

Report TR-TAPS-45-15

To: Chair Barfoot and Members of the Transportation and Public Safety Committee
From: M.J. Kelly, Director of Transportation Services
Meeting Date: April 23, 2015
Subject: 2015 Construction, Resurfacing and Minor Capital Budget Update
Status: Recommendation adopted by Committee as presented per Resolution TAPS62-15; Endorsed by County Council May 5, 2015 per Resolution CC67-15;

Recommendation(s)

WHEREAS the majority of the 2015 construction tenders have closed and the Transportation Services department 2015 Construction, Resurfacing and Minor Capital budget needs to be modified to reflect the projected costs;

AND WHEREAS TR-TAPS-31-15 recommends that the Grey Road 17 pulverize and pave not be awarded;

AND WHEREAS Grey Road 3 south of Ayton requires capital construction funds to be allocated to it in 2015;

NOW THEREFORE BE IT RESOLVED THAT Report TR-TAPS-45-15 regarding the 2015 Construction, Resurfacing and Minor Capital Budget be received;

AND THAT replacement of structures 010-590 and 010-900 be delayed and added to the budget for completion in 2016;

AND THAT a tender for pulverizing and paving on Grey Road 3 south of Ayton be added to the 2015 Construction, Resurfacing and Minor Capital program;

AND THAT the projected 2015 Construction, Resurfacing and Minor Capital deficit of \$154,623 be funded from any surpluses realized in the 2015 Transportation Services operating budgets, and if sufficient funds exist, that any shortfall in funding be funded from the Transportation Services General Reserve.

Background

The County of Grey Transportation Services Department has currently closed the majority of the 2015 tenders and the tenders have significantly exceeded the 2015 approved budget for Construction, Resurfacing and Minor Capital. In addition, a section of Grey

Road 3 south of Ayton deteriorated significantly during the 2014/2015 winter and requires capital expenditures. The Transportation Services Department is recommending modifications to the planned projects.

The reason for the increase in tender price includes the following:

- The original project cost was estimated using 2014 construction prices. With the significant drop in oil prices, it was felt that this was a very conservative estimate. However, the unit price for hot mix has increased resulting in this tender being over the estimated budget.
- Contractors are concerned that the oil prices will increase later in the year and have increased the prices to compensate for the potential increase.
- The tenders were issued later this year because of the timing of the budget approval and the contractors had already been awarded contracts.
- The scope of several of the projects increased upon completion of the final design.

Transportation Services will consider measures to enhance tendering for the future.

Hot mix consists of gravel, sand and asphalt cement. Asphalt cement is an oil based product and the price can change significantly over a construction season. As a result, many tenders, including Grey County's, implement a clause into the tender adjusting the hot mix price as the cost of the asphalt cement fluctuates. During the winter months, the asphalt cement index is dormant and, as a result, all Grey County tenders were bid based on the asphalt cement price for the fall of 2014, before the price of oil declined. It is expected that the price of asphalt cement may decline by approximately \$100.00 per tonne this spring. If this occurs, it would result in a savings of approximately \$230,000 for Grey County projects.

Significant Changes in Planned Projects

Grey Road 17 Pulverize and Pave

It is recommended to not award this contract in 2015, then reassess, modify and retender in 2016.

This project included pulverizing and paving the distressed hot mix surface that is cracked and distorted. In addition, the road platform was to be widened to accommodate paved shoulders.

The expected budget to complete this work is \$799,637.16 which is \$422,637.16 over the \$377,000 approved budget.

The reason for the cost exceeding the estimate could be contributed to the following:

- During design it was discovered that the work to widen the shoulders was more involved than initially planned.

- The treatment through the swamp area was more elaborate than originally estimated.
- The original project cost was estimated using 2014 construction prices. With the significant drop in oil prices it was felt that this was a very conservative estimate. However, the unit price for hot mix has increased resulting in this tender being over the estimated budget.

This section of Grey Road 17 had minimal deterioration during the winter and, as a result, there will be minimal work required to maintain the road in 2015.

The Grey Sauble Conservation Authority has recently identified that they require mitigation measures implemented for snapping turtle nesting. This will result in additional costs.

When the work is tendered in 2016, the design will be re-evaluated to determine if there is a more economic method.

Structure 010-590 and 010-900

Bruce County has advised that they are unable to partner with Grey County on this project until 2016.

Grey Road 3 South Pulverize and Pave Inclusion

The southern-most section of Grey Road 3, south of Ayton, deteriorated severely in the winter of 2014/2015. In accordance with the five year plan, this project is scheduled for resurfacing in 2018. It is estimated that this section of road will require approximately \$100,000 of work, including edge patching and pothole repair, to maintain it until 2018. To pulverize and pave this section of Grey Road 3, the cost would be approximately \$560,000, of which \$325,000 would be offset by gas tax funding. Considering the overall cost and potential safety issues, it is recommended to complete this work in 2015.

Grey Road 31- From Simcoe Road 91 to Singhampton

This project is being completed in partnership with Simcoe County and MAQ (St. Mary's Cement). The Consultant has recently completed the design and estimate. It appears that the Grey County portion could increase by approximately \$100,000 over the original estimate when the agreement was signed; therefore, it is recommended to increase the projected cost for this project by \$100,000.

Budget Estimate Shortfalls

Some increased scopes of work were discovered during the final design stage.

Grey Road 29 Pulverize and Pave

Tree cutting, full excavation and guiderail replacement at one section is more than anticipated. The tree cutting alone is anticipated to be an additional \$30,000.

Grey Road 12 Overlay

The channel (ramp) on Grey Road 12 at Oxmead requires some reconstruction work which was not accounted for at the time of estimating.

Grey Road 17A Overlay

Reconstruction of the intersection of Grey Road 1 and Grey Road 17A including full excavation of the turning and slip around lanes have been added to the project as they are rapidly deteriorating.

Financial / Staffing / Legal / Information Technology Considerations

With the proposed modifications, the levy will remain consistent; however, projected cost for each of the contracts have been adjusted as per the tendered contracts. The Grey Road 17 and Bruce County shared structure projects have been deferred until 2016. In addition, some of the gas tax and development charges funding have been modified.

[Attachment 2015 Construction Resurfacing and Minor Capital Update](#)

Link to Strategic Goals / Priorities

The values statement of the approved Corporate Strategic Plan includes fiscal responsibility. Consistent application of the purchasing policy requirements focuses on the commitment to ensure effective and efficient processes, which offer prudent use of public funds.

Respectfully submitted by,

M.J. Kelly
Director of Transportation Services

The County of Grey
Construction, Resurfacing and Minor Capital

Description	2015 BUDGET	2015 Projection
Minor Capital		
Grey Road 19 Slope Stabilization		
Minor Capital	650,000	650,000
Culverts Under 3m	450,000	450,000
Sub-Total - Minor Capital	1,100,000	1,100,000
Major Bridge and Culvert Repairs		
Bridge Maintenance	550,000	550,000
Bridge Capital - Normanby-Carrick Bridge	500,000	500,000
Bridge Capital - 5 Year Bridge Designs	50,000	50,000
Structure Detailed Investigations	50,000	50,000
Transfer From Reserve - TS General	(50,000)	(50,000)
Transfer From Reserve - Capital Infrastructure	(500,000)	(500,000)
Sub-Total - Major Bridge and Culvert Repairs	600,000	600,000
Construction and Resurfacing		
	14,656,130	14,360,753
Transfer From Reserve - Development Charges	(1,041,703)	(1,161,660)
Transfer From Reserve - Transportation General	(1,673,090)	(1,707,756)
Transfer From Reserve - Federal Gas Tax Funding	(2,902,830)	(2,902,830)
Additional Funding Sources (see below)	(5,269,555)	(4,819,555)
Sub-Total - Construction and Resurfacing	3,768,952	3,768,952
Pre-Engineering Costs for Capital Projects	310,000	310,000
Traffic Signal Engineering	5,000	5,000
Transfer to Reserve - Transportation General	241,839	241,839
Transfer to Reserve - Traffic Signal	75,000	75,000
Total Expenditures	17,537,969	17,242,592
Transfer From Reserve - Transportation General	(1,723,090)	(1,757,756)
Transfer From Reserve - Development Charges	(1,041,703)	(1,161,660)
Transfer From Reserve - Capital Infrastructure	(500,000)	(500,000)
Transfer From Reserve - Federal Gas Tax Funding	(2,902,830)	(2,902,830)
Additional Funding Sources		
Federal Grant		
Provincial Conditional Grant	(2,944,555)	(2,944,555)
Other Municipalities	(1,075,000)	(625,000)
Cost Recoveries - Partners	(1,250,000)	(1,250,000)
Net Levy Requirements	6,100,791	6,100,792

The County of Grey
Construction and Resurfacing

Description	2015 BUDGET	2015 Projection
Grey Road 119 Reconstruction: 4th Line - Grey Road 19 (119024-119033)	3,314,888	3,232,676
Fed/Prov Grants - Mill Funding	(1,930,000)	(1,930,000)
From Reserve - Carried from 2014	(50,000)	(50,000)
Net Levy	1,334,888	1,252,676
Grey Road 15 Reconstruction: Water Treatment Plant North - East Bayshore Road (15030)	2,084,538	2,187,711
From Reserve - 2014 Carryforward	(525,090)	(525,090)
From Reserve - DC Category 5	(26,537)	(34,206)
From Reserve - DC Category 2	(839,857)	(857,205)
Investing in Ontario	(690,040)	(690,040)
Net Levy	3,014	81,170
Grey Road 31 Road Construction (F15 - 18)	2,500,000	2,600,000
Partners - MAQ	(1,250,000)	(1,250,000)
Partners - Simcoe County	(625,000)	(625,000)
From Reserves - Carried from 2014	(398,000)	(398,000)
Net Levy	227,000	327,000
Grey Road 29 Pulverize & Pave Rehabilitation: 0.6 km West of 1st Concession - South Limit of Bognor (29019)	352,963	445,612
From Reserve - DC Category 3	(175,309)	(270,249)
From Reserve - Federal Gas Tax	(120,000)	(120,000)
Net Levy	57,654	55,363
Grey Road 15 Grind and Pave: 7th Street to 8th Street (15006)	22,673	96,985
Grey Road 15 Grind and Pave: 9th Street to 10th Street (15012)	23,115	
Net Levy	45,788	96,985
Grey Road 3 Structure 3900 260 m North of Grey Road 18	600,000	519,371
From Reserve - Transportation General	(300,000)	(494,666)
Net Levy	300,000	24,705
Grey Road 40 Pulverize & Pave Rehabilitation: Gore Crescent - Veterans Road North (40033-40034)	509,715	554,729
From Reserve - Federal Gas Tax	(300,000)	(300,000)
Net Levy	209,715	254,729
Grey Road 4 Pulverize & Pave Rehabilitation: Grey Road 28 - 1.0 km Easterly (4018)	420,000	246,689
From Reserve - Construction Reserve	(400,000)	(240,000)
Net Levy	20,000	6,689

The County of Grey
Construction and Resurfacing

Description	2015 BUDGET	2015 Projection
Grey Road 40 Preventative Overlay: Grey Road 2 to 7th Line(40066)	205,001	225,854
From Reserve - Federal Gas Tax	(150,000)	(150,000)
Net Levy	55,001	75,854
Grey Road 9 Patch and Preventative Microsurface Highway 6 - Grey Road 109 (9027)	320,737	431,086
From Reserve - Federal Gas Tax	(80,000)	(80,000)
Net Levy	240,737	351,086
Grey Road 12 Overlay 16 Sideroad - 7th Line (12063)	284,058	415,328
From Reserve - Federal Gas Tax	(100,000)	(100,000)
Net Levy	184,058	315,328
Grey Road 17A Preventative Overlay Grey Road 17 - Grey Road 1 (17A003)	489,655	542,389
From Reserve - Federal Gas Tax	(320,000)	(320,000)
Net Levy	149,655	222,389
Grey Road 17 Pulverize & Pave Rehabilitation: Grey Road 170 - Concession 14 (17010)	377,000	-
From Reserve - Federal Gas Tax	(325,000)	-
Net Levy	52,000	-
Grey Road 18 Preventative Overlay Grey Road 29 to Hwy 26	771,987	802,321
From Reserve - Federal Gas Tax	(542,000)	(542,000)
Provincial Grant - Investing in Ontario	-	-
Net Levy	229,987	260,321
10-590 Bridge Partners - Bruce County	450,000	-
Net Levy	(225,000)	-
010-900 Culvert Partners - Bruce County	450,000	-
Net Levy	(225,000)	-
Grey Road 3 Pulverize and Pave Rehabilitation Victoria St. to 1 km S of Concession 18 (3017-3022)	1,150,000	1,150,000
From Reserve - Federal Gas Tax	(665,830)	(665,830)
Provincial Grant OCIF	(324,515)	(324,515)
Net Levy	159,655	159,655
Grey Road 3 Pulverize and Pave Rehabilitation Bentink Sullivan Townline to Grey Road 25 (3045)	350,000	350,000
From Reserve - Federal Gas Tax	(300,000)	(300,000)
Net Levy	50,000	50,000
Grey Road 3 south Pulverize and Pave Rehabilitation From the Grey/Wellington Townline north 3.5 km		560,000
From Reserve Federal Gas Tax		(325,000)
Net Levy	-	235,000
Total Expenditures	14,656,130	14,360,753
From Reserve - Development Charges	(1,041,703)	(1,161,660)
From Reserve - Transportation Services	(1,673,090)	(1,707,756)
Additional Funding Sources	(5,289,555)	(4,819,555)
Federal Gas Tax Funding	(2,902,830)	(2,902,830)
Net Levy Requirement	3,768,952	3,768,952