

Staff Report

Report Title: Stewart Municipal Drain Update	
Date: Feb. 3, 2025	Report Number: DRA-2025-02
Department: Drains	File Number: C11 DRA 25
Prepared By: Ken McCallum	
Attachments: None	

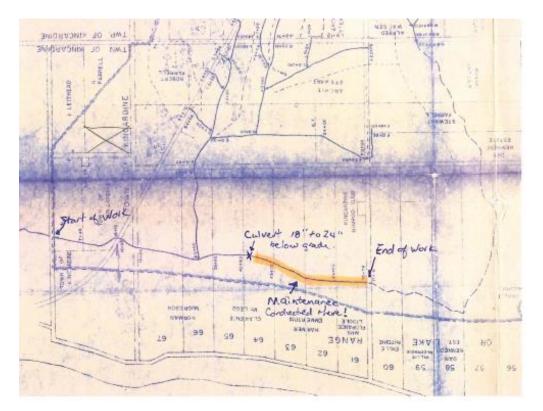
Recommendation:

THAT the Township of Huron-Kinloss Committee of the Whole hereby receives Report DRAIN-2025-02, prepared by Ken McCallum, Drainage Superintendent;

AND FURTHER directs Staff to issue a notice and organize a meeting to explore solutions for the ongoing drainage issues in the Stewart Municipal Drain.

Background

Maintenance work on the Stewart Municipal Drain commenced in the fall of 2024, with plans to clean out the open ditch from the municipal boundary upstream to Concession 12. However, work was halted when municipal staff identified concerns regarding a culvert that appeared to have been installed at improper elevations, negatively impacting the drain's functionality.



A survey was conducted, and the following observations were made:

Observations

1. Culvert Description:

- The culvert in question is a 6-foot pipe located on **Pt. Lot 64, Concession A, Lake Range**.
- This culvert was not part of the original municipal drain design and is classified as a **private crossing**, making it the sole responsibility of the landowner on whose property it is situated.

2. Drain Grade Observations:

- **Downstream of the culvert:** The ditch grades are within design tolerances at 0.25%, with minor sediment buildup requiring 4–6 inches of removal at various locations to restore continuous grade and flow.
- **Upstream of the culvert:** Maintenance work deviates from the designed grades, exceeding the design at 0.05%, due to adjustments made to align with the culvert's elevation.

3. Culvert Impact:

• The culvert is installed approximately **18–24 inches below the downstream ditch grade**, preventing the free flow of water

Conclusion

The improper installation elevation of the private culvert has significantly impacted the functionality of the Stewart Municipal Drain:

- Water flow is restricted due to the culvert's placement below the downstream ditch grade.
- Deviations from the design grades during upstream maintenance have compromised the drain's intended functionality.

Conducting further maintenance under current conditions will not resolve the issues and will not provide adequate depths for the established grades upstream, rendering the drain unmaintainable in its present state.

Discussion/Analysis/Overview

The following options are provided for Council's consideration:

Option 1:

Direct municipal staff to send notice to organize a meeting with the directly involved landowners to Discuss the survey findings.

• Provide an opportunity for landowners to request the appointment of an engineer to address the current issues with the drain.

Option 2:

Council appoints an engineer to assess and provide a report under the Drainage Act to address the current issues and restore the drain's functionality.

Financial Impacts:

The Township of Huron-Kinloss will be accountable for all assessments associated with lands and roads within the watershed.

Performance Measurement:

N/A

Strategic Area:

□Embrace a thriving rural lifestyle □Prepare for Inclusive Growth ☑ Enhance Municipal Service Delivery□ Ensure Financial Stability

Strategic Goal: Protect, promote and restore our natural environment

Respectfully Submitted By: Ken McCallum, Drainage Superintendent

Report Approved By:

Jodi MacArthur, Chief Administrative Officer