



**ROADS SUB-COMMITTEE MEETING AGENDA
WEDNESDAY, AUGUST 13, 2019 - 1:30 P.M.
MEETING HELD IN THE COUNCIL CHAMBERS**

1. Call to Order
2. Additions/Deletions/Approval of Agenda
3. Declaration of Pecuniary Interest or Conflict of Interest
4. Approval of Draft Minutes - July 17, 2019
5. Business Arising from Minutes
6. Correspondence Items
7. General Business
 1. Monthly Update from Public Works Superintendent
 2. Tile Drainage Conveyance License Agreement with the Municipality of Grey Highlands - Public Works Superintendent to speak on this matter.
 3. Structure 2021 - Email update from Chris Knechtel
 4. Other/Additions
 5. Unfinished Business
 1. 5 Sideroad Structure - Update (if any)
 2. Wargon - Update
 3. Update from onsite at Heidi Sewell's Property in Horning's Mills
8. Delegations
 1. 2:00pm - Arunas Kalinauskas, B.Sc., R.J. Burnside and Associates - Draft Road Management Plan
9. Recommendations to Council
10. Public Question Period
11. Confirmation Motion
12. Adjournment and Date of Next Meeting

Municipality of Grey Highlands

TILE DRAINAGE CONVEYANCE LICENSE AGREEMENT

THIS AGREEMENT dated the 13 day of June, 2019

BETWEEN:

RICCARDO TAMBURRO

hereinafter called the "Licensee"

OF THE FIRST PART

AND

THE CORPORATION OF THE TOWNSHIP OF MELANCTHON

hereinafter called the "Township"

OF THE SECOND PART

AND

THE CORPORATION OF THE MUNICIPALITY OF GREY

HIGHLANDS

hereinafter called the "Municipality"

OF THE THIRD PART

WHEREAS the Licensee has requested permission from the Municipalities to convey tile drainage flow through lands owned by the Township (Township Lands) and the Municipality (the Municipal Lands);

AND WHEREAS the foregoing drainage flow arises from works by the Licensee which have or will be as a "Mutual Drain Agreement" under authority of section 2 of the Drainage Act, R.S.O. 1990 wherein drainage flows originating from the Licensee's Lands and after passing through the Township and Municipality's Lands, will outlet on other lands owned by the Licensee (the Outlet Lands);

AND WHEREAS the Licensee will enter into an agreement under authority of section 2 of the *Drainage Act*, R.S.O. 1990 with the owner of the Outlet Lands;

AND WHEREAS the Township and the Municipality has agreed to permit its lands, which comprise an opened and maintained public highway, to be used for the conveyance of drainage flows on the understanding that Licensee will assume all responsibility for the cost of works necessary to accommodate the passage of drainage flows and any liability for such works or the conveyance of such drainage flow;

AND WHEREAS the authorization hereunder will become operative upon the inclusion of this agreement as Schedule A to the aforementioned Mutual Drain Agreement and its registration on title to the Licensee's Lands and the Outlet Lands;

NOW THEREFORE in consideration of the premises and the mutual covenants hereinafter contained, the parties agreed as follows:

1. Lands

The Lands subject to this License Agreement as well as the Licensee's Lands and the Outlet Lands are more particularly described as

Party of the First Part:

Name - Riccardo Tamburro - Roll # 22190000030190000000
Legal Description: Lot 26,27 Con 3 SDR Osprey TWP.
Being PIN

And

Name - Riccardo Tamburro - Roll # 420814000200200
Legal Description: Part Lot 27, Concession 3 SDR
Being PIN

Party of the Second Part:

Name - THE CORPORATION OF THE TOWNSHIP OF MELANCTHON
Roll #
Legal Description: Melancthon – Osprey Townline
Being PIN

Party of the Third Part:

Name - THE CORPORATION OF THE MUNICIPALITY OF GREY HIGHLANDS
Roll #
Legal Description: Melancthon – Osprey Townline
Being PIN

2. License

The Licensee is hereby authorized to convey drainage flows through the Township and the Municipality's lands subject to the terms and conditions set out in this agreement.

3. Drainage Works and Costs

- a. The Licensee shall be responsible for all cost incurred by the Municipality arising from the authorization granted in section 2.
- b. Every provision of this Agreement by which the Licensee is obligated in any way shall be deemed to include the words "at the expense of the Licensee" unless the context otherwise requires.
- c. The Licensee shall pay such reasonable fees as may be invoiced to the Township and the Municipality by its solicitor and/or consulting engineer in connection with all work to be performed as a result of the provisions of this Agreement. In the event that the Township or the Municipality engages the services of an engineer or technical personnel not permanently employed by the Township or the Municipality, to review the plans of the Licensee and/or carry out on-site inspections of the work performed, the Township or the Municipality will advise the Licensee accordingly of this need, and the costs of such outside engineers so engaged shall be the responsibility of the Licensee. The Township or the Municipality may require a deposit for this purpose.
- d. Where additional drainage works are required to convey the

drainage flows through the Township and Municipal Lands, the Licensee shall be responsible for all costs related thereto.

4. Indemnification from Liability and Release

The Licensee:

- a. covenants and agrees with the Township and the Municipality that the Licensee will indemnify and save harmless the Township and Municipality, its officers, servants, officials and agents from any claim or demand, loss, cost, charge or expense which the Township and/or the Municipality may incur or be liable for in consequence of the permission hereinbefore granted and/or the exercise by the Licensee of such permission
- b. hereby releases and forever discharges the Township and the Municipality, its officers, servants, officials and agents from any claim, demand, loss, cost, charge or expense which may arise as a result of the Township and/or the Municipality performing any work on the Township and Municipal Lands which may interfere with the Roadway.

5. Effective Date, Term and Notice

- a. This Licence shall only become effective upon:
 - i. the execution of a Mutual Drain Agreement by then owners of the Licensee's Lands and Outlet Lands; and
 - ii. the registration of such agreement on title to the foregoing lands.
- b. Upon coming into effect as provided in subsection a, this License shall continue from year to year subject to the termination provisions hereinafter set forth.
- c. Upon the deletion from title to either or both of the Licensee's Lands and the Outlet Lands, the Licensee shall provide copies of the instrument effecting the deletion.

6. Termination of Agreement

This License:

- a. may be terminated by the Township and/or the Municipality, at its sole discretion upon the giving of six (6) months' notice in writing by the Municipality and/or Township to the Licensee. In addition to the foregoing, whereupon the Licensee has been given notice of a default under the terms of this License, and such default has not been corrected within fifteen (15) days of receiving such notice the Township and/or the Municipality may terminate this License; or
- b. shall automatically terminate upon the termination of the Mutual Agreement Drain Agreement and/or its removal/deletion from title to the Outlet Lands and/or the Licensee's Lands; or
- c. shall automatically terminate upon the granting of a permanent easement to the Licensee for the conveyance of drainage flows from the Licensee's Lands.
- d. shall automatically terminate upon the construction of a Municipal Drain for the conveyance of drainage flows from the Licensee's Lands.

7. No Interest in Land

The Licensee acknowledges that this Agreement shall in no way create any interest in land or permanent easement rights.

8. Emergency Situation

If, in the opinion of the Township or the Municipality, there is an emergency situation as a result of the authorization granted hereunder, which requires immediate attention to avoid damage to private or public property or services owned by the Township and the Municipality or to eliminate a potential hazard to persons, such work may be done immediately by the Township or the Municipality at the expense of the Licensee, but notice shall be given to the Licensee at the earliest possible time.

9. Assignment

This license may not be assigned to a subsequent owner of the Licensee's Lands without the Township or the Municipality's written consent which will not be unreasonably withheld.

IN WITNESS WHEREOF the Parties have hereunto affixed their signatures and corporate seal attested to by the hands of their proper officers, duly authorized in that behalf.

SIGNED, SEALED AND DELIVERED



Party to the First Part

JULY 15/19

Date

JULY 15/19

Date

THE CORPORATION OF THE TOWNSHIP OF
MELANCTHON

Party of the Second Part

Craig Micks, Director of Public Works

Denise B. Holmes, Municipal Clerk

Date

THE CORPORATION OF THE MUNICIPALITY
OF GREY HIGHLANDS

Party of the Third Part

Herb Lemon, Director, Transportation &
Environmental Services

Raylene Martell, Municipal Clerk

Date

Denise Holmes

From: Chris Knechtel <Chris.Knechtel@rjburnside.com>
Sent: Tuesday, July 23, 2019 4:13 PM
To: Denise Holmes
Cc: 'Wendy Atkinson (watkinson@melancthontownship.ca)'; Craig Micks (roads@melancthontownship.ca); Matt Brooks; Mark August; Arunas Kalinauskas
Subject: Structure 2021 (2nd Line NW) - Temporary Repair Quotation
Attachments: DSCF2828.JPG; DSCF2831.JPG

Hi Denise,

Further to the email correspondence below, we have reached out to Jarlian Construction who will be completing the Structure 2003 Rehabilitation to get a quote on the temporary repair for Culvert 2021 on the 2nd Line NW.

The culvert is a significant size for a steel multi-plate (5.2 m span) and the Township would be looking in the range of \$500k +/- to replace it. A short term repair option to help slow down the performance deficiency of the bolt hole cracking (see attached photo) would be to weld vertical steel reinforcing bars (bent to suit the culvert curvature) at the bolt hole crack locations. This would only be a temporary fix, but would allow the Township to keep the road open to through traffic while they plan for a future replacement. The temporary repair could be monitored under future biennial inspections to see how it is performing and the recommended years to replacement for the culvert could be adjusted accordingly.

Jarlian has provided a quotation of **\$8,700.00 (+HST)** which includes an estimate of 50 welded steel bars. This quote also includes mobilization, insurance, waterway control, access, restoration, etc. This quotation seems reasonable for the scope of work given our experience on similar repairs. The Township may wish to set aside a contingency of \$500-\$1,000 for bolt replacements (see attached photos) and other unforeseen occurrences.

To assist the Contractor with identifying the areas requiring repair, overseeing construction and documenting the repairs, we anticipate our engineering fees for this project would be approximately \$1,000 (+HST). However, we will work to keep our costs down as much as possible.

Please review and if this is acceptable to the Township we will ask Jarlian to proceed and we will coordinate the work accordingly.

We do not expect a permit from the Conservation Authority will be required for this work as it is classified as maintenance and can be completed out of the water. We will confirm with the Contractor once we receive their proposed methodology. They confirmed this work could be completed in 2019 before the snow flies once the approval is given.

Let us know if you require any further information or clarification.

Have a good evening.

Chris

Chris Knechtel, P.Eng.
Project Engineer

R.J. Burnside & Associates Limited | www.rjburnside.com
Office: +1 800-265-9662 Direct: +1 519-938-3012

Cc: Chris Knechtel <Chris.Knechtel@rjburnside.com>; watkinson@melancthontownship.ca

Subject: RE: Resolutions from Council Meeting December 20, 2018

Hi Arunas,

I just wanted to follow up with a couple of the motions passed at the December 20th Council meeting.

The first one is the motion pertaining to Structure 2021 and is located on the 2nd Line NE. With regards to the short term repair to weld steel to reinforce over the cracked locations, the Roads Sub-Committee is wondering how many years this repair will give the Township before this structure has to be replaced?

The other matter is in regards to the Road Study. Mayor White indicated that he would like to see a more detailed work plan on this study and possible Terms of Reference. It was mentioned at the meeting about the need to include core samples from the more heavily travelled roads and this was not included in the quoted price. How much extra is this and what are your thoughts? We just want to make sure that this Road Study is going to give us the information we need to move forward with making important decisions about our road infrastructure. The motion was passed subject to a suitable timeline to Staff and therefore I am seeking that information – when can it be started and when will we receive the final version.

The Roads Sub-Committee has scheduled a meeting for next Wednesday, so if I could have the information for that meeting, that would be great!

Should you have any questions, please don't hesitate to contact me.

Thank you.

Denise B. Holmes, AMCT
CAO/Clerk, Township of Melancthon
519-925-5525 Ext. 101

From: Arunas Kalinauskas [<mailto:Arunas.Kalinauskas@rjburnside.com>]

Sent: Friday, December 21, 2018 11:40 AM

To: Wendy Atkinson

Cc: Chris Knechtel; 'Denise Holmes'

Subject: RE: Resolutions from Council Meeting December 20, 2018

Thanks Wendy,

Appreciate the scanned resolutions. We will be in touch in the New Year to discuss the potential road study to ensure it fits with the Townships requirements.

Wishing you all a wonderful Christmas and Happy New Year.

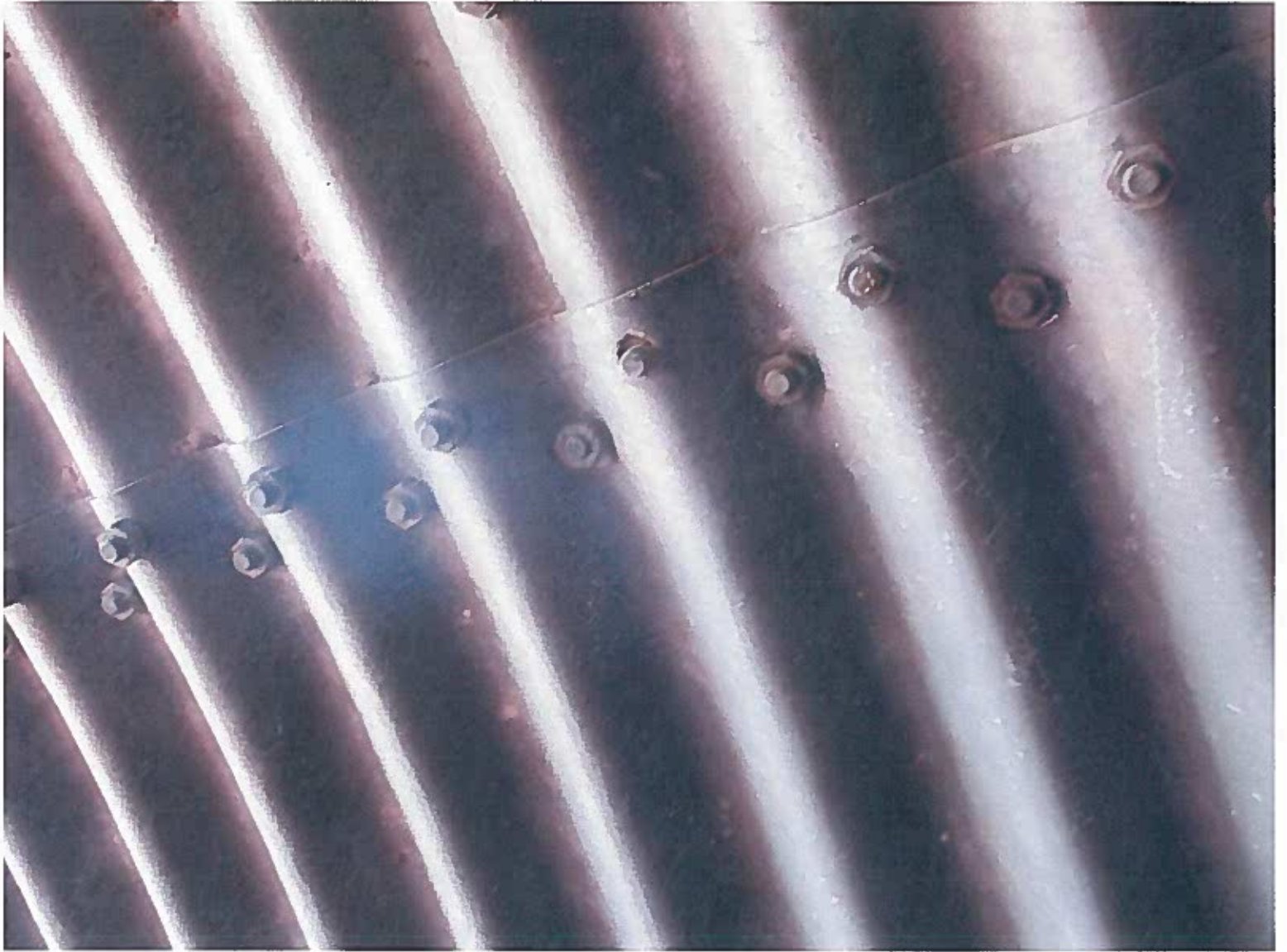
Best Regards,

Arunas

Arunas Kalinauskas, B.Sc.
Business Manager - Asset Management & GIS

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Road Management Plan Summary Township of Melancthon



August 13, 2019

Arunas Kalinauskas – Business Manager
Asset Management / GIS

Agenda

- Road Management Plan Project Summary
- Asphalt vs. Gravel
- Select Gravel Roads
- Some Paved Roads Highlighted
- Summary
- Questions



Road Management Plan

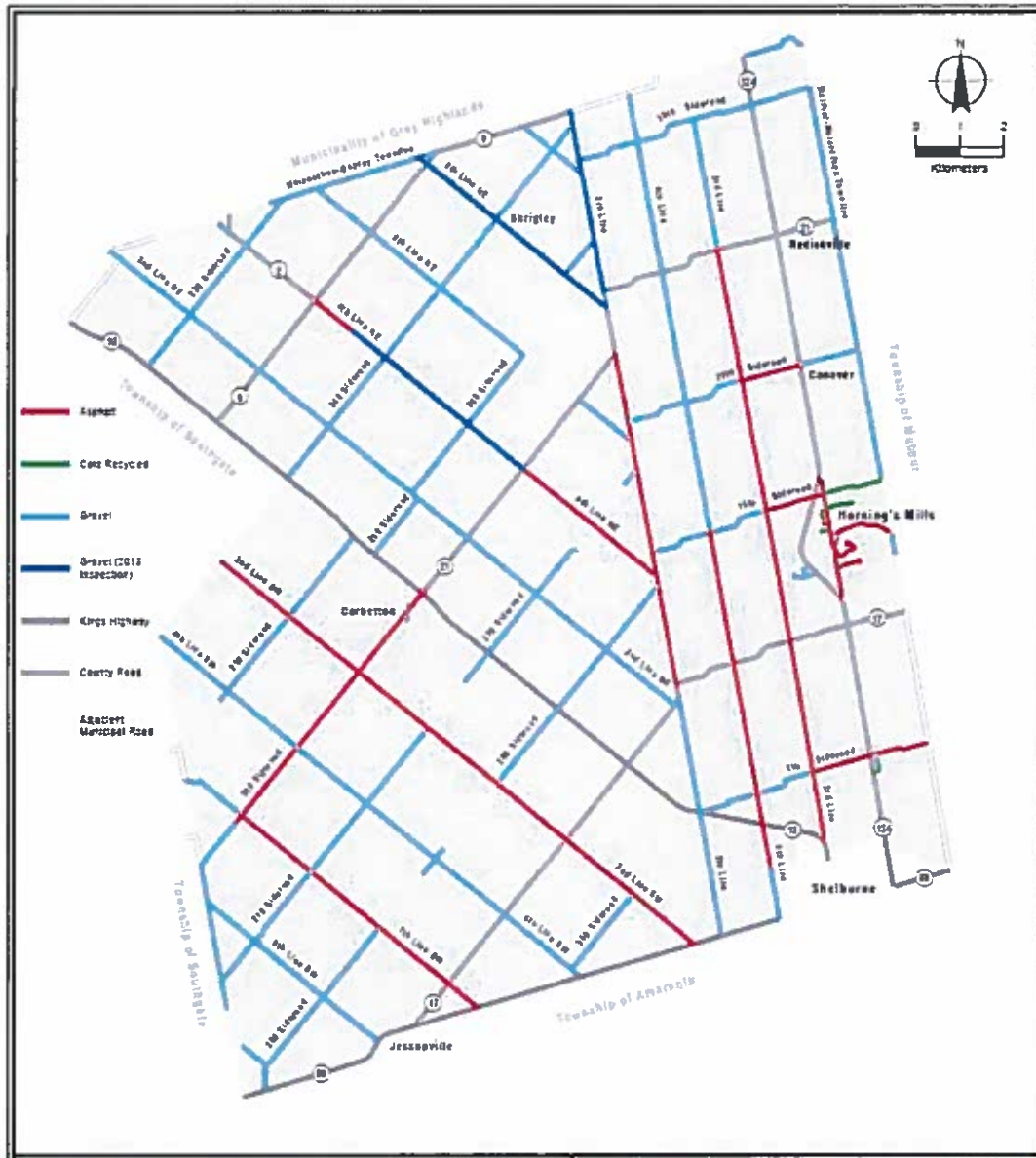
- Completed – found some Road Rehabilitation cost estimates too high
- Reworking the proposed 5 Year Plan
- Ensuring that Projects are grouped together for most cost-effective results
- Today – looking to present some critical information on Paved vs. Gravel lifecycle costs
- Also seeking some guidance on some potential direction



Project Summary

- 91km of Melancthon roads reviewed, and deficiencies identified for surface and base
 - 74km High Class Bituminous (HCB)
 - 2km Cold Recycled Asphalt
 - 15km Gravel
- 22 Automatic Traffic Recorder counts
- No Horizontal deficiencies
- Drainage is understood to be adequate
- Found on many paved roads that the asphalt was only 1 inch thick?





Vertical Deficiencies

- Some Vertical Deficiencies
 - 3rd Line OS from Highway 10 to 5th Sideroad.
 - 3rd Line OS from 5th Sideroad to 2 km north of 5th Sideroad.
 - 3rd Line OS from 2 km north of 5th Sideroad to County Road 17.
 - 3rd Line OS from County Road 17 to 15th Sideroad.
 - 3rd Line OS from 15th Sideroad to 1.5 km south of 20th Sideroad.
 - 3rd Line OS from 1.5 km south of 20th Sideroad to 20th Sideroad.

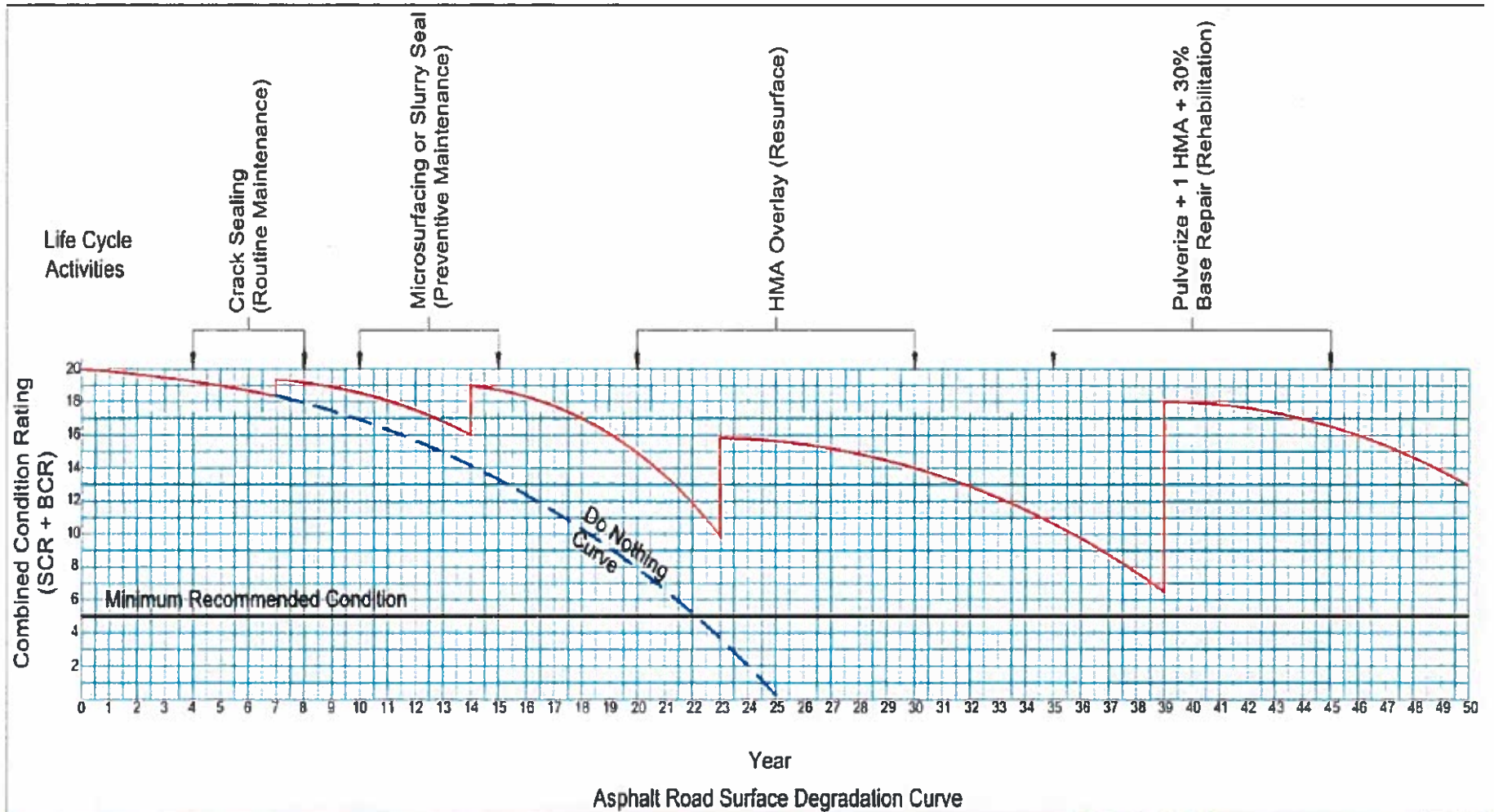


Road Width Deficiencies

- Some roads with Road Width issues
 - High Street from William Street to Main Street.
 - Church Street from Main Street to end of road.
 - Addeson Street from George Street to Lloyd Street.
 - Lloyd Street from Addeson Street to Main Street.
 - George Street from Addeson Street to Main Street.
 - Mill Lane from Main Street to end of road.
 - 3rd Line OS limited shoulder width



Road Lifecycle



Gravel vs Asphalt Roads

- Gravel
 - Maintenance Gravel \$5,200/every 2 years (\$10.40/tonne)
 - Grading approx. 7 times per year (1.5hr/km at \$150/hr)
- Asphalt
 - Grinding, supply, and place 700 tonne gravel grading compacting is \$13,575/km
 - Cost supply and place 50mm depth asphalt \$70,000/km



Gravel vs Asphalt Roads cont.

- Assume road base has a 60 year lifecycle

Scenario	Existing Base Condition	Present Value Cost Per Km of 60 Year Maintenance / Improvement Lifecycle*
Retain Existing Gravel	Good	\$169,953
Retain Existing Gravel to Future Gravel	Poor	\$198,184
Conversion of Existing Gravel to Future Hardtop	Good	\$216,996
Conversion of Existing Gravel to Future Hardtop	Poor	\$239,046
Retain Existing Hardtop	Good	\$220,996
Retain Existing Hardtop	Poor	\$243,096
Conversion of Existing Hardtop to Future Gravel	Good	\$180,134
Conversion of Existing Hardtop to Future Gravel	Poor	\$202,184



Gravel vs Asphalt Roads cont.

- More to consider than just straight cost
 - Continuity of road network
 - Redistribution of traffic
 - Hardtop roads provide protection to road base
 - Reduced dust emissions
 - Impact on road maintenance
 - Possible impact on real estate values



Gravel Upgrade Prioritization

Section ID	Road Name	From	To	Existing AADT Volume (vpd)	GUPI
1596	4 th Line NE	Sideroad 240	1 km N of Sideroad 240	289	45
1452	5 th Line OS	County Road 21	30 th Sideroad	222	40
1519	5 th Line OS	30 th Sideroad	Sideroad 240	222	40
1520	5 th Line OS	Sideroad 240	County Road 9	222	40
1594	4 th Line NE	Sideroad 250	Sideroad 240	200	35
1511	8 th Line NE	Sideroad 240	County Road 9	145	15
1603	8 th Line NE	County Road 9	Townline	125	15
1440	8 th Line NE	5 th Line OS	Sideroad 250	196	10
1441	8 th Line NE	Sideroad 250	Sideroad 240	125	10
1595	4 th Line NE	County Road 21	Sideroad 250	149	0



Upgrade Potential

- 4th Line NE - from Dufferin Road 21 to 1.0 km north of 240 Sideroad.
- 5th Line OS – Dufferin Road 21 to Dufferin Road 9;
- 8th Line NE - Dufferin Road 21 to Dufferin Road 9

Asphalt Downgrade Prioritization

Section ID	Road Name	From	To	Existing AADT Volume (vpd)	GUPI
1489	7 th Line SW	Sideroad 270	200m S of Sideroad 260	177	5
95B	4 th Line OS	Strada Pit North Entrance	15 th Sideroad	79	20
194	15 th Sideroad	County Road 124	Main Street	125	20
1345	20 th Sideroad	3 rd Line	County Road 124	164	20
1490	3 rd Line OS	20 th Sideroad	County Road 21	107	25
95A	4 th Line OS	County Road 17	Strada Pit North Entrance	125	25
1491	15 th Sideroad	Main Street	East End of Hardtop	125	25
176	15 th Sideroad	3 rd Line	County Road 124	125	25



Downgrade Potential

- 7th Line SW – From 89 to Riverview
- 4th Line OS – Strada Gravel Pit to 15th Sideroad
- 15th Sideroad – Main Street to the east termination of the hardtop
- 20th Sideroad – Maintain this road as a hardtop road for network connectivity;



20 Year Plan

- Current analysis shows that Township needs \$500,000 per year to maintain the current Level of Service
- Re-working some of the cost estimates, is expected to lower this value down.



Questions



Arunas.Kalinauskas@rjburnside.com

R.J. Burnside & Associates Limited

519-938-3071

rjburnside.com



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