

VILLAGE OF BINGHAM FARMS ROAD IMPROVEMENTS PROGRAM PRELIMINARY OPINION OF TOTAL PROJECT COSTS

November 2023 13511

CURRENT ENR (Nov. 2023):

				Estimated Total Project Cost Range ²						
Estimate Number	Road	Approximate Road Length (ft)	Road Material		norter Term / Preventive Maintenance	R	Selective Tehabilitation		Longer Term Rehabilitation	
1	Bingham Lane	3,730	Asphalt	\$	569,400	\$	569,400	\$	1,923,500	
2	Bingham Road	5,280	Asphalt	\$	1,694,800	\$	1,694,800	\$	3,484,900	
3	Bristol Lane	4,100	Asphalt		N/A**	\$	2,640,600	\$	2,640,600	
4	Bristol Ct.	1,535	Asphalt		N/A**	\$	889,800	\$	889,800	
5	Britner Ct.	665	Asphalt		N/A**	\$	424,800	\$	424,800	
6	Brooks Lane	660	Asphalt	\$	113,100	\$	113,100	\$	328,900	
7	Coachlight Lane	705	Concrete	\$	163,600	\$	163,600	\$	299,900	
8	Fromm Court	1,360	Asphalt	\$	252,300	\$	252,300	\$	632,900	
9	Hickory Hollow	880	Asphalt	\$	224,800	\$	224,800	\$	490,500	
10	Old Orchard Trail	2,535	Asphalt	\$	384,900	\$	384,900	\$	1,161,300	
11	Old Stage Road	845	Concrete	\$	218,100	\$	218,100	\$	346,600	
12	Sager Ct.	695	Asphalt		N/A**	\$	418,600	\$	418,600	
13	Shagwood Drive	1,780	Asphalt	\$	404,300	\$	404,300	\$	868,600	
14	Timber Trail - Road	2,215	Asphalt	\$	596,900	\$	596,900	\$	919,500	
14b	Timber Trail - Path *	2,215	Asphalt	\$	325,400.00				N/A	
	Total:	26,985	N/A			\$	8,996,000.00	\$	14,830,400.00	

* Road Length and Costs for Timber Trail Path alternative, not included in the **Totals** at the bottom of the table.

	** Short Term/Preventative Maintenance not recommended due to existing soils and road condition.									
Estimate Number	Road	Approximate Road Length (ft)	Road Material	Shorter Term / Preventive Maintenance	Longer Term Rehabilitation					
1	Bingham Lane	3,730	Asphalt	Crack sealing, surface seal, ditch cleanout	HMA Rehab 5", underdrain, drainage improvements					
2	Bingham Road	5,280	Asphalt	HMA resurfacing 2", ditch cleanout crack treatment, FD repairs	HMA Rehab 6", underdrain, drainage improvements, curb					
3	Bristol Lane *	4,100	Asphalt	Not Recommended	HMA Rehab 5", underdrain, drainage improvements					
4	Bristol Ct.	1,535	Asphalt	Not Recommended	HMA Rehab 5", underdrain, drainage improvements					
5	Britner Ct.	665	Asphalt	Not Recommended	HMA Rehab 5", underdrain, drainage improvements					
6	Brooks Lane	660	Asphalt	Crack sealing, slurry seal, ditch cleanout	HMA Rehab 4", underdrain, drainage improvements					
7	Coachlight Lane	705	Concrete	Full Depth Concrete Repairs (smaller scope)	Full Depth Concrete Repairs (expanded scope)					
8	Fromm Court	1,360	Asphalt	Crack sealing, cape seal, drainage improvements	HMA Rehab 4", underdrain, drainage improvements					
9	Hickory Hollow	880	Asphalt	HMA resurfacing 2", ditch cleanout crack treatment	HMA Rehab 5", underdrain, drainage improvements					
10	Old Orchard Trail	2,535	Asphalt	Crack sealing, slurry seal, ditch cleanout	HMA Rehab 4", underdrain, drainage improvements					
11	Old Stage Road	845	Concrete	Full Depth Concrete Repairs (smaller scope)	Full Depth Concrete Repairs (expanded scope)					
12	Sager Ct.	695	Asphalt	Not Recommended	HMA Rehab 5", underdrain, drainage improvements					
13	Shagwood Drive	1,780	Asphalt	HMA resurfacing 2", ditch cleanout crack treatment	HMA Rehab 5", underdrain, drainage improvements					
14	Timber Trail - Road	2,215	Asphalt	HMA Crush & Shape + 3" resurfacing, drainage	HMA Rehab 4", underdrain, drainage improvements					
14b	Timber Trail - Path **	2,215	Asphalt	alt HMA Crush & Shape + 2", Ditch Cleanout						
Total: 26,985										



PROJECT:	VILLAGE OF BINGHAM FARMS ROAD IMPROVEMENTS PROGRAM	DATE:	November 17, 2023
LOCATION:	BINGHAM LANE	PROJECT #:	20220208
WORK:	CRACK SEALING, SURFACE SEAL, DITCH CLEANOUT	ESTIMATOR:	WJW
	DITCH CLEANOUT (ASSUME 20%)	CHECKED BY:	BWS
		CURRENT ENR (Nov. 2023):	13511

ltem	Qty	Unit		Re	v Unit Price		Rev Total
1	Mobilization	1 LS	@	\$	17,000.00	=	\$ 17,000.00
2	Color Audio-Video Route Survey	1 LS	@	φ \$	3,000.00	=	\$ 3,000.00
3	Crack Sealing, HMA Pavement	0.706 Mile	@	\$	25,000.00	_	\$ 17,650.00
5	HMA Surface, Rem	862 SYD	@	\$	10.00	=	\$ 8,620.00
6	HMA Surface, Rem, Driveway Approach	145 SYD	@	\$	10.00	=	\$ 1,450.00
7	Conc Pavt, Rem, Driveway Approach	20 SYD	@	\$	30.00	=	\$ 600.00
8	Stone, Rem, Driveway Approach	20 SYD	@	\$	50.00	=	\$ 1,000.00
9	Brick Paver, Rem, Driveway	20 SYD	@	\$	70.00	=	\$ 1,400.00
10	Butt Joint	765 LFT	@	\$	10.00	=	\$ 7,650.00
11	Station Grading	- STA	@	\$	3,000.00	=	\$ -
12	Subgrade Undercutting, Type II, Special (As Needed)	287 CYD	@	\$	40.00	=	\$ 11,490.00
13	Large Aperture Geogrid (As Needed)	862 SYD	@	\$	10.00	=	\$ 8,620.00
14	Aggregate Base, 21AA, Special (As Needed)	181 TON	@	\$	40.00	=	\$ 7.240.00
15	1" x 3" Crushed Concrete, Special (As Needed)	259 TON	@	\$	25.00	=	\$ 6,470.00
16	Ditch Cleanout/Reestablishment (As Needed)	7.5 STA	@	\$	1,000.00	=	\$ 7,500.00
17	Underdrain, Subgrade, Open-Graded, 6-inch, Special	- LFT	@	\$	25.00	=	\$ -
18	Underdrain, Cleanout	- EA	@	\$	4,000.00	=	\$ -
19	Aggregate Base, 21AA, Special	- TON	@	\$	40.00	=	\$ -
20	Slurry Seal	8,620 SYD	@	\$	5.00		\$ 43,100.00
21	HMA, 5EML	71 TON	@	\$	195.00	=	\$ 13,870.00
22	HMA, 4EML	119 TON	@	\$	180.00	=	\$ 21,330.00
23	HMA, 5EML, RCOC Approach	10 TON	@	\$	195.00	=	\$ 1,930.00
24	HMA, 4EML, RCOC Approach	35 TON	@	\$	180.00	=	\$ 6,240.00
25	HMA, 5EML, Driveway Approach	17 TON	@	\$	195.00	=	\$ 3,300.00
26	HMA, 4EML, Driveway Approach	28 TON	@	\$	180.00	=	\$ 5,070.00
27	Structure, Adjust	16 EA	0	\$	1,000.00	=	\$ 16,000.00
28	Structure, Reconstruct	8 EA	@	\$	2,500.00	=	\$ 20,000.00
29	Maintenance Gravel/Millings (As Needed)	125 TON	@	\$	30.00	=	\$ 3,750.00
30	Miscellaneous Drainage Improvements	1 LS	@	\$	75,000.00	=	\$ 75,000.00
31	Site Restoration	4,636 SYD	@	\$	7.00	=	\$ 32,450.00
32	Soil Erosion and Sedimentation Control	1 LS	@	\$	6,000.00	=	\$ 6,000.00
33	Street Sign, Artistic, Special	2 EA	@	\$	600.00	=	\$ 1,200.00
34	Maintaining Traffic	1 LS	@	\$	15,500.00	=	\$ 15,500.00
	SUBTOTAL						\$ 364,400.00
	Construction Contingency (25%)						\$ 91,100.00
	TOTAL CONSTRUCTION						\$ 455,500.00
	Engineering, Survey, Geotechnical, Permitting (25%)						\$ 113,900.00
	TOTAL PROJECT						\$ 569,400.00



555 Hulet Drive Bloomfield Hills, MI 48302 P: (248) 454-6300 - F: (248) 454-6312

PROJECT:	VILLAGE OF BINGHAM FARMS ROAD IMPROVEMENTS PROGRAM	DATE:	November 17, 2023
LOCATION:	BINGHAM LANE	PROJECT #:	20220208
WORK:	HMA REHAB 5", UNDERDRAIN, DRAINAGE IMPROVEMENTS	ESTIMATOR:	WJW
	UNDERDRAIN (100% OF THE ROAD)	CHECKED BY:	BWS
	DITCH CLEANOUT (ASSUME 20%)	CURRENT ENR (Nov. 2023):	13511

Item	Qty	Unit		Re	ev Unit Price			Rev Total
		1.10		¢	112 000 00	_	¢	112 000 00
1 2	Mobilization	1 LS 1 LS	@	\$ \$	112,000.00 3,000.00	=	\$ \$	112,000.00 3,000.00
2	Color Audio-Video Route Survey	8,620 SYD	@	φ \$	3,000.00 6.00	=	φ \$	51,720.00
3 4	Cold Milling HMA, 4"	580 SYD	@	ֆ \$	10.00	=	φ \$	5,800.00
4 5	HMA Surface, Rem, Driveway Approach	80 SYD	@	э \$	30.00	=	φ \$	2,400.00
5 6	Conc Pavt, Rem, Driveway Approach	60 SYD	@	э \$	50.00 50.00	=	э \$	2,400.00
7	Stone, Rem, Driveway Approach	40 SYD	@	φ \$	70.00	=	φ \$	2,800.00
8	Brick Paver, Rem, Driveway	40 31D 765 LFT	@	φ \$	10.00	=	φ \$	7,650.00
9	Butt Joint	37.5 STA	@	э \$	3,000.00	=	φ \$	
	Station Grading		@					112,500.00
10	Subgrade Undercutting, Type II, Special (As Needed)	287 CYD	@	\$	40.00	=	\$	11,490.00
11	Large Aperture Geogrid (As Needed)	862 SYD	@	\$	10.00		\$	8,620.00
12	Aggregate Base, 21AA, Special (As Needed)	181 TON	@	\$	40.00	=	\$	7,240.00
13	1" x 3" Crushed Concrete, Special (As Needed)	259 TON	@	\$	25.00	=	\$	6,470.00
14	Ditch Cleanout/Reestablishment (As Needed)	7.5 STA	@	\$	1,000.00	=	\$	7,500.00
15	Underdrain, Subgrade, Open-Graded, 6-inch, Special	7,510 LFT	@	\$	25.00	=	\$	187,750.00
16	Underdrain, Cleanout	20 EA	@	\$	4,000.00	=	\$	80,000.00
17	Aggregate Base, 21AA, Special	492 TON	@	\$	30.00	=	\$	14,770.00
18	HMA, 5EML	938 TON	@	\$	175.00	=	\$	164,200.00
19	HMA, 4EML	1,407 TON	@	\$	160.00	=	\$	225,190.00
20	HMA, 5EML, RCOC Approach	10 TON	@	\$	195.00	=	\$	1,930.00
21	HMA, 4EML, RCOC Approach	35 TON	@	\$	180.00	=	\$	6,240.00
22	HMA, 5EML, Driveway Approach	84 TON	@	\$	195.00	=	\$	16,300.00
23	HMA, 4EML, Driveway Approach	125 TON	@	\$	180.00	=	\$	22,570.00
24	Structure, Adjust	16 EA	@	\$	1,000.00	=	\$	16,000.00
25	Structure, Reconstruct	8 EA	@	\$	2,500.00	=	\$	20,000.00
26	Maintenance Gravel/Millings (As Needed)	125 TON	@	\$	30.00	=	\$	3,750.00
27	Miscellaneous Drainage Improvements	1 LS	@	\$	75,000.00	=	\$	75,000.00
28	Site Restoration	4,636 SYD	@	\$	7.00	=	\$	32,450.00
29	Soil Erosion and Sedimentation Control	1 LS	@	\$	6,000.00	=	\$	6,000.00
30	Street Sign, Artistic, Special	2 EA	@	\$	600.00	=	\$	1,200.00
31	Maintaining Traffic	1 LS	@	\$	15,500.00	=	\$	15,500.00
	SUBTOTAL						\$	1,231,000.00
	Construction Contingency (25%)						\$	307,800.00
	TOTAL CONSTRUCTION						\$	1,538,800.00
	Engineering, Survey, Geotechnical, Permitting (25%)						\$	384,700.00

TOTAL PROJECT

\$ 1,923,500.00



PROJECT:	VILLAGE OF BINGHAM FARMS ROAD IMPROVEMENTS PROGRAM	DATE:	November 17, 2023
LOCATION:	BINGHAM ROAD	PROJECT #:	20220208
WORK:	HMA RESURFACING 2", DITCH CLEANOUT CRACK TREATMENT, FD REPAIRS	ESTIMATOR:	WJW
	DITCH CLEANOUT (ASSUME 30%)	CHECKED BY:	BWS
	LEAVE HMA CURB IN PLACE, GUARDRAIL IMPROVEMENTS	CURRENT ENR (Nov. 2023):	13511

n	Qty	Unit	ł		Re	v Unit Price			Rev Total
1	Mobilization	1	LS	@	\$	51,000.00	=	\$	51,000.00
2	Color Audio-Video Route Survey		LS	@	գ \$	4,000.00	=	φ \$	4,000.00
3	Cold Mill HMA, 2"	13,200		@	\$	4.00	_	\$	52,800.00
4	Crack Repair, Det 7	500		@	\$	25.00		\$	12,500.00
5	HMA Surface, Rem	1,980		@	\$	10.00	=	\$	19,800.00
6	HMA Surface, Rem, Driveway Approach	,	SYD	@	\$	10.00	=	\$	7,000.00
7	HMA Curb, Rem		LFT	@	\$	5.00	=	\$	2,250.00
8	Butt Joint		LFT	@	\$	10.00	=	\$	9,650.00
9	Station Grading	-	STA	@	\$	3,000.00	=	\$	-
10	Subgrade Undercutting, Type II, Special (As Needed)		CYD	@	\$	40.00	=	\$	26,370.00
11	Large Aperture Geogrid (As Needed)	1,980		@	\$	10.00	=	\$	19,800.00
12	Aggregate Base, 21AA, Special (As Needed)	,	TON	@	\$	40.00	=	\$	16,630.00
13	1" x 3" Crushed Concrete, Special (As Needed)		TON	@	\$	25.00	=	\$	14,850.00
14	Ditch Cleanout/Reestablishment (As Needed)		STA	@	\$	1,000.00	=	\$	32,500.00
15	Underdrain, Subgrade, Open-Graded, 6-inch, Special	-	LFT	@	\$	25.00	=	\$	-
16	Underdrain, Cleanout	-	EA	@	\$	4,000.00	=	\$	-
17	Aggregate Base, 21AA, Special		TON	@	\$	40.00	=	\$	8,320.00
18	HMA, 5EML	1,537		@	\$	180.00	=	\$	276,650.00
19	HMA, 4EML	,	TON	@	\$	180.00	=	\$	48,420.00
20	HMA, 5EML, RCOC Approach		TON	@	\$	195.00	=	\$	10,680.00
21	HMA, 4EML, RCOC Approach		TON	@	\$	180.00	=	\$	34,510.00
22	HMA, 5EML, Driveway Approach	64	TON	@	\$	195.00	=	\$	12,390.00
23	HMA, 4EML, Driveway Approach	106	TON	@	\$	180.00	=	\$	19,060.00
24	Curb and Gutter, Conc, Det F4	450	LFT	@	\$	40.00	=	\$	18,000.00
25	Structure, Adjust	22	EA	0	\$	1,000.00	=	\$	22,000.00
26	Structure, Reconstruct	11	EA	0	\$	2,500.00	=	\$	27,500.00
27	Maintenance Gravel/Millings (As Needed)	250	TON	@	\$	30.00	=	\$	7,500.00
28	Bridge/Culvert Repair	1	LS	0	\$	75,000.00	=	\$	75,000.00
29	Miscellaneous Guardrail Improvements	1	LS	@	\$	48,000.00	=	\$	48,000.00
30	Miscellaneous Drainage Improvements	1	LS	@	\$	120,000.00	=	\$	120,000.00
31	Site Restoration	1	LS	@	\$	45,000.00	=	\$	45,000.00
32	Soil Erosion and Sedimentation Control	1	LS	@	\$	11,000.00	=	\$	11,000.00
33	Street Sign, Artistic, Special	5	EA	@	\$	600.00	=	\$	3,000.00
34	Maintaining Traffic	1	LS	@	\$	22,500.00	=	\$	22,500.00
	SUBTOTAL - ROAD REHABILITATION							\$	1,078,700.00
35	Sharrow Symbol	10	EA	@	\$	200.00	=	\$	2,000.00
36	Share The Road & Bike Sign		SFT	@	\$	20.00	=	\$	2,250.00
37	Sign Post, 3 lb.	160	LFT	@	\$	10.00	=	\$	1,600.00
	SUBTOTAL - SHARED ROAD ALTERNATIVE							\$	5,900.00
	Construction Contingency (25%)							\$	271,200.00
	TOTAL CONSTRUCTION							\$	1,355,800.00
	Engineering, Survey, Geotechnical, Permitting (25%)							\$	339,000.00
	TOTAL PROJECT							\$	1,694,800.00



555 Hulet Drive Bloomfield Hills, MI 48302

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PROJECT:	VILLAGE OF BINGHAM FARMS ROAD IMPROVEMENTS PROGRAM	DATE:	November 17, 2023
LOCATION:	BINGHAM ROAD	PROJECT #:	20220208
WORK:	HMA REHAB 6", UNDERDRAIN, DRAINAGE IMPROVEMENTS, CURB	ESTIMATOR:	WJW
	UNDERDRAIN (50% OF THE ROAD) AND DITCH CLEANOUT (ASSUME 30%)	CHECKED BY:	BWS
	BIT CURB REMOVAL AND REPLACEMENT W/ CONCRETE CURB, GUARDRAIL IMPROVEMENTS	CURRENT ENR (Nov. 2023):	13511

ltem	Qty	Uni	t		Re	ev Unit Price		Rev Total
1	Mobilization	1	LS	@	\$	106,000.00	=	\$ 106,000.00
2	Color Audio-Video Route Survey		LS	@	\$	4,000.00	=	\$ 4,000.00
3	HMA Surface, Rem	13,200		@	\$	6.00	=	\$ 79,200.00
4	HMA Surface, Rem, Driveway Approach		SYD	@	\$	10.00	=	\$ 7,000.00
5	HMA Curb, Rem	1,800		@	\$	5.00	=	\$ 9,000.00
6	Butt Joint		LFT	@	\$	10.00	=	\$ 9,650.00
7	Station Grading		STA	@	\$	3,000.00	=	\$ 162,000.00
8	Subgrade Undercutting, Type II, Special (As Needed)		CYD	@	\$	40.00	=	\$ 26,370.00
9	Large Aperture Geogrid (As Needed)	1,980		@	\$	10.00	=	\$ 19.800.00
10	Aggregate Base, 21AA, Special (As Needed)		TON	@	\$	40.00	=	\$ 16,630.00
11	1" x 3" Crushed Concrete, Special (As Needed)		TON	@	\$	25.00	=	\$ 14,850.00
12	Ditch Cleanout/Reestablishment (As Needed)		5 STA	@	\$	1,000.00	=	\$ 32,500.0
13	Underdrain, Subgrade, Open-Graded, 6-inch, Special	10,800		@	\$	25.00	=	\$ 270,000.00
10	Underdrain, Subgrade, Open-Graded, Grinch, Special		EA	@	\$	4,000.00	=	\$ 112,000.0
15	Aggregate Base, 21AA, Special	1,386		@	\$	40.00	=	\$ 55,440.0
16	HMA, 5EML	1,537		@	\$	175.00	=	\$ 268,960.00
17	HMA, 4EML	3,074		@	\$	160.00	=	\$ 491,820.00
18	HMA, 5EML, RCOC Approach		TON	@	\$	195.00	=	\$ 10.680.00
10	HMA, 4EML, RCOC Approach		TON	@	\$	180.00	=	\$ 34,510.0
20	HMA, 5EML, Neveray Approach		TON	@	\$	195.00	=	\$ 12,390.0
21	HMA, 4EML, Driveway Approach		TON	@	\$	180.00	=	\$ 19,060.0
22	Curb and Gutter, Conc, Det F4	2,400		@	\$	35.00	=	\$ 84,000.0
23	Structure, Adjust		EA	@	\$	1,000.00	=	\$ 22,000.0
24	Structure, Reconstruct		EA	@	\$	2,500.00	=	\$ 27,500.0
25	Maintenance Gravel/Millings (As Needed)		TON	@	\$	30.00	=	\$ 7,500.0
26	Bridge/Culvert Repair		LS	@	\$	75,000.00	=	\$ 75,000.0
27	Miscellaneous Guardrail Improvements		LS	@	\$	48,000.00	=	\$ 48,000.0
28	Miscellaneous Drainage Improvements		LS	@	\$	120,000.00	=	\$ 120,000.0
29	Site Restoration		LS	@	\$	45,000.00	=	\$ 45,000.0
30	Soil Erosion and Sedimentation Control		LS	@	\$	11,000.00	=	\$ 11,000.0
31	Street Sign, Artistic, Special		EA	@	\$	600.00	=	\$ -
32	Maintaining Traffic	1	LS	@	\$	22,500.00	=	\$ 22,500.0
	SUBTOTAL - ROAD REHABILITATION							\$ 2,224,400.0
33	Sharrow Symbol	10	EA	@	\$	200.00	=	\$ 2,000.0
34	Share The Road & Bike Sign	113	SFT	@	\$	20.00	=	\$ 2,250.0
35	Sign Post, 3 lb.	160	LFT	@	\$	10.00	=	\$ 1,600.0
	SUBTOTAL - SHARED ROAD ALTERNATIVE							\$ 5,900.0
	Construction Contingency (25%)							\$ 557,600.0
	TOTAL CONSTRUCTION							\$ 2,787,900.0
	Engineering, Survey, Geotechnical, Permitting (25%)							\$ 697,000.0
	TOTAL PROJECT							\$ 3,484,900.00



PROJECT:	VILLAGE OF BINGHAM FARMS ROAD IMPROVEMENTS PROGRAM	DATE:	November 17, 2023
LOCATION:	BRISTOL LANE	PROJECT #:	20190463
WORK:	HMA REHAB 5", UNDERDRAIN, DRAINAGE IMPROVEMENTS	ESTIMATOR:	WJW
	UNDERDRAIN (ASSUME 50% OF THE ROAD) AND DITCH CLEANOUT (ASSUME 30%)	CHECKED BY:	BWS
	BIT CURB REMOVAL AND REPLACEMENT W/ CONCRETE CURB, GUARDRAIL IMPROVEMENTS	CURRENT ENR (Nov. 2023):	13511

ltem	Qty	Unit		Re	ev Unit Price		Rev Total		
		4.10		¢	80.000.00		¢	80.000.00	
1 2	Mobilization	1 LS 1 LS	@	\$ \$	80,000.00 5,500.00	=	\$ \$	80,000.00 5,500.00	
2	Color Audio-Video Route Survey	10,200 SYD	@	ъ \$	5,500.00 6.00	=	э \$	5,500.00 61,200.00	
5 5	HMA Surface, Rem	700 SYD	@	ъ \$	10.00	=			
5 6	HMA Surface, Rem, Driveway Approach	1,275 LFT	@	ъ \$	10.00	=	\$ \$	7,000.00 12,750.00	
7	Butt Joint Station Crading	41 STA	@ @	φ \$	3,000.00	=	գ Տ	123,000.00	
8	Station Grading	510 CYD		φ \$	40.00	=	Ψ \$		
o 9	Subgrade Undercutting, Type II, Special (As Needed)	1,530 SYD	@	ъ \$	40.00	=	Դ Տ	20,400.00 15,300.00	
9 10	Large Aperture Geogrid (As Needed)	321 TON	@	ъ \$	40.00	=	э \$,	
10	Aggregate Base, 21AA, Special (As Needed)	459 TON	@	ъ \$	40.00 25.00	=	э \$	12,850.00 11,480.00	
12	1" x 3" Crushed Concrete, Special (As Needed)	459 TON 20 STA	@	ъ \$	1,000.00	=	э \$	20,000.00	
12	Ditch Cleanout/Reestablishment (As Needed)	12,500 LFT	@	ъ \$	25.00	=	э \$		
13 14	Underdrain, Subgrade, Open-Graded, 6-inch, Special	12,500 LFT 26 EA	@	ъ \$	4,000.00	=	э \$	312,500.00	
14	Underdrain, Cleanout	1.071 TON	@ @	ъ \$	4,000.00	=	э \$	104,000.00 42,840.00	
15	Aggregate Base, 21AA, Special	1,221 TON		φ \$	40.00 175.00	=	գ Տ	213,760.00	
18	HMA, 5EML	12 TON	@ @	φ \$	195.00	=	φ \$	2,250.00	
10	HMA, 5EML, RCOC Approach	12 TON 64 TON	@	φ \$	195.00	=	φ \$	2,250.00	
20	HMA, 5EML, Driveway Approach	1,832 TON	@	φ \$	195.00	=	գ Տ	293,160.00	
20	HMA, 4EML HMA, 4EML, RCOC Approach	40 TON	@	φ \$	180.00	=	φ \$	7,280.00	
22	HMA, 4EML, RCOC Approach HMA, 4EML, Driveway Approach	106 TON	@	φ \$	180.00	=	\$	19,060.00	
23	Structure, Adjust	14 EA	@	φ \$	1,000.00	=	φ \$	14,000.00	
24	Structure, Reconstruct	7 EA	@	φ \$	2,500.00	=	φ \$	17,500.00	
26	Maintenance Gravel/Millings (As Needed)	250 TON	@	\$	2,300.00	=	Ψ \$	7,500.00	
20	Miscellaneous Drainage Improvements	1 LS	@	\$	175,000.00	=	\$	175,000.00	
28	Site Restoration	1 LS	@	\$	60,000.00	=	\$	60,000.00	
29	Soil Erosion and Sedimentation Control	1 LS	@	\$	6,000.00	=	\$	6,000.00	
30	Street Sign, Artistic, Special	1 EA	@	\$	600.00	=	\$	600.00	
31	Maintaining Traffic	1 LS	@	\$	28,000.00	=	\$	28,000.00	
01			W	Ψ	20,000.00	_	Ψ	20,000.00	
	SUBTOTAL - ROAD REHABILITATION						\$	1,685,300.00	
32	Sharrow Symbol	8 EA	@	\$	200.00	=	\$	1,600.00	
33	Share The Road & Bike Sign	90 SFT	@	\$	20.00	=	\$	1,800.00	
34	Sign Post, 3 lb.	128 LFT	@	\$	10.00	=	\$	1,280.00	
	SUBTOTAL - SHARED ROAD ALTERNATIVE						\$	4,700.00	
	Construction Contingency (25%)						\$	422,500.00	
	TOTAL CONSTRUCTION						\$	2,112,500.00	
	Engineering, Survey, Geotechnical, Permitting (25%)						\$	528,100.00	
	TOTAL PROJECT						\$	2,640,600.00	



PROJECT:	VILLAGE OF BINGHAM FARMS ROAD IMPROVEMENTS PROGRAM	DATE:	November 17, 2023
LOCATION:	BRISTOL CT	PROJECT #:	20220208
WORK:	HMA REHAB 5", UNDERDRAIN, DRAINAGE IMPROVEMENTS	ESTIMATOR:	WJW
	100% UNDERDRAIN	CHECKED BY:	BWS
	DITCH CLEANOUT (ASSUME 50%)	CURRENT ENR (Nov. 2023):	13511

ltem	Qty	Unit			Re	v Unit Price			Rev Total
				•	•	07 000 00		•	07 000 00
1	Mobilization		LS	@	\$	27,000.00	=	\$	27,000.00
2	Color Audio-Video Route Survey		LS	@	\$	2,000.00	=	\$	2,000.00
3	Cold Milling HMA, 4"	3,535		@	\$	6.00	=	\$	21,210.00
4	HMA Surface, Rem	707		@	\$	10.00	=	\$	7,070.00
5	HMA Surface, Rem, Driveway Approach	120		@	\$	10.00	=	\$	1,200.00
6	Conc Pavt, Rem, Driveway Approach		SYD	@	\$	30.00	=	\$	2,400.00
7	Butt Joint		LFT	@	\$	10.00	=	\$	-
8	Station Grading		STA	@	\$	3,000.00	=	\$	48,000.00
9	Subgrade Undercutting, Type II, Special (As Needed)		CYD	@	\$	40.00	=	\$	3,600.00
10	Large Aperture Geogrid (As Needed)	406		@	\$	10.00	=	\$	4,060.00
11	Aggregate Base, 21AA, Special (As Needed)		TON	@	\$	40.00	=	\$	3,920.00
12	1" x 3" Crushed Concrete, Special (As Needed)	140		@	\$	25.00	=	\$	3,500.00
13	Ditch Cleanout/Reestablishment (As Needed)		STA	@	\$	1,000.00	=	\$	17,000.00
14	Underdrain, Subgrade, Open-Graded, 6-inch, Special	3,450		@	\$	25.00	=	\$	86,250.00
15	Underdrain, Cleanout	14		@	\$	4,000.00	=	\$	56,000.00
16	Aggregate Base, 21AA, Special	371	TON	@	\$	40.00	=	\$	14,850.00
17	HMA, 5EML	389	TON	@	\$	175.00	=	\$	68,050.00
18	HMA, 4EML	583	TON	@	\$	160.00	=	\$	93,320.00
19	HMA, 5EML, Driveway Approach	17	TON	@	\$	195.00	=	\$	3,220.00
20	HMA, 4EML, Driveway Approach	28	TON	@	\$	180.00	=	\$	4,950.00
21	Structure, Adjust	2	EA	@	\$	1,000.00	=	\$	2,000.00
22	Structure, Reconstruct	3	EA	@	\$	2,500.00	=	\$	7,500.00
23	Maintenance Gravel/Millings (As Needed)	58	TON	@	\$	30.00	=	\$	1,740.00
24	Miscellaneous Drainage Improvements	1	LS	@	\$	50,000.00	=	\$	50,000.00
25	Site Restoration	1	LS	@	\$	20,000.00	=	\$	20,000.00
26	Soil Erosion and Sedimentation Control	1	LS	@	\$	5,000.00	=	\$	5,000.00
27	Street Sign, Artistic, Special	1	EA	@	\$	600.00	=	\$	600.00
28	Maintaining Traffic	1	LS	@	\$	15,000.00	=	\$	15,000.00
	SUBTOTAL							\$	569,400.00
	Construction Contingency (25%)							\$	142,400.00
	TOTAL CONSTRUCTION							\$	711,800.00
	Engineering, Survey, Geotechnical, Permitting (25%)							\$	178,000.00
	TOTAL PROJECT							\$	889,800.00



PROJECT:	VILLAGE OF BINGHAM FARMS ROAD IMPROVEMENTS PROGRAM	DATE:	November 17, 2023
LOCATION:	BRITNER CT.	PROJECT #:	20220208
WORK:	HMA REHAB 5", UNDERDRAIN, DRAINAGE IMPROVEMENTS	ESTIMATOR:	WJW
	100% UNDERDRAIN	CHECKED BY:	BWS
	DITCH CLEANOUT (ASSUME 75%)	CURRENT ENR (Nov. 2023):	13511

Item	Qty	Unit		Re	v Unit Price			Rev Total
		4.10	0	•	40.000.00		^	10 000 00
1	Mobilization	1 LS 1 LS	@	\$	13,000.00	=	\$	13,000.00
2 3	Color Audio-Video Route Survey	1,640 SYE	. @	\$	2,000.00 6.00	=	\$	2,000.00 9,840.00
	Cold Milling HMA, 4"	246 SYL	<u> </u>	\$	0.00 10.00	=	\$	
3	HMA Surface, Rem		•	\$		=	\$	2,460.00
4	HMA Surface, Rem, Driveway Approach	140 SYE 60 SYE		\$	10.00 30.00	=	\$	1,400.00
5	Conc Pavt, Rem, Driveway Approach	- LFT	0	\$			\$	1,800.00
6	Butt Joint		0	\$	10.00	=	\$	-
7	Station Grading	7 STA	0	\$	3,000.00	=	\$	21,000.00
8	Subgrade Undercutting, Type II, Special (As Needed)	27 CYE	0	\$	40.00	=	\$	1,090.00
9	Large Aperture Geogrid (As Needed)	164 SYE	<u> </u>	\$	10.00	=	\$	1,640.00
10	Aggregate Base, 21AA, Special (As Needed)	34 TON	0	\$	40.00	=	\$	1,380.00
11	1" x 3" Crushed Concrete, Special (As Needed)	49 TON	0	\$	25.00	=	\$	1,230.00
12	Ditch Cleanout/Reestablishment (As Needed)	7.65 STA	0	\$	1,000.00	=	\$	7,650.00
13	Underdrain, Subgrade, Open-Graded, 6-inch, Special	1,330 LFT		\$	25.00	=	\$	33,250.00
14	Underdrain, Cleanout	6 EA	@	\$	4,000.00	=	\$	24,000.00
15	Aggregate Base, 21AA, Special	172 TOM	0	\$	40.00	=	\$	6,890.00
16	HMA, 5EML	180 TON		\$	175.00	=	\$	31,570.00
17	HMA, 4EML	271 TOM	0	\$	160.00	=	\$	43,300.00
18	HMA, 5EML, Driveway Approach	17 TON	<u> </u>	\$	195.00	=	\$	3,220.00
19	HMA, 4EML, Driveway Approach	28 TON	0	\$	180.00	=	\$	4,950.00
20	Structure, Adjust	2 EA	@	\$	1,000.00	=	\$	2,000.00
21	Structure, Reconstruct	1 EA	@	\$	2,500.00	=	\$	2,500.00
22	Maintenance Gravel/Millings (As Needed)	50 TON	0	\$	30.00	=	\$	1,500.00
23	Miscellaneous Drainage Improvements	1 LS	@	\$	35,000.00	=	\$	35,000.00
24	Site Restoration	1 LS	@	\$	10,000.00	=	\$	10,000.00
25	Soil Erosion and Sedimentation Control	1 LS	@	\$	2,500.00	=	\$	2,500.00
26	Street Sign, Artistic, Special	1 EA	@	\$	600.00	=	\$	600.00
27	Maintaining Traffic	1 LS	@	\$	6,000.00	=	\$	6,000.00
	SUBTOTAL						\$	271,800.00
	Construction Contingency (25%)						\$	68,000.00
	TOTAL CONSTRUCTION						\$	339,800.00
	Engineering, Survey, Geotechnical, Permitting (25%)						\$	85,000.00
	TOTAL PROJECT						\$	424,800.00



PROJECT:	VILLAGE OF BINGHAM FARMS ROAD IMPROVEMENTS PROGRAM	DATE:	November 17, 2023
LOCATION:	BROOKS LANE	PROJECT #:	20220208
WORK:	CRACK SEALING, SLURRY SEAL, DITCH CLEANOUT	ESTIMATOR:	WJW
	LIMITED FULL DEPTH REPAIRS, DITCH & DRAINAGE IMPROVEMENTS	CHECKED BY:	BWS
		CURRENT ENR (Nov. 2023):	13511

ltem	Qty	Uni	t		Re	ev Unit Price		Rev Total
1	Mobilization	1	LS	@	\$	3,000.00	=	\$ 3,000.00
2	Color Audio-Video Route Survey		LS	@	\$	2,000.00	=	\$ 2,000.00
3	Crack Sealing, HMA Pavement	0.125		@	\$	25,000.00		\$ 3,130.00
4	HMA Surface, Rem		SYD	@	\$	10.00	=	\$ 260.00
5	HMA Surface, Rem, Driveway Approach	-	SYD	@	\$	20.00	=	\$ -
6	Conc Pavt, Rem, Driveway Approach	-	SYD	@	\$	20.00	=	\$ -
7	Stone, Rem, Driveway Approach	-	SYD	@	\$	20.00	=	\$ -
8	Butt Joint	-	LFT	@	\$	10.00	=	\$ -
9	Station Grading	-	STA	@	\$	3,000.00	=	\$ -
10	Subgrade Undercutting, Type II, Special (As Needed)	9	CYD	@	\$	40.00	=	\$ 350.00
11	Large Aperture Geogrid (As Needed)	26	SYD	@	\$	10.00	=	\$ 260.00
12	Aggregate Base, 21AA, Special (As Needed)	5	TON	@	\$	40.00	=	\$ 220.00
13	1" x 3" Crushed Concrete, Special (As Needed)	8	TON	@	\$	25.00	=	\$ 200.00
14	Ditch Cleanout/Reestablishment (As Needed)	1	STA	@	\$	1,000.00	=	\$ 1,000.00
15	Slurry Seal	1,045	SYD	@	\$	5.00		\$ 5,230.00
16	Underdrain, Subgrade, Open-Graded, 6-inch, Special	-	LFT	@	\$	25.00	=	\$ -
17	Underdrain, Cleanout	-	EA	0	\$	4,000.00	=	\$ -
18	Aggregate Base, 21AA, Special	3	TON	@	\$	40.00	=	\$ 110.00
19	HMA, 5EML	2.2	TON	@	\$	195.00	=	\$ 420.00
20	HMA, 4EML	3.6	TON	@	\$	180.00	=	\$ 650.00
21	HMA, 5EML, Driveway Approach	-	TON	@	\$	195.00	=	\$ -
22	HMA, 4EML, Driveway Approach	-	TON	@	\$	180.00	=	\$ -
23	Structure, Adjust	3	EA	@	\$	1,000.00	=	\$ 3,000.00
24	Structure, Reconstruct	1	EA	@	\$	2,500.00	=	\$ 2,500.00
25	Maintenance Gravel/Millings (As Needed)	25	TON	@	\$	30.00	=	\$ 750.00
26	Miscellaneous Drainage Improvements		LS	@	\$	25,000.00	=	\$ 25,000.00
27	Site Restoration	1,742		@	\$	7.00	=	\$ 12,200.00
28	Soil Erosion and Sedimentation Control		LS	@	\$	4,000.00	=	\$ 4,000.00
29	Street Sign, Artistic, Special		EA	@	\$	600.00	=	\$ 600.00
30	Maintaining Traffic	1	LS	@	\$	7,500.00	=	\$ 7,500.00
	SUBTOTAL							\$ 72,400.00
	Construction Contingency (25%)							\$ 18,100.00
	TOTAL CONSTRUCTION							\$ 90,500.00
	Engineering, Survey, Geotechnical, Permitting (25%)							\$ 22,600.00
	TOTAL PROJECT							\$ 113,100.00



555 Hulet Drive Bloomfield Hills, MI 48302 P: (248) 454-6300 - F: (248) 454-6312

PROJECT:	VILLAGE OF BINGHAM FARMS ROAD IMPROVEMENTS PROGRAM	DATE:	November 17, 2023
LOCATION:	BROOKS LANE	PROJECT #:	20220208
WORK:	HMA REHAB 4", UNDERDRAIN, DRAINAGE IMPROVEMENTS	ESTIMATOR:	WJW
	UNDERDRAIN (100% OF THE ROAD)	CHECKED BY:	BWS
	DITCH CLEANOUT (ASSUME 15%)	CURRENT ENR (Nov. 2023):	13511

Item	Qty	Unit		Re	ev Unit Price			Rev Total
1	Mah 21	1 L	<u> </u>	¢	10 000 00	=	¢	10 000 00
1 2	Mobilization	1 L	- 0	\$ \$	10,000.00 2,000.00	=	\$ \$	10,000.00 2,000.00
2	Color Audio-Video Route Survey	0.000 N	0	э \$	2,000.00	-		2,000.00
3 4	Crack Sealing, HMA Pavement	1,045 S		э \$	25,000.00		\$ \$	- 6,270.00
4 5	Cold Milling HMA, 3"	1,045 S		э \$	10.00	=	э \$	1,050.00
6	HMA Surface, Rem	220 S		գ \$	10.00	-	φ \$	2,200.00
7	HMA Surface, Rem, Driveway Approach	60 S		φ \$	30.00	=	φ \$	2,200.00
8	Conc Pavt, Rem, Driveway Approach Stone, Rem, Driveway Approach	40 S		φ \$	50.00	=	φ \$	2,000.00
9	Butt Joint	40 S 300 L	0	գ \$	10.00	-	φ \$	2,000.00
10		6.6 S		\$	3,000.00	=	φ \$	19,800.00
10	Station Grading Subgrade Undercutting, Type II, Special (As Needed)	35 C		\$	40.00	=	\$	1,390.00
12		105 S	. 0	գ \$	40.00	-	φ \$	1,050.00
12	Large Aperture Geogrid (As Needed) Aggregate Base, 21AA, Special (As Needed)	105 S	FON @	φ \$	40.00	-	φ \$	880.00
13	1" x 3" Crushed Concrete, Special (As Needed)	22 T 31 T		\$	40.00 25.00	=	φ \$	780.00
15	Ditch Cleanout/Reestablishment (As Needed)	1 S	STA @	\$	1,000.00	=	\$	1,000.00
16	Slurry Seal	0 8	0	\$	5.00	-	\$	1,000.00
10	Underdrain, Subgrade, Open-Graded, 6-inch, Special	1,070 L		\$	25.00	=	Ψ \$	26,750.00
18	Underdrain, Subgrade, Open-Graded, 6-inch, Special	1,070 E 5 E	-	\$	4,000.00	=	\$	20,000.00
19	Aggregate Base, 21AA, Special	11 T		\$	40.00	=	\$	440.00
20	HMA, 5EML	88 T	FON @	\$	175.00	=	\$	15,430.00
21	HMA, 4EML	147 T	0	\$	160.00	=	\$	23,510.00
22	HMA, 5EML, Driveway Approach	26 T	FON @	\$	195.00	=	\$	5,150.00
23	HMA, 4EML, Driveway Approach	44 T		\$	180.00	=	\$	7,920.00
24	Structure, Adjust	3 E		\$	1,000.00	=	\$	3,000.00
25	Structure, Reconstruct	2 E	0	\$	2,500.00	=	\$	5,000.00
26	Maintenance Gravel/Millings (As Needed)	25 T		\$	30.00	=	\$	750.00
27	Miscellaneous Drainage Improvements	1 L		\$	25,000.00	=	\$	25,000.00
28	Site Restoration	1,742 S		\$	7.00	=	\$	12,200.00
29	Soil Erosion and Sedimentation Control	1 L	0	\$	4,000.00	=	\$	4,000.00
30	Street Sign, Artistic, Special	1 E		\$	600.00	=	\$	600.00
31	Maintaining Traffic	1 L		\$	7,500.00	=	\$	7,500.00
	SUBTOTAL						\$	210,500.00
	Construction Contingency (25%)						\$	52,600.00
	TOTAL CONSTRUCTION						\$	263,100.00
	Engineering, Survey, Geotechnical, Permitting (25%)						\$	65,800.00

TOTAL PROJECT

328,900.00

\$



PROJECT:	VILLAGE OF BINGHAM FARMS ROAD IMPROVEMENTS PROGRAM	DATE:	November 17, 2023
LOCATION:	COACHLIGHT LANE	PROJECT #:	20220208
WORK:	FULL DEPTH CONCRETE REPAIRS (SMALLER SCOPE)	ESTIMATOR:	WJW
	AS-NEEDED CURB AND GUTTER	CHECKED BY:	BWS
		CURRENT ENR (Nov. 2023):	13511

ltem	Qty	Unit		Re	ev Unit Price		Rev Total
1	Mobilization	1 LS	@	\$	5,000.00	=	\$ 5,000.00
2	Color Audio-Video Route Survey	1 LS	@	\$	2,500.00	=	\$ 2,500.00
3	Concrete Pavt, Rem	328 SYD	@	\$	30.00	=	\$ 9,830.00
4	Concrete Pavt, Rem, Driveway Approach	40 SYD	@	\$	30.00	=	\$ 1,200.00
5	Curb and Gutter, Rem	246 LFT	@	\$	9.00	=	\$ 2,210.00
6	Station Grading	7 STA	@	\$	1,500.00	=	\$ 10,580.00
7	Subgrade Undercutting, Type II, Special (As Needed)	123 CYD	@	\$	40.00	=	\$ 4,900.00
8	Large Aperture Geogrid (As Needed)	368 SYD	@	\$	10.00	=	\$ 3,680.00
9	Aggregate Base, 21AA, Special (As Needed)	77 TON	@	\$	40.00	=	\$ 3,090.00
10	1" x 3" Crushed Concrete, Special (As Needed)	110 TON	@	\$	25.00	=	\$ 2,760.00
11	Underdrain, Subgrade, Open-Graded, 6-inch, Special	- LFT	@	\$	25.00	=	\$ -
12	Underdrain, Cleanout	- EA	@	\$	4,000.00	=	\$ -
13	Aggregate Base, 21AA, Special	34 TON	@	\$	40.00	=	\$ 1,380.00
14	Driveway, Nonreinforced Conc, 6 inch	40 SYD	@	\$	60.00	=	\$ 2,400.00
15	Conc Pavt, 8 inch	328 SYD	@	\$	75.00	=	\$ 24,580.00
16	Curb and Gutter, Conc, Det D3	246 LFT	@	\$	40.00	=	\$ 9,830.00
17	Structure, Adjust	2 EA	@	\$	1,000.00	=	\$ 2,000.00
18	Structure, Reconstruct	1 EA	@	\$	2,500.00	=	\$ 2,500.00
19	Maintenance Gravel/Millings (As Needed)	50 TON	@	\$	30.00	=	\$ 1,500.00
20	Site Restoration	235 SYD	@	\$	7.00	=	\$ 1,650.00
21	Soil Erosion and Sedimentation Control	1 LS	@	\$	2,500.00	=	\$ 2,500.00
22	Street Sign, Artistic, Special	1 EA	@	\$	600.00	=	\$ 600.00
23	Maintaining Traffic	1 LS	@	\$	10,000.00	=	\$ 10,000.00
	SUBTOTAL						\$ 104,700.00
	Construction Contingency (25%)						\$ 26,200.00
	TOTAL CONSTRUCTION						\$ 130,900.00
	Engineering, Survey, Geotechnical, Permitting (25%)						\$ 32,700.00
	TOTAL PROJECT						\$ 163,600.00



PROJECT:	VILLAGE OF BINGHAM FARMS ROAD IMPROVEMENTS PROGRAM	DATE:	November 17, 2023
LOCATION:	COACHLIGHT LANE	PROJECT #:	20220208
WORK:	FULL DEPTH CONCRETE REPAIRS (EXPANDED SCOPE)	ESTIMATOR:	WJW
	AS-NEEDED CURB AND GUTTER	CHECKED BY:	BWS
		CURRENT ENR (Nov. 2023):	13511

ltem	Qty	Unit			Re	ev Unit Price		Rev Total
1	Mobilization		LS	@	\$	9,000.00	=	\$ 9,000.00
2	Color Audio-Video Route Survey		LS	@	\$	2,500.00	=	\$ 2,500.00
3	Concrete Pavt, Rem	656		@	\$	30.00	=	\$ 19,670.00
4	Concrete Pavt, Rem, Driveway Approach	100		@	\$	30.00	=	\$ 3,000.00
5	Curb and Gutter, Rem	492		@	\$	9.00	=	\$ 4,420.00
6	Station Grading		STA	@	\$	1,500.00	=	\$ 10,580.00
7	Subgrade Undercutting, Type II, Special (As Needed)	252		@	\$	40.00	=	\$ 10,070.00
8	Large Aperture Geogrid (As Needed)	756		@	\$	10.00	=	\$ 7,560.00
9	Aggregate Base, 21AA, Special (As Needed)	158		@	\$	40.00	=	\$ 6,340.00
10	1" x 3" Crushed Concrete, Special (As Needed)	227		@	\$	25.00	=	\$ 5,670.00
11	Underdrain, Subgrade, Open-Graded, 6-inch, Special		LFT	@	\$	25.00	=	\$ -
12	Underdrain, Cleanout		EA	@	\$	4,000.00	=	\$ -
13	Aggregate Base, 21AA, Special		TON	@	\$	40.00	=	\$ 2,750.00
14	Driveway, Nonreinforced Conc, 6 inch	100		@	\$	60.00	=	\$ 6,000.00
15	Conc Pavt, 8 inch	656		@	\$	75.00	=	\$ 49,160.00
16	Curb and Gutter, Conc, Det D3	492	LFT	@	\$	40.00	=	\$ 19,670.00
17	Structure, Adjust		EA	@	\$	1,000.00	=	\$ 2,000.00
18	Structure, Reconstruct		EA	@	\$	2,500.00	=	\$ 2,500.00
19	Maintenance Gravel/Millings (As Needed)		TON	@	\$	30.00	=	\$ 1,500.00
20	Site Restoration	196	SYD	@	\$	7.00	=	\$ 1,370.00
21	Soil Erosion and Sedimentation Control		LS	@	\$	2,500.00	=	\$ 2,500.00
22	Street Sign, Artistic, Special	-	EA	@	\$	600.00	=	\$ 600.00
23	Maintaining Traffic	1	LS	@	\$	25,000.00	=	\$ 25,000.00
	SUBTOTAL							\$ 191,900.00
	Construction Contingency (25%)							\$ 48,000.00
	TOTAL CONSTRUCTION							\$ 239,900.00
	Engineering, Survey, Geotechnical, Permitting (25%)							\$ 60,000.00
	TOTAL PROJECT							\$ 299,900.00



555 Hulet Drive Bloomfield Hills, MI 48302 P: (248) 454-6300 - F: (248) 454-6312

PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST ESTIMATE NO. 8

DATE: November 17, 2023

 PROJECT #:
 20220208

 ESTIMATOR:
 WJW

 CHECKED BY:
 BWS

 CURRENT ENR (Nov. 2023):
 13511

PROJECT:	VILLAGE OF BINGHAM FARMS ROAD IMPROVEMENTS PROGRAM
LOCATION:	FROMM CT.
WORK:	CRACK SEALING, CAPE SEAL, DRAINAGE IMPROVEMENTS
	DITCH CLEANOUT (ASSUME 15%)

em	Qty	Unit	t		Re	v Unit Price			Rev Total
1	Mobilization	1	LS	@	\$	8,000.00	=	\$	8,000.00
2	Color Audio-Video Route Survey		LS	@	\$	2,500.00	=	Ψ \$	2,500.00
3	•	0.419		@	Ψ \$	25,000.00	-	Ψ \$	10,480.00
4	Crack Sealing, HMA Pavement HMA Surface, Rem		SYD	@	Ψ \$	10.00	=	Ψ \$	3,110.00
5	HMA Surface, Rem, Driveway Approach		SYD	@	\$	10.00	=	\$	800.00
6	Conc Pavt, Rem, Driveway Approach		SYD	@	\$	30.00	=	\$	1,200.00
7	Butt Joint		LFT	@	\$	10.00	=	\$	1,900.0
8	Station Grading	-	STA	@	\$	3,000.00	=	\$	-
9	Subgrade Undercutting, Type II, Special (As Needed)	104	CYD	@	\$	40.00	=	\$	4,140.0
10	Large Aperture Geogrid (As Needed)		SYD	@	Ψ \$	10.00	=	Ψ \$	3,110.0
11	Aggregate Base, 21AA, Special (As Needed)		TON	@	Ψ \$	40.00	=	Ψ \$	2,610.0
12	1" x 3" Crushed Concrete, Special (As Needed)		TON	@	\$	25.00	=	\$	2,330.0
13	Ditch Cleanout/Reestablishment (As Needed)		STA	@	\$	1,000.00	=	\$	2,000.0
14	Cape Seal Surface	3,110		@	\$	6.00		\$	18,660.0
14	Underdrain, Subgrade, Open-Graded, 6-inch, Special	-	LFT	@	\$	25.00	=	\$	- 10,000.0
15	Underdrain, Subgrade, Open-Graded, 6-inch, Special	_	EA	@	\$	4,000.00	=	\$	_
16	Aggregate Base, 21AA, Special	65	TON	@	\$	40.00	=	\$	2,610.0
10	HMA, 5EML		TON	@	\$	195.00	=	\$	3,560.0
18	HMA, 4EML		TON	@	\$	180.00	=	\$	5,470.0
19	HMA, 5EML, RCOC Approach		TON	@	\$	195.00	=	\$	1,930.0
20	HMA, 4EML, RCOC Approach		TON	@	\$	180.00	=	\$	6,240.0
21	HMA, 5EML, Driveway Approach		TON	@	\$	195.00	=	\$	1,930.0
22	HMA, 4EML, Driveway Approach		TON	@	\$	180.00	=	\$	2,970.0
23	Structure, Adjust		EA	@	\$	1,000.00	=	\$	6,000.0
24	Structure, Reconstruct		EA	@	\$	2,500.00	=	\$	7,500.0
25	Maintenance Gravel/Millings (As Needed)		TON	@	\$	30.00	=	\$	1,500.0
26	Miscellaneous Drainage Improvements		LS	@	\$	25,000.00	=	\$	25,000.0
27	Site Restoration	3,609		@	\$	7.00	=	\$	25,260.0
28	Soil Erosion and Sedimentation Control		LS	@	\$	2,500.00	=	\$	2,500.0
29	Street Sign, Artistic, Special		EA	@	\$	600.00	=	\$	600.0
30	Maintaining Traffic		LS	@ @	\$	7,500.00	=	\$	7,500.0
	SUBTOTAL							\$	161,400.0
	Construction Contingency (25%)							\$	40,400.0
	TOTAL CONSTRUCTION							\$	201,800.0
	Engineering, Survey, Geotechnical, Permitting (25%)							\$	50,500.0

TOTAL PROJECT

252,300.00

\$



555 Hulet Drive Bloomfield Hills, MI 48302 P: (248) 454-6300 - F: (248) 454-6312

PROJECT:	VILLAGE OF BINGHAM FARMS ROAD IMPROVEMENTS PROGRAM	DATE:	November 17, 2023
LOCATION:	FROMM CT.	PROJECT #:	20220208
WORK:	HMA REHAB 4", UNDERDRAIN, DRAINAGE IMPROVEMENTS	ESTIMATOR:	WJW
	UNDERDRAIN (100% OF THE ROAD)	CHECKED BY:	BWS
	DITCH CLEANOUT (ASSUME 15%)	CURRENT ENR (Nov. 2023):	13511

Item	Qty	Unit		Re	v Unit Price			Rev Total
1	Makilantian	1 LS	0	\$	19,000.00	=	\$	19,000.00
2	Mobilization Color Audio-Video Route Survey	1 LS	@ @	գ \$	2,000.00	=	φ \$	2,000.00
3	Cold Milling HMA, 4"	3,110 SYD	@	\$	2,000.00	-	\$	18,660.00
4	HMA Surface, Rem	311 SYD	@	\$	10.00	=	\$	3,110.00
5	HMA Surface, Rem, Driveway Approach	320 SYD	@	\$	10.00	=	\$	3,200.00
6	Conc Pavt, Rem, Driveway Approach	80 SYD	@	\$	30.00	=	\$	2,400.00
7	Butt Joint	470 LFT	@	\$	10.00	=	\$	4,700.00
8	Station Grading	13.6 STA	@	\$	3,000.00	=	\$	40,800.00
9	Subgrade Undercutting, Type II, Special (As Needed)	104 CYD	@	\$	40.00	=	\$	4,140.00
10	Large Aperture Geogrid (As Needed)	311 SYD	@	\$	10.00	=	\$	3,110.00
11	Aggregate Base, 21AA, Special (As Needed)	65 TON	@	\$	40.00	=	\$	2,610.00
12	1" x 3" Crushed Concrete, Special (As Needed)	93 TON	@	\$	25.00	=	\$	2,330.00
13	Ditch Cleanout/Reestablishment (As Needed)	2 STA	@	\$	1,000.00	=	\$	2,000.00
14	Underdrain, Subgrade, Open-Graded, 6-inch, Special	2,450 LFT	@	\$	25.00	=	\$	61,250.00
15	Underdrain, Cleanout	6 EA	@	\$	4,000.00	=	\$	24,000.00
16	Aggregate Base, 21AA, Special	33 TON	@	\$	40.00	=	\$	1,310.00
17	HMA, 5EML	249 TON	0	\$	175.00	=	\$	43,600.00
18	HMA, 4EML	415 TON	0	\$	160.00	=	\$	66,440.00
19	HMA, 5EML, RCOC Approach	10 TON	@	\$	195.00	=	\$	1,930.00
20	HMA, 4EML, RCOC Approach	35 TON	@	\$	180.00	=	\$	6,240.00
21	HMA, 5EML, Driveway Approach	33 TON	@	\$	195.00	=	\$	6,440.00
22	HMA, 4EML, Driveway Approach	55 TON	@	\$	180.00	=	\$	9,900.00
23	Structure, Adjust	6 EA	@	\$	1,000.00	=	\$	6,000.00
24	Structure, Reconstruct	3 EA	@	\$	2,500.00	=	\$	7,500.00
25	Maintenance Gravel/Millings (As Needed)	50 TON	@	\$	30.00	=	\$	1,500.00
26	Miscellaneous Drainage Improvements	1 LS	@	\$	25,000.00	=	\$	25,000.00
27	Site Restoration	3,609 SYD	@	\$	7.00	=	\$	25,260.00
28	Soil Erosion and Sedimentation Control	1 LS	@	\$	2,500.00	=	\$	2,500.00
29	Street Sign, Artistic, Special	1 EA	@	\$	600.00	=	\$	600.00
30	Maintaining Traffic	1 LS	@	\$	7,500.00	=	\$	7,500.00
	SUBTOTAL						\$	405,000.00
	Construction Contingency (25%)						\$	101,300.00
	TOTAL CONSTRUCTION						\$	506,300.00
	Engineering, Survey, Geotechnical, Permitting (25%)						\$	126,600.00
	TOTAL PROJECT						\$	632,900.00



PROJECT:	VILLAGE OF BINGHAM FARMS ROAD IMPROVEMENTS PROGRAM	DATE:	November 17, 2023
LOCATION:	HICKORY HOLLOW	PROJECT #:	20220208
WORK:	HMA RESURFACING 2", DITCH CLEANOUTCRACK TREATMENT	ESTIMATOR:	WJW
	FULL DEPTH REPAIRS AND CRACK TREATMENT	CHECKED BY:	BWS
	DRAINAGE IMPROVEMENTS, DITCH CLEANOUT (ASSUME 15%)	CURRENT ENR (Nov. 2023):	13511

Item	Qty	Unit		Re	v Unit Price		Rev Total
			_				
1	Mobilization	1 LS	@	\$	7,000.00	=	\$ 7,000.00
2	Color Audio-Video Route Survey	1 LS	@	\$	1,500.00	=	\$ 1,500.00
3	Cold Milling HMA, 2"	2,210 SYD	@	\$	4.00		\$ 8,840.00
4	Crack Repair, Det 7	250 ft	@	\$	25.00		\$ 6,250.00
5	HMA Surface, Rem	221 SYD	@	\$	10.00	=	\$ 2,210.00
6	HMA Surface, Rem, Driveway Approach	80 SYD	@	\$	10.00	=	\$ 800.00
7	Butt Joint	185 LFT	@	\$	10.00	=	\$ 1,850.00
8	Station Grading	- STA	@	\$	3,000.00	=	\$ -
9	Subgrade Undercutting, Type II, Special (As Needed)	74 CYD	@	\$	40.00	=	\$ 2,950.00
10	Large Aperture Geogrid (As Needed)	221 SYD	@	\$	10.00	=	\$ 2,210.00
11	Aggregate Base, 21AA, Special (As Needed)	46 TON	@	\$	40.00	=	\$ 1,860.00
12	1" x 3" Crushed Concrete, Special (As Needed)	93 TON	@	\$	25.00	=	\$ 2,320.00
13	Ditch Cleanout/Reestablishment (As Needed)	1.5 STA	@	\$	1,000.00	=	\$ 1,500.00
14	Underdrain, Subgrade, Open-Graded, 6-inch, Special	- LFT	@	\$	25.00	=	\$ -
15	Underdrain, Cleanout	- EA	@	\$	4,000.00	=	\$ -
16	Aggregate Base, 21AA, Special	- TON	@	\$	40.00	=	\$ -
17	HMA, 5EML	243 TON	@	\$	180.00	=	\$ 43,760.00
18	HMA, 4EML	24 TON	@	\$	180.00	=	\$ 4,380.00
19	HMA, 5EML, Driveway Approach	7 TON	@	\$	195.00		\$ 1,290.00
20	HMA, 4EML, Driveway Approach	11 TON	@	\$	180.00		\$ 1,980.00
21	Structure, Adjust	5 EA	@	\$	1,000.00	=	\$ 5,000.00
22	Structure. Reconstruct	2 EA	@	\$	2,500.00	=	\$ 5,000.00
23	Maintenance Gravel/Millings (As Needed)	30 TON	@	\$	30.00	=	\$ 900.00
24	Miscellaneous Drainage Improvements	1 LS	@	\$	25,000.00	=	\$ 25,000.00
25	Site Restoration	850 SYD	@	\$	7.00	=	\$ 5,950.00
26	Soil Erosion and Sedimentation Control	1 LS	@	\$	2,500.00	=	\$ 2,500.00
27	Street Sign, Artistic, Special	2 EA	0	\$	600.00	=	\$ 1,200.00
28	Maintaining Traffic	1 LS	@	\$	7,500.00	=	\$ 7,500.00
	SUBTOTAL						\$ 143,800.00
	Construction Contingency (25%)						\$ 36,000.00
	TOTAL CONSTRUCTION						\$ 179,800.00
	Engineering, Survey, Geotechnical, Permitting (25%)						\$ 45,000.00
	TOTAL PROJECT						\$ 224,800.00



PROJECT:	VILLAGE OF BINGHAM FARMS ROAD IMPROVEMENTS PROGRAM	DATE:	November 17, 2023
LOCATION:	HICKORY HOLLOW	PROJECT #:	20220208
WORK:	HMA REHAB 5", UNDERDRAIN, DRAINAGE IMPROVEMENTS	ESTIMATOR:	WJW
	UNDERDRAIN (100% OF THE ROAD)	CHECKED BY:	BWS
	DITCH CLEANOUT (ASSUME 15%)	CURRENT ENR (Nov. 2023):	13511

ltem	Qty	Unit		Re	v Unit Price		Rev Total
							/
1	Mobilization	1 LS	@	\$	15,000.00	=	\$ 15,000.00
2	Color Audio-Video Route Survey	1 LS	@	\$	2,000.00	=	\$ 2,000.00
3	Cold Milling HMA, 5"	2,210 SYD	@	\$	6.00		\$ 13,260.00
4	HMA Surface, Rem	332 SYD	@	\$	10.00	=	\$ 3,320.00
5	HMA Surface, Rem, Driveway Approach	220 SYD	@	\$	10.00	=	\$ 2,200.00
6	Butt Joint	325 LFT	@	\$	10.00	=	\$ 3,250.00
7	Station Grading	9 STA	@	\$	3,000.00	=	\$ 27,000.00
8	Subgrade Undercutting, Type II, Special (As Needed)	17 CYD	@	\$	40.00	=	\$ 660.00
9	Large Aperture Geogrid (As Needed)	50 SYD	@	\$	10.00	=	\$ 500.00
10	Aggregate Base, 21AA, Special (As Needed)	10 TON	@	\$	40.00	=	\$ 420.00
11	1" x 3" Crushed Concrete, Special (As Needed)	15 TON	@	\$	25.00	=	\$ 370.00
12	Ditch Cleanout/Reestablishment (As Needed)	1.5 STA	@	\$	1,000.00	=	\$ 1,500.00
13	Underdrain, Subgrade, Open-Graded, 6-inch, Special	1,790 LFT	@	\$	25.00	=	\$ 44,750.00
14	Underdrain, Cleanout	6 EA	@	\$	4,000.00	=	\$ 24,000.00
15	Aggregate Base, 21AA, Special	232 TON	@	\$	40.00	=	\$ 9,280.00
16	HMA, 5EML	243 TON	@	\$	175.00	=	\$ 42,540.00
17	HMA, 4EML	365 TON	@	\$	160.00	=	\$ 58,340.00
18	HMA, 5EML, Driveway Approach	18 TON	@	\$	195.00		\$ 3,540.00
19	HMA, 4EML, Driveway Approach	30 TON	@	\$	180.00		\$ 5,450.00
20	Structure, Adjust	5 EA	@	\$	1,000.00	=	\$ 5,000.00
21	Structure, Reconstruct	2 EA	@	\$	2,500.00	=	\$ 5,000.00
22	Maintenance Gravel/Millings (As Needed)	30 TON	@	\$	30.00	=	\$ 900.00
23	Miscellaneous Drainage Improvements	1 LS	@	\$	25,000.00	=	\$ 25,000.00
24	Site Restoration	1,703 SYD	@	\$	7.00	=	\$ 11,920.00
25	Soil Erosion and Sedimentation Control	1 LS	@	\$	2,500.00	=	\$ 2,500.00
26	Street Sign, Artistic, Special	2 EA	@	\$	600.00	=	\$ 1,200.00
27	Maintaining Traffic	1 LS	@	\$	5,000.00	=	\$ 5,000.00
	SUBTOTAL						\$ 313,900.00
	Construction Contingency (25%)						\$ 78,500.00
	TOTAL CONSTRUCTION						\$ 392,400.00
	Engineering, Survey, Geotechnical, Permitting (25%)						\$ 98,100.00
	TOTAL PROJECT						\$ 490,500.00



PROJECT:	VILLAGE OF BINGHAM FARMS ROAD IMPROVEMENTS PROGRAM						DATE:	Nov	vember 17, 2023
LOCATION:						PROJE			20208
WORK:						ESTIM			D/ECA
	LIMITED FULL DEPTH REPAIRS, LIMITED DITCH & DRAINAGE IMPROVEMENTS					CHECKE			
				Cl		T (MARCH 2022			91.43
Item	Qty	Unit				RENT ENR (Nov.	2023):	135	11 Rev Total
item	પાપ્	01111			Ne	VOIIILFIICE			Nev Total
1	Mobilization		LS	@	\$	12,000.00	=	\$	12,000.00
2	Color Audio-Video Route Survey	1	LS	@	\$	2,000.00	=	\$	2,000.00
3	Crack Sealing, HMA Pavement	0.480	Mile	@	\$	25,000.00		\$	12,000.00
4	HMA Surface, Rem	580	SYD	@	\$	10.00	=	\$	5,800.00
5	HMA Surface, Rem, Driveway Approach	140	SYD	@	\$	10.00	=	\$	1,400.00
6	Conc Pavt, Rem, Driveway Approach	60	SYD	@	\$	30.00	=	\$	1,800.00
7	Brick Paver, Rem, Driveway	40	SYD	@	\$	70.00	=	\$	2,800.00
8	Butt Joint	290	LFT	@	\$	10.00	=	\$	2,900.00
9	Station Grading	-	STA	@	\$	3,000.00	=	\$	-
10	Subgrade Undercutting, Type II, Special (As Needed)	193	CYD	@	\$	40.00	=	\$	7,730.00
11	Large Aperture Geogrid (As Needed)	580	SYD	@	\$	10.00	=	\$	5,800.00
12	Aggregate Base, 21AA, Special (As Needed)	122	TON	@	\$	40.00	=	\$	4,870.00
13	1" x 3" Crushed Concrete, Special (As Needed)		TON	@	\$	25.00	=	\$	4,350.00
14	Ditch Cleanout/Reestablishment (As Needed)		STA	@	\$	1,000.00	=	\$	5,000.00
15	Underdrain, Subgrade, Open-Graded, 6-inch, Special	-	LFT	@	\$	25.00	=	\$, -
16	Underdrain, Cleanout	-	EA	@	\$	4,000.00	=	\$	-
17	Aggregate Base, 21AA, Special	122		@	\$	40.00	=	\$	4,870.00
18	Slurry Seal	5,800		@	\$	5.00		\$	29,000.00
19	HMA, 5EML		TON	@	\$	195.00	=	\$	9,330.00
20	HMA, 4EML	80	TON	@	\$	180.00	=	\$	14,360.00
21	HMA, 5EML, Driveway Approach	20	TON	@	\$	195.00	=	\$	3,860.00
22	HMA, 4EML, Driveway Approach	33	TON	@	\$	180.00	=	\$	5,940.00
23	Structure, Adjust	4	EA	@	\$	1,000.00	=	\$	4,000.00
24	Structure, Reconstruct	2	EA	@	\$	2,500.00	=	\$	5,000.00
25	Maintenance Gravel/Millings (As Needed)	100	TON	@	\$	30.00	=	\$	3,000.00
26	Miscellaneous Drainage Improvements	1	LS	0	\$	45,000.00	=	\$	45,000.00
27	Site Restoration	5,698	SYD	@	\$	7.00	=	\$	39,890.00
28	Soil Erosion and Sedimentation Control	1	LS	@	\$	2,500.00	=	\$	2,500.00
29	Street Sign, Artistic, Special	1	EA	@	\$	600.00	=	\$	600.00
30	Maintaining Traffic	1	LS	0	\$	10,500.00	=	\$	10,500.00
	SUBTOTAL							\$	246,300.00
	Construction Contingency (25%)							\$	61,600.00
	TOTAL CONSTRUCTION							\$	307,900.00
	Engineering, Survey, Geotechnical, Permitting (25%)							\$	77,000.00
	TOTAL PROJECT							\$	384,900.00



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PROJECT:	VILLAGE OF BINGHAM FARMS ROAD IMPROVEMENTS PROGRAM	DATE:	November 17, 2023
LOCATION:	OLD ORCHARD TRAIL	PROJECT #:	20220208
WORK:	HMA REHAB 4", UNDERDRAIN, DRAINAGE IMPROVEMENTS	ESTIMATOR:	RAD/ECA
	UNDERDRAIN (100% OF THE ROAD)	CHECKED BY:	BWS
	DITCH CLEANOUT (ASSUME 20%)	CURRENT ENR (Nov. 2023):	13511

Item	Qty	Unit	t		Re	v Unit Price		Rev Total
1	Mobilization		LS	@	\$	35,000.00	=	\$ 35,000.00
2	Color Audio-Video Route Survey		LS	@	\$	2,000.00	=	\$ 2,000.00
3	Cold Milling HMA, 4"	5,800		@	\$	6.00		\$ 34,800.00
4	HMA Surface, Rem, Driveway Approach		SYD	@	\$	10.00	=	\$ 4,000.00
5	Conc Pavt, Rem, Driveway Approach		SYD	@	\$	30.00	=	\$ 4,200.00
6	Brick Paver, Rem, Driveway		SYD	@	\$	75.00	=	\$ 3,000.00
7	Butt Joint		LFT	@	\$	10.00	=	\$ 4,700.00
8	Station Grading		STA	@	\$	3,000.00	=	\$ 76,500.00
9	Subgrade Undercutting, Type II, Special (As Needed)		CYD	@	\$	40.00	=	\$ 7,730.00
10	Large Aperture Geogrid (As Needed)		SYD	@	\$	10.00	=	\$ 5,800.00
11	Aggregate Base, 21AA, Special (As Needed)		TON	@	\$	4.00	=	\$ 490.00
12	1" x 3" Crushed Concrete, Special (As Needed)		TON	@	\$	25.00	=	\$ 4,350.00
13	Ditch Cleanout/Reestablishment (As Needed)	5	STA	@	\$	1,000.00	=	\$ 5,000.00
14	Underdrain, Subgrade, Open-Graded, 6-inch, Special	5,110		@	\$	25.00	=	\$ 127,750.00
15	Underdrain, Cleanout	12	EA	@	\$	4,000.00	=	\$ 48,000.00
16	Aggregate Base, 21AA, Special	609	TON	@	\$	40.00	=	\$ 24,360.00
17	HMA, 5EML	479	TON	@	\$	175.00	=	\$ 83,740.00
18	HMA, 4EML	798	TON	@	\$	160.00	=	\$ 127,600.00
19	HMA, 5EML, Driveway Approach	48	TON	@	\$	195.00	=	\$ 9,330.00
20	HMA, 4EML, Driveway Approach	80	TON	@	\$	180.00	=	\$ 14,360.00
21	Structure, Adjust	9	EA	@	\$	1,000.00	=	\$ 9,000.00
22	Structure, Reconstruct	4	EA	@	\$	2,500.00	=	\$ 10,000.00
23	Maintenance Gravel/Millings (As Needed)	100	TON	@	\$	30.00	=	\$ 3,000.00
24	Miscellaneous Drainage Improvements	1	LS	@	\$	45,000.00	=	\$ 45,000.00
25	Site Restoration	5,698	SYD	@	\$	7.00	=	\$ 39,890.00
26	Soil Erosion and Sedimentation Control	1	LS	@	\$	2,500.00	=	\$ 2,500.00
27	Street Sign, Artistic, Special	1	EA	@	\$	600.00	=	\$ 600.00
28	Maintaining Traffic	1	LS	@	\$	10,500.00	=	\$ 10,500.00
	SUBTOTAL							\$ 743,200.00
	Construction Contingency (25%)							\$ 185,800.00
	TOTAL CONSTRUCTION							\$ 929,000.00
	Engineering, Survey, Geotechnical, Permitting (25%)							\$ 232,300.00
								4 4 6 4 6 6 6 6 6 6

TOTAL PROJECT

\$ 1,161,300.00



PROJECT:	VILLAGE OF BINGHAM FARMS ROAD IMPROVEMENTS PROGRAM	DATE:	November 17, 2023
LOCATION:	OLD STAGE ROAD	PROJECT #:	20220208
WORK:	FULL DEPTH CONCRETE REPAIRS (SMALLER SCOPE)	ESTIMATOR:	WJW
	AS-NEEDED CURB AND GUTTER (ASSUME 15%)	CHECKED BY:	BWS
		CURRENT ENR (Nov. 2023):	13511

ltem	Qty	Unit			Re	v Unit Price		Rev Total
				_				
1	Mobilization		LS	@	\$	7,000.00	=	\$ 7,000.00
2	Color Audio-Video Route Survey		LS	@	\$	2,500.00	=	\$ 2,500.00
3	Conc Pavt, Rem		SYD	@	\$	30.00	=	\$ 12,400.00
4	Conc Pavt, Rem, Driveway Approach		SYD	@	\$	30.00	=	\$ 2,400.00
5	HMA Surface, Rem, Driveway Approaches		SYD	@	\$	10.00	=	\$ 200.00
6	Curb and Gutter, Rem		LFT	@	\$	9.00	=	\$ 2,340.00
7	Station Grading		STA	@	\$	1,500.00	=	\$ 12,750.00
8	Subgrade Undercutting, Type II, Special (As Needed)		CYD	@	\$	40.00	=	\$ 5,500.00
9	Large Aperture Geogrid (As Needed)		SYD	@	\$	10.00	=	\$ 4,130.00
10	Aggregate Base, 21AA, Special (As Needed)		TON	@	\$	40.00	=	\$ 3,470.00
11	1" x 3" Crushed Concrete, Special (As Needed)	124	TON	@	\$	25.00	=	\$ 3,100.00
12	Underdrain, Subgrade, Open-Graded, 6-inch, Special	-	LFT	@	\$	25.00	=	\$ -
13	Underdrain, Cleanout	-	EA	@	\$	4,000.00	=	\$ -
14	Aggregate Base, 21AA, Special		TON	@	\$	40.00	=	\$ 1,740.00
15	Driveway, Nonreinforced Conc, 6 inch		SYD	@	\$	50.00	=	\$ 5,000.00
16	Conc Pavt, 8 inch		SYD	@	\$	65.00	=	\$ 26,860.00
17	Curb and Gutter, Conc, Det D3		LFT	@	\$	35.00	=	\$ 9,090.00
18	Structure, Adjust		EA	@	\$	1,000.00	=	\$ 8,000.00
19	Structure, Reconstruct		EA	@	\$	2,500.00	=	\$ 10,000.00
20	Maintenance Gravel/Millings (As Needed)		TON	@	\$	30.00	=	\$ 1,800.00
21	Site Restoration		SYD	@	\$	7.00	=	\$ 1,970.00
22	Soil Erosion and Sedimentation Control		LS	@	\$	2,500.00	=	\$ 2,500.00
23	Street Sign, Artistic, Special		EA	@	\$	600.00	=	\$ 1,800.00
24	Maintaining Traffic	1	LS	@	\$	15,000.00	=	\$ 15,000.00
	SUBTOTAL							\$ 139,600.00
	Construction Contingency (25%)							\$ 34,900.00
	TOTAL CONSTRUCTION							\$ 174,500.00
	Engineering, Survey, Geotechnical, Permitting (25%)							\$ 43,600.00
	TOTAL PROJECT							\$ 218,100.00



PROJECT:	VILLAGE OF BINGHAM FARMS ROAD IMPROVEMENTS PROGRAM	DATE:	November 17, 2023
LOCATION:	OLD STAGE ROAD	PROJECT #:	20220208
WORK:	FULL DEPTH CONCRETE REPAIRS (EXPANDED SCOPE)	ESTIMATOR:	WJW
	AS-NEEDED CURB AND GUTTER (ASSUME 30%)	CHECKED BY:	BWS
		CURRENT ENR (Nov. 2023):	13511

Item	Qty	Unit		Re	v Unit Price	Rev Total		Rev Total
1	Mobilization	1 LS	@	\$	11,000.00	=	\$	11,000.00
2	Color Audio-Video Route Survey	1 LS	@	\$	2,500.00	=	\$	2,500.00
3	Conc Pavt, Rem	827 SYD	9	\$	30.00	=	\$	24,800.00
4	Conc Pavt, Rem, Driveway Approach	160 SYD	0	\$	30.00	=	\$	4,800.00
5	HMA Surface, Rem, Driveway Approaches	40 SYD	0	\$	10.00	=	\$	400.00
6	Curb and Gutter, Rem	519 LFT	@	\$	9.00	=	\$	4,670.00
7	Station Grading	8.5 STA	@	\$	1,500.00	=	\$	12,750.00
8	Subgrade Undercutting, Type II, Special (As Needed)	275 CYD	0	\$	40.00	=	\$	11,010.00
9	Large Aperture Geogrid (As Needed)	827 SYD	0	\$	10.00	=	\$	8,270.00
10	Aggregate Base, 21AA, Special (As Needed)	173 TON	@	\$	40.00	=	\$	6,940.00
11	1" x 3" Crushed Concrete, Special (As Needed)	248 TON	0	\$	25.00	=	\$	6,200.00
12	Underdrain, Subgrade, Open-Graded, 6-inch, Special	- LFT	@	\$	25.00	=	\$	-
13	Underdrain, Cleanout	- EA	@	\$	4,000.00	=	\$	-
14	Aggregate Base, 21AA, Special	87 TON		\$	40.00	=	\$	3,470.00
15	Driveway, Nonreinforced Conc, 6 inch	200 SYD	@	\$	50.00	=	\$	10,000.00
16	Conc Pavt, 8 inch	827 SYD	@	\$	65.00	=	\$	53,720.00
17	Curb and Gutter, Conc, Det D3	519 LFT	@	\$	35.00	=	\$	18,180.00
18	Structure, Adjust	8 EA	@	\$	1,000.00	=	\$	8,000.00
19	Structure, Reconstruct	4 EA	@	\$	2,500.00	=	\$	10,000.00
20	Maintenance Gravel/Millings (As Needed)	60 TON		\$	30.00	=	\$	1,800.00
21	Site Restoration	563 SYD		\$	7.00	=	\$	3,940.00
22	Soil Erosion and Sedimentation Control	1 LS	@	\$	2,500.00	=	\$	2,500.00
23	Street Sign, Artistic, Special	3 EA	@	\$	600.00	=	\$	1,800.00
24	Maintaining Traffic	1 LS	@	\$	15,000.00	=	\$	15,000.00
	SUBTOTAL						\$	221,800.00
	Construction Contingency (25%)						\$	55,500.00
	TOTAL CONSTRUCTION						\$	277,300.00
	Engineering, Survey, Geotechnical, Permitting (25%)						\$	69,300.00
	TOTAL PROJECT						\$	346,600.00



PROJECT:	VILLAGE OF BINGHAM FARMS ROAD IMPROVEMENTS PROGRAM	DATE:	November 17, 2023
LOCATION:	SAGER CT.	PROJECT #:	20220208
WORK:	HMA REHAB 5", UNDERDRAIN, DRAINAGE IMPROVEMENTS	ESTIMATOR:	WJW
	100% UNDERDRAIN	CHECKED BY:	BWS
	DITCH CLEANOUT (ASSUME 75%)	CURRENT ENR (Nov. 2023):	13511

ltem	Qty	Unit		Re	v Unit Price			Rev Total
				¢	40.000.00		^	40.000.00
1	Mobilization	1 LS	@	\$	13,000.00	=	\$	13,000.00
2	Color Audio-Video Route Survey	1 LS	@	\$	2,000.00	=	\$	2,000.00
3	Cold Milling HMA, 5"	1,700 SYD	@	\$	6.00	=	\$	10,200.00
3	HMA Surface, Rem	149 SYD	@	\$	10.00	=	\$	1,490.00
4	HMA Surface, Rem, Driveway Approach	120 SYD	@	\$	10.00	=	\$	1,200.00
5	Conc Pavt, Rem, Driveway Approach	20 SYD	@	\$	30.00	=	\$	600.00
6	Butt Joint	- LFT	@	\$	10.00	=	\$	-
7	Station Grading	7 STA	@	\$	3,000.00	=	\$	21,000.00
8	Subgrade Undercutting, Type II, Special (As Needed)	17 CYD	@	\$	40.00	=	\$	660.00
9	Large Aperture Geogrid (As Needed)	170 SYD	@	\$	10.00	=	\$	1,700.00
10	Aggregate Base, 21AA, Special (As Needed)	36 TON	@	\$	40.00	=	\$	1,430.00
11	1" x 3" Crushed Concrete, Special (As Needed)	51 TON	@	\$	25.00	=	\$	1,280.00
12	Ditch Cleanout/Reestablishment (As Needed)	8.025 STA	@	\$	1,000.00	=	\$	8,030.00
13	Underdrain, Subgrade, Open-Graded, 6-inch, Special	1,390 LFT	@	\$	25.00	=	\$	34,750.00
14	Underdrain, Cleanout	5 EA	@	\$	4,000.00	=	\$	20,000.00
15	Aggregate Base, 21AA, Special	179 TON	@	\$	40.00	=	\$	7,140.00
16	HMA, 5EML	187 TON	@	\$	175.00	=	\$	32,730.00
17	HMA, 4EML	281 TON	@	\$	160.00	=	\$	44,880.00
18	HMA, 5EML, Driveway Approach	12 TON	@	\$	195.00	=	\$	2,250.00
19	HMA, 4EML, Driveway Approach	19 TON	@	\$	180.00	=	\$	3,470.00
20	Structure, Adjust	2 EA	@	\$	1,000.00	=	\$	2,000.00
21	Structure, Reconstruct	1 EA	@	\$	2,500.00	=	\$	2,500.00
22	Maintenance Gravel/Millings (As Needed)	50 TON	@	\$	30.00	=	\$	1,500.00
23	Miscellaneous Drainage Improvements	1 LS	@	\$	35,000.00	=	\$	35,000.00
24	Site Restoration	1 LS	@	\$	10,000.00	=	\$	10,000.00
25	Soil Erosion and Sedimentation Control	1 LS	@	\$	2,500.00	=	\$	2,500.00
26	Street Sign, Artistic, Special	1 EA	@	\$	600.00	=	\$	600.00
27	Maintaining Traffic	1 LS	@	\$	6,000.00	=	\$	6,000.00
	SUBTOTAL						\$	267,900.00
	Construction Contingency (25%)						\$	67,000.00
	TOTAL CONSTRUCTION						\$	334,900.00
	Engineering, Survey, Geotechnical, Permitting (25%)						\$	83,700.00
	TOTAL PROJECT						\$	418,600.00



DATE: November 17, 2023

PROJECT #: 20220208 ESTIMATOR: WJW CHECKED BY: BWS

555 Hulet Drive Bloomfield Hills, MI 48302 P: (248) 454-6300 - F: (248) 454-6312

PROJECT:	VILLAGE OF BINGHAM FARMS ROAD IMPROVEMENTS PROGRAM	DATE:	Novemb
LOCATION:	SHAGWOOD DR.	PROJECT #:	2022020
WORK:	HMA RESURFACING 2", DITCH CLEANOUT CRACK TREATMENT	ESTIMATOR:	WJW
	DITCH CLEANOUT (ASSUME 75%)	CHECKED BY:	BWS
		CURRENT ENR (Nov. 2023):	13511

Item	Qty	Unit		Re	v Unit Price			Rev Total
. 1	Mobilization	1 LS	@	\$	12,000.00	=	\$	12,000.00
2	Color Audio-Video Route Survey	1 LS	@	φ \$	2,000.00	=	φ \$	2,000.00
3	Cold Milling HMA, 2"	4,350 SYD	@	\$	4.00	=	\$	17,400.00
4	Crack Repair, Det 7	300 ft	@	\$	25.00		\$	7,500.00
5	HMA Surface, Rem	389 SYD	@	\$	10.00	=	\$	3,890.00
6	HMA Surface, Rem, Driveway Approach	160 SYD	@	\$	10.00	=	\$	1,600.00
7	Brick Paver, Rem, Driveway Approach	40 SYD	@	\$	70.00	=	\$	2,800.00
8	Butt Joint	230 LFT	@	\$	10.00	=	\$	2,300.00
9	Station Grading	- STA	@	\$	3,000.00	=	\$	-
10	Subgrade Undercutting, Type II, Special (As Needed)	130 CYD	@	\$	40.00	=	\$	5,190.00
11	Large Aperture Geogrid (As Needed)	389 SYD	@	\$	10.00	=	\$	3,890.00
12	Aggregate Base, 21AA, Special (As Needed)	82 TON	@	\$	40.00	=	\$	3,270.00
13	1" x 3" Crushed Concrete, Special (As Needed)	117 TON	@	\$	25.00	=	\$	2,920.00
14	Ditch Cleanout/Reestablishment (As Needed)	13.5 STA	@	\$	1,000.00	=	\$	13,500.00
15	Underdrain, Subgrade, Open-Graded, 6-inch, Special	- LFT	0	\$	25.00	=	\$	-
16	Underdrain, Cleanout	- EA	0	\$	4,000.00	=	\$	-
17	Aggregate Base, 21AA, Special	- TON	@	\$	40.00	=	\$	-
18	HMA, 5EML	479 TON	0	\$	180.00	=	\$	86,130.00
19	HMA, 4EML	64 TON	@	\$	180.00	=	\$	11,550.00
20	HMA, 5EML, Driveway Approach	17 TON	@	\$	195.00	=	\$	3,220.00
21	HMA, 4EML, Driveway Approach	28 TON	@	\$	180.00	=	\$	4,950.00
22	Structure, Adjust	9 EA	@	\$	1,000.00	=	\$	9,000.00
23	Structure, Reconstruct	4 EA	@	\$	2,500.00	=	\$	10,000.00
24	Maintenance Gravel/Millings (As Needed)	50 TON	@	\$	30.00	=	\$	1,500.00
25	Miscellaneous Drainage Improvements	1 LS	@	\$	35,000.00	=	\$	35,000.00
26	Site Restoration	1 LS	@	\$	10,000.00	=	\$	10,000.00
27	Soil Erosion and Sedimentation Control	1 LS	@	\$	2,500.00	=	\$	2,500.00
28	Street Sign, Artistic, Special	1 EA	@	\$	600.00	=	\$	600.00
29	Maintaining Traffic	1 LS	@	\$	6,000.00	=	\$	6,000.00
	SUBTOTAL						\$	258,700.00
	Construction Contingency (25%)						\$	64,700.00
	TOTAL CONSTRUCTION						\$	323,400.00
	Engineering, Survey, Geotechnical, Permitting (25%)						\$	80,900.00
	TOTAL PROJECT						\$	404,300.00



PROJECT:	VILLAGE OF BINGHAM FARMS ROAD IMPROVEMENTS PROGRAM	DATE:	November 17, 2023
LOCATION:	SHAGWOOD DR.	PROJECT #:	20220208
WORK:	HMA REHAB 5", UNDERDRAIN, DRAINAGE IMPROVEMENTS	ESTIMATOR:	WJW
	UNDERDRAIN (100% OF THE ROAD)	CHECKED BY:	BWS
	DITCH CLEANOUT (ASSUME 75%)	CURRENT ENR (Nov. 2023):	13511

ltem	Qty	Unit		Re	v Unit Price			Rev Total
				<u>^</u>			<u>^</u>	
1	Mobilization	1 LS	@	\$	26,000.00	=	\$	26,000.00
2	Color Audio-Video Route Survey	1 LS	@	\$	2,000.00	=	\$	2,000.00
3	Cold Milling HMA, 5"	4,350 SYD	@	\$	6.00	=	\$	26,100.00
3	HMA Surface, Rem	389 SYD	@	\$	10.00	=	\$	3,890.00
4	HMA Surface, Rem, Driveway Approach	360 SYD	@	\$	10.00	=	\$	3,600.00
5	Brick Paver, Rem, Driveway Approach	40 SYD	@	\$	70.00	=	\$	2,800.00
6	Butt Joint	410 LFT	@	\$	10.00	=	\$	4,100.00
7	Station Grading	18 STA	@	\$	3,000.00	=	\$	54,000.00
8	Subgrade Undercutting, Type II, Special (As Needed)	43 CYD	@	\$	40.00	=	\$	1,730.00
9	Large Aperture Geogrid (As Needed)	435 SYD	@	\$	10.00	=	\$	4,350.00
10	Aggregate Base, 21AA, Special (As Needed)	91 TON	@	\$	40.00	=	\$	3,650.00
11	1" x 3" Crushed Concrete, Special (As Needed)	131 TON	@	\$	25.00	=	\$	3,260.00
12	Ditch Cleanout/Reestablishment (As Needed)	13.5 STA	@	\$	1,000.00	=	\$	13,500.00
13	Underdrain, Subgrade, Open-Graded, 6-inch, Special	3,350 LFT	@	\$	25.00	=	\$	83,750.00
14	Underdrain, Cleanout	8 EA	@	\$	4,000.00	=	\$	32,000.00
15	Aggregate Base, 21AA, Special	41 TON	@	\$	40.00	=	\$	1,630.00
16	HMA, 5EML	479 TON	@	\$	175.00	=	\$	83,740.00
17	HMA, 4EML	718 TON	@	\$	160.00	=	\$	114,840.00
18	HMA, 5EML, Driveway Approach	33 TON	@	\$	195.00	=	\$	6,440.00
19	HMA, 4EML, Driveway Approach	55 TON	@	\$	180.00	=	\$	9,900.00
20	Structure, Adjust	9 EA	@	\$	1,000.00	=	\$	9,000.00
21	Structure, Reconstruct	4 EA	@	\$	2,500.00	=	\$	10,000.00
22	Maintenance Gravel/Millings (As Needed)	50 TON	@	\$	30.00	=	\$	1,500.00
23	Miscellaneous Drainage Improvements	1 LS	@	\$	35,000.00	=	\$	35,000.00
24	Site Restoration	1 LS	@	\$	10,000.00	=	\$	10,000.00
25	Soil Erosion and Sedimentation Control	1 LS	@	\$	2,500.00	=	\$	2,500.00
26	Street Sign, Artistic, Special	1 EA	@	\$	600.00	=	\$	600.00
27	Maintaining Traffic	1 LS	@	\$	6,000.00	=	\$	6,000.00
	SUBTOTAL						\$	555,900.00
	Construction Contingency (25%)						\$	139,000.00
	TOTAL CONSTRUCTION						\$	694,900.00
	Engineering, Survey, Geotechnical, Permitting (25%)						\$	173,700.00
	TOTAL PROJECT						\$	868,600.00



PROJECT:	VILLAGE OF BINGHAM FARMS ROAD IMPROVEMENTS PROGRAM	DATE:	November 17, 2023
LOCATION:	TIMBER TRAIL	PROJECT #:	20220208
WORK:	HMA CRUSH & SHAPE + 3" RESURFACING, DRAINAGE	ESTIMATOR:	WJW
	NO UNDERDRAIN	CHECKED BY:	BWS
	DITCH CLEANOUT (ASSUME 75%)	CURRENT ENR (Nov. 2023):	13511

Item	Qty	Unit		Re	v Unit Price		Rev Total
1	Mobilization	1 LS	@	\$	18,000.00	=	\$ 18,000.00
2	Color Audio-Video Route Survey	1 LS	@	\$	2,000.00	=	\$ 2,000.00
3	HMA Base Crushing and Shaping	4,355 SYD	@	\$	5.00	=	\$ 21,780.00
4	HMA Surface, Rem, Driveway Approaches	40 SYD	@	\$	10.00	=	\$ 400.00
5	Butt Joint	170 LFT	@	\$	10.00	=	\$ 1,700.00
6	Station Grading	22 STA	@	\$	5,000.00	=	\$ 110,000.00
7	Subgrade Undercutting, Type II, Special (As Needed)	218 CYD	@	\$	40.00	=	\$ 8,710.00
8	1" Aperture Geogrid (As Needed)	653 SYD	@	\$	10.00	=	\$ 6,530.00
9	Aggregate Base, 21AA, Special (As Needed)	- TON	@	\$	40.00	=	\$ -
10	1" x 3" Crushed Concrete, Special (As Needed)	- TON	@	\$	25.00	=	\$ -
11	Earthwork to Place & Compact Pulverized HMA in Undercuts	218 CYD	@	\$	5.00	=	\$ 1,090.00
12	Ditch Cleanout/Reestablishment (As Needed)	16.5 STA	@	\$	1,000.00	=	\$ 16,500.00
13	Underdrain, Subgrade, Open-Graded, 6-inch, Special	- LFT	@	\$	25.00	=	\$ -
14	Underdrain, Cleanout	- EA	@	\$	4,000.00	=	\$ -
15	Aggregate Base, 21AA, Special	- TON	@	\$	40.00	=	\$ -
16	HMA, 5EML	359 TON	@	\$	175.00	=	\$ 62,880.00
17	HMA, 4EML	359 TON	@	\$	160.00	=	\$ 57,490.00
18	HMA, 5EML, Driveway Approach	3 TON	@	\$	195.00	=	\$ 640.00
19	HMA, 4EML, Driveway Approach	6 TON	@	\$	180.00	=	\$ 990.00
20	Structure, Adjust	2 EA	@	\$	1,000.00	=	\$ 2,000.00
21	Structure, Reconstruct	1 EA	@	\$	2,500.00	=	\$ 2,500.00
22	Maintenance Gravel/Millings (As Needed)	90 TON	@	\$	30.00	=	\$ 2,700.00
23	Miscellaneous Drainage Improvements	1 LS	@	\$	45,000.00	=	\$ 45,000.00
24	Site Restoration	1 LS	@	\$	10,000.00	=	\$ 10,000.00
25	Soil Erosion and Sedimentation Control	1 LS	@	\$	2,500.00	=	\$ 2,500.00
26	Street Sign, Artistic, Special	1 EA	@	\$	600.00	=	\$ 600.00
27	Maintaining Traffic	1 LS	@	\$	8,000.00	=	\$ 8,000.00
	SUBTOTAL						\$ 382,000.00
	Construction Contingency (25%)						\$ 95,500.00
	TOTAL CONSTRUCTION						\$ 477,500.00
	Engineering, Survey, Geotechnical, Permitting (25%)						\$ 119,400.00
	TOTAL PROJECT						\$ 596,900.00



PROJECT:	VILLAGE OF BINGHAM FARMS ROAD IMPROVEMENTS PROGRAM	DATE:	November 17, 2023
LOCATION:	TIMBER TRAIL	PROJECT #:	20220208
WORK:	HMA REHAB 4", UNDERDRAIN, DRAINAGE IMPROVEMENTS	ESTIMATOR:	WJW
	UNDERDRAIN (100% OF THE ROAD)	CHECKED BY:	BWS
	DITCH CLEANOUT (ASSUME 75%)	CURRENT ENR (Nov. 2023):	13511

ltem	Qty	Unit	Rev Unit Price					Rev Total	
1	Mobilization	1 LS	@	\$	28,000.00	=	\$	28,000.00	
2	Color Audio-Video Route Survey	1 LS	@	\$	2,000.00	=	\$	2,000.00	
3	HMA Surface, Rem	4,355 SYD	@	\$	6.00	=	\$	26,130.00	
4	HMA Surface, Rem, Driveway Approaches	40 SYD	@	\$	10.00	=	\$	400.00	
5	Butt Joint	170 LFT	@	\$	10.00	=	\$	1,700.00	
6	Station Grading	22 STA	@	\$	3,000.00	=	\$	66,000.00	
7	Subgrade Undercutting, Type II, Special (As Needed)	290 CYD	@	\$	40.00	=	\$	11,610.00	
8	Large Aperture Geogrid (As Needed)	871 SYD	@	\$	10.00	=	\$	8,710.00	
9	Aggregate Base, 21AA, Special (As Needed)	181 TON	@	\$	40.00	=	\$	7,240.00	
10	1" x 3" Crushed Concrete, Special (As Needed)	261 TON	@	\$	25.00	=	\$	6,540.00	
11	Ditch Cleanout/Reestablishment (As Needed)	16.5 STA	@	\$	1,000.00	=	\$	16,500.00	
12	Underdrain, Subgrade, Open-Graded, 6-inch, Special	4,390 LFT	@	\$	25.00	=	\$	109,750.00	
13	Underdrain, Cleanout	13 EA	@	\$	4,000.00	=	\$	52,000.00	
14	Aggregate Base, 21AA, Special	457 TON	@	\$	40.00	=	\$	18,290.00	
15	HMA, 5EML	359 TON	@	\$	175.00	=	\$	62,880.00	
16	HMA, 4EML	599 TON	@	\$	160.00	=	\$	95,810.00	
17	HMA, 5EML, Driveway Approach	3 TON	@	\$	195.00	=	\$	640.00	
18	HMA, 4EML, Driveway Approach	6 TON	@	\$	180.00	=	\$	990.00	
19	Structure, Adjust	2 EA	@	\$	1,000.00	=	\$	2,000.00	
20	Structure, Reconstruct	1 EA	@	\$	2,500.00	=	\$	2,500.00	
21	Maintenance Gravel/Millings (As Needed)	90 TON	@	\$	30.00	=	\$	2,700.00	
22	Miscellaneous Drainage Improvements	1 LS	@	\$	45,000.00	=	\$	45,000.00	
23	Site Restoration	1 LS	@	\$	10,000.00	=	\$	10,000.00	
24	Soil Erosion and Sedimentation Control	1 LS	@	\$	2,500.00	=	\$	2,500.00	
25	Street Sign, Artistic, Special	1 EA	@	\$	600.00	=	\$	600.00	
26	Maintaining Traffic	1 LS	@	\$	8,000.00	=	\$	8,000.00	
	SUBTOTAL						\$	588,500.00	
	Construction Contingency (25%)						\$	147,100.00	
	TOTAL CONSTRUCTION						\$	735,600.00	
	Engineering, Survey, Geotechnical, Permitting (25%)						\$	183,900.00	
	TOTAL PROJECT						\$	919,500.00	



PROJECT:	VILLAGE OF BINGHAM FARMS ROAD IMPROVEMENTS PROGRAM	DATE:	September 25, 2023
LOCATION:	TIMBER TRAIL - PATH	PROJECT #:	20220208
WORK:	HMA CRUSH & SHAPE + 2", DITCH CLEANOUT	ESTIMATOR:	WJW
	DITCH CLEANOUT (ASSUME 20%)	CHECKED BY:	BWS
		CURRENT ENR (Nov. 2023):	13511

ltem	Qty	Unit	Rev Unit Price					Rev Total	
						_	_		
1	Mobilization	1 LS	@	\$	10,000.00	=	\$	10,000.00	
2	Color Audio-Video Route Survey	1 LS	@	\$	2,000.00	=	\$	2,000.00	
3	HMA Base Crushing and Shaping	4,355 SYD	@	\$	5.00	=	\$	21,780.00	
4	HMA Surface, Rem, Driveway Approaches	40 SYD	@	\$	10.00	=	\$	400.00	
5	Butt Joint	170 LFT	@	\$	10.00	=	\$	1,700.00	
6	Subgrade Undercutting, Type II, Special (As Needed)	218 CYD	@	\$	40.00	=	\$	8,710.00	
7	Large Aperture Geogrid (As Needed)	653 SYD	@	\$	10.00	=	\$	6,530.00	
8	Aggregate Base, 21AA, Special (As Needed)	137 TON	@	\$	40.00	=	\$	5,490.00	
9	1" x 3" Crushed Concrete, Special (As Needed)	196 TON	@	\$	25.00	=	\$	4,900.00	
10	Ditch Cleanout/Reestablishment (As Needed)	4.5 STA	@	\$	1,000.00	=	\$	4,500.00	
11	HMA, 36A	406 TON	@	\$	185.00	=	\$	75,130.00	
12	Structure, Adjust	2 EA	@	\$	1,000.00	=	\$	2,000.00	
13	Structure, Reconstruct	1 EA	@	\$	2,500.00	=	\$	2,500.00	
14	Bollards	9 EA	@	\$	900.00	=	\$	8,100.00	
15	Miscellaneous Drainage Improvements	1 LS	@	\$	45,000.00	=	\$	45,000.00	
16	Site Restoration	1 LS	@	\$	5,000.00	=	\$	5,000.00	
17	Soil Erosion and Sedimentation Control	1 LS	@	\$	2,500.00	=	\$	2,500.00	
18	Maintaining Traffic	1 LS	@	\$	2,000.00	=	\$	2,000.00	
	SUBTOTAL						\$	208,200.00	
	Construction Contingency (25%)						\$	52,100.00	
	TOTAL CONSTRUCTION						\$	260,300.00	
	Engineering, Survey, Geotechnical, Permitting (25%)						\$	65,100.00	
	TOTAL PROJECT						\$	325,400.00	