



## AGENDA

### Bentley Town Council Regular Meeting

Tuesday October 24, 2023

6:45pm Regular Meeting

*Followed by Organizational Meeting around 7:30pm – see separately posted agenda on town website.*

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#### 1. Call to Order

#### 2. Indigenous Acknowledgement

**“We acknowledge that we are meeting on Treaty 6 Territory and Home of Metis Nation Region 3, on land that is part of a historic agreement involving mutuality and respect. We recognize all the many First Nations, Metis, Inuit, and non-First Nations whose footsteps have marked these lands.”**

#### 3. Amendments & Acceptance of Agenda

#### 4. Adoption of Previous Minutes:

##### a) Regular Meeting of Council October 10, 2023

#### 5. Financial:

##### a) Prepaid Cheque Listing – Cheques No. 20230744 to 20230790

#### 6. New Business

##### a) 50<sup>th</sup> Street, Dick Damron Drive Rehab – Report and Cost Estimates (Presentation by Associated Engineering)

#### 7. Correspondence

##### a) Lacombe County Council Highlights – October 12, 2023

#### 8. Other Business

##### a) Medicine Lodge Ski Hill Site Visit with Medicine Lodge Ski Club and O’Chiese First Nation Elders. Will Greg and Pam be attending?

#### 9. Adjournment



## Minutes of the Regular of the Council of the Town of Bentley

October 10, 2023

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**Date and Place** Minutes of the Regular Meeting of the Council of the Town of Bentley held Tuesday, October 10, 2023, at 6:45 p.m., in the Bentley Municipal Office

**In Attendance** Mayor Greg Rathjen  
Deputy Mayor Eastman  
Councillor Grimsdale  
Councillor Valiquette  
Councillor Hansen  
CAO, Marc Fortais

**Call to Order** Mayor Rathjen called the regular meeting to order at 6:45pm

**Indigenous Acknowledgement** “We acknowledge that we are meeting on Treaty 6 Territory and Home of Metis Nation Region 3, on land that is part of a historic agreement involving mutuality and respect. We recognize all the many First Nations, Metis, Inuit, and non-First Nations whose footsteps have marked these lands.”

**Read by Mayor Rathjen**

### Agenda

**Motion 220/2023** Moved by Councillor Valiquette, “THAT the agenda of the October 10, 2023, Regular Meeting of Mayor and Council be accepted.”

**Carried**

### Previous Minutes

**Motion 221/2023** Moved by Councillor Grimsdale, “THAT the minutes of the September 26, 2023, Regular Meeting of Council be accepted.”

**Carried**

### Financial

a) **Prepaid Cheque Listing – Cheques No. 20230710 to 20230743**

**Motion 222/2023** Moved by Deputy Mayor Eastman, “THAT Cheques No. 20230710 to 20230743 be received for information.”

**Carried**

## New Business

### a) Parkland Regional Library System Proposed 2024 Budget

**Motion 223/2023** Moved by Councillor Hansen, "THAT Mayor and Council approve the municipal per capita requisition for Parkland Regional Library System (PRLS) in the amount of \$9.18; AND

THAT Mayor and Council support the 2024 Proposed Parkland Regional Library Budget as presented."

**Carried**

### b) Amendment to Policy 52-2015 Annual Recreation, Cultural, Tourism Funding Support – including request for financial and reserve disclosure (if any) with applications.

**Motion 224/2023** Moved by Councillor Grimsdale, "THAT Mayor and Council amend policy 52-2015 to include eligibility requirements, that organizations applying for the grant, do not have significant cash or reserves that could be used to fund their ask; AND

THAT the application procedure include the right of the Town of Bentley administration to ask organizations that are applying for funding to provide disclosure of reserves or cash balances to help with assessing their application."

**Carried**

### c) Fortis Franchise Fee Rate Renewal

**Motion 225/2023** Moved by Deputy Mayor Eastman, "THAT Mayor and Council set the electrical distribution franchise fee percentage for the 2023 November deadline related to the Franchise Fee collected in the 2024 year at 10%."

**Carried**

### d) ATCO Franchise Fee Rate Renewal

**Motion 226/2023** Moved by Councillor Valiquette, "THAT Mayor and Council set the natural gas distribution system franchise fee percentage for the 2023 November deadline related to the Franchise Fee Collected in the 2024 year at 12%."

**Carried**

### e) Bentley Southeast Area Structure Plan – (Lacombe County Upcoming First Reading of Bylaw 1397/23)

**Motion 227/2023** Moved by Councillor Hansen, "THAT Mayor and Council receive the report regarding the Bentley Southeast Area Structure Plan as Information."

**Carried**

## **Correspondence**

### **a) Lacombe County Council Highlights – September 28, 2023**

**Motion 228/2023** Moved by Councillor Hansen, “THAT correspondence item a) be received for information.”

**Carried**

## **Other Business**

### **None**

## **Council Reports**

- a) Greg Rathjen
- b) Deputy Mayor Eastman
- c) Councillor Grimsdale
- d) Councillor Hansen
- e) Councillor Valiquette

**Motion 229/2023** Moved by Councillor Valiquette, “THAT the September Council reports be accepted as information.”

**Carried**

## **Adjournment**

**Motion 230/2023** Moved by Deputy Mayor Eastman, “THAT the October 10, 2023, Regular Meeting of Mayor and Council be adjourned at 7:58 pm”.

**Carried**

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**Mayor Greg Rathjen**

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**CAO Marc Fortais**



# TOWN OF BENTLEY

Page 1 of 3

## Cheque Listing For Council

2023-Oct-18  
1:40:06PM

Cheque #	Date	Vendor Name	Invoice #	Invoice Description	Invoice Amount	Cheque Amount
20230744	2023-10-15	RATHJEN, ARTHUR M				
20230745	2023-10-15	VALIQUETTE, BRENDA C				
20230746	2023-10-15	HANSEN, PAMELA				
20230747	2023-10-15	GRIMSDALE, DALE A				
20230748	2023-10-15	EASTMAN, LENORE M				
20230749	2023-10-06	BUNZL CLEANING & HYGIENE	137460	PAYMENT SENIOR DROPPIN TOILET TISSUE	273.57	273.57
20230750	2023-10-06	CENTRAL SHARPENING LTD.	30227	PAYMENT ARENA-SHARPEN ICE KNIFE ANI	189.00	189.00
20230751	2023-10-06	EASTMAN, LENORE	09092023	PAYMENT REIMBURSEMENT MILEAGE TO I	63.72	63.72
20230752	2023-10-06	EMPRINGHAM DISPOSAL CORP.	53808	PAYMENT RECYCLING FOR SEPTEMBER 2	1,943.56	1,943.56
20230753	2023-10-06	G.L.D.C. GAS CO-OP LTD.	670724	PAYMENT FIREHALL NATURAL GAS BILL	53.19	53.19
20230754	2023-10-06	GREGG DISTRIBUTORS LP	059-579716 059-582086 059-582834 059-583189	PAYMENT PW PPE, FURNANCE FILTERS, M PW SHOP FALL EQUIPMENT MAI PW FALL EQUIPMENT MAINTEN/ PW SHOP SUPPLIES & PPE	423.06 852.65 99.57 128.07	1,503.35
20230755	2023-10-06	GRIMSDALE, DALE	#36pbsnpq #qvrvwacz #wqgæri #zabcmdqf 26092023 29092023 SEP262023 SEP27.2023 SEP282023	PAYMENT PRECISE PARKLINK FOR CONVE PRECISE PARKLINK FOR CONVE PRECISE PARKLINK FOR CONVE PRECISE PARK LINK FOR CONVI AUMA MILEAGE BENTLEY TO ED AUMA MILEAGE DOUBLETREE T REIMBURSEMENT CASABLANCA GREATER EDMONTON TAXI SER GREATER EDMONTON TAXI SER	20.35 8.35 20.35 20.35 87.32 87.32 16.78 7.00 13.70	281.52
20230756	2023-10-06	HANSEN; , PAMELA DAWN	14092023	PAYMENT REIMBURSEMENT MILEAGE REC	24.78	24.78
20230757	2023-10-06	KTI LIMITED	#EST11954	PAYMENT HANDHELD FOR METER READIN	3,116.42	3,116.42
20230758	2023-10-06	LOOV, CHRISTOPHER	27092023 27092023. SEPT272023	PAYMENT SOBEYS - GROCERIES FOR FAL NO FRILL - - GROCERIES FOR FA WOODEN SHOE GROCERIES FC	179.84 96.95 65.75	342.54
20230759	2023-10-06	PINZ PLUS	23466	PAYMENT MAGNETIC NAME TAGS FOR ST/	351.75	351.75
20230760	2023-10-06	RATHJEN, GREG	14092023 15092023 20092023 26092023 30092023	PAYMENT MEETING AT THE COUNTY SEPT MEETING AT THE COUNTY IDP S MAYORS MEETING IN INNISFAIL AUMA CONVENTION EDMONTON GREATER EDMONTON TAXI SER	15.34 15.34 74.34 174.64 13.46	293.12
20230761	2023-10-06	TELUS COMMUNICATIONS INC.	04102023 04102023. OCT042023	PAYMENT ARENA WIFI TELUS BILL FOR OCTOBER 2023 INTERAC LINE	78.75 776.99 37.55	893.29
20230762	2023-10-06	NEW WEST FREIGHTLINER INC.	X108051137:01	PAYMENT 2011 FREIGHTLINER GARBAGE	430.09	430.09
20230763	2023-10-15	CARSON, BARBARA J				



## TOWN OF BENTLEY

Page 2 of 3

## Cheque Listing For Council

2023-Oct-18  
1:40:06PM

Cheque Cheque #	Date	Vendor Name	Invoice #	Invoice Description	Invoice Amount	Cheque Amount
20230764	2023-10-15	JENSEN, DARREN J				
20230765	2023-10-15	MEREDITH, SANDRA L				
20230766	2023-10-15	GIBSON, COLE C				
20230767	2023-10-15	DENNEHY, NATHAN				
20230768	2023-10-15	GREAVES, LORYANNE				
20230769	2023-10-15	FORTAIS, MARC C				
20230770	2023-10-15	KIKSTRA, ROBERT B				
20230771	2023-10-15	LOOV, CHRISTOPHER D				
20230772	2023-10-13	ACCESS GAS SERVICES	202309-AB1878	PAYMENT ACCESS NATURAL GAS BILL FOI	1,559.93	
20230773	2023-10-13	BENTLEY ESSO	30092023	PAYMENT VEHICLE/EQUIPMENT GAS/DIES	854.70	
20230774	2023-10-13	BENTLEY SENIORS DROP-IN	06102023	PAYMENT MEDICINE LODGE SKI HILL MEE	50.00	
20230775	2023-10-13	CARSON, BARB	30092023	PAYMENT REIMBURSEMENT FALL FESTIV	171.32	
20230776	2023-10-13	CHAPMAN RIEBEEK LLP	2310008	PAYMENT GENERAL MATTERS	430.00	
20230777	2023-10-13	CLEARTECH INDUSTRIES INC.	INV1087251 INV1088196	PAYMENT WATER - CHEMICALS & CONTAIN WATER - CHEMICALS AND CONT	1,539.84 1,161.80	
20230778	2023-10-13	GO SERVICES INC.	15167844	PAYMENT PORTAPOTTIES FOR SEPTEMBER	630.00	
20230779	2023-10-13	HI-WAY 9 EXPRESS LTD.	43627907	PAYMENT FREIGHT FOR FOX CANADA SHI	240.20	
20230780	2023-10-13	OUTLAW ELECTRIC LTD.	9913	PAYMENT ELECTRICAL MAINTENANCE FOI	252.00	
20230781	2023-10-13	PITNEYWORKS	03102023	PAYMENT POSTAGE	540.00	
20230782	2023-10-13	TELUS MOBILITY INC.	09102023	PAYMENT PUBLIC WORKS CELL PHONES	122.19	
20230783	2023-10-13	WOLF CREEK BUILDING SUPPLIES	42485 596722 596838 601397	PAYMENT CREDIT REFUND ARENA BUILDIN ARENA-BUILDING MAINTENANC ARENA-BUILDING MAINTENANC ARENA-BUILDING MAINTENANC	(63.76) 32.00 2.92 81.64	52.80
20230784	2023-10-18	327241 ALBERTA LTD.	1228	PAYMENT ANIMAL CONTROL SERVICES FC	997.50	
20230785	2023-10-18	HHID	367520	PAYMENT DIRECTOR EMERGENCY MANAG	787.50	
20230786	2023-10-18	OLDS CONCRETE SERVICES (2014) LTD.	2826	PAYMENT 2023 CONCRETE PROGRAM	21,427.38	
20230787	2023-10-18	SERVUS CREDIT UNION	29092023	PAYMENT SERVUS MASTERCARD BILL FOI	1,127.85	
20230788	2023-10-18	WORKERS' COMPENSATION BOARD	26708875	PAYMENT INSTALLMENT PAYMENT	2,881.93	
20230789	2023-10-18	TANTEC ELECTRONICS LTD	363374	PAYMENT ARENA-SERVICE & LABOUR PA	401.99	



# TOWN OF BENTLEY

Page 3 of 3

## Cheque Listing For Council

2023-Oct-18  
1:40:06PM

Cheque	Cheque #	Date	Vendor Name	Invoice #	Invoice Description	Invoice Amount	Cheque Amount
	20230790	2023-10-18	TLC VENTURES INC.	505	PAYMENT WATER-ANNUAL SERVICE OF AN	971.25	971.25

**Total 69,373.55**

\*\*\* End of Report \*\*\*



**Agenda Date:** October 24, 2023

**Agenda Item:** New Business: 50<sup>th</sup> Street South (Dick Damron Drive) Concept Plan and Cost Estimate

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## **ADMINISTRATIVE RECOMMENDATION**

THAT Mayor and Council accept the report prepared from Associated Engineering regarding 50<sup>th</sup> Street (Dick Damron Drive) Rehab Conceptual Design; AND

THAT Mayor and Council consider prioritizing the work to fix the collapsing cement pipe section on 50<sup>th</sup> Street and complete the work prior to the end of 2023 with paving to occur in spring 2024; AND

THAT Administration be directed to seek out funding via grants to support the phased rehabilitation of 50<sup>th</sup> Street; AND

THAT, when sufficient funding has been secured, a report be brought back to council to provide an updated timeline, cost, and plan so that detailed design can be approved.

## **SUMMARY & BACKGROUND**

As part of the 2023 budget process, Mayor, and Council authorized administration to undertake a competitive process to hire an engineering firm to provide a report regarding the functional design of 50<sup>th</sup> Street (Dick Damron Drive). The functional design is intended to review 50<sup>th</sup> Street from 50<sup>th</sup> avenue to 55<sup>th</sup> avenue and include a full review of the roadway and deep utilities.

This important corridor is the entertainment district of Bentley, providing access to the Arena, Curling Club, Blindman Agricultural Society and Morrisroe Recreation Area. It is also host to the Bentley Farmers Market and key events such as the Bentley Rodeo.

The town was interested in reconstructing the roadway to a full urban standard with consideration given to active transportation and the walkability of the pedestrian traffic along the corridor.

The Town hired association engineering after receiving and reviewing multiple quotes to ensure that the process was competitive, and value was obtained for the local taxpayer. A preliminary topographic survey was undertaken of the corridor to confirm the existing ground profiles, ditches and drainage patterns and the location of surface features, such as utility poles, driveways etc.

A public open house was held on June 14, 2023, to present the preliminary concept plan and design approach to solicit community feedback. The preliminary concept illustrated a narrowed roadway, parallel parking stalls for all parking areas, curb extensions at all intersections, a widened monolithic sidewalk along

the west side of the corridor and a relocated sidewalk along the east side of the corridor. The plan also illustrated where opportunities existed to provide features, such as separate boulevards, expanded parking zones, and areas for furnishings and planting. Site constraints such as the existing lane and driveway access and the current alignment of the Fortis Poles were also identified as fixtures influencing the proposed design.

In addition to the open house, community feedback was obtained via a paper survey provided to each attendee, as well as a digital survey hosted on the Town's website for a two-week period following the open house. The primary concerns raised by respondents included:

- The condition of existing sidewalks
- Occasional congestion
- Lack of available parking
- Lack of traffic calming
- Residents told us that redesign should focus on a comfortable safe corridor for pedestrians who primarily use it for recreation and travel to local businesses and amenities.
- Improvements such as wider sidewalks, shortened intersection crossings (curb extensions), upgraded lighting, and additional seating areas were identified as elements that should be considered in the redesign.
- Residents also noted that additional parking stalls should be added where possible to address congestion during events and in high traffic areas.

For the most part, residents were not in favour of a “themed” redevelopment and commented that the design approach should be uncomplicated and focused on replacing the aging infrastructure, ease of maintenance and also include more planting and natural materials.

This report and concept plan is being presented by our consultant Associated Engineering. (**Attachment #1 – 50<sup>th</sup> Street (Dick Damron Drive) Rehabilitation and Cost Estimate Report**). It should be noted that it is a large project with an estimated order of magnitude cost of approximately \$5,000,000 for full road rehab and all deep utilities trunk mains replaced as well as upgraded light standards. If the town wished to bury all Fortis infrastructure it would be an additional \$700,000 bringing the total to \$5,700,000. As a result, it can and should be phased in as funding is secured over time. Town administration will address the high-risk area that has been identified through this process upon council approval once we receive a quotation from our local contractor.

## BUDGET AND FINANCIAL INFORMATION

- |                                  |             |
|----------------------------------|-------------|
| • Total Conceptual Design Budget | \$56,153.00 |
|----------------------------------|-------------|

## RATIONAL FOR RECOMMENDATION

- The project for conceptual design was approved through the 2023 budget process and has been completed to a good standard.
- The concept plan takes into consideration the local feedback needed to undertake necessary upgrades to the underground infrastructure and roadway, that will put Bentley in a good position long term to attract new residents and to continue to grow for many years.

- The work completed in this concept plan will also feed into the Phase II Asset Management Planning for the entire community sewer, water, stormwater and Rodway system that will be undertaken in 2024 if approved via the 2024 budget process.

**ATTACHMENTS:**

- 1) 50<sup>th</sup> Street (Dick Damron Drive) – Rehabilitation and Cost Estimate Report

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Marc Fortais, CAO



DRAFT

# CONCEPT REPORT

## 50 Street (Dick Damron Drive) Rehabilitation Concept

October 2023



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# TABLE OF CONTENTS

SECTION	PAGE NO.
Table of Contents	i
1      Introduction	1
2      Data Collection and Existing Conditions	1
2.1    Roadway	1
2.2    Sidewalks	1
2.3    Parking	1
2.4    Fortis Poles and Street Lighting	2
2.5    Drainage	2
2.6    Underground	3
3      Community Engagement and Feedback	3
3.1    Public Open House	4
3.2    What We Heard	4
4      Concept Development	4
4.1    Roadway	4
4.2    Sidewalks	5
4.3    Parking	5
4.4    Lighting	5
4.5    Streetscaping	6
4.6    Drainage	6
4.7    Underground	6
5      Opinion of Probable Cost	7
6      Schedule and Implementation	8
6.1    Staging	8
7      Conclusions	9
8      Recommendations	9
Closure	
Appendix A - Architect's Concept Plan	
Appendix B - Engineering Concept Figures	
Appendix C - Opinion of Probable Cost	
Appendix D - Summary of Public Engagement Memo	
Appendix E - Stormwater Master Plan	



## 1 INTRODUCTION

The Town of Bentley is seeking to develop a long term concept for the rehabilitation of 50 Street (Dick Damron Drive), including the replacement of aging infrastructure to meet the long term needs of the Town. The objective of the project is to develop a concept for the roadway and utilities between 50 Avenue and 55 Avenue, which will form the basis for future detailed design and implementation subject to Council approval and funding availability. The Town envisions development of the corridor as an entertainment district, with the redesign focused on beautifying the streetscape and improving the overall experience of residents and visitors. The design proposes a full urban standard for the roadway, utility upgrades, and replacements where necessary, and improvements to the pedestrian realm.

The Town engaged Associated Engineering to undertake the concept design of 50 Street, or Dick Damron Drive. The scope of the assignment is bounded by the northside of 50 Avenue on the south and the northside of 55 Avenue on the north, including the intersection improvements along the road.

## 2 DATA COLLECTION AND EXISTING CONDITIONS

A preliminary topographic survey was undertaken of the corridor to confirm the existing ground profiles, ditches, drainage patterns, and the location other surface features, such as utility poles, driveways, etc. Associated Engineering staff also walked the alignment to conduct an onsite review to confirm existing conditions and potential constraints and identify opportunities for future improvements. Information gathered from the survey and site review will be used to develop a comprehensive base plan for use in the functional design to determine an initial approach to rehabilitation of the roadway.

### 2.1 Roadway

The existing roadway is within a 20 m right-of-way with an asphalt surface that varies in width from approximately 13.50 m (curb to curb) between 50 and 53 Avenue and to 9.0 m (edge to edge) between 53 and 55 Avenue. The asphalt paving extends to 55 Avenue, where the surfacing transitions to gravel. Concrete curbs exist on both sides of the roadway south of 53 Avenue, and there are either gravel or grass shoulders on either side north of 53 Avenue. The condition of the existing roadway surface is fair to poor with the condition deteriorating significantly in the north end of the corridor. Town staff note that replacement of this aging infrastructure is required.

### 2.2 Sidewalks

Narrow concrete sidewalks are provided on both sides of the street and are usually monolithic between 50 and 53 Avenue, except for the east block between 51 and 52 Avenue, where there is a separate sidewalk and grass boulevard. North of 53 Avenue, a narrow sidewalk is installed along the east side only and varies between monolithic and separate with a boulevard. Existing sidewalks south of 52 Avenue and along the west side between 52 and 53 Avenue are in good condition, but north of 52 Avenue the overall quality and condition of the sidewalks deteriorates significantly. The Town has noted these sidewalks require replacement and a sidewalk replacement.

### 2.3 Parking

Parking varies along the corridor with parallel stalls provided on both sides of the roadway between 50 and 52 Avenue, and angled parking is provided east of the arena between 52 and 53 Avenue. Parking is not permitted along the west side of the roadway in front of the arena and no additional parking is provided north of 53 Avenue, with the exception of gravel stalls in front of a multi-unit residential building. The gravel or grass shoulder north of

53 Avenue is typically used for informal parking by residents, or as overflow parking during events at the arena. It is estimated there are an approximate 45-50 stalls currently available; however, painted divider lines are not visible in all parking areas.

## 2.4 Fortis Poles and Street Lighting

The Fortis utility poles, and the overhead services are along the east side of the corridor. Between 52 and 53 Avenue, where a boulevard is not present, the poles are located at the back of the existing parking stalls and within the asphalt surface. These poles were installed within the last year, and in some locations, encroach on the existing sidewalk pedestrian zone. Initial discussions with the Town suggest that due to their recent installation, these poles may remain in place; however, replacement with more decorative standards should be explored.

Two separate requests were submitted to Fortis for exploration of potential improvements to illumination levels along the corridor. The first request focused on an assessment of the existing illumination and the potential for improvements, utilizing existing infrastructure (poles). It was recommended that new light fixtures be added to the existing poles on the west side of the 52 Avenue intersection and an existing fixture south of 53 Avenue be upgraded to a higher wattage.

The second request was to provide a preliminary design and estimate for burying all existing overhead infrastructure, upgrading lighting levels to IESNA standards, and installation of decorative poles and fixtures. This is an option to be considered in the functional design concept. Relocating overhead powerlines, and especially to an underground alignment can be cost prohibitive. While the concept will consider it, the cost to relocate them will be separated from the overall 50 Street rehabilitation cost. This is an item that will need to be revisited during detailed design evaluated based on the funds available for the project.

## 2.5 Drainage

The underground drainage infrastructure is limited in the corridor, and mostly consists of catch basins connected to a short length of culvert, before discharging to a surficial drainage feature (a ditch or swale). The corridor slopes from north to south, and from the east to the west within the corridor.

North of 53 Avenue, on the east side of the corridor, drainage is managed via a ditch, which drains south into a culvert that crosses 50 Street and goes west. An existing storm sewer is located on the intersection of 50 Street and 53 Avenue. The upstream end of the storm sewer is a catch basin manhole on the northeast corner of the intersection draining west to outlet into a ditch that then flows north along the CN rail track. The figure showing existing drainage patterns prepared by Stantec is attached in [Appendix E](#).

On the west side (north of 53 Avenue), drainage from the street directly drains onto the adjacent farmland. This existing drainage course does not have its own right-of-way and crosses private property. The surface drainage is not attenuated in any way for quality and quantity. As well, since it is on private land, there is a risk of the drainage course being disturbed or re-directed that could have impacts upstream including the drainage from the Town.

To the south of 53 Avenue, surface drainage is accommodated in the gutters, with catch basins at 51 Avenue and 50 Avenue capturing the surface from an approximate half a kilometer of road and approximately one third of the Town's surface drainage. These catch basins drain to an existing 450 mm storm sewer trunk. The trunk drains to an existing stormwater management facility (pond) that attenuates flows and then drains to the west. Then the trunk was

constructed a 375 mm stub was left (shown on record drawings but not confirmed) for future extension to the north of 50 Avenue.

## **2.6      Underground**

### **2.6.1     Sanitary**

A 200 mm diameter sanitary sewer runs underneath 50 Street from 55 Avenue to the alley north of 50 Avenue (northside of existing bar/restaurant). The sanitary sewer then runs west, eventually connecting to a wastewater management facility. This north/south running portion of the sanitary sewer system is responsible for collecting everything within the Bentley town limits east of 50 Street and north of 50 Avenue, resulting in a considerable portion of Bentley served by this trunk sewer. Given the age and importance of the trunk, it is critical the sewer be rehabilitated as opportunity arise.

The condition of the existing trunk sewer was evaluated using a camera inspection, performed by High Pressure Flushing Inc. provided to Associated Engineering by the Town. The inspection shows that in some areas along a portion of the alignment have eroded exposing bare aggregate in the concrete pipe. There is a small area north of 50 Avenue where two breaks were observed in the CCTV video. There are cavities observable behind the breaks caused by the flow has eroding the soils and leaving voids that are subject to settlement. Both breaks are located on the main between 50 Avenue and 51 Avenue. The Town's Public Works Department is in the process of engaging a local contractor to repair these breaks to reduce the risk of further collapse.

In addition to the noted defects, most service connections from adjacent properties are protruding into the pipe. The protrusions can impede flows in the pipe and trap debris. Protrusions also limit the options available for rehabilitating the sanitary sewer pipe. The remainder of the alignment is reported to be clay tile pipe. The inspection operator noted sags and other deficiencies along the sewer where the inspection could be carried through.

### **2.6.2     Water**

A 200 mm watermain runs beneath 50 Street, starting at 50 Avenue and going to 52 Avenue, and then a 150 mm from 52 Avenue to 55 Avenue. The existing pipe are asbestos cement installed in the 70's and is reaching the end of its service life. Under the Town's current Asset Management planning, these lines are identified for lifecycle replacement when the opportunity presents itself. Replacing the existing waterlines with a proposed 200 mm PVC watermain from 50 Avenue to 55 Avenue and connecting to the lines along the alignment will improve distribution in the area.

Given that the road will be reconstructed, the Town may consider completing an assessment of the distribution system to identify if there are any restriction in the system cause by the capacity of the existing line. If upsizing is required to provide improved flow, it would be prudent to replace the lines during the upgrading of the road.

## **3           COMMUNITY ENGAGEMENT AND FEEDBACK**

The scope of work included engage Town residents to aid in the development of the concept. It is important to the Town that the residents have an opportunity to guide the redesign of 50 Street and to prioritize the elements of the redesign to best fit the needs of the community. Associated engineering prepared an initial concept plan to share with residents and seek input. The plan was shared through public engagement as well as an online survey hosted by the Town of Bentley home page. The following discussed the result of this stage of the project.

### **3.1 Public Open House**

A public open house was held on June 14, 2023, to present the preliminary concept plan and design approach and to solicit community feedback. The preliminary concept illustrated a narrowed roadway, parallel parking stalls for all parking areas, curb extensions at all intersections, a widened monolithic sidewalk along the west side of the corridor and a relocated sidewalk along the east side of the corridor. The plan also illustrated where opportunities exist to provide features, such as a separate boulevard, expanded parking zones, and areas for furnishings and planting. Site constraints, such as the existing lane and driveway accesses and the current alignment of the Fortis poles were also identified as fixtures influencing the proposed design.

### **3.2 What We Heard**

Community feedback was collected via a paper survey provided to each attendee, as well as a digital survey, hosted on the Town's website for a two-week period, following the open house. The primary concerns of most respondents were the condition of existing sidewalks, occasional congestion, lack of available parking, and lack of traffic calming. Residents told us the redesign should focus on a comfortable and safe corridor for the pedestrians, who primarily use it for recreation and travel to local businesses and amenities.

Improvements, such as wider sidewalks, shortened intersection crossings (curb extensions), upgraded lighting, and additional seating areas, were all identified as elements that should be considered in the redesign. Residents also noted that additional parking stalls should be added, where possible, to address congestion during social events and in high traffic areas. For the most part, residents were not in favour of a "themed" redevelopment and commented that the design approach should be uncomplicated and focused on replacing the aging infrastructure, ease of maintenance, but also include more planting and natural materials.

## **4 CONCEPT DEVELOPMENT**

The following concept is developed through consultation with the Town's project team and consideration of the feedback received from residents. Conceptual cross-sections are proposed to illustrate how the design approach can be applied to each block between 50 and 55 Avenue. A draft design board is provided to illustrate both plan and perspective views of the proposed redevelopment and included a preliminary "kit of parts" identifying options for the general style and appearance of furnishings and site features. The draft design board is attached in [Appendix A](#) and described below.

### **4.1 Roadway**

The functional design proposes reducing the roadway width between curbs to 11.5 m at parking locations and 9.0 m at intersections. Narrowing of the roadway will allow for parallel parking to be consistently incorporated on both sides of the street throughout the corridor and maximize the available pedestrian zone. Curb extensions are provided at all intersections and further define the pedestrian zone. A narrowed roadway and curb extensions improve pedestrian safety by slowing (calming) vehicle traffic and reducing the pedestrian walking distance at crosswalk locations. Curb extensions also provide an opportunity for incorporating streetscape elements, such as decorative paving, light standards, planting, and furnishings. Together these elements develop a rhythm and identity along the corridor and contribute to the overall sense of place.

The proposed roadway width will limit large agricultural vehicles through this corridor and an alternate route should be identified by the Town for occasional use.

## 4.2 Sidewalks

The functional design proposes concrete sidewalks on both sides of the corridor from 50 Avenue to 55 Avenue. A 2.5 m wide monolithic sidewalk is proposed for the west side of the corridor. There is sufficient right-of-way to accommodate additional sidewalk/boulevard width, with the only major site constraints being the patio dining at the Monkey Top Saloon and parking lot at Westview. A 1.5 m wide monolithic sidewalk is proposed for the east side, located between the existing Fortis utility poles and the roadway. There is also sufficient right-of-way to accommodate additional sidewalk/ boulevard width if the Fortis utility poles are removed. Curb extensions at all intersections provide space for seating nodes or rest areas within the pedestrian realm, improving accessibility and walkability. Additional rest areas are also provided at key locations along the corridor, such as near building entries and popular destinations. These areas are defined using consistent streetscape elements, such as contrasting paving, planting, and furnishings.

It is important to note that the existing grading of the road is a challenge to provide uniform cross section. The east side of the right-of-way is higher in elevation than the west side, in some cases over 1 m difference. The centerline of the existing road and cross fall is also higher than desirable. The revised design will consider the elevation difference and will include improvement to provide adequate surface drainage and still reduce the over all crossfall. However, the allowable corrections are limited because 50 Street must still connect to the existing streets. Therefore, the reconstruction of any part of the road will require grading outside the right-of-way to tie into the existing properties. This will include landscaping on private property as well as reconstruction of portions of private driveways. In future phases, easements or land-use agreements will be required with the adjacent property owners and should therefore be considered in the scheduling and implementation.

## 4.3 Parking

The functional design proposes parallel parking on both sides of the corridor, where existing site constraints, such as driveways, parking lots, and utilities allow. Up to 65 parking stalls can be accommodated in the proposed arrangement with additional stalls available along the west side of 50 Street, north of 54 Avenue. Consistent application of parallel parking throughout the corridor establishes municipal parking expectations for residents and visitors. It also provides space within the right-of-way for wider sidewalks, an expanded pedestrian realm, and additional landscape buffer between public and private property. Angled parking for motorcycles is proposed adjacent to the Monkey Top Saloon, between 50 Avenue and the rear laneway. Existing driveways and laneways are accommodated along the corridor and additional signage will more than likely be required in the future to enforce no parking zones.

## 4.4 Lighting

The functional design proposes burying all existing overhead infrastructure, removal of existing wooden poles, and installation of decorative poles and fixtures. The Domus decorative pole and luminaire are suggested from the Fortis' catalogue of standard fixtures and will compliment the overall design of the corridor. Placement of the light standards at regular intervals and at each intersection will provide a consistent streetscape design element and meet IESNA standards for illumination levels. The proposed alignment of the east sidewalk has been designed to accommodate the existing Fortis poles to avoid relocation if necessary. The cost to relocate the poles is significant, and therefore has been separated from the over all project's costs. The Town can reevaluate relocation at future detailed design stages and based on funding available.

## 4.5 Streetscaping

The functional design recommends a consistent palette of surfacing, planting, and furnishings throughout the corridor to define and beautify the pedestrian realm and improve the experience of residents and visitors. Seating nodes are included at key locations along the corridor, such as curb extensions and near public facilities, or attractions. These nodes are characterized, using decorative paving and consistent furnishings, including benches, bike racks, planters, waste receptacles, and streetlights. Wood plank stamped concrete is proposed as decorative paving, in contrast to broom finished concrete sidewalks. A black powder-coated finish is recommended for all furnishings including the decorative light standards. Furnishings will also have wood or composite accents to further establish the rural theme and a wood post and rail fence provides a physical separation between the sidewalk and any parking lots or utility areas.

Tree planting is provided in the landscape buffer area between the sidewalk and property line along the west side of the corridor. This will add a vertical element to the design and provide additional shade for rest areas. Additional tree planting can also be accommodated along the east side of the corridor if the existing overhead lines are removed. Raised planters are proposed at all curb extensions and can be removed seasonally to facilitate street maintenance and snow clearing.

## 4.6 Drainage

The Stormwater Management Plan, prepared by Stantec, notes that the cross-sectional area of the road/boulevard is adequate for all flows generated; however, it recommends the inclusion of an underground system to provide a higher level of service. In this concept a stormwater trunk is proposed along 50 Street from the existing stub on 50 Avenue up to 52 Avenue, and a second storm sewer from 53 Avenue to 55 Avenue.

The existing catch basins on at the intersections of 51, 52, and 53 Avenues are proposed to be replaced on the new alignment to capture surface water from the streets to the east. A 450 mm storm sewer is proposed on 50 Street to be extended from the existing manholes on 53 Avenue north to 54 and 55 Avenue and new catch basins are proposed at the intersections to convey stormwater to the existing storm sewer. The existing culvert is partially buried and suffers from freezing and frequent clogging. This culvert can be removed and replaced with appropriate catch basins with particular attention required to the grade behind the proposed walk to allow drainage. Catch basins are also proposed at the intersection of 54 Avenue on an alignment the facilitates the future development of 54 Avenue to the east.

The existing storm sewer on 50 Avenue includes a stub for the future extension to the north of 50 Avenue. The proposed 375 mm storm will be extended to 51 and 52 Avenue to accommodate the replacement of catch basins on the new alignment. The existing outfall of the storm sewer is to a ditch which drains to the south. Prior to construction of 50 Street, it will be important to evaluate the outfall ensure it is functioning as intended. The Town reports that the ability to drain the storm sewer is limited by the connecting ditch network. Confirming ditch grades through survey is suggested.

## 4.7 Underground

### 4.7.1 Sanitary Sewer Replacement

The existing sanitary sewer has reached the end of its design life. The CCTV inspection reveals several areas with significant deficiencies and the protruding services are concerning as they can trap debris and cause blockages in the flow. The reconstruction of 50 Street presents an opportunity to replace the existing sanitary sewer, upsize to accommodate future growth and provide a new design life. There are two locations between MH59 and MH41, which

requires immediate attention due to the observed pipe collapse. The Town is currently engaging resources to complete these repairs as soon as feasible.

The two failed areas should be repaired as soon as possible. The failed sections should be exposed, and have the portions of the pipe cut, removed, and replaced with new 200 mm PVC DR 35. The southern location is relatively close to the existing manhole and should be replaced all the way to the manhole to reduce the number of couplers required.

#### 4.7.2 Water

As noted previously, the existing watermains are reaching the end of their lifecycle and have been identified in the Asset Management Plan to be replaced when presented with the opportunity. The existing line north of 52 Avenue is 150 mm diameter and does not meet current standards. A new 200 mm PVC DR18 main is proposed for the entire alignment. The section from 50 Avenue to 52 Avenue can be placed on the same alignment as the existing line. North of 52 Avenue the existing line jogs to the east side of the road before turning north again. The proposed alignment for the new line is to continue north on the same alignment as the south. This allows the new line to be constructed before the old line is taken out of service, and also allows for a consistent cross section for the infrastructure. A new line will also improve flows in the distribution system.

## 5 OPINION OF PROBABLE COST

An opinion of probable cost is included within [Appendix C](#). The estimate was prepared on a “per-block” basis and represents potential overall costs for the ultimate build-out of the corridor, as shown in the functional design plan and described above. A summary of the opinion of cost is as follows:

**Table 5-1 Preliminary Opinion of Probable Costs**

Location	Cost
<b>Total - 50 to 51 Avenue</b>	\$720,000.00
<b>Total - 51 to 52 Avenue</b>	\$880,000.00
<b>Total - 52 to 53 Avenue</b>	\$650,000.00
<b>Total - 53 to 54 Avenue</b>	\$620,000.00
<b>Total - 54 to 55 Avenue</b>	\$610,000.00
<b>Subtotal</b>	<b>\$3,480,000.00</b>
Engineering (10%)	\$350,000.00
Contingency (25%)	\$870,000.00
<b>Total (Excl. GST)</b>	<b>\$4,700,000.00</b>
<b>Electrical (Optional Costs)</b>	
Relocate Existing Lines Underground	\$630,000.00
Supply And Install New Light Standards	\$305,000.00
<b>Subtotal</b>	<b>\$935,000.00</b>
<b>Grand Total (Excl. GST)</b>	<b>\$5,635,000.00</b>

The costs provided are based on replacing the watermain and the sanitary sewer and at the time of construction. The cost also includes the storm sewer on 50 Street. In the development of the concept, the team met with the electrical franchise utility (Fortis Alberta at the time of the study) to determine the costs and feasibility of moving the overhead power cable underground. Removing the overhead power lines will require the street lighting be replaced as the existing luminaries are mounted on the existing poles. However, it would also provide an opportunity for decorative poles to be installed to fit in with the new concepts and allow for supporting lighting for other activities (like decorations/street markets, etc.) the costs are included in the table as optional costs for the Town's consideration.

## **6 SCHEDULE AND IMPLEMENTATION**

Implementing the construction of the rehabilitation of 50 Street is a long and costly process. Generally, speaking the Town can expect construction of each block to require approximately 1 month of construction time. Given the length of the road and scope of work, it would be fair to assume that the project will require two construction seasons to complete. In advance of construction the Town will need to schedule adequate time to complete detailed design, tender, and contractor selection.

The rehabilitation of the 50 Street does not require onerous Regulatory approvals. For the scope of work within the existing right-of-way, a Notification to Alberta Environment, as per the Water Act, will be required for changes or upgrades to the existing potable water distribution network, sanitary sewer collection network, and the proposed storm sewer.

A substantial portion of the work will be undertaken within the existing right-of-way. However, the work will require grading to meld the proposed grading with the adjacent properties. The Town will need to secure temporary easements on the adjacent properties to facilitate construction.

### **6.1 Staging**

Given the complexity of the project, the scale of construction, and the costs, staging the implementation is recommended. Ideally, the staging would be driven by the underground infrastructure starting on the low-end near 50 Avenue and progressing block by block northwards as funding allows. The Town has recently completed surface improvements on 50 Street from 50 Avenue to 52 Avenue. These improvements included sidewalk repairs and pavement repairs, so the existing road is in relatively good condition.

The existing road condition is in poorer condition north of 53 Avenue. The road shows signs of pavement failure, there are sections where the sidewalk has trip hazards and other defects or does not exist at all. Therefore, from a priority perspective, the Town prefers to start the reconstruction of 50 Street between 53 Avenue and 55 Avenue to address the poor condition of the road and sidewalks. The proposed storm sewer starts in the intersection of 53 Avenue. There may be temporary work required to provide continuity in the drainage until the future downhill sections are completed, but these can be minimalized during detailed design.

## 7 CONCLUSIONS

The objective of the project was to complete conceptual redesign of the roadway and utilities between 50 Avenue and 55 Avenue, which will form the basis for future detail design upon Council's approval and funding. The analysis undertaken in this report shows that 50 Street (Dick Damron Drive) can be redesigned to improve the pedestrian experience while maintaining the connection to the current adjacent land uses. The redesign can be accommodated within the available roadway, which results in narrowing of the road width, but still allow the through traffic and necessary on-street parking.

The rehabilitation will require full reconstruction of the surface of the road. This is an opportunity for the Town to address the aging underground infrastructure at the same time. The existing potable water mains that are at the end of their lifecycle will be replaced in phases to accommodate the surface restoration. The inspection of the existing sanitary sewer shows that there are areas of the pipe that are failing and require repairs. The protrusion of the service connections into the main limit the options for rehabilitation. Furthermore, capacity on this trunk may be required to accommodate future development north of the Town. The sanitary sewer mains will need to be replaced as each block of the road is complete. The rehabilitation of the road is an opportunity for the Town to install a storm sewer trunk. This will facilitate surface drainage on the new road as well as capture surface drainage from the adjacent connecting the Avenues.

The cost of the project is in the order of magnitude of \$4.7M. Removal of the existing overhead lines will require another approximately \$1M. A qualified general contractor, experienced in municipal construction should be capable of completing the works in two construction seasons. Funding constraints and other schedule conflicts may lead the Town to decide to implement the project in two phases. The blocks north of 53 Avenue could be advanced first considering the road is in poor condition.

## 8 RECOMMENDATIONS

The following recommendations are proposed for the Town's consideration based on the conclusion noted above and the concept development discussed in this report:

1. The Town complete the repairs of the pipe collapse on the sanitary sewer between 50 Avenue and 52 Avenue as soon as convenient.
2. The Town initiate detailed design of the 50 Street (Dick Damron Drive) project to be ready for construction in 2025 and 2026 subject to funding availability.
3. The Town seek funding for the project and budget approximately \$3M (accounting for inflation from 2023 to 2025) for construction in 2025.
4. The Town seek funding and budget an additional \$3.2M (accounting for inflation from 2023 to 2026) for construction in 2026.



## CLOSURE

We trust the Town of Bentley will find this report comprehensive and that it provides the necessary information for the Town to proceed to the next stage. Should you have any questions or require additional information, please contact the undersigned.

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

Respectfully submitted,

Associated Engineering Alberta Ltd.

Nelson Dos Santos, P.Eng.  
Project Manager

Jason Bennett, CSLA  
Project Engineer



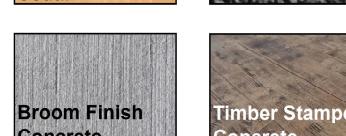


## APPENDIX A - ARCHITECT'S CONCEPT PLAN





### Kit of Parts



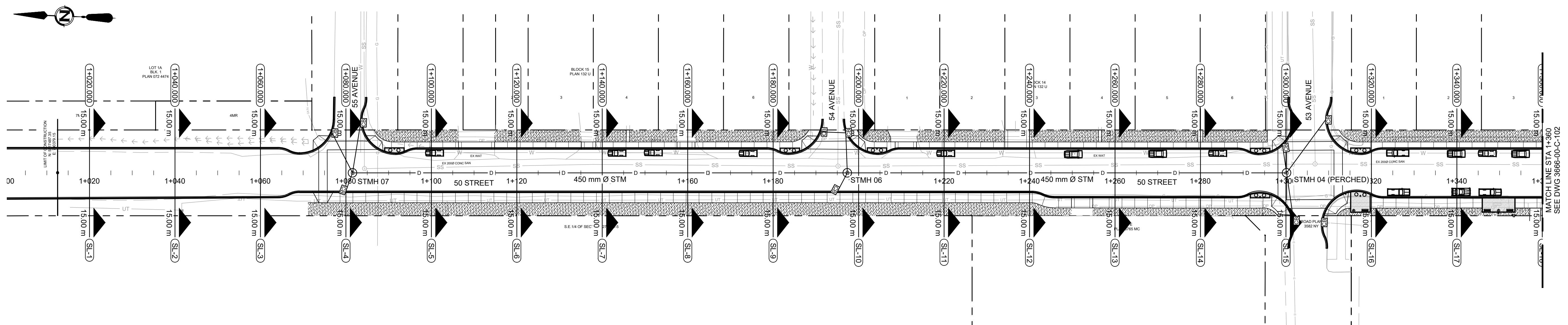
# 50th Street Functional Design - Concept Plan



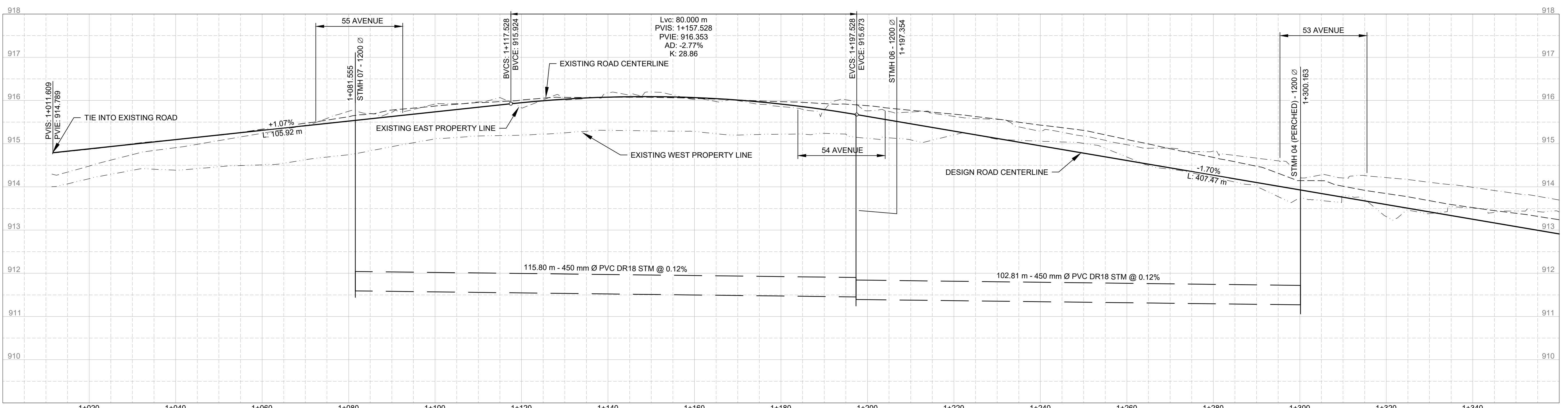
## APPENDIX B – ENGINEERING CONCEPT FIGURES



IF NOT 50 mm ADJUST SCALES  
50 mm      SCALE(S) SHOWN ARE INTENDED FOR ANSI D (22X34) SIZE DRAWINGS, TABLOID (11X17) SIZE DRAWINGS ARE 1/2 OF SCALE(S) SHOWN UNLESS NOTED OTHERWISE

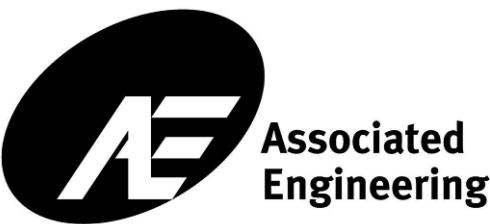


# PLAN



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PROFILE 1:500 H 1:5



# Associated Engineering



**PRELIMINARY/  
FOR DISCUSSION  
NOT FOR CONSTRUCTION**

TOWN OF BENTLEY

## 50 STREET FUNCTIONAL DESIGN

20233666-00

A	YYYYMMDD	E. ENGINEER	A.FONG	ISSUED FOR REVIEW
REV	DATE	DESIGN	DRAWN	DESCRIPTION

SCALE: AS SHOWN



CIVIL  
PLAN & PROFILE  
50 STREET



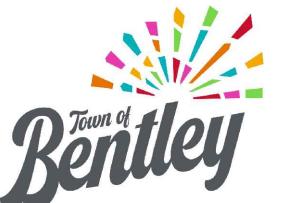
PRELIMINARY/  
FOR DISCUSSION  
NOT FOR CONSTRUCTION  
**DRAFT**

TOWN OF BENTLEY

50 STREET FUNCTIONAL DESIGN

20233666-00

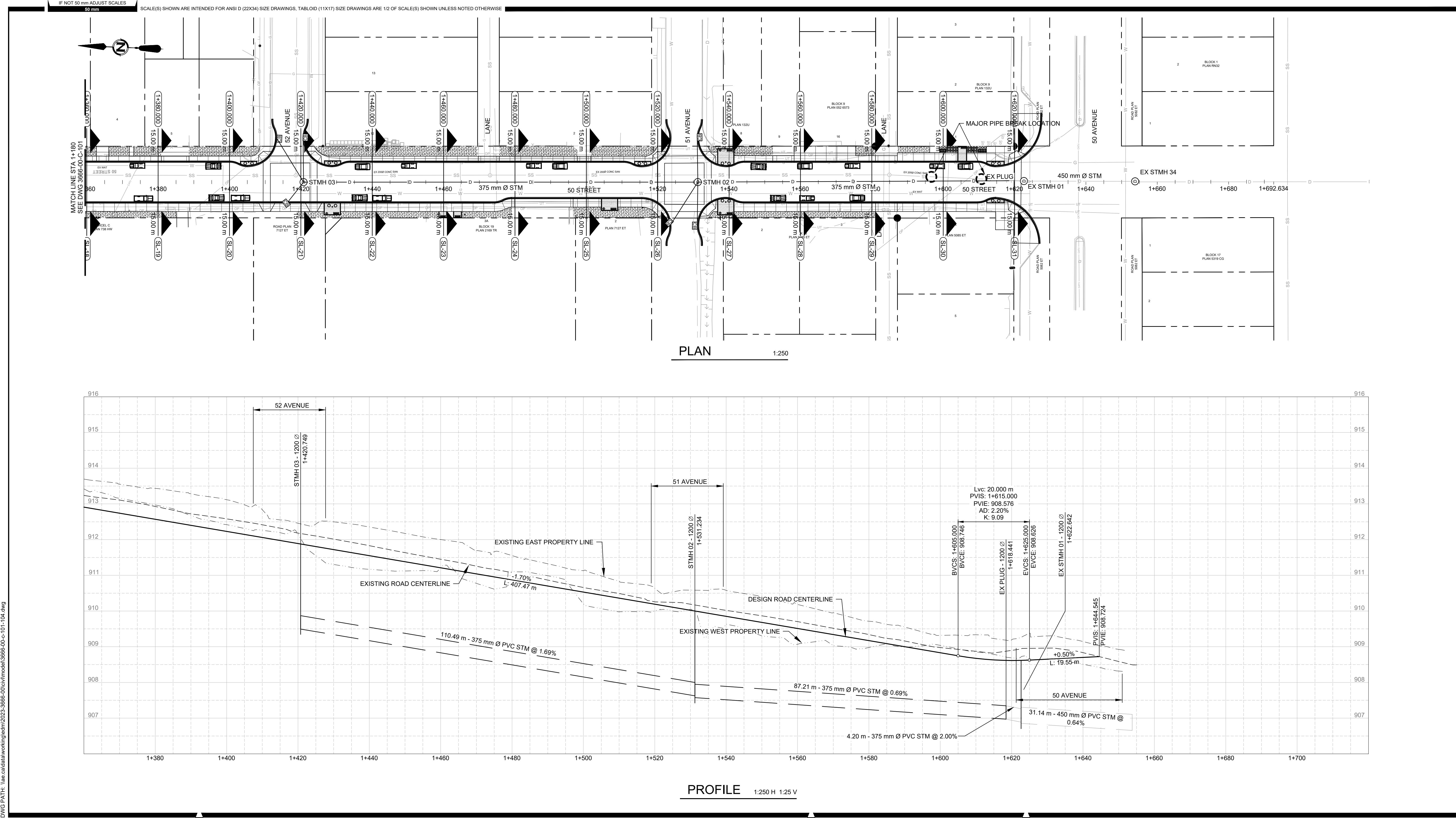
SCALE: AS SHOWN



CIVIL  
PLAN & PROFILE  
50 STREET

DRAWING 3666-00-C-102

REVISION A  
SHEET 4



## APPENDIX C - OPINION OF PROBABLE COST



<p style="text-align: center;"><b>Opinion of Probable Cost</b> <b>Summary</b></p> <p style="text-align: center;">  <b>Associated Engineering</b> </p>		<p><i>Client</i> Town of Bentley</p> <p><i>Project</i> <b>50th Street Functional Design</b></p> <p><i>Subject</i></p> <p>Proj. No.: 2023-3666      Date: October 2023</p>		
<b>Item</b>	<b>Description</b>			
<b>1.0</b>	<b>50th Avenue to 51st Avenue</b>			
1.1	General			\$ 110,000.00
1.2	Removals			\$ 25,160.00
1.3	Sanitary Sewer			\$ 119,049.50
1.4	Water			\$ 84,660.00
1.5	Storm Sewer			\$ 64,350.50
1.6	Surface Work			\$ 261,190.00
1.7	Landscaping			\$ 58,330.00
<b>TOTAL - 50th to 51st</b>				\$ <b>722,740.00</b>
<b>2.0</b>	<b>51st Avenue to 52nd Avenue</b>			
2.1	General			\$ 180,000.00
2.2	Removals			\$ 25,260.00
2.3	Sanitary Sewer			\$ 141,263.50
2.4	Water			\$ 124,180.00
2.5	Storm Sewer			\$ 121,226.50
2.6	Surface Work			\$ 245,336.00
2.7	Landscaping			\$ 44,700.00
<b>TOTAL - 51st to 52nd</b>				\$ <b>881,966.00</b>
<b>3.0</b>	<b>52nd Avenue to 53rd Avenue</b>			
3.1	General			\$ 110,000.00
3.2	Removals			\$ 25,820.00
3.3	Sanitary Sewer			\$ 131,180.00
3.4	Water			\$ 74,800.00
3.5	Storm Sewer			\$ 18,800.00
3.6	Surface Work			\$ 252,032.00
3.7	Landscaping			\$ 35,000.00
<b>TOTAL - 52nd to 53rd</b>				\$ <b>647,632.00</b>
<b>4.0</b>	<b>53rd Avenue to 54th Avenue</b>			
4.1	General			\$ 80,000.00
4.2	Removals			\$ 14,595.00
4.3	Sanitary Sewer			\$ 110,565.00
4.4	Water			\$ 89,850.00
4.5	Storm Sewer			\$ 60,948.00
4.6	Surface Work			\$ 239,466.00
4.7	Landscaping			\$ 24,425.00
<b>TOTAL - 53rd to 54th</b>				\$ <b>619,849.00</b>

Opinion of Probable Cost Summary					
 Associated Engineering					
<b>50th Street Functional Design</b>					
<i>Subject</i>					
<i>Proj. No.:</i> 2023-3666 <i>Date:</i> October 2023					
Item	Description				
5.0	<b>54th Avenue to North of 55th Avenue</b>				\$ 80,000.00
5.1	General				\$ 15,395.00
5.2	Removals				\$ 116,180.00
5.3	Sanitary Sewer				\$ 85,800.00
5.4	Water				\$ 66,360.00
5.5	Storm Sewer				\$ 225,155.60
5.6	Surface Work				\$ 20,715.00
5.7	Landscaping				
	<b>TOTAL - 54th to 55th</b>				\$ 609,605.60
	TOTAL - 50th to 51st				\$ 720,000.00
	TOTAL - 51st to 52nd				\$ 880,000.00
	TOTAL - 52nd to 53rd				\$ 650,000.00
	TOTAL - 53rd to 54th				\$ 620,000.00
	TOTAL - 54th to 55th				\$ 610,000.00
	<b>SUBTOTAL</b>				\$ 3,480,000.00
	<b>Engineering (10%)</b>				\$ 350,000.00
	<b>Contingency (25%)</b>				\$ 870,000.00
	<b>TOTAL (EXCL. GST)</b>				\$ 4,700,000.00
6	<b>ELECTRICAL(Optional Costs)</b>				
6.1	Relocate Existing Lines Underground	LS			\$ 630,000.00
6.2	Supply and Install New Light Standards	LS			\$ 305,000.00
	<b>SUBTOTAL</b>				\$ 935,000.00
	<b>GRAND TOTAL (EXCL. GST)</b>				\$ 5,635,000.00

<p style="text-align: center;"><b>Opinion of Probable Cost</b>  <b>50th Avenue to 51st Avenue</b></p>  <p><b>Associated Engineering</b></p>		<p><i>Client</i>  <b>Town of Bentley</b></p> <p><i>Project</i>  <b>50th Street Functional Design</b></p> <p><i>Subject</i></p> <p><i>Proj. No.:</i> 2023-3666      <i>Date:</i> October 2023</p>			
Item	Description	Unit	Total	Unit Price	Extension
1.0	<b>GENERAL</b>				
1.1	Contract Requirements (Mobilization, Demobilization, Bonding, Insurance, Traffic Control, Temporary Works etc.)	LS	1	\$100,000.00	\$ 100,000.00
1.2	Survey	LS	1	\$10,000.00	\$ 10,000.00
	<b>TOTAL PART 1.0 - GENERAL</b>				<b>\$ 110,000.00</b>
2.0	<b>REMOVALS</b>				
2.1	Remove and Dispose Concrete Monowalk (c/w curb)	m <sup>2</sup>	356	\$35.00	\$ 12,460.00
2.2	Remove and Dispose Asphalt	m <sup>3</sup>	110	\$50.00	\$ 5,500.00
2.3	Remove and Dispose Granular Road Structure	m <sup>3</sup>	280	\$10.00	\$ 2,800.00
2.4	Remove and Dispose Granular Base (Monowalk)	m <sup>3</sup>	40	\$10.00	\$ 400.00
2.5	Remove and Dispose Signs and Site Furnishings	LS	1	\$2,500.00	\$ 2,500.00
2.6	Remove and Dispose Vegetation	LS	1	\$1,500.00	\$ 1,500.00
	<b>TOTAL PART 2.0 - REMOVALS</b>				<b>\$ 25,160.00</b>
3.0	<b>SANITARY SEWERS</b>				
3.1	Trenching and Backfill (Depth to Invert) .1 0 m to 4 m	m	113	\$150.00	\$ 16,950.00
3.2	Pipe Zone Material .1 Class B for 200 mm Dia. Main	m	113	\$50.00	\$ 5,650.00
3.3	Over-excavation	m <sup>3</sup>	51	\$70.00	\$ 3,559.50
3.4	Supply and Install Sanitary Sewer Main .1 250 mm Dia. PVC DR35	m	113	\$300.00	\$ 33,900.00
3.5	Supply and Install Manholes .1 1200 mm I.D.	vm	6	\$2,000.00	\$ 12,000.00
	.2 Type F-80 Frame and Cover	ea	2	\$800.00	\$ 1,600.00
3.6	Sanitary Service .1 100 mm Dia. PVC DR35	ea	7	\$6,000.00	\$ 42,000.00
3.7	CCTV Sewer Inspection .1 Construction Completion	m	113	\$15.00	\$ 1,695.00
	.2 End of Warranty Period	m	113	\$15.00	\$ 1,695.00
	<b>TOTAL PART 3.0 - SANITARY SEWER</b>				<b>\$ 119,049.50</b>
4.0	<b>WATER MAINS</b>				
4.1	Trenching and Backfill (Depth to Invert) .1 0 m to 4 m	m	117	\$150.00	\$ 17,550.00
4.2	Pipe Zone Material .1 Class B for 200 mm Dia. Main	m	117	\$50.00	\$ 5,850.00
4.3	Over-excavation	m <sup>3</sup>	176	\$70.00	\$ 12,285.00
4.4	Supply and Install Sanitary Sewer Main				

<p style="text-align: center;"><b>Opinion of Probable Cost</b>  <b>50th Avenue to 51st Avenue</b></p>  <p><b>Associated Engineering</b></p>		<p><i>Client</i>  <b>Town of Bentley</b></p> <p><i>Project</i>  <b>50th Street Functional Design</b></p> <p><i>Subject</i></p>			
		<i>Proj. No.:</i> 2023-3666		<i>Date:</i> October 2023	
Item	Description	Unit	Total	Unit Price	Extension
4.5	.1 200 mm Dia. PVC DR35 Supply and Install Fittings c/w Thrust Blocking .1 Tees .2 Crosses .3 Valves .4 Elbows	m  ea  ea  ea  ea	117  1  0  2  0	\$75.00  \$4,000.00  \$4,000.00  \$5,000.00  \$4,000.00	\$ 8,775.00  \$ 4,000.00  \$ -  \$ 10,000.00  \$ -
4.6	Water Service c/w CC	ea	7	\$1,600.00	\$ 11,200.00
4.7	Tie-in to existing Watermain	ea	3	\$5,000.00	\$ 15,000.00
<b>TOTAL PART 4.0 - WATER MAIN</b>					<b>\$ 84,660.00</b>
5.0	<b>STORM SEWER</b>				
5.2	.1 0 m to 4 m	m	87	\$150.00	\$ 13,050.00
5.3	Pipe Zone Material	m	87	\$50.00	\$ 4,350.00
5.4	.1 Class B for 250 mm Dia. Main	m <sup>3</sup>	39	\$70.00	\$ 2,740.50
5.5	Over-excavation				
5.6	Supply and Install Storm Sewer Main	m	87	\$400.00	\$ 34,800.00
5.7	.1 450 mm Dia. PVC DR35	vm	3	\$2,000.00	\$ 6,000.00
5.8	Supply and Install Manholes	ea	1	\$800.00	\$ 800.00
5.9	.2 Type F-80 Frame and Cover	ea		\$2,500.00	\$ -
5.6	Remove and Dispose Existing Catch Basins	ea		\$12,000.00	\$ -
5.7	Supply and Install Catch Basins c/w 250mm lead	ea	0	\$10,000.00	\$ -
5.8	500 dia. 20m long Culvert Outlet c/w End Treatment	ea	0	\$15.00	\$ 1,305.00
5.9	CCTV Sewer Inspection	m	87	\$15.00	\$ 1,305.00
	.1 Construction Completion	m	87	\$15.00	\$ 1,305.00
	.2 End of Warranty Period	m	87	\$15.00	\$ 1,305.00
<b>TOTAL PART 5.0 - STORM SEWER</b>					<b>\$ 64,350.50</b>
6.0	<b>SURFACE WORK</b>				
6.1	Subgrade Preparation				
	.1 300 mm Depth	m <sup>2</sup>	1,230	\$4.00	\$ 4,920.00
	.2 150 mm Depth	m <sup>2</sup>	760	\$2.00	\$ 1,520.00
6.2	Granular Base				
	.1 20 mm Minus Base Gravel - 250 mm Depth	m <sup>3</sup>	310	\$95.00	\$ 29,450.00
	.2 20 mm Minus Base Gravel - 150 mm Depth	m <sup>3</sup>	120	\$95.00	\$ 11,400.00
6.3	Asphalt Paving				
	.1 60 mm Base Lift	m <sup>2</sup>	1,230	\$30.00	\$ 36,900.00
	.2 40 mm Final Lift	m <sup>2</sup>	1,230	\$20.00	\$ 24,600.00
	.4 Yellow Centerline	m	90	\$10.00	\$ 900.00
	.5 Cross Walks and Stop Bars	LS	1	\$1,000.00	\$ 1,000.00

Opinion of Probable Cost 50th Avenue to 51st Avenue		<i>Client</i> Town of Bentley <i>Project</i> <b>50th Street Functional Design</b> <i>Subject</i> <i>Proj. No.:</i> 2023-3666 <i>Date:</i> October 2023			
 <b>Associated Engineering</b>					
Item	Description	Unit	Total	Unit Price	Extension
6.4	.6 Parking Delineation Concrete .1 Curb and Gutter .2 Concrete Sidewalk (inc. lane and driveway access) .3 Para Ramps	m  m  m <sup>2</sup>  ea	40  230  530  4	\$10.00  \$160.00  \$210.00  \$500.00	\$ 400.00  \$ 36,800.00  \$ 111,300.00  \$ 2,000.00
	<b>TOTAL PART 6.0 - SURFACE WORK</b>				<b>\$ 261,190.00</b>
7.0	<b>LANDSCAPING</b>				
7.1	Plant Material .1 60mm Caliper Deciduous Tree .2 Perennials and Grasses .3 Sod Over 100mm Depth Topsoil	ea.  ea.  m <sup>2</sup>	4  42  150	\$ 650.00  \$ 40.00  \$ 25.00	\$ 2,600.00  \$ 1,680.00  \$ 3,750.00
7.2	Site Furnishings .1 Waste Receptacle .2 Bike Racks .3 Benches .4 Planters .5 Post and Rail Fence	ea.  ea.  ea.  m  m	2  2  3  8  53	\$ 1,500.00  \$ 1,000.00  \$ 2,000.00  \$ 850.00  \$ 500.00	\$ 3,000.00  \$ 2,000.00  \$ 6,000.00  \$ 6,800.00  \$ 26,500.00
7.3	Maintenance .1 Watering, pruning and weeding as required	yea.	2	\$ 3,000.00	\$ 6,000.00
	<b>TOTAL PART 7.0 - LANDSCAPING</b>				<b>\$ 58,330.00</b>
	TOTAL PART 1.0 - GENERAL TOTAL PART 2.0 - REMOVALS TOTAL PART 3.0 - SANITARY SEWER TOTAL PART 4.0 - WATER MAIN TOTAL PART 5.0 - STORM SEWER TOTAL PART 6.0 - SURFACE WORK TOTAL PART 7.0 - LANDSCAPING  <b>SUBTOTAL</b> Engineering (10%) Contingency (25%)				\$ 110,000.00  \$ 25,160.00  \$ 119,049.50  \$ 84,660.00  \$ 64,350.50  \$ 261,190.00  \$ 58,330.00  \$ 722,740.00  \$ 80,000.00  \$ 190,000.00
	<b>GRAND TOTAL (EXCL. GST)</b>				<b>\$ 912,740.00</b>
	<b>NOTE:</b> Subtotals and Grand Total rounded to nearest \$10,000.				

<p style="text-align: center;"><b>Opinion of Probable Cost</b>  <b>51st Avenue to 52nd Avenue</b></p>  <p><b>Associated Engineering</b></p>		<p><i>Client</i>  <b>Town of Bentley</b></p> <p><i>Project</i>  <b>50th Street Functional Design</b></p> <p><i>Subject</i></p> <p><i>Proj. No.:</i> 2023-3666      <i>Date:</i> October 2023</p>			
Item	Description	Unit	Total	Unit Price	Extension
1.0	<b>GENERAL</b>				
1.1	Contract Requirements (Mobilization, Demobilization, Bonding, Insurance, Traffic Control, Temporary Works etc.)	LS	1	\$170,000.00	\$ 170,000.00
1.2	Survey	LS	1	\$10,000.00	\$ 10,000.00
	<b>TOTAL PART 1.0 - GENERAL</b>				<b>\$ 180,000.00</b>
2.0	<b>REMOVALS</b>				
2.1	Remove and Dispose Concrete Monowalk (c/w curb)	m <sup>2</sup>	396	\$35.00	\$ 13,860.00
2.2	Remove and Dispose Asphalt	m <sup>3</sup>	120	\$50.00	\$ 6,000.00
2.3	Remove and Dispose Granular Road Structure	m <sup>3</sup>	300	\$10.00	\$ 3,000.00
2.4	Remove and Dispose Granular Base (Monowalk)	m <sup>3</sup>	40	\$10.00	\$ 400.00
2.5	Remove and Dispose Signs and Site Furnishings	LS	1	\$500.00	\$ 500.00
2.6	Remove and Dispose Vegetation	LS	1	\$1,500.00	\$ 1,500.00
	<b>TOTAL PART 2.0 - REMOVALS</b>				<b>\$ 25,260.00</b>
3.0	<b>SANITARY SEWERS</b>				
3.1	Trenching and Backfill (Depth to Invert) .1 0 m to 4 m	m	149	\$150.00	\$ 22,350.00
3.2	Pipe Zone Material .1 Class B for 200 mm Dia. Main	m	149	\$50.00	\$ 7,450.00
3.3	Over-excavation	m <sup>3</sup>	67	\$70.00	\$ 4,693.50
3.4	Supply and Install Sanitary Sewer Main .1 250 mm Dia. PVC DR35	m	149	\$300.00	\$ 44,700.00
3.5	Supply and Install Manholes .1 1200 mm I.D.	vm	6	\$2,000.00	\$ 12,000.00
	.2 Type F-80 Frame and Cover	ea	2	\$800.00	\$ 1,600.00
3.6	Sanitary Service .1 100 mm Dia. PVC DR35	ea	4	\$6,000.00	\$ 24,000.00
3.7	CCTV Sewer Inspection .1 Construction Completion	m	149	\$15.00	\$ 2,235.00
	.2 End of Warranty Period	m	149	\$15.00	\$ 2,235.00
3.8	Tie-in Existing Pipes to Manhole	ea	4	\$5,000.00	\$ 20,000.00
	<b>TOTAL PART 3.0 - SANITARY SEWER</b>				<b>\$ 141,263.50</b>
4.0	<b>WATER MAINS</b>				
4.1	Trenching and Backfill (Depth to Invert) .1 0 m to 4 m	m	131	\$150.00	\$ 19,650.00
4.2	Pipe Zone Material .1 Class B for 200 mm Dia. Main	m	131	\$50.00	\$ 6,550.00
4.3	Over-excavation	m <sup>3</sup>	197	\$70.00	\$ 13,755.00

<p style="text-align: center;"><b>Opinion of Probable Cost</b>  <b>51st Avenue to 52nd Avenue</b></p>  <p><b>Associated Engineering</b></p>		<p><i>Client</i>  <b>Town of Bentley</b></p> <p><i>Project</i>  <b>50th Street Functional Design</b></p> <p><i>Subject</i></p> <p><b>Proj. No.: 2023-3666      Date: October 2023</b></p>			
Item	Description	Unit	Total	Unit Price	Extension
4.4	Supply and Install Sanitary Sewer Main .1 200 mm Dia. PVC DR35	m	131	\$75.00	\$ 9,825.00
4.5	Supply and Install Fittings c/w Thrust Blocking .1 Tees .2 Crosses .3 Valves .4 Elbows	ea	0	\$4,000.00	\$ -
		ea	2	\$4,000.00	\$ 8,000.00
		ea	6	\$5,000.00	\$ 30,000.00
		ea	0	\$4,000.00	\$ -
4.6	Water Service c/w CC .1 100 mm Dia. PVC DR35	ea	4	\$1,600.00	\$ 6,400.00
4.7	Tie-in to existing Watermain	ea	6	\$5,000.00	\$ 30,000.00
<b>TOTAL PART 4.0 - WATER MAIN</b>					<b>\$ 124,180.00</b>
5.0	<b>STORM SEWER</b>				
5.2	.1 0 m to 4 m	m	111	\$150.00	\$ 16,650.00
5.3	Pipe Zone Material .1 Class B for 250 mm Dia. Main	m	111	\$50.00	\$ 5,550.00
5.4	Over-excavation	m <sup>3</sup>	50	\$70.00	\$ 3,496.50
5.5	Supply and Install Storm Sewer Main .1 450 mm Dia. PVC DR35	m	111	\$400.00	\$ 44,400.00
5.6	Supply and Install Manholes .1 1200 mm I.D.	vm	3	\$2,000.00	\$ 6,000.00
		ea	1	\$800.00	\$ 800.00
5.7	.2 Type F-80 Frame and Cover				
5.8	Remove and Dispose Existing Catch Basins	ea	2	\$2,500.00	\$ 5,000.00
5.9	Supply and Install Catch Basins c/w 250mm lead	ea	3	\$12,000.00	\$ 36,000.00
	500 dia. 20m long Culvert Outlet c/w End Treatment	ea	0	\$10,000.00	\$ -
	CCTV Sewer Inspection .1 Construction Completion	m	111	\$15.00	\$ 1,665.00
	.2 End of Warranty Period	m	111	\$15.00	\$ 1,665.00
<b>TOTAL PART 5.0 - STORM SEWER</b>					<b>\$ 121,226.50</b>
6.0	<b>SURFACE WORK</b>				
6.1	Subgrade Preparation .1 300 mm Depth	m <sup>2</sup>	1,314	\$4.00	\$ 5,256.00
	.2 150 mm Depth	m <sup>2</sup>	665	\$2.00	\$ 1,330.00
6.2	Granular Base .1 20 mm Minus Base Gravel - 250 mm Depth	m <sup>3</sup>	330	\$95.00	\$ 31,350.00
	.2 20 mm Minus Base Gravel - 150 mm Depth	m <sup>3</sup>	100	\$95.00	\$ 9,500.00
6.3	Asphalt Paving .1 60 mm Base Lift	m <sup>2</sup>	1,314	\$30.00	\$ 39,420.00
	.2 40 mm Final Lift	m <sup>2</sup>	1,314	\$20.00	\$ 26,280.00
	.3 Yellow Centerline	m	105	\$10.00	\$ 1,050.00

<p style="text-align: center;"><b>Opinion of Probable Cost</b>  <b>51st Avenue to 52nd Avenue</b></p> <p style="text-align: center;">  <b>Associated Engineering</b> </p>		<p><i>Client</i>  <b>Town of Bentley</b></p> <p><i>Project</i>  <b>50th Street Functional Design</b></p> <p><i>Subject</i></p> <p><b>Proj. No.: 2023-3666      Date: October 2023</b></p>			
Item	Description	Unit	Total	Unit Price	Extension
6.4	.4 Cross Walks and Stop Bars .5 Parking Delineation Concrete .1 Curb and Gutter .2 Concrete Sidewalk (inc. lane and driveway access) .3 Para Ramps	LS m  m m <sup>2</sup> ea	1 50  240 425 4	\$1,000.00 \$10.00  \$160.00 \$210.00 \$500.00	\$ 1,000.00 \$ 500.00  \$ 38,400.00 \$ 89,250.00 \$ 2,000.00
	<b>TOTAL PART 6.0 - SURFACE WORK</b>				<b>\$ 245,336.00</b>
7.0	<b>LANDSCAPING</b>				
7.1	Plant Material .1 60mm Caliper Deciduous Tree .2 Perennials and Grasses .3 Sod Over 100mm Depth Topsoil	ea. ea. m <sup>2</sup>	2 400	\$ 650.00 \$ 40.00 \$ 25.00	\$ 1,300.00 \$ - \$ 10,000.00
7.2	Site Furnishings .1 Waste Receptacle .2 Bike Racks .3 Benches .4 Planters .5 Post and Rail Fence	ea. ea. ea. ea. m	2 1 4 4 24	\$ 1,500.00 \$ 1,000.00 \$ 2,000.00 \$ 850.00 \$ 500.00	\$ 3,000.00 \$ 1,000.00 \$ 8,000.00 \$ 3,400.00 \$ 12,000.00
7.3	Maintenance .1 Watering, pruning and weeding as required	yea.	2	\$ 3,000.00	\$ 6,000.00
	<b>TOTAL PART 7.0 - LANDSCAPING</b>				<b>\$ 44,700.00</b>
	<b>TOTAL PART 8.0 - ELECTRICAL</b>				<b>#REF!</b>
	TOTAL PART 1.0 - GENERAL TOTAL PART 2.0 - REMOVALS TOTAL PART 3.0 - SANITARY SEWER TOTAL PART 4.0 - WATER MAIN TOTAL PART 5.0 - STORM SEWER TOTAL PART 6.0 - SURFACE WORK TOTAL PART 7.0 - LANDSCAPING  <b>SUBTOTAL</b> Engineering (10%) Contingency (25%)				\$ 180,000.00 \$ 25,260.00 \$ 141,263.50 \$ 124,180.00 \$ 121,226.50 \$ 245,336.00 \$ 44,700.00  \$ 881,966.00 \$ 90,000.00 \$ 230,000.00
	<b>GRAND TOTAL (EXCL. GST)</b>				<b>\$ 1,111,966.00</b>
	<b>NOTE:</b> Subtotals and Grand Total rounded to nearest \$10,000.				

Opinion of Probable Cost  
51st Avenue to 52nd Avenue



*Client*

Town of Bentley

*Project*

**50th Street Functional Design**

*Subject*

Proj. No.: 2023-3666 Date: October 2023

Item	Description	Unit	Total	Unit Price	Extension

<p style="text-align: center;"><b>Opinion of Probable Cost</b>  <b>52nd Avenue to 53rd Avenue</b></p>  <p><b>Associated Engineering</b></p>		<p><i>Client</i>  <b>Town of Bentley</b></p> <p><i>Project</i>  <b>50th Street Functional Design</b></p> <p><i>Subject</i></p> <p><i>Proj. No.:</i> 2023-3666      <i>Date:</i> October 2023</p>			
Item	Description	Unit	Total	Unit Price	Extension
1.0	<b>GENERAL</b>				
1.1	Contract Requirements (Mobilization, Demobilization, Bonding, Insurance, Traffic Control, Temporary Works etc.)	LS	1	\$100,000.00	\$ 100,000.00
1.2	Survey	LS	1	\$10,000.00	\$ 10,000.00
	<b>TOTAL PART 1.0 - GENERAL</b>				<b>\$ 110,000.00</b>
2.0	<b>REMOVALS</b>				
2.1	Remove and Dispose Concrete Monowalk (c/w curb)	m <sup>2</sup>	332	\$35.00	\$ 11,620.00
2.2	Remove and Dispose Asphalt	m <sup>3</sup>	130	\$50.00	\$ 6,500.00
2.3	Remove and Dispose Granular Road Structure	m <sup>3</sup>	330	\$10.00	\$ 3,300.00
2.4	Remove and Dispose Granular Base (Monowalk)	m <sup>3</sup>	40	\$10.00	\$ 400.00
2.5	Remove and Dispose Signs and Site Furnishings	LS	1	\$2,500.00	\$ 2,500.00
2.6	Remove and Dispose Vegetation	LS	1	\$1,500.00	\$ 1,500.00
	<b>TOTAL PART 2.0 - REMOVALS</b>				<b>\$ 25,820.00</b>
3.0	<b>SANITARY SEWERS</b>				
3.1	Trenching and Backfill (Depth to Invert) .1 0 m to 4 m	m	120	\$150.00	\$ 18,000.00
3.2	Pipe Zone Material .1 Class B for 200 mm Dia. Main	m	120	\$50.00	\$ 6,000.00
3.3	Over-excavation	m <sup>3</sup>	54	\$70.00	\$ 3,780.00
3.4	Supply and Install Sanitary Sewer Main .1 250 mm Dia. PVC DR35	m	120	\$300.00	\$ 36,000.00
3.5	Supply and Install Manholes .1 1200 mm I.D.	vm	3	\$2,000.00	\$ 6,000.00
	.2 Type F-80 Frame and Cover	ea	1	\$800.00	\$ 800.00
3.6	Sanitary Service .1 100 mm Dia. PVC DR35	ea	7	\$6,000.00	\$ 42,000.00
3.7	CCTV Sewer Inspection .1 Construction Completion	m	120	\$15.00	\$ 1,800.00
	.2 End of Warranty Period	m	120	\$15.00	\$ 1,800.00
3.8	Tie-in Existing Pipes to Manhole	ea	3	\$5,000.00	\$ 15,000.00
	<b>TOTAL PART 3.0 - SANITARY SEWER</b>				<b>\$ 131,180.00</b>
4.0	<b>WATER MAINS</b>				
4.1	Trenching and Backfill (Depth to Invert) .1 0 m to 4 m	m	120	\$150.00	\$ 18,000.00
4.2	Pipe Zone Material .1 Class B for 200 mm Dia. Main	m	120	\$50.00	\$ 6,000.00
4.3	Over-excavation	m <sup>3</sup>	180	\$70.00	\$ 12,600.00

<p style="text-align: center;"><b>Opinion of Probable Cost</b>  <b>52nd Avenue to 53rd Avenue</b></p>  <p><b>Associated Engineering</b></p>		<p><i>Client</i>  <b>Town of Bentley</b></p> <p><i>Project</i>  <b>50th Street Functional Design</b></p> <p><i>Subject</i></p> <p>Proj. No.: 2023-3666      Date: October 2023</p>			
Item	Description	Unit	Total	Unit Price	Extension
4.4	Supply and Install Sanitary Sewer Main .1 200 mm Dia. PVC DR35	m	120	\$75.00	\$ 9,000.00
4.5	Supply and Install Fittings c/w Thrust Blocking .1 Tees .2 Crosses .3 Valves .4 Elbows	ea	0	\$4,000.00	\$ -
		ea	0	\$4,000.00	\$ -
		ea	0	\$5,000.00	\$ -
		ea	2	\$4,000.00	\$ 8,000.00
4.6	Water Service c/w CC .1 100 mm Dia. PVC DR35	ea	7	\$1,600.00	\$ 11,200.00
4.8	Tie-in to existing Watermain	ea	2	\$5,000.00	\$ 10,000.00
<b>TOTAL PART 4.0 - WATER MAIN</b>					<b>\$ 74,800.00</b>
5.0	<b>STORM SEWER</b> .1 0 m to 4 m	m	0	\$150.00	\$ -
5.2	Pipe Zone Material .1 Class B for 250 mm Dia. Main	m	0	\$50.00	\$ -
5.3	Over-excavation	m <sup>3</sup>	0	\$70.00	\$ -
5.4	Supply and Install Storm Sewer Main .1 450 mm Dia. PVC DR35	m	0	\$400.00	\$ -
5.5	Supply and Install Manholes .1 1200 mm I.D. (Perched) .2 Type F-80 Frame and Cover	vm	3	\$2,000.00	\$ 6,000.00
		ea	1	\$800.00	\$ 800.00
5.6	Remove and Dispose Existing Catch Basins	ea		\$2,500.00	\$ -
5.7	Supply and Install Catch Basins c/w 250mm lead	ea	3	\$4,000.00	\$ 12,000.00
5.8	500 dia. 20m long Culvert Outlet c/w End Treatment	ea	0	\$10,000.00	\$ -
5.9	CCTV Sewer Inspection .1 Construction Completion .2 End of Warranty Period	m	0	\$15.00	\$ -
		m	0	\$15.00	\$ -
<b>TOTAL PART 5.0 - STORM SEWER</b>					<b>\$ 18,800.00</b>
6.0	<b>SURFACE WORK</b>				
6.1	Subgrade Preparation .1 300 mm Depth .2 150 mm Depth	m <sup>2</sup>	1,343	\$4.00	\$ 5,372.00
		m <sup>2</sup>	680	\$2.00	\$ 1,360.00
6.2	Granular Base .1 20 mm Minus Base Gravel - 250 mm Depth .2 20 mm Minus Base Gravel - 150 mm Depth	m <sup>3</sup>	340	\$95.00	\$ 32,300.00
		m <sup>3</sup>	110	\$95.00	\$ 10,450.00
6.3	Asphalt Paving .1 60 mm Base Lift .2 40 mm Final Lift .3 Yellow Centerline	m <sup>2</sup>	1,343	\$30.00	\$ 40,290.00
		m <sup>2</sup>	1,343	\$20.00	\$ 26,860.00
		m	105	\$10.00	\$ 1,050.00

<p style="text-align: center;"><b>Opinion of Probable Cost</b>  <b>52nd Avenue to 53rd Avenue</b></p>  <p><b>Associated Engineering</b></p>		<p><i>Client</i>  <b>Town of Bentley</b></p> <p><i>Project</i>  <b>50th Street Functional Design</b></p> <p><i>Subject</i></p> <p><b>Proj. No.: 2023-3666      Date: October 2023</b></p>			
Item	Description	Unit	Total	Unit Price	Extension
6.4	.4 Cross Walks and Stop Bars .5 Parking Delineation Concrete .1 Curb and Gutter .2 Concrete Sidewalk (inc. lane and driveway access) .3 Para Ramps	LS m m m m <sup>2</sup> ea	1 55 240 440 4	\$1,000.00 \$10.00 \$160.00 \$210.00 \$500.00	\$ 1,000.00 \$ 550.00 \$ 38,400.00 \$ 92,400.00 \$ 2,000.00
	<b>TOTAL PART 6.0 - SURFACE WORK</b>				<b>\$ 252,032.00</b>
7.0	<b>LANDSCAPING</b>				
7.1	Plant Material .1 60mm Caliper Deciduous Tree .3 Perennials and Grasses .4 Sod Over 100mm Depth Topsoil	ea. ea. m <sup>2</sup>	6 400	\$ 650.00 \$ 40.00 \$ 25.00	\$ 3,900.00 \$ - \$ 10,000.00
7.2	Site Furnishings .1 Waste Receptacle .2 Bike Racks .3 Benches .4 Planters .5 Post and Rail Fence	ea. ea. ea. m m	2 1 3 6 0	\$ 1,500.00 \$ 1,000.00 \$ 2,000.00 \$ 850.00 \$ 500.00	\$ 3,000.00 \$ 1,000.00 \$ 6,000.00 \$ 5,100.00 \$ -
7.3	Maintenance .1 Watering, pruning and weeding as required	yea.	2	\$ 3,000.00	\$ 6,000.00
	<b>TOTAL PART 7.0 - LANDSCAPING</b>				<b>\$ 35,000.00</b>
	TOTAL PART 1.0 - GENERAL TOTAL PART 2.0 - REMOVALS TOTAL PART 3.0 - SANITARY SEWER TOTAL PART 4.0 - WATER MAIN TOTAL PART 5.0 - STORM SEWER TOTAL PART 6.0 - SURFACE WORK TOTAL PART 7.0 - LANDSCAPING  <b>SUBTOTAL</b> <b>Engineering (10%)</b> <b>Contingency (25%)</b>				\$ 110,000.00 \$ 25,820.00 \$ 131,180.00 \$ 74,800.00 \$ 18,800.00 \$ 252,032.00 \$ 35,000.00  \$ 647,632.00 \$ 70,000.00 \$ 170,000.00
	<b>GRAND TOTAL (EXCL. GST)</b>				<b>\$ 817,632.00</b>
	<b>NOTE:</b> Subtotals and Grand Total rounded to nearest \$10,000.				

<p style="text-align: center;"><b>Opinion of Probable Cost</b>  <b>53rd Avenue to 54th Avenue</b></p>  <p><b>Associated Engineering</b></p>		<p><i>Client</i>  <b>Town of Bentley</b></p> <p><i>Project</i>  <b>50th Street Functional Design</b></p> <p><i>Subject</i></p> <p><i>Proj. No.:</i> 2023-3666      <i>Date:</i> October 2023</p>			
Item	Description	Unit	Total	Unit Price	Extension
1.0	<b>GENERAL</b>				
1.1	Contract Requirements (Mobilization, Demobilization, Bonding, Insurance, Traffic Control, Temporary Works etc.)	LS	1	\$70,000.00	\$ 70,000.00
1.2	Survey	LS	1	\$10,000.00	\$ 10,000.00
	<b>TOTAL PART 1.0 - GENERAL</b>				<b>\$ 80,000.00</b>
2.0	<b>REMOVALS</b>				
2.1	Remove and Dispose Concrete Monowalk (c/w curb)	m <sup>2</sup>	137	\$35.00	\$ 4,795.00
2.2	Remove and Dispose Asphalt	m <sup>3</sup>	100	\$50.00	\$ 5,000.00
2.3	Remove and Dispose Granular Road Structure	m <sup>3</sup>	260	\$10.00	\$ 2,600.00
2.4	Remove and Dispose Granular Base (Monowalk)	m <sup>3</sup>	20	\$10.00	\$ 200.00
2.5	Remove and Dispose Signs and Site Furnishings	LS	1	\$500.00	\$ 500.00
2.6	Remove and Dispose Vegetation	LS	1	\$1,500.00	\$ 1,500.00
	<b>TOTAL PART 2.0 - REMOVALS</b>				<b>\$ 14,595.00</b>
3.0	<b>SANITARY SEWERS</b>				
3.1	Trenching and Backfill (Depth to Invert)				
	.1 0 m to 4 m	m	110	\$150.00	\$ 16,500.00
3.2	Pipe Zone Material				
	.1 Class B for 200 mm Dia. Main	m	110	\$50.00	\$ 5,500.00
3.3	Over-excavation	m <sup>3</sup>	50	\$70.00	\$ 3,465.00
3.4	Supply and Install Sanitary Sewer Main				
	.1 250 mm Dia. PVC DR35	m	110	\$300.00	\$ 33,000.00
3.5	Supply and Install Manholes				
	.1 1200 mm I.D.	vm	3	\$2,000.00	\$ 6,000.00
	.2 Type F-80 Frame and Cover	ea	1	\$800.00	\$ 800.00
3.6	Sanitary Service				
	.1 100 mm Dia. PVC DR35	ea	7	\$6,000.00	\$ 42,000.00
3.7	CCTV Sewer Inspection				
	.1 Construction Completion	m	110	\$15.00	\$ 1,650.00
	.2 End of Warranty Period	m	110	\$15.00	\$ 1,650.00
	<b>TOTAL PART 3.0 - SANITARY SEWER</b>				<b>\$ 110,565.00</b>
4.0	<b>WATER MAINS</b>				
4.1	Trenching and Backfill (Depth to Invert)				
	.1 0 m to 4 m	m	130	\$150.00	\$ 19,500.00
4.2	Pipe Zone Material				
	.1 Class B for 200 mm Dia. Main	m	130	\$50.00	\$ 6,500.00
4.3	Over-excavation	m <sup>3</sup>	195	\$70.00	\$ 13,650.00
4.4	Supply and Install Sanitary Sewer Main				

<p style="text-align: center;"><b>Opinion of Probable Cost</b>  <b>53rd Avenue to 54th Avenue</b></p>  <p><b>Associated Engineering</b></p>		<p><i>Client</i>  <b>Town of Bentley</b></p> <p><i>Project</i>  <b>50th Street Functional Design</b></p> <p><i>Subject</i></p>			
		<i>Proj. No.:</i> 2023-3666		<i>Date:</i> October 2023	
Item	Description	Unit	Total	Unit Price	Extension
4.5	.1 200 mm Dia. PVC DR35 Supply and Install Fittings c/w Thrust Blocking .1 Tees .2 Crosses .3 Valves .4 Elbows	m  ea  ea  ea  ea		\$75.00  \$4,000.00  \$4,000.00  \$5,000.00  \$4,000.00	\$ -  \$ -  \$ 4,000.00  \$ 15,000.00  \$ -
4.6	Water Service c/w CC	ea	7	\$1,600.00	\$ 11,200.00
4.7	.1 100 mm Dia. PVC DR35 Tie-in to existing Watermain	ea	4	\$5,000.00	\$ 20,000.00
<b>TOTAL PART 4.0 - WATER MAIN</b>					<b>\$ 89,850.00</b>
5.0	<b>STORM SEWER</b>				
5.2	.1 0 m to 4 m	m	103	\$150.00	\$ 15,420.00
5.3	Pipe Zone Material	m	103	\$50.00	\$ 5,140.00
5.4	.1 Class B for 250 mm Dia. Main	m <sup>3</sup>	154	\$70.00	\$ 10,794.00
5.5	Over-excavation				
5.6	Supply and Install Storm Sewer Main	m	103	\$75.00	\$ 7,710.00
5.7	.1 250 mm Dia. PVC DR35				
5.8	Supply and Install Manholes	vm	3	\$2,000.00	\$ 6,000.00
5.9	.1 1200 mm I.D.	ea	1	\$800.00	\$ 800.00
5.6	Remove and Dispose Existing Catch Basins	ea		\$2,500.00	\$ -
5.7	Supply and Install Catch Basins c/w 250mm lead	ea	3	\$4,000.00	\$ 12,000.00
5.8	500 dia. 20m long Culvert Outlet c/w End Treatment	ea	0	\$10,000.00	\$ -
5.9	CCTV Sewer Inspection				
	.1 Construction Completion	m	103	\$15.00	\$ 1,542.00
	.2 End of Warranty Period	m	103	\$15.00	\$ 1,542.00
<b>TOTAL PART 5.0 - STORM SEWER</b>					<b>\$ 60,948.00</b>
6.0	<b>SURFACE WORK</b>				
6.1	Subgrade Preparation				
	.1 300 mm Depth	m <sup>2</sup>	1,244	\$4.00	\$ 4,976.00
	.2 150 mm Depth	m <sup>2</sup>	430	\$2.00	\$ 860.00
6.2	Granular Base				
	.1 20 mm Minus Base Gravel - 250 mm Depth	m <sup>3</sup>	320	\$95.00	\$ 30,400.00
	.2 20 mm Minus Base Gravel - 150 mm Depth	m <sup>3</sup>	70	\$95.00	\$ 6,650.00
6.3	Asphalt Paving				
	.1 60 mm Base Lift	m <sup>2</sup>	1,244	\$30.00	\$ 37,320.00
	.2 40 mm Final Lift	m <sup>2</sup>	1,244	\$20.00	\$ 24,880.00
	.4 Yellow Centerline	m	100	\$10.00	\$ 1,000.00
	.5 Cross Walks and Stop Bars	LS	1	\$1,000.00	\$ 1,000.00

Opinion of Probable Cost 53rd Avenue to 54th Avenue  <b>Associated Engineering</b>		<i>Client</i> Town of Bentley <i>Project</i> <b>50th Street Functional Design</b> <i>Subject</i> Proj. No.: 2023-3666      Date: October 2023			
Item	Description	Unit	Total	Unit Price	Extension
6.4	.6 Parking Delineation Concrete .1 Curb and Gutter .2 Concrete Sidewalk (inc. lane and driveway access) .3 Para Ramps	m  m  m <sup>2</sup>  ea	40  238  440  3	\$10.00  \$160.00  \$210.00  \$500.00	\$ 400.00  \$ 38,080.00  \$ 92,400.00  \$ 1,500.00
<b>TOTAL PART 6.0 - SURFACE WORK</b>					<b>\$ 239,466.00</b>
7.0	<b>LANDSCAPING</b>				
7.1	Plant Material .1 60mm Caliper Deciduous Tree .2 Shrubs .3 Perennials and Grasses .4 Sod Over 100mm Depth Topsoil	ea.  ea.  ea.  m <sup>2</sup>	3  \$ 650.00  \$ 70.00  \$ 40.00  455	\$ 1,950.00  \$ -  \$ -  \$ 25.00	\$ -  \$ -  \$ -  \$ 11,375.00
7.2	Site Furnishings .1 Waste Receptacle .2 Bike Racks .3 Benches .4 Planters .5 Post and Rail Fence	ea.  ea.  ea.  ea.  m	0  0  0  6  0	\$ 1,500.00  \$ 1,000.00  \$ 2,000.00  \$ 850.00  \$ 500.00	\$ -  \$ -  \$ -  \$ 5,100.00
7.3	Maintenance .1 Watering, pruning and weeding as required	yea.	2	\$ 3,000.00	\$ 6,000.00
<b>TOTAL PART 7.0 - LANDSCAPING</b>					<b>\$ 24,425.00</b>
TOTAL PART 1.0 - GENERAL TOTAL PART 2.0 - REMOVALS TOTAL PART 3.0 - SANITARY SEWER TOTAL PART 4.0 - WATER MAIN TOTAL PART 5.0 - STORM SEWER TOTAL PART 6.0 - SURFACE WORK TOTAL PART 7.0 - LANDSCAPING					\$ 80,000.00  \$ 14,595.00  \$ 110,565.00  \$ 89,850.00  \$ 60,948.00  \$ 239,466.00  \$ 24,425.00
<b>SUBTOTAL</b>					\$ 619,849.00
<b>Engineering (10%)</b>					\$ 70,000.00
<b>Contingency (25%)</b>					\$ 160,000.00
<b>GRAND TOTAL (EXCL. GST)</b>					<b>\$ 779,849.00</b>
<b>NOTE:</b> Subtotals and Grand Total rounded to nearest \$10,000.					

<p style="text-align: center;"><b>Opinion of Probable Cost</b>  <b>54th Avenue to North of 55th Avenue</b></p>  <p><b>Associated Engineering</b></p>		<p><i>Client</i></p> <p>Town of Bentley</p> <p><i>Project</i></p> <p><b>50th Street Functional Design</b></p> <p><i>Subject</i></p> <p>Proj. No.: 2023-3666      Date: October 2023</p>			
Item	Description	Unit	Total	Unit Price	Extension
1.0	<b>GENERAL</b>				
1.1	Contract Requirements (Mobilization, Demobilization, Bonding, Insurance, Traffic Control, Temporary Works etc.)	LS	1	\$70,000.00	\$ 70,000.00
1.2	Survey	LS	1	\$10,000.00	\$ 10,000.00
<b>TOTAL PART 1.0 - GENERAL</b>					<b>\$ 80,000.00</b>
2.0	<b>REMOVALS</b>				
2.1	Remove and Dispose Concrete Monowalk (c/w curb)	m <sup>2</sup>	137	\$35.00	\$ 4,795.00
2.2	Remove and Dispose Asphalt	m <sup>3</sup>	110	\$50.00	\$ 5,500.00
2.3	Remove and Dispose Granular Road Structure	m <sup>3</sup>	290	\$10.00	\$ 2,900.00
2.4	Remove and Dispose Granular Base (Monowalk)	m <sup>3</sup>	20	\$10.00	\$ 200.00
2.5	Remove and Dispose Signs and Site Furnishings	LS	1	\$500.00	\$ 500.00
2.6	Remove and Dispose Vegetation	LS	1	\$1,500.00	\$ 1,500.00
<b>TOTAL PART 2.0 - REMOVALS</b>					<b>\$ 15,395.00</b>
3.0	<b>SANITARY SEWERS</b>				
3.1	Trenching and Backfill (Depth to Invert)				
	.1 0 m to 4 m	m	120	\$150.00	\$ 18,000.00
3.2	Pipe Zone Material				
	.1 Class B for 200 mm Dia. Main	m	120	\$50.00	\$ 6,000.00
3.3	Over-excavation	m <sup>3</sup>	54	\$70.00	\$ 3,780.00
3.4	Supply and Install Sanitary Sewer Main				
	.1 250 mm Dia. PVC DR35	m	120	\$300.00	\$ 36,000.00
3.5	Supply and Install Manholes				
	.1 1200 mm I.D.	vm	3	\$2,000.00	\$ 6,000.00
	.2 Type F-80 Frame and Cover	ea	1	\$800.00	\$ 800.00
3.6	Sanitary Service				
	.1 100 mm Dia. PVC DR35	ea	7	\$6,000.00	\$ 42,000.00
3.7	CCTV Sewer Inspection				
	.1 Construction Completion	m	120	\$15.00	\$ 1,800.00
	.2 End of Warranty Period	m	120	\$15.00	\$ 1,800.00
<b>TOTAL PART 3.0 - SANITARY SEWER</b>					<b>\$ 116,180.00</b>
4.0	<b>WATER MAINS</b>				
4.0	<b>WATER MAINS</b>				
4.1	Trenching and Backfill (Depth to Invert)				
	.1 0 m to 4 m	m	120	\$150.00	\$ 18,000.00
4.2	Pipe Zone Material				
	.1 Class B for 200 mm Dia. Main	m	120	\$50.00	\$ 6,000.00
4.3	Over-excavation	m <sup>3</sup>	180	\$70.00	\$ 12,600.00
4.4	Supply and Install Sanitary Sewer Main				

<p style="text-align: center;"><b>Opinion of Probable Cost</b>  <b>54th Avenue to North of 55th Avenue</b></p>  <p><b>Associated Engineering</b></p>		<p><i>Client</i></p> <p>Town of Bentley</p> <p><i>Project</i></p> <p><b>50th Street Functional Design</b></p> <p><i>Subject</i></p> <p>Proj. No.: 2023-3666      Date: October 2023</p>			
Item	Description	Unit	Total	Unit Price	Extension
4.5	.1 200 mm Dia. PVC DR35 Supply and Install Fittings c/w Thrust Blocking .1 Tees .2 Crosses .3 Valves .4 Elbows	m  ea  ea  ea  ea	120  1  2  \$4,000.00  \$4,000.00  \$5,000.00  \$4,000.00	\$75.00  \$4,000.00  \$4,000.00  \$10,000.00  \$ -	\$ 9,000.00  \$ 4,000.00  \$ -  \$ 10,000.00  \$ -
4.6	Water Service c/w CC	ea	7	\$1,600.00	\$ 11,200.00
4.7	.1 100 mm Dia. PVC DR35 Tie-in to existing Watermain	ea	3	\$5,000.00	\$ 15,000.00
<b>TOTAL PART 4.0 - WATER MAIN</b>					<b>\$ 85,800.00</b>
5.0	<b>STORM SEWER</b>				
5.2	.1 0 m to 4 m	m	116	\$150.00	\$ 17,400.00
5.3	Pipe Zone Material	m	116	\$50.00	\$ 5,800.00
5.4	.1 Class B for 250 mm Dia. Main	m <sup>3</sup>	174	\$70.00	\$ 12,180.00
5.5	Over-excavation				
5.6	Supply and Install Storm Sewer Main	m	116	\$75.00	\$ 8,700.00
5.7	.1 250 mm Dia. PVC DR35				
5.8	Supply and Install Manholes	vm	3	\$2,000.00	\$ 6,000.00
5.9	.1 1200 mm I.D.	ea	1	\$800.00	\$ 800.00
5.6	.2 Type F-80 Frame and Cover				
5.7	Remove and Dispose Existing Catch Basins	ea		\$2,500.00	\$ -
5.8	Supply and Install Catch Basins c/w 250mm lead	ea	3	\$4,000.00	\$ 12,000.00
5.9	500 dia. 20m long Culvert Outlet c/w End Treatment	ea	0	\$10,000.00	\$ -
5.0	CCTV Sewer Inspection				
5.1	.1 Construction Completion	m	116	\$15.00	\$ 1,740.00
5.2	.2 End of Warranty Period	m	116	\$15.00	\$ 1,740.00
<b>TOTAL PART 5.0 - STORM SEWER</b>					<b>\$ 66,360.00</b>

<p style="text-align: center;"><b>Opinion of Probable Cost</b>  <b>54th Avenue to North of 55th Avenue</b></p> 		<p><i>Client</i></p> <p>Town of Bentley</p> <p><i>Project</i></p> <p><b>50th Street Functional Design</b></p> <p><i>Subject</i></p> <p>Proj. No.: 2023-3666      Date: October 2023</p>			
Item	Description	Unit	Total	Unit Price	Extension
<b>6.0</b>	<b>SURFACE WORK</b>				
6.1	Subgrade Preparation				
	.1 300 mm Depth	m <sup>2</sup>	2,066	\$ 4.00	\$ 8,264.00
	.2 150 mm Depth	m <sup>2</sup>	465	\$ 2.00	\$ 930.00
6.2	Granular Base				
	.1 20 mm Minus Base Gravel - 250 mm Depth	m <sup>3</sup>	520	\$ 95.00	\$ 49,400.00
	.2 20 mm Minus Base Gravel - 150 mm Depth	m <sup>3</sup>	70	\$ 95.00	\$ 6,650.00
6.3	Asphalt Paving				
	.1 60 mm Base Lift	m <sup>3</sup>	124	\$ 30.00	\$ 3,718.80
	.2 40 mm Final Lift	m <sup>3</sup>	83	\$ 20.00	\$ 1,652.80
	.4 Yellow Centerline	m	192	\$ 10.00	\$ 1,920.00
	.5 Cross Walks and Stop Bars	LS	1	\$ 1,000.00	\$ 1,000.00
	.6 Parking Delineation	m	30	\$ 10.00	\$ 300.00
6.4	Concrete				
	.1 Curb and Gutter	m	403	\$ 160.00	\$ 64,480.00
	.2 Concrete Sidewalk (inc. lane and driveway access)	m <sup>2</sup>	404	\$ 210.00	\$ 84,840.00
	.3 Para Ramps	ea	4	\$ 500.00	\$ 2,000.00
<b>TOTAL PART 6.0 - SURFACE WORK</b>					<b>\$ 225,155.60</b>
<b>7.0</b>	<b>LANDSCAPING</b>				
7.1	Plant Material				
	.1 60mm Caliper Deciduous Tree	ea.	2	\$ 650.00	\$ 1,300.00
	.2 Shrubs	ea.		\$ 70.00	\$ -
	.3 Perennials and Grasses	ea.	26	\$ 40.00	\$ 1,040.00
	.4 Sod Over 100mm Depth Topsoil	m <sup>2</sup>	455	\$ 25.00	\$ 11,375.00
7.2	Site Furnishings				
	.1 Waste Receptacle	ea.	0	\$ 1,500.00	\$ -
	.2 Bike Racks	ea.	0	\$ 1,000.00	\$ -
	.3 Benches	ea.	0	\$ 2,000.00	\$ -
	.4 Planters	ea.	2	\$ 500.00	\$ 1,000.00
	.5 Post and Rail Fence	m	0	\$ 500.00	\$ -
7.3	Maintenance				
	.1 Watering, pruning and weeding as required	yea.	2	\$ 3,000.00	\$ 6,000.00
<b>TOTAL PART 7.0 - LANDSCAPING</b>					<b>\$ 20,715.00</b>

<p style="text-align: center;"><b>Opinion of Probable Cost</b>  <b>54th Avenue to North of 55th Avenue</b></p> <p style="text-align: center;">  <b>Associated Engineering</b> </p>	<i>Client</i>				
	Town of Bentley				
	<i>Project</i>				
	<b>50th Street Functional Design</b>				
	<i>Subject</i>				
	Proj. No.: 2023-3666      Date: October 2023				
Item	Description	Unit	Total	Unit Price	Extension
	TOTAL PART 1.0 - GENERAL				\$ 80,000.00
	TOTAL PART 2.0 - REMOVALS				\$ 15,395.00
	TOTAL PART 3.0 - SANITARY SEWER				\$ 116,180.00
	TOTAL PART 4.0 - WATER MAIN				\$ 85,800.00
	TOTAL PART 5.0 - STORM SEWER				\$ 66,360.00
	TOTAL PART 6.0 - SURFACE WORK				\$ 225,155.60
	TOTAL PART 7.0 - LANDSCAPING				\$ 20,715.00
	<b>SUBTOTAL</b>				\$ 609,605.60
	Engineering (10%)				\$ 70,000.00
	Contingency (25%)				\$ 160,000.00
	<b>GRAND TOTAL (EXCL. GST)</b>				\$ 769,605.60
	<b>NOTE:</b> Subtotals and Grand Total rounded to nearest \$10,000.				

## APPENDIX D - SUMMARY OF PUBLIC ENGAGEMENT MEMO





Client:	Marc Fortais, CAO Town of Bentley	Page: 1 of 4
Date:	July 3, 2023	File No.
Subject:	50 <sup>th</sup> Street Functional Design Public Engagement Summary	Project: 2023-3666
By:	Jason Bennett, CSLA	Checked: Nelson Dos Santos

## 1 BACKGROUND

A public open house was held by the Town of Bentley, on June 14th, with a representative from Associated Engineering in attendance to answer questions and collect feedback on the 50th Street Redesign project. During the engagement session, a preliminary functional design was presented which consisted of 2 design boards identifying the opportunities and constraints related to potential improvements along the corridor. Key design components, presented as part of the preliminary functional plan, included:

- narrowed roadway width (modified City of Red Deer/ Red Deer County Residential Collector cross section),
- widened sidewalk along the west side,
- realigned sidewalk along the east side,
- additional landscaped space between back of walk and ROW,
- parallel parking on both sides of the street, and
- expanded curb bulges at all intersections.

Approximately 35-40 residents attended the session throughout the evening. A paper survey, consisting of 5 questions was provided to each attendee so that they may offer their input into the design, with a total of 8 completed surveys collected at the event or later delivered to the Town office. The survey was also hosted digitally for a period of 2 weeks via a link on the Town's website and social media. A total of 39 digital responses were collected at the time the survey closed on June 30th, 2023, with all but 7 of the responses from residents who did not attend the open house.

The following is a record of the common themes we heard during the open house and subsequent engagement survey with regards to how the corridor is used and the overall vision for the redesign.

## 2 COMMUNITY FEEDBACK

### Question 1 – What is your priority for the redesign of 50th Street?

#### What We Heard...

The most frequent responses to this question were: safety and replacement sidewalks, with additional parking, traffic calming, and less congestion also noted as priorities. In general, respondents felt the redesign of 50th Street should be pedestrian oriented and safe, either through replacement of existing



sidewalks (where required) or further enhancements of the streetscape to address congestion. The addition of parking stalls along the corridor was noted frequently, possibly as a measure to address concerns of vehicle congestion at the intersection of 50th Avenue, near the arena, and during market days. Numerous responses questioned the need for additional improvements when the existing sidewalks and grading are what really need to be addressed.

#### What this means for the design...

The design should focus on a comfortable and safe pedestrian corridor. This could include wider sidewalks, shortened intersection crossings (curb bulges), and additional seating and rest areas. Where possible current parking should be expanded to provide additional stalls. Additional planting should also be explored with consideration of future maintenance requirements.

The Town could also investigate opportunities to expand parking lots at high demand locations such as the arena.

#### Question 2 – How do you currently use 50th Street?

#### What We Heard...

The most frequent responses to this question were: walking for recreation or access to activities/businesses, driving to access activities/ business, and parking. One-third of the respondents noted they currently live on the street and use it for both residential parking and access to activities and businesses. Several respondents reported that they prefer to avoid driving in the area at times due to congestion around the arena and intersection of 50th Avenue. The preference noted for walking is likely due to both the relatively short trip from nearby residential areas as well as limited available parking during popular events such as the market and wing night.

#### What this means for the design...

The design should focus on providing a comfortable and safe corridor for pedestrians who use it for recreation and access to local amenities. This could include wider sidewalks, shortened intersection crossings, and additional seating and rest areas.

Where possible, existing parking facilities should be expanded to provide additional stalls.

#### Question 3 – What are some current issues with 50th Street that should be addressed as part of this redesign?

#### What We Heard...

The most frequent responses to this question were: condition of the sidewalks, available parking, maintenance of sidewalks and adjacent landscaping. Lighting was also noted by several respondents but may be limited to specific locations and not the entire corridor. It is very clear that residents feel the replacement of the existing sidewalks, specifically along the northeast portion of the corridor, is a high priority. Comments regarding parking typically note congestion in high activity areas (arena and the intersection of 50th Avenue) and the possible need for additional parking lot development. Lack of signage and enforcement of parking issues (angled in an area designated for parallel, for example) was



also noted and will be an important factor if the parking orientation was to change. Maintenance of existing sidewalks and landscaping was also mentioned frequently, and future maintenance requirements should be considered in the final design.

#### What this means for the design...

The design should address the condition of existing sidewalks and available parking. The focus should be on providing a comfortable and safe corridor for pedestrians and where possible, expand existing parking facilities to provide additional stalls. Future operational and maintenance requirements should also be considered to ensure sidewalks and parking areas are easily cleared in the winter months, furnishings are resilient, and planting is drought tolerant and limited to key project areas.

#### Question 4 – What features would you like to see in the redesign of 50th Street?

##### What We Heard...

The most frequent responses to this question were: wider sidewalks, benches and sitting areas, additional planting, and lighting. In general, respondents felt the redesign of 50th Street should be pedestrian oriented, either through replacement of existing sidewalks (where required) or further enhancements to improve comfort and safety, including benches, lighting, and planting. Many responses also suggested limiting the upgrades to fixing existing sidewalks and improved maintenance as priorities. Respondents who provided comments such as these, noted the potential cost as their primary concern regarding upgrades to the corridor. In response to this question, additional parking and traffic calming were not frequently noted as desired features of the redesign and when parking was suggested, it was in the form of expanded parking lots to address congestion.

##### What this means for the design...

The design should focus on a comfortable and safe pedestrian corridor. At a minimum, this would include replacement and widening of existing sidewalks. Additional features such as shortened intersection crossings (curb bulges), seating areas, and landscape planting should also be considered. Additional pedestrian level lighting could also be provided along the west side of the corridor if overhead lighting along the east side is determined to be insufficient.

The Town could also investigate opportunities to expand parking lots at high demand locations such as the arena.

#### Question 5 – What theme would you like to see in the redesign of 50th Street?

##### What We Heard...

The most frequent responses to this question were: highlight natural materials, prefer not to have a theme, and western motifs. There was a noted preference for the design of the corridor to be timeless and stand on its own and not be too thematic, simpler is better. Where “no theme” was indicated, respondents preferred either a simpler approach such as replacing the existing sidewalks or minimal enhancements. It was noted by several respondents that more could be done to identify the street as Dick Damron Drive, for example replacing existing street signs with something more decorative. Music



and the legacy of Dick Damron were also noted as potential themes by some respondents, but others preferred to see this limited to improved signage or public art (murals).

### What this means for the design...

The design should focus on inclusion of natural materials such as wood, stone, and planting to suit the rural character of the corridor. Inclusion of the Town's branding should still be included on pageantry items such as banner poles and furnishings where possible. Overall, the preference is for a simpler approach to the redesign with a focus on landscaping and replacement of the existing sidewalks.

### 3        NEXT STEPS

The next step for the project is to meet with the Town to review the results of public engagement and confirm the design principles so the functional concept plan can be finalized. This meeting is scheduled to take place the week of July 3<sup>rd</sup>. Once the design principles and approach have been confirmed, Associated Engineering will begin refinement of the functional plan presented at the open house and development of representative cross sections. Three cross sections will be developed to illustrate the corridor design and will cover the "urban" portion of the project at 50<sup>th</sup> Avenue, the "semi-rural" section at the arena and residences, and the "rural" section at 55<sup>th</sup> Avenue.

Yours truly,

Jason Bennett, CSLA  
Senior Landscape Architect

## APPENDIX E - STORMWATER MASTER PLAN

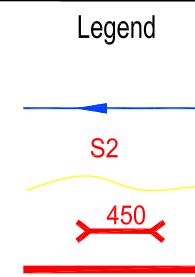




ORIGINAL SHEET - ANSI B



**Stantec Consulting Ltd.**  
600-4808 Ross Street  
Red Deer AB Canada  
T4N 1X5  
Tel. 403.341.3320  
Fax. 403.342.0969  
www.stantec.com



**Notes**

FLOW DIRECTION  
DRAINAGE DITCH  
CATCHMENT ID  
3.0m CONTOUR INTERVAL  
CULVERT & DIAMETER (mm)  
CATCHMENT BOUNDARY

0 100 300 500m  
1:10000

**TOWN OF BENTLEY**  
**STORMWATER MANAGEMENT PLAN**  
**FOR BENTLEY ROADS PROGRAM**  
Figure No.  
**1.1**  
Title

**EXISTING DRAINAGE PATTERNS**



WHERE PEOPLE ARE THE KEY

## HIGHLIGHTS OF THE REGULAR COUNCIL MEETING OCTOBER 12, 2023

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### **COMMITTEE OF THE WHOLE MEETING NOTES**

The following recommendations from the Committee of the Whole meeting held on October 3, 2023 received Council approval:

- The presentation and discussion with RCMP and Rural Red Deer Restorative Justice Program representatives was received for information.
- The County Manager was directed to prepare a report and recommendation regarding amendments to the Library Funding Policy for consideration at a future Council meeting.
- The County Manager was directed to revise the Councillor Remuneration Policy for consideration at a future Council meeting.
- The County Manager was directed to prepare a Council Performance Review format/process for consideration at a future Council Meeting.
- The Gull Lake Regional Trail presentation was received for information and the County Manager was directed to prepare a report and recommendation regarding the Gull Lake Regional Trail for consideration at a future Council Meeting.
- The presentation regarding Data Processing Centers was received for information.

### **SUBDIVISION S-021-23 BOUNDARY ADJUSTMENT**

By resolution of Council, a request to adjust the boundaries of Subdivision S-021-23 was approved, subject to conditions. The boundary adjustment will increase the size of five existing residential lots within the subdivision.

### **NUMBER OF DWELLINGS ON AGRICULTURAL 'A' DISTRICT PARCELS**

The Terms of Reference for the Number of Dwellings on Agricultural 'A' District Parcels received Council endorsement. A meeting to seek public feedback regarding dwellings on Agricultural 'A' District parcels will be held on November 29, 2023 at 7:00 p.m. at the Lacombe County Office.

### **POLICY EN (10) RURAL CRIME WATCH**

Amendments to Policy EN (10) Rural Crime Watch received Council approval.

### **REQUEST FOR ROAD CLOSURE 109 NY**

Road Plan 109 NY is a road allowance within the Pt. NE 1/4 07-41-01-W5M. In the summer of 2023, the road was realigned. Part of the road must be closed to provide for the registration of a new road plan for the new road alignment.

The proposal was circulated to interested parties for comment; there was no response from adjacent landowners and the affected utility companies responded with no concerns.

By resolution of Council, the closure of Road Plan 109 NY was approved. To complete the road closure process, the request will be forwarded to Alberta Transportation for approval and then registered with Land Titles.



WHERE PEOPLE ARE THE KEY

### **REQUEST FOR ROAD CLOSURE AND SALE 1756 CO**

Road Plan 1756 CO is a road diversion within Pt. NW 33-41-22 W4M. Daniel Hucal is requesting the closure and sale of Road Plan 1756 CO so it can be consolidated with his property. The proposed closure will see 1.03 acres closed and consolidated with the Pt. NW 33-41-22 W4M (157.38 acres).

The County Manager was authorized to proceed with the closure of Road Plan 1756 CO. The proposal will be circulated to interested parties for comment, and a report on the comments and cancellation request will be presented at the November 14, 2023 Council meeting.

### **BROWNFIELD SOLAR OPPORTUNITY – SUNALTA POWER INC.**

SunAlta Power Inc. has requested the assistance of Lacombe County to identify a suitable site in the County for the development of a brownfield solar facility. SunAlta Power Inc. is seeking sites that are suitably zoned for solar facilities, are minimally 25 acres in size, have flat or low slope topography, are in close proximity to an electrical distribution grid, and are available for purchase or 25-year lease. The request was received for information.

### **POLICY AD (22) FCSS Programs**

Council approved proposed changes to Policy AD (22) FCSS Programs.

### **HIGHWAY 11 & 766 INTERSECTION – TRAFFIC CIRCLE**

Lacombe County will provide a letter to the Town of Eckville indicating strong and continued support for the construction of a roundabout at the intersection of Highway 11 and Highway 766.

### **MEETING WITH THE MINISTER OF ENERGY RE: ALPHABOW**

In response to an invitation from Ponoka County, Council will provide support and representation for a potential meeting with the Honorable Brian Jean, Minister of Energy and Minerals, to discuss concerns regarding the Alberta Energy Regulator and AlphaBow.

### **BYLAW NO. 1397/23 SOUTHEAST BENTLEY AREA STRUCTURE PLAN**

Bylaw No. 1397/23, a bylaw of Lacombe County to adopt the Southeast Bentley Area Structure Plan, received first reading. A public hearing for Bylaw No. 1397/23 will be held on November 14, 2023 at 9:00 a.m.

### **RED DEER RIVER MUNICIPAL USERS GROUP**

By resolution, Council expressed support for the Red Deer River Municipal Users Group in their funding application for a feasibility study to look at options for the Red Deer River Sub-Basin to meet future demands of the region.

**Next Regular Council Meeting is  
October 26, 2023 – 9:00 a.m.**

**Next Committee of the Whole Meeting is  
December 5, 2023 – 9:00 a.m.**

**Lacombe County Administration Building**

**\*\*For more details from Lacombe County Council meetings, please refer to the meeting minutes. All meeting minutes are posted on the website ([www.lacombeCounty.com](http://www.lacombe縣.com)) after approval.**