



West Superior Street Reconstruction Project



Alex Popp, PE

City of Duluth Project Engineer

West Superior Street Project



— Project Location

Project Funding and Requirements

- \$24,990,160 Rebuilding America Infrastructure with Sustainability and Equity (RAISE) grant from FHWA administered by MnDOT
- \$7,684,530 Infrastructure Investment and Jobs Act (IIJA) Match Program grant from MnDOT
- Grant funding comes with specific requirements



RAISE Grants

Rebuilding America Infrastructure with Sustainability and Equity



U.S. Department
of Transportation

Project Schedule



- Design Almost Complete
- Bidding Spring 2025
- Project Construction 2025 - 2028

Design Team



Building a Better World
for All of Us®

Design Lead – SEH, Inc
Project Manager – Matt Bolf, PE



Damon Farber
Urban and Streetscape Design



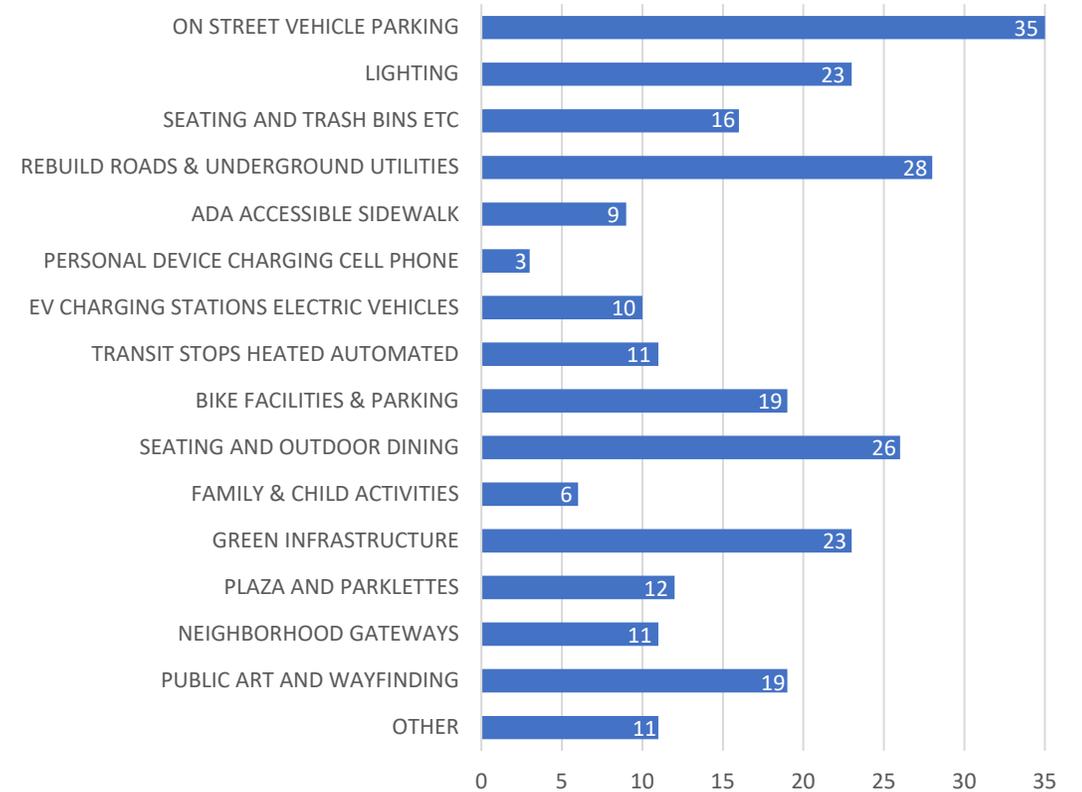
ALLIANT

Alliant Engineering
Traffic Engineering, Preliminary
Design, and Construction Staging

Open House #1 – March 7, 2023

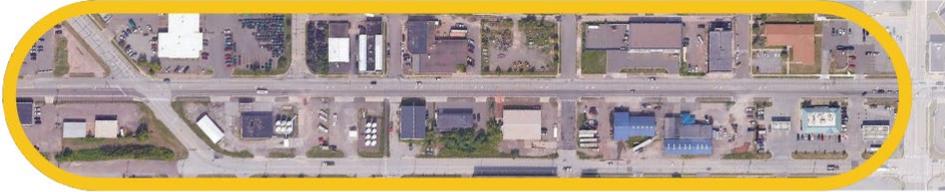


Open House 1 Prioritization Activity Results



West Superior Street Character Districts

CARLTON STREET TO 27TH AVE W



Character District 01

LIGHT INDUSTRIAL

27TH AVE W TO 22ND AVE W



Character District 02

INDUSTRIAL TO COMMERCIAL TRANSITION

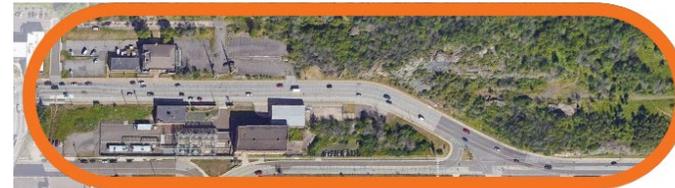
22ND AVE W TO PEIDMONT AVE / GARFIELD AVE



Character District 03

NEIGHBORHOOD COMMERCIAL CORE

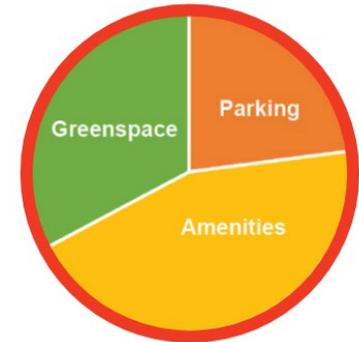
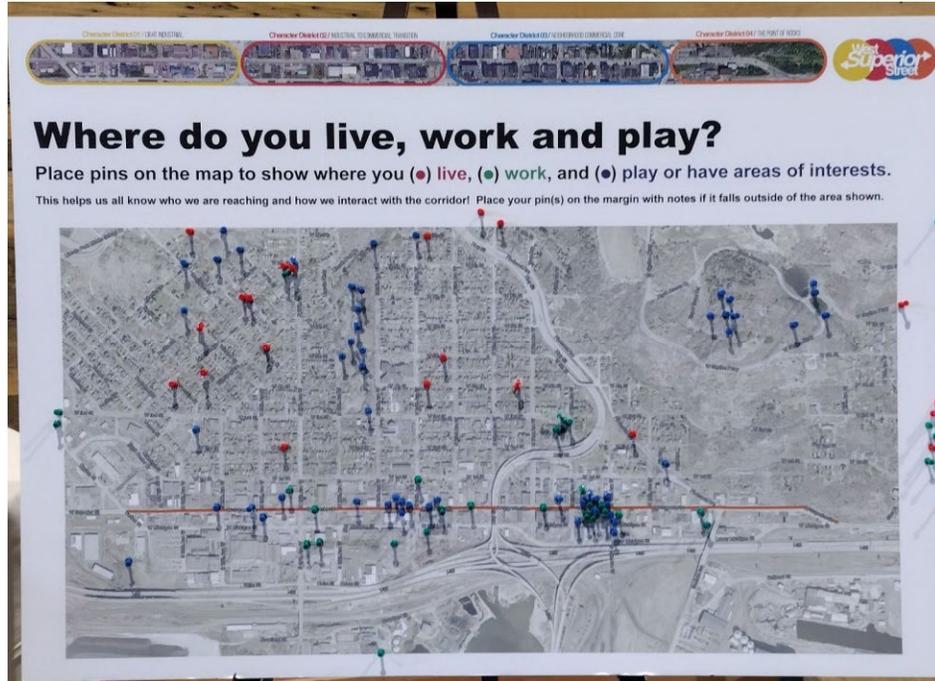
PEIDMONT AVE / GARFIELD AVE TO WEST MICHIGAN STREET



Character District 04

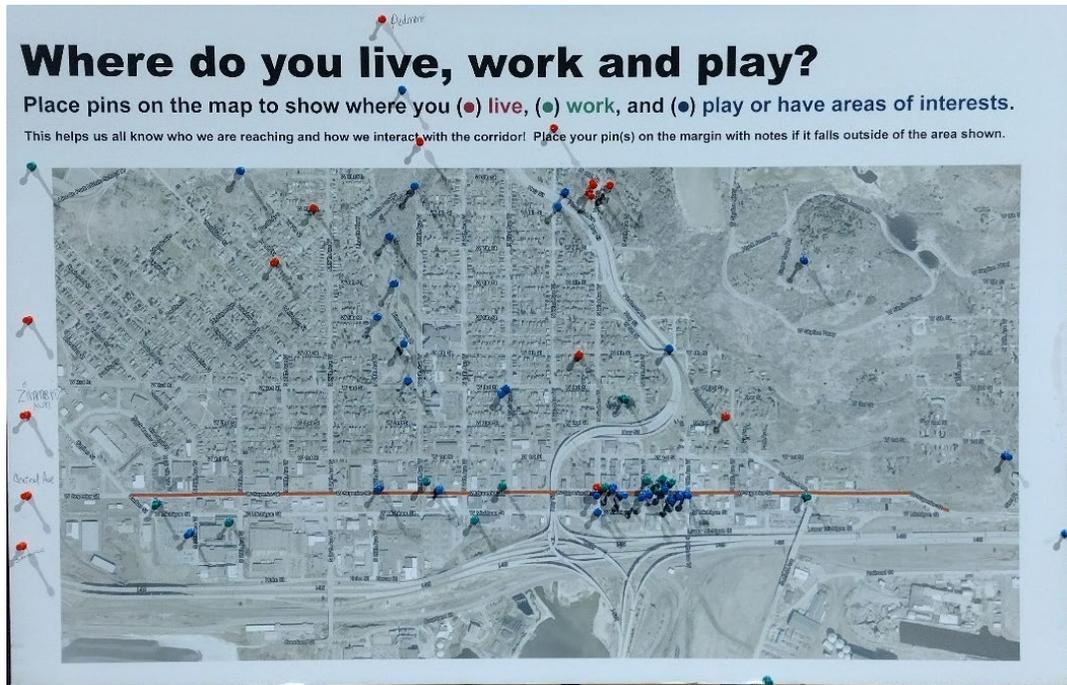
THE POINT OF ROCKS

Open House #2 – June 27, 2023



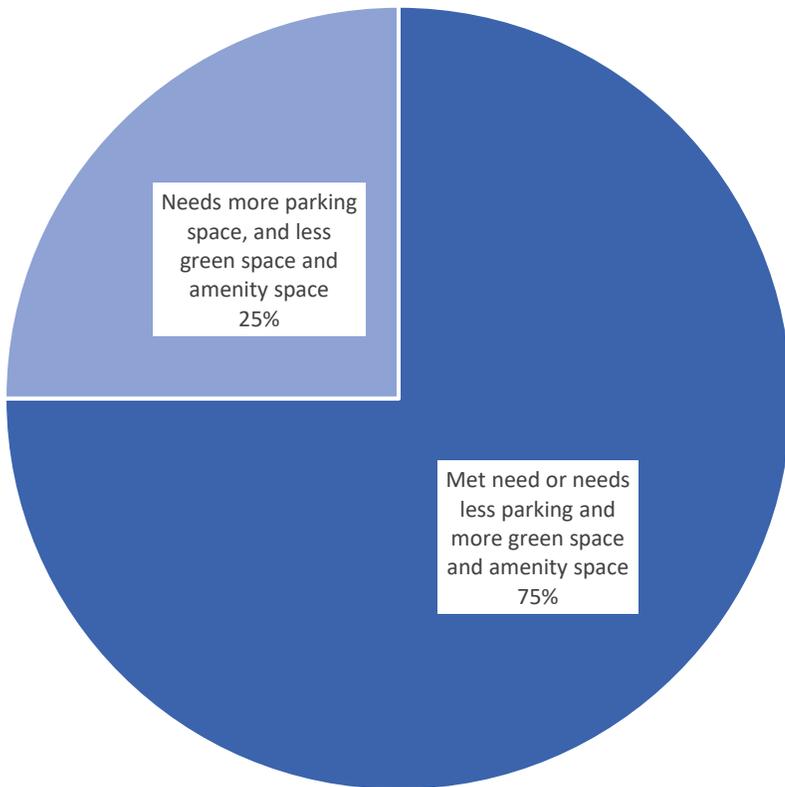
Decorative Site Furniture (12)	Electric Vehicle Charging (7)	Wayfinding (5)	Stormwater Plantings (12)
Programmed Open Space (10)	Winter Activation (12)	District Identity (13)	Pollinator Planting (10)
Pedestrian Scale Lighting (17)	Interpretive Signage (2)	Public Art (15)	Shade Trees (17)
Accessible Bus Stops (14)	Bike Crossings (14)	Signalized Ped Crossings (4)	Green Intersections (14)

Open House #3 – November 1, 2023

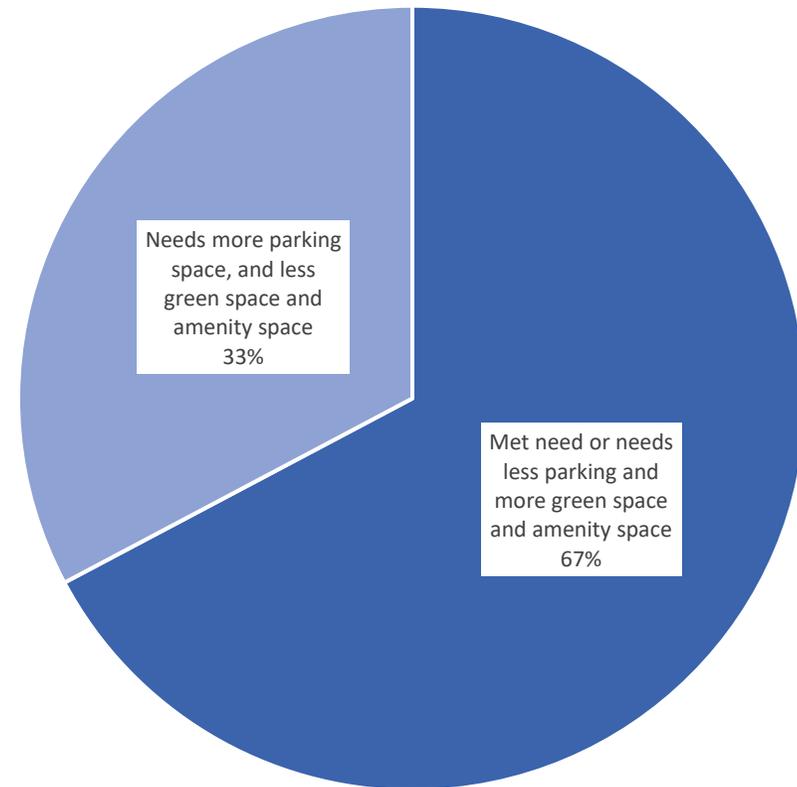


Open House #3 Parking Surveys

Character District 1 (Carlton Street to 27th Avenue W)

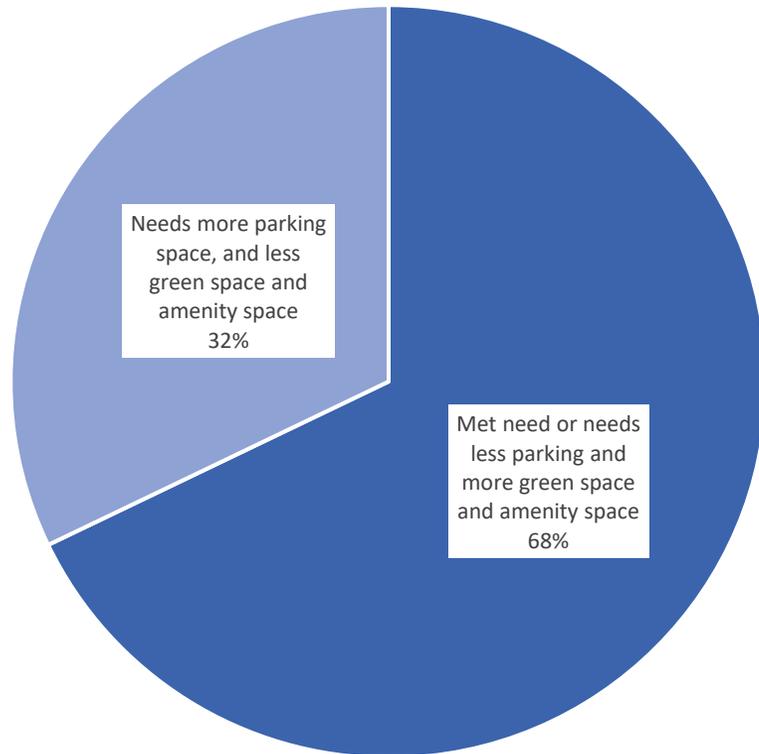


CHARACTER DISTRICT 2 (27TH AVENUE W TO 22ND AVENUE W)

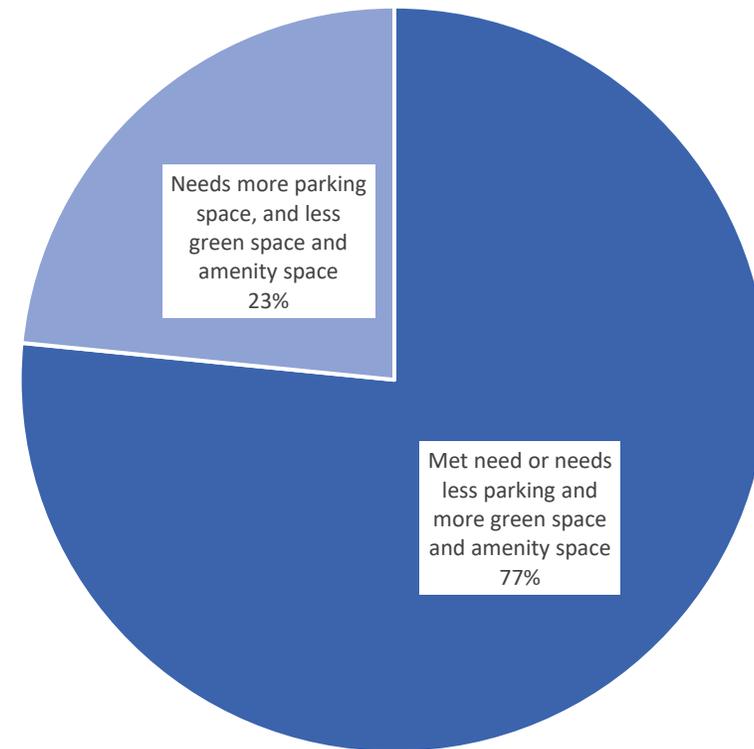


Open House #3 Parking Surveys

CHARACTER DISTRICT 3 (22ND AVENUE W TO PIEDMONT AVENUE/GARFIELD AVENUE)



CHARACTER DISTRICT 4 (PIEDMONT AVENUE/GARFIELD AVENUE TO MICHIGAN STREET)

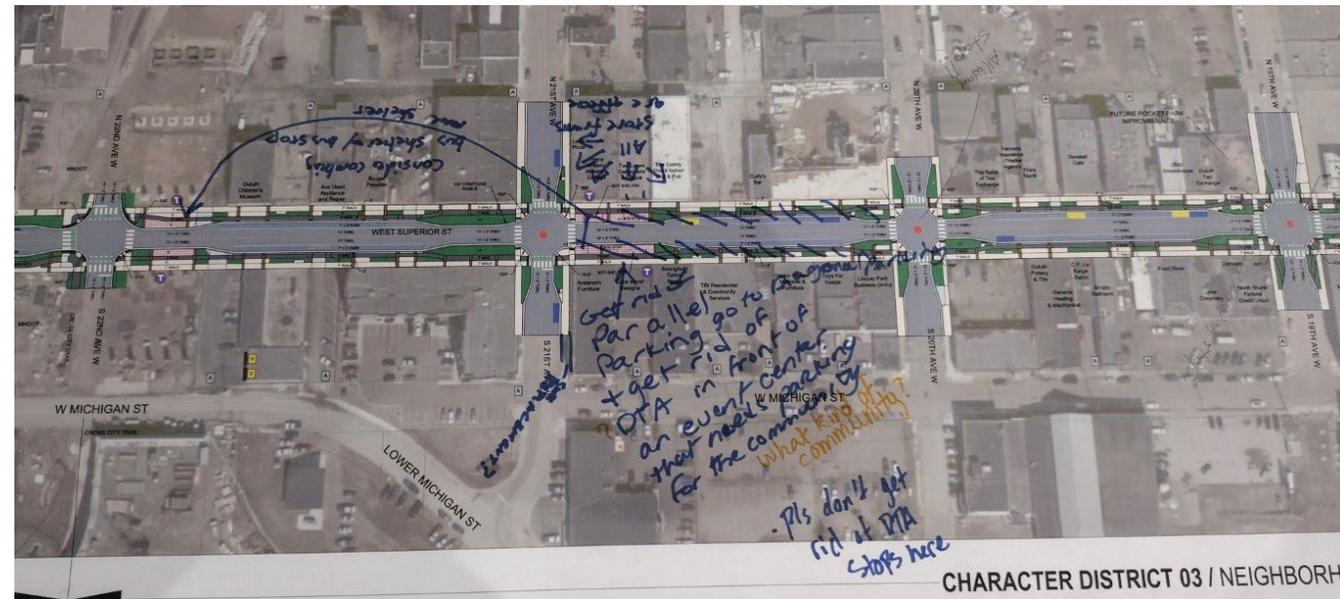
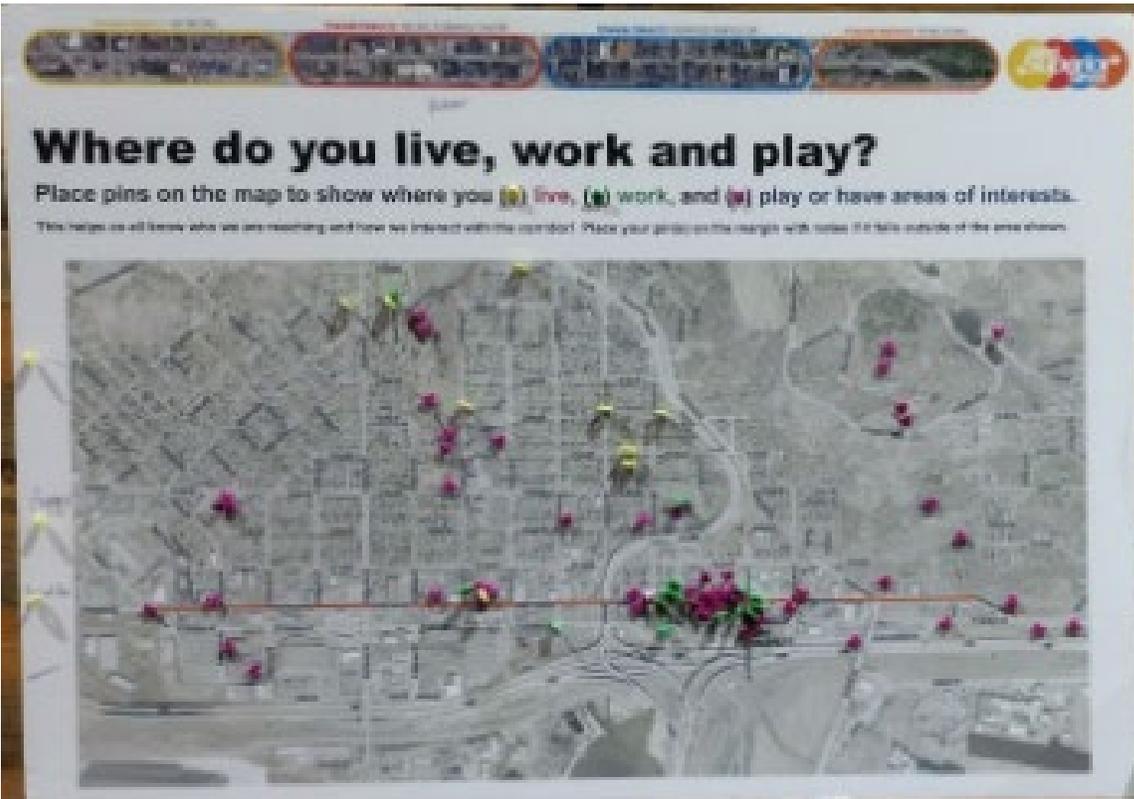


Open House #5 - November 13, 2024

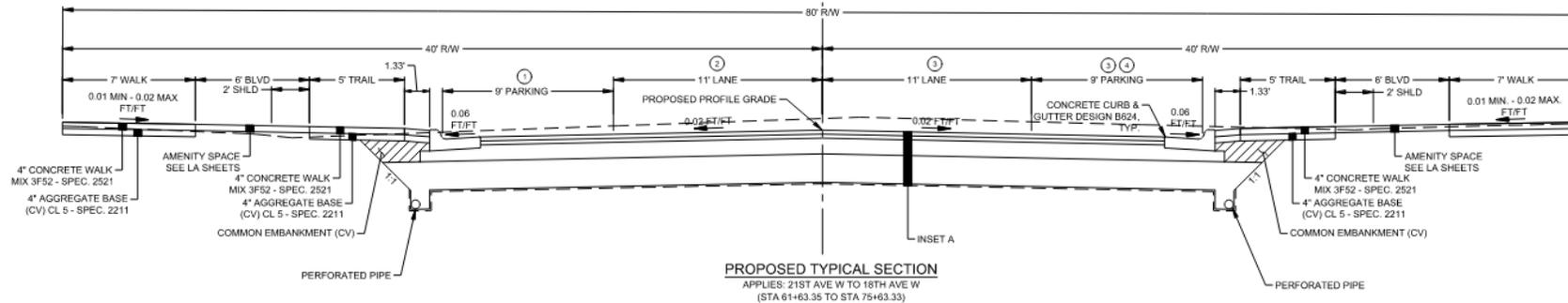
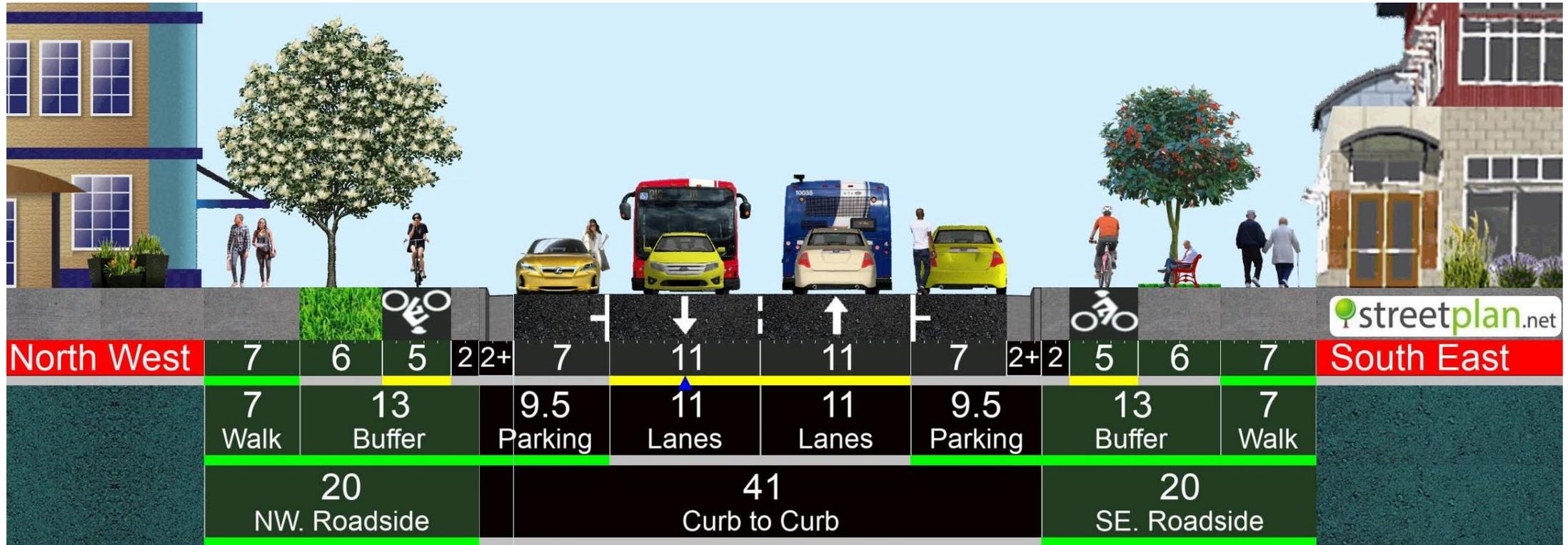
What to Expect During Construction

Pedestrians

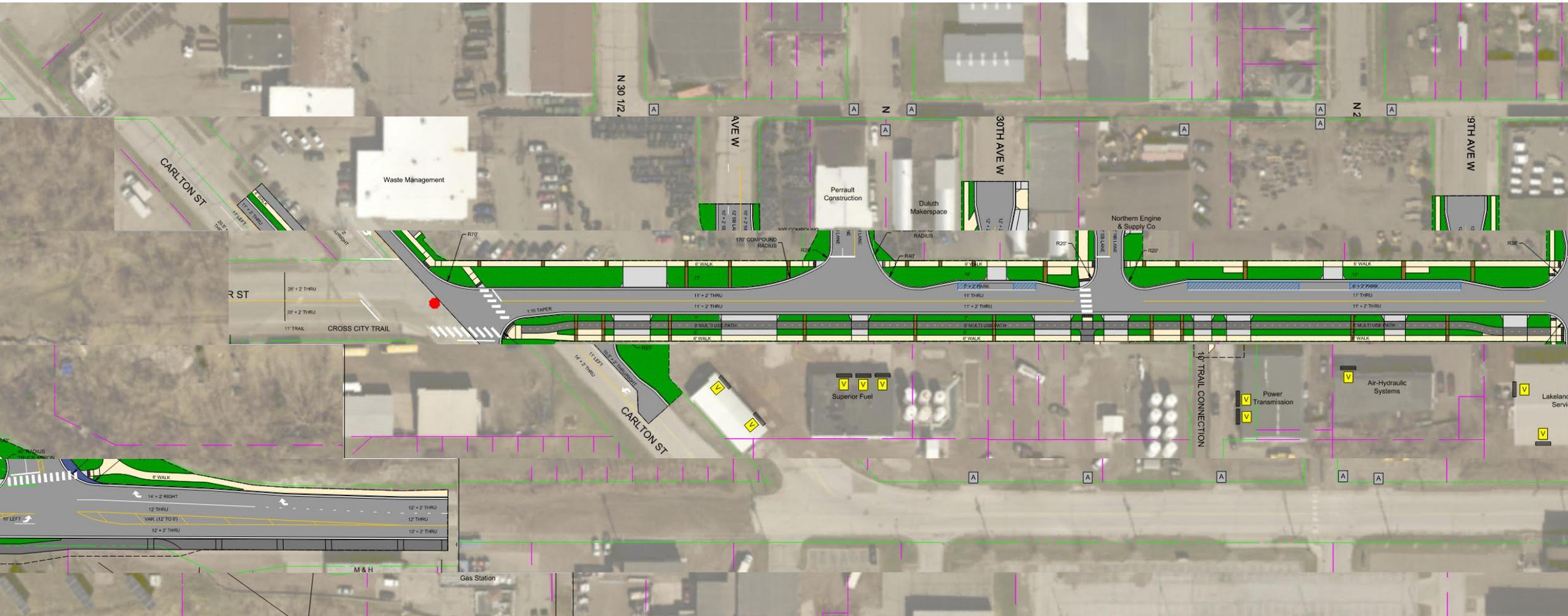
Images show a temporary mid-block crossing (left) and sidewalk conditions in front of businesses during construction.



Typical Section



Layout



Layout Rendering – Character District 1



Layout Renderings – Character District 3



Proposed On-Street Parking Supply

PARKING SUPPLY COUNT - DRAFT: 11/8/2024

On-Street Parking Supply Summary on West Superior Street										
Character District	Block	Existing			Proposed			Delta Per Block		
		WB	EB	Total	WB	EB	Total	WB	EB	Total
The Point of Rocks	Michigan to Garfield	32	5	37	15	5	20	-17	0	-17
	<i>Adjacent Side Street Parking Changes in Character District:</i>									0
	Character District Totals:		37			20			-17	
Neighborhood Commercial Core	Garfield to 17th	0	4	4	0	2	2	0	-2	-2
	17th to 18th	16	12	28	13	12	25	-3	0	-3
	18th to 19th	8	9	17	6	11	17	-2	2	0
	19th to 20th	16	6	22	11	11	22	-5	5	0
	20th to 21st	12	6	18	6	9	15	-6	3	-3
	21st to 22nd	10	3	13	9	9	18	-1	6	5
	<i>Adjacent Side Street Parking Changes in Character District:</i>									-16
Character District Totals:		102			99			-19		
Industrial to Commercial Transition	22nd to 23rd	4	8	12	6	10	16	2	2	4
	23rd to 24th	12	7	19	6	4	10	-6	-3	-9
	24th to 25th	9	9	18	8	5	13	-1	-4	-5
	25th to 26th	13	10	23	10	10	20	-3	0	-3
	26th to 27th	9	9	18	3	5	8	-6	-4	-10
	<i>Adjacent Side Street Parking Changes in Character District:</i>									-8
Character District Totals:		90			67			-31		
Light Industrial	27th to 28th	11	7	18	2	0	2	-9	-7	-16
	28th to 29th	12	6	18	9	0	9	-3	-6	-9
	29th to 30th	14	7	21	10	0	10	-4	-7	-11
	30th to 30 1/2	5	0	5	2	0	2	-3	0	-3
	30 1/2 to Carlton	8	3	11	0	0	0	-8	-3	-11
	<i>Adjacent Side Street Parking Changes in Character District:</i>									-10
Character District Totals:		73			23			-60		

* Parking supply count includes handicap stalls, drop-off, and loading zones; similar special use of parking stall will be maintained in the proposed condition.



Curbside Management

W SUPERIOR STREET RECONSTRUCTION PROJECT LOADING ZONES AND ACCESSIBLE SPACES SURVEY

Please fill out the below survey to help the project team understand your needs in order to manage the curbside parking spaces following the completion of the W Superior Street reconstruction project. The information gathered will inform the final design of the area's on-street parking configuration

Your name (printed): _____

Your business/organization's name: _____

3009 W. SUPERIOR ST.

Loading Zone

Does your organization require an on-street loading zone to serve an ongoing need for deliveries?

Yes

No

If yes:

Is there currently a nearby on-street loading zone that serves your organizations needs

Yes

No

If an on-street zone is not provided, is there an off-street loading zone option that serves your needs?

Yes

No

What would be your preferred hours for the loading zone?

Morning (8 AM - 12 PM)

Afternoon (12 PM - 5 PM)

Evening (5 PM - 11 PM)

Overnight (11 PM – 8 AM)

Other (please specify): _____

What vehicle would you like to be accommodated in the loading zone?

Passenger car (19' long, 1 space)

Intermediate semitrailer (33' trailer, 46' long, 3 spaces)

Delivery Box Truck (30' long, 2 spaces)

Other (please specify): _____

Short Term Parking (outside your building)

Do you desire short term parking spaces?

Yes

No

If yes, how long should the short-term parking be allowed?

15 minutes

30 minutes

1 hour

Other (please specify): _____

Accessible Parking (outside your building)

Do you currently have an accessible parking space?

Yes

No

Do you (still) require an accessible parking space?

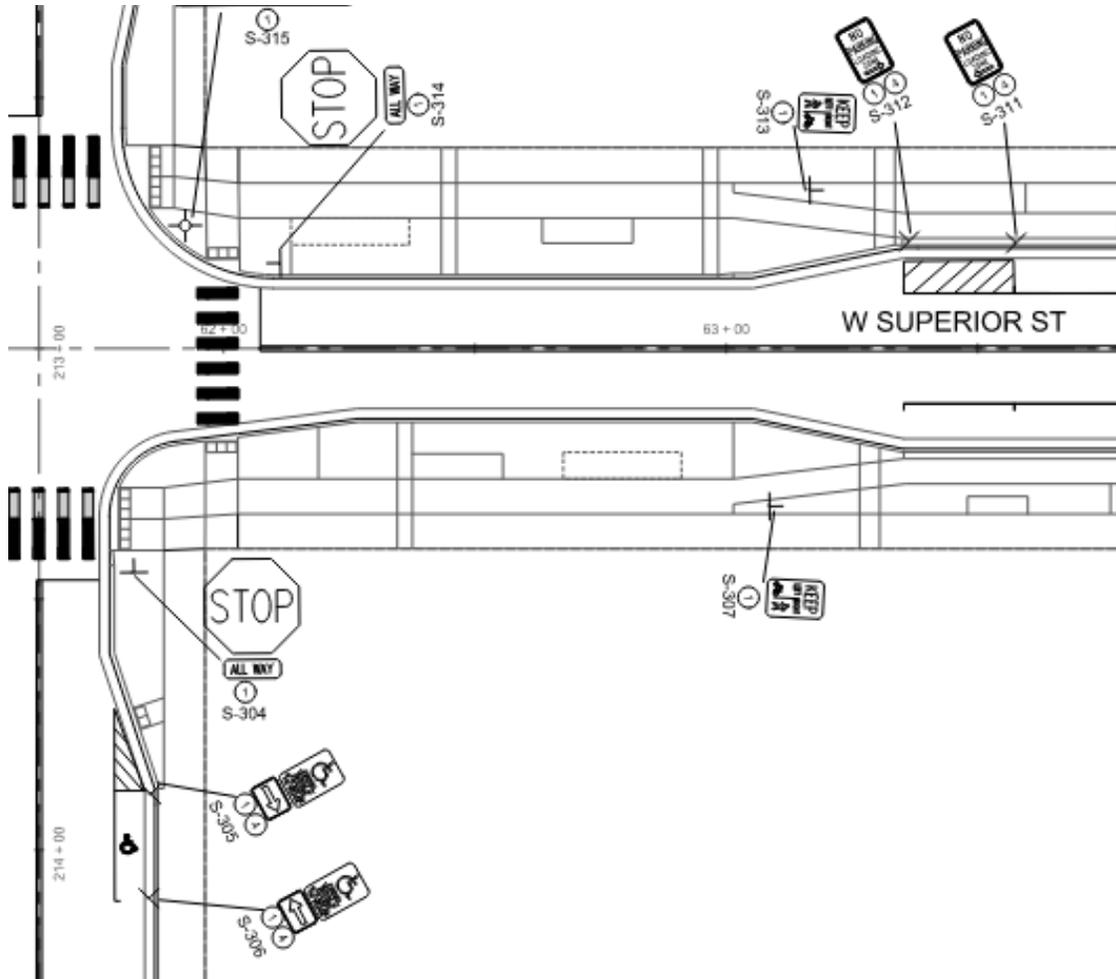
Yes

No

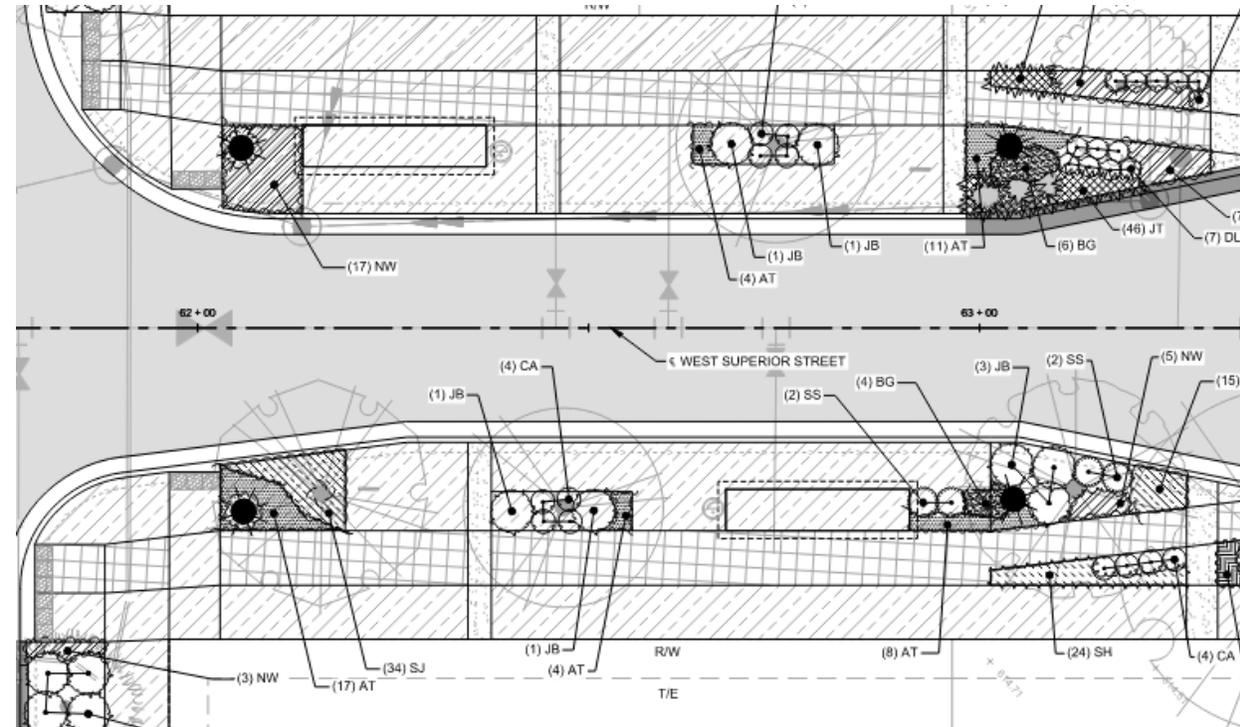
If you don't currently have a space but are requesting a new one:

Reason for the request: _____

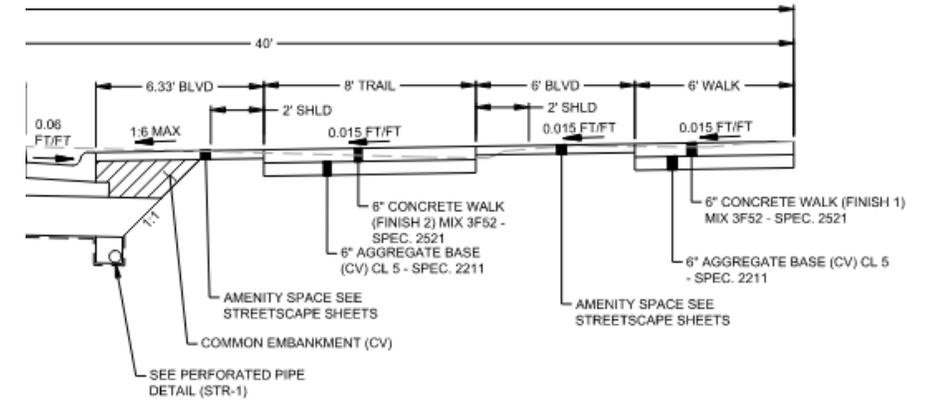
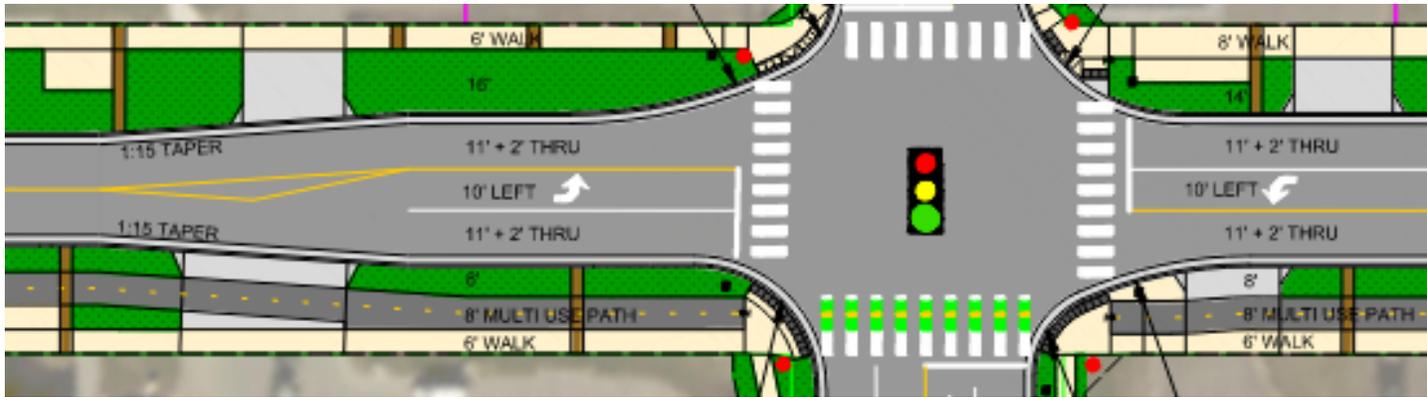
Who will use this zone? (applicant's car, Stride bus, etc.) _____



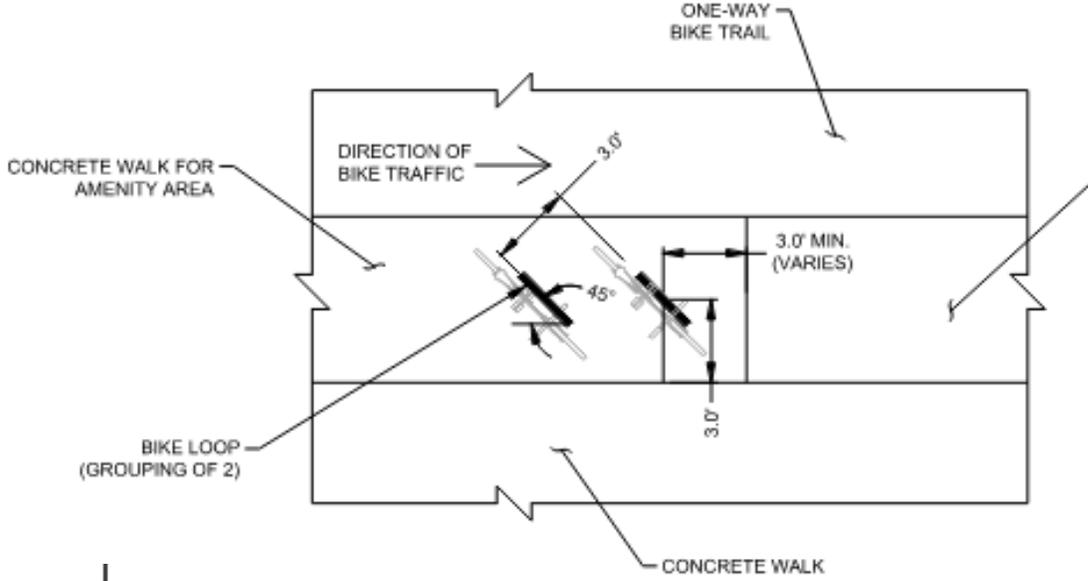
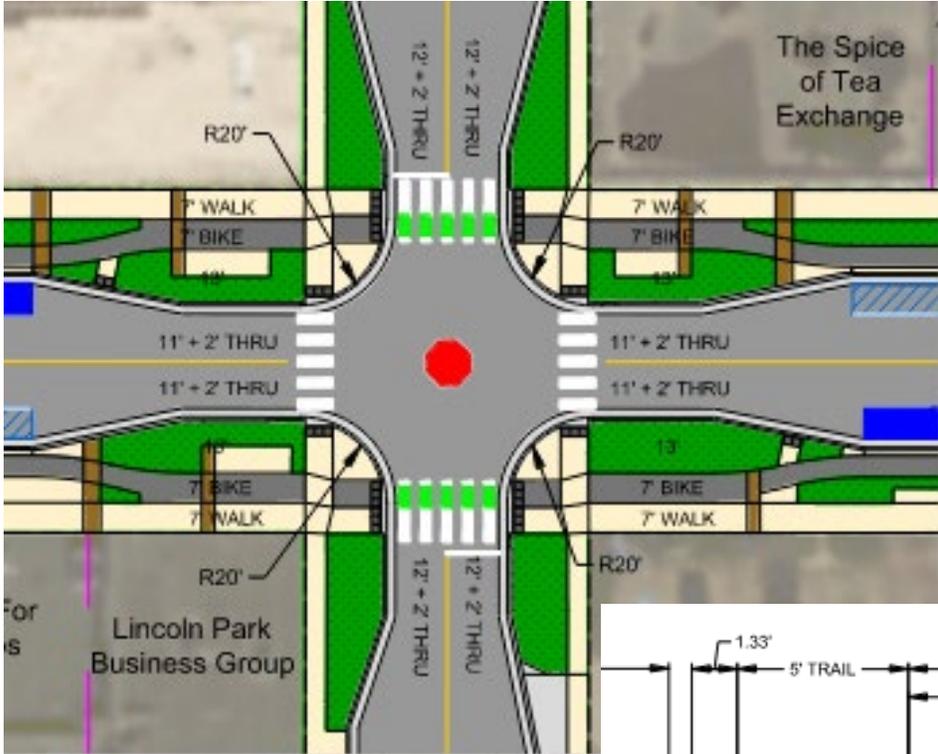
DTA Better Bus Blueprint Accommodations



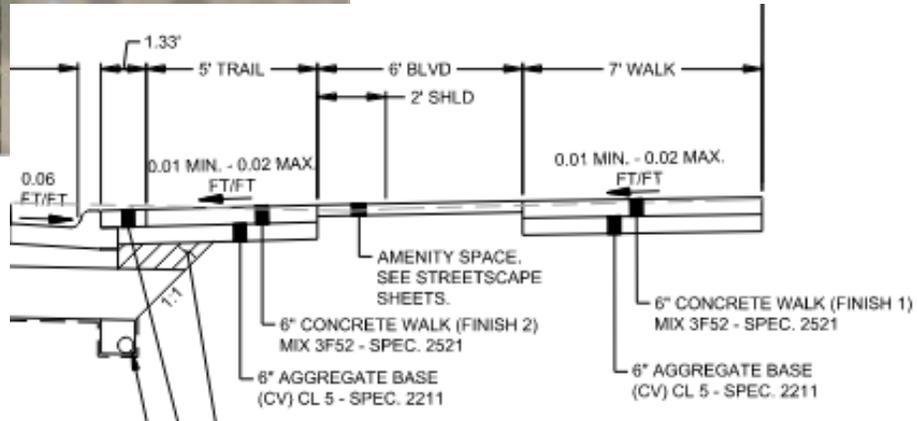
Bike and Pedestrian Design Elements



Bike and Pedestrian Design Elements



BIKE LOOP LAYOUT DETAIL @ ONE-WAY TRAIL (SOUTH SIDE)

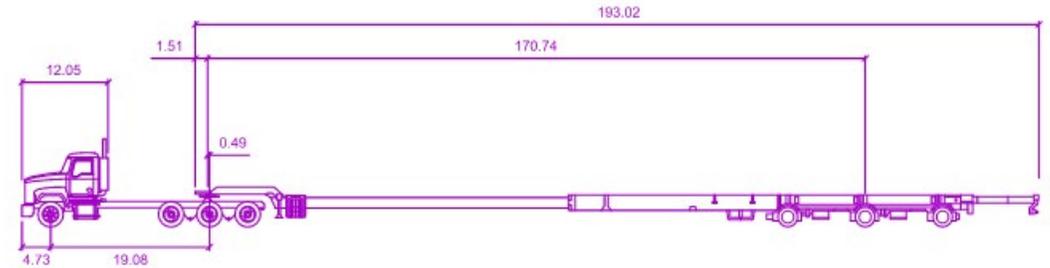
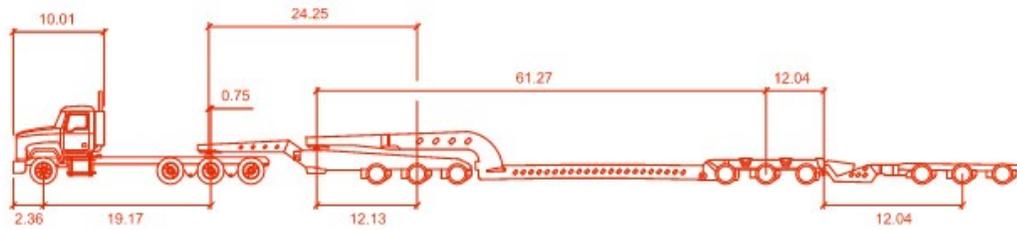


OSOW Routes in Project Area



- OSOW ROUTE
- - - HIGH CLEARANCE OSOW ROUTE
- - - PORT ROUTE ALT 1
- PORT ROUTE ALT 2

Design Vehicles for OSOW Routes

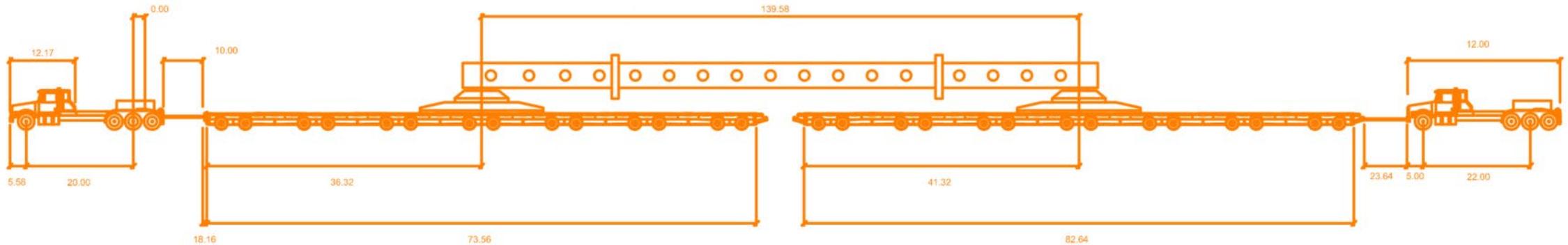


New OSOW Transport Vehicle

	feet		
First Unit Width	: 8.50	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 40.0
First Unit Track	: 8.50	Articulating Angle	: 70.0
Trailer Track	: 8.50		

ST - Wind Blade Trailer 3

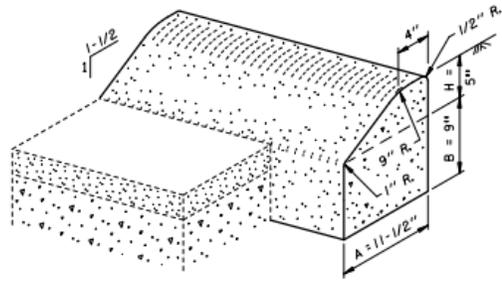
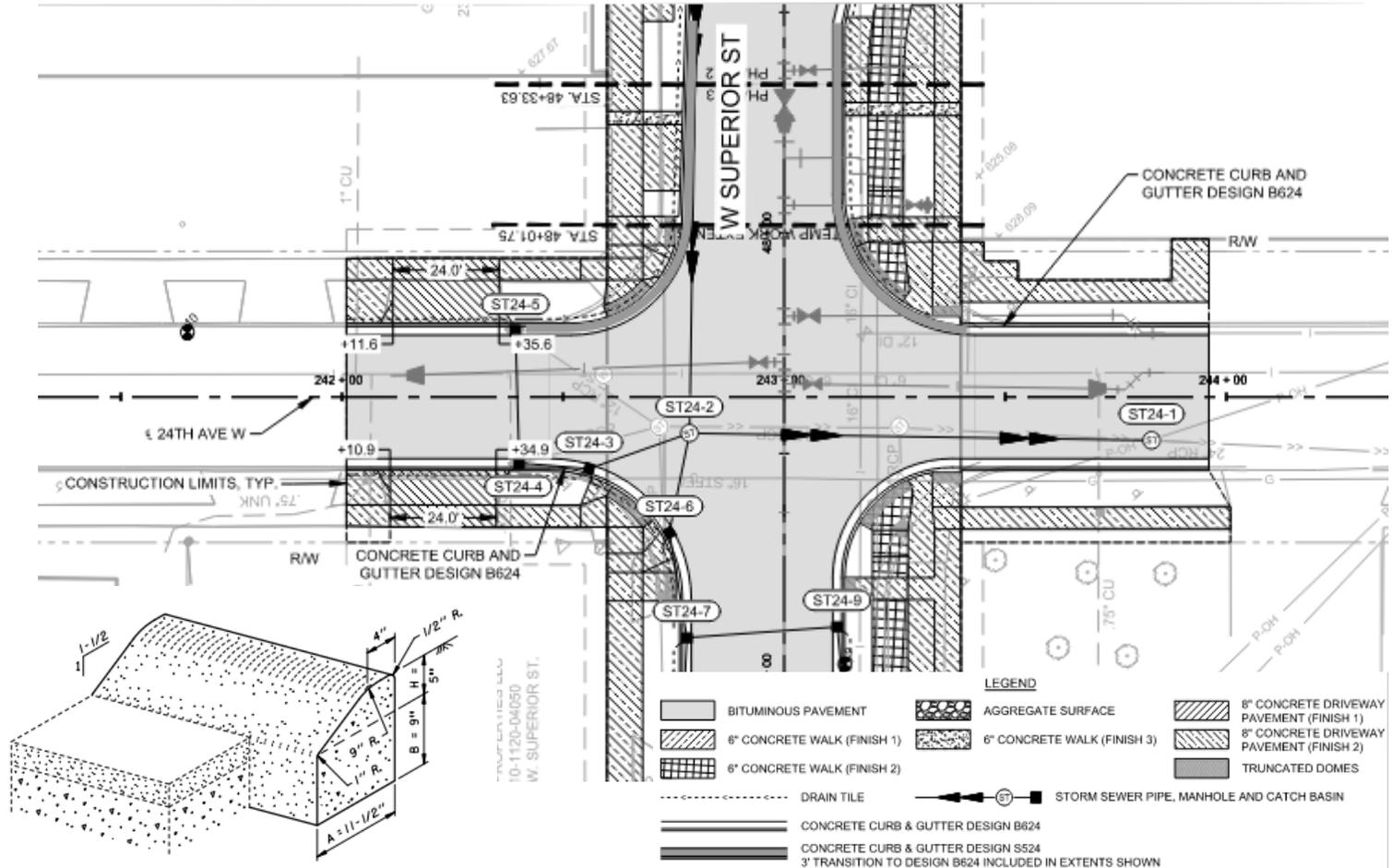
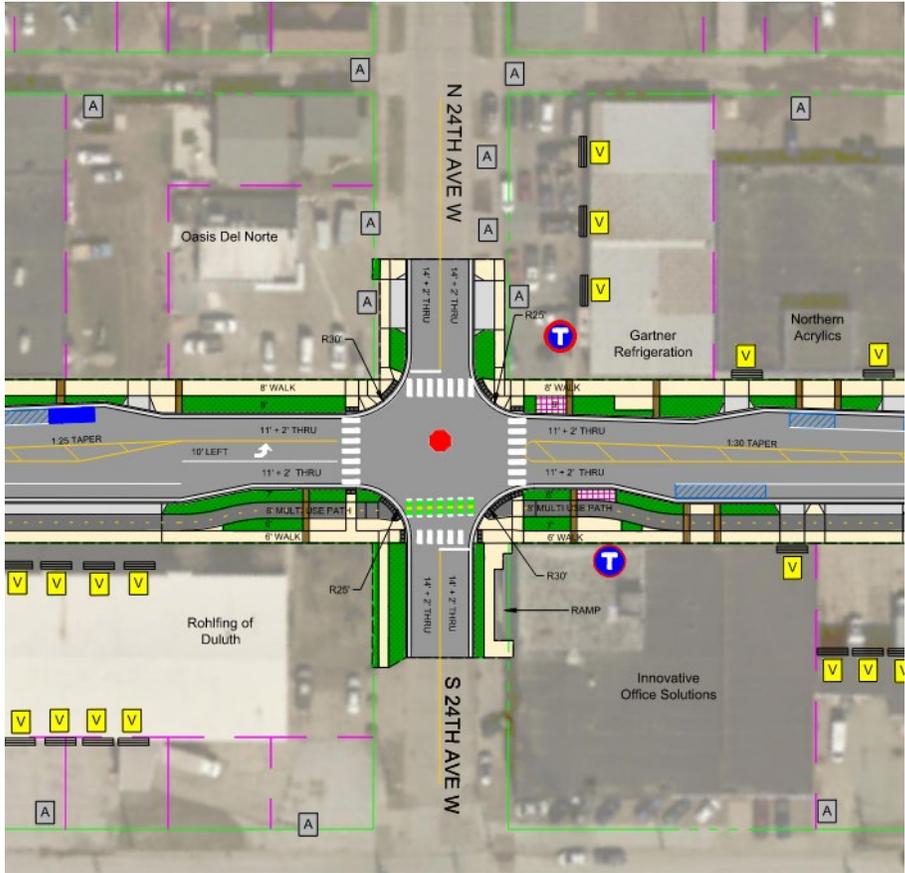
	feet		
First Unit Width	: 8.01	Lock to Lock Time	: 6.0
Trailer Width	: 2.99	Steering Angle	: 40.0
First Unit Track	: 8.01	Articulating Angle	: 70.0
Trailer Track	: 8.01		



BARNHART BOILER

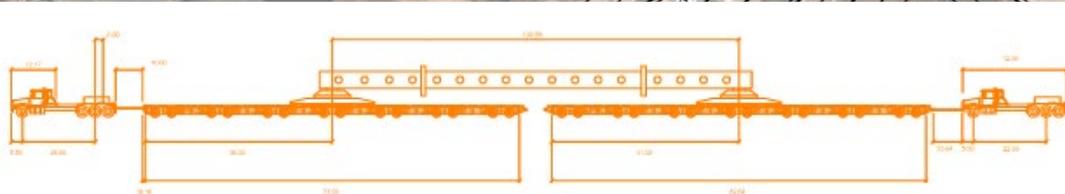
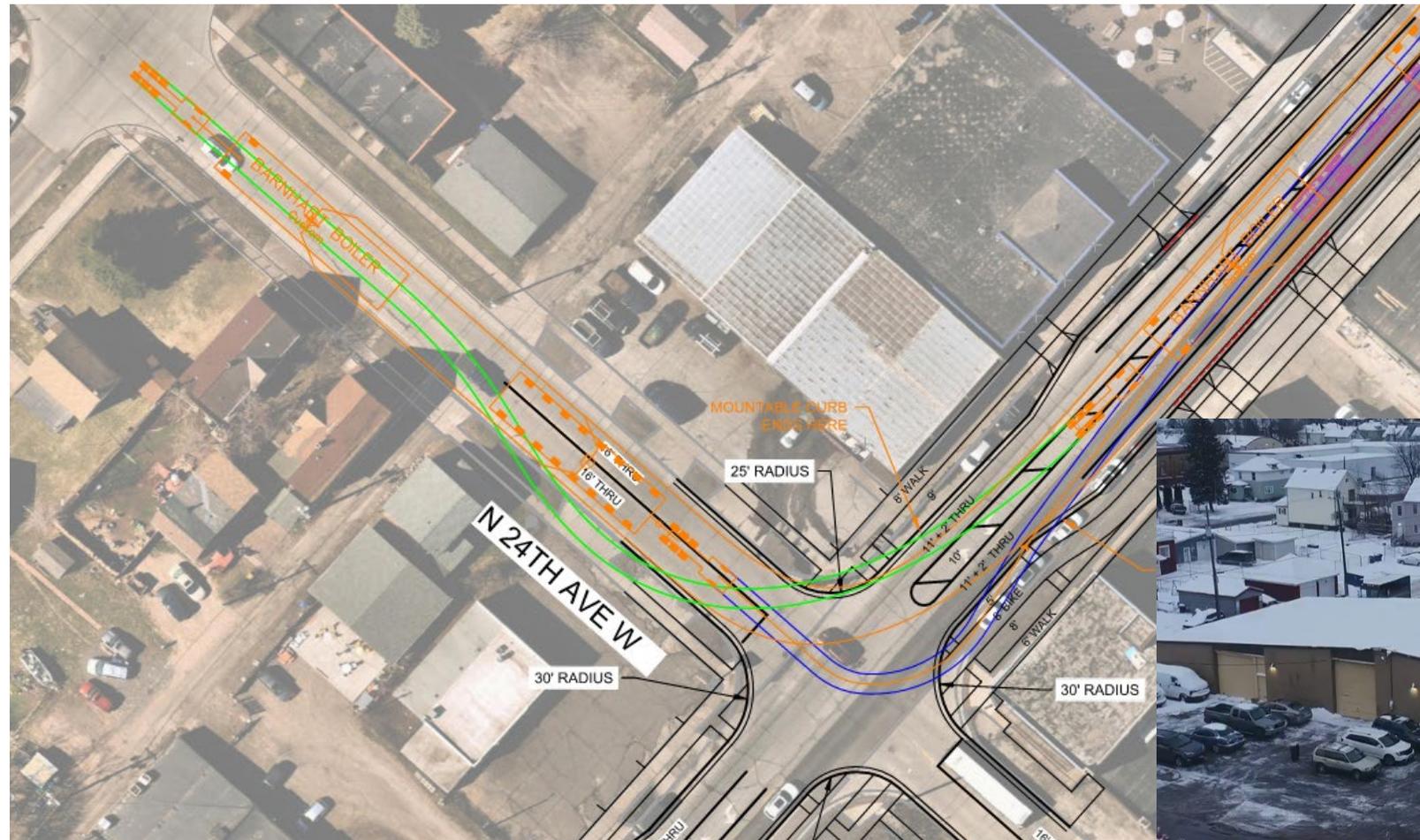
	feet		
Tractor Width	: 8.20	Lock to Lock Time	: 6.0
Trailer Width	: 18.00	Steering Angle	: 25.0
Tractor Track	: 8.20	Articulating Angle	: 50.0
Trailer Track	: 18.00		

24th Avenue West Layout

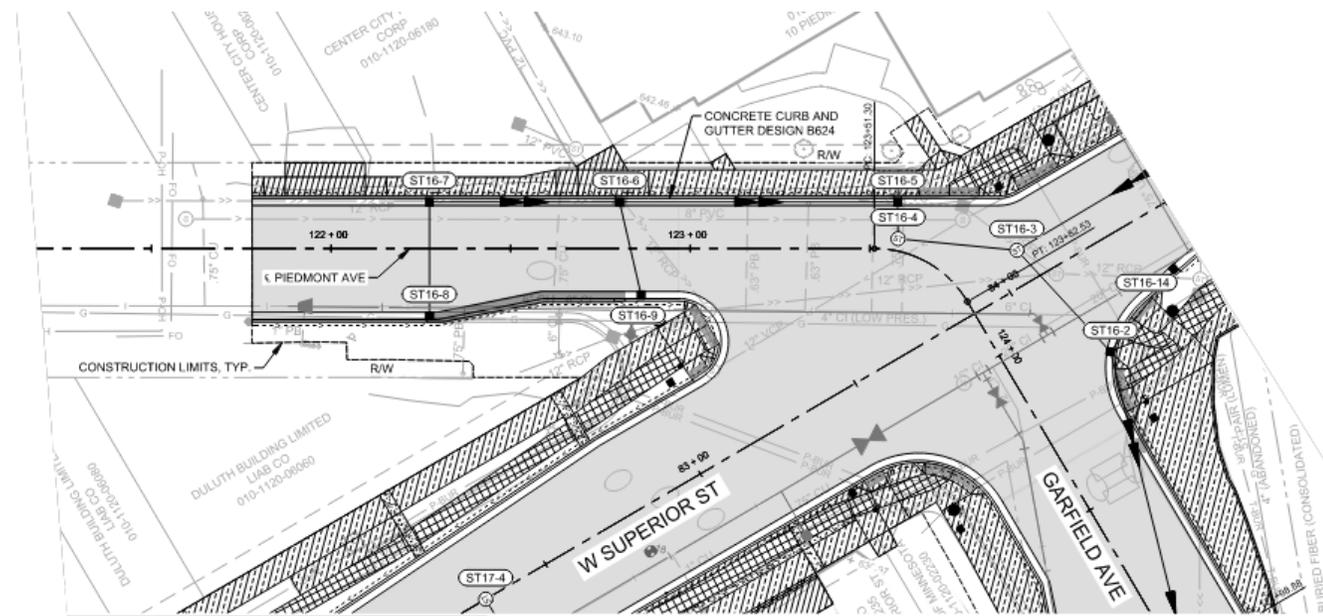
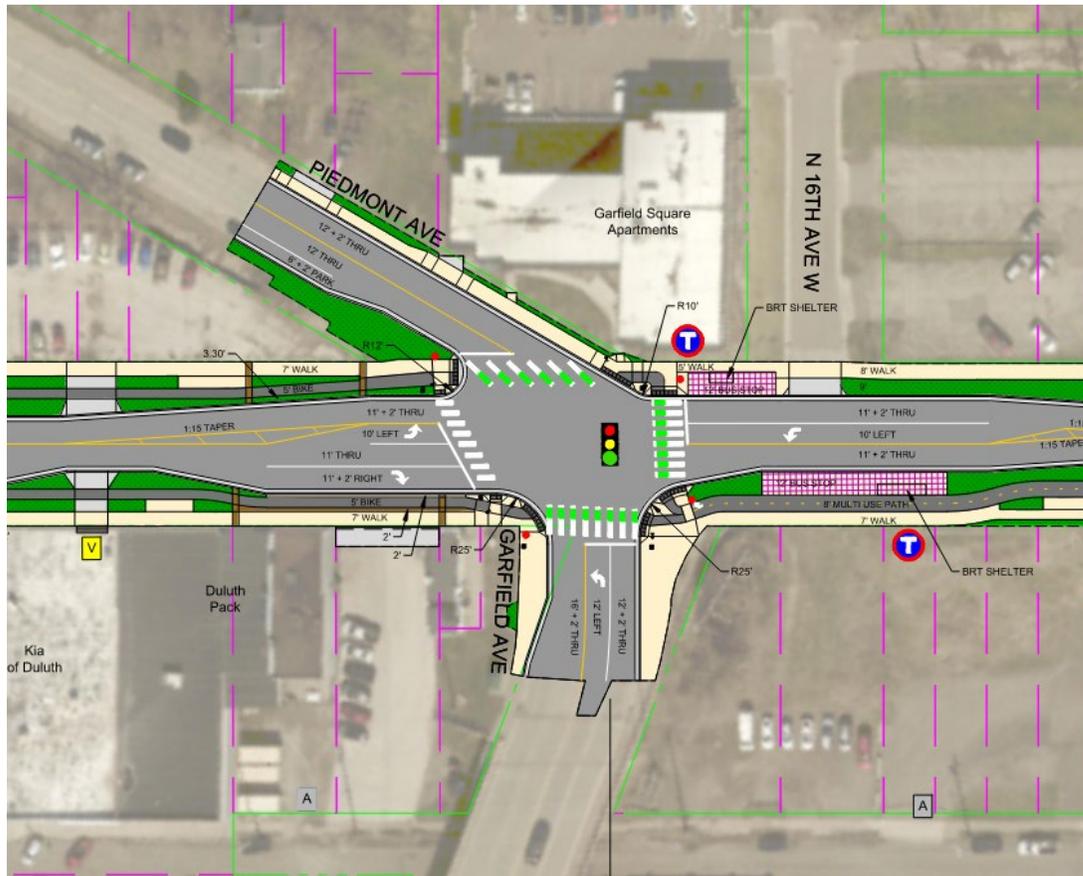


DESIGN S

24th Avenue West Turning Movements

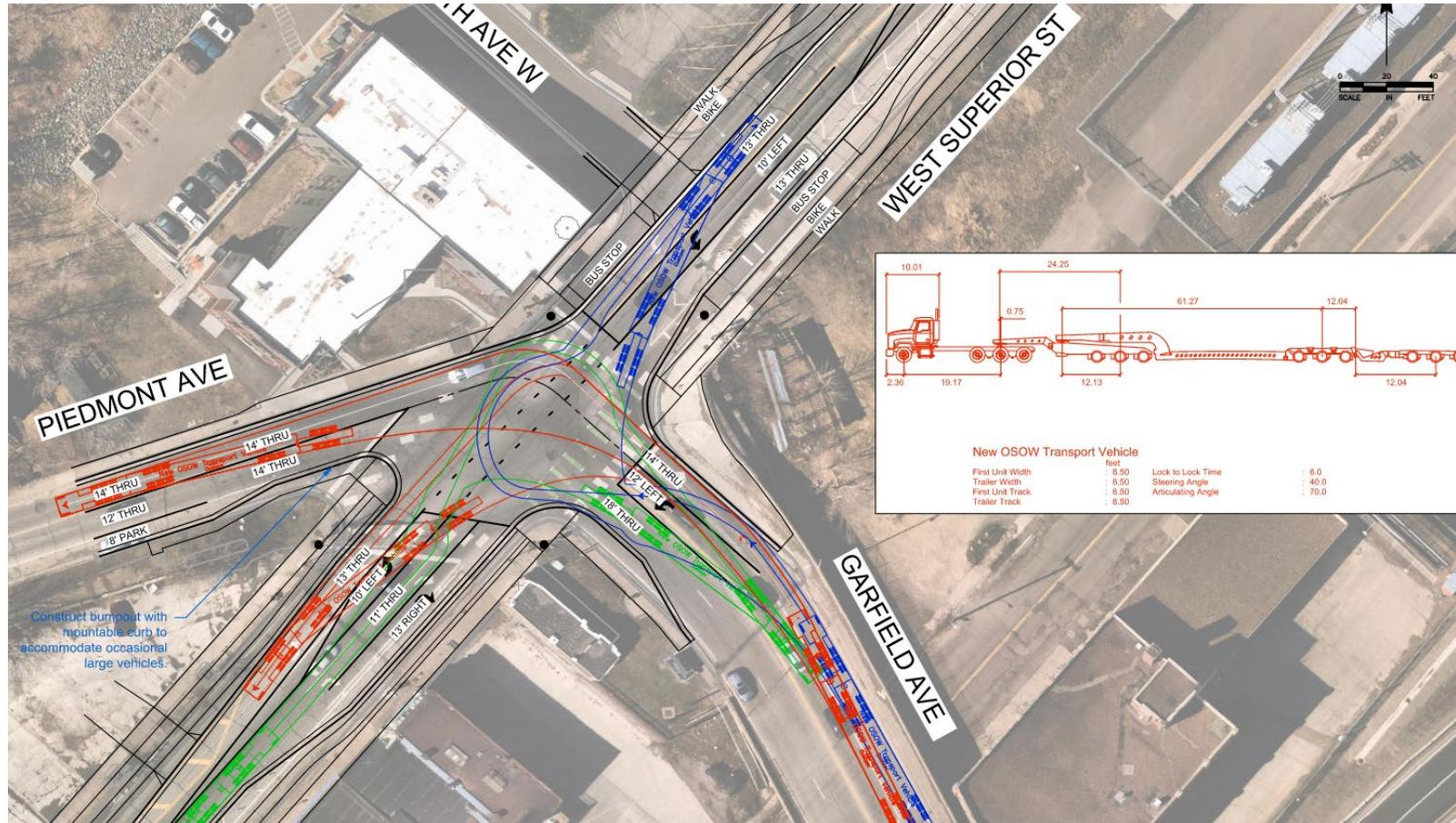


Garfield Avenue/Piedmont Avenue Layout

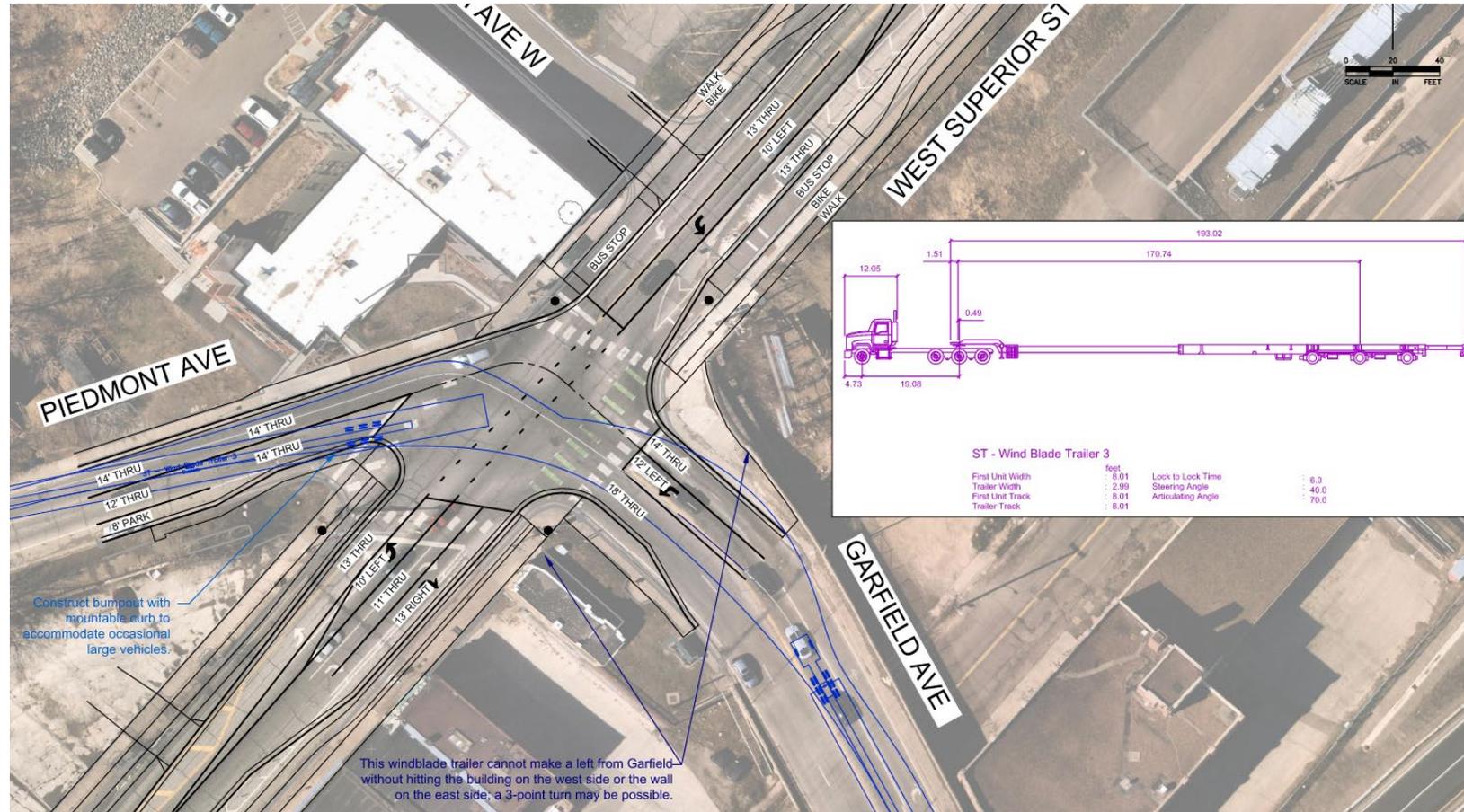


LEGEND			
	BITUMINOUS PAVEMENT		6" CONCRETE DRIVEWAY PAVEMENT (FINISH 1)
	6" CONCRETE WALK (FINISH 1)		6" CONCRETE WALK (FINISH 3)
	6" CONCRETE WALK (FINISH 2)		6" CONCRETE DRIVEWAY PAVEMENT (FINISH 2)
	TRUNCATED DOMES		STORM SEWER PIPE, MANHOLE AND CATCH BASIN
	DRAIN TILE		CONCRETE CURB & GUTTER DESIGN B624
	CONCRETE CURB & GUTTER DESIGN S524		3' TRANSITION TO DESIGN B624 INCLUDED IN EXTENTS SHOWN

Garfield Avenue/Piedmont Avenue Turning Movements



Garfield Avenue/Piedmont Avenue Turning Movements

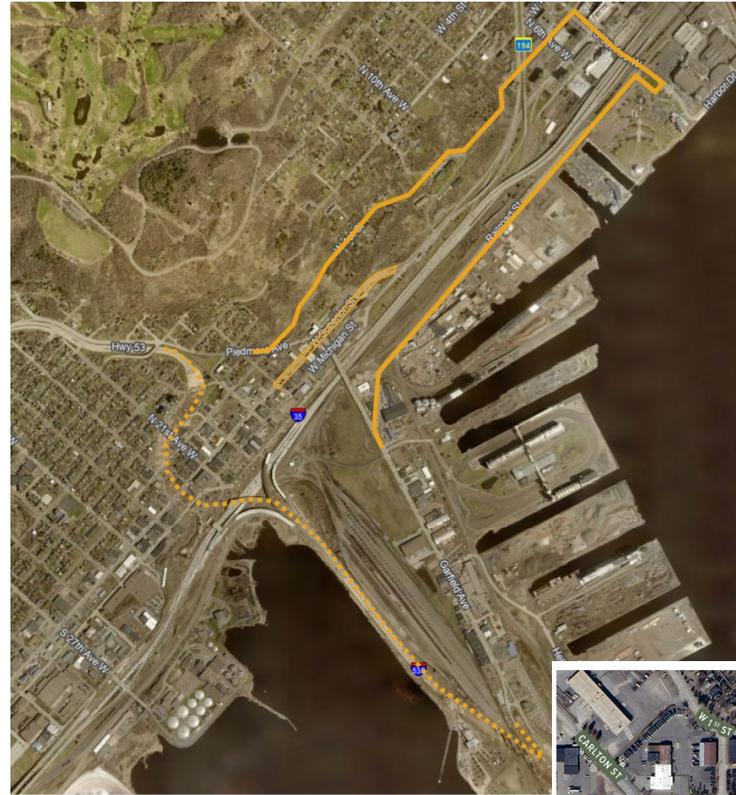


Project Phasing and Schedule

- 2025 Phase 0: 27th Avenue West and Michigan Street Intersections
- 2026 Phase 1: Michigan Street through 18th Avenue W
- 2027 Phase 2: 18th Avenue W to 24th Avenue W
- 2028 Phase 3: 24th Avenue W to Carlton Street



Detour Routes



2025

2026

2027

2028



Match Line - See Bottom View Left Side

Match Line - See Top View Right Side



Questions or Comments?

