DEPARTMENT OF THE ARMY
SAVANNAH DISTRICT, CORPS OF ENGINEERS
100 WEST OGLETHORPE AVENUE
SAVANNAH, GEORGIA 31401-3640

REPLY TO
ATTENTION OF

NOVEMBER 0 5 2013

Regulatory Division
SAS-2010-01169

JOINT PUBLIC NOTICE
Savannah District/State of Georgia

The Savannah District has received an application for a Department of the Army Permit, pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344), as follows:

Application Number: SAS-2010-01169

Applicant: Mr. Wally Orrel
McIntosh County Industrial Development Authority
Post Office Box 896
Darien, Georgia 31305

Agent: Mr. Alton Brown
Resource & Land Consultants, Inc.
41 Park of Commerce Way, Suite 303
Savannah, Georgia 31405

Location of Proposed Work: The project site is located in wetlands adjacent to and a ditch that drains to Cathead Creek, north of Georgia Highway 251, west of Interstate 95, north of the city of Darien, McIntosh County, Georgia (Latitude 31.4225, Longitude -81.4517).

Description of Work Subject to the Jurisdiction of the U.S. Army Corps of Engineers: The construction of a 368.67 acre industrial park. The project would impact 3.57 acres of jurisdictional wetland and 0.36 acre of jurisdictional ditch. The location and extent of potentially jurisdictional waters was verified by letter dated May 11, 2011. The site also includes 6.358 acres of previously filled wetlands that were verified by the Corps as isolated, non-jurisdictional. To mitigate for unavoidable impacts to waters of the United States, the applicant proposes to purchase 29.0 wetland mitigation credits from a commercial mitigation bank that includes the project area in its primary service area.

BACKGROUND

This Joint Public Notice announces a request for authorizations from both the Corps and the State of Georgia. The applicant's proposed work may also require local governmental approval.

STATE OF GEORGIA

Water Quality Certification: The Georgia Department of Natural Resources, Environmental Protection Division, intends to certify this project at the end of 30 days in accordance with the provisions of Section 401 of the Clean Water Act, which is required for a Federal Permit to conduct activity in, on, or adjacent to the waters of the State of Georgia. Copies of the application and supporting documents relative to a specific application will be available for review and copying at the office of the Georgia Department of Natural Resources, Environmental Protection Division, Water Protection Branch, 4220 International Parkway, Suite 101, Atlanta, Georgia 30354, during regular office hours. A copier machine is available for public use at a charge of 25 cents per page. Any person who desires to comment, object, or request a public hearing relative to State Water Quality Certification must do so within 30 days of the State's receipt of application in writing and state the reasons or basis of objections or request for a hearing. The application can be reviewed in the Savannah District, U.S. Army Corps of Engineers, Regulatory Division, 100 West Oglethorpe Avenue Savannah, Georgia 31401-3640.

State-owned Property and Resources: The applicant may also require assent from the State of Georgia, which may be in the form of a license, easement, lease, permit or other appropriate instrument.

Georgia Coastal Management Program: Prior to the Corps making a final permit decision on this application, the project must be certified by the Georgia Department of Natural Resources, Coastal Resources Division, to be consistent with applicable provisions of the State of Georgia Coastal Management Program (15 CFR 930). Anyone wishing to comment on Coastal Management Program certification of this project should submit comments in writing within 30 days of the date of this notice to the Federal Consistency Coordinator, Ecological Services Section, Coastal Resources Division, Georgia Department of Natural Resources, One Conservation Way, Brunswick, Georgia 31523-8600 (Telephone 912-264-7218).

U.S. ARMY CORPS OF ENGINEERS

The Savannah District must consider the purpose and the impacts of the applicant's proposed work, prior to a decision on issuance of a Department of the Army Permit.

Cultural Resources Assessment: Review of the latest published version of the National Register of Historic Places indicates that no registered properties or properties listed as eligible for inclusion are located at the site or in the area affected by the proposed work. A Phase I cultural resources survey has been completed within the project site. No sites eligible for listing on the National Register of Historic Places were found on the project site. It is anticipated that the proposed project would have no effect on cultural resources.

Endangered Species: Pursuant to Section 7(c) of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.), we request information from the U.S. Department of the Interior, Fish and Wildlife Service, the U.S. Department of Commerce, the National Oceanic and Atmospheric Administration, and the National Marine Fisheries Service; or, any other interested party, on whether any species listed or proposed for listing may be present in the area. A threatened and endangered species survey has been completed within the project site. No protected species were observed on the project site. Marginal foraging habitat for the wood stork (*Mycteria americana*) exists in wetlands on the subject property. We request concurrence from the U.S. Fish and Wildlife Service that the proposed project may affect, but would not likely adversely affect the wood stork. It is anticipated that the proposed project would have no effect on any other threatened and endangered species or their habitats.

Public Interest Review: The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors, which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and in general, the needs and welfare of the people.

Consideration of Public Comments: The Corps is soliciting comments from the public; federal, state, and local agencies and officials; Native American Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Application of Section 404(b)(1) Guidelines: The proposed activity involves the discharge of dredged or fill material into the waters of the United States. The Savannah District's evaluation of the impact of the activity on the public interest will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency, under the authority of Section 404(b) of the Clean Water Act.

Public Hearing: Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application for a Department of the Army Permit. Requests for public hearings shall state, with particularity, the reasons for requesting a public hearing. The decision whether to hold a public hearing is at the discretion of the District Engineer, or his designated appointee, based on the need for additional substantial information necessary in evaluating the proposed project.

Comment Period: Anyone wishing to comment on this application for a Department of the Army Permit should submit comments in writing to the Commander, U.S. Army Corps of Engineers, Savannah District, Attention: Mr. William M. Rutlin, 100 West Oglethorpe Avenue, Savannah, Georgia 31401-3640, no later than 30 days from the date of this notice. Please refer to the applicant's name and the application number in your comments.

If you have any further questions concerning this matter, please contact Mr. William M. Rutlin, Project Manager, Coastal Branch at 912-652-5893.

**Encls
1. Project Description, 15 pages
2. Tidewaters Industrial Park plan sheets, 9 pages

Tidewater Industrial Park
McIntosh County Industrial Development Authority
McIntosh County, Georgia
Project Description
October 2013

1.0 INTRODUCTION:

The McIntosh County Industrial Development Authority (MCIDA) is seeking authorization to impact 3.57 acres of jurisdictional wetland and 0.36 acre of jurisdictional ditch to facilitate the development of a master planned industrial park. The project site totals 368.67 acres located west of Interstate 95, east of Kings Road and north of Darien, within McIntosh County, Georgia (32.417000°, -81.451257°; Figure 1).

2.0 BACKGROUND & PROJECT PURPOSE/NEED:

2.1 Background: The MCIDA is a statutory development authority whose mission is to expand economic opportunities for McIntosh County by growing, attracting, developing and supporting new and existing industrial business in the community. As part of that mission, MCIDA recognized the need for an industrial park within McIntosh County. Because the logistics of industrial and manufacturing businesses are directly tied to access and transportation, Interstate 95 access is critical. Any industrial development authority that does not currently offer sites adjacent to major interstates is at a competitive disadvantage. The MCIDA continually markets industrial sites to major industries and several opportunities to secure new industry. However until MCIDA is able to offer a fully permitted and entitled industrial and manufacturing space adjacent to a major interstate, the authority will continue to be at a competitive disadvantage. These entitlement obligations include but are not limited to providing adequate access through the site, creating pods of developable area suitable to accommodate large facilities typical for industrial and manufacturing business operation, and installation of utilities. Recognizing the need for fully entitled manufacturing and industrial space adjacent to Interstate 95, the concept of the proposed Tidewater Industrial Park began in 2012.

2.2 Project Purpose/Need: The overall project purpose is to develop a master planned industrial park adjacent to Interstate 95 within McIntosh County to enable MCIDA to compete with regional development authorities, support future industrial needs of MCIDA, create additional jobs, and sustain the economic development success for McIntosh County.

3.0 EXISTING SITE CONDITIONS:

A jurisdictional area delineation was completed within the tract and the most recent jurisdictional determination was completed by the U.S. Army Corps of Engineers (USACE) in May 2011 under Regulatory Branch #SAS-2010-01169 (Appendix A). Based on this jurisdictional determination, the 368.67 acre project area contains 77.40 acre of jurisdictional wetland, 0.44 acre of jurisdictional ditch and 290.83 acre of upland. It should be noted that between 2011 and 2012, 0.08 acre of ditch (ditch #3 depicted on the attached permit drawings) was impacted during installation of a road crossing. Because a PCN was not submitted to the USACE for this crossing and per the request of the USACE, the applicant has included this 0.08 acre impact as part of this permit application and will provide mitigation for the crossing as part of the overall project. No other impacts within wetlands or waters of the U.S. have occurred since 2012 and no additional impacts will occur prior to authorization from the USACE.

The project site contains habitats common for the Coastal Plain of Georgia and typical for McIntosh County. The project site historically consisted of intensively managed timberland (pine and hardwood pulpwood production) previously owned by large timber corporations (most recently International Paper). More recent management activities have included clearing and site preparation of upland areas in anticipation of industrial development. The following provides a brief description of each habitat within the property. Photographs depicting the various habitats are presented in Appendix B.

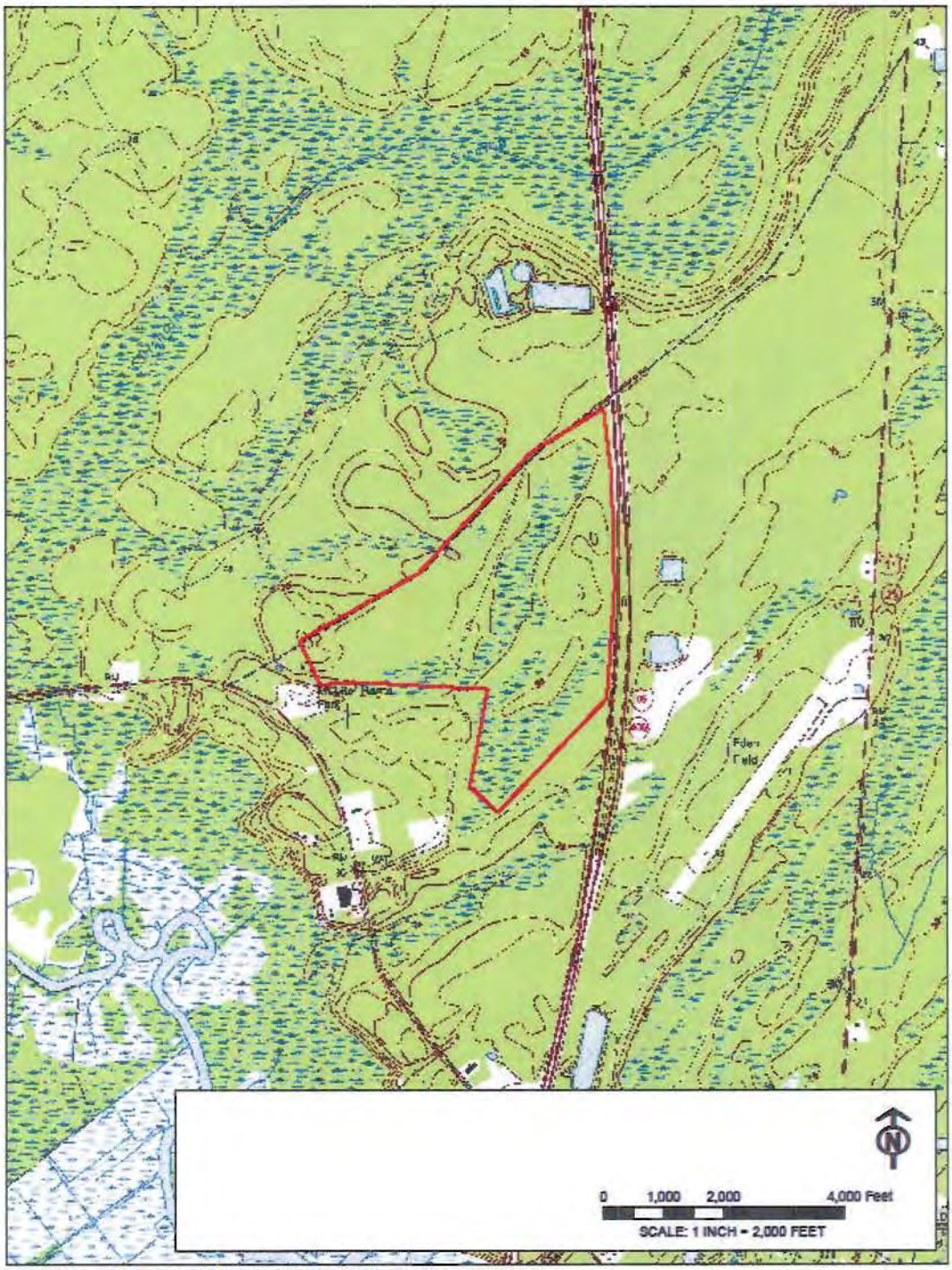


FIGURE 1: US GEOLOGICAL SUVEY RIDGEVILLE QUADRANGLE

The majority of the upland has been cleared, with some areas of pine plantation remaining. The cleared areas are periodically maintained through mowing. In addition, portions of the property are comprised of both forested and timbered wetland. Three open borrow pits/stormwater detention ponds are also located within the subject property. The following will provide a list of vegetative species present within each of the habitats.

3.1 Upland Loblolly Pine Plantation: (Appendix B, Photograph 1) The subject property contains managed pine plantation. Estimated age of the overstory is ten years. Species composition and distribution is as follows:

Overstory:
Loblolly Pine (Pinus taeda)
Understory:
Dog Fennel (Eupatorium capillifolium)
Sweetgum (Liquidambar styraciflua)
Winged Sumac (Rhus copallinum)
Bracken fern (Pteridium aquilinum)
Horse sugar (Sympolacaceae tinctoria)
Saw palmetto (Serenoa repens)
Vines:
Yellow Jessamine (Gelsemium sempervirens)

3.2 Cutover Wetland: (Appendix B, Photograph 2) A portion of the property contains clear-cut wetland where vegetation is scarce and contains only naturally regenerating sapling and herbaceous species.

Overstory:
N/A
Understory:
Red maple (Acer rubrum)
Red bay (Persea borbonia)
Sweetgum
Wax myrtle (Myrica cerifera)
Wool grass (Scirpus cyperinus)
Virginia chain-fern (Woodwardia virginica)
Soft rush (Juncus effuses)
Blackberry (Rubus spp.)

3.3 Borrow Pit/Stormwater Retention Ponds: (Appendix B, Photograph 3) The subject property contains three man-made borrow pits/stormwater retention ponds. No vegetation is present within these areas.

Overstory:
N/A
Understory:
N/A

3.4 Forested Wetland: (Appendix B, Photograph 4) Forested wetland area consists of mature overstory with common coastal plain vegetation.

Overstory:
Swamp tupelo (Nyssa sylvatica)
Bald cypress (Taxodium distichuum)
Slash pine (Pinus elliottii)
Red Maple
Understory:
Swamp titi (Cyrilla racemiflora)

Fetter bush (Lyonia lucida)
Greenbrier (Smilax laurifolia)

3.5 Cleared Pine Plantation: (Appendix B, Photograph 5) Portions of the property consists of cleared, graded and maintained upland. Species composition and distribution is as follows:

Overstory:
N/A
Understory:
Dog Fennel
Bracken fern

3.6 Forested Wetland-Thinned: (Appendix B, Photograph 6) Area consists of mature overstory that was recently thinned. Vegetation is common to the Coastal Plain of Georgia.

Overstory:
Loblolly pine
Bald cypress
Understory:
Wax myrtle
Virginia chain-fern
Wool grass
Maidencane (Panicum hemitomon)
Red root (Photinia pyrifolia)

4.0 PROPOSED PROJECT:
The proposed project will require 3.93 acres of wetland and ditch impact to accommodate the master plan for development of the proposed industrial park. As depicted in the permit drawings (Appendix C), the project will include construction of building area, installation of access roads, installation of stormwater management facilities (within upland only), extension of utilities, and construction of employee, trailer and equipment parking areas. Impacts associated with the project include the following:

Table 2.

Habitat	Activity	Impact Acreage
Wetland	General Fill (Permanent)	3.57
Ditch	General Fill (Permanent))	0.36*
	Total	**3.93**

*includes 0.08 acre of previously installed road crossing

Impacts will create area suitable in size to support the large buildings, parking and access roads associated with the proposed industrial park and are necessary to achieve the overall objectives for the site development.

The project area contains 77.84 acres of jurisdictional waters of the U.S. (wetland and ditch) and 73.91 acres will be avoided and remain undisturbed as part of the overall design. Large contiguous wetland areas were avoided during the project design and only smaller depressional wetlands and ditches were proposed for impact.

5.0 ALTERNATIVE ANALYSIS:
Prior to preparation of this permit application and during design of the project, the applicant considered both off-site and on-site alternatives. The following provides a description of other tracts considered during the

development plan review process as well as on-site alternatives considered in an effort to avoid and minimize on-site wetlands to the greatest extent practicable.

5.1 Site Screening Criteria: As part of the alternative site analysis, the following site screening criteria were applied to the overall project.

- **Geographic Location.** MCIDA determined that development of a fully permitted and entitled industrial park within McIntosh County is necessary to enable the applicant to compete with neighboring development authorities. Since MCIDA, the geographic location was naturally restricted to properties within McIntosh County.

- **Size.** The project site must be of suitable size to accommodate large contiguous areas of developable land necessary to accommodate parking, buildings, roads, etc. associated with manufacturing and distribution facilities. In addition, the cost associated with development and infrastructure installation needed to support an industrial site is significantly higher than most other development projects and a project site must be of suitable size to support numerous industries to allow site development cost sharing. For this reason, the size restriction placed on the project was a minimum of 100 acres and a maximum of 500 acres.

- **Zoning.** As with any project, land use restrictions associated with current zoning is a major consideration. For this site screening criteria, tracts that are currently zoned for the intended use or that could be reasonably re-zoned to accommodate the proposed project were considered practicable.

- **Utilities.** With any development project, utility services or access to utility services (water, sewer, electrical, gas, phone, cable, etc.) are required. For this reason, location of existing utilities and cost associated with servicing the project site if those utilities were not already available was a consideration in the site screening criteria.

- **Access.** Because industrial parks include operation of large trucks and trailers, public safety and traffic management is always a consideration. Entrance and exit points for the site and travel corridors to and from the interstate were determined to be an important site screening criteria.

5.2 Summary of Alternative Sites Screened for Practicability: Considering the site screening criteria above, the applicant reviewed all properties available for sale within McIntosh County. At the time of the search, 111 properties were for sale but only four of those properties met the size criteria outlined above. The applicant's proposed project site and each of the four alternative sites were evaluated in consideration of the site screening criteria. Location and site maps for each alternative are provided in Appendix F.

a. **Applicants Preferred Alternative:** The applicant's preferred alternative is located within the identified geographic area of review and falls within the size limit criteria. The property is currently zoned for industrial use and re-zoning would not be required. Water, sewer and electrical services have been extended to existing development located adjacent to the proposed industrial park and immediate extension of the services into the park is available. Access to the site is suitable to support the proposed land use. The applicants preferred alternative is practicable.

b. **Alternative Site 1.** This site totals 123 acres and falls within the prescribed project area size criteria. This site is located west of the intersection of Highway 251 and Ardick Road within McIntosh County which is within the identified geographic area of review. The property is currently zoned A5 (Agricultural) but could be rezoned for the intended industrial use. Utilities are not currently servicing the site but extension of public utilities from Highway 251 would be feasible. Access to the site is suitable to support the proposed land use. Alternative 1 is a practicable alternative.

c. **Alternative Site 2.** This site totals 936 acres and falls within the prescribed project area size criteria. This site is located adjacent to and east of Interstate 95, adjacent to and north of Highway 251 and adjacent to and west of Highway 17 within McIntosh County which is within the identified geographic area of review. The property is currently zoned A5 (Agricultural) but could be rezoned for the intended industrial use. Utilities are currently servicing the site. Access to the site is suitable to support the proposed land use. Alternative 2 is a practicable alternative.

d. **Alternative Site 3.** This site totals 116 acres and falls within the prescribed project area size criteria. This site is located adjacent to and east of Warsaw Road and north of Townsend Road within McIntosh County which is within the identified geographic area of review. The property is currently zoned A5 (Agricultural) but could be rezoned for the intended industrial use. Utilities are not currently servicing the site but could be extended down Warsaw Road. Access to the site is suitable to support the proposed land use. Alternative 3 is a practicable alternative.

e. **Alternative Site 4.** Site 4 totals 295 acres which meets the project area size criteria. The tract is located south of Shellman Bluff Road and east of Young Man Road within McIntosh County. This site falls within the geographic area of review. The property is currently zoned A5 (Agricultural) but could be rezoned for the intended industrial use. Utilities are not currently servicing the site but could be extended to the site. Access to the site is suitable to support the proposed land use. Alternative 3 is a practicable alternative.

f. **Alternative Sites 5-106.** These properties all fell within the geographic review area and could be acquired (listed for sale). However of these properties, 99 were less than 10 acres in size, 4 were 10-50 acres in size and 4 were less than 100 acres. Thus, Alternative Sites 5-106 did not meet the project area size criteria and no further evaluation was conducted.

Based on the site analysis above, a total of 5 sites were determined to be practicable including the Preferred Alternative, Alternative Site 1, Alternative Site 2, Alternative Site 3, Alternative Site 4, and Alternative Site 5. Table 3 provides an overall summary of site screening criteria to each alternative site.

Table 3.

Site Screening Selection Criteria	Applicant's Preferred Alternative	Alternative Site 1	Alternative Site 2	Alternative Site 3	Alternative Site 4	Alternative Sites 5-106
Geographic Location	Yes	Yes	Yes	Yes	Yes	Yes
Size	Yes	Yes	Yes	Yes	Yes	No
Zoning	Yes	Yes	Yes	Yes	Yes	N/A
Utilities	Yes	Yes	Yes	Yes	Yes	N/A
Access	Yes	Yes	Yes	Yes	Yes	N/A
Practicable Alterative	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**No**

5.3 Review of Practicable Alternatives: Following consideration of alternative sites using the site screening criteria, the applicant completed an analysis of practicable alternatives to identify the least environmentally damaging practicable alternative pursuant to 40 CFR 230.7(b)(1). The purpose of the below analysis is to ensure that "no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem". The applicant evaluated potential environmental impacts that would result from construction of the proposed facility. This

evaluation was completed by considering several environmental factors listed below as well as additional non-environmental factors which could impact development of the site.

Environmental Factors:

- Stream Impacts (quantitative). The linear footage of potential stream impact was evaluated for each practicable alternative.

- Stream Impacts (qualitative). The functional value of potential stream impact areas was evaluated for each practicable alternative.

- Wetland Impacts (quantitative). The acreage of potential wetland impact was evaluated for each practicable alternative.

- Wetland Function (qualitative). The functional value of potential wetland impact areas was evaluated for each practicable alternative.

- Impacts to Other Waters (quantitative). The acreage of open water impact for each site was considered during review of each practicable alternative.

- Other Waters Functions (qualitative). The functional value of any open water impact areas was evaluated for each practicable alternative.

- Federally Listed Threatened or Endangered Species. A preliminary assessment of each practicable alternative was conducted to determine the potential occurrence of animal and plants species (or their preferred habitats) currently listed as threatened or endangered by state and federal regulations [Federal Endangered Species Act of 1973 (16 USC 1531-1543)]. The U.S. Fish and Wildlife Service (USFWS) lists the following plant and animal species as endangered or threatened in McIntosh County, Georgia:

  North Atlantic right whale (Eubalaena glacialis)
  West Indian manatee (Trichechus manatus)
  Piping plover (Charadrius melodus)
  Wood stork (Mycteria Americana)
  Altamaha spinymussel (Elliptio spinosa)
  Eastern indigo snake (Drymarchon corais couperi)
  Green sea turtle (Chelonia mydas)
  Leatherback sea turtle (Dermochelys coriacea)
  Loggerhead sea turtle (Caretta caretta)
  Flatwoods salamander (Ambystoma cingulatum)
  Shortnose sturgeon (Acipenser brevirostrum)

- Cultural Resources. A preliminary assessment of cultural resources was conducted for each site by reviewing available State Historic Preservation Office information at http://www.nr.nps.gov/.

- Flood Plain Impact. The acreage of potential flood plain impact was evaluated for each practicable alternative.

- Stream Buffer Impact. The linear footage of potential stream buffer impact was evaluated for each practicable alternative.

Other Factors:

- Applicant Owned: Any tracts currently owned by the applicant were noted.

5.3.1 Proposed Action or Applicant's Preferred Alternative: The project site totals 368.67 acres located west of Interstate 95, east of Kings Road and north of Darien. As described in Section 3.0 above, the subject property has been historically managed for silviculture production and more recent management activities have included clearing and site preparation in anticipation of industrial development. The following provides a brief assessment of factors associated with the proposed and preferred alternative.

Environmental Factors:

- Stream Impacts (quantitative). No stream impacts are associated with this alternative.

- Stream Impacts (qualitative). No stream impacts are associated with this alternative.

- Wetland Impacts (quantitative). The applicant's preferred alternative contains 77.40 acre of jurisdictional wetland, 0.44 acre of jurisdictional ditch and 290.83 acre of upland. The proposed site plan will require 3.57 acres of wetland impact.

- Wetland Function (qualitative). Based on the field delineation, review of the NWI, topographic survey, and historic aerial photography the wetland areas would have experienced impacts associated with fragmentation from construction of I-95, installation of silvicultural ditches, and intensive timber management. While these actions may have resulted in the degradation of these wetlands, the overall function and value would be medium.

- Impacts to Other Waters (quantitative). The proposed project requires 0.36 acre of silvicultural ditch impact.

- Other Waters Functions (qualitative). The existing ditches within the property were constructed as part of the past timber management to drain larger contiguous wetlands and isolated depressional wetlands. This habitat commonly found on timber tracts throughout the Coastal Plain of Georgia. These areas contain shrub and herbaceous vegetation within and adjacent to the ditch, spoil material adjacent to the ditch and water within the ditch following rain events and during wet periods. Considering the historic and natural condition of this area as a forested wetland, the functional value of these ditches would be low.

- Federally Listed Threatened or Endangered Species. RLC conducted a threatened and endangered species survey to determine the potential occurrence of animal and plants species (or their preferred habitats) currently listed as threatened or endangered by state and federal regulations [Federal Endangered Species Act of 1973 (16 USC 1531-1543)]. Neither the listed species nor habitat typically associated with these species was observed during the survey. Due to the location of the project area and historic land management (intensive timber management including site preparation, ditching, bedding, tree planting, etc.) and the absence of habitat and listed species, the proposed project is not likely to adversely impact any threatened or endangered species. A copy of the Threatened and Endangered Species Report of Findings can be found in Appendix D.

- Cultural Resources. A Phase I cultural resource survey has been completed within the project site by Southeastern Archeological Services. There were no previously recorded cultural resources within or near the project area. Based on the Phase I survey, no sites eligible for listing on the National Register of Historic Places were recorded. Southeastern Archeological Services has recommended that no further cultural resource investigations are necessary for this undertaking. See Appendix E.

- Flood Plain Impact. According to the FEMA FIRM Data, the applicant's preferred site contains an estimated 112 acres of flood plain and approximately 2 acres of flood plain impacts are associated with the proposed project.

- Stream Buffer Impact. No stream buffer impacts are associated with this alternative.

Other Factors:

- Applicant Owned: Yes.

5.3.2 No Action Alternative: Obviously with every project, a "no action" alternative must be considered. The proposed project has been initiated to facilitate the establishment of an industrial park within McIntosh County. MCIDA continues to seek new businesses, attempt to create jobs and improve the overall economy for the county. Today, industries review numerous sites throughout the southeast prior to construction of a new facility and many development authorities compete for each of these projects. Factors which play an important role in site selection are location, site access, tract size, purchase price, zoning, utilities, wetland area, floodplain, development costs, etc. The most critical factor is often permitting requirements and timeframe for construction. In order for McIntosh County to become a viable candidate for any prospective business, available parcels must be created with all entitlements in place. Without development of this master plan project, MCIDA will continue to be at a competitive disadvantage and will continue to be eliminated from the candidate site list for many large industries and corporation. While the "no-action alternative" avoids any impacts to wetland resources, this alternative would not meet the overall project purpose to create and sustain industrial development within the county and would negatively affect McIntosh County with loss of tax revenue and job creation. For this reason, the "no-action" alternative is not feasible.

5.3.3 Off-Site Alternatives: As discussed above, industrial developments of this scale require consideration of many factors. These types of storage and manufacturing businesses require manufacturing and warehousing of products on-site and frequent hauling and distribution of products to retail locations throughout the southeast. For this reason, appropriate site location and site access is critical. The site must be within close distance to major arterial roads. The site must avoid to the greatest extent practicable residential areas. The site must contain access which can support the high volume of large truck traffic. The site must contain large pods of developable land on which large warehousing and manufacturing facilities can be constructed. Once site location and access issues are satisfied, factors such as wetlands, soils, stormwater management, water, sewer, power, zoning, topography, floodplain etc. must be considered. It is all of these basic site requirements that greatly limit opportunities to construct these types of facilities.

Preliminary consideration of off-site alternatives included parcel size and geographic location within McIntosh County. The applicant then evaluated other practicable off-site alternatives that fit within the parameters prescribed above for construction of an industrial site. This evaluation was conducted to confirm that the project complies with Section 404(b)(1) Guidelines. The guidelines are sequential and require that permit applicants avoid unnecessary environmental impacts by preparing an analysis of available off-site alternatives that would potentially result in less adverse impacts than the proposed project to the maximum extent practicable.

5.3.3.1 Alternative Site 1: This site totals 123 acres located west of the intersection of Highway 251 and Ardick Road. Based on review of aerial photography the entire tract consists of intensively managed timberland.

Environmental Factors:

- Stream Impacts (quantitative). No stream impacts are associated with this alternative.

- Stream Impacts (qualitative). No stream impacts are associated with this alternative.

- Wetland Impacts (quantitative). This tract contains an estimated 48 acres of wetlands. Because the size of the wetland present and its location within the tract, any industrial site master plan would require impacts to an estimated 19 acres of jurisdictional wetlands.

- Wetland Function (qualitative). Review of aerial photography indicates that the entire site, both wetland and upland, has been intensively managed for timber production. Based on review of the NWI, topographic survey, and aerial photography the historic limits of the wetlands have been impacted by standard silvicultural practices. Therefore, the functional value of the wetland would be relatively low.

- Impacts to Other Waters (quantitative). Review of available information does not depict any other waters present within the property beyond wetland. Thus, no impacts to Other Waters would be required.

- Other Waters Functions (qualitative). Not applicable.

- Federally Listed Threatened or Endangered Species. Based on location of the tract and current site conditions, neither listed species nor habitat typically associated with these species are present within Alternative Site 1. Thus, no adverse impacts to federally listed threatened and endangered species are expected.

- Cultural Resources. A Phase I cultural resource survey has not been completed within the site. However, based on a query of the NHR database, no sites are known to occur within this site.

- Flood Plain Impact. According to the FEMA FIRM Data, Alternative Site 1 contains approximately 33 acres of flood plain and an estimated 19 acres would be impacted by the project.

- Stream Buffer Impact. No stream buffer impacts are associated with this alternative.

Other Factors:

- Applicant Owned: No.

5.3.3.2 Alternative Site 2: This site totals 936 acres and falls within the prescribed project area size criteria. This site is located adjacent to and east of Interstate 95, adjacent to and north of Highway 251 and adjacent to and west of Highway 17. Based on review of aerial photography the tract consists of typical hardwood and pine forest timberland.

Environmental Factors:

- Stream Impacts (quantitative). No stream impacts are associated with this alternative.

- Stream Impacts (qualitative). No stream impacts are associated with this alternative.

- Wetland Impacts (quantitative). This tract contains approximately 379 acres of wetlands. For the size and configuration of the tract, it contains a large amount of jurisdictional wetland and is likely that wetland impacts exceeding 30 acres would be required to facilitate the proposed master plan.

- Wetland Function (qualitative). Based on review of the NWI, topographic survey, and aerial photography the historic limits of the wetlands may have been impacted by standard silviculture practices on the tract. The functional value of the wetland would be in the medium range.

- Impacts to Other Waters (quantitative). The tract contains an estimated 20.3 acres of open water pond and an unknown linear footage of silvicultural ditch. While the exact acreage of impacts to these Other Waters is unknown, greater than 5 acres would be anticipated considering the location of these habitats. It is anticipated that approximately 2 acres of pond impact and 1 acre of ditch impact would be required for the development of the facility within this property.

- Other Waters Functions (qualitative). Just as with the proposed alternative, it is assumed that the existing ditches were constructed as part of the past timber management to drain larger contiguous wetlands and isolated depressional wetlands and the open water ponds were constructed for borrow material (used for both the construction of Interstate 95 and the internal road system within the property). This habitat commonly found on timber tracts throughout the Coastal Plain of Georgia considering the historic and natural condition of these areas, the functional value would be relatively low.

- Federally Listed Threatened or Endangered Species. Based on location of the tract and current site conditions, neither listed species nor habitat typically associated with these species are present within Alternative Site 2. Therefore, no adverse impacts to federally listed threatened and endangered species are expected.

- Cultural Resources. A Phase I cultural resource survey has not been completed within the project area. However, based on a query of the NHR database, no sites are known to occur within this site.

- Flood Plain Impact. According to the FEMA FIRM Data, Alternative Site 2 contains 457 acres of flood plain and due to the landscape position and site configuration significant flood plain impacts would be required.

- Stream Buffer Impact. No stream buffer impacts are associated with this alternative.

Other Factors:

- Applicant Owned: No.

5.3.3.3 Alternative Site 3: This tract consists of approximately 116 acres located adjacent to and east of Warsaw Road and north of Townsend Road. Based on review of aerial photography the entire tract consists of intensively managed timberland.

Environmental Factors:

- Stream Impacts (quantitative). No stream impacts are associated with this alternative.

- Stream Impacts (qualitative). No stream impacts are associated with this alternative.

- Wetland Impacts (quantitative). This tract contains an estimated 54 acres of wetlands. For the size and configuration of the tract, it contains a large amount of jurisdictional wetland and is likely that wetland impacts exceeding 25 acres would be required to facilitate the proposed master plan.

- Wetland Function (qualitative). Based on review of the NWI, topographic survey, and aerial photography the historic limits of the wetlands have been impacted by the upstream and downstream damming of wetland systems to create open water ponds. The functional value of the wetland would be in the low.

- Impacts to Other Waters (quantitative). Review of available information does not depict any other waters present within the property beyond wetland. Thus, no impacts to Other Waters would be required.

- Other Waters Functions (qualitative). Not applicable

- Federally Listed Threatened or Endangered Species. Based on location of the tract and current site conditions, neither listed species nor habitat typically associated with these species are present within Alternative Site 5. Therefore, no adverse impacts to federally listed threatened and endangered species are expected.

- Cultural Resources. A Phase I cultural resource survey has not been completed within the project area.

However, based on a query of the NHR database, no sites are known to occur within this site.

- Flood Plain Impact. According to the FEMA FIRM Data, approximately 15% of Alternative Site 3 is within the 100 year flood zone and development of the tract would require an estimated 2 acres of impacts.

- Stream Buffer Impact. No stream buffer impacts are associated with this alternative.

Other Factors:

- Applicant Owned: No.

5.3.3.4 Alternative Site 4: This tract consists of approximately 295 acres located south of Shellman Bluff Road and east of Young Man Road. Based on review of aerial photography the tract consists of timberland and tidal marsh.

Environmental Factors:

- Stream Impacts (quantitative). No stream impacts are associated with this alternative.

- Stream Impacts (qualitative). No stream impacts are associated with this alternative.

- Wetland Impacts (quantitative). Based on available information, this tract contains 88 acres of tidal wetland and 16 acres of freshwater wetland. Due to the extent of tidal wetland which would greatly restrict and limit developable land, impacts to all 16 acres of wetland would be required to facilitate the proposed master plan.

- Wetland Function (qualitative). Based on review of available information, Based on age of the timber, lack of disturbance and overall condition of both the freshwater and tidal marsh, the functional value of the wetland would be high.

- Impacts to Other Waters (quantitative). The site contains 1.4 acres of open water pond. While this pond may not be filled during development it would be likely that impacts would be required for incorporation of this pond into the overall stormwater management plan.

- Other Waters Functions (qualitative). The open water pond is man-made and was presumably used as a source of borrow material. The overall function would be relatively low.

- Federally Listed Threatened or Endangered Species. Based on location of the tract and current site conditions, neither listed species nor habitat typically associated with these species are present within Alternative Site 4. Therefore, no adverse impacts to federally listed threatened and endangered species are expected.

- Cultural Resources. A Phase I cultural resource survey has not been completed within the project area. However, based on a query of the NHR database, no sites are known to occur within this site.

- Flood Plain Impact. According to the FEMA FIRM Data, approximately 90% of Alternative Site 4 is within the 100 year flood zone and development of the tract would require significant flood plain impacts.

- Stream Buffer Impact. No stream buffer impacts are associated with this alternative.

Other Factors:

- Applicant Owned: No.

5.3.4 Summary of Off-Site Alternatives Analysis: When comparing the practicable alternatives, the Applicant's Preferred Alternative is the least damaging when considering all environmental factions including wetlands, floodplain, cultural resources, protected species and other environmental considerations. As outlined in Table 4.

below, the Applicant's Preferred Alternative requires less wetland than the other alternative sites. It should also be noted that the project site contains 77.84 acres of jurisdictional waters including wetland and ditch. This equates to 21% jurisdictional area and 79% upland. As was demonstrated by the off-site alternatives analysis, Alternatives 1,2,3 and 4 contained 39%, 43%, 46% and 36% jurisdictional area respectively. Thus, it would not be feasible to find another site that would require less jurisdictional area impact.

Table 4.

Alternative	Tract Acreage	Jurisdictional Waters of U.S. Acreage	Percent Jurisdictional Area	Required Jurisdictional Area Impact
Proposed/Preferred	368.67 ac	77.84 ac	21%	3.57 ac
1	123 ac	48 ac	39%	19 ac
2	936 ac	399 ac	43%	33 ac
3	116 ac	54 ac	46%	25 ac
4	295	105 ac	36%	16 ac

In addition to the decreased overall environmental impact through the site selection, the Applicant's Preferred Alternative is located in the desired geographic location and provides visibility to Interstate 95, as well as immediate access to the Interstate. Numerous alternative sites were located long distances from the interstate, would require capital investments to secure the property, would require re-zoning, and would necessitate the establishment of utilities (water, sewer, and power). All alternative sites analyzed would require construction of infrastructure to facilitate the goals of the proposed industrial facility while the proposed site does not require re-zoning, utilities, access road installation, etc. These improvements would likely require additional impacts to environmental resources.

Based on the assessment of alternatives analysis completed above, the Applicant's Preferred Alternative is the least damaging practicable alternative. Table 5 provides a summary of the practicable alternatives and the values for each factor. Exhibits depicting each alternative are provided in Appendix F.

Table 5.

FACTORS Environmental Factors	No Action Alternative	Applicant's Preferred (proposed & permitted)	Alt 1	Alt 2	Alt 3	Alt 4
Stream Impacts (Linear Feet)	None	None	None	None	None	None
Loss in Stream Function	None	None	None	None	None	None
Wetland Impacts (Acres)	None	3.57	19	30	25	16
Loss in Wetland Function	None	Low	Low	Med	Low	Med
Impacts to Other Waters (Acres)	None	0.36	0	3	3	0
Loss of Other Waters Functions	None	Low	Low	No	Low	No
Federal Endangered Species	N/A	No	No	No	No	No
Cultural Resources	N/A	No	No	No	No	No
Flood Plain	N/A	Yes	Yes	Yes	Yes	Yes
Stream Buffer	N/A	No	No	No	No	No
Other Factors						
Ownership by MCIDA	N/A	Yes	No	No	No	No
LEDPA	**N/A**	**Yes**	**No**	**No**	**No**	**No**

5.4 On-Site Alternatives & Avoidance/Minimization: In addition to the determination that the proposed project site was the most practicable and least damaging alternative, the applicant considered on-site alternatives in an effort to avoid and minimize jurisdictional area impacts to the greatest extent practicable. The proposed project includes the construction of an industrial park which will support large manufacturing and distribution facilities. The footprint of these facilities often requires large contiguous development area anywhere from a minimum of 350,000 square feet to over 1,000,000 square feet. The land plan proposed as a part of this project maintains these design requirements while avoiding wetlands to the maximum extent practicable.

The proposed plan is the result of numerous design alternatives where the applicant focused on least environmentally damaging options while still meeting the needed requirements for the master plan. The applicant, engineer, and environmental consultant narrowed the on-site alternatives for consideration to three alternatives. Table 6 provides an outline of the three on-site alternatives which were considered. Exhibits depicting each alternative are provided in Appendix G.

Table 6.

Alternative	Project Area (Acres)	Wetland Impact (acres)	Ditch Impact (acres)	Total (acres)
Scenario 1 (Proposed)	203.83	3.57	0.36	3.93
Scenario 2	203.83	5.43	0.36	5.79
Scenario 3	203.83	9.14	0.36	9.50

When considering the overall development plan, location of proposed impacts compared to location and quality of preservation areas, the applicant continually considered opportunities for avoidance and minimization. Although alternative plans, which provided flexibility for general design, were preferred, these alternative site plans required a greater acreage of wetland impact. The applicant's plan restricts and limits the activities to upland area, avoids and preserves the larger wetland systems, avoids and preserves forested wetland systems to the greatest extent practicable, and proposes impacts to the minimal acreage of wetland.

Based on review of alternative site plans, it is the applicant's opinion that the current site design and layout has avoided and minimized wetland impacts to the greatest extent practicable while still satisfying the overall project purpose.

6.0 STORMWATER MANAGEMENT:

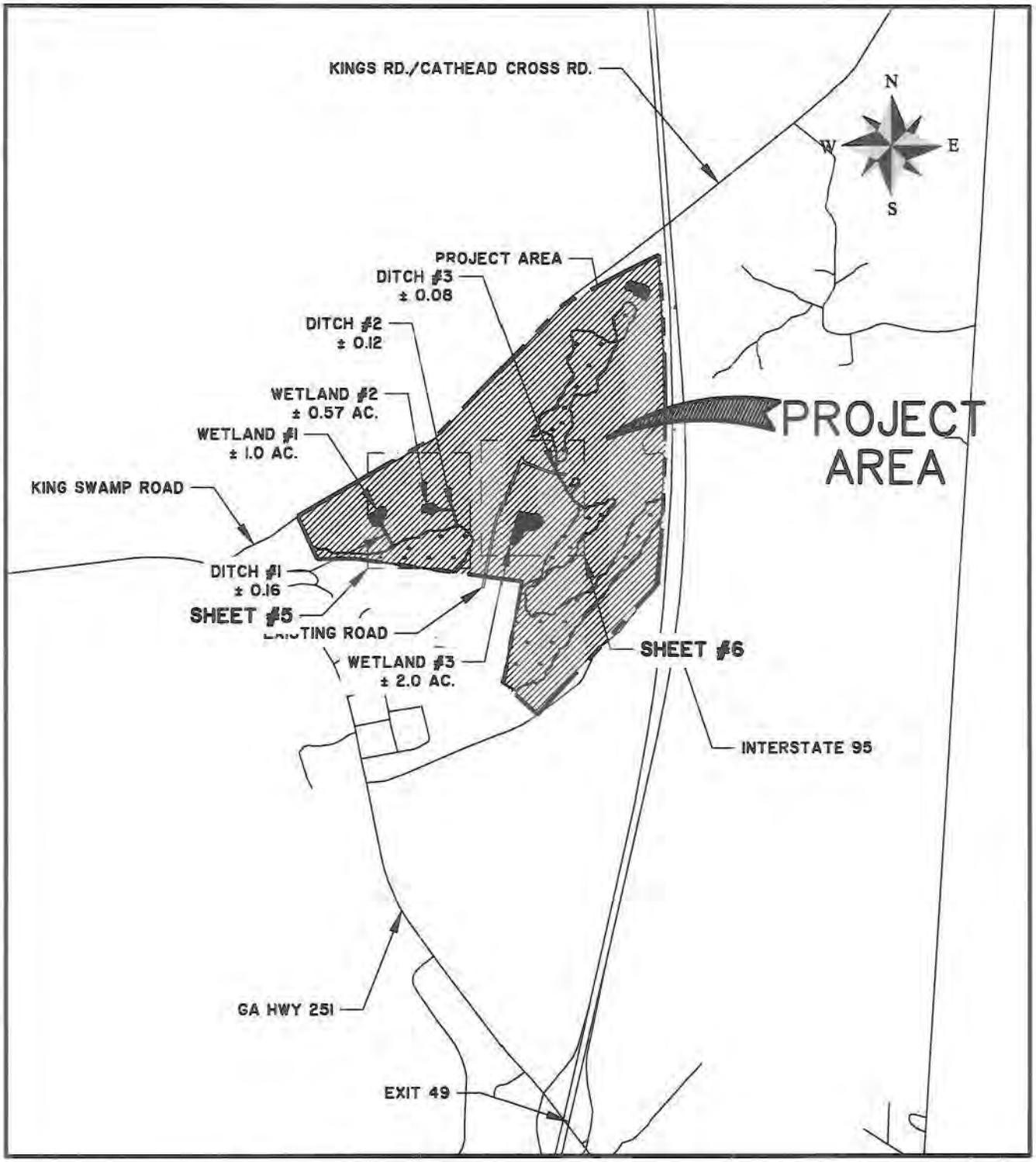
Thomas & Hutton, the consulting engineer is designing the stormwater master plan for the project. Although this plan has not yet been finalized, preliminary design includes construction of stormwater management ponds that are being designed to accommodate the stormwater volume associated with development of the site. The final plan will meet any and all stormwater management requirements of the local and state authorities. No impact to jurisdictional areas is associated with construction of the stormwater detention ponds and all stormwater management facilities will be constructed in upland area.

7.0 COMPENSATORY MITIGATION:

As indicated above, the proposed project requires 3.57 acres of permanent wetland fill and 0.36 acre of permanent ditch fill. Preliminary mitigation credit calculations indicate that the proposed wetland impact requires 29.0 wetland mitigation credits to compensate for the unavoidable impact (Appendix H). Upon approval of the proposed project and prior to initiation of authorized wetland impacts, the applicant will purchase 29.0 wetland mitigation credits from Margin Bay Wetland Mitigation Bank, Wilhelmina-Morgan Mitigation Bank, Wilkinson Oconee Mitigation Bank, Yam Grandy Mitigation Bank, Old Thorn Pond Mitigation Bank and/or Black Creek Mitigation Bank whose service area is the Ogeechee River Watershed.

8.0 CONCLUSION:

In summary, the MCIDA is proposing the construction of an industrial development with immediate access and visibility to Interstate 95 located near Darian, McIntosh County, Georgia. The proposed project is the result of numerous design plan reviews during which the applicant, engineer, and environmental consultant were able to further avoid and minimize wetland impacts. While the applicant has avoided and minimized impacts to jurisdictional waters to the greatest extent practicable, the project will require 3.93 acres of jurisdictional area impacts to facilitate implementation of the overall site plan. As compensatory mitigation for the proposed impacts, the applicant is proposing the purchase of 29.0 wetland mitigation credits from an USACE approved mitigation bank within the Ogeechee River Service Area. All development activities will be conducted using best management practices to prevent unintended or secondary impacts to wetlands and waters adjacent to the project site.



TIDEWATERS INDUSTRIAL PARK

PROPOSED ACTIVITY:

LOCATION MAP

CLIENT:

MCINTOSH COUNTY INDUSTRIAL DEVELOPMENT AUTHORITY

LOCATION: DARIEN, MCINTOSH COUNTY, GEORGIA

DATE: September 30, 2013 SHEET: 1

JOB NUMBER: J- 24584.0003 SCALE: 1" = 2000'

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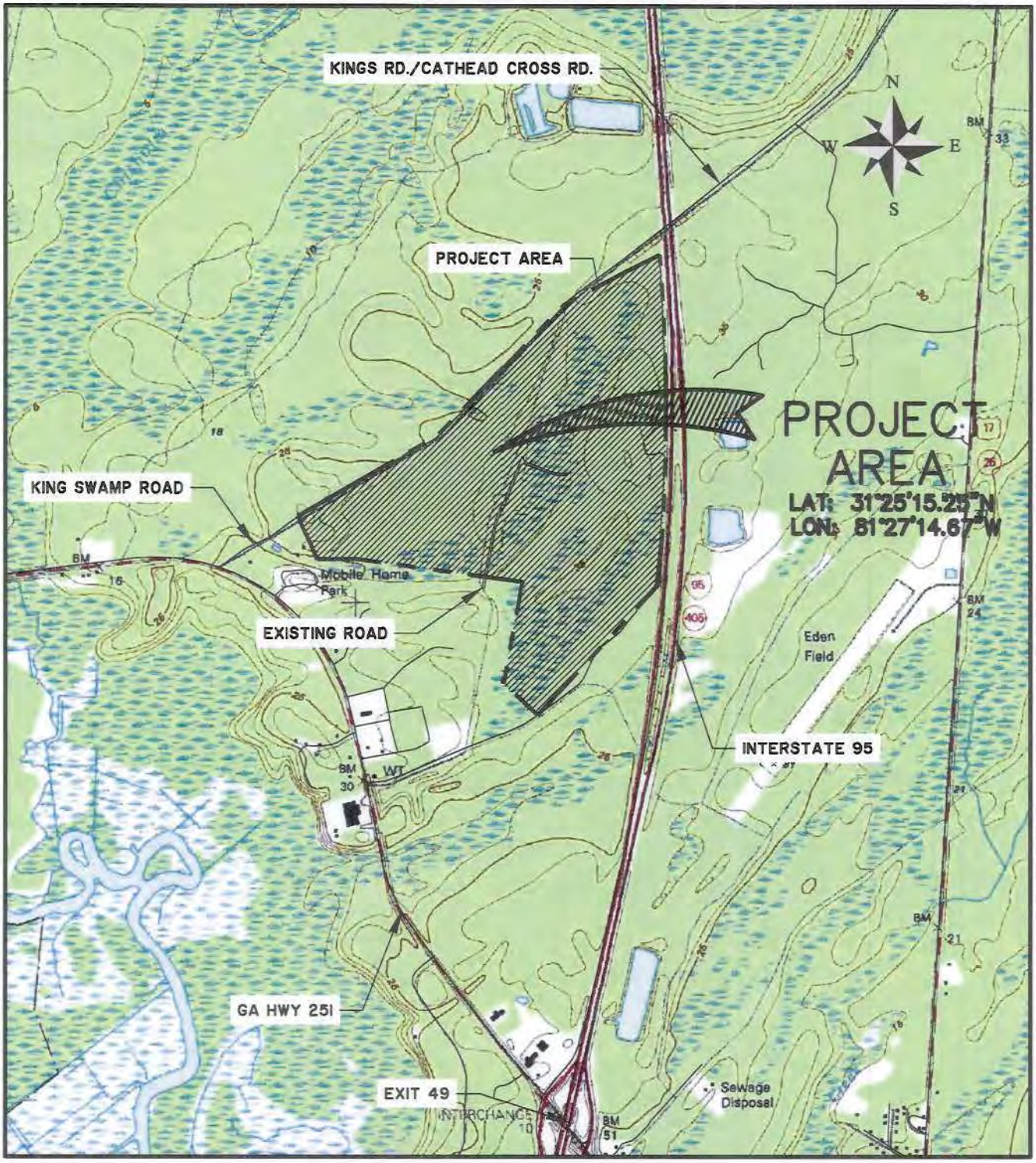

TIDEWATERS INDUSTRIAL PARK

PROPOSED ACTIVITY:

QUAD MAP

CLIENT:

MCINTOSH COUNTY INDUSTRIAL DEVELOPMENT AUTHORITY

LOCATION: DARIEN, MCINTOSH COUNTY, GEORGIA

DATE: September 30, 2013 SHEET: 2

JOB NUMBER: J - 24584.0003 SCALE: 1" = 2000'

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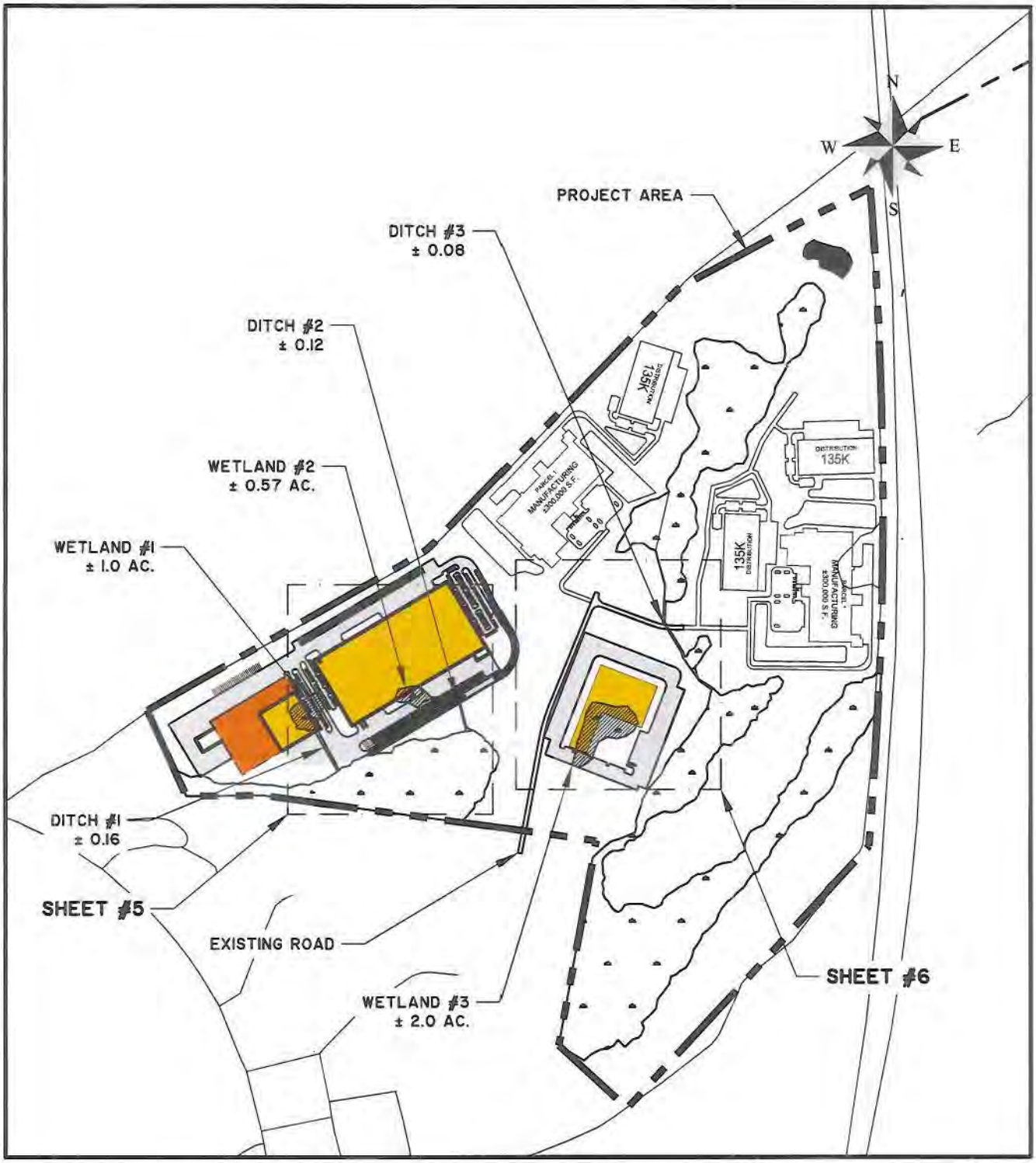

TIDEWATERS INDUSTRIAL PARK

PROPOSED ACTIVITY:

SHEET LAYOUT

CLIENT:

MCINTOSH COUNTY INDUSTRIAL DEVELOPMENT AUTHORITY

LOCATION: DARIEN, MCINTOSH COUNTY, GEORGIA

DATE: September 30, 2013 SHEET: 3

JOB NUMBER: J - 24584.0003 SCALE: 1" = 1000'

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LEGEND

ACREAGE SUMMARY

TOTAL PROJECT ACREAGE	±368.67 AC
TOTAL JURISDICTIONAL WETLAND ACREAGE	±77.40 AC
TOTAL DITCH ACREAGE	±0.44 AC
TOTAL UPLAND ACREAGE	±290.83 AC

WETLAND IMPACTS

JURISDICTIONAL WETLANDS TO BE IMPACTED

WETLANDS TO BE FILLED FOR INDUSTRIAL LAND DEVELOPMENT ACTIVITIES	±3.57 AC
DITCHES TO BE FILLED FOR INDUSTRIAL LAND DEVELOPMENT ACTIVITIES	±0.36 AC
TOTAL IMPACTS	±3.93 AC

TIDEWATERS INDUSTRIAL PARK

PROPOSED ACTIVITY:

LEGEND

CLIENT:

MCINTOSH COUNTY INDUSTRIAL DEVELOPMENT AUTHORITY

LOCATION: DARIEN, MCINTOSH COUNTY, GEORGIA

DATE: September 30, 2013 SHEET: 4

JOB NUMBER: J - 24584.0003 SCALE:

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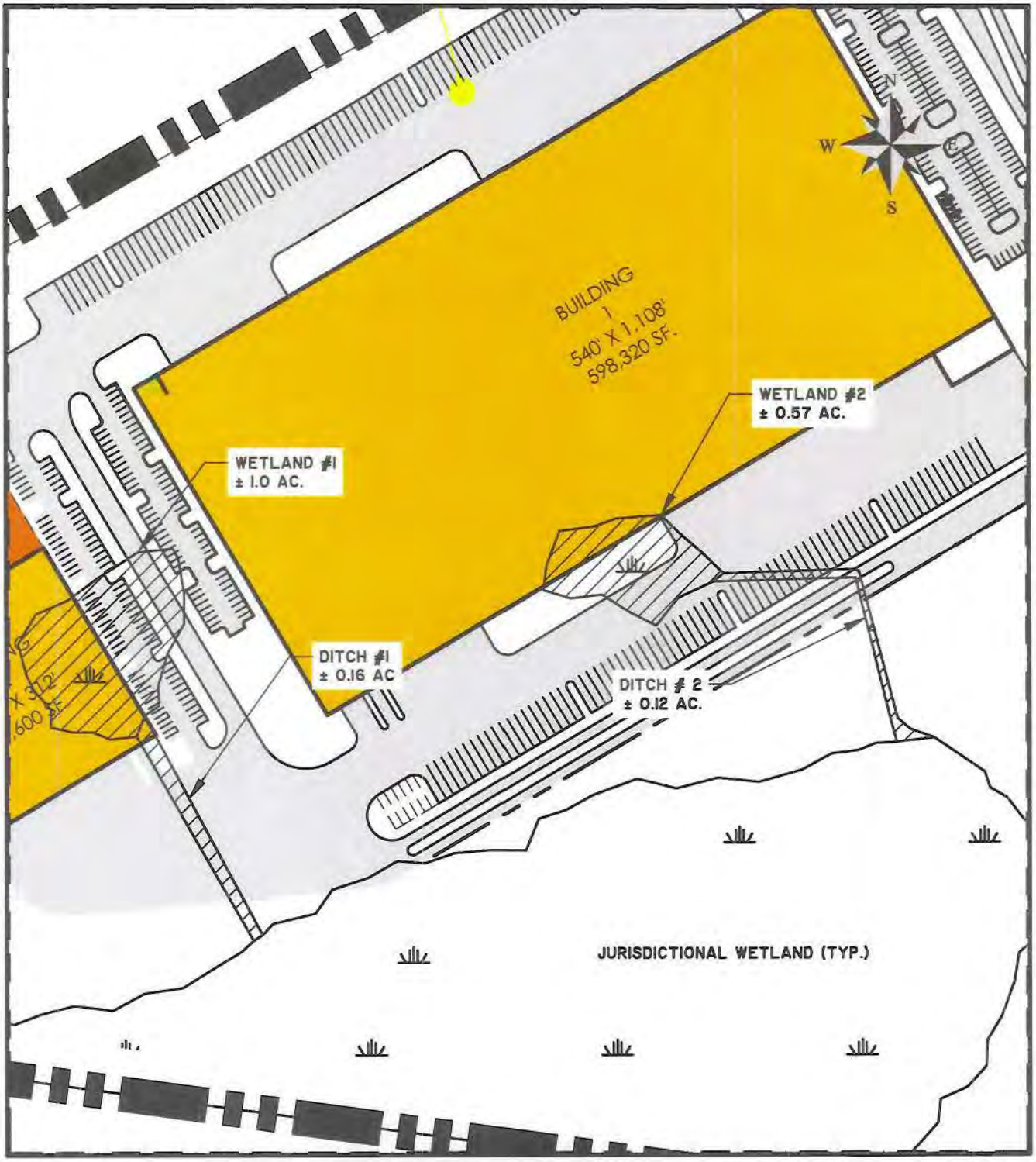

TIDEWATERS INDUSTRIAL PARK

PROPOSED ACTIVITY:

WETLAND #1 AND WETLAND #2

CLIENT:

MCINTOSH COUNTY INDUSTRIAL DEVELOPMENT AUTHORITY

LOCATION: DARIEN, MCINTOSH COUNTY, GEORGIA

DATE: September 30, 2013 SHEET: 5

JOB NUMBER: J - 24584.0003 SCALE: 1" = 200'

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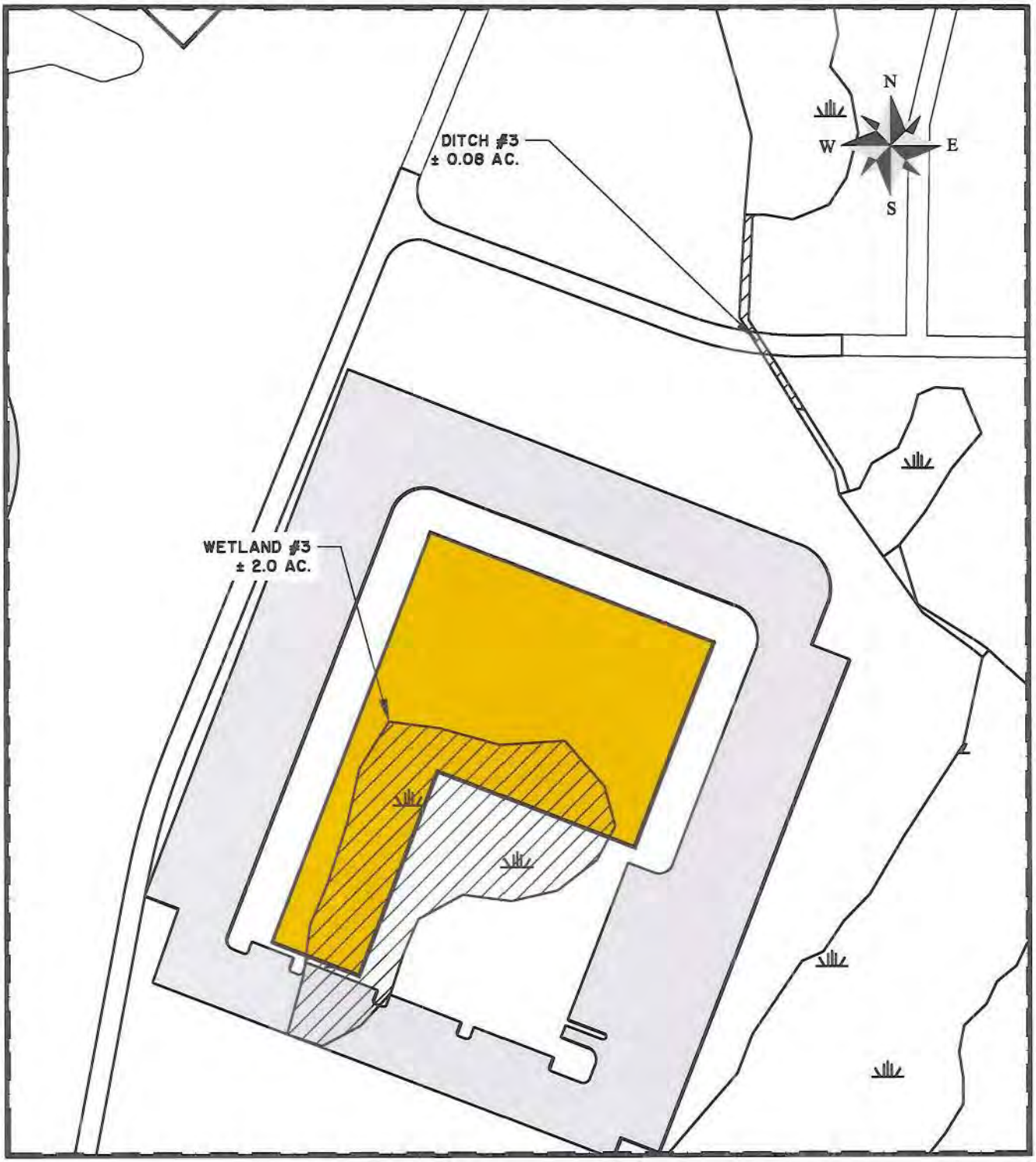

TIDEWATERS INDUSTRIAL PARK

PROPOSED ACTIVITY:

WETLAND #3

CLIENT:

MCINTOSH COUNTY INDUSTRIAL DEVELOPMENT AUTHORITY

LOCATION: DARIEN, MCINTOSH COUNTY, GEORGIA

DATE: September 30, 2013 SHEET: 6

JOB NUMBER: J - 24584.0003 SCALE: 1" = 200'

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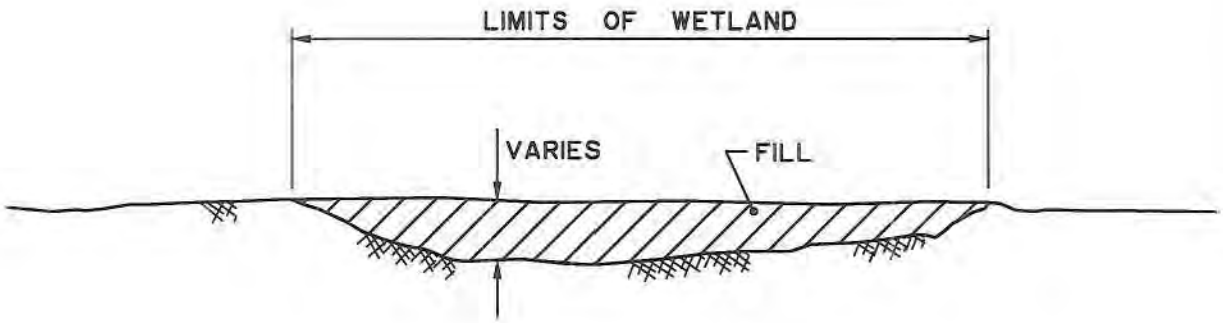
JURISDICTIONAL WETLANDS

TOTAL CU. YDS. OF FILL (20% COMPACTION) = 26,000 CY.

TOTAL CU. YDS. OF EXCAVATION = 9,300 CY.



WETLAND FILL SECTION

NOT TO SCALE

TIDEWATERS INDUSTRIAL PARK

PROPOSED ACTIVITY:

WETLAND FILL SECTION

CLIENT:

MCINTOSH COUNTY INDUSTRIAL DEVELOPMENT AUTHORITY

LOCATION: DARIEN, MCINTOSH COUNTY, GEORGIA

DATE: September 30, 2013 SHEET: 7

JOB NUMBER: J - 24584.0003 SCALE: NTS

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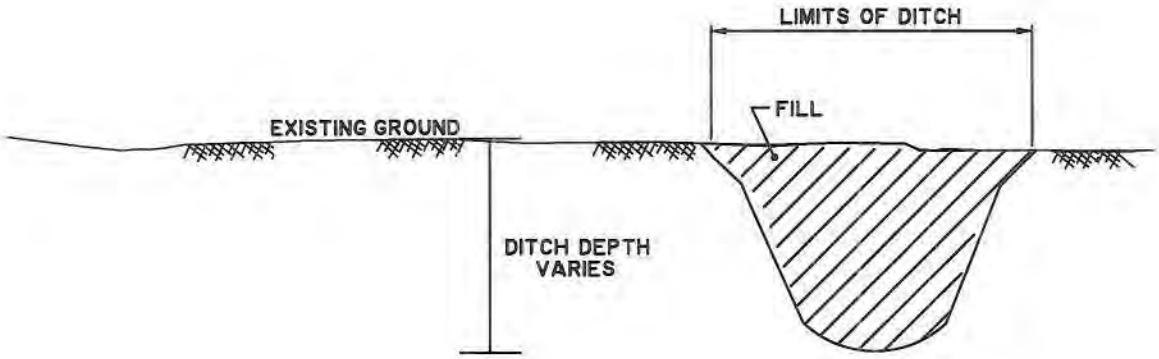
JURISDICTIONAL WETLANDS

TOTAL CU. YDS. OF FILL (20% COMPACTION) = 540 CY.

TOTAL CU. YDS. OF EXCAVATION = 190 CY.



DITCH FILL SECTION DETAIL

NOT TO SCALE

TIDEWATERS INDUSTRIAL PARK

PROPOSED ACTIVITY:

DITCH FILL SECTION

CLIENT:

MCINTOSH COUNTY INDUSTRIAL DEVELOPMENT AUTHORITY

LOCATION: DARIEN, MCINTOSH COUNTY, GEORGIA

DATE: September 30, 2013 SHEET: 8

JOB NUMBER: J - 24584.0003 SCALE: NTS

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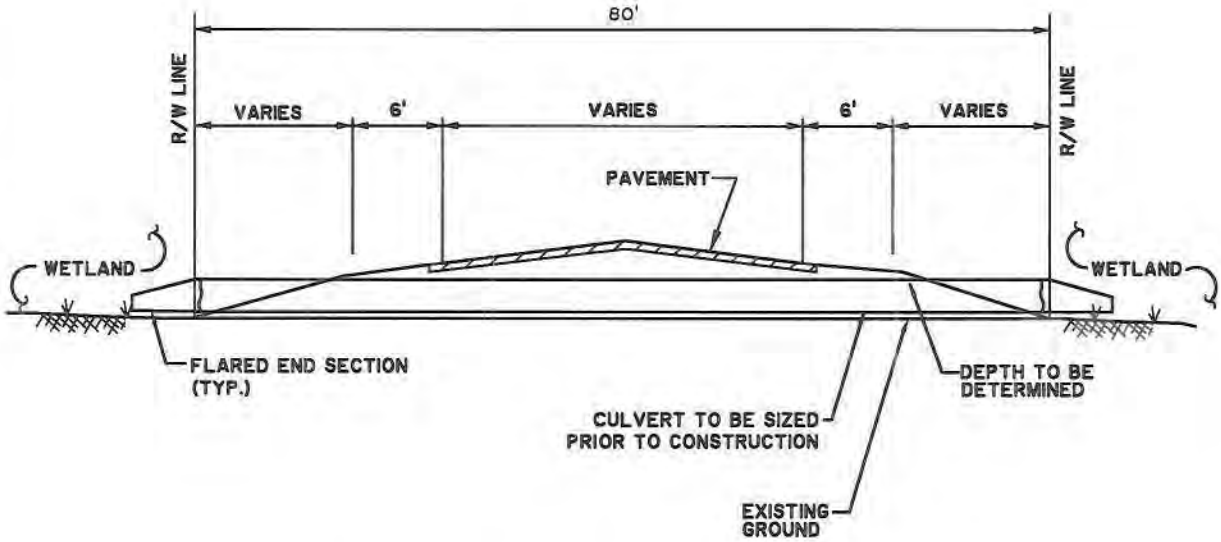

TYPICAL WETLAND CROSSING W/ PIPE ROAD SECTION

NOT TO SCALE

TIDEWATERS INDUSTRIAL PARK

PROPOSED ACTIVITY:

TYPICAL WETLAND CROSSING W/ PIPE ROAD SECTION

CLIENT:

MCINTOSH COUNTY INDUSTRIAL DEVELOPMENT AUTHORITY

LOCATION: DARIEN, MCINTOSH COUNTY, GEORGIA

DATE: September 30, 2013 SHEET: 9

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