

**CONCEPT DESIGN - CAPITAL COST ESTIMATE**

**I-5 Trade Corridor - Concept 4**

**Corridor Section: Columbia River Crossing -Double-Decker Str.**

**Date:** 27-Mar-02

**Date of Cost Index:** August 2001

			Unit	Quantity	Cost	Total	
<b>I. RIGHT OF WAY/REAL ESTATE</b>							<b>\$60,167,438</b>
1	1.1	Commercial	SF	869,472	\$25	\$21,736,800	
	1.2	Residential	SF	14,043	\$15	\$210,645	
	1.3	Buildings	LS	1	\$12,000,000	\$12,000,000	
	1.3.1	Relocation of Business	LS	1	\$20,000,000	\$20,000,000	
	1.4	Open Lands	SF	132,250	\$5.00	\$661,250	
	1.5	Railroad R/W	SF	59,317	\$1.50	\$88,976	
2	Subtotal					\$54,697,671	
3	Engineering & Admin		LS	10%	\$5,469,767	\$5,469,767	
<b>II. CIVIL CONSTRUCTION</b>							
1	Utility Relocations						<b>\$19,248,000</b>
	1.1	Urban Corridor	M	12.7	\$1,500,000.00	\$19,020,000	
	1.2	Open Lands	M	1	\$200,000.00	\$228,000	
	1.3	Lane Addition	M	0	\$125,000.00	\$0	
2	General Excavation/Fill						<b>\$3,415,020</b>
	2.1	General Excavation	CY	73,530	\$14.00	\$1,029,420.00	
	2.2	Fill	CY	170,400	\$14.00	\$2,385,600.00	
3	Surfacing / Paving						\$17,556,430
	3.1	New Surfacing - ACP (includes wearing course, base course, agg base, excav to 30" section depth)	SY	147,521	\$65.00	\$9,588,865.00	
	3.2	New Surfacing - PCC (includes concrete, agg base, excav to section depth)	SY	76,500	\$92.00	\$7,038,000.00	
	3.3	Overlay Surfacing - ACP (includes surface prep, ACP wearing course, and leveling course)	SY	143,010	\$6.50	\$929,565.00	
	3.4	Sidewalk - PCC (includes concrete, excav, agg base)	SY	370			
4	Roadside Development						\$13,820,000
	4.1	Drainage System	M	13.8	\$1,000,000.00	\$13,820,000.00	
	4.2	Restoration of Wetlands	AC	\$ -	\$170,000.00	\$0.00	
5	Traffic Services & Safety						\$6,185,930
	5.1	Illumination	M	13.8	\$250,000.00	\$3,455,000.00	
	5.2	Signage (includes signage, supports, sign bridges, and pavement markings)	M	13.8	\$100,000.00	\$1,382,000.00	
	5.3	Signalized Intersection	EA	4	\$300,000.00	\$1,200,000.00	
	5.4	Striping	LM	56	\$2,650.00	\$148,930.00	
6	Structures						\$460,993,433
	6.01	Highway overpass	SF	213,629	\$100.00	\$21,362,900.00	
	6.02	Overland Bridge	SF	201,052	\$150.00	\$30,157,800.00	
	6.03	Low/Mid level over water	SF	597,200	\$275.00	\$164,230,000.00	
	6.04	High level over water	SF	6,800	\$325.00	\$2,210,000.00	
	6.05	Movable lift span	SF	0	\$1,670.00	\$0.00	
	6.06	Double Deck over water	SF	460,000	\$438.00	\$201,480,000.00	
	6.07	Pedestrian Bridge	SF	0	\$140.00	\$0.00	
	6.08	Bridge Widening	SF	68,480	\$154.00	\$10,545,920.00	
	6.09	Bridge Demolition	SF	500,175	\$25.73	\$12,869,502.75	
	6.1	Cut and Cover Box	LF	430	4299	\$1,848,570.00	
	6.11	Tunnel	LF	0	\$3,750	\$0.00	
	6.12	Tie-back Retaining Wall	SF	0	\$90.00	\$0.00	
	6.13	MSE Retaining Wall	SF		\$29.00	\$0.00	
	6.14	CIP wall <10' hgt	SF	61,675	\$35.00	\$2,158,625.00	
	6.15	CIP wall 10'-15' hgt	SF	111,000	\$40.00	\$4,440,000.00	
	6.16	CIP wall 15'-20' hgt	SF	36,840	\$47.00	\$1,731,480.00	
	6.17	CIP wall 20'-25' hgt	SF	64,300	\$55.00	\$3,536,500.00	
	6.18	Soundwalls	SF	43,420	\$23.00	\$998,660.00	
	6.19	Soundwall Relocation	SF	0	\$16.00	\$0.00	
	6.2	Soundwall Demolition	SF	0	\$10.00	\$0.00	
	6.21	Concrete Barrier	LF	62,245	\$55.00	\$3,423,475.00	
7	Park and Ride						\$0
	7.1	Surface Lot	Space		\$2,500.00	\$0.00	
	7.2	Garage - 0-3 levels	Space		\$9,000.00	\$0.00	
	7.3	Garage - 4+ levels	Space		\$11,000.00	\$0.00	
8	Civil Construction Subtotal (Lines 1 through 7)						\$521,218,813
9	Mobilization -				8% of Line 8	\$ 41,697,505	
10	Subtotal (Lines 8 & 9)					\$ 562,916,318	
11	Construction Contingency				32% of Line 10	\$ 180,133,222	
12	Construction Total (Lines 10 & 11)					\$ 743,049,540	
<b>III. DESIGN ENGINEERING &amp; ADMINISTRATION (25% of Line 12)</b>							<b>\$ 185,762,385</b>
<b>IV. TOTAL CAPITAL COST (2001 \$) Lines I, 12 and III</b>							<b>\$ 988,979,362</b>
<b>V. LRT SYSTEM (EXPO TO 5TH ST., VACOUVER)</b>							<b>\$186,447,546</b>
1	Civil Construction				\$16,300,304.00		
2	Bridge Construction				\$70,675,000.00		
3	Transit Vehicles (4 LRVs)				\$12,057,834.00		
4	Operations Facilities				\$2,007,656.00		
5	Traction Electrification System				\$3,104,967.00		
6	Signals				\$2,991,811.00		
7	Communications				\$844,353.00		
8	Fare Collection				\$496,002.00		
9	Right of way				\$19,125,445.00		
10	Engineering & Admin				\$32,017,480.00		
11	Contingency				\$26,826,694.00		
<b>VI. TOTAL CAPITAL COST (2001 \$) Lines IV AND V</b>							<b>\$ 1,175,426,908</b>