GRANDY MANOR POPLAR BRANCH TOWNSHIP, CURRITUCK COUNTY, NORTH CAROLINIA

PRELIMINARY STORMWATER MANAGEMENT NARRATIVE

MARCH 27, 2025

PREPARED BY:



1805 West City Drive, Unit E Elizabeth City, NC 27909 252.621.5030 License No. C-1652 www.timmons.com



Grandy Manor – 20-LOT SUBDIVISION

Site Information

Grandy Manor is a 23.04-acre project located adjacent to Poplar Branch Road to the east and the just off of U.S. Highway 158 – Caratoke Highway on the West in Grandy, Poplar Branch Township. The site <u>does not</u> contain any U.S. Army Corps of Engineers wetlands. The majority of the site is wooded with some fallow field and consist of existing perimeter drainage ditches and a cross ditch that captures the over land runoff from the property and further conveys that runoff downstream to "Outlaw Ditch."

The topography of the site is gently sloping from East to West from Poplar Branch Road to the wooded areas and ditches. Elevations range from 10 to 12-foot MSL.

Soils within the site consist primarily of Portsmouth (Pt) fine sandy loam in the central area of the site and a mix of Conetoe (CnA) and Dragston (Ds) loamy fine sand soils throughout the remainder of the project.

Proposed Development

The proposed development will utilize vegetative swales to convey runoff from the proposed lots alongside property lines, to either rear property line ditches, new roadside ditches or directly to the stormwater BMP's. The BMP's will incorporate an outfall structure at the downstream ends that will outlet to the existing cross ditch that leads north to Outlaw Ditch. Off-site runoff from the adjacent parcels to the south of the property and highway drainage from the west will be allowed to continue draining through the existing ditches.

Preliminary Analysis

The proposed development will not negatively affect the existing off-site drainage. Perimeter ditches will be unchanged and cross ditches only relocated as necessary to work with the proposed development pattern. Is the intention of this development to utilize the NCDEQ's Low Density Stormwater Permit option to ensure that the proposed development maintains a low impact design. The proposed BMP storage will be designed and constructed in accordance with the County's Stormwater Manual. It is anticipated that any rise in stormwater runoff to the downstream water surface of Outlaw Ditch will be below 0.01 feet. HEC-RAS models for the site will be provided during the Permitting & Construction document phase.