

CH2M HILL - ORDER OF MAGNITUDE ESTIMATE
City of Vernonia Transportation System Plan

PROJECT: RD-7; California Street Improvements			PREPARED BY: Darren Hippenstiel	DATE: 06/20/2011	
DESIGN LEVEL: Planning Level					
KIND OF WORK: Roadway, Earthwork, Drainage			LENGTH (MILE): 0.51 mi	SHEET: 1 of 1	
NO.	ITEM	UNIT	QUANTITY	UNIT COST	COST
1	Curb, Gutter, Sidewalks & Drainage	Mi.		\$1,230,200.00	\$0
2	Shared Use Path	Mi.		\$187,800.00	\$0
3	New Roadway - Local Agg. Roads	Lane-Mi.	0.85	\$111,600.00	\$94,860
4	Overlay Existing Roadway	Lane-Mi.		\$0.00	\$0
5	Reconstruct Existing Roadway	Lane-Mi.		\$269,700.00	\$0
6	Intersection Widening	EA		\$75,400.00	\$0
7	Large Roundabouts	EA		\$1,100,000.00	\$0
8	Small Roundabouts	EA		\$400,000.00	\$0
9	Interconnect Signal	LS		\$35,000.00	\$0
10	New Signal	EA		\$300,000.00	\$0
11	Signal Modifications	EA		\$65,000.00	\$0
12	Earthwork (See Note)	CY	1,500	\$30.00	\$45,000
13	Traffic Calming	5-10%		-	\$0
14	Illumination	Mi.		\$338,000.00	\$0
15	Landscaping	Mi.		\$235,000.00	\$0
16	Bridges	SF		\$150.00	\$0
17	Walls	SF		\$55.00	\$0
SUBTOTAL					\$139,860

	ADDITIONAL CONST. COSTS	SUGGESTED	PERCENTAGE		COST
	Construction Surveying	1.0-2.5%	1.0%		\$1,400
	TP & DT	3.0-8.0%	4.0%		\$5,600
	Mobilization	8.0-10.0%	10.0%		\$14,000
	Erosion Control	0.5-2.0%	2.0%		\$2,800
	Contingency	30-40%	40.0%		\$55,900
	Escalation (per year)	0.5-2.0%	0.0%		\$0
	<i>Design Year</i>				
	<i>Construction Year</i>		2011		
TOTAL CONSTRUCTION COST					\$219,560

	ENGINEERING COSTS	SUGGESTED	PERCENTAGE		COST
	Design Engineering	13.0%	13.0%		\$28,500
	Construction Engineering	10.0%	10.0%		\$22,000
TOTAL PROJECT COST					\$271,000

Notes:

- Proposed 20' minimum section local road, aggregate surfacing; length of improvements 2,700'
- 10" Agg surfacing, assume subgrade geotextile
- Poor/weak soil existing due to location in flood plain
- 0.5' average exc/emb depth over 1/2 of roadway to set grade
- No illumination, curb or enclosed drainage
- All improvements are off-alignment (reduced traffic control)