

**Wetland Restoration Plan
SR 1828, Cypress Creek Road
Duplin County**

**TIP B-5632
WBS No. 45587.1.1**

January 24, 2023

The North Carolina Department of Transportation (NCDOT) will perform on-site mitigation for wetland impacts associated with Transportation Improvement Program (TIP) B-5632. This site occurs within and adjacent to the project Right-of-Way of SR 1828, Cypress Creek Road. The restoration project begins approximately at Sta. 15+75 and ends approximately at Sta. 16+50. NCDOT will restore 0.208 acre of riverine wetlands within the existing Right-of-Way

The 0.208-acre wetland restoration area within NCDOT Right-of-Way will mitigate for 0.201 acres of permanent impact in wetlands due to the bridge and approaches being constructed on a new alignment to address safety issues.

EXISTING CONDITIONS

The project is located in Duplin County, approximately 15 miles west of Jacksonville, NC between NC Hwy 50 and NC Hwy 258. The adjacent land use is primarily comprised of agricultural and forested land with some low -density housing interspersed throughout.

The area surrounding the mitigation area contains Bottomland Hardwood Forest community types. Dominate species of the Black Water Bottomland Hardwood include bald cypress (*Taxodium distichum*), swamp chestnut (*Quercus Michauxii*), green ash (*Fraxinus Pennsylvanica*), and Water oak (*Quercus nigra*).

The B-5632 NRTR dated August 2021

https://connect.ncdot.gov/site/Preconstruction/division/div03/B-5632%20Duplin%20187/Natural%20Environment/B-5632%20Final%20NRTR%208_20_2021.pdf

provides additional details concerning existing roadway and natural resource conditions.

PROPOSED CONDITIONS

The proposed mitigation consists of the restoration of 0.208 acres of riverine wetlands. The restoration activities will involve removal of the existing adjacent roadway fill of SR 1828, Cypress Creek Road. This area will be graded to match the existing adjacent reference wetland elevation as well as ripped and disked if necessary. The 0.208-acre restoration within NCDOT Right-of-Way will be placed on the Natural Environment Unit's Mitigation Geo-Database for protection perpetuity.

The Natural Environment Unit shall be contacted to provide construction assistance to ensure that the mitigation area is constructed appropriately.

VEGETATION PLANTING

Following the successful completion of site grading and stabilization, the restoration areas as well as the temporary construction and utility easement areas will be planted with species found in both cypress-gum swamp and bottomland hardwood communities including at least three of the following: bald cypress (*Taxodium distichum*), atlantic white cedar (*Chamaecyparis thyoides*), water oak (*Quercus nigra*), and swamp tupelo (*Nyssa biflora*) depending on availability (see attached Wetland Reforestation sheets).

Native grass seeding and mulching will be performed on all disturbed areas within the wetland restoration area for stabilization purposes according to guidance and standard procedures of NCDOT's Roadside Environmental Unit.

MONITORING

Upon successful completion of construction, the following monitoring strategy is proposed for the 0.208-acre restoration within the NCDOT Right-of-Way. NCDOT will document monitoring activities on the site in an annual report distributed to the regulatory agencies.

HYDROLOGIC MONITORING

No specific hydrological monitoring is proposed for the wetland restoration area. The target elevation will be based on the reference wetland and verified during construction. Constructing the site at the adjacent wetland elevation will ensure the hydrology in the restored area is like the hydrology in the reference area.

VEGETATION SUCCESS CRITERIA

NCDOT shall monitor the restoration site by visual observation and photo points for survival and aerial cover of vegetation. NCDOT shall monitor the site for a minimum of three years or until the site is deemed successful. Monitoring will be initiated upon completion of the site planting.