








ROUTE 5 CORRIDOR STUDY

PROJECT SUMMARY

In 2023, Metro undertook the Route 5 Corridor study to identify ways to improve bus travel times and reliability along its alignment. Route 5 is a frequent, all-day bus route that provides connections and supports multiple centers between Downtown Seattle and Shoreline Community College via the Fremont, Phinney Ridge, and Greenwood neighborhoods. In addition, Route 5 supports multiple centers, such as regional growth centers (Seattle Downtown and Uptown), local centers (Greenwood-Phinney Ridge and Bitter Lake Urban Villages), and Shoreline Community College in Shoreline. As of Fall 2022, Route 5 is one of Metro's highest ridership bus routes with average weekday boardings of approximately 3,320. The key goals of this study were to identify improvements for a 10 to 15 percent reduction in transit travel time, meet on-time performance to a minimum threshold of 80 percent, and increase bus ridership.

This study identified and evaluated preliminary improvements, assessed potential investments for their efficacy in achieving study goals, and completed preliminary design (10%) and conceptual level cost estimates of the selected transit priority improvements along the corridor.

This folio summarizes the concepts that are recommended to advance to design, as well as contingency concepts that could be considered as alternatives to recommended concepts if issues arise concerning budget or other concerns. This folio identifies the estimated transit travel time savings associated with each concept, their respective costs, and 10% design plans.

-  Roadway improvements at four locations
-  Signal timing or modification at 11 intersections
-  One transit only improvement and facility
-  Two bus zone improvements
-  Eight bus stop relocations or conversions
-  Five bus zone closures
-  Rechannelization at three locations

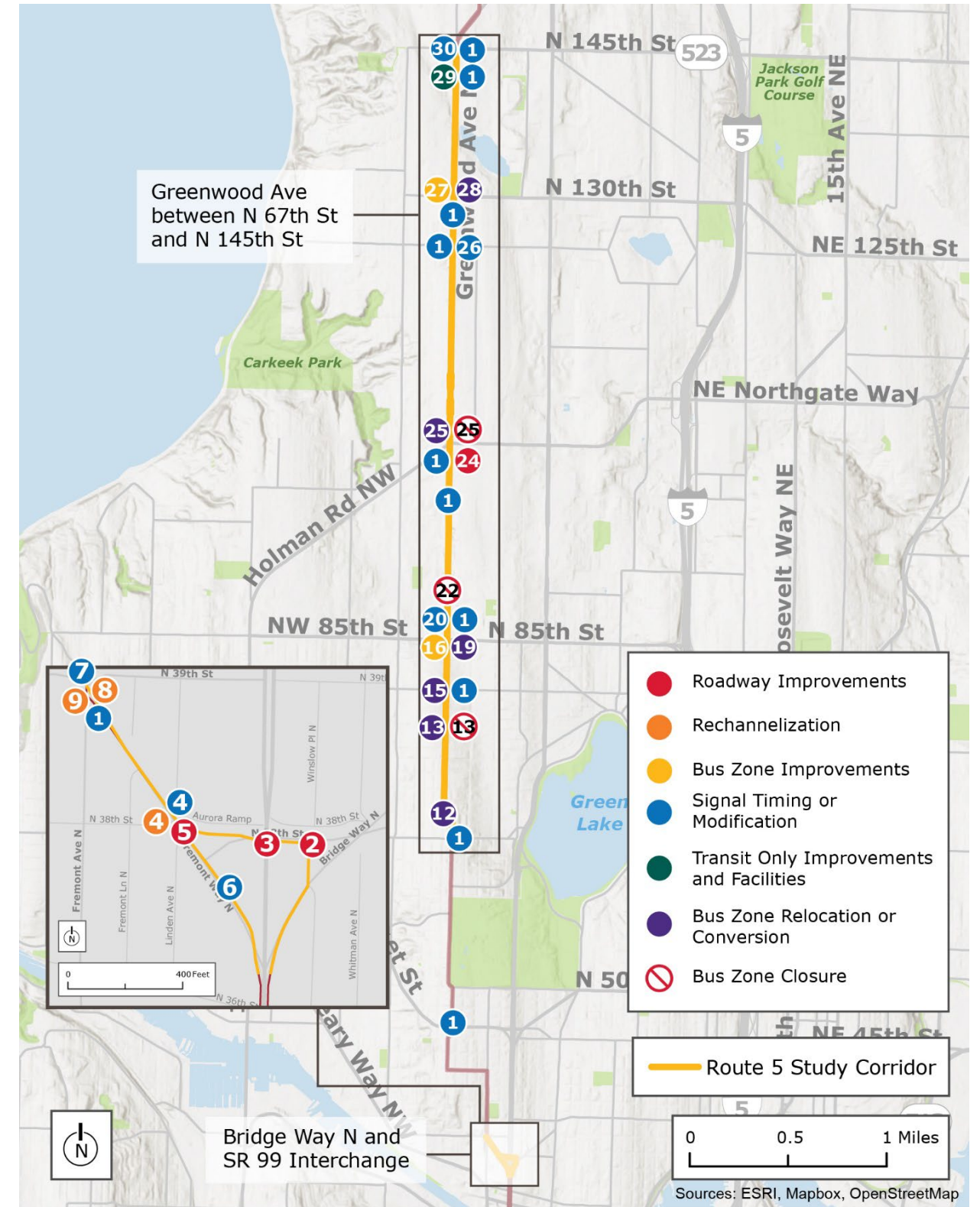
BUS DELAY SAVINGS

Concept Status	Concept Numbers	AM Peak Delay Saving (min, %)		PM Peak Delay Saving (min, %)	
		SB	NB	SB	NB
Recommended Concepts	1, 2, 3, 4, 5, 6, 7, 8, 9, 12, 13, 15, 19, 20, 22, 24, 25, 26, 28, 29, 30	6.2, 25%	5.0, -21%	7.0, -29%	6.4, -22%
Contingency Concepts	16, 27	0.0, 0% (reliability improvement)			

Note: Concepts 2, 3, 5, 8, 12, 16, 24, and 27 have no delay saving because they are reliability improvements only.

COST ESTIMATES

Concept Status	Concept Numbers	Total Order of Magnitude Cost
Recommended Concepts	1, 2, 3, 4, 5, 6, 7, 8, 9, 12, 13, 15, 16, 19, 20, 22, 24, 25, 26, 27, 28, 29, 30	\$7,385,000
Contingency Concepts	16, 27	\$303,000
Total Cost of All Recommended Concept Improvements		\$7,688,000



Concept 1

PROJECT INFORMATION

DESCRIPTION: Install Next-Gen Transit Signal Priority (TSP) at 11 Signalized Intersections

LOCATION: Signalized intersections at Greenwood Ave N and N 145th St, N 143rd St, N 130th St, N 125th St, Holman Rd N/N 105th St, N 100th St, N 85th St, N 80th St, N 65th St, and at Phinney Ave N/N 46th St, and at Fremont Way N/Ave N/N 39th St

KEY IMPROVEMENT ELEMENT(S): Signal modification/TSP

STATUS: Recommended

TIME SAVINGS (sec):

AM Southbound	AM Northbound	PM Southbound	AM Northbound
185	161	181	190

10% COST ESTIMATE

Cost Type	Amount
Construction Costs	\$283,000
Soft Costs	\$126,000
Rough order of Magnitude GRAND TOTAL	\$409,000

CONCEPT LOCATION

See map on first page for visual representation of locations.

10% DESIGN PLANS

No design plans prepared for this concept.

Concept 2

PROJECT INFORMATION

DESCRIPTION: Install 'Don't Block the Box' treatments, signage and other treatments to the east of intersection along Bridge Way N

LOCATION: N 38th St and Bridge Way N

KEY IMPROVEMENT ELEMENT(S): Signage/Channelization

STATUS: Recommended

TIME SAVINGS (sec): N/A (reliability improvement)

10% COST ESTIMATE

Due to proximity and interrelatedness, costs for Concepts 2, 3, 4, 5, 7, 8, and 9 combined

Cost Type	Amount
Construction Costs	\$986,000
Soft Costs	\$445,000
Rough order of Magnitude GRAND TOTAL	\$1,431,000

CONCEPT LOCATION



10% DESIGN PLANS



Concept 3

PROJECT INFORMATION

DESCRIPTION: Install C curb on N 38th Street between Bridge Way N and slip lane to Fremont Way N

LOCATION:

KEY IMPROVEMENT ELEMENT(S): Signage/Channelization

STATUS: Recommended

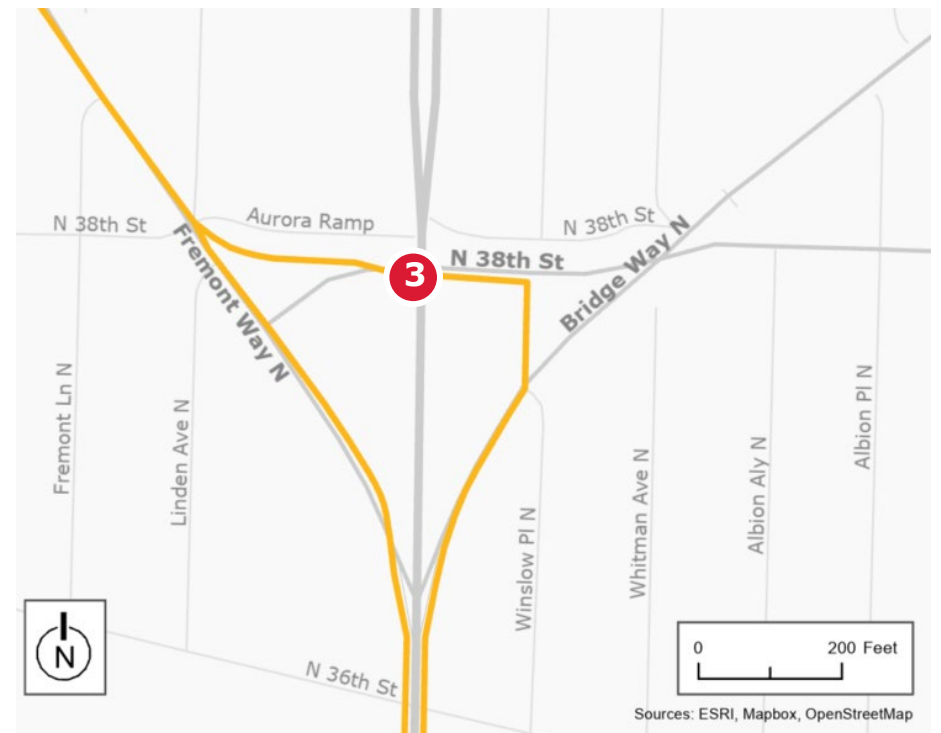
TIME SAVINGS (sec): N/A (reliability improvement)

10% COST ESTIMATE

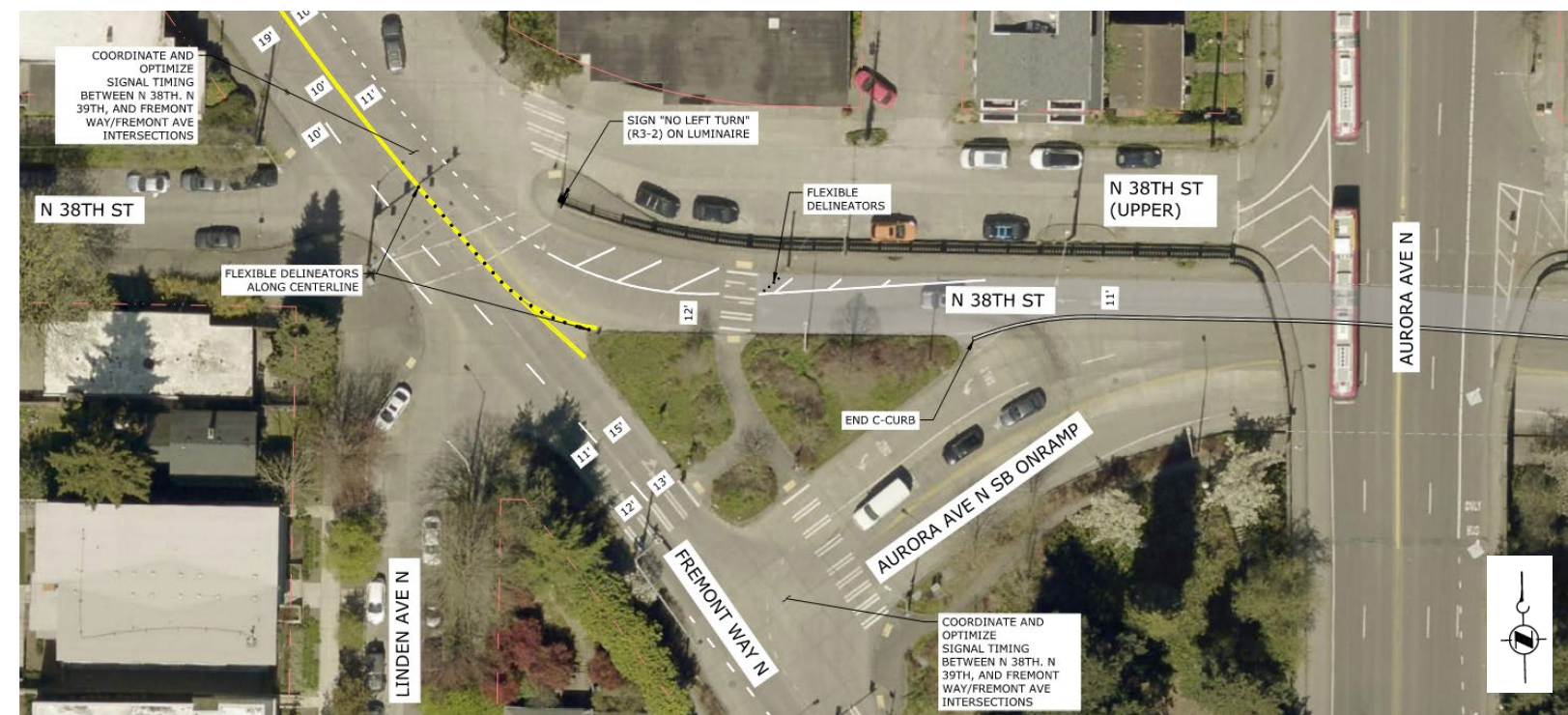
Due to proximity and interrelatedness, costs for Concepts 2, 3, 4, 5, 7, 8, and 9 combined

Cost Type	Amount
Construction Costs	\$986,000
Soft Costs	\$445,000
Rough order of Magnitude GRAND TOTAL	\$1,431,000

CONCEPT LOCATION



10% DESIGN PLANS



Concept 4

PROJECT INFORMATION

DESCRIPTION: Signal coordination between N 39th Street, N 38th Street, slip lane to Fremont Way N and Fremont Way N/N 38th St intersections

LOCATION: N 38th St and Bridge Way N

KEY IMPROVEMENT ELEMENT(S): Signal Modification/TSP; Signage/Channelization

STATUS: Recommended

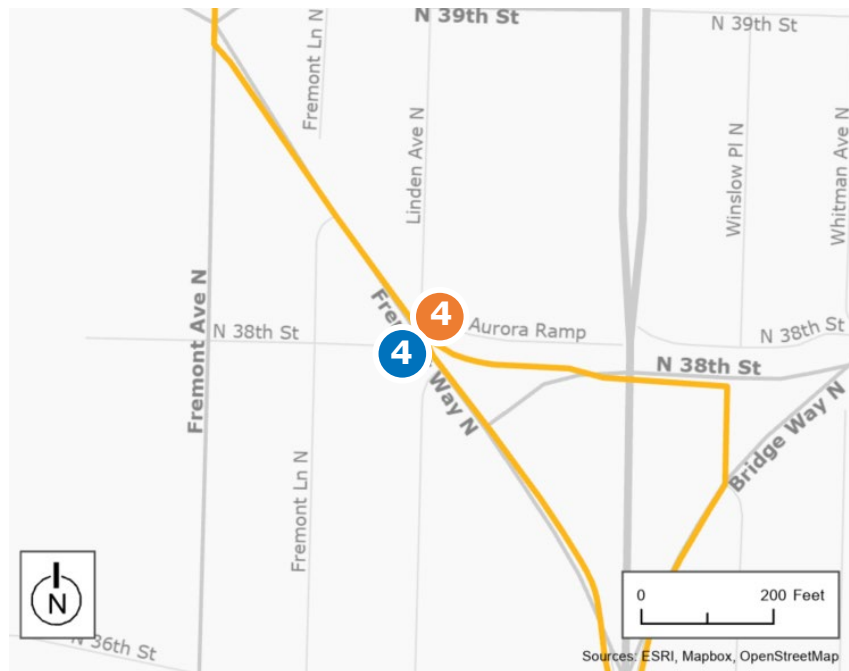
TIME SAVINGS (sec): variable – could result in travel time savings at some intersections and travel time increases at other intersections.

10% COST ESTIMATE

Due to proximity and interrelatedness, costs for Concepts 2, 3, 4, 5, 7, 8, and 9 combined

Cost Type	Amount
Construction Costs	\$986,000
Soft Costs	\$445,000
Rough order of Magnitude GRAND TOTAL	\$1,431,000

CONCEPT LOCATION



10% DESIGN PLANS

No design plans prepared for this concept.

Concept 5

PROJECT INFORMATION

DESCRIPTION: Install signage and flexible delineator posts to prohibit left turns to SB Linden Ave N and lefts toward N 38th St

LOCATION: N 38th St and Fremont Way N

KEY IMPROVEMENT ELEMENT(S): Signage/Channelization

STATUS: Recommended

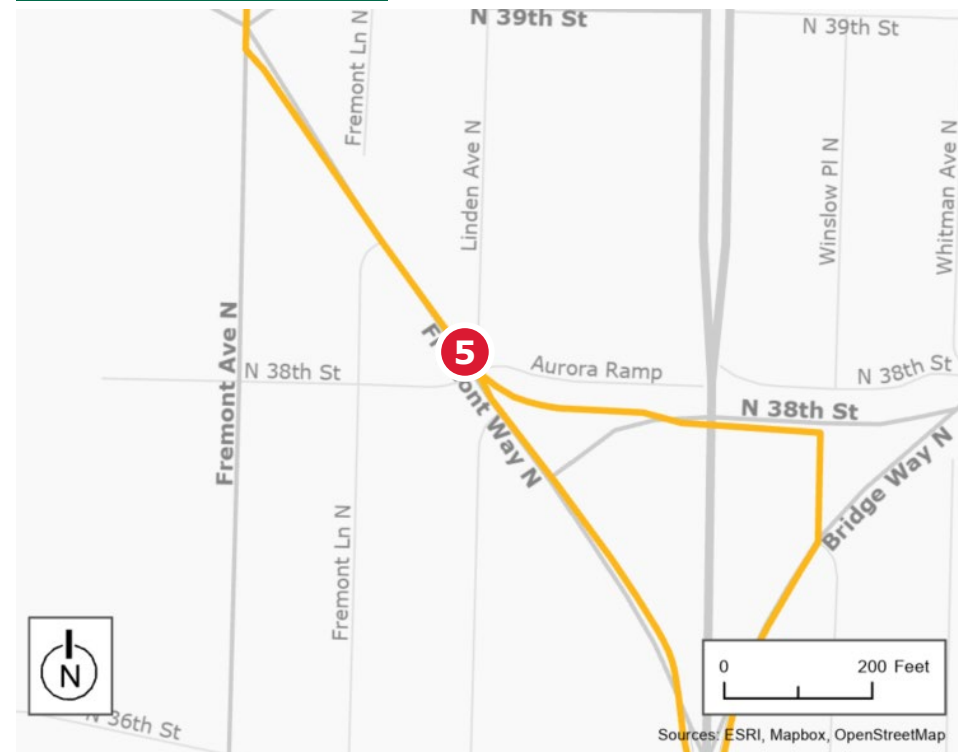
TIME SAVINGS (sec): N/A (reliability improvement)

10% COST ESTIMATE

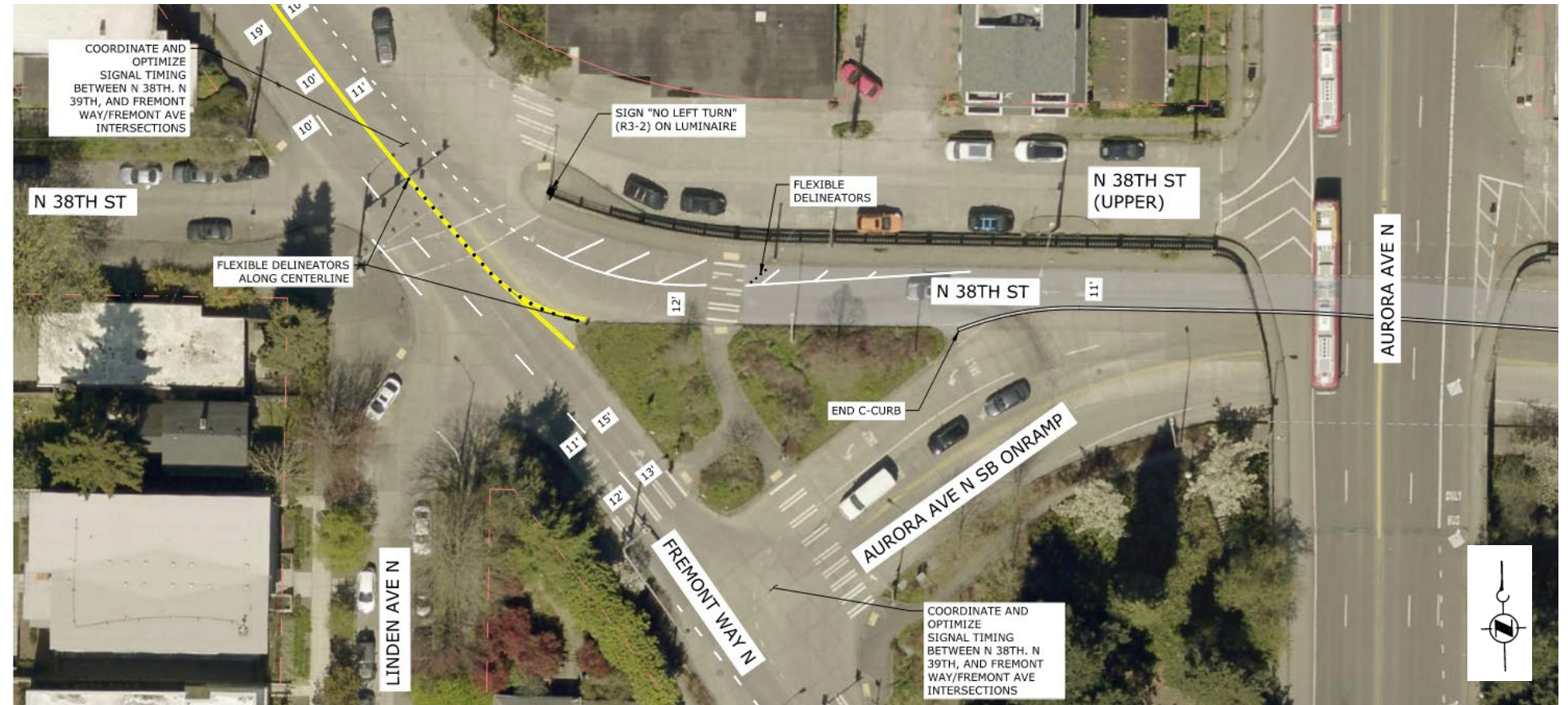
Due to proximity and interrelatedness, costs for Concepts 2, 3, 4, 5, 7, 8, and 9 combined

Cost Type	Amount
Construction Costs	\$986,000
Soft Costs	\$445,000
Rough order of Magnitude GRAND TOTAL	\$1,431,000

CONCEPT LOCATION



10% DESIGN PLANS



Concept 6

PROJECT INFORMATION

DESCRIPTION: Install a reverse queue jump using the signal on Fremont Way N and the N 38th St slip lane

LOCATION: Fremont Way N at SB On-Ramp

KEY IMPROVEMENT ELEMENT(S): Signal modification/TSP

STATUS: Recommended

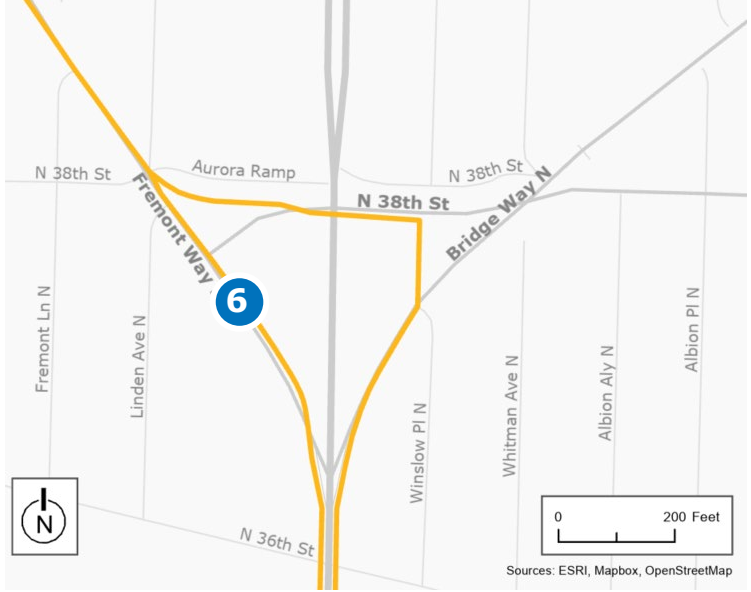
TIME SAVINGS (sec):

AM Southbound	AM Northbound	PM Southbound	AM Northbound
15	0	15	0

10% COST ESTIMATE

Cost Type	Amount
Construction Costs	\$74,000
Soft Costs	\$32,000
Rough order of Magnitude GRAND TOTAL	\$106,000

CONCEPT LOCATION



10% DESIGN PLANS



Concept 7

PROJECT INFORMATION

DESCRIPTION: Install a southbound protected left phase on Fremont Ave N

LOCATION: N 39th St and Fremont Ave N

KEY IMPROVEMENT ELEMENT(S): Signal modification/TSP

STATUS: Recommended

TIME SAVINGS (sec):

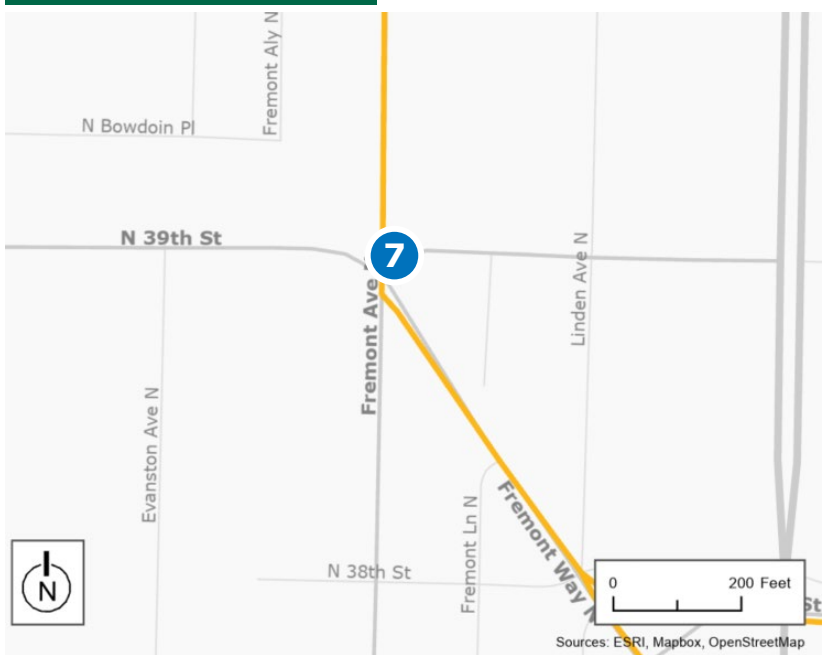
AM Southbound	AM Northbound	PM Southbound	AM Northbound
29	0	50	0

10% COST ESTIMATE

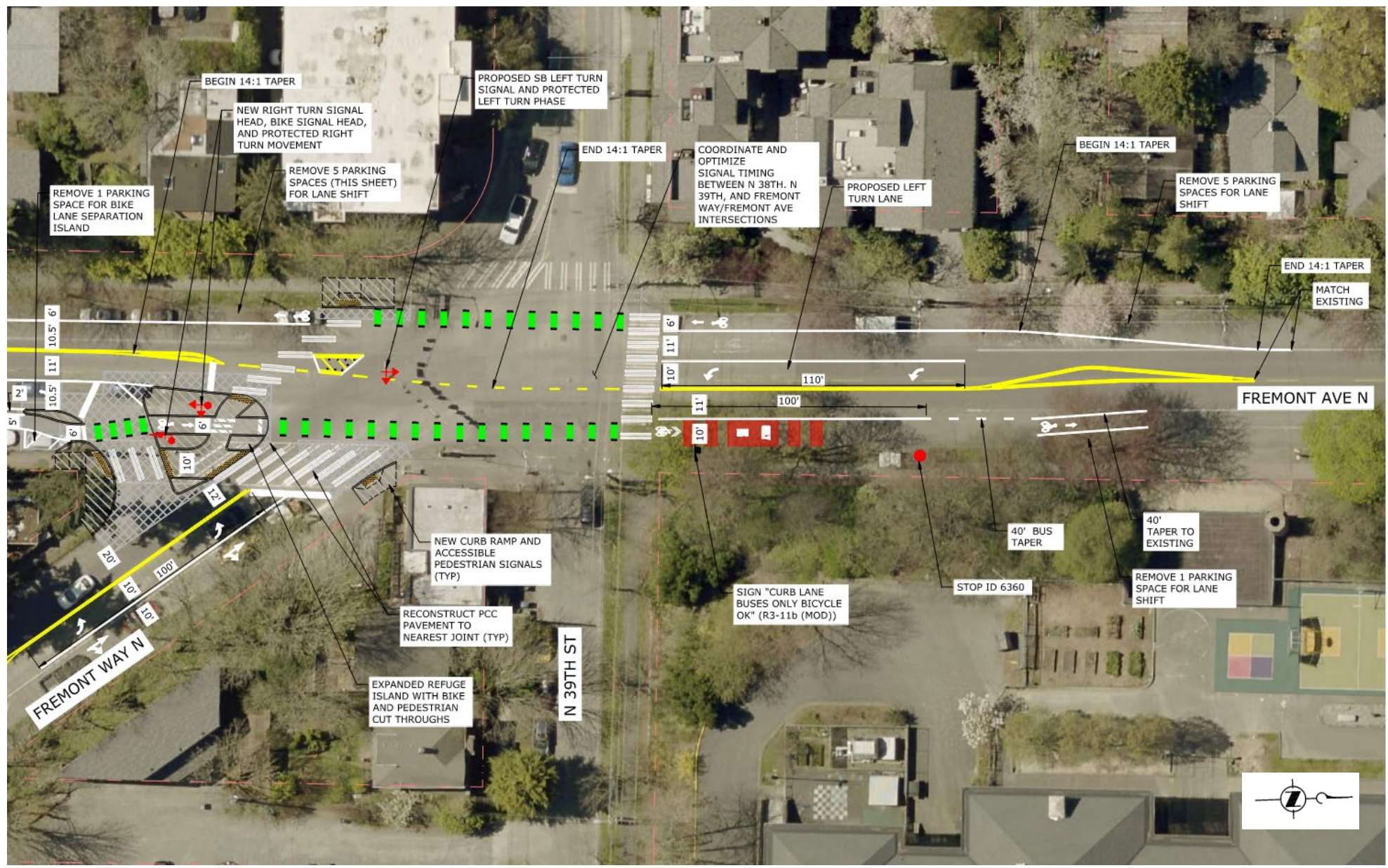
Due to proximity and interrelatedness, costs for Concepts 2, 3, 4, 5, 7, 8, and 9 combined

Cost Type	Amount
Construction Costs	\$986,000
Soft Costs	\$445,000
Rough order of Magnitude GRAND TOTAL	\$1,431,000

CONCEPT LOCATION



10% DESIGN PLANS



Concept 8

PROJECT INFORMATION

DESCRIPTION: Rechanelize Fremont Ave N on the south approach to provide one northbound through lane and one striped northbound right turn lane with an expanded pedestrian refuge island to delineate this movement so southbound left-turning traffic can identify the northbound movements

LOCATION: N 39th St and Fremont Ave N

KEY IMPROVEMENT ELEMENT(S): Parking Removal (19 spaces); Signage/Channelization

STATUS: Recommended

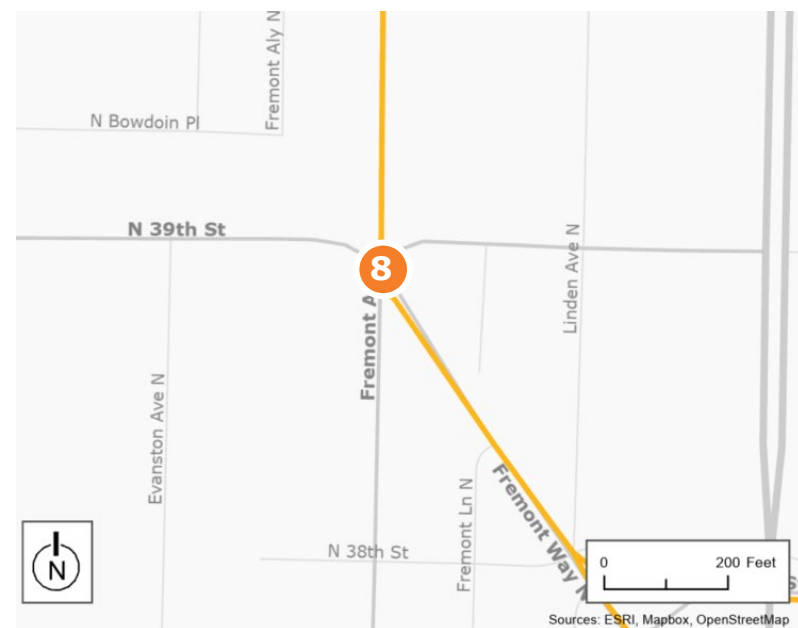
TIME SAVINGS (sec): N/A (reliability improvement)

10% COST ESTIMATE

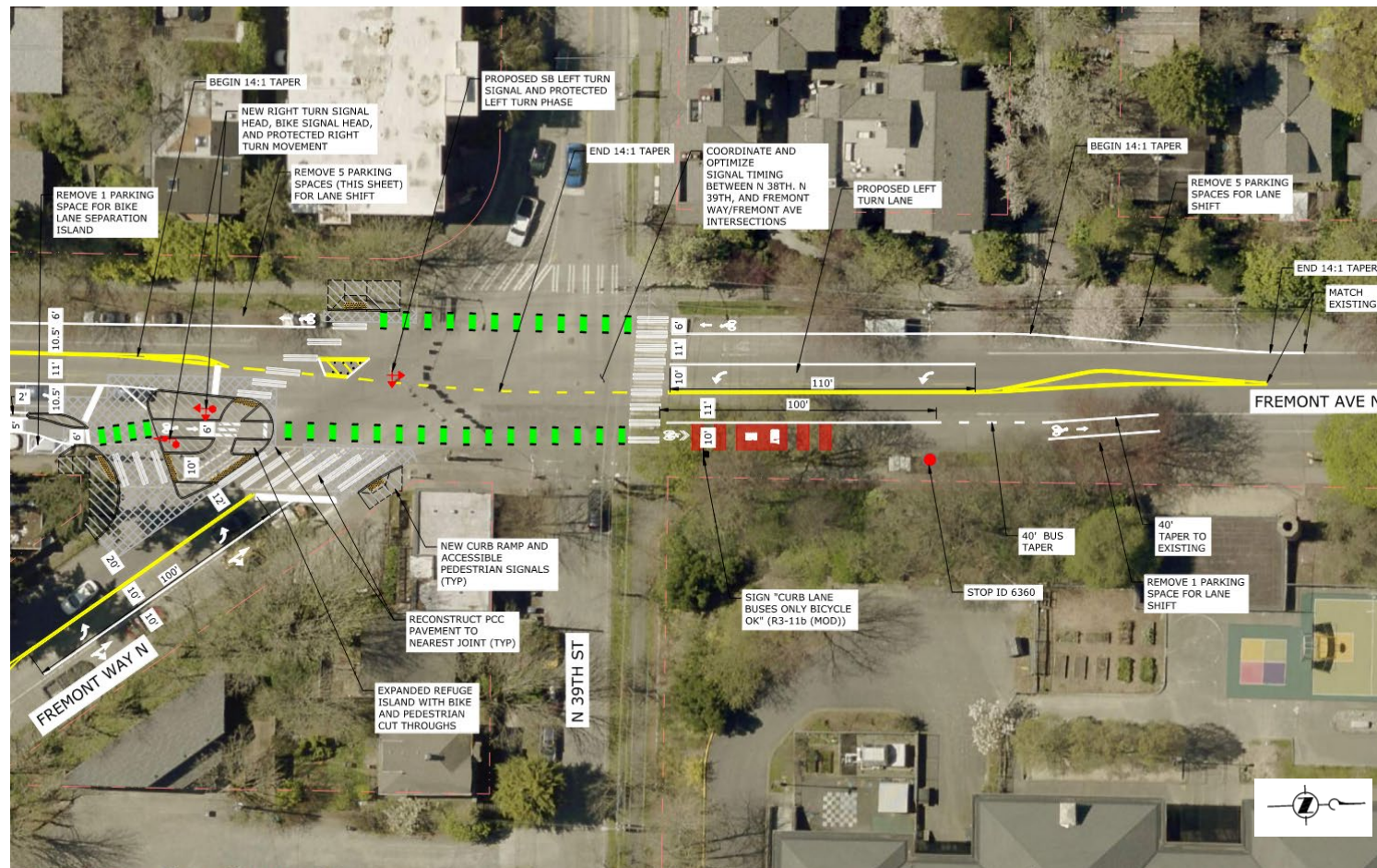
Due to proximity and interrelatedness, costs for Concepts 2, 3, 4, 5, 7, 8, and 9 combined

Cost Type	Amount
Construction Costs	\$986,000
Soft Costs	\$445,000
Rough order of Magnitude GRAND TOTAL	\$1,431,000

CONCEPT LOCATION



10% DESIGN PLANS



Concept 9

PROJECT INFORMATION

DESCRIPTION: Install a transit bypass lane along Fremont Way N to allow buses to bypass general purpose queues at the north/northwest approach of Fremont Way/Fremont Avenue N/N 39th Street intersection.

LOCATION: N 39th St and Fremont Ave N

KEY IMPROVEMENT ELEMENT(S): Signage/Channelization

STATUS: Recommended

TIME SAVINGS (sec):

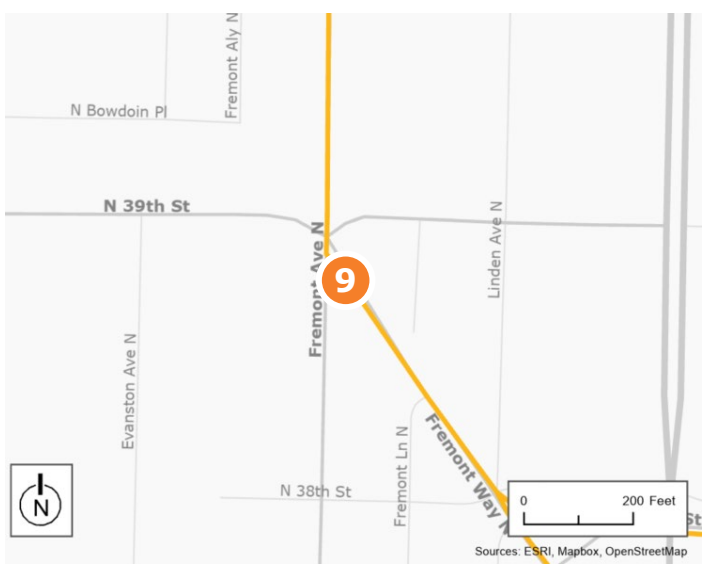
AM Southbound	AM Northbound	PM Southbound	AM Northbound
35	16	6	38

10% COST ESTIMATE

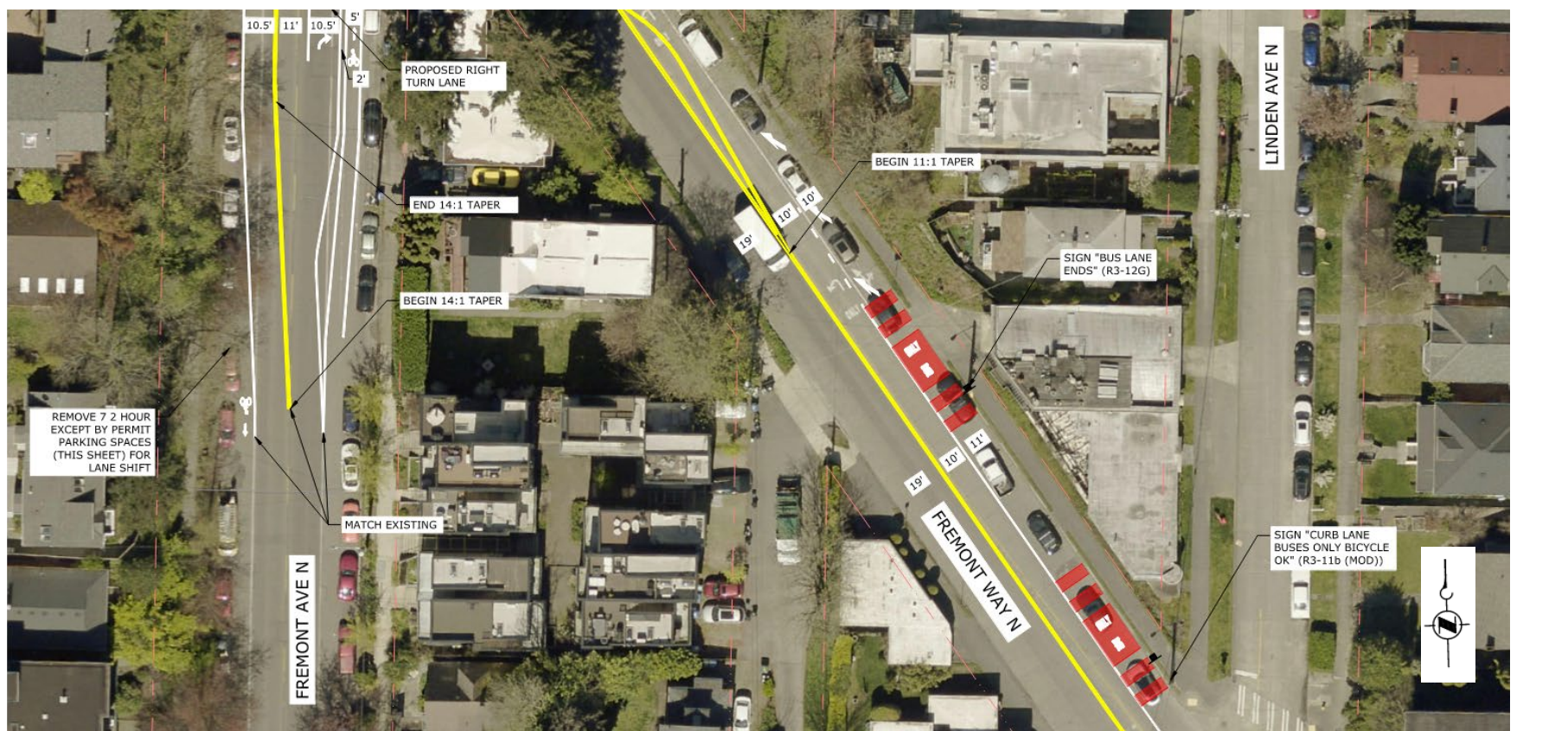
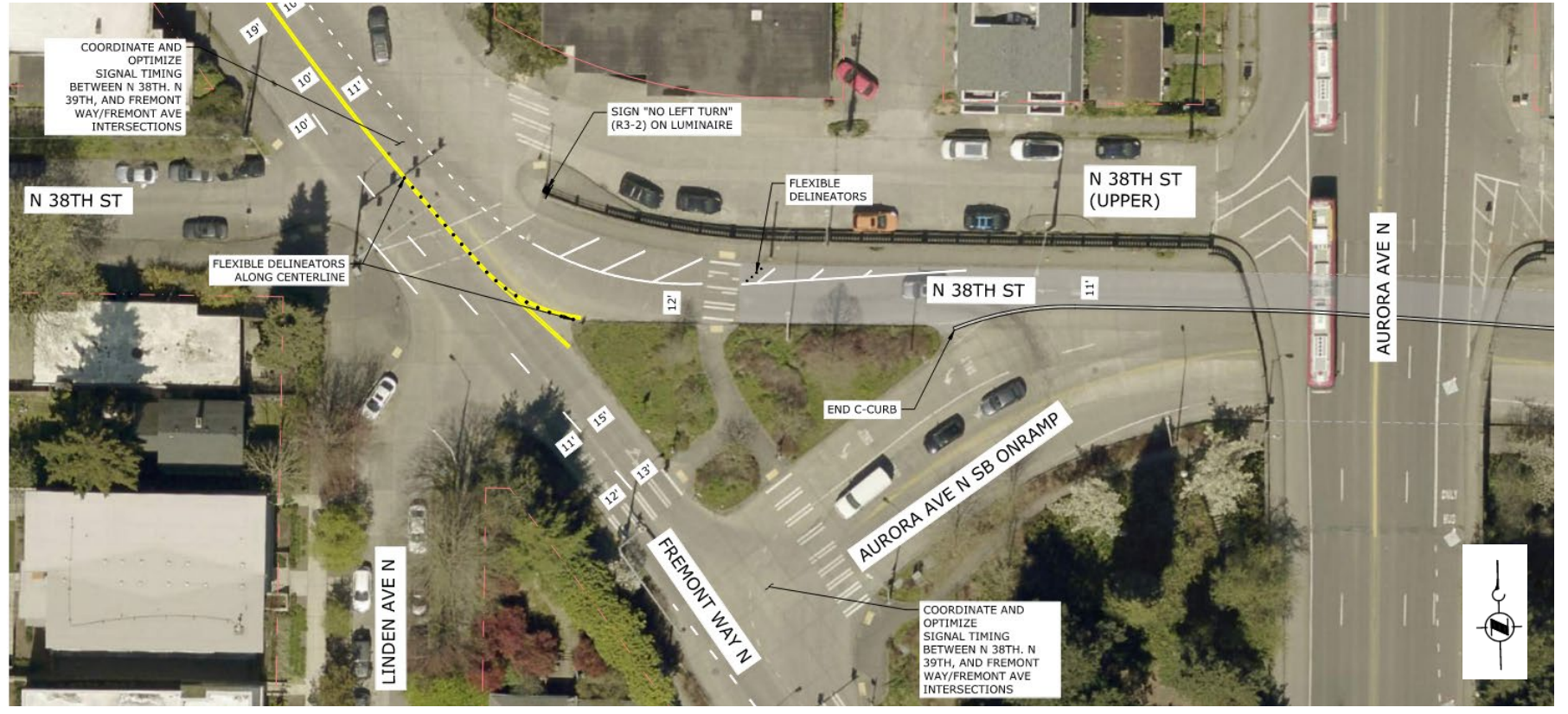
Due to proximity and interrelatedness, costs for Concepts 2, 3, 4, 5, 7, 8, and 9 combined

Cost Type	Amount
Construction Costs	\$986,000
Soft Costs	\$445,000
Rough order of Magnitude GRAND TOTAL	\$1,431,000

CONCEPT LOCATION

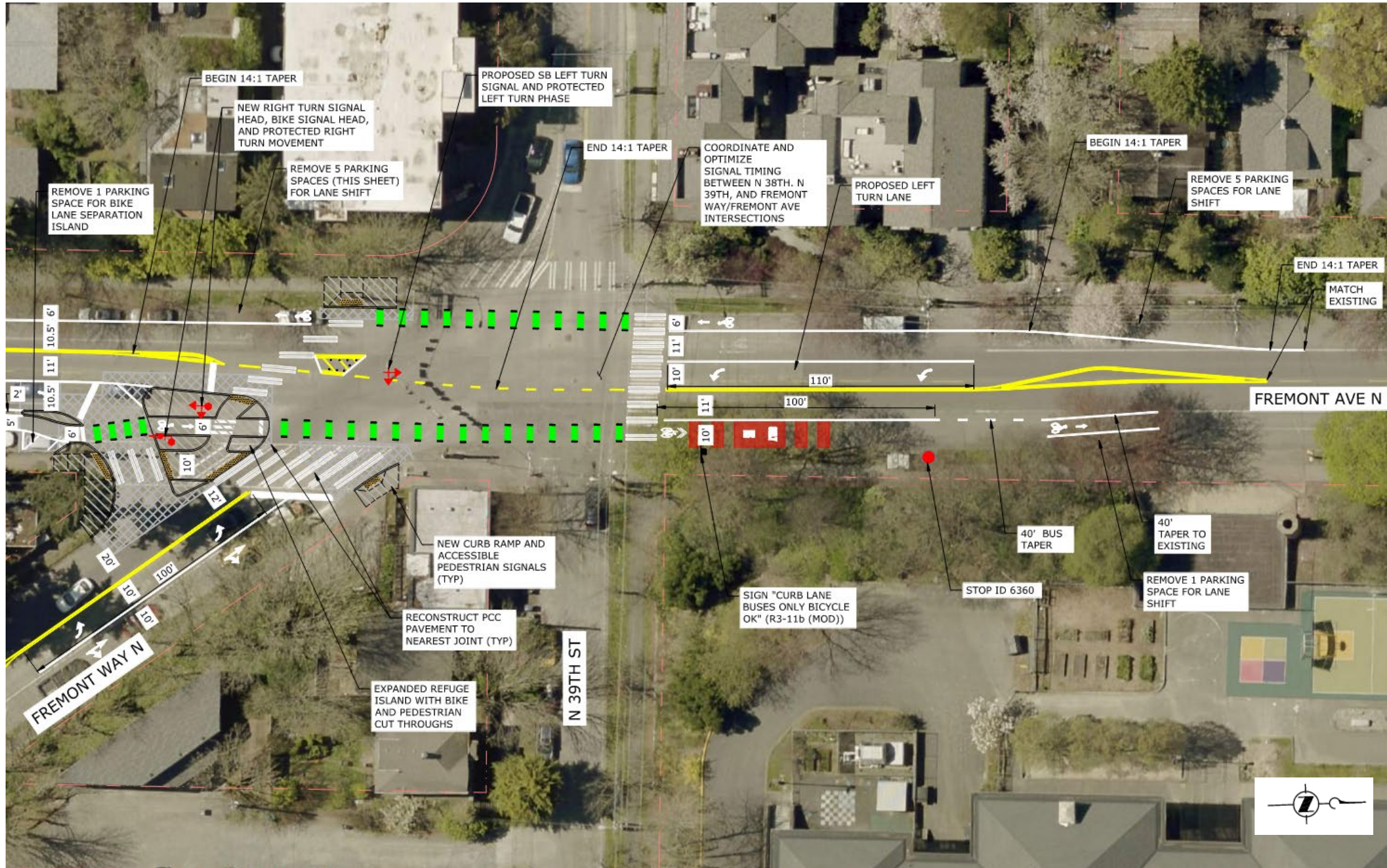


10% DESIGN PLANS



Concept 9 cont.

10% DESIGN PLANS



Concept 12

PROJECT INFORMATION

DESCRIPTION: Move inbound bus zone approximately 200 feet south, just north of the pedestrian crossing

LOCATION: Phinney Ave N and N 67th St

KEY IMPROVEMENT ELEMENT(S): Bus Zone Relocation

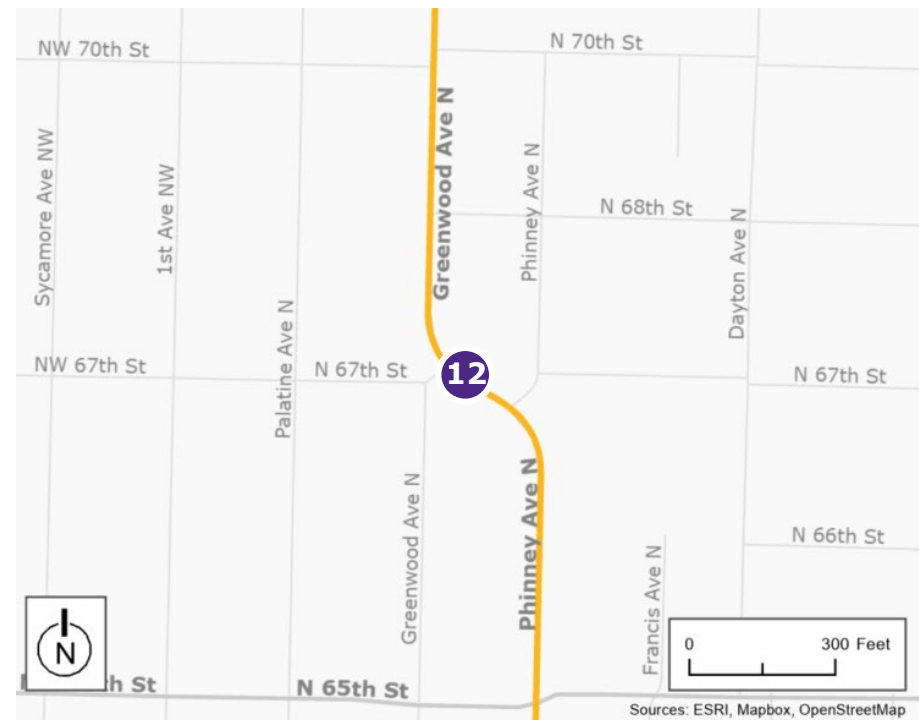
STATUS: Recommended

TIME SAVINGS (sec): N/A (reliability improvement)

10% COST ESTIMATE

Cost Type	Amount
Construction Costs	\$430,000
Soft Costs	\$195,000
Rough order of Magnitude GRAND TOTAL	\$625,000

CONCEPT LOCATION



10% DESIGN PLANS



Concept 13

PROJECT INFORMATION

DESCRIPTION: Close bus stop pair at N 77th Street (5820, 6600) and convert inbound stop (5830) at N 76th Street to an in-lane bus zone

LOCATION: Greenwood Ave N and N 76th St and N 77th St

KEY IMPROVEMENT ELEMENT(S): Parking Removal (2 spaces); Bus Zone Removal; Convert Bus Zone to In-Lane - Civil Modification

STATUS: Recommended

TIME SAVINGS (sec):

AM Southbound	AM Northbound	PM Southbound	AM Northbound
17	7	17	7

10% COST ESTIMATE

Cost Type	Amount
Construction Costs	\$336,000
Soft Costs	\$152,000
Rough order of Magnitude GRAND TOTAL	\$488,000

CONCEPT LOCATION



10% DESIGN PLANS



Concept 16

PROJECT INFORMATION

DESCRIPTION: Apply red paint on pavement along outbound bus zone from intersection to head of zone

LOCATION: Greenwood Ave N and N 85th St

KEY IMPROVEMENT ELEMENT(S): Other

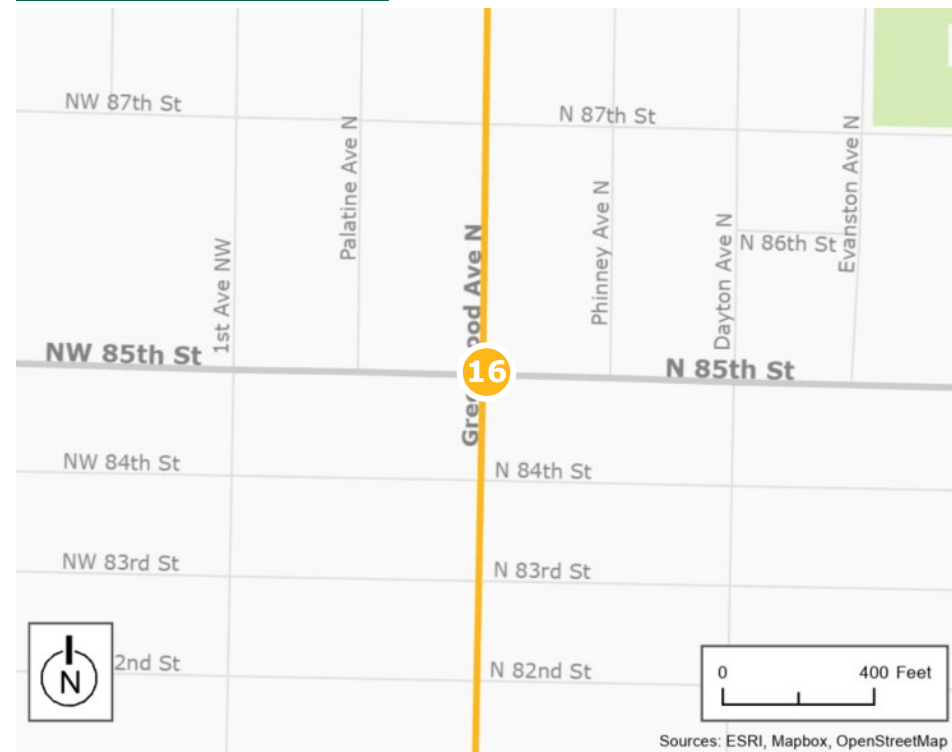
STATUS: Contingency

TIME SAVINGS (sec): N/A (reliability improvement)

10% COST ESTIMATE

Cost Type	Amount
Construction Costs	\$21,000
Soft Costs	\$9,000
Rough order of Magnitude GRAND TOTAL	\$30,000

CONCEPT LOCATION



10% DESIGN PLANS



Concept 19

PROJECT INFORMATION

DESCRIPTION: Convert pull out bus stops to in-lane bus stops

LOCATION: Greenwood Ave N and N 85th St

KEY IMPROVEMENT ELEMENT(S): Parking Removal (6 spaces)

STATUS: Recommended

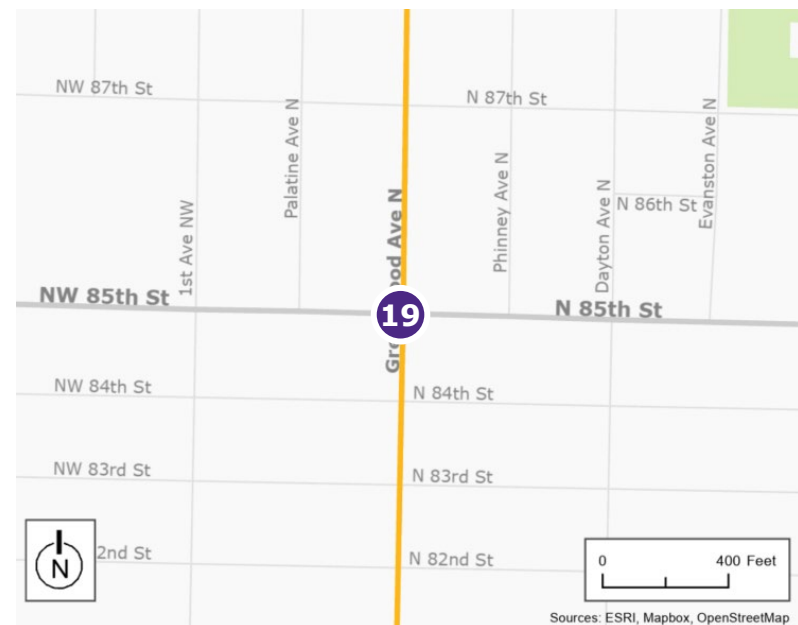
TIME SAVINGS (sec):

AM Southbound	AM Northbound	PM Southbound	AM Northbound
10	10	10	10

10% COST ESTIMATE

Cost Type	Amount
Construction Costs	\$645,000
Soft Costs	\$291,000
Rough order of Magnitude GRAND TOTAL	\$936,000

CONCEPT LOCATION



10% DESIGN PLANS



Concept 20

PROJECT INFORMATION

DESCRIPTION: Signal phasing (unsplitting the phasing) improvements; restrict left turns in east-west direction all directions

LOCATION: Greenwood Ave N and N 85th St

KEY IMPROVEMENT ELEMENT(S): Signal Modification/TSP

STATUS: Recommended

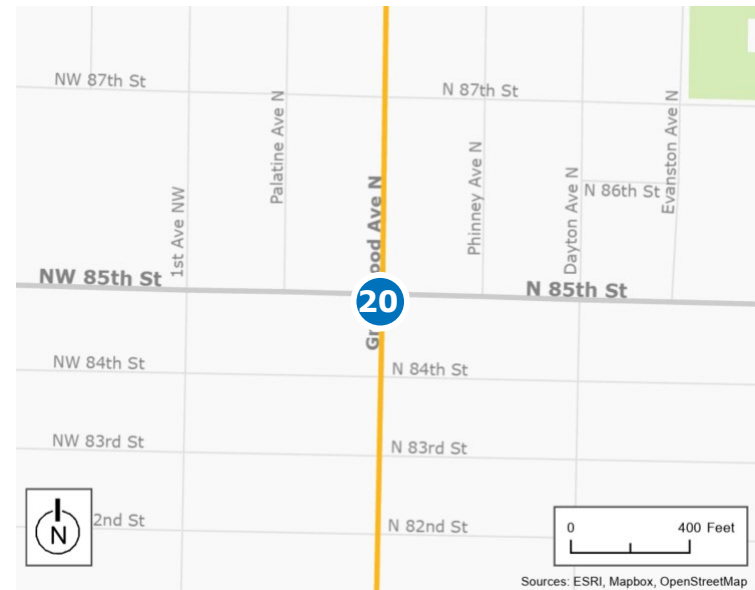
TIME SAVINGS (sec):

AM Southbound	AM Northbound	PM Southbound	AM Northbound
15	12	15	26

10% COST ESTIMATE

Cost Type	Amount
Construction Costs	\$31,000
Soft Costs	\$15,000
Rough order of Magnitude GRAND TOTAL	\$46,000

CONCEPT LOCATION



10% DESIGN PLANS



Concept 22

PROJECT INFORMATION

DESCRIPTION: Close bus stop pair at N 90th Street (5770, 6660)

LOCATION: Greenwood Ave N and N 90th St

KEY IMPROVEMENT ELEMENT(S): Bus Zone Removal

STATUS: Recommended

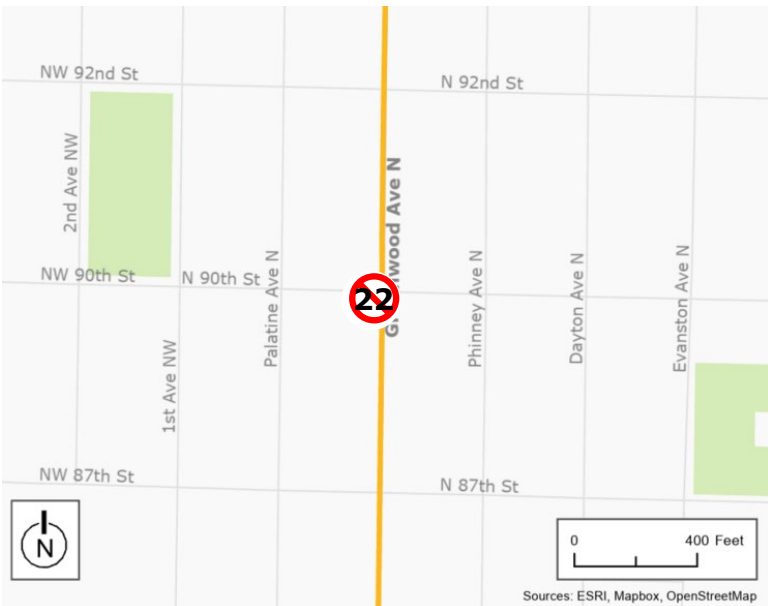
TIME SAVINGS (sec):

AM Southbound	AM Northbound	PM Southbound	AM Northbound
7	7	7	7

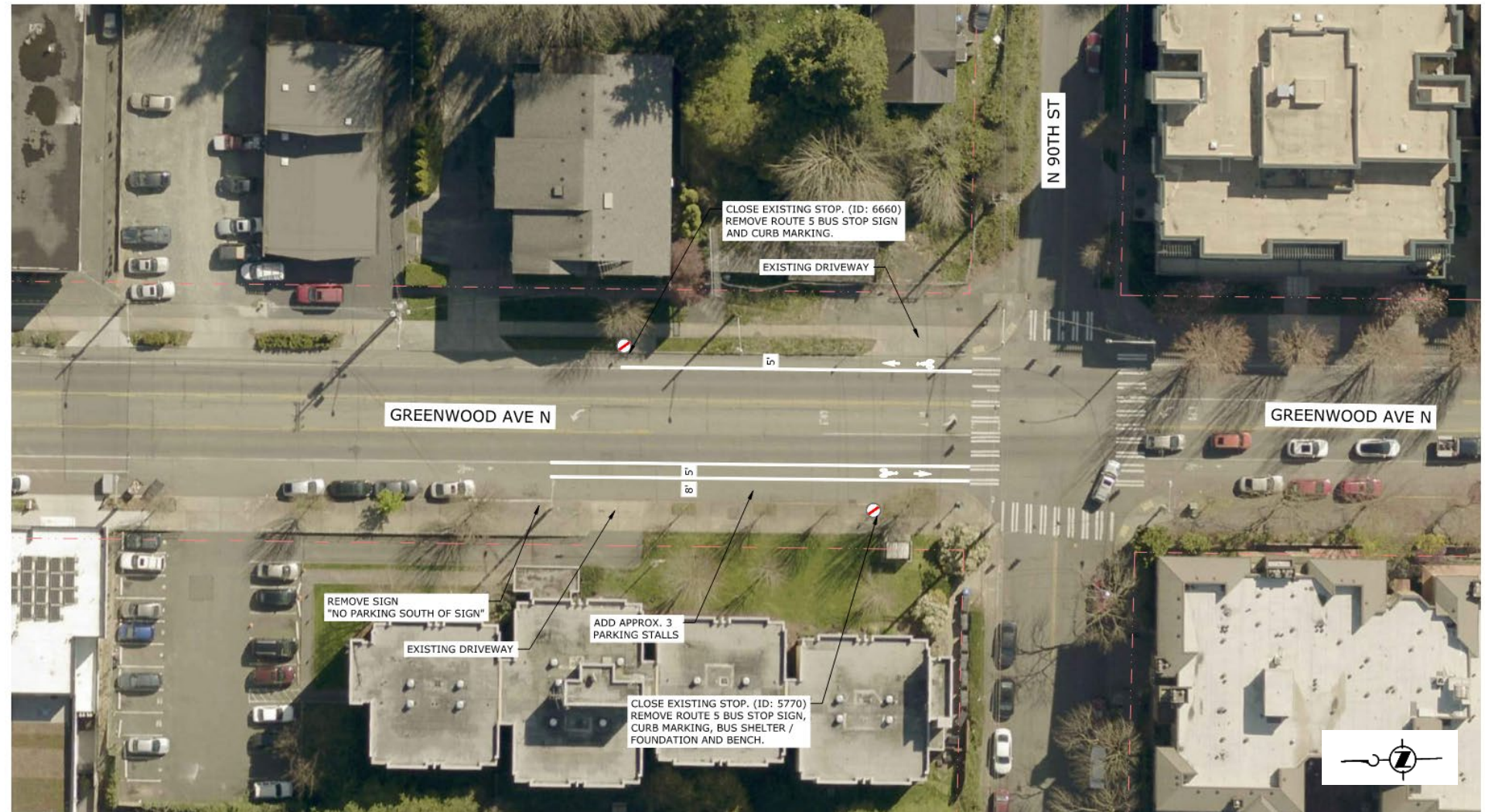
10% COST ESTIMATE

Cost Type	Amount
Construction Costs	\$16,000
Soft Costs	\$7,000
Rough order of Magnitude GRAND TOTAL	\$23,000

CONCEPT LOCATION



10% DESIGN PLANS



Concept 24

PROJECT INFORMATION

DESCRIPTION: Additional/advanced pavement markings and/or signage indicating through lane converts to right only

LOCATION: Greenwood Ave N and N 105th St/Holman Rd N

KEY IMPROVEMENT ELEMENT(S): Signage/Channelization

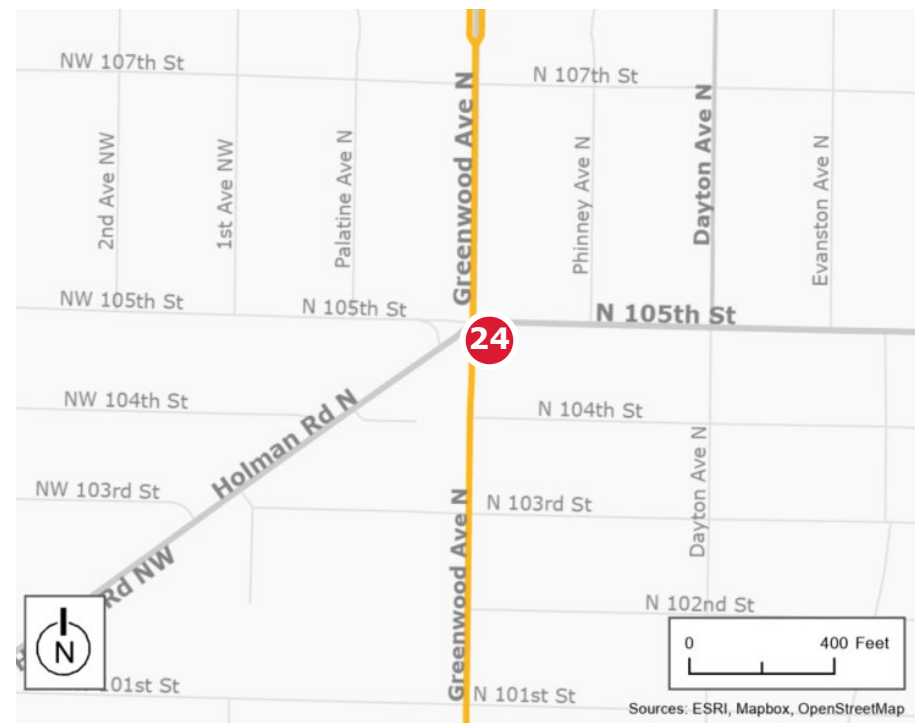
STATUS: Recommended

TIME SAVINGS (sec): N/A (reliability improvement)

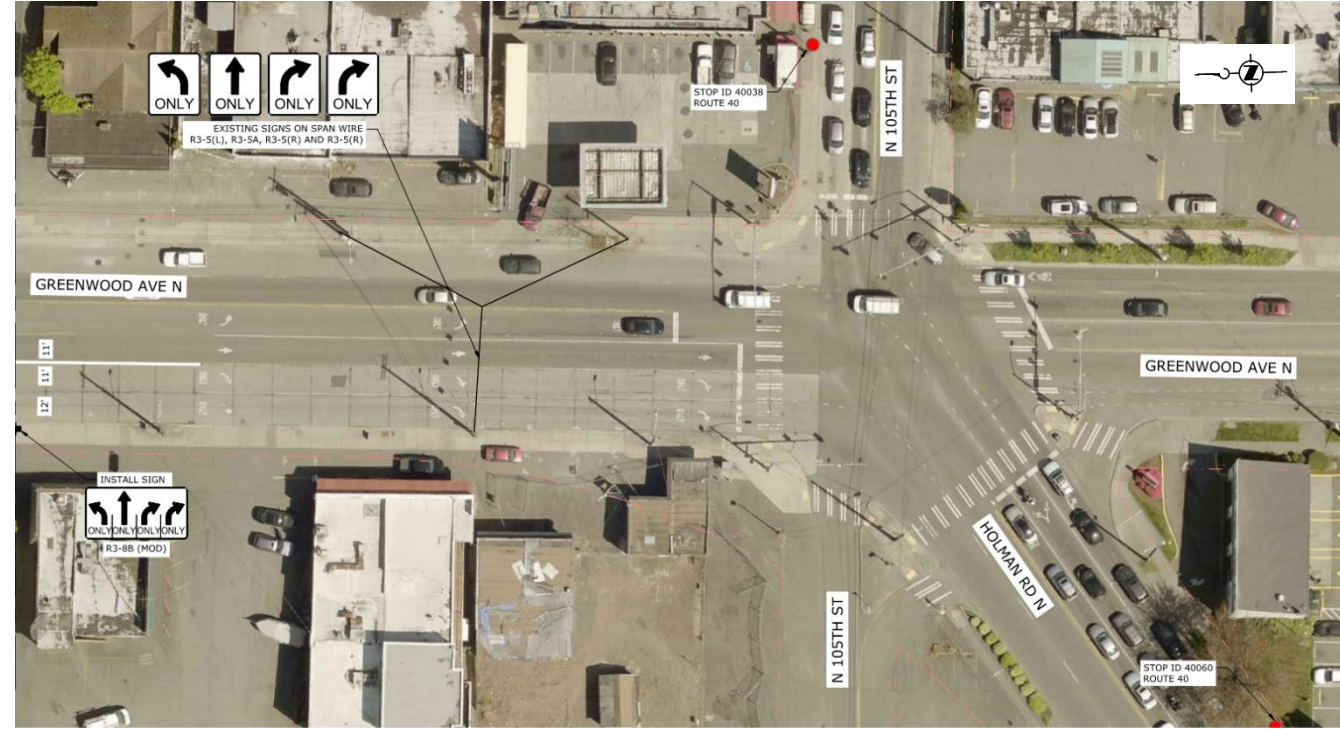
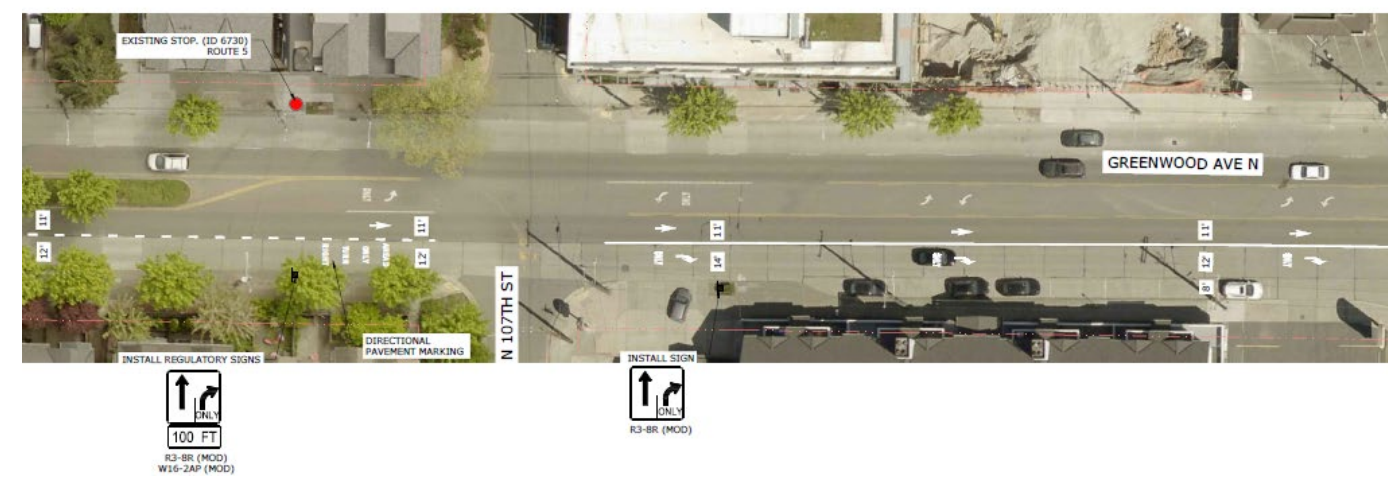
10% COST ESTIMATE

Cost Type	Amount
Construction Costs	\$79,000
Soft Costs	\$36,000
Rough order of Magnitude GRAND TOTAL	\$115,000

CONCEPT LOCATION



10% DESIGN PLANS



Concept 25

PROJECT INFORMATION

DESCRIPTION: Close outbound stop at N 107th St (6730) and move outbound bus zone at N 103rd St (6710) to far-side of N 105th Street, modify signal phasing to reduce potential for traffic from Holman Rd N conflicting with bus serving the zone

LOCATION: Greenwood Ave N and N 105th St/Holman Rd N

KEY IMPROVEMENT ELEMENT(S): Bus Zone Relocation; Bus Zone Removal

STATUS: Recommended

TIME SAVINGS (sec):

AM Southbound	AM Northbound	PM Southbound	AM Northbound
0	12	0	12

10% COST ESTIMATE

Cost Type	Amount
Construction Costs	\$156,000
Soft Costs	\$71,000
Rough order of Magnitude GRAND TOTAL	\$227,000

CONCEPT LOCATION



10% DESIGN PLANS



Concept 25 cont.

10% DESIGN PLANS



Concept 26

PROJECT INFORMATION

DESCRIPTION: Increase cycle length from "half cycle" to full cycle (matching N 130th St)

LOCATION: Greenwood Ave N and N 125th St

KEY IMPROVEMENT ELEMENT(S): Signal Modification/TSP

STATUS: Recommended

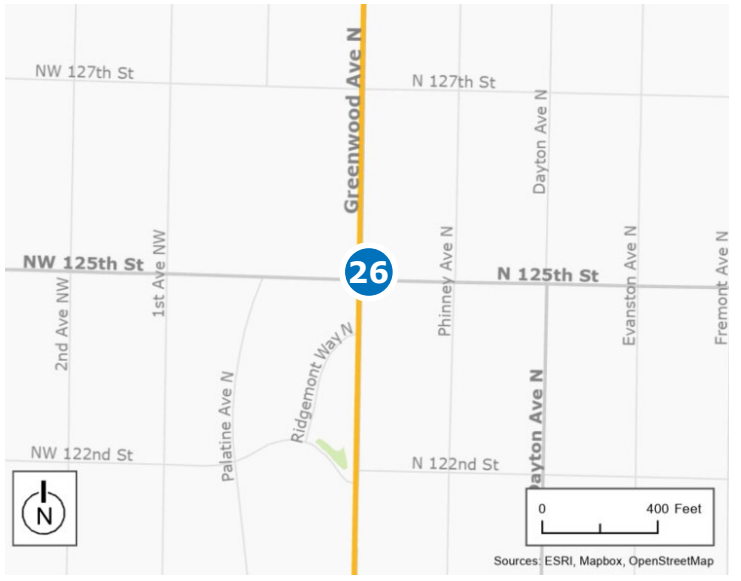
TIME SAVINGS (sec):

AM Southbound	AM Northbound	PM Southbound	AM Northbound
17	2	-6	93

10% COST ESTIMATE

Cost Type	Amount
Construction Costs	\$17,000
Soft Costs	\$8,000
Rough order of Magnitude GRAND TOTAL	\$25,000

CONCEPT LOCATION



10% DESIGN PLANS



Concept 27

PROJECT INFORMATION

DESCRIPTION: Apply red paint on pavement along outbound bus zone from intersection to head of zone

LOCATION: Greenwood Ave N and N 130th St

KEY IMPROVEMENT ELEMENT(S): Parking Removal (1 space); Other

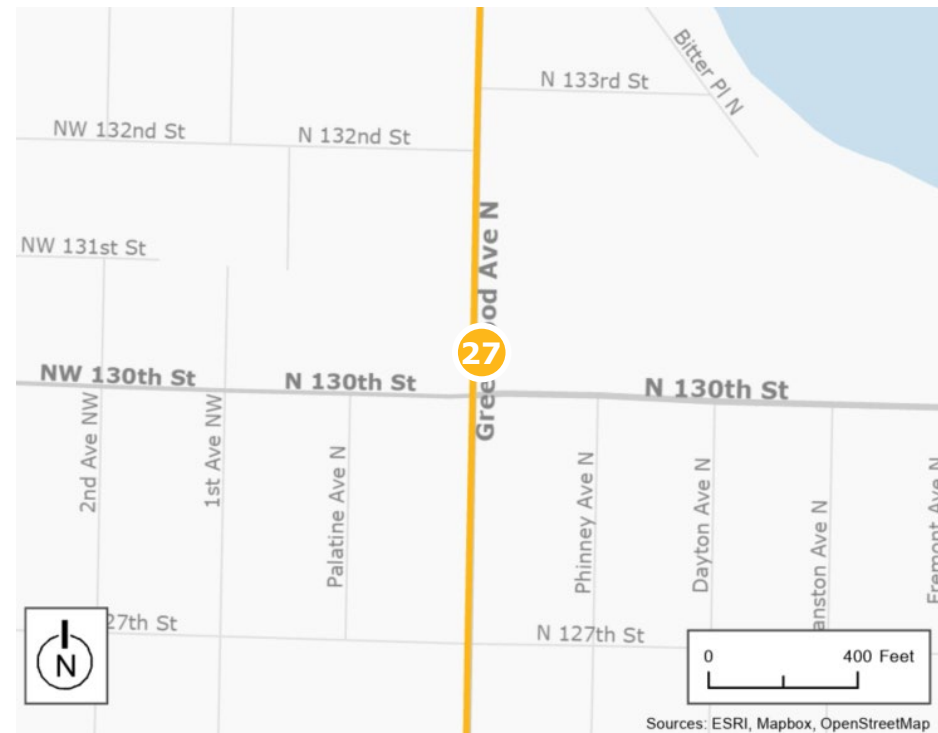
STATUS: Contingency

TIME SAVINGS (sec): N/A (reliability improvement)

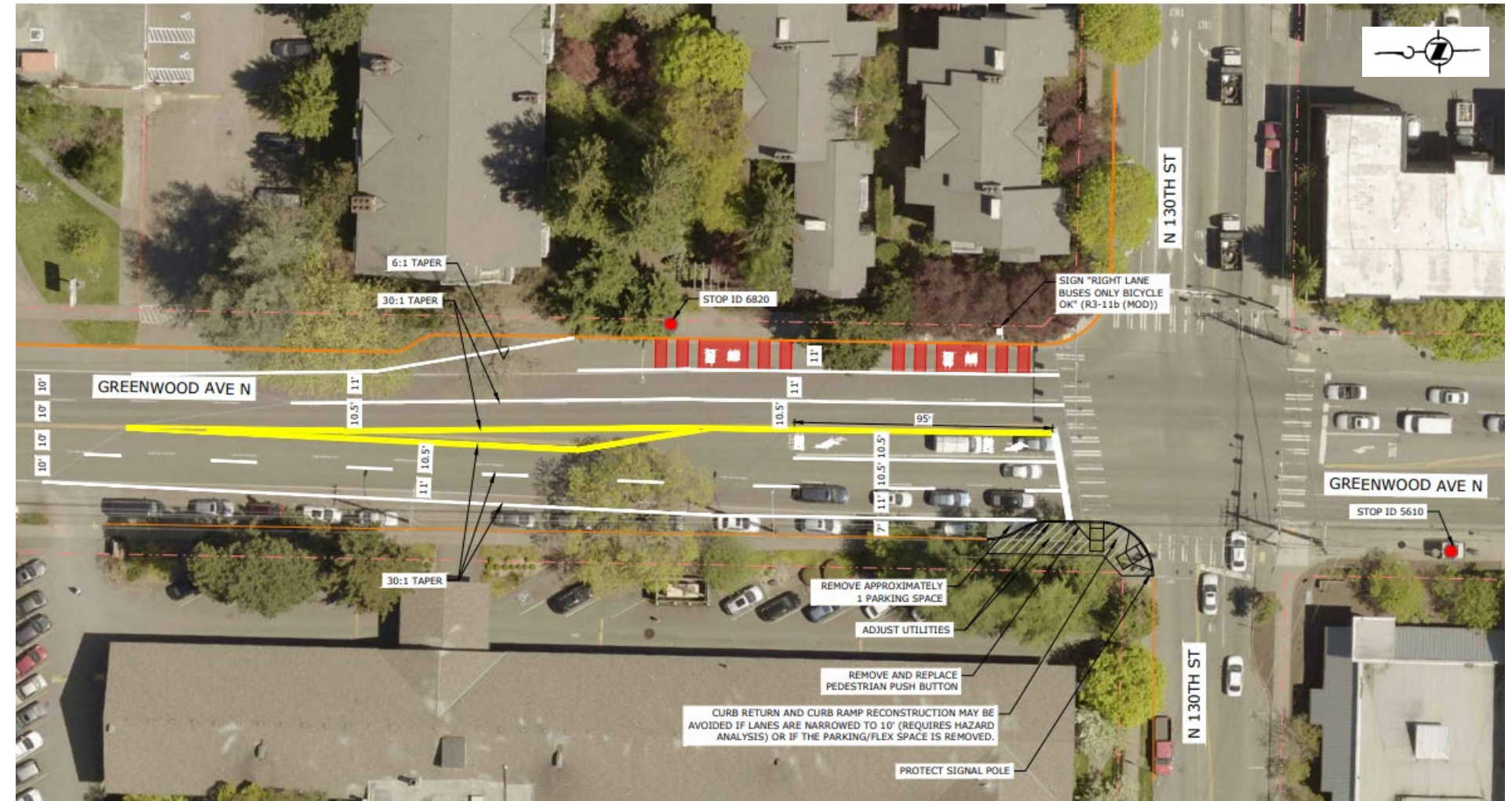
10% COST ESTIMATE

Cost Type	Amount
Construction Costs	\$188,000
Soft Costs	\$85,000
Rough order of Magnitude GRAND TOTAL	\$273,000

CONCEPT LOCATION



10% DESIGN PLANS



Concept 28

PROJECT INFORMATION

DESCRIPTION: Construct in-lane bus zone

LOCATION: Greenwood Ave N and N 130th St

KEY IMPROVEMENT ELEMENT(S): Convert Bus Zone to In-Lane - Civil Modification

STATUS: Recommended

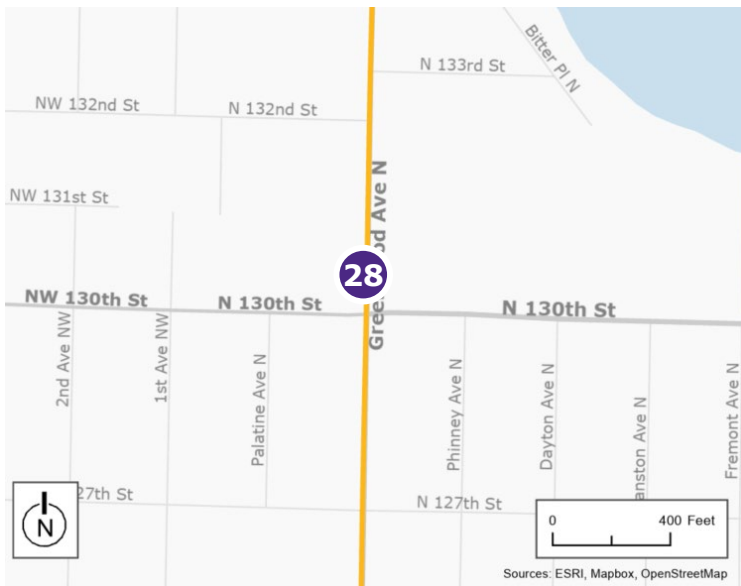
TIME SAVINGS (sec):

AM Southbound	AM Northbound	PM Southbound	AM Northbound
0	10	0	10

10% COST ESTIMATE

Cost Type	Amount
Construction Costs	\$235,000
Soft Costs	\$107,000
Rough order of Magnitude GRAND TOTAL	\$342,000

CONCEPT LOCATION



10% DESIGN PLANS



Concept 29

PROJECT INFORMATION

DESCRIPTION: Greenwood BAT lanes (N 130th St-N 145th St): Southbound BAT lanes between N 130th St to N 145th St and northbound queue jump at N 145th St

LOCATION: Greenwood Ave N and N 143rd St

KEY IMPROVEMENT ELEMENT(S): Parking Removal (20 spaces); Signage/Channelization

STATUS: Recommended

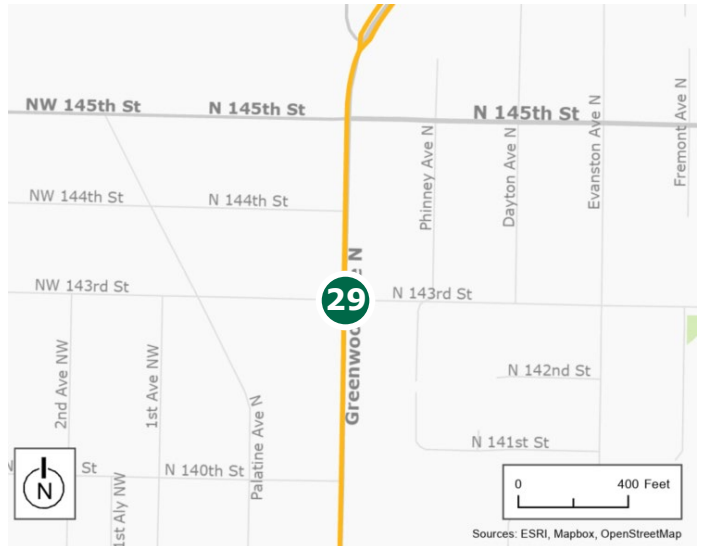
TIME SAVINGS (sec):

AM Southbound	AM Northbound	PM Southbound	AM Northbound
34	11	68	-8

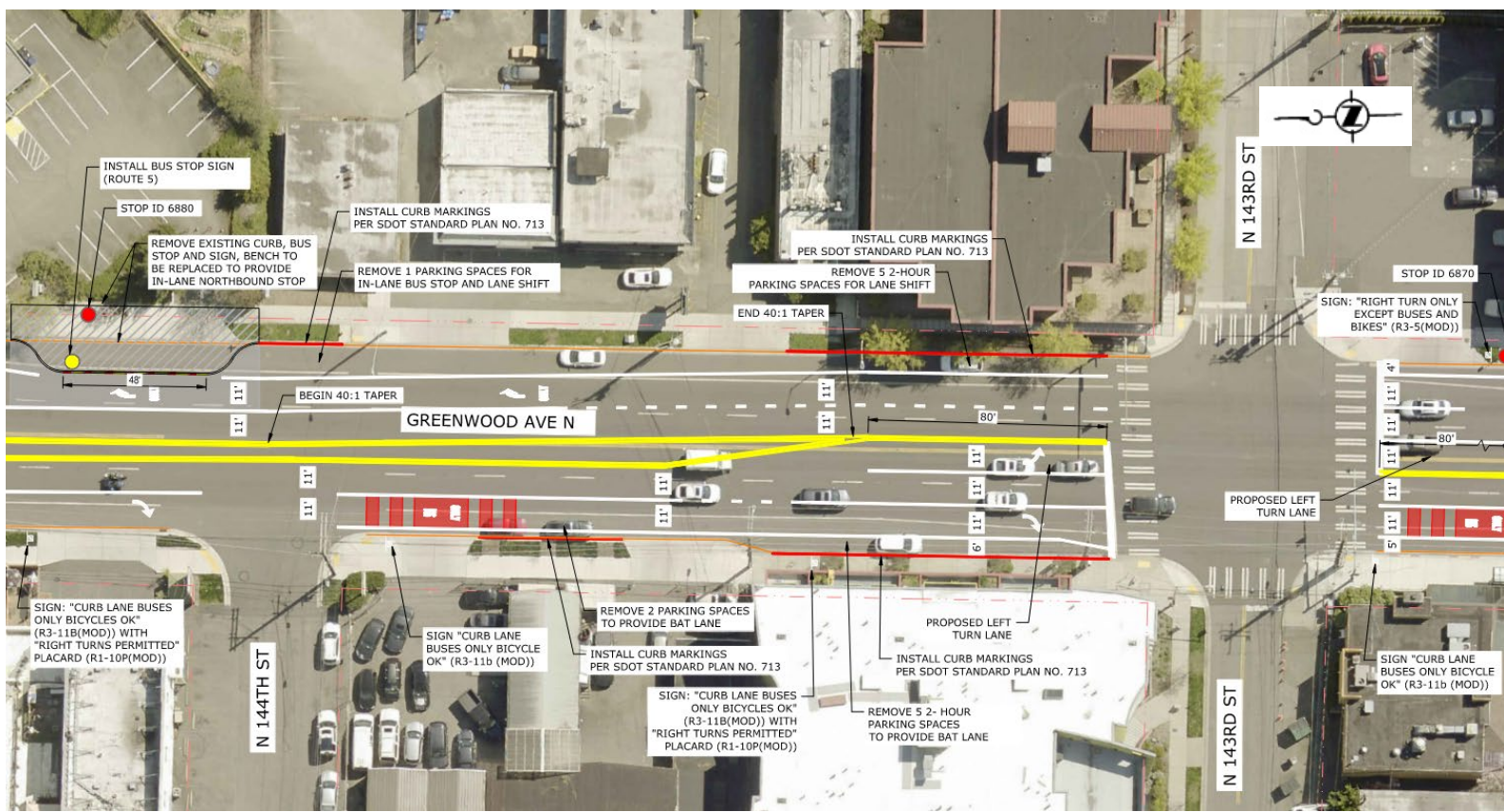
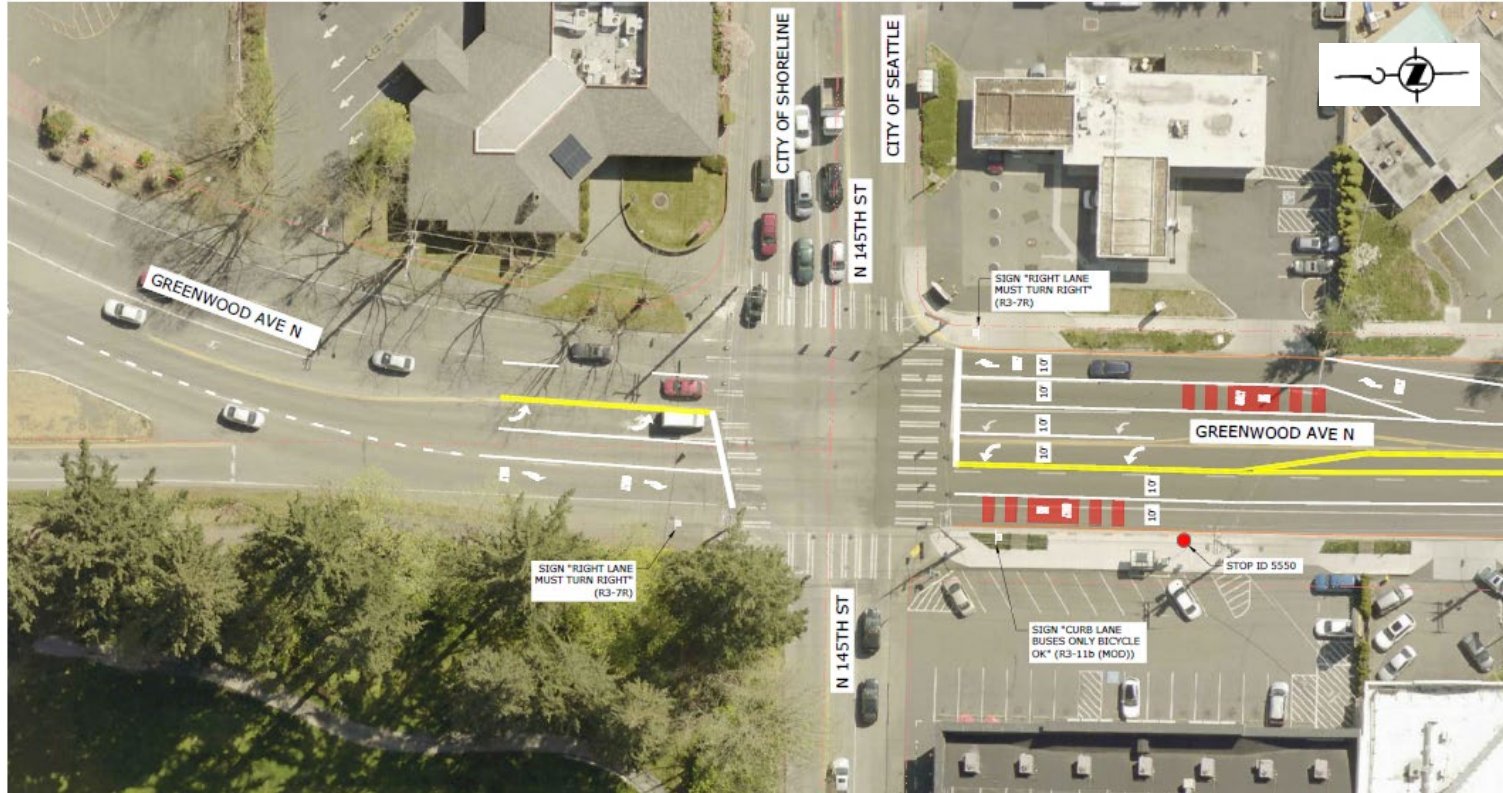
10% COST ESTIMATE

Cost Type	Amount
Construction Costs	\$1,144,000
Soft Costs	\$457,000
Rough order of Magnitude GRAND TOTAL	\$1,601,000

CONCEPT LOCATION



10% DESIGN PLANS



Concept 29 cont.

10% DESIGN PLANS



Concept 29 cont.

10% DESIGN PLANS



Concept 29 cont.

10% DESIGN PLANS



Concept 29 cont.

10% DESIGN PLANS



Concept 30

PROJECT INFORMATION

DESCRIPTION: Adjust signal timing to allow for more green time for the NB/SB movements

LOCATION: Greenwood Ave N and N 145th St

KEY IMPROVEMENT ELEMENT(S): Signal Modification/TSP

STATUS: Recommended

TIME SAVINGS (sec): AM: -1 SB, 45 NB; PM: 47 SB, -11 NB

AM Southbound	AM Northbound	PM Southbound	AM Northbound
-1	45	47	-11

10% COST ESTIMATE

Cost Type	Amount
Construction Costs	\$17,000
Soft Costs	\$8,000
Rough order of Magnitude GRAND TOTAL	\$25,000

CONCEPT LOCATION



10% DESIGN PLANS

