



**Grant County**  
**Department of Public Works**  
124 Enterprise St. S.E.  
Ephrata, WA 98823



Serial No. 17-197

## Memo

**To:** Honorable Board of County Commissioners  
Grant County

**From:** Jeff Tincher, P.E.   
Director/County Road Engineer

**Date:** October 3, 2017

**Re:** 2017 Updated Prioritization of Gravel to Oil Projects

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Grant County Public Works has completed the update to the Gravel to Oil projects. Please find attached an updated list and a recommendation for programming projects in calendar years 2021 thru 2028.

### Background

In 1999, Grant County embarked on a program of upgrading existing gravel roads to paved. This program anticipated directing as much as \$7 to \$8 million of the County Road Fund over several years to placing a bituminous surface treatment on the highest ranked gravel roads. Current yearly funding is approximately \$600,000 to \$700,000 with a current estimated cost of \$225,000 per project mile.

On December 21, 1999 the Grant County Department of Public Works, with the help of a consultant, implemented a priority programming method for evaluating and ranking gravel roads within Grant County to provide both a methodology and an immediate rank-ordered list of such roads for upgrading to a paved surface. Since then that list has continued to be worked off of. It is important to note that the majority of potential projects are from an existing list proposed by the Stakeholder Advisory Committee (originally formed 1999) members and Public Works with some potential projects added thru out the years. The Original priority list was completed in 2000 with updates in 2006 and 2011.

### 2017 Update

This 2017 update is the 4<sup>th</sup> phase of evaluations and rankings. With the completion of the gravel to oil evaluations and continued effort to pave the roadway segments on the 2011 list, a total of 12 projects have been completed totaling approximately 23 miles paved so far, this is out of the 93 on the original list. A few additional roads were added to the list in spring 2017 making the existing total to still be completed 81 remaining projects. Currently there are 8 projects listed on the Public Works 6 year improvement plan equaling an additional 13 miles to be completed which were not included in this update since they are currently programmed.

The 2017 evaluation followed the same guidelines for data collection and ranking criteria used in the past evaluations. The data compiled was:

1. ADT (Average Daily Traffic) traffic Counts & ADT truck counts
2. Adjacent residences
3. Bus route ADT
4. Network completion/missing link
5. County maintenance costs
6. Dust susceptible crops
7. Accident history (2012-2017)
8. Agricultural land values (based on crop type)

Based upon the data gathered in 2017 the list was updated and the roads listed were given new rankings. Overall project cost for the highest ranked 16 projects is included with the proposed construction year (see attached Appendix A).

Changes in rankings occurred on some projects on the list. The majority of these rank changes can be attributed to the amount/type of adjacent crops and the addition/subtraction of adjacent residences. Other contributing factors are listed above, numbers 1-8. The 2017 priority array differences are explained by significant changes in characteristic values.

### Recommendations

The Department of Public Works has the following recommendations:

1. Accept the resultant rank-ordered list of the project list as shown in Appendix B to serve as the basis for selecting specific projects to be constructed. If sufficient funding is available program the projects as shown in Appendix A.
2. Maintain the existing Cost Share Program as it provides an alternate means of funding gravel road upgrades for projects that do not rank well or not at all on the priority array.

Dated this <u>31<sup>st</sup></u> day of <u>October</u> , 2017		
Board of County Commissioners		
Grant County, Washington		
<u>Approve</u>	<u>Disapprove</u>	<u>Abstain</u>
Dist #1 <u>[Signature]</u>	Dist #1 _____	Dist #1 _____
Dist #2 <u>[Signature]</u>	Dist #2 _____	Dist #2 _____
Dist #3 <u>[Signature]</u>	Dist #3 _____	Dist #3 _____

“To meet current and future needs, serving together with public and private entities, while fostering a respectful and successful work environment.”

**APPENDIX A**  
2017 Gravel to Oil Priority Array  
9/19/2017

Rank	Rd No	Rd Name	BMP	EMP	Length	FFC	Begin	End	Project Cost	Approx. Construction Year	Total Adjusted Score
1	94030	12-NE	8.24	9.01	0.77	8	at M NE	East End Bridge #158	\$173,250	2021	4.485853
2	94020	8-NE	1.18	1.98	0.8	8	end of oil E of N-NE	begin of oil	\$180,000	2022	4.42494
3	38830	G.7-NW/ 5.6-NW/ H-NW	0	2.17	2.17	9	at 5-NW	at 7-NW	\$488,250	2021	4.356887
4	43750	S-NE	3.52	5.53	2.01	9	End of Oil	Where 5.5-NE would be	\$452,250	2022	4.327416
5	13200	11-SW	0	0.75	0.75	9	at Dodson Rd	at Beginning of pavement	\$168,750	2023	4.318342
6	32260	12-NW	1	1.33	0.33	9	at U-NW	0.33 miles W of U-NE	\$74,250	2023	4.149551
8	10270	12-SW	6.74	7.97	1.23	9	at end pvmt E of J-SW	W to K-SW	\$276,750	2024	3.976999
9	21930	K-SE	1.5	2.01	0.51	9	0.50 m north 5-SE	at 4-SE	\$114,750	2023	3.777927
10	22100	Baseline .5-SE	0	1.01	1.01	9	at M-SE	at N-SE	\$227,250	2024	3.426342
11	30400	Martin Rd	0	2.1	2.1	9	at T-NW	E to R-NW	\$472,500	2025	3.411054
12	51600	31-NE	3.98	6.99	3.01	8	at N-NE	at Q-NE	\$677,250	2026	3.394788
13	93039	3-NW	0	0.79	0.79	9	at Adams Rd	at SR-283	\$177,750	2025	3.204388
14	45880	18-NE	0.5	2.01	1.51	9	at W-NE	at U-NE	\$339,750	2027	3.168113
15	46750	16-NE	7.4	9.69	2.29	9	at gate	at Stratford Rd	\$515,250	2028	3.159958
16	46628	B.5-NE	0	0.62	0.62	9	at 20 NE	0.62 mi. NE of 20 NE	\$139,500	2027	3.1213
<b>Total:</b>									<b>\$4,477,500</b>		

**NOTES:** Average Project Cost \$225,000 per mile, Approx. \$600,000 to \$700,000 funding per year

Approximate Funding Each Year	
2021	\$661,500
2022	\$632,250
2023	\$357,750
2024	\$504,000
2025	\$650,250
2026	\$677,250
2027	\$479,250
2028	\$515,250
<b>TOTAL:</b>	<b>\$4,477,500</b>

## APPENDIX B

2017 Priority Array - Sorted

9/6/2017

Ref #	Rd No	Rd Name	BMP	EMP	Length	FFC	Begin	End	School District	Total Adjusted Score	Rank
1	94030	12-NE	8.24	9.01	0.77	8	at M NE	East End Bridge #158	MLK	4.49	1
2	94020	8-NE	1.18	1.98	0.8	8	end of oil E of N-NE	begin of oil	MLK	4.42	2
3	38830	G.7-NW/5.6-NW/H-NW	0	2.17	2.17	9	at 5-NW	at 7-NW	EPH	4.36	3
4	43750	5-NE	3.52	5.53	2.01	9	End of Oil	Where 5.5-NE would be	MLK	4.33	4
5	13200	11-SW	0	0.75	0.75	9	at Dodson Rd	at Beginning of pavement	ROY	4.32	5
6	32260	12-NW	1	1.33	0.33	9	at U-NW	0.33 miles W of U-NE	QUI	4.15	6
7	12530	H SW	0	1.02	1.02	9	at 12 SW	at SR 26	ROY	4.15	7
8	10270	12-SW	6.74	7.97	1.23	9	at end pvmt E of J-SW	W to K-SW	ROY	3.98	8
9	21930	K-SE	1.5	2.01	0.51	9	0.50 m north 5-SE	at 4-SE	MLK	3.78	9
10	22100	Baseline .5-SE	0	1.01	1.01	9	at M-SE	at N-SE	MLK	3.43	10
11	30400	Martin Rd	0	2.1	2.1	9	at T-NW	E to R-NW	QUI	3.41	11
12	51600	31-NE	3.98	6.99	3.01	8	at N-NE	at Q-NE	WIL	3.39	12
13	93039	3-NW	0	0.79	0.79	9	at Adams Rd	at SR-283	QUI	3.20	13
14	45880	18-NE	0.5	2.01	1.51	9	at W-NE	at U-NE	ODE/WIL	3.17	14
15	46750	16-NE	7.4	9.69	2.29	9	at gate	at Stratford Rd	MLK	3.16	15
16	46628	B.5-NE	0	0.62	0.62	9	at 20 NE	0.62 mi. NE of 20 NE	SLK	3.12	16
17	20790	E-SE/ 15.1-SE	0	4.12	4.12	9	at D-SE	at 12-SE	ROY	3.11	17
18	50850	Dry Coulee Rd	3.91	9.79	5.88	9	end of oil vic D-NE	at Pinto Ridge Rd	SLK/C-H	3.01	18
19	36550	M.7-NW	0	2	2	9	at 8-NW	at 6-NW	QUI	2.98	19
20	46800+ 46880	N / 21 / 22-NE	0.00 4.16	4.67 5.78	6.29	9	at inter w/22-NE at N-NE	at Stratford Rd at end of oil	WIL	2.94	20
21	30431	10-NW	0	1.03	1.03	9	at H-NW	E to end county road	EPH	2.93	21
22	16790	N-NW	0	0.99	0.99	9	at Baseline West	N to S Frontage Rd	QUI	2.91	22
23	30040	4-NW	0	2.02	2.02	9	at E-NW	at Dodson Rd	EPH	2.88	23
24	15300	Royal Slope Rd	2.71	4.31	1.6	8	at G.5-SW	W to I-SW	ROY	2.80	24
25	32850	Q-NW/Overen Rd	3.28	4.12	0.84	8	at end of oil on Q-NW	N to X w/14-NW	QUI	2.79	25

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26	11500+ 11590	10-SW / P-SW	2.05 2.07	3.06 3.07	2.01	9	at Beverly-Burke Rd at 11-SW	at P-SW at 10-SW	ROY	2.79	26
27	36950	J-NW	1.15	1.64	0.49	9	at Martin Rd	end county road	QUI	2.75	27
28	20550	B-SE	5.78	6.83	1.05	9	at 13-SE	at 12-SE	ROY	2.73	28
29	46370	Bouldercrest Rd	0	0.34	0.34	9	at Nepple Rd	begin oil vic 7.5-NE	MLK	2.73	29
30	36700	8-NW	4.02	5.03	1.01	9	at L-NW	at K-NW	QUI	2.66	30
31	40200	8-NE	0	1.09	1.09	9	at M-NE	at Beginning of pavement	MLK	2.62	31
32	10330	23-SW	0	3.16	3.16	9	at R-SW	E to O-SW	WAL	2.58	32
33	25000+ 25190	7-SE / T-SE	0.00 0.00	1.00 1.01	2.01	9	at S-SE	E to T-SW then S to SR-170	WAR	2.56	33
34	45900	19-NE	0	2.91	2.906	9	at 19-NE/Blackrock Xsect	0.98 mi E of U-NE	ODE/WIL	2.54	34
35	91010	Lower Crab Creek	3.16	5.79	2.63	8	at end of oil	W end Bridge 308	ROY	2.52	35
36	11510	11-SW/ R-SW	0	2.02	2.02	9	at Beverly-Burke Rd	at 10-SW	ROY	2.50	36
37	25690	W.2-SE	0	1.23	1.23	9	at V-SE at X-w/5-SE	E to X w/W.2-SE SE to 6-NE	WAR	2.49	37
38	30850	T-SW/ 2-SW	2.01	3.83	1.82	9	at 1-SW	end county road	QUI	2.47	38
39	16550	1.5/2-SW	0	1.17	1.17	9	at Q-SW	at Beverly-Burke Rd (R-SW)	QUI	2.41	39
40	36900	11.5/F-NW	5.25	8.06	2.81	9	0.10 mi E of H-NW	E to F-NW; N to Martin Rd	EPH	2.40	40
41	52500	29-NE	0	6.23	6.23	9	at R-NE	at X-NE (county line)	WIL	2.35	41
42	38920	6-NW	0	1.01	1.01	9	at F-NW	at G-NW	EPH	2.34	42
43	16850	L.5-NW	0	1	1	9	at Baseline West	N to S Frontage Rd	QUI	2.22	43
44	32750	M.5-NW	0	0.91	0.91	9	at 13-NW	end county road	QUI	2.20	44
45	12150+ 12280	K /14.5 / L.5-SW	1.55 1.78	2.05 3.84	2.56	9	at 13.5-SE	S to 14.5 then W to end of L.5	ROY	2.19	45
46	14050	Division-S	0	0.94	0.94	9	at 11-SW	at End County Road	ROY	2.18	46
47	40730	D-NE	0	0.96	0.96	9	at Mae Valley Rd	at N Frontage Rd	MLK	2.17	47
48	22600	R-SE/11-SE	6.64	9.38	2.74	9	at end of oil S of SR-170	S to 11-SE then W to SR-17	WAR	2.16	48

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9/6/2017

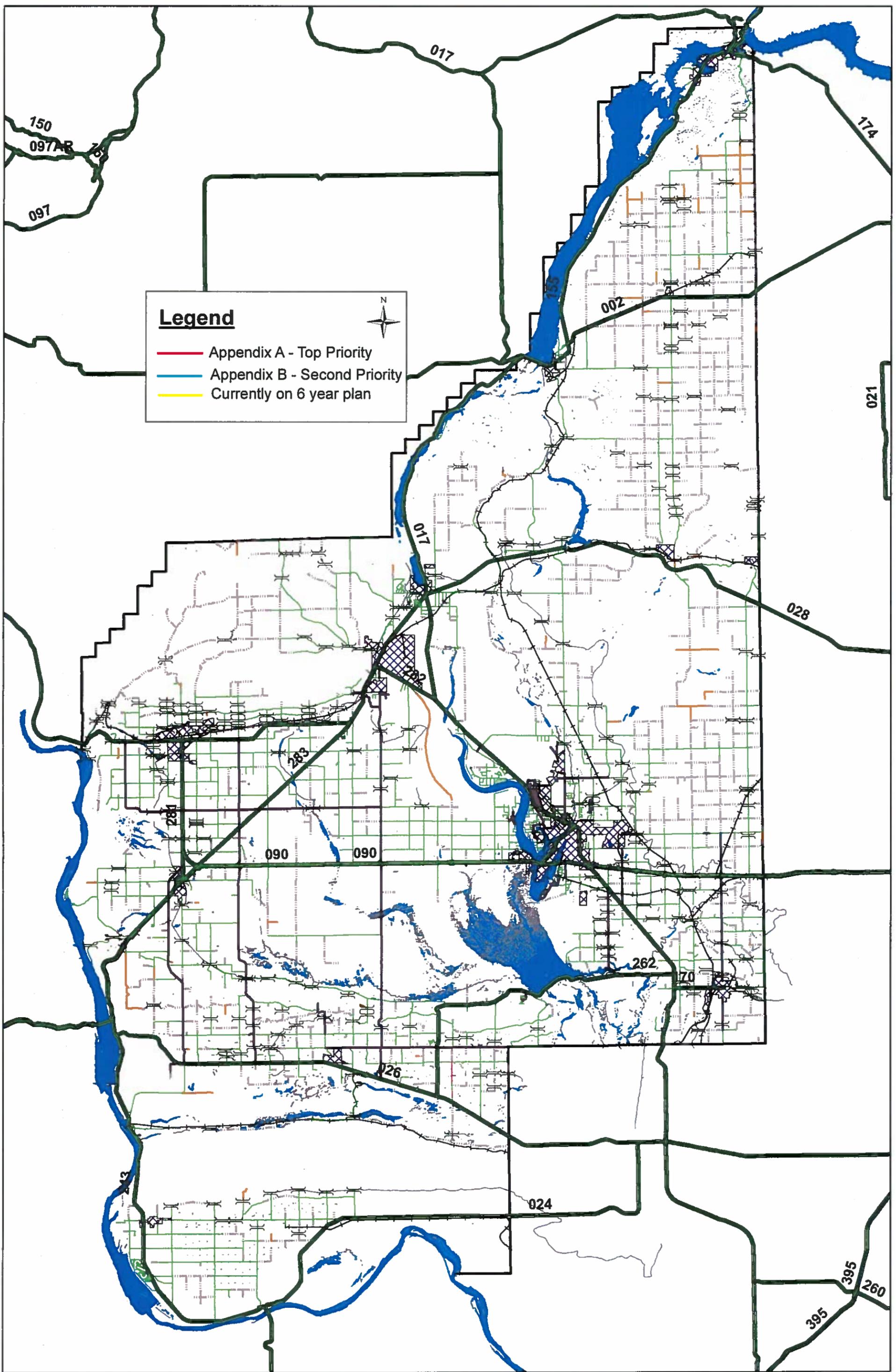
Ref #	Rd No	Rd Name	BMP	EMP	Length	FFC	Begin	End	School District	Total Adjusted Score	Rank
49	94020	8-NE	0	0.98	0.98	9	at M-NE	at N-NE	MLK	2.05	49
50	43048	Sheep Canyon Rd	5.01	6.98	1.97	9	at Johnson Rd	at G-NW	EPH	2.05	50
51	46780	18-NE	0	2.03	2.03	9	at Stratford Rd	W to 0.51 mi. W of Br#120	EPH/WIL	2.03	51
52	36900	F-NW	8.06	8.42	0.36	9	at Martin Rd	N to irrigation canal	EPH	2.03	52
53	33700	24-NW	4.31	6.12	1.81	7	at end of oil	W to 45D turn	QUI/EPH	1.99	53
54	50100	44-NE	0	3.02	3.02	9	at R-NE	at O-NE	C-H	1.98	54
55	47150	K-NE	3.18	5.14	1.96	9	at K-NE at end oil	at Stratford Rd at 15-NE	MLK	1.92	55
56	12010	K-SW	0	1.4	1.4	9	at 11-SW	at begin new oil	ROY	1.84	56
57	32300	Baird Springs Rd	13.7	20	6.28	8	at Overen Rd	at end of oil at Bridge 306	QUI	1.84	57
58	10560	I-SW	0	1.5	1.5	9	at 24-SW	S to 25.5-SW	WAL	1.81	58
59	13600	11.2 SW	0.38	1	0.62	9	end oil	A SW	ROY	1.77	59
60	53250	J.5-NE	0	1.05	1.05	9	at SR-2	at 36-NE	C-H	1.73	60
61	53750	P-NE	7.03	12.1	5.09	9	at 31-NE	at 36-NE	WIL/C-H	1.72	61
62	39120	6-NW	0.25	1.26	1.01	9	at E-NW	end county road	EPH	1.72	62
63	30550	V-SW	1.19	2	0.81	9	at end oil S of 1-SW	S to end county road	QUI	1.63	63
64		Trinidad streets			0.205	9			QUI	1.61	64
65	20450	S-SE	0.56	1.69	1.13	9	at end oil on S-SE	at County Gravel Pit	WAR	1.59	65
66	45090	M.2 NE	0	0.25	0.25	9	at 10 NE	at End County Road	MLK	1.55	66
67	40610	C NE	0	0.9	0.9	9	Mae Valley Road	N. Frontage Road	MLK	1.51	67
68	20740	14.7 SE	0	2.01	2.01	9	at D SE	at B SE	ROY	1.48	68
69	32740	13 NW	4	5.18	1.18	9	end oil	.41 miles E of K NW	QUI	1.41	69
70	12410	I-SW	1	2.23	1.23	9	at 11-SW	at Royal Slope Rd SW	ROY	1.40	70
71	94034	Troutlodge Rd NE	0	2.1	2.1	9	at SR-17	at B.5-NE	EPH	1.37	71
72	38670	I.6-NW	0	0.28	0.28	9	at 5-NW	S 0.28 miles	EPH	1.34	72
73	10320	25.5-SW	1	4.96	3.96	9	at I-SW	to SR24	WAL	1.24	73
74	20520	10.5 SE	0	1.07	1.07	9	at B SE	at C SE	ROY	1.15	74

## **APPENDIX B**

2017 Priority Array - Sorted

9/6/2017

Ref #	Rd No	Rd Name	BMP	EMP	Length	FFC	Begin	End	School District	Total Adjusted Score	Rank
75	91010	Lower Crab Cr.	11.6	13.1	1.5	8	at Public Fishing access	at E end begin pavement	ROY	1.09	75
76	30710	U-SW	3	3.7	0.7	9	at 1-SW	S to 53 ft S of wasteway	QUI	0.92	76
77	46750	E / 19 / D.7-NE	0.6	2.25	1.65	9	at end pvmt S of 20-NE	S 1.4 miles to last residence	EPH	0.83	77
78	21690	A-SE	1.8	2.78	0.98	9	end of oil	end county road	MLK	0.79	78
79	15000	S-SW	4.53	7.03	2.5	9	at 9-SW	S to SR-26	ROY	0.77	79
80	11450	R-SW	1	1.53	0.53	9	end oil 1 mi S of SR-26	1.01 mi. S of 13-SW/R-SW X	ROY	0.64	80
81	52250	Q-NE	8.21	13.3	5.1	9	at 31-NE	at 36-NE	WIL/C-H	0.41	81



**Legend**

- Appendix A - Top Priority
- Appendix B - Second Priority
- Currently on 6 year plan

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