



## REPORT TO COUNTY COUNCIL

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FROM: Julie Gonyou, Chief Administrative Officer

DATE: April 2, 2019

SUBJECT: Port Bruce Bridge Project Update – Supplemental Report

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### **RECOMMENDATION:**

THAT the report titled “Port Bruce Bridge Project Update – Supplemental Report” from the Chief Administrative Officer, dated April 2, 2019 be received and filed.

### **INTRODUCTION:**

A report from the Director of Engineering Services, County Solicitor, and Chief Administrative Officer (CAO) titled “Port Bruce Bridge Project Update” was presented to County Council on March 26, 2019. This report provided an overview of expenditures paid by the County (up to March 11, 2019) for goods, services and mitigation associated with both the collapse of the Port Bruce Bridge and the installation of the temporary bridge.

The following supplemental report seeks to satisfy a request received from a member of Council for additional information and provides an overview of publicly available information on this project. This report seeks to dispel misconceptions that the bridge project was grossly over-budget or that staff did not seek timely and necessary approvals for each aspect of the project which required Council's consent.

### **BACKGROUND:**

Following the collapse of the Port Bruce Bridge on February 23, 2018, County Council recognized the immediacy and importance of responding to the community's transportation and emergency response needs. Council responded to this need through a resolution that authorized the CAO and Warden to move forward with the installation of a temporary bridge, understanding the need to protect the safety and security of the residents of Port Bruce.

It was often difficult for staff to provide Council with solid and reliable estimates for each aspect of the demolition/clean up and the preparation for and installation of the temporary bridge. Not only did our staff have little experience dealing with an infrastructure failure of this magnitude, but we found that our regular contractors had little experience with it as well. It isn't very often that a bridge collapses and as a result, staff were careful to consistently report all preliminary figures as “*estimates only*”. Revised and accurate estimates, tender submission pricing and changes in anticipated project costs were reported to County Council in a timely manner and approval was received prior to the commencement of work. Council approval through resolution was obtained prior to the execution of any contracts by the Warden and CAO.

## **KEY MILESTONES:**

The following offers a review of the Port Bruce Bridge Collapse and Temporary Bridge timeline of events and summary of key decision making milestones of Elgin County Council.

### **February 23, 2018**

The Catfish Creek Bridge on Imperial Road collapsed. The Warden and senior staff met to ensure that an emergency detour was in place, safety fencing and barricades were installed, appropriate signage was in place, OPP patrols in the area were increased, and a plan was formulated to provide essential emergency services to the residents of Port Bruce. Safety fencing and barricades, etc. are included in Table 1 – “Collapsed Bridge Expenditure Summary” under “Miscellaneous (notification, site protection, etc.)”.

### **February 28, 2018**

A Special Meeting of County Council was called in response to a request from the Township of Malahide to explore municipal responsibilities including safety, security and convenience of residents. Malahide Township suggested that one entrance to the village of Port Bruce was unacceptable and requested that Elgin County explore a temporary, short-term bridge. Within the parameters established by the County’s procurement policy, the CAO approved the use of Dillon Consulting for a preliminary, initial engineering assessment of the bridge collapse.

Council directed staff to prepare a report detailing and considering all engineering and construction options including short-term and long-term solutions related to the Port Bruce Bridge and report back to Council.

### **February 29 – March 12, 2018**

Elgin County Warden and CAO met with the Ontario Office of the Fire Marshal, the Provincial Emergency Operations Centre, the Ministry of Safety and Correctional Services and the Township of Malahide to ensure all options were explored including the option of a military installed temporary bridge proposed by Malahide Township.

### **March 13, 2018**

County CAO presented a report detailing four options, including:

- a. Purchase of a temporary bridge to be installed at an off-site location;
- b. Military installed temporary bridge (did not meet criteria);
- c. Foregoing the installation of the temporary bridge in favour of an expedited rebuild of the Imperial Road Bridge; and
- d. Rental bridge option (determined to be close in cost to purchasing temporary bridge).

At this meeting, County Council recognized the immediate need for the installation of a temporary bridge in Port Bruce at the request of Malahide Township. At this meeting, Council authorized the Warden and the CAO to proceed with the procurement and installation of the temporary bridge, subject to the Township of Malahide's permission to redirect traffic, and the County's ability to obtain a permit to use the waterway. There was urgency associated with demolition of the collapsed bridge because of the time constraints associated with spawning season. The collapsed bridge had to be removed by April 13<sup>th</sup>, 2018.

It was moved by Councillor Jenkins and Seconded by Councillor Mennill that the CAO was authorized by Council to undertake many actions, most notably, County Council:

- a. consented to continued engineering review of the collapsed structure;
- b. authorized utilizing emergency procurement not to exceed \$1M to sole source a demolition contractor for the removal of the collapsed bridge.  
**\*\* up to \$1M was approved** - Priestly Demolition's actual price for the removal of the collapsed bridge was **\$537,683.56**. The total for demolition is included in Table 2 – "Temporary Bridge Expenditure Summary as of March 11, 2019" under "Demolition";
- c. authorized the CAO to sole source a temporary bridge for an expedited bridge installation and Council authorized the Warden and CAO to proceed with the procurement; and
- d. directed that staff provide a follow up report including cost, delivery estimates, potential installation dates; Council authorized the Warden and CAO to proceed with the procurement and installation of the temporary bridge, subject to Township of Malahide's permission to redirect traffic, and our ability to obtain a permit to use the waterway; and staff provide a report detailing costs at the March 27<sup>th</sup>, 2018 meeting of County Council.

### **March 14, 2018**

Staff immediately proceeded to survey that which was identified as the preferred bridge site location (Bank Street), completing geotechnical investigations (Spriet Associates) and exploring approval requirements.

The pre-work completed by Spriet Associates totalled \$31,000 and is included in Table 2 "Temporary Bridge Expenditure Summary" under "Engineering (surveys, geotechnical, etc.)".

### **March 16, 2018**

The County received approval through resolution from the Township of Malahide which granted the County permission to investigate the feasibility of installing a temporary bridge at the south limits of Bank Street, where a bridge formerly existed, and obtained permission to redirect traffic on this road.

### **March 23, 2018**

Truck was removed from the Imperial Road Bridge by the operator.

### **March 26 – April 13, 2018**

Demolition and removal of the Imperial Road Bridge from Catfish Creek was completed in accordance with environmental timelines.

### **April 19 – May 7, 2018**

The Warden, CAO and County Solicitor worked to overcome legal, logistical and supplier related obstacles.

Survey investigations completed by Spriet Associates confirmed the bridge span and type required at the Bank Street location and in order to minimize project timing, it was recommended that the panel bridge be purchased directly from the bridge supplier as soon as possible.

The County's engineering consultant Spriet Associates worked quickly to prepare the detailed design and finalized contract package for the temporary bridge.

Spriet Associates total engineering costs associated with many aspects of the temporary bridge including engineering (surveys, geotechnical, etc.), detailed design and bridge specifications, inspection of other bridges (Jamestown Bridge), detailed design of temporary boat launch etc. was \$134,218. This is reflected in Table 2 – "Temporary Bridge Expenditure Summary" under "Engineering (surveys, geotechnical, etc.)".

### **May 8, 2018**

Council authorized \$1.52M for project requirements related to the temporary bridge to be installed at the south limits of Bank Street including road work, purchase of bridge and bridge installation. The estimated project cost of a temporary bridge was reported at this meeting to include the cost of the bridge itself \$625,000 and the other fees include installation, engineering and road work.

The original estimate for a temporary bridge reported to County Council in February/March 2018 was for \$600,000 based on 2016 costs for the County's replacement of Edison Drive Bridge. Once accurate costing information was available it was relayed to County Council and it was clear at that time that the original estimate provided to Council only included the cost of the bridge.

While \$625,000 was approved for the bridge itself, the actual cost of the bridge was \$608,067, included in Table 2 – "Temporary Bridge Expenditure Summary as of March 11, 2019" under "Acrow Panel Bridge Purchase".

Staff was directed to facilitate an appropriate Emergency Services Plan with interested local municipal partners and/or contractors that service the community of Port Bruce.

Staff was directed to host a public information session to share traffic detour plans and the completed plans for the temporary bridge at the Bank Street/Dexter Line location.

### **May 14, 2018**

A temporary bridge (55 m long x 5.5 m wide) was purchased from Acrow Bridge. A comprehensive review of the existing detour signage was undertaken. Township of Malahide as well as residents and visitors of Port Bruce provided feedback for improvements which enhanced awareness that local businesses, the beach and Lake Erie remained open for business.

### **May 28, 2018**

An invitation of tender is issued for installation of the temporary panel bridge and associated road works. Tenders closed June 5<sup>th</sup>, 2018.

### **June 11, 2018**

A public information session was held at the East Elgin Community Complex.

### **June 12, 2018**

Three experienced bidders were invited to submit a bid for the installation of the temporary panel bridge in Port Bruce. It was noted in a report to Council on June 12, 2018 that while McLean Taylor Construction submitted the lowest compliant bid for the project at a total price of \$972,000.00 inclusive of a contingency allowance and exclusive of HST, the lowest submitted bid was reported to Council as being over the budget estimate by approximately 40%.

Despite the higher than anticipated price, Council remained committed to the installation of the temporary bridge and awarded the installation of the temporary panel bridge to McLean Taylor Construction Limited at a total price of \$972,000.00, inclusive of a contingency allowance and exclusive of HST, and the Warden and CAO were authorized by Council to sign the contracts. The actual cost for the work completed by McLean Taylor was **\$897,450** and is included in Table 2 – “Temporary Bridge Expenditure Summary as of March 11, 2019” under “Bridge Installation”.

At this meeting, a report provided to County Council titled “Contract Award – Port Bruce Temporary Panel Bridge Installation Contract No. 6290-18-05” provided Council with estimated costs associated with the bridge, installation, engineering and potential mitigating elements. Please note an additional column **\*new** has been added to reflect actual costs.

### **Bridge and Installation (estimates from June 12, 2018)**

Item	Description	Estimated Value	Anticipated Cost (on June 12, 2018)	*NEW Actual (up to April 2, 2019)
1.	Acrow Panel Bridge	\$625,000	<b>\$625,000</b>	\$608,067
2.	Contract No. 6290-18-05 (installation, road work purchase of bridge and installation)	\$690,852	<b>\$972,000</b>	\$891,450
3.	Engineering	\$126,468	<b>\$126,500</b>	\$134,218
4.	Potential Mitigating Elements	\$50,000	<b>\$50,000</b>	\$131,286
<b>TOTAL</b>		\$1,492,320	<b>\$1,773,500</b>	\$1,765,021

#### **Mid-June 2018**

Construction and installation of a temporary bridge on Bank Street/Dexter Line began (June 18, 2018).

#### **Mid-August 2018**

The temporary bridge was opened to traffic ahead of schedule on Monday, August 20, 2018.

#### **September 5, 2018**

Staff were directed to have Dillon Consulting complete the forensic failure investigative report (at a total cost of no more than \$145,100.00 exclusive of HST). Invoices received from Dillon Consulting to date are included in Table 1 - "Collapsed Bridge Expenditure Summary as of March 11, 2019" under "Imperial Road Collapse Forensic Failure Investigation".

### **OTHER CONSIDERATIONS:**

#### **Miscellaneous and Mitigation Measures**

It was reported to County Council by the CAO and County Solicitor that the installation of the temporary bridge and resultant efforts to mitigate against adverse effects were unlikely to give rise to a complete legal solution. Mitigation Measures, as reported to Council on March 26, 2019 in the amount of \$131,286 must be considered in closed session if raised as it relates to potential and on-going litigation.

The Township of Malahide, who completed necessary work on behalf of the County submitted invoices to the County of Elgin for several miscellaneous services:

1. Installation of Temporary Signs - **total \$750.33** (included in Table 1 – “Collapsed Bridge Expenditure Summary as of March 11, 2019” under “Miscellaneous (notification, site protection, etc.)”.)
2. Bridge Clean Up (6 Volunteer Fire Fighters and 1 fire truck) - **total \$2251.68** (included in Table 2 – “Temporary Bridge Expenditure Summary as of March 11, 2019” under “Mitigation Measures”.)
3. Garbage and Recycling Collection Detour, raise hydrant, signage labour, vehicle usage – **total \$16,882.77** (included in Table 2 – “Temporary Bridge Expenditure Summary as of March 11, 2019” under “Mitigation Measures”.)

### **COLLAPSED AND TEMPORARY BRIDGE EXPENDITURE SUMMARY**

#### **March 26, 2019 – Port Bruce Bridge Project Update**

A report from the Director of Engineering Services, County Solicitor and CAO relayed the following costs associated with both the collapsed and temporary bridge structures. An additional column detailing “aspects requiring Council’s consent” has been added to enhance transparency.

**Table 1**

<b>Collapsed Bridge Expenditure Summary</b>		<b>Additional Information</b>
<b>(as of March 11, 2019)</b>		<b>Aspects requiring Council’s Consent</b>
Imperial Road Collapse Forensic Failure Investigation	\$117,751	On March 13, 2018, Council consented to <b>\$145,100.00</b> – it is important to note that the study is not yet complete. \$117,751 reflects invoices received as of March 11, 2019.
Demolition	\$572,180	On March 13, 2018, Council authorized utilizing emergency procurement to single-source a demolition contractor for the removal of the collapsed bridge in an amount <b>not to exceed \$1M</b> . Priestly Demolition’s price for the removal was <b>\$536,683.56</b> .
Miscellaneous (notification, site protection, etc.)	\$41,336	Includes invoice from Township of Malahide for installation of signs in the amount of \$750.33. Other miscellaneous items include emergency fencing, barricades, etc.
<b>TOTAL</b>	<b>\$731,267</b>	

**Table 2**

<b>Temporary Bridge Expenditure Summary</b>		<b>Additional Information re: aspects requiring Council's Direction</b>
<b>(as of March 11, 2019)</b>		
Engineering (surveys, geotechnical, etc.)	\$134,218	Work completed by Spriet Associates, including site preparation, survey and inspection, geotechnical, engineering design for temporary bridge, temporary boat launch, etc. <b>Total \$134,218.</b>
Acrow Panel Bridge Purchase	\$608,067	On May 8, 2018 Council approved \$625,000 for the purchase of the Acrow Panel Bridge. The cost of the bridge was <b>\$608,067.</b>
Bridge Installation	\$891,450	On May 8, 2018 Council authorized \$1.52M for project requirements related to the temporary bridge including \$625,000 for the purchase of the temporary bridge. The remaining budgeted amount for the installation, road work, purchase of the bridge and bridge installation approved by Council was \$895,000. On June 12, 2018, Council approved McLean Taylor as the lowest compliant bid for the installation project at a total price of \$972,000.00, an increase over the previously approved amount of \$895,000. The total for the installation was <b>\$891,450.</b>
Mitigation Measures	\$131,286	Originally estimated on June 12, 2018 to be <b>\$50,000.</b> Invoices received to date total <b>\$113,286.</b> This section also includes invoice from the Township of Malahide for Bridge Clean Up which totalled \$2251.68.
Miscellaneous (signs, public information centre, etc.)	\$10,453	
<b>TOTAL</b>	<b>\$1,865,474</b>	

**OUTSTANDING COSTS:**

- 1. Fire Service:** Central Elgin Fire Department provided supplementary Fire Service to the residents of Port Bruce until such time as the temporary bridge was installed. **This invoice was not included in financials reported as of March 11, 2019 and will be included in the next Port Bruce Bridge Project Update report.**
- 2. Forensic Investigation:** The "Imperial Road Collapse Forensic Failure Investigation" will wrap up in the coming weeks. It is expected that Dillon Consulting will submit an invoice the County in the amount of \$27,349 once the investigation is complete.
- 3. Mitigation measures:** County may be faced with unexpected costs associated with on-going litigation and potential litigation.



**CONCLUSION:**

Staff worked diligently over a period of 6 months to restore access for residents in the Community of Port Bruce. In addition to regular Council meetings, the Warden called Special Meetings as required. This report provides a summary of publicly available information and serves as a supplemental report to the report "Port Bruce Bridge Project Update" received by County Council on March 26, 2019.

All of which is Respectfully Submitted

Julie Gonyou  
Chief Administrative Officer