LANSING TRANSPORTATION SERVICE CENTER (LTSC)
M-100 Bridge Replacements

- Stakeholder Involvement
- Project Overview
- Project Schedule
- Bridge Slide
- Question/Answer
Stakeholders

- City of Potterville
- Other stakeholders…

City of Potterville

Local Home and Business Owners

Fire Department

MDOT

FHWA

Benton Township

Peds
Project Overview

- M-100 Bridge Replacement over the Canadian National/Grand Trunk Western Railroad
- M-100 Bridge Replacement over the Thornapple Drain
- M-100 Bridge Replacement over the Sharp Drain
- Construction Budget Approx. $8.6 Million
Thornapple & Sharp Drains
Existing Condition

Original Construction
1940

Width of Structure
40’
Thornapple & Sharp Drains
Future Condition

- Thornapple Drain: Precast Arch Culvert
- Sharp Drain: Concrete Box Beam Bridge
  - With Carbon Fiber Reinforcement
Sharp Drain
Carbon Fiber Reinforcement

CN/GTW Railroad
Existing Condition

- Original Construction 1940
- Length of Structure 157’
- Width of Structure 40’
CN/GTW Railroad
Existing Condition
CN/GTW Railroad
Future Condition
Existing Lanes vs Proposed

• 2 Existing 11’ lanes
• 9’ Shoulders

• 2 Proposed 12’ lanes
• 10’ Shoulders
• 10’ Pedestrian Path
Future Pedestrian Path

West Path
• 8’ wide
• Starts at the Pedestrian Tunnel and ends at Valley Springs

East Path
• 5’ wide
• Starts at Main St. and ends at the Pedestrian Tunnel
Pedestrians, Park & School
-Protective Fence (5’ Chain link)
Access to the Pedestrian Tunnel Maintained
(short shutdown for extension during school spring break)
Construct Temporary Road

- Constructed on west side of M-100
- Permanent bridge deck will be constructed at the temporary location on temporary abutments
- Two-way traffic will be maintained on the temporary road
- All existing driveways within construction area will be maintained
CN/GTW Railroad
Construction for the Bridge Slide

1. Existing bridge will be demolished

2. New permanent bridge abutments and new roadway will be built

3. Once complete – full M-100 shutdown for 1 weekend.
   a. Slide Bridge into place
   b. Pour concrete approaches
   c. Set up barrier wall
   d. Re-open M-100 on the new bridge deck.
Short term detour ~ 1 weekend (bridge slide)
CN/GTW Railroad
After the Slide

2015
1. Site clean-up and temporary site stabilization
2. Winter shutdown

April 2016
1. Remove temporary road and abutments
2. Complete pedestrian walkway
3. Final restoration

June 2016 – All work complete
Construction Timeframe Review

- **Thornapple Drain:** April 2015 – September 2015
- **Sharp Drain:** April 2016 – October 2016
- **Railroad Bridge Reconstruction:** Late March 2015 – November 2015
- **Removal of temporary structures, Pedestrian path construction, and final restoration:** Spring of 2016

- **Work Stoppages**
  - Memorial Day
  - Gizzard Fest
  - 4th of July
  - Labor Day
Benefits

- New Bridges = Reduced Maintenance Costs
- Only Short Term M-100 Closure Required
- Minor disruption to the 32 trains a day
- Improved Safety
- Improved Pedestrian Facilities
Bridge Slide – Hilman Roller
Bridge Slide – Hilman Roller
Bridge Slide – Hilman Roller
Questions?

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