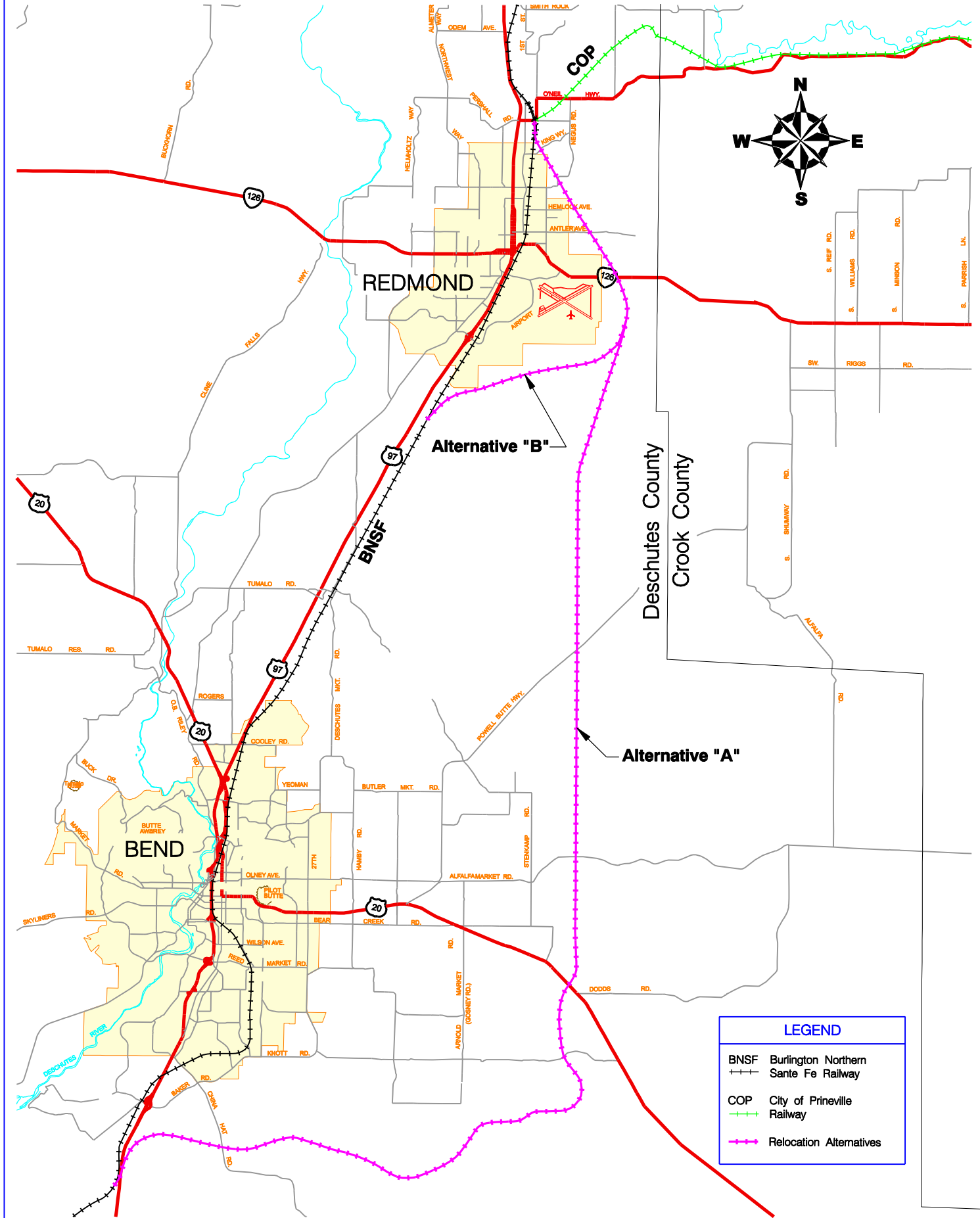


CENTRAL OREGON RAIL PLANNING RELOCATION ALTERNATIVES



LEGEND	
BNSF	Burlington Northern
+++	Sante Fe Railway
COP	City of Prineville Railway
---	Relocation Alternatives

DAVID EVANS AND ASSOCIATES, INC.

SUMMARY COST ESTIMATE

PROJEC ODOT0000608 Central Oregon Rail Plan	Engineer Name/Phone: Chris White, Jon Burgi 1-541-389-7614
CROSSING NO: 118 & 119 - Pilot Butte Canal and Maint. Road	LOCATION: <div style="text-align: right;">Bend</div>
RAIL SEGMENT IDENTIFICATION:	RAIL SEGMENT LENGTH:

NO.	ITEM	UNIT	QUANTITY	UNIT COST	TOTAL
1	Mobilization	LS	1	\$100,842	\$100,842
2	Clearing and Grubbing	LS	1	\$10,000	\$10,000
3	Selective Demolition	LS	1	\$50,000	\$50,000
4	CLSM Pipe Encasement Complete	CY	185	\$110	\$20,350
5	90-inch Steel Pipe System Complete	LF	300	\$900	\$270,000
6	Inlet Structure Complete	LS	1	\$90,000	\$90,000
7	Outlet Structure Complete	LS	1	\$80,000	\$80,000
8	Excavation	LS	1	\$40,000	\$40,000
9	Embankment	LS	1	\$30,000	\$30,000
10	Landscape Restoration and Seeding	LS	1	\$15,000	\$15,000
11	Road Reconstruction / Box Culvert Crossing	LS	1	\$235,000	\$235,000

SUBTOTAL \$941,192

ADDITIONAL COSTS

Utility Allowance	\$40,000
Design/Construction Engineering/Surveying (25%)	\$235,298
Special Costs (Unique to crossing or segment)	\$0
Contingency (25%)	\$235,298
SUBTOTAL	\$510,596

TOTAL CONSTRUCTION COST \$1,451,788

RIGHT-OF-WAY COSTS (Supplied by ODOT)

TOTAL CROSSING/SEGMENT COST \$1,451,788

Assumptions/Notes: King Way cul-de-sac at each side of new RR. RR at grade.

DAVID EVANS AND ASSOCIATES, INC.

SUMMARY COST ESTIMATE

PROJECT: ODOT0000608 Central Oregon Rail Plan	Engineer Name/Phone: Chris White, Jon Burgi 1-541-389-7614
CROSSING NO: 117 - Canal Lateral	LOCATION: Redmond
RAIL SEGMENT IDENTIFICATION:	RAIL SEGMENT LENGTH:

NO.	ITEM	UNIT	QUANTITY	UNIT COST	TOTAL
1	Mobilization	LS	1	\$53,124	\$53,124
2	Clearing and Grubbing	LS	1	\$8,000	\$8,000
3	Selective Demolition	LS	1	\$30,000	\$30,000
4	CLSM Pipe Encasement Complete	CY	60	\$95	\$5,700
5	36-inch HDPE Pipe System Complete	LF	200	\$160	\$32,000
6	Inlet Structure Complete	LS	1	\$55,000	\$55,000
7	Outlet Structure Complete	LS	1	\$45,000	\$45,000
8	Excavation	LS	1	\$10,000	\$10,000
9	Embankment	LS	1	\$12,000	\$12,000
10	Landscape Restoration and Seeding	LS	1	\$10,000	\$10,000
11	Road Reconstruction / Box Culvert Crossing	LS	1	\$235,000	\$235,000

SUBTOTAL \$495,824

ADDITIONAL COSTS

Utility Allowance	\$25,000
Design/Construction Engineering/Surveying (25%)	\$123,956
Special Costs (Unique to crossing or segment)	\$0
Contingency (25%)	\$123,956

SUBTOTAL \$272,912

TOTAL CONSTRUCTION COST \$768,736

RIGHT-OF-WAY COSTS (Supplied by ODOT)

TOTAL CROSSING/SEGMENT COST

\$768,736

Assumptions/Notes:

DAVID EVANS AND ASSOCIATES, INC.

SUMMARY COST ESTIMATE

PROJECT: ODOT0000608 Central Oregon Rail Plan	Engineer Name/Phone: Chris White, Jon Burgi 1-541-389-7614
CROSSING NO: 114 - Canal Lateral	LOCATION: Redmond
RAIL SEGMENT IDENTIFICATION:	RAIL SEGMENT LENGTH:

NO.	ITEM	UNIT	QUANTITY	UNIT COST	TOTAL
1	Mobilization	LS	1	\$53,124	\$53,124
2	Clearing and Grubbing	LS	1	\$8,000	\$8,000
3	Selective Demolition	LS	1	\$30,000	\$30,000
4	CLSM Pipe Encasement Complete	CY	60	\$95	\$5,700
5	36-inch HDPE Pipe System Complete	LF	200	\$160	\$32,000
6	Inlet Structure Complete	LS	1	\$55,000	\$55,000
7	Outlet Structure Complete	LS	1	\$45,000	\$45,000
8	Excavation	LS	1	\$10,000	\$10,000
9	Embankment	LS	1	\$12,000	\$12,000
10	Landscape Restoration and Seeding	LS	1	\$10,000	\$10,000
11	Road Reconstruction / Box Culvert Crossing	LS	1	\$235,000	\$235,000

SUBTOTAL \$495,824

ADDITIONAL COSTS

Utility Allowance	\$25,000
Design/Construction Engineering/Surveying (25%)	\$123,956
Special Costs (Unique to crossing or segment)	\$0
Contingency (25%)	\$123,956
SUBTOTAL	\$272,912

TOTAL CONSTRUCTION COST \$768,736

RIGHT-OF-WAY COSTS (Supplied by ODOT)

TOTAL CROSSING/SEGMENT COST \$768,736

Assumptions/Notes:

DAVID EVANS AND ASSOCIATES, INC.

SUMMARY COST ESTIMATE

PROJECT: ODOT0000608 Central Oregon Rail Plan	Engineer Name/Phone: Chris White, Jon Burgi 1-541-389-7614
CROSSING NO: 113 - Canal Lateral	LOCATION: Redmond
RAIL SEGMENT IDENTIFICATION:	RAIL SEGMENT LENGTH:

NO.	ITEM	UNIT	QUANTITY	UNIT COST	TOTAL
1	Mobilization	LS	1	\$53,124	\$53,124
2	Clearing and Grubbing	LS	1	\$8,000	\$8,000
3	Selective Demolition	LS	1	\$30,000	\$30,000
4	CLSM Pipe Encasement Complete	CY	60	\$95	\$5,700
5	36-inch HDPE Pipe System Complete	LF	200	\$160	\$32,000
6	Inlet Structure Complete	LS	1	\$55,000	\$55,000
7	Outlet Structure Complete	LS	1	\$45,000	\$45,000
8	Excavation	LS	1	\$10,000	\$10,000
9	Embankment	LS	1	\$12,000	\$12,000
10	Landscape Restoration and Seeding	LS	1	\$10,000	\$10,000
11	Road Reconstruction / Box Culvert Crossing	LS	1	\$235,000	\$235,000

SUBTOTAL \$495,824

ADDITIONAL COSTS

Utility Allowance	\$25,000
Design/Construction Engineering/Surveying (25%)	\$123,956
Special Costs (Unique to crossing or segment)	\$0
Contingency (25%)	\$123,956
SUBTOTAL	\$272,912

TOTAL CONSTRUCTION COST \$768,736

RIGHT-OF-WAY COSTS (Supplied by ODOT)

TOTAL CROSSING/SEGMENT COST \$768,736

Assumptions/Notes:

DAVID EVANS AND ASSOCIATES, INC.

SUMMARY COST ESTIMATE

PROJECT: ODOT0000608 Central Oregon Rail Plan	Terry Shike/503-361-8635
CROSSING NO: 111	Maple/Negus Ave.
RAIL SEGMENT IDENTIFICATION: Reroute	RAIL SEGMENT LENGTH:

NO.	ITEM	UNIT	QUANTITY	UNIT COST	TOTAL
	Bridge 86' x 145'	ft2	12470	\$165	\$2,057,550
	MSE Retaining Walls	ft2	74000	\$100	\$7,400,000
	Embankment	yd3	64000	\$15	\$960,000
	Paving	ft2	171000	\$10	\$1,710,000
	Sidewalks	ft2	27000	\$10	\$270,000

SUBTOTAL \$12,397,550

ADDITIONAL COSTS

Utility Allowance	\$100,000
Design/Surveying (10%)	\$1,239,755
Constr.Engr./Contingency (50%)	\$6,198,775
Special Costs (Unique to crossing or segment)	

SUBTOTAL \$7,538,530

TOTAL CONSTRUCTION COST

RIGHT-OF-WAY COSTS (Supplied by ODOT)

TOTAL CROSSING/SEGMENT COST \$19,936,080

Assumptions/Notes:

- Four lanes, median, with 6 ft bike/shoulder and 6 ft sidewalks.
- Retaining walls each side to reduce ROW costs.
- Bridge on 45 degree skew

DAVID EVANS AND ASSOCIATES, INC.

SUMMARY COST ESTIMATE

PROJECT: ODOT0000608 Central Oregon Rail Plan		Terry Shike/503-361-8635			
CROSSING NO: 101		Antler Avenue			
RAIL SEGMENT IDENTIFICATION: Reroute		RAIL SEGMENT LENGTH:			
NO.	ITEM	UNIT	QUANTITY	UNIT COST	TOTAL
	Bridge 86' x 115'	ft2	9890	\$165	\$1,631,850
	MSE Retaining Walls	ft2	73000	\$100	\$7,300,000
	Embankment	yd3	64000	\$15	\$960,000
	Paving	ft2	171000	\$10	\$1,710,000
	Sidewalks	ft2	27000	\$10	\$270,000
SUBTOTAL					\$11,871,850

ADDITIONAL COSTS	
Utility Allowance	\$100,000
Design/Surveying. (10%)	\$1,187,185
Constr. Engr./Contingency (50%)	\$5,935,925
Special Costs (Unique to crossing or segment)	
SUBTOTAL	\$7,223,110
TOTAL CONSTRUCTION COST	
RIGHT-OF-WAY COSTS (Supplied by ODOT)	
TOTAL CROSSING/SEGMENT COST	
	\$19,094,960

Assumptions/Notes:

- Four lanes, median, with 6 ft bike/shoulder and 6 ft sidewalks.
- Retaining walls each side to reduce ROW costs.
- Bridge on 30 degree skew

DAVID EVANS AND ASSOCIATES, INC.

SUMMARY COST ESTIMATE

PROJECT: ODOT0000608 Central Oregon Rail Plan		Terry Shike/503-361-8635			
CROSSING NO: 99		Highway 126			
RAIL SEGMENT IDENTIFICATION: Reroute		RAIL SEGMENT LENGTH:			
NO.	ITEM	UNIT	QUANTITY	UNIT COST	TOTAL
	Bridge 86' x 115'	ft2	9890	\$165	\$1,631,850
	MSE Retaining Walls	ft2	73000	\$100	\$7,300,000
	Embankment	yd3	64000	\$15	\$960,000
	Paving	ft2	171000	\$10	\$1,710,000
	Sidewalks	ft2	27000	\$10	\$270,000
SUBTOTAL					\$11,871,850

ADDITIONAL COSTS	
Utility Allowance	\$100,000
Design/Surveying (10%)	\$1,187,185
Constr.Engr./Contingency (50%)	\$5,935,925
Special Costs (Unique to crossing or segment)	
SUBTOTAL	\$7,223,110
TOTAL CONSTRUCTION COST	
RIGHT-OF-WAY COSTS (Supplied by ODOT)	
TOTAL CROSSING/SEGMENT COST	
	\$19,094,960

Assumptions/Notes:

- Four lanes, median, with 6 ft bike/shoulder and 6 ft sidewalks.
- Retaining walls each side to reduce ROW costs.
- Bridge on 30 degree skew

DAVID EVANS AND ASSOCIATES, INC.

SUMMARY COST ESTIMATE

PROJECT: ODOT0000608 Central Oregon Rail Plan	Engineer Name/Phone: Chris White, Jon Burgi 1-541-389-7614
CROSSING NO: 91-N. Unit Main Canal and Maint. Road	LOCATION: Bend
RAIL SEGMENT IDENTIFICATION:	RAIL SEGMENT LENGTH:

NO.	ITEM	UNIT	QUANTITY	UNIT COST	TOTAL
1	Mobilization	LS	1	\$102,498	\$102,498
2	Clearing and Grubbing	LS	1	\$10,000	\$10,000
3	Selective Demolition	LS	1	\$50,000	\$50,000
4	CLSM Pipe Encasement Complete	LS	1	\$20,500	\$20,500
5	108-inch Steel Pipe System Complete	CY	215	\$110	\$23,650
6	Inlet Structure Complete	LF	300	\$1,100	\$330,000
7	Outlet Structure Complete	LS	1	\$90,000	\$90,000
8	Excavation	LS	1	\$45,000	\$45,000
9	Embankment	LS	1	\$35,000	\$35,000
10	Landscape Restoration and Seeding	LS	1	\$15,000	\$15,000
11	Road Reconstruction / Box Culvert Crossing	LS	1	\$235,000	\$235,000

SUBTOTAL \$956,648

ADDITIONAL COSTS

Utility Allowance	\$40,000
Design/Construction Engineering/Surveying (25%)	\$239,162
Special Costs (Unique to crossing or segment)	\$0
Contingency (25%)	\$239,162
SUBTOTAL	\$518,324

TOTAL CONSTRUCTION COST \$1,474,972

RIGHT-OF-WAY COSTS (Supplied by ODOT)

TOTAL CROSSING/SEGMENT COST \$1,474,972

Assumptions/Notes:

DAVID EVANS AND ASSOCIATES, INC.

SUMMARY COST ESTIMATE

PROJECT: ODOT0000608 Central Oregon Rail Plan		Terry Shike/503-361-8635			
CROSSING NO: 88,89,127		SW McCaffery Road			
RAIL SEGMENT IDENTIFICATION: Reroute		RAIL SEGMENT LENGTH:			
NO.	ITEM	UNIT	QUANTITY	UNIT COST	TOTAL
	Bridge 24' x 100'	ft2	2400	\$165	\$396,000
	MSE Retaining Walls	ft2	0	\$100	\$0
	Embankment	yd3	111200	\$15	\$1,668,000
	Paving	ft2	54000	\$10	\$540,000
	Sidewalks	ft2	0	\$10	\$0
SUBTOTAL					\$2,604,000

ADDITIONAL COSTS	
Utility Allowance	\$100,000
Design/Surveying (10%)	\$260,400
Constr.Engr./Contingency (50%)	\$1,302,000
Special Costs (Unique to crossing or segment)	
SUBTOTAL	\$1,662,400

TOTAL CONSTRUCTION COST	
RIGHT-OF-WAY COSTS (Supplied by ODOT)
TOTAL CROSSING/SEGMENT COST	
	\$4,266,400

Assumptions/Notes:
 Two lanes, no shoulders, no bike lanes, no sidewalks
 Embankment with 2:1 slopes, no retaining walls.
 Bridge on 0 degree skew

DAVID EVANS AND ASSOCIATES, INC.

SUMMARY COST ESTIMATE

PROJECT: ODOT0000608 Central Oregon Rail Plan		Terry Shike/503-361-8635			
CROSSING NO: 124/125		N. Unit Main Canal/Sherman Road			
RAIL SEGMENT IDENTIFICATION: Reroute		RAIL SEGMENT LENGTH:			
NO.	ITEM	UNIT	QUANTITY	UNIT COST	TOTAL
	RR Bridge, 45' x 200'	ft2	9000	\$635	\$5,715,000
SUBTOTAL					\$5,715,000

ADDITIONAL COSTS	
Utility Allowance	\$100,000
Design/Surveying (10%)	\$571,500
Constr.Engr./Contingency (50%)	\$2,857,500
Special Costs (Unique to crossing or segment)	
SUBTOTAL	\$3,529,000
TOTAL CONSTRUCTION COST	
RIGHT-OF-WAY COSTS (Supplied by ODOT)	
TOTAL CROSSING/SEGMENT COST	
	\$9,244,000

Assumptions/Notes:
 Double track bridge - steel through girders with transverse floor beams and ballasted track.
 Two span - 125'-75' 0n 20 degree skew.
 All approach costs are in the track bed cost estimate.

DAVID EVANS AND ASSOCIATES, INC.

SUMMARY COST ESTIMATE

PROJECT: ODOT0000608 Central Oregon Rail Plan		Terry Shike/503-361-8635			
CROSSING NO: 121A		19th St. Extension			
RAIL SEGMENT IDENTIFICATION: Reroute		RAIL SEGMENT LENGTH:			
NO.	ITEM	UNIT	QUANTITY	UNIT COST	TOTAL
	Bridge 86' x 125'	ft2	10750	\$165	\$1,773,750
	MSE Retaining Walls	ft2	73200	\$100	\$7,320,000
	Embankment	yd3	64000	\$15	\$960,000
	Paving	ft2	171000	\$10	\$1,710,000
	Sidewalks	ft2	27000	\$10	\$270,000
SUBTOTAL					\$12,033,750

ADDITIONAL COSTS	
Utility Allowance	\$100,000
Design/Surveying (10%)	\$1,203,375
Constr.Engr./Contingency (50%)	\$6,016,875
Special Costs (Unique to crossing or segment)	
SUBTOTAL	\$7,320,250
TOTAL CONSTRUCTION COST	
RIGHT-OF-WAY COSTS (Supplied by ODOT)	
TOTAL CROSSING/SEGMENT COST	
	\$19,354,000

Assumptions/Notes:

Four lanes, median, with 6 ft bike/shoulder and 6 ft sidewalks.

Retaining walls each side to reduce ROW costs.

Bridge on 35 degree skew