Hennepin County Minnesota

4th Street S Ramp to NB I-35W and Auxiliary Lane to Johnson Street NE

Presentation to:

Transportation and Public Works Committee of the Minneapolis City Council

November 15, 2011

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Presenter

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Senior Project Manager – Design Division

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Background

- The purpose and need for the project is to relieve congestion on Washington Avenue, removing traffic diverting to University/4th Street interchange, and improve transit access to NB I-35W.
- Estimated Cost of $13.4 Million
- Cost Breakdown:
  - $9.4 Million State Bonds
  - $4.0 Million Local Match
- Project Team consists of Hennepin County, City of Minneapolis, and MnDOT

Project Scope

- Northbound ramp from 4th Street South to I-35W
- 4th Street South eastbound double left turn lane to northbound I-35W
- Auxiliary lane from north end of I-35W bridge to Johnson Street NE
- Development of a concept that is consistent with or does not preclude a managed facility on I-35W (Mn/Pass or HOV)

Project Scope (cont.)

- Remove one of two lanes from Hwy 55 to NB I-35W
- Reconfigure Johnson Street exit to serve Johnson Street, New Brighton Boulevard, and Stinson Boulevard
- Add retaining walls on portions of I-35W
- Analyze freeway traffic noise and mitigate with noise walls where necessary

Public Involvement

Open Houses & Exhibitions:

- Open House #1 – August 23rd
- Third Ward Neighborhoodfest
- Open House #2 – October 25th

Media Coverage:

- Northeaster, October 19th
- The Journal, November 7th

Public Involvement (cont.)

Presentations:

- Central Corridor Management Committee
- Downtown Minneapolis Transportation Management Organization
- Windom Park Neighborhood
- Beltrami Neighborhood

Project Schedule

June-Sept. 2011	• Preliminary Engineering
Sept. – Dec. 2011	• Public hearing and approval process
December 2011	• RFP Release
February 2012	• Open bids
November 2012	• Substantial Construction Complete

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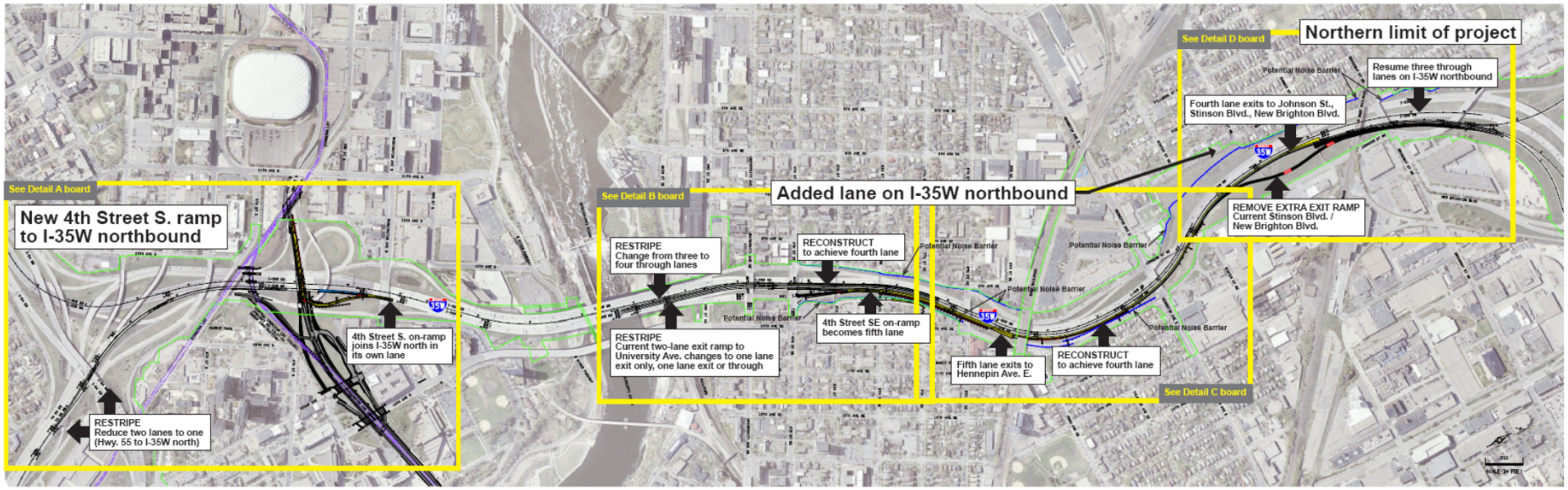
4th Street S Ramp and Auxiliary Lane

Project Scope



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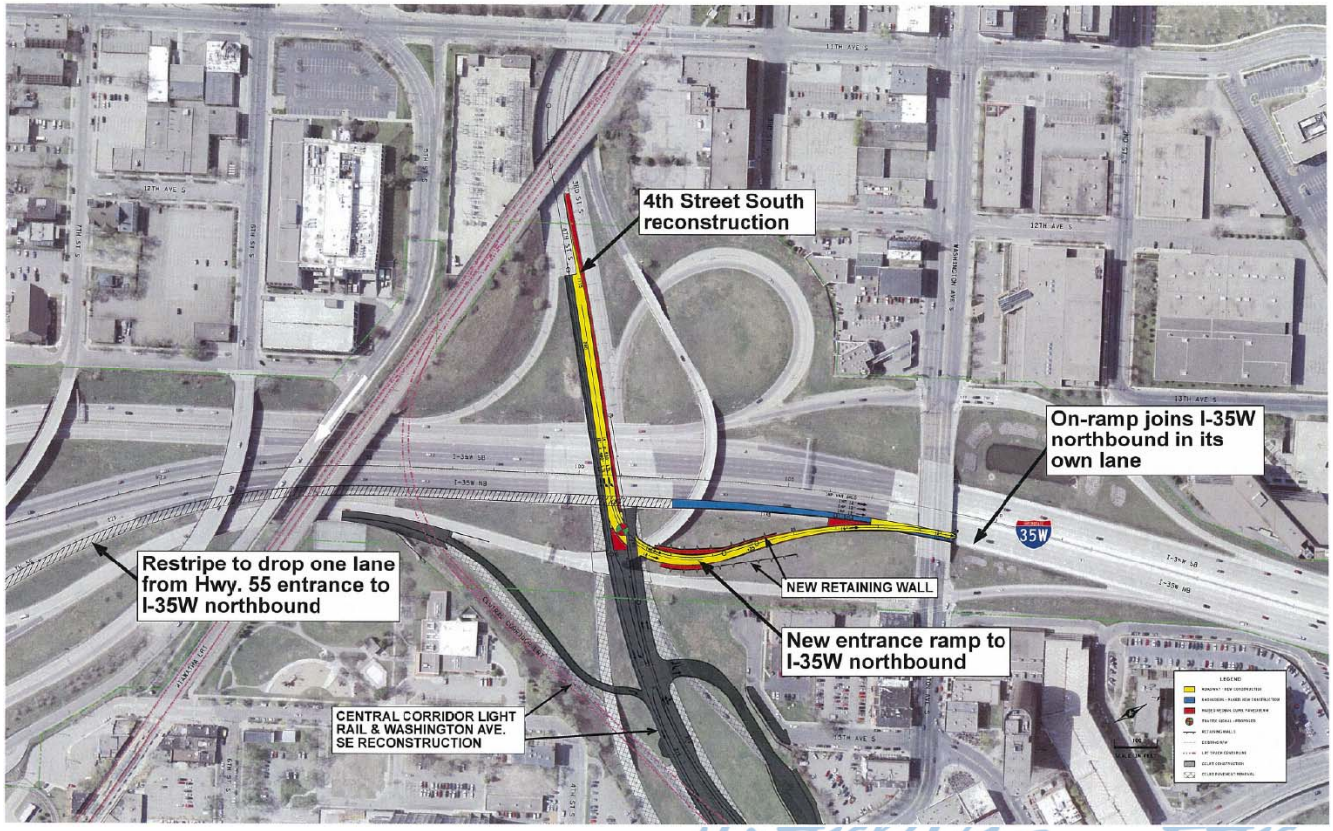
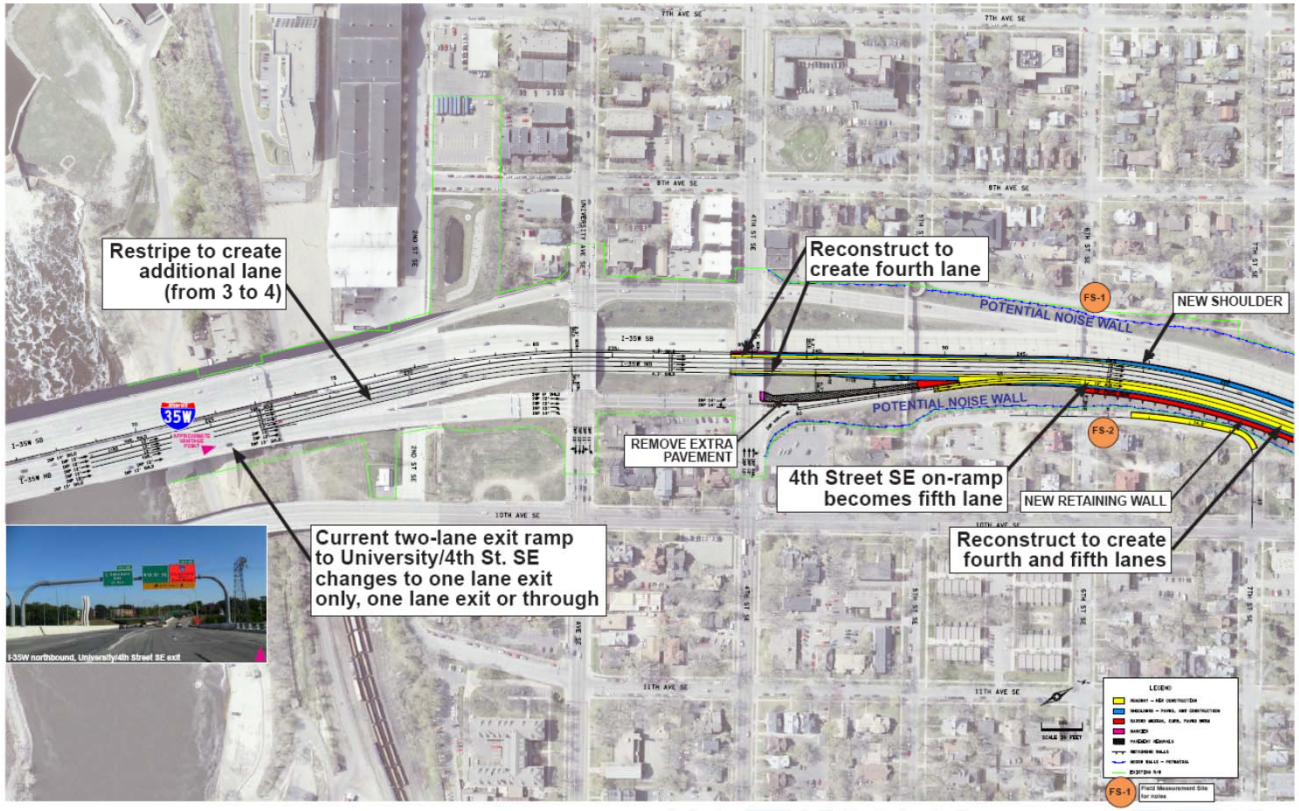
4th Street S and I-35W Interchange

Detail A: 4th Street South Ramp



I-35W Lanes Added Map 1

Detail B: I-35W, River to 8th Street SE



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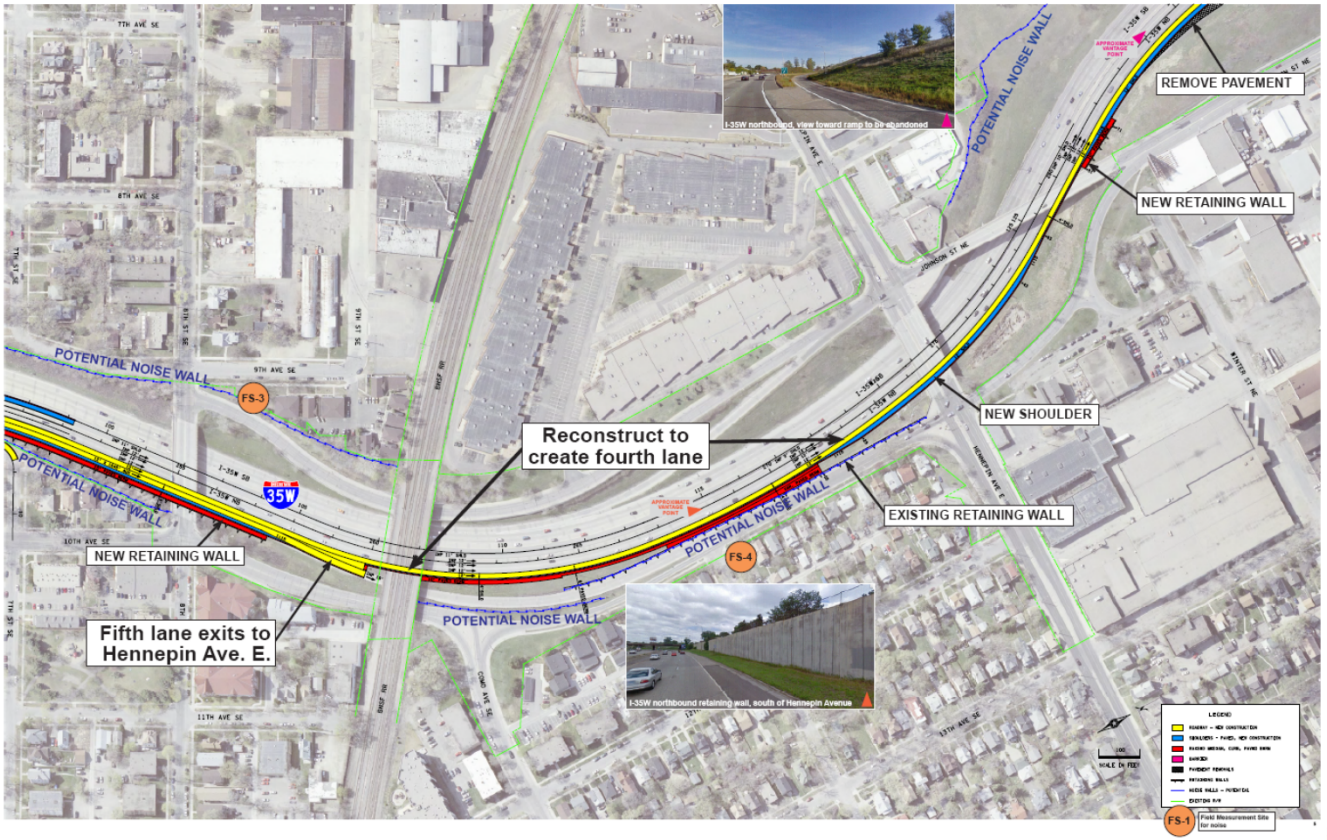
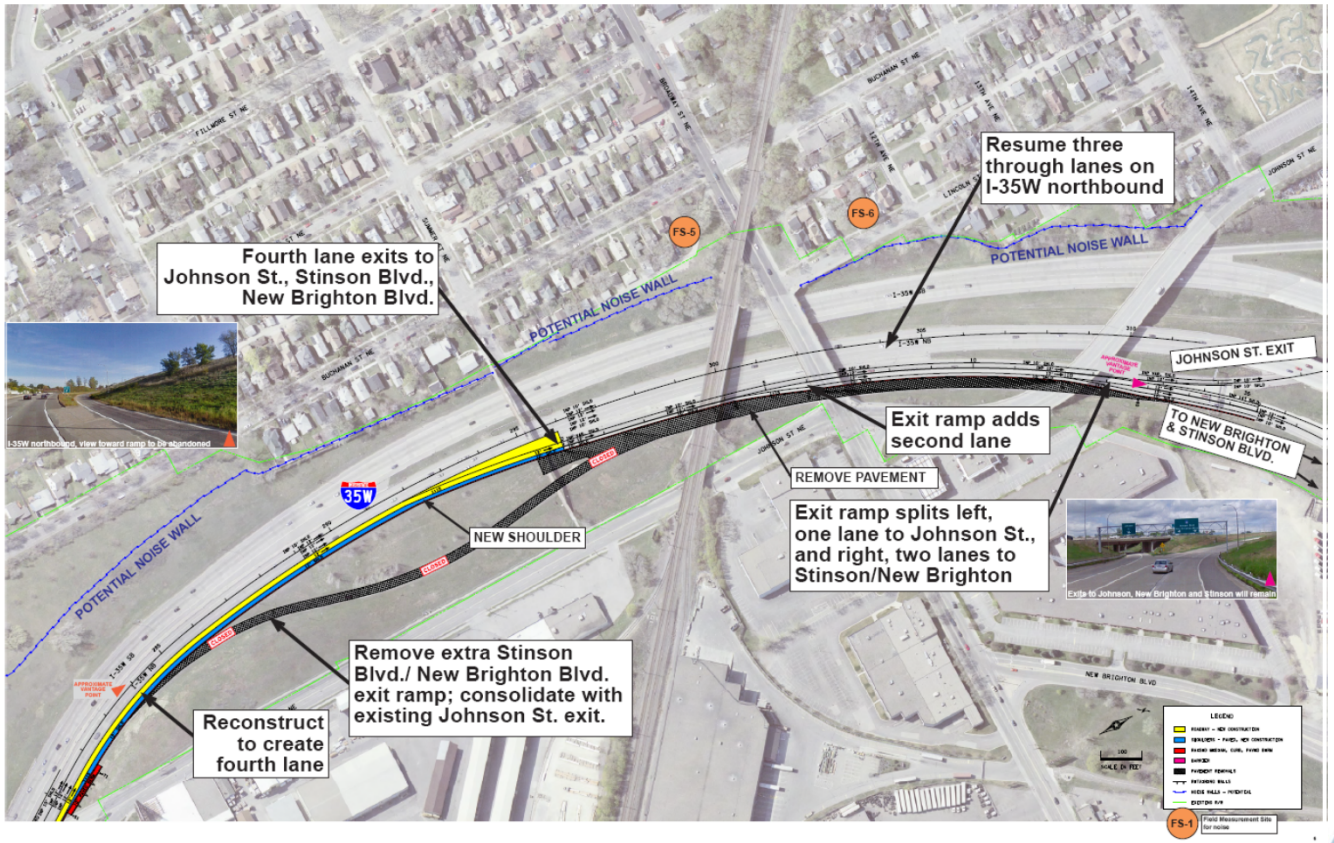
I-35W Lanes Added Map 2

Detail C: I-35W, 8th Street SE to Johnson Street NE



I-35W Lanes Added Map 3

Detail D: I-35W, Johnson Street NE to New Brighton Blvd.



Noise Policy and Process

Noise Barrier Policy and Process

Mn/DOT Noise Process

1. Identify land uses along corridor
2. Review historical Mn/DOT noise measurements
3. Using MINNOISE, model loudest hour traffic noise levels:
   - Existing condition daytime (7 a.m. –10 p.m.) and nighttime (10 p.m. – 7 a.m.)
   - No-build: Design year daytime and nighttime
   - Build: Design year daytime and nighttime
4. Compare design year noise levels to the Minnesota State Noise Standards
5. Using MINNOISE, model potential noise barriers along the corridor for receptors that exceed the Minnesota State Noise Standard
   - Determine if noise barriers are feasible
     - One receptor per barrier must receive a 5 dBA reduction
     - Barrier maximum height of 20 feet
     - Review constructability, safety, topography, drainage, utilities, maintenance issues, etc.
   - Determine if noise barriers are reasonable
     - One receptor per barrier must meet a noise reduction design goal of 7 dBA
     - Cost per noise barrier cannot exceed $43,500 per benefited receptor
     - Solicit viewpoints of benefited owners/ residents (those who receive at least a 5 dBA reduction)
6. Noise barriers that are feasible and reasonable will be identified in the environmental document as being likely to be constructed
7. Final recommendations on the construction of noise barriers is determined during final design

Minnesota State Noise Standards

Land Use	Code	Daytime dBA (7 a.m. – 10 p.m.)		Nighttime dBA (10 p.m. – 7 a.m.)	
Residential	NAC-1	L_{10} of 65	L_{50} of 60	L_{10} of 55	L_{50} of 50
Commercial	NAC-2	L_{10} of 70	L_{50} of 65	L_{10} of 70	L_{50} of 65
Industrial	NAC-3	L_{10} of 80	L_{50} of 75	L_{10} of 80	L_{50} of 75

Definitions

dB Decibel; a unit of sound pressure level

dBA A weighted dB that closely represents what humans hear

L10 Sound level exceeded 10 percent of the time

L50 Sound level exceeded 50 percent of the time

MINNOISE Mn/DOT's computer model for developing traffic noise levels

NAC Noise Area Classification

Receptor An outdoor place where frequent human use occurs and a lowered noise level may be of benefit.

Thank you! Questions?

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