

## TOWN OF BLACKFALDS STANDING COMMITTEE OF COUNCIL

Civic Cultural Centre - 5018 Waghorn Street Monday, November 18, 2024, at 7:00 p.m.

### **AGENDA**

#### 1. WELCOME AND CALL TO ORDER

- 1.1 Welcome
- 1.2 Call to Order
- 1.3 Review of Agenda
  - Standing Committee of Council Meeting Agenda for November 18, 2024

#### 2. LAND ACKNOWLEDGEMENT

2.1 Treaty Six Land Acknowledgement - Blackfalds Town Council acknowledges that we are on Treaty Six Territory, a traditional meeting ground, gathering place, and travelling route to the Cree, Saulteaux (So-toe), Blackfoot, Métis, Dene (De-nay) and Nakota Sioux (Sue). We acknowledge all the many First Nations, Métis, and Inuit whose footsteps have marked these lands for centuries.

#### 3. PRESENTATIONS

3.1 CIBC Wood Gundy, James Hobson and Charet Chahal

#### 4. BUSINESS

- 4.1 Request for Direction, Community Awards Criteria
- 4.2 Request for Direction, Womacks Road & Broadway Avenue Intersection Improvements
- 4.3 Request for Direction, CPKC Train Whistle Cessation Next Steps
- 4.4 Request for Direction, EBC Parking Expansion Survey Results
- 4.5 Request for Direction, Member at Large Recognition Policy
- 4.6 Request for Direction, Code of Conduct Bylaw

#### 5. **CONFIDENTIAL**

5.1 CAO Wage Grid, FOIP Section 24(1) – Advice from Officials

#### 6. ADJOURNMENT

- Regular Council Meeting November 26, 2024
- Regular Council Meeting December 10, 2024



## TOWN OF BLACKFALDS STANDING COMMITTEE OF COUNCIL PRESENTATION

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**MEETING DATE:** November 18, 2024

PREPARED BY: Danielle Nealon, Executive & Legislative Coordinator

PRESENTED BY: James Hobson and Charet Chahal

SUBJECT: CIBC Wood Gundy

#### **BACKGROUND**

James Hobson and Charet Chahal from CIBC Wood Gundy will present an Economic Update for 2024 to Standing Committee of Council.

#### **ATTACHMENTS**

Economic Update - November 2024

#### **APPROVALS**

Kim Isaak,

Chief Administrative Officer

Department Director/Author

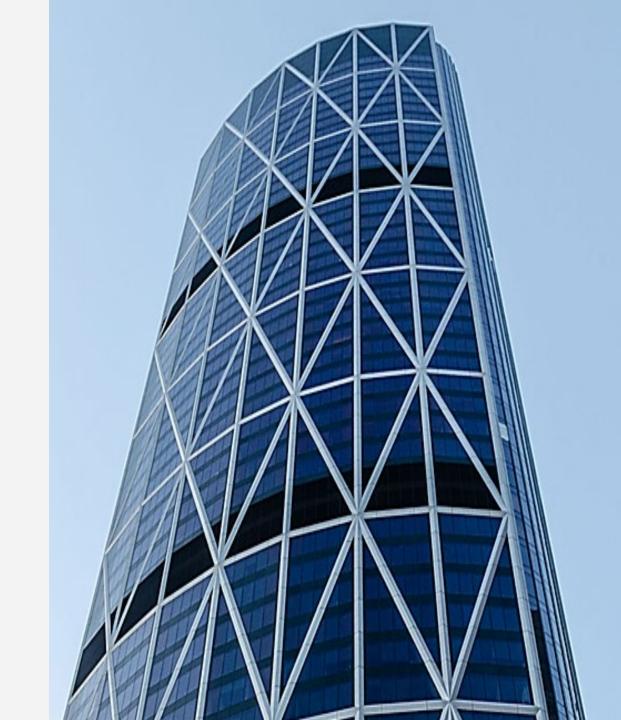


HOBSON CHAHAL ADVISORY GROUP WOOD GUNDY

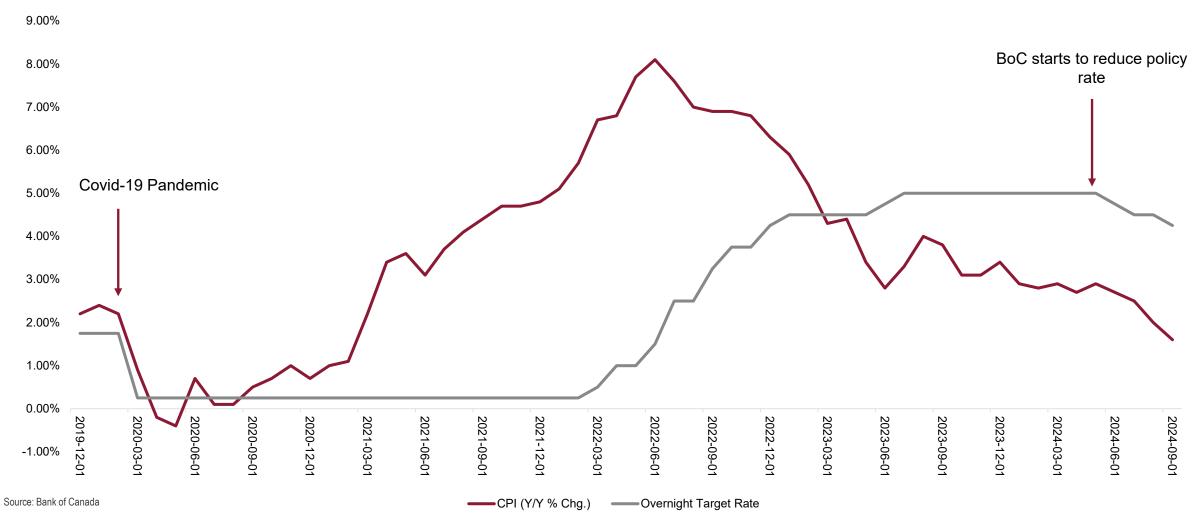
## Economic Update

## Prepared by:

James Hobson, CFA, Portfolio Manager Charet Chahal, CFA, Portfolio Manager



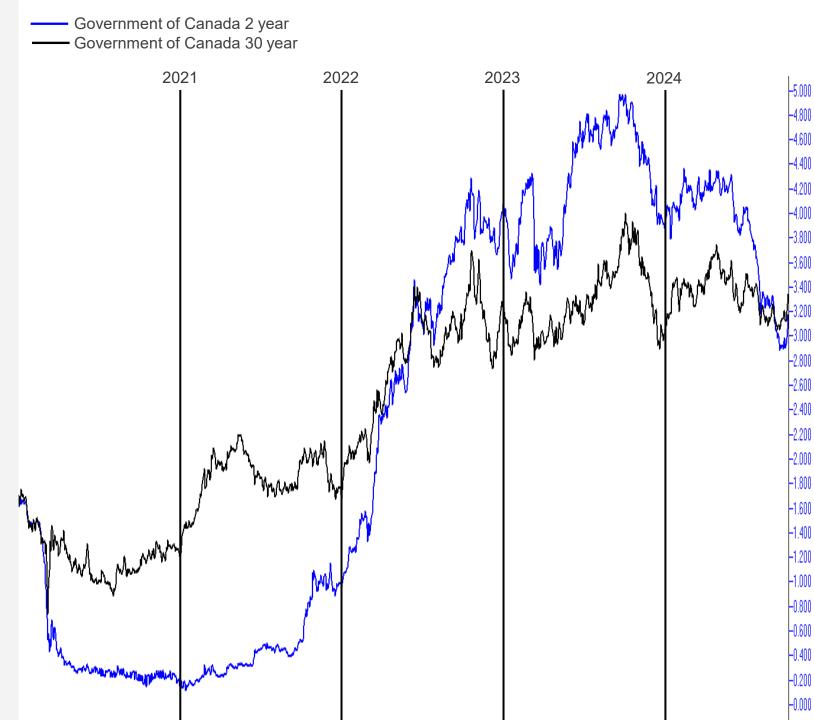
## Bank of Canada increased policy rates alongside rising inflation



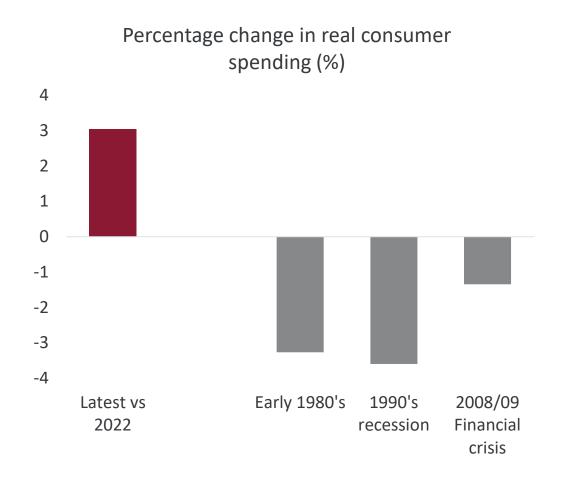


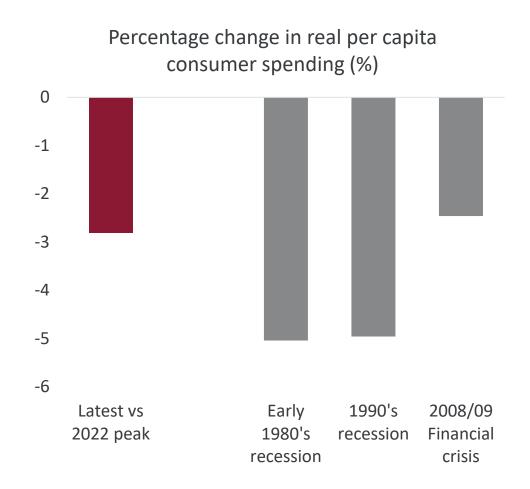
## Yields

Yields peaked and have come down as central bankers focused on easing inflationary pressures



## Per-capita consumer spending already declining similarly to prior recessions

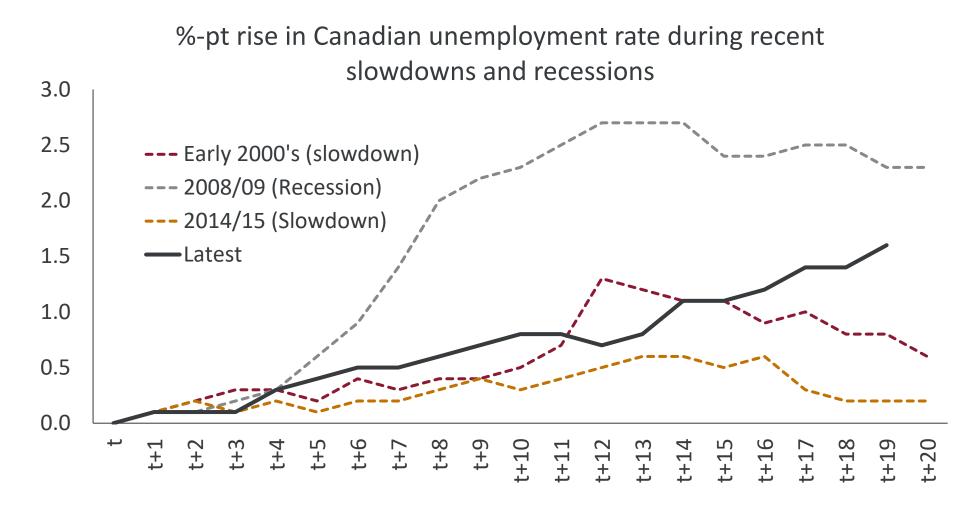




Source: Statistics Canada, CIBC



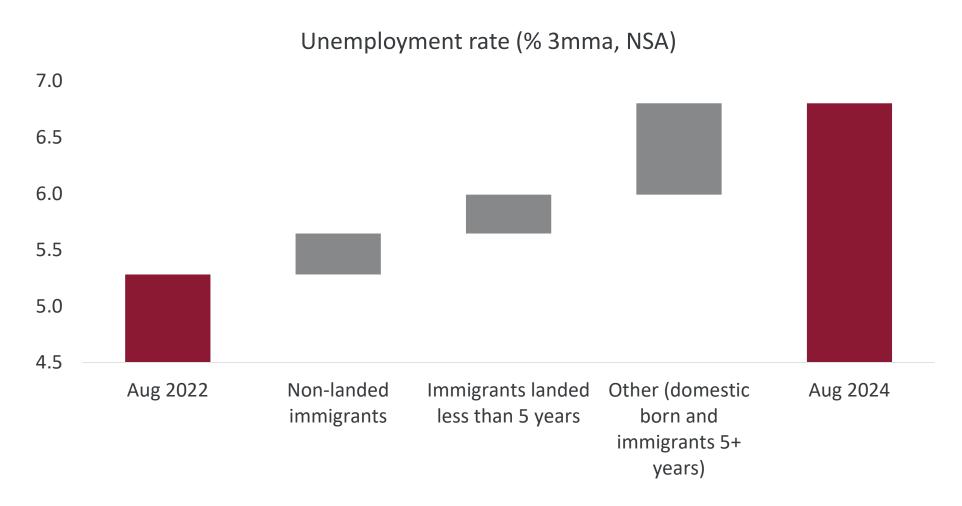
# Rise in unemployment rate greater than previous slowdowns, not yet close to recessionary levels







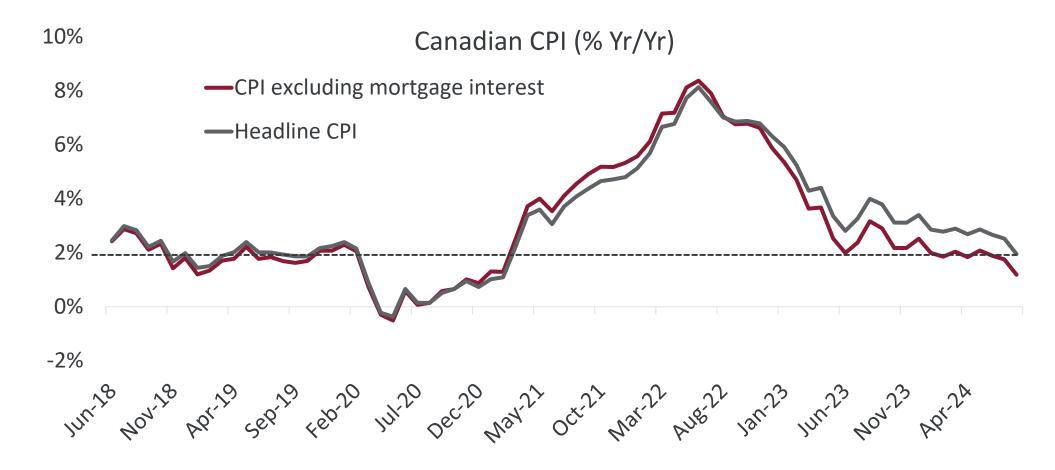
## Recent increase in unemployment not just a population growth story



Source: Statistics Canada, CIBC



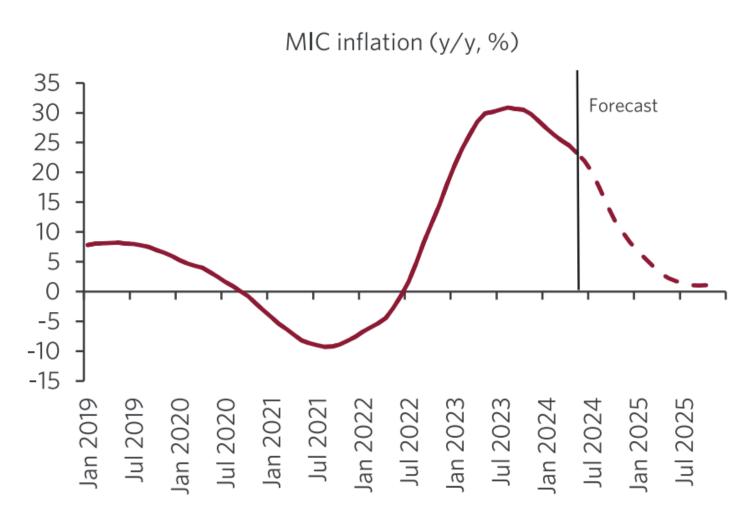
## The Bank of Canada's own actions are driving one of the few remaining inflationary elements



Source: Statistics Canada, CIBC



## Mortgage Interest Costs (MIC) to cool dramatically over the coming year



- MIC has been the fastest growing item in the CPI, running 23% y/y as of May
- MIC to drop to around 1% y/y by end-2025, by then adding just 0.1%-points to inflation

Source: Statistics Canada, CIBC Economics Calculations



## Canadian economy now well stocked, could absorb a strengthening of demand or another supply shock

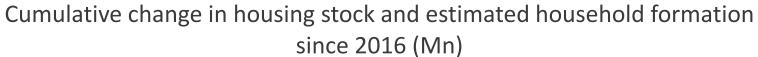


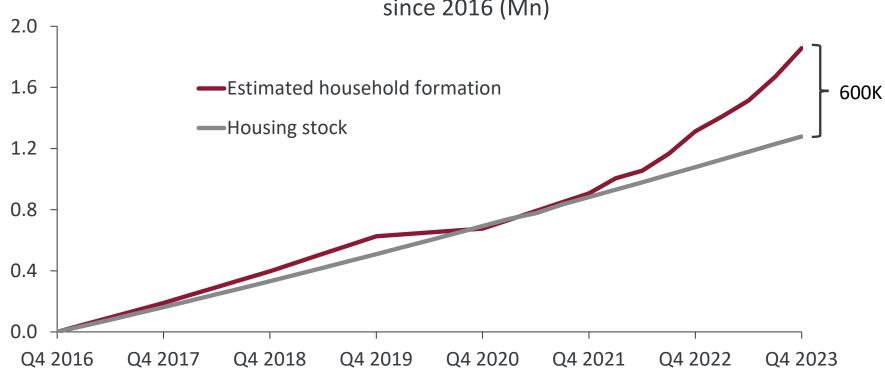


Source: Statistics Canada, BEA, Bloomberg, CIBC



## Housing supply shortfall equivalent to almost three years of building

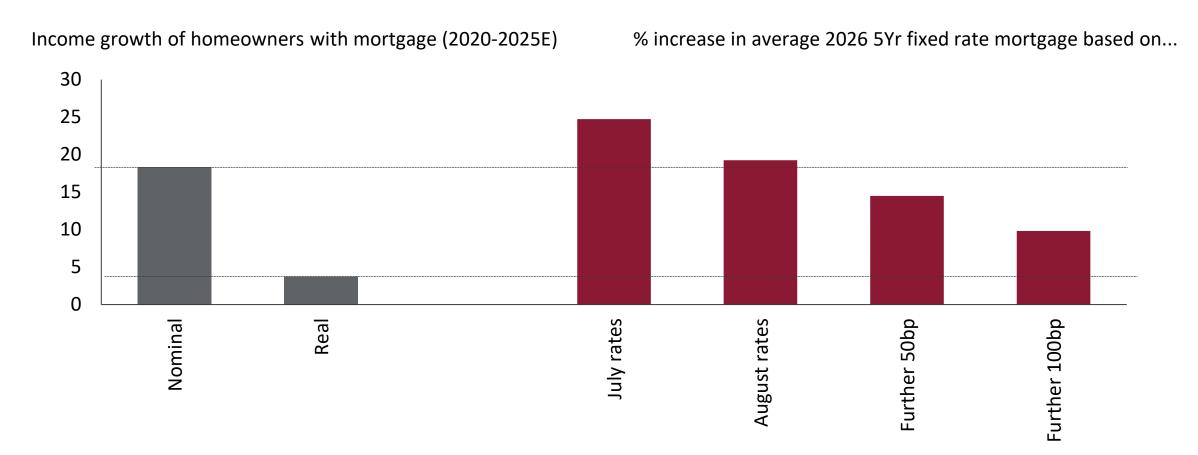




Source: StatCan, CMHC, CIBC



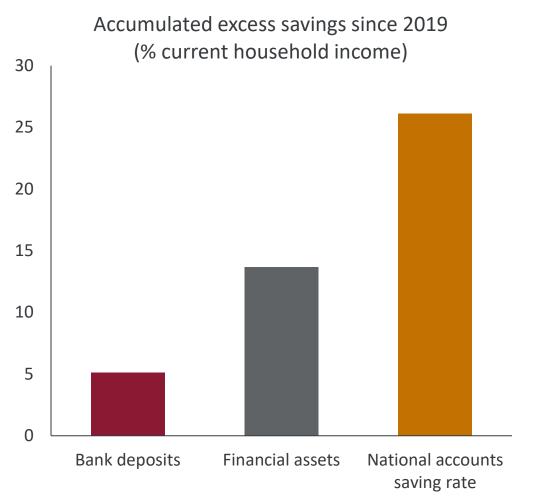
# Bank of Canada have to cut more than markets were previously expecting to ease threat from mortgage renewals

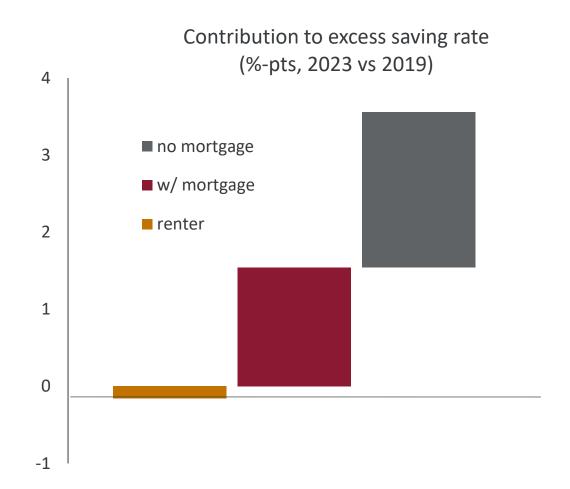


Source: Statistics Canada, BoC, CIBC



## Excess savings? Yes, but how much and who is holding it

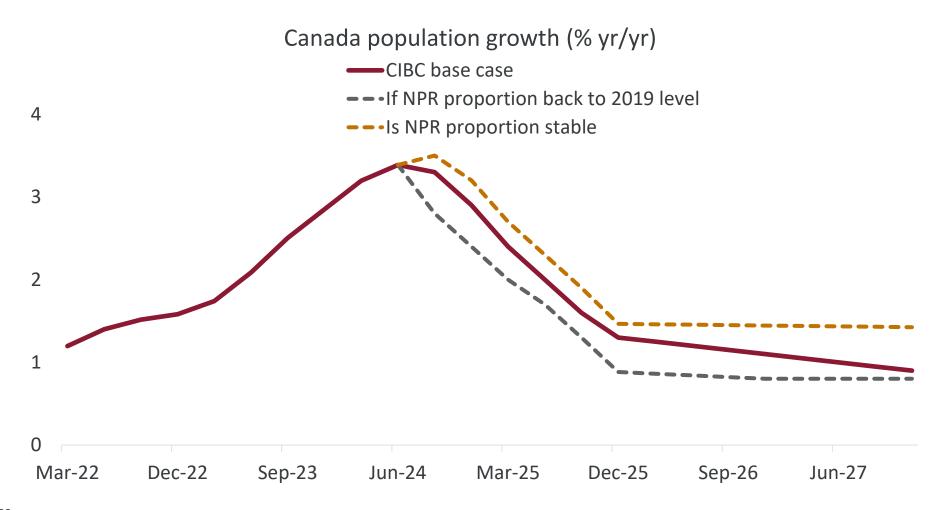




Source: Statistics Canada, BoC, CIBC



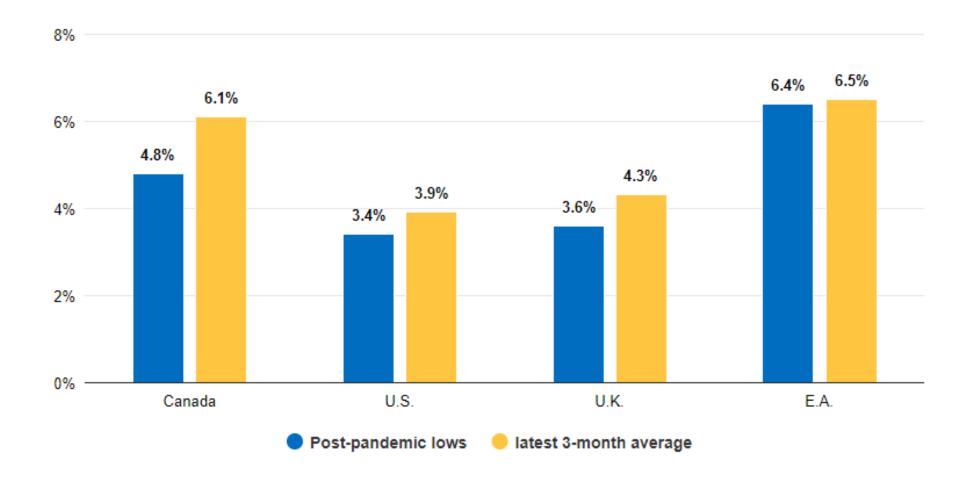
## Population growth to slow, but how much is uncertain



Source: Statistics Canada, CIBC



## Employment: Canada's unemployment rising more than other regions



Source: Haver, RBC Economics

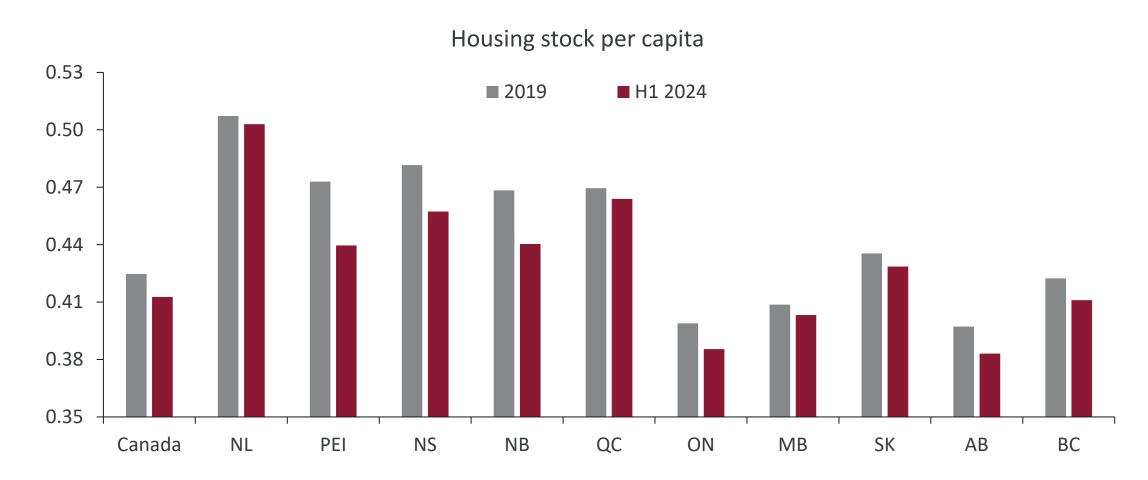


## Provincial growth – Alberta has room to run above the national average

	Real GDP					Unemployment rate %					Consumer Price Index Y/Y % Chg					
	Y/Y % Chg															
	2022A	2023E	2024F	2025F	2026F	2022A	2023A	2024F	2025F	2026F	2022A	2023A	2024F	2025F	2026F	
BC	3.8	1.6	0.8	1.7	2.8	4.6	5.1	5.5	5.5	5.0	6.9	4.0	2.5	1.8	1.9	
Alta	5.0	1.5	2.2	2.5	3.1	5.8	5.9	7.1	7.1	6.3	6.5	3.3	2.9	1.9	1.9	
Sask	6.0	1.6	2.0	1.8	2.4	4.7	4.8	5.4	5.3	4.8	6.6	3.9	1.5	1.8	1.9	
Man	3.3	1.3	1.3	1.6	2.3	4.5	4.8	5.1	5.3	4.9	7.9	3.6	1.2	2.5	2.0	
Ont	3.9	1.6	0.7	1.5	2.9	5.6	5.6	6.9	6.9	6.3	6.8	3.8	2.4	1.7	1.9	
Qué	2.5	0.2	0.8	1.9	2.5	4.3	4.4	5.5	5.6	5.1	6.7	4.5	2.2	1.5	1.9	
NB	1.1	1.3	1.5	1.7	2.1	7.2	6.6	7.0	7.0	6.7	7.3	3.5	2.5	1.8	1.9	
NS	2.9	1.3	1.7	1.8	2.2	6.6	6.3	6.6	6.9	6.4	7.5	4.0	2.5	1.8	1.9	
PEI	2.9	2.2	2.5	2.1	2.5	7.5	7.4	7.8	8.2	7.8	8.9	2.9	2.1	1.7	1.9	
N&L	-1.7	-2.5	3.5	2.1	2.3	11.2	9.9	10.0	9.7	9.5	6.4	3.3	2.0	1.6	1.9	
Canada	3.8	1.2	1.1	1.8	2.7	5.3	5.4	6.4	6.4	5.8	6.8	3.9	2.4	1.7	1.9	

Sources: CIBC, Statistics Canada, CMHC

## Alberta housing stock per capita now the lowest in the country

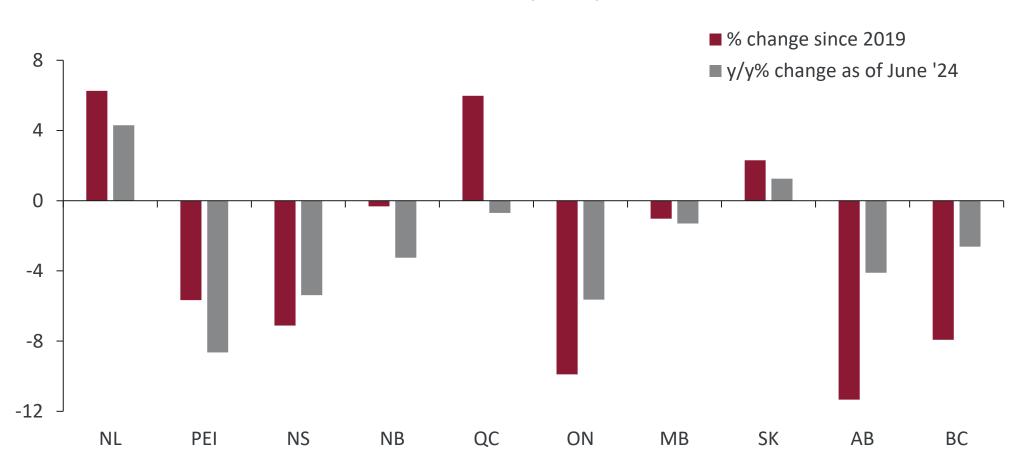


Source: StatCan, CIBC



## Households in Alberta have been hardest hit by high rates, room for growth as rates come down





Source: StatCan, CIBC



## Interest rate forecast

## Canada

Variable	2024 7-Nov	2024 Dec	2025 Mar	2025 Jun	2025 Sep	2025 Dec	2026 Jun	2026 Dec
Overnight target rate	3.75	3.25	2.75	2.25	2.25	2.25	2.25	2.25
98-Day Treasury Bills	3.51	3.05	2.55	2.20	2.10	2.10	2.20	2.20
2-Year Government Bond	3.10	2.85	2.50	2.30	2.45	2.60	2.80	3.10
10-Year Government Bond	3.25	3.05	3.00	2.95	3.10	3.15	3.25	3.40

## **United States**

Variable	2024 7-Nov	2024 Dec	2025 Mar	2025 Jun	2025 Sep	2025 Dec	2026 Jun	2026 Dec
Federal funds rate (midpoint)	4.625	4.375	3.875	3.375	3.375	3.375	3.375	3.375
91-Day Treasury Bills	4.54	4.20	3.70	3.30	3.25	3.25	3.30	3.40
2-Year Government Note	4.24	4.10	3.85	3.45	3.35	3.30	3.45	3.75
10-Year Government Note	4.37	4.25	4.00	3.85	3.65	3.50	3.60	3.80

Source: CIBC Economics as of July 29, 2024



## Summary – What does this all mean?

## Inflation:

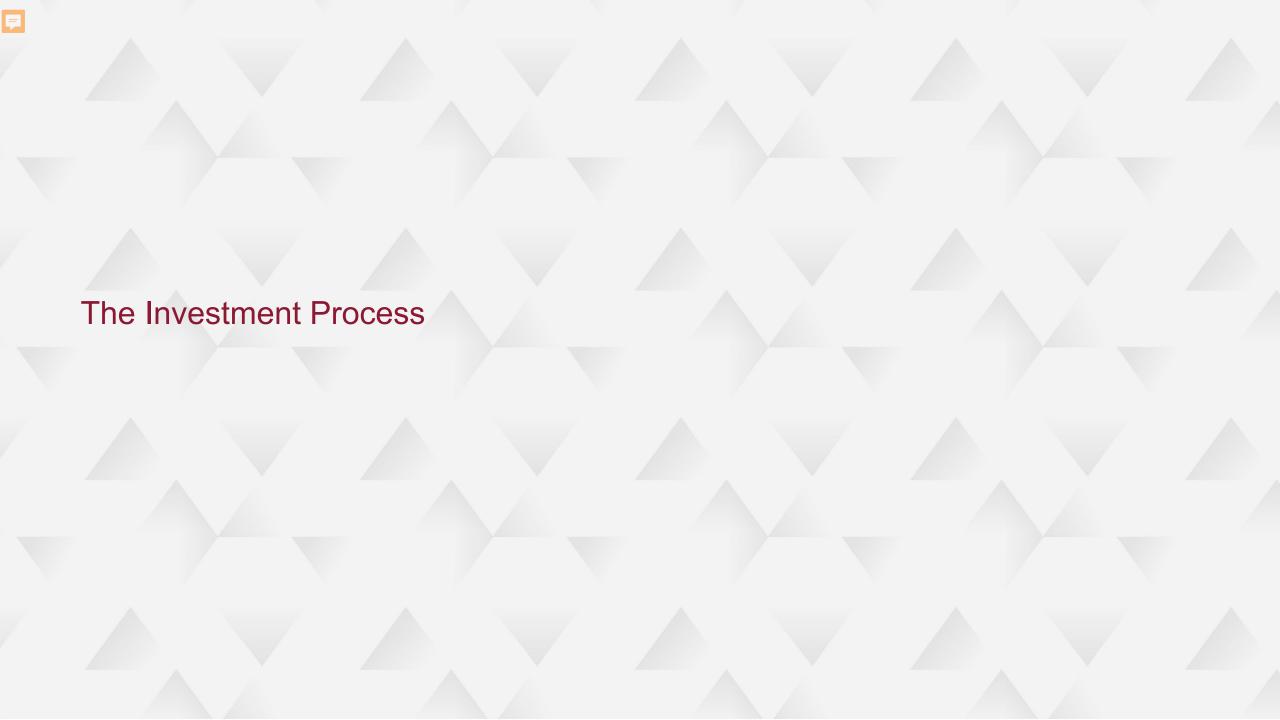
- Even though inflation has eased and will continue to do so, the cost of past inflationary pressures has already been incurred and will need to be offset
- There is room for growth before inflation becomes a concern again

## Interest Rates:

- In Canada, there is a need to accelerate growth, so interest rates will need to fall below the neutral rate unlike the US
- Rates likely to remain low through 2026 due to mortgage renewal considerations

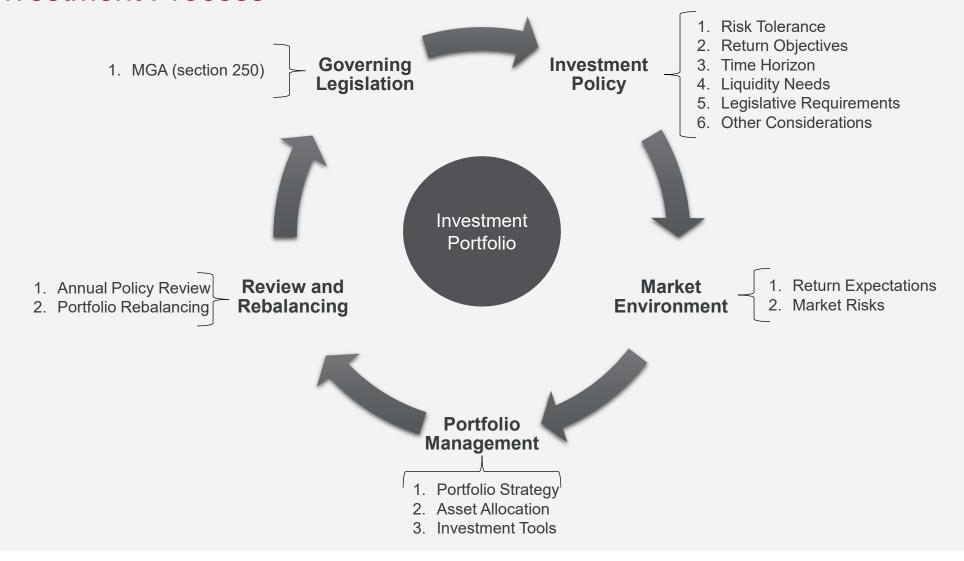
## Alberta:

Our province leads in growth potential due to a diversity of factors, not just commodities





## **Our Investment Process**





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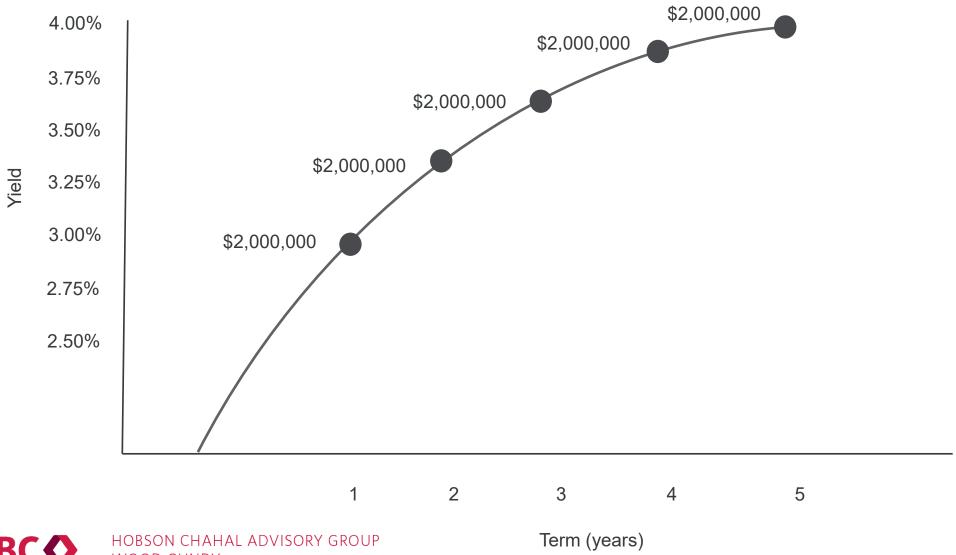
## Our Investment Philosophy

"The important thing about an investment philosophy is that you have one you can stick with." – David Booth, Nobel Laureate

- 1. Preservation of Capital Paramount under the MGA
- 2. Risk Mitigation Ensuring sufficient diversification among assets
- **3. Return on Investment -** Maximizing rate of return subject to constraints
  - Generate additional cash flow and grow the portfolio
  - Protect funds from the eroding effects of inflation
- 4. Liquidity Needs Structuring portfolios for optimal liquidity



## **Bond Ladder**

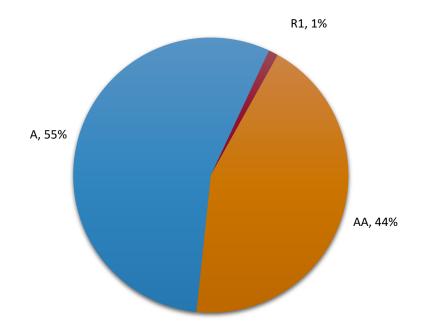




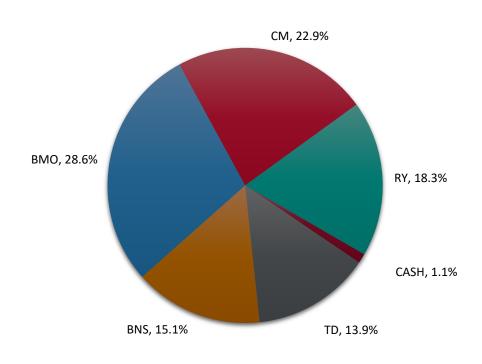
WOOD GUNDY

## Portfolio Characteristics

## **Credit Rating (DBRS)**



### **Issuer Diversification**

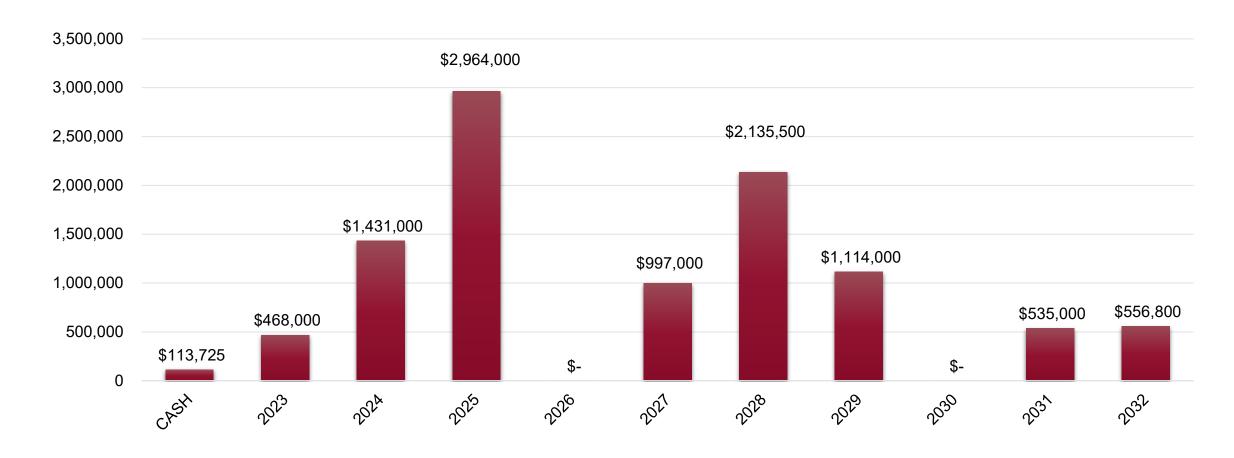


- Portfolio remains well diversified and maintains high credit quality
- YTD Performance: 6.51%





## Maturity Schedule



Maturity schedule is structured to optimize return and liquidity



WOOD GUNDY

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# Questions?



### TOWN OF BLACKFALDS STANDING COMMITTEE OF COUNCIL REQUEST FOR DIRECTION

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MEETING DATE: November 18, 2024

PREPARED BY: Sawyer Hick, FCSS Manager

PRESENTED BY: Sawyer Hick, FCSS Manager

SUBJECT: Community Awards Criteria

#### **BACKGROUND**

The Dylan Stork Youth Ambassador Award was originally created in 2006 to honour the legacy of Dylan, a remarkable young man who served as the Stollery's ambassador through the Champion Child Program. This award is designed to recognize individuals or groups under 18 who reside in Blackfalds and have made a significant impact within the community. Their positive attitude and exceptional contributions expand beyond the boundaries of Blackfalds, whether through sports, community engagement, academic achievement, or artistic talents.

The Carol Simpson Volunteer of the Year Award was created by Town Council in 2014 to acknowledge an outstanding community member who exemplifies excellence in volunteering. This award celebrates individuals who lead by example and are dedicated to individuals dedicated to community service and positive change in Blackfalds.

The recipients of both awards are selected by Town Council through a process facilitated by FCSS staff.

#### DISCUSSION

In June, we brought forth a request for direction regarding whether or not to change the award criteria for the Dylan Stork Youth Ambassador Award and Carol Simpson Volunteer of the Year Award. After thorough consideration, Administration has decided not to change the current award criteria to honour the individuals for whom the awards are named and to acknowledge their significant contributions to our community. We acknowledge this decision may lead to the Dylan Stork Youth Ambassador Award not being presented annually if applicants do not fulfill the specific criteria.

One change we are implementing is to enhance the nomination process by offering an online application form in addition to the traditional paper copy. We believe this will help streamline the nomination process and make it more accessible.

#### FINANCIAL IMPLICATIONS

None



### TOWN OF BLACKFALDS STANDING COMMITTEE OF COUNCIL REQUEST FOR DIRECTION

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#### **ADMINISTRATIVE RECOMMENDATION**

That Standing Committee of Council consider the following motion:

1. That Standing Committee of Council receive the Community Awards Criteria as information.

#### **ALTERNATIVES**

a) That Standing Committee of Council refer the Community Awards Criteria back to Administration for more information.

#### **ATTACHMENTS**

None

**APPROVALS** 

Kim Isaak,

Chief Administrative Officer

Department Director/Author



### TOWN OF BLACKFALDS STANDING COMMITTEE OF COUNCIL REQUEST FOR DIRECTION

Page 1 of 3

MEETING DATE: November 18, 2024

PREPARED BY: Niki Burkinshaw, Municipal Engineer

PRESENTED BY: Niki Burkinshaw, Municipal Engineer

SUBJECT: Womacks Road & Broadway Avenue Intersection Improvements

#### **BACKGROUND**

Consistent with the 2015 Transportation Master Plan, upgrades are needed at the intersection of Womacks Road and Broadway Avenue to address increasing traffic with growth in the western portion of the Town. With the extension of Womacks Road across the CPKC rail line and the free-flowing traffic changing to be on that roadway, concerns have been expressed by residents relating to sightlines (in particular, for southbound drivers) and the ability to turn onto or cross Womacks Road during busy times of day, including during events at the Eagle Builders Centre.

A high-level intersection assessment for the Womacks Road and Broadway Avenue intersection was completed with a focus on providing traffic modeling and a conceptual design for a roundabout at that location. The other options included for the assessment were a signalized intersection concept and smaller geometric improvements (providing bulbing at the intersection). The accompanying memo (attached) was finalized in October 2024.

#### DISCUSSION

The 2015 Transportation Master Plan (by Stantec) recommended signalization of the Womacks Road and Broadway Avenue intersection by the 12,000 population horizon. It is noted that at the time the Master Plan was completed, roundabouts were just starting to become a focus of road agencies when looking at intersection improvements and so roundabouts were not considered as part of that study. Currently, most road agencies – including Alberta Transportation and Economic Corridors (ATEC) and municipalities across the province – require that roundabouts be considered at locations where traffic control greater than stop signs are needed (e.g. prior to or instead of signalization). Construction of the Eagle Builders Centre was also not considered as part of the 2015 study.

Installation of a four-way stop at the intersection has not been considered. This is because, while it would partially address the sightline concerns, a four-way stop would not address the growing delays as traffic volumes increase at the intersection. Four-way stops also do not clear traffic under a train delay or operate as efficiently as roundabouts under higher volume conditions, such as when an event at the Eagle Builders Centre ends, due to driver misunderstanding with regards to who has the right of way at four-way stops and the time it takes to stop and go again (drivers need to consider three other directions of traffic).

The options looked at for improvements to the Womacks Road and Broadway Avenue intersection, along with key considerations for each, are listed below:

#### Option 1 (recommended option) – roundabout with westbound right-turn lane

- o Addresses sightline concerns and increasing traffic demands.
- Roundabouts have proven benefits compared to other types of intersections (including traffic signals) including – increased safety with reduced conflict points, promoting





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- lower speeds and traffic calming, improved operational performance, environmental benefits (e.g. less idling), and lower operating costs.
- Reduced westbound traffic queuing (e.g. towards the CPKC rail crossing) compared to the signalized alternative.

## • Option 2 – signalization with dedicated westbound right-turn and southbound left-turn lanes

- Addresses sightline concerns and increasing traffic demands.
- o Lower capital costs, but higher operating cost, compared to roundabout.
- Design would need to address skewed north/south traffic movement (due to a dedicated southbound left-turn lane) and shielding of traffic signal lights with the close proximity of residential properties.

### • Option 3 – northwest corner bulb

- Addresses sightline concerns by moving the stop bar for southbound traffic further south (e.g. making it easier to see to the east when stopped).
- Does not address increasing traffic demands (a roundabout or signalization would still be required in the future).
- Lower capital cost for improvement.

#### • Option 4 (Status Quo) – do not complete intersection improvements

- o Does not address sightline concerns or increasing traffic demands.
- No costs incurred, as no intersection improvements would be completed

A concept plan illustrating the recommended option (roundabout with westbound right-turn lane) is attached.

If approved, this would be Blackfalds' first roundabout. While many drivers may be familiar with their operation from other municipalities, including Lacombe and Red Deer, and with the Highway 2A and Highway 597 roundabout that has been in operation since the summer of 2015, some drivers may not be familiar with their operation. It is recommended to plan public information and/or engagement events leading up to the opening of the roundabout, should it be the selected option.

#### FINANCIAL IMPLICATIONS

The financial resources needed for each of the options is summarized below and approximate:

- Option 1 (roundabout with WB right-turn lane) 2024/25 design & construction \$1,200,000
- Option 2 (signalization) \$500,000 to \$750,000
- Option 3 (NW bulb) \$66,000
- Option 4 (Status Quo) no financial resources required

A funding request has been included as part of the 2025 Capital Budget relating to the proposed roundabout at Womacks Road and Broadway Avenue.

Due to the short amount of time to complete the design, utility coordination, and detour planning needed to be able to construct the roundabout in 2025, Administration is requesting that \$200,000 be approved as an adjustment to the 2024 Capital Budget for beginning the design and utility coordination for the intersection improvements in 2024.



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#### ADMINISTRATIVE RECOMMENDATION

That Standing Committee of Council consider the following motion:

- 1. That Standing Committee of Council recommend to Council to direct Administration to move forward with the design and construction of a roundabout (with westbound right-turn lane) at the intersection of Womacks Road and Broadway Avenue.
- 2. That Standing Committee of Council recommend to Council to amend the 2024 Capital Budget to include \$200,000 for starting the detailed design and utility coordination for the intersection improvements and earmark \$1,000,000 for 2025 budget.
- 3. That Standing Committee of Council recommend to Council to direct Administration to develop public information and/or engagement activities to raise awareness about navigating roundabouts leading up to the opening of the Womacks Road and Broadway Avenue roundabout.

#### **ALTERNATIVES**

- a) That Standing Committee of Council refers this item back to Administration for more information.
- b) That Standing Committee of Council recommend Administration to move forward with the design and construction of traffic signals at the intersection of Womacks Road and Broadway Avenue, pending 2025 budget approval.
- c) That Standing Committee of Council recommend Administration to move forward with the design and construction of a bulb at the northwest corner of Womacks Road and Broadway Avenue, pending 2025 budget approval.
- d) That Standing Committee of Council recommend Administration to not move forward with intersection improvements at Womacks Road and Broadway Avenue.

#### **ATTACHMENTS**

- Womacks Road and Broadway Avenue Intersection Assessment (Memo) Stantec Consulting Ltd., October 2024
- Roundabout with Right Turn Concept Stantec Consulting Ltd., November 2024
- Womacks Road & Broadway Avenue Intersection Improvements Business Case November 13, 2024

**APPROVALS** 

Kim Isaak,

Chief Administrative Officer

Department Director / Author

NSurkinshaw

## Womacks Road and Broadway Avenue Intersection Assessment

**Technical Memorandum** 

October 25, 2024

Prepared for: Town of Blackfalds

Prepared by: Stantec Consulting Ltd.

Project/File: 1136785892



The conclusions in the Memorandum (memo) titled Womacks Road and Broadway Avenue Intersection Assessment are Stantec's professional opinion, as of the time of the Memo, and concerning the scope described in the Memo. The opinions in the document are based on conditions and information existing at the time the scope of work was conducted and do not take into account any subsequent changes. The Memo relates solely to the specific project for which Stantec was retained and the stated purpose for which the Memo was prepared. The Memo is not to be used or relied on for any variation or extension of the project, or for any other project or purpose, and any unauthorized use or reliance is at the recipient's own risk.

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Prepared by

Signature

Patrick Wong

**Printed Name** 

Signature

Graeme Nickle

**Printed Name** 

PERMIT TO PRACTICE STANTEC CONSULTING LTD.

Signature David A. Maclassan Date 04 NOV 2024

**PERMIT NUMBER: P 0258** The Association of Professional Engineers

and Geoscientists of Alberta



Project: 1136785892

#### 1 Introduction

The extension of Womacks Road across the CPKC railway was completed in 2022 forming a new 4-legged intersection with Broadway Avenue. The Womacks Road and Broadway Avenue intersection is free flowing on Womacks Road (east/west) and stop-controlled on Broadway Avenue (north/south). Marked pedestrian crossings are on the south and west legs. The existing intersection is illustrated in **Figure 1.1**. The sightlines for Broadway Avenue, southbound traffic on the north side of Womacks Road have been identified as a recognized concern by members of the public. The sight line calculations for the posted, 40 km/hr. speed on Womacks Road meet TAC Guidelines. As the north leg is stop controlled, sight line calculations for the posted, 50 km/hr. speed on Broadway Avenue were not completed.

To improve upon the existing intersection, this memo describes three potential upgrades that can improve sightlines and/or intersection safety:

- bulbing the northwest corner to shift the stop line further south;
- traffic signals; and
- a roundabout (with provisional expansion options).

To support the evaluation of the options, this memo also includes considerations for operational level of service at the 16.5k and 22.5k population horizons, conceptual drawings complete with turning movements of large vehicles, and opinions of probable costs.



Figure 1.1 - Womacks Road & Broadway Avenue Intersection

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### 2 Traffic Analysis

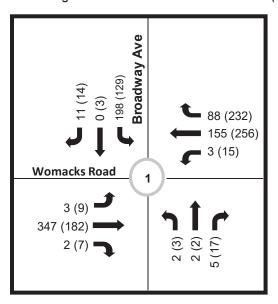
#### 2.1 Existing Traffic Data

Traffic counts were completed on Wednesday April 17, 2024, at the following time slots:

• AM Peak between 7:30 am and 9:30 am and PM Peak between 2:30 pm and 4:30 pm

The 2024 existing traffic volumes are illustrated in Figure 2.1.

Figure 2.1 - 2024 Existing Traffic Volumes – AM Peak Hour (PM Peak Hour)



#### 2.1.1 Signal Warrant Analysis – Existing Conditions

The Signal Warrant Analysis was completed using Transportation Association of Canada's (TAC) Traffic Signal Analysis Spreadsheet (2014). When the spreadsheet yields a W-value equal to or greater than 100 points, signalization is required. The analysis was completed for the 2024 existing conditions.

The warrant yielded the following results summarized in Table 2.1.

Table 2.1 - Signal Warrant Analysis Results

	2024	Warranted?
Womacks Road & Broadway Ave	39	No

According to the results, signals are not warranted at the study intersection. The full signal warrants can be found appended to this memorandum.



#### 2.1.2 Intersection Capacity Analysis – Existing Conditions

Synchro models were created to analyze the study intersection with a two-way stop controlled. **Table 2.2** summarizes the unsignalized intersection capacity analysis results for both AM and PM peak periods under the 2024 existing conditions.

					Inter	section	Moven	nents					
Womacks Road & Broadway Ave (2024 Existing Conditions)	EB			WB		NB			SB			Overall Intersection	
(2024 Existing Conditions)	L	Т	R	L	Т	R	L	Т	R	L	Т	R	intersection
Intersection / Laning Characteristics	SH	1	SH	SH	1	SH	SH	1	SH	SH	1	SH	
AM Peak Hour													
Volumes (veh/h)	3	347	2	3	155	88	2	2	5	198	0	11	Intersection
Volume/Capacity Ratio (v/c)	-	0	-	-	0	-	-	0.02	-	-	0.6	-	Delay
Total Delay (s)	-	0.1	-	-	0.1	-	-	12.2	-	-	26.9	-	7.1s
Lane LOS	-	Α	-	-	Α	-	-	В	-	-	D	-	LOS A
Queue Length 95th (m)	-	0.1	-	-	0	-	-	0.5	-	-	28.4	-	
PM Peak Hour													
Volumes (veh/h)	9	182	7	15	256	232	3	2	17	129	3	14	Intersection
Volume/Capacity Ratio (v/c)	-	0.01	-	-	0.01	-	-	0.04	-	-	0.47	-	Delay
Total Delay (s)	-	0.5	-	-	0.4	-	-	11	-	-	24	-	4.6s
Lane LOS	-	Α	-	-	Α	-	-	В	-	-	С	-	LOS A
Queue Length 95th (m)	-	0.2	-	-	0.3	-	-	0.9	-	-	18.2	-	

Table 2.2 - Unsignalized Intersection Analysis Results

The SYNCHRO analysis results indicated that the existing two-way stop controlled intersection functions adequately for both peak hours, with the max v/c ratio at 0.6 for the southbound movements during the AM peak hour and a LOS of D.

### 2.2 16.5K and 22.5K Population Traffic Data

The 16.5K and 22.5K population traffic data, as illustrated in **Figure 2.2**, were obtained from the Town's Transportation Master Report.

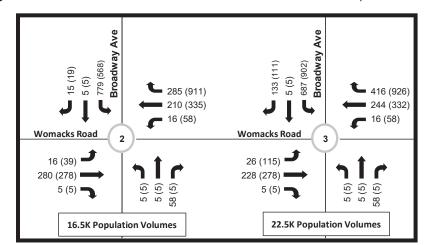


Figure 2.2 - 16.5K and 22.5K Traffic Volumes – AM Peak Hour (PM Peak Hour)

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Upon discussion with the Town, it was determined that the volumes for the southbound left turn and westbound right turn were too conservative at the 16.5K conditions, as such, a factor of 0.8 was applied to these movements for the analysis. **Figure 2.3** illustrates the adjusted volumes.

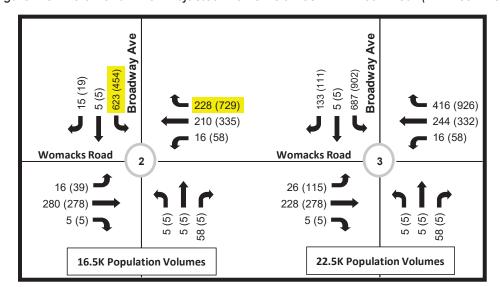


Figure 2.3 - 16.5K and 22.5K Adjusted Traffic Volumes - AM Peak Hour (PM Peak Hour)

### 2.3 Intersection Capacity Analysis

#### 2.3.1 Analysis Criteria

The Intersection Capacity Analysis (ICA) was completed to determine whether the Level of Service (LOS) and the delay of the studied intersections remains at an acceptable level once they are subjected to the design volumes. The traffic modeling software package of Synchro Studio 11 (for signalized intersections) and SIDRA 9.0 (for roundabouts) have been used to complete intersection capacity analysis. The LOS for the intersection is based on the computed delays on each of the traffic movements. LOS 'A' represents minimal delays and LOS 'F' represents a scenario with significant vehicular delays. The LOS criteria for unsignalized intersections are described in **Table 2.3**.

LOS	Control Delay (seconds per vehicle)
	Signalized Intersection
Α	10.0 or less
В	10.1 to 20.0
С	20.1 to 35.0
D	35.1 o 55.0
E	55.1 to 80.0
F	More than 80.0

Table 2.3 - Level of Service Criteria



LOS 'D' is acceptable for a given turning movement. Movements experiencing LOS E for short term planning or LOS 'F' for long term planning typically require upgrading to increase performance of the failing traffic movements.

The volume to capacity (V/C) Ratio indicates the level of congestion for a lane. A V/C ratio equal to or greater than 1.00 indicates that the lane is operating at or above capacity. It is generally accepted in the short-term and long-term planning horizons that lanes operating with V/C ratios equal to or less than 0.85 and 0.90, respectively, have acceptable levels of congestion.

The following parameters were used for the traffic operation analysis.

- Peak Hour Factor Existing: 0.83 (AM); 0.89 (PM); Future: 0.92
- %HV 5% (North & East legs); 2% (South & West legs)
- Ideal Saturation Flow (vehicles per hour per lane) 1900 (As per the Town's TMP)

#### 2.3.2 Roundabout Analysis Results

**Figure 2.4** illustrates the proposed configurations for the roundabout and **Table 2.4** summarizes the roundabout capacity analysis results for both AM and PM peak periods under the 2024 existing conditions, 16.5K conditions and 22.5K conditions.

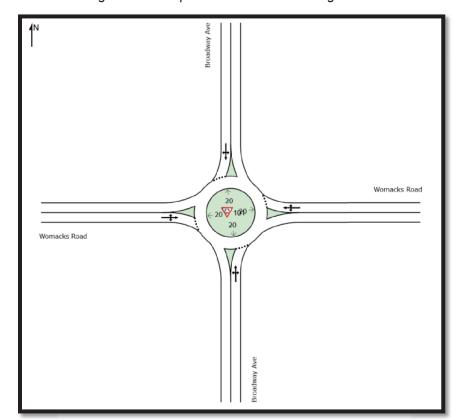


Figure 2.4 - Proposed Roundabout Configurations

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Table 2.4 - Roundabout Analysis Results

					Inter	section	Mover	nents					
Womacks Road & Broadway Ave		EB			WB			NB			SB		Overall
(2024 Existing Conditions)	L	Т	R	L	Т	R	L	Т	R	L	Т	R	Intersection
Intersection / Laning Characteristics	SH	1	SH	SH	1	SH	SH	1	SH	SH	1	SH	
AM Peak Hour													
Volumes (veh/h)	3	347	2	3	155	88	2	2	5	198	1	11	Intersection
Volume/Capacity Ratio (v/c)	-	0.374	-	-	0.184	-	-	0.014	-	-	0.217	-	Delay
Total Delay (s)	-	2.8	-	-	1.4	-	-	5.8	-	-	8.2	-	3.8s
Lane LOS	-	Α	-	-	Α	-	-	Α	-	-	Α	-	LOS A
Queue Length 95th (m)	_	17.9	-	_	8	-	_	0.5	-	_	8.6	_	
PM Peak Hour													
Volumes (veh/h)	9	182	7	15	256	232	3	2	17	129	3	14	Intersection
Volume/Capacity Ratio (v/c)	_	0.185	-	_	0.352	-	_	0.024	-	_	0.155	_	Delay
Total Delay (s)	_	2.3	-	_	1.6	-	_	3.7	-	_	8.5	_	3.0s
Lane LOS	_	Α	-	_	Α	-	_	Α	-	_	Α	_	LOS A
Queue Length 95th (m)	_	7.6	_	_	17.7	-	_	0.8	_	_	5.9	_	
<u> </u>					Inter	section	Mover	nents					
Womacks Road & Broadway Ave		EB			WB			NB			SB		Overall
(16.5K Conditions - Adjusted)	L	Т	R	L	Т	R	L	Т	R	L	Т	R	Intersection
Intersection / Laning Characteristics	SH	1	SH	SH	1	SH	SH	1	SH	SH	1	SH	
AM Peak Hour													
Volumes (veh/h)	16	280	5	16	210	228	5	5	58	623	5	15	Intersection
Volume/Capacity Ratio (v/c)	_	0.467	_	_	0.323	-	_	0.141	-	_	0.607	_	Delay
Total Delay (s)	_	7.6	_	_	1.7	-	_	10	_	_	9.5	_	6.7s
Lane LOS	_	Α	_	_	Α	-	_	Α	_	_	Α	_	LOS A
Queue Length 95th (m)	_	27	_	_	17.2	-	_	6.8	_	_	38	_	
PM Peak Hour													
Volumes (veh/h)	39	278	5	58	335	729	5	5	5	454	5	19	Intersection
Volume/Capacity Ratio (v/c)	-	0.436	-	-	0.809	-	-	0.026	-	-	0.569	-	Delay
Total Delay (s)	-	5.8	-	-	2.5	-	-	8	-	-	11.6	-	5.3s
Lane LOS	_	Α	_	_	Α	-	_	Α	_	_	В	_	LOS A
Queue Length 95th (m)	-	23.2	-	-	112.6	-	-	1.1	-	-	37.5	-	
					Inter	section	Mover	nents					
Womacks Road & Broadway Ave		EB			WB			NB			SB		Overall
(22.5K Conditions)	L	Т	R	L	Т	R	L	Т	R	L	Т	R	Intersection
Intersection / Laning Characteristics	SH	1	SH	SH	1	SH	SH	1	SH	SH	1	SH	
AM Peak Hour													
Volumes (veh/h)	26	228	5	16	244	416	5	5	58	687	5	133	Intersection
Volume/Capacity Ratio (v/c)	-	0.475	-	-	0.485	-	-	0.163	-	-	0.803	-	Delay
Total Delay (s)	-	8.9	-	-	1.8	-	-	10.5	-	-	13.2	-	8.3s
Lane LOS	-	Α	-	-	Α	-	-	В	-	-	В	-	LOS A
Queue Length 95th (m)	-	28.8	-	-	33.3	-	-	8.3	-	-	92.5	-	
PM Peak Hour													
Volumes (veh/h)	115	278	5	58	332	926	5	5	5	902	5	111	Intersection
Volume/Capacity Ratio (v/c)	-	0.912	-	-	1.083	-	-	0.054	-	-	1.182	-	Delay
Total Delay (s)	-	45.9	-	-	83.9	-	-	17.3	-	-	183.8	-	115s
Lane LOS	-	D	-	-	F	-	-	В	-	-	F	-	LOS F
Queue Length 95th (m)	-	126.3	-	-	815.3	-	-	2.8	-	-	963.4	-	

The SIDRA analysis results indicated that the single lane roundabout would function adequately for the existing and 16.5K conditions. During the 16.5K horizon, queuing of the westbound traffic during the PM peak (113 m) will extend beyond the railway crossing (approx. 85m). The single lane roundabout is



expected to be slightly over capacity at the 22.5K population horizon; however, queueing for westbound and southbound traffic is quite substantial. It is recommended that the Town monitors the single lane roundabout prior to the 22.5K population horizon to determine whether a further study is needed.

#### 2.3.3 Roundabout Expansion Analysis Results

**Figure 2.5** illustrates the proposed configurations for the roundabout and **Table 2.5** summarizes the roundabout capacity analysis results for both AM and PM peak periods under the 2024 existing conditions, 16.5K conditions and 22.5K conditions.

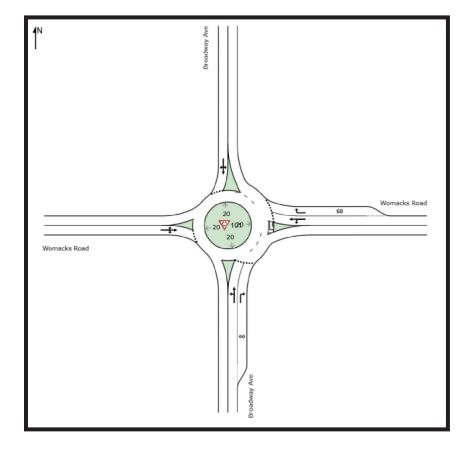


Figure 2.5 - Proposed Roundabout Configurations

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Table 2.5 - Roundabout Expansion Analysis Results

Wassada Baad 0 B		Intersection Movements											Q
Womacks Road & Broadway Ave		EB			WB			NB			SB		Overall
(2024 Existing Conditions)	L	Т	R	L	Т	R	L	Т	R	L	Т	R	Intersection
Intersection / Laning Characteristics	SH	1	SH	SH	1	1	SH	1	1	SH	1	SH	
AM Peak Hour													
Volumes (veh/h)	3	347	2	3	155	88	2	2	5	198	1	11	Intersection
Volume/Capacity Ratio (v/c)	-	0.374	-	0.11	0.11	0.075	0.006	0.006	0.006	-	0.217	-	Delay
Total Delay (s)	-	2.8	-	5.5	1.2	2	8.8	4.6	4.6	-	8.2	-	3.7s
Lane LOS	-	Α	-	Α	Α	Α	Α	Α	Α	-	Α	-	LOS A
Queue Length 95th (m)	-	17.9	-	4.5	4.5	2.9	0.2	0.2	0.3	-	8.6	-	
PM Peak Hour													
Volumes (veh/h)	9	182	7	15	256	232	3	2	17	129	3	14	Intersection
Volume/Capacity Ratio (v/c)	-	0.185	-	0.177	0.177	0.177	0.006	0.006	0.015	-	0.155	-	Delay
Total Delay (s)	-	2.3	-	5.5	1.3	2	7.4	3.2	3.2	-	4.5	-	3.0s
Lane LOS	-	Α	-	Α	Α	Α	Α	Α	Α	-	Α	-	LOS A
Queue Length 95th (m)	-	7.6	-	7.3	7.3	7.2	0.2	0.2	0.6	-	5.9	-	
					Inter	section	Moven	nents					_
Womacks Road & Broadway Ave		EB			WB			NB			SB		Overall
(16.5K Conditions - Adjusted)	L	Т	R	L	Т	R	L	Т	R	L	Т	R	Intersection
Intersection / Laning Characteristics	SH	1	SH	SH	1	1	SH	1	1	SH	1	SH	
AM Peak Hour													
Volumes (veh/h)	16	280	5	16	210	228	5	5	58	623	5	15	Intersection
Volume/Capacity Ratio (v/c)	-	0.438	-	0.163	0.163	0.145	0.022	0.022	0.085	-	0.584	-	Delay
Total Delay (s)	-	9.8	-	8.9	4.3	4.3	16.5	11.9	10.2	-	10.7	-	8.6s
Lane LOS	-	Α	-	Α	Α	Α	В	В	В	-	В	-	LOS A
Queue Length 95th (m)	-	23.9	-	7.2	7.2	6.4	1	1	4.5	-	34.4	-	
PM Peak Hour													
Volumes (veh/h)	39	278	5	58	335	729	5	5	5	454	5	19	Intersection
Volume/Capacity Ratio (v/c)	-	0.408	-	0.313	0.313	0.467	0.012	0.012	0.008	-	0.524	-	Delay
Total Delay (s)	-	8.4	-	9.1	4.5	4.5	12.6	8	9.2	-	12.3	-	7.2s
Lane LOS	-	Α	-	Α	Α	Α	В	Α	Α	-	В	-	LOS A
Queue Length 95th (m)	-	20.9	-	16.3	16.3	30.6	0.6	0.6	0.4	-	30.1	-	
					Inter	section	Moven	nents					
Womacks Road & Broadway Ave (22.5K Conditions)		EB			WB			NB			SB		Overall Intersection
(22.5K Conditions)	L	Т	R	L	Т	R	L	Т	R	L	Т	R	intersection
Intersection / Laning Characteristics	SH	1	SH	SH	1	1	SH	1	1	SH	1	SH	
AM Peak Hour													
Volumes (veh/h)	26	228	5	16	244	416	5	5	58	687	5	133	Intersection
Volume/Capacity Ratio (v/c)	-	0.473	-	0.207	0.207	0.274	0.027	0.027	0.106	-	8.0	-	Delay
Total Delay (s)	-	8.9	-	5.7	1.4	2.1	14.2	9.9	8.8	-	13.1	-	8.2s
Lane LOS	-	Α	-	Α	Α	Α	В	Α	Α	-	В	-	LOS A
Queue Length 95th (m)		28.6	-	9.9	9.9	14.6	1.3	1.3	6		90.5	-	
PM Peak Hour		· · · · · ·									· · · · · ·		
Volumes (veh/h)	115	278	5	58	332	926	5	5	5	902	5	111	Intersection
Volume/Capacity Ratio (v/c)	-	0.953	-	0.379	0.379	0.68	0.029	0.029	0.02	-	1.146	-	Delay
Total Delay (s)	-	61.4	-	6.5	2.2	3	18.6	14.3	17.9	-	154.4	-	67.6s
Lane LOS	-	E	-	Α	Α	Α	В	В	В	-	F	-	LOS E
Queue Length 95th (m)	-	157	-	21.2	21.2	60.9	1.7	1.7	1	-	838.1	-	

The SIDRA analysis results indicated that the single lane roundabout expansion would function adequately for the existing and 16.5K conditions. The single lane roundabout expansion is expected to be slightly over capacity at the 22.5K population horizon; however, queueing for southbound traffic is quite substantial. It is



recommended that the Town monitors the single lane roundabout prior to the 22.5K population horizon to determine whether a further study is needed.

#### 2.3.4 Signalized Intersection Analysis Results

**Figure 2.6** illustrates the proposed configurations for the signalized intersection and **Table 2.6** summarizes the signalized intersection capacity analysis results for both AM and PM peak periods under the 2024 existing conditions, 16.5K conditions and 22.5K conditions.





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Table 2.6 - Signalized Intersection Analysis Results

					Inter	section	Moven	nents					
Womacks Road & Broadway Ave		EB			WB			NB			SB		Overall
(2024 Existing Conditions)	L	Т	R	L	Т	R	L	Т	R	L	Т	R	Intersection
Intersection / Laning Characteristics	SH	1	SH	SH	1	SH	SH	1	SH	SH	1	SH	
AM Peak Hour													
Volumes (veh/h)	3	347	2	3	155	88	2	2	5	198	0	11	Intersection
Volume/Capacity Ratio (v/c)	_	0.47	_	_	0.34	_	_	0.02	_	_	0.55	_	Delay
Total Delay (s)	_	11.8	_	_	8.5	_	_	8.7	_	_	15.7	_	11.8s
Lane LOS	_	В	_	_	Α	_	_	Α	_	_	В	_	LOS A
Queue Length 95th (m)	_	45	_	_	26.3	_	_	2.4	_	_	26.7	_	20071
PM Peak Hour													
Volumes (veh/h)	9	182	7	15	256	232	3	2	17	129	3	14	Intersection
Volume/Capacity Ratio (v/c)	-	0.21	-	-	0.56	-	_	0.05	-	-	0.43	-	Delay
Total Delay (s)		8.2	_	_	10.4	_	_	8.5	_	_	17.9	_	11.1s
Lane LOS	_	Α	_	_	В	_		Α	_	-	В	_	LOS B
Queue Length 95th (m)	_	22.4	_	_	59.4	_	-	4.4	_	-	26.2	_	LOGB
Queue Length 95th (III)	<u> </u>	22.4		_		section	Movon				20.2		
Womacks Road & Broadway Ave		EB			WB	Section	WIOVEI	NB			SB		Overall
(16.5K Conditions - Adjusted)	L	T	R	L	T	R	L	T	R	L	T	R	Intersection
Intersection / Laning Characteristics	SH	1	SH	SH	1	1	SH	1	SH	1	1	SH	
	311	ı ı	511	311	'		311	'	311	<u>'</u>	'	311	
AM Peak Hour	16	200	5	16	210	228	5	5	EO	600	5	15	Intersection
Volumes (veh/h) Volume/Capacity Ratio (v/c)	16	280			210 0.46		_		58	623	0.02	15	Intersection
. , ,	-	0.59	-	-		0.39		0.23		0.8		-	Delay
Total Delay (s)	-	32.4	-	-	29.9	5.9	-	15.7	-	20.7 C	4.6	-	21.8s
Lane LOS	-	C	-	-	C	A	-	B	-		Α	-	LOS C
Queue Length 95th (m)	-	89.3	-	-	67.1	17.7	-	15.2	-	123.6	3.4	-	
PM Peak Hour		070	_		005	700	_	_	_	454	-	40	1
Volumes (veh/h)	39	278	5	58	335	729	5	5	5	454	5	19	Intersection
Volume/Capacity Ratio (v/c)	-	0.47	-	-	0.6	0.71	-	0.04	-	0.76	0.04	-	Delay
Total Delay (s)	-	17.5	-	-	20.2	5.4	-	28.2	-	26.8	8.1	-	15.6s
Lane LOS	-	В	-	-	С	A	-	C	-	С	Α	-	LOS B
Queue Length 95th (m)	-	75	-	-	97.4	23.2	-	7.9	-	106.3	5.2	-	
Womacks Road & Broadway Ave						section	Moven			1			Overall
(22.5K Conditions)		EB			WB			NB			SB	_	Intersection
	L	Т	R	L	T	R	L	Т	R	L	Т	R	
Intersection / Laning Characteristics	SH	1	SH	SH	1	1	SH	1	SH	1	1	SH	
AM Peak Hour			_				_	_			_		
Volumes (veh/h)	26	228	5	16	244	416	5	5	58	687	5	133	Intersection
Volume/Capacity Ratio (v/c)	-	0.55	-	-	0.55	0.59	-	0.24	-	0.85	0.16	-	Delay
Total Delay (s)	-	33.5	-	-	33.7	6.5	-	16.5	-	23.5	2.1	-	20.6s
Lane LOS	-	С	-	-	С	Α	-	В	-	С	Α	-	LOS C
Queue Length 95th (m)	-	79.8	-	-	80.2	24.4	-	15.6	-	146.2	7.9	-	
PM Peak Hour													
Volumes (veh/h)	115	278	5	58	332	926	5	5	5	902	5	111	Intersection
Volume/Capacity Ratio (v/c)	-	0.83	-	-	0.56	8.0	-	0.08	-	1.42	0.18	-	Delay
Total Delay (s)	-	40.7	-	-	24.5	7.1	-	36.8	-	224.8	4.1	-	86s
Lane LOS	-	D	-	-	С	Α	-	D	-	F	Α	-	LOS F
Queue Length 95th (m)	-	#151.7	-	-	105.3	32.4	-	8.5	-	#313	10.4	-	

<sup># - 95&</sup>lt;sup>th</sup> percentile volume exceeds capacity, queue may be longer.

The SYNCHRO analysis results indicated that for the existing conditions, a shared left-through-right lane would be sufficient for all approaches, the worst LOS is B with a max v/c ratio of 0.55. However, due to the



projected heavy southbound left turn and westbound right turn movements, a minimum of a southbound left turn lane and a westbound right turn lane would be needed. With the added turn lanes, the southbound left turn movement is expected to fail at the 22.5K population horizon with a LOS F and a v/c ratio of 1.42.

The signalized intersection results were reviewed further with the Town. It was determined that due to the poor level of service that a signalized intersection would provide without significant improvements and impacts to surrounding lands, it does not need to be evaluated further. Should this intersection be considered to undergo significant improvements, constructing the ultimate Womacks Road alignment should be considered which proposes to signalize the Womacks Road and Broadway Avenue intersection.

#### 2.4 Traffic Analysis Summary

The existing intersection, as it continues to operate will be hindered by the southbound left turn during the AM peak and the westbound right turn during the PM peak. As the Town continues to grow, the existing intersection could become over capacity as the (approximately) population approaches the 14.5K horizon (assuming the current population is 13K).

Based on the above findings, a single lane roundabout is the most desirable option to improve the Womacks Road and Broadway Avenue intersections level of service. The analysis results show the roundabout functioning adequately as the Town continues to grow, approaching the 22.5K population horizon and at that time, the ultimate buildout of Womacks Road may become a viable option.

### 3 Intersection Figures and Turning Movements

A conceptual figure for each of the signal lane roundabout, the single lane roundabout expansion, and the northwest bulbed corner options have been prepared and are attached to this document. A figure for the signalized intersection option was not prepared due to the results from the section above.

#### 3.1 Northwest Bulbed Corner

While the existing configuration of the Womacks Road and Broadway Avenue intersection exceeds the minimum specification for sight lines as set by the Transportation Association of Canada for the 40km/hr. posted speed of Womacks Road, they can be improved upon. Bulbing the northwest corner of the intersection is considered as an improvement, allowing the Broadway Avenue, north leg stop bar to move approximately 1.1m south of the current stop bar location. The shift of the stop bar farther south does improve southbound vehicle visibility to the east and meets the minimum standard by TAC which notes, the edge of the major road (Womacks Road in this case) to the stop bar being 2.0m or 4.4m (vertex of the clear sight triangle) to the driver's eye in a passenger car. **Figures 3.1A** to **3.1C** appended to this memorandum reflect the northwest corner bulb. The bulb also improves the sight of crossing pedestrians to vehicles across the west intersection leg. There is no pedestrian route proposed on the northeast corner of the intersection mitigating the need for a crosswalk at this time. Should a crosswalk on the north leg be added in the future, the stop bar would need to be moved north. A slight shift of the centerline is also proposed.



Turning movements of vehicles hauling longer trailers have been modeled and reflect minimal tracking into the adjacent lane to turn north onto Broadway Avenue. Turning movements for the WB-21 (semi-transport) design vehicle have also been modelled. **Figure 3.1A** and **3.1B** reflect the design vehicle turning movements.

The footprint of this option would be quite small requiring asphalt and concrete removals, and new concrete sidewalk and curb & gutter to be installed. A shallow utility manhole would have to be slightly adjusted, but otherwise, franchise shallow utilities are unaffected. A RRFB (rectangular rapid flash beacon) would also have to be relocated. There is no deep utility work anticipated to be required. **Figure 3.1C** is reflective of the utility improvements.

### 3.2 Single Lane Roundabout

The single lane roundabout option is representative of a roundabout with only one circulatory lane (no designated turn lanes) with splitters island on each leg, a ~16.0m inner mountable island to accommodate larger turning vehicles and provides an ~25.0m outer diameter. The proposed roundabout size is similar to one constructed on the south side of Red Deer, at the in the intersection of Lantern Street and Liberty Avenue in Gasoline Alley pictured below (from Google Streetview).

As part of the intersection analysis, turning movements for the WB-21 and bus (coach bus) design vehicles were considered. The turning movement figures (3.2A, 3.2B, 3.3A, 3.3B) can be found appended to this memorandum. The bus design vehicle is utilized for all legs and do not track overtop of medians/island. A school bus would maneuver the roundabout in a similar manner. The WB-21 design vehicle was utilized for turning movements on the east and north legs only as it is the Towns designated truck route. In addition, the WB-21 turning movement is shown on the west leg to show that larger trucks can utilize this leg of the intersection as there is commercial land to the west. The WB-21 design vehicle is shown to drive over the medians/islands instead of following the circulatory road to make respective turns due to the driving radius of the design vehicle (13.8m) being larger than the roundabout radius (~11.0m). The WB-21 turning movements, however, do not track into adjacent lanes. Large trucks (WB-21) are not permitted on the south leg due to the constrained geometry within the parking lot.

The proposed size of the roundabout is small enough that no additional land would be required at Broadway Avenue and Womacks Road. Franchise shallow utilities would need to relocate their existing infrastructure, including telecommunications pedestals and streetlights. Deep utility infrastructure adjustments to manholes and valves would also be required as well as catch basin relocations. Utility improvements for this option as shown inf **Figure 3.2C** attached. The roundabout geometry does require sidewalks to be adjusted, but pedestrian routes are still maintained on the west and south legs of the intersection. There is opportunity to include a future pedestrian crossing on the north leg near splitter island with enough space for a sidewalk to allow pedestrian traffic on the east side of Broadway Avenue. To accommodate the sidewalk, back sloping into property would likely be needed to achieve desirable slopes or mitigating disturbance eon private property by installing a retaining wall. It is likely some of the existing fence would have to be removed and reinstalled as well.





Figure 3: Single Lane Roundabout Example

### 3.3 Single Lane Roundabout Expansion

Expanding the single lane roundabout to include a yielding, dedicated westbound right turn lane and a yielding, dedicated northbound right turn lane is also considered. This roundabout configuration and turning movements for a WB-21 design vehicle are reflected in **Figures 3.4A** and **3.4B** appended to this memorandum.

The additions of the yielding dedicated right turn lanes increase the roundabout footprint. In the northeast corner, the roundabout footprint is maintained within the right-of-way but would require back sloping into private property or installation of a retaining wall. It is likely some of the existing fence would have to be removed and reinstalled as well. In the southeast corner, varying widths of the proposed monowalk/asphalt trail allow work to remain in the right of way but would require back sloping into private property. Land acquisition should be provisioned for in respective corners to increase the space behind Town infrastructure.

Franchise shallow utility relocations as part the single lane roundabout phase should also consider locations outside of the expansion footprint to minimize throwaway costs. This should apply to the southwest, northwest, and northeast quadrant of the intersection. The southeast quadrant would require existing overhead power and power poles to be relocated, likely underground. This could be completed as part of the single lane roundabout but has been factored in with the expansion of the south leg. Deep utility work would be required through the likes of catch basin relocations and lead adjustments.

Similar to the single lane roundabout option above, pedestrian crossing would be accommodated on the west and south legs and could be planned for a north leg crossing. On the north leg, there would however be minor adjustment as the curb line thus affecting the sidewalk width.



### 4 Opinion of Probable Cost and Constructability

#### 4.1 Opinion of Probable Cost

For the roundabout and bulbed corner options presented above, an opinion of probable costs has been prepared, reflective of recent pricing from similar projects in Central Alberta. Table 4.1 below provides a high-level summary of each options cost.

Conceptual Cost **Additional Work Outside** Conceptual (Construction incl **Construction Contract** Total Contingency) (Engineer, Land, Franchise) Single Lane Roundabout \$627,288.00 \$952,288.00 \$325,000.00 Roundabout Expansion -\$112,410.00 \$87,000.00 \$199,410.00 Northbound Right Turn Lane Roundabout Expansion -\$166,416.00 \$30,000.00 \$196,416.00 Westbound Right Turn Lane **NW Corner Bulb** \$52,272.00 \$13,000.00 \$65,272.00

Table 4.1 - Conceptual Opinions of Probable Cost

A more detailed breakdown of each options cost can be found appended to the back of this document.

A conceptual opinion of probable for the traffic signals was not prepared; however, a set of traffic signals could cost between \$500K-\$750K.

### 4.2 Constructability

The constructability of the bulbed corner and single lane roundabout would vary substantially which this section considers.

The bulbed corner would be the easiest to construct and could very likely be completed while allowing the intersection to remain operational during construction with minimal detouring or lane closures.

To construct the roundabout, the Womacks Road and Broadway Avenue intersection in its entirety would probably have to be temporarily closed and a temporary detour road constructed, possibly through the Eagle Builders Centre parking lot. Roundabout construction may typically see half the roundabout constructed at a time while allowing traffic to flow through the intersection depending on available space. The Womacks Road and Broadway Avenue intersection is guite constrained which would make



#### **Womacks Road and Broadway Avenue Intersection Assessment**

construction difficult to complete alongside active, two-way traffic through the intersection and could result in an increased construction duration.

Phasing of the single lane roundabout expansion lanes should also be considered as the westbound right turn lane will affect the roundabout geometrics significantly more than the northbound right turn lane. To allow for phasing the expansion lanes, the northbound right turn lane would have to be constructed in phase 1 and the westbound right turn lane in phase 2. The northbound right turn lane can be constructed by simply adjusting the curb line and widening the existing road in the southeast quadrant of the intersection. The westbound right turn lane requires the north leg splitter island to be extended south, the west leg splitter island to be shifted south, the roundabout inner circle to be adjusted in addition the northeast curb line being adjusted. It would be difficult to phase the westbound right turn lane ahead of the northbound right turn lane due to the amount of roundabout geometry affected without constructing both right turn lane options. In both cases, the western half of the roundabout would remain untouched. The costs noted above reflect phase 1 as the northbound right turn lane and phase 2, the westbound right turn lane.

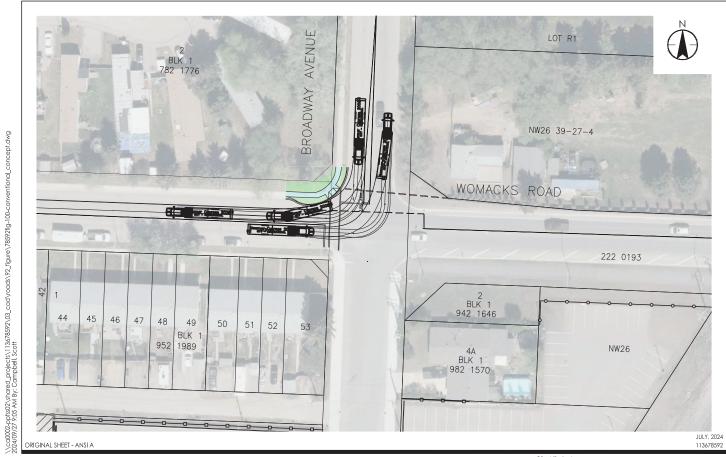
### 5 Closing

The options presented above are both able to improve sight lines at the Womacks Road and Broadway Avenue intersection; however, the roundabout option will also improve the intersections level of service as the Town continues to grow and provides options for expansion.

Should you have any further questions or comments, please feel free to contact us.



# Appendix A Figures and Traffic Analysis Results







PRELIMINARY FOR DISCUSSION PURPOSES ONLY

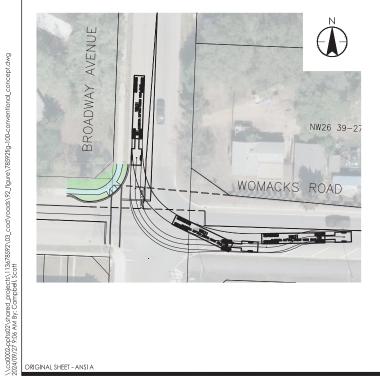
Client/Project

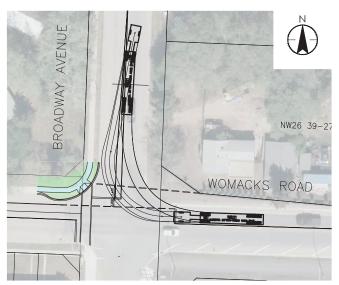
TOWN OF BLACKFALDS
WOMACKS ROAD AND BROADWAY AVENUE

Figure No.

Title

NW BULBOUT CONCEPT TRUCK CAMPER TURNING MOVEMENTS





ORIGINAL SHEET - ANSI A

SEPTEMBER, 2024 113678592



1100 - 4900 50th Street Red Deer AB Canada T4N 1X7 www.stantec.com

22.5 37.5m 

PRELIMINARY FOR DISCUSSION PURPOSES ONLY

Client/Project

TOWN OF BLACKFALDS WOMACKS ROAD AND BROADWAY AVENUE

Figure No 3.1B

Title

NW BULBOUT CONCEPT WB-21 TURNING MOVEMENTS





PRELIMINARY FOR DISCUSSION PURPOSES ONLY

Client/Project

TOWN OF BLACKFALDS
WOMACKS ROAD AND BROADWAY AVENUE

Figure No.

Title NV

NW BULBOUT CONCEPT UTILITIES IMPROVEMENTS





PRELIMINARY FOR DISCUSSION PURPOSES ONLY

Client/Project

TOWN OF BLACKFALDS
WOMACKS ROAD AND BROADWAY AVENUE

Figure No. 3.2A

Title

ROUNDABOUT BUS TURNING MOVEMENTS





PRELIMINARY FOR DISCUSSION PURPOSES ONLY

Client/Project

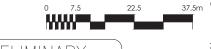
TOWN OF BLACKFALDS
WOMACKS ROAD AND BROADWAY AVENUE

Figure No. 3.2B

Title

ROUNDABOUT BUS TURNING MOVEMENTS





PRELIMINARY FOR DISCUSSION PURPOSES ONLY

Client/Project

TOWN OF BLACKFALDS
WOMACKS ROAD AND BROADWAY AVENUE

Figure No.
3.2C

ROUNDABOUT UTILITY IMPROVEMENTS





PRELIMINARY FOR DISCUSSION PURPOSES ONLY

Client/Project

TOWN OF BLACKFALDS
WOMACKS ROAD AND BROADWAY AVENUE

Figure No. 3.3A

Title

ROUNDABOUT WB-21 TURNING MOVEMENT





PRELIMINARY FOR DISCUSSION PURPOSES ONLY

Client/Project

TOWN OF BLACKFALDS
WOMACKS ROAD AND BROADWAY AVENUE

Figure No.
3.4A
Title

ROUNDABOUT WITH RIGHT TURNS WB-21 TURNING MOVEMENTS





PRELIMINARY FOR DISCUSSION PURPOSES ONLY

Client/Project

TOWN OF BLACKFALDS
WOMACKS ROAD AND BROADWAY AVENUE

Figure No.
3.4B

Title

ROUNDABOUT WITH RIGHT TURNS UTILITY IMPROVEMENTS

## Town of Blackfalds - Womacks Road and Broadway Avenue Intersection Assessment Schedule 1 - Northwest Corner Bulbout

Part 1: General Requirements           1.1         Mobilization and Demobilization         L.S.         1         \$4,000.00         \$4,000.00           1.2         Traffic Accommodation Strategy         L.S.         1         \$1,000.00         \$1,000.           1.3         Hydrovac (Provisional)         P.C.S         1         \$5,000.00         \$5,000.           Subtotal Part 1:         \$10,000.           Part 2: Site Work, Demolition, and Removals           2.1         Sawcut, Remove, and Dispose Existing Asphalt         \$9, m         20         \$5.00         \$100.           2.2         Sawcut, Remove, and Dispose Existing Curb and Gutter and/or Pinned Curb including granular base         lin. m         5         \$20.00         \$100.           2.3         Sawcut, Remove, and Dispose of Existing Concrete Sidewalki/Monowalki/Apron including granular base         \$9, m         30         \$10.00         \$300.           Subtotal Part 2:         \$500.         \$500.         \$10.00         \$300.         \$300.           Part 3:         Concrete Work         \$10.00         \$3.960.         \$3.960.         \$3.960.           3.2         1.5m Separate Concrete Sidewalk including granular base         lin. m         12         \$200.00         \$2.400.
1.2       Traffic Accommodation Strategy       L.S.       1       \$1,000.00       \$1,000.         1.3       Hydrovac (Provisional)       P.C.S       1       \$5,000.00       \$5,000.         Subtotal Part 1:       \$10,000.         Part 2: Site Work, Demolition, and Removals         2.1       Sawcut, Remove, and Dispose Existing Asphalt       sq. m       20       \$5.00       \$100.         2.2       Sawcut, Remove, and Dispose Existing Curb and Gutter and/or Pinned Curb including granular base       lin. m       5       \$20.00       \$100.         2.3       Sawcut, Remove, and Dispose of Existing Concrete Sidewalk/Monowalk/Apron including granular base       sq. m       30       \$10.00       \$300.         Subtotal Part 2:       \$500.         Part 3: Concrete Work         3.1       250mm Standard, Reversed, Depressed Curb & Gutter including granular base       lin. m       22       \$180.00       \$3,960.
1.3 Hydrovac (Provisional) Subtotal Part 1:  Part 2: Site Work, Demolition, and Removals  2.1 Sawcut, Remove, and Dispose Existing Asphalt  2.2 Sawcut, Remove, and Dispose Existing Curb and Gutter and/or Pinned Curb including granular base  2.3 Sawcut, Remove, and Dispose of Existing Concrete Sidewalk/Monowalk/Apron including granular base  Subtotal Part 2:  Part 3: Concrete Work  3.1 250mm Standard, Reversed, Depressed Curb & Gutter including granular base  lin. m  22 \$180.00 \$3.960.
Subtotal Part 1: \$10,000.  Part 2: Site Work, Demolition, and Removals  2.1 Sawcut, Remove, and Dispose Existing Asphalt sq. m 20 \$5.00 \$100.  2.2 Sawcut, Remove, and Dispose Existing Curb and Gutter and/or Pinned Curb including granular base lin. m 5 \$20.00 \$100.  2.3 Sawcut, Remove, and Dispose of Existing Concrete Sidewalk/Monowalk/Apron including granular base sq. m 30 \$10.00 \$300.  Subtotal Part 2: \$500.  Part 3: Concrete Work  3.1 250mm Standard, Reversed, Depressed Curb & Gutter including granular base lin. m 22 \$180.00 \$3.960.
Part 2: Site Work, Demolition, and Removals  2.1 Sawcut, Remove, and Dispose Existing Asphalt sq. m 20 \$5.00 \$100.  2.2 Sawcut, Remove, and Dispose Existing Curb and Gutter and/or Pinned Curb including granular base lin. m 5 \$20.00 \$100.  2.3 Sawcut, Remove, and Dispose of Existing Concrete Sidewalk/Monowalk/Apron including granular base sq. m 30 \$10.00 \$300.  Subtotal Part 2: \$500.  Part 3: Concrete Work  3.1 250mm Standard, Reversed, Depressed Curb & Gutter including granular base lin. m 22 \$180.00 \$3,960.
2.1 Sawcut, Remove, and Dispose Existing Asphalt sq. m 20 \$5.00 \$100.  2.2 Sawcut, Remove, and Dispose Existing Curb and Gutter and/or Pinned Curb including granular base lin. m 5 \$20.00 \$100.  2.3 Sawcut, Remove, and Dispose of Existing Concrete Sidewalk/Monowalk/Apron including granular base sq. m 30 \$10.00 \$300.  Subtotal Part 2: \$500.  Part 3: Concrete Work  3.1 250mm Standard, Reversed, Depressed Curb & Gutter including granular base lin. m 22 \$180.00 \$3,960.
2.2 Sawcut, Remove, and Dispose Existing Curb and Gutter and/or Pinned Curb including granular base lin. m 5 \$20.00 \$100.  2.3 Sawcut, Remove, and Dispose of Existing Concrete Sidewalk/Monowalk/Apron including granular base sq. m 30 \$10.00 \$300.  Subtotal Part 2: \$500.  Part 3: Concrete Work  3.1 250mm Standard, Reversed, Depressed Curb & Gutter including granular base lin. m 22 \$180.00 \$3,960.
including granular base lin. m 5 \$20.00 \$100.  2.3 Sawcut, Remove, and Dispose of Existing Concrete Sidewalk/Monowalk/Apron including granular base sq. m 30 \$10.00 \$300.  Subtotal Part 2: \$500.  Part 3: Concrete Work  3.1 250mm Standard, Reversed, Depressed Curb & Gutter including granular base lin. m 22 \$180.00 \$3,960.
including granular base sq. m 30 \$10.00 \$300.  Subtotal Part 2: \$500.  Part 3: Concrete Work  3.1 250mm Standard, Reversed, Depressed Curb & Gutter including granular base lin. m 22 \$180.00 \$3,960.
Part 3: Concrete Work  3.1 250mm Standard, Reversed, Depressed Curb & Gutter including granular base lin. m 22 \$180.00 \$3,960.
3.1 250mm Standard, Reversed, Depressed Curb & Gutter including granular base lin. m 22 \$180.00 \$3,960.
lin. m 22 <u>\$180.00</u> <u>\$3,960.</u>
3.2 1.5m Separate Concrete Sidewalk including granular base lin. m 12 \$200.00 \$2,400.
3.3 Monolithic Concrete Sidewalk, width varies up to 3.8m including granular base
lin. m 10 <u>\$350.00</u> <u>\$3,500.</u>
3.4 Curb Ramps including granular base (Paraplegic) each 2 \$1,100.00 \$2,200.
Subtotal Part 3: \$12,060.
Part 4: Roadway Excavation, Subgrade, Sub Base and Base Preparation
4.1 Waste Excavation and Dispose Off-Site (Provisional) cu. m 50 \$20.00 \$1,000.
Subtotal Part 4: \$1,000.
Part 5: Pavement Markings and Signage
5.1 Painted Pavement Markings L.S. 1 <u>\$2,500.00</u> <u>\$2,500.0</u>
5.2 Signage L.S. 1 <u>\$2,500.00</u> <u>\$2,500.0</u>
5.3 RRFB Relocation L.S. 1 \$10,000.00 \$10,000.
Subtotal Part 5: \$15,000.
Part 6: Landscaping and Fine Grading
6.1 Landscaping and Fine Grading L.S. 1 \$5,000.00 \$5,000.
Subtotal Part 6: \$5,000.

## Town of Blackfalds - Womacks Road and Broadway Avenue Intersection Assessment Schedule 1 - Northwest Corner Bulbout

Item	Item of Work	Unit	Estimated Quantity	Unit Price	Total
Schedu	le 1 - Northwest Corner Bulbout Summary				
	Part 1: General Requirements				 \$10,000.00
	Part 2: Site Work, Demolition, and Removals				 \$500.00
	Part 3: Concrete Work				 \$12,060.00
	Part 4: Roadway Excavation, Subgrade, Sub Base and Base Preparation				 \$1,000.00
	Part 5: Pavement Markings and Signage				\$15,000.00
	Part 6: Landscaping and Fine Grading				 \$5,000.00
	SUBTOTAL				\$43,560.00
	CONTINGENCY			20%	 \$8,712.00
	SUBTOTAL INCL. CONTINGENCY				 \$52,272.00
	Additional Work Outside Construction Contract				
	Professional Services (Engineering) (Rounded to nearest \$1,000)			15%	\$ 8,000.00
	Shallow Utility Relocations - Estimate Only				\$ 5,000.00
	ESTIMATED CONSTRUCTION CONTRACT PLUS ADDITIONAL WORK				\$ 65,272.00

# Town of Blackfalds - Womacks Road and Broadway Avenue Intersection Assessment Schedule 2 - Single Lane Roundabout Concept

Item	Item of Work	Unit	Estimated Quantity	Unit Price	Total
Part 1:	General Requirements				
1.1	Mobilization and Demobilization	L.S.	1 _	\$39,000.00	\$39,000.00
1.2	Traffic Accommodation Strategy and Detour Road	L.S.	1 _	\$59,000.00	\$59,000.00
1.3	Hydrovac (Provisional)	P.C.S	1 _	\$35,000.00	\$35,000.00
	Subtotal Part 1:				\$133,000.00
Part 2:	Site Work, Demolition, and Removals				
2.1	Sawcut, Remove, and Dispose Existing Asphalt	sq. m	1,866	\$5.00	\$9,330.00
2.2	Asphalt Concrete Pavement Milling - 50mm Depth	sq. m	100	\$10.00	\$1,000.00
2.3	Sawcut, Remove, and Dispose Existing Curb and Gutter and/or Pinned Curb including granular base	lin. m	160 <u> </u>	\$20.00	\$3,200.00
2.4	Sawcut, Remove, and Dispose of Existing Concrete Sidewalk/Monowalk/Apron including granular base	sq. m	330	\$10.00	\$3,300.00
2.5	Remove and Dispose Existing Storm Sewer Catch Basin	each	2	\$500.00	\$1,000.00
	Subtotal Part 2:				\$17,830.00
Part 3:	Storm Sewer				
3.1	Catch Basin Lead - Trench excavation, pipe supply and install, bedding, backfill and compaction 250mm Pipe	lin. m	20	\$370.00	\$7,400.00
3.2	Supply and Install Catch Basin	each	2	\$5,000.00	\$10,000.00
3.3	Replace unsuitable material and replace with 40 mm screened rock backfill material (provisional)	cu. m	2	\$60.00	\$120.00
3.4	Adjust Storm Manhole/Catch Basin Manhole RIM Elevation including remove and drop existing barrels, and grade ring adjustments	each	1 _	\$465.00	\$465.00
	Subtotal Part 3:				\$17,985.00
Part 4:	Sanitary Sewer				
4.1	Adjust Sanitary Manhole Rim Elevation including remove and drop existing barrels, and grade ring adjustments	each	2	\$475.00	\$950.00
	Subtotal Part 4:				\$950.00
Part 5:	Water Main				
5.1	Adjust Water Valve Rim Elevation including valve box replacement and rod adjustment	each	1 _	\$800.00	\$800.00
	Subtotal Part 5:				\$800.00
Part 6:	Concrete Work				
6.1	250mm Standard, Reversed, Depressed, Reinforced Curb & Gutter excluding granular base	lin. m	305	\$180.00	\$54,900.00
6.2	1.5m Separate Concrete Sidewalk including granular base	lin. m	55	\$200.00	\$11,000.00
6.3	Monolithic Concrete Sidewalk, width varies up to 3.8m excluding granular base	lin. m	85 _	\$350.00	\$29,750.00
6.4	Curb Ramps including granular base (Paraplegic)	each	4	\$1,100.00	\$4,400.00
6.5	Reinforced Concrete Median Cap excluding granular base	sq. m	240	\$180.00	\$43,200.00

# Town of Blackfalds - Womacks Road and Broadway Avenue Intersection Assessment Schedule 2 - Single Lane Roundabout Concept

Item	Item of Work	Unit	Estimated Quantity	Unit Price	Total
6.6	Reinforced Concrete Apron, 150mm Depth with 15M Reinforcement	sq. m	45	\$500.00	\$22,500.00
	Subtotal Part 6:				\$165,750.00
Part 7:	Roadway Excavation, Subgrade, Sub Base and Base Preparation				
7.1	Waste Excavation and Dispose Off-Site (Provisional)	cu. m	1,255	\$20.00	\$25,100.00
7.2	Woven Geotextile	sq. m	2,280	\$3.00	\$6,840.00
7.3	Des. 2 Class 25 Granular Base, 200mm depth	sq.m	2,280	\$11.00	\$25,080.00
7.4	75mm Minus Granular Subbase, 350mm Depth	sq. m	2,280	\$16.00	\$36,480.00
	Subtotal Part 7:				\$93,500.00
Part 8:	Asphaltic Concrete Paving				
8.1	Asphalt Top/Overlay Lift, 50mm Type 5b.(3)	sq. m	1,680	\$15.00	\$25,200.00
8.2	Asphalt Bottom Lift, 75mm Type 5b.(2)	sq. m	1,580	\$20.00	\$31,600.00
8.3	Asphalt Trail, 75mm Type 5b(1), 3.00m wide including granular base	lin. m	35 <u> </u>	\$175.00	\$6,125.00
	Subtotal Part 8:				\$62,925.00
Part 9:	Pavement Markings and Signage				
9.1	Painted Pavement Markings	L.S.	1 _	\$10,000.00	\$10,000.00
9.2	Signage	L.S.	1 _	\$10,000.00	\$10,000.00
	Subtotal Part 9:				\$20,000.00
Part 10:	Landscaping and Fine Grading				
10.1	Landscaping and Fine Grading	L.S.	1 _	\$10,000.00	\$10,000.00
	Subtotal Part 10:				\$10,000.00

# Town of Blackfalds - Womacks Road and Broadway Avenue Intersection Assessment Schedule 2 - Single Lane Roundabout Concept

Item	Item of Work	Unit	Estimated Quantity	Unit Price	Total
Schedule 2	- Single Lane Roundabout Concept Summary				
Pa	art 1: General Requirements				 \$133,000.00
Pa	art 2: Site Work, Demolition, and Removals				 \$17,830.00
Pa	art 3: Storm Sewer				 \$17,985.00
Pa	art 4: Sanitary Sewer				 \$950.00
Pa	art 5: Water Main				 \$800.00
Pa	art 6: Concrete Work				 \$165,750.00
Pa	art 7: Roadway Excavation, Subgrade, Sub Base and Base Preparation				 \$93,500.00
Pa	art 8: Asphaltic Concrete Paving				 \$62,925.00
Pa	art 9: Pavement Markings and Signage				 \$20,000.00
Pa	art 10: Landscaping and Fine Grading				 \$10,000.00
SI	UBTOTAL				\$522,740.00
CC	ONTINGENCY			20%	 \$104,548.00
SUI	BTOTAL INCL. CONTINGENCY				\$627,288.00
Add	ditional Work Outside Construction Contract				
Pr	rofessional Services (Engineering) (Rounded to nearest \$1,000)			15%	\$ 95,000.00
Sh	nallow Utility Streetlights - Estimate Only				\$ 150,000.00
Sh	nallow Utility Relocations - Estimate Only				\$ 80,000.00
ES <sup>-</sup>	TIMATED CONSTRUCTION CONTRACT PLUS ADDITIONAL WORK				\$ 952,288.00

## Town of Blackfalds - Womacks Road and Broadway Ave Roundabout Concept Schedule 2A - Northbound Right Turn Lane Addition

Costs have been derived assuming assuming this lane addition would be completed as the first phase.

	Item	Item of Work	Unit	Estimated Quantity	Unit Price	Total
Traffic Accommodation Strategy	Part 1:	General Requirements				
Hydrovac (Provisional)   P.C.S   1   \$10,000,00   \$10,000,00   \$10,000,00     Subtotal Part 1:	1.1	Mobilization and Demobilization	L.S.	1 _	\$8,000.00	\$8,000.00
Subtotal Part 1:   Savout, Remove, and Dispose Existing Asphalt/Trail   sq. m   105   \$5.00   \$520.00	1.2	Traffic Accommodation Strategy	L.S.	1 _	\$4,000.00	\$4,000.00
Part 2:         Site Work, Demolition, and Removals           2.1         Sawcut, Remove, and Dispose Existing Asphalt/Trail         sq.m         106         \$5.00         \$525.00           2.2         Asphalt Concrete Pavement Milling - Somm Depth         sq.m         70         \$10.00         \$700.00           2.3         Sawcut, Remove, and Dispose Existing Cubr and Gutter and/or Prinned Curb including granular base         ilin. m         70         \$20.00         \$1,400.00           2.4         Sawcut, Remove, and Dispose Existing Concrete Sidewalk/Monowalk/Apron including granular base         sq. m         125         \$10.00         \$1,260.00           2.5         Remove and Dispose Existing Storm Sewer Catch Basin         each         1         \$500.00         \$500.00           2.5         Remove and Dispose Existing Storm Sewer Catch Basin         each         1         \$500.00         \$500.00           5.5         Remove and Dispose Existing Storm Sewer Catch Basin         each         1         \$500.00         \$500.00           5.5         Remove and Dispose Existing Storm Sewer Catch Basin         each         1         \$5.000.00         \$1.850.00           5.2         Storm Sewer         \$300.00         \$1.000.00         \$1.000.00         \$1.500.00         \$1.500.00         \$1.500.00         \$1.500.00<	1.3	Hydrovac (Provisional)	P.C.S	1 _	\$10,000.00	\$10,000.00
2.1         Sawout, Remove, and Dispose Existing Asphalt/Trail         sq. m         105         \$5.00         \$520.00           2.2         Asphalt Concrete Pervenent Milling - 50mm Depth         sq. m         70         \$10.00         \$700.00           2.3         Sawout, Remove, and Dispose Existing Concrete Sidewalk/Monovalk/Apron including granular base         lin. m         70         \$20.00         \$1.400.00           2.4         Sawout, Remove, and Dispose Existing Concrete Sidewalk/Monovalk/Apron including granular base         sq. m         125         \$10.00         \$1.250.00           2.5         Remove and Dispose Existing Sform Sewer Catch Basin         each         1         \$500.00         \$500.00           2.5         Remove and Dispose Existing Sform Sewer Catch Basin         each         1         \$500.00         \$500.00           2.5         Remove and Dispose Existing Concrete Sidewalk Monovalk/Apron including granular base         lin. m         1         \$500.00         \$500.00           2.5         Remove and Dispose Existing Concrete Sidewalk including granular base         lin. m         5         \$370.00         \$1.850.00           3.1         Storm Sawer         Storm Sawer         \$1.000.00         \$12.00         \$12.00           3.2         Suphy and Install Catch Basin         each Trench exception from the part		Subtotal Part 1:				\$22,000.00
Asphalt Concrete Pavement Milling - 50mm Depth   sq. m   70   \$10.00   \$700.00	Part 2:	Site Work, Demolition, and Removals				
Sawout, Remove, and Dispose Existing Curb and Gulter and/or Pinned Curb including granular base   lin. m   70   \$20.00   \$1.400.00	2.1	Sawcut, Remove, and Dispose Existing Asphalt/Trail	sq. m	105	\$5.00	\$525.00
Including granular base   Inc. m   70   \$20.00   \$1,400.00	2.2	Asphalt Concrete Pavement Milling - 50mm Depth	sq. m	70	\$10.00	\$700.00
Including granular base   sq. m   125   \$10.00   \$1250.00	2.3		lin. m	70 <u> </u>	\$20.00	\$1,400.00
Subtotal Part 2:         \$4,375.00           Part 3:         Storm Sewer           3.1         Catch Basin Lead - Trench excavation, pipe supply and install, bedding, backfill and compaction 250mm Pipe         lin. m         5         \$370.00         \$1,850.00           3.2         Supply and Install Catch Basin         each         1         \$5,000.00         \$5,000.00           3.2         Replace unsuitable material and replace with 40 mm screened rock backfill material (provisional)         ou. m         2         \$60.00         \$12,000.00           3.2         Replace unsuitable material and replace with 40 mm screened rock backfill material (provisional)         ou. m         2         \$60.00         \$12,000.00           3.2         Subtotal Part 3:         ***********************************	2.4		sq. m	125	\$10.00	\$1,250.00
Part 3:         Storm Sewer           3.1         Catch Basin Lead - Trench excavation, pipe supply and install, bedding, backfill and compaction 250mm Pipe         lin. m         5         \$370.00         \$1,860.00           3.2         Supply and Install Catch Basin         each         1         \$5,000.00         \$5,000.00           3.3         Replace unsuitable material and replace with 40 mm screened rock backfill material (provisional)         cu. m         2         \$60.00         \$120.00           3.0         Subtotal Part 3:         Unit of the Work         \$12,860.00         \$12,860.00         \$12,860.00         \$0.00	2.5	Remove and Dispose Existing Storm Sewer Catch Basin	each	1 _	\$500.00	\$500.00
Catch Basin Lead - Trench excavation, pipe supply and install, bedding, backfill and compaction 250mm Pipe   lin. m   5   \$370.00   \$1,850.00		Subtotal Part 2:				\$4,375.00
Supply and Install Catch Basin   each   1   \$5,000.00   \$5,000.00	Part 3:	Storm Sewer				
Replace unsuitable material and replace with 40 mm screened rock backfill material (provisional)   cu. m   2   \$60.00   \$120.00	3.1		lin. m	5	\$370.00	\$1,850.00
Material (provisional)   Cu. m   2   \$60.00   \$120.00     Subtotal Part 3:   Subtotal Part 3:   Se6.970.00     Part 6:   Concrete Work   Concrete Sidewalk including granular base   Iin. m   72   \$180.00   \$12,960.00     6.2   1.5m Separate Concrete Sidewalk including granular base   Iin. m   10   \$250.00   \$2,500.00     6.3   Monolithic Concrete Sidewalk, excluding granular base   Iin. m   10   \$250.00   \$2,500.00     6.4   Curb Ramps including granular base (Paraplegic)   each   0   \$11,000.00   \$0.00     6.5   Reinforced Concrete Median Cap excluding granular base   sq. m   0   \$180.00   \$0.00     6.6   Reinforced Concrete Apron, 150mm Depth with 15M Reinforcement   sq. m   0   \$500.00   \$0.00     Subtotal Part 6:   \$15,460.00     Part 7:   Roadway Excavation, Subgrade, Sub Base and Base Preparation   Cu. m   150   \$20.00   \$3,000.00     7.2   Woven Geotextile   sq. m   275   \$3.00   \$825.00     7.3   Des. 2 Class 25 Granular Base, 200mm depth   sq. m   275   \$11.00   \$3,025.00     7.4   75mm Minus Granular Subbase, 350mm Depth   sq. m   275   \$11.00   \$3,025.00     8.4,400.00   \$4,400.00   \$4,400.00   \$4,400.00   \$4,400.00     7.5   Sin Minus Granular Subbase, 350mm Depth   sq. m   275   \$11.00   \$3,025.00     8.5   \$4,400.00	3.2	Supply and Install Catch Basin	each	1 _	\$5,000.00	\$5,000.00
Part 6:         Concrete Work           6.1         250mm Standard, Reversed, Depressed, Reinforced Curb & Gutter excluding granular base         lin. m         72         \$180.00         \$12,960.00           6.2         1.5m Separate Concrete Sidewalk including granular base         lin. m         0         \$200.00         \$0.00           6.3         Monolithic Concrete Sidewalk, excluding granular base         lin. m         10         \$250.00         \$2,500.00           6.4         Curb Ramps including granular base (Paraplegic)         each         0         \$1,100.00         \$0.00           6.5         Reinforced Concrete Median Cap excluding granular base         \$q. m         0         \$180.00         \$0.00           6.6         Reinforced Concrete Apron, 150mm Depth with 15M Reinforcement         \$q. m         0         \$500.00         \$0.00           Part 7:         Roadway Excavation, Subgrade, Sub Base and Base Preparation           7.1         Waste Excavation and Dispose Off-Site (Provisional)         cu. m         150         \$20.00         \$3,000.00           7.2         Woven Geotextile         \$q. m         275         \$3.00         \$825.00           7.3         Des. 2 Class 25 Granular Base, 200mm depth         \$q. m         275         \$11.00         \$3	3.3	·	cu. m	2 _	\$60.00	\$120.00
250mm Standard, Reversed, Depressed, Reinforced Curb & Gutter excluding granular base   Iin. m   72   \$180.00   \$12,960.00		Subtotal Part 3:				\$6,970.00
Sepandiar base   Sepa	Part 6:	Concrete Work				
6.3       Monolithic Concrete Sidewalk, excluding granular base       lin. m       10       \$250.00       \$2,500.00         6.4       Curb Ramps including granular base (Paraplegic)       each       0       \$1,100.00       \$0.00         6.5       Reinforced Concrete Median Cap excluding granular base       sq. m       0       \$180.00       \$0.00         6.6       Reinforced Concrete Apron, 150mm Depth with 15M Reinforcement       sq. m       0       \$500.00       \$0.00         Subtotal Part 6:       \$15,460.00         Part 7: Roadway Excavation, Subgrade, Sub Base and Base Preparation         7.1       Waste Excavation and Dispose Off-Site (Provisional)       cu. m       150       \$20.00       \$3,000.00         7.2       Woven Geotextile       sq. m       275       \$3.00       \$825.00         7.3       Des. 2 Class 25 Granular Base, 200mm depth       sq. m       275       \$11.00       \$3,025.00         7.4       75mm Minus Granular Subbase, 350mm Depth       sq. m       275       \$16.00       \$4,400.00	6.1		lin. m	72 <u> </u>	\$180.00	\$12,960.00
6.4       Curb Ramps including granular base (Paraplegic)       each       0       \$1,100.00       \$0.00         6.5       Reinforced Concrete Median Cap excluding granular base       sq. m       0       \$180.00       \$0.00         6.6       Reinforced Concrete Apron, 150mm Depth with 15M Reinforcement       sq. m       0       \$500.00       \$0.00         Subtotal Part 6:       \$15,460.00         Part 7: Roadway Excavation, Subgrade, Sub Base and Base Preparation         7.1       Waste Excavation and Dispose Off-Site (Provisional)       cu. m       150       \$20.00       \$3,000.00         7.2       Woven Geotextile       sq. m       275       \$3.00       \$825.00         7.3       Des. 2 Class 25 Granular Base, 200mm depth       sq. m       275       \$11.00       \$3,025.00         7.4       75mm Minus Granular Subbase, 350mm Depth       sq. m       275       \$16.00       \$4,400.00	6.2	1.5m Separate Concrete Sidewalk including granular base	lin. m	0 _	\$200.00	\$0.00
6.5       Reinforced Concrete Median Cap excluding granular base       sq. m       0       \$180.00       \$0.00         6.6       Reinforced Concrete Apron, 150mm Depth with 15M Reinforcement       sq. m       0       \$500.00       \$0.00         Subtotal Part 6:       \$15,460.00         Part 7: Roadway Excavation, Subgrade, Sub Base and Base Preparation         7.1       Waste Excavation and Dispose Off-Site (Provisional)       cu. m       150       \$20.00       \$3,000.00         7.2       Woven Geotextile       sq. m       275       \$3.00       \$825.00         7.3       Des. 2 Class 25 Granular Base, 200mm depth       sq. m       275       \$11.00       \$3,025.00         7.4       75mm Minus Granular Subbase, 350mm Depth       sq. m       275       \$16.00       \$4,400.00	6.3	Monolithic Concrete Sidewalk, excluding granular base	lin. m	10	\$250.00	\$2,500.00
6.6       Reinforced Concrete Apron, 150mm Depth with 15M Reinforcement       sq. m       0       \$500.00       \$0.00         Subtotal Part 6:       \$15,460.00         Part 7: Roadway Excavation, Subgrade, Sub Base and Base Preparation         7.1       Waste Excavation and Dispose Off-Site (Provisional)       cu. m       150       \$20.00       \$3,000.00         7.2       Woven Geotextile       sq. m       275       \$3.00       \$825.00         7.3       Des. 2 Class 25 Granular Base, 200mm depth       sq. m       275       \$11.00       \$3,025.00         7.4       75mm Minus Granular Subbase, 350mm Depth       sq. m       275       \$16.00       \$4,400.00	6.4	Curb Ramps including granular base (Paraplegic)	each	0 _	\$1,100.00	\$0.00
Subtotal Part 6:         \$15,460.00           Part 7: Roadway Excavation, Subgrade, Sub Base and Base Preparation           7.1         Waste Excavation and Dispose Off-Site (Provisional)         cu. m         150         \$20.00         \$3,000.00           7.2         Woven Geotextile         sq. m         275         \$3.00         \$825.00           7.3         Des. 2 Class 25 Granular Base, 200mm depth         sq. m         275         \$11.00         \$3,025.00           7.4         75mm Minus Granular Subbase, 350mm Depth         sq. m         275         \$16.00         \$4,400.00	6.5	Reinforced Concrete Median Cap excluding granular base	sq. m	0 _	\$180.00	\$0.00
Part 7: Roadway Excavation, Subgrade, Sub Base and Base Preparation           7.1         Waste Excavation and Dispose Off-Site (Provisional)         cu. m         150         \$20.00         \$3,000.00           7.2         Woven Geotextile         sq. m         275         \$3.00         \$825.00           7.3         Des. 2 Class 25 Granular Base, 200mm depth         sq. m         275         \$11.00         \$3,025.00           7.4         75mm Minus Granular Subbase, 350mm Depth         sq. m         275         \$16.00         \$4,400.00	6.6	Reinforced Concrete Apron, 150mm Depth with 15M Reinforcement	sq. m	0 _	\$500.00	\$0.00
7.1       Waste Excavation and Dispose Off-Site (Provisional)       cu. m       150       \$20.00       \$3,000.00         7.2       Woven Geotextile       sq. m       275       \$3.00       \$825.00         7.3       Des. 2 Class 25 Granular Base, 200mm depth       sq. m       275       \$11.00       \$3,025.00         7.4       75mm Minus Granular Subbase, 350mm Depth       sq. m       275       \$16.00       \$4,400.00		Subtotal Part 6:				\$15,460.00
7.2         Woven Geotextile         sq. m         275         \$3.00         \$825.00           7.3         Des. 2 Class 25 Granular Base, 200mm depth         sq. m         275         \$11.00         \$3,025.00           7.4         75mm Minus Granular Subbase, 350mm Depth         sq. m         275         \$16.00         \$4,400.00	Part 7:	Roadway Excavation, Subgrade, Sub Base and Base Preparation				
7.3       Des. 2 Class 25 Granular Base, 200mm depth       sq.m       275       \$11.00       \$3,025.00         7.4       75mm Minus Granular Subbase, 350mm Depth       sq. m       275       \$16.00       \$4,400.00	7.1	Waste Excavation and Dispose Off-Site (Provisional)	cu. m	150	\$20.00	\$3,000.00
7.4 75mm Minus Granular Subbase, 350mm Depth sq. m 275 \$16.00 \$4,400.00	7.2	Woven Geotextile	sq. m	275	\$3.00	\$825.00
	7.3	Des. 2 Class 25 Granular Base, 200mm depth	sq.m	275	\$11.00	\$3,025.00
Subtotal Part 7: \$11,250.00	7.4	75mm Minus Granular Subbase, 350mm Depth	sq. m	275	\$16.00	\$4,400.00
		Subtotal Part 7:				\$11,250.00

## Town of Blackfalds - Womacks Road and Broadway Ave Roundabout Concept Schedule 2A - Northbound Right Turn Lane Addition

Costs have been derived assuming assuming this lane addition would be completed as the first phase.

Item	Item of Work	Unit	Estimated Quantity	Unit Price		Total
Part 8:	Asphaltic Concrete Paving					
8.1	Asphalt Top/Overlay Lift, 50mm Type 5b.(3)	sq. m	262	\$15.00		\$3,930.00
8.2	Asphalt Bottom Lift, 75mm Type 5b.(2)	sq. m	192	\$20.00		\$3,840.00
8.3	Asphalt Trail, 75mm Type 5b(1), 3.00m wide including granular base	lin. m	62	\$175.00		\$10,850.00
	Subtotal Part 8:					\$18,620.00
Part 9:	Pavement Markings and Signage					
9.1	Painted Pavement Markings	L.S.	1 _	\$5,000.00		\$5,000.00
9.2	Signage	L.S.	1 _	\$5,000.00		\$5,000.00
	Subtotal Part 9:					\$10,000.00
Part 10:	Landscaping and Fine Grading					
10.1	Landscaping and Fine Grading	L.S.	1 _	\$5,000.00		\$5,000.00
	Subtotal Part 10:					\$5,000.00
Schedu	ıle 2A - Northbound Right Turn Lane Addition Summary					
	Part 1: General Requirements					\$22,000.00
	Part 2: Site Work, Demolition, and Removals					\$4,375.00
	Part 3: Storm Sewer					\$6,970.00
	Part 6: Concrete Work					\$15,460.00
	Part 7: Roadway Excavation, Subgrade, Sub Base and Base Preparation				-	\$11,250.00
	Part 8: Asphaltic Concrete Paving				-	\$18,620.00
	Part 9: Pavement Markings and Signage				-	\$10,000.00
	Part 10: Landscaping and Fine Grading				-	\$5,000.00
	SUBTOTAL					\$93,675.00
	CONTINGENCY			20%		\$18,735.00
	SUBTOTAL INCL. CONTINGENCY					\$112,410.00
	Additional Work Outside Construction Contract					
	Professional Services (Engineering) (Rounded to nearest \$1,000)			15%	\$	17,000.00
	Land Acquisition				\$	20,000.00
	Shallow Utility Relocations - Estimate Only				\$	50,000.00
	ESTIMATED CONSTRUCTION CONTRACT PLUS ADDITIONAL WORK				\$	199,410.00

### Town of Blackfalds - Womacks Road and Broadway Ave Roundabout Concept Schedule 2B - Westbound Right Turn Lane Addition Costs have been derived assuming assuming this lane addition would be completed as the second phase.

Item	Item of Work	Unit	Estimated Quantity	Unit Price	Total
Part 1:	General Requirements				
1.1	Mobilization and Demobilization	L.S.	1 _	\$22,000.00	\$22,000.00
1.2	Traffic Accommodation Strategy and Detour Road	L.S.	1 _	\$11,000.00	\$11,000.00
1.3	Hydrovac (Provisional)	P.C.S	1 _	\$5,000.00	\$5,000.00
	Subtotal Part 1:				\$38,000.00
Part 2:	Site Work, Demolition, and Removals				
2.1	Sawcut, Remove, and Dispose Existing Asphalt	sq. m	60	\$5.00	\$300.00
2.2	Asphalt Concrete Pavement Milling - 50mm Depth	sq. m	335	\$10.00	\$3,350.00
2.3	Sawcut, Remove, and Dispose Existing Curb and Gutter and/or Pinned Curb including granular base	lin. m	26	\$20.00	\$520.00
2.4	Sawcut, Remove, and Dispose of Existing Concrete Sidewalk/Monowalk/Apron/Median including granular base	sq. m	65	\$10.00	\$650.00
2.5	Remove and Dispose Existing Storm Sewer Catch Basin	each	1 _	\$500.00	\$500.00
	Subtotal Part 2:				\$5,320.00
Part 3:	Storm Sewer				
3.1	Catch Basin Lead - Trench excavation, pipe supply and install, bedding, backfill and compaction 250mm Pipe	lin. m	5	\$370.00	\$1,850.00
3.2	Supply and Install Catch Basin	each	1 _	\$5,000.00	\$5,000.00
3.3	Replace unsuitable material and replace with 40 mm screened rock backfill material (provisional)	cu. m	2 _	\$60.00	\$120.00
	Subtotal Part 3:				\$6,970.00
Part 6:	Concrete Work				
6.1	250mm Standard, Reversed, Depressed, Reinforced Curb & Gutter excluding granular base	lin. m	112	\$180.00	\$20,160.00
6.2	1.5m Separate Concrete Sidewalk including granular base	lin. m	0	\$200.00	\$0.00
6.3	Monolithic Concrete Sidewalk, width varies up to 3.8m excluding granular base	lin. m	0 _	\$350.00	\$0.00
6.4	Curb Ramps including granular base (Paraplegic)	each	0 _	\$1,100.00	\$0.00
6.5	Reinforced Concrete Median Cap excluding granular base	sq. m	65 -	\$180.00	\$11,700.00
6.6	Reinforced Concrete Apron, 150mm Depth with 15M Reinforcement	sq. m	0 _	\$500.00	\$0.00
	Subtotal Part 6:				\$31,860.00
Part 7:	Roadway Excavation, Subgrade, Sub Base and Base Preparation				
7.1	Waste Excavation and Dispose Off-Site (Provisional)	cu. m	120	\$20.00	\$2,400.00
7.2	Woven Geotextile	sq. m	216	\$3.00	\$648.00
7.3	Des. 2 Class 25 Granular Base, 200mm depth	sq.m	216	\$11.00	\$2,376.00
7.4	75mm Minus Granular Subbase, 350mm Depth	sq. m	216	\$16.00	\$3,456.00
	Subtotal Part 7:				\$8,880.00

## Town of Blackfalds - Womacks Road and Broadway Ave Roundabout Concept Schedule 2B - Westbound Right Turn Lane Addition

Costs have been derived assuming assuming this lane addition would be completed as the second phase.

Item	Item of Work	Unit	Estimated Quantity	Unit Price	Total
Part 8:	Asphaltic Concrete Paving				
8.1	Asphalt Top/Overlay Lift, 50mm Type 5b.(3)	sq. m	410	\$15.00	\$6,150.00
8.2	Asphalt Bottom Lift, 75mm Type 5b.(2)	sq. m	75	\$20.00	 \$1,500.00
8.3	Asphalt Trail, 75mm Type 5b(1), 3.00m wide including granular base	lin. m	0	\$175.00	 \$0.00
	Subtotal Part 8:				 \$7,650.00
Part 9:	Pavement Markings and Signage				
9.1	Painted Pavement Markings	L.S.	1 _	\$5,000.00	 \$5,000.00
9.2	Signage	L.S.	1 _	\$5,000.00	\$5,000.00
	Subtotal Part 9:				\$10,000.00
Part 10:	Landscaping and Fine Grading				
10.1	Landscaping and Fine Grading	L.S.	1 _	\$5,000.00	 \$5,000.00
10.2	Retaining Wall Installation or Back Sloping (includes fence removal and reinstallation)	L.S.	1 _	\$140,000.00	 \$140,000.00
	Subtotal Part 10:				 \$145,000.00
Schedu	lle 2B - Westbound Right Turn Lane Addition Summary				
	Part 1: General Requirements				 \$38,000.00
	Part 2: Site Work, Demolition, and Removals				 \$5,320.00
	Part 3: Storm Sewer				\$6,970.00
	Part 6: Concrete Work				\$31,860.00
	Part 7: Roadway Excavation, Subgrade, Sub Base and Base Preparation				 \$8,880.00
	Part 8: Asphaltic Concrete Paving				 \$7,650.00
	Part 9: Pavement Markings and Signage				 \$10,000.00
	Part 10: Landscaping and Fine Grading				 \$145,000.00
	SUBTOTAL				\$253,680.00
	CONTINGENCY			20%	 \$50,736.00
	SUBTOTAL INCL. CONTINGENCY				 \$304,416.00
	Additional Work Outside Construction Contract				
	Professional Services (Engineering) (Rounded to nearest \$1,000)			15%	\$ 46,000.00
	Shallow Utility Relocations - Estimate Only				\$ 5,000.00
	ESTIMATED CONSTRUCTION CONTRACT PLUS ADDITIONAL WORK				\$ 355,416.00

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Volume (vph)	3	347	2	3	155	88	2	2	5	198	0	11
Future Volume (vph)	3	347	2	3	155	88	2	2	5	198	0	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.999			0.952			0.919			0.993	
Flt Protected					0.999			0.990			0.955	
Satd. Flow (prot)	0	1882	0	0	1740	0	0	1714	0	0	1735	0
Flt Permitted		0.998			0.995			0.931			0.730	
Satd. Flow (perm)	0	1878	0	0	1733	0	0	1611	0	0	1326	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			58			6			55	
Link Speed (k/h)		40			40			40			50	
Link Distance (m)		574.2			516.1			316.8			304.2	
Travel Time (s)		51.7			46.4			28.5			21.9	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	2%	2%	2%	5%	5%	5%	2%	2%	2%	5%	5%	5%
Adj. Flow (vph)	3	390	2	3	174	99	2	2	6	222	0	12
Shared Lane Traffic (%)		000	_				_	_			· ·	
Lane Group Flow (vph)	0	395	0	0	276	0	0	10	0	0	234	0
Turn Type	Perm	NA	· ·	Perm	NA	· ·	Perm	NA		Perm	NA	•
Protected Phases	1 01111	4		1 01111	8		1 01111	2		1 01111	6	
Permitted Phases	4	•		8	· ·		2	_		6	· ·	
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase	•	•					_	_				
Minimum Initial (s)	20.0	20.0		20.0	20.0		12.0	12.0		12.0	12.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		24.0	24.0		24.0	24.0	
Total Split (s)	31.0	31.0		31.0	31.0		29.0	29.0		29.0	29.0	
Total Split (%)	51.7%	51.7%		51.7%	51.7%		48.3%	48.3%		48.3%	48.3%	
Maximum Green (s)	25.0	25.0		25.0	25.0		23.0	23.0		23.0	23.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	2.0	0.0		2.0	0.0		2.0	0.0		2.0	0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag		0.0			0.0			0.0			0.0	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Min	Min		Min	Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	0	20.9		0	20.9		U	13.5		0	13.5	
Actuated g/C Ratio		0.45			0.45			0.29			0.29	
v/c Ratio		0.47			0.43			0.23			0.25	
Control Delay		11.8			8.5			8.7			15.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		11.8			8.5			8.7			15.7	
LOS		11.0 B										
					A			A 0 7			15.7	
Approach Delay		11.8			8.5			8.7			15.7	

#### 1: Womacks Road & Broadway Ave

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		В			А			Α			В	
Queue Length 50th (m)		18.9			9.5			0.3			11.4	
Queue Length 95th (m)		45.0			26.3			2.4			26.7	
Internal Link Dist (m)		550.2			492.1			292.8			280.2	
Turn Bay Length (m)												
Base Capacity (vph)		1013			961			802			685	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.39			0.29			0.01			0.34	
Intersection Summary												
^ T	O 11											

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 46.5

Natural Cycle: 50

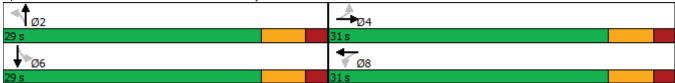
Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.55

Intersection Signal Delay: 11.8 Intersection LOS: B
Intersection Capacity Utilization 48.4% ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: Womacks Road & Broadway Ave



Lane Group         EBL         EBT         EBR         WBL         WBT         WBR         NBL         NBT         NBR         SBL         SBT           Lane Configurations         4 <t< th=""><th>SBR  14 14 1900 1.00  0  Yes</th></t<>	SBR  14 14 1900 1.00  0  Yes
Traffic Volume (vph)         9         182         7         15         256         232         3         2         17         129         3           Future Volume (vph)         9         182         7         15         256         232         3         2         17         129         3           Ideal Flow (vphpl)         1900 </th <th>14 1900 1.00</th>	14 1900 1.00
Traffic Volume (vph)         9         182         7         15         256         232         3         2         17         129         3           Future Volume (vph)         9         182         7         15         256         232         3         2         17         129         3           Ideal Flow (vphpl)         1900 </td <td>14 1900 1.00</td>	14 1900 1.00
Future Volume (vph)         9         182         7         15         256         232         3         2         17         129         3           Ideal Flow (vphpl)         1900	14 1900 1.00
Ideal Flow (vphpl)         1900 <td>0</td>	0
Lane Util. Factor         1.00 <td>0</td>	0
Frt         0.995         0.938         0.893         0.987           Flt Protected         0.998         0.999         0.994         0.958           Satd. Flow (prot)         0         1870         0         1714         0         0         1672         0         0         1730           Flt Permitted         0.972         0.989         0.950         0.733	0
Fit Protected         0.998         0.999         0.994         0.958           Satd. Flow (prot)         0         1870         0         0         1714         0         0         1672         0         0         1730           Flt Permitted         0.972         0.989         0.950         0.733	0
Satd. Flow (prot)       0       1870       0       0       1714       0       0       1672       0       0       1730         Flt Permitted       0.972       0.989       0.950       0.733	0
Flt Permitted 0.972 0.989 0.950 0.733	0
Satd. Flow (perm) 0 1822 0 0 1697 0 0 1598 0 0 1324	
Right Turn on Red Yes Yes Yes	
Satd. Flow (RTOR) 4 96 19 10	
Link Speed (k/h) 40 40 50	
Link Distance (m) 574.2 516.1 316.8 304.2	
Travel Time (s) 51.7 46.4 28.5 21.9	
Peak Hour Factor 0.89 0.89 0.89 0.89 0.89 0.89 0.89 0.89	0.89
Heavy Vehicles (%) 2% 2% 2% 5% 5% 5% 2% 2% 2% 5% 5%	5%
Adj. Flow (vph) 10 204 8 17 288 261 3 2 19 145 3	
Shared Lane Traffic (%)	10
Lane Group Flow (vph) 0 222 0 0 566 0 0 24 0 0 164	0
Turn Type Perm NA Perm NA Perm NA Perm NA	U
Protected Phases 4 8 2	
Permitted Phases 4 8 2 6	
Detector Phase 4 4 8 8 2 2 6 6	
Switch Phase	
Minimum Initial (s) 20.0 20.0 20.0 20.0 12.0 12.0 12.0 12.0	
Minimum Split (s) 26.0 26.0 26.0 26.0 24.0 24.0 24.0 24.0	
Total Split (s) 34.0 34.0 34.0 26.0 26.0 26.0 26.0	
Total Split (%) 56.7% 56.7% 56.7% 56.7% 43.3% 43.3% 43.3% 43.3%	
Maximum Green (s) 28.0 28.0 28.0 20.0 20.0 20.0 20.0 20.0	
Yellow Time (s) 4.0 4.0 4.0 4.0 4.0 4.0 4.0	
All-Red Time (s) 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0	
Lost Time Adjust (s) 0.0 0.0 0.0 0.0	
Total Lost Time (s) 6.0 6.0 6.0	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s) 3.0 3.0 3.0 3.0 3.0 3.0 3.0	
Recall Mode Min Min Min None None None None	
Walk Time (s) 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0	
Flash Dont Walk (s) 11.0 11.0 11.0 11.0 11.0 11.0	
Pedestrian Calls (#/hr) 0 0 0 0 0 0 0 0	
Act Effct Green (s) 26.7 26.7 13.1 13.1	
Actuated g/C Ratio 0.57 0.57 0.28 0.28	
v/c Ratio 0.21 0.56 0.05 0.43	
Control Delay 8.2 10.4 8.5 17.9	
Queue Delay 0.0 0.0 0.0 0.0	
Total Delay 8.2 10.4 8.5 17.9	
LOS A B A B	
Approach Delay 8.2 10.4 8.5 17.9	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		Α			В			Α			В	
Queue Length 50th (m)		9.4			25.0			0.3			9.6	
Queue Length 95th (m)		22.4			59.4			4.4			26.2	
Internal Link Dist (m)		550.2			492.1			292.8			280.2	
Turn Bay Length (m)												
Base Capacity (vph)		1227			1172			706			581	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.18			0.48			0.03			0.28	

## Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 46.5

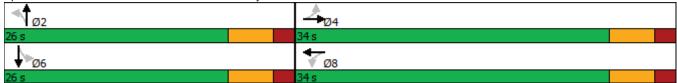
Natural Cycle: 55

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.56

Intersection Signal Delay: 11.1 Intersection LOS: B
Intersection Capacity Utilization 58.0% ICU Level of Service B

Analysis Period (min) 15



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			ર્ન	7		4		ሻ	f)	
Traffic Volume (vph)	16	280	5	16	210	228	5	5	58	623	5	15
Future Volume (vph)	16	280	5	16	210	228	5	5	58	623	5	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998				0.850		0.883			0.886	
Flt Protected		0.997			0.997			0.997		0.950		
Satd. Flow (prot)	0	1874	0	0	1824	1555	0	1658	0	1738	1621	0
Flt Permitted		0.976			0.964			0.977		0.593		
Satd. Flow (perm)	0	1835	0	0	1764	1555	0	1625	0	1085	1621	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1				248		63			16	
Link Speed (k/h)		40			40			40			50	
Link Distance (m)		574.2			516.1			316.8			304.2	
Travel Time (s)		51.7			46.4			28.5			21.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	5%	5%	5%	2%	2%	2%	5%	5%	5%
Adj. Flow (vph)	17	304	5	17	228	248	5	5	63	677	5	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	326	0	0	245	248	0	73	0	677	21	0
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	4	4		8	8	8	2	2		1	6	
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0	20.0	12.0	12.0		7.0	12.0	
Minimum Split (s)	26.0	26.0		26.0	26.0	26.0	24.0	24.0		12.0	24.0	
Total Split (s)	40.0	40.0		40.0	40.0	40.0	26.0	26.0		54.0	80.0	
Total Split (%)	33.3%	33.3%		33.3%	33.3%	33.3%	21.7%	21.7%		45.0%	66.7%	
Maximum Green (s)	34.0	34.0		34.0	34.0	34.0	20.0	20.0		49.0	74.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		1.0	2.0	
Lost Time Adjust (s)		0.0			0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)		6.0			6.0	6.0		6.0		5.0	6.0	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	Min	Min		Min	Min	Min	None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0			7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0			0	
Act Effct Green (s)		23.9			23.9	23.9		12.9		43.4	42.3	
Actuated g/C Ratio		0.30			0.30	0.30		0.16		0.55	0.53	
v/c Ratio		0.59			0.46	0.39		0.23		0.80	0.02	
Control Delay		32.4			29.9	5.9		15.7		20.7	4.6	
Queue Delay		0.0			0.0	0.0		0.0		0.0	0.0	
Total Delay		32.4			29.9	5.9		15.7		20.7	4.6	
LOS		С			С	Α		В		С	Α	
Approach Delay		32.4			17.8			15.7			20.2	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		С			В			В			С	
Queue Length 50th (m)		42.6			30.7	0.0		1.3		58.5	0.3	
Queue Length 95th (m)		89.3			67.1	17.7		15.2		123.6	3.4	
Internal Link Dist (m)		550.2			492.1			292.8			280.2	
Turn Bay Length (m)												
Base Capacity (vph)		847			814	851		487		1201	1451	
Starvation Cap Reductn		0			0	0		0		0	0	
Spillback Cap Reductn		0			0	0		0		0	0	
Storage Cap Reductn		0			0	0		0		0	0	
Reduced v/c Ratio		0.38			0.30	0.29		0.15		0.56	0.01	
Intersection Summary												

### Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 79.1

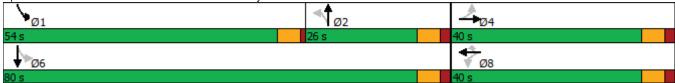
Natural Cycle: 70

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.80

Intersection Signal Delay: 21.8 Intersection LOS: C
Intersection Capacity Utilization 79.3% ICU Level of Service D

Analysis Period (min) 15



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4	7		4		ሻ	f)	
Traffic Volume (vph)	39	278	5	58	335	729	5	5	5	454	5	19
Future Volume (vph)	39	278	5	58	335	729	5	5	5	454	5	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998				0.850		0.955			0.879	
Flt Protected		0.994			0.993			0.984		0.950		
Satd. Flow (prot)	0	1868	0	0	1817	1555	0	1770	0	1738	1608	0
Flt Permitted		0.911			0.903					0.615		
Satd. Flow (perm)	0	1712	0	0	1652	1555	0	1799	0	1125	1608	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1				792		5			21	
Link Speed (k/h)		40			40			40			50	
Link Distance (m)		574.2			516.1			316.8			304.2	
Travel Time (s)		51.7			46.4			28.5			21.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	5%	5%	5%	2%	2%	2%	5%	5%	5%
Adj. Flow (vph)	42	302	5	63	364	792	5	5	5	493	5	21
Shared Lane Traffic (%)		002			001	.02				100		
Lane Group Flow (vph)	0	349	0	0	427	792	0	15	0	493	26	0
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		pm+pt	NA	·
Protected Phases	1 01111	4		1 01111	8	1 01111	1 01111	2		1	6	
Permitted Phases	4	•		8		8	2	_		6	•	
Detector Phase	4	4		8	8	8	2	2		1	6	
Switch Phase	•	•					_	_		•		
Minimum Initial (s)	20.0	20.0		20.0	20.0	20.0	12.0	12.0		7.0	12.0	
Minimum Split (s)	26.0	26.0		26.0	26.0	26.0	24.0	24.0		12.0	24.0	
Total Split (s)	59.0	59.0		59.0	59.0	59.0	25.0	25.0		36.0	61.0	
Total Split (%)	49.2%	49.2%		49.2%	49.2%	49.2%	20.8%	20.8%		30.0%	50.8%	
Maximum Green (s)	53.0	53.0		53.0	53.0	53.0	19.0	19.0		31.0	55.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		1.0	2.0	
Lost Time Adjust (s)	2.0	0.0		2.0	0.0	0.0	2.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0			6.0	6.0		6.0		5.0	6.0	
Lead/Lag		0.0			0.0	0.0	Lag	Lag		Lead	0.0	
Lead-Lag Optimize?							Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	Min	Min		Min	Min	Min	None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		INOTIC	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0			0	
Act Effct Green (s)	0	28.9		U	28.9	28.9	0	13.2		25.6	24.5	
Actuated g/C Ratio		0.43			0.43	0.43		0.20		0.38	0.37	
v/c Ratio		0.43			0.43	0.43		0.20		0.76	0.04	
Control Delay		17.5			20.2	5.4		28.4		26.8	8.1	
Queue Delay		0.0			0.0	0.0		0.0		0.0	0.0	
Total Delay		17.5			20.2	5.4		28.4		26.8	8.1	
LOS		17.5 B			20.2 C	5.4 A		20.4 C		20.6 C	0. I	
						А				U		
Approach Delay		17.5			10.6			28.4			25.9	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		В			В			С			С	
Queue Length 50th (m)		25.8			34.0	0.0		0.9		42.3	0.3	
Queue Length 95th (m)		75.0			97.4	23.2		7.9		106.3	5.2	
Internal Link Dist (m)		550.2			492.1			292.8			280.2	
Turn Bay Length (m)												
Base Capacity (vph)		1409			1360	1420		568		929	1353	
Starvation Cap Reductn		0			0	0		0		0	0	
Spillback Cap Reductn		0			0	0		0		0	0	
Storage Cap Reductn		0			0	0		0		0	0	
Reduced v/c Ratio		0.25			0.31	0.56		0.03		0.53	0.02	

## Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 66.6

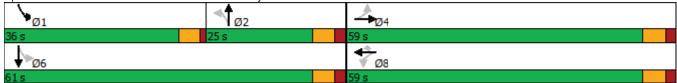
Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.76

Intersection Signal Delay: 15.6 Intersection LOS: B
Intersection Capacity Utilization 87.2% ICU Level of Service E

Analysis Period (min) 15



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			ની	7		4		ሻ	ĵ.	
Traffic Volume (vph)	26	228	5	16	244	416	5	5	58	687	5	133
Future Volume (vph)	26	228	5	16	244	416	5	5	58	687	5	133
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		60.0	0.0		0.0	60.0		0.0
Storage Lanes	0		0	0		1	0		0	1		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998				0.850		0.883			0.855	
Flt Protected		0.995			0.997			0.997		0.950		
Satd. Flow (prot)	0	1870	0	0	1824	1555	0	1658	0	1738	1564	0
Flt Permitted		0.943			0.969			0.965		0.581		
Satd. Flow (perm)	0	1773	0	0	1773	1555	0	1605	0	1063	1564	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1				452		63			145	
Link Speed (k/h)		40			40			40			50	
Link Distance (m)		574.2			516.1			316.8			304.2	
Travel Time (s)		51.7			46.4			28.5			21.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	5%	5%	5%	2%	2%	2%	5%	5%	5%
Adj. Flow (vph)	28	248	5	17	265	452	5	5	63	747	5	145
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	281	0	0	282	452	0	73	0	747	150	0
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	4	4		8	8	8	2	2		1	6	
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0	20.0	12.0	12.0		7.0	12.0	
Minimum Split (s)	26.0	26.0		26.0	26.0	26.0	24.0	24.0		12.0	24.0	
Total Split (s)	38.0	38.0		38.0	38.0	38.0	25.0	25.0		57.0	82.0	
Total Split (%)	31.7%	31.7%		31.7%	31.7%	31.7%	20.8%	20.8%		47.5%	68.3%	
Maximum Green (s)	32.0	32.0		32.0	32.0	32.0	19.0	19.0		52.0	76.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		1.0	2.0	
Lost Time Adjust (s)		0.0			0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)		6.0			6.0	6.0		6.0		5.0	6.0	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	Min	Min		Min	Min	Min	None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0			7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0			0	
Act Effct Green (s)		24.0			24.0	24.0		12.9		47.0	45.9	
Actuated g/C Ratio		0.29			0.29	0.29		0.16		0.57	0.55	
v/c Ratio		0.55			0.55	0.59		0.24		0.85	0.16	
Control Delay		33.5			33.7	6.5		16.5		23.5	2.1	
Queue Delay		0.0			0.0	0.0		0.0		0.0	0.0	

	•	$\rightarrow$	•	•	•	•		<b>†</b>		-	<b>↓</b>	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		33.5			33.7	6.5		16.5		23.5	2.1	
LOS		С			С	Α		В		С	Α	
Approach Delay		33.5			17.0			16.5			19.9	
Approach LOS		С			В			В			В	
Queue Length 50th (m)		38.5			38.8	0.0		1.3		69.2	0.3	
Queue Length 95th (m)		79.8			80.2	24.4		15.6		146.2	7.9	
Internal Link Dist (m)		550.2			492.1			292.8			280.2	
Turn Bay Length (m)						60.0				60.0		
Base Capacity (vph)		736			735	909		442		1216	1396	
Starvation Cap Reductn		0			0	0		0		0	0	
Spillback Cap Reductn		0			0	0		0		0	0	
Storage Cap Reductn		0			0	0		0		0	0	
Reduced v/c Ratio		0.38			0.38	0.50		0.17		0.61	0.11	
Intersection Summary												

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 82.8

Natural Cycle: 75

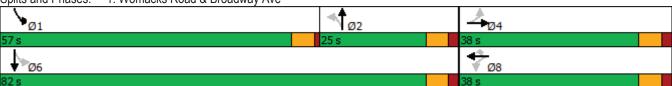
Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 20.6 Intersection Capacity Utilization 88.8%

Intersection LOS: C ICU Level of Service E

Analysis Period (min) 15



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			ન	7		4		ሻ	ĵ»	
Traffic Volume (vph)	115	278	5	58	332	926	5	5	5	902	5	111
Future Volume (vph)	115	278	5	58	332	926	5	5	5	902	5	111
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		60.0	0.0		0.0	60.0		0.0
Storage Lanes	0		0	0		1	0		0	1		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998				0.850		0.955			0.856	
Flt Protected		0.986			0.993			0.984		0.950		
Satd. Flow (prot)	0	1853	0	0	1817	1555	0	1770	0	1738	1566	0
Flt Permitted		0.588			0.880			0.840		0.627		
Satd. Flow (perm)	0	1105	0	0	1610	1555	0	1511	0	1147	1566	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1				1007		5			121	
Link Speed (k/h)		40			40			40			50	
Link Distance (m)		574.2			516.1			316.8			304.2	
Travel Time (s)		51.7			46.4			28.5			21.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	5%	5%	5%	2%	2%	2%	5%	5%	5%
Adj. Flow (vph)	125	302	5	63	361	1007	5	5	5	980	5	121
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	432	0	0	424	1007	0	15	0	980	126	0
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	4	4		8	8	8	2	2		1	6	
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0	20.0	12.0	12.0		7.0	12.0	
Minimum Split (s)	26.0	26.0		26.0	26.0	26.0	24.0	24.0		12.0	24.0	
Total Split (s)	54.0	54.0		54.0	54.0	54.0	25.0	25.0		41.0	66.0	
Total Split (%)	45.0%	45.0%		45.0%	45.0%	45.0%	20.8%	20.8%		34.2%	55.0%	
Maximum Green (s)	48.0	48.0		48.0	48.0	48.0	19.0	19.0		36.0	60.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		1.0	2.0	
Lost Time Adjust (s)		0.0			0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)		6.0			6.0	6.0		6.0		5.0	6.0	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	Min	Min		Min	Min	Min	None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0			7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0			0	
Act Effct Green (s)		48.3			48.3	48.3		12.1		42.8	41.8	
Actuated g/C Ratio		0.47			0.47	0.47		0.12		0.42	0.41	
v/c Ratio		0.83			0.56	0.80		0.08		1.42	0.18	
Control Delay		40.7			24.5	7.1		36.8		224.8	4.1	
Queue Delay		0.0			0.0	0.0		0.0		0.0	0.0	

	<b>→</b>	<b>→</b>	>	6	◆	•	•	<b>†</b>	-	-	Ţ	4
1 0	EDI	EDT	<b>T</b>	T WDI	MDT	MDD	NDI	NDT	NDD	ODI	ODT	000
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		40.7			24.5	7.1		36.8		224.8	4.1	
LOS		D			С	Α		D		F	Α	
Approach Delay		40.7			12.3			36.8			199.7	
Approach LOS		D			В			D			F	
Queue Length 50th (m)		61.2			49.9	0.0		1.6		~250.1	0.6	
Queue Length 95th (m)	:	#151.7			105.3	32.4		8.5		#313.0	10.4	
Internal Link Dist (m)		550.2			492.1			292.8			280.2	
Turn Bay Length (m)						60.0				60.0		
Base Capacity (vph)		522			761	1265		287		689	975	
Starvation Cap Reductn		0			0	0		0		0	0	
Spillback Cap Reductn		0			0	0		0		0	0	
Storage Cap Reductn		0			0	0		0		0	0	
Reduced v/c Ratio		0.83			0.56	0.80		0.05		1.42	0.13	

## Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 102.2

Natural Cycle: 130

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.42 Intersection Signal Delay: 86.0

Intersection LOS: F

Intersection Capacity Utilization 113.6%

ICU Level of Service H

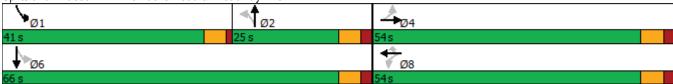
Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.



Analysis Period (min)

T. WOMACKS I KOAG	oad & bloadway Ave											
	•	<b>→</b>	$\rightarrow$	•	<b>←</b>	*	4	<b>†</b>	1	-	<b>↓</b>	1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Volume (veh/h)	3	347	2	3	155	88	2	2	5	198	0	11
Future Volume (Veh/h)	3	347	2	3	155	88	2	2	5	198	0	11
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	3	390	2	3	174	99	2	2	6	222	0	12
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	273			392			638	676	391	634	628	224
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	273			392			638	676	391	634	628	224
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			99	99	99	42	100	99
cM capacity (veh/h)	1290			1150			382	373	658	381	394	809
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	395	276	10	234								
Volume Left	3	3	2	222								
Volume Right	2	99	6	12								
cSH	1290	1150	507	392								
Volume to Capacity	0.00	0.00	0.02	0.60								
Queue Length 95th (m)	0.1	0.1	0.5	28.4								
Control Delay (s)	0.1	0.1	12.2	26.9								
Lane LOS	Α	Α	В	D								
Approach Delay (s)	0.1	0.1	12.2	26.9								
Approach LOS			В	D								
Intersection Summary												
Average Delay			7.1									
Intersection Capacity Utiliza	ation		45.1%	IC	CU Level o	f Service			Α			
A 1 1 D 1 1/ 1)			4 =									

15

TI TTOTHAGIC TOUG	0. 5.00.											
	•	<b>→</b>	*	•	<b>←</b>	*	4	†	1	-	ļ	1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			44	
Traffic Volume (veh/h)	9	182	7	15	256	232	3	2	17	129	3	14
Future Volume (Veh/h)	9	182	7	15	256	232	3	2	17	129	3	14
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	10	204	8	17	288	261	3	2	19	145	3	16
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	549			212			698	811	208	700	684	418
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	549			212			698	811	208	700	684	418
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			99			99	99	98	57	99	97
cM capacity (veh/h)	1021			1341			338	306	832	334	359	628
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	222	566	24	164								
Volume Left	10	17	3	145								
Volume Right	8	261	19	16								
cSH	1021	1341	628	351								
Volume to Capacity	0.01	0.01	0.04	0.47								
Queue Length 95th (m)	0.2	0.3	0.9	18.2								
Control Delay (s)	0.5	0.4	11.0	24.0								
Lane LOS	Α	Α	В	С								
Approach Delay (s)	0.5	0.4	11.0	24.0								
Approach LOS			В	С								
Intersection Summary												
Average Delay			4.6									
Intersection Capacity Utiliza	ation		54.7%	IC	U Level o	of Service			Α			
Analysis Period (min)			15									

**♥** Site: 101 [Town of Blackfalds - Womarks Road & Broadway

Ave - AM Peak - 2024 Existing (Site Folder: General)]

New Site

Site Category: (None)

Roundabout

Vehi	cle Mc	vement	Perfor	mance										
Mov ID	Turn	INPI VOLUI [ Total	MES HV]	DEM/ FLO' [ Total	WS HV]	Deg. Satn	Delay	Level of Service	95% BA QUE [ Veh.	EUE Dist]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
Sout	n: Broad	veh/h dway Ave	%	veh/h	%	v/c	sec		veh	m	_			km/h
1	L2	2	2.0	2	2.0	0.014	8.9	LOS A	0.1	0.5	0.65	0.54	0.65	39.1
2	T1	2	2.0	2	2.0	0.014	4.6	LOSA	0.1	0.5	0.65	0.54	0.65	38.7
3	R2	5	2.0	6	2.0	0.014	5.1	LOSA	0.1	0.5	0.65	0.54	0.65	37.9
Appr		9	2.0	11	2.0	0.014	5.8	LOSA	0.1	0.5	0.65	0.54	0.65	38.4
East:	Woma	cks Road												
4	L2	3	5.0	4	5.0	0.184	5.5	LOS A	1.1	8.0	0.07	0.21	0.07	40.9
5	T1	155	5.0	187	5.0	0.184	1.2	LOSA	1.1	8.0	0.07	0.21	0.07	40.5
6	R2	88	5.0	106	5.0	0.184	1.7	LOS A	1.1	8.0	0.07	0.21	0.07	39.6
Appr	oach	246	5.0	296	5.0	0.184	1.4	LOSA	1.1	8.0	0.07	0.21	0.07	40.2
North	n: Broad	lway Ave												
7	L2	198	5.0	239	5.0	0.217	8.4	LOS A	1.2	8.6	0.39	0.62	0.39	45.9
8	T1	1	5.0	1	5.0	0.217	3.9	LOS A	1.2	8.6	0.39	0.62	0.39	45.8
9	R2	11	5.0	13	5.0	0.217	4.0	LOS A	1.2	8.6	0.39	0.62	0.39	44.8
Appr	oach	210	5.0	253	5.0	0.217	8.2	LOSA	1.2	8.6	0.39	0.62	0.39	45.9
West	: Woma	acks Road	d											
10	L2	3	2.0	4	2.0	0.374	7.0	LOS A	2.5	17.9	0.53	0.39	0.53	39.8
11	T1	347	2.0	418	2.0	0.374	2.8	LOS A	2.5	17.9	0.53	0.39	0.53	39.4
12	R2	2	2.0	2	2.0	0.374	3.2	LOS A	2.5	17.9	0.53	0.39	0.53	38.6
Appr	oach	352	2.0	424	2.0	0.374	2.8	LOSA	2.5	17.9	0.53	0.39	0.53	39.4
All Ve	ehicles	817	3.7	984	3.7	0.374	3.8	LOSA	2.5	17.9	0.35	0.39	0.35	41.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Organisation: STANTEC CONSULTING LTD. | Licence: PLUS / 1PC | Processed: Tuesday, October 8, 2024 10:41:23 PM

▼ Site: 101 [Town of Blackfalds - Womarks Road & Broadway

Ave - PM Peak - 2024 Existing (Site Folder: General)]

New Site

Site Category: (None)

Roundabout

Vehi	cle Mo	vement	Perfor	mance										
Mov	Turn	INP	UT	DEMA	AND	Deg.	Aver.	Level of	95% BA	ACK OF	Prop.	Effective	Aver.	Aver.
ID		VOLU		FLO\		Satn	Delay	Service	QUE		Que	Stop	No.	Speed
		[ Total	HV]	[ Total	HV]				[ Veh.	Dist ]		Rate	Cycles	
		veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
South	n: Broad	dway Ave	)											
1	L2	3	2.0	3	2.0	0.024	7.1	LOS A	0.1	8.0	0.47	0.45	0.47	39.9
2	T1	2	2.0	2	2.0	0.024	2.8	LOS A	0.1	8.0	0.47	0.45	0.47	39.5
3	R2	17	2.0	19	2.0	0.024	3.3	LOS A	0.1	8.0	0.47	0.45	0.47	38.7
Appro	oach	22	2.0	25	2.0	0.024	3.7	LOSA	0.1	8.0	0.47	0.45	0.47	38.9
East:	Woma	cks Road	k											
4	L2	15	5.0	17	5.0	0.352	5.6	LOS A	2.4	17.7	0.11	0.23	0.11	40.8
5	T1	256	5.0	288	5.0	0.352	1.3	LOS A	2.4	17.7	0.11	0.23	0.11	40.4
6	R2	232	5.0	261	5.0	0.352	1.7	LOS A	2.4	17.7	0.11	0.23	0.11	39.5
Appro	oach	503	5.0	565	5.0	0.352	1.6	LOSA	2.4	17.7	0.11	0.23	0.11	40.0
North	: Broad	lway Ave												
7	L2	129	5.0	145	5.0	0.155	9.0	LOS A	8.0	5.9	0.47	0.65	0.47	45.9
8	T1	3	5.0	3	5.0	0.155	4.5	LOS A	8.0	5.9	0.47	0.65	0.47	45.8
9	R2	14	5.0	16	5.0	0.155	4.5	LOS A	0.8	5.9	0.47	0.65	0.47	44.8
Appro	oach	146	5.0	164	5.0	0.155	8.5	LOSA	0.8	5.9	0.47	0.65	0.47	45.8
West	: Woma	icks Roa	d											
10	L2	9	2.0	10	2.0	0.185	6.3	LOS A	1.1	7.6	0.38	0.31	0.38	40.1
11	T1	182	2.0	204	2.0	0.185	2.1	LOS A	1.1	7.6	0.38	0.31	0.38	39.7
12	R2	7	2.0	8	2.0	0.185	2.5	LOSA	1.1	7.6	0.38	0.31	0.38	38.9
Appro	oach	198	2.0	222	2.0	0.185	2.3	LOSA	1.1	7.6	0.38	0.31	0.38	39.7
All Ve	ehicles	869	4.2	976	4.2	0.352	3.0	LOSA	2.4	17.7	0.24	0.33	0.24	40.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Organisation: STANTEC CONSULTING LTD. | Licence: PLUS / 1PC | Processed: Tuesday, October 8, 2024 10:41:55 PM

New Site

Site Category: (None)

Roundabout

Vehi	cle Mo	vement	Perfor	mance										
Mov	Turn	INP	UT	DEMA	AND	Deg.	Aver.	Level of	95% BA	CK OF	Prop.	Effective	Aver.	Aver.
ID		VOLU		FLO\		Satn	Delay	Service	QUE		Que	Stop	No.	Speed
		[ Total	HV]	[ Total	HV]				[ Veh.	Dist ]		Rate	Cycles	
0 11		veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
South	n: Broad	dway Ave	•											
1	L2	5	2.0	5	2.0	0.141	13.6	LOS B	1.0	6.8	0.88	0.82	0.88	37.5
2	T1	5	2.0	5	2.0	0.141	9.3	LOS A	1.0	6.8	0.88	0.82	0.88	37.1
3	R2	58	2.0	63	2.0	0.141	9.7	LOS A	1.0	6.8	0.88	0.82	0.88	36.4
Appr	oach	68	2.0	74	2.0	0.141	10.0	LOSA	1.0	6.8	0.88	0.82	0.88	36.5
East:	Woma	cks Road	i											
4	L2	16	5.0	17	5.0	0.323	5.6	LOSA	2.4	17.2	0.17	0.25	0.17	40.6
5	T1	210	5.0	228	5.0	0.323	1.3	LOS A	2.4	17.2	0.17	0.25	0.17	40.2
6	R2	228	5.0	248	5.0	0.323	1.8	LOS A	2.4	17.2	0.17	0.25	0.17	39.4
Appr	oach	454	5.0	493	5.0	0.323	1.7	LOSA	2.4	17.2	0.17	0.25	0.17	39.8
North	ı: Broad	way Ave												
7	L2	623	5.0	677	5.0	0.607	9.7	LOSA	5.2	38.0	0.65	0.70	0.66	45.2
8	T1	5	5.0	5	5.0	0.607	5.1	LOS A	5.2	38.0	0.65	0.70	0.66	45.1
9	R2	15	5.0	16	5.0	0.607	5.2	LOS A	5.2	38.0	0.65	0.70	0.66	44.1
Appr	oach	643	5.0	699	5.0	0.607	9.5	LOSA	5.2	38.0	0.65	0.70	0.66	45.2
West	: Woma	icks Roa	d											
10	L2	16	2.0	17	2.0	0.467	11.7	LOS B	3.8	27.0	0.88	0.91	0.97	38.4
11	T1	280	2.0	304	2.0	0.467	7.4	LOS A	3.8	27.0	0.88	0.91	0.97	38.1
12	R2	5	2.0	5	2.0	0.467	7.8	LOS A	3.8	27.0	0.88	0.91	0.97	37.3
Appr	oach	301	2.0	327	2.0	0.467	7.6	LOSA	3.8	27.0	0.88	0.91	0.97	38.1
All Ve	ehicles	1466	4.2	1593	4.2	0.607	6.7	LOSA	5.2	38.0	0.56	0.61	0.58	41.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Organisation: STANTEC CONSULTING LTD. | Licence: PLUS / 1PC | Processed: Tuesday, October 8, 2024 10:45:08 PM

New Site

Site Category: (None)

Roundabout

Vehi	icle Mo	vement	Perfor	mance										
Mov ID	Turn	INP VOLU [ Total veh/h		DEMÆ FLO\ [ Total veh/h		Deg. Satn v/c		Level of Service		ACK OF EUE Dist ] m	Prop. I Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
Sout	h: Broad	dway Ave												
1	L2	5	2.0	5	2.0	0.026	10.7	LOS B	0.2	1.1	0.78	0.65	0.78	38.3
2	T1	5	2.0	5	2.0	0.026	6.4	LOS A	0.2	1.1	0.78	0.65	0.78	37.9
3	R2	5	2.0	5	2.0	0.026	6.9	LOS A	0.2	1.1	0.78	0.65	0.78	37.2
Appr	oach	15	2.0	16	2.0	0.026	8.0	LOSA	0.2	1.1	0.78	0.65	0.78	37.8
East	: Woma	cks Road												
4	L2	58	5.0	63	5.0	0.809	6.3	LOS A	15.4	112.6	0.58	0.35	0.58	39.7
5	T1	335	5.0	364	5.0	0.809	2.0	LOSA	15.4	112.6	0.58	0.35	0.58	39.4
6	R2	729	5.0	792	5.0	0.809	2.4	LOS A	15.4	112.6	0.58	0.35	0.58	38.5
Appr	oach	1122	5.0	1220	5.0	0.809	2.5	LOSA	15.4	112.6	0.58	0.35	0.58	38.8
North	n: Broad	lway Ave												
7	L2	454	5.0	493	5.0	0.569	11.8	LOS B	5.1	37.5	0.80	0.87	0.89	44.4
8	T1	5	5.0	5	5.0	0.569	7.3	LOSA	5.1	37.5	0.80	0.87	0.89	44.3
9	R2	19	5.0	21	5.0	0.569	7.4	LOS A	5.1	37.5	0.80	0.87	0.89	43.3
Appr	oach	478	5.0	520	5.0	0.569	11.6	LOS B	5.1	37.5	0.80	0.87	0.89	44.4
Wes	t: Woma	icks Road	t t											
10	L2	39	2.0	42	2.0	0.436	9.5	LOS A	3.3	23.2	0.81	0.76	0.83	38.9
11	T1	278	2.0	302	2.0	0.436	5.3	LOS A	3.3	23.2	0.81	0.76	0.83	38.5
12	R2	5	2.0	5	2.0	0.436	5.7	LOS A	3.3	23.2	0.81	0.76	0.83	37.7
Appr	oach	322	2.0	350	2.0	0.436	5.8	LOSA	3.3	23.2	0.81	0.76	0.83	38.6
All V	ehicles	1937	4.5	2105	4.5	0.809	5.3	LOSA	15.4	112.6	0.67	0.55	0.70	40.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Organisation: STANTEC CONSULTING LTD. | Licence: PLUS / 1PC | Processed: Tuesday, October 8, 2024 10:47:39 PM

▼ Site: 101 [Town of Blackfalds - Womarks Road & Broadway

Ave - AM Peak - 22.5K (Site Folder: General)]

New Site

Site Category: (None)

Roundabout

Vehi	cle Mo	vement	Perfor	mance										
	Turn	INP		DEMA		Deg.		Level of	95% BA			Effective	Aver.	Aver.
ID		VOLU [Total	MES HV1	FLO <sup>1</sup> [Total	WS HV1	Satn	Delay	Service	QUE [ Veh.	EUE Dist ]	Que	Stop Rate	No. Cycles	Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m m		Maic	Cycles	km/h
South	n: Broad	dway Ave												
1	L2	5	2.0	5	2.0	0.163	14.1	LOS B	1.2	8.3	0.93	0.86	0.93	37.3
2	T1	5	2.0	5	2.0	0.163	9.8	LOS A	1.2	8.3	0.93	0.86	0.93	37.0
3	R2	58	2.0	63	2.0	0.163	10.2	LOS B	1.2	8.3	0.93	0.86	0.93	36.2
Appro	oach	68	2.0	74	2.0	0.163	10.5	LOS B	1.2	8.3	0.93	0.86	0.93	36.3
East:	Woma	cks Road												
4	L2	16	5.0	17	5.0	0.485	5.7	LOSA	4.6	33.3	0.26	0.27	0.26	40.4
5	T1	244	5.0	265	5.0	0.485	1.5	LOSA	4.6	33.3	0.26	0.27	0.26	40.1
6	R2	416	5.0	452	5.0	0.485	1.9	LOSA	4.6	33.3	0.26	0.27	0.26	39.2
Appro	oach	676	5.0	735	5.0	0.485	1.8	LOSA	4.6	33.3	0.26	0.27	0.26	39.5
North	: Broad	lway Ave												
7	L2	687	5.0	747	5.0	0.803	13.9	LOS B	12.7	92.5	0.90	0.90	1.13	43.6
8	T1	5	5.0	5	5.0	0.803	9.4	LOS A	12.7	92.5	0.90	0.90	1.13	43.5
9	R2	133	5.0	145	5.0	0.803	9.4	LOS A	12.7	92.5	0.90	0.90	1.13	42.6
Appro	oach	825	5.0	897	5.0	0.803	13.2	LOS B	12.7	92.5	0.90	0.90	1.13	43.4
West	: Woma	icks Road	d											
10	L2	26	2.0	28	2.0	0.475	12.8	LOS B	4.0	28.8	0.95	0.99	1.06	37.9
11	T1	228	2.0	248	2.0	0.475	8.5	LOS A	4.0	28.8	0.95	0.99	1.06	37.6
12	R2	5	2.0	5	2.0	0.475	8.9	LOS A	4.0	28.8	0.95	0.99	1.06	36.8
Appro	oach	259	2.0	282	2.0	0.475	8.9	LOSA	4.0	28.8	0.95	0.99	1.06	37.6
All Ve	ehicles	1828	4.5	1987	4.5	0.803	8.3	LOSA	12.7	92.5	0.67	0.68	0.79	40.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Organisation: STANTEC CONSULTING LTD. | Licence: PLUS / 1PC | Processed: Tuesday, October 8, 2024 10:49:25 PM Project: \\ca0002-ppfss02\shared\_projects\113678592\02\_transportation\04\_planning\01\_traffic\_analysis\SIDRA\Womacks & Broadway.sip9

**♥** Site: 101 [Town of Blackfalds - Womarks Road & Broadway

Ave - PM Peak - 22.5K (Site Folder: General)]

New Site

Site Category: (None)

Roundabout

Vehi	icle Mo	vemen	t Perfori	mance										
Mov	Turn	INF	PUT	DEMA	AND	Deg.	Aver.	Level of	95% BA	ACK OF	Prop.	Effective	Aver.	Aver.
ID			JMES	FLO\		Satn	Delay	Service		EUE	Que	Stop	No.	Speed
		[ Total	HV]	[ Total	HV]				[ Veh.	Dist ]		Rate	Cycles	
		veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
Sout	h: Broad	dway Ave	9											
1	L2	5	2.0	5	2.0	0.054	20.0	LOS B	0.4	2.8	1.00	0.83	1.00	34.9
2	T1	5	2.0	5	2.0	0.054	15.7	LOS B	0.4	2.8	1.00	0.83	1.00	34.6
3	R2	5	2.0	5	2.0	0.054	16.2	LOS B	0.4	2.8	1.00	0.83	1.00	34.0
Appr	oach	15	2.0	16	2.0	0.054	17.3	LOS B	0.4	2.8	1.00	0.83	1.00	34.5
East	: Woma	cks Road	d											
4	L2	58	5.0	63	5.0	1.083	87.7	LOS F	111.7	815.3	1.00	2.28	3.12	21.3
5	T1	332	5.0	361	5.0	1.083	83.4	LOS F	111.7	815.3	1.00	2.28	3.12	21.2
6	R2	926	5.0	1007	5.0	1.083	83.8	LOS F	111.7	815.3	1.00	2.28	3.12	21.0
Appr	oach	1316	5.0	1430	5.0	1.083	83.9	LOS F	111.7	815.3	1.00	2.28	3.12	21.1
North	n: Broad	lway Ave	)											
7	L2	902	5.0	980	5.0	1.182	184.3	LOS F	132.0	963.4	1.00	4.85	8.43	14.6
8	T1	5	5.0	5	5.0	1.182	179.8	LOS F	132.0	963.4	1.00	4.85	8.43	14.6
9	R2	111	5.0	121	5.0	1.182	179.8	LOS F	132.0	963.4	1.00	4.85	8.43	14.5
Appr	oach	1018	5.0	1107	5.0	1.182	183.8	LOS F	132.0	963.4	1.00	4.85	8.43	14.6
West	t: Woma	icks Roa	d											
10	L2	115	2.0	125	2.0	0.912	48.9	LOS D	17.7	126.3	1.00	1.80	2.50	27.6
11	T1	278	2.0	302	2.0	0.912	44.7	LOS D	17.7	126.3	1.00	1.80	2.50	27.4
12	R2	5	2.0	5	2.0	0.912	45.1	LOS D	17.7	126.3	1.00	1.80	2.50	27.0
Appr	oach	398	2.0	433	2.0	0.912	45.9	LOS D	17.7	126.3	1.00	1.80	2.50	27.4
All V	ehicles	2747	4.5	2986	4.5	1.182	115.0	LOS F	132.0	963.4	1.00	3.16	4.99	18.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Organisation: STANTEC CONSULTING LTD. | Licence: PLUS / 1PC | Processed: Tuesday, October 8, 2024 10:51:48 PM

**♥** Site: 101 [Town of Blackfalds - Womarks Road & Broadway

Ave - AM Peak - 2024 Existing (Site Folder: General)]

New Site

Site Category: (None)

Roundabout

Vehi	cle Mo	vemen	t Perfori	mance										
Mov	Turn	INF	PUT	DEMA	AND	Deg.	Aver.	Level of	95% BA	ACK OF	Prop.	Effective	Aver.	Aver.
ID			JMES	FLO\		Satn	Delay	Service	QUE		Que	Stop	No.	Speed
		[ Total	HV]	[ Total	HV]				[ Veh.	Dist ]		Rate	Cycles	
0 11		veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
South	n: Broad	dway Ave	9											
1	L2	2	2.0	2	2.0	0.006	8.8	LOS A	0.0	0.2	0.65	0.53	0.65	38.7
2	T1	2	2.0	2	2.0	0.006	4.6	LOS A	0.0	0.2	0.65	0.53	0.65	38.3
3	R2	5	2.0	6	2.0	0.006	4.6	LOS A	0.0	0.3	0.65	0.48	0.65	38.4
Appro	oach	9	2.0	11	2.0	0.006	5.5	LOSA	0.0	0.3	0.65	0.50	0.65	38.4
East:	Woma	cks Road	d											
4	L2	3	5.0	4	5.0	0.110	5.5	LOS A	0.6	4.5	0.06	0.17	0.06	40.9
5	T1	155	5.0	187	5.0	0.110	1.2	LOS A	0.6	4.5	0.06	0.17	0.06	40.6
6	R2	88	5.0	106	5.0	0.075	2.0	LOS A	0.4	2.9	0.06	0.31	0.06	39.4
Appro	oach	246	5.0	296	5.0	0.110	1.5	LOSA	0.6	4.5	0.06	0.22	0.06	40.1
North	n: Broad	lway Ave	)											
7	L2	198	5.0	239	5.0	0.217	8.4	LOS A	1.2	8.6	0.39	0.62	0.39	45.9
8	T1	1	5.0	1	5.0	0.217	3.9	LOS A	1.2	8.6	0.39	0.62	0.39	45.8
9	R2	11	5.0	13	5.0	0.217	4.0	LOS A	1.2	8.6	0.39	0.62	0.39	44.8
Appro	oach	210	5.0	253	5.0	0.217	8.2	LOSA	1.2	8.6	0.39	0.62	0.39	45.9
West	: Woma	icks Roa	d											
10	L2	3	2.0	4	2.0	0.374	7.0	LOS A	2.5	17.9	0.53	0.39	0.53	39.8
11	T1	347	2.0	418	2.0	0.374	2.8	LOS A	2.5	17.9	0.53	0.39	0.53	39.4
12	R2	2	2.0	2	2.0	0.374	3.2	LOS A	2.5	17.9	0.53	0.39	0.53	38.6
Appro	oach	352	2.0	424	2.0	0.374	2.8	LOSA	2.5	17.9	0.53	0.39	0.53	39.4
All Ve	ehicles	817	3.7	984	3.7	0.374	3.8	LOSA	2.5	17.9	0.35	0.40	0.35	41.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Organisation: STANTEC CONSULTÍNG LTD. | Licence: PLUS / 1PC | Processed: Tuesday, October 8, 2024 10:59:05 PM Project: \\ca0002-ppfss02\shared\_projects\\13678592\\02\_transportation\\04\_planning\\01\_traffic\_analysis\SIDRA\\Womacks & Broadway\_with new

**♥** Site: 101 [Town of Blackfalds - Womarks Road & Broadway

Ave - PM Peak - 2024 Existing (Site Folder: General)]

New Site

Site Category: (None)

Roundabout

Vehi	cle Mo	vement	Perfor	mance										
Mov ID	Turn	INPI VOLU [ Total veh/h		DEM/ FLO¹ [ Total veh/h		Deg. Satn v/c	Delay	Level of Service	95% BA QUE [ Veh. veh	EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
Soutl	n: Broad	dway Ave	70	ven/m	70	V/C	sec		ven	m				KIII/II
1	L2	3	2.0	3	2.0	0.006	7.4	LOS A	0.0	0.2	0.48	0.49	0.48	39.0
2	T1	2	2.0	2	2.0	0.006	3.2	LOS A	0.0	0.2	0.48	0.49	0.48	38.7
3	R2	17	2.0	19	2.0	0.015	3.2	LOS A	0.1	0.6	0.44	0.41	0.44	38.7
Appr	oach	22	2.0	25	2.0	0.015	3.7	LOSA	0.1	0.6	0.45	0.43	0.45	38.8
East:	Woma	cks Road												
4	L2	15	5.0	17	5.0	0.177	5.5	LOS A	1.0	7.3	0.09	0.20	0.09	40.8
5	T1	256	5.0	288	5.0	0.177	1.3	LOS A	1.0	7.3	0.09	0.20	0.09	40.4
6	R2	232	5.0	261	5.0	0.177	2.0	LOS A	1.0	7.2	0.09	0.31	0.09	39.3
Appr	oach	503	5.0	565	5.0	0.177	1.7	LOSA	1.0	7.3	0.09	0.25	0.09	39.9
North	: Broad	lway Ave												
7	L2	129	5.0	145	5.0	0.155	9.0	LOS A	0.8	5.9	0.46	0.65	0.46	45.9
8	T1	3	5.0	3	5.0	0.155	4.5	LOS A	0.8	5.9	0.46	0.65	0.46	45.8
9	R2	14	5.0	16	5.0	0.155	4.5	LOS A	0.8	5.9	0.46	0.65	0.46	44.8
Appr	oach	146	5.0	164	5.0	0.155	8.5	LOSA	8.0	5.9	0.46	0.65	0.46	45.8
West	: Woma	cks Road	t											
10	L2	9	2.0	10	2.0	0.185	6.3	LOS A	1.1	7.6	0.38	0.31	0.38	40.1
11	T1	182	2.0	204	2.0	0.185	2.1	LOS A	1.1	7.6	0.38	0.31	0.38	39.7
12	R2	7	2.0	8	2.0	0.185	2.5	LOSA	1.1	7.6	0.38	0.31	0.38	38.9
Appr	oach	198	2.0	222	2.0	0.185	2.3	LOSA	1.1	7.6	0.38	0.31	0.38	39.7
All Ve	ehicles	869	4.2	976	4.2	0.185	3.0	LOSA	1.1	7.6	0.23	0.33	0.23	40.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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▼ Site: 101 [Town of Blackfalds - Womarks Road & Broadway Ave - AM Peak - 16.5K - Adjusted Volumes (Site Folder: General)]

New Site

Site Category: (None)

Roundabout

Vehi	icle Mo	vement	Perfor	mance										
Mov	Turn	INP	TU'	DEMA	AND _	Deg.	Aver.	Level of	95% BA	CK OF	Prop.	Effective	Aver.	Aver.
ID		VOLU		FLO\		Satn	Delay	Service	QUE		Que	Stop	No.	Speed
		[ Total	HV]	[ Total	HV]				[ Veh.	Dist ]		Rate	Cycles	
		veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
Sout	h: Broad	dway Ave	•											
1	L2	5	2.0	5	2.0	0.022	16.5	LOS B	0.1	1.0	0.82	0.72	0.82	49.3
2	T1	5	2.0	5	2.0	0.022	11.9	LOS B	0.1	1.0	0.82	0.72	0.82	49.4
3	R2	58	2.0	61	2.0	0.085	10.2	LOS B	0.6	4.5	0.86	0.75	0.86	50.6
Appr	oach	68	2.0	72	2.0	0.085	10.8	LOS B	0.6	4.5	0.86	0.75	0.86	50.4
East	: Woma	cks Road	ł											
4	L2	16	5.0	17	5.0	0.163	8.9	LOS A	1.0	7.2	0.14	0.41	0.14	55.7
5	T1	210	5.0	221	5.0	0.163	4.3	LOS A	1.0	7.2	0.14	0.41	0.14	55.9
6	R2	228	5.0	240	5.0	0.145	4.3	LOS A	0.9	6.4	0.13	0.47	0.13	54.7
Appr	oach	454	5.0	478	5.0	0.163	4.4	LOSA	1.0	7.2	0.14	0.44	0.14	55.2
North	n: Broad	lway Ave												
7	L2	623	5.0	656	5.0	0.584	10.8	LOS B	4.7	34.4	0.62	0.70	0.62	51.2
8	T1	5	5.0	5	5.0	0.584	6.2	LOS A	4.7	34.4	0.62	0.70	0.62	51.3
9	R2	15	5.0	16	5.0	0.584	6.0	LOS A	4.7	34.4	0.62	0.70	0.62	50.2
Appr	oach	643	5.0	677	5.0	0.584	10.7	LOS B	4.7	34.4	0.62	0.70	0.62	51.2
West	t: Woma	icks Roa	d											
10	L2	16	2.0	17	2.0	0.438	14.2	LOS B	3.4	23.9	0.86	0.88	0.91	52.3
11	T1	280	2.0	295	2.0	0.438	9.6	LOS A	3.4	23.9	0.86	0.88	0.91	52.3
12	R2	5	2.0	5	2.0	0.438	9.4	LOS A	3.4	23.9	0.86	0.88	0.91	51.1
Appr	oach	301	2.0	317	2.0	0.438	9.8	LOSA	3.4	23.9	0.86	0.88	0.91	52.3
All V	ehicles	1466	4.2	1543	4.2	0.584	8.6	LOSA	4.7	34.4	0.53	0.66	0.54	52.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: \\ca0002-ppfss02\shared\_projects\\113678592\\02\_transportation\04\_planning\01\_traffic\_analysis\SIDRA\Womacks & Broadway\_with new

New Site

Site Category: (None)

Roundabout

Vehi	cle Mo	vement	Perfor	mance										
	Turn	INP		DEMA		Deg.		Level of	95% BA			Effective	Aver.	Aver.
ID		VOLU	IMES HV 1	FLO' [ Total	WS HV1	Satn	Delay	Service	QUE [ Veh.	EUE Dist ]	Que	Stop Rate	No. Cycles	Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m m		Maic	Cycles	km/h
South	n: Broad	dway Ave	;											
1	L2	5	2.0	5	2.0	0.012	12.6	LOS B	0.1	0.6	0.76	0.62	0.76	51.7
2	T1	5	2.0	5	2.0	0.012	8.0	LOS A	0.1	0.6	0.76	0.62	0.76	51.8
3	R2	5	2.0	5	2.0	0.008	9.2	LOS A	0.0	0.4	0.75	0.62	0.75	51.3
Appr	oach	15	2.0	16	2.0	0.012	9.9	LOSA	0.1	0.6	0.75	0.62	0.75	51.6
East:	Woma	cks Road	ł											
4	L2	58	5.0	61	5.0	0.313	9.1	LOSA	2.2	16.3	0.25	0.44	0.25	55.0
5	T1	335	5.0	353	5.0	0.313	4.5	LOSA	2.2	16.3	0.25	0.44	0.25	55.1
6	R2	729	5.0	767	5.0	0.467	4.5	LOSA	4.2	30.6	0.27	0.47	0.27	54.2
Appr	oach	1122	5.0	1181	5.0	0.467	4.7	LOSA	4.2	30.6	0.26	0.46	0.26	54.5
North	: Broad	lway Ave												
7	L2	454	5.0	478	5.0	0.524	12.6	LOS B	4.1	30.1	0.72	0.82	0.77	50.5
8	T1	5	5.0	5	5.0	0.524	7.9	LOSA	4.1	30.1	0.72	0.82	0.77	50.6
9	R2	19	5.0	20	5.0	0.524	7.7	LOSA	4.1	30.1	0.72	0.82	0.77	49.5
Appr	oach	478	5.0	503	5.0	0.524	12.3	LOS B	4.1	30.1	0.72	0.82	0.77	50.5
West	: Woma	acks Roa	d											
10	L2	39	2.0	41	2.0	0.408	12.5	LOS B	2.9	20.9	0.78	0.79	0.78	52.7
11	T1	278	2.0	293	2.0	0.408	7.9	LOS A	2.9	20.9	0.78	0.79	0.78	52.8
12	R2	5	2.0	5	2.0	0.408	7.6	LOS A	2.9	20.9	0.78	0.79	0.78	51.6
Appr	oach	322	2.0	339	2.0	0.408	8.4	LOSA	2.9	20.9	0.78	0.79	0.78	52.8
All Ve	ehicles	1937	4.5	2039	4.5	0.524	7.2	LOSA	4.2	30.6	0.47	0.61	0.48	53.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: \\ca0002-ppfss02\shared\_projects\113678592\02\_transportation\04\_planning\01\_traffic\_analysis\SIDRA\Womacks & Broadway\_with new

**♥** Site: 101 [Town of Blackfalds - Womarks Road & Broadway

Ave - AM Peak - 22.5K (Site Folder: General)]

New Site

Site Category: (None)

Roundabout

Vehi	cle Mo	vement	Perfor	mance										
	Turn	INP		DEMA		Deg.		Level of	95% BA			Effective	Aver.	Aver.
ID		VOLU [Total	MES HV1	FLO <sup>1</sup> [Total	WS HV1	Satn	Delay	Service	QUE [ Veh.	EUE Dist ]	Que	Stop Rate	No. Cycles	Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m m		Maic	Cycles	km/h
South	n: Broad	dway Ave												
1	L2	5	2.0	5	2.0	0.027	14.2	LOS B	0.2	1.3	0.89	0.74	0.89	36.8
2	T1	5	2.0	5	2.0	0.027	9.9	LOS A	0.2	1.3	0.89	0.74	0.89	36.5
3	R2	58	2.0	63	2.0	0.106	8.8	LOS A	0.8	6.0	0.95	0.79	0.95	36.8
Appro	oach	68	2.0	74	2.0	0.106	9.3	LOSA	0.8	6.0	0.94	0.78	0.94	36.7
East:	Woma	cks Road												
4	L2	16	5.0	17	5.0	0.207	5.7	LOS A	1.4	9.9	0.19	0.22	0.19	40.5
5	T1	244	5.0	265	5.0	0.207	1.4	LOS A	1.4	9.9	0.19	0.22	0.19	40.1
6	R2	416	5.0	452	5.0	0.274	2.1	LOSA	2.0	14.6	0.19	0.32	0.19	39.2
Appro	oach	676	5.0	735	5.0	0.274	1.9	LOSA	2.0	14.6	0.19	0.28	0.19	39.5
North	: Broad	lway Ave												
7	L2	687	5.0	747	5.0	0.800	13.8	LOS B	12.4	90.5	0.88	0.89	1.11	43.6
8	T1	5	5.0	5	5.0	0.800	9.3	LOSA	12.4	90.5	0.88	0.89	1.11	43.5
9	R2	133	5.0	145	5.0	0.800	9.3	LOS A	12.4	90.5	0.88	0.89	1.11	42.6
Appro	oach	825	5.0	897	5.0	0.800	13.1	LOS B	12.4	90.5	0.88	0.89	1.11	43.5
West	: Woma	icks Road	d											
10	L2	26	2.0	28	2.0	0.473	12.7	LOS B	4.0	28.6	0.95	0.99	1.06	37.9
11	T1	228	2.0	248	2.0	0.473	8.5	LOS A	4.0	28.6	0.95	0.99	1.06	37.6
12	R2	5	2.0	5	2.0	0.473	8.9	LOS A	4.0	28.6	0.95	0.99	1.06	36.8
Appro	oach	259	2.0	282	2.0	0.473	8.9	LOSA	4.0	28.6	0.95	0.99	1.06	37.6
All Ve	ehicles	1828	4.5	1987	4.5	0.800	8.2	LOSA	12.4	90.5	0.64	0.67	0.76	40.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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**♥** Site: 101 [Town of Blackfalds - Womarks Road & Broadway

Ave - PM Peak - 22.5K (Site Folder: General)]

New Site

Site Category: (None)

Roundabout

Veh	icle Mo	vemen	t Perfori	mance										
Mov	Turn	INF	PUT	DEMA	AND	Deg.	Aver.	Level of	95% BA	ACK OF	Prop.	Effective	Aver.	Aver.
ID			JMES	FLO\		Satn	Delay	Service		EUE	Que	Stop	No.	Speed
		[ Total	HV]	[ Total	HV]				[ Veh.	Dist ]		Rate	Cycles	
		veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
Sout	h: Broad	dway Ave	9											
1	L2	5	5.0	5	5.0	0.030	19.0	LOS B	0.2	1.8	1.00	0.74	1.00	35.1
2	T1	5	5.0	5	5.0	0.030	14.7	LOS B	0.2	1.8	1.00	0.74	1.00	34.8
3	R2	5	5.0	5	5.0	0.021	18.4	LOS B	0.1	1.1	0.99	0.77	0.99	33.5
Appr	oach	15	5.0	16	5.0	0.030	17.4	LOS B	0.2	1.8	1.00	0.75	1.00	34.5
East	: Woma	cks Road	d											
4	L2	58	5.0	63	5.0	0.379	6.5	LOSA	2.9	21.2	0.47	0.36	0.47	39.7
5	T1	332	5.0	361	5.0	0.379	2.2	LOSA	2.9	21.2	0.47	0.36	0.47	39.4
6	R2	926	5.0	1007	5.0	0.682	3.0	LOS A	8.4	61.1	0.63	0.48	0.63	38.4
Appr	oach	1316	5.0	1430	5.0	0.682	3.0	LOSA	8.4	61.1	0.59	0.44	0.59	38.7
North	n: Broad	lway Ave	)											
7	L2	902	5.0	980	5.0	1.147	155.4	LOS F	115.1	839.9	1.00	4.60	7.93	16.5
8	T1	5	5.0	5	5.0	1.147	150.9	LOS F	115.1	839.9	1.00	4.60	7.93	16.4
9	R2	111	5.0	121	5.0	1.147	150.9	LOS F	115.1	839.9	1.00	4.60	7.93	16.3
Appr	oach	1018	5.0	1107	5.0	1.147	154.9	LOS F	115.1	839.9	1.00	4.60	7.93	16.5
Wes	t: Woma	icks Roa	d											
10	L2	115	5.0	125	5.0	0.974	72.7	LOS F	24.4	177.9	1.00	2.19	3.23	23.5
11	T1	278	5.0	302	5.0	0.974	68.5	LOS E	24.4	177.9	1.00	2.19	3.23	23.3
12	R2	5	5.0	5	5.0	0.974	68.9	LOS E	24.4	177.9	1.00	2.19	3.23	23.0
Appr	oach	398	5.0	433	5.0	0.974	69.7	LOS E	24.4	177.9	1.00	2.19	3.23	23.4
All V	ehicles	2747	5.0	2986	5.0	1.147	69.0	LOSE	115.1	839.9	0.80	2.24	3.69	24.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

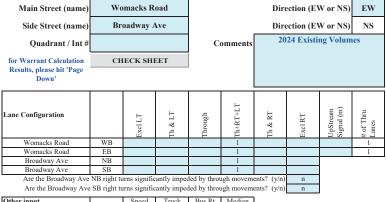
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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## **Town of Blackfalds - Traffic Signal Warrant Analysis**

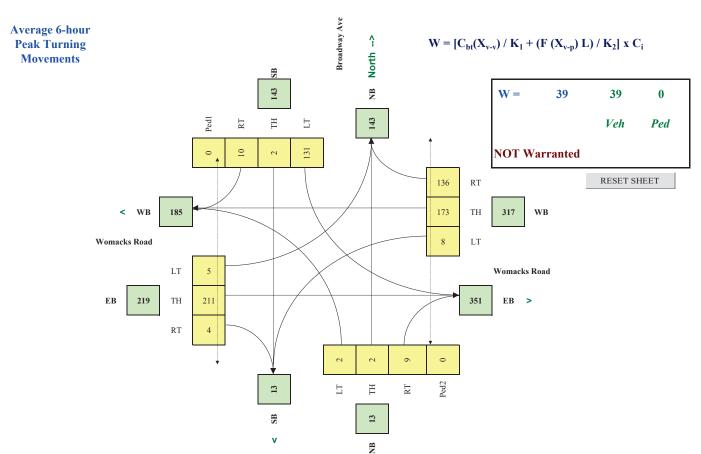


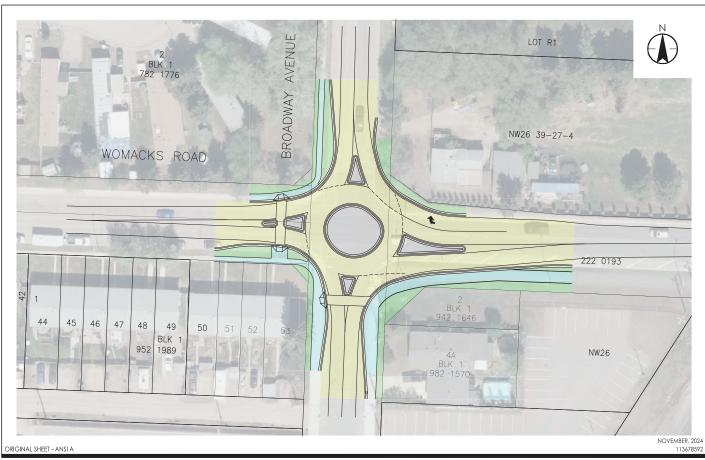
Road Authority:	Town of Blackfalds
City:	Town of Blackfalds, AB
Analysis Date:	September 24, 2024
Count Date:	2024
Date Entry Format:	(yyyy-mm-dd)

Demographics		
Elem. School/Mobility Challenged	(y/n)	n
Senior's Complex	(y/n)	n
Pathway to School	(y/n)	n
Metro Area Population	(#)	10,500
Control Dusiness District	(x1/m)	

Other input		Speed (Km/h)	Truck %	Bus Rt (y/n)	Median (m)
Womacks Road	EW	40	5.0%	n	
Broadway Ave	NS	50	5.0%	n	

Set Peak Hours													Ped1	Ped2	Ped3	Ped4
Traffic Input		NB			SB			WB			EB		NS	NS	EW	EW
	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT	W Side	E Side	N Side	S Side
	1	1	4	143	1	8	1	112	63	2	250	1	0	0	0	0
	2	2	5	198	1	11	2	155	88	3	347	2	0	0	0	0
press 'Set Peak Hours' Button to set the peak hour	1	1	3	119	1	7	1	93	53	2	208	1	0	0	0	0
periods	2	1	10	77	2	8	10	161	146	5	109	4	0	0	0	0
	3	2	17	129	3	14	16	269	244	9	182	7	0	0	0	0
	3	2	16	119	3	13	15	247	224	8	167	6	0	0	0	0
Total (6-hour peak)	12	9	55	785	11	61	45	1,037	818	29	1,263	21	0	0	0	0
Average (6-hour peak)	2	2	9	131	2	10	8	173	136	5	211	4	0	0	0	0







1100 - 4900 50th Street Red Deer AB Canada T4N 1X7 www.stantec.com



PRELIMINARY FOR DISCUSSION PURPOSES ONLY

Client/Project

TOWN OF BLACKFALDS
WOMACKS ROAD AND BROADWAY AVENUE

Figure No.

Title

ROUNDABOUT CONCEPT



# **Business Case - Womacks Road & Broadway Avenue Intersection Improvements**

## **BUSINESS CASE**

PREPARED BY: DATE:

Niki Burkinshaw, Municipal Engineer NOVEMBER 12, 2024

TO: CC:

Kim Issak, CAO Preston Weran, Director of IPS

### **EXECTUTIVE SUMMARY**

Consistent with the 2015 Transportation Master Plan, intersection upgrades are needed at the intersection of Womacks Road and Broadway Avenue to address increasing traffic with growth in the western portion of the Town. With the extension of Womacks Road across the rail line and the free-flowing traffic changing to be on that roadway, concerns have been expressed by residents relating to sightlines and the ability to turn onto or cross Womacks Road during busy times of day including during events at the Eagle Builders Centre. A high-level intersection assessment for the Womacks Road and Broadway Avenue intersection was completed with a focus on providing traffic modeling and a conceptual design for a roundabout at that location. The accompanying memo (attached) was finalized in October 2024.

The Director and Municipal Engineer recommend moving forward with the detailed design, tendering, and construction of a roundabout with westbound right-turn lane at the Womacks Road and Broadway Avenue intersection. Two potential schedule options are presented below.

### ISSUE TO BE ADDRESSED

The extension of Womacks Road across the Canadian Pacific Kansas City (CPKC) rail line was complete in 2022, forming a new 4-legged intersection with Broadway Avenue. At the intersection, traffic is now free-flowing on Womacks Road (eastbound / westbound), where previously, as a t-intersection, traffic was free-flowing on Broadway Avenue (northbound / southbound). Public concerns have been received regarding sightlines to the east and west, as well as concerns regarding getting onto Womacks Road from Broadway Avenue and the Eagle Builders Centre parking lot during events.

Stantec Consulting Ltd. (Stantec) was retained in March 2024 to provide a high-level intersection assessment for the Womacks Road and Broadway Avenue intersection, with a focus on providing traffic modeling and a conceptual design for a roundabout at that location. The other options included for the assessment were a signalized intersection concept and smaller geometric improvements (providing bulbing at the intersection).

As the Town continues to develop within the northern portion of the municipality, traffic volumes at the intersection of Womacks Road and Broadway Avenue will grow, resulting in increasing delays for drivers and increasing safety concerns for all roadway users, including active modes (pedestrians, cyclists, etc.). It is also noted that Broadway Avenue is part of the Town's Truck Route network.

The 2015 Transportation Master Plan (by Stantec) recommended signalization of the Womacks Road and Broadway Avenue intersection by the 12,000 population horizon. It is noted that at the time the Master Plan was completed, roundabouts were just starting to become a focus of road agencies when looking at intersection improvements and so roundabouts were not considered as part of that study. Currently, most road agencies – including Alberta Transportation and Economic Corridors (ATEC) and municipalities across the province – require that roundabouts be considered at locations where traffic control greater than stop signs are needed (e.g. prior to or instead of signalization). Construction of the Eagle Builders Centre was also not considered as part of the 2015 study.

Installation of a four-way stop at the intersection has not been considered. This is because, while it would partially address the sightline concerns, a four-way stop would not address the growing delays as traffic volumes increase at the intersection. Four-way stops also do not clear traffic under a train delay or operate as efficiently as roundabouts under higher volume conditions, such as when an event at the Eagle Builders Centre ends, due to driver confusion with regards to who has the right of way at four-way stops and the time it takes to stop and go again (drivers need to consider three other directions of traffic).

## OPTIONS TO CONSIDER

#### Option 1 - Status Quo

Describe the current situation:

Do not complete any intersection improvements at the Womacks Road and Broadway Avenue intersection.

The intersection is currently a two-way stop-controlled intersection with free-flowing traffic on Womacks Road (eastbound / westbound). Currently, vehicle delays and queuing are experienced, particularly for southbound traffic in the AM peak hour, as well as during events at the Eagle Builders Centre for traffic entering and exiting the centre. Public concerns relating to sightlines to the west have been received in the past and a 15m no-parking zone has is signed along the south side of Womacks Road, west of Broadway Avenue, to address that. Concerns regarding sightlines to the east for southbound traffic have also been received, and verified through field observations.

#### Benefits:

- No costs incurred, as no intersection improvements would be completed.
- Cost savings of \$66,000 \$1,200,000, compared to the other Options presented below.

#### Risks / Disadvantages:

- Concerns regarding sightlines to the east and west would not be addressed beyond what exists now (e.g. the 15m no-parking zone).
- Traffic delays and queueing will continue to grow as development occurs within the Town's northern subdivisions.
- If a parking lot is developed north of Womacks Road (Option 5 for the Eagle Builders Centre parking expansion), additional safety concerns will need to be addressed with an increase in pedestrians crossing Womacks Road during events.

#### **Option 2 - Roundabout**

Describe the Option 2 situation/changes:

Analysis for a single-lane roundabout was carried out for the Womacks Road and Broadway Avenue intersection based on current (2024) traffic volumes and at the 16,500 and 22,500 future population horizons.

When referring to Level of Service (LOS) below, the LOS designation (letter) is summarized as follows:

- LOS-A is the highest LOS classification representing low traffic volumes and little to no delay.
- LOS-F is the lowest designation representing very low speeds, volumes exceeding the capacity of the intersection, and long delays with stop-and-go traffic.

Typically, a maximum LOS-D is considered acceptable in the short-term with a maximum LOS-E being considered acceptable for longer-term (10+ years) planning.

A high-level summary of the analysis results for a single-lane roundabout is as follows:

- **2024** all movements experience minimal delays and queueing in both the AM and PM peak hours. All movements are shown to operate at a LOS-A. The westbound queueing is not expected to exceed the distance (approximately 85m) between the intersection and the CPCK rail line.
- **16,500 population horizon** all movements expected to continue to experience minimal delays in the AM and PM peak hours. Movements are shown to operate at a LOS-A or LOS-B. The westbound queueing is expected extend up to 113m to the east (backing up as far as Grigg Way), exceeding the available distance between the intersection and the CPCK rail line.
- **22,500 population horizon** both the westbound and southbound movements are expected to exceed acceptable LOS (max LOS-F) in the PM peak hour. The westbound queueing is expected to extend up to 815m to the east (backing up as far as, or further than, Highway 2A), exceeding the available distance between the intersection and the CPCK rail.

To address the westbound queuing concerns and poor operations at the long-term horizon, additional analysis was completed based on the roundabout including a dedicated westbound right-turn and dedicated northbound right-turn lane. With the additional lanes, the high-level summary of the analysis is as follows:

- **16,500 population horizon** all movements expected to continue to experience minimal delays in the AM and PM peak hours. Movements are shown to operate at a LOS-A to LOS-B. The westbound queueing is not expected to exceed the distance between the intersection and the CPCK rail line.
- **22,500 population horizon** –the southbound movement is expected to exceed acceptable LOS (max LOS-F) in the PM peak hour. The westbound queueing is not expected to exceed the distance between the intersection and the CPCK rail line. Significant queuing is expected in the SB direction in the PM peak hour with the queue extending over 800m to the north (backing up past Westbrooke Road). Eastbound queuing is expected to increase in the PM peak hour, extending over 150m to the west (approaching the Lansdowne Avenue intersection).

For Option 2, it would be recommended to include construction of the dedicated westbound right-turn with the initial construction; while the dedicated northbound right-turn lane could be added at a later time if / when needed. The "Analysis" section below presents two options for the timing of construction.

Due to the constrained right-of-way at the intersection, a roundabout at Womacks Road and Broadway Avenue is expected to be similar in size to the Lantern Street and Liberty Avenue roundabout located in Gasoline Alley (by Galaxy Cinemas) with a fully mountable central island to allow for truck, coach bus, and other larger vehicles turning movements.

#### Benefits:

- Sightline concerns would be addressed through detailed design and construction of the roundabout.
   Vehicles slow down and yield to traffic already within a roundabout, which will also help alleviate the pubic concerns relating to the sightlines with Womack Road currently having free-flowing traffic
- Roundabouts have proven benefits compared to other types of intersections (including traffic signals) including increased safety with reduced conflict points, promoting lower speeds and traffic calming, improved operational performance, environmental benefits (e.g. less idling), and lower operating costs.
- Comparable operational performance in the long-term compared to signalization (some movements operating within acceptable parameters, and some movements exceeding them).
- Reduced westbound queues with the westbound right-turn lane, compared to the signalized option.

#### Risks / Disadvantages:

- Capital cost for construction of the roundabout, including the westbound right-turn lane, is estimated to be \$1,200,000.
- Both the single-lane and expanded roundabout options fit within the existing road right-of-way. However, with the addition of the westbound right-turn lane backsloping onto private property or a retaining wall will be needed in the northeast corner of the intersection.
- This would be Blackfalds' first roundabout. While many drivers may be familiar with their operation from other municipalities, including Lacombe and Red Deer, and with the Highway 2A and Highway 597 roundabout that has been in operation since the summer of 2015, some drivers may not be familiar with their operation. It is recommended to plan public information and/or engagement events leading up to the opening of the roundabout, should it be the selected option.

#### **Option 3 - Signalization**

Describe the Option 3 situation/changes:

Analysis for a signalized intersection was carried out for the Womacks Road and Broadway Avenue intersection based on current (2024) traffic volumes and at the 16,500 and 22,500 future population horizons.

For the 2024 analysis, the intersection included a single shared approach lane in all directions. For the 16,500 and 22,500 population horizons, the analysis included a dedicated westbound right-turn lane and dedicated southbound left-turn lane; all other movements are shared approach lanes.

A high-level summary of the analysis results is as follows:

- **2024** all movements experience minimal delays and queueing in both the AM and PM peak hours. All movements are shown to operate at a LOS-A or LOS-B. The westbound queueing is not expected to exceed the distance (approximately 85m) between the intersection and the CPCK rail line.
- **16,500 population horizon** all movements expected to experience moderate delays in the AM and PM peak hours, with most movements operating at a LOS-A to LOS-C. The westbound queueing is expected to extend up to 97m to the east (backing up as far as Grigg Way), exceeding the available distance between the intersection and the CPCK rail line.
- **22,500 population horizon** even with a dedicated southbound left-turn lane, the southbound left-turn movements is expected to exceed the typically acceptable LOS (max LOS-F) in the PM peak hour. The westbound queueing is expected to extend up to 105m to the east (backing up as far as

Grigg Way), exceeding the available distance between the intersection and the CPCK rail line. Significant queuing is also expected in the SB direction with the queue extending over 300m to the north in the PM peak hour (backing up past the mobile home park access). Eastbound queuing is expected to increase in the PM peak hour, extending over 100m to the west (extending to the Broadway Village access).

#### Benefits:

• Lower capital cost compared to construction of a roundabout (comparative cost savings of \$450,000 - \$700,000).

#### Risks / Disadvantages:

- Capital cost expected to be \$500,000 \$750,000, not including any required land purchase.
- Additional land requirements to be confirmed based on detailed design in particular for the ultimate Womacks Road (east of Broadway Avenue) configuration, which includes a trail along the north side of the roadway.
- Comparable operational performance in the long-term compared to signalization (some movements operating within acceptable parameters, and some movements exceeding them). However, with signals the westbound queue is expected to exceed the distance between the intersection and the CPCK rail crossing.
- Higher operational costs (compared to roundabout option) to power and maintain traffic signal hardware.
- Design will need to account for shielding lights, where possible, to minimize impacts to adjacent residential properties.
- Would include a skewed north/south movement with introduction of the southbound left-turn lane.

#### **Option 4 - Northwest Corner Bulb**

Describe the Option 4 situation/changes:

While the existing configuration of Wo macks Road and Broadway Avenue have been confirmed to meet the minimum sightline requirements set by the Transportation Association of Canada (TAC) based on the posted speed limits for eastbound and westbound traffic, there have been concerns raised regarding sighlines for southbound vehicles turning onto or crossing Womacks Road. The sightlines can be improved by constructing a bulb on the northwest corner of the intersection, which will allow the stop bar to be moved approximately 1.1m to the south. Shifting the stop bar will increase sightlines for southbound drivers.

Construction of the bulb would also improve the visibility and sightlines for pedestrians and shorten the crossing distance across Womacks Road.

#### Benefits:

- Improves sightlines for southbound drivers turning onto or crossing Womacks Road.
- Improves visibility of and sightlines for pedestrians crossing Womacks Road, as well as shortens the crossing distance.
- Lower initial capital costs for improvements (estimated to be \$66,000).
- No additional land requirements.

#### Risks / Disadvantages:

- Does not address increasing delays as traffic volumes increase at the intersection. Additional improvements (e.g. roundabout or signalization) would still be required in the future (prior to the 16,500 population horizon).
- Larger vehicles, including vehicles with longer trailers, would possibly cross the centerline on the north leg of the intersection. This would be refined / confirmed during detailed design if this option is selected.

#### **ANALYSIS**

Some non-financial resources (staff time) will be needed to provide project management for the design and construction phases of the intersection improvements. Additional staff time will be needed if Option 2 is selected to provide public information / engagement regarding how to drive through roundabouts. This work can be completed with existing staff resources.

The financial resources needed for each of the options is summarized below:

- Option 1 (Status Quo) no financial resources required
- Option 2A (roundabout with WB right-turn lane) 2025 design \$415,000 / 2026 construction -\$785,000
  - o Franchise utility coordination would be included in 2025 work.
  - o Public information / engagement is recommended if Option 2 is selected.
  - o Optional NB right-turn lane additional \$200,000
- Option 2B (roundabout with WB right-turn lane) 2025 design & construction \$1,200,000
- Option 3 (signalization) \$500,000 to \$750,000
  - o This does not include land requirements, which will be confirmed through detailed design.
- Option 4 (NW bulb) \$66,000

#### RECOMMENDATION

It is recommended to move forward with **Option 2B** – detailed design and construction of a roundabout, including westbound right-turn lane, at the intersection of Womacks Road and Broadway Avenue with design and construction in 2024/2025. The 2025 work would also include franchise utility coordination.

Proceeding with a roundabout at the intersection is for the following reasons:

- Increased safety for all users with a reduced number of conflict points compared to a signalized intersection;
- Reduced queuing through the 16.5K population horizon, in particular for westbound traffic (to avoid traffic queuing back past the CPCK rail crossing);
- Improved sightlines for drivers, as they would need to look for vehicles already in the roundabout rather than looking further east and west down Womacks Road for a gap in traffic;
- Lower operational costs (e.g. no power needed); and
- Lower delays for vehicles and lower emissions from less idling, in particular during off-peak traffic (e.g. won't need to wait for the light to turn green to go if no traffic is approaching).

Depending on the outcome related to the Eagle Builders Centre parking expansion, the scope of improvements at Womacks Road and Broadway Avenue will be adjusted if / as necessary (e.g. related to additional sidewalks or pedestrian crossings that may be needed depending on the location of the parking expansion.

#### HOW WILL WE DETERMINE SUCCESS OF THIS INITIATIVE?

Completion of the intersection improvements at the intersection of Womacks Road and Broadway Avenue that improves safety for roadway users – both drivers and pedestrians – and improves the flow of traffic during peak hours and events hosted at the Eagle Builders Centre.

#### SUGGESTED SCHEDULE FOR IMPLEMENTING THE RECOMMENDATION

#### Option 2A - 2025 Design / 2026 Construction:

Confirm Scope of Improvements – Fall 2024
Initiate Detailed Design – January 2025
Initiate Discussions with Franchise Utilities – Spring 2024
Detailed Design Complete – September 2025
Project out to Tender – November 2025
Construction Award – January 2026
Construction Start – Spring/Summer 2026
Construction Complete – August 2026

#### Option 2B - 2024/25 Design & Construction:

Confirm Scope of Improvements – Fall 2024
Start Preliminary Land Negotiations (based on conceptual design) – Fall 2024
Initial Discussions with Franchise Utilities (based on conceptual design) – Fall 2024
Initiate Detailed Design –Fall 2024
Detailed Design Complete – Early to mid-March 2025
Project out to Tender – End of March / Early April 2025
Construction Award – End of April 2025
Construction Start – July 2025
Construction Complete – August 2025

#### PROJECT BUDGET & CASH FLOW

Additional Funds to be requested as part of the 2024/25 capital budget approval outside of the current 5 year plan, but inside the recommended TMP horizon for 12,000 population.

## ALIGNMENT WITH STRATEGIC PLAN & OTHER MAJOR PLANNING DOCUMENTS

The Town's 2024 – 2026 Mid-Term Strategic Plan lists "(investing) in the safety of our residents through pedestrian safety and advocacy for highway improvements" as one of the top priorities, further noting that the Town will "consider pedestrians first and focus on safe pedestrian crossing throughout the town." Intersection improvements at Womacks Road and Broadway Avenue will not only improve safety for drivers, but also for pedestrians. In particular, roundabouts are proven to have many safety benefits for pedestrians including less conflict points with vehicles (e.g. traffic approaches from one direction at a time) slower speeds, and (depending on the design) shorter crossing distances.

The 2015 Transportation Master Plan recommended signalization of the Womacks Road and Broadway Avenue intersection by the 12,000 population horizon. It is noted that at the time the Master Plan was completed, roundabouts were just starting to become a focus of road agencies when looking at intersection improvements and so roundabout were not considered as part of that study.

COLLABORATION V	VITH OTHER TOWN DEPART	MENTS	
TOWN WORK UNIT	THEIR ROLE IN THE PROJECT	TIMELINE FOR THEIR INVOLVEMENT	WHO DO YOU PLAN TO SPEAK TO ABOUT THEIR INVOLVEMENT?
Marketing & Communications	Public information / engagement lead	Spring / Summer 2026	TBD
CAO	Landowner negotiations	Winter 2025 – Spring 2026	TBD
Project, Events & EBC Department	Detour planning input before & during construction	Winter 2025 – Fall 2026	TBD
Emergency Management & Protective Services	Detour planning input before & during construction	Winter 2025 – Fall 2026	TBD

## **ATTACHMENTS**

• "Womacks Road and Broadway Avenue Intersection Assessment – Technical Memo" (Stantec, October 15, 2024)

BUSINESS CASE APPROVALS	
PROJECT SPONSOR (PRINT NAME): Preston Weran	PROJECT LEAD (PRINT NAME): Niki Burkinshaw
Project Sponsor (Signature):	Project Lead (Signature):
Date:	Date:
November 13, 2024	November 13, 2024
November 13, 2024	November 13, 2024



## TOWN OF BLACKFALDS STANDING COMMITTEE OF COUNCIL REQUEST FOR DIRECTION

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MEETING DATE: November 18, 2024

PREPARED BY: Niki Burkinshaw, Municipal Engineer

PRESENTED BY: Niki Burkinshaw, Municipal Engineer

SUBJECT: CPKC Train Whistle Cessation Next Steps

#### **BACKGROUND**

At the February 28, 2023, Regular Meeting of Council, a member of the public appeared before Council as a delegation outlining concerns about the numerous train whistles during the day and nighttime hours as the Canadian Pacific Kansas City ("**CPKC**") trains travel through the community. The key concern was the disruption of sleep that the train whistles cause during nighttime hours. It was also indicated that the train whistles are a deterrent for people to take up residency in Blackfalds. The individual outlined several other communities that have or are moving to train whistle cessation and implored Council to take similar action.

An open house to gather public feedback for the support of this initiative took place earlier in 2023. Following the open house, Administration brought forward a report to the March 23, 2023, meeting to request that Council consider a Whistle Cessation Study to determine if any improvements were needed. The Whistle Cessation Study has been completed and is attached.

It was noted that upon completion of the study, Transport Canada would then work with the rail company and the Town towards a resolve to have the whistle cessation put in place. The link below outlines the process in detail.

https://tc.canada.ca/en/rail-transportation/grade-crossings/apply-stop-train-whistling-public-grade-crossing#a02

The review period by Transport Canada and CPKC is expected to take several months, and if the train whistle cessation agreement is completed with Transport Canada, the train whistle cessation would then be implemented.

#### DISCUSSION

The Whistle Cessation Study outlines deficiencies and remedial measures for each crossing, as well as summarizing the whistle cessation requirements for each location. Under existing conditions at the time that the report was prepared, all 4 crossing locations meet the requirements for whistle cessation. It is noted that this does not include the proposed trail along the north side of the South Street crossing. To meet the requirements for whistle cessation once the proposed trail is constructed, the trail crossing will require Flashing Lights, Bells & Gates (FLB & G) for pedestrians walking in both directions.

The remedial measures for each of the crossings that fall under the Town's responsibility include the following:

- Womacks Road crossing add westbound "X" paint marking and refresh the existing paint markings (stop bars in both directions and the eastbound "X" marking);
- South Street crossing none:



## TOWN OF BLACKFALDS STANDING COMMITTEE OF COUNCIL REQUEST FOR DIRECTION

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- Eagle Builders Centre pedestrian crossing install trail-sized railway crossing ahead warning signs for pedestrians in both directions; and
- Township Road 40-0 crossing none.

The remedial measures falling under the Town's responsibility are currently in progress and are expected to be completed in the fall of 2024.

In addition to the remedial measures noted above, the Town will likely be required to install fencing to address the area between East Railway Street and Lansdown Avenue, in the vicinity of Moore Street, where trespassing concerns have been noted (approximately 525m in length). This will be confirmed through discussions with CPKC.

From previous discussions with CPKC relating to whistle cessation, it is expected that the Town will need to enter a third-party insurance policy to protect CPKC and the Town from additional liability should there be an accident resulting from the train whistle cessation at the crossings.

The process of moving forward to pursue whistle cessation is generally summarized as follows:

- Town to consult with the CPKC to confirm feasibility of whistle cessation.
- Town to notify all relevant associations and organizations (based on Transport Canada requirements) and to issue a public notice which says that the Town intents to pass a resolution to stop train whistling at the railway crossings.
- If it is agreed (by both the Town and CPKC) that the crossings meet the requirements for whistle cessation, the Town would then pass a resolution saying it agrees whistling should not be used at the crossings and send a copy of the resolutions to CPKC and all relevant associations and organizations.
- Once they receive the resolution, the railway company must:
  - o Issue special instructions to stop train whistling at the crossings:
  - Notify Transport Canada of the effective date of whitling cessation; and
  - Notify the Town in writing of the whistling cessation, not later than 30 days after the day the whistling stops.
- Town and CPKC to both ensure the right safety conditions are met in accordance with the Railway Safety Act and Grade Crossing Regulations. If the proper safety conditions are not maintained, Transport Canada may order that train whistling start again.

Once CPKC and the Town agree regarding the crossings meeting the requirements for whistle cessation, Administration would come back to Council requesting that a resolution be passed agreeing that whistling should not be used at the crossings within Town limits. Lacombe County would need to follow the same process relating to the Township 40-0 crossing, should they choose to do so.

#### FINANCIAL IMPLICATIONS

The financial resources needed to move forward with whistle cessation include:

- Fencing \$45,000 for installation of 525m of fencing
- Fencing and project contingency \$50,000 (if required)
  - Land purchase may be required (to be determined)
- FLB & G system for the future South Street pedestrian crossing \$55,000
- Additional liability insurance to be determined (estimated \$1,000 per year)



# TOWN OF BLACKFALDS STANDING COMMITTEE OF COUNCIL REQUEST FOR DIRECTION

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A funding request has been included as part of the 2025 Capital Budget relating to the whistle cessation for \$150,000.

#### ADMINISTRATIVE RECOMMENDATION

That Standing Committee of Council consider the following motion:

- 1. That Standing Committee of Council recommend Administration to move forward with the next steps in the whistle cessation process, including:
  - Consulting with CPKC to confirm the feasibility of whistle cessation in Blackfalds;
  - Notifying all relevant associations and organizations (based on Transport Canada requirements); and
  - Issuing a public notice which says that the Town intends to pass a resolution to stop train whistling at the railway crossings.

#### **ALTERNATIVES**

- a) That Standing Committee of Council refer CPKC Train Whistle Cessation Next Steps back to Administration for more information.
- b) That Standing Committee of Council recommend Administration to not move forward with the whistle cessation process.

#### **ATTACHMENTS**

• Blackfalds Whistle Cessation Study, Final Report - WATT Consulting Group, August 2024

#### **APPROVALS**

Kim Isaak.

Chief Administrative Officer

Department Director / Author



# Blackfalds Whistle Cessation Study

Final Report

# Town of Blackfalds





WATT CONSULTING GROUP August 6, 2024

> WATT CALGARY 1300 – 736 6th Ave SW Calgary, AB T2P 3T7 403-273-9001



# BLACKFALDS WHISTLE CESSATION STUDY

Tanner Vollema, EIT Transportation Engineer-in-Training

Author

PERMIT TO PRACTICE WATT CONSULTING GROUP LTD.

RM Signature Brenden Strawn

RM APEGA ID #: 251987

Date: August 7, 2024

**PERMIT NUMBER: P003818** 

The Association of Professional Engineers and Geoscientists of Alberta (APEGA)

Prepared For: Town of Blackfalds

Date: August 6, 2024 Our File No: 4168.T01 Niki Burkinshaw, P.Eng. Senior Transportation Planning Engineer

Reviewer



WATT CALGARY 1300 – 736 6th Ave SW Calgary, AB T2P 3T7 403-273-9001



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#### 1.0 INTRODUCTION

#### 1.1 Background and Scope

Watt Consulting Group Ltd was retained by the Town of Blackfalds to examine the feasibility of eliminating whistling at three crossings located in the Town of Blackfalds (Town) as well as the Township Road 400 crossing just north of the Town boundary. To determine what improvements are required at the subject crossings to meet the whistling cessation requirements specified in Section 104 of the Grade Crossings Regulations (GCR) and Appendix D of the Grade Crossing Standards (GCS), the project team completed the following tasks:

- Conducted compliance reviews of the railway crossings; and
- Identified engineering and/or enforcement countermeasures with the potential to mitigate the identified non-conformities and deficiencies at the crossings.

The review of the at-grade railway crossings was conducted using the following regulations, standards, and guidelines:

- Grade Crossings Handbook
- Grade Crossings Regulations (GCR) required
- Grade Crossing Standards (GCS) cited by the GCR
- Manual of Uniform Traffic Control Devices for Canada (MUTCDC)

The rail agencies' data (e.g., volume of railway traffic, maximum train speed, and crossing mileage) were obtained from Canadian Pacific Kansas City (CPKC) Rail, who is the rail authority.

To support this study, a site inspection was conducted on January 29, 2024. Daily vehicular / pedestrian traffic counts were conducted at each crossing between January 23 and 26, 2024.

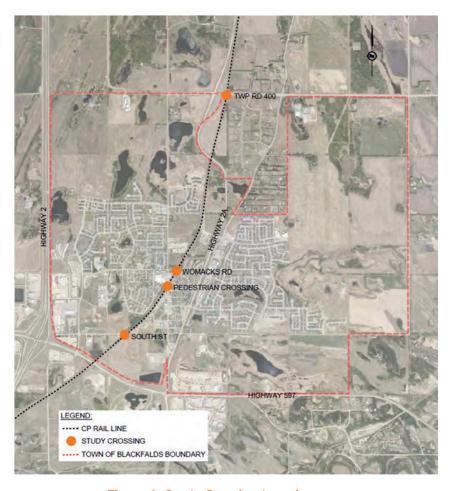


# 1.2 Study Area

The study area consisted of a total of four grade crossings along a CPKC railway corridor. The crossings reviewed consisted of the following:

- 1. Womacks Road (Leduc Subdivision Mile 12.03)
- 2. Short Street (Leduc Subdivision Mile 11.35)
- 3. EBC Pedestrian Crossing (Leduc Subdivision Mile 12.18)
- 4. Township Road 400 (Leduc Subdivision Mile 13.54)

The location of each crossing is shown in **Figure 1**.



**Figure 1: Study Crossing Locations** 



#### 1.3 Report Structure

This report is organized in the following sections:

- Safety deficiencies and remedial measures: lists the deficiencies and safety
  issues identified during the field investigations and the associated remedial
  measures for the subject crossings to meet the prevailing standards and
  regulations. Note that each crossing has a separate safety deficiencies and
  remedial measures section.
- Whistle Cessation Requirements: identifies the required improvements to achieve whistle cessation at the crossings.
- Action plan: provides clear implementation plan that translate the technical findings into implementable sets of prioritized action items with associated budget level cost estimates and responsible parties.



#### 2.0 WOMACKS ROAD CROSSING

The crossing on Womacks Road (Leduc Subdivision, Mile 12.03) is a single-track crossing operated by CPCK Rail with Womacks Road being a paved, undivided urban 2-lane collector roadway with daily volumes of 7,300 vpd and a 40 km/h posted speed limit. The warning devices include Railway Crossing Ahead signs and a flashing lights, bell, and gates (FLB&G) warning system that includes overhead flashing lights. An aerial view of the crossing is shown in **Figure 2**.



Figure 2: Womacks Rd Crossing Aerial Photo

#### 2.1 Sight Distances

#### 2.1.1 Stopping Sight Distance

The calculated minimum stopping sight distances (SSD) for the Womacks Road crossing is based on an approaching driver having an unobstructed view of the warning system at the crossing, using the SSD formula provided in Section 7.2 of the Grade Crossing Standards.



The calculated Womacks Road crossing minimum SSD is 63.5m based on a design speed of 50 km/h (posted speed of 40 km/h). The observed SSD for the westbound approach is 130m while the eastbound approach SSD exceeds 300m; therefore, the SSD for both approaches exceed the minimum requirements. This is consistent with the recommendation from Transport Canada that sight distances above and beyond the minimum requirements be provided for increased safety.<sup>1</sup>

### 2.1.2 Sight Distance Along the Railway

The sight distance along the railway (DSTOPPED) is the minimum distance a driver or pedestrian must be able to see approaching railway equipment from the stopped position at the crossing. As the Womacks Road crossing includes a pedestrian crossing, DSTOPPED distances were calculated separately for vehicles and pedestrians. The Womacks Road crossing required minimum DSTOPPED distances for vehicles were calculated to be 205m at the westbound and eastbound stop position. The Womacks Road crossing required minimum DSTOPPED distances for pedestrians were calculated to be 180m and 225m at the westbound and eastbound stop positions respectively.

The actual DSTOPPED distances for westbound and eastbound vehicles and pedestrians looking right and left from stopped positions were at least 400m, exceeding the minimum DSTOPPED distances required by the GCS.

#### 2.2 Compliance Deficiencies and Remedial Measures

During the on-site inspection, WATT confirmed all applicable sections of the GCR that the crossing must satisfy. **Table 1** specifies deficiencies or non-compliant items identified at the crossing with a recommended remedial measure to ensure regulatory compliance.

**Grade Crossing Angle:** The Grade Crossing Handbook Article 6 stipulates the requirements that new grade crossings be constructed so that the angle between the centre line of the roadway and the railway be between 70 and 110 degrees for passive warning systems and between 30 and 150 degrees for crossings with active warning systems when the train speed is more than 25km/h (15 mph). This standard also applies to existing grade crossings when changes are made to the crossing in order to improve

Blackfalds Whistle Cessation Study

<sup>&</sup>lt;sup>1</sup> From the Transport Canada website <a href="https://www.tc.gc.ca/eng/railsafety/railsafety-978.html">https://www.tc.gc.ca/eng/railsafety-978.html</a>



safety. The angle between the roadway and the railway at the Womacks Road grade crossing was observed to be 60 degrees. As there is an active warning system (FLB&G) in place, no additional measures are recommended due to the crossing angle.

Intersecting Roads within 30 m: The Grade Crossing Handbook Article 11 stipulates the requirements that new grade crossings be constructed so that no part of an intersecting road or entrance way is closer than 30m to the nearest rail of the grade crossing when the train speed is more than 25km/h (15 mph). If an intersection is within 30m of a railway crossing, a traffic signal with interconnection to the railway warning system can be used to allow for the close proximity of the intersection.

There is a T-intersection 30m east of the crossing, which is the minimum separation required. Eastbound vehicles are able to freely turn right and will not impede traffic flow, unless a pedestrian is in the crosswalk across the south leg of the intersection. As the minimum 30m distance requirement is met, no additional measures are recommended.

Warning Signage / Paint Markings: The MUTCDC specifies that Railway Crossing Ahead warning signs be placed 50m ahead of the stop bar for a 40km/h road. The eastbound sign is placed appropriately; however, the westbound sign is placed only 25m ahead of the stop bar. The westbound Railway Crossing Ahead sign is placed such that drivers turning onto Womacks Road from Gregg St will see the sign after they turn. Therefore, relocating the sign is not recommended.

There are double stop-bars on both approaches, and an X pavement marking located appropriately (10m) after the eastbound Railway Crossing Ahead sign. There is no X paint marking on the westbound approach, though it was shown in the design drawings when the crossing was constructed. So, the X pavement markings may have worn off or may have been missed being installed. Installing the missing X is recommended.

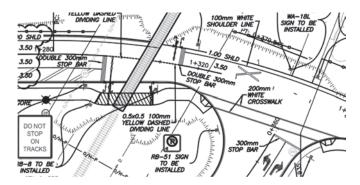


Figure 3: Womacks Rd & Gregg St Design Pavement Markings



**Pedestrian Crossing:** A 3m multi-use pathway is located on the south side of Womacks Road and is separated by a grass boulevard approximately 4m in width. The pathway includes a separate active warning system (FLB&G) as well as "Do Not Stop On Tracks" signs and painted gore markings between the gates.

Table 1: Deficiencies and Remedial Measures (Womacks Rd Crossing)

Observations / Deficiencies	Remedial Measures		
Sight Distances			
The SSD and DSTOPPED distances exceed the GCS	No remedial measures		
guidelines.	recommended.		
Signs and Road Mark	kings		
Westbound Railway Crossing Ahead warning sign	Sign placement is appropriate, no		
is placed 25m from the stop bar (instead of 50m	changes are recommended.		
specified by MUTCDC) in order to catch Gregg St	Westbound X paint marking		
traffic. There is no westbound X paint marking.	should be added. Existing stop		
Stop bars and eastbound X paint markings are	bars and eastbound X paint		
heavily faded.	marking should be reapplied.		
Road Geometry			
Crossing is skewed (60 degrees). Additionally, the	Active warning system (FLB&G) is		
Gregg St intersection is 30m from the crossing.	already in place. No additional		
	mitigations are recommended.		
Pedestrian / Cycling Fa	cilities		
Separated multi-use pathway has FLB&G system. No remedial measures are			
"Do Not Stop on Tracks" signage and painted gore	recommended.		
markings between the gates.			
Warning System	1		
FLB&G system, including separate FLB&G system	No remedial measures		
on pedestrian pathway crossing in place.	recommended.		
Crossing Surface			
Concrete crossing surface; good condition.	No remedial measures		
	recommended.		
Trespassing			
Fencing on both sides of the railway south of	No remedial measures		
crossing. North of the crossing, fencing in place on	recommended.		
west side of railway and dense brush / trees on			
east side of railway. No evidence of trespassing			
was observed.			



# 2.3 Whistle Cessation Requirements

Whistle cessation requirements are specified in Section 104 of the GCR and Appendix D of the GCS. The minimum requirement to achieve whistle cessation at the Womacks Road crossing as per the GCR and GCS is a crossing warning system with FLB&G (Flashing Lights, Bell, and Gate). The pedestrian pathway also requires a separate FLB&G active warning system.

Currently the road crossing is equipped with an FLB&G active warning system, including overhead flashing lights. The pedestrian crossing includes a separate FLB&G active warning system. Therefore, the Womacks Road crossing meets the requirements for whistle cessation.



#### 3.0 SOUTH STREET CROSSING

The crossing on South Street (Leduc Subdivision, Mile 11.35) previously functioned as two-track crossing operated by CPCK Rail; however, the spur line does not appear to be in use, and the tracks and ties have been removed north and south of the crossing. South Street is a paved, undivided urban 2-lane collector roadway with daily volumes of 1,250 vpd and a 50 km/h posted speed limit. The warning devices include Railway Crossing Ahead signs and a flashing lights, bell, and gates (FLB&G) warning system. Note that although the crossing is currently a two-track crossing, one of the tracks appears to be currently being decommissioned, with removal of the ties and tracks being undertaken on either side of the crossing. An aerial view of the crossing is shown in **Figure 4.** 



Figure 4: South Street Crossing Aerial Photo



#### 3.1 Sight Distances

## 3.1.1 Stopping Sight Distance

The calculated minimum stopping sight distances (SSD) for the South Street crossing is based on an approaching driver having an unobstructed view of the warning system at the crossing, using the SSD formula provided in Section 7.2 of the Grade Crossing Standards.

The calculated South Street crossing minimum SSD is 83.0m based on a design speed of 60 km/h (posted speed of 50 km/h). The SSD for the westbound approach is 250m while the eastbound approach SSD exceeds 500m; therefore, the SSD for both approaches exceed the minimum requirements. This is consistent with the recommendation from Transport Canada that sight distances above and beyond the minimum requirements be provided for increased safety.<sup>2</sup>

#### 3.1.2 Sight Distance Along the Railway

The minimum  $D_{\text{STOPPED}}$  at the South Street Crossing (the minimum sight distance along the railway that a driver must be able to see from the stopped position) was calculated at 286m for the westbound approach and 333m for the eastbound approach.

The actual DSTOPPED distances for westbound and eastbound vehicles looking right and left from stopped positions were at least 400m, exceeding the minimum DSTOPPED distances required by the GCS.

#### 3.2 Compliance Deficiencies and Remedial Measures

During the on-site inspection, WATT confirmed all applicable sections of the GCR that the crossing must satisfy. **Table 2** specifies deficiencies or non-compliant items identified at the crossing with a recommended remedial measure to ensure regulatory compliance.

**Grade Crossing Angle:** The Grade Crossing Handbook Article 6 stipulates the requirements that new grade crossings be constructed so that the angle between the centre line of the roadway and the railway be between 30 and 150 degrees for crossings with active warning systems when the train speed is more than 25km/h (15

<sup>&</sup>lt;sup>2</sup> From the Transport Canada website <a href="https://www.tc.gc.ca/eng/railsafety/railsafety-978.html">https://www.tc.gc.ca/eng/railsafety/railsafety-978.html</a>



mph). The angle between the roadway and the railway at the South Street grade crossing was observed to be 40 degrees. As there is an active warning system (FLB&G) in place, no additional measures are recommended due to the crossing angle.

Intersecting Roads within 30 m: The Grade Crossing Handbook Article 11 stipulates the requirements that new grade crossings be constructed so that no part of an intersecting road or entrance way is closer than 30 metres to the nearest rail of the grade crossing when the train speed is more than 25km/h (15 mph). There are no intersections within 30m of the South Street crossing; the nearest intersections are the Blackfalds Dog Park access, located 125m west of the crossing, and East Railway Street, located 110m east of the crossing.

Warning Signage / Paint Markings: The MUTCDC specifies that Railway Crossing Ahead warning signs be placed 50m ahead of the stop bar for a 50km/h road. There are Railway Crossing Ahead signs in both directions; the westbound sign is placed 50m ahead of the stop bar while the eastbound sign is placed 70m ahead of the stop bar. The eastbound sign is easily visible to oncoming drivers and no other signs are between the warning sign and the crossing; therefore, the existing placement is acceptable and does not require relocation.

There are double stop-bars and X paint markings located appropriately on both approaches. The paint markings are in good condition.

Crossing Surface: The main line crossing surface is concrete and in good condition. The spur line crossing is wood and in fair condition. The spur line does not appear to be in use, and the tracks and ties have been removed north and south of the crossing (as of the date of the site visit). It is recommended that the remnant tracks and wood crossing be removed and the road surface re-instated with an asphalt surface and appropriately-sloped tie-ins. From past repairs to the crossing, the current roadway surface was observed to be rough with a notable elevation difference between the main crossing and the spur line – this should be repaired.

**Trespassing**: No pedestrian infrastructure exists near to the crossing. The adjacent land uses are agricultural / industrial. No desire lines or evidence of trespassing was observed. No trespassing is expected to occur.

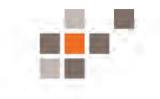


Table 2: Deficiencies and Remedial Measures (South St Crossing)

Observations / Deficiencies	Remedial Measures		
Sight Distances			
The SSD and DSTOPPED distances exceed the	No remedial measures		
GCS guidelines.	recommended.		
Signs and Road Markings			
"Railway Crossing Ahead' warning sign	No remedial measures		
placement is appropriate. Double stop bars and	recommended.		
X marking in place and in good condition on			
both approaches.			
Road Geome	try		
Crossing is skewed (40 degrees).	Active warning system (FLB&G) is		
	already in place. No additional		
	mitigations are recommended.		
Crossing Surf	ace		
Concrete crossing surface on main line is in	Recommended to remove remnant		
good condition. The wood crossing surface on	spur line tracks and wooden		
the discontinued spur line is in fair condition.	crossing; replace with repaired		
	asphalt road surface, with tie-ins		
	appropriately graded.		
Trespassing			
No pedestrian infrastructure exists near to the	No remedial measures		
crossing. The adjacent land uses are agricultural	recommended.		
/ industrial. No desire lines or evidence of			
trespassing was observed. No trespassing is			
expected near the crossing.			

# 3.3 Whistle Cessation Requirements

Whistle cessation requirements are specified in Section 104 of the GCR and Appendix D of the GCS. The minimum requirement to achieve whistle cessation at the South Street crossing as per the GCR and GCS is a crossing warning system with FLB&G (Flashing Lights, Bell, and Gate).

Currently the road crossing is equipped with an FLB&G active warning system. Therefore, the South Street crossing meets the requirements for whistle cessation.



# 3.4 Proposed Trail

The Town is currently planning on installing a 3.0m wide asphalt trail on the north side of South Street which would cross the rail line. As shown in **Figure 5**, the draft design shows the trail bending away from South Street and crossing the rail line on the north side of the existing FLB&G system.

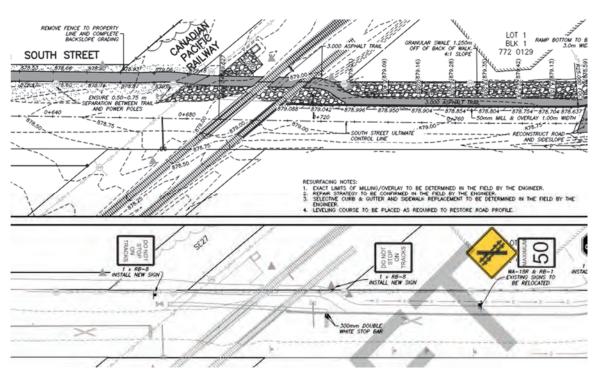


Figure 5: South Street - Proposed Trail

To meet the requirements for whistle cessation once the proposed trail is constructed, the trail will require a FLB&G warning system in both the eastbound and westbound directions.



#### 4.0 EAGLE BUILDERS CENTRE PEDESTRIAN CROSSING

The Eagle Builders Centre (EBC) pedestrian crossing (Leduc Subdivision, Mile 12.18) is a single-track crossing operated by CPCK Rail with the pathway being a 3m wide asphalt multi-use pathway. A 24-hr count of the pathway observed 86 pedestrians used the crossing (however, the count was conducted on January 24/25, 2024, and it is likely that pedestrian volumes may be significantly higher outside of the winter months). The crossing is equipped with a flashing lights, bell, and gates (FLB&G) active warning system. An aerial view of the crossing is shown in **Figure 6**.



Figure 6: EBC Pedestrian Crossing Aerial Photo



#### 4.1 Sight Distances

#### 4.1.1 Stopping Sight Distance

The calculated minimum stopping sight distances (SSD) for the South Street crossing is based on an approaching driver having an unobstructed view of the warning system at the crossing, using the SSD formula provided in Section 7.2 of the Grade Crossing Standards. There is no specific formula noted for trail crossings compared to roadway crossings.

TAC's Geometric Design Guide indicates that cyclists may ride at speeds of 12 to 20 km/h and notes to design based on a speed of 30 km/h (this would be typical of cyclist speeds on urban pathways, while those cyclists riding "road bikes" on roadways may travel at higher speeds). The calculated South Street crossing minimum SSD is 31.2m based on a design speed of 30 km/h. Note that this calculation is for vehicles which are expected to have a much longer braking distance compared to bikes.

While there is a curve immediately before both the eastbound and westbound crossing locations, which serves to slow cyclists and other faster trail users (e.g. e-scooters), the crossing is visible for more than the minimum calculated SSD for both approaches.

#### 4.1.2 Sight Distance Along the Railway

The sight distance along the railway (DSTOPPED) is the minimum distance a driver or pedestrian must be able to see approaching railway equipment from the stopped position at the crossing. The required minimum DSTOPPED distances for pedestrians at the EBC pedestrian crossing were calculated to be 165m and 185m at the westbound and eastbound stop positions respectively. The actual DSTOPPED distances for westbound and eastbound pedestrians looking right and left from stopped positions were at least 500m, exceeding the minimum DSTOPPED distances required by the GCS.

#### 4.2 Compliance Deficiencies and Remedial Measures

During the on-site inspection, WATT confirmed all applicable sections of the GCR that the crossing must satisfy. **Table 3** specifies deficiencies or non-compliant items identified at the crossing with a recommended remedial measure to ensure regulatory compliance.



Warning Signage / Paint Markings: There are no Railway Crossing Ahead signs on either approach to the crossing. The Manual of Uniform Traffic Control Devices for Canada (MUTCDC) does not specify spacing distances for pedestrian signage; it is recommended to place these signs 50m ahead of the crossing (equivalent to the spacing for a 30km/h roadway) – though it is noted this distance may need to be shortened due to the trail geometry approaching the crossing. These signs should be smaller signs, consistent with typical trail signage, rather than standard roadway signage sizes.

There are 'Do Not Stop On Tracks' signs placed ahead of the warning system. There are no stop bars present; however, there is painted gore on each approach that begins prior to each gate and serves to instruct pedestrians on where to stop and to stay clear of the gates when in operation.

**Trespassing**: To the north of the crossing, there is fencing placed on both sides of the track between the pedestrian crossing and the Womacks Road crossing. South of the tracks, fencing is installed on the east side of the tracks for at least 400m; fencing is also in place south of the pedestrian pathway from the crossing west to Westwood Drive. There were no desire lines or other evidence of trespassing observed during the site visit. No trespassing is expected to occur.

Table 3: Deficiencies and Remedial Measures (EBC Pedestrian Crossing)

Observations / Deficiencies	Remedial Measures		
Sight Distances			
The SSD DSTOPPED distances exceed the GCS	No remedial measures		
guidelines in both directions.	recommended.		
Signs and Road Markin	ngs		
There are no Railway Crossing Ahead warning signs	Recommended to install (trail-		
on either approach. 'Do Not Stop On Tracks'	sized) Railway Crossing Ahead		
signage and painted gore marking are present on	warning signs approx. 50m		
each approach.	ahead of each approach.		
Trespassing			
Fencing on both sides of the railway north of the	No remedial measures		
crossing and on the east side of the railway south of	recommended.		
the crossing. Fencing also in place on the south side			
of the path from the crossing west to Westwood			
Drive. No trespassing is expected.			



# 4.3 Whistle Cessation Requirements

Whistle cessation requirements are specified in Section 104 of the GCR and Appendix D of the GCS. The minimum requirement to achieve whistle cessation at the EBC pedestrian crossing as per the GCR and GCS is a crossing warning system with FLB&G (Flashing Lights, Bell, and Gate).

Currently the crossing is equipped with an FLB&G active warning system. Therefore, the EBC pedestrian crossing meets the requirements for whistle cessation.



#### 5.0 TOWNSHIP ROAD 400 CROSSING

The crossing on Township Road 400 (Leduc Subdivision, Mile 13.54) is a single-track crossing operated by CPCK Rail. The crossing is a single-track crossing on a two-lane paved asphalt road. Township Road 400 is a paved, undivided rural 2-lane roadway with daily volumes of 510 vpd and a 100 km/h posted speed limit. Township Road 400 in within the County of Lacombe's jurisdiction. The warning devices include Railway Crossing Ahead signs and a FLB&G (flashing lights, bell, and gates) warning system. An aerial view of the crossing is shown in **Figure 7**.



Figure 7: Township Road 400 Crossing Aerial Photo

#### 5.1 Sight Distances

#### 5.1.1 Stopping Sight Distance

The calculated minimum stopping sight distances (SSD) for the Township Road 400 crossing is based on an approaching driver having an unobstructed view of the warning system at the crossing, using the SSD formula provided in Section 7.2 of the Grade Crossing Standards. Township Road 400 provides access to agricultural land, therefore it is expected that larger trucks servicing these lands will use the road. Therefore, a WB-20 design vehicle was used for sight distance calculations.

The calculated Womacks Road crossing minimum SSD is 220m on both the westbound and eastbound approach. The SSD for the eastbound and westbound approach exceed 300m – though it is noted that the Township Road 400 and Highway 2A intersection is located approximately 150 m west of the rail crossing. The SSD for both approaches exceed the minimum requirements.



#### 5.1.2 Sight Distance Along the Railway

The minimum  $D_{\text{STOPPED}}$  at the Township Road 400 Crossing (the minimum sight distance along the railway that a driver must be able to see from the stopped position) was calculated at 330m for the westbound and eastbound approaches.

The actual DSTOPPED distances for westbound vehicles at the stopped position exceeded 350m and 500m to the left and right respectively. The actual DSTOPPED distances for eastbound vehicles at the stopped position exceeded 500m and 350m to the left and right respectively.

#### 5.2 Compliance Deficiencies and Remedial Measures

During the on-site inspection, WATT confirmed all applicable sections of the GCR that the crossing must satisfy. **Table 4** specifies deficiencies or non-compliant items identified at the crossing with a recommended remedial measure to ensure regulatory compliance.

Grade Crossing Angle: The Grade Crossing Handbook Article 6 stipulates the requirements that new grade crossings be constructed so that the angle between the centre line of the roadway and the railway be between 30 and 150 degrees for crossings with active warning systems when the train speed is more than 25km/h (15 mph). This standard also applies to existing grade crossings when changes are made to the crossing in order to improve safety. The angle between the roadway and the railway at the Township Road 400 grade crossing was observed to be 80 degrees. As there is an active warning system (FLB&G) in place, no additional measures are recommended due to the crossing angle.

Intersecting Roads within 30 m: The Grade Crossing Handbook Article 11 stipulates the requirements that new grade crossings be constructed so that no part of an intersecting road or entrance way is closer than 30 metres to the nearest rail of the grade crossing when the train speed is more than 25km/h (15 mph). If an intersection is within 30m of a railway crossing, a traffic signal with interconnection to the railway warning system can be used to allow for the close proximity of the intersection. The removal of intersections within 30m of railway crossings is not required for existing grade crossings but it is suggested that they be reviewed and may be required to install



additional flashing light units to warn vehicles on intersecting roads or entrance ways. Alternatively, signalization of adjacent intersections may also be undertaken.

There are two private accesses located 25m west of the crossing. These accesses provide access to agricultural fields and will have very low traffic volumes. As the intersecting roads are private accesses, mitigation measures such as additional signalization and/or additional light units beyond the existing FLB&G active warning system are not recommended.

Warning Signage / Paint Markings: The MUTCDC specifies that Railway Crossing Ahead warning signs be placed 140m ahead of the stop bar for a 100km/h road. The westbound Railway Crossing Ahead sign is currently placed 220m ahead of the crossing.

The westbound Railway Crossing Ahead warning sign should be relocated to 140m ahead of the railway crossing stop bar, The eastbound Railway Crossing Sign is adequately placed due to the location of the Highway 2A intersection; however, the sign was observed to be missing a fastener and as a result was hanging upside down on the sign post at the time of the site visit.

There are double stop-bars and X paint markings on both approaches. The westbound X marking is placed 10m ahead of the existing Railway Crossing Ahead sign (210m ahead of the crossing). Keeping with the above recommendation to move this sign, the X marking should also be relocated along with the sign and placed 10m west of the relocated Railway Crossing Ahead sign (or 130m ahead of the crossing).

Additionally, there is a Stop Ahead warning sign placed 100m before the crossing (and 250m ahead of the stop sign at the Township Road 400 / Highway 2A intersection) along with 'Stop Ahead' stencil markings painted on the road surface adjacent to the sign. The Stop Ahead sign and stencil may cause drivers to incorrectly believe that the rail crossing is stop-controlled, and they may stop unexpectedly at the rail crossing. It is noted that the 'Stop Ahead' sign would normally be required to be placed 140m in advance of the stop bar at the Highway 2A intersection, but this would place it on or immediately following the rail crossing which is not feasible and explains the placement of the sign east of the rail line.

With the above recommendation to move the Railway Crossing Ahead warning sign should to 140m in advance of the rail crossing stop bar, it is further recommended that the 'Stop Ahead' sign be relocated to 50m west of the relocated Railway Crossing Ahead warning sign, consistent with the MUTCDC's sign spacing recommendations.



The related 'Stop Ahead' paint markings should either be relocated with the sign or removed (as they are supplementary to the sign itself).

**Trespassing**: The crossing is located in rural agricultural area. No pedestrian infrastructure is located near the crossing. No desire lines or evidence of trespassing was observed. No trespassing is expected.

Table 4: Deficiencies and Remedial Measures (Twp Rd 400 Crossing)

Observations / Deficiencies	Remedial Measures	
Sight Distances		
The SSD and DSTOPPED distances exceed the GCS	No remedial measures	
guidelines.	recommended.	
Signs and Road Mark	kings	
Westbound Railway Crossing Ahead warning sign	Relocate WB Railway Crossing	
is placed 220m ahead of the stop bar (instead of	Ahead sign to 140m in advance	
140m specified by MUTCDC). WB X marking is at	of crossing. Relocate X marking to	
existing Railway Crossing Ahead sign (210m	10m west of relocated Railway	
ahead of crossing). Stop Ahead warning sign and	Crossing Ahead sign.	
stencil markings placed 100m ahead of rail		
crossing (250m from stop control at Highway 2A	Relocate Stop Ahead warning	
intersection facing WB traffic.	sign to 50m west of relocated	
	Railway Crossing Ahead sign.	
	Relocate Stop Ahead pavement	
	markings with sign (or remove).	
Crossing Surface		
Concrete crossing surface; good condition.	No remedial measures	
	recommended.	
Trespassing		
Crossing is located in rural agricultural area. No	No remedial measures	
pedestrian infrastructure is located near the	recommended.	
crossing. No desire lines or evidence of trespassing		
was observed. No trespassing is expected.		



# **5.3** Whistle Cessation Requirements

Whistle cessation requirements are specified in Section 104 of the GCR and Appendix D of the GCS. The minimum requirement to achieve whistle cessation at the Township Road 400 crossing as per the GCR and GCS is a crossing warning system with FLB&G (Flashing Lights, Bell, and Gate).

Currently the road crossing is equipped with an FLB&G active warning system. Therefore, the Township Road 400 crossing meets the requirements for whistle cessation.



# 6.0 LANSDOWNE AVENUE / EAST RAILWAY STREET FENCING

An existing area of concern for people trespassing on the rail right-of-way is where Lansdown Avenue and East Railway Street run parallel to the rail line, as illustrated in **Figure 8**.



Figure 8: Area of Trespassing Concern



There are existing fences along the east side of the rail line, but a gap exists and areas where people appear to be crossing the rail line are visible in aerial photos. The Town is looking to mitigate the risk of continued pedestrian crossings of the rail line and is in the early stages of planning and may install a fence within the gap area.

Installing the proposed fence on the east side of rail line is the preferred location to fully close the gap. However, this would require the cooperation of private landowners and/or require land purchase.

Alternatively, a fence could be installed on the west side of the rail line. If this is the option that moves forward, it is recommended to overlap the east and west fences a sufficient distance to deter people from walking around the ends. It would be proposed that a minimum 100m overlap be provided. This option would also require some cooperation of private landowners and/or require land purchase, though not for the full length of the proposed fence.



#### 7.0 ACTION PLAN

Based on the identified remedial measures and recommended improvements, an implementation strategy was developed for the four railway crossings included in the study, in order to achieve regulatory compliance and whistle cessation:

- Table 5 identifies minimum remedial measures to achieve regulatory compliance.
- Table 6 identifies minimum remedial measures to achieve whistle cessation.

The approximate costs (low, medium, high) and the party responsible for implementing the remedial measures are provided in each table. The cost classification used is as follows:

• Low: less than \$500

Medium: \$500 to \$5,000High: more than \$5,000

**Table 5: Required Remedial Measures** 

Crossing Location	Remedial Measure	Relative Cost	Responsible Party
Womacks Rd	Add westbound X paint marking and refresh	Low	Town
Crossing	existing paint markings (stop bars and		
	eastbound X paint markings).		
South St	Remove remnant tracks and wooden	High	CPCK
Crossing	crossing surface, replace with repaired		
	asphalt driving surface with appropriate		
	grade tie-ins.		
EBC	Install Railway Crossing Ahead warning	Low	Town
Pedestrian	signs on each approach (smaller signs		
Crossing	consistent with trail signage).		
Township Rd	Relocate existing WB Railway Crossing	Low	County
400 Crossing	Ahead warning sign to 140m ahead of		
	crossing. Relocate WB painted X marking to		
	10m west of relocated Railway Crossing		
	Ahead sign.		
	Relocate existing WB Stop Ahead warning	Low	County
	sign to 50m west of relocated Railway		
	Crossing Ahead sign. Relocate or remove		
	'Stop Ahead' stencil road markings.		



**Table 6: Required Whistle Cessation Measures** 

Crossing Location	Remedial Measure	Relative Cost	Responsible Party
All Crossing	All study crossings have FLB&G	N/A	N/A
Locations	active warning systems. No remedial		
	measures required for whistle		
	cessation.		

In addition to required remedial measures listed above, as discussed in **Section 6.0** of this report, the Town is in the early stages of planning and may install a fence in the gap where Lansdown Avenue and East Railway Street run parallel to the rail line and an existing concern about pedestrian trespass exists.



# Appendix A – Photos at Crossings

# **LOCATION 1: WOMACKS ROAD**



Photo 1A - Womacks Road – Eastbound Approach Warning Sign



Photo 1B - Womacks Road - Eastbound Approach and Signage



Photo 1C - Womacks Road - Eastbound Approach facing North



Photo 1D - Womacks Road - Pedestrian Crossing Paint Markings



Photo 1E - Womacks Road - Crossing Surface facing East



Photo 1F - Womacks Road - Crossing Surface facing North



Photo 1G - Womacks Road - View South Along Tracks



Photo 1H - Womacks Road - No Left When Lights Flashing Sign



Photo 1I - Womacks Road - Westbound Approach



Photo 1J - Womacks Road - Damaged Warning Sign at Eastbound Pedestrian Gate



Photo 1K - Womacks Road - Eastbound Approach with Warning Signage

# **LOCATION 2: SOUTH STREET**



Photo 2A - South Street - Eastbound Approach with Warning Sign



Photo 2B - South Street - Eastbound Approach Road Markings



Photo 2C - South Street - Eastbound Approach Stop Bar



Photo 2D - South Street - Main Line Crossing Condition Facing North



Photo 2E - South Street - Spur Line Crossing Condition Facing North



Photo 2F - South Street - Facing South Along Tracks



Photo 2G - South Street - Facing North Along Tracks



Photo 2H - South Street - Westbound Approach Including Warning Sign



Photo 2I – South Street - Westbound Approach Including Stop Bar

# **LOCATION 3: EBC PEDESTRIAN CROSSING**



Photo 3J - EBC Pedestrian Crossing - East Side Pedestrian Path Facing North



Photo 3K - EBC Pedestrian Crossing - Westbound Control and Signage Facing Northwest



Photo 3L - EBC Pedestrian Crossing - Westbound Approach Facing West



Photo 3M - EBC Pedestrian Crossing - Facing North Along Tracks



Photo 3N - EBC Pedestrian Crossing - Facing South Along Tracks



Photo 30 - EBC Pedestrian Crossing - Crossing Surface Facing South



Photo 3P - EBC Pedestrian Crossing - Eastbound Approach Facing East

# **LOCATION 4: TOWNSHIP ROAD 400**



Photo 4A - Township Road 400 - Facing West from Greystone Close



Photo 4B - Township Road 400 - Westbound Approach Facing West



Photo 4C - Township Road 400 - Westbound Approach Sightline Looking North



Photo 4D - Township Road 400 - Westbound Stop Bar and Obstructed Sightline North



Photo 4E - Township Road 400 - Facing North from Crossing



Photo 4F - Township Road 400 - Crossing Condition facing North



Photo 4G - Township Road 400 - Crossing Condition facing South



Photo 4H - Township Road 400 - Facing South from Crossing



Photo 4I - Township Road 400 - Eastbound Approach facing Southeast



Photo 4J - Township Road 400 - Eastbound Approach facing East



Photo 4K - Township Road 400 - Eastbound Approach from Highway 2A Intersection



## TOWN OF BLACKFALDS STANDING COMMITTEE OF COUNCIL REQUEST FOR DIRECTION

Page 1 of 1

MEETING DATE: November 18, 2024

PREPARED BY: Rick Kreklewich, Director of Community Services

PRESENTED BY: Rick Kreklewich, Director of Community Services

SUBJECT: EBC Parking Expansion Survey Results

#### **BACKGROUND**

At the June 17, 2024, Standing Committee of Council Meeting, eight parking options were presented to Council for expanding the parking at the Eagle Builders Centre. Each option included a proposed drawing, pros/cons and cost per stall. The Administrative recommendation was to hold a public open house, which took place on July 25, 2024, at the Abbey Centre. A short survey was provided to residents asking which option they favoured and if they had any comments relative to the subject. The survey was provided in person at the open house and online until August 6, 2024.

### **DISCUSSION**

78 survey responses were received. A total of 112 votes were cast as respondents could vote for multiple options. The option that received the highest vote was Option 5, with 58 (51.79%) votes. Option 5 is the land north of Womacks Road, located at 5405 Broadway Avenue. The next option with the highest votes was Option 2B, with 18 votes (16.07%), located at 5101 Westwood Drive. Several comments were collected and have been included in the attached document information. As per Council discussion during the 2025 Budget deliberations, this project will be considered in future budget discussions.

### ADMINISTRATIVE RECOMMENDATION

That Standing Committee of Council consider the following motion:

1. That Standing Committee of Council receive the EBC Parking Open House Responses as information.

### **ALTERNATIVES**

a) That Standing Committee of Council refer EBC Parking Expansion Survey Results back to Administration for more information.

#### **ATTACHMENTS**

Chief Administrative Officer

• EBC Parking Open House Responses

APPROVALS

Wim Jack

Kim Isaak,

Department Director/Author

# **EBC Parking Open House**

# Responses

The following data was collected via the Open House on July 25, as well as the online form that was available until August 6.

78 responses were collected.



# Option 1:11 votes

# (Comments)

**Option 1** is just the right thing to do.

Option 1 would be ideal to do as the visibility of the street is a major concern for safety.

**Option 1** makes most common sense but costs a lot.

Option 1 should not even be presented, totally ridiculous.

**Option 1** along with option 5 modified (addition of the property just south of the proposed lot 5) south should be considered. Option 1 should have been dealt with properly from the start. Get it done, sooner then later.

I feel **Option 1** is very expensive for the total number of parking spots it is best for the town. It will drastically improve the appearance of the town as the house is very old a oddly placed currently with a parking lot surrounding it.

I feel like these option would create adequate parking spaces without congesting and already congested intersection.

**Option 1** should have already been done. The Town needs to be fair with compensation of this family's home. I'm sure the value of the home has dropped since the current parking lot was put, and I think the Town needs to consider that when negotiating. The street light situation will need to be addressed as well. It gets quite dark at that corner. Consider peace officers directing traffic after event?

Option 1 should not even be presented, totally ridiculous.

**Option 1** is an utter joke and the town did a huge disservice to everyone by not appropriating the land previously. This situation is going to haunt us citizens for a long time.

**Option 1:** The landowners there held out looking for a pay day from my tax dollars, I'm not keen on rewarding that kind of community spirit. Especially because I work hard and pay a lot in land taxes, and don't care too much for freeloaders.

# **Option 2A: 13 votes**

# (Comments)

Best option for the most parking and traffic flow.

Option 2a+b proximity is ideal and # of stalls.

We feel **Option 2a** would be the best for it will have the most parking stalls and be the least disruptive to the residents that live on Westwood Drive. The trees along there should be removed because they are cotton wood or whatever that is called, and they shed cotton every spring.

Only other suggestion would be to move the snow storage to the property at **Option 5**, and add additional parking to **Option 2a**.

Totally opposed to 2A/B or 3A/B.

I think the **Option 2**s placement is logical with addition parking, although I sympathize for the resident who live near and oppose this option. **Option 5** would be a viable alternative, though I would imagine that it would be used less - although it is the same distance away from the EBC, it is more visually removed & people would likely park on surrounding streets first.

**Option 2a** is significantly safer for children to walk to the building with significantly less traffic, as well as it connects more seamlessly to the EBC existing parking.

I think having the new parking lot right by Westwood is the smart thing to do. It was part of the plan years ago where council at the time purchased the land for developing extra parking spaces for the twinning of the arena. The people in that area do not own that land. The drawings show that you can beautify the area and would make the values of the land go up.

**Option 2A** is significantly safer for children to walk to the building, with significantly less traffic, as well as it connects more seamlessly to the eagle builders existing parking.

I don't like the idea of cutting down trees, destroying homes of local deer and rabbits like in **Options 2 and 3**.

The trees are natural barrier to the train noise. They are also a habitat for deer, skunk, fox and moose, as well as many species of birds. Opening Westwood to Lansdowne would create traffic issues.

Please do not remove the trees there is wildlife living in the trees. Also Saskatoon berry bushes growing down there. With the playground in that area it may not be safe for the kids!

Leave the trees alone on Westwood drive! Buy both houses on the Womacks-Broadway intersection and rework the intersection for traffic flow i.e. lights, roundabout.

I am a Westwood drive resident and highly disagree with any option of putting a parking lot across from our houses!!!!!

# **Option 2B: 18 votes**

# (Comments)

I think the option is good. It would offer safety with the fenced off area to stop crossing the train tracks. It would also be esthetically pleasing by removing the scrub trees.

**2b** is most likely the best proposal. It's the safest option for people to go from their cars to the arena and back without having to cross a major street in town. Safety of pedestrian should be the concern with any of the ideas and **2b** is also cost effective.

It creates a large number of new parking stalls for one of the cheapest prices per stall. I don't feel that people will walk for option 5 and it will still create congestion. The way the parking stalls are angled for **2B**, it makes the most sense to have a one way street. Perhaps parking passes for residents to clear up parking congestion in front of nearby homes on game days as well.

To me, option **2b** makes the most sense, town no longer has to fight with the owner of the house on the corner and it gains the most parking stalls...getting rid of the trees there makes sense well cause the train starts green space fire every year.

I think the option **2s** placement is logical with addition parking although I sympathize for the resident who live near and oppose this option.

**2b** is most likely the best proposal. It's the safest option for people to go from their cars to the arena and back without having to cross a major street in town. Safety of pedestrian should be the concern with any of the ideas and **2b** is also cost effective.

First and foremost, safety needs to be the most important factor in the parking expansion option. Option 2 (B) seems to be a better option for that. Essentially expanding the existing parking lot by turning Westwood Dr into a one-way could take much of the congestion away from the Broadway Ave and Womacks RD intersection. We have lived in Blackfalds for 30+ years so have seen a lot of change but guite honestly, Womacks RD now has multiple dangerous intersections no matter whether you are pedestrian traffic or vehicle traffic and a combination of both. Therefore, adding both types of traffic to this intersection is not ideal. Option 2 (B) will at least help move traffic out of the area to the south. What would make this even more optimal would be the Westridge Drive to South Street connector being built. As residents in the part of town to the north of Womacks RD, we deal with these unfavorable intersections at Womacks and Sunridge Ave, Womacks and Broadway Ave and Womacks and Gregg St on a daily basis. Many of the options will add to higher traffic flow in this area and increased risks to motorists and especially pedestrians. We have already experienced close calls with other motorist particularly at Broadway and Womacks. Not adding to these issues would be the best decision. Option 2 also adds the most parking spaces and reality is, there are going to more events taking place at EBC going forward which means increased regular traffic in the area.

**Option 2 & 3:** The Westwood parking options are the smart options, the Town already purchased the property and planned to put the required additional parking there. The trees do not block the sounds of the train, and adding additional parking farther away will not prevent people from parking on Westwood or Lansdowne.

If 11 properties on Westwood (in a community of nearly 12,000) are able to tell Council and Administration what is best for the entire community, there is an issue. It becomes even worse when a member of Town Council lives in the affected area. That councillor should recuse themselves in order to not influence the public and other council members. When it was put to a public vote in 2023, the Westwood option won easily. On that same public vote was the urban hens and train whistle cessation, both those projects have actions taken based off the poll's results. But the EBC parking poll which had adding additional parking on Westwood as the clear winner, has seen nothing happen except more options provided.

Adding parking across from the Westwood properties will increase the property values of all 11 owners - they don't seem to realize that, but Realtors have said it will not decrease their property value. The trees on the east side of Westwood are dying, they are a fire hazard, and provide a visual barrier for youth to do nefarious activities. Trees do not provide a sound barrier from the train horn, the train horn is heard all over town, Westwood properties are 160 feet from the train tracks and the train horn is 130 decibels. I can clearly hear the train coming through town from over 1200 feet away with 4 blocks of houses in between. When Westwood residents say they live on a quiet street, they are referring to minimal traffic. I understand they do not want to change from a dead-end street, their concern is it would be a potential short cut from Womacks/Broadway intersection to Lansdowne Ave. That concern is legitimate and fair, so traffic direction and control is the real important part for them to see the benefits. Options 3A or 3B are the best options because of that, and traffic through the current EBC parking lot would only increase safety risks in the parking lot of the library and arena 1 & 2 users.

# **Option 3A: 3 votes**

# (Comments)

# Option 3B: 3 votes

## (Comments)

As someone who frequently attends minor hockey practices and games and bulldogs hockey games, I believe that any of the Westwood options is the best option.

# Option 4 : 2 votes

# (Comments)

The most materially affected are the homeowners along Westwood Drive because of the removal of the existing trees blocking their view of the railway, to some extent lessen the noise from the train horns by retaining the existing forest of trees, not have to deal with the unnecessary traffic during events at the EBC. Consider that the bank of trees along(market value). I support the Westwood Drive homeowners in significantly opposing all options related to the Westwood Drive (**Option 2A, 2B, 3A and 3B**).

Options 2-4,6 will all create more traffic flow problems.

# Option 5 : 58 votes

## (Comments)

**Option 5** is the only option that allows for event parking expansion. The field can be used for extra parking on the grass in the event of it need be for something, like the centennial cup BCHL all star game

**Option 5** would be the most logical. Move crosswalk further down Broadway. Larger sign for crossing and flashing lights!

I feel **option five** will create increased traffic congestion and also be significantly more dangerous for children and pedestrians to cross Womacks, especially with all the eagle builders centre parking existing out onto Womacks. The train already creates congestion at that intersection, I feel adding the parking lot down the street will only create further issues.

Lowest cost, room to buy more land for future parking lot expansion. Least impact on residents when EBC was built parking lot stalls were relaxed - now town is trying to solve problem

**Option 5** would be top of the list for me. It allows a large number of stalls, less than 1 block from the EBC, with only the acreage affected – and they have trees to block (suggest buy + move this house! It would improve the intersection).

For cost and saving consider leaving option 5 lot gravel for now, and in future if it receives high usage, pave it then.

**Option 5** would be the least disturbance to the neighborhoods around the arena. We support the arena however the options in regards to parking are limited. Opening Lansdowne will create more traffic. Removing trees is an eyesore for the neighborhood. **Option 5** is an empty lot. It is the one that will not disturb as many residents. This should be a decision made by a plebiscite not just town council!!!

**Option 5** would be the best option to include as it creates a large amount of parking stalls for a cheaper price.

**Option 5** Should be started even if it is gravel for the next while as suggested by a citizen. Then we should also acquire the property to the south of this lot. Then we have a large, sizable are for parking for now and into future events. Then when the money come around, we can pave that lot. Set it up into phases and put it into a 5-year total plan. But purchasing those two properties should be considered first.

Turning roads into parking lots is going to turn traffic flow into chaos in order for people to get in and out of the parking lot. Not to mention the proposed ideas make the town look like we are completely incompetent in providing services that are both aesthetically pleasing but are also efficient to use and actually functional. I can't even believe you would consider **Options 2,3,4, and 6** without considering how it would be used. The only logical solution is **Option 5**. No one wants to give the family in the house in **Option 1** a payday because they held out first time around. So **Option 1** should be eliminated. It's also clear you never considered how this civil engineering disaster would effect residents living in the effected areas. We really need to plan better to prevent loosing or degrading the value of their communities. I would plan for lights or a traffic circle at the terribly engineered intersection at Womacks road and Broadway avenue. You are going to need it. This whole Eagle Builders Centre is in either the wrong location or completely incompetent personnel planned the project out. Now we have to deal with it and I believe this is the best foot forward.

**Option 5** is the cheapest and makes the most sense. Yes, people have to walk to the centre. Good! Promotes good health. Just fix that intersection!

- I recently purchased my home just over a year ago and I would be absolutely devastated if I saw all the forestry cut down in from of my house and turned into a parking lot. The trees currently act as a sound barrier to the train constantly going through town. Having the trees removed would increase the noise and brightness of the train lights during all hours of the day. There is a lot of wildlife to be found living in this area. Removing the trees can cause significant damage to the eco system. I have many concerns about this project going forward on Westwood Drive along with my fellow neighbors. We risk a change of the values of our homes decreasing. We risk the chance of higher traffic near young children playing in their homes. Most importantly we risk the chance of destroying the eco system. My concern and option in that Option 5 would be the best choice moving forward. It allows for more expansion down the road. The parking lot would be away from other households. Less risk of any safety concerns. It would decrease the sound from the train. With multiple derailments over the past years from the trains. The trees would act as a secondary precaution. Most importantly would remove the risk of damaging any eco systems that have been created in the trees along Westwood Drive. I please ask for strong consideration in the expansion as this will impact many lives moving forward. My home is very important to me and I chose to live here because I love this town and hockey. I attend many games throughout the year and will continue. I have had no concerns of anyone parking in front of my house during games. The road currently is very sufficient for parking. Vehicle park on both sides of the road and never block any driveways. I appreciate the town of Blackfalds and Members of Council for taking this time to hear concern.

The 5 adults at our residence are voting for parking **Option 5** as it is the least disruptive and fiscally responsible option – not to mention it also has the option for expansion. We feel the EBC building is beautiful but could have been built elsewhere at a much better cost with MUCH better planning. This has been a gong show from day one and I am hopeful that the new town council will NOT make the same errors that the previous council did.

**Option 5** is very low cost and provides a good number of spots. It really has little to no negative points!

I have read many things about the EBC. As a resident of 18 years, I admit I have not involved myself which municipal decisions making as much as I could have. Trusted that elected officials had the community's best interests at heart. My vote is for **Option 5**, it is the best choice but from what I understand It is not the councils first choice and I only wonder why that is..

After looking at all the options, my vote would be for **Option #5**. Every other option puts members of the community at risk! Parking lot issues should have been looked at before the EBC was even constructed.

As someone who frequently attends minor hockey practices and games and bulldogs hockey games, I believe that any of the Westwood options is the best option. Option 5 is the next best option, but it would not be a safe option. Imagine people walking to the bulldogs game, crossing the busy intersection of Womacks and Broadway at night, holding up traffic either trying to find parking, or just traveling through. It would be a very unsafe intersection. Also, people won't park there because it's too far from the rink, the would park around Westwood and Lansdowne still because it is closer, so in my opinion, it defeats the purpose of having parking at **Option 5**. And because the parking lot is behind a house, most people wouldn't even see it as an option. They wouldn't know it is there.

**Option 5** is way to far from the arena and no one will park there maybe a handful of vehicles and that's it. Plus the safety of the pedestrians crossing in mid street - like WHAT?

**5** although sounds easy and makes sense it alone adding 100 cars to the intersection of womacks and Broadway during events is a terrible idea. Womacks and Broadway is already the most dangerous intersection in town. It's unsafe to make left hand turns from Broadway onto womacks already without adding 100 cars coming out of a parking lot all wanting to turn left or right onto womacks. Furthermore people are gonna get stuck on the train tracks while 45 cars in front of them are slowly entering this parking lot .Both Broadway and womacks would need to be widened to have turn lanes so people not attending the event can continue on their way . Now to the people that have to walk to the arena from their car they have to cross both Broadway and womacks at some point in their walk, 2 roads that are very busy as is.

How are these people going to cross womacks? Having every car stop and wait for 200 people to cross the street? Intersection of womacks and Broadway as bad enough without adding 200 people to it trying to get to the arena relying on people in their cars to see them in the dark cause it's gonna be winter and stop for them. Again someone well get stuck on the train tracks waiting for the cars up front to move while they are waiting for people to cross the street and someone is gonna get hit by a train. People aren't patient have me first attitudes and that well be a disaster putting the parking there.

While **Option 5** is chosen with great hesitancy. IF, and again I say this with great hesitancy, if this is the option chosen, how exactly is traffic going to be handled. Above comments apply to this scenario as well.

First comment is that only Blackfalds citizens that will be materially affected by the EBC Parking issue be taken into consideration by the final decision of our elected council. That is only fair to the residents that have homes along Westwood Drive and other streets in the vicinity ie. Stanley St, Lansdowne Ave, Womacks Road, and Broadway Avenue. The most materially affected are the homeowners along Westwood Drive because of the removal of the existing trees blocking their view of the railway, to some extent lessen the noise from the train horns by retaining the existing forest of trees, not have to deal with the unnecessary traffic during events at the EBC. Consider that the bank of trees along(market value). I support the Westwood Drive homeowners in significantly opposing all options related to the Westwood Drive (Option 2A, 2B, 3A and 3B).

Secondly, citizens from outside of Blackfalds ie. Red Deer, Lacombe, Sylvan, and rural communities do not pay taxes to Blackfalds and therefore any comments or options selected regarding the EBC Parking issue by these citizens must not be considered by our elected council. It is only fair to the tax payers of Blackfalds.

**Option 5** is the only logical option. Except for Option 6, all the other options are more expensive than **Option 5**. As started in the tackle of pros and cons for the various options, **Option 5** is the easiest area to convert into a parking lot and allows for future parking expansion. And Option 5 parking lot to the EBC. But it is probably no worse than walking the distance from the Rogers Centre in Edmonton or the Saddledome in Calgary. As taxpayers for Blackfalds we need to cognizant of what we are all ready paying for the +30 million facility.

**Option 5** seems like the best option and impacts the least amount of people. All the other options seem inconsiderate of the people who live right near the train. I live on Stanley Street and my road is busy enough as it is and people are always blocking my driveway. I fear that with more parking close by the problem will only escalate. Having the parking lot on the other side seems like the best shot at helping so that we don't feel like we live in a parking lot.

- I am in favour of **Option 5** - with a couple of conditions. I would like to see it done with gravel/crush, and not paved. This way, we can see how well it is used, and if it will remain a parking lot for the long term. The other condition is the intersection at Womacks and the EBC. This needs to be adjusted, and fast. We cannot wait until we are at 20K+ population. Ideally, a roundabout, but if that doesn't fit, then at minimum a 4 way stop with lights, although I'm not sure how well that will work with the Railway crossing so close by.

**Option 5** has the least impact on residents and has the potential to add on and expand.

### Below is my feedback

**Option 5** provides the greatest value to Blackfalds residents.

- 1. **Option 5** is the same distance to the EBC as any of the four Westwood Dr. **Options 2(A), 2(B), 3(A) & 3(B)]**.
- 2. **Option 5** provides the greatest number of additional EBC parking stalls for a lower overall cost to our community.
- 3. **Option 5** has the lowest average cost per stall.

- 4. Option 5 is the least destructive to Blackfalds residents' home values.
- 5. **Option 5** is the least destructive to the natural environment that is home to wildlife and provides beauty to our community.
- 6. **Option 5** does not remove a natural sound barrier to the train for residents of our community.
- 7. **Option 5** allows the only opportunity for future parking expansion, whether regularly required or event specific.

There are more benefits to **Option 5** than one can list and few, if any, drawbacks.

The one concern raised is increased pedestrian traffic at the intersection of Broadway Ave. N. And Womacks Rd. To help alleviate this problem, I propose a crosswalk with pedestrian lights on Broadway further back from the intersection directing pedestrian traffic across to Broadway to the West side where there is already a crosswalk with pedestrian lights at Broadway and Womacks. (See attached markup in green.)

I was told by the Director of Infrastructure that mid-road crosswalks don't meet "community standards". Well, there are already multiple in Blackfalds (Park St. East of the Shell service station to name one) and while not ideal, unfortunately not ideal is all we are left with at this point. "Community standards" is the excuse whenever Director Weran does not want to do something. There are plenty of cases around Town that indicate Preston only cites "community standards" when it is convenient and suits him.

I cannot believe the Town of Blackfalds paid Stantec for FOUR different design options of the one Westwood Dr. Parking lot. Being that had it not been for residents raising their voices, this was originally the ONLY plan the Town of Blackfalds had, it is a clear indication of a concerted effort by a few in our municipal government to force it through.

Additionally, most can't understand how **Options 1, 4 and 6** were not a part of the initial construction. This is a real failure between the Director of Infrastructure and Stantec. This is a common theme with issues in our community.

Alternatively, at the Open House residents proposed to the mayor and Director of Infrastructure a phased solution to this EBC parking issue.

Phase 1: (Year 1-2)Over the next year fairly negotiate the parking lot house on the SE corner of the Broadway/Womacks intersection (**Option 1**), expropriate the land and fix that issue. While this is a costly option if we are looking 50 years into the future and planning on hosting large-scale events, we need to right this wrong.

Phase 2: (Year 2-3)Proceed with **Option 5** the following year. One resident who I just met last night pointed out, why not just gravel this overflow parking lot to save money as is done in other communities. To which many residents remarked good idea. However, when the Town doesn't want to do something, again we have "community standards" but you can point to many instances where these "community standards" are overlooked to the Town benefit, when convenient.

Apparently, the community standard is asphalt which we can all agree would be better. Keep reading and see Phase 4.

Phase 3: (Year 3-4)While negotiating for this house, explore the expropriation of the house on the NE corner of the Broadway/Womacks intersection (unofficial Option 7). The fence that was added to this house due to the road realignment has created dangerous sightlines. Expropriating this property would help alleviate some of the concerns with this intersection and help with the increased foot traffic from **Option 5**.

Once the property is expropriated, expand **option 5** out to Womacks and make the parking lot visible so people, residents and visitors know to use it. Think of the Red Deer Farmer's Market at the downtown arena. We could host large markets in the EBC parking lot and have plenty of parking across the street like the Red Deer Farmer's market had with the Tennis Club at the Servus Arena.

No one wants to take anyone's home but unfortunately sometimes it must be done for the growth of a community which is why the province has measures like the Expropriation Act to ensure it is done fairly. It's time to start being fair and we were told the Town did personally notify both property owners of the Open House. That's a start and better late than never as it was previously.

Phase 4: (Year 4-5) Asphalt the gravel parking lot that is **Option 5** and 7. We do want to have a "community standard" and if we have a plan and stick with it, we will get there. It doesn't all have to be done at once, but it does need to get done for the future of our community. There is a very valid concern about foot traffic across the busy road however with a more open intersection pedestrian crossing lights we can help minimize the effects of crossing the road. Councillor Dennis even discussed a traffic officer for events at the intersection. An excellent option and we can use existing on duty Bylaw Enforcement Officers for an hour before and after events. It's that or they're ticketing and towing vehicles, I'd prefer they were given the opportunity to positively engage with the community.

At this point there are no ideal options, it's about the best path forward. This path provides the only way to expand for an event like the Centennial Cup (I know that's no longer possible), the BCHL All-Star Game or any other event.

By the end of the Open House, we did hear from the mayor and Director of Infrastructure that they would consider this..... That's a start.

The bottom-line is that any of the FOUR Westwood Dr. Options are the worst options. Any Westwood Dr. Parking lot would be further detrimental to our community, degrade more residents home investments, destroy a natural area (home to wildlife as well as a sound and visual barrier to the train) and it does not allow for any future growth opportunity, whether required or for special events.

Thank you for your time.

# Option 6 : 4 votes

# (Comments)

**Option 6** would only amplify the current issues we are experiencing. No matter what option you move forward with, please consider taking action to reduce the impact on residents in the immediate vicinity. We would love to see permit holder only parking implemented within a 2 block radius of residential streets.

Note\* Option 6 - for the love of god, no!

**Option 6** is preferred because ,honestly, I don't think any more money should be spent on this situation.

I am also in favour of **Option 6**. Again, I feel this could be accomplished with crush or gravel, the same as the back alley. This will clean up that back area, and although it's not a lot of spots - it's enough for the cost that it makes sense to move forward with it. I do not feel we should be pursuing any options that require us to purchase land at this point, as we will need to move quickly to have something completed by the start of this hockey season.

### **GENERAL COMMENTS**

### (Comments)

This parking issue should have been taken care of at the time of build. No need to spend + go over budget. The arena is one of the most fancy facilities in AB, and a parking issue which should have been all taken cared in the first place.

As we near year six of voicing concerns for the available parking at EBC we certainly need to find a resolution. As none of the presented build options have been decided or budgeted, there is a previously presented option for neighboring resident parking permits. These permits need to be implemented asap, along with actual enforcement during busy events that will then encourage use of the identified off-site parking lots. The newest options presented still fall short of the required stalls. The relaxation from 428 stalls required to 329 stalls proposed should have never been approved! As we hope to capitalize on the expense we have put out to build the EBC and attract big events we need to have at minimum 428 stalls, however more will never hurt. The key to achieve this goal is a combination of developing four lots, how can the development potential of these 4 lots be overlooked once again? Lot 5309, 5401, 5405 (town owned) and 5409 are clearly the most logical solutions. Administration knew from the start they needed 5309, they had to of! I believe the town owned 5317 & 5321 for several years and rented the properties until their removal was required. 5401 should have been clearly identified as required for the full implementation of the Womacks/Gregg Street realignment project that has been in the master plan for many years! Instead they butchered that master plan and attempted to cover it up with a cheap bandaid that has proven to be ineffective. On top of that a building permit must have been approved for 5401 to build an addition and full renovation of the property. Town owned 5405, Option #5 is simply a piece of the puzzle that should be included in a greater project development that would finalize the parking fiasco as we near year 6. Is developing option #5 as it is presented financially responsible? Or would it be best to complete the puzzle at the same time? 5409 has been advertised as development land for many years, the town should purchase and include in the parking lot puzzle as well.

As for 5101 Westwood Drive, I still question the legality and how the lot was changed from residential to public facility? That is something that needs to be answered. As a homeowner that will be directly affected with the development of 5101 Westwood Drive, I have voiced my objections and will continue to do so!

Turning roads into parking lots is going to turn traffic flow into chaos in order for people to get in and out of the parking lot. Not to mention the proposed ideas make the town look like we are completely incompetent in providing services that are both aesthetically pleasing but are also efficient to use and actually functional. I can't even believe you would consider **options 2,3,4, and 6** without considering how it would be used.

Whatever the town decided, I please hope you consider that already negative impact the parking, road realignment and influx in traffic has had on residents in the immediate vicinity. There are ongoing problems with parking, people speeding, people blocking alleyways and driveways and so on. I ask that the town please seriously considers this, and takes steps to reduce this impact on home owners who raised these same concerns before the twinning arena. Please think about making the residential within 2 block radius permit holder parking only. This strategy is used in towns like sylvan, or other cities to limit impact on residents of sporting events and tourist draws. I believe it is the only solution that would fix some of the problems we have been experiencing due to the increased traffic in the area and visitor who do not respect property, bylaws, and those who live there.

I do not support any new parking lot construction. This should have been thought out the original build. The cost per parking stall is outrageous. If overflow parking is needed, then make some gravel areas. We don't need paved parking.

Would really like to see some number regarding the amount of stalls being utilized currently at the waterpark/town hall/civic centre during events. I have personally driven through on event days and have not seen these options being utilized at all. Spending unnecessary money for a parking lot is not favourable. I believe that traffic at the intersection is already a nightmare and perhaps having flaggers or a bylaw officer to not only direct traffic through the intersection but to direct vehicles where to go when the lot is full. We have many very good options that I do not believe have been fully utilized or explored. The "plow ahead" methodology that has been previously demonstrated by the town is not serving the citizens well at all. The fact that FOUR options clearly state what the towns preference is, it doesn't feel that you are listening at all.

Personally, none of the options are appealing. The arena never should have been built in the current location in the first place. Whomever decided not to pay the last standing home owner the little bit extra he wanted should be roasted. Now you want to pay him out at an exorbitant cost to tax payers. No thanks you. Next, you should not be removing any trees along the tracks as they are not only there as a sound barrier, but provide a clean air scrubber for pollution and are a green space and wildlife corridor. So NONE of those trees should be touched AT ALL. The dumb idea to block off Broadway AVE was also a dumb idea. That should be returned to a thoroughfare with a 4-way stop at Broadway and Womacks, block off the entrance at Waghorn and Gregg st, widen that and turn that into a parking lot probably gaining 50+ stalls, which would also be safer for families using Tayles park. Allow parking on the useless baseless "gathering area" by the track SE of the arena by the old dump station. Lastly offer shuttle rides to further overflow parking areas around town. Once again why should Blackfalds tax payers suffer increased taxes for poor decisions and planning from planning committees that would not listen to tax payers in the first place

Fix the traffic flow problem created by the original parking configuration at the intersection of womacks and broadway. Maybe make it a four way stop or add lights. I'm not happy with the civil engineering we are hiring here, seems like they are not through and wasteful with money. Maybe hire someone who didn't get there degree by thinking D is for diploma

**Option 1:** The Town tried already with the house in the parking lot, can't imagine that price would have come down. Administration and Council won't likely want to go through that process again, it would create quite a buzz on social media. Seems strange to think it is unacceptable to make Westwood houses face a parking lot (with new healthy trees landscaped in and a walking trail connecting to bark park), but forcing the families in the parking lot house and the house to the north of it, to lose their homes for more parking is acceptable to them.

**Option 4 & 5:** Vehicles will park as close to the EBC as they can, Lansdowne and Westwood will continue to always have vehicles parking on those streets for larger events. Those people will not stop parking there because there is additional parking which options 4 & 5 provide. Pedestrian crossing Womacks at night in the dark in the winter to attend EBC events from parking options 5 is the least safe of the options. Option 4 requires crossing at Womacks or the EBC Plaza, both of which are far walking distances when compared to other parking options.

Option 6: Not enough spaces and the alley is already very tight for current homeowners.

**Option 7:** It makes no sense to add additional parking for the amount you want to spend. This arena is a headache and has caused the town taxes to increase. You should have put a parkade in the parking lot originally. So, I know that Eagle Builders built the hospital parking lot parkade. Here is what I propose:

Option 7: Build a 2-story parkade. Have it "donated" by the company whose name is on the building or have a discount since you want to spend over a million dollars anyway. PROS:

- More parking space,
- · less likely to make the community mad,
- will never have to worry about needing more parking space than an additional 100+ parking stalls.
- the cost is less over time,
- · saves taxpayers dollars in the future,
- · all Blackfalds citizens remain happy.

CONS: None because the other options are garbage and a waste of money.

Use the closest open space to the parking lot for more parking obviously. Why put it somewhere else farther away and make people park further away and walk longer. Parking at the arena needs more space. I don't like cutting trees down, so could the same number cut down be replaced in [town]? Is there a plan for that treed space to be developed into something? Could a new pub or restaurant move in there, they would do well when there are bigger events.

How does any of these parking options keep people from parking in front of my house? I live behind the arena and on busy nights I have nowhere to park in front of my house. Unless my roommate parks in front of our house early before the weekend hockey parents take it, then we only have one back-alley parking spot for the two of us. When I come home from work on Saturdays, I have to find a parking spot way down the road. On Sundays, when I'm on days off, I have to walk past some open parking spaces on my street to get my car. Can't there be a better solution?



## TOWN OF BLACKFALDS STANDING COMMITTEE OF COUNCIL REQUEST FOR DIRECTION

Page 1 of 1

MEETING DATE: November 18, 2024

**PREPARED BY:** Kim Isaak, Chief Administrative Officer

PRESENTED BY: Kim Isaak, Chief Administrative Officer

SUBJECT: Member at Large Recognition Policy

### **BACKGROUND**

As part of the Council Committee Audit, it was recommended that a formal policy be drafted outlining how recognition would be provided to Members at Large who are appointed to Council Committees.

#### DISCUSSION

Administration took the current practice of providing new appointees with a Town of Blackfalds promotional item at the start of the term and a welcome letter along with the addition of an annual appreciation meal that would be held at the last meeting of the year. This practice has now been added into policy and Administration is seeking direction from Council on the Policy as presented.

### FINANCIAL IMPLICATIONS

No change to budget.

### **ADMINISTRATIVE RECOMMENDATION**

That Standing Committee of Council consider the following motion:

1. That Standing Committee of Council recommend to Council to bring forward the Member at Large Recognition Policy to the November 26, 2024, Regular Meeting of Council for consideration.

### **ALTERNATIVES**

a) That Standing Committee of Council recommend amendments to the Member at Large Recognition Policy.

#### **ATTACHMENTS**

Draft - Member at Large Recognition Policy

### **APPROVALS**

Him Jaak	
Kim Isaak, Chief Administrative Officer	Department Director/Author



# MEMBER AT LARGE RECOGNITION

POLICY NO.:	
DIVISION DEPARTMENT	Administration
REVIEW PERIOD	Every 4 Years or Upon Legislative Change

### 1. POLICY PURPOSE

1.1 To recognize the important contribution Council Committee Members at Large make to the community and to establish that a formal acknowledgement shall be given to each Member at Large upon the commencement and conclusion of service on the applicable Council Committee.

### 2. POLICY STATEMENT

2.1 Council for the Town of Blackfalds recognizes that leadership and engagement are crucial to move towards the Town's goals and will acknowledge the time commitment and value that Member at Large volunteers make through their participation on Council Committees.

### 3. **DEFINITIONS**

- 3.1 "Chief Administrative Officer" means the individual appointed by Council to the position as per the *Municipal Government Act*, as amended.
- 3.2 "**Committee**" means a committee, commission, board, authority, task force or other body established by Council.
- 3.3 "Council" means the Council of the Town of Blackfalds elected pursuant to the Local Authorities Election Act of Alberta, as amended.
- 3.4 "Member(s) at Large" means a Town of Blackfalds or Lacombe County resident who has been appointed to a Council Committee by resolution of Council for a specified term.
- 3.5 "**Town**" means the municipality of the Town of Blackfalds.

### 4. SCOPE

4.1 This Policy applies to all Member at Large appointees.





#### 5. AUTHORITY AND RESPONSIBILITIES

- 5.1 Council to:
  - 5.1.1 Adopt and support this Policy by resolution.
  - 5.1.2 Consider the allocation of resources for the successful implementation of this Policy in the annual budget process.
- 5.2 Chief Administrative Officer to:
  - 5.2.1 Advise Council on the development, implementation, and amendment of this Policy.
  - 5.2.2 Ensure Policy review occurs and verify the implementation of this Policy.

#### 6. POLICY

- 6.1. At the beginning of the Member at Large appointees' term, the Member at Large will be provided with a Town of Blackfalds promotional item and a welcome letter from the Mayor.
- 6.2. At the last meeting, prior to the end of the year, an appreciation meal will be provided to the Council Committee.
- 6.3. At the conclusion of a Member at Large term or upon the resignation of a Member at Large, a letter of thanks will be provided from the Mayor.
- 6.4. Other forms of recognition may be considered as determined by Council.
- 6.5. The Legislative / Executive Assistant shall be responsible for ensuring recognition is given upon the commencement, conclusion or resignation of a Member at Large term.

### 7. EXCLUSIONS

None

### 8. SPECIAL SITUATIONS

8.1. Other forms of recognition may be considered as determined by Council.

### 9. RELATED DOCUMENTS

None





# **COUNCIL POLICY**

ayor	Chief Administrative	Chief Administrative Officer	
ate	Date		
DLICY RECORD HISTORY			
	Resolution No:	Date	
olicy Adopted			
olicy Reviewed			
olicy Revised			
MINISTRATIVE REVISIONS			
Date		Description	





## TOWN OF BLACKFALDS STANDING COMMITTEE OF COUNCIL REQUEST FOR DIRECTION

Page 1 of 2

MEETING DATE: November 18, 2024

**PREPARED BY:** Kim Isaak, Chief Administrative Officer

PRESENTED BY: Kim Isaak, Chief Administrative Officer

SUBJECT: Code of Conduct Bylaw

#### **BACKGROUND**

The original Council Code of Conduct Bylaw was adopted in 2022 as a result of the requirement under the Modernized MGA. In 2023, it was revised to its current form. It has been identified that there is a need to clarify various sections of the bylaw to clearly lay out the process as well as to provide for the option that a sub-Committee of Council investigate complaints as opposed to complaints being investigated by an independent Investigator.

#### DISCUSSION

The draft attached bylaw was reviewed in detail at the workshop of Council held on September 16, 2024. At that time, there were questions on the following sections.

17.2 Members are encouraged to pursue this informal complaint procedure as the first means of remedying conduct that they believe breaches this Bylaw. However, a Member is not required to complete this informal complaint procedure prior to pursuing the formal complaint procedure outlined below.

The question on this was whether the provision above applies to members of the public. Currently, as written, it does not, but the bylaw could be changed so that it does apply to members of the public. The one issue to note is that the information complaint process does not always work practically for members of the public due to the power dynamic of the situation. Based on this information Administration is recommending that the bylaw draft remain as is and that the provision above not be extended to members of the public.

18.8 After Council has made a resolution on the complaint, the investigation reports and the related resolution of Council shall be posted on the Town's website, in accordance with FOIP.

The above provision would require that the full report, subject to FOIP redactions and the full resolution of Council of any sanctions imposed would be made public via the website. Note, that the resolution on sanctions was always required to be made public, and if a FOIP request came in, the town would be required to disclose a redacted version. For transparency, Administration is recommending that provision 18.8. remain as is.

The final question that was raised was who would conduct the initial review of the complaint if the complaint was against the Mayor and Deputy Mayor. Administration recommends that the draft bylaw be amended to include that in the case that the complaint is about the Mayor and Deputy Mayor, that either the previous Deputy Mayor or the next scheduled Deputy Mayor would hear the complaint.



# TOWN OF BLACKFALDS STANDING COMMITTEE OF COUNCIL REQUEST FOR DIRECTION

Page 2 of 2

### FINANCIAL IMPLICATIONS

There will be cost savings with the addition of the option that a Sub-Committee of Council investigates the complaints as opposed to the hiring of an external Investigator.

# **ADMINISTRATIVE RECOMMENDATION**

That Standing Committee of Council consider the following motion:

1. That Standing Committee of Council recommend to Council that the draft Code of Conduct Bylaw, with the inclusion of the recommendations outlined by Administration be brought forward to the November 26, 2024, Regular Meeting of Council for consideration.

### **ALTERNATIVES**

a) That Standing Committee of Council recommends amendments to the Code of Conduct Bylaw before coming forward to Council.

### **ATTACHMENTS**

- Draft Code of Conduct Bylaw with Tracked Changes
- Draft Code of Conduct Bylaw Clean Version

#### **APPROVALS**

Kim Isak		
Kim Isaak,	Department Director/Author	
Chief Administrative Officer		



# BEING A BYLAW OF THE TOWN OF BLACKFALDS IN THE PROVINCE OF ALBERTA TO ESTABLISH A CODE OF CONDUCT FOR MEMBERS OF COUNCIL

**WHEREAS**, section 146.1 of the *Municipal Government Act,* RSA 2000, c M-26, as amended from time to time, provides that council must, by bylaw, establish a code of conduct governing the conduct of members;

**AND WHEREAS**, the *Code of Conduct for Elected Officials Regulation*, AR 200/2017 provides minimum requirements for the contents of the Code of Conduct;

**AND WHEREAS**, when establishing a code of conduct, Council shall consider sections 3 and 153 of the *Municipal Government Act*;

**AND WHEREAS**, the public is entitled to expect the highest standards of conduct from elected members of council;

**AND WHEREAS**, the establishment of a code of conduct for members of Council is consistent with the principles of transparent and accountable government;

**AND WHEREAS,** a code of conduct ensures that members of Council share a common understanding of acceptable conduct extending beyond the legislative provisions governing the conduct of members;

**NOW THEREFORE,** the Council of the Town of Blackfalds, in the Province of Alberta, duly assembled, enacts as follows:

# PART 1 - TITLE

1.1 This Bylaw may be referred to as the "Code of Conduct Bylaw".

# **PART 2 - DEFINITIONS**

- 2.1 In this Bylaw, words have the meanings set out in the Act, except that:
  - a. **"Act"** means the *Municipal Government Act*, RSA 2000, c M-26, and associated regulations, as amended;
  - b. "Administration" means the administrative and operational arm of the Municipality, comprised of the various departments and business units and including all employees who operate under the leadership and supervision of the Chief Administrative Officer and includes the CAO;
  - c. **"CAO"** means the Chief Administrative Officer of the Municipality, or their delegate;
  - d. "Complainant" includes any Member, the CAO, Town staff or employees, or members of the public submitting a complaintmeans any person who submits a complaint, and may include Members and Administration;
  - e. "Council" means the Mayor and Councillors of the Town of Blackfalds duly elected pursuant to the provisions of the Local Authorities Election Act, R.S.A. 2000, L-21, and associated regulations, as amended the council of the Town of Blackfalds;
  - <u>"Council Committee" means a committee, board, commission or authority or any other body established by Council.</u>
  - d.f. "FOIP" means Alberta's the Freedom of Information and Protection of PrivacyAct, RSA 2000, c F-25, any associated regulations, and any amendments or successor legislation;



- e.g. "Investigator" means the individual <u>retained at the direction of Council</u> or body established by Council to investigate and report on complaints;
- member of means a member of Council duly elected and continuing to hold office or a member of a Council Committee duly appointed, and includes a Councillor or the Mayor; including the Mayor;
- f.i. "Respondent" means the Member who is the subject of a complaint; and
- g.j. "Municipality Town" means the municipal corporation of the Town of Blackfalds.

## **PART 3 - PURPOSE AND APPLICATION**

- 3. 3.1 The purpose of this Bylaw is to establish expected standards for the of ethical conduct foref Mmembers relating to their roles and obligations as representatives of the Municipality and a procedure for the investigation and enforcement of those standards.
- This Code of Conduct applies to the Mayor and all members of Council.
- 5. The purpose of the Code of Conduct is to provide a formal document setting out expectations and support for high standards of member conduct and to prevent ethical conflicts and assist in their resolution. The Bylaw is to be given a broad and liberal interpretation in accordance with the Act. It is not possible to address every situation and accordingly, Members are to conduct themselves in a manner that reflects not only the letter of the Bylaw but the spirit and intent of the Bylaw.
- 3.2 Prior to participating as a Member of council or a Council Committee, each Member shall sign the Statement of Acknowledgement as provided in Schedule "A" affirming they have read and fully understands this Code of Conduct and agree to follow and abide by the Code of Conduct in good faith

## PART 4 - PROPOSED ADDITION ON ROLESREPRESENTING THE TOWN

## 6.4.1 COUNCIL ROLEMembers shall:

- a. The fundamental role of Council is to provide direction, make policy decisions and to represent the public interest.act honestly and, in good faith, serve the welfare and interests of the Town as a whole;
- b. Council must not exercise a power, function or duty that is specifically assigned to the Chief Administrative Officer provided through legislation or bylawperform their functions and duties in a conscientious and diligent manner with integrity, accountability, and transparency;
- c. conduct themselves in a professional manner with dignity and make every effort to
  participate diligently in the meetings of Council, Council Committees, and other
  bodies to which they are appointed;
- d. arrange their private affairs and conduct themselves in a manner that promotes public confidence and will bear close public scrutiny; and-
- b. be transparent and accountable with respect to all expenditures and strictly comply with all municipal bylaws, policies and procedures regarding claims for remuneration and expenses.

## PART 56 - COMMUNICATING ON BEHALF OF THE MUNICIPALITY

5.1 Unless Council directs otherwise, the Mayor is Council's official spokesperson and in the absence of the Mayor it is the Deputy Mayor. All inquiries from the media regarding the



official Council position on <u>decisions and resolutions</u> <u>-an issue</u> shall be referred to Council's official spokesperson.

5.1

- 7.5.2 Matters relating to the administration or operations of the Town are to be referred to the CAO, or Acting CAO.
- 8.5.3 A Mmember must not claim to speak on behalf of Council unless authorized to do so by the whole of Council.
- 9.5.4 A Mmember who is authorized to act as Council's official spokesperson must ensure that their comments accurately reflect the official position and will of Council as a whole, even if the Mmember personally disagrees with Council's position.
- 40.5.5 Members of Council have the right to express their personal opinions; however, in doing so, the Members must ensure that it is not perceived as representing Council's opinion on a matter.
- 11.5.6 No Mmember shall make a statement when they know that statement is false.
- <u>12.5.7</u> No <u>M</u>member shall make a statement with the intent to mislead Council, <u>-employees of the TownAdministration</u> or members of the public, <u>including the media</u>.
- 13. This Bylaw applies to all forms of communication.

5.8

# PART 67 - USE OF SOCIAL MEDIA

- 14.6.1 As with any other activity, Members must ensure their use of social media complies with the law, the requirements of this Bylaw, and any related bylaws or policies. This Bylaw applies to all communications a Member makes, regardless of the social media account or device from which the communication is made.
- 15. For the purpose of Part 6sSection 14 of this Bylaw "communications" means any information submitted by a Member to a social media network or platform that is capable of being displayed usings software or approved hardware such as text, images, links or other content and include a Member commenting on or sharing content created by other users of the social network or platform.
  - 16. Members may use social media either with a personal account or a government official account; however, they shall conduct themselves respectfully and ethically.
  - 17. Members utilizing social media shall abide by any Town policies in place with respect to behavior and content and shall support the role of Council and respect the differences of opinion.
  - 18. Abiding by Town policies will include both elected official social media accounts as well as private social media accounts when content relates to Town business and activities.

6.2



# PART 78 - RESPECTING THE DECISION-MAKING PROCESS

7.1 Decision making authority lies with Council or the Council Committee and not with any individual Mmember. Council may only act by bylaw policy or resolution passed at a Council meeting held in public at which there is a quorum present.

<del>19.</del>

7.2 No Mmember shall attempt to bind the Municipality Town or give direction to employees in—Administration, agents, contractors, consultants or other service providers or prospective vendors to the MunicipalityTown.

<del>20.</del>

- 7.1 Members shall conduct and convey Council <u>or Council Committee</u> business and all their duties in an open and transparent manner and in so doing, allow the public to view the process and rationale which was used to reach decisions and the reasons for taking certain actions, except those matters that are exceptions to disclosure required by the <u>Freedom of Information and Protection of Privacy Act. FOIP.</u>
- 21. Members shall accurately communicate the decisions of Council, even if they disagree with Council's decision, such that respect for the decision-making processes of Council is fostered.

7.3

# PART 89 - ADHERENCE TO POLICIES, PROCEDURES AND BYLAWS

- <u>22.8.1</u> Members shall uphold the law established by the Parliament of Canada and the Legislature of Alberta and the bylaws, policies and procedures adopted by Council.
- 23.8.2 Members shall respect the Municipality Town as an institution, its bylaws, policies and procedures and shall encourage public respect for the Municipality Town, its bylaws and policies., policies and procedures.
- 24. Members must not encourage disobedience of any bylaw or, policy or procedure of the Municipality Town in responding to a member of the public, as this undermines public confidence in the Municipality Town and in the rule of law.

8.3

# PART 910 - RESPECTFUL INTERACTIONS WITH COUNCIL MEMBERS, STAFF, THE PUBLIC AND OTHERS

- 25.9.1. Members shall act in a manner that demonstrates fairness, respect for individual differences and opinions, and an intention to work together for the common good and in furtherance of the public interest.
- <u>26.9.2.</u> Members shall treat one another, employees of the <u>Municipality Town</u> and members of the public with courtesy, dignity and respect and without abuse, bullying or intimidation.
- 27.9.3. No Mmember shall use indecent, abusive, or insulting words or expressions toward another member, any employee of the Municipality, or any member of the public.
- 28.9.4. No Mmember shall speak or conduct themselves in a manner that is discriminatory to any individual based on the person's race, religious beliefs, colour, gender, physical disability, mental disability, age, ancestry, place of origin, marital status, source of income, family status or sexual orientation.



9.1. Members shall respect the fact that employees not involve themselves in matters of in Administration work for the Town as a corporate body and are charged with making decisions and recommendations that reflectbased on their professional expertise and a corporate perspective and Members must refrain from applying undue influence on Administrationthat employees are required to do so with undue influence from any Member or group of Members. which fall within the jurisdiction of the Chief Administrative Officer, or which are identified as powers of the Chief Administrative Officer by the Municipal Government Act, the Chief Administrative Officer Bylaw, or by any other legislation or enactment of Council

9.5.

- 29. Members and shall only seek information about the operation and administration of the Town from the CAO or any person the CAO delegates to provide such information to Members. employees of the Town may be present at social and community events, and in such situations, both parties must refrain from discussing workplace matters, including direction of Town programs and services; however, this does not prevent Members and employees from generally communicating.
- 30.9.6. Members shall respect the fact that employees in Administration work for the Municipality as a corporate body and are charged with making recommendations that reflect their professional expertise and a corporate perspective and that employees are required to do so without undue influence from any member or group of members.

# 31.9.7. Members must not:

- a. involve themselves in matters of Administration, which fall within the jurisdiction of the CAO<del>, as defined by Part 2 of this Bylaw</del>;
- b. use, or attempt to use, their authority or influence for the purpose of intimidating, threatening, coercing, commanding, or influencing any employee of the <u>Municipality Town</u> with the intent of interfering in the employee's duties; or
- c. maliciously or falsely injure the professional or ethical reputation or the prospects or practice of employees of the <a href="MunicipalityTown">MunicipalityTown</a>.

# PART 104 - CONFIDENTIAL INFORMATION

- 32.10.1 Members must keep in confidence matters discussed in private at a Council or Council <u>cC</u>committee <u>mM</u>meeting until the matter is discussed at a meeting held in public.
- 33.10.2 In the course of their duties, Mmembers may also become privy to confidential information received outside of an in-camera closed session meeting. Members must not:
  - a. disclose or release by any means to any member of the public, including the media, any confidential information acquired by virtue of their office, unless the disclosure is required by law or authorized by Council or the Council Committee;
  - access or attempt to gain access to confidential information in the custody or control
    of the <u>Municipality Town</u> unless it is necessary for the performance of the
    <u>Mmember's duties and is not otherwise prohibited by Council or the Council
    <u>Committee</u>, and only then if the information is acquired through appropriate channels
    in accordance with applicable Council bylaws and policies; <u>or</u>
    </u>



40.1 No Mmember shall use confidential information for personal benefit or for the benefit of any other individual organization.

10.3

- 10.4 Confidential information includes information in the possession of, or received in confidence by the Town that the Town is prohibited from disclosing pursuant to legislation, court order or by contract, or is required to refuse to disclose, under FOIP or any other legislation, or any other information that pertains to the business of the Town, and is generally considered to be of a confidential nature, including but not limited to information concerning:
  - a. the security of the property of the Town;
  - b. a proposed or pending acquisition or disposition of land or other property;
  - c. a tender that has or will be issued but has not been awarded;
  - d. Contract negotiations;
  - e. employment and labour relations;
  - f. draft documents and legal instruments, including report, policies, bylaws, and resolutions, that have not been the subject matter of deliberation in a meeting open to the public;
  - g. law enforcement matters;
  - h. litigation or potential litigation, including matters before administrative tribunals;
     and
  - i. advice that is subject to solicitor-client privilege.

# PART 112 - CONFLICTS OF INTEREST

- 34.11.1 Members have a statutory duty to comply with the pecuniary interest provisions set out in Part 5, Division 6 of the Act and a corresponding duty to vote unless required or permitted to abstain under the Act or another enactment.
- 35.11.2 Members are to be free from undue influence and not act or appear to act in order to gain financial or other benefits for themselves, family, friends or associates, business or otherwise.
- 36.11.3 Members shall approach decision-making on matters where the requirement of procedural fairness imposes such an obligation, with an open mind that is capable of persuasion.
- 37.11.4 It is the individual responsibility of Members to assess their pecuniary or other conflicts of interest and they may need to seek independent legal advice, at their sole expense.

  It is the individual responsibility of each Member to seek independent legal advice, at the Member's sole expense, with respect to any situation that may result in a pecuniary or other conflict of interest.

# PART 123 - IMPROPER USE OF INFLUENCE

- 38.12.1 No Mmember shall use the influence of the Mmember's office for any purpose other than for the exercise of the Mmember's official duties.
- 39.12.2 No Mmember shall act as a paid agent to advocate on behalf of any individual,



organization or corporate entity before Council or a <u>Council</u> <u>ComitteeCommitteeCommittee of Council</u> or any other body established by Council.

- 40-12.3 Members shall not contact or otherwise attempt to influence members of any adjudicative body regarding any matter before it relating to the Town.
- Members shall refrain from using their positions to obtain employment with the Municipality Town for themselves, family members or close associates. Members are ineligible to apply or be considered for any position with the Municipality Town while they hold their elected position.

## PART 134 - USE OF MUNICIPAL ASSETS AND SERVICES

- 41.13.1 Members may use Town property, shall use municipal property, equipment, services, supplies and staff—Administrative resources ("Town Assets") only for the performance of their duties as a Mmember, subject to the following-limited exceptions:
  - a. <a href="mailto:municipal">municipal</a> Town Assets property, equipment, service, supplies and staff resources that are available to the general public may be used by a <a href="Mmember for personal use upon on the same terms and conditions as members of the general public, including booking and payment of any applicable fees or charges; -and
  - b. electronic communication devices, including but not limited to desktop computers, laptops, tablets, and smartphones, which are supplied by the <a href="Municipality-Town"><u>Municipality-Town</u></a> to a <a href="Municipality-Town"><u>Mmember</u></a>, may be used by the <a href="Minember for personal use, provided that the use is not for personal gain and is in accordance with this <a href="Minember for personal gain"><u>Bylaw.;</u></a>, or activities generally considered to be offensive or inappropriate and <a href="further-that:">further that:</a>
- 42.13.2 Aall electronic communications, documents and materials created, viewed, shared and stored on electronic communication devices supplied by the Town are subject to FOIP and may be inspected, traced, retrieved and logged as part of an investigation pursuant to this Bylaw or any other relevant legislation and Members are required to provide any electronic device supplied by the Town and facilitate access to the electronic device and to any electronic accounts created by the Town for investigation purposes. . all emails or messages sent or received on Town devices are subject to FOIP:

all files stored on Town devices, all use of internal .email and all use of the Internet through the Town's firewall may be inspected, traced or logged by the Town;

in the event of a complaint pursuant to this Bylaw, Council may require that any or all of the electronic communication devices provided by the Town to Members may be confiscated and inspected as part of the investigation, including downloading information which is considered relevant to the investigation, All email messages or Internet connects may be retrieved.

- 47. Members must refrain from using any Town property, equipment, services, or supplies including email, Internet services, or any other electronic communication device, if the use could be offensive or inappropriate.
- 13.3 Upon a Member ceasing to hold office or upon the expiry or revocation of a Member's appointment to a Council Committee, as applicable, a Member must immediately deliver



to the TownCAO any items, including but not limited to, records, accounts, papers, money or property money, book, paper, thing, or other property of the Town that is in the Member's possession or under the Member's control-including, without restriction any record created or obtained by virtue of the Member's office other than a personal record or constituency record as those terms are used in the FOIP.

# PART 145 - ORIENTATION AND OTHER TRAINING ATTENDANCE

- 48.14.1 Every Mmember must attend the orientation training offered by the Municipality in accordance with the Act. within 90 days after the member takes the oath of office.
- 49.14.2 Unless excused by Council, every Mmembers must attend any other training organized at the direction of Council. for the benefit of members throughout the Council term.
- 50.14.3 Should a Council Committee offer orientation training, the appointed Member's attendance is required Members must attend any orientation or training provided for any Council Committee or board they are appointed to by Council.

# PART 156 - GIFTS AND HOSPITALITY

- 51.15.1 Members shall not accept gifts, hospitality or other benefits that would, to a reasonable member of the public, appear to be in gratitude for influence, to induce influence, or otherwise to go beyond the necessary and appropriate public functions involved.
- 52.15.2 Gifts received by a Mmember on behalf of the Municipality-Town as a matter of official protocol which have significance or historical value for the Municipality-Town shall be left with the Municipality-Town when the Mmember ceases to hold office.

  No member shall use any facilities, equipment, supplies, services, municipal logo or other resources of the Municipality for any election campaign or campaign related activity.
- 53.15.3 Members are not precluded from accepting:
  - a. rewards, gifts, or benefits not connected with the performance or duties of office; political contributions that are accepted in accordance with applicable law;

a.

 b. reasonable quantities of food and beverages at banquets, receptions, ceremonies or similar events;

<del>.</del>

c. -service provided without compensation by persons volunteering their time;

<del>.</del>

d. food, lodging, transportation, and entertainment provided by other levels of government or by other local government, boards, or commissions;

<del>a .</del>

e. e. a reimbursement of expenses incurred in the performance of duties or office;

<del>2 .</del>

f. token gifts such as souvenirs, mementos, and commemorative gifts that are given in recognition of service or attending an event; or

ŧ.

g. gifts that are received as an incident of protocol or social obligation that normally and reasonably accompany the responsibility of office.

## **PART 16 - ELECTION CAMPAIGNS**

16.1 No Member shall use any facilities, equipment, supplies, services, municipal logo, or



other resources of the Town for any election campaign or campaign-related activity.

# PART 17 - INFORMAL COMPLAINT PROCESS

- Any Member who has been advised by a personmember of the public or has themselves identified or witnessed conduct by another Member (the "Other Member") that the Member reasonably believes, in good faith, is a contravention of this Bylaw, may address the prohibited alleged breachconduct by either one or both of the following:
  - a. aAdvising the Other Member that the conduct violates this Bylaw and encouraging the Other Member to stop; or
  - -rRequesting the Mayor to assist in informal discussion of the alleged contraventionconductalleged breach with the Other Membre in an attempt to resolve the issues. In the event that the Mayor is the subject of, or is implicated in an alleged contravention of this Bylaw, the Member may request the assistance of the Deputy Mayor.

- <u>Individuals Members</u> are encouraged to pursue this informal complaint procedure as the first means of remedying conduct that they believe violates breaches this Bylaw. However, an individual Member is not required to complete this informal complaint procedure prior to pursuing the formal complaint procedure outlined below.
- In order to facilitate meaningful resolution, all persons involved in the informal complaint process will maintain confidentiality.

## PART 18 - INFORMAL FORMAL COMPLAINT PROCEDURE

- \_\_Any person or a representative of an organization who has identified or witnessed behaviour or an activityconduct by a Mmember of Council, that they believe, s in good faith, is in contravention of the Council Code of Conduct (the "Codethis Bylaw"), may wish to address the prohibited behaviour or activity conduct by submit submitting a formal complaint as outlined below.
- 18.1 In this -Part, the term Mayor -should be substituted by the term- Deputy Mayor if the complaint is involves about the Mayor.

18.2 Formal complaints under this Code of Conduct must be made: themselves as follows: Advise the member that the behavior or activity contravenes the Codeby a Member; Encourage the member to stop the prohibited behavior or activityby the CAO; Keep a written record of the incident(s) including dates, times, locations, other persons present, and any other relevant information by a Town employee; If applicable, confirm to the member your satisfaction with the response of the member; or if applicable, advise the member of your dissatisfaction with the response; and by a member of the public. Consider the need to pursue the matter in accordance with the formal complaint procedure outlined in Part 18, or in accordance with another applicable judicial or quasi-judicial

- process or complaint procedure. Formal complaints ahll be considered in accordance with the following procedure.All
- formal complaints shall:
  - a. All complaints shall be made in writing;



- b. and be dated;
- c. include the name of the Member alleged to have contravened the Bylaw;
- d. include reasonable and probable grounds for the allegation that a Member has contravened this Bylaw, including a detailed description of the facts, as they are known and , giving rise to the complaint, including the names of any witnesses;
  - <u>include the Complainant's full name and contact information</u> <u>anonymous complaint shall not be accepted</u> or investigated; and
- —e. -be addressed to the Mayor.-
- i. the name of the Member alleged to have contravened this Bylaw;
- ii. Reasonable and probable grounds for the allegation that a Member has contravened this Bylaw, including a detailed description of the facts, as they are known, giving rise to the complaint, including the names of any witnesses; and
- iii. The Complainant's name and contact information;
- 18.4 Complaints that do not comply with section 18.359 will not be considered.
- 60.18.5 Complaints that name more than one Member may be treated as separate complaints. Multiple complaints about a Member may be addressed collectively.
- 18.6 On receipt of a complaint, the Mayor e-will within 7 business days of receipt of the complaint complete an initial assessment. Complaints that:
  - <u>are not about a current Member;</u>
  - a.
  - provide insufficient information or factsallege a violation of the Act or FOIP:
  - b
    - allege a contravention of this Bylaw that has already been the subject of a prior complaint fully addressed by council;
  - <u>C.</u>
    - <u>allege criminal activity; or</u>
  - d.
  - e. are more properly covered by other applicable legislative appeal, complaint or court processes;
  - will be immediatelysummarily refused in writing with reasons provided to the Complainant and Council but will be otherwise confidential. -- The decision of the Mayor is final. The Mayor -may seek legal advice in making this initial assessment.
- A complaint must be received no later than 60 days after the date on which the conduct occurred that gave rise to the complaint or the Complainant became aware of the conduct that gave rise to the complaint. Council may proceed with a complaint submitted after 60 days if All complaints shall be submitted within 60 days of the event(s) giving rise to the complaint, unless in the opinion of Council, it is in the best interests of the public and/or the Town to proceed with an investigation outside of this time period.;
- 18.7
- A complaint that meets the criteria in section 18.3 shall be provided to the Respondent.

  A complaints that meets the criteria in section 59 and is not summarily dismissed under section 60 shall be provided to the Respondent. If the complaint is submitted properly under this Bylaw and the facts, as reported, include the name of one or more Members who are alleged to be responsible for the breach of this Bylaw, the Member or Members concerned shall receive a copy of the complaint, redacted if reasonable to do so, Names of the Complainants and witnesses may be provided to the Member(s)



## concerned if an investigation proceeds and:

i. the investigation cannot be completed without releasing the Complainant's name; or

ii. the Member(s) concerned require the name(s) in order to properly respond to the allegations.

The Mayor will schedule a closed session item at the first Council meeting after the initial assessment of the complaint to \_te\_provide the complaint to Council and Council, excluding -the Respondent and the Complainant, if the Complainant is a Member, shall review the complaint.—

<u> 18.9</u>

18.10 If Council is of the opinion that a complaint:

- a. is not about a current Member;
- b. is frivolous or vexatious;
- c. is not made in good faith;
- d. has no grounds or insufficient grounds for investigating;
- e. is more appropriately addressed by another applicable legislative appeal, complaint and court process;
- f. alleges criminal activity;
- g. alleges a violation of the Act or FOIP; or
- h. alleges a contravention of this Bylaw that has already been the subject of a prior complaint fully addressed by Council;

Council may choose not to have the complaint investigated, or, if already commenced, may terminate any investigation, or may dispose of the complaint in a summary manner. The Complainant and the Respondent shall be advised by the Mayor in writing of any such decision with reasons.

- If Council is of the opinion that a complaint is frivolous or vexatious, or is not made in good faith, or that there are no grounds or insufficient grounds for investigating, is more appropriately addressed by another applicable legislative appeal, complaint and court process or has already been fully address under the Bylaw, Council may choose not to have the complaint investigated, or, if already commenced, may terminate any investigation, or may dispose of the complaint in a summary manner. The Complainant and the Member(s) Respondent shall be advised by the Mayor in writing of any such decision with reasons.;
- 18.11 ——If Council decides to investigate the complaint, Council may by resolution direct the CAO to retain an investigator or Council may establish an ad hoc committee to conduct the investigation.
- 18.12 Best efforts will be made by the Investigator to maintain confidentiality over the complaint and investigation process. an Investigator will be appointed and all proceedings regarding the investigation shall be confidential;
- 61.18.13 The Investigator will advise the Respondent and the Complainant of the next steps in the investigation, including when the Respondent and Complainant may provide information to the Investigator.
- 62.18.14 The Investigator shall take reasonable steps to conclude any investigation within



60 days of the date upon which a complaint is provided to the Investigator.

63.18.15 Upon completingcompletion of the an investigation of a complaint, the Investigator shall provide a written report to Council and the MemberRespondent, summarizing the Investigator's investigation process, the evidence gathered, and the conclusions about the alleged breach, conclusions with respect to the substance of the complaint, which may include recommendations as to sanctions, that may be imposed by Council.

-The Respondent A Member who is the subject of an investigation-shall be afforded procedural fairness, including an opportunity to provide input to the Investigator and to respond to the Investigator's report before Council deliberates and makes any decision or imposes any sanction. is imposed; The Mayor will advise the Respondent when the Respondent will have the opportunity to speak to Council in closed session.

18.16

18.17 Council, in closed session, excluding the Member and the Complainant if the Complainant is a Member, shall, after reviewing the Investigator's report and any submissions from the Respondent, deliberate on the complaint and determine if there was a breach of the Bylaw and if so, whether or not to impose sanctions. Council will make a resolution in open session and the Mayor will advise the Respondent and the Complainant in writing of Council's decision. Upon receiving the Investigator's report, all of Council except the Member or Members of Council about whom the complaint was made and, where the complaint was brought by a Member of Council, that Member of Council, shall deliberate on the Investigator's conclusions with respect to the substance of the complaint and recommendations as to sanctions, if any, and make a recommendation to Council.

The Investigator shall take reasonable steps to conclude any investigation within 60 days of the date upon which a complaint is submitted to the InvestigateAfter Council has made a resolution on the complaint, the investigation reports and the related resolution of Council shall be posted on the Town's website, in accordance with FOIP.

18.18

# **PART 19 - COMPLIANCE AND ENFORCEMENT**

- 64.19.1 Members shall uphold the letter and the spirit of intent of this Bylaw.
- 65.19.2 Members are expected to cooperate in every way possible in securing compliance with the application and enforcement of this Bylaw.
- 66.19.3 No Mmember shall:
  - undertake any act of reprisal or threaten reprisal against a <u>Ceomplainant or any</u> other person for providing relevant information to <u>Council or to any other</u> <u>personthe Investigator</u>;
  - b. obstruct Council, or any other personthe Investigator, in carrying out the objectives or requirements of this Bylaw Upon receiving the Investigator's report, all of Council except the Member or Members of Council about whom the complaint was made and, where the complaint was brought by a Member of Council, that Member of Council, shall deliberate on the Investigator's conclusions with respect to the substance of the complaint and recommendations as to sanctions, if any, and make a recommendation to C
- 67.19.4 Sanctions that may be imposed on a Mmember, by Council, upon a finding that the member has breached this Bylaw may include:
  - a. a letter of reprimand addressed to the Mmember;



b.	requesting	the Mmemb	per to issue	a letter of	apology.
ν.	roquoding	THO IVI	301 to 10040	a lottol of	apology,

- publication of a letter of reprimand or request for apology and the Mmember's response;
- e.d. a requirement to attend training;
- d.e. suspension or removal of the appointment of a <u>M</u>member as the <del>deputy chief</del> elected <u>Deputy Mayor or Acting Mayor</u> official or acting chief elected official under section 152 of the Act;
- e.f. suspension or removal of the chief elected official's presiding duties under section 154 of the Act;
- g. suspension or removal of the Mayor's presiding duties under section 154 of the Act;
- f.h. suspension or removal from some or all Council Ceommittees and bodies to which council has the right to appoint Mmembers;
- g.i. reduction or suspension of remuneration as defined in section 275.1 of the *Act* corresponding to a reduction in duties, excluding allowances for attendance at council meetings;
- i. any other sanction Council deems reasonable and appropriate in the circumstances provided that the sanction does not prevent a member from fulfilling the legislated duties of a member and the sanction is not contrary to the Act.

65.Once Council has received and considered the Investigator's report, it will be reviewed in accordance with FOIP and may be posted, to the extent possible, on the Town's website.

# PART 20 - REVIEW

<u>-This Bylaw shall be brought forward for review at the beginning of each term of Council, when relevant legislation is amended, and at any other time that Council considers appropriate to ensure that it remains current and continues to accurately reflect the standards of ethical conduct expected of members.</u>

# PART 21 - DATE OF FORCE

69.21.1 That this Bylaw shall come into effect, upon the date on which it is finally read and passed.

## PART 22 — REPEAL OF BYLAW 12782,232

	MAYOR JAMIE HOOVER
(RES. )	
READ for the first time this day of	, <del>A.D. 202</del> 2024.
70.22.1 Bylaw 12782.232 – Council Code of Conduct By are hereby repealed.	/law, and any amendments thereto





			CAO MYRON THOMPSONKIM ISAAI
		day of	, A.D. 202
(RES.			MAYOR JAMIE HOOVE
READ for tI	he third and final time this _	day of_	CAO MYRON THOMPSONKIM ISAAI, A.D. 202
(RES.	)		MAYOR JAMIE HOOVEI
			CAO MYRON THOMPSONKIM ISAAI



# BEING A BYLAW OF THE TOWN OF BLACKFALDS IN THE PROVINCE OF ALBERTA TO ESTABLISH A CODE OF CONDUCT FOR MEMBERS OF COUNCIL

\_\_\_\_\_

**WHEREAS**, section 146.1 of the *Municipal Government Act*, RSA 2000, c M-26, as amended from time to time, provides that council must, by bylaw, establish a code of conduct governing the conduct of members;

**AND WHEREAS,** the *Code of Conduct for Elected Officials Regulation*, AR 200/2017 provides minimum requirements for the contents of the Code of Conduct;

**AND WHEREAS**, when establishing a code of conduct, Council shall consider sections 3 and 153 of the *Municipal Government Act*;

**AND WHEREAS**, the public is entitled to expect the highest standards of conduct from elected members of council;

**AND WHEREAS**, the establishment of a code of conduct for members of Council is consistent with the principles of transparent and accountable government;

**AND WHEREAS,** a code of conduct ensures that members of Council share a common understanding of acceptable conduct extending beyond the legislative provisions governing the conduct of members;

**NOW THEREFORE,** the Council of the Town of Blackfalds, in the Province of Alberta, duly assembled, enacts as follows:

# PART 1 - TITLE

1.1 This Bylaw may be referred to as the "Code of Conduct Bylaw".

# **PART 2 - DEFINITIONS**

- 2.1 In this Bylaw, words have the meanings set out in the Act, except that:
  - a. "Act" means the Municipal Government Act, RSA 2000, c M-26, and associated regulations, as amended;
  - b. "Administration" means the administrative and operational arm of the Municipality, comprised of the various departments and business units and including all employees who operate under the leadership and supervision of the Chief Administrative Officer and includes the CAO;
  - c. "CAO" means the Chief Administrative Officer of the Municipality, or their delegate;
  - d. "Complainant" means any person who submits a complaint, and may include Members and Administration;
  - e. "Council" means the council of the Town of Blackfalds;
  - f. "FOIP" means the *Freedom of Information and Protection of PrivacyAct*, RSA 2000, c F-25, any associated regulations, and any amendments or successor legislation;
  - g. "Investigator" means the individual retained at the direction of Council or body established by Council to investigate and report on complaints;
  - h. "Member" means a member of Council including the Mayor;
  - i. "Respondent" means the Member who is the subject of a complaint; and



j. "Town" means the municipal corporation of the Town of Blackfalds.

# **PART 3 - PURPOSE AND APPLICATION**

- 3.1 The purpose of this Bylaw is to establish expected standards of ethical conduct for Members and a procedure for the investigation and enforcement of those standards.
- 3.2 The Bylaw is to be given a broad and liberal interpretation in accordance with the Act. It is not possible to address every situation and accordingly, Members are to conduct themselves in a manner that reflects not only the letter of the Bylaw but the spirit and intent of the Bylaw.

## PART 4 – REPRESENTING THE TOWN

### 4.1 Members shall:

- a. act honestly and, in good faith, serve the welfare and interests of the Town as a whole;
- b. perform their functions and duties in a conscientious and diligent manner with integrity, accountability, and transparency;
- c. conduct themselves in a professional manner with dignity and make every effort to participate diligently in the meetings of Council, Council Committees, and other bodies to which they are appointed;
- d. arrange their private affairs and conduct themselves in a manner that promotes public confidence and will bear close public scrutiny; and
- e. be transparent and accountable with respect to all expenditures and strictly comply with all municipal bylaws, policies and procedures regarding claims for remuneration and expenses.

# PART 5 - COMMUNICATING ON BEHALF OF THE MUNICIPALITY

- 5.1 Unless Council directs otherwise, the Mayor is Council's official spokesperson and in the absence of the Mayor it is the Deputy Mayor. All inquiries from the media regarding the official Council position on decisions and resolutions shall be referred to Council's official spokesperson.
- 5.2 Matters relating to the administration or operations of the Town are to be referred to the CAO.
- 5.3 A Member must not claim to speak on behalf of Council unless authorized to do so by the whole of Council.
- 5.4 A Member who is authorized to act as Council's official spokesperson must ensure that their comments accurately reflect the official position and will of Council as a whole, even if the Member personally disagrees with Council's position.
- 5.5 Members have the right to express their personal opinions; however, in doing so, the Members must ensure that it is not perceived as representing Council's opinion on a matter.
- 5.6 No Member shall make a statement when they know that statement is false.
- 5.7 No Member shall make a statement with the intent to mislead Council, Administration or members of the public, including the media.
- 5.8 This Bylaw applies to all forms of communication.



# PART 6 - USE OF SOCIAL MEDIA

- 6.1 As with any other activity, Members must ensure their use of social media complies with the law, the requirements of this Bylaw, and any related bylaws or policies. This Bylaw applies to all communications a Member makes, regardless of the social media account or device from which the communication is made.
- 6.2 For the purpose of Part 6 of this Bylaw "communications" means any information submitted by a Member to a social media network or platform that is capable of being displayed using software or approved hardware such as text, images, links or other content and include a Member commenting on or sharing content created by other users of the social network or platform.

## PART 7 - RESPECTING THE DECISION-MAKING PROCESS

- 7.1 Decision making authority lies with Council and not with any individual Member. Council may only act by bylaw or resolution passed at a Council meeting held in public at which there is a quorum present.
- 7.2 No Member shall attempt to bind the Town or give direction to Administration, agents, contractors, consultants or other service providers or prospective vendors to the Town.
- 7.3 Members shall conduct and convey Council business and all their duties in an open and transparent manner and in so doing, allow the public to view the process and rationale which was used to reach decisions and the reasons for taking certain actions, except those matters that are exceptions to disclosure required by FOIP.
- 7.4 Members shall accurately communicate the decisions of Council, even if they disagree with Council's decision, such that respect for the decision-making processes of Council is fostered.

# PART 8 - ADHERENCE TO POLICIES, PROCEDURES AND BYLAWS

- 8.1 Members shall uphold the law established by the Parliament of Canada and the Legislature of Alberta and the bylaws, policies and procedures adopted by Council.
- 8.2 Members shall respect the Town as an institution, its bylaws, policies and procedures and shall encourage public respect for the Town, its bylaws and policies.
- 8.3 Members must not encourage disobedience of any bylaw or policy of the Town in responding to a member of the public, as this undermines public confidence in the Town and in the rule of law.

# PART 9 - RESPECTFUL INTERACTIONS WITH COUNCIL MEMBERS, STAFF, THE PUBLIC AND OTHERS

- 9.1 Members shall act in a manner that demonstrates fairness, respect for individual differences and opinions, and an intention to work together for the common good and in furtherance of the public interest.
- 9.2 Members shall treat one another, employees of the Town and members of the public with courtesy, dignity and respect and without abuse, bullying or intimidation.
- 9.3 No Member shall use indecent, abusive, or insulting words or expressions toward another member, any employee of the Municipality, or any member of the public.
- 9.4 No Member shall speak or conduct themselves in a manner that is discriminatory to any individual based on the person's race, religious beliefs, colour, gender, physical disability, mental disability, age, ancestry, place of origin, marital status, source of income, family status or sexual orientation.



- 9.5 Members shall respect the fact that Administration is charged with making decisions and recommendations based on their professional expertise and a corporate perspective and Members must refrain from applying undue influence on Administration.
- 9.6 Members shall only seek information about the operation and administration of the Town from the CAO or any person the CAO delegates to provide such information to Members.
- 9.7 Members must not:
  - involve themselves in matters of Administration, which fall within the jurisdiction of the CAO:
  - b. use, or attempt to use, their authority or influence for the purpose of intimidating, threatening, coercing, commanding, or influencing any employee of the Town with the intent of interfering in the employee's duties; or
  - c. maliciously or falsely injure the professional or ethical reputation or the prospects or practice of employees of the Town.

# **PART 10 - CONFIDENTIAL INFORMATION**

- 10.1 Members must keep in confidence matters discussed in private at a Council or Council committee meeting until the matter is discussed at a meeting held in public.
- 10.2 In the course of their duties, Members may become privy to confidential information received outside of a closed session meeting. Members must not:
  - disclose or release by any means to any member of the public, including the media, any confidential information acquired by virtue of their office, unless the disclosure is required by law or authorized by Council or the Council Committee;
  - b. access or attempt to gain access to confidential information in the custody or control of the Town unless it is necessary for the performance of the Member's duties and is not otherwise prohibited by Council or the Council Committee, and only then if the information is acquired through appropriate channels in accordance with applicable Council bylaws and policies; or
- 10.3 Members shall not use confidential information for personal benefit or for the benefit of any other individual organization.
- 10.4 Confidential information includes information in the possession of, or received in confidence by the Town that the Town is prohibited from disclosing pursuant to legislation, court order or by contract, or is required to refuse to disclose, under FOIP or any other legislation, or any other information that pertains to the business of the Town, and is generally considered to be of a confidential nature, including but not limited to information concerning:
  - a. the security of the property of the Town;
  - b. a proposed or pending acquisition or disposition of land or other property;
  - c. a tender that has or will be issued but has not been awarded;
  - d. Contract negotiations;
  - e. employment and labour relations;
  - f. draft documents and legal instruments, including report, policies, bylaws, and resolutions, that have not been the subject matter of deliberation in a meeting open to the public;



- g. law enforcement matters;
- h. litigation or potential litigation, including matters before administrative tribunals; and
- i. advice that is subject to solicitor-client privilege.

## PART 11 - CONFLICTS OF INTEREST

- 11.1 Members have a statutory duty to comply with the pecuniary interest provisions set out in Part 5, Division 6 of the Act and a corresponding duty to vote unless required or permitted to abstain under the Act or another enactment.
- 11.2 Members are to be free from undue influence and not act or appear to act in order to gain financial or other benefits for themselves, family, friends or associates, business or otherwise.
- 11.3 Members shall approach decision-making with an open mind that is capable of persuasion.
- 11.4 It is the individual responsibility of Members to assess their pecuniary or other conflicts of interest and they may need to seek independent legal advice, at their sole expense.

# PART 12 - IMPROPER USE OF INFLUENCE

- 12.1 No Member shall use the influence of the Member's office for any purpose other than for the exercise of the Member's official duties.
- 12.2 No Member shall act as a paid agent to advocate on behalf of any individual, organization or corporate entity before Council or a Council Committee or any other body established by Council.
- 12.3 Members shall not contact or otherwise attempt to influence members of any adjudicative body regarding any matter before it relating to the Town.
- 12.4 Members shall refrain from using their positions to obtain employment with the Town for themselves, family members or close associates. Members are ineligible to apply or be considered for any position with the Town while they hold their elected position.

# **PART 13 - USE OF MUNICIPAL ASSETS AND SERVICES**

- 13.1 Members may use Town property, equipment, services, supplies and Administrative resources ("**Town Assets**") only for the performance of their duties as a Member, subject to the following:
  - a. Town Assets that are available to the general public may be used by a Member for personal use on the same terms and conditions as members of the general public, including booking and payment of any applicable fees or charges; and
  - b. electronic communication devices, including but not limited to desktop computers, laptops, tablets, and smartphones, which are supplied by the Town to a Member, may be used by the Member for personal use, provided that the use is not for personal gain and is in accordance with this Bylaw.
- 13.2 All electronic communications, documents and materials created, viewed, shared and stored on electronic communication devices supplied or paid for by the Town are subject to FOIP and may be inspected, traced, retrieved and logged as part of an investigation pursuant to this Bylaw or any other relevant legislation and Members are required to provide any electronic device supplied or paid for by the Town and facilitate access to the electronic device and to any electronic accounts created by the Town or used for municipal purposes by the Member for investigation purposes.



13.3 Upon a Member ceasing to hold office or upon the expiry or revocation of a Member's appointment to a Council Committee, as applicable, a Member must immediately deliver to the CAO any items, including but not limited to, records, accounts, papers, money or property in the Member's possession or under the Member's control.

# PART 14 - ORIENTATION AND OTHER TRAINING ATTENDANCE

- 14.1 Every Member must attend the orientation training offered by the Municipality in accordance with the Act.
- 14.2 Unless excused by Council, Members must attend any other training organized at the direction of Council.
- 14.3 Members must attend any orientation or training provided for any Council Committee or board they are appointed to by Council.

# PART 15 - GIFTS AND HOSPITALITY

- 15.1 Members shall not accept gifts, hospitality or other benefits that would, to a reasonable member of the public, appear to be in gratitude for influence, to induce influence, or otherwise to go beyond the necessary and appropriate public functions involved.
- 15.2 Gifts received by a Member on behalf of the Town as a matter of official protocol which have significance or historical value for the Town shall be left with the Town when the Member ceases to hold office.
- 15.3 Members are not precluded from accepting:
  - a. rewards, gifts, or benefits not connected with the performance or duties of office;
  - b. reasonable quantities of food and beverages at banquets, receptions, ceremonies or similar events;
  - c. service provided without compensation by persons volunteering their time;
  - d. food, lodging, transportation, and entertainment provided by other levels of government or by other local government, boards, or commissions;
  - e. a reimbursement of expenses incurred in the performance of duties or office;
  - f. token gifts such as souvenirs, mementos, and commemorative gifts that are given in recognition of service or attending an event; or
  - g. gifts that are received as an incident of protocol or social obligation that normally and reasonably accompany the responsibility of office.

# PART 16 - ELECTION CAMPAIGNS

16.1 No Member shall use any facilities, equipment, supplies, services, municipal logo, or other resources of the Town for any election campaign or campaign-related activity.

# **PART 17 - INFORMAL COMPLAINT PROCESS**

- 17.1 Any Member who has been advised by a member of the public or has themselves identified or witnessed conduct by another Member (the "Other Member") that the Member reasonably believes, in good faith, is a contravention of this Bylaw, may address the alleged breach by either one or both of the following:
  - a. advising the Other Member that the conduct violates this Bylaw and encouraging the Other Member to stop; or



- b. requesting the Mayor to assist in informal discussion of the alleged breach with the Other Member in an attempt to resolve the issue. In the event that the Mayor is the subject of, or is implicated in an alleged contravention of this Bylaw, the Member may request the assistance of the Deputy Mayor.
- 17.2 Members are encouraged to pursue this informal complaint procedure as the first means of remedying conduct that they believe breaches this Bylaw. However, a Member is not required to complete this informal complaint procedure prior to pursuing the formal complaint procedure outlined below.
- 17.3 In order to facilitate meaningful resolution, all persons involved in the informal complaint process will maintain confidentiality.

## **PART 18 - FORMAL COMPLAINT PROCEDURE**

- 18.1 Any person who has identified or witnessed conduct by a Member, that they believe, in good faith, is in contravention of this Bylaw may submit a formal complaint as outlined below.
- 18.2 In this Part, the term Mayor should be substituted by the term Deputy Mayor if the complaint involves the Mayor.
- 18.3 All formal complaints shall:
  - a. be made in writing;
  - b. be dated;
  - c. include the name of the Member alleged to have contravened the Bylaw;
  - d. include reasonable and probable grounds for the allegation that a Member has contravened this Bylaw, including a detailed description of the facts, as they are known and the names of any witnesses;
  - e. include the Complainant's full name and contact information anonymous complaint shall not be accepted or investigated; and
  - f. be addressed to the Mayor.
- 18.4 Complaints that do not comply with section 18.3 will not be considered.
- 18.5 Complaints that name more than one Member may be treated as separate complaints.

  Multiple complaints about a Member may be addressed collectively.
- 18.6 On receipt of a complaint, the Mayor will within 7 business days of receipt of the complaint complete an initial assessment. Complaints that:
  - a. are not about a current Member;
  - b. allege a violation of the Act or FOIP;
  - c. allege a contravention of this Bylaw that has already been the subject of a prior complaint fully addressed by Council;
  - d. allege criminal activity; or
  - e. are more properly covered by other applicable legislative appeal, complaint or court processes;

will be summarily refused in writing with reasons provided to the Complainant and Council but will be otherwise confidential. The decision of the Mayor is final.

- 18.7 A complaint must be received no later than 60 days after the date on which the conduct occurred that gave rise to the complaint or the Complainant became aware of the conduct that gave rise to the complaint. Council may proceed with a complaint submitted after 60 days if in the opinion of Council, it is in the best interest of the public and/or the Town to proceed with an investigation outside of this time period.
- 18.8 A complaint that meets the criteria in section 18.3 shall be provided to the Respondent.



- 18.9 The Mayor will schedule a closed session item at the first Council meeting after the initial assessment of the complaint to provide the complaint to Council and Council, excluding the Respondent and the Complainant, if the Complainant is a Member, shall review the complaint.
- 18.10 If Council is of the opinion that a complaint:
  - a. is not about a current Member;
  - b. is frivolous or vexatious;
  - c. is not made in good faith;
  - d. has no grounds or insufficient grounds for investigating;
  - e. is more appropriately addressed by another applicable legislative appeal, complaint and court process;
  - f. alleges criminal activity;
  - g. alleges a violation of the Act or FOIP; or
  - h. alleges a contravention of this Bylaw that has already been the subject of a prior complaint fully addressed by Council;

Council may choose not to have the complaint investigated, or, if already commenced, may terminate any investigation, or may dispose of the complaint in a summary manner. The Complainant and the Respondent shall be advised by the Mayor in writing of any such decision with reasons.

- 18.11 If Council decides to investigate the complaint, Council may by resolution direct the CAO to retain an investigator or Council may establish an ad hoc committee to conduct the investigation.
- 18.12 Best efforts will be made by the Investigator to maintain confidentiality over the complaint and investigation process.
- 18.13 The Investigator will advise the Respondent and the Complainant of the next steps in the investigation, including when the Respondent and Complainant may provide information to the Investigator.
- 18.14 The Investigator shall take reasonable steps to attempt to conclude any investigation within 60 days of the date upon which a complaint is provided to the Investigator.
- 18.15 Upon completion of the investigation, the Investigator shall provide a written report to Council and the Respondent, summarizing the investigation process, the evidence gathered, and the conclusions about the alleged breach, which may include recommendations as to sanctions, that may be imposed by Council.
- 18.16 The Respondent shall be afforded procedural fairness, including an opportunity to respond to the Investigator's report before Council deliberates and makes any decision or imposes any sanction. The Mayor will advise the Respondent when the Respondent will have the opportunity to respond to Council in closed session.
- 18.17 Council, in closed session, excluding the Member and the Complainant if the Complainant is a Member, shall, after reviewing the Investigator's report and any submissions from the Respondent, deliberate on the complaint and determine if there was a breach of the Bylaw and if so, whether or not to impose sanctions. Council will make a resolution in open session and the Mayor will advise the Respondent and the Complainant in writing of Council's decision.
- 18.18 After Council has made a resolution on the complaint, the investigation reports and the related resolution of Council shall be posted on the Town's website, in accordance with FOIP



# **PART 19 - COMPLIANCE AND ENFORCEMENT**

- 19.1 Members shall uphold the letter and the spirit of intent of this Bylaw.
- 19.2 Members are expected to cooperate in every way possible in securing compliance with the application and enforcement of this Bylaw.
- 19.3 No Member shall:
  - a. undertake any act of reprisal or threaten reprisal against a Complainant or any other person for providing relevant information to the Investigator; or
  - b. obstruct the Investigator, in carrying out the objectives or requirements of this Bylaw.
- 19.4 Sanctions that may be imposed on a Member, by Council, upon a finding that the member has breached this Bylaw may include:
  - a. a letter of reprimand addressed to the Member;
  - b. requesting the Member to issue a letter of apology;
  - publication of a letter of reprimand or request for apology and the Member's response;
  - d. a requirement to attend training;
  - e. suspension or removal of the appointment of a Member as the Deputy Mayor or Acting Mayor under section 152 of the Act;
  - f. suspension or removal of the chief elected official's presiding duties under section 154 of the Act;
  - g. suspension or removal of the Mayor's presiding duties under section 154 of the Act;
  - h. suspension or removal from some or all Council Committees and bodies to which council has the right to appoint Members;
  - reduction or suspension of remuneration as defined in section 275.1 of the Act corresponding to a reduction in duties, excluding allowances for attendance at council meetings;
  - j. any other sanction Council deems reasonable and appropriate in the circumstances provided that the sanction does not prevent a Member from fulfilling the legislated duties of a Member and the sanction is not contrary to the Act.

# PART 20 - REVIEW

20.1 This Bylaw shall be brought forward for review at the beginning of each term of Council, when relevant legislation is amended, and at any other time that Council considers appropriate to ensure that it remains current and continues to accurately reflect the standards of ethical conduct expected of members.

# **PART 21 - DATE OF FORCE**

21.1 That this Bylaw shall come into effect, upon the date on which it is finally read and passed.



22.1	Bylaw 1278.23 – Council Chereby repealed.	Code of Conduct Byla	w, and any amendments thereto, are
READ	for the first time this	day of	, 2024.
(RES.	)		
			MAYOR JAMIE HOOVER
			CAO KIM ISAAK
READ	for the second time this	day of	, 2024.
(RES.	)		
	•		MAYOR JAMIE HOOVER
			CAO KIM ISAAK
READ	for the third time this	day of	, 2024.
(RES.	)		
			MAYOR JAMIE HOOVER
			CAO KIM ISAAK