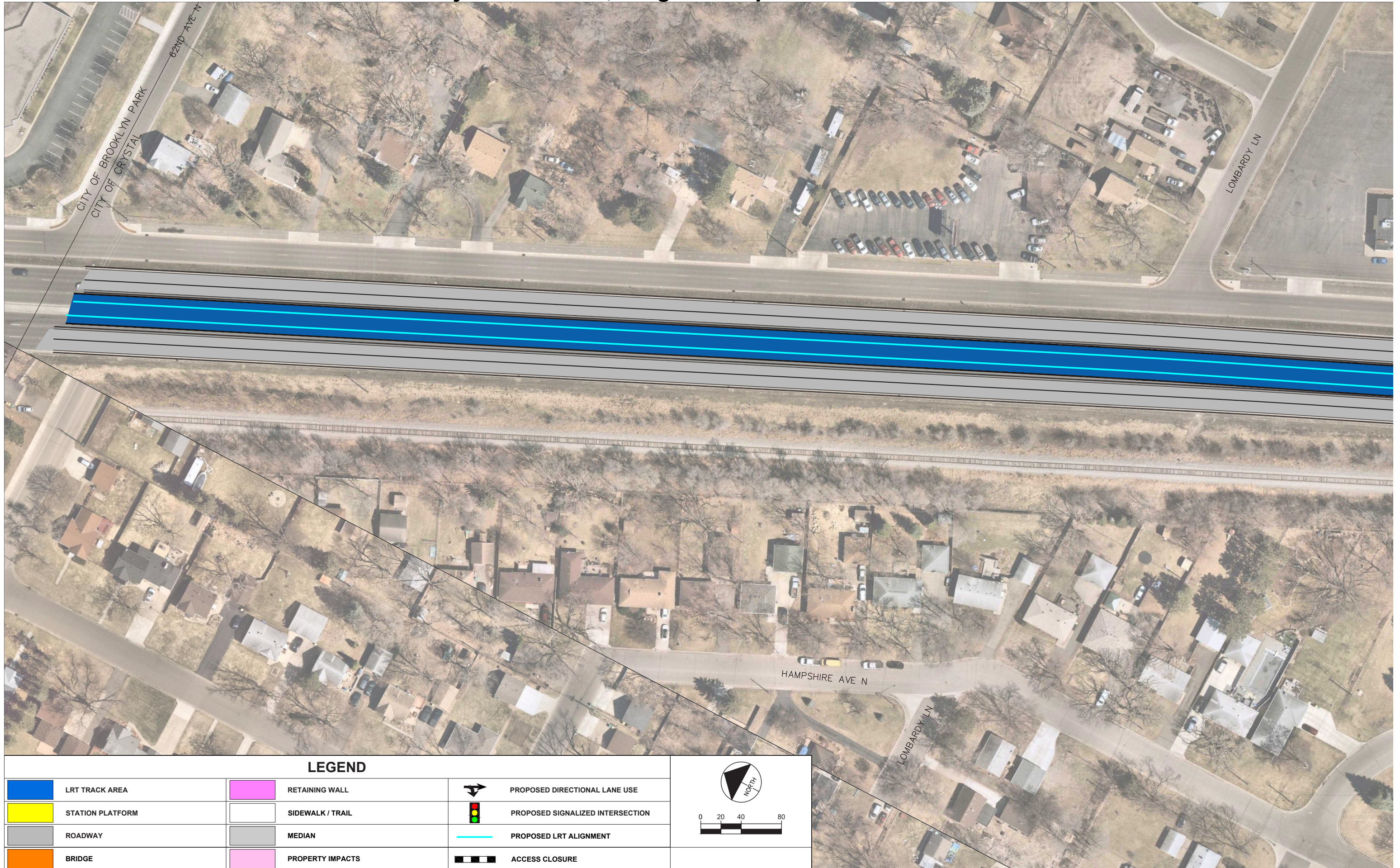












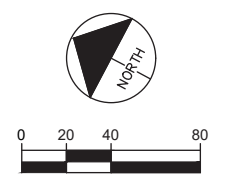


Baseline Layout - 4 lanes, no grade separation at Bass Lake Road



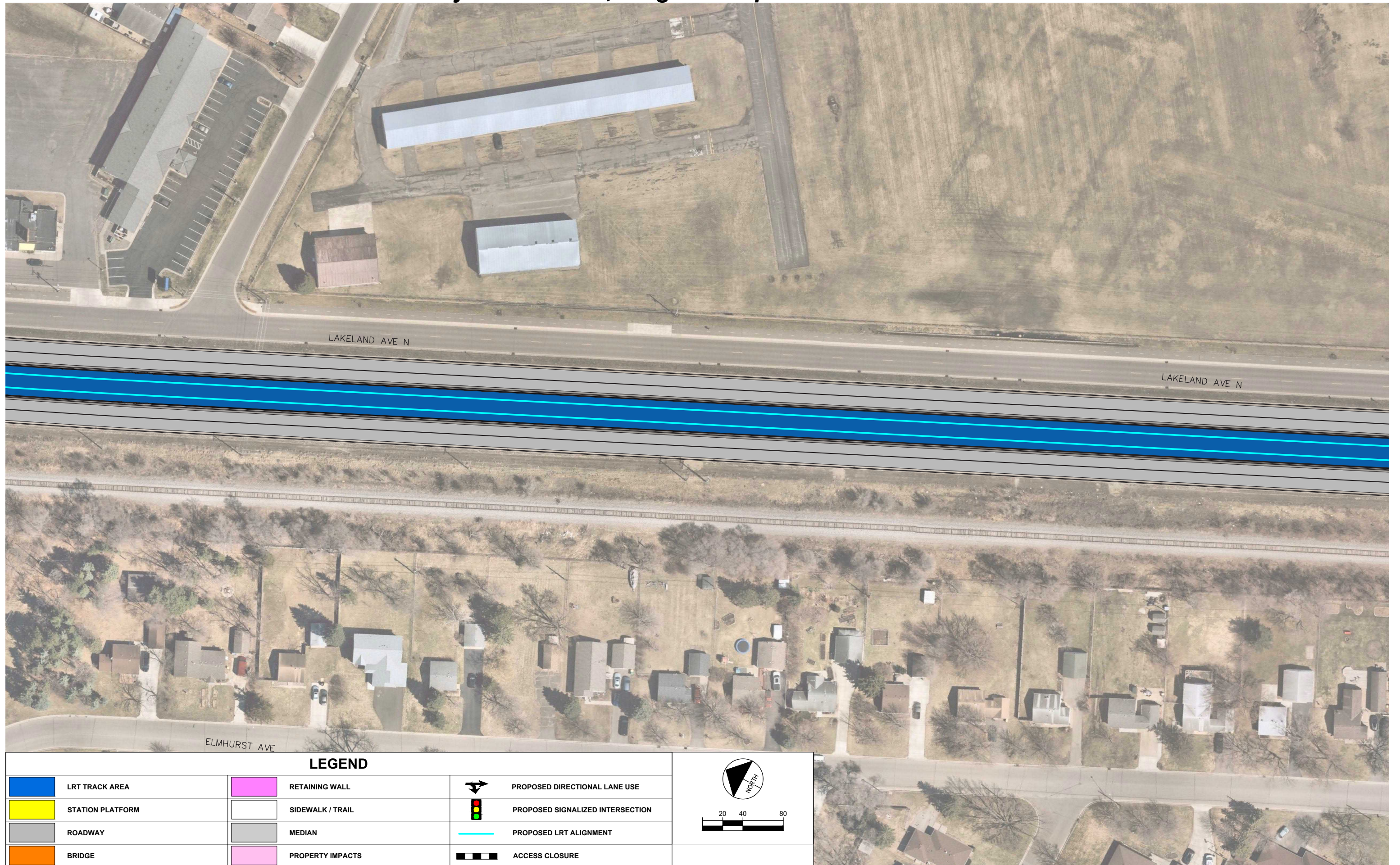
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	LRT TRACK AREA		RETAINING WALL		PROPOSED DIRECTIONAL LANE USE
	STATION PLATFORM		SIDEWALK / TRAIL		PROPOSED SIGNALIZED INTERSECTION
	ROADWAY		MEDIAN		PROPOSED LRT ALIGNMENT
	BRIDGE		PROPERTY IMPACTS		ACCESS CLOSURE



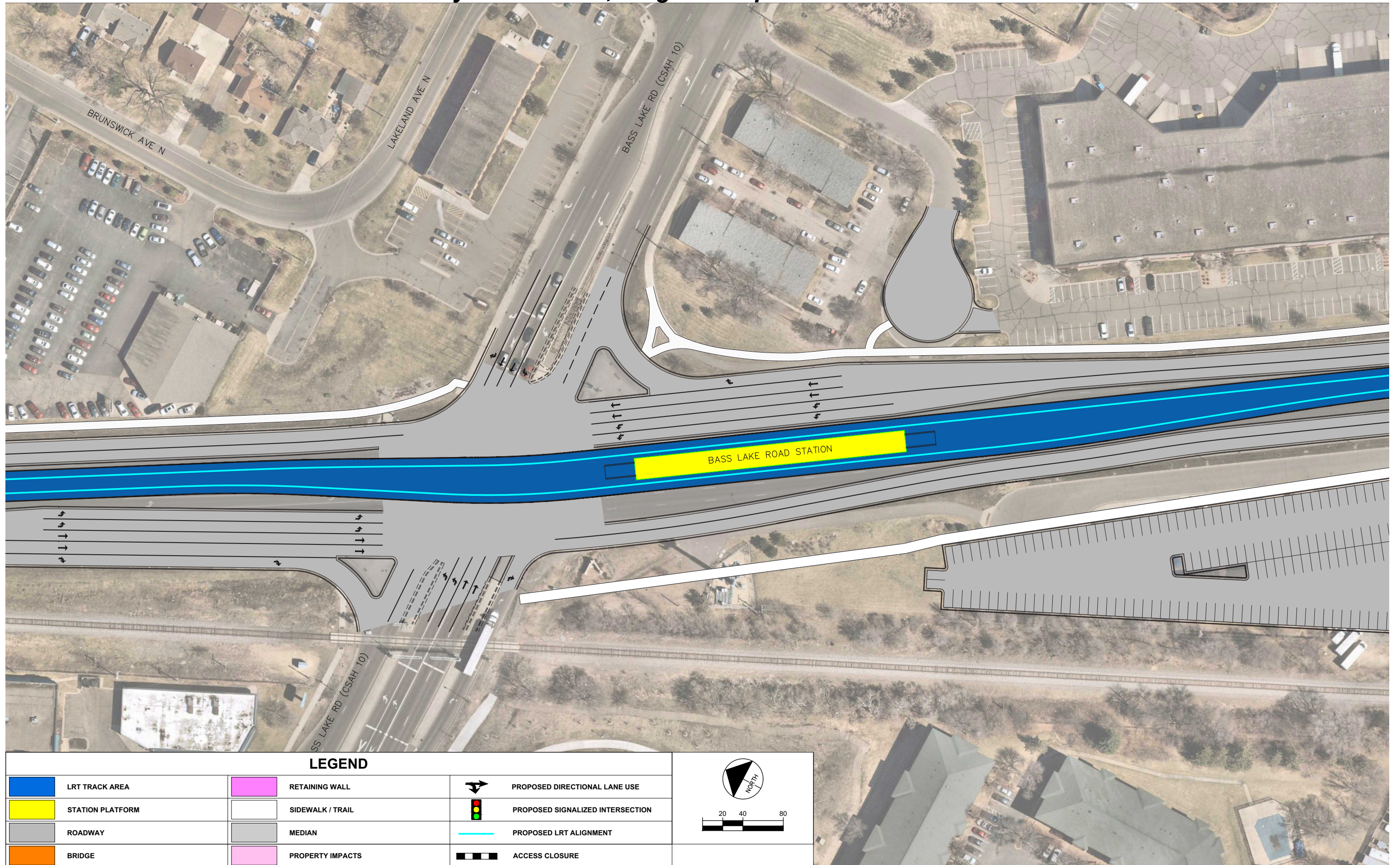
DRAFT Concept in Development





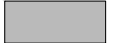
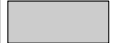






Baseline Layout - 4 lanes, no grade separation at Bass Lake Road

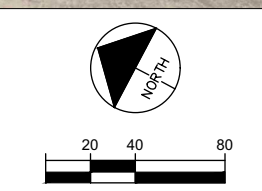


DRAFT Concept in Development

Baseline Layout - 4 lanes, no grade separation at Bass Lake Road

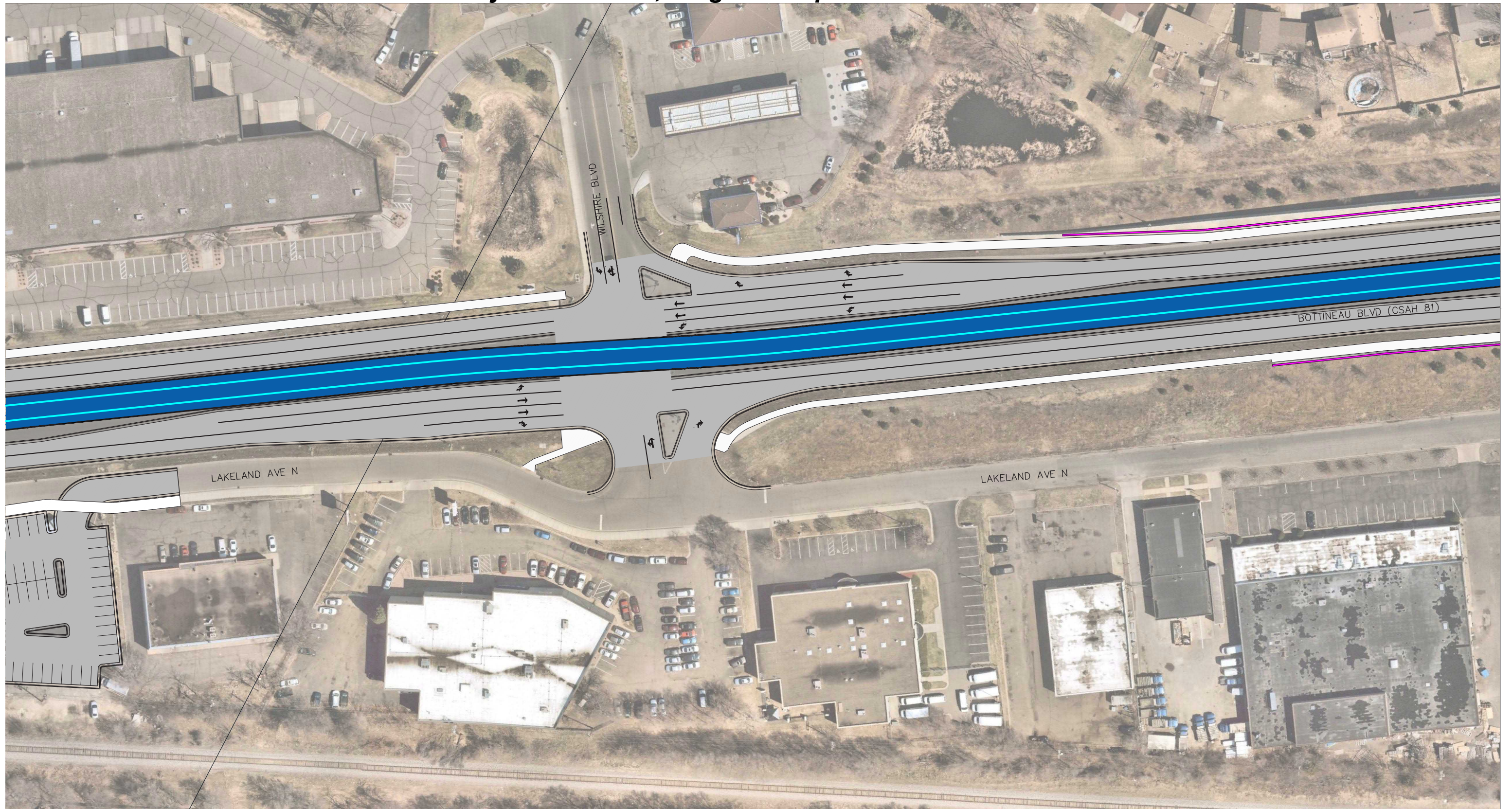


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	LRT TRACK AREA		RETAINING WALL
	STATION PLATFORM		SIDEWALK / TRAIL
	ROADWAY		MEDIAN
	BRIDGE		PROPERTY IMPACTS
			PROPOSED DIRECTIONAL LANE USE
			PROPOSED SIGNALIZED INTERSECTION
			PROPOSED LRT ALIGNMENT
			ACCESS CLOSURE







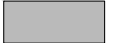
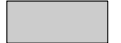






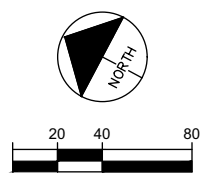
DRAFT Concept in Development

Baseline Layout - 4 lanes, no grade separation at Bass Lake Road



LEGEND




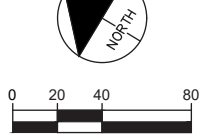




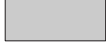




	LRT TRACK AREA		RETAINING WALL		PROPOSED DIRECTIONAL LANE USE
	STATION PLATFORM		SIDEWALK / TRAIL		PROPOSED SIGNALIZED INTERSECTION
	ROADWAY		MEDIAN		PROPOSED LRT ALIGNMENT
	BRIDGE		PROPERTY IMPACTS		ACCESS CLOSURE

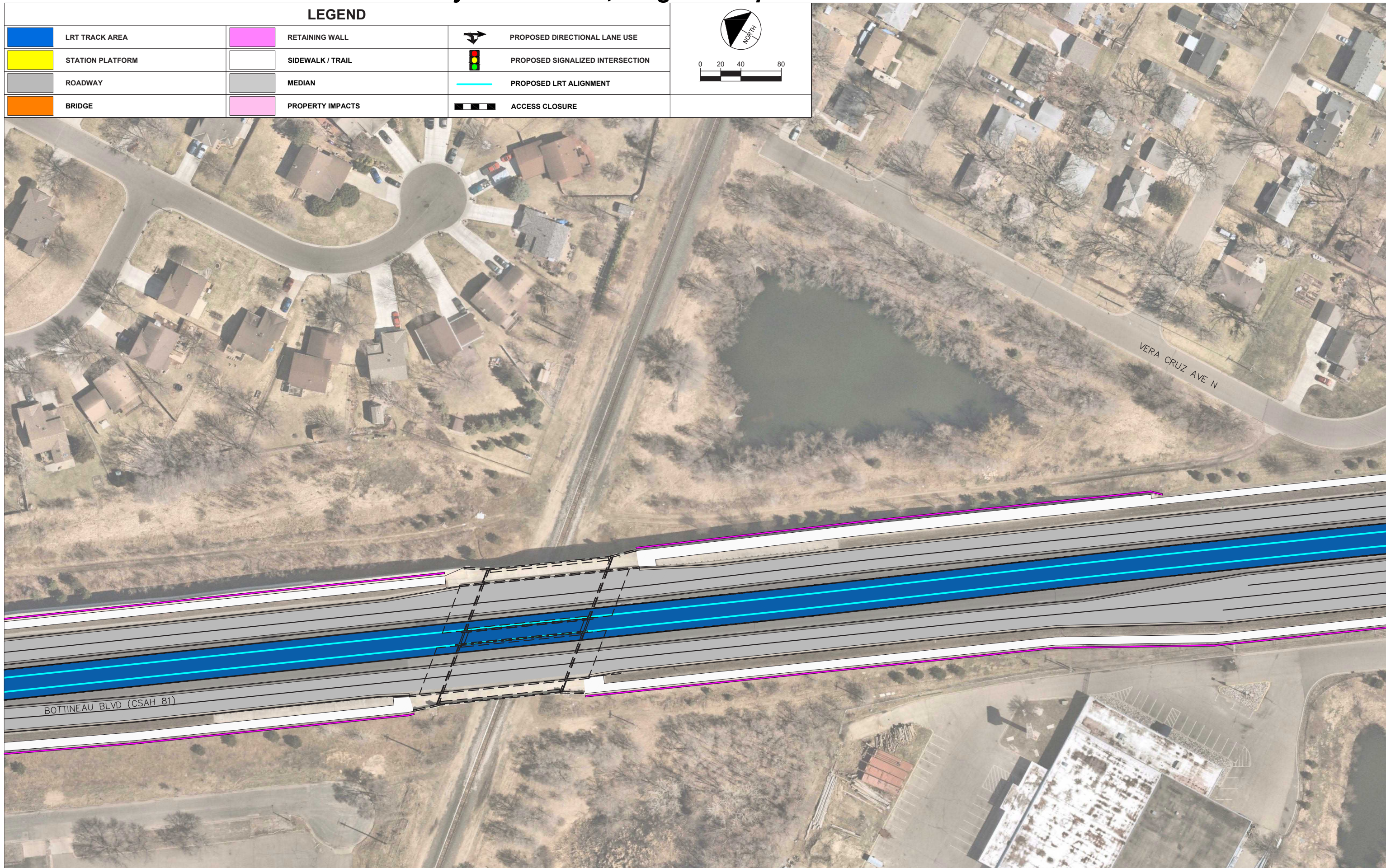


DRAFT Concept in Development

Baseline Layout - 4 lanes, no grade separation at Bass Lake Road













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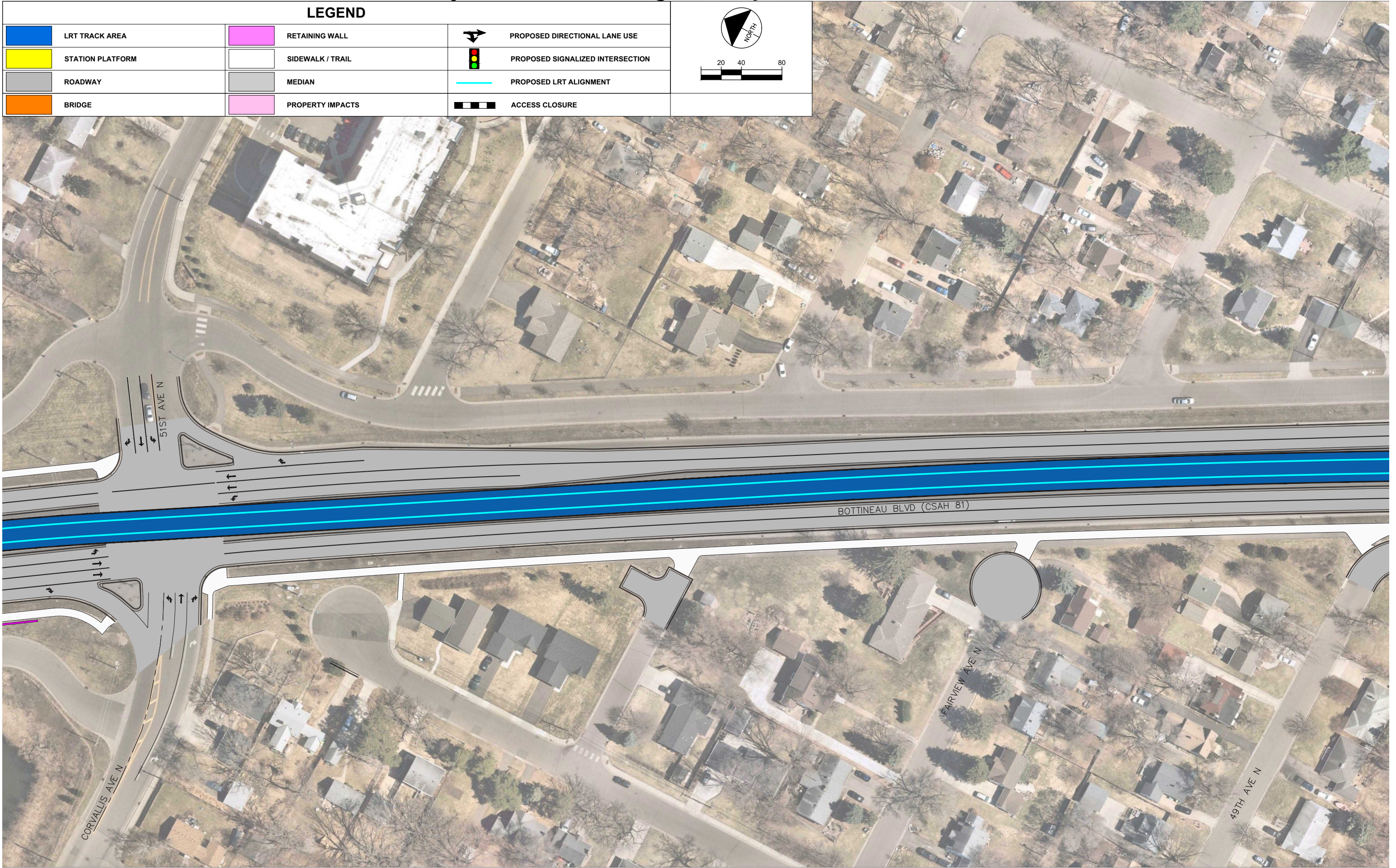
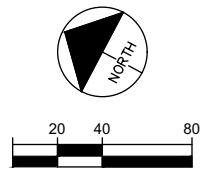
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	STATION PLATFORM		SIDEWALK / TRAIL		PROPOSED SIGNALIZED INTERSECTION	
	ROADWAY		MEDIAN		PROPOSED LRT ALIGNMENT	
	BRIDGE		PROPERTY IMPACTS		ACCESS CLOSURE	



Baseline Layout - 4 lanes, no grade separation at Bass Lake Road













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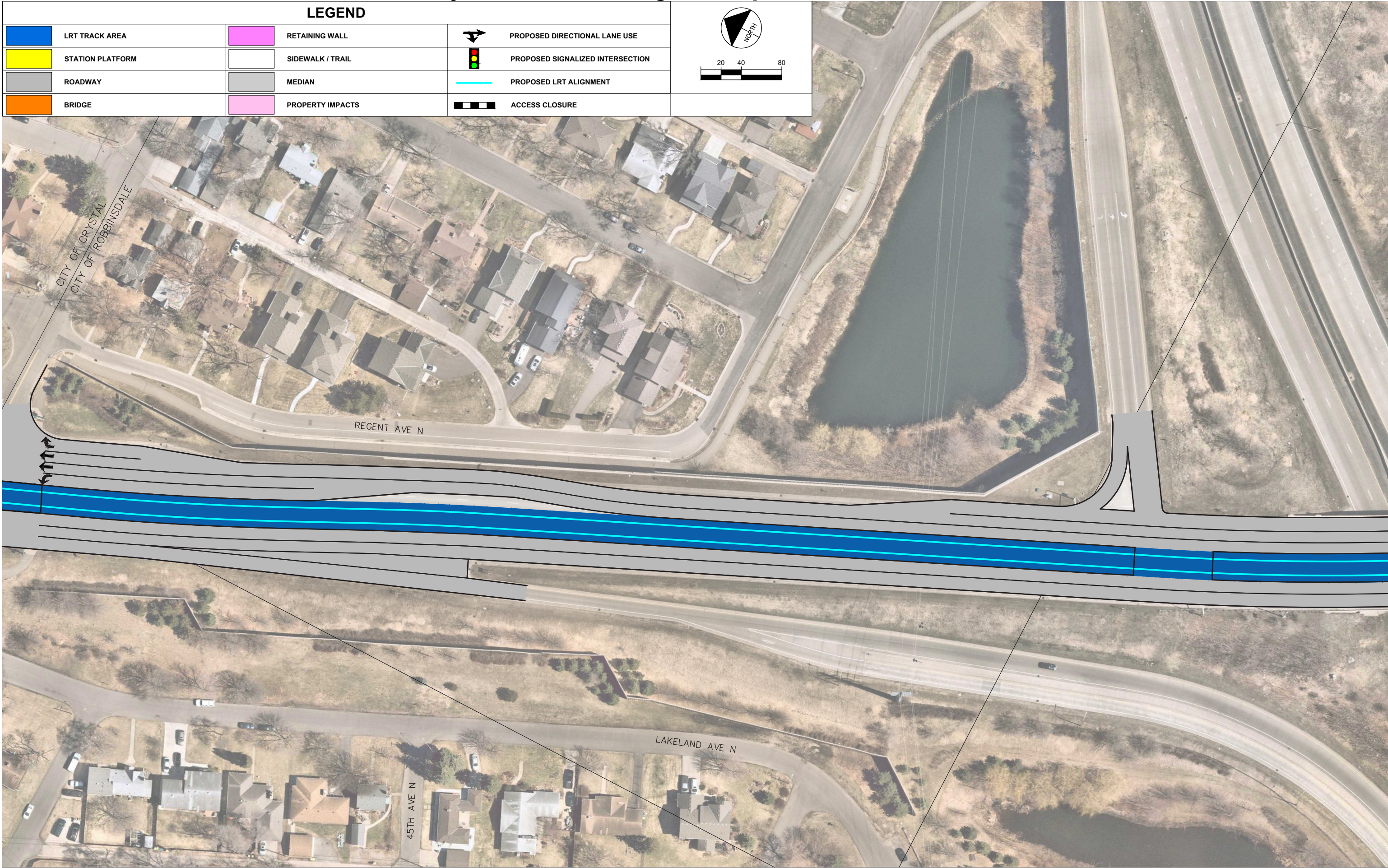
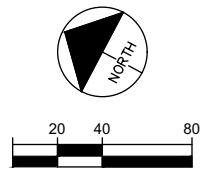
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	STATION PLATFORM		SIDEWALK / TRAIL		PROPOSED SIGNALIZED INTERSECTION
	ROADWAY		MEDIAN		PROPOSED LRT ALIGNMENT
	BRIDGE		PROPERTY IMPACTS		ACCESS CLOSURE



Baseline Layout - 4 lanes, no grade separation at Bass Lake Road

LEGEND













	LRT TRACK AREA		RETAINING WALL		PROPOSED DIRECTIONAL LANE USE
	STATION PLATFORM		SIDEWALK / TRAIL		PROPOSED SIGNALIZED INTERSECTION
	ROADWAY		MEDIAN		PROPOSED LRT ALIGNMENT
	BRIDGE		PROPERTY IMPACTS		ACCESS CLOSURE

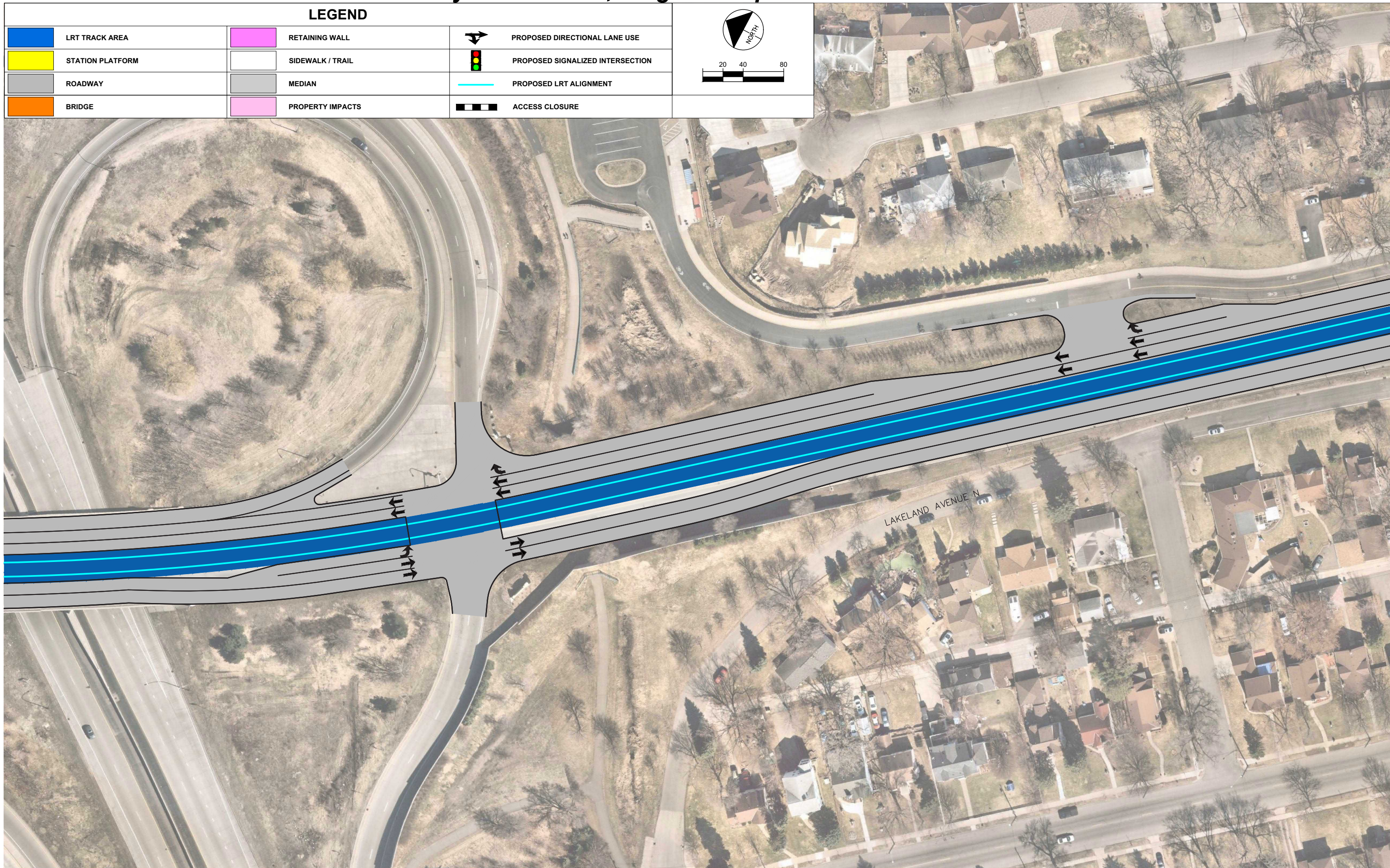
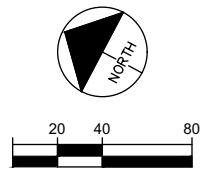


DRAFT Concept in Development

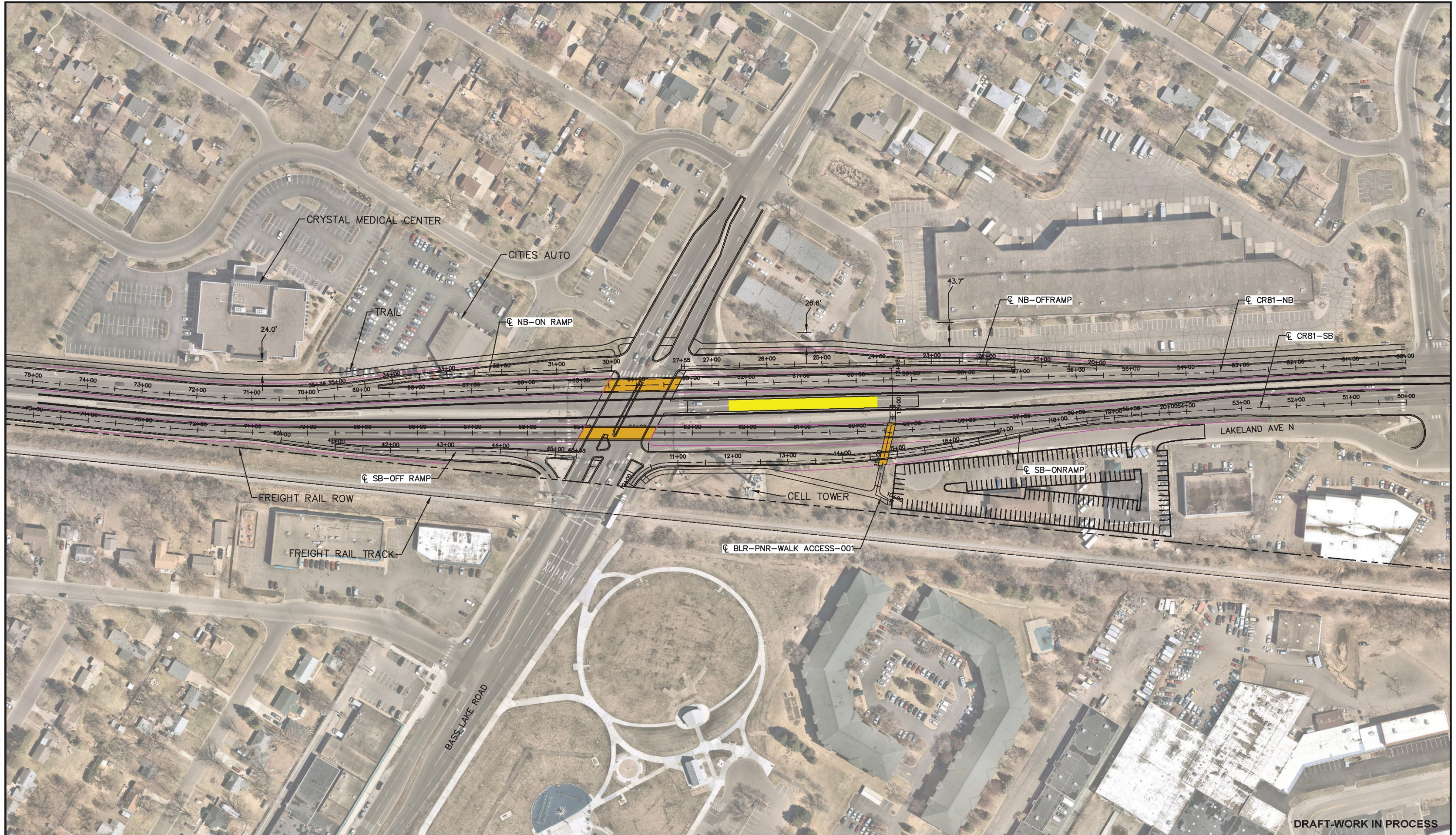
Baseline Layout - 4 lanes, no grade separation at Bass Lake Road

LEGEND

	LRT TRACK AREA		RETAINING WALL		PROPOSED DIRECTIONAL LANE USE
	STATION PLATFORM		SIDEWALK / TRAIL		PROPOSED SIGNALIZED INTERSECTION
	ROADWAY		MEDIAN		PROPOSED LRT ALIGNMENT
	BRIDGE		PROPERTY IMPACTS		ACCESS CLOSURE



Bass Lake Road Interchange Alternative



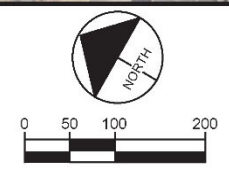
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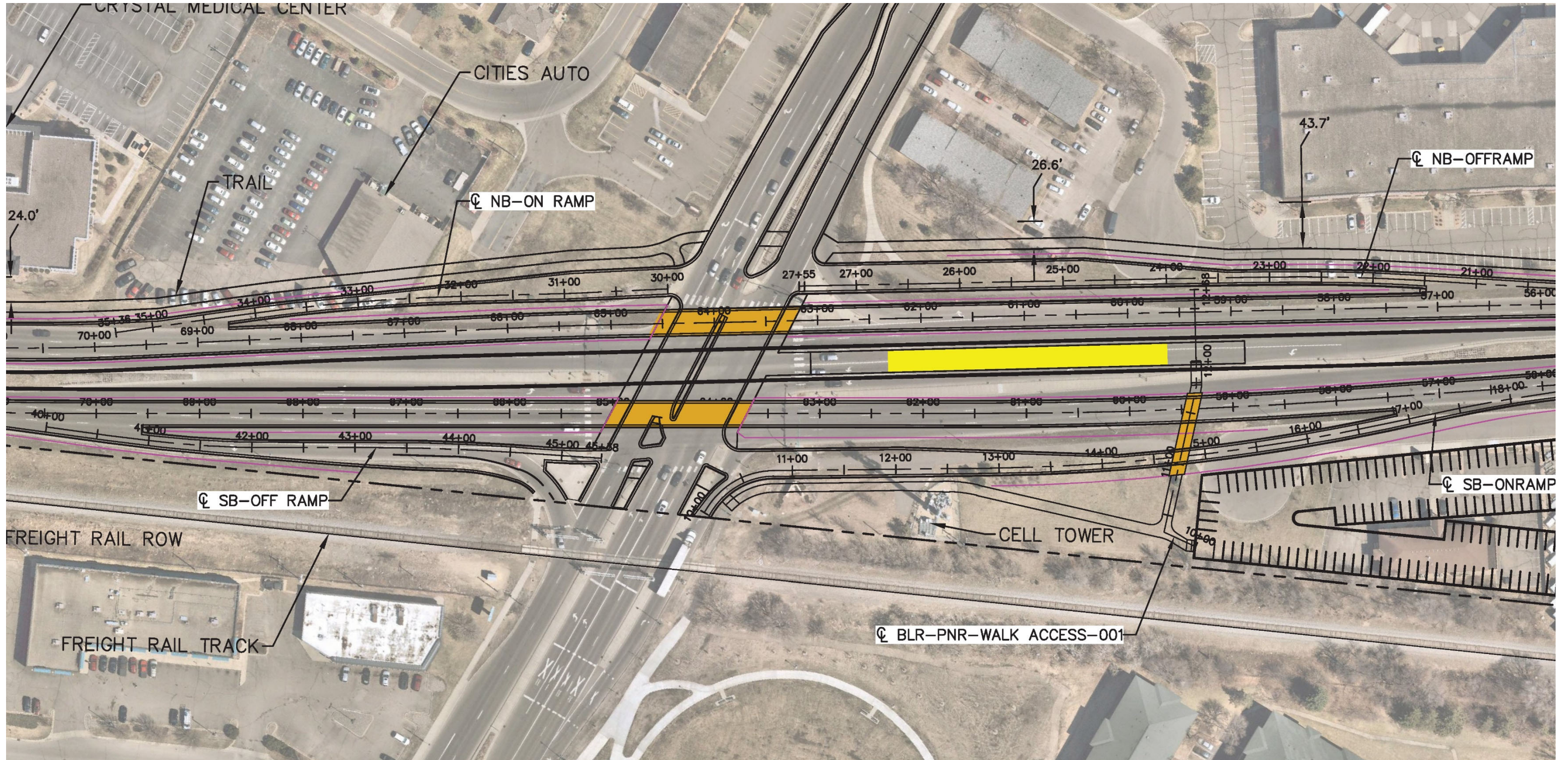


BLUE LINE LRT EXTENSION
 BASS LAKE ROAD/ CR 81 INTERCHANGE
 TIGHT DIAMOND ALTERNATIVE

Rev X
 09/07/2021



Bass Lake Road Interchange Alternative





**Crystal
Medical**

**Becker
Park**

Looking Northwest



Looking Southeast



Travel Time Comparison

*CR 81 Corridor – TH 100 Interchange to I-94 Interchange
(approx. 3 miles)*

Northbound

Peak Hour	No-Build	Build	Overall Change
AM	4 min 53 sec	4 min 48 sec	- 5 sec
PM	4 min 55 sec	5 min 28 sec	+ 33 sec

Southbound

Peak Hour	No-Build	Build	% Change
AM	5 min 23 sec	5 min 21 sec	- 2 sec
PM	5 min 42 sec	5 min 17 sec	- 25 sec

No-Build - AM Peak Hour
CR 81 - Crystal

Intersection	Direction	Movement	Average Delay (sec/veh)	LOS	Modeled Volume (vph)
CSAH 81 (Bottineau Blvd)/ 63rd Ave N	Eastbound	Left	43.7	D	87
		Through	40.7	D	134
		Right	7.1	A	128
	Westbound	Left	42.7	D	196
		Through	40.0	D	221
		Right	8.2	A	118
	Northbound	Left	53.5	D	46
		Through	23.5	C	710
		Right	3.1	A	57
	Southbound	Left	47.2	D	106
		Through	21.2	C	1325
		Right	1.1	A	28
Intersection			25.6	C	3156
CSAH 81 (Bottineau Blvd)/CSAH 10 (Bass Lake Rd)	Eastbound	Left	56.7	E	138
		Through	45.7	D	247
		Right	12.2	B	187
	Westbound	Left	51.3	D	71
		Through	46.2	D	277
		Right	6.3	A	98
	Northbound	Left	52.8	D	233
		Through	19.8	B	699
		Right	1.4	A	15
	Southbound	Left	59.4	E	62
		Through	29.9	C	1355
		Right	6.2	A	233
Intersection			30.5	C	3617
CSAH 81 (Bottineau Blvd)/Wilshire Blvd	Eastbound	Left	46.9	D	9
		Through	36.9	D	6
		Right	7.7	A	10
	Westbound	Left	72.9	E	297
		Through	80.9	F	23
		Right	24.9	C	80
	Northbound	Left	62.5	E	20
		Through	6.3	A	864
		Right	2.0	A	108
	Southbound	Left	44.2	D	62
		Through	10.4	B	1535
		Right	13.0	B	12
Intersection			17.2	B	3024

Build - AM Peak Hour
CR 81 - Crystal

Intersection	Direction	Movement	Average Delay (sec/veh)	LOS	Modeled Volume (vph)
CSAH 81 (Bottineau Blvd)/ 63rd Ave N	Eastbound	Left	53.6	D	87
		Through	51.4	D	135
		Right	20.3	C	128
	Westbound	Left	48.0	D	197
		Through	43.0	D	223
		Right	9.2	A	118
	Northbound	Left	45.3	D	46
		Through	27.1	C	707
		Right	2.2	A	57
	Southbound	Left	54.6	D	106
		Through	24.1	C	1313
		Right	2.4	A	28
Intersection			29.6	C	3157
CSAH 81 (Bottineau Blvd) NB Ramps/CSAH 10 (Bass Lake Rd) - East Intersection	Eastbound	Left	0.7	A	136
		Through	0.1	A	313
	Westbound	Through	42.6	D	368
		Right	34.7	C	98
	Northbound	Left	62.1	E	233
		Right	9.0	A	14
Intersection			29.1	C	1162
CSAH 81 (Bottineau Blvd) SB Ramps/CSAH 10 (Bass Lake Rd) - West Intersection	Eastbound	Through	40.2	D	387
		Right	2.2	A	205
	Westbound	Left	1.3	A	89
		Through	0.2	A	510
	Southbound	Left	57.7	E	62
		Right	6.8	A	232
Intersection			14.4	B	1485
CSAH 81 (Bottineau Blvd)/Wilshire Blvd	Eastbound	Left	42.5	D	9
		Through	34.4	C	6
		Right	8.7	A	10
	Westbound	Left	47.3	D	299
		Through	48.1	D	23
		Right	12.3	B	80
	Northbound	Left	58.3	E	29
		Through	10.5	B	865
		Right	3.2	A	109
	Southbound	Left	41.3	D	51
		Through	18.4	B	1538
		Right	16.2	B	56
Intersection			19.3	B	3087

No-Build - AM Peak Hour
CR 81 - Crystal

Intersection	Direction	Movement	Average Delay (sec/veh)	LOS	Modeled Volume (vph)
CSAH 81 (Bottineau Blvd)/ Corvallis Ave N	Eastbound	Left	33.9	C	70
		Through	46.7	D	10
		Right	11.1	B	151
	Westbound	Left	33.4	C	65
		Through	46.3	D	30
		Right	4.9	A	46
	Northbound	Left	49.8	D	95
		Through	8.0	A	876
		Right	0.6	A	6
	Southbound	Left	59.0	E	5
		Through	16.1	B	1791
		Right	4.9	A	42
	Intersection			15.5	B
CSAH 81 (Bottineau Blvd)/47th Ave	Eastbound	Left	52.3	D	12
		Through	61.2	E	4
		Right	64.9	E	119
	Westbound	Left	39.2	D	60
		Through	43.3	D	14
		Right	10.6	B	24
	Northbound	Left	44.2	D	49
		Through	3.8	A	944
		Right	1.8	A	20
	Southbound	Left	84.5	F	3
		Through	12.6	B	1996
		Right	12.0	B	6
	Intersection			13.2	B
CSAH 81 (Bottineau Blvd)/MN 100 SB Off-Ramp	Eastbound	Left	-	-	-
		Through	-	-	-
		Right	-	-	-
	Westbound	Left	52.6	D	212
		Through	-	-	-
		Right	6.4	A	148
	Northbound	Left	-	-	-
		Through	3.2	A	865
		Right	-	-	-
	Southbound	Left	-	-	-
		Through	6.1	A	931
		Right	0.0	A	1244
	Intersection			9.5	A

Build - AM Peak Hour
CR 81 - Crystal

Intersection	Direction	Movement	Average Delay (sec/veh)	LOS	Modeled Volume (vph)
CSAH 81 (Bottineau Blvd)/ Corvallis Ave N	Eastbound	Left	31.9	C	74
		Through	42.7	D	10
		Right	19.2	B	151
	Westbound	Left	31.3	C	66
		Through	40.1	D	31
		Right	6.5	A	52
	Northbound	Left	48.5	D	94
		Through	13.5	B	877
		Right	0.8	A	6
	Southbound	Left	44.8	D	5
		Through	27.6	C	1784
		Right	10.2	B	42
	Intersection			23.6	C
CSAH 81 (Bottineau Blvd)/47th Ave	Eastbound	Left	56.1	E	12
		Through	55.3	E	4
		Right	62.5	E	119
	Westbound	Left	40.8	D	60
		Through	37.0	D	14
		Right	12.5	B	24
	Northbound	Left	46.3	D	49
		Through	4.3	A	945
		Right	1.5	A	20
	Southbound	Left	60.3	E	3
		Through	15.1	B	1987
		Right	13.4	B	6
	Intersection			14.8	B
CSAH 81 (Bottineau Blvd)/MN 100 SB Off-Ramp	Eastbound	Left	-	-	-
		Through	-	-	-
		Right	-	-	-
	Westbound	Left	68.4	E	212
		Through	-	-	-
		Right	9.0	A	148
	Northbound	Left	-	-	-
		Through	3.1	A	866
		Right	-	-	-
	Southbound	Left	-	-	-
		Through	4.7	A	929
		Right	0.0	A	1237
	Intersection			10.6	B

No-Build - PM Peak Hour
CR 81 - Crystal

Intersection	Direction	Movement	Average Delay (sec/veh)	LOS	Modeled Volume (vph)
CSAH 81 (Bottineau Blvd)/ 63rd Ave N	Eastbound	Left	55.3	E	105
		Through	49.1	D	234
		Right	8.1	A	51
	Westbound	Left	53.0	D	129
		Through	50.0	D	192
		Right	11.8	B	98
	Northbound	Left	60.0	E	126
		Through	32.5	C	1676
		Right	6.8	A	184
	Southbound	Left	47.1	D	120
		Through	19.2	B	683
		Right	0.8	A	58
Intersection			32.1	C	3655
CSAH 81 (Bottineau Blvd)/CSAH 10 (Bass Lake Rd)	Eastbound	Left	57.1	E	373
		Through	45.9	D	386
		Right	9.6	A	214
	Westbound	Left	61.7	E	120
		Through	53.4	D	411
		Right	13.8	B	164
	Northbound	Left	29.6	C	373
		Through	14.4	B	1699
		Right	4.9	A	40
	Southbound	Left	62.3	E	123
		Through	39.5	D	567
		Right	4.6	A	181
Intersection			30.1	C	4663
CSAH 81 (Bottineau Blvd)/Wilshire Blvd	Eastbound	Left	65.2	E	32
		Through	43.7	D	8
		Right	10.4	B	42
	Westbound	Left	55.6	E	121
		Through	65.3	E	4
		Right	9.0	A	88
	Northbound	Left	55.3	E	21
		Through	5.3	A	1958
		Right	3.7	A	107
	Southbound	Left	42.9	D	61
		Through	1.9	A	824
		Right	3.8	A	14
Intersection			8.1	A	3281

Build - PM Peak Hour
CR 81 - Crystal

Intersection	Direction	Movement	Average Delay (sec/veh)	LOS	Modeled Volume (vph)
CSAH 81 (Bottineau Blvd)/ 63rd Ave N	Eastbound	Left	70.3	E	104
		Through	61.9	E	233
		Right	10.3	B	51
	Westbound	Left	59.7	E	129
		Through	56.2	E	191
		Right	15.9	B	97
	Northbound	Left	69.3	E	122
		Through	39.6	D	1674
		Right	16.3	B	186
	Southbound	Left	75.0	E	122
		Through	21.7	C	686
		Right	0.9	A	58
Intersection			39.4	D	3665
CSAH 81 (Bottineau Blvd) NB Ramps/CSAH 10 (Bass Lake Rd) - East Intersection	Eastbound	Left	0.5	A	397
		Through	0.1	A	528
	Westbound	Through	60.3	E	529
		Right	53.3	D	163
	Northbound	Left	62.6	E	378
		Right	14.6	B	56
Intersection			31.9	C	2051
CSAH 81 (Bottineau Blvd) SB Ramps/CSAH 10 (Bass Lake Rd) - West Intersection	Eastbound	Through	43.9	D	803
		Right	4.5	A	195
	Westbound	Left	0.8	A	110
		Through	0.1	A	798
	Southbound	Left	86.3	F	122
		Right	7.5	A	180
Intersection			21.8	C	2208
CSAH 81 (Bottineau Blvd)/Wilshire Blvd	Eastbound	Left	74.6	E	71
		Through	84.4	F	9
		Right	23.1	C	50
	Westbound	Left	54.2	D	119
		Through	59.3	E	4
		Right	22.0	C	89
	Northbound	Left	57.2	E	22
		Through	29.5	C	1952
		Right	21.2	C	107
	Southbound	Left	54.3	D	45
		Through	14.2	B	811
		Right	6.6	A	12
Intersection			27.6	C	3303




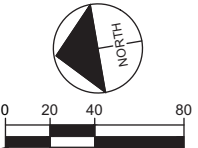






No-Build - PM Peak Hour
CR 81 - Crystal

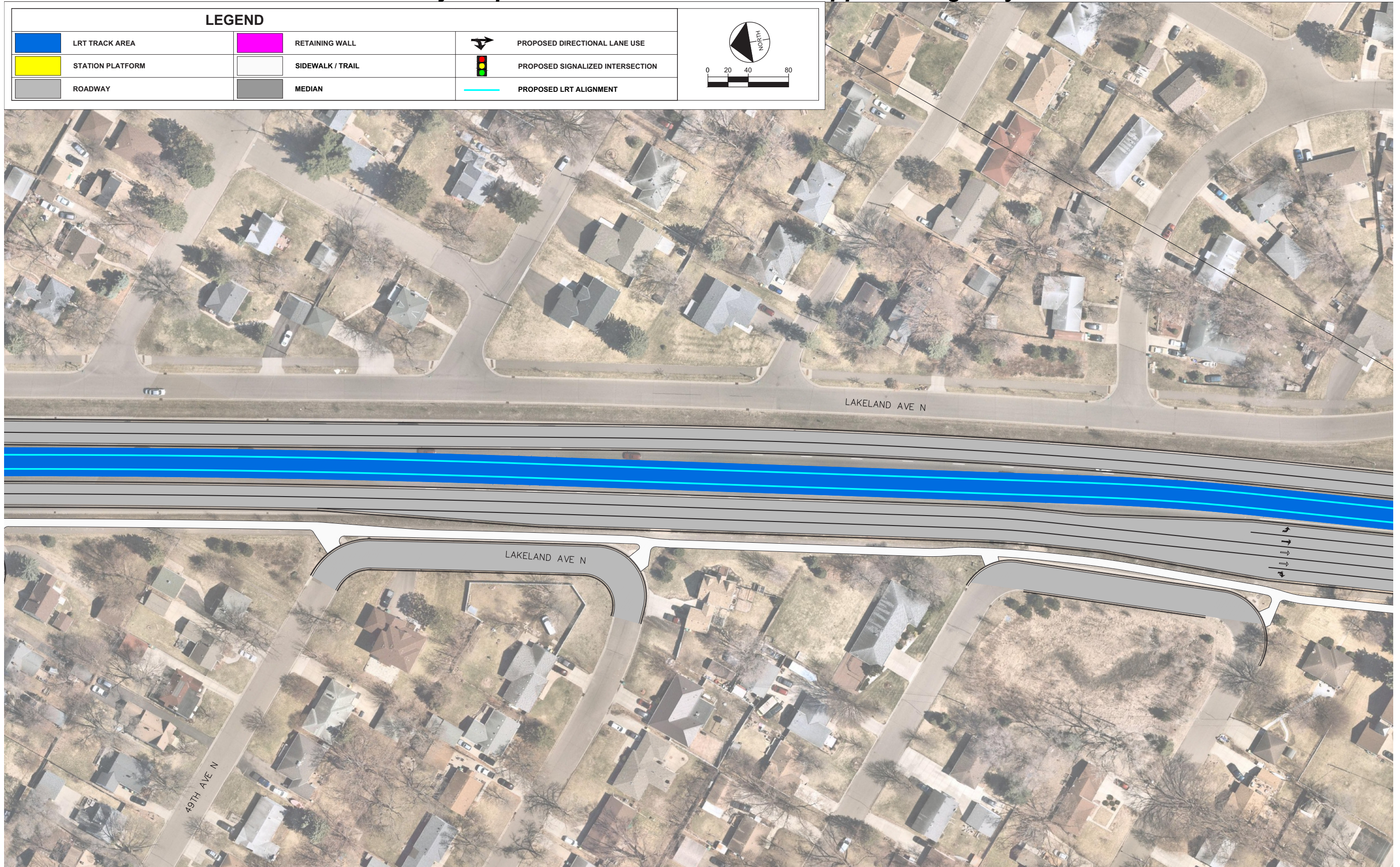
Intersection	Direction	Movement	Average Delay (sec/veh)	LOS	Modeled Volume (vph)
CSAH 81 (Bottineau Blvd)/ Corvallis Ave N	Eastbound	Left	50.2	D	84
		Through	57.5	E	27
		Right	6.0	A	145
	Westbound	Left	50.3	D	25
		Through	60.1	E	20
		Right	8.6	A	26
	Northbound	Left	63.3	E	162
		Through	8.5	A	1989
		Right	2.1	A	10
	Southbound	Left	67.4	E	40
		Through	20.3	C	892
		Right	2.4	A	44
	Intersection			16.6	B
CSAH 81 (Bottineau Blvd)/47th Ave	Eastbound	Left	55.2	E	14
		Through	65.9	E	16
		Right	85.9	F	69
	Westbound	Left	56.4	E	28
		Through	59.2	E	6
		Right	11.9	B	18
	Northbound	Left	43.8	D	131
		Through	2.3	A	2143
		Right	2.9	A	64
	Southbound	Left	89.7	F	7
		Through	9.8	A	1061
		Right	5.5	A	14
	Intersection			9.0	A
CSAH 81 (Bottineau Blvd)/MN 100 SB Off-Ramp	Eastbound	Left	-	-	-
		Through	-	-	-
		Right	-	-	-
	Westbound	Left	55.4	E	217
		Through	-	-	-
		Right	20.1	C	269
	Northbound	Left	-	-	-
		Through	4.1	A	2078
		Right	-	-	-
	Southbound	Left	-	-	-
		Through	0.7	A	624
		Right	0.0	A	534
	Intersection			8.3	A

Build - PM Peak Hour
CR 81 - Crystal




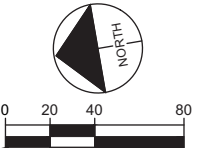






Intersection	Direction	Movement	Average Delay (sec/veh)	LOS	Modeled Volume (vph)
CSAH 81 (Bottineau Blvd)/ Corvallis Ave N	Eastbound	Left	47.9	D	83
		Through	50.3	D	27
		Right	9.1	A	146
	Westbound	Left	43.3	D	25
		Through	54.1	D	19
		Right	16.4	B	26
	Northbound	Left	48.6	D	160
		Through	18.5	B	1978
		Right	13.9	B	10
	Southbound	Left	78.5	E	46
		Through	25.3	C	905
		Right	3.0	A	49
	Intersection			23.0	C
CSAH 81 (Bottineau Blvd)/47th Ave	Eastbound	Left	59.0	E	14
		Through	61.4	E	16
		Right	81.8	F	68
	Westbound	Left	57.3	E	28
		Through	69.4	E	6
		Right	20.7	C	18
	Northbound	Left	45.4	D	131
		Through	7.2	A	2143
		Right	5.9	A	64
	Southbound	Left	70.4	E	7
		Through	10.5	B	1039
		Right	6.4	A	15
	Intersection			12.1	B
CSAH 81 (Bottineau Blvd)/MN 100 SB Off-Ramp	Eastbound	Left	-	-	-
		Through	-	-	-
		Right	-	-	-
	Westbound	Left	60.7	E	222
		Through	-	-	-
		Right	50.1	D	268
	Northbound	Left	-	-	-
		Through	6.0	A	2068
		Right	-	-	-
	Southbound	Left	-	-	-
		Through	6.2	A	606
		Right	0.0	A	529
	Intersection			13.6	B

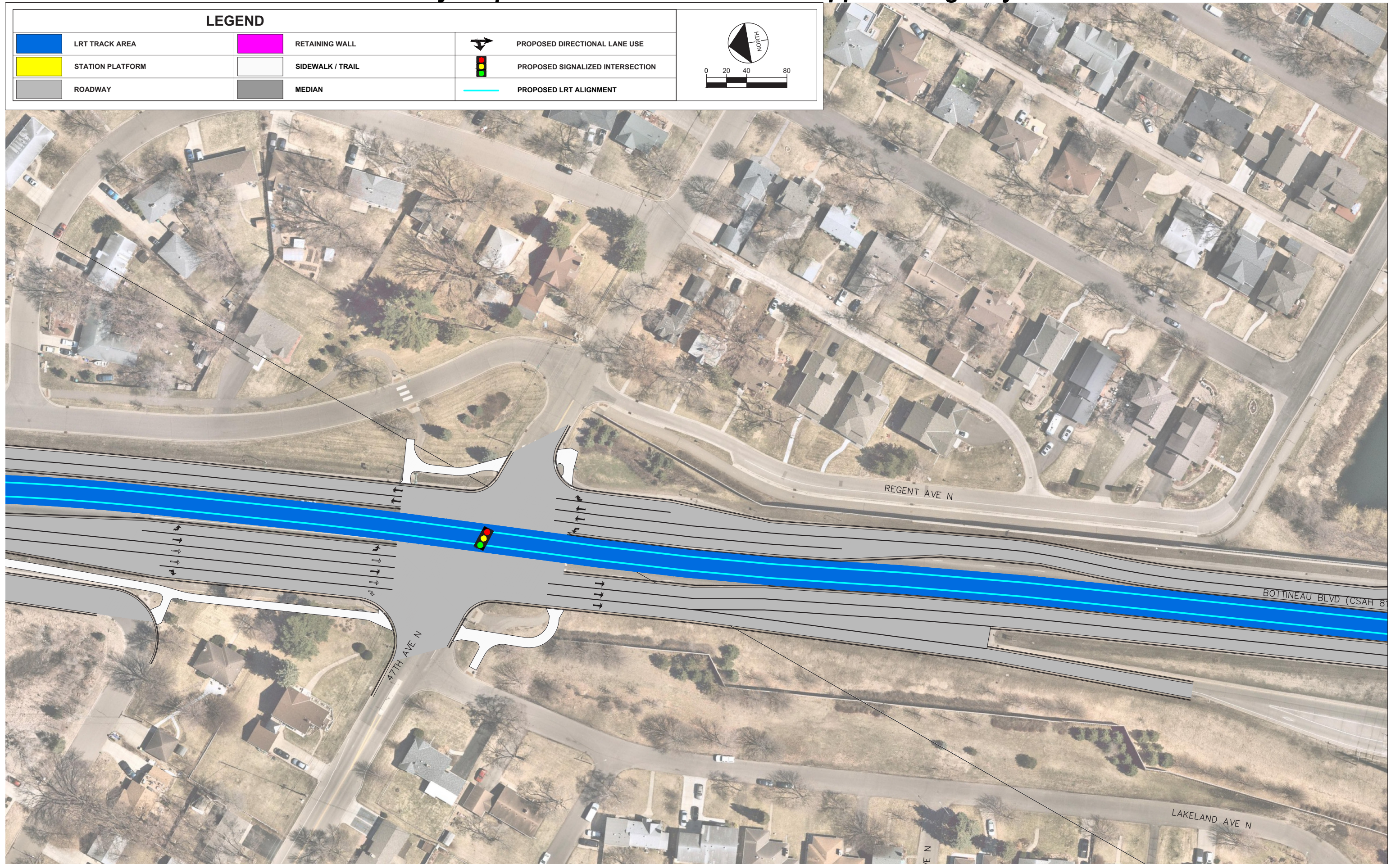
4 Lane Layout plus a 3rd southbound lane approaching Hwy 100

LEGEND						
	LRT TRACK AREA		RETAINING WALL		PROPOSED DIRECTIONAL LANE USE	
	STATION PLATFORM		SIDEWALK / TRAIL		PROPOSED SIGNALIZED INTERSECTION	
	ROADWAY		MEDIAN		PROPOSED LRT ALIGNMENT	













4 Lane Layout plus a 3rd southbound lane approaching Hwy 100

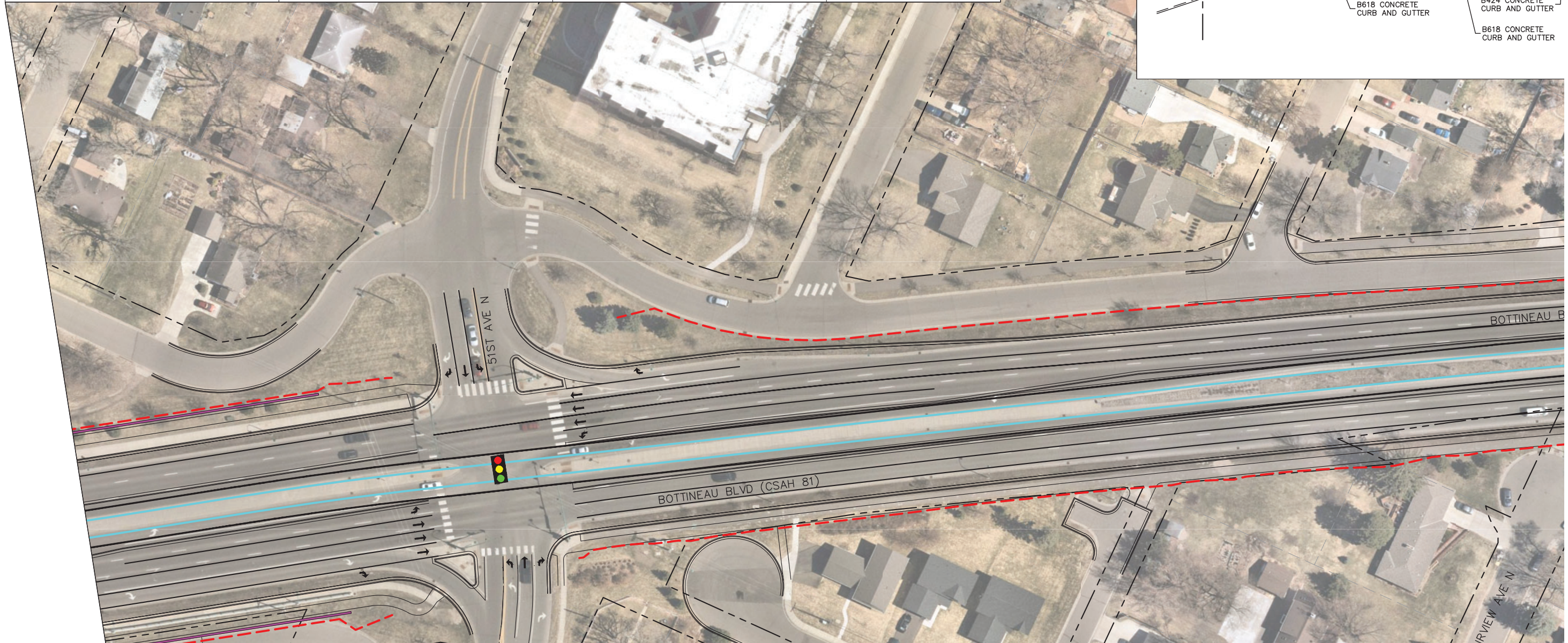
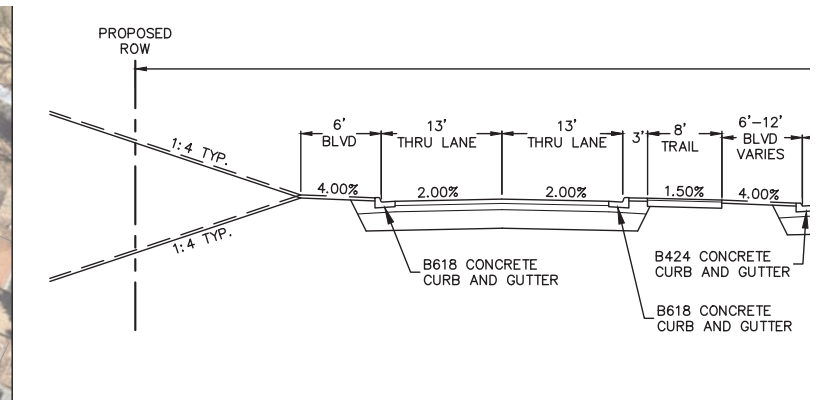
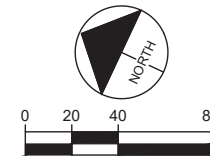
LEGEND						
	LRT TRACK AREA		RETAINING WALL		PROPOSED DIRECTIONAL LANE USE	
	STATION PLATFORM		SIDEWALK / TRAIL		PROPOSED SIGNALIZED INTERSECTION	
	ROADWAY		MEDIAN		PROPOSED LRT ALIGNMENT	



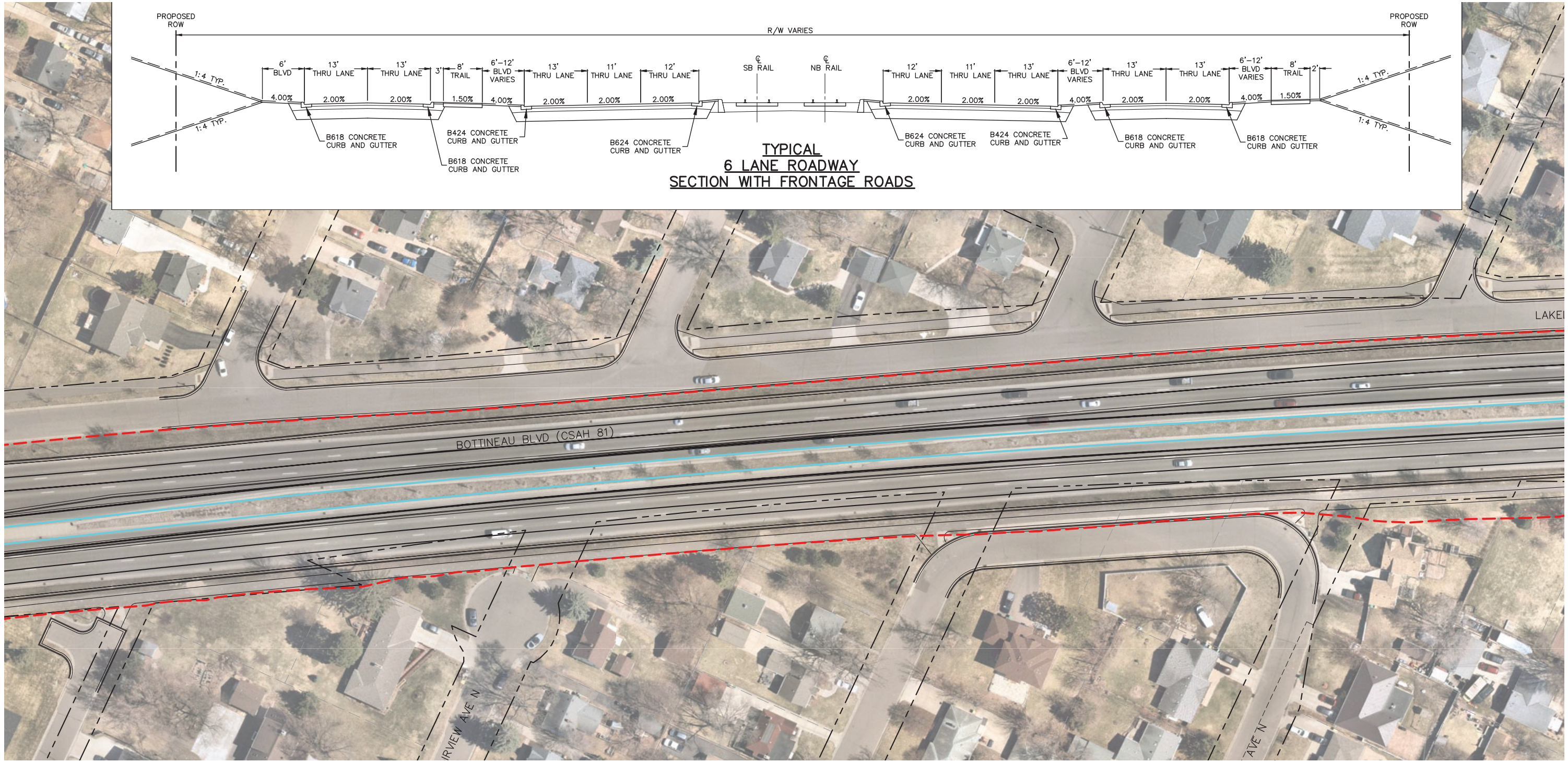
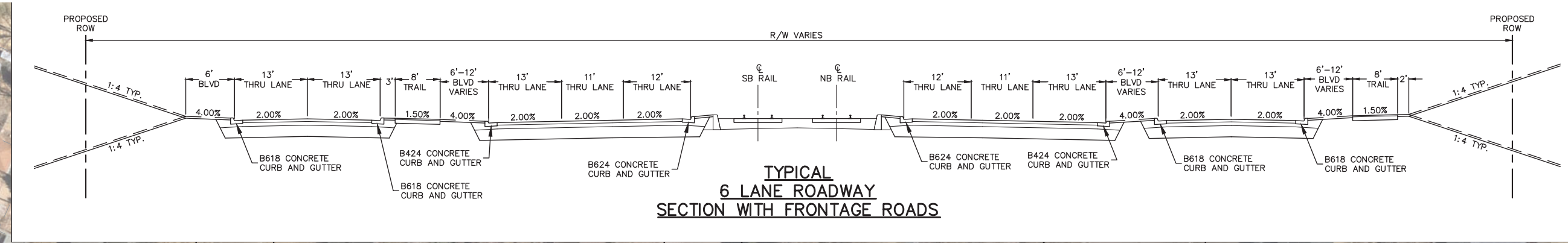
6 Lane Scenario - Corvallis to 47th

LEGEND

	LRT TRACK AREA		RETAINING WALL		PROPOSED DIRECTIONAL LANE USE
	STATION PLATFORM		SIDEWALK / TRAIL		PROPOSED SIGNALIZED INTERSECTION
	ROADWAY		MEDIAN		PROPOSED LRT ALIGNMENT
	LIMITS OF 6 LANE CORRIDOR				



6 Lane Scenario - Corvallis to 47th



6 Lane Scenario - Corvallis to 47th

