

**STAFF REPORT:      ENGINEERING AND PUBLIC WORKS DEPARTMENT**

**REPORT TO:**                    Infrastructure and Recreation  
Committee

**MEETING DATE:**            July 9<sup>th</sup> 2012

**REPORT NO.:**                EPW.12.054

**SUBJECT:**                    Contract Contingency Increase  
2012-08-T-EPW - Slabtown  
Bridge Replacement

**PREPARED BY:**            Tom Gray, Engineering Design  
Technologist

**A.      Recommendations**

THAT Council receive Report EPW.12.054 entitled “Contract Contingency Increase 2012-08-T-EPW – Slabtown Bridge Replacement”; and,

AND THAT Council endorse the expenditure of an estimated \$42,302.80, excluding HST, to reface the existing abutments as part of the Slabtown Bridge Replacement;

AND THAT Council approve an increase in the contract contingency value for the Slabtown Bridge Replacement (2012-08-T-EPW) to Maloney and Pepping Construction Ltd., by \$25,000 from \$604,779 to \$629,779, excluding HST.

**B.      Background**

The Slabtown Bridge in the Town of The Blue Mountains spans the Beaver River and is the only access into the Slabtown community. The bridge replacement project is underway and progressing well.

**Reface Abutments**

The existing bridge abutments have been designated for rehabilitation, rather than replacement, to minimize the impact to the Beaver River. During the rehabilitation process, it has been determined by Gamsby & Mannerow Ltd (consultant) that the existing concrete in the abutments is more deteriorated than expected. The consultant is recommending re-facing the abutments at an additional estimated cost of \$42,302.80, which is the net cost difference between the work that will be required to re-face the abutments and that work which is differed. The value re-facing was calculated on the unit prices provided at time of tendering and is therefore considered fair value for the work anticipated.

It is predicted that the concrete abutments in their current condition, if patched as per the original contract, will have a service life of 20 to 30 years. By re-facing the abutments, the service life is expected to increase to 50 years. The new steel bridge super-structure although is expected to have a service life of 75 years. In any event, the life of the abutments will be less than the bridge and the Town at some point will need to

do additional abutment repairs to extend the life of the abutments to the life of the super-structure. The question of whether to proceed with additional abutment repairs now is one of weighing the additional costs to the additional service life.

On balance, Staff recommend that the additional abutment work be completed to extend the bridge system life to at least 50 years at which time the Town can make a decision on what repairs are necessary given the circumstances of the day.

The current construction contract provides \$50,000 in contingency. Staff have the authority to expend the contingency up to the allowance, however given the size of the expenditure and the nature of the value judgement, the issue has been brought to the Infrastructure and Recreation Committee for endorsement. With the endorsement of the Committee, the Director of Engineering and Public Works will execute the Change Order to minimise any delay in work and resultant contract extension.

### **Contract Contingency Increase**

With the expenditure of \$42,302.80 as discussed above, the contingency allowance is reduced to around \$7,700. Staff consider this to be a low amount given the nature of the bridge rehabilitation work. The single biggest contingency concern was the abutments. Since the extent of any abutment repairs are now known, Staff feel that full contingency replacement is not necessary, however Staff recommend that the contract value be increased by \$25,000 from \$604,779 to \$629,779, excluding HST, to permit a contingency allowance of around \$32,700 be available for unexpected expenses. The expenditure of any contingency is only permitted when a Change Order has been executed by the Director of Engineering and Public Works.

### **C. The Blue Mountains' Strategic Plan**

Completing this project assists with the Town's Strategic Plan Goal #2 "Addressing the Town's Municipal Infrastructure needs".

### **D. Environmental Impacts**

By re-facing the abutments during the current construction contract, any further rehabilitation above the Beaver River will differ from approximately 20 – 30 years until 50 years.

**E. Financial Impact**

An updated chart with the proposed budget for the Slabtown Bridge Replacement with the proposed \$25,000 contract contingency allowance increase is provided below.

<b>Budget Item</b>	<b>Budget Amount</b>	<b>Tendered Cost</b>	<b>Revised Contract Cost</b>
Engineering & Contract Administration	\$100,000	\$89,000	\$89,000
Construction	\$1,070,000	\$604,779	\$629,779
Contingency	\$125,000	\$ 0	\$ 0
<b>Total</b>	<b>\$1,352,000</b>	<b>\$693,779</b>	<b>\$718,779</b>

The revised anticipated budget surplus is \$633,221.

**F. In Consultation With**

Capital Accountant

**G. Attached**

None

Respectfully submitted,

Tom Gray  
Tom Gray  
Engineering Design Technologist

Reg Russwurm  
Reg Russwurm  
Director of Engineering & Public Works

For more information, please contact:  
Tom Gray  
[tgray@thebluemountains.ca](mailto:tgray@thebluemountains.ca)  
519-599-3131 ext. 277