

20th & 21st Streets Cross-Town Bicycle Route

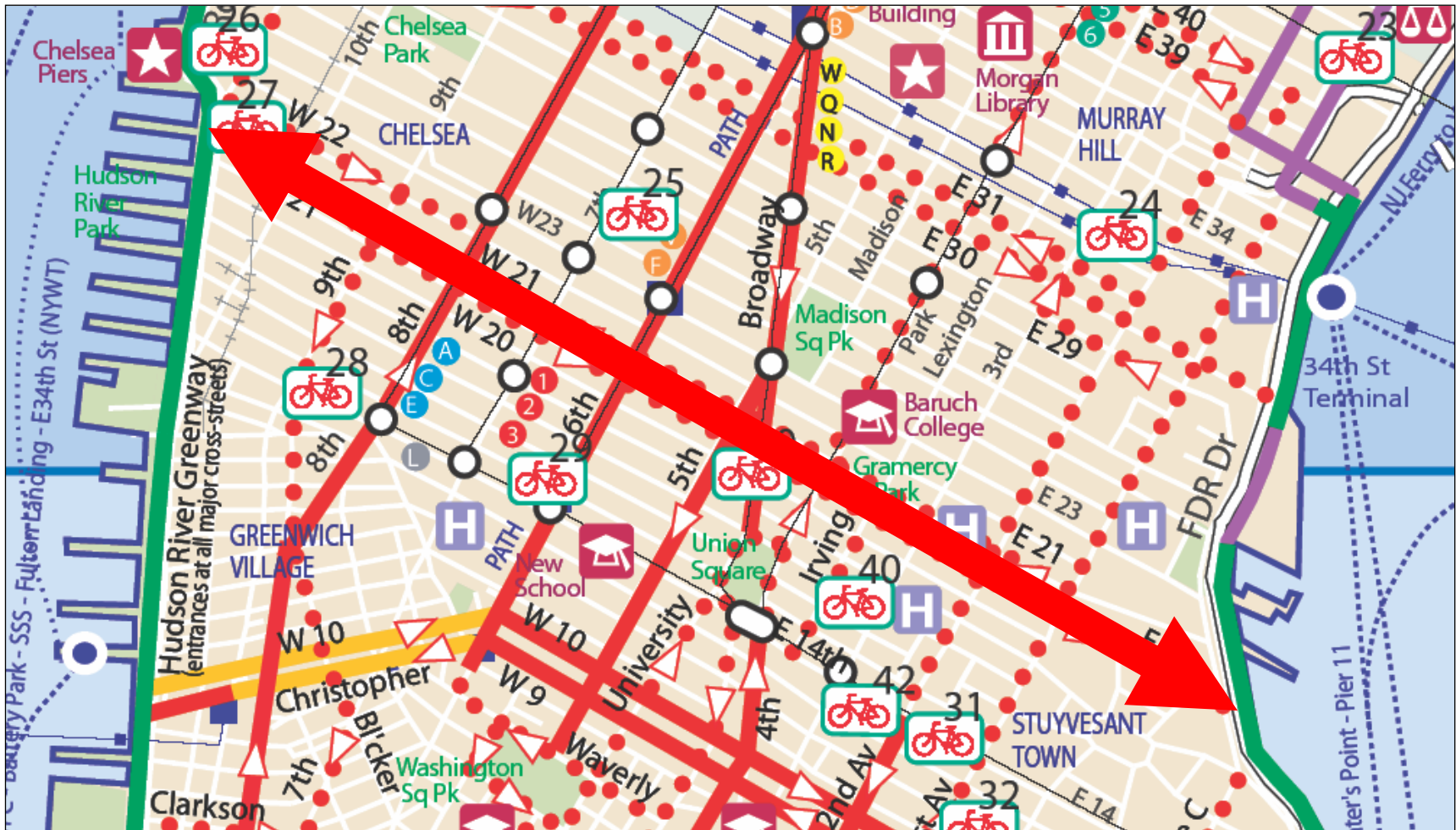


Division of Street Management & Safety
Traffic Operations Bureau
Presentation to CB 6, Manhattan
April, 2007

DOT 3-Year Bicycle Network Expansion Plan

- 200 mile expansion of on-street network
- Targeted to:
 - Increase connectivity
 - Areas with high demand
 - Citywide backbone of routes
- Routes from NYC *Bicycle Master Plan*

20th & 21st Streets: Bicycle Network Link



West Side: Connections



Chelsea Piers & Hudson River Park Bikeway

East Side: Connections



Stuyvesant Town & Peter Cooper Village

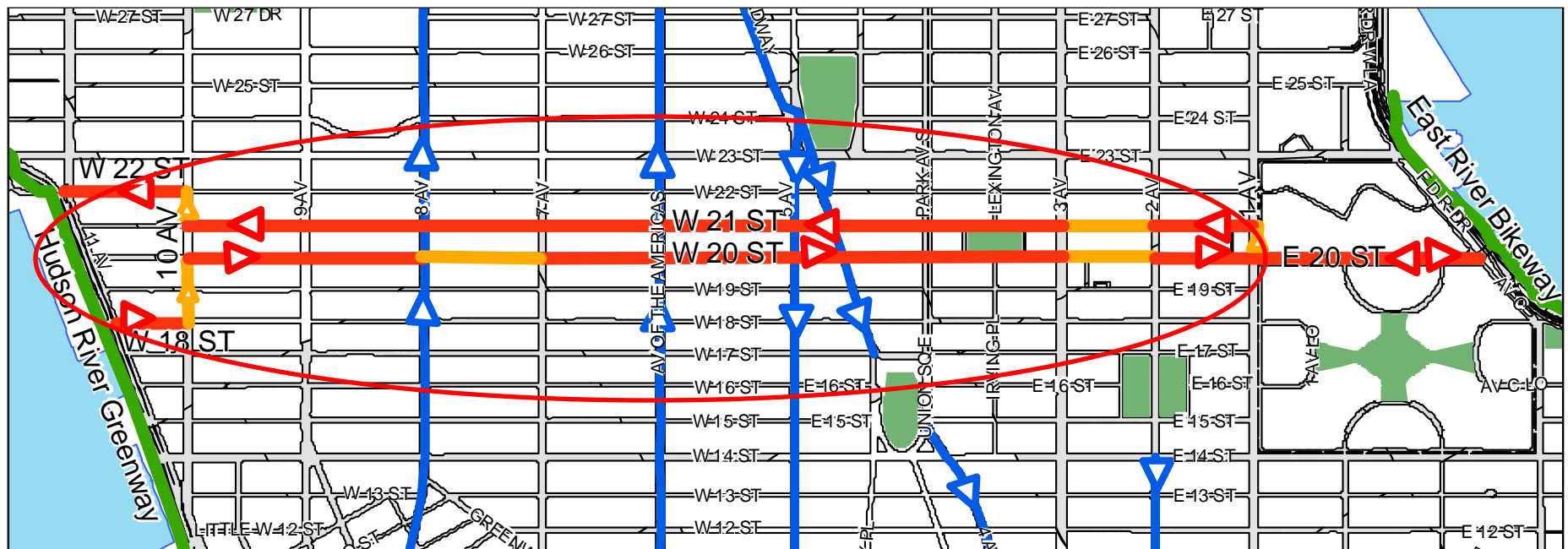


Stuyvesant Cove & East River Bikeway



20th & 21st Streets Bicycle Route: Project Summary

- 20th & 21st Streets (10th Ave to 1st Ave)
 - One-Way Pair
 - Bicycle Lanes
 - No Impact on Parking Lanes or Travel Lanes
- 18th & 22nd Streets (10th to 11th Ave)
 - Bicycle Lanes
 - Signalized crossings to Hudson River path
- 20th Street (East of 1st Ave)
 - "Road Diet" Travel Lane Reduction
 - Bicycle Lanes
 - Improved Bus Operations



20th & 21st Streets Bicycle Route: Project Map



Existing Bicycle Facilities

-  Class 1, Greenway / Off-Street Path
-  Class 2, Bicycle Lane

Planned Bicycle Facilities

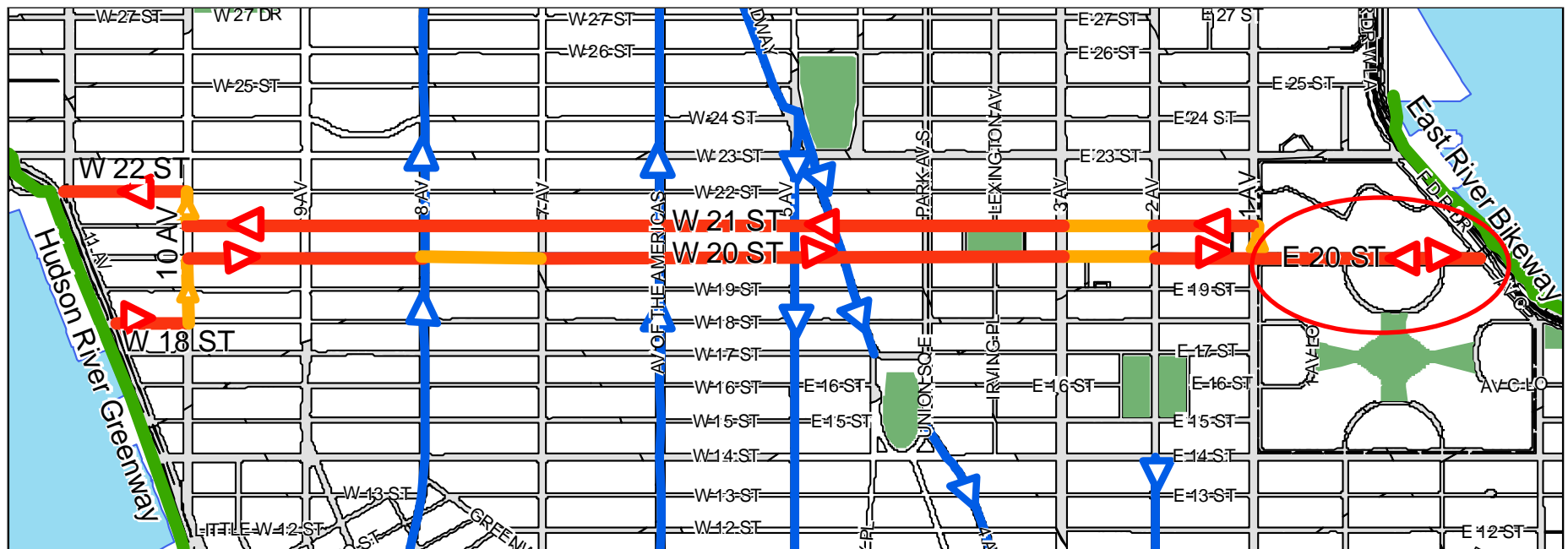
-  Class 2, Bicycle Lane
-  Class 3, Bicycle Route

Bicycle Lane Markings





Typical Bicycle Lane Markings for a Crosstown One-Way Street



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Existing Bicycle Facilities

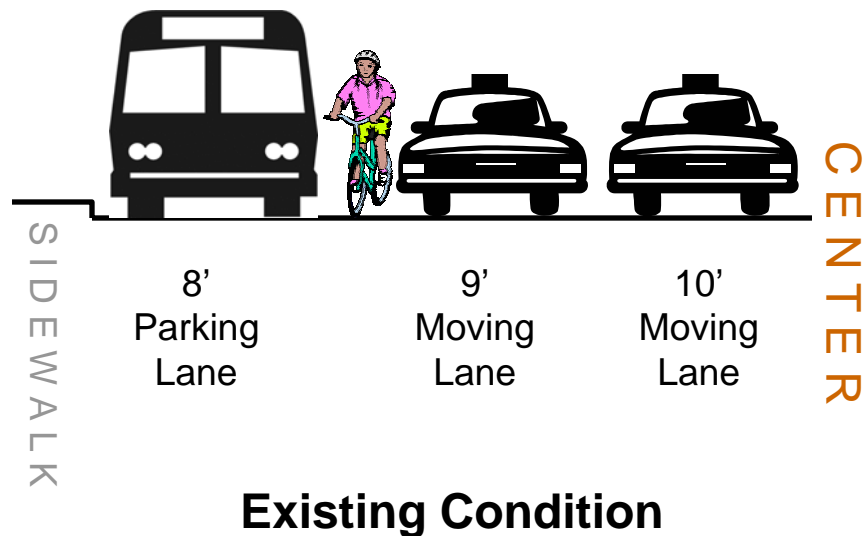
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Planned Bicycle Facilities

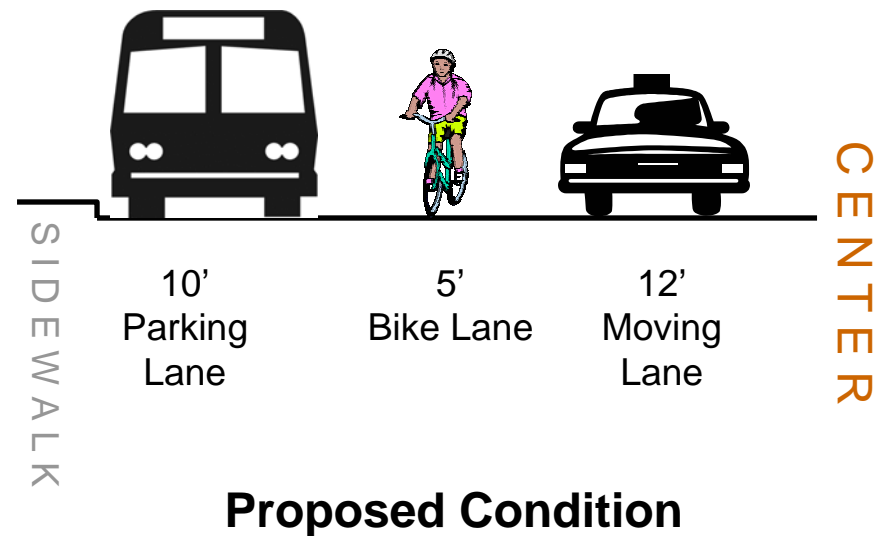
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Uncomfortable Cycling Environment

- Cyclist squeezes b/w moving lane and parked cars, or
- “Takes” moving lane



- Cyclist separated from travel lanes

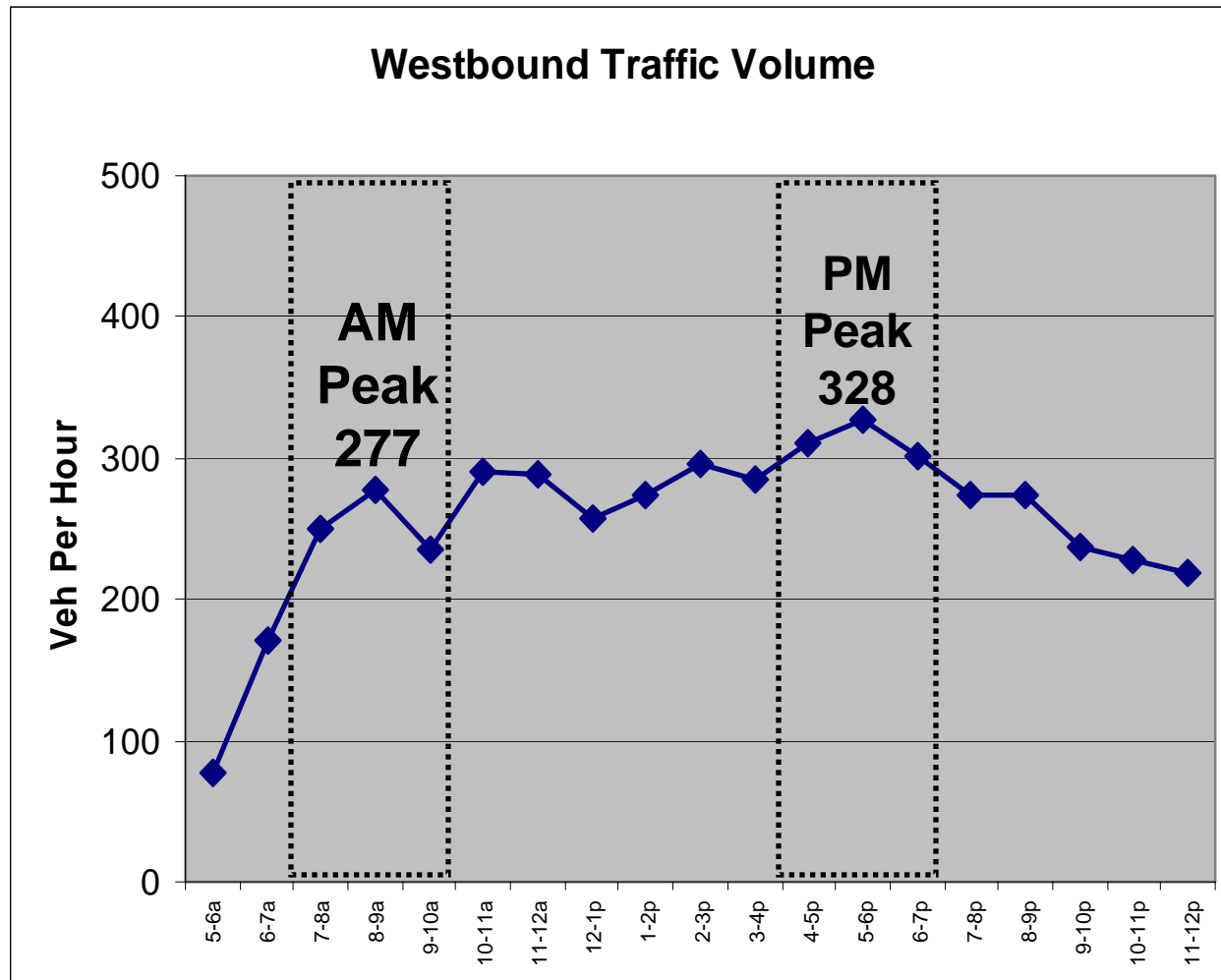


Excess Capacity: Speeds

- Excess Capacity
 - Grand Street (at Clinton): 590 vehicles per hour in peak hours
 - E 20th Street: 370 vehicles per hour in peak hours
- Speed Study (E/B E. 20th St, Midday sample)
 - 53% of vehicles exceed 30 mph speed limit
 - 85th Percentile Speed = 37mph
- Thru Lane Removal
 - 1 Lane: lead vehicle sets pace
 - Successful Speed reductions using “Road Diet”:
 - Vanderbilt Ave
 - Gerritsen Ave

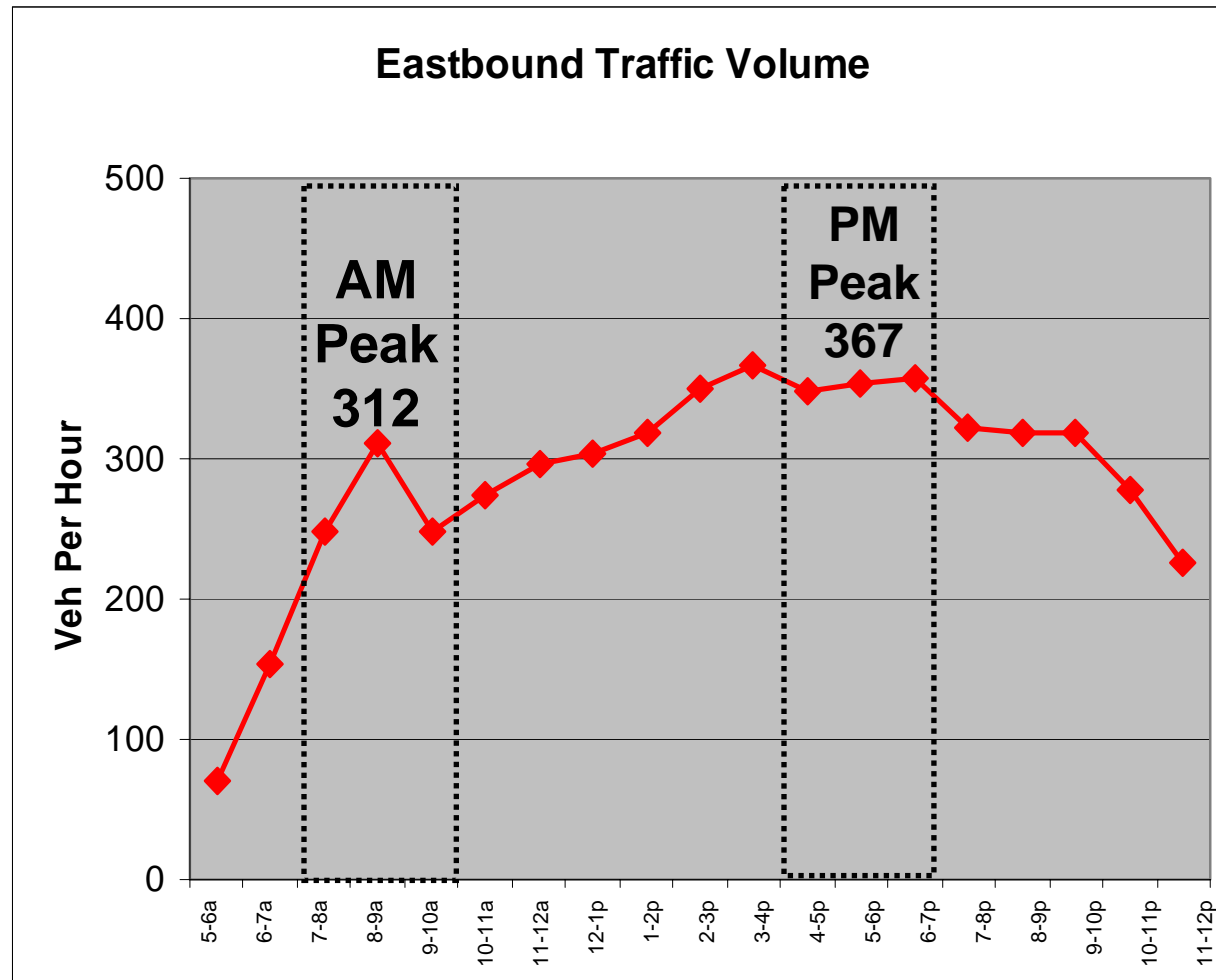


E 20th Street Traffic Volume



Traffic Counts performed on E 20th Street between 1st Ave & Avenue C, October 2006

E 20th Street Traffic Volume



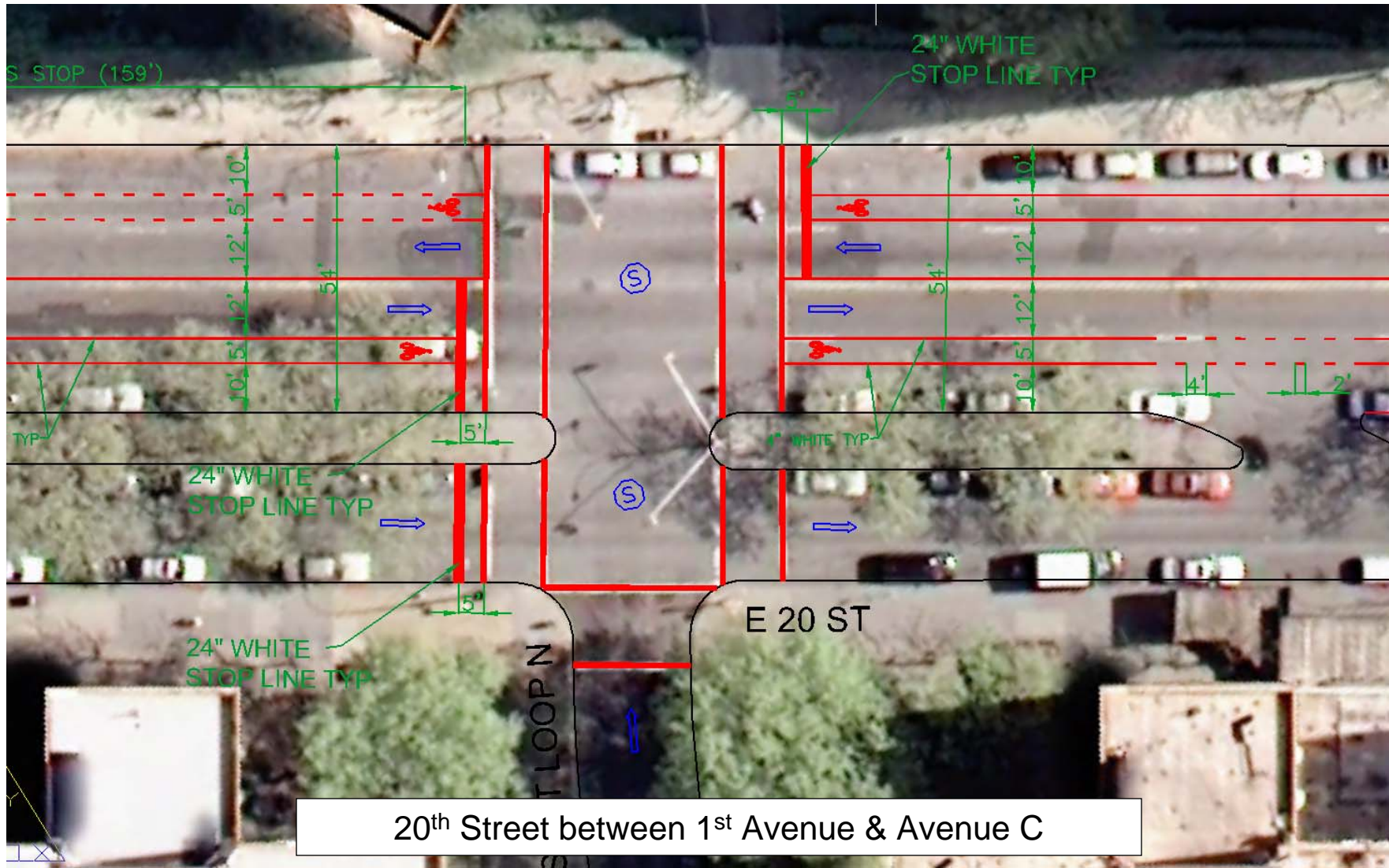
Traffic Counts performed on E 20th Street between 1st Ave & Avenue C, October 2006

Bicycle Lane Markings



Typical Bicycle Lane Markings for a Two-Way Street

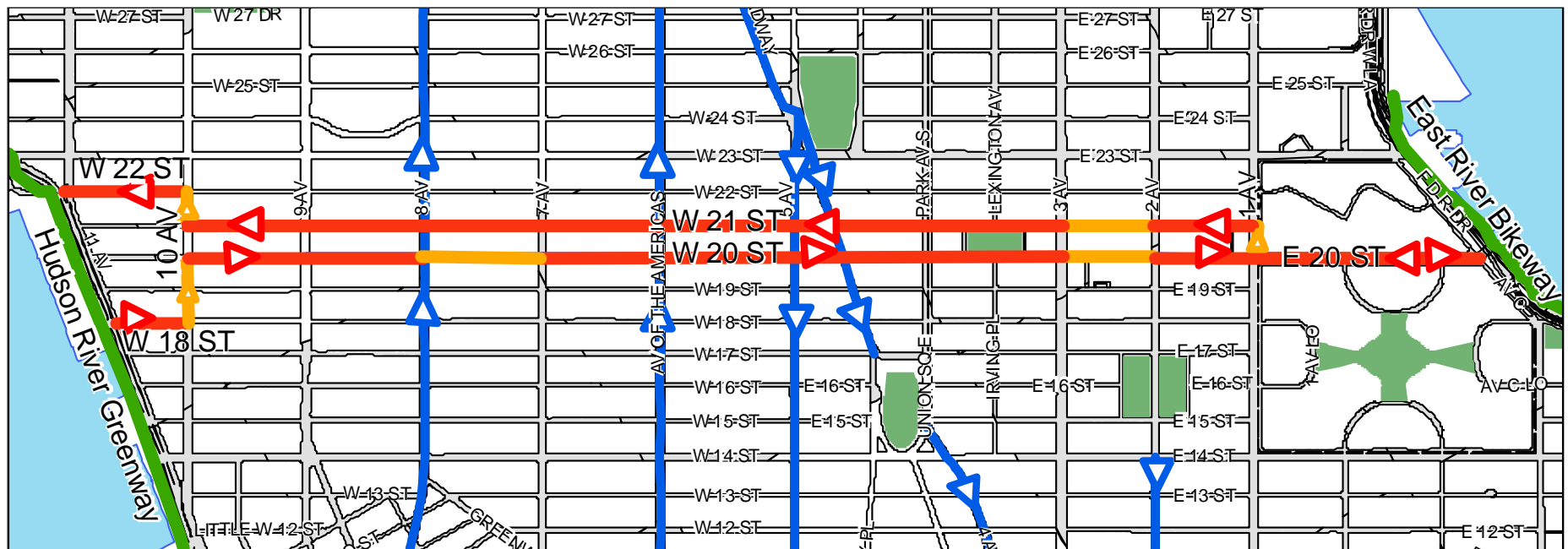
Bicycle Lane Markings





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Planned Bicycle Facilities

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End of Presentation