

PROJECT NARRATIVE

TIMBER FARMS RESIDENTIAL SUBDIVISION BRUNSWICK COUNTY, NC

JULY 2024

ACTION ID# SAW-2020-01560

DWR PROJECT# 20221526

INTRODUCTION

Hardee Timber Tract, LLC proposes the development of Timber Farms, a single-family and multi-family residential development to be located northwest of the intersection of Hwy 17 and Hwy 904 in Ash, NC (Brunswick County). The project area is located within the Lumber River Basin and is approximately 781 acres in size. In order to build within the site, multiple jurisdictional ditch impacts are needed. One wetland crossing impact is also needed to access uplands in the northern part of the site. Proposed impacts are 6.04 acres of non-stream jurisdictional ditches, 2.86 acres of open water pond, and 0.767 acres of 404 wetlands.

Note that 0.496 acres of jurisdictional ditch impact were previously authorized under a Nationwide Permit 29 and 401 Water Quality Certification in 2023 for Phase 1 of the development, which included the spine road entrance off Hwy 17 and single-family and multi-family development in the southern part of the tract. These impacts have not yet been installed. Also note that Section 404/401 permits have been issued to another entity who proposes commercial development off Hwy 17 and adjacent to this site. This development is not part of the work being proposed in this application.

PURPOSE AND NEED

The purpose of this project is to create an economically viable residential community in central Brunswick County to serve the housing needs of the community. Between July 2021 and July 2022, the U.S. census report showed Brunswick County's population increased by 5.7% (from 144,814 to 153,064). Compared to the 2010 Census (107,431), the population has increased by more than 40% in thirteen years. Because of this steady growth, there is a housing shortage in Brunswick County. The specific location of this project was chosen due to its proximity to both Myrtle Beach, SC, Shallotte, NC, and several beach towns. Additionally, the site has multiple points of access from major roads and readily available tie-ins to necessary water and wastewater services. Impacts to jurisdictional features are needed for site access and lot development.

EXISTING CONDITIONS

Habitat

The 781-acre project area is located northwest of the intersection of Hwy 17 and Hwy 904 in Ash, NC (Brunswick County) (Figure 1). Access to the property is provided by Highway 17 (Ocean Highway West) located to the south of the property, Highway 904 (Longwood Road) and Pea Landing Road to the northwest. The northwestern and eastern portions of the property are predominantly agricultural fields. Remaining uplands within the site have recently been timbered. Wetlands are located in the southwestern and central portions of the property. These wetlands are Carolina bays, pocosins, or pine flats that support a dense assemblage of pond pine (*Pinus serotina*), titi (*Cyrilla racemiflora*), gallberry (*Ilex glabra*), and fetterbush (*Lyonia lucida*). A stream is located in the southeastern portion of the site and flows northeast to the Shallotte River. A network of drainage ditches is located throughout the property and one manmade pond is located in the northern part of the tract. A canal has recently been constructed in the southern part of the site, as depicted in the Phase 1 site plan that was previously authorized. Several agricultural dirt roads provide access throughout the property. Adjacent land use is undeveloped and forested, agriculture fields, or residential.

Wetlands and Water Classifications

A site delineation of 404 wetlands for the project area was performed by Davey Resource Group, Inc (DRG) and was approved by Mr. Gary Beecher of the U.S. Army Corps of Engineers under two separate JDs (Appendix A). Mr. Beecher issued the Preliminary JD for the western portion of the site (SAW-2002-00088) on 4/1/2020 and a delineation concurrence email for the eastern portion of the site (SAW-2020-01560) on 11/1/2021. The project area contains approximately 160 acres of 404 wetlands, 1,000 LF of stream, and 10.8 miles of non-stream jurisdictional ditches. DRG staff recently performed an assessment of the wetlands near the proposed wetland impact area using the NC Wetland Assessment Method (NCWAM). The wetland rated overall medium quality (Appendix B).

According to the topographic quadrangle for this area, the stream channel on site flows northeast to the Shallotte River, which then runs east and south to the Atlantic Ocean (Figure 2) in the Lumber River Basin. Other ditches and/or wetlands either flow to northeast to the Shallotte River, north to Cawcaw Swamp, or southwest to Little Cawcaw Swamp. The Shallotte River is classified by the NC Division of Water Resources as C, Sw, and HQW. Cawcaw Swamp and Little Cawcaw Swamp are classified as C and Sw. These channels flow west to the Waccamaw River. The C water classification is given to waters protected for uses such as secondary recreation, fishing, wildlife, fish consumption, aquatic life including propagation, survival and maintenance of biological integrity, and agriculture. Secondary recreation includes wading, boating, and other uses involving human body contact with water where such activities take place in an infrequent, unorganized, or incidental manner. The Swamp Waters (Sw) classification is a supplemental classification intended to recognize those waters which have low velocities and other natural characteristics which are different from adjacent streams. The High Quality Waters (HQW) classification is a supplemental classification intended to

protect waters which are rated excellent based on biological and physical/chemical characteristics through monitoring or special studies, primary nursery areas designated by the Marine Fisheries Commission, and other functional nursery areas designated by the Marine Fisheries Commission. No CAMA-regulated Areas of Environmental Concern (AEC) exist within this site.

According to the Brunswick County Generalized Soil Survey, uplands within the site are predominantly Foreston loamy fine sand, Goldsboro fine sandy loam, Leon fine sand, Lynchburg fine sandy loam, Rains fine sandy loam, and Tomahawk loamy fine sand (Figure 3). Wetlands are predominantly Murville mucky fine sand and Torhunta mucky fine sandy loam. Note that much of the site was ditched many years ago, affecting hydrology over the years.

Federally Protected Species

Staff of DRG evaluated the project area to determine if the site provides suitable habitat to support federally listed threatened or endangered species known to occur in the region. A list of federally protected species was identified using the US Fish and Wildlife Service’s Information, Planning, and Consultation (IPaC) system (Table 1; Appendix C). Species with the federal classification of Endangered (E), Threatened (T), or Officially Proposed (P) for such listing are protected under the Endangered Species Act (ESA) of 1973, as amended and the Bald and Golden Eagle Protection Act.

A search of the North Carolina Natural Heritage Program (NHP) database was also conducted to identify areas within and around the site that are already known to support federally listed species. According to their files, no federally listed species are known to occur on the site. The federally listed American alligator has been documented within a one-mile radius of the site.

Table 1. Federally listed endangered and threatened species known to occur in Brunswick County, NC

Common Name	Scientific Name	Status		Habitat Description	Habitat Present in Project Area?
		US	NC		
ANIMALS					
American Alligator	<i>Alligator mississippiensis</i>	T (S/A)	T	Freshwater swamps, marshes, rivers, and lakes	No
Bald Eagle	<i>Haliaeetus leucocephalus</i>	BGPA	T	Nests in large trees near open water	No
Green Sea Turtle	<i>Chelonia mydas</i>	T	T	Shallow waters (except when migrating) inside reefs, bays, and inlets; open beaches are required for nesting.	No
Hawksbill sea turtle	<i>Eretmochelys imbricata</i>	E	E	Rocky areas, coral reefs, shallow coastal areas, lagoons or oceanic islands, and narrow creeks and passes	No
Kemp’s Ridley Sea Turtle	<i>Lepidochelys kempii</i>	E	E	Nearshore and inshore waters of the northern Gulf of Mexico; open beaches are required for nesting.	No

Common Name	Scientific Name	Status		Habitat Description	Habitat Present in Project Area?
		US	NC		
Leatherback sea turtle	<i>Dermochelys coriacea</i>	E	E	Tropical and temperate waters of the Atlantic, Pacific, and Indian Oceans	No
Loggerhead sea turtle	<i>Caretta caretta</i>	T	T	Estuarine and oceanic waters; bays, lagoons, salt marshes, creeks, ship channels, and the mouths of large rivers	No
Magnificent Rams-horn	<i>Planorbella magnifica</i>	C	E	Orton Pond and pond on Sand Hill Creek; formerly Greenfield Lake (endemic to North Carolina)	No
Monarch Butterfly	<i>Danaus plexippus</i>	C		East population migrates between central Mexico and Canada; requires nectar habitat including milkweed plants.	Yes
Northern Long-eared Bat	<i>Myotis septentrionalis</i>	T		Hibernates in caves and mines; roosts underneath bark, in cavities or in crevices of both live trees and snags. They are site generalists and can be found in a range of forested areas.	Yes
Piping plover	<i>Charadrius melodus</i>	T	T	coastal beaches, sand flats at the ends of sand spits and barrier islands	No
Red-Cockaded Woodpecker	<i>Picoides borealis</i>	E	E	Open pine woodlands and savannas with large old pines	No
Red Knot	<i>Calidris canutus rufa</i>	T		Intertidal, marine habitats, especially near coastal inlets, estuaries, and bays	No
Tri-Colored Bat	<i>Perimyotis subflavus</i>	PE		Roosts in trees, primarily among leaves. Hibernates in culverts, tree cavities, and abandoned wells.	Yes
Wood Stork	<i>Mycteria americana</i>	T		Freshwater and estuarine wetlands for nesting, feeding and roosting.	No
PLANTS					
Cooley's Meadowrue	<i>Thalictrum cooleyi</i>	E	E	Moist to wet bogs and savannas with neutral soils	No
Rough-leaved Loosestrife	<i>Lysimachia asperulaefolia</i>	E	E	Ecotones between pine savannas and pocosins, on moist to seasonally saturated sands, on organic soils overlaying sand	No

TABLE 1 KEY:

Status	Definition
E	Endangered: A taxon “in danger of extinction throughout all or a significant portion of its range.”
T	Threatened: A taxon “likely to become endangered within the foreseeable future throughout all or a significant portion of its range.”
P	Proposed for Listing
C	Candidate for Listing
T(S/A)	Threatened due to similarity of appearance - a species that is threatened due to similarity of appearance with other rare species and is listed for its protection.
BGPA	Bald and Golden Eagle Protection Act.

The sea turtles, piping plover, and red knot are all found in either coastal or marine habitats and would not be located within the proposed project. The other species listed in the table are discussed below.

American Alligator

The American alligator lives primarily in freshwater swamps and marshes, but also in rivers, lakes, and smaller bodies of water. The stream and ditches within the site are too small and too far removed from larger bodies of water to provide suitable habitat for this species. Therefore, no impacts to the species would occur from site development.

Bald Eagle

Bald eagles in the southeast typically build their nests in the zone between forests and marsh or open water. Nests are built in dominant live pines or cypress trees that provide a clear flight path. The site is not located in close proximity to open water (~ 5 miles from the Waccamaw River, 8 miles from the Shallotte River, and 4.5 miles from the AIWW). Additionally, most trees in uplands were recently timbered. Although some larger trees exist in wetlands, because the tract is not close to open water, it does not provide suitable habitat for the bald eagle. The project would not adversely affect this species.

Magnificent Ramshorn

The magnificent ramshorn is a large freshwater snail that is adapted to still or slow-flowing aquatic habitats such as beaver ponds or man-made mill ponds. The species is endemic to southeastern North Carolina and was historically known from only four sites in the lower Cape Fear River Basin. However, all four sites appear to be extirpated. This is largely due to a loss of freshwater habitat from saltwater intrusion and a loss of beaver ponds. One manmade pond is located in the northern part of the site and the applicant plans to impact this pond. However,

this species is largely believed to be extirpated from the wild and it is unlikely to be present within this manmade pond. Therefore, no impacts to this species are anticipated.

Monarch Butterfly

The monarch butterfly is globally distributed throughout 90 countries, islands, and island groups. It occurs in open-canopy woodlands, prairies, meadows, agricultural lands, utility rights-of-way, and urban and suburban gardens throughout North America. North American populations are well known for their long-distance migration. In eastern North America, monarchs travel north in the spring, from Mexico to Canada, over two to three successive generations, breeding along the way. They then migrate back to Mexico in the fall. Therefore, eastern North America can provide both breeding and migrating habitat. Adult monarch butterflies require a variety of blooming nectar resources, which they feed on throughout their migration and breeding seasons (spring through fall). Monarchs also need milkweed (*Asclepias spp*) for both egg laying and larval feeding within this habitat. Milkweed typically grows in meadows, prairies, edges of forests, and along roads. Forested portions of the site do not provide suitable habitat for the species. However, fields located in the eastern and northwestern parts of the tract do provide suitable habitat for this species. This species is currently a candidate for listing.

Northern Long-Eared Bat

The northern long-eared bat (NLEB) was listed as threatened under the Endangered Species Act in 2015 (80 FR 17974) because of population declines caused by white-nose syndrome and the continued spread of the disease. The northern long-eared bat hibernates during the winter in caves and mines with constant temperatures, high humidity, and no air currents. During the winter and summer, they roost alone or in colonies underneath bark, in cavities or in crevices of both live trees and snags. They are site generalists and can be found in a range of forested areas from large contiguous forested blocks to small, wooded lots; densely vegetated stands to more open stands; and hardwood forests to mixed pine/hardwood forests. No hibernacula appear to exist within the project area. Forested portions of the site provide appropriate winter and summer roosting habitat. Most of the uplands within the site have been or will be cleared of trees in preparation of development. The USFWS NLEB Determination Key was completed for this project and resulted in a “May Affect, Not Likely to Adversely Affect” (MANLAA) Determination (Appendix C).

Red-Cockaded Woodpecker

The red-cockaded woodpecker (RCW) is a small bird that is generally found in open pine woodlands and savannas with large old pines for nesting and roosting habitat. Cavity trees are located in open stands with little or no hardwood midstory or overstory. While RCWs typically require pines 10” diameter at breast height (DBH) or larger for nesting, in southeastern North Carolina (including Brunswick County), they may nest in trees as small as 8” DBH. Foraging habitat is provided in pine and pine hardwood stands 30 years old or older with foraging

preference for pine trees 8-inch DBH or larger. In good, well-stocked pine habitat, sufficient foraging habitat can be provided on 75 to over 500 acres depending on habitat quality and RCW population density. Foraging habitat should be within 0.5 miles of nesting habitat. In southeastern North Carolina (including Brunswick County), RCWs forage and nest in both upland and wetland communities.

Most of the uplands within the site have either been recently timbered or are fields. Some forested uplands exist between some of the wetland pockets west of the main entrance road. These uplands support fairly young loblolly pines and some hardwood species as well. Forested wetlands support a dense mix of pond pine (*Pinus serotina*), titi (*Cyrilla racemiflora*), gallberry (*Ilex glabra*), and fetterbush (*Lyonia lucida*). The site does not appear to provide suitable habitat for this species.

Tri-Colored Bat

The tri-colored bat's range includes the eastern half of the United States as well as sections of Canada and Central America. During the spring, summer and fall, tricolored bats are found in forested habitats where they roost in trees, primarily among leaves. During the winter, they are found roosting in culverts, tree cavities, and abandoned water wells in the southern U.S. Forested portions of the site provide suitable winter and summer roosting habitat for this species. Additionally, several culverts exist throughout the site where dirt roads cross ditches. Many of these culverts will likely need to be replaced during site development. This species is currently proposed for listing.

Wood Stork

Wood storks use freshwater and estuarine wetlands for nesting, feeding and roosting. They feed in a wide variety of tidal and freshwater ecosystems: freshwater marshes, ponds, hardwood and cypress swamps, narrow tidal creeks or shallow tidal pools, and artificial wetlands such as seasonally flooded roadside and agricultural ditches, impoundments and large reservoirs. Particularly attractive feeding sites are depressions in marshes or swamps where fish become concentrated during periods of falling water levels. They nest in patches of medium to tall trees, either in standing water or on islands surrounded by expanses of open water. Appropriate habitat for this species does not occur on site.

Cooley's Meadowrue

Cooley's meadowrue inhabits sunny, moist places such as open, savanna-like forest edges and clearings, wet savannas over calcareous clays, and ecotones between wet savannas and non-riverine swamp forests. Soils are basic, sandy loams. Wetland areas within the site, including ditch banks, appear to be too densely vegetated to provide appropriate habitat for this species. Therefore, suitable habitat for this plant species does not exist on this site.

Rough-Leaved Loosestrife

Rough-leaved loosestrife generally occurs in the ecotones between pine savannas and pocosins, on moist to seasonally saturated sands. Because this plant is shade-intolerant, moist areas exposed to sunlight provide suitable habitat. Wetlands and channels within the site appear to be too densely vegetated to provide appropriate habitat for the rough-leaved loosestrife. Therefore, suitable habitat for this plant does not exist on this site.

Cultural Resources

The NC State Historic Preservation Office HPOWEB GIS Service was reviewed to determine if there are any known historic or cultural resources on or adjacent to the project area. According to their website, no known historic or cultural resources have been documented on or adjacent to the project area. Additionally, DRG requested comments from SHPO for the project area. They responded and had no comment (Appendix D).

Local Zoning and Land Use Plan

The site is located within Brunswick County's jurisdiction and is zoned Medium Density Residential (R-7500). According to the County's Unified Development Ordinance, the Medium Density Residential zoning district (as well as several other residential districts) is "established to provide for orderly suburban residential development. A limited number of commercial and civic uses are allowed, subject to the restrictions necessary to preserve and protect the residential character of the neighborhood. A special permit process for higher intensity development is also allowed, using discretion to balance issues of higher density with improved amenities. Due to the higher intensity developments contained in this district, it is intended to be applied to properties served by public sewer and water systems." Note that lot density for this site has been approved by Brunswick County through a Planned Unit Development.

The Future Land Use Map (2012) for the Brunswick County CAMA Core Land Use Plan (2007) classifies the project area as 'Low-Density Residential'. According to the land use plan, this classification corresponds to the R-7500 zoning district and is for agricultural uses, single-family residences, multi-family residences in certain cases, emergency shelters, parks, and places of worship. The proposed project coincides with the CAMA Land Use Plan.

ALTERNATIVES ANALYSIS

The alternatives evaluated include a no-action alternative and several on-site site layouts, including the preferred project. Off-site alternatives are not discussed since the applicant already owns the project site.

No-Action Alternative

The no-action alternative would keep the site in its current, undeveloped condition and would prohibit the applicant from expanding the planned unit development on this site. The no-action alternative is not considered feasible for several reasons. Brunswick County is experiencing steady population growth. The site is centrally located off Hwy 17 and is zoned for residential development. Additionally, the site is able to tie into off-site utility infrastructure. The no-action alternative would leave hundreds of acres of valuable uplands undeveloped. The inability to develop this tract of land would be a significant loss of return for the applicant and a loss of housing for the community.

On-site Alternatives

On-Site Alternative #1: Bridging the Wetland Crossing

One on-site alternative that was evaluated included bridging the wetland crossing in the northern part of the site. In general, a piling-supported bridge is not considered to be an impact by the USACE and NCDWR and could provide a mechanism to reduce or completely avoid wetland disturbance within the tract. This crossing is approximately 500 LF in length. The estimated cost to install a bridge to NC DOT specifications at this location is approximately \$1,500,000. In contrast, a regular crossing that utilizes a culvert and fill is projected to cost around \$241,500. Additionally, there is an existing road crossing at this location and it made sense to simply widen this existing road. Therefore, this alternative was rejected from further consideration.

On-Site Alternative #2: Reducing Lots to Avoid Jurisdictional Ditch Impacts

The applicant evaluated the possibility of reducing lot counts in order to reduce jurisdictional ditch impacts. However, because ditches extend heavily into and across uplands within the site, avoiding ditches would result in losing a significant number of lots. Furthermore, many of the ditches on site are 4 feet wide or wider with fairly steep slopes. Leaving them on site around residential lots would present a safety hazard to lot owners, especially those with young children. Finally, the ditches on site are manmade and have little habitat or water quality benefit.

On-Site Alternative #3: Preferred Project

The preferred project consists of developing 1,700 single-family lots, 500 multi-family units, 300 townhomes, and an approximately 6.7-acre amenity area within this site (Sheet 1). The proposed project will also consist of roadway grading and paving, the installation of water main services, and the installation of stormwater and wastewater collection systems. Roads for the project will be private but constructed to NCDOT minimum standards for subdivision roads. Sewer will be pumped into an existing force main located on Hwy 17 at the site's entrance (i.e. spine road). The main water connection will also be on Hwy 17 at the spine road, but it is anticipated there will be additional connections at the NC-904 entrance and Pea Landing Road for redundancy. All stormwater will be collected via a storm drain piping system.

One road crossing through wetlands is needed in the northern part of the site to access uplands in this area (Sheet 2). It is an extension of the main spine road, which will traverse the entire site. The road will be 36-ft wide and will have 5-ft wide sidewalks on either side in accordance with Brunswick County Planning Department requirements. Additionally, 3:1 fill slopes will be used. A 36-inch culvert will be installed to maintain hydrologic flow. The wetland crossing has been revised to closely align with the existing dirt road in an effort to minimize wetland impacts.

Jurisdictional ditches to be impacted are located entirely within the tract. Filling these ditches will not result in a hydrologic trespass issue to adjacent property owners. Water flow through existing ditches is noted with arrows on Sheet 1. Boundary ditches will remain open. Wetland pockets within the site will remain connected to downstream waters through swales as depicted on the site plan.

Prior to site development, sediment and erosion control measures will be put in place. The limits of disturbance will then be cleared of vegetation and graded, and roadways and utilities will be installed. Building construction will occur once infrastructure is complete. Track hoe, loader, dump truck, bob cat, and other standard construction equipment will be used.

ENVIRONMENTAL IMPACTS

The project proposes to impact 6.04 acres of non-stream jurisdictional ditches, 2.86 acres of an open water pond, and 0.767 acres of 404 wetlands (Sheets 1 & 2). Secondary impacts to wetlands and water quality could occur during and after construction of the project through erosion and stormwater runoff. These potential impacts will be minimized by the development and implementation of a Stormwater Plan and a Sedimentation and Erosion Control Plan. These plans will reduce the potential for erosion or runoff into wetlands and other water bodies located off site.

MITIGATION

The applicant has attempted to minimize wetland impacts as much as possible. One wetland impact is needed for a road crossing in order to gain access to uplands located in the northern part of the tract. The road has been positioned to align with an existing dirt road crossing to minimize impacts. Additionally, 3:1 slopes will be used.

To mitigate for proposed wetland impacts, the applicant proposes to buy into the Stone Farm Mitigation Bank for the restoration of 1.5 acres of non-riparian wetlands (2:1 mitigation to impact ratio) within the Lumber River Basin (Appendix G).

U.S. Army Corps of Engineers (USACE)
APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT

33 CFR 325. The proponent agency is CECW-CO-R.

**Form Approved -
 OMB No. 0710-0003
 Expires: 01-08-2018**

The public reporting burden for this collection of information, OMB Control Number 0710-0003, is estimated to average 11 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR APPLICATION TO THE ABOVE EMAIL.

PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and/or instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned. System of Record Notice (SORN). The information received is entered into our permit tracking database and a SORN has been completed (SORN #A1145b) and may be accessed at the following website: <http://dpcl.dod.mil/Privacy/SORNs/Index/DOD-wide-SORN-Article-View/Article/570115/a1145b-ce.aspx>

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETE
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(ITEMS BELOW TO BE FILLED BY APPLICANT)

5. APPLICANT'S NAME First - Benjy Middle - Last - Hardee Company - Hardee Timber Tract LLC E-mail Address - doug@aohardee-son.com	8. AUTHORIZED AGENT'S NAME AND TITLE (agent is not required) First - Kim Middle - Last - Williams Company - Davey Resource Group, Inc. E-mail Address - kim.williams@davey.com
6. APPLICANT'S ADDRESS: Address - 55 Park Street Extension City - Little River State - SC Zip - 29566 Country - USA	9. AGENT'S ADDRESS: Address - 3805 Wrightsville Avenue; Suite 15 City - Wilmington State NC Zip - 28403 Country - USA
7. APPLICANT'S PHONE NOs. w/AREA CODE a. Residence b. Business 843-249-1264 c. Fax	10. AGENTS PHONE NOs. w/AREA CODE a. Residence b. Business 910-452-0001 c. Fax 910-452-0020

STATEMENT OF AUTHORIZATION

11. I hereby authorize, _____ to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

SEE ATTACHED

 SIGNATURE OF APPLICANT DATE

NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY

12. PROJECT NAME OR TITLE (see instructions) Timber Farms Residential Subdivision	
13. NAME OF WATERBODY, IF KNOWN (if applicable) Shalotte River	14. PROJECT STREET ADDRESS (if applicable) Address: Hwy 17 & Longwood Rd (NC 904) City - Ash State - NC Zip -
15. LOCATION OF PROJECT Latitude: 33.957305 °N Longitude: -78.519710 °W	
16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (see instructions) State Tax Parcel ID See attached Municipality Unincorporated Section - Township - Ash Range -	

17. DIRECTIONS TO THE SITE

From Wilmington, take Highway 17S into Brunswick County. Turn right onto NC 904. Site will be on the left (Figure 1).

18. Nature of Activity (Description of project, include all features)

The project consists of constructing a residential subdivision. (See Project Narrative).

19. Project Purpose (Describe the reason or purpose of the project, see instructions)

The purpose of this project is to create an economically viable residential community in central Brunswick County to serve the housing needs of the community. The specific location of this project was chosen due to its proximity to both Myrtle Beach, SC, Shallotte, NC, and several beach towns. Additionally, the site has multiple points of access from major roads and readily available tie-ins to necessary water and wastewater services. Impacts to jurisdictional features are needed for site access and lot development (See Project Narrative).

USE BLOCKS 20-23 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. Reason(s) for Discharge

Impacts to jurisdictional features are needed for site access and lot development (See Project Narrative).

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards:

Type **Clean, compacted sub-grade soil materials, clean ABC aggregate, pavement etc**

Amount in Cubic Yards **TBD**

22. Surface Area in Acres of Wetlands or Other Waters Filled (see instructions)

Proposed impacts are 6.04 acres of non-stream jurisdictional ditches, 2.86 acres of open water pond, and 0.767 acres of 404 wetlands.

23. Description of Avoidance, Minimization, and Compensation (see instructions)

The applicant evaluated several on-site alternatives and determined that the preferred project is the least environmentally damaging yet practicable alternative (see project narrative). The applicant proposes to mitigate the unavoidable wetland impacts by purchasing credits from the Stone Farm Mitigation Bank at a 2:1 ratio.

24. Is Any Portion of the Work Already Complete? Yes No IF YES, DESCRIBE THE COMPLETED WORK

25. Addresses of Adjoining Property Owners, Lessees, Etc., Whose Property Adjoins the Waterbody (if more than can be entered here, please attach a supplemental list).

a. Address- **See attached (Appendix F)**

City - State - Zip -

b. Address-

City - State - Zip -

c. Address-

City - State - Zip -

d. Address-

City - State - Zip -

e. Address-

City - State - Zip -

26. List of Other Certificates or Approvals/Denials received from other Federal, State, or Local Agencies for Work Described in This Application.

AGENCY	TYPE APPROVAL*	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED
N/A					

* Would include but is not restricted to zoning, building, and flood plain permits

27. Application is hereby made for permit or permits to authorize the work described in this application. I certify that this information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

See Attached

SIGNATURE OF APPLICANT

DATE

Kim Wilkins - DRG

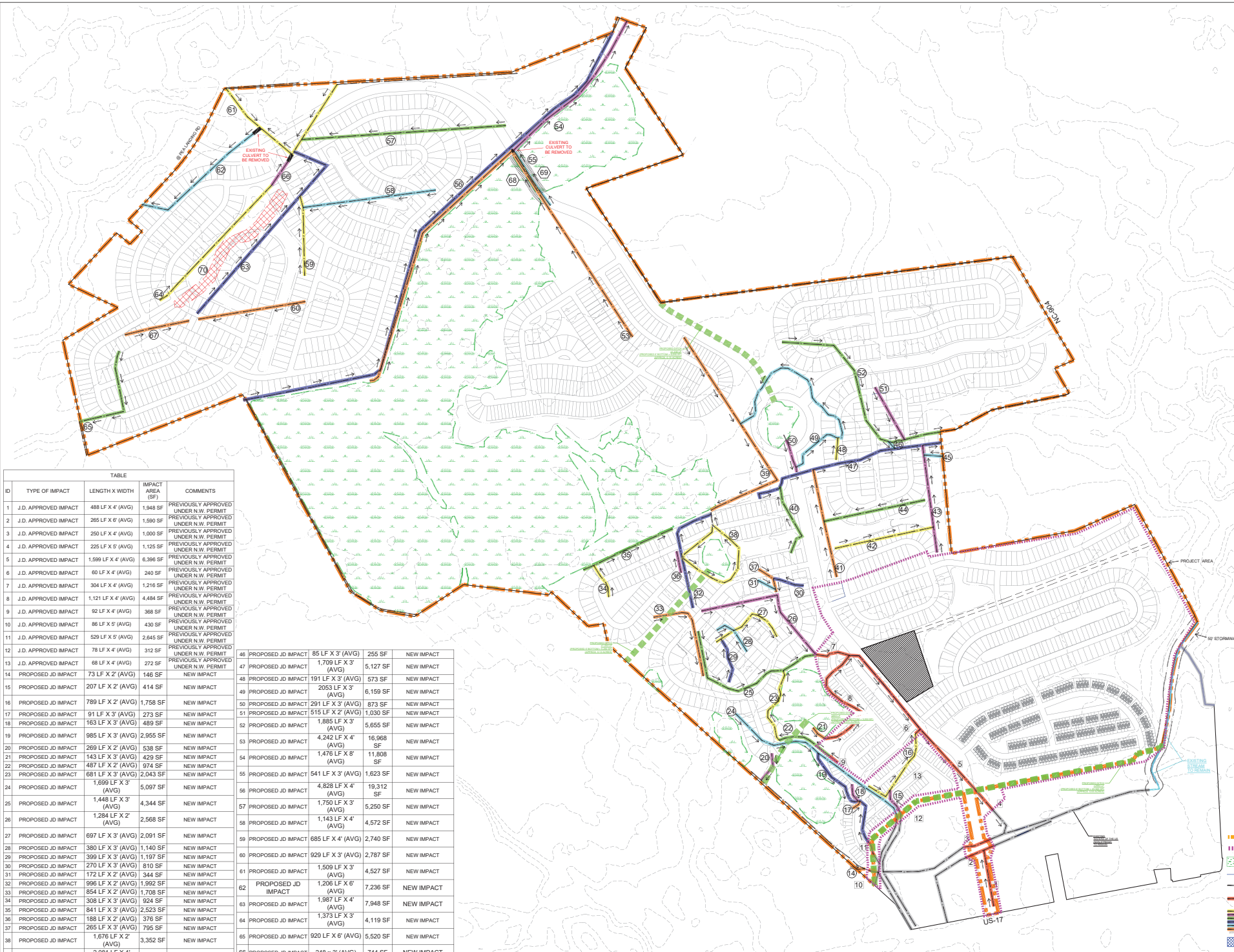
SIGNATURE OF AGENT

07/17/2024

DATE

The Application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than \$10,000 or imprisoned not more than five years or both.



ID	TYPE OF IMPACT	LENGTH X WIDTH	IMPACT AREA (SF)	COMMENTS
1	J.D. APPROVED IMPACT	488 LF X 4' (AVG)	1,948 SF	PREVIOUSLY APPROVED UNDER N.W. PERMIT
2	J.D. APPROVED IMPACT	265 LF X 6' (AVG)	1,580 SF	PREVIOUSLY APPROVED UNDER N.W. PERMIT
3	J.D. APPROVED IMPACT	250 LF X 4' (AVG)	1,000 SF	PREVIOUSLY APPROVED UNDER N.W. PERMIT
4	J.D. APPROVED IMPACT	225 LF X 5' (AVG)	1,125 SF	PREVIOUSLY APPROVED UNDER N.W. PERMIT
5	J.D. APPROVED IMPACT	1,599 LF X 4' (AVG)	6,396 SF	PREVIOUSLY APPROVED UNDER N.W. PERMIT
6	J.D. APPROVED IMPACT	60 LF X 4' (AVG)	240 SF	PREVIOUSLY APPROVED UNDER N.W. PERMIT
7	J.D. APPROVED IMPACT	304 LF X 4' (AVG)	1,216 SF	PREVIOUSLY APPROVED UNDER N.W. PERMIT
8	J.D. APPROVED IMPACT	1,121 LF X 4' (AVG)	4,484 SF	PREVIOUSLY APPROVED UNDER N.W. PERMIT
9	J.D. APPROVED IMPACT	92 LF X 4' (AVG)	368 SF	PREVIOUSLY APPROVED UNDER N.W. PERMIT
10	J.D. APPROVED IMPACT	86 LF X 5' (AVG)	430 SF	PREVIOUSLY APPROVED UNDER N.W. PERMIT
11	J.D. APPROVED IMPACT	528 LF X 5' (AVG)	2,645 SF	PREVIOUSLY APPROVED UNDER N.W. PERMIT
12	J.D. APPROVED IMPACT	78 LF X 4' (AVG)	312 SF	PREVIOUSLY APPROVED UNDER N.W. PERMIT
13	J.D. APPROVED IMPACT	68 LF X 4' (AVG)	272 SF	PREVIOUSLY APPROVED UNDER N.W. PERMIT
14	PROPOSED JD IMPACT	73 LF X 2' (AVG)	146 SF	NEW IMPACT
15	PROPOSED JD IMPACT	207 LF X 2' (AVG)	414 SF	NEW IMPACT
16	PROPOSED JD IMPACT	789 LF X 2' (AVG)	1,758 SF	NEW IMPACT
17	PROPOSED JD IMPACT	91 LF X 3' (AVG)	273 SF	NEW IMPACT
18	PROPOSED JD IMPACT	163 LF X 3' (AVG)	489 SF	NEW IMPACT
19	PROPOSED JD IMPACT	985 LF X 3' (AVG)	2,955 SF	NEW IMPACT
20	PROPOSED JD IMPACT	269 LF X 2' (AVG)	538 SF	NEW IMPACT
21	PROPOSED JD IMPACT	143 LF X 3' (AVG)	429 SF	NEW IMPACT
22	PROPOSED JD IMPACT	487 LF X 2' (AVG)	974 SF	NEW IMPACT
23	PROPOSED JD IMPACT	681 LF X 3' (AVG)	2,043 SF	NEW IMPACT
24	PROPOSED JD IMPACT	1,690 LF X 3' (AVG)	5,070 SF	NEW IMPACT
25	PROPOSED JD IMPACT	1,448 LF X 3' (AVG)	4,344 SF	NEW IMPACT
26	PROPOSED JD IMPACT	1,294 LF X 2' (AVG)	2,588 SF	NEW IMPACT
27	PROPOSED JD IMPACT	697 LF X 3' (AVG)	2,091 SF	NEW IMPACT
28	PROPOSED JD IMPACT	380 LF X 3' (AVG)	1,140 SF	NEW IMPACT
29	PROPOSED JD IMPACT	399 LF X 3' (AVG)	1,197 SF	NEW IMPACT
30	PROPOSED JD IMPACT	270 LF X 3' (AVG)	810 SF	NEW IMPACT
31	PROPOSED JD IMPACT	172 LF X 2' (AVG)	344 SF	NEW IMPACT
32	PROPOSED JD IMPACT	996 LF X 2' (AVG)	1,992 SF	NEW IMPACT
33	PROPOSED JD IMPACT	854 LF X 2' (AVG)	1,708 SF	NEW IMPACT
34	PROPOSED JD IMPACT	308 LF X 3' (AVG)	924 SF	NEW IMPACT
35	PROPOSED JD IMPACT	841 LF X 3' (AVG)	2,523 SF	NEW IMPACT
36	PROPOSED JD IMPACT	188 LF X 2' (AVG)	376 SF	NEW IMPACT
37	PROPOSED JD IMPACT	265 LF X 3' (AVG)	795 SF	NEW IMPACT
38	PROPOSED JD IMPACT	1,676 LF X 2' (AVG)	3,352 SF	NEW IMPACT
39	PROPOSED JD IMPACT	2,081 LF X 4' (AVG)	8,324 SF	NEW IMPACT
40	PROPOSED JD IMPACT	652 LF X 3' (AVG)	1,956 SF	NEW IMPACT
41	PROPOSED JD IMPACT	939 LF X 4' (AVG)	3,756 SF	NEW IMPACT
42	PROPOSED JD IMPACT	863 LF X 2' (AVG)	1,726 SF	NEW IMPACT
43	PROPOSED JD IMPACT	925 LF X 4' (AVG)	3,700 SF	NEW IMPACT
44	PROPOSED JD IMPACT	882 LF X 2' (AVG)	1,764 SF	NEW IMPACT
45	PROPOSED JD IMPACT	158 LF X 2' (AVG)	316 SF	NEW IMPACT
46	PROPOSED JD IMPACT	85 LF X 3' (AVG)	255 SF	NEW IMPACT
47	PROPOSED JD IMPACT	1,709 LF X 3' (AVG)	5,127 SF	NEW IMPACT
48	PROPOSED JD IMPACT	191 LF X 3' (AVG)	573 SF	NEW IMPACT
49	PROPOSED JD IMPACT	2053 LF X 3' (AVG)	6,159 SF	NEW IMPACT
50	PROPOSED JD IMPACT	291 LF X 3' (AVG)	873 SF	NEW IMPACT
51	PROPOSED JD IMPACT	515 LF X 2' (AVG)	1,030 SF	NEW IMPACT
52	PROPOSED JD IMPACT	1,885 LF X 3' (AVG)	5,655 SF	NEW IMPACT
53	PROPOSED JD IMPACT	4,242 LF X 4' (AVG)	16,968 SF	NEW IMPACT
54	PROPOSED JD IMPACT	1,476 LF X 8' (AVG)	11,808 SF	NEW IMPACT
55	PROPOSED JD IMPACT	541 LF X 3' (AVG)	1,623 SF	NEW IMPACT
56	PROPOSED JD IMPACT	4,828 LF X 4' (AVG)	19,312 SF	NEW IMPACT
57	PROPOSED JD IMPACT	1,750 LF X 3' (AVG)	5,250 SF	NEW IMPACT
58	PROPOSED JD IMPACT	1,143 LF X 4' (AVG)	4,572 SF	NEW IMPACT
59	PROPOSED JD IMPACT	685 LF X 4' (AVG)	2,740 SF	NEW IMPACT
60	PROPOSED JD IMPACT	929 LF X 3' (AVG)	2,787 SF	NEW IMPACT
61	PROPOSED JD IMPACT	1,509 LF X 3' (AVG)	4,527 SF	NEW IMPACT
62	PROPOSED JD IMPACT	1,206 LF X 6' (AVG)	7,236 SF	NEW IMPACT
63	PROPOSED JD IMPACT	1,987 LF X 4' (AVG)	7,948 SF	NEW IMPACT
64	PROPOSED JD IMPACT	1,373 LF X 3' (AVG)	4,119 SF	NEW IMPACT
65	PROPOSED JD IMPACT	920 LF X 6' (AVG)	5,520 SF	NEW IMPACT
66	PROPOSED JD IMPACT	248 x 3' (AVG)	744 SF	NEW IMPACT
67	PROPOSED JD IMPACT	663 x 3' (AVG)	1,889 SF	NEW IMPACT
68	PROP. WETLAND IMPACT	N/A	14,755 SF	NEW IMPACT
69	PROP. WETLAND IMPACT	N/A	18,650 SF	NEW IMPACT
70	PROPOSED OPEN WATER IMPACT	N/A	124,692 SF	NEW IMPACT

#	TYPE OF IMPACT	SQUARE FEET	ACRES
1	APPROVED JD IMPACT	21,626 SF	0.496 AC
2	PROPOSED JD IMPACT	263,099 SF	6.04 AC
3	OPEN WATER IMPACT	124,692 SF	2.86 AC
4	WETLAND IMPACT	33,405 SF	0.767 AC

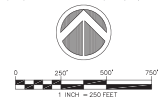
LEGEND

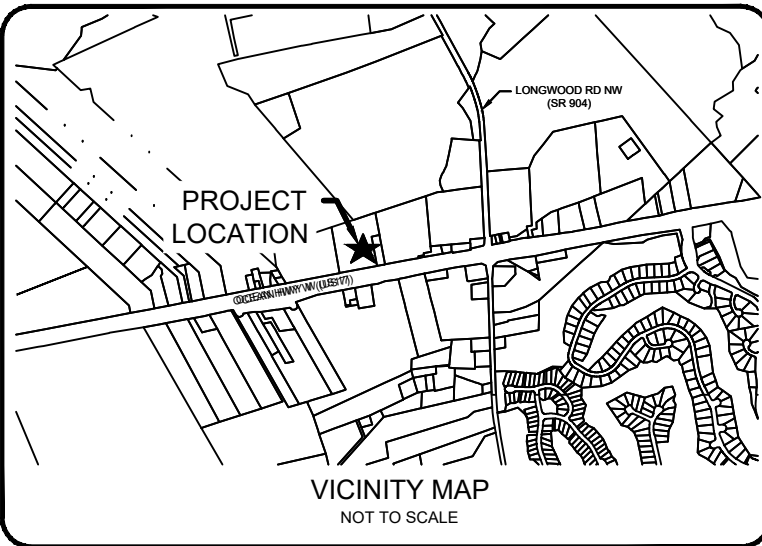
- OVERALL PROJECT BOUNDARY
- PHASE ONE BOUNDARY
- WETLANDS
- STREAM
- JURISDICTIONAL DITCH
- APPROVED IMPACT (N.W. PERMIT)
- PROPOSED DITCH IMPACT
- PROPOSED WETLAND IMPACT
- PROPOSED OPEN WATER IMPACT
- NEW DITCH/CANAL
- DIRECTION OF FLOW

TIMBER FARMS

OVERALL IMPACT EXHIBIT

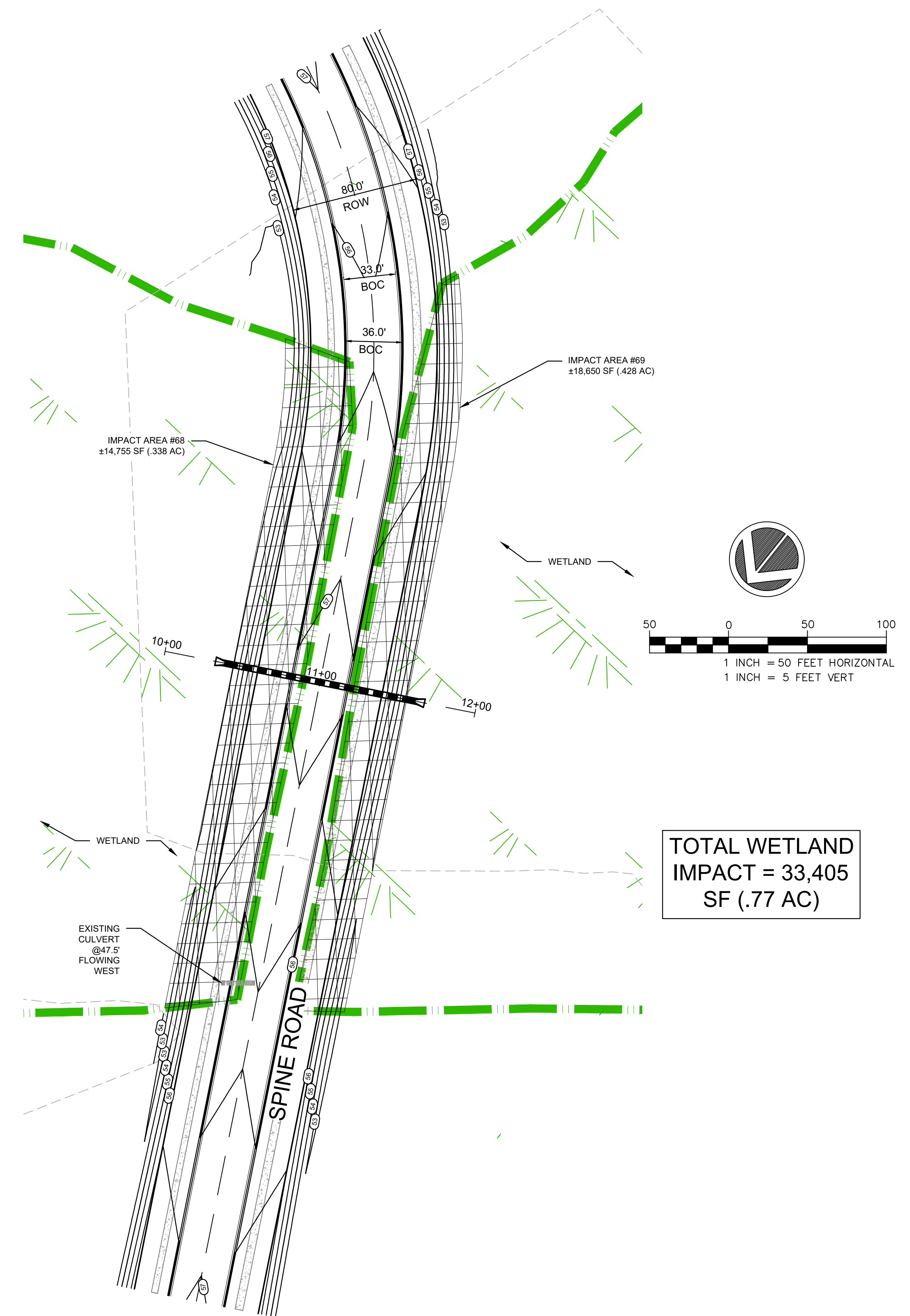
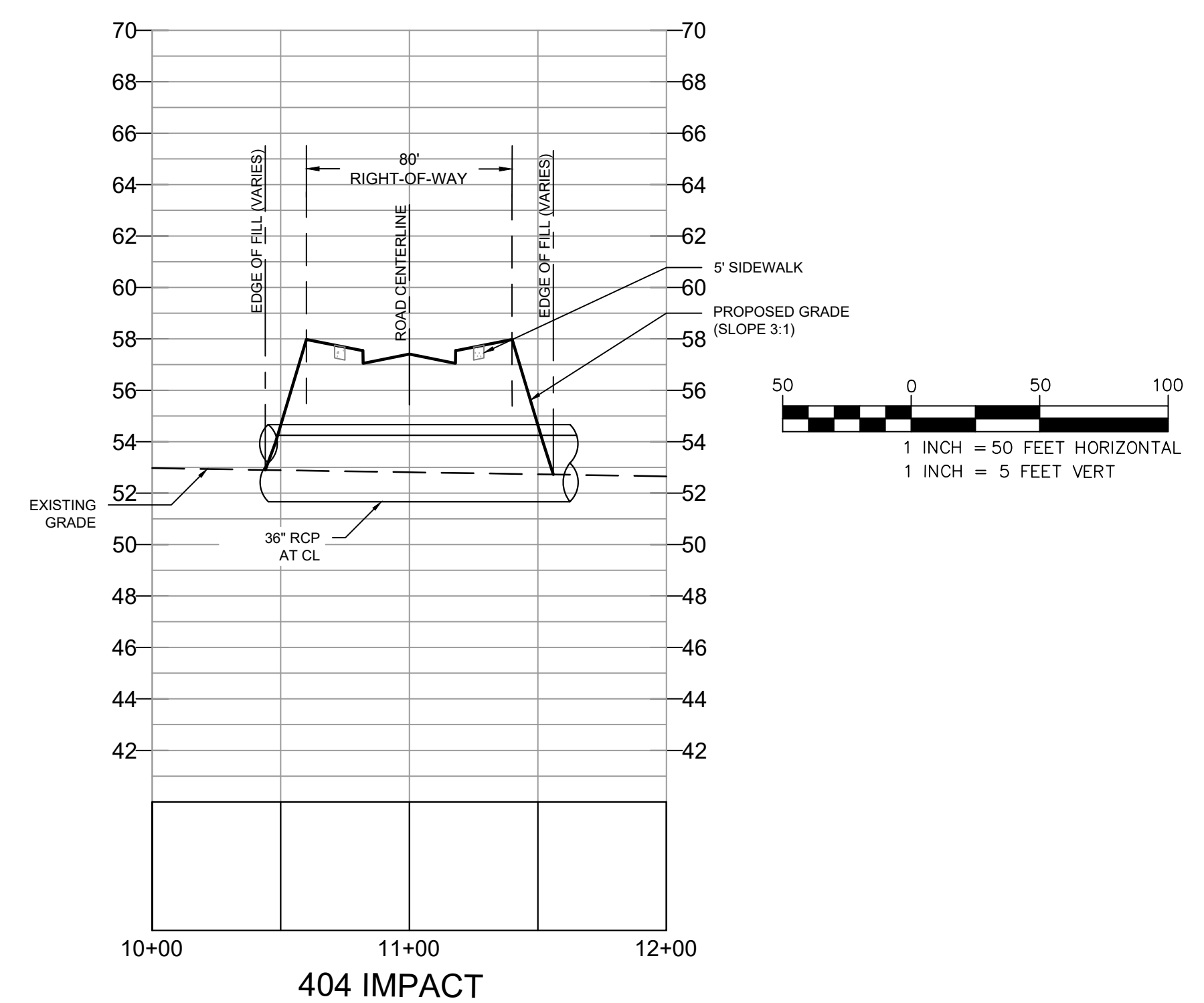
JULY 18th, 2024



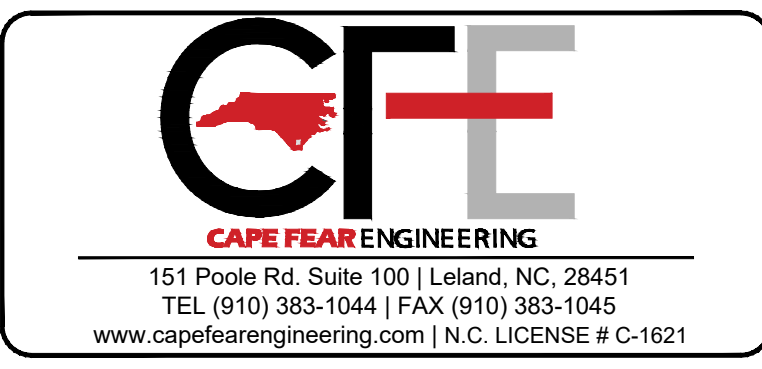


NOTES: SEE SHEET I-1 FOR GENERAL NOTES AND LEGEND

ISSUED FOR REGULATORY REVIEW



REV. #	DESCRIPTION	REV. BY	DATE
REVISIONS			



PROJECT NUMBER:	805
SCALE:	AS SHOWN
DATE:	JULY 2024
TRACKING:	

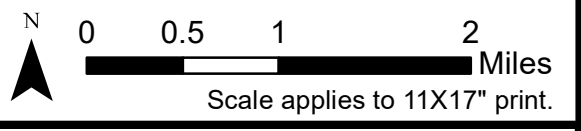
TIMBER FARMS

WETLAND IMPACT EXHIBIT
SHEET 2

PROJECT NUMBER	SHEET NUMBER
805	EX-1



L:\WETLANDS\2017 WETLANDS FILES\03-17-338 ---
 Timber Farms, Greg Gore\Maps\GIS
 Boundaries are approximate and not meant to be absolute.
 Map Source: 2008 Delorme Atlas & Gazetteer, pg. 86



Timber Farms
 Brunswick County, NC
 August 2019
 LMG # 03-17-338

3805 Wrightsville Avenue
 Wilmington, NC 28403
 (910) 452-0001

Figure 1
 Vicinity Map

This is not a survey. All boundaries and distances are considered approximate. This represents a preliminary sketch prepared from field notes. The site has not been field verified by the USACE at this time.

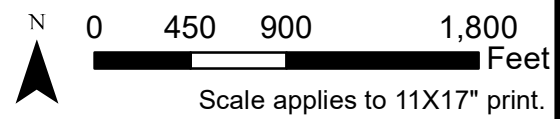


Legend

- Project Area ~ 698.1 Ac
- Wetland Waters of the US ~ 160.7 Ac (23%)

Esri, HERE, Garmin, (c) OpenStreetMap contributors

L:\WETLANDS\2017 WETLANDS FILES\03-17-338 --- Timber Farms, Greg Gore\Maps
Boundaries are approximate and not meant to be absolute.
Map Source: 2016 NC OneMap Aerial Photography



Timber Farms
Brunswick County, NC

Map Date: September 2019
LMG # 17.338

a DAVEY company
3805 Wrightsville Avenue
Wilmington, NC 28403
(910) 452-0001

Figure 8
PJD Form
Reference Map