

4578 Little Marrowbone Road Culvert Replacement

Existing Conditions

Description:

The culvert structure consists of a 31' long 24" CMP culvert with a natural stone masonry headwall at the outlet located approximately 302' east of the featured address, 4578 Little Marrowbone Road. The corrugated metal pipe shows severe section loss throughout the pipe leading to a void of up to 1.5' deep by 2' wide running under most of the pipe. The outlet headwall shows mortar loss in the joints and brittle shale rock is stacked over the headwall and failing to support the road embankment. The road is cracking and sagging atop the culvert due to the void below the pipe which has been partially patched before.

Spans: 1

Length: 31'

Width: 24"

Rise: 24"

Reasons for replacement:

- ✓ Embankment Erosion
- ✓ 100% Section Loss
- ✓ Patched Roadway Settlement/Failure



Failing Outlet Headwall w/ Erosion



100% Section Loss through Invert



Patched Roadway Settlement/Failure

4578 Little Marrowbone Road Culvert Replacement

Proposed Conditions

Description:

The proposed culvert construction will include a 24" RCP with reinforced concrete headwalls, roadway reconstruction, and site restoration to ensure proper functionality. The project shall be completed under intermittent lane closures. Both lanes of traffic will be open at the end of each workday and access to all properties shall be maintained throughout the project duration.

Spans: 1

Length: 36.5'

Width: 24"

Rise: 24"

Opinion of Probable Cost: \$112,000

Anticipated Construction Duration: 3 Weeks

Anticipated Schedule for Construction:

June 16th through July 8th

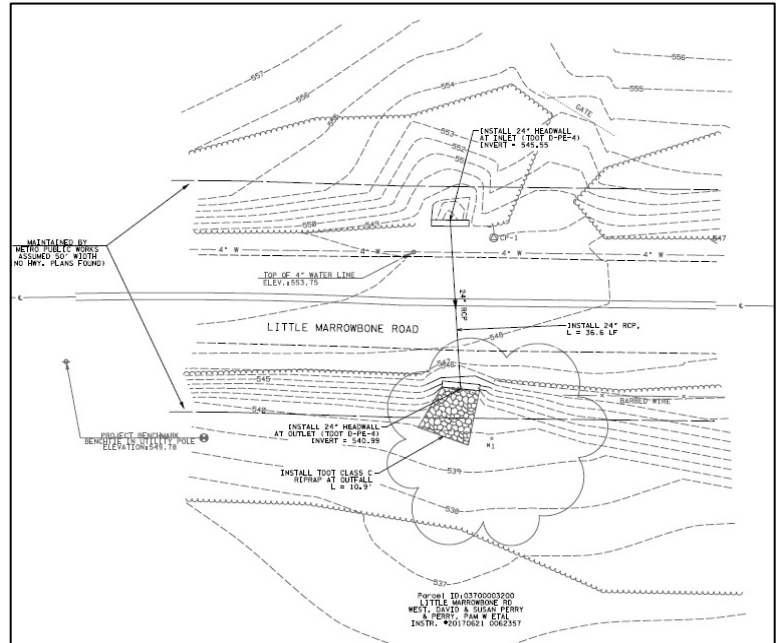
Intermittent Lane Closures:

June 16th through July 8th

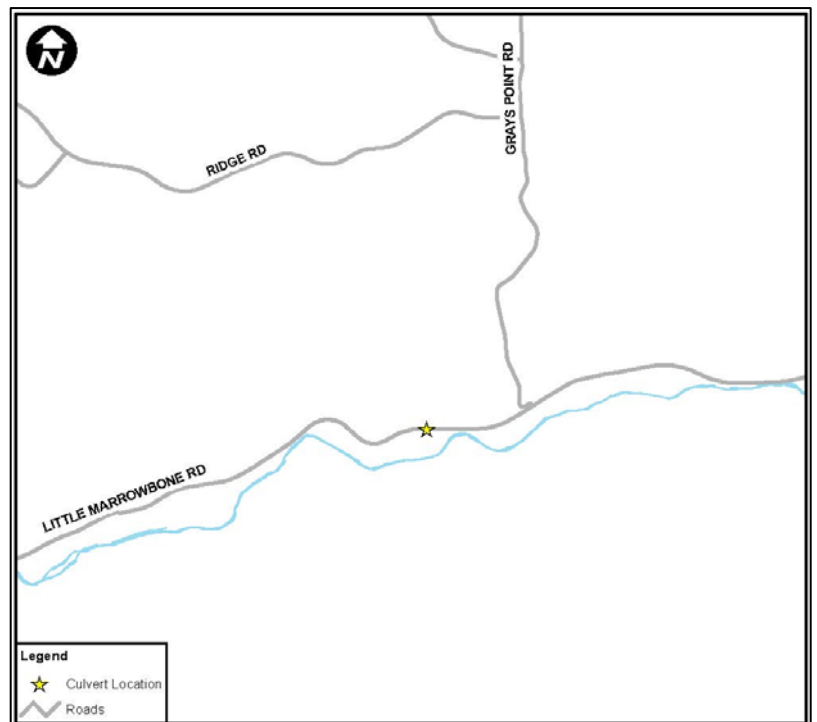
Project Status: Ready for construction

Construction Challenges:

- ✓ Maintenance of Through Traffic
- ✓ Coordination Between Utilities and the NDOT Annual Contractor



Project Plan View



Vicinity Map