



TOWNSHIP OF NORTH HURON

REPORT

Item No. 18-03-05

REPORT TO: Reeve Vincent and Members of Council
PREPARED BY: Kirk Livingston
DATE: 05/03/2018
SUBJECT: Whitfield Municipal Drain
ATTACHMENTS: Power Point Presentation

RECOMMENDATION:

THAT the Council of the Township of North Huron hereby consider appointing an Engineer under Section 78 (1) of the Drainage Act requesting a report for repairs and improvements to the Whitfield Municipal Drain.

EXECUTIVE SUMMARY

At the February 20, 2018 Council meeting for the Township of North Huron, the following motion was passed;

THAT the Council of the Township of North Huron hereby directs the Drainage Superintendent to investigate the Whitfield Drain to assess the condition of the drain in terms of supporting the additional output from the proposed development.

Whitfield Municipal Drain (1953)

- Constructed in 1953
- The upstream end of the Whitfield Drain starts in North Huron, west of Highway #4 and outlets on the North side of Thuell Street in Blyth
- The drain consists of 1,000 ft of 6" pipe, 500 ft of 8" pipe, 476 ft of 10" pipe, all west of Highway #4
- Road crossing pipe through Highway #4
- 160 ft of 12" pipe in Morris Turnberry
- 3,106 ft of 12" pipe within the boundaries of the village of Blyth and North Huron
- 20 ft of 15" pipe in the Village of Blyth

Gamsby & Mannerow Report in 1977

- In 1977 a report was prepared under Section 66 of the Drainage Act to permit other lands to drain into the Whitfield Drain that were previously not calculated as part of the 1953 report, these lands were located in North Huron, west of Highway #4
- The Engineer (Mr. Shifflett) said" according to normal design criteria...the Whitfield Drain has insufficient capacity to handle the area it serves now, but due to the relatively additional flat area (23 extra acres) were added into the already under sized drain, they were certain it wouldn't cause any problems down stream, but there would be additional delay in draining the upstream lands.

R.J Burnside and Associates Ltd. Report 2001

- In 2001 Burnside was appointed to prepare a report under section 78 of the Drainage Act for repairs and improvements to the Whitfield Drain
- A site meeting was held for affected land owners with great attendance
- The majority of the problems appear to be between Thuell Street and the north side of North Street. At this time water was boiling out from the ground to the surface and a substantial channel was eroded out downstream due to the steep grade. Judging by the extent of the erosion the tile had been impaired for quite some time. The owners upstream indicted the drain was satisfactory to them.
- It was discussed with the land owners that repairs and improvements are expensive but Burnside would investigate
- Investigation noted the drain varied from the 1953 report, such that the drain was constructed as an open ditch north of Thuell Street, where by the report indicated it to be a closed drain
- The section between Thuell Street and the Blyth Creek is not part of the Whitfield Drain, therefore no maintenance can be performed. (past DSI applied to close this section and was denied by DFO.)
- It appeared at this time that only minor repairs would be satisfactory to the land owners and municipal representatives
- R. J. Burnside was Instructed to prepare a report under section 76 of the Drainage Act which establishes a revised assessment schedule for maintenance purposes due to severances and new ownerships.

February 23, 2018

- A thorough walk of the drain from Blyth Creek to north of the North Street road allowance was completed on February 23, 2018. A power point presentation has been put together with notes and observations.

Observations and Conclusions

- No maintenance work can be completed on the section between Thuell Street and Water Street as this is not part of the Whitfield Drain.
- No maintenance work can be completed between Thuell Street and the north lot line of Lot 139 (Utley) (to the closed drain)
- No maintenance work can be completed on the open channel / open drainage ditch which runs parallel with the Whitfield Drain
- Only band aid solutions can be applied to the Whitfield Drain as per the engineer's report
- The Whitfield Drain is already insufficient in capacity as cited by the Gamsby & Mannerow report in 1977 and further accepted 22 -23 acres of additional land outside the 1953 report.

DISCUSSION

As prepared for Council, the power point presentation should be a supportive indicator of the actual condition of the Municipal Drain, and the actual Engineer reports in 2001 & 1977 indicate the drain is insufficient in size to accommodate the existing quantity of water, let alone adding an additional 22 acres into in 1977.

FINANCIAL IMPACT

There will be a financial impact to all land owners within the watershed boundaries of the Whitfield Drain if a Section 78 report is initiated, or a petition is submitted for a Section 4 report

FUTURE CONSIDERATIONS

No further considerations at this time.

RELATIONSHIP TO STRATEGIC PLAN

Goal #2 the Township's residents are engaged and well informed.

Goal #4 the Township is fiscally responsible.

A handwritten signature in blue ink, appearing to read "Kirk Livingston", written over a horizontal line.

Kirk Livingston,
Drainage Superintendent

A handwritten signature in blue ink, appearing to read "Dwayne Evans", written over a horizontal line.

Dwayne Evans, CAO