

Report TR-TAPS-13-14

To: Chair Barfoot and Members of the Transportation and Public Safety Committee
From: M.J. Kelly, Director of Transportation Services
Meeting Date: January 23, 2013
Subject: "In-House" Construction Evaluation
Status: Endorsed by Committee as presented per Resolution TAPS23-14 January 22, 2014; Endorsed by County Council February 4, 2014 per Resolution CC21-14;

Recommendation(s)

WHEREAS in accordance with the Transportation Services Internal Review completed in May, 2013 the "In House" construction activities are to be monitored;

AND WHEREAS the 2013 "In House" activities have been evaluated and it is not cost effective to maintain a Construction Crew; however the Bridge Crew should be continued as it appears that it will provide value;

NOW THEREFORE BE IT RESOLVED THAT Report TR-TAPS-13-14 be received;

AND THAT the Transportation Services Department continues the utilization of a Bridge Crew and discontinues the utilization of a Construction Crew in 2014.

Background

The Transportation Services Internal Review completed in May, 2013 consisted of an evaluation of the "In-House" Construction completed by Grey County Staff. The "In House" construction includes a Bridge Crew and a Construction Crew.

The Internal Review identified a number of suggestions that would improve the efficiency of these crews and recommended that the activities be monitored.

Bridge Crew

The following modifications have been made or are in the process of being implemented with the Bridge Crew.

- Lead Hand has been hired.

- The planning, prioritization and coordination of the Bridge Crew activities have increased.

- Paperwork improvements were incorporated to better monitor the Bridge Crew accomplishments.
- The Department is working on hiring a Structural Engineer.
- The new Collective Agreement includes a modified work week, which should improve the overall efficiency of the Crew.

There have been substantial improvements made to the Bridge Crew and it appears that there is value to retain the Bridge Crew, at least until a complete comprehensive evaluation is completed.

Construction Crew

The following modifications have been made to the Construction Crew in 2013:

- The Crew utilized more efficient operated belly dump trucks to transport granular material.
- Paperwork improvements were incorporated to assist with obtaining representative costs.
- Filling and retaining staff positions improved, but there were some inconsistencies with staff vacations.
- The new Collective Agreement includes modifications to the work week, but the modifications proposed to enhance construction efficiencies were not supported.

In 2013, records were kept to compare the cost of productivity on the major pulverize and pave “In House” project and similar projects that were tendered. The cost for the “In House” granular “A” material was \$15.95 per tonne and the cost for the granular “A” material provide by a Contractor was \$10.75 per tonne. Therefore the cost to complete the work “In House” was \$5.20 per tonne more. There was approximately 22,000 tonnes of granular “A” used on the “In House” project. Therefore it could be assumed that the additional “In House” cost is approximately \$114,000.

The “In House” construction crew installed 16 centerline culverts for a total length of 219 metres under Grey Road 1 in 2013. The centerline culverts installed varied in diameter from 450 millimeters to 600 millimeters. The average cost for the “In House” crew to install one metre of culvert was approximately \$450. The industry standard to install one metre of 600 millimeters of culvert is about \$250. This cost does not include the rehabilitation of the road surface. Therefore it cost at least \$40,000 more to do this work “In House” than the industry standard

28 working days were required to complete the culvert work by the “In House Crew” where typically a contractor would complete one culvert per day.

The utilization of “In House” construction crew reduces the amount of inspection and engineering time; however the amount of staff administration time is significantly increased for “In House” projects. In addition, when two parties complete work on a project there can be issues regarding the enforcement of warranties.

It is recognized that the “In House” Construction Crew made every effort to complete the work as efficiently as possible, however it is very difficult for them to compete with the private sector because of specialized equipment, expertise and labour costs.

It is recommended that the Transportation Services Department no longer forms an “In House” Construction Crew for economic reasons.

During the summer of 2014, the Grey County Transportation Services Staff will be used for the Bridge Crew, maintenance and inspection activities. This will result in maintaining all full time employees and only hiring seasonal staff for winter work.

Financial / Staffing / Legal / Information Technology Considerations

The elimination of the “In House” Construction Crew will result in a cost savings of approximately \$150,000 per year.

Link to Strategic Goals / Priorities

The proposed modification will result in cost efficiencies that will enhance in achieving excellence in government and services.

Respectfully submitted by,

M.J. Kelly
Director of Transportation Services

List of Attachments

[TR-TAPS-37-13 Transportation Services Reviews](#)

[Attachment TR-TAPS-37-13 Transportation Services Internal Review Summary Report May 2013](#)