



Capital Business Case

**County Road 2 Road and
Infrastructure Reconstruction**

2023 Budget

Operations

County Road 2 Road and Infrastructure Reconstruction

Executive Summary

The Operations Department is including the County Road 2 Road and Infrastructure Project in the 2023 Capital budget in order to gain more secure source of safe drinking water in the Village of Cardinal, to reduce the instance of watermain breaks and improve the overall Township Level of Risk standing in asset management.

Business Need

Cardinal County Road #2 Corridor Rehabilitation has historically been identified as a priority project of Council back to 2015. Due to the substantial expense of the project, multiple grants have been applied for over the years but were not successful. The scope of the project has typically spanned from Shanly Road to the Eastern extent of the Cardinal Water Distribution System and has included water, sewer and storm sewer components. The 2021 Investing in Canada Infrastructure Program, (ICIP), Green Stream intake segment, focused on potable water only. Staff applied for ICIP funding and were successful in securing partial funding for a new watermain and apertures through a three-way cost sharing partnership between the Township and both Federal and Provincial Governments.

The proposed project is reduced in scale compared to previous years and will encompass the section starting at approximately Civic #738 County Rd. 2 to the West limit, and continue easterly approximately 800 meters terminating at the east side of St. Lawrence St., (see attached GIS). The existing water main in this section was installed in 1953, is made of predominately of cast iron and, historically, has had the highest number of watermain breaks in Cardinal. The plan includes looping the lower Walker St. main into the new County Rd. 2 main. This will add another avenue to feed water back and forth from north and south of County Rd. 2 increasing redundancy from 2 to 3 routes of flow. Additionally, new sewer main, storm, sidewalks and curb are included in the scope.

In October of 2021, Council awarded Jewell Engineering Inc. the contract for design and tendering the project. Throughout the design process, Staff and Jewell have been collaborating with United Counties of Leeds and Grenville, (UCLG), in regard to design and funding to incorporate localized new storm sewers, road, curb and sidewalks. Ingredion has been included in the design discussions having interest in the rail spur crossing CR2 and both rail and truck logistics during construction period. Funding for replacing the Sanitary main and appurtenances will be the sole responsibility of the Township.

After final design, a Tender was developed and issued December 15, 2022 for the construction project. The Tender was placed on the Government Bidding site and the Township sent Tender notice letters to 12 qualified contractors. The Tender will close February 7, 2023 and results will be tabulated for Council's consideration.

Options or Solutions Analysis

1. Remain status quo- Risk losing the Provincial and Federal financial contribution and potentially face continued main breaks as the existing infrastructure continues to depreciate.
2. Maintain the County Road 2 project in the 2023 budget, review tender submissions and consider recommendation by Jewell Engineering to award.

Financial and/or Non-Financial Benefits

The financial impacts for the options are as follows:

1. Option 1 - Remain status quo- This option has no impact to budget directly but increases the potential for reduced service level and escalating operational costs due to unpredictable main breaks.
2. Option 2 – Jewell Engineering estimates the total cost of the construction is \$4.2MM. The ICIP Green Stream application provided a cost estimate of \$2,110,336.25 to complete the CR2 water main replacement within the scope of the proposed project. The Federal Government will contribute up to \$844,134.50, the Province to contribute \$703,375.07 and the Township \$562,826.68.

The UCLG has committed to propose budget in 2023 to reconstruct local storm sewers and roads within its road authority and the scope of the project.

Replacement of the Sanitary sewer in the project will be the Township's responsibility solely.

Funding for the Township portion could be secured through a combination of reserves, debenture, user rates and taxation.

Risk Analysis

The risk associated with remaining status quo is that we maintain a high potential for main breaks that inconvenience users and threaten the integrity of potable water within the distribution system. High costs of repairs, Township equipment and staff availability, (ie; during winter weather events), and operator fatigue should also be considered.

Recommendation

After a review of the options, staff recommends Council keep the County Road 2 project in the scope of the EC 2023 budget for further review and consideration.

Implementation Plan

A Staff report with Tender proposals and a recommendation from Jewell engineering will be provided to Council for consideration after the February 7th closing of the Tender. Should Council accept one of the proponent's submissions, staff anticipate that construction could proceed after half load restrictions are lifted in early May of 2023.

Documentation

- A Global Information System, (GIS), depicting the scope of the project is attached for perspective.
- Cardinal Water Break Maps 2008 – Present.

Acceptance Sign-off

Lead Department

Prepared By: Gord Shaw, Director of Operations **Date:** January 24, 2023

Signature: 

Approved By: Sean Nicholson, Treasurer **Date:** January 30, 2023

Signature: 

Approved By: Dave Grant, CAO **Date:** January 30, 2023

Signature: 