

NOTICE: IN ORDER TO FACILITATE REMOTE ELECTRONIC PARTICIPATION, AS REQUIRED, FOR THE **FEBRUARY 23, 2021 TOWNSHIP BOARD SPECIAL MEETING**, A ZOOM MEETING HAS BEEN SCHEDULED. **TOWNSHIP RESIDENTS/PROPERTY OWNERS AND OTHER INTERESTED PARTIES ARE INVITED TO ATTEND.** INSTRUCTIONS FOR CONNECTING TO THE MEETING APPEAR BELOW.

Whitewater Zoom is inviting you to a scheduled Zoom meeting.

Topic: Township Board Special Meeting-Budget
Time: Feb 23, 2021 06:00 PM Eastern Time (US and Canada)

Join Zoom Meeting

<https://zoom.us/j/96043810912?pwd=VVM3ZjZUY0k3d283U2tuakNIajI1dz09>

Meeting ID: 960 4381 0912

Passcode: 594287

One tap mobile

+16465588656,,96043810912#,,,,*594287# US (New York)

Dial by your location

+1 646 558 8656 US (New York)

Meeting ID: 960 4381 0912

Passcode: 594287

Find your local number: <https://zoom.us/u/atHtnaJWj>

Contact Information for Board Members:

Supervisor Ron Popp – 231-267-5141 x23 supervisor@whitewatertownship.org

Clerk Cheryl Goss – 231-267-5141 x24 clerk@whitewatertownship.org

Treasurer Ardella Benak – 231-267-5141 x22 treasurer@whitewatertownship.org

Trustee Paul Hubbell – 231-267-5141 trustee02@whitewatertownship.org

Trustee Heidi Vollmuth - 231-633-9468 heidivyourtrustee@gmail.com

Whitewater Township will provide necessary reasonable auxiliary aids and services to individuals with disabilities upon reasonable advance notice. Contact the township clerk at 231-267-5141 or the TDD at 800-649-3777.

WHITEWATER TOWNSHIP BOARD
Agenda for Special Meeting – February 23, 2021
6:00 p.m. at the Whitewater Township Hall
5777 Vinton Road, Williamsburg, MI 49690
Phone 231-267-5141/Fax 231-267-9020

- A. Call to Order
- B. Roll Call of Board Members
- C. Set/Adjust Meeting Agenda
- D. Declaration of Conflict of Interest

E. Public Comment

Any person shall be permitted to address a meeting of the township board. Public comment shall be carried out in accordance with following board rules and procedures:

1. Comments shall be directed to the board, with questions directed to the chair.
2. Any person wishing to address the board shall speak from the lectern and state his or her name and address.
3. Persons may address the board on matters that are relevant to township government issues.
4. No person shall be allowed to speak more than once on the same matter, excluding the time needed to answer board members' questions. The chair shall control the amount of time each person shall be allowed to speak, which shall not exceed five (5) minutes.
5. In order to avoid unscheduled debates, the board generally will not comment or respond to presenters. Silence or non-response from the board should not be interpreted as disinterest or disagreement by the board.

F. Agenda Items as Listed in Special Meeting Notice

1. Budget Work Session – General Fund

G. Board Comments/Discussion

H. Public Comment

I. Adjournment

BUDGET WORKSHEET
 Rev thru 12/31 - Exp thru 1/19

Whitewater Township

Month: 1/31/2021	Prior Year Actual	Current Year				(6) Requested	(7) Recommended	(8) Adopted
		Original Budget	Amended Budget	Actual Thru January	Estimated Total			
Fund: 101 - GENERAL FUND								
Revenues								
Dept: 000								
402 Property Taxes	127,281	127,400	127,400	23,574	0	141,888		
445 Penalties & Interest	2,814	1,000	1,000	2,039	0	1,500		
447 Property Tax Admin Fees	65,491	64,000	64,000	46,987	0	65,000		
448 Collection Fees	0	4,250	4,250	7,078	0	5,000		
451 Franchise Fees	31,517	32,400	32,400	23,153	0	32,400		
476 Licenses & Permits	3,220	2,100	2,100	2,585	0	2,300		
566 State Grants	0	0	0	0	0	0		
573 Local Community Stabilization	0	0	0	0	0	0		
574 State-Shared Revenues	229,546	230,000	230,000	192,233	0	235,135		
575 Swamp Taxes/Comm Forest Distri	30,481	25,000	25,000	29,975	0	29,000		
590 Grants-Private Sources	0	0	0	0	0	0		
607 Service Fees	1,650	1,500	1,500	1,625	0	1,600		
608 Interment Fees	3,575	2,000	2,000	3,150	0	3,000		
633 Election Reimbursement	0	3,000	3,000	5,115	0	0		
642 Sale of Cemetery Lots	1,600	600	600	600	0	600		
643 Miscellaneous Sales	39	0	0	108	0	0		
665 Interest Earned	2,979	1,800	1,800	1,228	0	1,000		
668 Oil & Gas Lease	0	0	0	0	0	0		
670 Cell Tower Lease	41,883	42,300	42,300	28,619	0	34,800		
671 Other Revenues	694	1,000	1,000	1,881	0	1,000		
673 Sale of Fixed Assets	4	0	0	0	0	0		
678 Gypsy Moth Assessment	0	0	0	0	0	0		
687 Refunds	33	100	100	0	0	0		
699 Transfers From Other Funds	0	0	0	0	0	0		
Dept: 000	<u>542,807</u>	<u>538,450</u>	<u>538,450</u>	<u>369,950</u>	0	<u>554,223</u>	0	0
Total Revenues	<u>542,807</u>	<u>538,450</u>	<u>538,450</u>	<u>369,950</u>	0	<u>554,223</u>	0	0

Expenditures							
Dept: 101 Township Board							
702 Salaries	5,600	9,000	9,000	5,200	0	6,000	
703 Wages	1,124	3,000	3,000	2,140	0	3,000	
715 Social Security (Employer)	417	744	744	443	0	558	
716 Medicare (Employer)	97	174	174	104	0	131	
727 Office Supplies & Expense	1,298	1,600	1,600	2,408	0	2,600	
728 Postage	572	800	800	585	0	800	
802 Audit & Accounting Services	6,678	7,000	7,000	6,682	0	7,000	
804 Professional Services	4,180	15,000	15,000	0	0	2,500	

Fund: 101 - GENERAL FUND

Expenditures							
Dept: 101 Township Board							
817 Clean Up Day Services	9,985	12,000	12,000	9,810	0	12,000	
830 Pension Plan	3,042	3,209	3,209	3,232	0	4,000	
840 Dues and Memberships	3,587	3,800	3,800	3,775	0	4,000	
852 Promotional Expenses	1,250	1,500	1,500	1,000	0	1,500	
853 Finance Charges	0	0	0	0	0	0	
854 Late Fees	0	0	0	0	0		
860 Mileage Reimbursement	0	100	100	0	0	100	
865 Meal/Lodging Expense	0	200	200	0	0	200	
880 Education & Training	0	250	250	0	0	250	
901 Publishing	1,427	2,500	2,500	1,375	0	2,500	
902 Printing	0	100	100	0	0	100	
903 Township Newsletter Expense	2,345	2,500	2,500	820	0	2,000	
940 Equipment Rental	1,049	1,200	1,200	2,119	0	1,500	
941 Postage Meter Rental/Fees	1,071	1,300	1,300	0	0	0	
955 Grand Vision	0	0	0	0	0	0	
956 Miscellaneous Expense	0	750	750	130	0	500	
957 Boardman River Project	0	0	0	0	0	0	
958 Gypsy Moth Program	0	0	0	0	0	0	
959 Scrap Tire Expense	234	400	400	388	0	400	
964 Refunds	0	500	500	239	0	400	
Township Board	43,956	67,627	67,627	40,450	0	52,039	0 0

Dept: 171 Supervisor							
702 Salaries	26,780	27,585	27,585	22,280	0	27,585	

703 Wages	0	2,000	2,000	0	0	2,000		
715 Social Security (Employer)	1,660	1,835	1,835	1,381	0	1,835		
716 Medicare (Employer)	388	429	429	323	0	429		
727 Office Supplies & Expense	0	250	250	55	0	250		
728 Postage	45	40	40	1	0	40		
860 Mileage Reimbursement	35	400	400	84	0	400		
865 Meal/Lodging Expense	0	250	250	0	0	250		
880 Education & Training	0	500	500	0	0	400		
Supervisor	<u>28,908</u>	<u>33,289</u>	<u>33,289</u>	<u>24,124</u>	0	<u>33,189</u>	0	0
Dept: 195 Elections								
703 Wages	2,990	10,000	10,000	8,891	0	6,000		
715 Social Security (Employer)	22	300	300	67	0	300		
716 Medicare (Employer)	5	100	100	16	0	100		
727 Office Supplies & Expense	3,006	2,500	2,500	2,928	0	2,500		
Fund: 101 - GENERAL FUND								
Expenditures								
Dept: 195 Elections								
728 Postage	661	1,500	1,500	2,603	0	1,500		
847 Software Support	120	0	0	0	0	0		
860 Mileage Reimbursement	178	400	400	0	0	200		
865 Meal/Lodging Expense	105	200	200	297	0	300		
880 Education & Training	135	500	500	932	0	750		
901 Publishing	86	500	500	341	0	400		
970 Capital Expenditure	0	0	0	0	0	0		
Elections	<u>7,308</u>	<u>16,000</u>	<u>16,000</u>	<u>16,075</u>	0	<u>12,050</u>	0	0
Dept: 209 Assessor								
702 Salaries	1,200	1,200	1,200	1,000	0	1,200		
715 Social Security (Employer)	74	75	75	62	0	75		
716 Medicare (Employer)	17	18	18	15	0	18		
727 Office Supplies & Expense	507	300	300	212	0	350		
728 Postage	853	1,000	1,000	772	0	1,000		
807 Assessing Services	22,650	24,000	24,000	19,400	0	24,000		
847 Software Support	633	700	700	645	0	700		
880 Education & Training	0	0	0	0	0	0		
901 Publishing	0	50	50	0	0	50		
Assessor	<u>25,934</u>	<u>27,343</u>	<u>27,343</u>	<u>22,106</u>	0	<u>27,393</u>	0	0

Dept: 210 Attorney									
801	Legal Services	17,337	35,000	35,000	25,908	0	35,000		
	Attorney	<u>17,337</u>	<u>35,000</u>	<u>35,000</u>	<u>25,908</u>	<u>0</u>	<u>35,000</u>	<u>0</u>	<u>0</u>
Dept: 215 Clerk									
702	Salaries	27,295	28,115	28,115	22,708	0	28,115		
703	Wages	11,970	13,000	13,000	10,982	0	13,500		
715	Social Security (Employer)	2,432	2,488	2,488	2,061	0	2,600		
716	Medicare (Employer)	569	582	582	482	0	610		
727	Office Supplies & Expense	1,680	1,500	1,500	1,488	0	1,600		
728	Postage	106	100	100	43	0	100		
840	Dues and Memberships	150	120	120	-30	0	120		
847	Software Support	3,135	2,400	2,400	2,473	0	2,600		
860	Mileage Reimbursement	307	600	600	0	0	600		
865	Meal/Lodging Expense	428	600	600	0	0	600		
880	Education & Training	485	1,000	1,000	-485	0	1,000		
901	Publishing	1,086	1,500	1,500	999	0	1,500		
	Clerk	<u>49,643</u>	<u>52,005</u>	<u>52,005</u>	<u>40,721</u>	<u>0</u>	<u>52,945</u>	<u>0</u>	<u>0</u>
Dept: 247 Board of Review									
702	Salaries	1,050	1,200	1,200	325	0	1,200		
Fund: 101 - GENERAL FUND Expenditures									
Dept: 247 Board of Review									
715	Social Security (Employer)	65	75	75	18	0	75		
716	Medicare (Employer)	15	18	18	4	0	18		
727	Office Supplies & Expense	0	50	50	0	0	50		
728	Postage	0	100	100	0	0	50		
860	Mileage Reimbursement	99	400	400	46	0	250		
865	Meal/Lodging Expense	0	200	200	78	0	200		
880	Education & Training	209	1,000	1,000	199	0	1,000		
901	Publishing	40	250	250	0	0	100		
	Board of Review	<u>1,478</u>	<u>3,293</u>	<u>3,293</u>	<u>670</u>	<u>0</u>	<u>2,943</u>	<u>0</u>	<u>0</u>
Dept: 253 Treasurer									
702	Salaries	26,780	27,585	27,585	22,280	0	27,585		
703	Wages	9,532	11,356	11,356	7,001	0	12,000		
715	Social Security (Employer)	2,251	2,415	2,415	1,780	0	750		
716	Medicare (Employer)	527	565	565	416	0	175		

727 Office Supplies & Expense	2,189	1,600	1,600	1,096	0	1,600			
728 Postage	2,149	2,600	2,600	2,035	0	2,600			
804 Professional Services	0	0	0	0	0	0			
840 Dues and Memberships	0	100	100	0	0	100			
847 Software Support	1,305	1,500	1,500	1,330	0	1,500			
860 Mileage Reimbursement	670	1,350	1,350	641	0	1,350			
865 Meal/Lodging Expense	0	600	600	0	0	600			
880 Education & Training	706	1,000	1,000	-706	0	1,000			
901 Publishing	0	125	125	0	0	125			
Treasurer	46,109	50,796	50,796	35,873	0	49,385	0	0	
Dept: 265 Township Hall & Grounds									
703 Wages	0	2,000	2,000	0	0	2,000			
715 Social Security (Employer)	0	124	124	0	0	124			
716 Medicare (Employer)	0	29	29	0	0	29			
740 Operating Expense & Supplies	895	1,500	1,500	1,836	0	1,500			
809 Lawn Maintenance Services	695	1,000	1,000	890	0	1,200			
810 Janitorial Services	1,375	1,600	1,600	990	0	1,800			
811 Waste Removal Services	192	225	225	161	0	225			
845 Snowplowing Services	970	1,500	1,500	150	0	1,500			
851 Internet/Website	1,402	1,500	1,500	2,381	0	1,500			
922 Electricity	2,008	2,500	2,500	1,672	0	2,500			
923 Electric Heat	4,427	3,500	3,500	2,939	0	4,000			
924 Telephone	2,720	2,750	2,750	2,362	0	2,750			
Fund: 101 - GENERAL FUND									
Expenditures									
Dept: 265 Township Hall & Grounds									
930 Facility Repairs/Maintenance	2,971	10,000	10,000	3,234	0	10,000			
931 Office Equipment Repairs/Maint	2,467	3,000	3,000	6,489	0	3,000			
Township Hall & Grounds	20,122	31,228	31,228	23,104	0	32,128	0	0	
Dept: 276 Cemetery									
703 Wages	8	500	500	0	0	500			
715 Social Security (Employer)	0	31	31	0	0	31			
716 Medicare (Employer)	0	7	7	0	0	7			
740 Operating Expense & Supplies	296	1,000	1,000	327	0	1,000			
808 Cemetery Sexton	3,575	5,000	5,000	3,150	0	5,000			
809 Lawn Maintenance Services	3,100	4,000	4,000	3,450	0	4,000			

847 Software Support	0	0	0	0	0	<u>0</u>		
922 Electricity	305	400	400	623	0	<u>800</u>		
930 Facility Repairs/Maintenance	350	7,000	7,000	235	0	<u>5,000</u>		
Cemetery	<u>7,634</u>	<u>17,938</u>	<u>17,938</u>	<u>7,785</u>	0	<u>16,338</u>	0	0
Dept: 400 Planning Commission								
702 Salaries	5,950	11,000	11,000	1,590	0	<u>11,000</u>		
703 Wages	2,000	3,600	3,600	862	0	<u>3,600</u>		
715 Social Security (Employer)	493	905	905	152	0	<u>905</u>		
716 Medicare (Employer)	115	212	212	35	0	<u>212</u>		
727 Office Supplies & Expense	0	1,000	1,000	0	0	<u>1,000</u>		
728 Postage	0	2,000	2,000	0	0	<u>2,000</u>		
804 Professional Services	0	5,000	5,000	0	0	<u>10,000</u>		
840 Dues and Memberships	0	500	500	0	0	<u>250</u>		
860 Mileage Reimbursement	58	500	500	0	0	<u>250</u>		
865 Meal/Lodging Expense	0	0	0	0	0	<u>0</u>		
880 Education & Training	329	2,000	2,000	0	0	<u>2,000</u>		
901 Publishing	114	1,000	1,000	116	0	<u>1,000</u>		
902 Printing	0	500	500	0	0	<u>500</u>		
Planning Commission	<u>9,059</u>	<u>28,217</u>	<u>28,217</u>	<u>2,755</u>	0	<u>32,717</u>	0	0
Dept: 405 Zoning Administrator/Planning								
702 Salaries	9,422	0	0	0	0	<u>0</u>		
703 Wages	17	4,100	4,100	0	0	<u>2,000</u>		
715 Social Security (Employer)	585	254	254	0	0	<u>124</u>		
716 Medicare (Employer)	137	60	60	0	0	<u>29</u>		
727 Office Supplies & Expense	79	400	400	13	0	<u>250</u>		
728 Postage	13	100	100	3	0	<u>100</u>		
803 Medical Professional Services	0	0	0	0	0	<u>0</u>		
Fund: 101 - GENERAL FUND								
Expenditures								
Dept: 405 Zoning Administrator/Planning								
804 Professional Services	11,241	20,012	20,012	11,552	0	<u>20,212</u>		
830 Pension Plan	0	0	0	0	0	<u>0</u>		
840 Dues and Memberships	0	0	0	0	0	<u>0</u>		
847 Software Support	0	0	0	0	0	<u>0</u>		
860 Mileage Reimbursement	375	700	700	276	0	<u>500</u>		

715 Social Security (Employer)	0	0	0	0	0	0		
716 Medicare (Employer)	0	0	0	0	0	0		
Soc Sec/Medicare (Employer)	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	0	0
Dept: 865 Insurance								
820 Liability Insurance	5,476	13,500	13,500	6,371	0	13,500		
821 Workers Compensation	934	4,000	4,000	1,063	0	4,000		
Insurance	<u>6,410</u>	<u>17,500</u>	<u>17,500</u>	<u>7,434</u>	<u>0</u>	<u>17,500</u>	0	0
Dept: 890 Contingency								
890 Contingency	0	25,000	20,000	0	0	20,000		
Contingency	<u>0</u>	<u>25,000</u>	<u>20,000</u>	<u>0</u>	<u>0</u>	<u>20,000</u>	0	0
Dept: 901 Capital Expenditure								
970 Capital Expenditure	11,074	27,000	27,000	1,800	0	20,000		
971 Land	0	20,000	0	0	0	0		
Capital Expenditure	<u>11,074</u>	<u>47,000</u>	<u>27,000</u>	<u>1,800</u>	<u>0</u>	<u>20,000</u>	0	0
Dept: 966 Transfers Out								
999 Transfers To Other Funds 20K PRAC, 5K Road 45K fire cap.100K rd replace.	207,600	250,000	275,000	25,000	0	170,000		
Transfers Out	<u>207,600</u>	<u>250,000</u>	<u>275,000</u>	<u>25,000</u>	<u>0</u>	<u>170,000</u>	0	0
Total Expenditures	<u>515,685</u>	<u>754,587</u>	<u>754,587</u>	<u>287,952</u>	<u>0</u>	<u>623,567</u>	0	0

Change In Balance

(69,344)

Fund Balance as of 12.31.2021

762,405

Historical Society Questions:

- 1) How should the H/S handle donations? Can they accept monetary and artifacts?
- 2) Thinking about new members, what is the process? Appointment? Hire?
- 3) The last regular attending member has passed away. What is the Board's wishes for meetings? Approval of minutes?
- 4) Addressing items that maybe on loan from time to time. How shall those items be inventoried? Receipts? Insurance?

BUDGET WORKSHEET

Rev thru 12/31 - Exp thru 1/19

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1/21/2021
12:35 PM

Whitewater Township

Month: 1/31/2021	Prior Year Actual	Current Year		Actual Thru January	Estimated Total	(6) Requested	(7) Recommended	(8) Adopted
		Original Budget	Amended Budget					
Fund: 203 - ROAD FUND								
Revenues								
Dept: 000								
452 METRO Act Fees	8,747	8,000	8,000	9,654	0	9,000		
665 Interest Earned	44	5	5	32	0	30		
Dept: 000	<u>8,791</u>	<u>8,005</u>	<u>8,005</u>	<u>9,686</u>	<u>0</u>	<u>9,030</u>	<u>0</u>	<u>0</u>
Dept: 931 Transfers IN								
699 Transfers From Other Funds	10,000	5,000	5,000	0	0	5,000		
Transfers IN	<u>10,000</u>	<u>5,000</u>	<u>5,000</u>	<u>0</u>	<u>0</u>	<u>14,030</u>	<u>0</u>	<u>0</u>
Total Revenues	<u>18,791</u>	<u>13,005</u>	<u>13,005</u>	<u>9,686</u>	<u>0</u>	<u>14,030</u>	<u>0</u>	<u>0</u>
Expenditures								
Dept: 446 Road Right of Way								
846 Road Brining Service	11,084	18,000	18,000	16,839	0	20,000		
921 Street Lights	1,761	1,700	1,700	968	0	2,000		
Road Right of Way	<u>12,845</u>	<u>19,700</u>	<u>19,700</u>	<u>17,807</u>	<u>0</u>	<u>22,000</u>	<u>0</u>	<u>0</u>
Dept: 890 Contingency								
890 Contingency	0	0	0	0	0	0		
Contingency	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>22,000</u>	<u>0</u>	<u>0</u>
Total Expenditures	<u>12,845</u>	<u>19,700</u>	<u>19,700</u>	<u>17,807</u>	<u>0</u>	<u>22,000</u>	<u>0</u>	<u>0</u>
Change in Balance			(7,970)					Fund Balance as of 12.31.2020 14,927

BUDGET WORKSHEET
 Rev thru 12/31 - Exp thru 1/19

Whitewater Township

Month: 1/31/2021	Prior Year Actual	----- Current Year -----		Actual Thru January	Estimated Total	(6) Requested	(7) Recommended	(8) Adopted
		Original Budget	Amended Budget					
Fund: 204 - ROAD REPAIR/REPLACEMENT FUND								
Revenues								
Dept: 000								
665 Interest Earned	465	275	275	415	0	<u>400</u>	_____	_____
699 Transfers From Other Funds	50,000	50,000	50,000	0	0	<u>100,000</u>	_____	_____
Dept: 000	<u>50,465</u>	<u>50,275</u>	<u>50,275</u>	415	0	100,400	0	0
Total Revenues	<u>50,465</u>	<u>50,275</u>	<u>50,275</u>	415	0	100,400	0	0
Expenditures								
Dept: 000								
935 Road Repair 434,462 25% = 110K 11.10.2020 5 yr Crack Fill & 10 year Chip 46K	0	0	0	1,000	0	<u>156,000</u>	_____	_____
Dept: 000	<u>0</u>	<u>0</u>	<u>0</u>	1,000	0	156,000	0	0
Dept: 890 Contingency								
890 Contingency	0	0	0	-767	0	<u>5,000</u>	_____	_____
Contingency	<u>0</u>	<u>0</u>	<u>0</u>	-767	0	161,000	0	0
Total Expenditures	<u>0</u>	<u>0</u>	<u>0</u>	233	0	161,000	0	0
Change in Balance		(60,600)		Fund Balance as of 12.31.2020			266,346.00	

Memo

To: Whitewater Township Board
From: Ron Popp, Supervisor
CC: None
Date: 02-10-2021
Re: 2021 Recommended Road Funding

All,

The following spreadsheet pages use data from Grand Traverse County Road Commission's 2019 Pavement Surface Evaluation and Rating (PASER) system Report released February 27, 2020. The full report is available by request.

Page three is a summary of the data helping to organize it for quick review. For those who want to dive a little deeper, the next four pages display specific details of all Township Roads. Page 8 provides cost per mile information along with cost sharing percentages currently allowed by the Road Commission. The last two pages are an image of the original opinion of probable cost for repairs to Skegemog Point Road. Please recall there are no work scope changes slated for the "first two miles" of the project so, the opinion can be used with a high degree of confidence for budgeting purposes. The Township may want to consider policy regarding its level of future funding for any such project.

For the 2021/2022 budget I am recommending the Board allow for up to a 25% cost share of repairs to the "first two miles" of Skegemog Point Road as detailed under scenario #1 in the October 8, 2020 Opinion of Probable Cost. This impacts the Township Budget at a little under \$110,000.00. Listening to community input, future construction work on the "last mile" will not meet current minimum Road Commission Asset Management Policy and no public funds have been set aside. If that changes, budgeting can be amended as needed.

Additionally, I recommend we fund the Road Commission's Asset Management Plan addressing the 5-year crack sealing and 10-year chip sealing maintenance schedule resulting in an estimated 2021 investment of almost \$46,000.00.

Total 2021/2022 proposed Road Repair and Replacement Fund expenditures are:
\$156,000.00

Thank you for your work.

A handwritten signature in black ink, appearing to read "Ron Popp". The signature is stylized with a large, sweeping initial "R" and "P".

Ron Popp

Supervisor, Whitewater Township

Whitewater Township 5 Year Road Maintenance and Replacement Planning Guide Summary						
Asphalt Roads		Annual Inflation Rate 3%				
	2020	2021	2022	2023	2024	2025
Total Asphalt Road Miles	25.987					
Average Paser Rating	3.811					
Total 5 Yr. Crack Sealing Costs	\$40,539.72	\$41,755.91	\$43,008.59	\$44,298.85	\$45,627.81	\$46,996.65
Total 10 Yr. Chip Sealing Costs	\$368,280.00	\$379,328.40	\$390,708.25	\$402,429.50	\$414,502.38	\$426,937.46
Annual Crack and Chip Sealing Costs	\$44,586.65	\$45,924.25	\$47,301.97	\$48,721.03	\$50,182.67	\$51,688.15
2020 Costs to Replace all Roads	\$7,369,057.44	\$7,590,129.16	\$7,817,833.04	\$8,052,368.03	\$8,293,939.07	\$8,542,757.24
Annual Road Replacement Amortization	\$245,635.25	\$253,004.31	\$260,594.43	\$268,412.27	\$276,464.64	\$284,758.57
Required Annual Road Fund Amounts	\$290,221.90	\$298,928.55	\$307,896.41	\$317,133.30	\$326,647.30	\$336,446.72
Annual Township Contribution to Road Replacement 25%	\$72,555.47	\$74,732.14	\$76,974.10	\$79,283.33	\$81,661.83	\$84,111.68
Annual Township Contribution to Road Maintenance 100%	\$44,586.65	\$45,924.25	\$47,301.97	\$48,721.03	\$50,182.67	\$51,688.15
Annual Alternate Funding Sources Amounts	\$173,079.77	\$178,272.17	\$183,620.33	\$189,128.94	\$194,802.81	\$200,646.89

Whitewater Township 5 Year Road Maintenance and Replacement Planning Guide Detail - Page 1

State of Mich PRNo	Road Segment Name	From Desc	To Desc	Segment Length	Surf Sub Type	Eval Year	PASER Rating	Recommend Fix Type	Projected Maintenance Year	5 Yr Crack Sealing Costs	10 Yr Chip Sealing Costs	5Yr Crack Sealing and 10 yr Chip Sealing Costs Presented Annually	2021 Estimated Costs to Replace All Roads to PASER Rating of 9 or Above	30 Year Road Replacement Cost Presented Annually Without Inflation
1003505	Ayers Rd	Cram	Cook	0.412	Asphalt-Standard	2018	3	Crush & Shape		\$642.72	\$5,932.80	\$721.82	\$216,300.00	\$7,210.00
3280670	Bluff Trl	Elk Lake	Attribute C	0.126	Asphalt-Standard	2018	2	Crush & Shape		\$196.56	\$1,814.40	\$220.75	\$66,150.00	\$2,205.00
1003804	Carns Rd	Elk Lake	Topview Dr	0.448	Asphalt-Standard	2018	2	Crush & Shape		\$698.88	\$6,451.20	\$784.90	\$235,200.00	\$7,840.00
1003804	Carns Rd	Topview Dr	Clearview I	0.083	Asphalt-Standard	2018	2	Crush & Shape		\$129.48	\$1,195.20	\$145.42	\$43,575.00	\$1,452.50
1003804	Carns Rd	Clearview I	Trail End N	0.009	Asphalt-Standard	2018	2	Crush & Shape		\$14.04	\$129.60	\$15.77	\$4,725.00	\$157.50
994606	N Broomhe	Vinton	O Dell Rd	0.5	Asphalt-Standard	2018	3	Crush & Shape		\$780.00	\$7,200.00	\$876.00	\$262,500.00	\$8,750.00
994606	N Broomhe	O Dell Rd	Deal	0.498	Asphalt-Standard	2018	3	Crush & Shape		\$776.88	\$7,171.20	\$872.50	\$261,450.00	\$8,715.00
994606	N Broomhe	Deal	M 72	0.358	Asphalt-Standard	2018	3	Crush & Shape		\$558.48	\$5,155.20	\$627.22	\$187,950.00	\$6,265.00
1003503	Deal Rd	Broomhear	Broomhear	0.503	Asphalt-Standard	2018	6	Chip Seal		\$784.68	\$7,243.20	\$881.26	\$7,243.20	\$241.44
1003503	Deal Rd	Broomhear	Battle Cree	0.626	Asphalt-Standard	2018	6	Chip Seal		\$976.56	\$9,014.40	\$1,096.75	\$9,014.40	\$300.48
1003503	Deal Rd	Battle Cree	Mabel	0.117	Asphalt-Standard	2018	6	Chip Seal		\$182.52	\$1,684.80	\$204.98	\$1,684.80	\$56.16
1003503	Deal Rd	Mabel	Fairbanks C	0.245	Asphalt-Standard	2018	6	Chip Seal		\$382.20	\$3,528.00	\$429.24	\$3,528.00	\$117.60
1865919	Elk Lake Trl	Angell	Bluff	0.375	Asphalt-Standard	2018	2	Crush & Shape		\$585.00	\$5,400.00	\$657.00	\$196,875.00	\$6,562.50
1000302	Gay Rd	Elk Lake	Innis Ln	0.584	Asphalt-Standard	2018	2	Crush & Shape		\$911.04	\$8,409.60	\$1,023.17	\$306,600.00	\$10,220.00
1000302	Gay Rd	Innis Ln	Dead End c	0.056	Asphalt-Standard	2018	3	Crush & Shape		\$87.36	\$806.40	\$98.11	\$29,400.00	\$980.00
1004311	Island Lake	Supply	Terrace	0.22	Asphalt-Standard	2017	7	Chip Seal		\$343.20	\$3,168.00	\$385.44	\$3,168.00	\$105.60
3280012	Lackey Rd	Fairbanks C	Hanna Rd	0.135	Asphalt-Standard	2018	6	Chip Seal		\$210.60	\$1,944.00	\$236.52	\$1,944.00	\$64.80
3280012	Lackey Rd	Hanna Rd	[Undescrib	0.357	Asphalt-Standard	2018	6	Chip Seal		\$556.92	\$5,140.80	\$625.46	\$5,140.80	\$171.36
3280012	Lackey Rd	[Undescrib	Truax Lake	0.001	Asphalt-Standard	2006	6	Chip Seal		\$1.56	\$14.40	\$1.75	\$14.40	\$0.48
3280012	Lackey Rd	Truax Lake	Pickerd Ct	0.142	Asphalt-Standard	2018	5	Chip Seal		\$221.52	\$2,044.80	\$248.78	\$2,044.80	\$68.16
3280012	Lackey Rd	Pickerd Ct	Lackey	0.033	Asphalt-Standard	2018	5	Chip Seal		\$51.48	\$475.20	\$57.82	\$475.20	\$15.84
3280012	Lackey Rd	Pickerd Ct	Truax Lake	0.077	Asphalt-Standard	2018	5	Chip Seal		\$120.12	\$1,108.80	\$134.90	\$1,108.80	\$36.96
1003703	Mabel Rd	Deal	Watson	0.533	Asphalt-Standard	2018	6	Chip Seal		\$831.48	\$7,675.20	\$933.82	\$7,675.20	\$255.84
994603	Moore Rd	Crisp	M 72	0.49	Asphalt-Standard	2018	3	Crush & Shape		\$764.40	\$7,056.00	\$858.48	\$257,250.00	\$8,575.00
994603	Moore Rd	M 72	M 72	0.001	Asphalt-Standard	2011	3	Crush & Shape		\$1.56	\$14.40	\$1.75	\$525.00	\$17.50
994603	Moore Rd	M 72	Watson	0.027	Asphalt-Standard	2018	3	Crush & Shape		\$42.12	\$388.80	\$47.30	\$14,175.00	\$472.50
3281419	Pickerd Ct	Lackey Rd	Dead End c	0.168	Asphalt-Standard	2018	7	Chip Seal		\$262.08	\$2,419.20	\$294.34	\$2,419.20	\$80.64
994701	Skegemog	Watson	M 72	0.424	Asphalt-Standard	2018	7	Chip Seal		\$661.44	\$6,105.60	\$742.85	\$6,105.60	\$203.52
994605	Vinton Rd	M 72	Watson	0.129	Asphalt-Standard	2017	2	Crush & Shape		\$201.24	\$1,857.60	\$226.01	\$67,725.00	\$2,257.50

Whitewater Township 5 Year Road Maintenance and Replacement Planning Guide Detail - Page 2

State of Mich PRNo	Road Segment Name	From Desc	To Desc	Segment Length	Surf Sub Type	Eval Year	PASER Rating	Recommend Fix Type	Projected Maintenance Year	5 Yr Crack Sealing Costs	10 Yr Chip Sealing Costs	5Yr Crack Sealing and 10 yr Chip Sealing Costs Presented Annually	2021 Estimated Costs to Replace All Roads to PASER Rating of 9 or Above	0 Year Road Replacement Cost Presented Annually Without Inflation
994602	Old M72	M 72	Matterhorr	0.232	Asphalt-Stand	2018	5	Chip Seal		\$361.92	\$3,340.80	\$406.46	\$3,340.80	\$111.36
994602	Old M72	Matterhorr	Moore Rd	0.035	Asphalt-Stand	2018	3	Crush & Shape		\$54.60	\$504.00	\$61.32	\$18,375.00	\$612.50
994602	Old M72	Moore Rd	Tuscola	0.156	Asphalt-Stand	2018	4	Wedge & Cap		\$243.36	\$2,246.40	\$273.31	\$7,425.60	\$247.52
994602	Old M72	Tuscola	Elk Lake	0.315	Asphalt-Stand	2018	4	Wedge & Cap		\$491.40	\$4,536.00	\$551.88	\$14,994.00	\$499.80
994602	Old M72	Elk Lake	Vinton Rd	0.252	Asphalt-Stand	2018	3	Crush & Shape		\$393.12	\$3,628.80	\$441.50	\$132,300.00	\$4,410.00
994602	Old M72	Vinton Rd		0.447	Asphalt-Stand	2018	3	Crush & Shape		\$697.32	\$6,436.80	\$783.14	\$234,675.00	\$7,822.50
994602	Old M72		Cook	0.295	Asphalt-Stand	2018	4	Wedge & Cap		\$460.20	\$4,248.00	\$516.84	\$14,042.00	\$468.07
994602	Old M72	Cook		0.236	Asphalt-Stand	2018	5	Chip Seal		\$368.16	\$3,398.40	\$413.47	\$3,398.40	\$113.28
994602	Old M72		M 72	0.275	Asphalt-Stand	2018	3	Crush & Shape		\$429.00	\$3,960.00	\$481.80	\$144,375.00	\$4,812.50
994609	Watson Rd	M 72	Mabel	0.476	Asphalt-Stand	2018	5	Chip Seal		\$742.56	\$6,854.40	\$833.95	\$6,854.40	\$228.48
994609	Watson Rd	Mabel	Skegemog	0.25	Asphalt-Stand	2018	3	Crush & Shape		\$390.00	\$3,600.00	\$438.00	\$131,250.00	\$4,375.00
994409	Angell Rd	Elk Lake	Elk Lake Trl	0.594	Sealcoat-Stanc	2018	5	Chip Seal		\$926.64	\$8,553.60	\$1,040.69	\$8,553.60	\$285.12
994409	Angell Rd	Elk Lake Trl	Elk Lake	0.03	Sealcoat-Stanc	2018	4	Wedge & Cap		\$46.80	\$432.00	\$52.56	\$1,428.00	\$47.60
994409	Angell Rd	Elk Lake Trl	Dead End c	0.046	Sealcoat-Stanc	2018	4	Wedge & Cap		\$71.76	\$662.40	\$80.59	\$2,189.60	\$72.99
1000209	Applewooc	Hollyberry	Pineneedle	0.115	Sealcoat-Stanc	2018	4	Wedge & Cap		\$179.40	\$1,656.00	\$201.48	\$5,474.00	\$182.47
1000209	Applewooc	Pineneedle	Raintree	0.137	Sealcoat-Stanc	2018	4	Wedge & Cap		\$213.72	\$1,972.80	\$240.02	\$6,521.20	\$217.37
994401	Hawley Rd	City/Twp Li	Elk Lake	0.781	Sealcoat-Stanc	2018	5	Chip Seal		\$1,218.36	\$11,246.40	\$1,368.31	\$11,246.40	\$374.88
1000207	Briarwood	Cook	Elk View	0.08	Sealcoat-Stanc	2018	3	Crush & Shape		\$124.80	\$1,152.00	\$140.16	\$42,000.00	\$1,400.00
3280715	Church St	Williamsbu	Vinton	0.248	Sealcoat-Stanc	2018	3	Crush & Shape		\$386.88	\$3,571.20	\$434.50	\$130,200.00	\$4,340.00
1865807	Clearview [Trail End N	Hillendale I	0.229	Sealcoat-Stanc	2018	4	Wedge & Cap		\$357.24	\$3,297.60	\$401.21	\$10,900.40	\$363.35
1865807	Clearview [Hillendale I	Dead End c	0.025	Sealcoat-Stanc	2018	4	Wedge & Cap		\$39.00	\$360.00	\$43.80	\$1,190.00	\$39.67
994606	Cook Rd	M 72	Watson	0.18	Sealcoat-Stanc	2018	2	Crush & Shape		\$280.80	\$2,592.00	\$315.36	\$94,500.00	\$3,150.00
994606	Cook Rd	Watson	Briarwood	0.304	Sealcoat-Stanc	2018	2	Crush & Shape		\$474.24	\$4,377.60	\$532.61	\$159,600.00	\$5,320.00
994606	Cook Rd	Briarwood	Ayers	1.196	Sealcoat-Stanc	2018	3	Crush & Shape		\$1,865.76	\$17,222.40	\$2,095.39	\$627,900.00	\$20,930.00
994606	Cook Rd	Ayers	Miami Bear	0.109	Sealcoat-Stanc	2018	3	Crush & Shape		\$170.04	\$1,569.60	\$190.97	\$57,225.00	\$1,907.50
994606	Cook Rd	Miami Bear	Timber	0.143	Sealcoat-Stanc	2018	3	Crush & Shape		\$223.08	\$2,059.20	\$250.54	\$75,075.00	\$2,502.50
1003506	Cram Rd	Elk Lake	Williamsbu	0.766	Sealcoat-Stanc	2018	3	Crush & Shape		\$1,194.96	\$11,030.40	\$1,342.03	\$402,150.00	\$13,405.00

Whitewater Township 5 Year Road Maintenance and Replacement Planning Guide Detail - Page 3

State of Mich PRNo	Road Segment Name	From Desc To Desc	Segment Length	Surf Sub Type	Eval Year	PASER Rating	Recommend Fix Type	Projected Maintenance Year	5 Yr Crack Sealing Costs	10 Yr Chip Sealing Costs	5Yr Crack Sealing and 10 yr Chip Sealing Costs Presented Annually	2021 Estimated Costs to Replace All Roads to PASER Rating of 9 or Above	0 Year Road Replacement Cost Presented Annually Without Inflation
1003506	Cram Rd	Williamsbu Ayers	0.598	Sealcoat-Stanc	2018	4	Wedge & Cap		\$932.88	\$8,611.20	\$1,047.70	\$28,464.80	\$948.83
1003506	Cram Rd	Ayers Okaiyoka	0.503	Sealcoat-Stanc	2018	4	Wedge & Cap		\$784.68	\$7,243.20	\$881.26	\$23,942.80	\$798.09
1003506	Cram Rd	Okaiyoka Palaestrum	0.246	Sealcoat-Stanc	2018	5	Chip Seal		\$383.76	\$3,542.40	\$430.99	\$3,542.40	\$118.08
1000205	Elk View Dr	Hollyberry Briarwood	0.135	Sealcoat-Stanc	2018	4	Wedge & Cap		\$210.60	\$1,944.00	\$236.52	\$6,426.00	\$214.20
1000205	Elk View Dr	Briarwood Raintree	0.152	Sealcoat-Stanc	2018	4	Wedge & Cap		\$237.12	\$2,188.80	\$266.30	\$7,235.20	\$241.17
1000205	Elk View Dr	Raintree Dead End c	0.045	Sealcoat-Stanc	2018	3	Crush & Shape		\$70.20	\$648.00	\$78.84	\$23,625.00	\$787.50
1865815	Hillendale I	Clearview Topview Dr	0.069	Sealcoat-Stanc	2018	3	Crush & Shape		\$107.64	\$993.60	\$120.89	\$36,225.00	\$1,207.50
1865815	Hillendale I	Topview Dr Dead End c	0.042	Sealcoat-Stanc	2018	4	Wedge & Cap		\$65.52	\$604.80	\$73.58	\$1,999.20	\$66.64
1000206	Hollyberry	Elk View Applewooc	0.108	Sealcoat-Stanc	2018	4	Wedge & Cap		\$168.48	\$1,555.20	\$189.22	\$5,140.80	\$171.36
1000311	Innis Ln	Gay Dead End c	0.284	Sealcoat-Stanc	2018	2	Crush & Shape		\$443.04	\$4,089.60	\$497.57	\$149,100.00	\$4,970.00
1003708	Lake Side T	Baggs	0.274	Sealcoat-Stanc	2018	9	Crack Seal		\$427.44	\$3,945.60	\$480.05	\$427.44	\$14.25
1000303	Munro Rd	Angell	0.632	Sealcoat-Stanc	2018	3	Crush & Shape		\$985.92	\$9,100.80	\$1,107.26	\$331,800.00	\$11,060.00
1000303	Munro Rd	Gay Rd	0.369	Sealcoat-Stanc	2018	2	Crush & Shape		\$575.64	\$5,313.60	\$646.49	\$193,725.00	\$6,457.50
1000303	Munro Rd	Gay Rd Townline	0.987	Sealcoat-Stanc	2018	2	Crush & Shape		\$1,539.72	\$14,212.80	\$1,729.22	\$518,175.00	\$17,272.50
1003508	Palaestrum	Elk Lake Winnie Ln	0.456	Sealcoat-Stanc	2018	6	Chip Seal		\$711.36	\$6,566.40	\$798.91	\$6,566.40	\$218.88
1003508	Palaestrum	Winnie Ln Cram	0.134	Sealcoat-Stanc	2018	5	Chip Seal		\$209.04	\$1,929.60	\$234.77	\$1,929.60	\$64.32
1000210	Pineneedle	Applewooc Dead End c	0.212	Sealcoat-Stanc	2018	3	Crush & Shape		\$330.72	\$3,052.80	\$371.42	\$111,300.00	\$3,710.00
1000208	Raintree Dr	Elk View Applewooc	0.061	Sealcoat-Stanc	2018	3	Crush & Shape		\$95.16	\$878.40	\$106.87	\$32,025.00	\$1,067.50
994701	Skegemog	M 72 Lossie	0.561	Sealcoat-Stanc	2018	5	Chip Seal		\$875.16	\$8,078.40	\$982.87	\$8,078.40	\$269.28
994701	Skegemog	Lossie Kardes Rd	1.255	Sealcoat-Stanc	2018	4	Wedge & Cap		\$1,957.80	\$18,072.00	\$2,198.76	\$59,738.00	\$1,991.27
994701	Skegemog	Kardes Rd Shadow	0.29	Sealcoat-Stanc	2018	4	Wedge & Cap		\$452.40	\$4,176.00	\$508.08	\$13,804.00	\$460.13
994701	Skegemog	Shadow	0.4	Sealcoat-Stanc	2018	3	Crush & Shape		\$624.00	\$5,760.00	\$700.80	\$210,000.00	\$7,000.00
994701	Skegemog	Point Rd Kings Rd	0.21	Sealcoat-Stanc	2018	2	Crush & Shape		\$327.60	\$3,024.00	\$367.92	\$110,250.00	\$3,675.00
994701	Skegemog	Kings Rd Fairview	0.036	Sealcoat-Stanc	2018	2	Crush & Shape		\$56.16	\$518.40	\$63.07	\$18,900.00	\$630.00
994701	Skegemog	Fairview Fairview	0.173	Sealcoat-Stanc	2018	3	Crush & Shape		\$269.88	\$2,491.20	\$303.10	\$90,825.00	\$3,027.50
994701	Skegemog	Fairview Dead End c	0.085	Sealcoat-Stanc	2018	2	Crush & Shape		\$132.60	\$1,224.00	\$148.92	\$44,625.00	\$1,487.50

Whitewater Township 5 Year Road Maintenance and Replacement Planning Guide Detail - Page 4

State of Mich PRNo	Road Segment Name	From Desc To Desc	Segment Length	Surf Sub Type	Eval Year	PASER Rating	Recommend Fix Type	Projected Maintenance Year	5 Yr Crack Sealing Costs	10 Yr Chip Sealing Costs	5Yr Crack Sealing and 10 yr Chip Sealing Costs Presented Annually	2021 Estimated Costs to Replace All Roads to PASER Rating of 9 or Above	0 Year Road Replacement Cost Presented Annually Without Inflation
1865806	Topview Dr	Carns Hillendale	0.216	Sealcoat-Stanc	2018	4	Wedge & Cap		\$336.96	\$3,110.40	\$378.43	\$10,281.60	\$342.72
1108407	Townline R	City/Twp Li Munro	0.365	Sealcoat-Stanc	2016	6	Chip Seal		\$569.40	\$5,256.00	\$639.48	\$5,256.00	\$175.20
1108407	Townline R	Munro Elk Lake	0.5	Sealcoat-Stanc	2018	3	Crush & Shape		\$780.00	\$7,200.00	\$876.00	\$262,500.00	\$8,750.00
994605	Vinton Rd	O Dell	0.328	Sealcoat-Stanc	2018	3	Crush & Shape		\$511.68	\$4,723.20	\$574.66	\$172,200.00	\$5,740.00
994605	Vinton Rd		0.241	Sealcoat-Stanc	2018	3	Crush & Shape		\$375.96	\$3,470.40	\$422.23	\$126,525.00	\$4,217.50
994605	Vinton Rd	Whitney	0.144	Sealcoat-Stanc	2018	3	Crush & Shape		\$224.64	\$2,073.60	\$252.29	\$75,600.00	\$2,520.00
994605	Vinton Rd	Whitney Church	0.086	Sealcoat-Stanc	2018	3	Crush & Shape		\$134.16	\$1,238.40	\$150.67	\$45,150.00	\$1,505.00
994605	Vinton Rd	Church M 72	0.161	Sealcoat-Stanc	2018	3	Crush & Shape		\$251.16	\$2,318.40	\$282.07	\$84,525.00	\$2,817.50
Total Miles			25.987										
Average Paser Rating						3.811							
Total 5 Yr. Crack Sealing Costs									\$40,539.72				
Total 10 Yr. Chip Sealing Costs										\$368,280.00			
Annual Crack and Chip Sealing Costs											\$44,586.65		
2020 Costs to Replace all Roads												\$7,369,057.44	
Annual Road Replacement Amortization													\$245,635.25
Recommend Annual Road Fund Amounts												\$290,221.90	

Whitewater Township 5 year Road Maintenance and Replacement planning Guide Mix of Fix 2020 Cost Sheet

Fix Type	2020 Cost Per Mile	Township Split	Road Commission Split	Township Portion	Road Commission Portion	Years	Annual Inflation Rate
Crack Sealing	\$3,900.00	40%	60%	\$1,560.00	\$2,340.00		
Chip Sealing	\$36,000.00	40%	60%	\$14,400.00	\$21,600.00		
Wedge & Cap	\$119,000.00	40%	60%	\$47,600.00	\$71,400.00		
Crush & Shape	\$750,000.00	70%	30%	\$525,000.00	\$225,000.00		
Duration						30	
Inflation Rate							3%



“Our mission is to upgrade and maintain
a safe and efficient road system”

Date: October 8th, 2020

To: Ron Popp
Supervisor, Whitewater Township

From: Rob Sullivan
Project Engineer, Grand Traverse County Road Commission

Re: Skegemog Point Road
Opinion of Probable Construction Cost

Per your request, please find the attached cost estimates for Skegemog Point Road. The proposed project commences at M-72 and terminates at the road’s northern end.

The first 1.54 miles north of M-72 would consist of a chip and fog seal supported by HMA wedging. **Scenario 1** incorporates 3’ asphalt shoulders and HMA valley curb throughout. **Scenario 2** omits shoulder widening and valley curb. Both scenarios and their estimated costs are summarized in *Table 1: Chip Seal*.

The remaining 1.38 miles of existing roadway would be pulverized, recycled in-place, and overlaid with 3.5” of asphalt. The proposed cross section of the crush and shape is summarized in *Table 2: Crush & Shape*. The 380’ dead end/lake access road would be overlaid with 2” of HMA. The lake access road can be crushed and widened for an additional ~\$20,000.

Table 1: Chip Seal

Scenario		(USD)
Scenario 1		
	Wedge, Chip, and Fog Seal w/HMA Shoulders & Curb:	434,462
	GTCRC Cost Sharing (60%):	(260,677)
	<i>Subtotal:</i>	<i>173,785</i>
	Crush & Shape:	726,822
	GTCRC Cost Sharing (30%):	(218,047)
	<i>Subtotal:</i>	<i>508,775</i>
	<u><i>Project Subtotal:</i></u>	<u><i>682,560</i></u>
	5% Design and Construction Services:	34,128
	10% Contingency:	71,669
	TOTAL ESTIMATED COST:	788,357
Scenario 2		
	Wedge, Chip, and Fog Seal:	240,819
	GTCRC Cost Sharing (60%):	(144,491)
	<i>Subtotal:</i>	<i>96,328</i>
	Crush & Shape:	726,822
	GTCRC Cost Sharing (30%):	(218,047)
	<i>Subtotal:</i>	<i>508,775</i>
	<u><i>Project Subtotal:</i></u>	<u><i>605,103</i></u>
	5% Design and Construction Services:	30,255
	10% Contingency:	63,536
	TOTAL ESTIMATED COST:	698,894

Table 2: Crush & Shape

Crush & Shape Cross Section	Feet
Length of Section:	7,289
Existing HMA Width:	19-20
Proposed HMA Lane Width:	11
Proposed HMA Shoulder Width:	5
Proposed HMA Curb Width:	1.5
Proposed HMA Corridor Width:	32-35
Proposed Gravel Shoulder Width:	1

The attached estimate was created using the MERL (Michigan Engineers' Resource Library) estimating system. A 10% cost of construction was used for a contingency. A 5% cost of construction was used as a preliminary number for design and construction engineering. Please note the attached Opinion of Probable Cost is subject to the following conditions:

- The attached costs are based on preliminary information. The actual site conditions may result in variation of the unit prices or items. It was assumed the material beneath the existing roadway can be reused as subbase.
- Actual construction bids may vary significantly from the attached Opinion of Probable Construction Cost due to timing of construction, changed conditions, labor rate changes, or other factors beyond the control of the Grand Traverse County Road Commission
- This estimate assumes all work is completed in one year as a complete project. Options exist for completion in phases over multiple years.

We appreciate the continued communication and look forward to working with you in the future. Please feel free to contact me anytime.



Rob Sullivan
Project Engineer
Grand Traverse County Road Commission
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729 Licenses & Fees	0	0	0	0	0	<u>0</u>		
739 Fuel & Oil	0	0	0	0	0	<u>0</u>		
740 Operating Expense & Supplies	0	0	0	0	0	<u>0</u>		
746 Medical Supplies	0	0	0	0	0	<u>0</u>		
747 Uniforms	0	0	0	0	0	<u>0</u>		
801 Legal Services	0	0	0	0	0	<u>0</u>		
803 Medical Professional Services	0	0	0	0	0	<u>0</u>		
806 Contractual Services - MMR	295,000	295,000	295,000	295,000	0	<u>295,000</u>		
809 Lawn Maintenance Services	227	800	800	0	0	<u>800</u>		
810 Janitorial Services	3,325	600	600	0	0	<u>600</u>		
Fund: 210 - AMBULANCE FUND								
Expenditures								
Dept: 651 Ambulance								
811 Waste Removal Services	96	125	125	81	0	<u>125</u>		
812 Septic Services	0	0	0	0	0	<u>2,000</u>		
813 Billing Services	0	0	0	0	0	<u>0</u>		
823 State Unemployment	0	0	0	0	0	<u>0</u>		
830 Pension Plan	0	0	0	0	0	<u>0</u>		
840 Dues and Memberships	0	0	0	0	0	<u>0</u>		
845 Snowplowing Services	708	1,500	1,500	100	0	<u>1,500</u>		
855 Community Education	0	0	0	0	0	<u>0</u>		
860 Mileage Reimbursement	0	0	0	0	0	<u>0</u>		
865 Meal/Lodging Expense	0	0	0	0	0	<u>0</u>		
880 Education & Training	0	0	0	0	0	<u>0</u>		
901 Publishing	0	0	0	0	0	<u>0</u>		
902 Printing	0	0	0	0	0	<u>0</u>		
920 Natural Gas	720	1,000	1,000	351	0	<u>1,000</u>		
922 Electricity	3,425	4,000	4,000	2,398	0	<u>4,000</u>		
924 Telephone	0	0	0	0	0	<u>0</u>		
925 Cellular Phone	0	0	0	0	0	<u>0</u>		
927 Pager	0	0	0	0	0	<u>0</u>		
928 Water	383	500	500	349	0	<u>500</u>		
930 Facility Repairs/Maintenance	9,071	10,750	10,750	0	0	<u>7,000</u>		
942 Building Rental	0	0	0	0	0	<u>0</u>		
956 Miscellaneous Expense	0	0	0	0	0	<u>0</u>		

964 Refunds	0	0	0	0	0	0		
970 Capital Expenditure	3,901	51,000	63,500	61,303	0	0		
Ambulance	316,856	365,275	377,775	359,582	0	312,525	0	0
Dept: 862 Soc Sec/Medicare (Employer)								
715 Social Security (Employer)	0	0	0	0	0	0		
716 Medicare (Employer)	0	0	0	0	0	0		
Soc Sec/Medicare (Employer)	0	0	0	0	0	0	0	0
Dept: 890 Contingency								
890 Contingency	0	2,500	2,500	0	0	5,000		
Contingency	0	2,500	2,500	0	0	5,000	0	0
Total Expenditures	316,856	367,775	380,275	359,582	0	317,525	0	0

Change in Fund Balance

43,739

Fund Balance As of 12.31.2021

179,428

BUDGET WORKSHEET
 Rev thru 12/31 - Exp thru 1/19

Whitewater Township

Month: 1/31/2021	Prior Year Actual	Current Year		Actual Thru January	Estimated Total	(6) Requested	(7) Recommended	(8) Adopted
		Original Budget	Amended Budget					
Fund: 401 - PUBLIC IMPROVEMENT FUND								
Revenues								
Dept: 000								
566 State Grants	0	0	0	0	0	0		
590 Grants-Private Sources	0	0	0	0	0	0		
665 Interest Earned	59	27	27	78	0	0		
671 Other Revenues	0	0	0	0	0	0		
695 Proceeds from Loan	0	0	0	0	0	0		
699 Transfers From Other Funds	50,000	50,000	50,000	0	0	0		
Dept: 000	50,059	50,027	50,027	78	0	0	0	0
Total Revenues	50,059	50,027	50,027	78	0	0	0	0
Expenditures								
Dept: 000								
804 Professional Services	0	10,000	10,000	0	0	10,000		
816 Co Road Comm Services	0	0	0	0	0	0		
970 Capital Expenditure	0	0	0	0	0	0		
Dept: 000	0	10,000	10,000	0	0	10,000	0	0
Dept: 966 Transfers Out								
999 Transfers To Other Funds	0	0	0	0	0	0		
Transfers Out	0	0	0	0	0	0	0	0
Total Expenditures	0	10,000	10,000	0	0	10,000	0	0

Change in Fund Balance

(10,000)

Fund Balance as of 12.31.2021

50,364

Debt Service/Fire Capital Imp	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Expenditures	<u>197,928</u>	<u>233,000</u>	<u>245,500</u>	<u>241,601</u>	<u>0</u>	<u>45,000</u>	<u>0</u>	<u>0</u>

Change in Fund Balance

200

Fund Balance as of 12.31.2021

17,592

Expenditures

Dept: 309 MARIHUANA FUND

702 Salaries	0	0	0	0	0	<u> </u>	<u> </u>	<u> </u>
703 Wages	0	0	0	0	0	<u> </u>	<u> </u>	<u> </u>
715 Social Security (Employer)	0	0	0	0	0	<u> </u>	<u> </u>	<u> </u>
716 Medicare (Employer)	0	0	0	0	0	<u> </u>	<u> </u>	<u> </u>
727 Office Supplies & Expense	0	0	0	0	0	<u> </u>	<u> </u>	<u> </u>
728 Postage	0	0	0	0	0	<u> </u>	<u> </u>	<u> </u>
801 Legal Services	0	0	0	0	0	<u> </u>	<u> </u>	<u> </u>
802 Audit & Accounting Services	0	0	0	0	0	<u> </u>	<u> </u>	<u> </u>
804 Professional Services	0	0	0	0	0	<u> </u>	<u> </u>	<u> </u>
807 Assessing Services	0	0	0	0	0	<u> </u>	<u> </u>	<u> </u>
809 Lawn Maintenance Services	0	0	0	0	0	<u> </u>	<u> </u>	<u> </u>
810 Janitorial Services	0	0	0	0	0	<u> </u>	<u> </u>	<u> </u>
811 Waste Removal Services	0	0	0	0	0	<u> </u>	<u> </u>	<u> </u>
817 Clean Up Day Services	0	0	0	0	0	<u> </u>	<u> </u>	<u> </u>
830 Pension Plan	0	0	0	0	0	<u> </u>	<u> </u>	<u> </u>
840 Dues and Memberships	0	0	0	0	0	<u> </u>	<u> </u>	<u> </u>
845 Snowplowing Services	0	0	0	0	0	<u> </u>	<u> </u>	<u> </u>
847 Software Support	0	0	0	0	0	<u> </u>	<u> </u>	<u> </u>
851 Internet/Website	0	0	0	0	0	<u> </u>	<u> </u>	<u> </u>
852 Promotional Expenses	0	0	0	0	0	<u> </u>	<u> </u>	<u> </u>
853 Finance Charges	0	0	0	0	0	<u> </u>	<u> </u>	<u> </u>
854 Late Fees	0	0	0	0	0	<u> </u>	<u> </u>	<u> </u>
860 Mileage Reimbursement	0	0	0	0	0	<u> </u>	<u> </u>	<u> </u>
865 Meal/Lodging Expense	0	0	0	0	0	<u> </u>	<u> </u>	<u> </u>
880 Education & Training	0	0	0	0	0	<u> </u>	<u> </u>	<u> </u>
901 Publishing	0	0	0	0	0	<u> </u>	<u> </u>	<u> </u>
902 Printing	0	0	0	0	0	<u> </u>	<u> </u>	<u> </u>
903 Township Newsletter Expense	0	0	0	0	0	<u> </u>	<u> </u>	<u> </u>
922 Electricity	0	0	0	0	0	<u> </u>	<u> </u>	<u> </u>
923 Electric Heat	0	0	0	0	0	<u> </u>	<u> </u>	<u> </u>
924 Telephone	0	0	0	0	0	<u> </u>	<u> </u>	<u> </u>
930 Facility Repairs/Maintenance	0	0	0	0	0	<u> </u>	<u> </u>	<u> </u>

