#### Welcome

#### **Public Input Meeting**

SE Jamestown Interchange Westbound Bridge Reconstruction Project Number IM-2-094(143)260

Tuesday, January 26, 2016 Open House: 5:00–7:00 p.m. Presented By: Randall Sandvig

> Bridge Division NDDOT

# Interstate 94 SE Jamestown Interchange

#### **Bridge Reconstruction**

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#### Incidentals

### **Project Location**



- The SE Jamestown Interchange (Exit 260) is located at mile point 260.125 along Interstate 94.
- The bridge carries Westbound I-94 traffic over the Jamestown
   East Business Loop and Burlington Northern
   Railroad.

# **Project Description**





- This project consists of removal and replacement of the existing westbound structure and other incidental items.
- Built in 1958, the existing bridge has been classified as "Structurally Deficient."
- Presently the bridge has no load restrictions, however with continued deterioration, load restrictions could be necessary.



- A deceleration lane was added to the bridge in 1976, which widened the bridge from 30' to its current width of 42'.
  - Piers are now cracking in areas where they were widened.





- The open expansion joint design of the bridge makes the concrete bridge girders susceptible to deterioration and spalling.
  - The beam ends were previously repaired as part of a 1984 bridge deck overlay project.
  - The beams have deteriorated once again and need repairs.

- Due to drainage at the joints, ice often builds up over the piers during the winter.
  - Pier caps are cracking and spalling near the bearing plates.
  - Moderate rusting of rocker bearings and bearing plates has occurred.







• The deck has minor cracking and spalling.

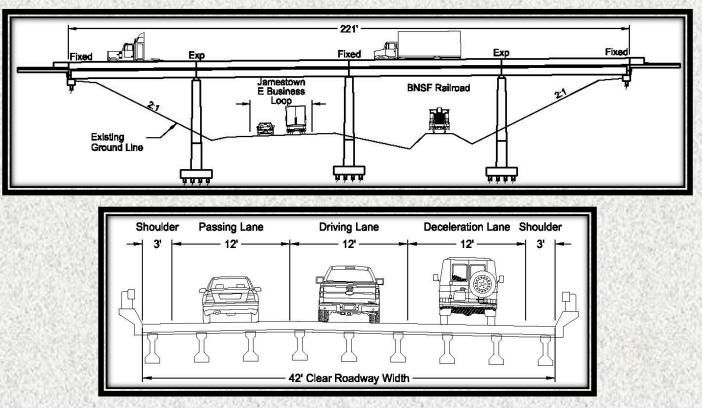
# Interstate 94 SE Jamestown Interchange

**Proposed Improvements** 

# **Existing Bridge**

- Spans 4
- Length 221'

- Bridge Width 42'
- 3' Shoulders
- Expansion/Open Joints
- 2:1 Abutment Slopes

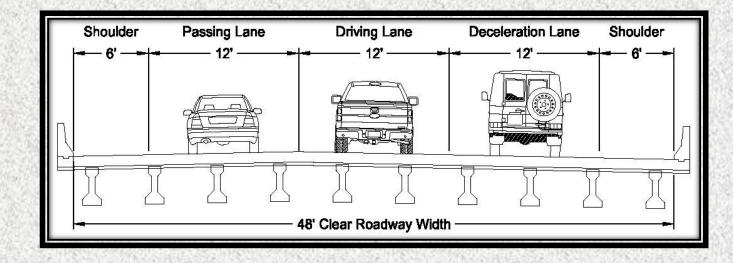


# **Proposed Bridge**

- Spans 4
- Longer Bridge

- Bridge Width 48'
- 6' Shoulders
- Integral Abutments, with no 

   Flatter Abutment Slopes expansion joints needed.



#### **Proposed Median Crossovers**

- Crossovers will be constructed to maintain westbound I-94 traffic in a two-way, two lane configuration with eastbound I-94 traffic through the construction zone.
- Proposed locations of crossovers are 5,000' west and 5,800' east of the SE Jamestown Interchange Westbound Bridge.



## **Proposed Reconstruction**

- Once the crossovers are constructed, westbound traffic will be redirected onto the I-94 eastbound roadway. The westbound bridge will then be closed to traffic.
- The existing bridge will be demolished.
- A new 4-span bridge with a clear roadway width of 48' will be constructed.
- Guardrail at the east end of the bridge will be updated.

### **Traffic Control Challenges**

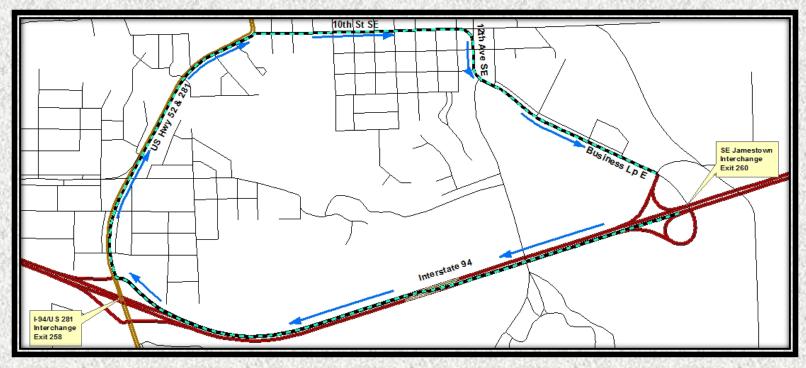
- Due to the westbound bridge closure, maintaining access to the westbound Exit 260 offramp would be costly during construction.
- A temporary exit ramp connected to the westbound Exit 260 offramp could be constructed to maintain traffic.
- Estimated additional cost to maintain the exit as described is \$431,500.



## **Traffic Control Challenges**

- The alternative to providing the temporary exit ramp is to close the exit entirely and provide a detour route for traffic.
- The proposed traffic control consists of detours utilizing I-94, US 52/US 281, 10<sup>th</sup> St SE, 12<sup>th</sup> Ave SE, and Business Loop E.

#### **Detour Plan**

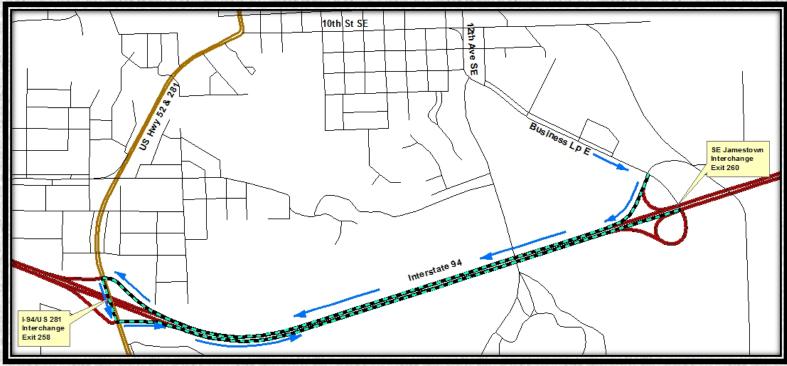


 Westbound I-94 to Jamestown Business Loop traffic will travel west on I-94 to Exit 258. Traffic will then be detoured north on US 52/US 281 to 10<sup>th</sup> St SE and continue east to 12<sup>th</sup> Ave SE. From there, traffic will continue south on 12<sup>th</sup> Ave SE towards Business Loop East. The length of this detour is 4.76 miles.

# **Traffic Control Challenges**

- Short term closures of the eastbound I-94 onramp and offramp will be necessary due to construction activities.
  - During some demolition activities while the existing bridge is being removed, the eastbound ramps will be closed. These types of closures are expected to last for 1 day or less.
  - While beams are being set for the new bridge, the eastbound ramps will be closed. These closures are expected to last for 1 day or less.
- Detour routes will be provided for these short term closures.

#### **Detour Plan**



#### **Eastbound Onramp Closure**

 Southbound Jamestown Business Loop to Eastbound I-94 traffic will travel west on I-94 to Exit 258 and will return on I-94 traveling east. The length of this detour is 4.31 miles.

#### **Detour Plan**



#### Eastbound Offramp Closure

 Eastbound I-94 to Jamestown Business Loop traffic will take Exit 258. Traffic will then be detoured north on US 52/US 281 to 10<sup>th</sup> St SE and continue east to 12<sup>th</sup> Ave SE. From there, traffic will continue south on 12<sup>th</sup> Ave SE towards Business Loop E. The length of this detour is 3.18 miles.

## **Proposed Reconstruction**

- The total estimated cost for the project is \$4,582,750 if a temporary exit ramp is to be constructed.
- The total estimated cost for the project is \$4,151,500 if the Westbound Exit 260 offramp is closed and a detour is used.
- The bid opening for this project is scheduled for March 10, 2017 and construction activities could possibly begin in May of 2017.
- Estimated project duration: Normally a maximum of 6 months is expected.

# **Questions / Comments**

- We would appreciate it if you would fill out the survey sheets attached to your handout. This is voluntary only.
- Please be sure to sign the sign-in sheet before you leave.
- We will be here until 7:00 p.m. to discuss the project & answer questions.
- Thank you for attending!