

Report TR-TAPS-03-15

To: Chair and Members of the Transportation and Public Safety Committee
From: Patrick Hoy, Engineering Manager
Meeting Date: December 18, 2014
Subject: **Construction and Minor Capital Design Summary**
Status: Recommendation adopted by Committee as presented per Resolution TAPS07-15; Endorsed by County Council January 6, 2015 per Resolution CC22-15;

Recommendation(s)

THAT Report TR-TAPS-03-15 regarding the Construction and Minor Capital Design Summary be received for information.

Background

The Five Year Capital and Extra-Ordinary Expenditure budget was approved by County Council on July 8, 2014. The September completion of current road needs inspections resulted in the removal of eight of the original twenty-two projects with one project being added for a total of fifteen projects proposed for 2015. The five year plan is a 'living document' that is reviewed frequently due to varied road deterioration, and projects undergoing changes as designs progress.

Typically, these projects would be approved as part of the budget process prior to the development of the tenders; however, due to the later than usual budget approval, it was decided to bring forward the design details relating to the projects at the earliest opportunity, as staff is currently working on the tenders for 2015. Below is a list of projects as shown on the approved 2015-2019 Five Year Capital and Extra-Ordinary Expenditures plan, and the current status. Further details follow the chart.

Retained Projects

1.	Grey Road 119 Reconstruction	Remain in 2015 Program
2.	Grey Road 15 (3 rd Avenue East, City of Owen Sound) Reconstruction	Remain in 2015 Program
3.	Grey Road 29 Rehabilitation - Bognor	Remain in 2015 Program
4.	Grey Road 15 Grind and Pave - 7 th Street East to 8 th Street East, City of Owen Sound	Remain in 2015 Program
5.	Grey Road 15 Grind and Pave - 9 th Street East to 10 th Street East, City of Owen Sound	Remain in 2015 Program
6.	Grey Road 3 Structure – Keady Bridge	Remain in 2015 Program - reduce estimate for 2015 budget
7.	Grey Road 40 Rehabilitation – Gore Crescent to Veterans Road North	Remain in 2015 Program
8.	Grey Road 40 Overlay – Grey Road 2 to Highway 26	Remain in 2015 Program – modified east limit to the 7 th Line
9.	Grey Road 4 Grind and Pave – Grey Road 28 - 1km east	Remain in 2015 Program
10.	Grey Road 31 Reconstruction	Remain in 2015 Program
11.	Grey Road 17A Hot Mix Overlay	Remain in 2015 Program – recommending paved shoulders
12.	Grey Road 9 Pulverize and Pave - Highway 6 to Grey Road 109 – 2.7km	Remain in 2015 Program – originally micro surface
13.	Grey Road 17 – Grey Road 170 to Concession 14 – 2.0km	Remain in 2015 Program
14.	Grey Road 12 – from Sideroad 16 to the 7 th Line – 2.8km	Remain in 2015 Program – originally micro surface

<i>Removed Projects</i>		
1.	Grey Road 5 – from 9 th Avenue East to 16 th Avenue East, City of Owen Sound	Removed from 2015 Budget
2.	Grey Road 18 – Highway 6/10 to Grey Road 11	Removed from 2015 Budget
3.	Grey Road 12 micro surface – from Sideroad 16 to the 7 th Line – 2.8km	Removed from 2015 Budget
4.	Grey Road 12 micro surface – from Euphrasia/St. Vincent Townline 3km north	Removed from 2015 Budget
5.	Grey Road 7 micro surface – from Euphrasia/St. Vincent Townline to 4 Sideroad	Removed from 2015 Budget
6.	Grey Road 40 micro surface – Grey Road 7 to 3 rd Line D	Removed from 2015 Budget
7.	Grey Road 9 micro surface – Neustadt	Removed from 2015 Budget
8.	Grey Road 17 Overlay – From Girl Guide Road to Grey Road 17B	Removed from 2015 Budget

<i>Additional Project</i>		
1.	Grey Road 18 – Grey Road 29 to Highway 26 – 6.7km	Added to 2015 budget

Retained Projects with Details

1. Grey Road 119 Reconstruction
 - Original budget of \$3,222,508 in the 5 year plan of which \$2,000,000 is funded through the MIII grant. The budget has been revised to \$3,255,237.
 - The limits of the project are from Blue Mountain Road to the hamlet of Banks (6.2km).

- The project will be a combination of repaving and full reconstruction/platform widening resulting in 3.25m lanes and 1.25m paved shoulders.
 - Some property issues are still outstanding but Ainley and Associates is nearing design completion.
2. Grey Road 15 Owen Sound
 - City of Owen Sound tender from the water treatment plant north 1km.
 - Full urban reconstruction upgrade with storm sewers and curb and gutter.
 - No bicycle lanes however the City will be paving an adjacent recreational trail.
 3. Grey Road 29 Rehabilitation
 - 2.1km pulverize and pave existing surface treatment with hot mix asphalt.
 - Some significant ditching and road repair on the east west portion and waterproofing of the existing bridge.
 - Paved shoulders will not be implemented.
 4. & 5. Grey Road 15 Grind and Pave
 - Grind and pave two blocks of 3rd Avenue East in Owen Sound (7th Street East to 8th Street and 9th Street East to 10th Street East).
 - The City has been notified regarding any coordination with work that may have been planned for these two blocks.
 - The existing urban cross-section will be maintained.
 6. Grey Road 3 Structure – Keady Bridge
 - Budget figure is being revised from \$1,422,991 to \$600,000.
 - GMBlueplan is nearing completion of the preliminary design for construction summer 2015. It is anticipated a pre-cast structure will reduce the time of the structure closure to just over a week.
 7. Grey Road 40 Rehabilitation
 - Gore Crescent to Veteran’s Road North Pulverize and Pave 3.5km section including culvert replacements.
 - Paved shoulders will not be constructed.
 8. Grey Road 40 Resurfacing
 - Grey Road 2 to the 7th Line (1.4km) is scheduled for an asphalt overlay. Shoulder widening will be included. The shoulders will be paved.
 9. Grey Road 4 Grind and Pave – Grey Road 28 - 1km east

- This 1km pulverize and pave is being completed as maintenance of the area is becoming more frequent.
- The project includes additional shoulder paving, minor patching in Hanover and drainage improvements.
- The Town of Hanover has been informed of the project as currently no improvements to the pedestrian facilities are proposed.

10. Grey Road 31 Reconstruction

- 11km of full reconstruction including culvert replacements, hot mix paving (currently surface treatment), and extensive guiderail upgrades.
- Limited platform widening will also be completed as part of the project.
- Land acquisitions are currently being investigated.
- Paved shoulders will not be implemented.

11. Grey Road 17A Hot Mix Overlay

- 2.7km section scheduled for an asphalt overlay.
- The intersection of Grey Road 17A and Grey Road 1 will also be reconstructed as the slip around lanes have shown signs of significant settlement since they were added.
- Although not on the shoulder widening map, the section is proposed to have paved shoulders for the following reasons:
 - The other Grey County Roads surrounding Grey Road 17A all have shoulder widening and it would appear that it should be included to maintain the integrity of the loop.
 - The east (600m) portion of Grey Road 17A has shoulder widening; paving the shoulders for the west 2.0km would maintain a consistent treatment.
 - This section of Grey Road 17A contains two (2) large hills and guiderail where typically the shoulder would be paved for maintenance reasons.
 - Due to the width of the existing platform, the shoulder widening can be completed without requiring platform widening.
 - This route is shown on the Grey County Cycling Routes brochure.

12. Grey Road 9 Pulverize and Pave (Highway 6 to Grey Road 109) – 2.7km

- 2.7km section scheduled for an asphalt overlay. It was determined that micro surfacing is not the correct treatment for this section. The project will include culvert replacements and guiderail improvements.
- Paved shoulders will not be completed.

13. Grey Road 17 – Grey Road 170 to Concession 14 – 2.0km

- This section of road requires multiple culvert replacements, a section of hot mix asphalt overlay and a section of pulverizing and paving.
- Due to the lack of platform width, it is proposed to match the section to the south with 3.25m lanes and 1.0m paved shoulders. More width would require platform widening which is very expensive in a wetland area.

14. Grey Road 12 – from Sideroad 16 to the 7th Line – 2.8km

- This section of road is in good condition and should be preserved prior to deterioration.
- Originally scheduled for micro surfacing, this has been modified to an asphalt overlay with the addition of a 0.5m partially paved shoulder (to reduce maintenance).

Removed Projects with Details

1. Grey Road 5 – from 9th Avenue East to 16th Avenue East, Owen Sound
 - It was determined that the road was holding and an overlay was not required.
2. Grey Road 18 – Highway 6/10 to Grey Road 11
 - It was determined to be two (2) lifts of asphalt, and an overlay is not the suitable treatment. This section will most likely be scheduled for a future cold in place.
3. Grey Road 12 Micro Surfacing
 - This project was discounted as micro surfacing suitable after the 2014 road inspections. It is past the point of this type of treatment.
4. Grey Road 12 Micro Surfacing
 - This project was discounted as micro surfacing suitable after the 2014 Road Inspections. It is past the point of this type of treatment.
5. Grey Road 7 Micro Surfacing
 - This project was discounted as micro surfacing suitable after the 2014 Road Inspections. It is past the point of this type of treatment.
6. Grey Road 40 Micro Surfacing
 - This project was discounted as micro surfacing suitable after the 2014 Road Inspections. It is past the point of this type of treatment.
7. Grey Road 9 Micro Surfacing

- This project was discounted as micro surfacing suitable after the 2014 Road Inspections. It is past the point of this type of treatment.
8. Grey Road 17 – From Girl Guide Road to Grey Road 17B
- The initial lift of 70mm is holding up well and lack of shoulders creates platform issues with a second lift. Granular sealing is still in place; overlay should be delayed.

Additional Project with Details

1. Grey Road 18 – Grey Road 29 to Highway 26 – 6.7km
- This 6.7km section of Grey Road 18 is currently surface treated. The surface treatment is in good condition and it is proposed to overlay the surface with hot mix prior to it deteriorating to the point of requiring pulverizing. This was originally not in the five year plan as it was going to be left to deteriorate until pulverizing became an option.
 - The shoulders will not be paved.

Financial / Staffing / Legal / Information Technology

Considerations

The Engineering Department has completed site reviews of all projects with the Maintenance staff, and are nearing completion of all detailed project cost estimates (to be completed December 12) and tenders. Funding for any additional work in the projects listed above will be funded from the savings from Project 003-900 (Keady Bridge).

Link to Strategic Goals / Priorities

The values statement of the approved Corporate Strategic Plan includes accelerating the commitment to lifecycle planning for long-term investment in County owned capital assets.

Respectfully submitted by,

Patrick Hoy, Engineering Manager

Director Sign Off: *Michael Kelly, Director of Transportation Services*

[Link to 2015 Projects Map - Transportation Services](#)

