AGENDA
Committee of the Whole
November 12, 2025
10:00 a.m.

---

1. CALL TO ORDER

2. CHANGES TO AGENDA & ADOPTION OF AGENDA

3. CONFIRMATION OF MINUTES

4. DELEGATIONS

4.1 Theresa Bernado, Assistant Manager, Vegreville & District FCSS - 10:00 a.m.

4.2 Kathy Dmytriw, EDO, Crossroads - 10:15 a.m.

5. REPORTS FOR DISCUSSION

5.1 Community Standards Bylaw

Administration Presenter:
Davin Gegolick, Director of Planning & Community Services

5.2 Lavoy Asset Management Plan

Administration Presenter:
Norm De Wet, Director of Operations

6. COUNCILLOR REQUESTS (INFORMATION / PROGRAM REQUESTS)

6.1 Division Reports (Verbal)

6.2 Councillor Request Report

7. CLOSED SESSION

8. OPEN SESSION

9. MOTIONS ARISING OUT OF THE CLOSED SESSION

10. ADJOURNMENT

Committee of the Whole
Meeting Minutes

October 15, 2025
9:00 a.m.

Members Present:	Reeve Roger Konieczny, Division 3 Deputy Reeve Kevin Bentley, Division 7 Councillor Joey Nafziger, Division 1 Councillor Eric Anderson, Division 2 Councillor Cliff Wowdzia, Division 4 Councillor Tara Kuzio, Division 5 Councillor Carl Ogrodnick, Division 6
Administration Present:	Pat Podoborozny, Chief Administrative Officer Jason Warawa, Director of Corporate Services Norm De Wet, Director of Operations Davin Gegolick, Director of Planning & Community Services Mike Fundytus, Director of Protective Services Audra Kropielnicki, Executive Coordinator

1. CALL TO ORDER

Reeve Konieczny called the meeting to order at 9:00 a.m.

2. CHANGES TO AGENDA & ADOPTION OF AGENDA

2025-W087
Moved by: Councillor Kuzio
THAT the Agenda for the October 15, 2025 Committee of the Whole meeting be adopted as presented.

Carried

3. CONFIRMATION OF MINUTES

2025-W088
Moved by: Councillor Wowdzia
THAT the September 10, 2025 Committee of the Whole meeting minutes be adopted as presented.

Carried

4. DELEGATIONS

4.1 Edward Gushnowski

External Presenters:
Edward Gushnowski

4.2 James McCrimmon

External Presenters:
James McCrimmon

Reeve Konieczny recessed the meeting at 9:45 a.m.

Reeve Konieczny reconvened the meeting at 9:54 a.m.

5. REPORTS FOR DISCUSSION

6. COUNCILLOR REQUESTS (INFORMATION/PROGRAM REQUESTS)

6.1 Divisional Reports
6.2 Councillor Request Report

2025-W089
Moved by: Councillor Nafziger
THAT the Divisional Reports and Councillor Request Report be accepted as presented.
Carried

7. CLOSED SESSION

8. OPEN SESSION

9. MOTIONS ARISING OUT OF CLOSED SESSION

10. ADJOURNMENT

Reeve Konieczny declared the meeting adjourned at 10:10 a.m.

_____
Reeve

_____
Chief Administrative Officer

COMMITTEE OF THE WHOLE
DISCUSSION PAPER

Topic: Community Standards Bylaw
Date: November 12, 2025

Background

We continue to receive complaints regarding community standards, including unsightly or nuisance properties, vehicle parking, and related concerns. While enforcement is both costly and time-consuming, we are actively addressing unsightly properties through the Land Use Bylaw, in accordance with the Municipal Government Act and Council direction.

Information for the Committee

Currently, 60% of municipalities in District 5 have a bylaw—separate from their Land Use Bylaw—for addressing nuisance and unsightly properties. With the recent hiring of a part-time Bylaw Enforcement Officer, we now have additional capacity to respond to complaints and enforce municipal bylaws.

Introducing a Community Standards Bylaw could further strengthen enforcement by including specific provisions for issuing tickets and defining enforcement powers, particularly targeting nuisance and unsightly property concerns in hamlets and acreage subdivisions.

District 5 Municipality	Community Standards Bylaw
Beaver County	Yes
Camrose County	No
MD of Bonnyville	No, but have a Public Safety Bylaw
Flagstaff County	No
Lac La Biche County	Yes
Lamont County	No, but have Unsightly Premises Bylaw
Smoky Lake County	No, but have Nuisances/Unsightly Premises Bylaw, Animal/Dog Control Bylaws, RV Bylaw
County of St. Paul	No, but have Littering, Unsightly Conditions, Noise Control, and Dog Control Bylaws
MD of Provost	No, but have Unsightly Premises Bylaw
Strathcona County	Yes
County of Two Hills	No
County of Vermilion River	No
MD of Wainwright	No
RM of Wood Buffalo	Yes

Discussion Questions:

1. Does the Committee of the Whole wish for administration to consider a Community Standards Bylaw?
2. If yes, is any further information required?
3. If no, can we agree that we are satisfied with the current status-quo?

COMMITTEE OF THE WHOLE
DISCUSSION PAPER

Topic: Lavoy Asset Management Plan
Date: November 12, 2025

Background

Administration engaged MPE Engineering to prepare a Utility Asset Management Plan for the Hamlet of Lavoy. The study reviewed underground utilities, stormwater drainage, roads, sidewalks, and key infrastructure such as the water pumphouse, reservoir, and bulk water station. The purpose was to identify existing deficiencies, assess condition, and create a practical 10-Year Capital Plan. This plan provides the foundation for long-term renewal of Lavoy's underground utilities and surface infrastructure, allowing Council to plan and budget strategically over the next 10 to 15 years.

Information for the Committee – Key Findings

Water Distribution System

- The water distribution network was built mainly in the early 1970s and is constructed entirely of asbestos cement (AC) pipe, which has a maximum service life of 75 years.
- Eight (8) hydrants are not draining properly and should be fully replaced.
- Replacement of aging valves.
- MPE also recommends the County prioritize the full removal and replacement of the existing AC watermain with new PVC watermain.

Sanitary Sewer System

- The sanitary mains are assumed to be PVC, also installed in the mid-1970s, with approximately 25 years of life remaining.
- A 2021 CCTV assessment identified a dislodged gasket on Railway Ave (east of Main Street) and three minor sags in a non-serviced area.
- Regular CCTV inspections every 5–6 years are recommended to monitor condition before significant rehabilitation is needed.

Roads & Sidewalks

- Pavement conditions range from fair to failed, with multiple segments needing full reconstruction.
- Road renewal priorities should align with underground utility replacements to maximize cost efficiency.

Pumphouse & Water Reservoir

- The pumphouse is in good condition, recently upgraded with a new generator and SCADA controls.
- Remaining galvanized piping and aging vertical turbine pumps should be monitored and planned for replacement. Administration is currently working on pricing.

Bulk Water Station

- Installed in 2012, the station is performing well but nearing electronic component end-of-life.
- The electronic component replacement is estimated at $15,000, and annual backflow certification costs about $2,000.
- Full system replacement should be anticipated by 2032.

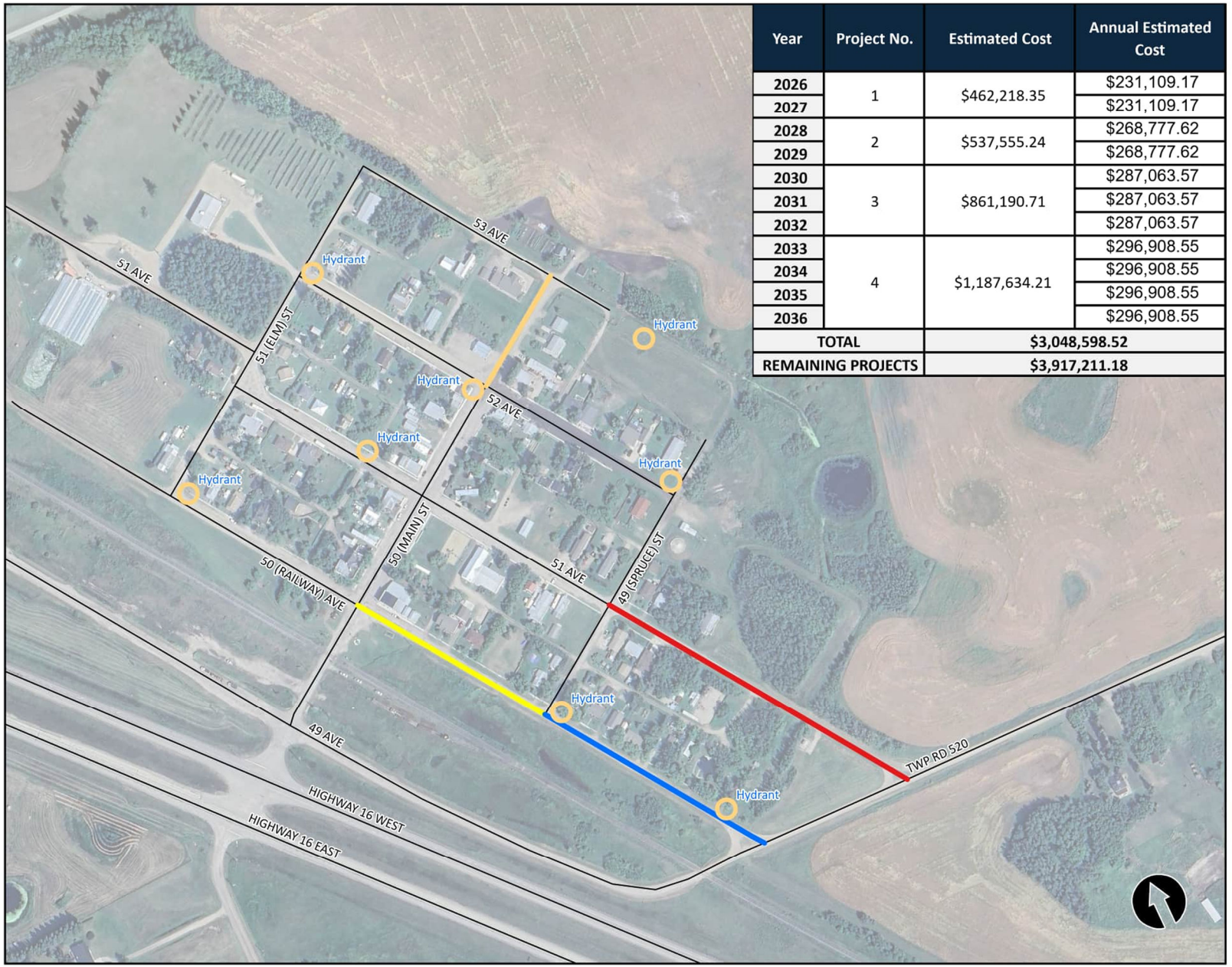
10-Year Capital Plan Overview (2026–2036)

Year	Project No.	Estimated Cost	Annual Estimated Cost	Project Description
2026	1	$462,218.35	$231,109.17	Remove and replace eight (8) hydrants along the water distribution system. All eight (8) hydrants have been identified as “not draining back”.
2027			$231,109.17	Remove and replace existing 150m AC watermain and complete full road reconstruction along 50 St (52 Ave to 53 Ave)
2028	2	$537,555.24	$268,777.62	Remove and replace existing 150mm AC watermain and complete full road reconstruction along 50 Ave (49 St to 50 St).
2029			$268,777.62	
2030	3	$861,190.71	$287,063.57	Remove and replace existing 150mm AC watermain and complete full road reconstruction along 50 Ave (Township Rd 520 to 49 St).
2031			$287,063.57	
2032			$287,063.57	
2033	4	$1,187,634.21	$296,908.55	Remove and replace existing 150mm AC watermain and complete full road reconstruction along 51 Ave (Township Rd 520 to 49 St)
2034			$296,908.55	
2035			$296,908.55	
2036			$296,908.55	
TOTAL		**$3,048,598.52**		
REMAINING PROJECTS		**$3,917,211.18**		

Summary

The renewal of Lavoy's underground and above-ground infrastructure is essential to maintain reliable service delivery for residents. Much of the hamlet's utility network, including the water distribution system, sanitary sewer, and supporting facilities, was installed in the 1970s and is now nearing the end of its expected service life.

By renewing these systems in a planned and staged approach, the County can maintain existing levels of service, and provide long-term financial stability.



Year	Project No.	Estimated Cost	Annual Estimated Cost
2026	1	$462,218.35	$231,109.17
2027			$231,109.17
2028	2	$537,555.24	$268,777.62
2029			$268,777.62
2030	3	$861,190.71	$287,063.57
2031			$287,063.57
2032			$287,063.57
2033	4	$1,187,634.21	$296,908.55
2034			$296,908.55
2035			$296,908.55
2036			$296,908.55
TOTAL		$3,048,598.52	
REMAINING PROJECTS		$3,917,211.18	

Replacement Year
- 2026-2027
- 2028-2029
- 2030-2032
- 2033-2036

0 100 m

Scale: 3,000
(ANSI B 11"x17")

1. **Background Layers:** Google Road Map (Standard); Google; Google Earth Satellite; Google
2. **Data Sources:** Altalis, NRCAN, Statistics Canada
3. **Coordinate System:** NAD 1983 UTM Zone 12N
4. **Note:** Culvert material is CSP unless otherwise noted.

a division of Englobe

TITLE
10 Year Capital Plan - Replacement Year
Asset Management Plan
Hamlet of Lavoy

LOCATION	REVIEW
County of Minburn No. 27 Alberta, CANADA	Drawn by DM on 03 Oct 2025 Review by SS on 03 Oct 2025

JOB	FIGURE	PAGE	DATE
5265-001	5	1 / 1	03 Oct 2025

Recommendation

THAT the Committee of the Whole receive the Hamlet of Lavoy Utility Asset Management Plan for information, and that Administration brings forward budget options as part of the Capital Plan for County Council's consideration.

Attachment:

Hamlet of Lavoy – Utility Asset Management Plan

a division of Englobe

Draft Report for:

COUNTY OF MINBURN

Hamlet of Lavoy – Utility Asset Management Plan

Date: October 3, 2025
Project No. 5265-001-00

#101, 10630-172 Street
Edmonton, AB T5S 1H8
Phone: 780-486-2000

a division of Englobe

County of Minburn
4909-50 Street
Vegreville, Alberta
T9C 1R6

October 3, 2025
File: N:\5265\001\00\DR01

Attention: Norm De Wet, CLGM
Director of Operations

Dear Mr. De Wet:

Re: Hamlet of Lavoy – Utility Asset Management Plan

MPE a division of Englobe (MPE), is pleased to submit our draft report for the Hamlet of Lavoy Utility Asset Management Plan.

We appreciate the opportunity to provide our services for this project. Should you have any questions or require additional information, please contact the undersigned at 780-632-8720 or mdowhun@mpe.ca.

Yours truly,

MPE a division of Englobe

Mike Dowhun, C.Tech.
Project Manager

MD/ss

Enclosure

Table of Contents

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

1.0 INTRODUCTION

1.1 Overview

The County of Minburn (County) requires a Utility Asset Management Plan for the Hamlet of Lavoy (Hamlet) that will identify utility infrastructure deficiencies, summarize the recommended upgrades and rehabilitation and provide a 10-Year plan for the County to address the identified deficiencies. To complete the Utility Asset Management Plan and develop a 10-Year Capital Plan, MPE a division of Englobe (MPE), reviewed available infrastructure records and as-built drawings, completed a field survey for the roads and sidewalks within the Hamlet, and assessed the current state of the underground watermains, sanitary sewer mains and associated infrastructure, including stormwater infrastructure, to help determine project priorities. After discussions with the County, the 10-Year Capital Plan presented within this report will use an annual budget projection of $250,000 per year.

1.2 Study Scope

The focus of this assessment is to develop a Utility Asset Management Plan for the Hamlet, which will help address major utility infrastructure deficiencies based on the projected annual budget. MPE reviewed all available information pertaining to the Hamlet's underground utilities, roads and sidewalks to identify the high-priority pieces of infrastructure. The following scope was undertaken by MPE in completing the Asset Management Plan:

- **Condition Reporting**: MPE completed an assessment of the current state of underground watermains and associated infrastructure, along with stormwater drainage infrastructure, through available records and as-built drawings. MPE also reviewed previous assessments completed of the Hamlet's underground sanitary sewer system. Recommendations for upgrades to the water, sanitary and stormwater infrastructure have been included in the overall 10-Year Capital Plan.
- **Road and Sidewalk Field Study**: MPE completed a field survey of the roads and sidewalks within the Hamlet of Lavoy and compiled the collected data into an overall plan for Road and Sidewalk Priorities, which is included in this report. Recommendations for road and sidewalk upgrades have been included in the overall 10-Year Capital Plan.
- **Water Reservoir, Bulk Water Station, & Wet-Well Condition Assessment**: MPE completed an on-site inspection of the Hamlet's water reservoir and pumps, the water truck-fill station, and the sewage lagoon. During this inspection, the County informed MPE that the Hamlet's sewer system operates fully by gravity. As a result, there is no sewage lift station, sewage pumps or force main. Recommendations for upgrades to these infrastructure assets have been included in the overall assessment.

1.3 Objective

The objective of this assessment is to complete a Utility Asset Management Plan. A 10-Year Plan is included within the Utility Asset Management Plan that will allow for rehabilitation of high-priority water, sanitary, stormwater, road, and sidewalk infrastructure while adhering to the County's annual budget. The 10-Year Capital Plan provides a guide to how infrastructure could be replaced based on the most recent infrastructure information and priorities. The County is encouraged to revisit the 10-Year Capital Plan presented within this report as priorities and budgets change.

2.0 EXISTING INFRASTRUCTURE & UPGRADE PRIORITIES

2.1 Underground Utilities

2.1.1 Water Distribution System

The Hamlet of Lavoy receives its water through a 100mm PVC DR18 forcemain, a part of the Alberta Central East (ACE) Regional Waterline, that delivers potable water to the Hamlet's pump house. The water is then pumped into the distribution system, which consists of asbestos-cement (AC) pipes constructed primarily in the early 1970s.

From the as-built drawings provided by the County, MPE has made the following assumptions about the water distribution system:

- The water distribution system is comprised only of AC pipe.
- The watermains were primarily constructed in the early 1970s.
- For the purpose of this report, the maximum service life of AC pipe is 75 years.

MPE has consolidated all available information regarding the existing water distribution system into **Figure 1.0 – Water Distribution System-Existing Conditions** within **Appendix A – Underground Utilities: Existing Conditions**.

The County has not communicated any known breaks, pressure issues, or fire flow issues in the water distribution system. Assuming that the earliest watermain was installed in 1970, with a maximum service life of 75 years for AC pipe, the watermains in the Hamlet have 25 years of remaining operational use.

The water distribution system is generally in good condition; however, aging valves and hydrants should be replaced to ensure optimal performance. The County completed an inventory of the hydrants within the Hamlet and noted the following with outstanding concerns:

No.	Hydrant Location	Concern(s)
1.	50 St & 53 Ave (East)	Not draining back.
2.	49 St & 52 Ave	Not draining back.
3.	50 St & 52 Ave	Not draining back.
4.	51 St & 52 Ave	Not draining back. Leaking at top of hydrant.
5.	50 St & 51 Ave (West)	Not draining back.
6.	51 St & Railway (50) Ave	Not draining back.
7.	49 St & Railway (50) Ave	Not draining back. Turns very hard.
8.	Pine St & Railway (50) Ave	Not draining back.

MPE recommends the County prioritize the full removal and replacement of all hydrants listed above.

MPE recommends that the County create a maintenance and operations log of any known (past or present) watermain breaks, pressure, or fire flow issues. These issues are usually indicative of the AC pipe having reached its capacity and will allow for a strategized rehabilitation.

MPE also recommends the County prioritize the full removal and replacement of the existing AC watermain with new PVC watermain.

2.1.2 Sanitary Sewer System

Due to conflicting or limited data, MPE has made the following assumptions regarding the existing sanitary sewer system:

- The spatial data and as-built drawings provided by the County indicate that the existing sanitary sewer system is constructed of Vitrified Clay (VCT) pipe; however, the most recent assessment completed by BARR Engineering in 2021 indicates that it is comprised only of Polyvinyl Chloride (PVC) pipe. MPE has chosen to move forward with the most recent data from BARR Engineering and assume that all sanitary mains within the Hamlet of Lavoy are comprised of PVC pipe with an expected service life of 75 years.
- The as-built drawings supplied by the County are dated 1976. MPE has assumed that all sanitary mains were constructed in the mid-1970s, with select sections rehabilitated in 2019.

MPE has consolidated all available information regarding the existing sanitary system into **Figure 2.0 – Sanitary Collection System** within **Appendix A – Underground Utilities: Existing Conditions**. MPE recommends the County review **Figure 2.0 – Sanitary Collection System** and confirm that all information available to the County has been captured.

Following a closed-circuit television (CCTV) inspection in 2019 and subsequent select sanitary sewer repairs completed that same year, the County had an overall condition assessment of the Hamlet's sanitary sewer system completed in early 2021. Refer to **Appendix B – Previous Assessments**. The assessment was based on the 2019 CCTV inspection results and identified sanitary sections with outstanding concerns. The following have yet to be addressed:

1. A dislodged seal between MH-10 and MH-9, which is not impacting flow.
2. Three (3) isolated sags, approximately 3m in length, between MH-27 and MH-26.

MPE has considered Item 1 in the above list to be a higher priority than Item 2, as the sewer line between MH-27 and MH-26 is currently not in service.

It is recommended to inspect the sewer line between MH-10 and MH-9 with CCTV and determine if the dislodged gaskets can be removed by means of robotic equipment. If the gaskets cannot be removed remotely, then regular inspections of the upstream manhole(s) should be performed to ensure no blockages or back-ups are occurring.

The sewer line between MH-27 and MH-26 is located along 53 Avenue, which is undeveloped, and there appears to be no services connected to the line. Until development occurs along 53 Avenue, there is no need to repair the sags. This section of pipe can be televised at the time future development takes place and re-assessed to determine if the line requires spot repairs or a full replacement.

Assuming that the earliest sanitary mains were installed in 1970 and considering an expected service life of 75 years for PVC pipe, the remaining sanitary segments in the Hamlet have approximately 25 years of remaining operational use. MPE recommends that the County continue with a complete CCTV inspection of the lines within 5 to 6 years to re-assess the condition rating of each segment and confirm if the pipes are all PVC. Careful attention should be made to ensure the sewer lines' structural integrity is not deteriorating. The roundness of the pipes will play a role in determining if there are concerns with future collapse. Once a re-assessment is made, then an updated plan can be developed for repairs or replacements.

It should also be noted that if any future road improvements are scheduled prior to re-assessing the sewer lines, CCTV inspections should be conducted on the areas scheduled for road upgrades.

2.1.3 Stormwater Collection System

MPE completed a field survey of the existing stormwater infrastructure within the Hamlet of Lavoy. In general, the existing stormwater culverts appear in fair condition; however, along with the ditches, they are severely silted in and overgrown. Currently, most of the stormwater system is functioning highly under capacity, and areas are experiencing surcharging and localized flooding. Several residents expressed concern to MPE during our site inspection.

Overall, the stormwater system consists of five (5) catchbasins (CBs) and a series of HDPE, one PVC, and numerous Corrugate Steel Pipe (CSP) culverts varying from 150mm to 600mm in size.

The existing CBs are constructed of metal grates placed over top of shallow culverts. All CBs except one are silted in and are not operating at full capacity. Due to the limited depth of the bury, it is not possible to install standard CBs with sumps. MPE recommends that all CBs be cleaned and then regularly inspected and maintained.

Many of the culverts, especially those along 50 (Railway) Avenue east of 50 (Main) Street, are clogged with debris or have silted-in ends. Some culvert ends are damaged, again reducing capacity. MPE recommends cleaning all culverts and then conducting a thorough inspection to determine more accurate conditions. Regular inspections and maintenance will alleviate surcharging and localized flooding. **Figure 2.1 – Stormwater Infrastructure: Visual Inspections** provides a few photos of the existing culverts and ditches within the Hamlet, taken by MPE during the field survey.

Figure 2.1: Stormwater Infrastructure: Visual Inspections

Of primary concern is the flooding issue at 4924-52 Avenue. Water draining from west of this residence cannot properly drain due to restrictions downstream. The residents at this location have experienced flooding in the yard and garden area. Our observations indicate that two culverts are blocked at 4912-52 Avenue, and the ditch heading east is clogged with silt. MPE recommends the replacement of the two culverts and cleaning the ditch. It would be advisable to survey this area, as the elevations of the culverts and ditch may need to be adjusted to ensure the area drains properly.

It is also recommended to remove any trees and clean or re-grade all ditches within the Hamlet. Erosion matting and grass seed should be placed where topsoil is exposed to prevent premature siltation. Installing rip-rap on the ends of the larger culverts (400mm or larger) would help protect the ends. The extent of the siltation would have occurred over a long period, so once the ditches are cleaned, it would not be expected to repeat the process annually. MPE would recommend that an inspection be conducted after the spring thaw and prior to freeze-up. Clearing debris and silt around culverts and catchbasins as it builds up will prevent downstream siltation and maintenance costs.

MPE has compiled all information into **Figure 3.0 – Stormwater System-Existing Conditions** within **Appendix A – Underground Utilities: Existing Conditions**. This identifies the type of material, sizes, and location of the stormwater components, as well as the existing conditions.

2.2 Roads & Sidewalks

MPE completed a field survey of the roads, sidewalks and alleys within the Hamlet of Lavoy. Data from the survey has been incorporated into the County's existing Geographic Information System (GIS). **Table 2.1: Pavement Distress Index** presents the pavement distress index representing the presence of various surface distress (i.e., cracking, potholes, etc.) occurring throughout a given pavement segment. The index was used to evaluate the pavement conditions within the Hamlet. The overall condition was represented by a value on a scale of one (1) to five (5), where one (1) is in good condition with minimal to no distress present and five (5) is considered an extremely distressed surface.

Table 2.1: Pavement Distress Index

Rating	Condition	Maintenance
1	Good	No required work.
2	Fair	Crack sealing, minor patching, mill and overlay.
3	Poor	Occasional potholes, minor base repair, OL w/minor base repair, mill and overlay.
4	Bad	Major base failure, reconstruction required.
5	Failed	Major base failure causing significant problems, reconstruction required.

The sidewalks were represented by an overall condition of Good, Fair and Poor based on the surface distress present. The field study also noted that there are currently minimal para-ramps for sidewalks within the Hamlet.

Refer to **Appendix C – Road and Sidewalk Assessment** for the tabulated results of the road and sidewalk field study, along with **Figure 4.0 –Roads and Sidewalks-Condition Rating** for an overall summary.

2.3 Pump House & Water Reservoir

MPE conducted an inspection of the Hamlet's pump house and water reservoir on July 23, 2025. The inspection provided insight into the current condition of the pump house and highlighted areas that may require further attention or upgrades**. Figure 2.2 – Pumphouse Interior** provides a few photos taken during the inspection.

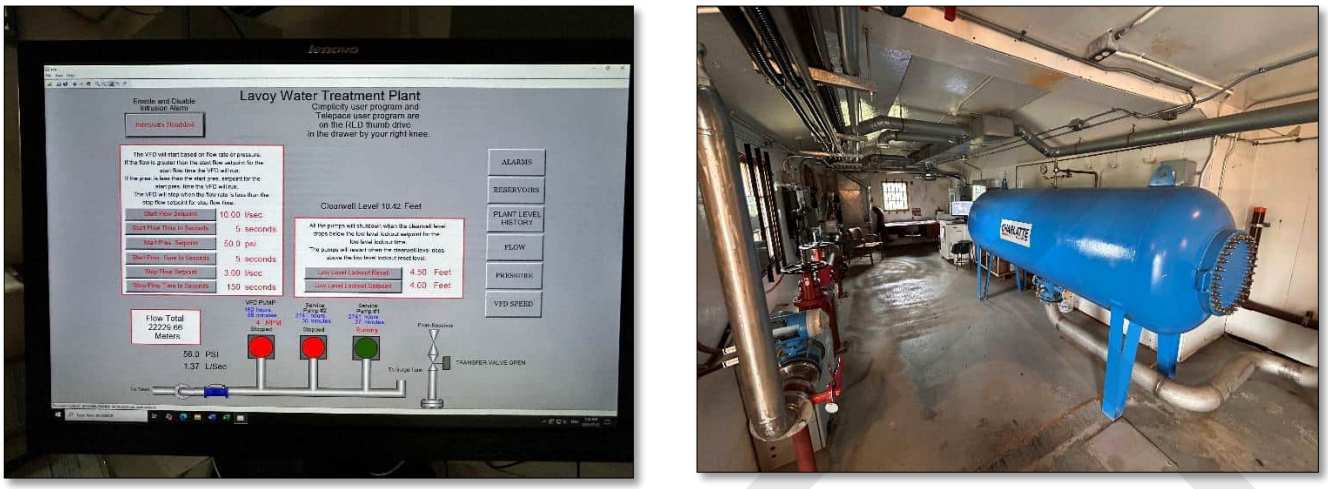


Figure 2.2: Pumphouse Interior

The mechanical system of the pump station is in satisfactory condition, with regular maintenance and necessary upgrades having been carried out. A new backup generator has been installed recently to ensure that the station continues to operate efficiently in the event of a power outage. Additionally, the Supervisory Control and Data Acquisition (SCADA) system, managed by a new PLC/HMI, is functioning well and is not expected to require any immediate upgrades. The system is performing as intended, and no immediate action is required. NCGL Construction, which currently provides maintenance services for the SCADA system, should perform regular reviews in accordance with its recommended intervals.

In September 2025, QQR Mechanical completed a significant upgrade by replacing outdated valves and replacing the distribution header with stainless steel piping. This work contributed to the overall improvement of the pump station's infrastructure.

MPE noted that the vertical turbines in the pump station were aging and recommended the County monitor their performance and plan for replacement in the near future. Additionally, some galvanized piping remains in the system and should be replaced with upgraded piping to ensure long-term reliability and efficiency.

At the time of inspection, no information was available regarding the condition of the concrete underground water reservoir. A thorough inspection of the reservoir is crucial to evaluate its structural integrity and estimated lifespan. The inspection should cover both the interior and exterior of the reservoir. As most of the reservoir's exterior is buried, excavation will be necessary in specific areas to expose the concrete walls. An internal inspection will require a certified diving contractor to assess underwater conditions.

Based on the information outlined above, the following recommendations have been made by MPE, regarding the pump house and water reservoir:

- Given that QQR Mechanical is already familiar with the pump station, it is recommended that they conduct a comprehensive review of the mechanical system. This review should include:
  - An assessment of the vertical turbines.
  - A long-term upgrade and a detailed maintenance schedule.
  - A cost estimate for the inspection and future upgrades for budget planning.
- NCGL Construction, which currently provides maintenance service for the SCADA system, should perform regular reviews in accordance with its recommended intervals.
- It is recommended that the concrete underground water reservoir undergo a full inspection to assess its condition. The estimated cost for this inspection is approximately $11,000, with an additional $2,500 required for excavation and backfill work.

2.4 Bulk Water Distribution Station

The Bulk Water Distribution Station was first installed in 2012 and consists of a self-contained system housed within a prefabricated steel building skid. Water is dispensed through an automated control system originally supplied by Municipal Solutions, now owned and operated by Flowpoint. The facility includes two exterior fill points with Cam-Lock fittings (2-inch and 3-inch). **Figure 2.3 –Bulk Water Distribution Station** provides photos captured during MPE's inspection of the bulk water station.

Figure 2.3: Bulk Water Distribution Station

Based on MPE's inspection and information provided by the County, the bulk water station is currently functioning well. However, Flowpoint has advised that the system's electronic control components (PLC and HMI panel) are now at the end of their life and are no longer supported. In the event of failure, these components will need to be replaced with current models. The estimated cost for replacement, including installation and calibration, is approximately $15,000.

Flowpoint also indicated that the two singer valves within the station require seal kit replacements every 10 years. No maintenance records were found to confirm whether this work has been completed since it was first installed in 2012. Flowpoint also noted that the backflow preventor must be inspected and recertified annually. MPE recommends that the County verify whether the most recent inspection of the backflow preventor has been conducted. Flowpoint estimates the annual cost for this service at approximately $2,000.

After review, Flowpoint and MPE estimate that the system has a remaining service life of approximately six years, with full replacement anticipated around 2032.

MPE recommends the County:

- Initiate annual maintenance inspections and ensure re-certification of the backflow preventor at an estimated cost of $2,000/year.
- Allocate budget for the proactive replacement of the PLC and HMI panel at an estimated cost of $15,000, to mitigate the risk of unexpected failure.
- Begin long-term capital planning for full system replacement in 2032. A cost estimate should be developed to support this planning.

2.5 Lagoon

The County informed MPE that the Hamlet's sanitary sewer system operates via a gravity-fed system and doesn't utilize sanitary lift stations with sewage-handling pumps or pressurized forcemains. The gravity sanitary sewer system feeds into the nearby lagoon located south-east of the Hamlet. **Figure 2.4 – Hamlet of Lavoy Sanitary Lagoon** shows the lagoon is fed by the hamlet of Lavoy's gravity-fed sanitary system.

Figure 2.4: Hamlet of Lavoy Sanitary Lagoon

2.6 Upgrade Priorities

MPE has reviewed information on the key pieces of infrastructure within the Hamlet of Lavoy. Upon review, it was determined that the main priority for underground infrastructure replacement is the water distribution system. Information on the water distribution is limited; however, hydrants with known issues and aging valves should be replaced. The existing watermains have been identified as AC material type; AC pipes are brittle and can crack or break when disturbed; aging pipes may be more prone to this. The removal of AC pipe requires specialized handling and safety measures, as cutting and disturbing it can release hazardous fibres, posing health risks to workers and the environment. MPE recommends the County prioritize removal and replacement of the existing AC watermains with PVC watermain.

The sanitary sewer system is comprised of PVC pipe and has approximately 25 years of operational use remaining. MPE has not deemed the sanitary system infrastructure as urgent priority in terms of upgrades however, the County is encouraged to continue with a complete CCTV inspection of the lines within 5 to 6 years to reassess the condition rating of each segment and confirm if the pipes are all PVC.

Roadway and sidewalk conditions vary within the Hamlet of Lavoy and are the second driving force in determining project priorities.

3.0 10-YEAR CAPITAL PROJECTION

MPE prepared a 10-Year Capital Projection that outlines the proposed schedule for project delivery, based on the information reviewed and the total estimated costs to complete the project. The plan outlines high-priority rehabilitation required to address issues within the sanitary, water, and road infrastructure. MPE recommends that the County review the plan as new information and data are acquired over the next ten years. The annual budget MPE used for the plan is $250,000.00. Due to the size of some projects, it will take multiple years to complete on the budget mentioned above.

Projects identified in the 10-Year Capital Plan are outlined in **Appendix D - 10-Year Capital Plan**. MPE has calculated approximate costs for these projects as outlined below, and our assumptions in calculating these costs are:

1. In areas where underground infrastructure is scheduled for rehabilitation, road restoration of a 4m wide trench and a mill and overlay for the remaining area are assumed unless other road rehabilitation treatments are recommended, such as reconstruction or full-depth repair. In those cases, the entire roadway is recommended for reconstruction.
2. All dollar values are presented in 2025 dollars.

The unit rates used for the rehabilitation recommendations are:

1. Roadway, Full Reconstruct: $255.00/$m^2$
2. Roadway, Trench Reconstruction: $285.00/$m^2$
3. Roadway, Gravel Placement & Grading: $150/$m^2$
4. Roadway, Mill & Overlay 50 mm: $55.00/$m^2$
5. Roadway, Mill, Base Repair & Overlay 55 mm: $75.00/$m^2$
6. Sanitary, Remove & *Replace (Open Cut), 200mm: $2,350.00/m*
7. Sanitary, Remove & *Replace (Open Cut), 200mm: $2,550.00/m*
8. Water, Hydrant Replacement: $2,500.00/ea.
9. Water, Remove & *Replace (Open Cut), 150 AC to 150 PVC: $2,800.00/m

Note: * Cost/m includes replacing water valves and water & sewer services.

3.1 10-Year Capital Plan

MPE developed a 10-Year Capital Plan, summarized on the following page in **Table 3.1: 10-Year Capital Plan Estimated Costs**. MPE prioritized infrastructure upgrades using the following criteria.

1. Removal and replacement of hydrants with known issues were ranked as a high priority.
2. Removal and replacement of AC watermains with PVC were prioritized over sanitary segments.
3. Roads requiring full road reconstruction were prioritized over roads that only required mill and overlay (with or without base repair).
4. Roads requiring mill and overlay with base repair were prioritized over roads requiring mill and overlay without base repair.

The highest priority project included removing and replacing an AC watermain, completing a full road reconstruction and replacing all eight (8) of the critical hydrants in Hamlet. The remainder of the plan was driven by full road reconstruction and upgrades from AC watermain pipe to PVC.

In developing the plan, MPE attempted to keep the annual budget to $250,000.00. Due to the sheer size and scope of some projects, the County will likely need to allocate the budget over multiple years before a project is completed. **Table 3.1: 10-Year Capital Plan** illustrates the estimated project costs as well as the annual costs required to ensure there are enough funds to complete the project. A map showing the project locations and extents can be found in **Appendix D – 10-Year Capital Plan**.

Table 3.1: 10-Year Capital Plan Estimated Costs

Year	Project No.	Estimated Cost	Annual Estimated Cost	Project Description
2026	1	$462,218.35	$231,109.17	Remove and replace eight (8) hydrants along the water distribution system. All eight (8) hydrants have been identified as "not draining back".
2027			$231,109.17	Remove and replace existing 150m AC watermain and complete full road reconstruction along 50 St (52 Ave to 53 Ave)
2028	2	$537,555.24	$268,777.62	Remove and replace existing 150mm AC watermain and complete full road reconstruction along 50 Ave (49 St to 50 St).
2029			$268,777.62	
2030	3	$861,190.71	$287,063.57	Remove and replace existing 150mm AC watermain and complete full road reconstruction along 50 Ave (Township Rd 520 to 49 St).
2031			$287,063.57	
2032			$287,063.57	
2033	4	$1,187,634.21	$296,908.55	Remove and replace existing 150mm AC watermain and complete full road reconstruction along 51 Ave (Township Rd 520 to 49 St)
2034			$296,908.55	
2035			$296,908.55	
2036			$296,908.55	
TOTAL		**$3,048,598.52**		
REMAINING PROJECTS		**$3,917,211.18**		

In total, the 10-Year Capital Plan is estimated to cost $3,048,598.52. The complete breakdown of the costs presented above can be found in **Appendix D – 10-Year Capital Plan**.

4.0 CONCLUSION

The following provides the major conclusions of this assessment:

1. MPE used an annual budget of $250,000.00 to create a 10-Year Capital Plan. All dollar values are in 2025 dollars.
2. Due to conflicting and limited record information, MPE assumed the existing sanitary system was constructed only of PVC and the earliest installation date was 1970. Assuming a 75-year operational life for PVC pipe, the sanitary system still has approximately 25 years of remaining service life.
3. Based on previous assessments completed by various engineering consulting firms, along with record information supplied by the County, MPE determined that there is two known sanitary segments (MH-27 to MH-26 and MH-10 to MH-9) with issues that remain to be addressed.
    a. The sewer line between MH-27 and MH-26 is located along 53 Avenue, which is undeveloped, and there appears to be no services connected to the line. Until development occurs along 53 Avenue, there is no need to repair the sags. This section of pipe can be televised at the time future development takes place and re-assessed to determine if the line requires spot repairs or a full replacement.
    b. It is recommended to inspect the sewer line between MH-10 and MH-9 with CCTV and determine if the dislodged gaskets can be removed by means of robotic equipment. If the gaskets cannot be removed remotely, then regular inspections of the upstream manhole(s) should be performed to ensure no blockages or back-ups are occurring.
4. All watermains within the Hamlet are constructed of AC pipe. MPE assumed the earliest installation date was 1970. Assuming a 75-year operational life for AC pipe, the water distribution system still has approximately 25 years of remaining service life. MPE recommends the County prioritize replacement of the AC watermain with PVC pipe.
5. MPE completed a field survey of the roads, sidewalks and alleys within the Hamlet of Lavoy, data from the survey has been incorporated into the County's existing Geographic Information System (GIS). Each road was assigned a maintenance program. Refer to **Appendix C – Road and Sidewalk Assessment** for the full assessment.
6. Regarding the Hamlet's pumphouse, MPE has made the following recommendations:
    a. Given that QQR Mechanical is already familiar with the pump station, it is recommended that they conduct a comprehensive review of the mechanical system. This review should include:
        i. An assessment of the vertical turbines.
        ii. A long-term upgrade and a detailed maintenance schedule.
        iii. A cost estimate for the inspection and future upgrades for budget planning.

b. NCGL Construction, which currently provides maintenance service for the SCADA system, should perform regular reviews in accordance with its recommended intervals.

c. It is recommended that the concrete underground water reservoir undergo a full inspection to assess its condition. The estimated cost for this inspection is approximately $11,000, with an additional $2,500 required for excavation and backfill work.

7. Regarding the Hamlet's water distribution station, MPE has made the following recommendations:

    a. Initiate annual maintenance inspections and ensure re-certification of the backflow preventor at an estimated cost of $2,000/year.

    b. Allocate budget for the proactive replacement of the PLC and HMI panel at an estimated cost of $15,000, to mitigate the risk of unexpected failure.

    c. Begin long-term capital planning for full system replacement in 2032. A cost estimate should be developed to support this planning.

8. The 10-Year capital plan was driven by full replacement of AC watermain with PVC where road segments required full road reconstruction.

    a. Removal and replacement of hydrants with known issues were ranked as a high priority.

    b. Removal and replacement of AC watermains with PVC were prioritized over sanitary segments.

    c. Roads requiring full road reconstruction were prioritized over roads that only required mill and overlay (with or without base repair).

    d. Roads requiring mill and overlay with base repair were prioritized over roads requiring mill and overlay without base repair.

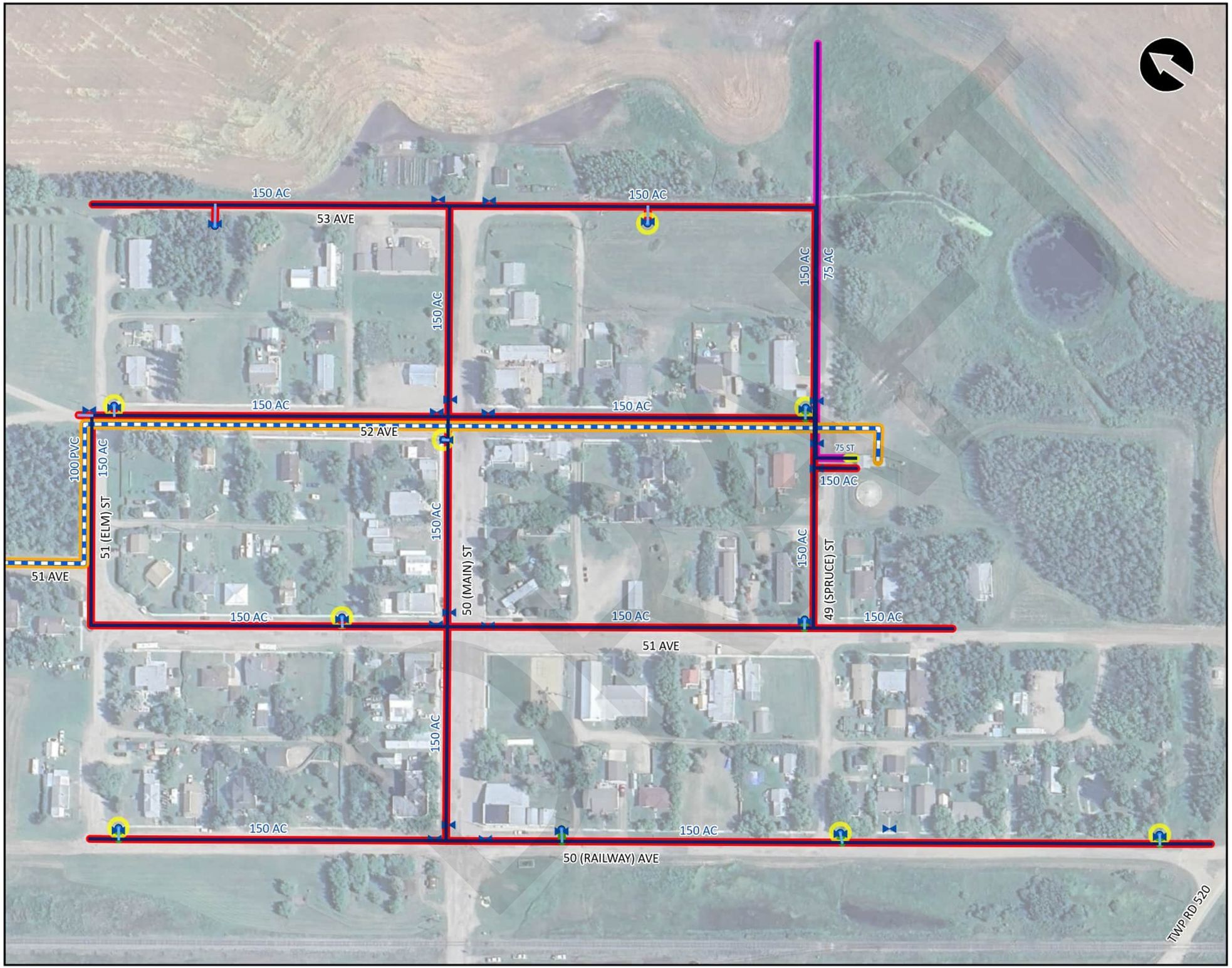
9. In total, the 10-Year Capital Plan is estimated to cost **$3,048,598.52** (in 2025 dollars).

10. The highest priority project included removing and replacing an AC watermain, completing a full road reconstruction, along with replacing all eight (8) of the critical hydrants in the Hamlet.

11. Due to the sheer size and scope of some projects, the County will likely need to save up the budget for multiple years before completion of a project.

APPENDIX A

Underground Utilities Existing Conditions



ACE Regional Waterline
Hydrant
Hydrant does not drain back
Valve
Watermain
Hydrant Lead

Install Year
Unknown
1976
1998
2004
2012

0 100 m

Scale: 1,800
(ANSI B 11"x17")

1. **Background Layers:** Google Road Map (Standard); Google; Google Earth Satellite; Google
2. **Data Sources:** Altalis, NRCAN, Statistics Canada
3. **Coordinate System:** NAD 1983 UTM Zone 12N

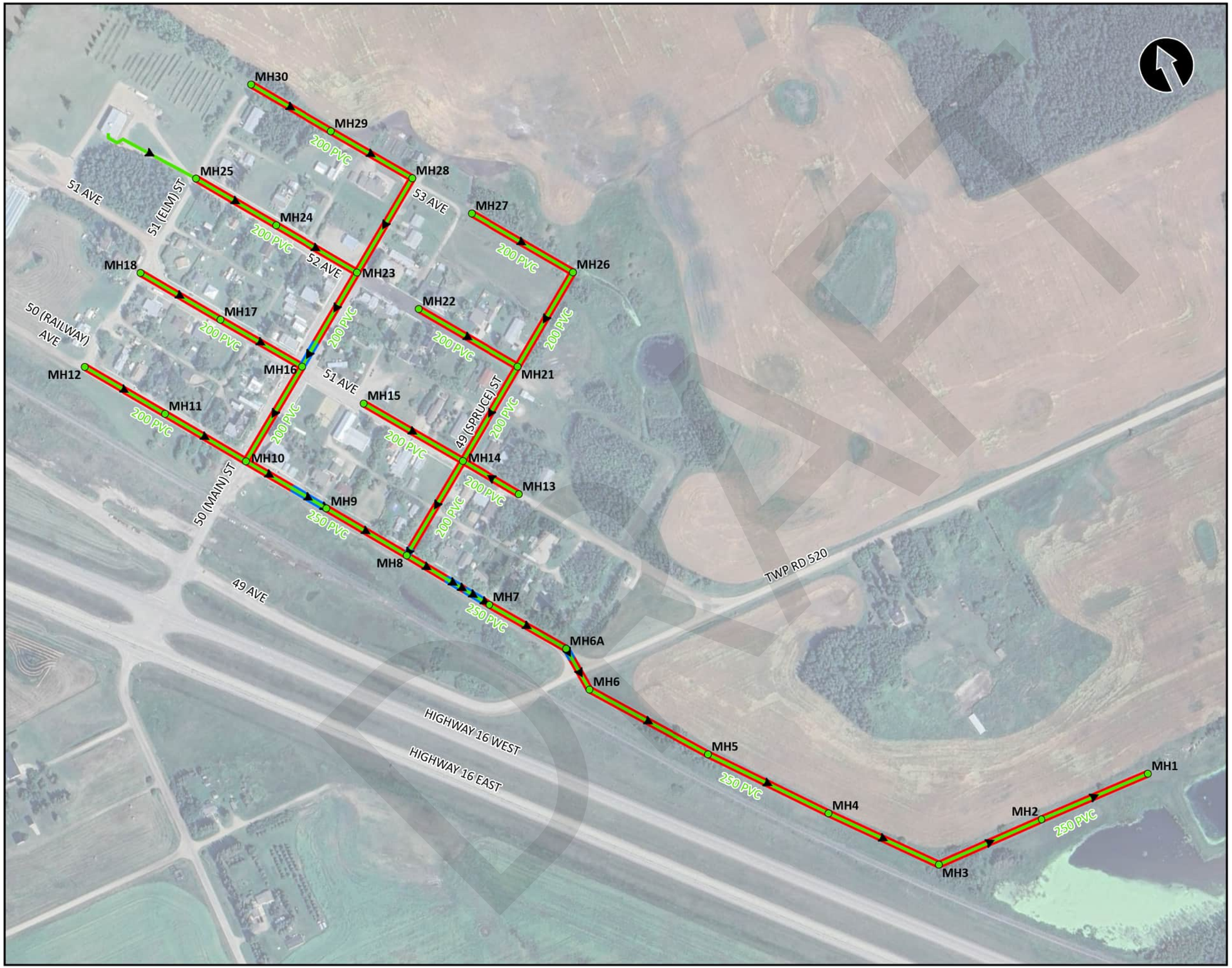
MPE
a division of Englobe

TITLE
Water Distribution System - Existing Conditions
Asset Management Plan
Hamlet of Lavoy

LOCATION	REVIEW
County of Minburn No. 27	Drawn by DM on 01 Oct 2025
Alberta, CANADA	Review by SS on 01 Oct 2025

JOB	FIGURE	PAGE	DATE
5265-001	1	1 / 1	01 Oct 2025

Date: 01 Oct 2025
Path: \\Englobe\Drive\MPE Drive\N Data\5265 County of Minburn No. 27\001 Hamlet of Lavoy Asset Management\pipelines_project\5265-001 Lavoy\AM\5265-001 Lavoy\AM apprx Layout: Fig1_ExWtrSys | Author: dmerrick



Sanitary Manhole

Sanitary Main

Install Year

1976

2019

0 100 m

Scale: 3,500
(ANSI B 11"x17")

1. **Background Layers:** Google Road Map (Standard); Google; Google Earth Satellite; Google
2. **Data Sources:** Altalis, NRCAN, Statistics Canada
3. **Coordinate System:** NAD 1983 UTM Zone 12N

a division of Englobe

TITLE
Sanitary Collection System
Asset Management Plan
Hamlet of Lavoy

LOCATION	REVIEW
County of Minburn No. 27	Drawn by DM on 03 Oct 2025
Alberta, CANADA	Review by SS on 03 Oct 2025

JOB	FIGURE	PAGE	DATE
5265-001	2	1 / 1	03 Oct 2025

Catch Basin

Culvert - Diameter (CSP unless noted)

- 150
- 200 - 260mm
- 300 - 370mm
- 400mm
- 500 - 525mm
- 600mm

0 100 m

Scale: 2,500
(ANSI B 11"x17")

1. **Background Layers:** Google Road Map (Standard); Google; Google Earth Satellite; Google
2. **Data Sources:** Altalis, NRCAN, Statistics Canada
3. **Coordinate System:** NAD 1983 UTM Zone 12N
4. **Note:** Culvert material is CSP unless otherwise noted.

MPE
a division of Englobe

TITLE
Stormwater System - Existing Conditions
Asset Management Plan
Hamlet of Lavoy

LOCATION
County of Minburn No. 27
Alberta, CANADA

REVIEW
Drawn by DM on 03 Oct 2025
Review by SS on 03 Oct 2025

JOB	FIGURE	PAGE	DATE
5265-001	3	1 / 1	03 Oct 2025

Date: 03, Oct, 2025

Path: \\Eamvfs\Drive\MPE Drive\N Data\5265 County of Minburn No 27\001 Hamlet of Lavoy Asset Management\gis\aro_project\5265_001 Lavoy\AM\5265_001 Lavoy\AM aprx | Layout: Fig3_ExStmSys | Author: dmerrick

APPENDIX B

Previous Assessments

3.0 | SANITARY SEWER REPAIRS

Rusway Construction Ltd. completed select sanitary sewer repairs which addressed Items 6. to 11. leaving the following items yet to be addressed by the County:

1. An approximately 24m sag along 52-4 to 51-3 (30 to 40 percent full).
2. An approximately 32m sag between 50-3 and 50-4 within which there was a protruding service the camera cannot get around (35 to 60 percent full).
3. Manhole 53-2 could not be opened.
4. A dislodged seal between 50-3 and 50-4 which is not impacting flow.
5. Three isolated sags approximately 3m in length between 53-5 and 53-6 (30 percent full).

It should be noted that based upon the soil conditions encountered at the site, and exposing the sanitary sewer main between 50-3 and 50-4 for collecting elevation data on the sanitary sewer main, that a significant longer length of the main would need to be replaced than just the sagged section. It is recommended that prior to future repair work commencing that the sanitary sewer mains associated with Items 1., 2., and 5. above be exposed at incremental distances along their alignments to confirm the repair lengths required to maintain positive flow in the mains. This exercise may indicate that full replacement from manhole to manhole may be required given the relatively flat sanitary sewer grades recorded at the site.

4.0 | CLOSURE

We appreciate the opportunity to work with the County on this project. If you have any questions or require any clarifications regarding this letter, please do not hesitate to contact us at (780) 875-1683 or via e-mail at rick.collins@bareng.ca.

Yours truly,
BAR Engineering Co. Ltd.

PROFESSIONAL ENGINEER ALBERTA
RICHARD THOMAS COLLINS

2020-01-15

Rick Collins, P. Eng.
Director
Municipal Division

Reviewed by:

Scott Simons, P. Eng.
Senior Engineer
Municipal Division

PERMIT TO PRACTICE
BAR ENGINEERING CO. LTD.
Signature
Date 2020-01-15
PERMIT NUMBER: P7266
The Association of Professional Engineers, Geologists, and Geophysicists of Alberta

Attachment: Water and Sanitary Sewer Infrastructure - Sanitary Sewer Repair Plan

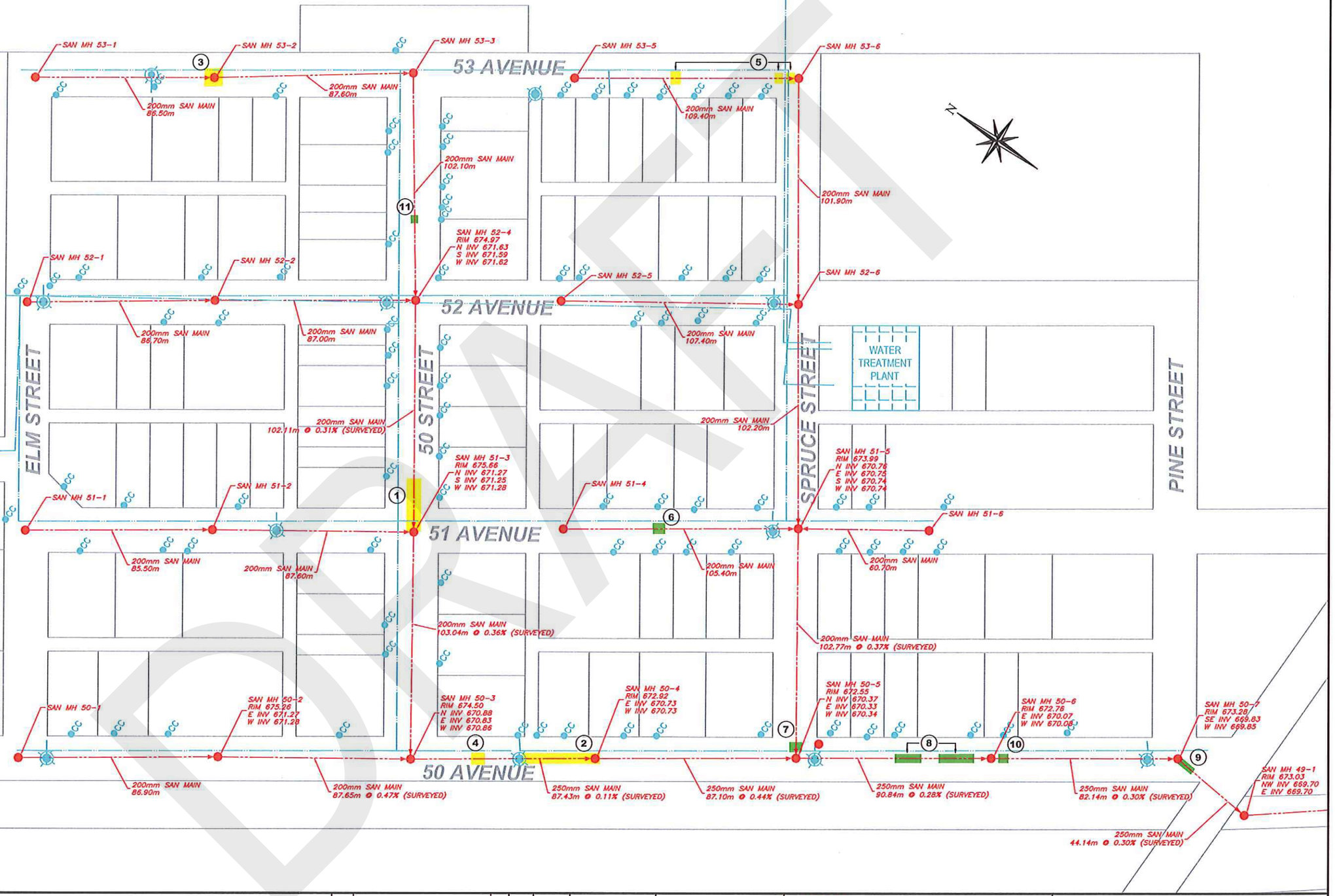
REPAIRS COMPLETED IN 2019

REPAIRS TO BE COMPLETED

Note:

Sanitary sewer lengths based upon CCTV data unless otherwise noted as "SURVEYED"

(1) Numbers reference BAR letter dated January 13, 2020



Legend

- Water Main
- Sanitary Sewer Main
- Sanitary Manhole
- Direction of Flow
- Valve
- Hydrant
- Water Service C.C. CC

Note:

The location of the utilities shown is approximate only. Other utilities may exist that are not shown. The exact locations should be determined by consulting the municipal authorities and utility companies concerned. The contractor shall also verify the exact location and invert elevation by hand excavation before construction.

All chainages are calculated along the centerline right of way.

NO.	DESCRIPTION	BY	CHK	MM/DD/YY
0	ISSUED FOR INFORMATION ONLY	ARD	SWS	05/15/19

REVISIONS

ENGINEER

PERMIT

BAR Engineering

SCALE: NTS

PROJECT #: 19MU-371000

DRAWING #: 19MU-371000 REV0

HAMLET OF LAVOY

WATER AND SANITARY SEWER INFRASTRUCTURE

SANITARY SEWER REPAIR PLAN

SHEET #: 1 of 2

Drawing path: P:\Municipal\19MU-371001 VMB Lavoy SAN System\300-Eng Design\Drafting\MU\19MU-371001 REV0.dwg Layout: 11x17 Page Last Saved: Jan 13, 2020 - 5:01 PM Plotted: January-14-20 8:20:24 AM

February 6, 2020 | Project No.: 19MU-371000

County of Minburn No. 27
4909 – 50 Street
Box 550
Vegreville, AB
T9C 1R6

Attention: **Darwin Ullery**

Re: Hamlet of Lavoy Water Distribution System Improvements
2019 Construction Season

1.0 | INTRODUCTION

BAR Engineering Co. Ltd. (hereinafter referred to as BAR, or the Consultant) is pleased to submit this summary letter to the County of Minburn No. 27 (hereinafter referred to as the County) summarizing the results of repairs made to the water distribution system in the Hamlet of Lavoy. Rusway Construction Ltd. completed repairs to, or replacements of, curb cocks, fire hydrants, and mainline valves based upon operation of the infrastructure and noted deficiencies. The water distribution system repairs were completed in July through September 2019.

2.0 | Mainline Valve (MV) and Hydrant Repairs

Rusway Construction Ltd. tested a total of 31 valves and 11 hydrants. 12 valves and 1 hydrant required either repair or replacement. The description of the work completed is as follows:

1. Repairs were required on MV31 which involved the replacement of the valve casing.
2. Total valve replacements for MV2, MV9-MV12, MV14, MV16-18, MV21, and MV30
3. The hydrant at the intersection of Spruce Street and 51 Avenue was replaced, and a new O-ring was added to the hydrant at Elm Street and 52 Avenue.

All other valves and hydrants were tested and considered to be in satisfactory working order.

3.0 | Curb Cock (CC) Repairs

Rusway Construction Ltd. tested a total of 93 CCs, with 23 CCs identified as requiring either repair or replacement. The description of work completed is as follows:

1. Repairs to CC62, CC63, and CC81 which involved the replacement of the spindle and box for the CC.
2. Total CC replacements were completed for CC1, CC7-CC9, CC29, CC37, CC46, CC48, CC55, CC68, CC82, CC85, and CC92.

It should be noted that either replacement or repair is needed on CC58-CC61, and CC64. The repairs were not completed as these CCs service empty lots. CC37 and CC68 were both relocated, leaving the old CC in its original place. CC18, CC19, CC73, CC76, and CC93 were not operating correctly, but given their location and the lots which they serviced (park space, double lot, etc.) the County indicated not to complete repairs. CC57 was unable to be located and therefore not tested. CC67 could not be located, but two (2) other CCs were found on either side of the County's documented coordinates for it, both in working order.



4.0 | CLOSURE

We appreciate the opportunity to work with the County on this project. If you have any questions or require any clarifications regarding this letter, please do not hesitate to contact us at (780) 875-1683 or via e-mail at rick.collins@bareng.ca.

Yours truly,
BAR Engineering Co. Ltd.

Rick Collins, P. Eng.
Director
Municipal Division

Attachment: Water and Sanitary Sewer Infrastructure - Water Repair Plan

HYDRANT
REPAIRED/REPLACED

WATER VALVE
REPAIRED

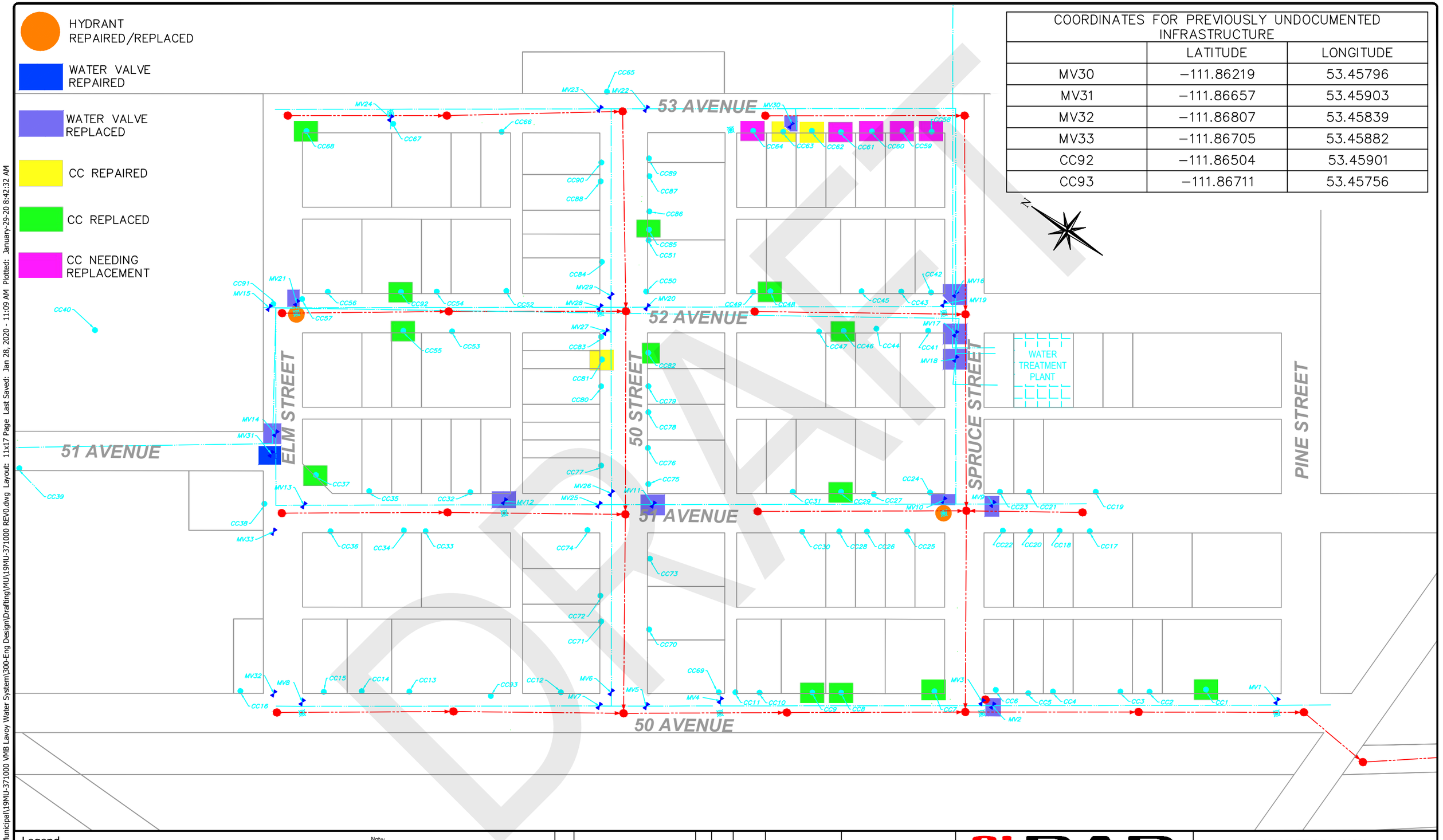
WATER VALVE
REPLACED

CC REPAIRED

CC REPLACED

CC NEEDING
REPLACEMENT

COORDINATES FOR PREVIOUSLY UNDOCUMENTED INFRASTRUCTURE		
	LATITUDE	LONGITUDE
MV30	−111.86219	53.45796
MV31	−111.86657	53.45903
MV32	−111.86807	53.45839
MV33	−111.86705	53.45882
CC92	−111.86504	53.45901
CC93	−111.86711	53.45756



Legend

Water Main
Sanitary Sewer Main
Sanitary Manhole
Direction of Flow
Valve
Hydrant
Water Service C.C. CC

Note:

The location of the utilities shown is approximate only. Other utilities may exist that are not shown. The exact locations should be determined by consulting the municipal authorities and utility companies concerned. The contractor shall also verify the exact location and invert elevation by hand excavation before construction.

All chainages are calculated along the centerline right of way.

NO.	DESCRIPTION	BY	CHK	MM/DD/YY
0	ISSUED FOR INFORMATION ONLY	ARD	SWS	05/15/19

REVISIONS

ENGINEER

PERMIT

BAR Engineering

SCALE: NTS

PROJECT #: 19MU-371000

DRAWING #: 19MU-371000 REV0

HAMLET OF LAVOY

WATER AND SANITARY SEWER INFRASTRUCTURE
WATER REPAIR PLAN

SHEET #: 2 of 2

Drawing path: P:\Municipal\19MU-371000 VMB Lavoy Water System\300-Eng Design\Drafting\MU\19MU-371000 REV0.dwg Layout: 11x17 Page Last Saved: Jan 28, 2020 - 11:09 AM Plotted: January-29-20 8:42:32 AM

January 29, 2021 | Project No.: 19MU-371001

County of Minburn No. 27
4909 – 50 Street
Box 550
Vegreville, AB
T9C 1R6

Attention: **Brent Williams**

Re: Hamlet of Lavoy Gravity Sanitary Sewer System
CCTV Inspection Review

1.0 | INTRODUCTION

BAR Engineering Co. Ltd. (hereinafter referred to as BAR) is pleased to submit this summary letter to the County of Minburn No. 27 (hereinafter referred to as the County) summarizing the results of a closed circuit television (CCTV) inspection review of the gravity sanitary sewer system within the Hamlet of Lavoy, AB.

The CCTV inspection work was completed by T2 Sewer Cleaning Ltd. in August 2019. Based upon a previous review of the CCTV data conducted by BAR in 2019 to identify repair areas, Rusway Construction Ltd. subsequently completed select sanitary sewer repairs in October and November 2019. Given the time between the initial review and the current request by the County to comment on the overall condition of the sanitary sewer system, BAR revisited the CCTV data in January 2021 in order to comment on the global condition of the sanitary sewer system.

2.0 | CCTV INSPECTION REVIEW

Based upon the CCTV inspection results, BAR identified the following outstanding concerns with the sanitary sewer system. The list does not include the previous repairs completed as outlined in BAR's letter dated January 13, 2020, which can be observed in the CCTV data.

1. An approximately 24m sag along 52-4 to 51-3 (30 to 40 percent full).
2. An approximately 32m sag between 50-3 and 50-4 within which there was a protruding service the camera cannot get around (35 to 60 percent full).
4. A dislodged seal between 50-3 and 50-4 which is not impacting flow.
5. Three isolated sags approximately 3m in length between 53-5 and 53-6 (30 percent full).

A plan is attached outlining the remaining areas of concern. Note that bulges were observed in the top half of the pipe between 52-5 and 52-6, and 51-5 and 51-6 which are not impacting flow (pipe observed to be deformed only).

Note that there were several areas of up to 20 percent full sags not identified on the summary provided above which BAR did not consider requiring repair due to flow characteristics not be severely impeded. The County has not experienced any significant historical issues in the sanitary sewer system and with a routine flushing program the impacts in these lesser sagged areas would be anticipated to have minimal effect on the system performance.



Overall the condition of the PVC pipe the sanitary sewer system is constructed of is in good shape and would be anticipated to provide the County competent performance for the foreseeable future. Relative to the original installation date of the sanitary sewer system being early 1970s (based upon discussion with County personnel), the sanitary sewer has been operating for approximately 50 years. The expected lifespan of PVC pipe is 50 to 80 years, with an average of 70 years, although some data provided by plastic pipe manufacturers indicates a possible 100+ year life for the material. One factor influencing lifespan will be the users of the system and with Lavoy being predominantly residential in nature (i.e; no significant industry or chemical exposure) the system would be anticipated to be a relatively inert environment limited to transmission of domestic waste.

3.0 | CLOSURE

We appreciate the opportunity to work with the County on this project. If you have any questions or require any clarifications regarding this letter, please do not hesitate to contact us at (780) 875-1683 or via e-mail at rick.collins@bareng.ca.

Yours truly,
BAR Engineering Co. Ltd.

Rick Collins, P. Eng.
Director
Municipal Division

Reviewed by:

Scott Simons, P.Eng.
Manager
Municipal Division

Attachment: Water and Sanitary Sewer Infrastructure – Sanitary Sewer Repair Plan

REPAIRS COMPLETED IN 2019

REPAIRS TO BE COMPLETED

Note:

Sanitary sewer lengths based upon CCTV data unless otherwise noted as "SURVEYED"

(1) Numbers reference BAR letter dated January 13, 2020

53 AVENUE
52 AVENUE
51 AVENUE
50 AVENUE
ELM STREET
50 STREET
SPRUCE STREET
PINE STREET
WATER TREATMENT PLANT

SAN MH 53-1
SAN MH 53-2
SAN MH 53-3
SAN MH 53-5
SAN MH 53-6
200mm SAN MAIN 86.50m
200mm SAN MAIN 87.60m
200mm SAN MAIN 102.10m
200mm SAN MAIN 109.40m
200mm SAN MAIN 101.90m
SAN MH 52-4 RIM 674.97 N INV 671.63 S INV 671.59 W INV 671.62
SAN MH 52-1
SAN MH 52-2
SAN MH 52-5
SAN MH 52-6
200mm SAN MAIN 86.70m
200mm SAN MAIN 87.00m
200mm SAN MAIN 107.40m
200mm SAN MAIN 102.11m @ 0.31% (SURVEYED)
200mm SAN MAIN 102.20m
SAN MH 51-3 RIM 675.66 N INV 671.27 S INV 671.25 W INV 671.28
SAN MH 51-5 RIM 673.99 N INV 670.76 E INV 670.75 S INV 670.74 W INV 670.74
SAN MH 51-1
SAN MH 51-2
SAN MH 51-4
SAN MH 51-6
200mm SAN MAIN 85.50m
200mm SAN MAIN 87.60m
200mm SAN MAIN 105.40m
200mm SAN MAIN 60.70m
200mm SAN MAIN 103.04m @ 0.36% (SURVEYED)
200mm SAN MAIN 102.77m @ 0.37% (SURVEYED)
SAN MH 50-1
SAN MH 50-2 RIM 675.26 E INV 671.27 W INV 671.28
SAN MH 50-3 RIM 674.50 N INV 670.88 E INV 670.83 W INV 670.86
SAN MH 50-4 RIM 672.92 E INV 670.73 W INV 670.73
SAN MH 50-5 RIM 672.55 N INV 670.37 E INV 670.33 W INV 670.34
SAN MH 50-6 RIM 672.76 E INV 670.07 W INV 670.08
SAN MH 50-7 RIM 673.28 SE INV 669.83 W INV 669.85
SAN MH 49-1 RIM 673.03 NW INV 669.70 E INV 669.70
200mm SAN MAIN 86.90m
200mm SAN MAIN 87.65m @ 0.47% (SURVEYED)
250mm SAN MAIN 87.43m @ 0.11% (SURVEYED)
250mm SAN MAIN 87.10m @ 0.44% (SURVEYED)
250mm SAN MAIN 90.84m @ 0.28% (SURVEYED)
250mm SAN MAIN 82.14m @ 0.30% (SURVEYED)
250mm SAN MAIN 44.14m @ 0.30% (SURVEYED)

Legend

- Water Main
- Sanitary Sewer Main
- Sanitary Manhole
- Direction of Flow
- Valve
- Hydrant
- Water Service C.C. (CC)

Note:

The location of the utilities shown is approximate only. Other utilities may exist that are not shown. The exact locations should be determined by consulting the municipal authorities and utility companies concerned. The contractor shall also verify the exact location and invert elevation by hand excavation before construction.

All chainages are calculated along the centerline right of way.

NO.	DESCRIPTION	BY	CHK	MM/DD/YY
0	ISSUED FOR INFORMATION ONLY	ARD	SWS	05/15/19

REVISIONS

ENGINEER

PERMIT

BAR Engineering

SCALE: NTS

PROJECT #: 19MU-371000

DRAWING #: 19MU-371000 REV0

HAMLET OF LAVOY

WATER AND SANITARY SEWER INFRASTRUCTURE

SANITARY SEWER REPAIR PLAN

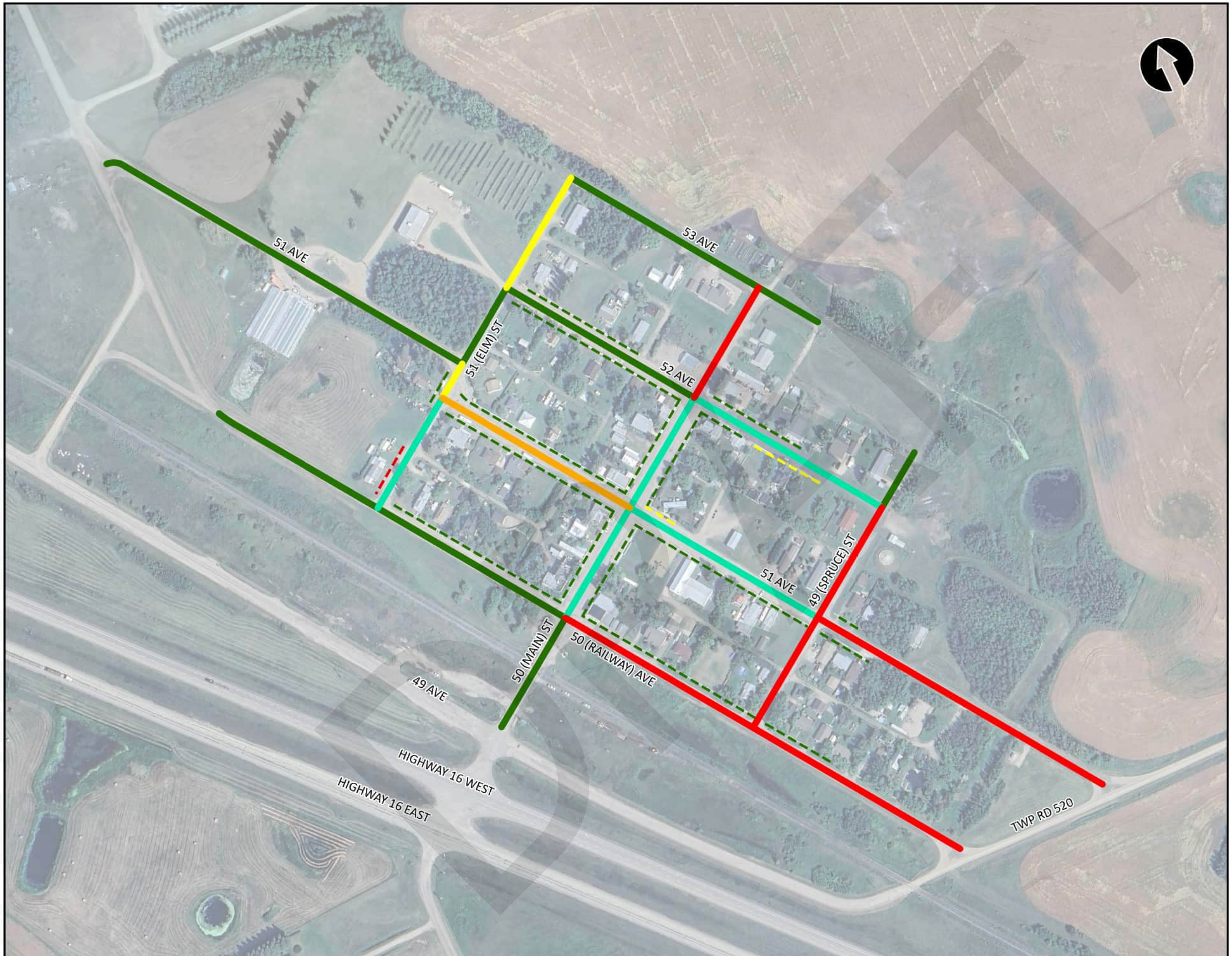
SHEET #: 1 of 2

Drawing path: P:\Municipal\19MU-371001 VMB Lavoy SAN System\300-Eng Design\Drafting\MU\19MU-371001 REV0.dwg Layout: 11x17 Page Last Saved: Jan 13, 2020 - 5:01 PM Plotted: January-14-20 8:20:24 AM

APPENDIX C

Road and Sidewalk Assessment

a division of Englobe



Road - Condition Rating
- Good
- Fair
- Poor
- Bad
- Failed

Sidewalk - Condition RatingCondition
- Good
- Fair
- Poor

0 100 m

Scale: 3,000
(ANSI B 11"x17")

1. **Background Layers:** Google Road Map (Standard); Google; Google Earth Satellite; Google
2. **Data Sources:** Altalis, NRCAN, Statistics Canada
3. **Coordinate System:** NAD 1983 UTM Zone 12N
4. **Note:** Culvert material is CSP unless otherwise noted.

a division of Englobe

TITLE
Roads and Sidewalk - Condition Rating
Asset Management Plan
Hamlet of Lavoy

LOCATION	REVIEW
County of Minburn No. 27 Alberta, CANADA	Drawn by DM on 01 Oct 2025 Review by SS on 01 Oct 2025

JOB	FIGURE	PAGE	DATE
5265-001	4	1 / 1	01 Oct 2025

Hamlet of Lavoy
Road Pavement Field Survey

segment_id	street_name	street_from	street_to	segment_length	segment_width	segment_area	functional_class	segment_lanes	surface_type	MPE_Notes	condition	score
10	50 (RAILWAY) AVE	TOWNSHIP ROAD 520	49 (SPRUCE) ST	192	6.60	1269	Local	2	AC	Failed not a lot of AC left	Failed	5
20	50 (RAILWAY) AVE	49 (SPRUCE) ST	50 (MAIN) ST	120	6.60	790	Local	2	AC	Last 55m width 11.7m	Failed	5
30	50 (RAILWAY) AVE	50 (MAIN) ST	51 (ELM) ST	55	12.00	666	Local	2	AC		Good	1
40	50 (RAILWAY) AVE	51 (ELM) ST	RANGE ROAD 134	148	6.60	978	Local	2	GR	Gravel regular grading	Good	1
50	51 AVE	TOWNSHIP ROAD 520	49 (SPRUCE) ST	265	6.60	1748	Local	2	AC	First 152m gravel	Failed	5
60	51 AVE	49 (SPRUCE) ST	50 (MAIN) ST	120	13.00	1557	Local	2	AC		Fair	2
70	51 AVE	50 (MAIN) ST	51 (ELM) ST	55	16.00	881	Local	2	AC		Bad	4
80	51 AVE	51 (ELM) ST	RANGE ROAD 134	329	7.00	2303	Local	2	GR	Gravel regular grading	Good	1
90	52 AVE	49 (SPRUCE) ST	50 (MAIN) ST	119	14.60	1744	Local	2	AC		Fair	2
100	52 AVE	50 (MAIN) ST	51 (ELM) ST	55	13.00	710	Local	2	AC		Good	1
110	53 AVE	50 (MAIN) ST ALLEY S	50 (MAIN) ST	55	4.00	219	Local	2	GR	Gravel regular grading	Fair	2
120	53 AVE	50 (MAIN) ST	51 (ELM) ST	55	4.00	220	Local	2	GR	Gravel regular grading	Fair	2
130	49 (SPRUCE) ST	50 (RAILWAY) AVE ALLEY	51 AVE	51	6.00	308	Local	2	AC	Failed not much AC left	Failed	5
140	49 (SPRUCE) ST	51 AVE	52 AVE	51	6.00	306	Local	2	AC		Failed	5
150	49 (SPRUCE) ST	52 AVE	52 AVE ALLEY	51	6.00	307	Local	2	GR	Gravel regular grading	Good	1
160	50 (MAIN) ST	HWY16 WB	50 (RAILWAY) AVE	101	8.00	812	Local	2	AC		Good	1
170	50 (MAIN) ST	50 (RAILWAY) AVE	51 AVE	102	20.00	2047	Local	2	AC		Fair	2
180	50 (MAIN) ST	51 AVE	52 AVE	102	20.00	2047	Local	2	AC		Fair	2
190	50 (MAIN) ST	52 AVE	53 AVE	102	6.00	614	Local	2	AC		Failed	5
200	51 (ELM) ST	50 (RAILWAY) AVE	51 AVE S	51	6.00	308	Local	2	AC		Fair	2
210	51 (ELM) ST	51 AVE S	51 AVE N	32	6.00	190	Local	2	AC		Poor	3
220	51 (ELM) ST	51 AVE N	52 AVE	19	6.00	113	Local	2	AC		Good	1
230	51 (ELM) ST	52 AVE	53 AVE	51	5.00	256	Local	2	AC		Poor	3

Rating	Condition	Maintenance
1	Good	No required work
2	Fair	Crack sealing, minor patching, mill & fill
3	Poor	Occasional potholes, minor base repair, OL w/ minor base repair, mill & fill,
4	Bad	Major base failure, no overlay
5	Failed	Major base failure causing significant problems, reconstruction

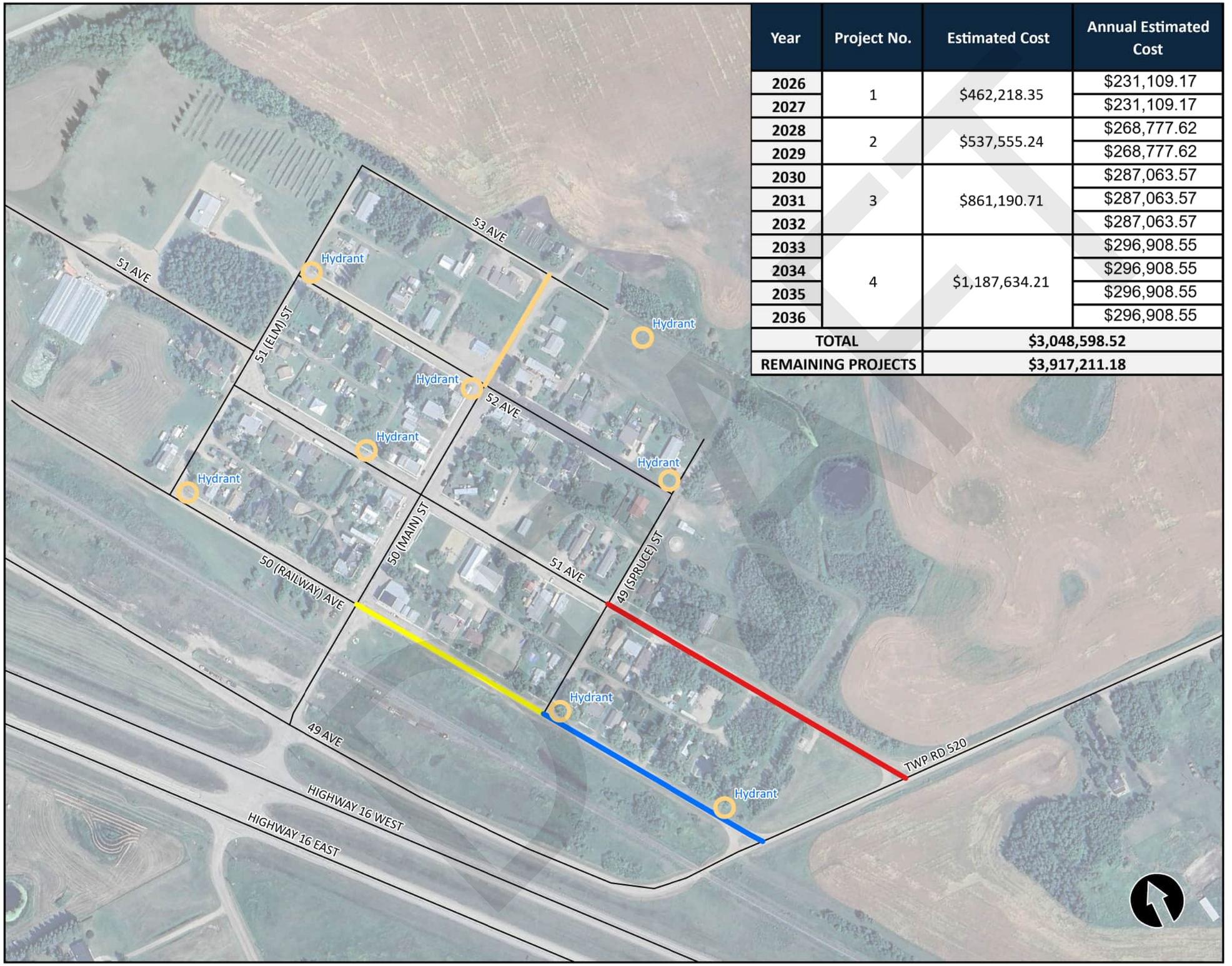
Hamlet of Lavoy
Sidewalk Field Survey

segment_id	street_name	street_from	street_to	segment_length	surface_type	curb_face	Condition	MPE_Notes
SWLK10_E	50 (RAILWAY) AVE	TOWNSHIP ROAD 520	49 (SPRUCE) ST	61	PCC	E	Good	Brush encroachment
SWLK100_E	52 AVE	50 (MAIN) ST ALLEY N	51 (ELM) ST	105	PCC	E	Good	
SWLK100_W	52 AVE	50 (MAIN)	51 (ELM) ST	155	PCC	W	Good	
SWLK170_N	50 (MAIN) ST	50 (RAILWAY) AVE	51 AVE	85	PCC	N	Good	
SWLK170_S	50 (MAIN) ST	50 (RAILWAY) AVE	51 AVE	84	PCC	S	Good	
SWLK180_N	50 (MAIN) ST	51 AVE	52 AVE	86	PCC	N	Good	
SWLK180_S	50 (MAIN) ST	51 AVE	52 AVE	88	PCC	S	Good	
SWLK20_E	50 (RAILWAY) AVE	49 (SPRUCE) ST	50 (MAIN) ST	160	PCC	E	Good	
SWLK200_N	51 (ELM) ST	50 (RAILWAY) AVE	50 (RAILWAY) AVE ALLEY	42	PCC	N	Poor	Grass growing in joints, trip hazards, faulting
SWLK210_N	51 (ELM) ST	51 AVE	51 AVE	32	PCC	N	Good	
SWLK30_E	50 (RAILWAY) AVE	50 (MAIN) ST	51 (ELM) ST	157	PCC	E	Good	Occasional new panel
SWLK50_E	51 AVE	TOWNSHIP ROAD 520	49 (SPRUCE) ST	20	PCC	E	Good	
SWLK50_W	51 AVE	TOWNSHIP ROAD 520	49 (SPRUCE) ST	43	PCC	W	Good	
SWLK60_E	51 AVE	50 (MAIN) ST ALLEY S	50 (MAIN) ST	25	PCC	E	Fair	Brush encroachment
SWLK60_W	51 AVE	49 (SPRUCE) ST	50 (MAIN) ST	159	PCC	W	Good	
SWLK70_E	51 AVE	50 (MAIN)	51 (ELM) ST	155	PCC	E	Good	
SWLK70_W	51 AVE	50 (MAIN) ST	51 (ELM) ST	155	PCC	W	Good	New until alley
SWLK90_E	52 AVE	49 (SPRUCE) ST	49 (SPRUCE) ST	81	PCC	E	Good	
SWLK90_W	52 AVE	50 (MAIN) ST ALLEY S	50 (MAIN) ST	42	PCC	W	Good	
SWLK90_W	52 AVE	49 (SPRUCE) ST	50 (MAIN) ST ALLEY S	63	PCC	W	Fair	

APPENDIX D

10-Year Capital Plan

MPE
a division of Englobe



Year	Project No.	Estimated Cost	Annual Estimated Cost
2026	1	$462,218.35	$231,109.17
2027			$231,109.17
2028	2	$537,555.24	$268,777.62
2029			$268,777.62
2030	3	$861,190.71	$287,063.57
2031			$287,063.57
2032			$287,063.57
2033	4	$1,187,634.21	$296,908.55
2034			$296,908.55
2035			$296,908.55
2036			$296,908.55
TOTAL		**$3,048,598.52**	
REMAINING PROJECTS		**$3,917,211.18**	

Replacement Year

- 2026-2027
- 2028-2029
- 2030-2032
- 2033-2036

0 100 m

Scale: 3,000
(ANSI B 11"x17")

1. **Background Layers:** Google Road Map (Standard); Google; Google Earth Satellite; Google
2. **Data Sources:** Altalis, NRCAN, Statistics Canada
3. **Coordinate System:** NAD 1983 UTM Zone 12N
4. **Note:** Culvert material is CSP unless otherwise noted.

a division of Englobe

TITLE
10 Year Capital Plan - Replacement Year
Asset Management Plan
Hamlet of Lavoy

LOCATION	REVIEW
County of Minburn No. 27	Drawn by DM on 03 Oct 2025
Alberta, CANADA	Review by SS on 03 Oct 2025

JOB	FIGURE	PAGE	DATE
5265-001	5	1 / 1	03 Oct 2025

HAMLET OF LAVOY 10-YEAR CAPITAL PLAN

							SANITARY		WATER		ROAD					COST
Priority/Project No.	Estimated Project Year	Street/Avenue	From (Street/Avenue)	To (Street/Avenue)	From (MH)	To (MH)	Open-Cut Replacement (200 mm)	Open-Cut Replacement (250 mm)	Hydrant Replacement	Open Cut Replacement (150 AC to 150 PVC)	Full Reconstruction	Trench Reconstruction	Gravel Placement & Grading	Mill and Overlay 50mm	Mill & Base Repair & Overlay 50mm	Total Cost
							$2,350.00	$2,500.00	$2,500.00	$2,800.00	$255.00	$285.00	$150.00	$55.00	$75.00	
							m	m	Ea.	m	m2	m2	m2	m2	m2	
1	2026-2027								8							$20,000.00
		50 (MAIN) ST	52 AVE	53 AVE						102	614					$442,218.35
2	2028-2029	50 (RAILWAY) AVE	49 (SPRUCE) ST	50 (MAIN) ST						120	790					$537,555.24
3	2030-2031	50 (RAILWAY) AVE	TOWNSHIP ROAD 520	49 (SPRUCE) ST						192	1269					$861,190.71
4	2032-2036	51 AVE	TOWNSHIP ROAD 520	49 (SPRUCE) ST						265	1748					$1,187,634.21
5	Future	49 (SPRUCE) ST	50 (RAILWAY) AVE ALLEY	51 AVE						51	308					$221,367.98
6	Future	49 (SPRUCE) ST	51 AVE	52 AVE						51	306					$220,872.82
7	Future	51 AVE	50 (MAIN) ST	51 (ELM) ST						55	881					$378,663.11
8	Future	51 (ELM) ST	51 AVE S	51 AVE N						32		128			62	$130,734.91
9	Future	51 (ELM) ST	52 AVE	53 AVE						51		204			52	$204,832.00
10	Future	51 AVE	49 (SPRUCE) ST	50 (MAIN) ST						120		480		1077		$532,038.04
11	Future	52 AVE	49 (SPRUCE) ST	50 (MAIN) ST						119		476		1268		$538,574.76
12	Future	53 AVE	50 (MAIN) ST ALLEY S	50 (MAIN) ST						55		220	220			$249,700.00
13	Future	53 AVE	50 (MAIN) ST	51 (ELM) ST						55		220	220			$249,700.00
14	Future	50 (MAIN) ST	50 (RAILWAY) AVE	51 AVE						102		408		1639		$492,034.53
15	Future	50 (MAIN) ST	51 AVE	52 AVE						102		408		1639		$492,041.09
16	Future	51 (ELM) ST	50 (RAILWAY) AVE	51 AVE S						51		204		104		$206,651.93

COMMITTEE OF THE WHOLE
DIVISION REPORT

Name: Councillor Joey Nafziger **Division:** 1

For Presentation at 11/12/2025 **Committee o**f the Whole **Meeting**

From Date: 10/13/25 To Date: 11/07/25

Resident Concerns:

Brushing request on RR81 south of HWY 16.

COMMITTEE OF THE WHOLE
DIVISION REPORT

Name: Councillor Ray Nedzielski **Division:** 2

For Presentation at 11/12/2025 **Committee of** the Whole **Meeting**

From Date: 10/27/25 To Date: 11/07/25

Resident Concerns:

Washboards on roads.

Dust control to Ranfurly Water Station.

Culvert on Twp Rd 514 west of RR 114.

COMMITTEE OF THE WHOLE
DIVISION REPORT

Name: Reeve Roger Konieczny **Division:** 3

For Presentation at 11/12/2025 **Committee o**f the Whole **Meeting**

From Date: 10/13/25 To Date: 11/07/25

Resident Concerns:

Nothing to report

COMMITTEE OF THE WHOLE
DIVISION REPORT

Name: Councillor Allen McCutcheon **Division:** 4

For Presentation at 11/12/2025 **Committee o**f the Whole **Meeting**

From Date: 10/27/25 To Date: 11/07/25

Resident Concerns:

53013 RR 115 - dusty road due to heavy traffic coming from Two Hills County.

53030 RR 122 - water backs up on road after heavy rain culverts damaged.

COMMITTEE OF THE WHOLE
DIVISION REPORT

Name: Deputy Reeve Tara Kuzio **Division:** 5

For Presentation at 11/12/2025 **Committee o**f the Whole **Meeting**

From Date: 10/13/25 To Date: 11/07/25

Resident Concerns:

Removal school bus signs Twp Rd 514 RR 125 (Kuzio, Breitkreuz).
Query on wood chips (transfer stations).
Approach request x 5.
Concern on culvert ends not being cleaned Twp Rd 514 east of Lavoy Cemetery.
Concerns on blading on RR 135.
Yellow Tansy from Mannville to Mundare in the municipal right of way.
Wapasu committee.
Wapasu subdivision snow clearing.
Snow clearing to Wapasu lake.

COMMITTEE OF THE WHOLE
DIVISION REPORT

Name: Councillor Carl Ogrodnick **Division:** 6

For Presentation at 11/12/2025 **Committee of** the Whole **Meeting**

From Date: 10/13/25 To Date: 11/07/25

Resident Concerns:

Washboards on corners.

Culvert on Holden Road.

Vegreville Bulk Water complaints.

Concerns over maintenance blading.

COMMITTEE OF THE WHOLE
DIVISION REPORT

Name: Councillor Jerri Ziegler **Division:** 7

For Presentation at 11/12/2025 **Committee of** the Whole **Meeting**

From Date: 10/27/25 To Date: 11/07/25

Resident Concerns:

Oiled Roads Concerns on Twp Rds 530 and 542 - why are we going backwards, is there another option.
Residents in Brookwood Estates burning grass, not sure if they are getting permits.
More taxation equity between agriculture lands and acreage's, what do acreage owners get from their taxes.
Could garbage bins be put in Brookwood Estates.
Could potable water be run to Brrokwood Estates, it was promised years ago.
Could Brookwood Estates get a playground.
Residents would like to put up slow down signs on roads during busy spring and fall truck hauling.
Trees need clearing in right of way on RR153 between Twp Rd 534 and Twp Rd 540.
Intersection at the corner of RR155 (south side) and HWY 16 needs widening for large trucks to turn.
North on RR152, halfway between creek and TWP Rd 534, culvert not functioning properly.
Residents would like to buy gravel from the County like residents can do in Lamont and Two Hills Counties.

Request #	Councillor Name or Motion Number	Request Title	Request	Responding Dept		Response Date	Status
CR25-03	2025-ASB003	Coyote Harvest Incentive Program	Operations to investigate and develop a Coyote Harvest Incentive Program policy pending funding from Alberta Professional Outfitters Society	Operations	Will be reported on at the next ASB in December.	30-Oct	Ongoing
CR25-34	2025-ASB022	ALUS Program Budget	Administration prepare the Terms of Reference for the Project Advisory Committee	Operations	Will determine what TOR's are required once an agreement is reached with Coordinator. To be reported on at the next ASB.	30-Oct-25	Ongoing
CR25-35	2025-ASB023	ALUS Program Budget	Administration prepare a contract for sharing a coordinator with the County of Two Hills for the June ASB meeting	Operations	Partnership not required with Two Hills, as ALUS Coodinator a independent coordinator. Waiting on response from Coordinator. Will be reported on at the next ASB.	30-Oct-25	Ongoing
CR25-36	Councillor Ogrodnick	Grains Connect Road	Look into possible solution to Grains Connect Road, Hwy 857 to Hwy 16A, semis unable to make the turn	Operations	CAO was going to see what concerns with shared with the Town of Vegreville and send same to AT.	30-Oct-25	Ongoing