

**CH2M HILL**  
**SUMMARY - ORDER OF MAGNITUDE COST ESTIMATE SUMMARY**

<b>PROJECT:</b> Vernonia TSP	<b>DATE:</b>	<b>SHEET:</b>
<b>DESIGN LEVEL:</b> Conceptual Level Estimates	2/23/2011	1 of 1

ALTERNATIVE	IMPROVEMENT	PROJECT COST
HB-1	PROJECT: High Build #1 - Widen OR 47	\$ 8,831,000
HB-2	PROJECT: High Build #2 - California Bike/Ped Improvements	\$ 450,000
HB-3	PROJECT: High Build #3 - New Bike/Ped Bridge	\$ 1,689,000
HB-5	PROJECT: High Build #5 - Mist Drive Intersection Improvements	\$ 369,000
HB-7a	PROJECT: High Build #7a - North/South Shared Use Path	\$ 452,000
HB-7b	PROJECT: High Build #7b - E/W Industrial Connector	\$ 2,647,000
HB-7c	PROJECT: High Build #7c - Louisiana Connection	\$ 358,000
HB-7d	PROJECT: High Build #7d - Texas Avenue Extension	\$ 1,445,000
LB-A	PROJECT: Low Build A - OR 47 @ Rose Signing	\$ 10,000
LB-Ga	PROJECT: Low Build G - Bridge Street Curb Extension	\$ 13,000
LB-Gb	PROJECT: Low Build G - Bridge Street Bioswale	\$ 15,000

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

PROJECT: High Build #1 - Widen OR 47			PREPARED BY: Darren Hippenstiel	DATE: 03/02/2011	
DESIGN LEVEL: Planning Level					
KIND OF WORK: Roadway, Walls, Earthwork, Drainage			LENGTH (MILE): 0.34	SHEET: 1 of 1	
NO.	ITEM	UNIT	QUANTITY	UNIT COST	COST
1	Curb, Gutter, Sidewalks & Drainage	Mi.	0.34	\$1,230,200.00	\$418,268
2	Shared Use Path	Mi.		\$187,800.00	\$0
3	New Roadway - State Highway	Lane-Mi.	0.44	\$457,100.00	\$201,124
4	Overlay Existing Roadway	Lane-Mi.	0.57	\$91,900.00	\$52,383
5	Reconstruct Existing Roadway	Lane-Mi.		\$304,900.00	\$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	6,250	\$30.00	\$187,500
13	Traffic Calming	5-10%		-	\$0
14	Illumination	Mi.	0.34	\$338,000.00	\$114,920
15	Landscaping	Mi.		\$235,000.00	\$0
16	Bridges	SF		\$150.00	\$0
17	Barrier	LF	1,200	\$1,750.00	\$2,100,000
18	Walls	SF	9,050	\$150.00	\$1,357,500
<b>SUBTOTAL</b>					<b>\$4,431,695</b>

	ADDITIONAL CONST. COSTS	SUGGESTED	PERCENTAGE		COST
	Construction Surveying	1.0-2.5%	2.0%		\$88,600
	TP & DT	3.0-8.0%	8.0%		\$354,500
	Mobilization	8.0-10.0%	10.0%		\$443,200
	Erosion Control	0.5-2.0%	2.0%		\$88,600
	Contingency	30-40%	40.0%		\$1,772,700
	Escalation (per year)	0.5-2.0%	2.0%		\$0
	<i>Estimate Year</i>		2011		
	<i>Construction Year</i>		2011		
<b>TOTAL CONSTRUCTION COST</b>					<b>\$7,179,295</b>

	ENGINEERING COSTS	SUGGESTED	PERCENTAGE		COST
	Design Engineering	13.0%	13.0%		\$933,300
	Construction Engineering	10.0%	10.0%		\$717,900
<b>TOTAL PROJECT COST</b>					<b>\$8,831,000</b>

Notes:

- Existing Roadway Width - 34'; 12' lanes, 10' shared use shoulder
- Proposed roadway width - 49'; 12' lanes, 6' bikes, 6.5' sidewalk (.5' curb)
- Widening is to north side only. Existing retaining wall is repaired/maintained and retrofit with concrete barrier
- 5' average height cut wall north (L=1,150')
- 10' average height (15' width) cut north
- Illumination included along corridor improvements
- Cost associated for right-of-way and environmental documentation are not included

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

<b>PROJECT:</b> High Build #2 - California Bike/Ped Improvements			<b>PREPARED BY:</b> Darren Hippenstiel		<b>DATE:</b> 03/02/2011
<b>DESIGN LEVEL:</b> Planning Level					
<b>KIND OF WORK:</b> Roadway, Earthwork, Drainage			<b>LENGTH (MILE):</b> 0.22		<b>SHEET:</b> 1 of 1
<b>NO.</b>	<b>ITEM</b>	<b>UNIT</b>	<b>QUANTITY</b>	<b>UNIT COST</b>	<b>COST</b>
1	Sidewalk & Drainage	Mi.		\$1,198,100.00	\$0
2	Shared Use Path	Mi.		\$187,800.00	\$0
3	New Roadway - Local Roads	Lane-Mi.	0.22	\$269,700.00	\$59,334
4	Overlay Existing Roadway	Lane-Mi.		\$91,900.00	\$0
5	Reconstruct Existing Roadway	Lane-Mi.		\$304,900.00	\$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	1,533	\$30.00	\$45,990
13	Traffic Calming	5-10%		-	\$0
14	Illumination	Mi.	0.22	\$338,000.00	\$74,360
15	Landscaping	Mi.	0.22	\$235,000.00	\$51,700
16	Bridges	SF		\$150.00	\$0
17	Walls	SF		\$55.00	\$0
<b>SUBTOTAL</b>					<b>\$231,384</b>

	<b>ADDITIONAL CONST. COSTS</b>	<b>SUGGESTED</b>	<b>PERCENTAGE</b>		<b>COST</b>
	Construction Surveying	1.0-2.5%	2.0%		\$4,600
	TP & DT	3.0-8.0%	4.0%		\$9,300
	Mobilization	8.0-10.0%	10.0%		\$23,100
	Erosion Control	0.5-2.0%	2.0%		\$4,600
	Contingency	30-40%	40.0%		\$92,600
	Escalation (per year)	0.5-2.0%	2.0%		\$0
	<i>Estimate Year</i>		2011		
	<i>Construction Year</i>		2011		
<b>TOTAL CONSTRUCTION COST</b>					<b>\$365,584</b>

	<b>ENGINEERING COSTS</b>	<b>SUGGESTED</b>	<b>PERCENTAGE</b>		<b>COST</b>
	Design Engineering	13.0%	13.0%		\$47,500
	Construction Engineering	10.0%	10.0%		\$36,600
<b>TOTAL PROJECT COST</b>					<b>\$450,000</b>

**Notes:**

- Proposed 12' width shared use path, 2" AC/10" Agg base
- Improvement limits from the west beginning of California to Missouri Intersection
- 2' average height earthwork
- Illumination and landscaping included along corridor improvements
- Cost associated for right-of-way and environmental documentation are not included

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

PROJECT: High Build #3 - New Bike/Ped Bridge			PREPARED BY: Darren Hippenstiel	DATE: 03/02/2011	
DESIGN LEVEL: Planning Level					
KIND OF WORK: Roadway, Walls, Earthwork, Drainage, Structures			LENGTH (MILE): 0.10	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.	0.07	\$187,800.00	\$13,146
3	New Roadway - State Highway	Lane-Mi.		\$457,100.00	\$0
4	Overlay Existing Roadway	Lane-Mi.		\$91,900.00	\$0
5	Reconstruct Existing Roadway	Lane-Mi.		\$304,900.00	\$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	1,750	\$30.00	\$52,500
13	Traffic Calming	5-10%		-	\$0
14	Illumination	Mi.	0.10	\$338,000.00	\$33,800
15	Landscaping	Mi.	0.10	\$235,000.00	\$23,500
16	Bridges	SF	3,000	\$225.00	\$675,000
17	Walls	SF	900	\$55.00	\$49,500
<b>SUBTOTAL</b>					<b>\$847,446</b>

	ADDITIONAL CONST. COSTS	SUGGESTED	PERCENTAGE		COST
	Construction Surveying	1.0-2.5%	2.0%		\$16,900
	TP & DT	3.0-8.0%	8.0%		\$67,800
	Mobilization	8.0-10.0%	10.0%		\$84,700
	Erosion Control	0.5-2.0%	2.0%		\$16,900
	Contingency	30-40%	40.0%		\$339,000
	Escalation (per year)	0.5-2.0%	2.0%		\$0
	<i>Estimate Year</i>		2011		
	<i>Construction Year</i>		2011		
<b>TOTAL CONSTRUCTION COST</b>					<b>\$1,372,746</b>

	ENGINEERING COSTS	SUGGESTED	PERCENTAGE		COST
	Design Engineering	13.0%	13.0%		\$178,500
	Construction Engineering	10.0%	10.0%		\$137,300
<b>TOTAL PROJECT COST</b>					<b>\$1,689,000</b>

Notes:

- Proposed 12' width shared use path, 2" AC/10" Agg base; length of improvements 550' (350' path)
- 200' length clear span, 15' wide bridge (12' path, 1.5' rails)
- Concrete girder type bridge assumed.
- 5' average height fill and wing walls at bridge approaches
- 5' average height fill approaching bridge
- Illumination included along corridor improvements
- Cost associated for right-of-way and environmental documentation are not included

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

PROJECT: High Build #5 - Mist Drive Intersection Improvements			PREPARED BY: Darren Hippenstiel	DATE: 03/02/2011	
DESIGN LEVEL: Planning Level					
KIND OF WORK: Roadway, Drainage			LENGTH (MILE): 0.04	SHEET: 1 of 1	
NO.	ITEM	UNIT	QUANTITY	UNIT COST	COST
1	Curb, Gutter, Sidewalks & Drainage	Mi.	0.04	\$1,216,700.00	\$48,668
2	Shared Use Path	Mi.		\$187,800.00	\$0
3	New Roadway - Collector	Lane-Mi.	0.14	\$339,100.00	\$47,474
4	Overlay Existing Roadway	Lane-Mi.		\$91,900.00	\$0
5	Reconstruct Existing Roadway	Lane-Mi.		\$304,900.00	\$0
6	Intersection Widening	EA	1	\$75,400.00	\$75,400
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		\$30.00	\$0
13	Traffic Calming	5-10%		-	\$0
14	Illumination	Mi.	0.04	\$338,000.00	\$13,520
15	Landscaping	Mi.		\$235,000.00	\$0
16	Bridges	SF		\$200.00	\$0
17	Walls	SF		\$55.00	\$0
<b>SUBTOTAL</b>					<b>\$185,062</b>

	ADDITIONAL CONST. COSTS	SUGGESTED	PERCENTAGE		COST
	Construction Surveying	1.0-2.5%	2.0%		\$3,700
	TP & DT	3.0-8.0%	8.0%		\$14,800
	Mobilization	8.0-10.0%	10.0%		\$18,500
	Erosion Control	0.5-2.0%	2.0%		\$3,700
	Contingency	30-40%	40.0%		\$74,000
	Escalation (per year)	0.5-2.0%	2.0%		\$0
	<i>Estimate Year</i>		2011		
	<i>Construction Year</i>		2011		
<b>TOTAL CONSTRUCTION COST</b>					<b>\$299,762</b>

	ENGINEERING COSTS	SUGGESTED	PERCENTAGE		COST
	Design Engineering	13.0%	13.0%		\$39,000
	Construction Engineering	10.0%	10.0%		\$30,000
<b>TOTAL PROJECT COST</b>					<b>\$369,000</b>

Notes:

Improvements consolidate intersection of Mist Dr. and OR47 to one location  
Roadway approaches widened along OR47 for SB left turn lane to Mist Drive  
200' reconstruction along Mist Dr, width 50'; 11' lanes, 8' swale, 8' parking, 12' shared use

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

PROJECT: High Build #7a - North/South Shared Use Path			PREPARED BY: Darren Hippenstiel	DATE: 03/02/2011	
DESIGN LEVEL: Planning Level					
KIND OF WORK: Roadway, Drainage			LENGTH (MILE): 0.66	SHEET: 1 of 1	
NO.	ITEM	UNIT	QUANTITY	UNIT COST	COST
1	Sidewalk & Drainage	Mi.		\$875,600.00	\$0
2	Shared Use Path	Mi.	0.7	\$187,800.00	\$123,948
3	New Roadway - Local Roads	Lane-Mi.		\$269,700.00	\$0
4	Overlay Existing Roadway	Lane-Mi.		\$91,900.00	\$0
5	Reconstruct Existing Roadway	Lane-Mi.		\$304,900.00	\$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	1,950	\$30.00	\$58,500
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
18	Wetland Mitigation	LS	1	\$50,000.00	\$50,000
<b>SUBTOTAL</b>					<b>\$232,448</b>

	ADDITIONAL CONST. COSTS	SUGGESTED	PERCENTAGE		COST
	Construction Surveying	1.0-2.5%	2.0%		\$4,600
	TP & DT	3.0-8.0%	4.0%		\$9,300
	Mobilization	8.0-10.0%	10.0%		\$23,200
	Erosion Control	0.5-2.0%	2.0%		\$4,600
	Contingency	30-40%	40.0%		\$93,000
	Escalation (per year)	0.5-2.0%	2.0%		\$0
	<i>Estimate Year</i>		2011		
	<i>Construction Year</i>		2011		
<b>TOTAL CONSTRUCTION COST</b>					<b>\$367,148</b>

	ENGINEERING COSTS	SUGGESTED	PERCENTAGE		COST
	Design Engineering	13.0%	13.0%		\$47,700
	Construction Engineering	10.0%	10.0%		\$36,700
<b>TOTAL PROJECT COST</b>					<b>\$452,000</b>

Notes:

- Proposed 12' width shared use path, 2" AC/10" Agg base
- 1' earthwork assumed for fill/cut/stabilization
- Illumination and landscaping not included along corridor improvements
- Reduced TP&DT for off-alignment work
- Alignment crosses wetlands, mitigation assumed
- Cost associated for right-of-way and environmental documentation are not included

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

PROJECT: High Build #7b - E/W Industrial Connector			PREPARED BY: Darren Hippenstiel	DATE: 03/02/2011	
DESIGN LEVEL: Planning Level					
KIND OF WORK: Roadway, Drainage			LENGTH (MILE): 0.47	SHEET: 1 of 1	
NO.	ITEM	UNIT	QUANTITY	UNIT COST	COST
1	Sidewalk & Drainage	Mi.	0.47	\$875,600.00	\$411,532
2	Shared Use Path	Mi.		\$187,800.00	\$0
3	New Roadway - State Highway	Lane-Mi.	1.49	\$457,100.00	\$681,079
4	Overlay Existing Roadway	Lane-Mi.		\$91,900.00	\$0
5	Reconstruct Existing Roadway	Lane-Mi.		\$304,900.00	\$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		\$30.00	\$0
13	Traffic Calming	5-10%		-	\$0
14	Illumination	Mi.	0.47	\$338,000.00	\$158,860
15	Landscaping	Mi.	0.47	\$235,000.00	\$110,450
16	Bridges	SF		\$150.00	\$0
17	Walls	SF		\$55.00	\$0
<b>SUBTOTAL</b>					<b>\$1,361,921</b>

	ADDITIONAL CONST. COSTS	SUGGESTED	PERCENTAGE		COST
	Construction Surveying	1.0-2.5%	2.0%		\$27,200
	TP & DT	3.0-8.0%	4.0%		\$54,500
	Mobilization	8.0-10.0%	10.0%		\$136,200
	Erosion Control	0.5-2.0%	2.0%		\$27,200
	Contingency	30-40%	40.0%		\$544,800
	Escalation (per year)	0.5-2.0%	2.0%		\$0
	<i>Estimate Year</i>		2011		
	<i>Construction Year</i>		2011		
<b>TOTAL CONSTRUCTION COST</b>					<b>\$2,151,821</b>

	ENGINEERING COSTS	SUGGESTED	PERCENTAGE		COST
	Design Engineering	13.0%	13.0%		\$279,700
	Construction Engineering	10.0%	10.0%		\$215,200
<b>TOTAL PROJECT COST</b>					<b>\$2,647,000</b>

Notes:

Roadway is new alignment east/west collector to future industrial connection to Knott Rd.  
Proposed roadway width - 60'; 12' lanes, 8' parking, 14' shared use (no curb), 6' shoulder  
Use state pavement section industrial area  
Improvements are at grade with negligible cut/fill  
Illumination and landscaping included along corridor improvements  
Reduced TP&DT for off-alignment work  
Cost associated for right-of-way and environmental documentation are not included

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

PROJECT: High Build #7c - Louisiana Connection			PREPARED BY: Darren Hippenstiel	DATE: 03/02/2011	
DESIGN LEVEL: Planning Level					
KIND OF WORK: Roadway, Drainage			LENGTH (MILE): 0.10	SHEET: 1 of 1	
NO.	ITEM	UNIT	QUANTITY	UNIT COST	COST
1	Sidewalk & Drainage	Mi.	0.10	\$956,200.00	\$95,620
2	Shared Use Path	Mi.		\$187,800.00	\$0
3	New Roadway - Local Roads	Lane-Mi.	0.23	\$269,700.00	\$62,031
4	Overlay Existing Roadway	Lane-Mi.		\$91,900.00	\$0
5	Reconstruct Existing Roadway	Lane-Mi.		\$304,900.00	\$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	880	\$30.00	\$26,400
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
<b>SUBTOTAL</b>					<b>\$184,051</b>

	ADDITIONAL CONST. COSTS	SUGGESTED	PERCENTAGE		COST
	Construction Surveying	1.0-2.5%	2.0%		\$3,700
	TP & DT	3.0-8.0%	4.0%		\$7,400
	Mobilization	8.0-10.0%	10.0%		\$18,400
	Erosion Control	0.5-2.0%	2.0%		\$3,700
	Contingency	30-40%	40.0%		\$73,600
	Escalation (per year)	0.5-2.0%	2.0%		\$0
	<i>Estimate Year</i>		2011		
	<i>Construction Year</i>		2011		
<b>TOTAL CONSTRUCTION COST</b>					<b>\$290,851</b>

	ENGINEERING COSTS	SUGGESTED	PERCENTAGE		COST
	Design Engineering	13.0%	13.0%		\$37,800
	Construction Engineering	10.0%	10.0%		\$29,100
<b>TOTAL PROJECT COST</b>					<b>\$358,000</b>

Notes:

- Roadway utilizes existing graded north/south connection
- Proposed roadway width - 40'; 10' lanes, 8' parking, 11' shared use
- Roadway section assumes full reconstruction
- 1' average earthwork assumed for widening and grading
- No illumination or landscaping
- Reduced TP&DT for off-alignment work
- Cost associated for right-of-way and environmental documentation are not included

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

PROJECT: High Build #7d - Texas Avenue Extension			PREPARED BY: Darren Hippenstiel	DATE: 03/02/2011	
DESIGN LEVEL: Planning Level					
KIND OF WORK: Roadway, Drainage			LENGTH (MILE): 0.31	SHEET: 1 of 1	
NO.	ITEM	UNIT	QUANTITY	UNIT COST	COST
1	Sidewalk & Drainage	Mi.	0.31	\$1,198,100.00	\$371,411
2	Shared Use Path	Mi.		\$187,800.00	\$0
3	New Roadway - Local Roads	Lane-Mi.	0.72	\$269,700.00	\$194,184
4	Overlay Existing Roadway	Lane-Mi.		\$91,900.00	\$0
5	Reconstruct Existing Roadway	Lane-Mi.		\$304,900.00	\$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		\$30.00	\$0
13	Traffic Calming	5-10%		-	\$0
14	Illumination	Mi.	0.31	\$338,000.00	\$104,780
15	Landscaping	Mi.	0.31	\$235,000.00	\$72,850
16	Bridges	SF		\$70.00	\$0
17	Walls	SF		\$55.00	\$0
<b>SUBTOTAL</b>					<b>\$743,225</b>

	ADDITIONAL CONST. COSTS	SUGGESTED	PERCENTAGE		COST
	Construction Surveying	1.0-2.5%	2.0%		\$14,900
	TP & DT	3.0-8.0%	4.0%		\$29,700
	Mobilization	8.0-10.0%	10.0%		\$74,300
	Erosion Control	0.5-2.0%	2.0%		\$14,900
	Contingency	30-40%	40.0%		\$297,300
	Escalation (per year)	0.5-2.0%	2.0%		\$0
	<i>Estimate Year</i>		2011		
	<i>Construction Year</i>		2011		
<b>TOTAL CONSTRUCTION COST</b>					<b>\$1,174,325</b>

	ENGINEERING COSTS	SUGGESTED	PERCENTAGE		COST
	Design Engineering	13.0%	13.0%		\$152,700
	Construction Engineering	10.0%	10.0%		\$117,400
<b>TOTAL PROJECT COST</b>					<b>\$1,445,000</b>

Notes:

- Roadway is new north extension of Texas Avenue
- Proposed roadway width - 60'; 10' lanes, 8' parking/swale both sides, 12' shared use both sides
- Improvements are at grade, earthwork is negligible
- Illumination and landscaping included along corridor improvements
- Reduced TP&DT for off-alignment work
- Cost associated for right-of-way and environmental documentation are not included

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

PROJECT: Low Build A - OR 47 @ Rose Signing			PREPARED BY: Darren Hippenstiel	DATE: 03/02/2011	
DESIGN LEVEL: Planning Level					
KIND OF WORK: Signing			LENGTH (MILE):	SHEET: 1 of 1	
NO.	ITEM	UNIT	QUANTITY	UNIT COST	COST
1	Signs	SF	100	\$25.00	\$2,500
2	Posts	Foot Board	90.0	\$7.00	\$630
<b><i>SUBTOTAL</i></b>					<b>\$3,130</b>

	ADDITIONAL CONST. COSTS	SUGGESTED	PERCENTAGE		COST
	Construction Surveying	1.0-2.5%	2.0%		\$1,000
	TP & DT	3.0-8.0%	4.0%		\$1,000
	Mobilization	8.0-10.0%	10.0%		\$1,000
	Erosion Control	0.5-2.0%	2.0%		\$0
	Contingency	30-40%	40.0%		\$1,300
	Escalation (per year)	0.5-2.0%	2.0%		\$0
	<i>Estimate Year</i>		2011		
	<i>Construction Year</i>		2011		
<b><i>TOTAL CONSTRUCTION COST</i></b>					<b>\$7,430</b>

	ENGINEERING COSTS	SUGGESTED	PERCENTAGE		COST
	Design Engineering	13.0%	13.0%		\$1,000
	Construction Engineering	10.0%	10.0%		\$700
<b><i>TOTAL PROJECT COST</i></b>					<b>\$10,000</b>

Notes:

- New signage at OR 47 and Rose Avenue intersection
- Assumes 5 total signs with new wood posts

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

PROJECT: Low Build G - Bridge Street Curb Extension			PREPARED BY: Darren Hippenstiel	DATE: 03/03/2011	
DESIGN LEVEL: Planning Level					
KIND OF WORK: Signing and Striping			LENGTH (MILE):	SHEET: 1 of 1	
NO.	ITEM	UNIT	QUANTITY	UNIT COST	COST
1	Signs	SF	1.5	\$25.00	\$38
2	Posts	Foot Board	18	\$7.00	\$126
3	Curb	LF	28	\$15.00	\$420
4	Sidewalk	SF	160	\$5.00	\$800
5	Inlet/Cath Basin	EA	1	\$1,500.00	\$1,500
6	12 Inch Storm Sewer Pipe, 5' deep	LF	20	\$80.00	\$1,600
<b>SUBTOTAL</b>					<b>\$4,484</b>

	ADDITIONAL CONST. COSTS	SUGGESTED	PERCENTAGE		COST
	Construction Surveying	1.0-2.5%	2.0%		\$1,000
	TP & DT	3.0-8.0%	4.0%		\$1,000
	Mobilization	8.0-10.0%	10.0%		\$1,000
	Erosion Control	0.5-2.0%	2.0%		\$500
	Contingency	30-40%	40.0%		\$1,800
	Escalation (per year)	0.5-2.0%	2.0%		\$0
	<i>Estimate Year</i>		2011		
	<i>Construction Year</i>		2011		
<b>TOTAL CONSTRUCTION COST</b>					<b>\$9,784</b>

	ENGINEERING COSTS	SUGGESTED	PERCENTAGE		COST
	Design Engineering	13.0%	13.0%		\$1,300
	Construction Engineering	10.0%	10.0%		\$1,000
<b>TOTAL PROJECT COST</b>					<b>\$13,000</b>

Notes:

- Curb extension includes new curb and sidewalk for the first parking space adjacent to intersection
- Parking space is MUTCD standard 8'x20'
- Assume 1 signs per corner; 1.5 SF and one post per sign
- Drainage impacts and revisions are assumed

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

PROJECT: Low Build G - Bridge Street Bioswale			PREPARED BY: Darren Hippenstiel	DATE: 03/03/2011	
DESIGN LEVEL: Planning Level					
KIND OF WORK: Signing and Striping			LENGTH (MILE):	SHEET: 1 of 1	
NO.	ITEM	UNIT	QUANTITY	UNIT COST	COST
1	Signs	SF	1.5	\$25.00	\$38
2	Posts	Foot Board	18	\$7.00	\$126
3	Bioswale Planting	SF	160	\$12.00	\$1,920
4	Curb	LF	56	\$15.00	\$840
5	Inlet/Cath Basin	EA	1	\$1,500.00	\$1,500
6	12 Inch Storm Sewer Pipe, 5' deep	LF	20	\$80.00	\$1,600
<b>SUBTOTAL</b>					<b>\$6,024</b>

	ADDITIONAL CONST. COSTS	SUGGESTED	PERCENTAGE		COST
	Construction Surveying	1.0-2.5%	2.0%		\$1,000
	TP & DT	3.0-8.0%	4.0%		\$1,000
	Mobilization	8.0-10.0%	10.0%		\$1,000
	Erosion Control	0.5-2.0%	2.0%		\$500
	Contingency	30-40%	40.0%		\$2,400
	Escalation (per year)	0.5-2.0%	2.0%		\$0
	<i>Estimate Year</i>		2011		
	<i>Construction Year</i>		2011		
<b>TOTAL CONSTRUCTION COST</b>					<b>\$11,924</b>

	ENGINEERING COSTS	SUGGESTED	PERCENTAGE		COST
	Design Engineering	13.0%	13.0%		\$1,600
	Construction Engineering	10.0%	10.0%		\$1,200
<b>TOTAL PROJECT COST</b>					<b>\$15,000</b>

Notes:

- Bioswale includes new curb and planting for the first parking space adjacent to intersection
- Parking space is MUTCD standard 8'x20'
- Assume 1 signs per corner; 1.5 SF and one post per sign
- Drainage impacts and revisions are assumed
- Bioswale planting includes grading, engineered soil, planting and irrigation
- Costs for bioswale planting provided by Alta Planning + Design

## Unit Costs (Based on Development Pricing)

### Curb, Gutter, Sidewalks, & Enclosed Drainage (Unit: Mile)

ITEM	UNIT	AMOUNT	UNIT COST	TOTAL	COMMENTS
Concrete Curb and Gutter	LF	10,560	\$15.00	\$158,400.00	For Both Sides of Rdwy
Concrete Sidewalk	SF	95,040	\$5.00	\$475,200.00	For Both Sides of Rdwy, 9' Avg. Wide
15 Inch Storm Sewer Pipe, 10' deep	LF	5,280	\$85.00	\$448,800.00	Long. Storm Pipe, Including Trenching/Backfill
Storm Manhole	EA	21	\$3,000.00	\$63,000.00	Every 250' (21 in a mile)
Standard Catch Basin	EA	42	\$1,500.00	\$63,000.00	Every 250' (21 in a mile*2 for both sides= 42)
<b>SUBTOTAL</b>				<b>\$1,208,400.00</b>	
Clearing and Grubbing - 0.6%				\$7,250.40	
Removal of Structures - 1.2%				\$14,500.80	
<b>TOTAL UNIT COST</b>				<b>\$1,230,200.00</b>	

### Curb, Gutter, Sidewalk (1 Side), & Enclosed Drainage (Unit: Mile)

ITEM	UNIT	AMOUNT	UNIT COST	TOTAL	COMMENTS
Concrete Curb and Gutter	LF	5,280	\$15.00	\$79,200.00	One Side Only
Concrete Sidewalk	SF	108,240	\$5.00	\$541,200.00	One Side Only, 20.5' width
15 Inch Storm Sewer Pipe, 10' deep	LF	5,280	\$85.00	\$448,800.00	Long. Storm Pipe, Including Trenching/Backfill
Storm Manhole	EA	21	\$3,000.00	\$63,000.00	Every 250' (21 in a mile)
Standard Catch Basin	EA	42	\$1,500.00	\$63,000.00	Every 250' (21 in a mile*2 for both sides= 42)
<b>SUBTOTAL</b>				<b>\$1,195,200.00</b>	
Clearing and Grubbing - 0.6%				\$7,171.20	
Removal of Structures - 1.2%				\$14,342.40	
<b>TOTAL UNIT COST</b>				<b>\$1,216,700.00</b>	

### Sidewalk (at grade), & Enclosed Drainage (Unit: Mile)

ITEM	UNIT	AMOUNT	UNIT COST	TOTAL	COMMENTS
Concrete Curb and Gutter	LF		\$15.00	\$0.00	No Curbs
Concrete Sidewalk	SF	126,720	\$5.00	\$633,600.00	For Both Sides of Rdwy, 12' Wide
15 Inch Storm Sewer Pipe, 10' deep	LF	5,280	\$85.00	\$448,800.00	Long. Storm Pipe, Including Trenching/Backfill
Storm Manhole	EA	21	\$3,000.00	\$63,000.00	Every 250' (21 in a mile)
Standard Catch Basin	EA	21	\$1,500.00	\$31,500.00	Every 250' (21 in a mile located in swale)
<b>SUBTOTAL</b>				<b>\$1,176,900.00</b>	
Clearing and Grubbing - 0.6%				\$7,061.40	
Removal of Structures - 1.2%				\$14,122.80	
<b>TOTAL UNIT COST</b>				<b>\$1,198,100.00</b>	

### Sidewalk (at grade), & Enclosed Drainage (Unit: Mile)

ITEM	UNIT	AMOUNT	UNIT COST	TOTAL	COMMENTS
Concrete Curb and Gutter	LF		\$15.00	\$0.00	No Curbs
Concrete Sidewalk	SF	63,360	\$5.00	\$316,800.00	12'; One side
15 Inch Storm Sewer Pipe, 10' deep	LF	5,280	\$85.00	\$448,800.00	Long. Storm Pipe, Including Trenching/Backfill
Storm Manhole	EA	21	\$3,000.00	\$63,000.00	Every 250' (21 in a mile)
Standard Catch Basin	EA	21	\$1,500.00	\$31,500.00	Every 250' (21 in a mile located in swale)
<b>SUBTOTAL</b>				<b>\$860,100.00</b>	
Clearing and Grubbing - 0.6%				\$5,160.60	
Removal of Structures - 1.2%				\$10,321.20	
<b>TOTAL UNIT COST</b>				<b>\$875,600.00</b>	

### Sidewalk, Curb one side & Enclosed Drainage (Unit: Mile)

ITEM	UNIT	AMOUNT	UNIT COST	TOTAL	COMMENTS
Concrete Curb and Gutter	LF	5,280	\$15.00	\$79,200.00	Curb One Side
Concrete Sidewalk	SF	63,360	\$5.00	\$316,800.00	12'; One side
15 Inch Storm Sewer Pipe, 10' deep	LF	5,280	\$85.00	\$448,800.00	Long. Storm Pipe, Including Trenching/Backfill
Storm Manhole	EA	21	\$3,000.00	\$63,000.00	Every 250' (21 in a mile)
Standard Catch Basin	EA	21	\$1,500.00	\$31,500.00	Every 250' (21 in a mile located in swale)
<b>SUBTOTAL</b>				<b>\$939,300.00</b>	
Clearing and Grubbing - 0.6%				\$5,635.80	
Removal of Structures - 1.2%				\$11,271.60	
<b>TOTAL UNIT COST</b>				<b>\$956,200.00</b>	

**Shared Use Path (Unit: Mile)**

ITEM	UNIT	AMOUNT	UNIT COST	TOTAL	COMMENTS
Asphalt	TN	802	\$85.00	\$68,151.11	12' path, 5280' long, depth=2 IN, density=2.050 TN/CY
Aggregate Base	TN	4,341	\$22.00	\$95,509.33	12' Lane, 5280' long, depth=12 IN, density=1.850 TN/CY
12 Inch Storm Sewer Pipe, 5' deep	LF	260	\$80.00	\$20,800.00	Lateral Culverts: 20' long, every 400 LF (13/mile)
			<b>SUBTOTAL</b>	<b>\$184,460.44</b>	
Clearing and Grubbing - 0.6%				\$1,106.76	
Removal of Structures - 1.2%				\$2,213.53	
			<b>TOTAL UNIT COST</b>	<b>\$187,800.00</b>	

**New Roadway - State Highway (Unit: Lane-Mile)**

ITEM	UNIT	AMOUNT	UNIT COST	TOTAL	COMMENTS
Asphalt	TN	3,207	\$85.00	\$272,604.44	12' Lanes, 5280' long, depth=8 IN, density=2.050 TN/CY
Aggregate Base	TN	5,065	\$22.00	\$111,427.56	12' Lanes, 5280' long, depth=12 IN, density=1.850 TN/CY
12 Inch Storm Sewer Pipe, 10' deep	LF	273	\$80.00	\$21,840.00	Lateral Culverts: 13' per lane, every 250 LF (21/mile)
Excavation	CY	-	\$15.00	\$0.00	
Embankment	CY	-	\$15.00	\$35,200.00	See Below For Earthwork
Thermoplastic Pavement Striping	LF	5,280	\$1.50	\$7,920.00	1 solid stripe per lane
			<b>SUBTOTAL</b>	<b>\$448,992.00</b>	
Clearing and Grubbing - 0.6%				\$2,693.95	
Removal of Structures - 1.2%				\$5,387.90	
			<b>TOTAL UNIT COST</b>	<b>\$457,100.00</b>	

**New Roadway - Collector Roads (Unit: Lane-Mile)**

ITEM	UNIT	AMOUNT	UNIT COST	TOTAL	COMMENTS
Asphalt	TN	2,405	\$85.00	\$204,453.33	12' Lanes, 5280' long, depth=6 IN, density=2.050 TN/CY
Aggregate Base	TN	2,894	\$22.00	\$63,672.89	12' Lanes, 5280' long, depth=8 IN, density=1.850 TN/CY
12 Inch Storm Sewer Pipe, 10' deep	LF	273	\$80.00	\$21,840.00	Lateral Culverts: 13' per lane, every 250 LF (21/mile)
Excavation	CY	-	\$15.00	\$0.00	
Embankment	CY	-	\$15.00	\$35,200.00	See Below For Earthwork
Thermoplastic Pavement Striping	LF	5,280	\$1.50	\$7,920.00	1 solid stripe per lane
			<b>SUBTOTAL</b>	<b>\$333,086.22</b>	
Clearing and Grubbing - 0.6%				\$1,998.52	
Removal of Structures - 1.2%				\$3,997.03	
			<b>TOTAL UNIT COST</b>	<b>\$339,100.00</b>	

**New Roadway - Local Roads (Unit: Lane-Mile)**

ITEM	UNIT	AMOUNT	UNIT COST	TOTAL	COMMENTS
Asphalt	TN	1,604	\$85.00	\$136,302.22	12' Lanes, 5280' long, depth=4 IN, density=2.050 TN/CY
Aggregate Base	TN	2,894	\$22.00	\$63,672.89	12' Lanes, 5280' long, depth=8 IN, density=1.850 TN/CY
12 Inch Storm Sewer Pipe, 10' deep	LF	273	\$80.00	\$21,840.00	Lateral Culverts: 13' per lane, every 250 LF (21/mile)
Excavation	CY	-	\$15.00	\$0.00	
Embankment	CY	-	\$15.00	\$35,200.00	See Below For Earthwork
Thermoplastic Pavement Striping	LF	5,280	\$1.50	\$7,920.00	1 solid stripe per lane
			<b>SUBTOTAL</b>	<b>\$264,935.11</b>	
Clearing and Grubbing - 0.6%				\$1,589.61	
Removal of Structures - 1.2%				\$3,179.22	
			<b>TOTAL UNIT COST</b>	<b>\$269,700.00</b>	

**Overlay Existing Roadway (Unit: Lane-Mile)**

ITEM	UNIT	AMOUNT	UNIT COST	TOTAL	COMMENTS
Asphalt	TN	802	\$85.00	\$68,151.11	12' Lanes, 5280' long, depth=2 IN, density=2.050 TN/CY
Cold Plane Pavement Removal	SF	15,840	\$1.00	\$15,840.00	12' Lanes, 5280' long, 25% of extg. rdwy.
Thermoplastic Pavement Striping	LF	5,280	\$1.50	\$7,920.00	1 solid stripe per lane
			<b>TOTAL UNIT COST</b>	<b>\$91,900.00</b>	

**Reconstruct Existing Roadway (Unit: Lane-Mile)**

ITEM	UNIT	AMOUNT	UNIT COST	TOTAL	COMMENTS
Excavation	CY	3,520	\$10.00	\$35,200.00	Removal of 4in. AC and 14in Aggregate Base
New Roadway	-	-	-	\$269,700.00	See 'New Roadway' Sheet for Cost Breakdown
			<b>TOTAL UNIT COST</b>	<b>\$304,900.00</b>	

**Intersection Widening (Unit: Each)**

ITEM	UNIT	AMOUNT	UNIT COST	TOTAL	COMMENTS
Asphalt	TN	296	\$85.00	\$25,169.44	26' of widening per approach, 2 approaches, 150' long, depth=6 IN, density=2.050 TN/CY
Aggregate Base	TN	624	\$22.00	\$13,717.41	26' of widening per approach, 2 approaches, 150' long, depth=14 IN, density=1.850 TN/CY
Concrete Curb and Gutter	LF	600	\$15.00	\$9,000.00	300' per approach, 2 approaches
Sidewalk	SF	4,200	\$5.00	\$21,000.00	300' per approach, 2 approaches, 7' Wide
Demolition of Extg. Curb/Sidewalk	CY	200	\$15.00	\$3,000.00	300' per approach, 2 approaches, 9' Wide, 1' Deep
Thermoplastic Pavement Striping	LF	1,200	\$1.50	\$1,800.00	2 solid stripes per lane, 4 new lanes, 150' long
<b>SUBTOTAL</b>				<b>\$73,686.85</b>	
Clearing and Grubbing - 0.6%				\$442.12	
Removal of Structures - 1.2%				\$884.24	
Landscaping - 0.5%				\$368.43	
<b>TOTAL UNIT COST</b>				<b>\$75,400.00</b>	

**Large Roundabouts (Unit: Each)**

ITEM	UNIT	AMOUNT	UNIT COST	TOTAL	COMMENTS
Asphalt	TN		\$85.00	\$0.00	26' of widening per approach, 2 approaches, 150' long, depth=6 IN, density=2.050 TN/CY
Aggregate Base	TN		\$22.00	\$0.00	26' of widening per approach, 2 approaches, 150' long, depth=14 IN, density=1.850 TN/CY
Concrete Curb and Gutter	LF		\$15.00	\$0.00	300' per approach, 2 approaches
Concrete Sidewalk	SF		\$5.00	\$0.00	300' per approach, 2 approaches, 7' Wide
Concrete Islands	SF		\$12.00		
Demolition of Extg. Curb/Sidewalk	CY		\$15.00	\$0.00	300' per approach, 4 approaches, 9' Wide, 1' Deep
Thermoplastic Pavement Striping	LF		\$1.00	\$0.00	2 solid stripes per lane, 4 new lanes, 150' long
<b>SUBTOTAL</b>				<b>\$0.00</b>	
Clearing and Grubbing - 0.6%				\$0.00	
Removal of Structures - 1.2%				\$0.00	
Landscaping - 0.5%				\$0.00	
Roundabout OLD	EA	1	\$1,100,000.00	\$1,100,000.00	Includes all costs associated with the construction of a One Lane Roundabout where an existing intersection is located. Cost per Rick Kuehn.
<b>TOTAL UNIT COST</b>				<b>\$1,100,000.00</b>	

**Small Roundabouts (Unit: Each)**

ITEM	UNIT	AMOUNT	UNIT COST	TOTAL	COMMENTS
Asphalt	TN		\$85.00	\$0.00	26' of widening per approach, 2 approaches, 150' long, depth=6 IN, density=2.050 TN/CY
Aggregate Base	TN		\$21.00	\$0.00	26' of widening per approach, 2 approaches, 150' long, depth=14 IN, density=1.850 TN/CY
Concrete Curb and Gutter	LF		\$15.00	\$0.00	300' per approach, 2 approaches
Concrete Sidewalk	SF		\$5.00	\$0.00	300' per approach, 2 approaches, 7' Wide
Concrete Islands	SF		\$12.00		
Demolition of Extg. Curb/Sidewalk	CY		\$15.00	\$0.00	300' per approach, 4 approaches, 9' Wide, 1' Deep
Thermoplastic Pavement Striping	LF		\$1.00	\$0.00	2 solid stripes per lane, 4 new lanes, 150' long
<b>SUBTOTAL</b>				<b>\$0.00</b>	
Clearing and Grubbing - 0.6%				\$0.00	
Removal of Structures - 1.2%				\$0.00	
Landscaping - 0.5%				\$0.00	
Roundabout OLD	EA	1	\$1,100,000.00	\$400,000.00	Includes all costs associated with the construction of a One Lane Roundabout in virgin ground. Cost per Rick Kuehn.
<b>TOTAL UNIT COST</b>				<b>\$400,000.00</b>	

**Restriping Existing Roadway (Unit: mi)**

ITEM	UNIT	AMOUNT	UNIT COST	TOTAL	COMMENTS
Stripe Removal	LF	1	\$0.65	\$0.65	1 solid stripe removed per lane
Thermoplastic Pavement Striping	LF	1	\$1.00	\$1.00	1 solid stripe per lane
<b>TOTAL UNIT COST</b>				<b>\$1.65</b>	

**Interconnect Signal (Unit: Lump Sum)**

ITEM	UNIT	AMOUNT	UNIT COST	TOTAL	COMMENTS
Interconnect Signal System	LS	1	\$35,000.00	\$35,000.00	Includes all costs to interconnect
<b>TOTAL UNIT COST</b>				<b>\$35,000.00</b>	

**New Signal (Unit: Each)**

ITEM	UNIT	AMOUNT	UNIT COST	TOTAL	COMMENTS
New Signal	LS	1	\$300,000.00	\$300,000.00	Includes signal system and all appurtenances (pole, wiring, detection devices, etc.) for 1 intersection
<b>TOTAL UNIT COST</b>				<b>\$300,000.00</b>	

**Signal Modifications (Unit: Each)**

ITEM	UNIT	AMOUNT	UNIT COST	TOTAL	COMMENTS
Modify Signal	LS	1	\$65,000.00	\$65,000.00	Includes all evaluations and modifications to the signal at one intersection
<b>TOTAL UNIT COST</b>				<b>\$65,000.00</b>	

**Earthwork (Unit: Lane-Mile)**

ITEM	UNIT	AMOUNT	UNIT COST	TOTAL	COMMENTS
Excavation	CY	1,173	\$15.00	\$17,600.00	Length=5280/2=2640LF, Max depth = 2'
Embankment	CY	1,173	\$15.00	\$17,600.00	Length=5280/2=2640LF, Max height = 2'
<b>TOTAL UNIT COST</b>				<b>\$35,200.00</b>	

**Earthwork Estimated (Unit: CY)**

ITEM	UNIT	AMOUNT	UNIT COST	TOTAL	COMMENTS
Earthwork (Cut/Fill)	CY	1	\$30.00	\$30.00	Rock excavation
<b>TOTAL UNIT COST</b>				<b>\$30.00</b>	

**Illumination (Unit: Mile)**

ITEM	UNIT	AMOUNT	UNIT COST	TOTAL	COMMENTS
Luminaire and appurtenances	EA	52	\$ 6,500.00	\$338,000.00	Luminaire, pole, wiring, etc (1 pole on each side every 200'=52 poles)
<b>TOTAL UNIT COST</b>				<b>\$338,000.00</b>	

**Landscaping (Unit: Mile)**

ITEM	UNIT	AMOUNT	UNIT COST	TOTAL	COMMENTS
Landscaping	LS	1	\$ 235,000.00	\$235,000.00	Plantings, Trees, Topsoil, and Irrigation sums up to approximately \$235,000 per mile (for both sides of roadway)
<b>TOTAL UNIT COST</b>				<b>\$235,000.00</b>	

**Bridges (Unit: Square Foot)**

ITEM	UNIT	AMOUNT	UNIT COST	TOTAL	COMMENTS
				\$0.00	The cost of this item is project dependent; see note 3 of the directions tab for more information
<b>TOTAL UNIT COST</b>				<b>\$0.00</b>	

**Walls (Unit: Square Foot)**

ITEM	UNIT	AMOUNT	UNIT COST	TOTAL	COMMENTS
Standard Retaining Wall	LS	1	\$55.00	\$55.00	Soil Nail Wall with facing
<b>TOTAL UNIT COST</b>				<b>\$55.00</b>	

**Right-of-Way (Unit: Square Foot)**

ITEM	UNIT	AMOUNT	UNIT COST	TOTAL	COMMENTS
Right-of-Way Acquisition	LS	1	\$10.00	\$10.00	ROW acquisition cost is approx. \$10/SF
<b>TOTAL UNIT COST</b>				<b>\$10.00</b>	