JOHNSON DRIVE
EMERGENCY BRIDGE
REPAIRS

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BRIDGE LOCATION
JOHNSON DRIVE BRIDGE OVER I-435
THE COLLISION

- ACCIDENT ON APRIL 10TH, 2016
- SUV HEADING SOUTH ON I-435 LOST CONTROL AND HIT THE BRIDGE
- POLICE WITNESS ESTIMATED THE VEHICLE WAS GOING OVER 100 MPH
- VEHICLE WAS AIRBORNE AND HIT THE BRIDGE ±10 FEET ABOVE GROUND
LOCATION OF IMPACT
LOCATION OF IMPACT
BRIDGE DAMAGE

Frame 1

Frame 2

Frame 3

Photo Credit: KDOT
BRIDGE DAMAGE
BRIDGE DAMAGE
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BRIDGE DAMAGE
BRIDGE ANALYSIS

- **2-D frame model**
- **Steel members only**
- **Analysis used to determine jacking load required to re-load the damaged leg**
ADDITIONAL ENGINEERING

- Documented all damaged locations
- Determined members to be repaired or replaced
- Provided rehabilitation plans
- Site visits during repairs
- Documented repairs and submitted as-built plans to KDOT
HEAT STRAIGHTENING
JOHNSON DRIVE EMERGENCY REPAIRS

- KDOT inspected the bridge the same day as the collision (April 10th, 2016)
- HNTB was onsite April 12th, 2016
- Flame-On was onsite and began repairs April 26th, 2016
- Work was completed and all lanes of traffic re-opened May 7th, 2016
QUESTIONS?