

Highway 99 (78th Street to RR Crossing) Concept Plan
Option 3 - Major Improvements with Grade Alteration and New RR Bridge
Comparative Cost Estimate

Date: 5/1/2013
Analyst: Otak, Inc.

	Quantity	Unit	Unit Cost	Total Item Cost
Mainline and 78th Street Intersection				
Sidewalk and Pedestrian Ramp Improvements	1	LS	\$1,160,000	\$1,160,000
Pavement Overlay (2-inch)	1	LS	\$970,000	\$970,000
Transit Stop Relocation and Enhancements	6	Each	\$10,000	\$60,000
Landscaping	400	Each	\$400	\$160,000
Streetscape Amenities - Category I	200	Each	\$2,500	\$500,000
Streetscape Amenities - Category II	16	Each	\$10,000	\$160,000
Stormwater Collection	1	LS	\$130,000	\$130,000
Traffic Signal Improvements	1	LS	\$1,000,000	\$1,000,000
Access Control Measures	1	LS	\$410,000	\$410,000
High Visibility Corners	2	Each	\$35,000	\$70,000
Utility Undergrounding (Both Sides)	9,500	LF	\$250	\$2,375,000
			SUBTOTAL	\$6,995,000
			Contingencies (30% of Subtotal)	\$2,099,000
			MAINLINE CONSTRUCTION COSTS SUBTOTAL	\$9,094,000
Pedestrian Connection at Railroad				
Multi-use Path Improvements	1	LS	\$153,000	\$153,000
Hwy 99 Inlay/Restriping	1	LS	\$170,000	\$170,000
Pedestrian Access Tunnel	1	LS	\$1,000,000	\$1,000,000
Retaining Walls	5,000	SF	\$100	\$500,000
			SUBTOTAL	\$1,823,000
			Contingencies (30% of Subtotal)	\$547,000
			PEDESTRIAN CONNECTION CONSTRUCTION COSTS SUBTOTAL	\$2,370,000
Railroad Crossing Improvements				
Hwy 99 Widening and Grade Alternation	1	LS	\$1,500,000	\$1,500,000
Retaining Walls	27,000	SF	\$130	\$3,510,000
Stormwater Management	1	LS	\$750,000	\$750,000
Railroad Bridge (Incl. Permits and Coordination)	1	LS	\$3,000,000	\$3,000,000
			SUBTOTAL	\$8,760,000
			Contingencies (30% of Subtotal)	\$2,628,000
			RR CROSSING IMPROVEMENTS CONSTRUCTION COSTS SUBTOTAL	\$11,388,000
			CONSTRUCTION COSTS TOTAL	\$22,852,000
Engineering / Design				
Preliminary Engineering (20% of Total Construction Costs)				\$4,571,000
Construction Engineering (15% of Total Construction Costs)				\$3,428,000
			ENGINEERING / DESIGN SUBTOTAL	\$7,999,000
			DESIGN & CONSTRUCTION SUBTOTAL	\$30,900,000
Right-of-Way / Property Restoration				
Right-of-Way Acquisition	10,000	SF	TBD	TBD
			RIGHT-OF-WAY / PROPERTY RESTORATION SUBTOTAL	\$0
			TOTAL PROJECT COSTS	\$30,900,000

Notes:

- Sidewalk and ped ramp construction includes earthwork, curb, sidewalk, traffic control, and erosion control on mainline Hwy 99 only. No construction costs are included for modifications to side streets.
- Pavement inlay includes 2-inch grind and inlay of existing pavement between 78th Street and 63rd Street, re-striping and traffic control.
- Transit Stop Relocation includes concrete pad, shelter w/ bench, and signage and a \$5,000 allowance for enhancements.
- Landscape includes one street tree in tree well every 30-ft O.C. average.
- Streetscape amenities includes: (1) Category I amenity every 60 LF; (1) Category II amenity every 120 LF for developments over 50,000 SF GFA. Assumes three parcels will develop to meet Category II criteria and allows for 4 Category II amenities per parcel.
- Stormwater Management includes an allowance for meeting Minimum Requirements 1 - 10 (50% of roadway improvement costs - i.e. sidewalk, widening, etc.), for the work south of 63rd Street.
- For the work north of 63rd Street, assumes sidewalks are installed using pervious concrete or the net increase in pervious pavement does not trigger Minimum Requirements 6 and 7.
- Signal improvements include new signals at all existing signalized intersections, and an additional \$5,000 per signal for installation of Transit Signal Priority System. Assumes C-TRAN will outfit their fleet with GPS based transmitters.
- Access control measures include a \$10,000 allowance for each driveway closure.
- Stormwater Collection includes replacing existing catch basins and reconnecting existing laterals
- These costs are not based on itemized construction costs and are for comparison purposes only.**
- Assumes sidewalk location and width can be adjusted to avoid direct impacts to existing buildings
- Costs are in 2013 dollars
- Based on Alt's 1, 2, 3A and 3B, dated May 2013
- Assumes existing street level lighting will remain, not additional illumination included except possible pedestrian level lights as part of Streetscape Amenity Category II.
- High Visibility Corners assume enhanced landscaping and public art or gateway feature at the 78th Street and 63rd Street intersections.
- Hwy 99 widening and grade alternation includes lowering Hwy 99 approximately 4-ft at RR bridge to gain WSDOT required clearance, widening Hwy 99 per typical section shown in plans, two 1-week closures of the railroad, and a 2 month closure of Hwy 99 between the RR crossing and 61st Street. A temporary RR bridge is not included.