SLIDING BRIDGE SPEEDS DELIVERY
West Bound I-44
Gasconade River Bridge
L06983
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
(57') (120'-150'-150'-120') (67') COMPOSITE PLATE GIRDER SPANS,
U.I.P. EXISTING SUBSTRUCTURE

GENERAL ELEVATION

P.L.A.N

Notes: For General Notes, Estimated Quantities and Estimated Quantities for Slab on Steel, see Sheet No. 2.
THE RISK
HIGH WATER MARK
Record Level of 34.88 Feet (14.88 Feet Above Flood Stage)

March 19, 2008
On this day, flood waters from Gasconade River rose to this level at this location.

FOR MORE INFORMATION, CONTACT:
National Weather Service Springfield, MO
www.weather.gov/sgf

USGS Missouri Water Science Center
water.usgs.gov

Missouri Basin River Forecast Center
www.srh.noaa.gov/mbrfc

Removal of this sign constitutes vandalism to County property.
$40,000 PER DAY LIQUIDATED DAMAGES
THE IDEA
BRIDGE CLOSURE DAYS

- Contract Max: 60 Calendar Days
- Our Bid: 35 Calendar Days
## Superstructure Replacement Options

- **As-Bid**  Roll-in Erected Structural Steel with Permanent Deck Form and Overhang Formwork in Place and Ready for Deck Pour
- **Option A** Roll-in Superstructure with Deck and Barrier Curb completely Constructed
- **Option B** Roll out Existing Superstructure (to the North) and Build Temporary Approaches. Then Place West Bound Traffic on Temporary Bridge Location.
BRIDGE CLOSURE DAYS

- As-Bid: 35 Calendar Days
- Option A: 20 Calendar Days
- Option B: 5 Calendar Days
THE WINNER IS:

OPTION A
YOU’RE FRICKIN’ NUTS
Option A: Roll-in Superstructure With Deck & Barrier Curb Completed

Work to be Completed Prior to Traffic Switch

1. Build Temporary False-Work North of Existing Bridge
2. Erect Structural Steel on Temporary False-Work
3. Install Permanent Steel Deck Form and Reinforcing Steel
4. Pour Deck and Barrier Curb
Option A: Roll-in Superstructure With Deck & Barrier Curb Completed

Work to be Completed During Head to Head Traffic

1. Remove Existing Superstructure
2. Replace Pier Cap at Bents 2 and 6
3. Modify Bents 1, 3, 4, 5, and 7
4. Roll New Superstructure In Place
5. Closure Pours at End Bents
6. Pour Approach Slabs
Lets Roll
The 19th Day
Project Summary

Minimized Impacts to Traffic

- May 4, 2011 – W.B. Traffic switched to E.B. Bridge
- May 16, 2011 – Superstructure slid into Place in less than 12 Hours
- May 23, 2011 – New W.B. Bridge opened to Traffic

Goal of Limiting the Closure to 20 Days or Less is Achieved
Project Summary

- Minor Modifications to Bridge
  - Diaphragms
  - Step Caps
  - Integral Abutments

- No Damage to New Superstructure
  - No Deck Cracking
Project Summary

- Successful Partnership
  - Owner / MoDOT
  - Traveling Public
  - Subcontractors & Material Suppliers
  - Designer / Engineer
  - Contractor
Challenges:

- The Engineer
- Voids Under Existing Footings
- The River
Awards:

- AGC Alliant Build America Award
- ACPA Award Best Highway Overlay Project in Missouri for 2011
QUESTIONS?