

7425 Harper Road Culvert Replacement

Existing Conditions

Description:

The culvert outlet is located approximately 100' south of 7425 Harper Road's driveway. The existing culvert consists of a 40' long 18" CMP with no headwalls and/or traffic control measures. There is an area of pavement failure/settlement near the inlet. The CMP has 100% section loss throughout the invert. The inlet embankment has areas of erosion threatening to undermine the roadway and the culvert inlet is completely buried. The downstream channel is scoured, and the outlet is obstructed by downed trees.

Spans: 1

Length: 40'

Width: 18"

Rise: 18"

Reasons for replacement:

- ✓ Embankment Erosion
- ✓ No Headwalls
- ✓ 100% Section Loss
- ✓ Roadway Failure/Settlement



Obstructed Outlet w/ Downed Trees



100% Section Loss throughout Invert



Pavement Failure/Settlement

7425 Harper Road Culvert Replacement

Proposed Conditions

Description:

The proposed culvert construction will include an 18" RCP with reinforced concrete headwalls as well as the installation of erosion control measures, roadway reconstruction, and site restoration. The project will require a road closure through the duration of the project due to depth of excavation and the narrow roadway prevents the contractor from safely maintaining a lane of traffic.

Spans: 1

Length: 42'

Width: 18"

Rise: 18"

Opinion of Probable Cost: \$77,000

Anticipated Construction Duration: 3 Weeks

Anticipated Schedule for Construction:

June 17th through July 8th

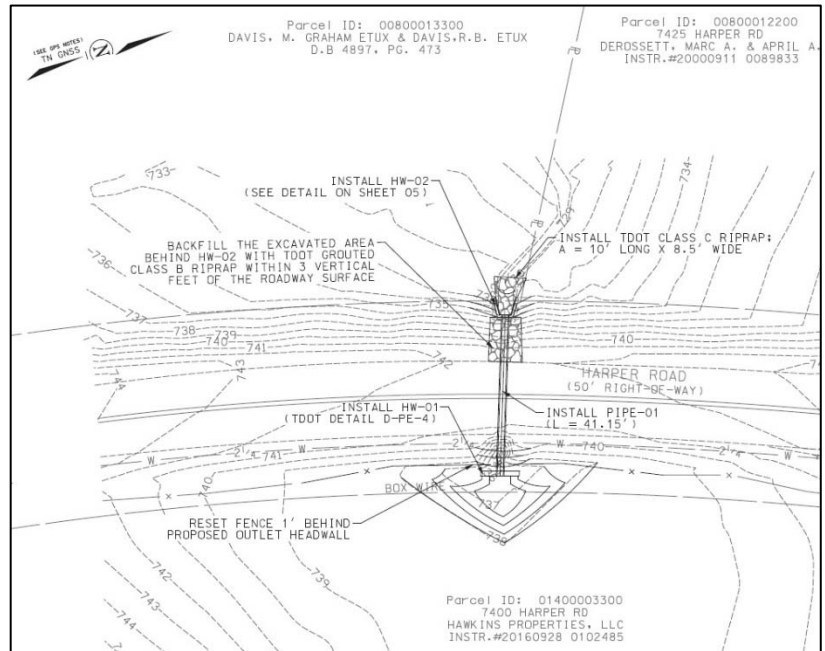
Intermittent Road Closures:

June 17th through July 8th

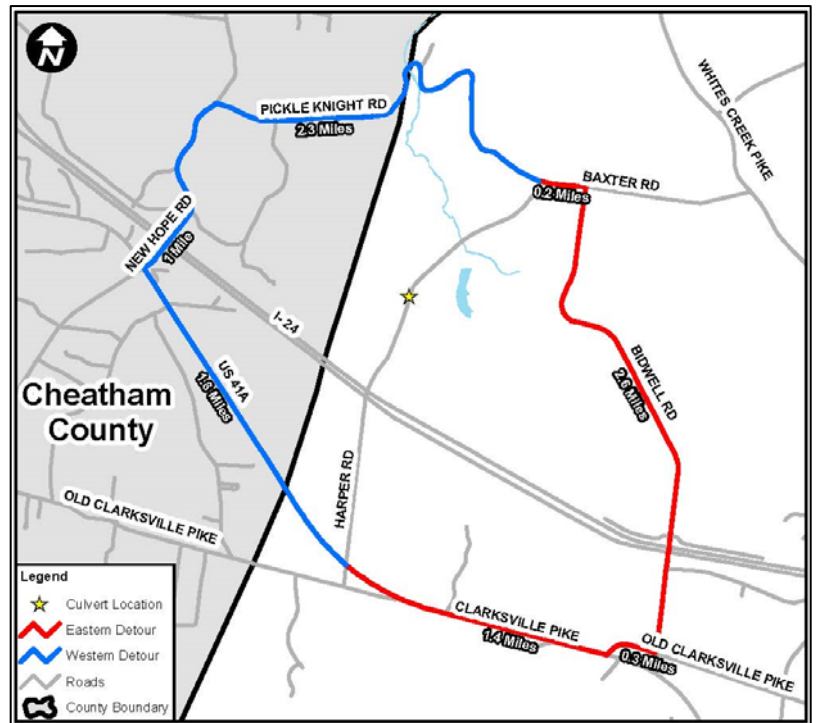
Project Status: Ready for construction

Construction Challenges:

- ✓ Depth of Excavation & Narrow Roadway
- ✓ Maintenance of Detour Route
- ✓ Coordination Between Utilities and the NDOT Annual Contractor



Project Plan View



Detour Map