



# Statewide Work Zone Safety Meeting November 2, 2017

**Ted Ulven**

**Work Zone Safety and Training**

**MnDOT Office of Construction and Innovative Contracting**



# D1 project pictures

June 2017

# Distracted Flagger



# Distracted Flagger



# DSD sign



# Lane shift and positive protection



# Roundabout construction



# Roundabout construction



# Approach to Roundabout construction bypass



# Special signing



# Culvert installation under traffic



# Use of PCMS for advance warning



# Advance signs trying to be noticed



# Lane shift and TWLTL closure



# Extra signing to deter pedestrains



# IWZ typically used on Interstate 35 projects



# Advance signing with static Zipper Merge



# Typical 2L2W operation



# Crossover TTC



# Miles of advance notice signing



# Mowing operation using mobile TTC





# D2 project pictures

July 2017

# Bemidji bypass, Nice use of tape striping



# Crossover and ramp exit



# Bicycles on the bypass.



# Deer River TH 2 detour



# Accommodating Peds



# Sanitary sewer installation



# Work area



# Westbound TH 2



# Storm Sewer installation



# Kennedy Bridge deck work



# TH 2 EB lane shift – ND side



# TH 2 EB lane shift – MN side



# Temporary pier



# New pier



# Contractor name sign





# D3 project pictures

July 2017

# TH 371 Bridge construction



# Many versatile uses of PCMS



# Maintaining turn lanes



# Long Prairie ADA improvements



# Long Prairie ADA improvements



# Long Prairie ADA improvements



# Roundabout construction



# Roundabout bypass



# Bypass and positive protection



# Parking lot bypass



# Typical road closure



# Flagger control



# Single lane traffic thru Work Zone



# Bypass construction





# D4 project pictures

June 2017

# Roundabout construction



# Roundabout construction



# Flagger control



# New drums with 6 inch sheeting



# New signs



# Culvert installation under traffic



# Flagger control



# Closed County Road



# PCMS without spellchecker



# Flagger Control



# PCMS on most projects



# Benson ADA upgrades



# Benson ADA upgrades



# Benson ADA upgrades



# TH 59 M&O



# TH 59 M&O



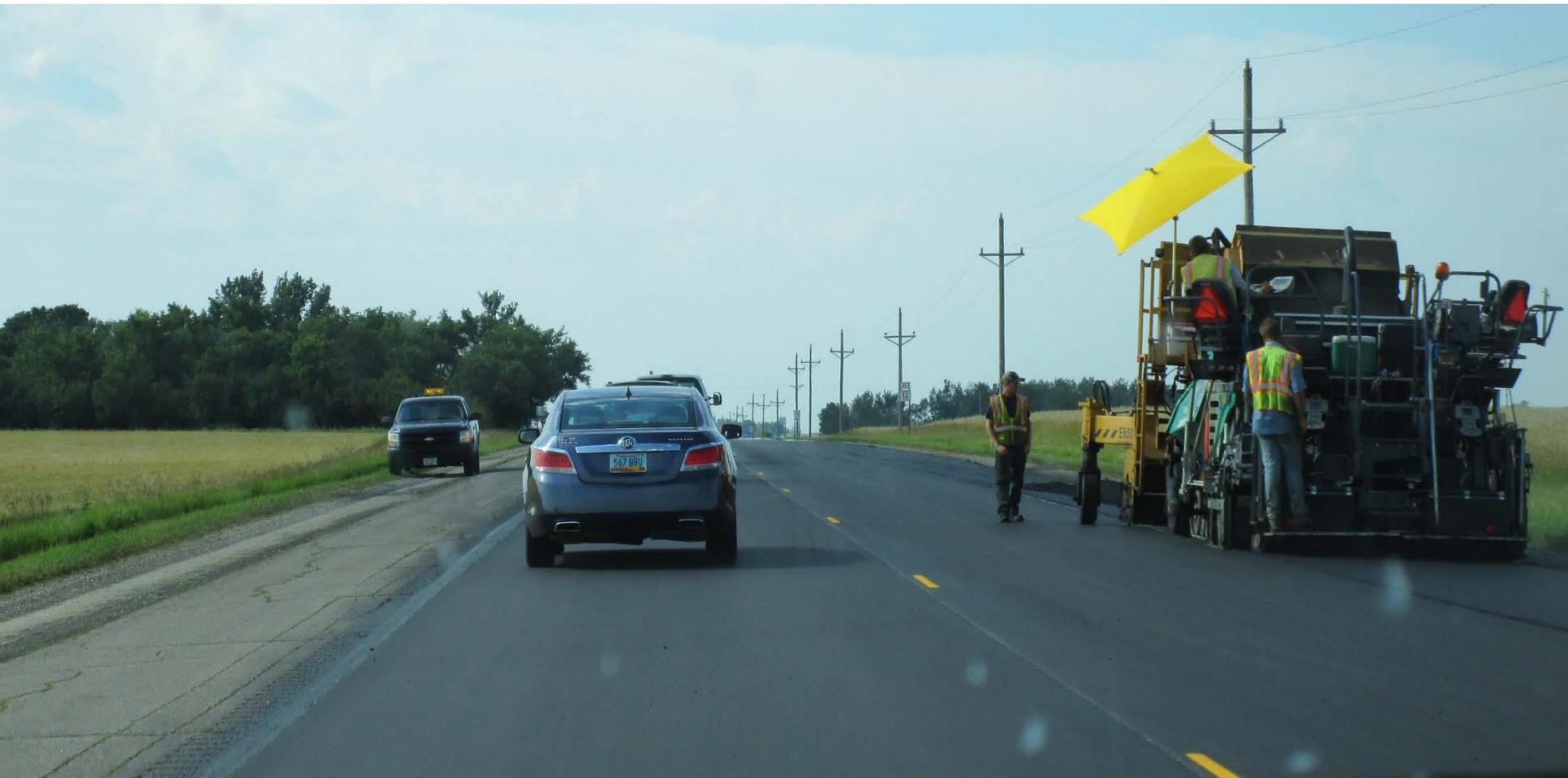
# TH 59 M&O



# Interim striping



# TH 59 M&O





# D6 project pictures

2017

# TH 52 Bridge Work



# Bridge work with one lane open



# Maintaining intersection



# One lane bridge



# Closure and detour



# Detour signing



# Signing at detour jct.



HUTCHINSON  
AREA  
TRANSPORTATION  
SERVICE



# D8 project pictures

2017

# Closure & Detour



# Roundabout bypass



# Staging for Roundabout



# Business signing



# Road closure for bridge work



# Detour signing





# Metro project pictures

Summer 2017

# TH 94 West of Minneapolis Use of existing OH signs for TTC



# Use of Positive Protection for major work



# Use of inplace CMS's



# PCMS's were flexible and effective



# Split traffic thru tunnel



# TH 94 East of St. Paul



# Split traffic



# All Traffic on new pavement



# Advance signing for split traffic



# TH 94 EB split area



# TH 35E south of St. Paul



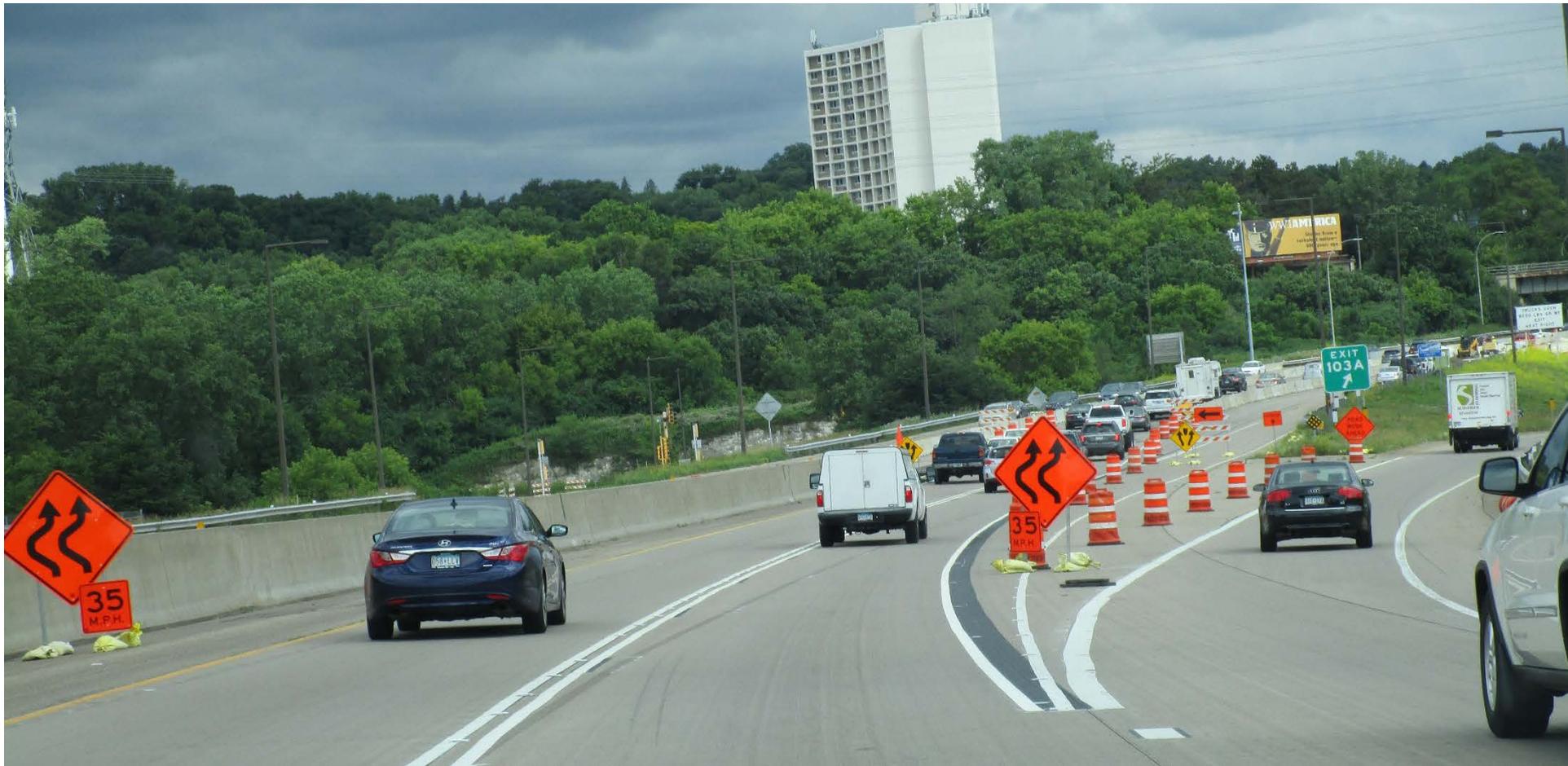
# TH 35E south of St. Paul



# Special Signing



# Special Signing



# TH 694 Split Traffic



# TH 694 Split Traffic



# TH 694 Split Traffic



# TH 694 Split Traffic



# TH 694 Split Traffic



# TH 694 Split Traffic



# TH 694 Split Traffic

