

Project Description

Bridge No. 07104 supports Route 165 over an unnamed brook in the town of Preston. The structure is located approximately 1,580 feet west of Long Society Road (see Location Map).

The existing bridge was constructed in 1955; it consists of a 6-foot diameter asphalt-coated corrugated metal pipe, approximately 100 feet long. The culvert is beneath 5 to 6 feet of ballast and is supported by headwall, endwall and wingwalls at the inlet and outlet. Bridge No. 07104 is in serious condition. The asphalt coating is missing on the lower side plates for the full length of the culvert and at random locations along the bottom plate. Heavy laminar rust and thinning steel is visible on the lower side plates that are easily dented or punctured. The pipe also appears to be sagging in the middle. Vertical and diagonal cracks were seen on the inlet and outlet reinforced concrete headwalls with light to moderate scaling.

The Route 165 lane configuration over the bridge is composed of two 12-foot lanes with 8-foot shoulders travelling eastbound (EB) and westbound (WB). Metal beam rail is present along both sides of the roadway and the bridge. The Average Daily Traffic (ADT) over the bridge is approximately 3,500 vehicles per day (2023 CTDOT Traffic Log).

There are overhead utility lines present along the north side of Route 165. No underground facilities are known to exist within the project area.

The project site lies within the Shetucket River drainage basin (3800) and is not located within an aquifer protection area. According to the FEMA Map Service Center, the Project Area is within a 0.2% Annual Chance Flood Hazard area. Review of CT DEEP's Natural Diversity Data Base (NDDDB) for Preston indicates that the project site is not located within an area identified as a known habitat for state and federally listed species and significant natural communities.

The purpose and need of this project is to address the serious condition of the bridge and restore the structure to good condition. The recommended rehabilitation consists of replacing the existing culvert with a 18'-0" wide x 7'-0" high precast concrete box culvert buried in a minimum of 2.0 feet of natural streambed material. The existing concrete headwalls and wingwalls at the inlet and outlet will be replaced with new precast concrete cutoff walls, return walls and wingwalls.

Traffic on Route 165 will require a 2–4-week detour to install the precast box culvert and reconstruct the roadway. Raising the lower aerial utilities is anticipated to provide additional working clearances for placement of the box culvert.

Construction is anticipated to begin in Spring 2029.