

VII. STANDING COMMITTEE

B. Finance, Audit and Facilities Committee

State Route 520 Project

See Attached

WSDOT Local Streets Traffic Modeling Results

Based on Tech Committee Graphic distributed 9/13/05

Prepared by Peter Dewey

10/11/2005

revised 10/17/05

Volume change	2030 Bi-directional PM Peak Hour Traffic Volumes									
	No build Volume	Base 6 lane (w/ Montlake Interchange)			Union Bay Bridge			Parallel Montlake Bridge		
		Volume	Volume change from no build	% change from no Build	Volume	Volume change from no build	% change from no Build	Volume	Volume change from no build	% change from no Build
Local Streets										
15th north of Pacific Street	1,150	1,080	(70)	-6%	1,530	380	33%	1,280	130	11%
Pacific west of 15th Ave	1,650	1,570	(80)	-5%	2,310	660	40%	1,820	170	10%
Pacific east of 15th Ave	2,680	2,570	(110)	-4%	3,660	980	37%	2,950	270	10%
Montlake north of Pacific Place	4,930	4,840	(90)	-2%	5,930	1,000	20%	5,400	470	10%
45th east of Montlake	4,490	4,200	(290)	-6%	5,440	950	21%	4,880	390	9%
Montlake at Shelby	5,660	5,760	100	2%	3,070	(2,590)	-46%	6,250	590	10%
Montlake at Calhoun	2,070	1,940	(130)	-6%	2,540	470	23%	2,320	250	12%
Arboretum on/off ramps	1,150	1,215	65	6%	1,710	560	49%	1,200	50	4%
SR 520										
SR 520 at Portage Bay	6,790	7,240	450	7%	6,580	(210)	-3%	7,275	485	7%
SR 520 east of Arboretum	8,630	8,900	270	3%	8,910	280	3%	8,890	260	3%

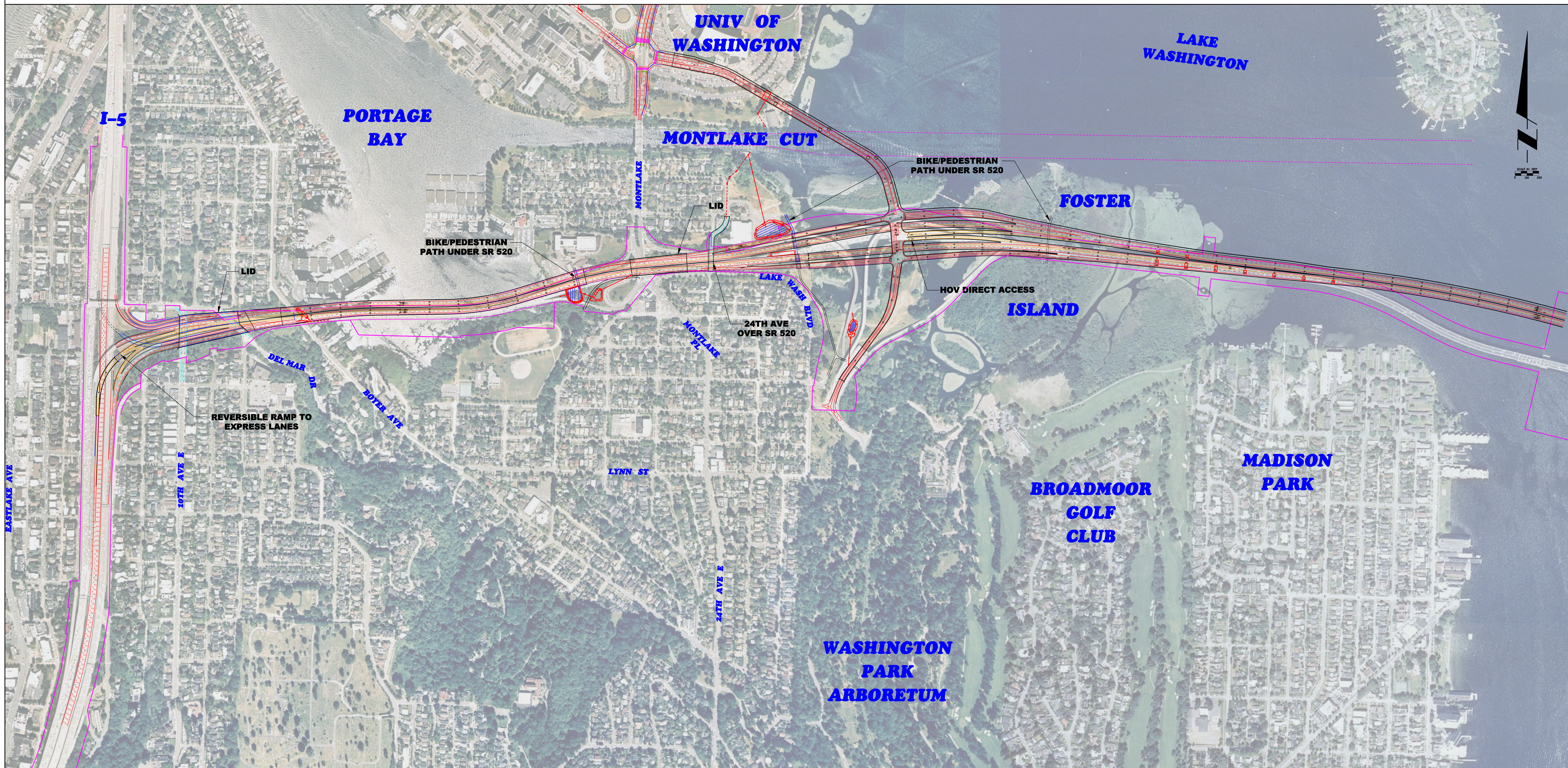
Notes:

The street system assumed for the No build, Base 6 lane and Parallel Montlake Bridge options are equivalent. The street system assumed with the Union Bay Bridge option includes an additional traffic lane *in each direction* on Montlake Blvd, 45th to Pacific Street, an additional eastbound lane on Pacific Place and a lengthened eastbound turn pocket on eastbound Pacific Street at Pacific Place. These street changes were added as was required to maintain intersection performance at acceptable levels. Without these street changes, traffic volumes would be much lower and some of the area intersections would fail.

Under the Union Bay bridge option, Shelby Hamlin volume would decline 46% which all other local street volumes would increase up to 49%, including a 23% volume increase on Montlake Blvd as it passes through the Montlake business district at Calhoun

Under the Union Bay bridge option, Montlake Blvd north of Pacific Place would have a PM peak volume 90% of the SR 520 volume at Portage Bay. 45th Street east of Montlake would be 83% of the SR 520 volume at Portage Bay.

6 - LANES WITH PACIFIC STREET INTERCHANGE



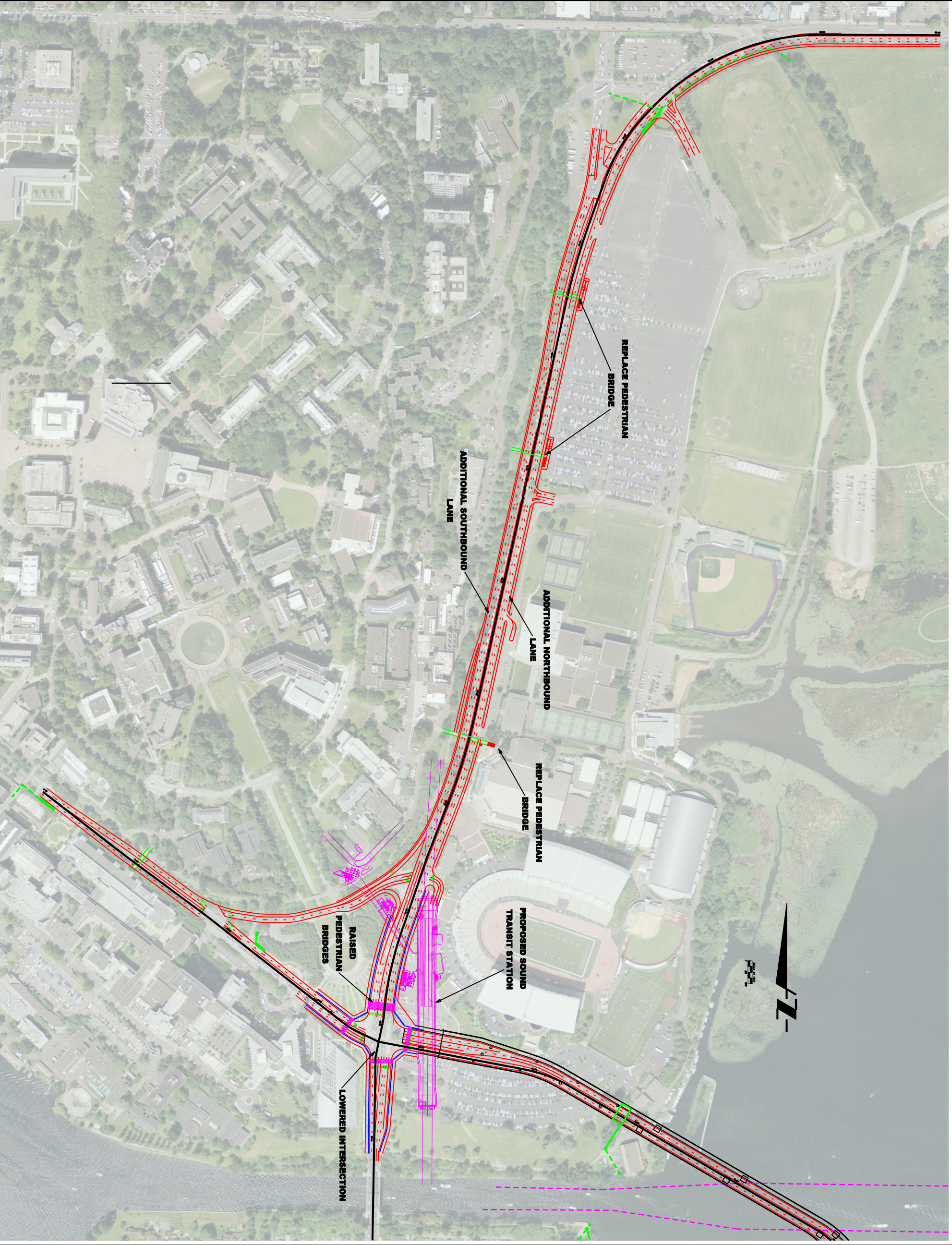
SHEET NO.	LEGEND
1	EDGE LINE
	LANE LINE
	STRUCTURE
	RETAINING WALL
	STAFFED BARRIER
	RIGHT-OF-WAY
	BIKE/PEDESTRIAN PATH
	BIKESHEDULE
	BIKESHEDULE
	HOV 3+ SHOULDER
	HOV 2+ SHOULDER

PRELIMINARY

SR 520
BRIDGE REPLACEMENT
AND HOV PROJECT

Parametrix, Inc.  Washington State Department of Transportation  U.S. Department of Transportation Federal Highway Administration 

MONTLAKE/PACIFIC INTERSECTION - DEPRESSED ROADWAY WITH RAISED PEDESTRIAN CROSSING



SHEET NO.	LEGEND
1	EDGE LINE
	LANE LINE
	STRUCTURE
	RETAINING WALL
	TRAFFIC BARRIER
RIGHT OF WAY	

PRELIMINARY

SR 520
BRIDGE REPLACEMENT
AND HOV PROJECT

Parametrix, Inc.
Sound Transit

Washington State
Department of Transportation
U.S. Department of Transportation
Federal Highway Administration