

Project Description

Bridge No. 06956 supports Country Village Lane over an unnamed Brook in the Town of Clinton. The structure is located approximately 0.2 miles east of Old Nod Road (see Location Map). The configuration of Country Village Lane over the bridge is composed of two 15-foot lanes with no shoulders. Timber posts only are present along both sides of the roadway and the bridge. The Average Daily Traffic (ADT) over the bridge is approximately 100 vehicles per day (2022 CTDOT Traffic Log).

The existing bridge, constructed in 1970, consists of four 58-inch by 36-inch corrugated steel arch pipe culverts. Concrete headwalls and endwalls are present at the inlet and outlet of the structure. The existing bridge has an overall structure length of approximately 50 feet. Bridge No. 06956 is in critical condition primarily due to the culvert condition and structural appraisals (Rating = 2). The existing culverts exhibit extreme deflection along the top of the pipe arch and reverse curvature along the bottom of the pipe arch. The bottom and corner plates exhibit extensive rust holes with light to severe laminar rust with pronounced thinning. Spans 2 and 3 both demonstrate rust holes ranging from approximately 6 feet to 8 feet long by 4 inches to 6 inches wide. This condition has lifted the bottom plate over the corner plates. Span 4 is slightly covered with sand and shows two perforations.

The proposed replacement involves replacing the existing four 58-inch by 36-inch corrugated steel arch pipe culverts with a 20-foot-wide by 6-foot-high precast concrete box culvert. Concrete cutoff walls, return walls, headwalls and wingwalls will be constructed at the inlet and outlet of the proposed structure. The total length of the proposed structure will be slightly longer than the existing structure at approximately 54 feet. Additionally, the structure skew has been increased from the existing estimated skew of 4 degrees to 9 degrees in relation to the roadway above to better facilitate stream flows.

Construction will be performed in two stages, constructing approximately half the structure in each stage. During the first stage of construction, new cutoff and return walls would be constructed downstream, approximately half the precast concrete box sections would be placed. During stage 2 the remaining structure will be placed with the new wingwalls and upstream headwalls constructed. One lane of traffic in each direction will be maintained in both stages.

Overhead utility lines are present along the north side of Country Village Lane at the bridge. These include cable, telecommunication and electric facilities. Prior to construction, it is anticipated that the overhead utilities will need to be temporarily relocated to the north and will be relocated to their existing location at the end of construction.

It is anticipated that right-of-way impacts will be required to accommodate the new structure and to facilitate temporary overhead utility relocations during construction.

It is anticipated that construction will begin in Spring 2028 depending on funding, right-of-way acquisition, and permits. The Opinion of Probable Construction cost is \$2,500,000 and will be undertaken with 100% Federal funds.