

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

SECRETARY

June 9, 2022

COUNTY: Gates

MEMORANDUM TO: Chris Bantos

Bridge Maintenance Engineer

FROM: Galen Cail, PE (LL)

Manager Maintenance East Ops

SUBJECT: Pipe Recommendations on SR 1100

(Carter Road)

Pursuant to your request on April 11, 2022, a review of the subject site has been made and the following is provided.

Site: 0.6 Mi. E. of SR 1103 Indian Neck Road

Drainage Area = +/- 4.3 sq miles
LAT/LONG= 36.3645 / -76.7243
Existing Reported as: 54" RCP/ 36" CMP
Recommended Structure: 10'-9" x 6'-10" CASPPA

Alternate Structure: 2 @ 78" Pipe

Alternate Structure: 112" x 75" CAPA**

This site is not located in FEMA regulated flood hazard zones but is located in the backwater of the Chowan River. FEMA coordination is not required.

All proposed culverts analyzed buried.

The existing 54" RCP and 36" CMP are anticipated to work in conjunction with an existing 72" x 44" CMPA located just north. Existing and proposed analysis accounted for conveyance of the existing 72" x 44" CMPA.

**Does not provide 25 Yr LOS but improves existing LOS.

WGC

CC: Brock Harrison

Mailing Address: NC DEPARTMENT OF TRANSPORTATION HYDRAULICS UNIT 1590 MAIL SERVICE CENTER RALEIGH, NC 27699-1590 Telephone: (919) 707-6700 Fax: (919) 250-4108 Customer Service: 1-877-368-4968

Location: 1000 BIRCH RIDGE DRIVE RALEIGH, NC 27610

Website: www.ncdot.gov