



THE CORPORATION OF THE TOWNSHIP OF HORTON
TRANSPORTATION & ENVIRONMENTAL SERVICES

November 3rd, 2021
 8:30 a.m.

NOTE: This meeting will be sparsely attended, due to social distancing protocols that have been recommended by the federal and provincial governments. Members of Council, Committee, and Staff will call in to the meeting and take part via video conference. Members of the Public, Media and other staff are requested not to attend. Please contact the CAO/Clerk if you have any questions or require additional information.

1. Call to Order & Roll Call
2. Declaration of Pecuniary Interest
3. Minutes from Previous Meeting:
 - i. October 6, 2021 **PG.2**
4. Road Surface Optimization, Preservation, & Development Policy Revision **PG.5**
5. Johnston Road Speed Adjustment Update **PG.18**
6. Landfill Site Grinding Contract Extension **PG.22**
7. Renfrew County Cost Sharing **PG.24**
8. Golf Course Road Granular Base Testing **PG.54**
9. Thompsonhill Detailed Design Update **PG.66**
10. New/Other Business
11. Next Meeting:
 - i. December 1, 2021 at 8:30 a.m.
12. Adjournment

RETURN TO AGENDA

THE CORPORATION OF THE TOWNSHIP OF HORTON

TES Committee Meeting

October 6th, 2021

8:30 a.m.

There was a meeting of the Transportation and Environmental Services Committee held in the Municipal Council Chambers on Wednesday October 6th, 2021. Present was Chair Tom Webster, Councillor Lane Cleroux, Mayor David Bennett, Public Advisory Members, Murray Humphries, Rick Lester, and Tyler Anderson. Staff present was Public Works Manager, Adam Knapp, and Executive Assistant Nichole Dubeau—Recording Secretary.

1. CALL TO ORDER

Chair Webster called the meeting to order at 8:34 a.m.

2. DECLARATION OF PECUNIARY INTEREST

There was no declaration of pecuniary interest from committee members.

3. MINUTES FROM PREVIOUS MEETING:

- September 1st, 2021

Moved by Rick Lester

Seconded by Murray Humphries

THAT the Committee approve the September 1st, 2021 Minutes.

Carried

4. REVISED ROAD SURFACE OPTIMIZATION, PRESERVATION AND DEVELOPMENT POLICY

Public Works Manager Adam Knapp reviewed the report. Public Advisory Member Murray Humphries stated that both the HL4 and HL3 surface should be the same, at 50 mm. There was committee discussion regarding the surface of roads when they are reconstructed or rehabilitated to match intersecting roads or to make the entire road hardtop. It was decided that Mr. Knapp would make the changes to the policy and bring back for committee review.

5. MTO ROAD CLOSING REQUEST

Public Works Manager Adam Knapp reviewed the report. Committee was in agreeance to close a section of Dugald Road, and to get the Road Surface Optimization, Preservation and Development Policy passed to ensure that the condition of the new section of Dugald Road is up to municipal standards.

Moved by Rick Lester

Seconded by Tyler Anderson

THAT the TES committee agree with staff recommendation to approve the request by the MTO to close a section of Dugald Road through municipal by-law;

AND THAT Council enact said by-law upon completion of the Highway 17 expansion project.

Carried

6. MTO MILLENNIUM TRAIL PURCHASE REQUEST

Public Works Manager Adam Knapp reviewed the report.

Moved by Murray Humphries

Seconded by Tyler Anderson

THAT the TES Committee accept the draft correspondence letter attached to this report as the official response to the MTO's proposed purchase of a section of the Millennium Trail;

AND THAT staff be directed to e-mail the letter as drafted to the MTO representatives who submitted the proposal.

Carried

RETURN TO AGENDA

7. GOLF COURSE ROAD MEETING

Public Works Manager Adam Knapp reviewed the report. Mayor Bennett suggested making the entire road a half-load road for the next year due to the condition of the road. The Committee was in agreeance to move forward with the granular base testing and Mr. Knapp is to contact Cavanaugh's Construction regarding hauling on the road.

Moved by Rick Lester

Seconded by Murray Humphries

THAT staff be directed to conduct granular base testing of Golf Course Road to accurately predict the level of rehabilitation necessary to facilitate the road as a year-round hauling roadway for the proposed aggregate pit in the early stages of development by Cavanaugh Construction;

FURTHER THAT once the level of rehabilitation is fully understood staff shall prepare an estimate for rehabilitating the roadway with a like for like surface versus the cost to bring the roadway to a year-round hauling roadway and bring forward the estimates to committee to discuss the level of funding necessary from all parties to facilitate the proposed future usage;

AND FURTHER THAT due to new information provided to both Councils and the need for further investigation that a portion of resolution 2021-189 be rescinded, that states "upon recommendation from the TES Committee, Council contribute 50% of the cost toward the rehabilitation of Golf Course Road with the Township of Admaston/Bromley and allocate \$53,371 in the 2022 Capital Budget from the Roads Infrastructure Reserves"

Carried

8. JOHNSTON ROAD SPEED LIMIT ADJUSTMENT FEASIBILITY

Public Works Manager Adam Knapp reviewed the report. There was committee discussion regarding the engineering of the road that was completed during reconstruction and why the speed limit was set as it was. Mr. Knapp is to review the original engineering report and bring back to committee.

9. RETENTION OF THE 2013 ¾ TONNE AND WESTERN PLOW

Public Works Manager Adam Knapp reviewed the report. Committee members were in agreeance that the Landfill Site Attendant should not be using his personal vehicle for work at the landfill or when transporting lawn equipment. They also agreed that the mileage fee that is remitted to the attendant can go towards the cost maintenance on the ¾ tonne.

Moved by Tyler Anderson

Seconded by Murray Humphries

THAT Committee agree with staff recommendation and retain the Western Plow and the 2013 GMC Sierra 3500 series pickup truck;

AND THAT that the plow and truck be retained until it is deemed unfeasible to maintain and at that time both the plow and truck shall be deemed surplus;

FURTHER THAT a portion of resolution 2021-92 be rescinded which states that, "once the XLS plow is installed, the straight blade Western Plow currently fitted to truck #11, the 2013 series GMC Silverado, be deemed surplus and sold on Gov Deals with the proceeds directed back into the Roads Equipment Reserves".

Carried

10. PUBLIC WORKS MAINTENANCE AND INSPECTION UPDATE

Public Works Manager Adam Knapp reviewed the report. Mayor Bennett stated that newer speed limit signs are already deteriorating and fading. Mr. Knapp is to contact the company they were purchased from to see about replacement or getting fixed.

11. NEW/OTHER BUSINESS

Public Advisory Member Murray Humphries questioned if there was any new information about the possible subdivision on Whitton Road. Public Works Manager Adam Knapp stated that it was in the preliminary stages of planning, and nothing has been confirmed. Executive Assistant Nichole Dubeau is to forward the concept plan to Committee members.

12. NEXT MEETING DATE

- i. November 3rd, 2021, at 8:30 a.m.

13. ADJOURNMENT

Chair Webster declared the meeting adjourned at 9:30 a.m.

CHAIR Tom Webster

PUBLIC WORKS MGR Adam Knapp



Township of Horton COUNCIL / COMMITTEE REPORT

Title: Revision #2 Draft Road Surface Optimization, Preservation and Development Policy	Date:	November 3rd, 2021.
	Council/Committee:	TES Committee
	Author:	Adam Knapp, Public Works Manager
	Department:	Public Works

RECOMMENDATIONS:

THAT the TES Committee agree with staff's recommendation to adopt the second revision of the draft Road Surface Optimization, Preservation and Development Policy.

AND THAT the draft policy be brought forward to council for approval.

BACKGROUND:

Staff's proposal to implement a Road Surface Optimization, Preservation and Development Policy was initially presented at the September 1st, 2021, then revised and presented a second time on October 6th, 2021, when further revisions were requested. The revisions included increasing the minimum thickness of HL3 to 50mm and to improved definition to Section 1 (Development and Assumption). The revisions have been highlighted in yellow.

ALTERNATIVES: N/A

FINANCIAL IMPLICATIONS: N/A

ATTACHMENTS:

REVISION #2 DRAFT - Road Surface Optimization, Preservation and Development Policy

CONSULTATIONS:

Hope Dillabough – CAO/Clerk

Prepared by: Adam Knapp, Public Works Manager

Reviewed by: Hope Dillabough, CAO/Clerk

RETURN TO AGENDA

The Township of Horton Policy and Procedures			
SECTION: TRANSPORTATION			POLICY #: T-04
POLICY: Road Surface Optimization, Preservation and Development Policy			
DATE: Sept. 1 2021	REV. DATE: June 2020 By-Law 2021-	COVERAGE: Transportation & Environmental Services	PAGE #: 1 of 12

POLICY STATEMENT:

The Township of Horton has established a policy to ensure the roads network within Horton Township are constructed and maintained to a high quality which promotes life cycle optimization and preservation of the road network. This policy shall work in collaboration with the most current version of the Minimum Maintenance Standards for Municipal Highways with an objective to ensure that every maintenance dollar spent attains high life extension value with low cost per square meter over the life cycle of the roadway to sustain an average Ride Condition Rating (RCR) of 6 or higher and an average Pavement Condition Rating (PCR) of 60 or higher on the Pavement Condition Index (PCI) throughout the Township of Horton's road network.

PROCEDURE:

Preservation and Optimization

- 1.11 That the Township of Horton shall strive to maintain an average Pavement Condition Index rating (PCI) no lower than 60 over the entire paved roads network. See section 1.
- 1.12 That Annual Average Daily Traffic be the sole factor determining the surface course of a roadway or section of roadway. See section 2.
- 1.13 That all roads currently paved or double surface treated shall remain as such and not have the surface course downgraded for any reason other than temporarily for the purpose of construction or rehabilitation. Roadways that are under construction or rehabilitation shall have the pre-existing surface course reapplied by December 20th of the year of construction or rehabilitation. If construction proceeds into the next calendar year a temporary surface course acceptable to the Township, in written agreement between the contractor and the Township, must be applied by December 20th of the year that construction or rehabilitation began.
- 1.14 That the MTO pavement structural design guidelines for secondary highways shall be the standard for granular base equivalency (GBE) thickness acceptable for pavement application on any municipally maintained or assumed roadway within the Township of Horton. Granular base testing may be performed by Township staff or Contract.
See section 3.
- 1.15 That prior to reconstruction of an existing paved roadway granular base testing may be requested, if staff or council believe the sub-base is insufficient or degraded, to confirm the granular base thickness is structurally sufficient. See section 3.

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- 1.16 That reclaimed Double Surface Treatment shall have a Granular Base Equivalency factor of 0.6 equivalent to Old Granular Base. See section 3.
- 1.17 That if the subgrade material is unknown or uncertain the highest GBE factor in the appropriate AADT column per section 3 of this document shall be the acceptable GBE for the roadway in question. See section 3.
- 1.18 That prior to upgrading an existing gravel roadway surface to a bituminous surface granular base testing must be performed to confirm the granular base thickness is structurally sufficient per the current AADT of the roadway. See Section 3.
- 1.19 That prior to reconstruction of an existing paved roadway a minimum of two preservation treatments or combination of treatments must be applied to the roadway. See section 7.
- 1.110 That prior to full reconstruction of any bituminous roadway the PCI rating must be in the 40th percentile or lower and preservation treatments deemed unfeasible to regain a sustainable PCI rating of 60 or above. See section 1.
- 1.111 That feasibility related to preservation versus reconstruction shall be determined by the Public Works Manager. If a divergence of opinion between Council and staff arises then an independent consultant or contractor may be requested to confirm in writing staff's categorization.
- 1.112 That brushing, grass cutting, ditch clean out, shouldering, cold patching and culvert replacements be deemed regular maintenance activities and not considered preservation treatments.
- 1.113 That any roadway receiving (DST) Double Surface Treatment shall have an AADT lower than 300 vehicles per day.
- 1.114 That any roadway prior to receiving (DST) Double Surface Treatment shall have a minimum granular base equivalency thickness of 350 millimetres and shall have no less than 200mm of granular A or granular M base material prior to application of DST. See section 3.

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Typical Road Profiles

- 1.115 That the typical paved road profile within the Township of Horton shall be as shown in section 4 of this policy. Any road platform width alterations shall be pending approval of the Public Works Manager. See section 4.
- 1.116 That any terminated (dead end) roadway must have a typical cul-de sac turn around area. See section 5.

Development and Assumption by the Township

- 1.117 Newly developed roadways shall be defined as the establishment of a new facility to be a part of the primary or secondary road system or the continuation of a developed establishment past an existing intersection to be a part of the primary or secondary road system.
- 1.118 That any newly developed roadway proposed for assumption shall have a hard top surface course that conforms with section 2 of this policy. The onus shall be on the developer to prove to the Township that the surface course proposed is adequate for any future development of the roadway and surrounding area.
- 1.119 Extension of a roadway shall be defined as adding to or continuing an established part of the primary or secondary road system that does not intersect another established part of the primary or secondary road system. If the roadway intersects any existing established roadway, it shall be considered newly developed.
- 1.120 Any extension of an existing roadway shall have a like for like surface that matches the existing roadway surface type.
- 1.121 That within 5 to 7 years of a roadway receiving (DST) Double Surface Treatment a Cape Seal, (SST) Single Surface Treatment with an emulsion overlay, or similar treatment must be applied to the roadway. See section 7.
- 1.122 That the cost to fulfil section 1.121 of this policy for any private road, proposed for assumption that has received a double surface treatment, shall be split 50/50 between the Township and the advocate. The payment shall be made to the Township of Horton

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by the advocate prior to the Township assuming the roadway. The cost shall be estimated by the Township of Horton's Public Works Manager.

- 1.123 That any private roadway proposed to be assumed by the Township of Horton shall meet or exceed all terms of this policy. The onus shall be on the advocate of the proposal to assume the roadway to provide documented proof to Council and staff that all terms have been met or exceeded.

Dust Suppression

- 1.124 That only flake dust suppression treatments shall be applied to roadways with an AADT below 49, a maximum once per calendar year. Flake dust suppression shall not be added if the application shall exceed yearly budgetary limits. Road selection shall be in order of AADT determined by the Public Works Manager if budgetary limits are a factor. See section 2.
- 1.125 That liquid dust suppression treatments shall be applied to gravel roadways with an AADT above 50 a maximum of once per calendar year. Secondary flake dust suppression may be added as a secondary spot treatment at the discretion of the Public Works Manager a maximum of once per calendar year. Secondary flake dust suppression shall not be added if it shall exceed yearly budgetary limits. See section 2.

Mandatory Yearly Review

- 1.126 That this policy must be reviewed yearly by the applicable Committee, and the current Public Works Manager.
- 1.127 That immediately upon the retirement or resignation of the current Public Works Manager this policy shall be forfeited and must be reviewed for readoption by the current Council at the time of retirement or resignation.

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1. **(PCI) PAVEMENT CONDITION INDEX**



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2. **ROADS SURFACE AND DUST SUPPRESSION TYPE BY (AADT)
ANNUAL AVERAGE DAILY TRAFFIC:**

All surface courses listed below are minimum standards, surface courses of higher quality may be accepted upon approval of the Public Works Manager. No surface course shall be applied that conflicts with term 1.B of this policy.

ANNUAL AVERAGE DAILY TRAFFIC (AADT)	DUST SUPPRESSION TYPE AND APPLICATION	BITUMINIOUS SURFACE COURSES (LAYERS)	SURFACE TYPE
0-49	1 Application of flake per calendar year	0	Gravel
50-199	1 Application of liquid per calendar year	0	Gravel
200-399	NA	1	(DST) Double Surface Treatment or 50mm HL4
400-999	NA	1	50mm HL4 or 50mm HL3
1000+	NA	2	Top Course 50mm HL4 or 50mm HL3 Base Course 50mm HL8

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3. ACCEPTABLE GRANULAR BASE EQUIVELANCY (GBE) THICKNESS

Table 3.3.3 Structural Design Guidelines for Flexible Pavements (Thickness in mm) –
Secondary Highways

AADT	Pavement Structure Elements	Gravels and Sands Suitable as Gran-Borrow	Subgrade Material			Lacustrine Clays	Varved & Leda Clays
			SANDS AND SILTS				
			5-75µm <40%	5-75µm 40-55%	5-75µm >55%		
2000- 3000 AADT	HM	90	90	90	90	90	
	B	150	150	150	150	150	
	SB**	—	300	450	600	800	
	GBE	330	530	630	730	865	
1500- 2000 AADT	HM	50	50	50	50	50	
	B	150	150	150	150	150	
	SB**	—	250	300	450	450 (300-600)	
	GBE	250	415	450	550	550 (450-650)	
1000- 1500 AADT	CL	50	50	50	50	50	
	B	150	150	150	150	150	
	SB**	—	250	300	450	450 (300-600)	
	GBE	240	405	440	540	540 (450-640)	
500- 1000 AADT	ST*	—	—	—	—	—	
	B	150	150	150	150	150	
	SB*	—	150	250	300	250	
	GBE	150	250	315	350	315	
200- 500 AADT	ST*	—	—	—	—	—	
	B	150	150	150	150	150	
	SB**	—	150	250	300	250	
	GBE	150	250	315	350	315	
Less than 200 AADT	Gravel	—	—	—	—	—	
	B	100	100	100	100	100	
	SB**	—	150	250	300	250	
	GBE	100	200	265	300	265	

Notes: All AADT Volumes refer to Present Traffic.

HM — Hot Mix Asphalt & Thickness

B — Base Thickness

SB — Subbase Thickness

GBE — Granular Base Equivalency Thickness

(1 mm HM = 2 mm B = 3 mm SB = 1.11)

CL — Cold Mixed, Cold Laid or Road Mixed Mulch

ST — Double Surface Treatment or Single Surface Treatment with Prime.

* — Apply surface treatments 0.25 m wider than lane width.

** — Proposed subbase thicknesses may be decreased or increased respectively, for harder or softer subgrade conditions in each category, except for varved and leda clay subgrade where exceptionally large ranges are shown.

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Granular Base Equivalency Factors

New Materials	
Material	Equivalency Factor
New (or Recycled) Hot Mix Asphalt	2.0
Granular A in Base	1.0
Granular B in Subbase	0.67
Cement Treated Material in Subbase (with Gr. A in base)	1.4
Cement Treated Material in Base (no subbase)	1.8
Bituminous Treated Material in Base (with Gr. A in subbase)	1.5
Cold Mix	1.8
OGDL	1.0

Existing or Recycled Materials	
Material	Equivalency Factor
Full Depth Reclamation (FDR)	1.0
Full Depth Reclamation Expanded Asphalt Stabilization (EAS)	1.6
Cold In-place Recycling (CIR)	1.8
Cold In-place Recycled with Expanded Asphalt (CIREAM)	1.8
Old HMA	1.25
Old Granular Base	0.75
Old Granular Subbase	0.5

Reconstruction Projects	
Material	Equivalency Factor
Old Granular Base*	0.6
Old Granular Subbase*	0.4

GBE calculation example

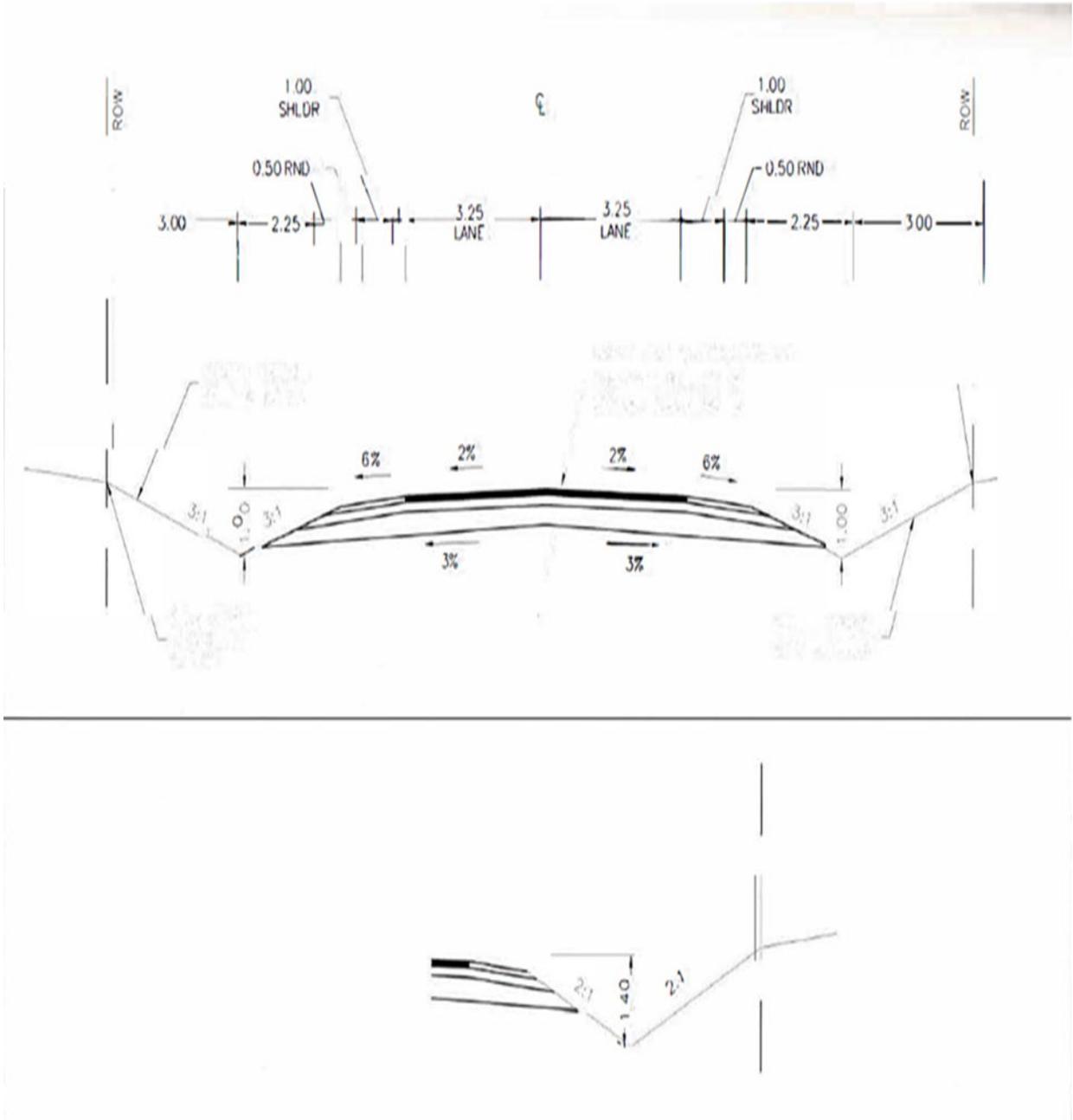
Component	Thickness	Granular Base Equivalency (GBE)
Hot mix asphalt	90 mm	90 x 2.0 = 180
Granular base	150 mm	150 x 1.0 = 150
Granular subbase	450 mm	450 x 0.667 = 300
Total pavement thickness	690 mm	Total GBE = 630

$$180 + 150 + 300 = 630 \text{ Total GBE}$$

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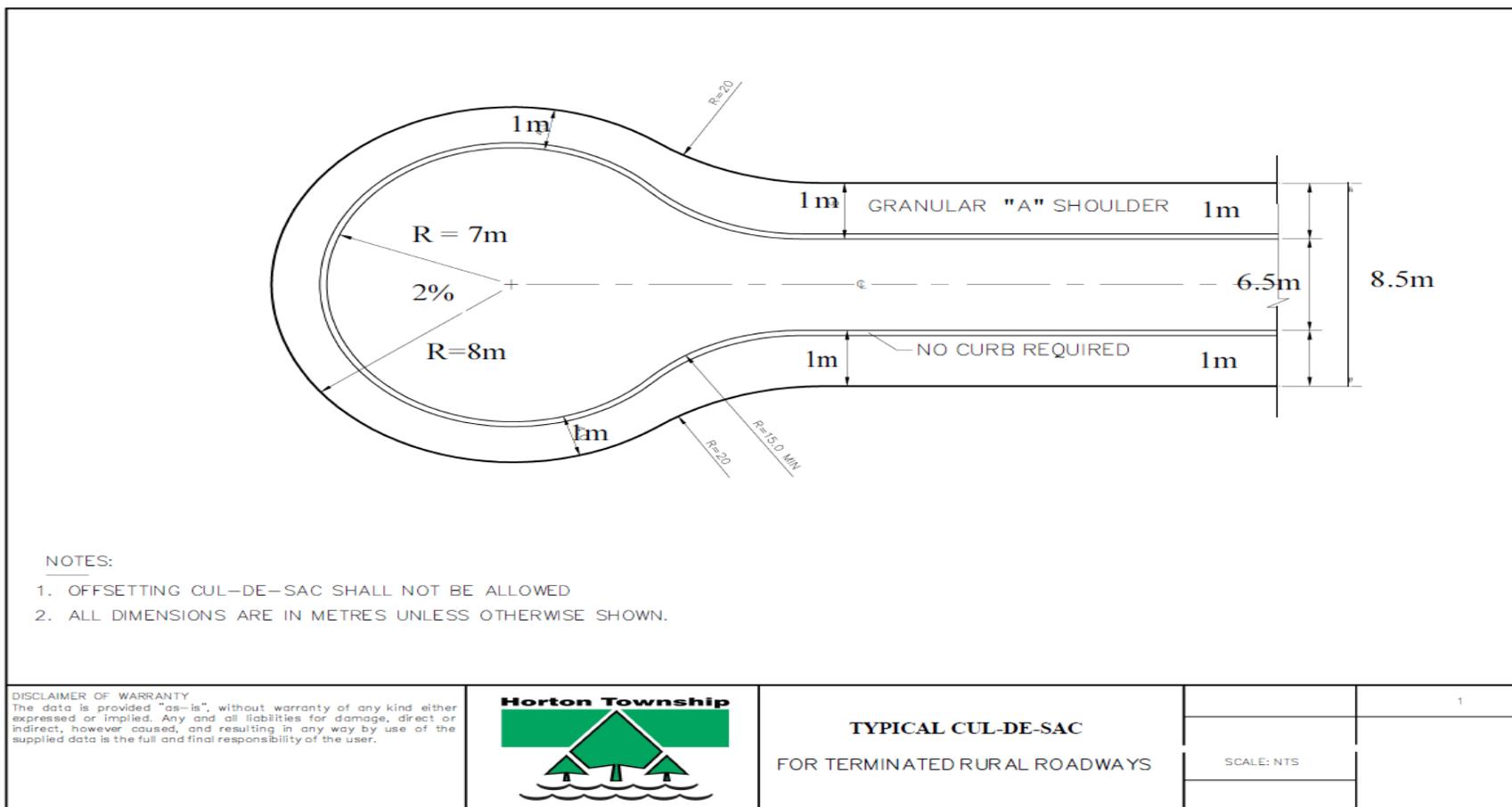
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4. TYPICAL PAVED ROAD PROFILE



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5. TYPICAL CUL DE SAC TURN AROUND

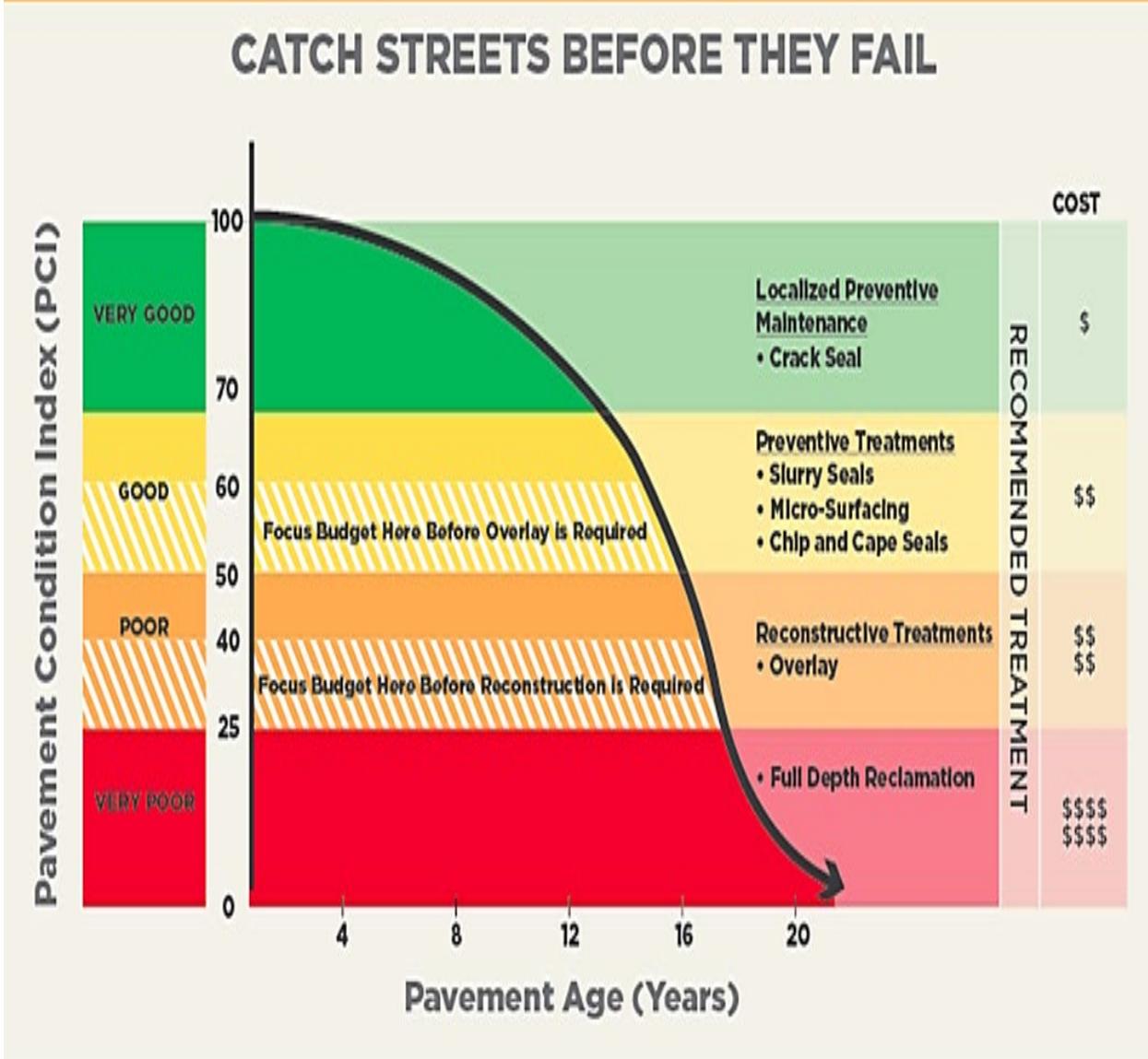


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6. THE CONCEPT OF PRESERVATION

THE CONCEPT OF PAVEMENT PRESERVATION

CATCH STREETS BEFORE THEY FAIL



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7. PAVEMENT OPTIMIZATION AND PRESERVATION PROCEDURE:

- i. One treatment or a combination of treatments from category I.
- ii. One treatment from category II or combination of treatments from category I and II.
- iii. Staff evaluates further preservation feasibility.
- iv. If preservation deemed unfeasible then reconstruct the roadway.

Category I preservation treatment options (PCI) rating between 60 and 100)

- i. Crack seal
- ii. Fog seal
- iii. Slurry seal
- iv. Micro surfacing
- v. Cape seal
- vi. Ultra-thin hot mix asphalt
- vii. Chip seal
- viii. Micro Milling
- ix. Hot in place asphalt Recycling
- x. Combination of treatments from category I
- xi. Other treatments applicable to PCI rating

Category II preservation treatment options (PCI) rating between 40-59)

- i. Cape seal
- ii. Chip seal
- iii. Scrub seal
- iv. Micro milling
- v. Hot in place asphalt recycling
- vi. Combination of treatments from category I and II
- vii. Other treatments applicable to PCI rating

Reconstruction (PCI) rating below 40 and preservation deemed unfeasible)

- i. Granular base testing as necessary
- ii. Brushing as necessary
- iii. Ditching and culvert replacements as necessary
- iv. Full depth pulverization of existing surface (depth between 200 -250mm)
- v. Additional granular material added (minimum 100mm Granular "A")
- vi. Pave with applicable surface for Annual Average Daily Traffic

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Township of Horton COUNCIL / COMMITTEE REPORT

Title: Follow up, Johnston Road Speed Limit Adjustment Feasibility	Date:	Nov 3 rd , 2021.
	Council/Committee:	TES Committee
	Author:	Adam Knapp, Public Works Manager
	Department:	Public Works

RECOMMENDATIONS:

THAT the TES committee accept this report as further information on the feasibility of increasing the speed limit of Johnston Road.

BACKGROUND:

During the October 6th, 2021, TES meeting staff presented vehicular traffic data collected from Johnston Road and in response to the requested speed adjustment request staff proposed that approximately 1000m Northwest of Mullins Road and 400m Southeast of Mullins Road remain 50 km/h and increasing the remainder of Johnston road to Storyland Road and Castleford Road to 70 km/h would avoid any safety concerns associated with the requested speed adjustment. Committee requested further review and for staff to review the preliminary design report from Greenview Environmental Management to ensure that no conflict with the report would arise from the adjustment and the report supports staff's recommendation.

Johnston Road detailed design specified a typical road cross section of:

3 meters minimum center line to edge of pave
1 meter wide shoulder

Staff have confirmed the roads as build platform is:

3.3 meters wide center line to edge of pave
1 meter wide shoulder

Page 12 of the preliminary report cites the TAC manual chart for through lane width of rural roadways with less than or equal to 450 vehicles per hour. The report then suggests a target lane width of 3.3 meters is within the recommended limits for design speeds of 60 kms and the TAC manual chart shows a practical lower limit of 3.3 meters for a design speed of 70 km/h to 100km/h. The chart and supporting statement are displayed below.

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Table 4.2.1: Through Lane Widths – Rural Roadways (Design Hour Directional Volume <=450)

Design Speed (km/h)	Design Domain			
	Practical Lower Limit	Recommended Range		Practical Upper Limit
		Recommended Lower Limit	Recommended Upper Limit	
60 and less	2.7m	3.0m	3.7m	4.0m
70 to 100	3.3m	3.5m	3.7m	4.0m
110 and higher	3.5m	3.5m	3.7m	4.0m

1. Where buses and larger trucks are expected to regularly use a lane, a minimum lane width of 3.3m is recommended regardless of the design speed or traffic volume.

The target lane width for the anticipated truck traffic is 3.3 m, and is considered within the recommended limits for design speeds of 60 km/h and less. Meeting the recommended lane and shoulder widths will require road widening for the road section from Mullins Road to Storyland Road (Area 2). Meeting the recommended lane and shoulder widths for design speeds from 70 to 100 km/h will require road widening for the entire road from Castleford Road to Storyland Road (Areas 1 and 2).

Page 13 of the reports cites the vertical curvature factors with respect to safe stopping distances and supports staffs concerns at Mullins Road intersection and through the vertically curved portion of Johnston Road. The supporting statement is displayed below.

4.1.6 Vertical Curvature (K)

Vertical Curvature (K) factors were reviewed with respect to safe stopping sight distances, per Table 3.3.2. of the TAC Manual.

Six (6) locations were noted in the section of road between Mullins Road and Storyland Road (Area 2), and one (1) location was noted between Castleford Road and Mullins Road (Area 1) that would not generally meet the K factors for design speeds over 50 km/h. Meeting design speeds of 60 km/h is considered easily achievable with minor vertical realignment. Meeting design speeds over 60 km/h is only considered achievable with significant vertical realignment.

Minor adjustments may be required at select entrance locations (i.e. field, residential, commercial, etc.) if vertical realignments occur in the vicinity.

The completed works and detailed design included several minor vertical realignments between 200 and 300mm to allow for a smoother riding surface but did not address the vertical curvature factors with respect to safe stopping distances. Therefore, staff reaffirm that if the Township wishes to stay within the designed parameters noted in the preliminary design and avoid potential litigation that staff's original recommendations to leave the speed limit as is or to adjust the speed limit as stated in paragraph #1 are the safest and most feasible options.

ALTERNATIVES:

N/A

FINANCIAL IMPLICATIONS:

N/A

ATTACHMENTS:

Johnston Road Field Measurements

CONSULTATIONS:

Hope Dillabough – CAO/Clerk

Prepared by: Adam Knapp, Public Works Manager

Reviewed by: Hope Dillabough, CAO/Clerk

JOHNSTON RD

- at pin # 2334
 - pavement 3.3m to ϕ
 - Shoulder 1.1m
- at Mullins rd
 - pavement 3.3m to ϕ
 - Shoulder 1.4m
- at cemetery
 - pavement 3.3m to ϕ
 - Shoulder 1.4m
- at pin # 2616
 - pavement 3.4m to ϕ
 - Shoulder 1.4m
- at KOA
 - pavement 3.4m to ϕ
 - Shoulder 1m



Township of Horton COUNCIL / COMMITTEE REPORT

Title: 1 Year Contract Extension PW 2018-11 Landfill Material Grinding	Date:	Nov 3 rd 2021
	Council/Committee:	TES Committee
	Author:	Adam Knapp, Public Works Manager
	Department:	Public Works

RECOMMENDATIONS:

That the TES committee agree with staff recommendation to extend the landfill material grinding contract with National Grinding Inc. for one (1) year at a total annual cost of \$27,685.00 including HST.

BACKGROUND:

The existing contract commenced on January 15, 2019 and will conclude December 31, 2021 (3 years). Extensions to the Contract may be considered on a yearly basis to a maximum of 3 additional years. The work has been completed per contract schedule and satisfaction of the Township of Horton to date. Staff deem that extending the contract with National Grinding Inc. at the existing prices shall assist in promoting stability in the 2022 yearly budget.

ALTERNATIVES:

Re-issue the tender

FINANCIAL IMPLICATIONS:

\$27,685.00 including HST if renewed for 1 year
Unknown if re-issued, probable increase in pricing.

ATTACHMENTS:

National Grinding Inc. 2018 Bid Submission

CONSULTATIONS:

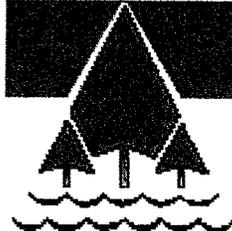
Hope Dillabough – CAO/Clerk

Prepared by: Adam Knapp, Public Works Manager

Reviewed by: Hope Dillabough, CAO/Clerk

RETURN TO AGENDA

Horton Township



The Corporation of The
TOWNSHIP OF HORTON

PUBLIC WORKS DEPARTMENT
Environmental Services

TENDER # PW 2018-11

MATERIAL GRINDING

Township of Horton Landfill

2082 Eady Road, Renfrew

CONTRACTOR NAME	BID AMOUNT
National Grinding Inc	\$ <u>27685.00</u> (incl. all applicable fees and taxes)



Township of Horton COUNCIL / COMMITTEE REPORT

Title: County of Renfrew Proposed Cost Sharing with Local Municipalities	Date:	Nov 3rd 2021
	Council/Committee:	TES Committee
	Author:	Adam Knapp, Public Works Manager
	Department:	Public Works

RECOMMENDATIONS:

THAT the TES committee accept this report and the draft policy attached as information

FURTHER THAT Committee and Council provide comments and concerns regarding this policy to staff prior to November 30th, 2021.

BACKGROUND:

The County of Renfrew has contacted local municipalities for comments and concerns regarding implementation of a cost sharing policy. Horton staff have several concerns with the negative affect that cost sharing policy may have in hindering our ability to budget and plan capital works and development within the Township. Staff firmly believe that the County is receiving adequate levy's currently and the development they are referring to has only increased the amount received. The developed areas should have mainly new infrastructure that should not require significant rehabilitation for many years allowing the County adequate time to plan with the status quo option proposed.

The chain of events and options proposed are as seen below:

During the April 13th County Operations Committee meeting Staff were direct by Resolution to research and develop draft policies related to growth management issues.

RESOLUTION NO. OP-C-21-04-48

Moved by Councillor Hunt

Seconded by Councillor Keller

THAT staff be directed to review the policy positions of other upper tier municipalities with respect to growth and the upper and lower tier responsibilities for this growth management and provide a draft policy for review and discussion at the June meeting of the Operations Committee. CARRIED

After research and consultation with other upper tier municipalities in Eastern Ontario, Staff brought forward a number of draft policies (Attached) for the Operations Committee on June 15th once presented, Committee agreed to move the item onto the County Council Agenda for the June 30th meeting.

5. Growth Related Policies [Strategic Plan Goal No. 3(b)]

RETURN TO AGENDA

The County of Renfrew's current Asset Management Plan only maintains our current assets and has no provisions for the growth or infrastructure expansion being experienced within several areas of the County.

At the April Operations Committee meeting, staff were directed to research policy positions of other upper tier municipalities with respect to growth, specifically, upper and lower tier responsibilities for growth related infrastructure.

During the June 30th Meeting of County Council members were requested and comment on the attached policies (Pages from June30 2021 CountyCouncilReportFINAL.pdf) by September 1st.

4. Growth Related Policies [Strategic Plan Goal No. 3(b)]

The County of Renfrew's current Asset Management Plan only maintains our current assets and has no provisions for the growth or infrastructure expansion being experienced within several areas of the County. Under the direction of our Committee, staff researched policy positions of other upper tier municipalities with respect to growth, specifically, upper and lower tier responsibilities for growth related infrastructure and are proposing the following potential options for consideration:

- a) Status Quo.
 - Continue to deal with growth related items on an individual basis.
- b) Draft Development Charges Policy.

(Attached Pages 217 – 233, 17 page policy)

 - Currently the County of Renfrew has no development charges. Research indicates that only one of the Eastern Ontario upper tier municipalities have a development charge by-law. A Draft County of Renfrew Development Charges Policy is attached as Appendix III. It is important to note that should Council want to proceed with this option the use of an external consultant is recommended.
- c) Draft Cost Sharing in Urban Areas.

(Attached Pages 234 – 238, 5-page policy)

 - Attached as Appendix IV is a Draft County of Renfrew Cost Sharing in Urban Areas Policy. The policy clearly outlines the County's responsibilities and financial contributions that would be required for expansion of infrastructure.
- d) Increase County Levy
 - Identify a percentage of the County levy that would be held in a reserve fund for growth along County Roads. This requires further research in consultation with the Corporate Services Department in respect to parameters referring to qualifications, what would be funded, the amount needed, and what constitutes growth that is not development driven.

RETURN TO AGENDA

ALTERNATIVES:

N/A

FINANCIAL IMPLICATIONS:

Negative Impact to Capital Planning Abilities
Increased County Levy's
County Development Charges

ATTACHMENTS:

Draft Cost Sharing with local Municipalities
Policy Development Charges in Urban Areas Policy

CONSULTATIONS:

Hope Dillabough – CAO/Clerk

Prepared by: Adam Knapp, Public Works Manager

Reviewed by: Hope Dillabough, CAO/Clerk

CORPORATE POLICIES AND PROCEDURES			
SECTION: Public Works and Engineering Department			POLICY #: PW-XX
POLICY: Cost Sharing with Local Municipalities			
DATE: October 2021	REV. DATE: -----	COVERAGE: All Areas of the County	PAGE #: 1 of 5

POLICY STATEMENT

County roads provide a road network for traffic other than local trips and provide a level of service somewhat lower than the King's highway system but significantly higher than local roads. Therefore, the local municipality shall share in the cost of work items, other than those that are elements of through roads.

PROCEDURE

PART A: Where works are required on County Roads identified as deficient now

1. The County shall be responsible for:
 - a) The construction of an urban cross-section up to the minimum "Geometric Design Standards for Undivided Urban Roads in Ontario" (i.e. two driving and one parking lane), but in no case less than the centre 7.0 m of any County road in an urban area.
 - b) The construction of curbs and gutters.
 - c) The construction of the paved boulevard between curb and sidewalk to a maximum of 0.5 m width.
 - d) The construction of catchbasins and the portion of storm sewers required to drain the County road. (In no case will the County drain land more than 25 m from the centreline of the road.)
 - e) The construction of a full rural section within any urban area.
 - f) The remaining costs of those works covered by Section 5, requested by the local municipality, and deemed feasible and economical by the Director of Public Works and Engineering, or designate.

2. Land acquisition when land is required to accommodate the road section specified in 1a) shall be the responsibility of the County.

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3. The County shall furnish the engineering plans, specifications, construction measurements, supervision and inspection as required in proportion to its own share of the cost of the works.
4. The County shall be responsible for utility relocation costs as outlined in the Public Service Works on Highways Act, R.S.O. 1990, c. P.49, as amended.
5. The local municipality shall be responsible for:
 - g) 100% of the construction of all sidewalks (Section 55 of the Municipal Act, 2001, as amended).
 - h) The construction of that portion of storm sewers over and above that required for County road drainage, based on the following:

Local share % = 100% less County's Share %

$$\text{County Share} = \frac{\text{(Theoretical pipe diameter to accommodate CRD)}}{\text{Actual pipe diameter to accommodate full drainage area}} \times 100\%$$

CRD – County Road Drainage
 - i) 100% of the cost of all local services, such as water or sanitary sewerage works.
 - j) 100% of that portion of the paved boulevard between curb and sidewalk beyond 0.5 m.
 - k) Land acquisition when required to accommodate road elements beyond that specified in Section 1).
 - l) 50% of the construction of additional parking lanes.
 - m) 100% of the construction of paved shoulders whether behind curbs and/or gutters or not.
 - n) Engineering in proportion with the cost of its share of the project.

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o) There will be a 7% administration charge on County "in-house" (but not contracted) work.

6. The County shall enter into an agreement for any proposed reconstruction (under the auspices of Section 20(1) of the Municipal Act, 2001, as amended). Costs shall be borne according to this policy.

PART B: Where works are requested on County Roads with no identified critical structural deficiencies

7. After reconstruction with a rural cross section (raised road, shoulders and ditches) some County roads have suffered ribbon development. The owners in the ribbon from time to time demand urban type services. An urban cross section costs 300% of a rural cross section to build, and 175% to maintain. Often, "urbanizing" a rural cross section is difficult (sufficient outlet depth for proper storm sewers, sufficient grade to accommodate drainage along the road, an elevation of the road above the surrounding lands, etc.).
8. Should "urbanizing" be requested and deemed possible by the Director of Public Works and Engineering, or designate, the project will be designed, the design approved by the County and an estimate prepared. An agreement (under the auspices of Section 20(1) of the Municipal Act, 2001, as amended) will be prepared and the information forwarded to the affected local municipality.

With the exception of sidewalks which are fully a local responsibility, costs to "urbanize" will be shared equally between the County and the Municipality.

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The works shall be scheduled for construction when approved by Council and accommodated in the County Budget.

Contract administration and construction supervision shall be the responsibility of the County.

PART C: Maintenance

9. The County shall be responsible for the maintenance of:
- a) The road between the curbs, including snow plowing, salting and sanding, (but not snow pickup and removal) as required.
 - b) Curbs and gutters, storm sewers and catchbasins.
 - c) Spring sweeping in urban areas.
 - d) Rural sections (including a minimum of 0.5 m of shouldering) in urban areas.
 - e) Upon 60 days notice to the local municipality, 50% of the cost of maintenance re-setting sanitary manholes and watermain chambers when work is performed by the County.
 - f) 100% of the cost of re-setting all manholes and watermain chambers in conjunction with resurfacing.
 - g) With exception to current agreements in place for maintenance along County Roads in Urban Areas.
10. The local municipality shall be responsible for the maintenance of:
- a) Sidewalks, including snow removal.
 - b) The loading and removal of snow from parking lanes (after the County plowing), as required.

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- c) Sanitary sewers and water works including full restoration of road cuts to County standards and the resetting of manholes when not covered by Section 9e).
 - d) Paved shoulders beyond curbs and/or gutters.
11. County Council may, if deemed advisable, make exceptions to this policy, provided the exemptions do not alter the County-wide application of the policy.

DRAFT

CORPORATE POLICIES AND PROCEDURES			
SECTION: Public Works and Engineering Department			POLICY #: PW-XX
POLICY: Development Charges in Urban Areas			
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POLICY STATEMENT

The Development Charges Act, 1997, as amended (hereinafter called “the Act” enables the Council of a municipality to pass policies for the imposition of development charges against land located in the municipality for increased capital costs required for the reason of the increased need for services arising from development in the area to which the policy applies.

1. Definitions:

- a) **The terms County or the County** are defined as pertaining to ‘The Corporation of the County of Renfrew’ as it relates to all definitions. All Policy statements refer to ‘the County of Renfrew’, and may be used interchangeably with ‘The Corporation of the County of Renfrew.’ In procedure statements, the terms ‘the County’ or ‘County’ refer to, and may be used interchangeably with, ‘The Corporation of the County of Renfrew.’
- b) **“Act”** means the Development Charges Act, S.O. 1997, c 27, as amended.
- c) **Agricultural use** is defined as lands, buildings or structures, excluding any portion thereof used as a dwelling unit or for commercial use, used or designed or intended for use for the purpose of a bona fide farming operation including, but not limited to, animal husbandry, dairying, livestock, fallow, field crops, removal of sod, forestry, fruit farming, greenhouses, horticulture, market gardening, pasturage, poultry keeping and equestrian facilities.

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- d) **Apartment dwelling** is defined as a dwelling consisting of four or more dwelling units, which units have a common entrance from street level and common halls and/or stairs, elevators and yards.
- e) **Bedroom** is defined as any room used or designated or intended for use as sleeping quarters including but not limited to, a den, a study, a family room or other similar use.
- f) **Commercial** is defined as any non-residential development not defined as “industrial” in this Policy.
- g) **Council** is defined as the council of the County.
- h) **County** is defined as the “Corporation of the County of Renfrew”.
- i) **Dwelling** is defined as a house, apartment, or other place of residence.
- j) **Detached dwelling** is defined as a dwelling containing only a dwelling unit or a dwelling unit and an accessory apartment.
- k) **Development** is defined as a process that creates growth, progress, positive change or the addition of physical, economic, environmental, social and demographic components. Development also includes redevelopment.
- l) **Development charge** is defined as a charge imposed pursuant to this policy adjusted in accordance with Section 13.

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- m) **Dwelling unit** is defined as a room or group of rooms in a dwelling used or intended to be used as a single independent and separate housekeeping unit containing a kitchen or sanitary facilities, and has a private entrance from outside or from a common hallway or stairway inside the dwelling, but does not include a room or suite of rooms in a hotel or motel.
- n) **Grade** is defined as the average level of finished ground adjoining a building or exterior walls.
- o) **Gross floor area** is defined as the total floor area, measured between the outside exterior walls or between the outside walls and the centre line of party walls dividing the building from another building, of all floors above the average level of finished ground adjoining the building at its exterior walls.
- p) **Hospital** is defined as land, buildings or structures used, or designed or intended for use as defined in the Public Hospitals Act, R.S.O. 1990, c. P. 40, as amended.
- q) **Industrial** is defined as any building used for or in connection with,
- manufacturing, producing, processing, storing or distributing something or processing something.
 - research or development in connection with manufacturing, producing or processing something.
 - retail sales by a manufacturer, producer or processor of something manufactured, produced or processed, if the retail sales are at the site where the manufacturing, production or processing takes place.

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- office for administrative purposes, if carried out with respect to manufacturing, producing, processing, storage or distribution and in or attached to the building or structure used for that manufacturing, producing, storage or distribution.
- r) **Non-residential use** is defined as land, buildings or structures or portions thereof used, or designed or intended for a use other than a residential use.
- s) **Other dwelling** is defined as any residential dwelling which is not a detached dwelling, a semi-detached dwelling, or an apartment dwelling.
- t) **Place of worship** is defined as that part of a building or structure used for worship and that is exempt from taxation as a place of worship under the Assessment Act, R.S.O. 1990, c. A.31, as amended.
- u) **Residential use** is defined as land or buildings or structures or part thereof any kind at all used, designed or intended to be used as a residence for one or more individuals but does not include a hotel or motel.
- v) **Semi-detached dwelling** is defined as the whole of a dwelling divided vertically both above grade and below grade into two separate dwelling units.

2. Schedule of Development Charges:

- 1) Subject to the provisions of this policy, development charges against land shall be calculated and collected in accordance to the related services set out in Schedule A, with the phased-in rates set out in Schedule B.

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- 2) The development charge with respect to the use of any land, buildings or structures shall be calculated as follow:
 - a) in the case of residential development, or residential portion of a mixed-use development, based upon the number and type of dwelling units, in accordance with Schedule B;
 - b) in the case of non-residential development, or the non-residential portion of a mixed-use development, based upon the number of square metres of gross floor area of such development, in accordance with Schedule B.
- 3) Council hereby determines that the development of land, buildings or structures for residential and non-residential uses have required or will require the provision, enlargement, expansion or improvement of the services referenced in Schedule A.

3. Applicable Lands:

- 1) Subject to subsections 2), 3), 4) and 7), this policy applies to all lands in the County, whether or not the land or use is exempt from taxation under Section 3 of the Assessment Act, 1990, c.A. 31, as amended.
- 2) This policy shall not apply to the following:
 - a) Land that is owned by and used for the purposes of:
 - a board as defined in subsection 1(1) of the Education Act;
 - the County, or any local board thereof;
 - an area municipality, or any local board thereof in the County;
 - b) The development of a non-residential farm building used for bona fide agricultural use;

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- c) A place of worship and land used in connection therewith;
 - d) A hospital;
 - e) An industrial building.
- 3) Notwithstanding exemptions contained in subsection 2), this policy shall not apply to development that would be exempt from the payment of development charges by the applicable lower-tier area municipal development charges policy.
- 4) This policy shall not apply to:
- a) a temporary use permitted under the zoning by-law amendment enacted under section 39 of the Planning Act.
 - b) temporary erection of a building without foundation as defined in the Building Code Act for a period not exceeding (6) consecutive months and not more than six (6) months in any one year on a site;
 - c) development where, by comparison with the land at any time within five years previous to the imposition of the charge:
 - no additional dwelling units are being created;
 - no additional non-residential gross floor area is being added.
- 5) Section 2 of this policy shall not apply to that category of exempt development described in subsection 2(3) of the Act, namely:
- a) the enlargement of an existing dwelling unit or the creation of one or two additional dwelling units in an existing detached dwelling; or
 - b) the creation of one additional dwelling unit in any other existing residential building.

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- 6) Notwithstanding subsection 5)a), development charges shall be calculated and collected in accordance with Schedule B where the total residential gross floor area of the additional one or two dwelling units is greater than the total gross floor area of the existing dwelling unit.
- 7) Notwithstanding subsection 5)b), development charges shall be calculated and collected in accordance with Schedule B, where the additional dwelling unit has a residential gross floor area greater than,
 - a) in the case of a semi-detached house, the gross floor area of the existing smallest dwelling unit, and
 - b) in the case of any other residential building, the residential gross floor area of the smallest dwelling unit contained in the residential building.
- 8) Section 2 of this policy shall not apply to that category of exempt development described in Section 4 of the Act, and section 1 of the Ontario Regulation 82/89, namely:
 - a) For the purpose of b), the terms “gross floor area” and “existing industrial building” shall have the same definition as those terms have in Ontario Regulation 89/98 under the Act.
 - b) The enlargement of the gross floor area of an existing industrial building, if the gross floor area is enlarged by fifty (50) percent or less;
 - c) Notwithstanding subsection b), if the gross floor area is enlarged by more the fifty (50) percent, development charges shall be payable and collected and the amount payable shall be calculated in accordance with Section 4.(3) of the Act.
- 9) There where a conflict exists between the provisions of this policy and any other agreement between the County and the owner, with respect to land to

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be charged under this Policy, the provisions of such agreement prevail to the extent of the conflict.

4. Application of Charges

- 1) Subject to subsection 2), development charges shall apply to, and shall be calculated, paid and collected in accordance with the provisions of this policy in respect of land to be developed for residential and non-residential uses within the geographical limits of the County, where,
 - a) The development requires,
 - the passing of a zoning by-law or an amendment thereto under Section 34 of the Planning Act, R.S.O. 1990, cP.13, as amended (the “Planning Act”);
 - a conveyance of land to which a by-law passed under subsection 50(7) of the Planning Act applies;
 - the approval of a plan of subdivision under Section 51 of the Planning Act;
 - a consent under Section 53 of the Planning Act;
 - the approval of a description under Section 9 of the Condominium Act, 1998 S.O. c.19, as amended; or
 - the issuing of a permit under the Building Code Act, 1992 S.O. c. 23, as amended, in relation to a building or structure.
- 2) Subsection 1) shall not apply in respect of local services as described in s.s.59(2) (a) and (b) of the Act;

5. Local Service Installation

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Nothing in this policy prevents Council from requiring, as a condition of any approval under Section 41, 51 or 53 of the Planning Act, that the owner, at his/her own expense, shall install or pay for such local services, as Council may require, or that the owner pay for the local connection to a water, sanitary sewer or storm drainage facility related to the approval or within the area to which the approval relates.

6. Multiple Charges

- 1) Where two or more of the actions described in Section 4.1) of this policy are required before land to which a development charge applies can be developed, only one development charge shall be calculated, paid and collected in accordance with the provisions of this policy.
- 2) Notwithstanding subsection 1), if two or more actions described in Section 4.1) of this policy occur at different times, and if the subsequent action has the effect of increasing the need for municipal services as set out in Schedule A, an additional development charge shall be calculated and collected in accordance with the provisions of this policy.
- 3) If development does not require a building permit but does require one or more of the actions described in Subsection 4.1) of this policy, then the development charge shall nonetheless be payable in respect of any increased or additional development permitted by such action.

7. Services in Lieu

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Council may authorize an owner, through an agreement under Section 38 of the Act, to substitute such part of the development charge applicable to the owner's development as may be specified in the agreement, by the provision at the sole expense of the owner, of services in lieu. Such agreement shall further specify that where the owner provides services in lieu in accordance with the agreement, Council shall give the owner credit, without interest, against the development charge in accordance with the agreement provisions and the provisions of Section 39 of the Act, equal to the reasonable cost to the owner of providing services in lieu, as determined by the County. In no case shall the agreement provide for a credit which exceeds the total development charge payable by an owner to the County in respect of the development to which the agreement relates.

8. Development Charge Redevelopment Credits

- 1) Where residential space is being converted to non-residential space, the development charge equivalent that would have been payable on the residential space shall be deducted from the charge calculated on the non-residential space being added.
- 2) Where non-residential space is being converted to residential space, the development charge equivalent that would have been payable on the non-residential space shall be deducted from the charge calculated on the residential units being added.
- 3) An owner who has obtained a demolition permit and demolished existing dwelling units or a non-residential building or structure in accordance with the provisions of the Building Code Act shall not be subject to the development charge with respect to the development being replaced, provided that the

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building permit for the replacement residential units or non-residential building or structure is issued not more than five (5) years after the date of issuance of the demolition permit and provided that any dwelling units or non-residential floor area created in excess of what was demolished shall be subject to the development charge imposed under Section 2.

- 4) Notwithstanding subsection 8.2) where the lower-tier area municipal Development Charge Policy provides for a longer redevelopment period, the lower-tier area municipal Development Charge Policy provisions will apply.
- 5) No redevelopment credit shall be made in excess of the development charge payable for a development.

9. Timing and Calculation and Payment

- 1) Development charges shall be calculated and payable in full in money or by provision of services as well as agreed upon, or by credit granted by the Act, on the date the first building permit is issued in relation to a building or structure on land to which the development charge applies.
- 2) Where development charges apply to land in relation to which a building permit is required, the building permit shall not be issued until the development charge has been paid in full to the County.
- 3) Notwithstanding subsections 1) and 2), an owner and the County of Renfrew may enter into an agreement to provide for the payment in full of a

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development charge before a building permit issuance or later than the issuing of a building permit.

- 4) If a development does not require a building permit, the development charge shall be calculated and paid in full at the rate in effect at the time the approval is granted as a condition of the earliest of any of the approvals required for the development and enumerated in Section 4 of this policy.

10. Policy Registration

This Policy or a certified copy of the policy may be registered against the title to any land to which this policy applies.

11. Reserve Funds

- 1) Monies received from payment of development charges shall be maintained in a separate reserve fund for each service designated in Schedule "A", plus interest earned thereon.
- 2) Monies received for the payment of development charges shall be used only in accordance with the provisions of s. 35 of the Development Charges Act.
- 3) Where any development charge, or part thereof, remains unpaid after due date, the amount unpaid shall be added to the tax roll and shall be collected as taxes.

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- 4) Where any unpaid development charges are collected as taxes under subsection 3), the monies so collected shall be credited to the development charge reserve fund or funds referred to in subsection 1).
- 5) The Director of Corporate Services shall, commencing in 2022 annually, furnish to Council a statement in respect of the reserve funds established hereunder for the prior year, containing the information set out in Sections 12 and 13 of Ontario Regulation 82/89, or amending regulation.

12. Policy Amendment or Repeal

- 1) Where this policy or any development charge prescribed thereunder is amended or repealed by order of the Ontario Municipal Board or by resolution of the Council, the Director of Corporate Services shall calculate forthwith the amount of any overpayment to be refunded as a result of said amendment or repeal.
- 2) Refunds that are required to be funded under subsection 1) shall be paid to the registered owner of the land on the date on which the refund is paid.
- 3) Refunds that are required to be paid under subsection 1) shall be paid with interest to be calculated as follows:
 - a) interest shall be calculated from the date on which the overpayment was collected to the day on which the refund is paid;
 - b) interest shall be paid using the Bank of Canada rate in effect on the date of enactment of this policy.

CORPORATE POLICIES AND PROCEDURES			
SECTION: Public Works and Engineering Department			POLICY #: PW-XX
POLICY: Development Charges in Urban Areas			
DATE: June 2021	REV. DATE: -----	COVERAGE: All Areas of the County	PAGE #: 14 of 17

13. Development Charge Schedule Indexing

The development charges referred to in Schedule “B” may be adjusted annually, without amendment to this policy, commencing on January 1, 2022, and annually thereafter on January 1, while this policy is in force, in accordance with the most recent twelve (12) month change in the Statistics Canada Quarterly, “Construction Price Statistics”.

14. Policy Administration

This Policy shall be administered by the Director of Corporate Services.

15. Schedules to the Policy

The following schedules to this policy form and integral part of this policy:

- Schedule A – Designated Municipal Services under this Policy
- Schedule B – Schedule of Development Charges

16. Date Policy Effective

This policy shall come into force on **January 1, 2021**.

17. Severability

CORPORATE POLICIES AND PROCEDURES			
SECTION: Public Works and Engineering Department			POLICY #: PW-XX
POLICY: Development Charges in Urban Areas			
DATE: June 2021	REV. DATE: -----	COVERAGE: All Areas of the County	PAGE #: 15 of 17

If, for any reason, any provision, section, subsection or paragraph of this by-law is held to be invalid, it is hereby declared to be the intention of Council that all of the remainder of this policy shall continue in full force and effect until repealed, re-enacted or amended, in whole or in part or dealt with in any other way.

18. Short Title

This policy may be cited as the “County of Renfrew Development Charge Policy”.

DRAFT

CORPORATE POLICIES AND PROCEDURES			
SECTION: Public Works and Engineering Department			POLICY #: PW-XX
POLICY: Development Charges in Urban Areas			
DATE: June 2021	REV. DATE: -----	COVERAGE: All Areas of the County	PAGE #: 16 of 17

SCHEDULE "A"
DESIGNATED MUNICIPAL SERVICES UNDER THIS POLICY

1. Transportation
2. Administration (Studies)
3. Long-Term Care
4. Community Services
5. Paramedic Services
6. Parks and Recreation

DRAFT

CORPORATE POLICIES AND PROCEDURES			
SECTION: Public Works and Engineering Department			POLICY #: PW-XX
POLICY: Development Charges in Urban Areas			
DATE: June 2021	REV. DATE: -----	COVERAGE: All Areas of the County	PAGE #: 17 of 17

SCHEDULE "B"
SCHEDULE OF DEVELOPMENT CHARGES

Service	Residential				Non-Residential
	Single and Semi-Detached Dwelling	Apartment s – 2 Bedrooms +	Apartments – Bachelor and 1 Bedroom	Other Multiples	(per sq. m of gross floor area)
Municipal Wide Services					
Transportation	\$XXX.XX	\$XXX.XX	\$XXX.XX	\$XXX.XX	\$XXX.XX
Administration	\$X.XX	\$X.XX	\$X.XX	\$X.XX	\$X.XX
Long-Term Care	\$X.XX	\$X.XX	\$X.XX	\$X.XX	\$X.XX
Community Services	\$X.XX	\$X.XX	\$X.XX	\$X.XX	\$X.XX
Paramedic Services	\$XX.XX	\$XX.XX	\$XX.XX	\$XX.XX	\$XX.XX
Total Municipal Wide Services	\$XXX.XX	\$XXX.XX	\$XXX.XX	\$XXX.XX	\$XXX.XX

CORPORATE POLICIES AND PROCEDURES			
SECTION: Public Works and Engineering Department			POLICY #: PW-XX
POLICY: Cost Sharing in Urban Areas			
DATE: June 2021	REV. DATE: -----	COVERAGE: All Areas of the County	PAGE #: 1 of 5

POLICY STATEMENT:

County roads provide a road network for traffic other than local trips and provide a level of service somewhat lower than the King's highway system but significantly higher than local roads. Therefore, the local municipality shall share in the cost of work items, other than those that are elements of through roads.

PROCEDURE:**PART A: Where works are required on County Roads identified as deficient now**

1. The County shall be responsible for:
 - a) The construction of an urban cross-section up to the minimum "Geometric Design Standards for Undivided Urban Roads in Ontario" (i.e. two driving and one parking lane), but in no case less than the centre 7.0 m of any County road in an urban area.
 - b) The construction of curbs and gutters.
 - c) The construction of the paved boulevard between curb and sidewalk to a maximum of 0.5 m width.
 - d) The construction of catchbasins and that portion of storm sewers required to drain the County road. (In no case will the County drain land more than 25 m from the centreline of the road.)
 - e) The construction of a full rural section within any urban area.
 - f) The remaining costs of those works covered by Section 5, requested by the local municipality, and deemed feasible and economical by the Director of Public Works and Engineering, or designate.

CORPORATE POLICIES AND PROCEDURES			
SECTION: Public Works and Engineering Department			POLICY #: PW-XX
POLICY: Cost Sharing in Urban Areas			
DATE: June 2021	REV. DATE: -----	COVERAGE: All Areas of the County	PAGE #: 2 of 5

2. Land acquisition when land is required to accommodate the road section specified in 1a) shall be the responsibility of the County.
3. The County shall furnish the engineering plans, specifications, construction measurements, supervision and inspection as required in proportion to its own share of the cost of the works.
4. The County shall be responsible for utility relocation costs as outlined in the Public Service Works on Highways Act, R.S.O. 1990, c. P.49, as amended.
5. The local municipality shall be responsible for:
 - a) 100% of the construction of all sidewalks (Section 55 of the Municipal Act, 2001, as amended).
 - b) The construction of that portion of storm sewers over and above that required for County road drainage,
 - c) 100% of the cost of all local services, such as water or sanitary sewerage works, based on the following:

Local share % = 100% - County's Share %

County Share = $\frac{\text{Theoretical pipe diameter to accommodate CRD}}{\text{Actual pipe diameter to accommodate full drainage area CRD}} \times 100\%$

CRD – County Road Drainage
 - d) 100% of that portion of the paved boulevard between curb and sidewalk beyond 0.5 m.
 - e) Land acquisition when required to accommodate road elements beyond that specified in Section 1).

CORPORATE POLICIES AND PROCEDURES			
SECTION: Public Works and Engineering Department			POLICY #: PW-XX
POLICY: Cost Sharing in Urban Areas			
DATE: June 2021	REV. DATE: -----	COVERAGE: All Areas of the County	PAGE #: 3 of 5

- f) 50% of the construction of additional parking lanes.
 - g) 100% of the construction of paved shoulders whether behind curbs and/or gutters or not.
 - h) Engineering in proportion with the cost of its share of the project.
 - i) There will be a 7% administration charge on County "in-house" (but not contracted) work.
6. The County shall enter into an agreement for any proposed reconstruction (Under the auspices of Section 20(1) of the Municipal Act, 2001, as amended). Costs shall be borne according to this policy.

PART B: Where works are requested on County Roads with no identified critical structural deficiencies

7. After reconstruction with a rural cross section (raised road, shoulders and ditches) some County roads have suffered ribbon development. The owners in the ribbon from time to time demand urban type services. An urban cross section costs 300% of a rural cross section to build, and 175% to maintain. Often, "urbanizing" a rural cross section is difficult (sufficient outlet depth for proper storm sewers, sufficient grade to accommodate drainage along the road, an elevation of the road above the surrounding lands, etc.).
8. Should "urbanizing" be requested and deemed possible by the Director of Public Works and Engineering, or designate, the project will be designed, the design approved by the County and an estimate prepared. An agreement (under the auspices of Section 20(1) of the Municipal Act, 2001, as amended) will be prepared and the information forwarded to the affected local municipality.

CORPORATE POLICIES AND PROCEDURES			
SECTION: Public Works and Engineering Department			POLICY #: PW-XX
POLICY: Cost Sharing in Urban Areas			
DATE: June 2021	REV. DATE: -----	COVERAGE: All Areas of the County	PAGE #: 4 of 5

With the exception of sidewalks which are fully a local responsibility, costs to “urbanize” will be shared equally between the County and the Municipality.

The works shall be scheduled for construction when approved by Council and accommodated in the County Budget.

Contract administration and construction supervision shall be the responsibility of the County.

PART C: Maintenance

9. The County shall be responsible for the maintenance of:
- a) The road between the curbs, including snow plowing, salting and sanding, (but not snow pickup and removal) as required.
 - b) Curbs and gutters, storm sewers and catchbasins.
 - c) Spring sweeping in urban areas.
 - d) Rural sections (including a minimum of 0.5 m of shouldering) in urban areas.
 - e) Upon 60 days notice to the local municipality, 50% of the cost of maintenance re-setting sanitary manholes and watermain chambers when work is performed by the County.
 - f) 100% of the cost of re-setting all manholes and watermain chambers in conjunction with resurfacing.
 - g) With exception to current agreements in place for maintenance along County Roads in Urban Areas.

CORPORATE POLICIES AND PROCEDURES			
SECTION: Public Works and Engineering Department			POLICY #: PW-XX
POLICY: Cost Sharing in Urban Areas			
DATE: June 2021	REV. DATE: -----	COVERAGE: All Areas of the County	PAGE #: 5 of 5

10. The local municipality shall be responsible for the maintenance of:
- a) Sidewalks, including snow removal.
 - b) The loading and removal of snow from parking lanes (after the County plowing), as required.
 - c) Sanitary sewers and water works including full restoration of road cuts to County standards and the resetting of manholes when not covered by Section 9e).
 - d) Paved shoulders beyond curbs and/or gutters.
11. County Council may, if deemed advisable, make exceptions to this policy, provided the exemptions do not alter the County-wide application of the policy.



Township of Horton COUNCIL / COMMITTEE REPORT

Title: Golf Course Road Granular Base Testing and Cost Estimates	Date:	Nov 3 rd 2021
	Council/Committee:	TES Committee
	Author:	Adam Knapp, Public Works Manager
	Department:	Public Works

RECOMMENDATIONS:

THAT the TES committee accept this report as information.

BACKGROUND:

During the October 6th 2021, TES meeting staff was directed to conduct granular base testing on Golf Course Road and compile estimates to rehabilitate the roadway.

All estimates are calculated at subcontracted prices with a 7% contingency calculated into the unit price and 13% HST included in the total cost.

Estimate #1 displays the cost to down grade the roads surface to gravel, this is the rehabilitation treatment proposed by the Township of Admaston Bromley.

Treatment Type	Category	Life Extension	Lane-Km* Treated	Lane-Km-Years	Unit Cost	Total Cost
Pulverizing		0.0	.53	0	4.00	\$13,780
150 mm Granular A		8.0	.65	5.2	10.00	\$42,250
Select...				0		\$0
Select...				0		\$0
Select...				0		\$0
Select...				0		\$0
Select...				0		\$0
Select...				0		\$0

Total cost = \$63,313.90

Estimate #2 displays the cost to rehabilitate the roadway with a like for like surface utilizing the Township of Horton’s typical rehabilitation techniques.

RETURN TO AGENDA

Treatment Type	Category	Life Extension	Lane-Km* Treated	Lane-Km-Years	Unit Cost	Total Cost
Pulverizing		0.0	.53	0	4.00	\$13,780
150 mm Granular "A" Ditching and Select I		8.0	.65	5.2	15.00	\$63,375
50 mm HL4		25.0	.65	16.25	17.00	\$71,825
Select...				0		\$0
Select...				0		\$0
Select...				0		\$0
Select...				0		\$0
Select...				0		\$0

ADD ROW

Total cost = \$168,347.40

Estimate #3 displays the cost to rehabilitate the roadway to a condition capable of facilitating year-round non weight restricted hauling.

Treatment Type	Category	Life Extension	Lane-Km* Treated	Lane-Km-Years	Unit Cost	Total Cost
500mm Granular B		0.0	.425	0	21.00	\$58,012
300 mm Granular B		0.0	.03	0	13.00	\$2,535
150 mm Granular "A" Ditching and Select I		8.0	.65	5.2	15.00	\$63,375
40 mm HL3		25.0	.65	16.25	17.00	\$71,825
50 mm HL8		25.0	.65	16.25	14.00	\$59,150
Select...				0		\$0
Select...				0		\$0
Select...				0		\$0

ADD ROW

Total cost = \$288,0333.61

RETURN TO AGENDA

Staff have attached the granular base testing data that supports these estimates to this report. Staff utilized the MTO pavement design and rehabilitation manual structural design guidelines for secondary highways. The chart is attached to this report.

Option #2 is calculated for a roadway with 55% sand and silts and shall accommodate 200-500 vehicles per day.

Option #3 is calculated for a roadway with 55% sand and silts and shall accommodate up to 3000 vehicles per day, this is the highest structural design standard category for secondary highways.

ALTERNATIVES:

N/A

FINANCIAL IMPLICATIONS:

As stated in the background

ATTACHMENTS:

Structural Design Guidelines for Secondary Highways

Golf Course Road like for like GBE Testing

Golf Course Road Year Round Hauling GBE Testing

CONSULTATIONS:

Hope Dillabough – CAO/Clerk

Prepared by: Adam Knapp, Public Works Manager

Reviewed by: Hope Dillabough, CAO/Clerk

Table 3.3.3 Structural Design Guidelines for Flexible Pavements (Thickness in mm) – Secondary Highways

AADT	Pavement Structure Elements	Gravels and Sands Suitable as Gran-Borrow	Subgrade Material				
			SANDS AND SILTS			Lacustrine Clays	Varved & Leda Clays
			5-75µm <40%	5-75µm 40-55%	5-75µm >55%		
2000-3000 AADT	HM B SB** GBE	90 150 — 330	90 150 300 530	90 150 450 630	90 150 600 730	90 150 450 630	90 150 800 865
1500-2000 AADT	HM B SB** GBE	50 150 — 250	50 150 250 415	50 150 300 450	50 150 450 550	50 150 300 450	50 150 450 (300-600) 550 (450-650)
1000-1500 AADT	CL B SB** GBE	50 150 — 240	50 150 250 405	50 150 300 440	50 150 450 540	50 150 300 450	50 150 450 (300-600) 540 (450-640)
500-1000 AADT	ST* B SB* GBE	— 150 — 150	— 150 150 250	— 150 250 315	— 150 300 350	— 150 250 315	— 150 350 (250-450) 385 (315-450)
200-500 AADT	ST* B SB** GBE	— 150 — 150	— 150 150 250	— 150 250 315	— 150 300 350	— 150 250 315	— 150 300 350
Less than 200 AADT	Gravel B SB** GBE	— 100 — 100	— 100 150 200	— 100 250 265	— 100 300 300	— 100 250 265	— 100 300 300

Notes: All AADT Volumes refer to Present Traffic.

HM — Hot Mix Asphalt & Thickness

B — Base Thickness

SB — Subbase Thickness

GBE — Granular Base Equivalency Thickness

(1 mm HM = 2 mm B = 3 mm SB = 1.11)

CL — Cold Mixed, Cold Laid or Road Mixed Mulch

ST — Double Surface Treatment or Single Surface Treatment with Prime.

* — Apply surface treatments 0.25 m wider than lane width.

** — Proposed subbase thicknesses may be decreased or increased respectively, for harder or softer subgrade conditions in each category, except for varved and leda clay subgrade where exceptionally large ranges are shown.

RETURN TO AGENDA



Horton Township

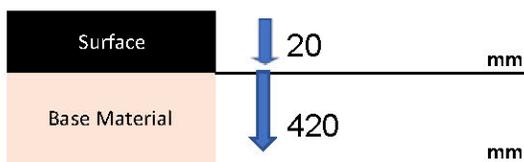
Granular Base Test Pit Form

Road Name : Golf Course Road

Date : Oct 21 2021

From : Highway 60

To: Cavanagh Pit Entrance



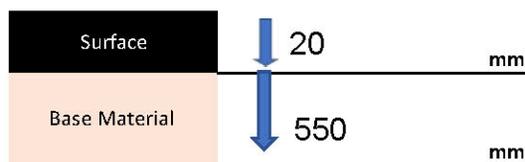
Location of Pit : 0+40

From stop bar at highway 60

Desired Structural Thickness	350
GBE Thickness	582
Total Material Required	0
Granular	100
Asphalt	50

From : Highway 60

To: Cavanagh Pit Entrance



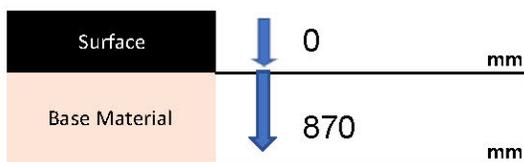
Location of Pit : 0+60

From stop bar at highway 60

Desired Structural Thickness	350
GBE Thickness	342
Total Material Required	8
Granular	100
Asphalt	50

From : Highway 60

To: Cavanagh Pit Entrance



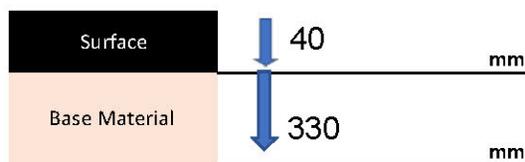
Location of Pit : 0+100

From stop bar at highway 60

Desired Structural Thickness	350
GBE Thickness	522
Total Material Required	0
Granular	100
Asphalt	50

From : Highway 60

To: Cavanagh Pit Entrance



Location of Pit : 0+160

From stop bar at highway 60

Desired Structural Thickness	350
GBE Thickness	222
Total Material Required	128
Granular	100
Asphalt	50

Granular Base Ratio of 0.6 for base and DST surface
Asphalt 50mm HL4

RETURN TO AGENDA



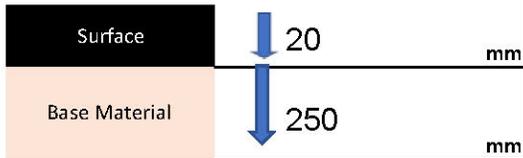
Horton Township Granular Base Test Pit Form

Road Name : Golf Course Road

Date : Oct 21 2021

From : Highway 60

To: Cavanagh Pit Entrance



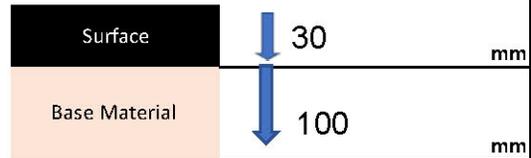
Location of Pit : 0+200

From stop bar at highway 60

Desired Structural Thickness	350
GBE Thickness	162
Total Material Required	188
Granular	138
Asphalt	50

From : Highway 60

To: Cavanagh Pit Entrance



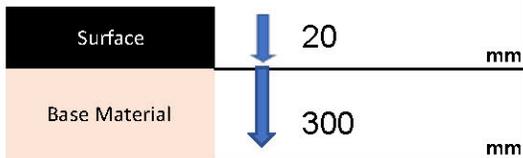
Location of Pit : 0+250

From stop bar at highway 60

Desired Structural Thickness	350
GBE Thickness	78
Total Material Required	272
Granular	222
Asphalt	50

From : Highway 60

To: Cavanagh Pit Entrance



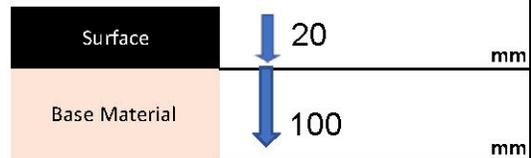
Location of Pit : 0+300

From stop bar at highway 60

Desired Structural Thickness	350
GBE Thickness	192
Total Material Required	158
Granular	108
Asphalt	50

From : Highway 60

To: Cavanagh Pit Entrance



Location of Pit : 0+320

From stop bar at highway 60

Desired Structural Thickness	350
GBE Thickness	72
Total Material Required	278
Granular	228
Asphalt	50

Granular Base Ratio of 0.6 for base and DST surface
Asphalt 50mm HL4

RETURN TO AGENDA



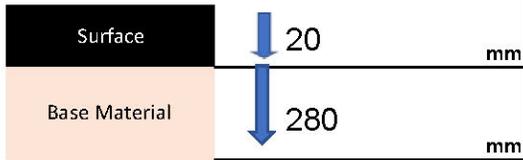
Horton Township Granular Base Test Pit Form

Road Name : Golf Course Road

Date : Oct 21 2021

From : Highway 60

To: Cavanagh Pit Entrance



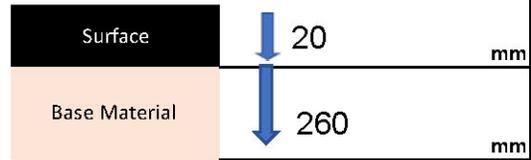
Location of Pit : 0+350

From stop bar at highway 60

Desired Structural Thickness	350
GBE Thickness	180
Total Material Required	170
Granular	120
Asphalt	50

From : Highway 60

To: Cavanagh Pit Entrance



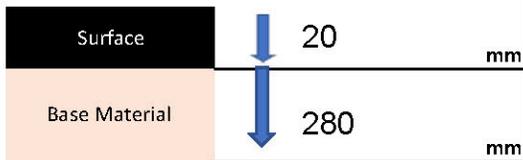
Location of Pit : 0+400

From stop bar at highway 60

Desired Structural Thickness	350
GBE Thickness	168
Total Material Required	182
Granular	132
Asphalt	50

From : Highway 60

To: Cavanagh Pit Entrance



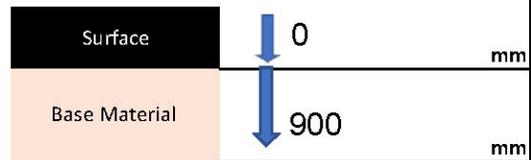
Location of Pit : 0+450

From stop bar at highway 60

Desired Structural Thickness	350
GBE Thickness	180
Total Material Required	170
Granular	120
Asphalt	50

From : Highway 60

To: Cavanagh Pit Entrance



Location of Pit : 0+500

From stop bar at highway 60

Desired Structural Thickness	350
GBE Thickness	540
Total Material Required	0
Granular	100
Asphalt	50

Granular Base Ratio of 0.6 for base and DST surface

Asphalt 40mm HL3

+50 mm HL4

Total 90 mm asphalt

RETURN TO AGENDA



Horton Township Granular Base Test Pit Form

Road Name : Golf Course Road

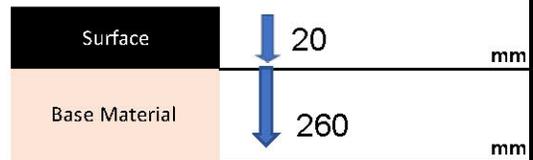
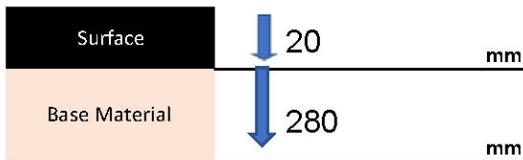
Date : Oct 21 2021

From : Highway 60

From : Highway 60

To: Cavanagh Pit Entrance

To: Cavanagh Pit Entrance



Location of Pit : 0+520

Location of Pit : 0+590

From stop bar at highway 60

From stop bar at highway 60

Desired Structural Thickness	350
GBE Thickness	264
Total Material Required	86
Granular	100
Asphalt	50

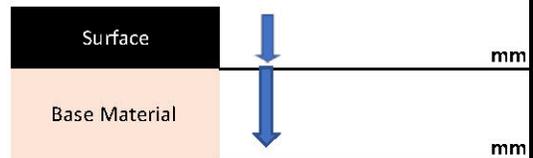
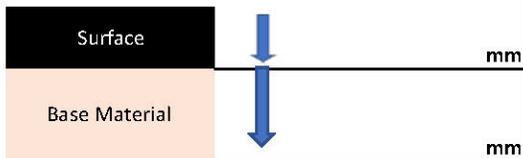
Desired Structural Thickness	350
GBE Thickness	480
Total Material Required	0
Granular	100
Asphalt	50

From :

From :

To:

To:



Location of Pit : _____

Location of Pit : _____

Desired Structural Thickness	
GBE Thickness	
Total Material Required	
Granular	
Asphalt	

Desired Structural Thickness	
GBE Thickness	
Total Material Required	
Granular	
Asphalt	

Granular Base Ratio of 0.6 for base and DST surface
Asphalt 50 mm HL4

RETURN TO AGENDA



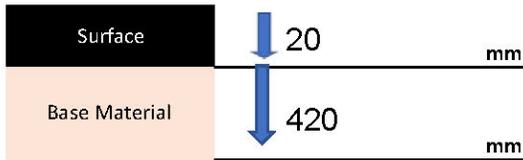
Horton Township
Granular Base Test Pit Form

Road Name : Golf Course Road

Date : Oct 21 2021

From : Highway 60

To: Cavanagh Pit Entrance



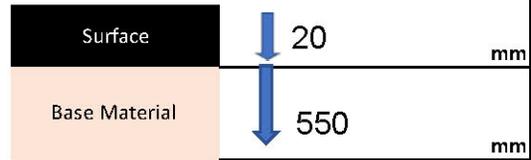
Location of Pit : 0+40

From stop bar at highway 60

Desired Structural Thickness	730
GBE Thickness	582
Total Material Required	148
Granular	58
Asphalt	90

From : Highway 60

To: Cavanagh Pit Entrance



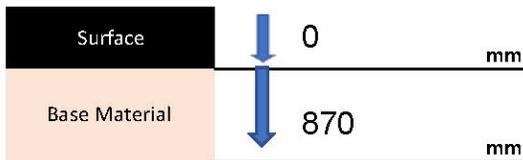
Location of Pit : 0+60

From stop bar at highway 60

Desired Structural Thickness	730
GBE Thickness	342
Total Material Required	388
Granular	298
Asphalt	90

From : Highway 60

To: Cavanagh Pit Entrance



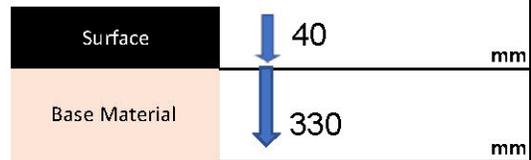
Location of Pit : 0+100

From stop bar at highway 60

Desired Structural Thickness	730
GBE Thickness	522
Total Material Required	208
Granular	118
Asphalt	90

From : Highway 60

To: Cavanagh Pit Entrance



Location of Pit : 0+160

From stop bar at highway 60

Desired Structural Thickness	730
GBE Thickness	222
Total Material Required	508
Granular	418
Asphalt	90

Granular Base Ratio of 0.6 for base and DST surface

Asphalt 40mm HL3

+ 50 mm HL4

Total 90 mm asphalt

RETURN TO AGENDA



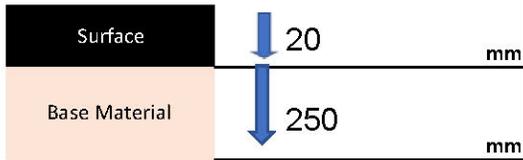
Horton Township
Granular Base Test Pit Form

Road Name : Golf Course Road

Date : Oct 21 2021

From : Highway 60

To: Cavanagh Pit Entrance

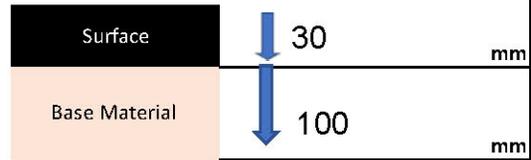


Location of Pit : 0+200
From stop bar at highway 60

Desired Structural Thickness	730
GBE Thickness	162
Total Material Required	568
Granular	478
Asphalt	90

From : Highway 60

To: Cavanagh Pit Entrance

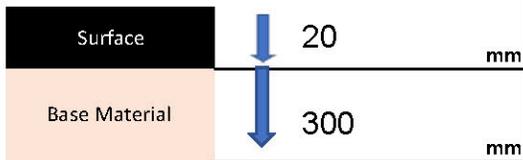


Location of Pit : 0+250
From stop bar at highway 60

Desired Structural Thickness	730
GBE Thickness	78
Total Material Required	652
Granular	562
Asphalt	90

From : Highway 60

To: Cavanagh Pit Entrance

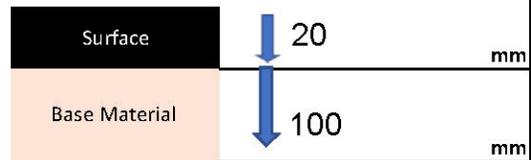


Location of Pit : 0+300
From stop bar at highway 60

Desired Structural Thickness	730
GBE Thickness	192
Total Material Required	538
Granular	448
Asphalt	90

From : Highway 60

To: Cavanagh Pit Entrance



Location of Pit : 0+320
From stop bar at highway 60

Desired Structural Thickness	730
GBE Thickness	72
Total Material Required	658
Granular	568
Asphalt	90

Granular Base Ratio of 0.6 for base and DST surface

Asphalt 40mm HL3

+50 mm HL4

Total 90 mm asphalt

RETURN TO AGENDA



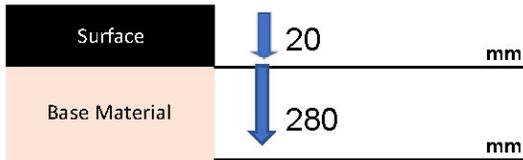
Horton Township
Granular Base Test Pit Form

Road Name : Golf Course Road

Date : Oct 21 2021

From : Highway 60

To: Cavanagh Pit Entrance

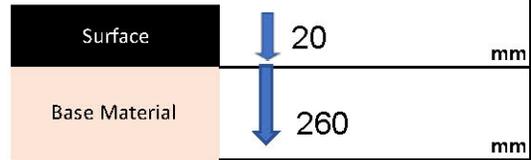


Location of Pit : 0+350
From stop bar at highway 60

Desired Structural Thickness	730
GBE Thickness	180
Total Material Required	550
Granular	460
Asphalt	90

From : Highway 60

To: Cavanagh Pit Entrance

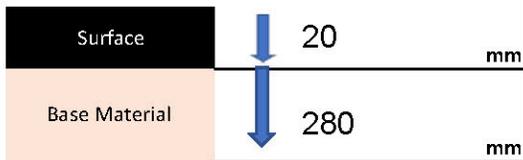


Location of Pit : 0+400
From stop bar at highway 60

Desired Structural Thickness	730
GBE Thickness	168
Total Material Required	562
Granular	472
Asphalt	90

From : Highway 60

To: Cavanagh Pit Entrance

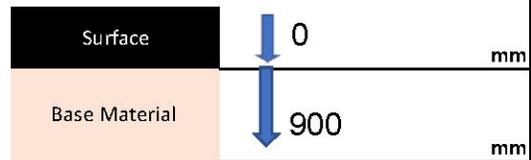


Location of Pit : 0+450
From stop bar at highway 60

Desired Structural Thickness	730
GBE Thickness	180
Total Material Required	550
Granular	460
Asphalt	90

From : Highway 60

To: Cavanagh Pit Entrance



Location of Pit : 0+500
From stop bar at highway 60

Desired Structural Thickness	730
GBE Thickness	540
Total Material Required	360
Granular	270
Asphalt	90

Granular Base Ratio of 0.6 for base and DST surface

Asphalt 40mm HL3

+50 mm HL4

Total 90 mm asphalt

RETURN TO AGENDA



Horton Township
Granular Base Test Pit Form

Road Name : Golf Course Road

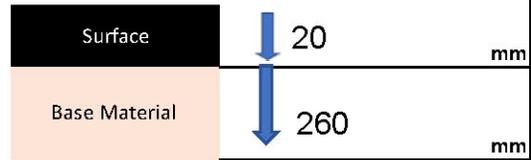
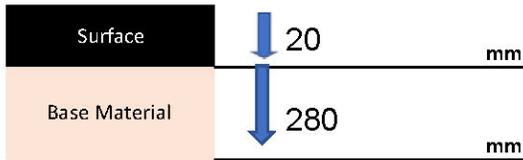
Date : Oct 21 2021

From : Highway 60

From : Highway 60

To: Cavanagh Pit Entrance

To: Cavanagh Pit Entrance



Location of Pit : 0+520

Location of Pit : 0+590

From stop bar at highway 60

From stop bar at highway 60

Desired Structural Thickness	730
GBE Thickness	264
Total Material Required	466
Granular	376
Asphalt	90

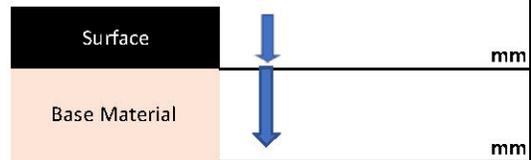
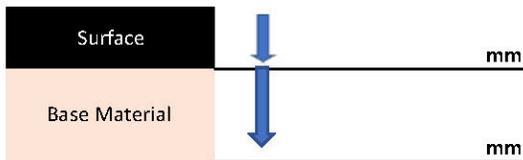
Desired Structural Thickness	730
GBE Thickness	480
Total Material Required	250
Granular	160
Asphalt	90

From :

From :

To:

To:



Location of Pit :

Location of Pit :

Desired Structural Thickness	
GBE Thickness	
Total Material Required	
Granular	
Asphalt	

Desired Structural Thickness	
GBE Thickness	
Total Material Required	
Granular	
Asphalt	

Granular Base Ratio of 0.6 for base and DST surface

Asphalt 40mm HL3

+50 mm HL4

Total 90 mm asphalt

RETURN TO AGENDA



Township of Horton COUNCIL / COMMITTEE REPORT

Title: Thompsonhill Detailed Design Status Update	Date:	Nov 3 rd , 2021
	Council/Committee:	TES Committee
	Author:	Adam Knapp, Public Works Manager
	Department:	Public Works

RECOMMENDATIONS:

THAT the TES committee accept this report as information.

BACKGROUND:

On October 26th, 2021 staff attended a meeting with the contracted engineering firm (JP2G) completing the detailed design of the area known as Thompsonhill. Numerous conflict areas were highlighted during the preliminary survey of the entire area. Most conflict areas are minor issues of tree removal to improve line of sight and drainage issues. The survey has confirmed that some streets are not typical or consistently sized easements, varying from approximately 20m to 8m and Margaret jogs in at the cemetery from approximately 20m to 8m. The survey also revealed that some property bars are in the roadway or very close to the roadway and will require realignment of the roadway and corner radii to improve drainage and ensure adequate shoulder width and a consistent and safe driving platform within the Townships allotted easements.

All roads shall be resurfaced with 50 mm HL4 with select areas having the granular base removed and replaced to attain adequate structural capacity. Spot repairs of the sewer main shall be completed on Knight St at Margaret St and near 36 Pucker Street, 58m of storm sewer from DICB #18 to DI 19 shall be completely replaced and one additional cross section shall be added into DICB 18 to eliminate drainage onto private lands at 57 Knight St.

Staff and the consulting engineers determined that a 3m lane width, 6m total, on Thompsonhill Cemetery St, Knight St, Dregas St and Nadobny St shall best suit the design limitations posed on these streets and significantly improve safety and line of site concerns in the area. Thompsonhill Cemetery St and Nadobny St intersection will also be redesigned as a 4 way stop.

Further investigation determined that Jane St, Paddy St and Margaret St have very narrow easements, less than 15m, and existing road platforms that are not suited for bi-directional traffic flow. To improve safety and drainage on these streets staff and the consulting engineers are proposing one directional traffic flow and a total road platform width that is 4m. The one directional traffic should not significantly hinder residents typical driving patterns and shall considerably reduce costs associated with pavement application and maintenance.

The traffic flow proposed shall be as follows:

- Paddy St – From Knight to Dregas

RETURN TO AGENDA

- Jane St – From Dregas to Knight
- Margaret St – From Knight to Thompsonhill Cemetery

Several challenges have slowed the progress of the detailed design to this point and the 50% design shall be completed by December of this year with the 80% and 100% shortly their after. Staff have asserted with the consulting engineers that this project is to be shovel ready for spring of 2022. Both parties believe this is a very attainable goal and that the preliminary works and the 50% design are the largest hurdle to overcome to achieve it. Staff goal is to ensure that the design and works being performed are in the best interest of the Township, its ratepayers and that the design is best suited to the areas unique challenges and character while achieving a 25+ year life cycle with no significant redesigns needed in the future.

ALTERNATIVES:

N/A

FINANCIAL IMPLICATIONS:

Estimated at \$1,480,752 HST included

ATTACHMENTS:

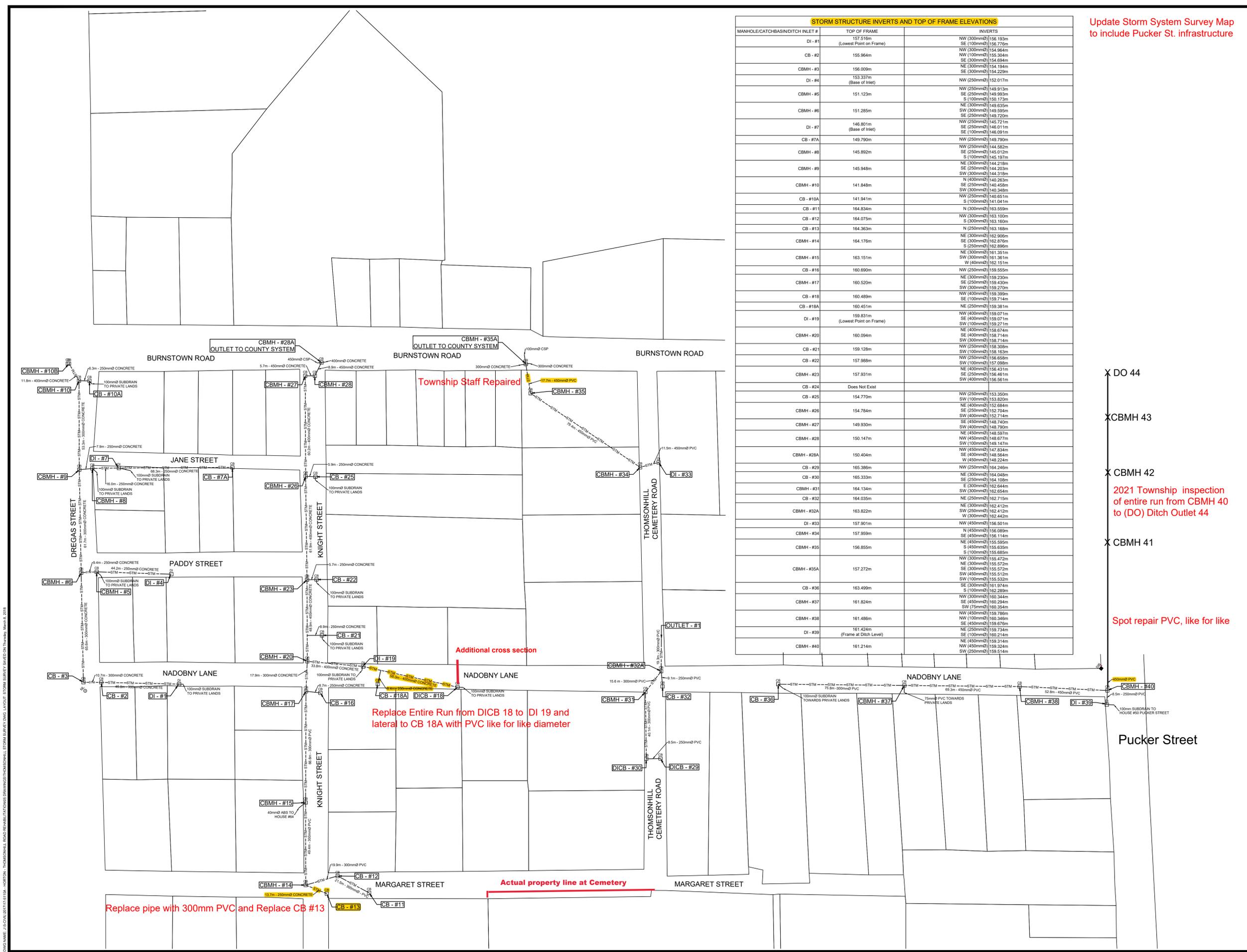
Thompsonhill Storm System Repair Areas
Township Responses 2021-10-21 Conflict Areas and Sight line Clearance area
LRO 49 - Plan (MBP41) Original Subdivision Plan 1847

CONSULTATIONS:

Hope Dillabough – CAO/Clerk

Prepared by: Adam Knapp, Public Works Manager

Reviewed by: Hope Dillabough, CAO/Clerk



STORM STRUCTURE INVERTS AND TOP OF FRAME ELEVATIONS		
MANHOLE/CATCH BASIN/DITCH INLET #	TOP OF FRAME	INVERTS
DI - #1	157.516m (Lowest Point on Frame)	NW (300mm) 156.193m SE (100mm) 156.776m
CB - #2	155.964m	NW (300mm) 154.964m NW (100mm) 155.304m SE (300mm) 154.694m
CBMH - #3	156.009m	NE (300mm) 154.194m SE (300mm) 154.229m
DI - #4	153.337m (Base of Inlet)	NW (250mm) 152.017m
CBMH - #5	151.123m	NW (250mm) 149.913m SE (250mm) 149.993m S (100mm) 150.173m
CBMH - #6	151.285m	NE (300mm) 149.635m SW (300mm) 149.595m SE (250mm) 149.720m
DI - #7	146.801m (Base of Inlet)	NW (250mm) 145.721m SE (250mm) 146.011m SE (100mm) 146.091m
CB - #7A	149.790m	NW (250mm) 149.790m
CBMH - #8	145.892m	NW (250mm) 144.582m SE (250mm) 145.012m S (100mm) 145.197m
CBMH - #9	145.948m	NE (300mm) 144.218m SE (250mm) 144.203m SW (300mm) 144.318m
CBMH - #10	141.848m	N (400mm) 140.263m SE (250mm) 140.458m SW (300mm) 140.348m
CB - #10A	141.941m	NW (250mm) 140.651m S (100mm) 141.041m
CB - #11	164.834m	N (300mm) 163.558m
CB - #12	164.075m	NW (300mm) 163.100m S (300mm) 163.160m
CB - #13	164.363m	N (250mm) 163.168m
CBMH - #14	164.178m	NE (300mm) 162.906m SE (300mm) 162.876m S (250mm) 162.896m
CBMH - #15	163.151m	NE (300mm) 161.351m SW (300mm) 161.361m W (40mm) 162.151m
CB - #16	160.690m	NW (250mm) 159.555m
CBMH - #17	160.520m	NE (300mm) 159.230m SE (250mm) 159.430m SW (300mm) 159.273m
CB - #18	160.469m	NW (400mm) 159.399m SE (100mm) 159.714m
CB - #18A	160.451m	NE (250mm) 159.381m
DI - #19	159.831m (Lowest Point on Frame)	NW (400mm) 159.071m SE (400mm) 159.071m SW (100mm) 159.271m
CBMH - #20	160.094m	NE (400mm) 158.674m SE (400mm) 158.714m SW (300mm) 158.714m
CB - #21	159.128m	NW (250mm) 158.308m SW (100mm) 158.163m
CB - #22	157.988m	NW (250mm) 156.658m SW (100mm) 157.098m
CBMH - #23	157.931m	NE (400mm) 156.431m SE (250mm) 156.461m SW (400mm) 156.561m
CB - #24	Does Not Exist	
CB - #25	154.770m	NW (250mm) 153.350m SW (100mm) 153.820m
CBMH - #26	154.784m	NE (400mm) 152.664m SE (250mm) 152.704m SW (400mm) 152.714m
CBMH - #27	149.930m	SE (450mm) 148.740m SW (400mm) 148.790m
CBMH - #28	150.147m	NE (450mm) 148.597m NW (400mm) 148.877m SW (100mm) 149.147m
CBMH - #28A	150.404m	NW (450mm) 147.834m SE (400mm) 148.564m W (450mm) 148.224m
CB - #29	165.386m	NW (250mm) 164.246m
CB - #30	165.333m	NE (300mm) 164.048m SE (250mm) 164.108m
CBMH - #31	164.134m	NE (300mm) 162.644m SW (300mm) 162.654m
CB - #32	164.039m	NE (250mm) 162.715m
CBMH - #32A	163.822m	NE (300mm) 162.412m SW (250mm) 162.412m W (300mm) 162.442m
DI - #33	157.901m	NW (450mm) 156.501m
CBMH - #34	157.959m	N (450mm) 156.089m SE (450mm) 156.114m
CBMH - #35	156.855m	NE (450mm) 155.595m S (450mm) 155.635m S (100mm) 155.685m
CBMH - #35A	157.272m	NW (300mm) 155.472m NE (300mm) 155.572m SE (300mm) 155.572m SW (450mm) 155.512m SW (100mm) 155.532m
CB - #36	163.499m	SE (300mm) 161.974m S (100mm) 162.289m
CBMH - #37	161.824m	NW (300mm) 160.344m SE (450mm) 160.294m SW (75mm) 160.354m
CBMH - #38	161.486m	NW (100mm) 160.346m NW (100mm) 160.346m SE (450mm) 159.676m
DI - #39	161.424m (Frame at Ditch Level)	NE (250mm) 159.734m SE (100mm) 160.214m
CBMH - #40	161.214m	NE (450mm) 159.314m NW (450mm) 159.334m SW (250mm) 159.514m

Update Storm System Survey Map to include Pucker St. infrastructure

- X DO 44
- X CBMH 43
- X CBMH 42
- 2021 Township inspection of entire run from CBMH 40 to (DO) Ditch Outlet 44
- X CBMH 41
- Spot repair PVC, like for like

PRELIMINARY
YYYY-MM-DD

No.	Date	By	Revision Comments
1	2019-03-05	SGW/CJM	PRELIMINARY STORM SURVEY LAYOUT
No.	YYYY-MM-DD	ENGR/DFT	REVISION COMMENTS

THOMPSONHILL ROAD REHABILITATION
RENFREW, ONTARIO
STORM SYSTEM SURVEY

Jp2g Consultants Inc.
ENGINEERS • PLANNERS • PROJECT MANAGERS
12 INTERNATIONAL DRIVE, PEMBRROKE, ON
Phone: (813) 828-2600, Fax: (813) 828-4513
1150 MORRISON DRIVE, SUITE 410, OTTAWA, ON
Phone: (813) 828-7800, Fax: (813) 828-2600

DESIGNED: CJM	PROJECT No.: 17-5110A
DRAFTED: CJM	REVISION DATE: 2018-03-05
CHECKED: SGW	APPROVED: SGW
SCALE: H=1:1000, V=1:1000	REVISION No.: 1

STORM SURVEY



MEMO

Date	October 21, 2021	Pages	1 (incl. this page)
To	Adam Knapp	From	Curtis Millar
Telephone	613-432-6271	Telephone	613-281-4585
Fax		Fax	
E-mail	aknapp@hortontownship.ca	E-mail	curtism@jp2g.com
Client No.	2020-07	Jp2g No.	17-5110B
Re	Thomsonhill Rehabilitation – Property Boundary Conflict Points and Areas of Interest for Sight Line Improvement		

Comments

Adam,

We have successfully brought in the legal survey from Adam Kasperzak onto the topographic survey previously conducted and have performed a review of property boundary lines and have noticed a few issues or conflict points. During this review I also noted areas that we had previously discussed had sight line issues and provided comment on these areas as it relates to the property boundary lines. Below is a numbered list of the areas of interest as noted above. The numbers correspond to a numbered location on the attached drawings in Appendix B.

Dregas Street (ROW 12.3m)

1. There is a retaining wall from 19 Paddy Street on the east side of Dregas St. that is on public lands by approximately 1.0m. It appears that this will likely be true for the entire length of the retaining wall. This should not impact the rehabilitation efforts in the area unless the desire is to widen the existing road platform then there could be some conflict. See attached picture (#1) of retaining wall in Appendix A.

1R. Staff do not wish to the widen roadway

2. There is a fence on the east side of Dregas St. that is on public lands by approximately 1.2m. It will have to be removed and reinstated at the property boundary in order to clear the trees currently on public lands blocking the sight lines from the intersection at Nadobny Lane. See attached picture of trees and fenceline (#2) in Appendix A.

2R. Yes remove and reinstate

3. The trees on east side of Dregas St. are blocking sight lines to the north from Nadobny Lane. Measurements would have to be taken to confirm but these trees appear to be on public lands and can be removed to improve the sight lines. See attached picture of trees (#2) in Appendix A.

3R. Confirm location, Staff wish to remove the trees to improve line of sight

Jane Street (ROW 9.1m)

4. The fence on the north side of Jane St. at 3877 Burnstown Road is close to the property line, the exact location will have to be confirmed with field measurements. At this time, it should not impact the rehabilitation of the street, but the location should be recorded. See attached picture of fence (#3) in Appendix A.

4R. Record and confirm location and leave as is

5. The fence on the south side of Jane Street at 1005 Jane St. is currently on public land by approximately 0.3m. It should not affect the rehabilitation of the street but should be noted so the municipality is aware. See attached picture of fenceline (#4) in Appendix A.

5R. Staff wish to explore the option of making Jane and Paddy one way streets to eliminate the need to widen the roadway and improve safety, Knight to Dregas flow of traffic

Paddy Street (ROW 15.3m)

No notable concerns currently. Some field measurements will be taken to determine the extents of what trees can be removed or trimmed out of the right of way.

Knight Street (ROW 15.1m)

6. Large Maple tree at corner of intersection with Nadobny Lane at 12 Nadobny Lane is impeding the sight line south. The tree is on public property and can be removed. See attached picture of tree (#5) in Appendix A.

6R. Remove

7. Tree on the east side of the street can be trimmed back to property but cannot be removed as its on private property. The row of trees on the west side of the street can be trimmed back to the property line but it will have to be field verified whether the trees are located on public property and can be completely removed. See attached picture of trees (#6) in Appendix A.

7R. Trim East to ROW to improve line of site and drainage, removal West preferred if possible

8. Large maple trees located along the west side of the street at 66 and 64 Knight Street are overhanging the road and municipality has expressed a desire to trim them back or remove them. We will have field measure their locations to determine if they are public lands or not. See attached picture of trees (#7) in Appendix A.

8R. Prefer removal homeowner at 66 knight frequently requests removal of dead maple**Nadobny Lane (ROW 15.2m)**

9. Fence is slightly over the property line on the north side of the street. This will not affect the rehabilitation of the streets, but the location should be recorded for the municipality's information. See attached picture of feneline (#8) in Appendix A.

9R . Record and leave as is

10. Large row of trees impeding sight lines and overhanging the ROW on the south side of the street at 62 Knight Street. Based on the legal survey the trees will be able to be trimmed back, but we will have to field measure the location of the trees to determine if they can be removed. See attached picture of trees (#9) in Appendix A.

10R. Prefer removal to facilitate improved drainage swale to CBMH #14 as discussed at site meet

11. There are rock retaining walls and large maple trees at 12 Nadobny Street that are inside the ROW. Currently they do not impact the rehabilitation of the street, but should the municipality wish to widen the road platform or clear the ROW these elements could be removed back to the property lines. See attached picture of trees and retaining walls (#10) in Appendix A.

11R. Clear and remove retaining wall and trees, trees are dying and pose viable safety concerns

12. The existing ditch is close to the property line which may make it difficult improving the drainage in the area. During detailed design a solution will be presented to the municipality to deal with the drainage issues here. The small shrubs and trees in this area will be able to be removed as the are inside the ROW. See attached picture of trees (#11) in Appendix A.

12R. Remove trees, homeowner has been informed and understands drainage improvements needed

13. The trees on the south side of the road at 24 Nadobny Lane are currently impeding the sight lines at the intersection of Thomsonhill Cemetery Street. These trees will be able to be trimmed back to the property line but to determine what extent of them can be removed field measurements will need to taken to determine if they are in the ROW or on private property. See attached picture of trees (#12) in Appendix A.

13R. Verify, removal preferred or trim as possible to facilitate sight improvements

14. At the northwest corner of the Nadobny Lane and Thomsonhill Cemetery Street there is a property bar that was located in the asphalt and has been confirmed by the legal survey. The radius at that corner of the intersection will have to be redesign so the finished road is not on private property.

14R. Redesign Details ??? Discussion needed

15. At many locations on the south side of the street there are trees in the ROW. Some need to be trimmed or removed to clear the site lines of the street. During detailed design the extent of the tree trimming, and removal will be determined. See attached picture of trees (#13) in Appendix A.

15R. Removal preferred, trim as possible

16. On the south side of the street at 60 Nadobny Lane there are trees and rock retaining walls in the ROW of the street. They currently don't impede the rehabilitation of the street, but the municipality may want

to remove some of the trees that are dead or entertain the idea of introducing a shallow ditch in the area to help resolve some drainage issues in the area. See attached picture of trees and retaining walls (#14) in Appendix A.

16R. Yes remove and instal swale and asphalt spill way to CBMH #40

Pucker Street (ROW 20m)

There are currently no issues related to sight lines or property boundaries on Pucker Street.

Thomsonhill Cemetary Street (ROW 12.2m)

17. There are trees on both sides of the streets that overhang the roadway or are inside the road's ROW. The location of the trees relative to the property boundaries will need to be confirmed with site measurements to determine the extent of what trees can be removed and what can be trimmed. See attached picture of trees (#15) in Appendix A.

17R. Horton staff have trimmed and improved, trim remaining as possible

18. Some shrubs and small trees overhang the ROW. Field measurements will be taken to determine the location of the trees in reference to the property lines and if they can be removed. See attached picture of trees (#16) in Appendix A.

18R. Verify and removal preffered

19. The legal survey has confirmed that the north-west corner of the Thomsonhill Cemetary Street and Margaret Street intersection is on private property. This corner of the intersection will need to be redesigned so that it does not land on private property.

19R. Redesign Details?? Discussion needed

Margaret Street (ROW 15.3m)

20. The property boundary on the south side of the street appears to be well inside the cemetery's fenceline. We will verify this with further legal plan integration into the drawing. This property boundary should be confirmed as it may help with the rehabilitation of the street.

20R. Confirm, Discuss options ???

CC: Michael Fadock P. ENG Project Manager

Appendix A



Figure #1: Retaining Wall along Dregas Street



Figure #2: Fenceline on East Side of Dregas Street



Figure #3: Fenceline on North Side of Jane Street at 3877 Burnstown Road



Figure #4: Fence on south side of Jane Street at 1005 Jane Street



Figure #5: Large Maple tree at 12 Nadobny Lane



Figure #6: Trees on north side of Nadobny Lane and Knight Street intersection

5R. Staff wish to explore the option of making Jane and Paddy one way streets to eliminate the need to widen the roadway and improve safety, Knight to Dregas flow of traffic



Figure #7: Large Maples on West side of Knight Street at 66 and 64 Knight Street



Figure #8: Fenceline on north side of Nadobny Lane



Figure #9: Row of Trees on south side of Street at 62 Knight Street



Figure #10: Rock retaining walls and trees at 12 Nadobny Lane



Figure #11: Existing ditch on north side of Nadobny Lane



Figure #12: Trees on south side of Nadobny Lane at 24 Nadobny Lane



Figure #13: Trees located on the south side of Nadobny lane.



Figure #14: Rock retaining walls and trees on south side of Nadobny Lane



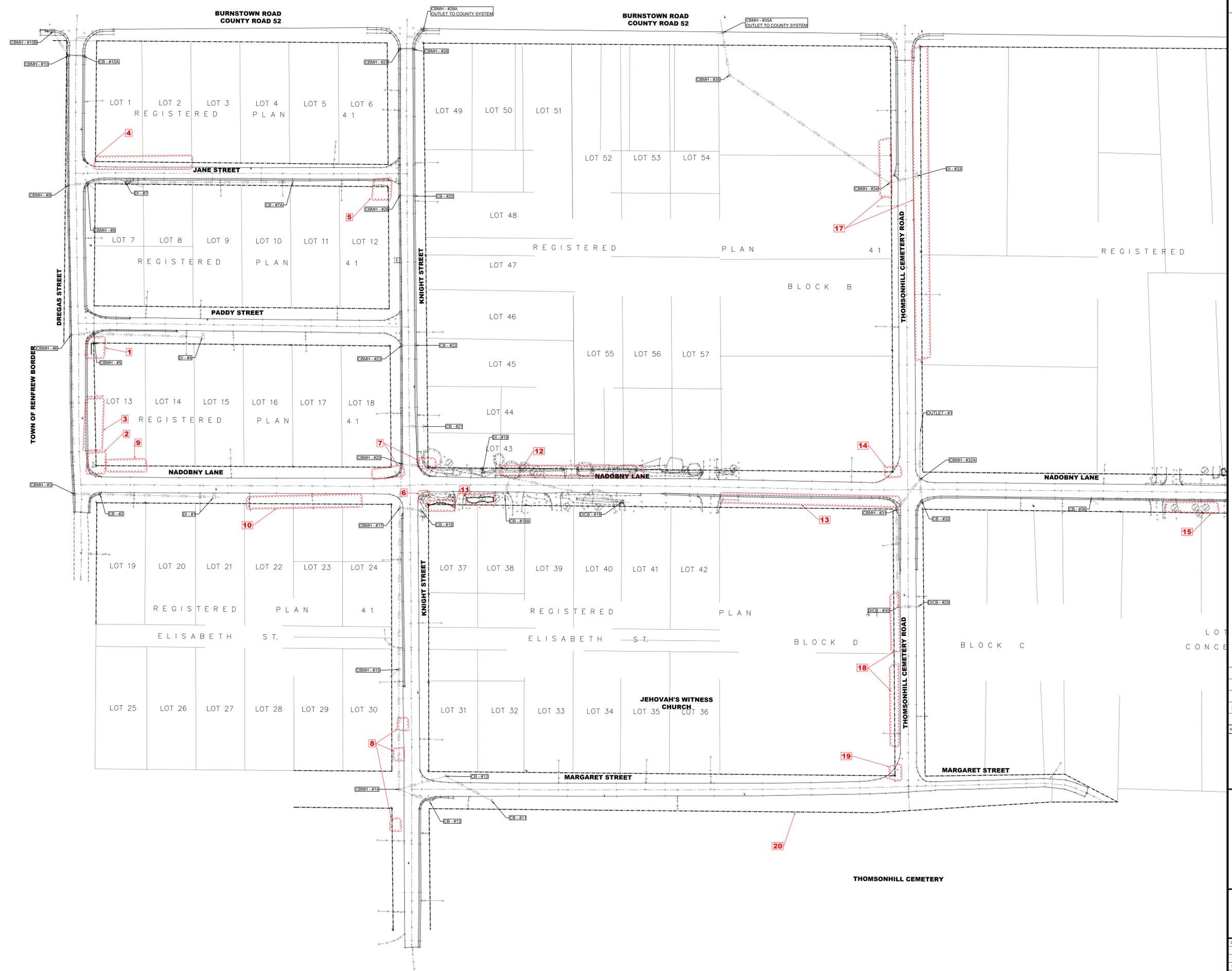
Figure #15: Tress on east and west side of Thomsonhill Cemetary Street



Figure #16: Trees on east side of Thomsonhill Cemetary Street

Appendix B

THE POSITION OF POLE LINES, CONDUITS, WATERMANS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWING AND, WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, THE CONTRACTOR SHALL REFORM THEMSELVES OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM.



2	2021-10-15	CJM	LEGAL SURVEY BROUGHT IN AND CONFLICT AREAS INDICATED
1	2021-06-22	CJM	BASE PLAN SUBMISSION
No.	YYYYMMDD	DDDDDD	REVISION COMMENTS

THOMSON HILL REHABILITATION
HORTON, ONTARIO
 ~
BASE PLAN DRAWING 1

J2 Jp2g Consultants Inc.
 ENGINEERS • PLANNERS • PROJECT MANAGERS
 12 INTERNATIONAL DRIVE, #2000, MISSISSAUGA, ONTARIO L4X 1L3
 1150 MORRISON DRIVE, SUITE 414, OTTAWA, ONTARIO K1G 0A9
 Phone: (905) 276-1111 Fax: (905) 276-1112

DESIGNED: CJM	PROJECT NO: 17-5110B
DRAFTED: CJM	REVISION DATE: 2021-10-15
CHECKED: MNF	APPROVED: MNF
SCALE: H=1:500	CLIENT REF NO: XX-XXXXXX

BASEPLAN 1



THE POSITION OF POLE LINES, CONDUITS, WATERMANS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWING AND, WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, THE CONTRACTOR SHALL REFORM THEMSELVES OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

No.	2021-10-15	CJM	LEGAL SURVEY BROUGHT IN AND CONFLICT AREAS INDICATED
No.	2021-06-22	CJM	BASE PLAN SUBMISSION
No.	YYYYMMDD	055000FF	REVISION COMMENTS

THOMSON HILL REHABILITATION
HORTON, ONTARIO
 ~
BASE PLAN DRAWING 2

Jp2g Consultants Inc.
 ENGINEERS • PLANNERS • PROJECT MANAGERS
 13 INTERNATIONAL DRIVE, RIVERSIDE ON
 PHONE: (519) 755-2222 FAX: (519) 755-4111
 1150 MORRISON DRIVE, SUITE 414, OTTAWA, ON
 PHONE: (416) 263-7662 FAX: (416) 263-7663

DESIGNED: CJM	PROJECT No.: 17-5110B
DRAFTED: CJM	REVISION DATE: 2021-10-15
CHECKED: MNF	APPROVED: MNF
SCALE: H=1:500	CLIENT REF No.: XX-XXXXXX

BASEPLAN 2

