STAVE TOWNSHIP
T157 North, Range 88 West 5th P.M.
FEMA Project DR-4128-ND 2013
PA-08-ND-4128-PW#00103(0)

Improved Project Request

COMPLETED PROJECTS

Grade Raise	Project 1 Wink Grade (Site 4-S)		Project 2 Gandrud Grade (11-S)		Project 3 Terry Stave Grade (10-S)	
Length	975 ft		1350 ft		735 ft	
Width	22 ft		22 ft		22 ft	
Height of existing road	5.5 ft		4 ft		5.3 ft	
Raise	1 ft		1 ft		1 ft	
Slope 1 Length	13 ft		10 ft		18.9 ft	
Slope Ratio	2		2		3	
Existing Slope	8 ft		8 ft		8 ft	
Finish Surface Gravel Depth	0.5 ft		0.5 ft		0.5 ft	
Ft^3/Yd	27		27		27	
Cost Pit Run	$ 20.00 yd		$ 20.00 yd		$ 20.00 yd	
Cost Gravel	$ 24.00 yd		$ 24.00 yd		$ 24.00 yd	
Cost Rip Rap	$ 61.00 yd		$ 61.00 yd		$ 61.00 yd	
Yards/Load	20 yd		20 yd		20 yd	
Pit Run Surface	794 yds	40.00 loads	1100.00 yds	55.00 loads	598.89 yds	30.00 loads
Pit Run Slopes	2289 yds	115.00 loads	1750.00 yds	88.00 loads	2431.01 yds	122.00 loads
Pit Run Each Side	1144 yds	58.00 loads	875.00 yds	44.00 loads	1215.51 yds	61.00 loads
Pit Run Total	3083 yds	$ 61,659.72	2850 yds	$ 57,000.00	3030 yds	$ 60,598.03
Gravel	397 yds	20 loads	550 yds	28 loads	299 yds	15 loads
Gravel Total		$ 9,533.33		$ 13,200.00		$ 7,186.67
Rip Rap Each Slope	235 yds	11.74 loads	250 yds	12.50 loads	257 yds	12.86 loads
Rip Rap Total	469 yds	23.47 loads	500 yds	25.00 loads	515 yds	25.73 loads
		$ 28,636.11		$ 30,500.00		$ 31,384.50
Sub Total		$ 99,829.17		$ 100,700.00		$ 99,169.19
Total		$ 299,698.36				

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Improved Project Request

NOT COMPLETED

Grade Raise	Project 4 East Quigly Grade (7-S)		Project 5 Midbow Grade (8-S)		Project 6 Alvstad Grade (14-S)	
Length	875 ft		750 ft		900 ft	
Width	22 ft		22 ft		22 ft	
Height of existing road	5 ft		5 ft		5 ft	
Raise	3 ft		1 ft		2 ft	
Slope 1 Length	24 ft		18 ft		21 ft	
Slope Ratio	3		3		3	
Existing Slope	4 ft		4 ft		4 ft	
Finish Surface Gravel Depth	0.5 ft		0.5 ft		0.5 ft	
Ft^3/Yd	27		27		27	
Cost Pit Run	$ 30.00 yd		$ 20.00 yd		$ 30.00 yd	
Cost Gravel	$ 24.00 yd		$ 24.00 yd		$ 24.00 yd	
Cost Rip Rap	$ 61.00 yd		$ 61.00 yd		$ 61.00 yd	
Yards/Load	20 yd		20 yd		20 yd	
Pit Run Surface	2140.00 yds	107.00 loads	620.00 yds	31.00 loads	1480.00 yds	74.00 loads
Pit Run Slopes	6240.00 yds	312.00 loads	3000.00 yds	150.00 loads	4900.00 yds	245.00 loads
Pit Run Each Side	3120.00 yds	156.00 loads	1500.00 yds	75.00 loads	2450.00 yds	123.00 loads
Pit Run Total	8380 yds	$ 251,400.00	3620 yds	$ 72,400.00	6380 yds	$ 191,400.00
Gravel	360 yds	18 loads	320 yds	16 loads	380 yds	19 loads
Gravel Total		$ 8,640.00		$ 7,680.00		$ 9,120.00
Rip Rap Each Slope	800 yds	40 loads	500 yds	25 loads	700 yds	35 loads
Rip Rap Total	1600 yds	80 loads	1000 yds	50 loads	1400 yds	70 loads
		$ 97,600.00		$ 61,000.00		$ 85,400.00
Sub Total		$ 357,640.00		$ 141,080.00		$ 285,920.00

Total $ 784,640.00

STAVE TOWNSHIP
Mountrail County
T157 North, Range 88 West 5th P.M.
29 miles of Gravel Roads

	Road Data	Project 1 - Road Reconstruct 66th Ave; 1/2 mi N & S from 69th St	Project 2 - Gravel 1 mi 65 th Ave; 71st St to 72nd	Project 3 - Gravel 10 mi
	Length	5280 ft	5280 ft	52800 ft
	Width	22 ft	22 ft	22 ft
	Height of existing road	0.5 ft	4 ft	5.3 ft
	Raise	1 ft	0 ft	0 ft
	Slope Length	3 ft	0 ft	0 ft
	Existing Slope	8 ft	0 ft	0 ft
	Finish Surface Gravel Depth	0.5 ft	0.25 ft	0.25 ft
	Cost Pit Run	$ 20.00 yd	$ 20.00 yd	$ 20.00 yd
	Cost Gravel	$ 24.00 yd	$ 24.00 yd	$ 24.00 yd
	Yards/Load	20 yd	20 yd	20 yd
Materials Only Estimate Delivered	Pit Run Surface	4302 yds 216.00 loads	0.00 yds 0.00 loads	0.00 yds 0.00 loads
	Pit Run Slopes	660 yds 33.00 loads	0.00 yds 0.00 loads	0.00 yds 0.00 loads
	Pit Run Each Side	330 yds 17.00 loads	0.00 yds 0.00 loads	0.00 yds 0.00 loads
	Total Pit Run	4962 yds $ 99,244.44	0 yds $ -	0 yds $ -
	Gravel	2151 yds 108 loads	1076 yds 54 loads	10756 yds 538 loads
		$ 51,626.67	$ 25,813.33	$ 258,133.33
	Sub Total	**$ 150,871.11**	**$ 25,813.33**	**$ 258,133.33**

Total	**$ 434,817.78**

Wayne Goettel