



REPLY TO
ATTENTION OF

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

D 5 AUG '14

Regulatory Division
SAS-2002-04820

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-2002-04820

Applicant: Mr. Jamie McCurry
Georgia Ports Authority
Post Office Box 2406
Savannah, Georgia 31402

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

Location of Proposed Work: The project site is located on a 1,594 acre site in the northeast quadrant of the intersection of Interstate Highways 16 and 95, in the City of Pooler, Chatham County, Georgia (Latitude 32.0774, Longitude -81.2211).

Description of Work Subject to the Jurisdiction of the U.S. Army Corps of Engineers: The proposed project is the completion of the Region 12 Industrial Mega Site (Chatham County Economic Development Site) for the Georgia Ports Authority. The U.S. Army Corps of Engineers authorized the proposed project in August 2002, to include impacts to 131.85 acres of wetlands. A permit modification in May 2003 reduced the proposed impacts to 121.31 acres. Impacts to 103 acres of wetlands were completed prior to permit expiration. The original permit and jurisdictional determination expired in 2007 and a new permit application and jurisdictional determination request have been submitted. The new jurisdictional determination, not yet verified, includes an additional 33.45 acres of wetland from what was previously verified. The new permit proposes to complete the remaining 18 acres of wetland impacts previously authorized, plus the additional 33.45 acres of newly delineated wetlands. Total impacts for the entire project would thus be 154.76 acres of waters of the United States. Mitigation for these impacts included the following completed activities: 284.34 acres of on-site wetland preservation, 100 acres of off-site wetland preservation at Mulberry Grove Plantation,

169.35 acres of on-site wetland enhancement, 11.25 acres of on-site wetland restoration, 43.08 acres of upland buffer preservation, and purchase of 50 wetland mitigation credits from Old Thorn Pond Mitigation Bank. Mitigation to offset the additional 33.45 acres of wetland impacts would include the purchase of an additional 237.5 wetland mitigation credits from a commercial wetland mitigation bank that serves the project area in its primary service area.

BACKGROUND

This Joint Public Notice announces a request for authorizations from both the U.S. Army Corps of Engineers 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).

US 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: The previous permit authorization included documentation that the proposed project would adversely affect one site eligible for listing on the National Register of Historic Places, and would have no adverse effect on three other resources eligible for listing on the National Register of Historic Places. Adverse effects were to be mitigated by a data recovery effort under a Memorandum of Agreement between the permittee, the Corps, and the Georgia Department of Natural Resources. As the proposed project permit area is the same as the original project, these findings are unchanged.

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. The proposed project was surveyed for listed species in February to April, 2002. No listed species or habitat were observed in the project area. The proposed project permit area is the same as the original permit. Additional surveys have documented that no species or habitat are present in the permit area, therefore the Corps has determined that the project would have no effect on any listed threatened or endangered species.

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 (9 pages)
2. Figures and Overall Permit Exhibit (4 pages)
3. Permit Drawings (12 pages)

Chatham County Economic Development Site

Georgia Ports Authority
Chatham County, Georgia
Project Description
July 2014

1.0 INTRODUCTION:

The Georgia Ports Authority (GPA) is seeking authorization to impact 49.82 acres of wetland and 0.93 acres of storm water pond to facilitate completion of the Chatham County Economic Development Site. The project area is located in northeast quadrant of Interstate 16 and Interstate 95 near Savannah within Chatham County, Georgia (32.079147°, -81.222665°) (Figures 1-3, Appendix A).

2.0 BACKGROUND/PROJECT HISTORY:

The Georgia Department of Industry, Trade, and Tourism in cooperation with the Georgia Allies developed the Georgia Mega-Site Strategy and the Georgia Mega –Site Criteria to assist in the identification and acquisition of 500 acre or larger industrial sites in 12 identified regions in Georgia (Figure 2, Appendix A). According to the Georgia Department of Industry, Trade, and Tourism, establishment of mega industrial sites is needed in order to attract industry to the State of Georgia. In August 2002, the U.S. Army Corps of Engineers issued GPA a Section 404 Permit authorizing impacts to 131.85 acres of wetland to facilitate development of the 1,594 acre Chatham County Economic Development Site which would serve as the mega industrial site for Region 12.

The site plan associated with the 404 permit required wetland impacts for the construction of buildings, installation of site access (road and rail), installation of utilities, and construction of other various attendant features. As required by the USACE permit and as outlined in the document titled *“Mitigation Plan for Chatham County Economic Development Site”* dated June 2002, compensatory mitigation included 273.8 acres of on-site wetland preservation, 100 acres of off-site wetland preservation at Mulberry Grove Planation, 169.35 acres of on-site wetland enhancement, 31.77 acres of on-site wetland creation, 11.25 acres of on-site wetland restoration, 43.08 acres of upland buffer preservation, and purchase of 50 wetland credits.

In May 2003, a modification was approved by the USACE which authorized the reduction in wetland impact from the originally permitted 131.85 acres to 121.31 acres. Due to the 10.54 acre reduction of impacts, the USACE also authorized modification to the mitigation plan and the removal of 31.77 acres of wetland creation and addition of 10.54 acres of wetland preservation (area removed from proposed impacts).

Since USACE authorization in 2002, the following activities have occurred within the 1,594 acre mega site.

- Approximately 400 acres have been cleared and graded
- Four lane primary access roads have been installed including the entrance from Highway 307, the entrance from Pine Meadow Road and the entrance from Pine Barren Road
- 119 acres has been developed into a manufacturing facility
- 85 % (+/- 103 acres) of the approved wetland impact has been completed
- 100% of the compensatory mitigation requirements have been fulfilled including recording of restrictive covenants, initiation and completion of wetland restoration and enhancement activities, completion of mitigation monitoring, and purchase of mitigation credits.

A copy of the original permit, compensatory mitigation plan, permit modification, cultural resources information, and recorded restrictive covenants can be found in Appendix B. Table 1. provides a summary of current site conditions.

Table 1. Site Conditions Summary Table

Area	Acres
Chatham County Economic Development Site	1,594
Open Space, Undeveloped Area, Stormwater Detention, Mitigation Area	897.98
(Upland Buffer Preservation, Wetland Restoration, Wetland Enhancement, Wetland Preservation, etc.)	508.02
Existing Development (Roads, Buildings, etc.)	188

While much of the site has been cleared, graded and generally improved since issuance of the permit, site preparation activities on the entire permit area were not completed within the permit timeframe. The economic climate throughout the country and absence of industry interest in mega sites coupled with funding constraints prohibited completion of the project prior to and since permit expiration in 2007. However, due to several recent inquiries regarding mega site property availability and review of the USACE permit documents, GPA realized that reauthorization of the 404 permit would be required to complete the project.

Because the 404 permit and subsequently the USACE jurisdictional determination expired 2007, the USACE requested that GPA complete a new wetland delineation within the project site. This delineation was completed within a 560.58 acre area (remaining development area). Portions of this area had been cleared, other areas had been cleared and graded and portions remained forested. Based on the 2014 delineation, the 560.58 acre project area contains 49.95 acres of wetland and 50.90 acres of open water pond (abandoned borrow pit). The new delineation identified approximately 33.45 acres of additional wetland area when compared to the previously approved delineation. Several factors have attributed to the increase in wetland limits including site preparation and land disturbance activities which altered the drainage patterns within the property. A copy of the 2014 wetland delineation survey can be found in Appendix C.

3.0 PROJECT PURPOSE:

The purpose of the proposed project is to obtain permit authorization from the USACE to complete development of the previously permitted Chatham County Economic Development Site. No changes in project footprint, project scope or project purpose are proposed.

4.0 EXISTING SITE CONDITIONS:

The project site contains habitats typical for Chatham County and the Coastal Plain of Georgia. Based on the current 2014 field observations, the 1,594 acre project area contains developed uplands, forested upland, forested wetland (including wetland mitigation areas), scrub/shrub wetland, and borrow pits / storm water ponds. The following provides a brief description of each habitat present and photographs depicting typical conditions of each habitat have been included in this application package (Appendix D).

4.1 Developed Upland: Developed uplands include existing roads, railroads, and other infrastructure as well as an existing manufacturing plant and grassed fields. The species composition within these areas is comprised of various native and non-native grasses with a few scattered shrub species. These areas have been mowed and maintained since the original site development.

4.2 Forested Upland: The forested uplands contain immature pine /natural regeneration and mature pine forest. The immature pine area was timbered in 2008/2009 and is dominated by loblolly pine (*Pinus taeda*), with early-successional hardwood seedlings and herbaceous species. The early-successional species includes water oak (*Quercus nigra*), sweetgum (*Liquidambar styraciflua*), red bay (*Persea borbonia*), sweet bay (*Magnolia virginiana*) and red maple (*Acer rubrum*) seedlings within a

ground cover of broomsedge (*Andropogon virginicus*), sweet pepper bush (*Clethra alnifolia*), dogfennel (*Eupatorium capillifolium*), bracken fern (*Pteridium aquilinum*), greenbrier (*Smilax laurifolia*), blackberry (*Rubus argutus*), and blueberry (*Vaccinium corymbosum*).

The remaining forested uplands are mature with 15+ years of growth. General species composition consists of loblolly pine, southern magnolia (*Magnolia grandiflora*), southern red oak (*Quercus falcate*), sweet gum, water oak, live oak (*Quercus virginiana*), American holly (*Ilex opaca*), red bay, and red maple. In general these areas have low percent coverage for the herbaceous layer but when present species include; giant cane (*Arundinaria gigantea*), american beautyberry (*Callicarpa Americana*), fetterbush (*Lyonia lucida*), wax myrtle (*Myrica cerifera*), inkberry (*Ilex glabra*), greenbrier, blackberry, bracken fern (*Pteridium aquilinum*), and cinnamon fern (*Osmunda cinnamomea*).

4.3 Forested Wetlands: The forested wetlands include preserved wetlands, enhanced wetlands and restored wetlands that were protected as part of the original mitigation plan. This habitat includes wetland areas delineated in 2014 and wetland areas which were permitted for fill but not impacted prior to permit expiration in 2007. In general these areas contain a mature canopy of red maple, sweetgum, blackgum (*Nyssa biflora*), loblolly pine, sweet bay, green ash (*Fraxinus pennsylvanica*), water oak, and areas of bald cypress (*Taxodium distichum*). Sapling and shrub species include American elm (*Ulmus americana*), ironwood (*Carpinus caroliniana*), silky dogwood (*Cornus amomum*), inkberry, and wax myrtle (*Myrica cerifera*). The herbaceous layer is dominated by blackstem chainfern (*Woodwardia virginica*), virginia chain-fern (*Woodwardia virginica*), giant cane, and sphagnum moss (*Sphagnum spp*).

4.4 Scrub / Shrub Wetland: These wetland areas are located on the eastern portion of the property and were clear cut 2008/2009. As with the immature pine plantation most of these were logged during the original site development. Species composition includes loblolly pine, chinese tallotree (*Triadica sebifera*), red maple, sweetgum, and blackgum within the sapling stratum. The shrub and herbaceous strata are dominated by blackberry, inkberry, wax myrtle, blackstem chainfern and greenbrier.

4.6 Borrow Pits / Storm Water Ponds (Open Water): The borrow pit within the current project area was created through borrow activities during the construction of Interstate-95. This is a non-vegetated deep water pond. The remaining four storm water ponds were created through borrow activities during past interstate construction activities and the original construction of the site. The ponds are used for active storm water management.

5.0 PROPOSED PROJECT:

The proposed project includes completing site preparation and grading activities within 565.58 acres which will require 50.75 acres of jurisdictional area impact (wetland and pond fill). No change in project scope, design, or purpose is proposed. Consistent with the original project scope and design, the development plan includes general site preparation activities (clearing, grading, filling, excavating, etc.) to create a large contiguous development pod suitable to support buildings, parking, utilities, and other attendant features associated with a mega site industrial park. Permit drawings depicting the proposed project and project related impacts can be found in Appendix E. Table 2. provides a summary of cumulative impacts when considering the project history and current site conditions.

Table 2. Project Summary Table

	2002 Permit	2003 Modification	2014 Permit Application
Tract Area	1594 ac.	1594 ac.	Total Tract 1594 ac. (2014 Project Area 560.58 ac.)
Wetland Impact (non-isolated and isolated)	174.85 ac.	164.31 ac.	185.82 ac.
Pond Impact	43 ac.	43 ac.	43.93 ac.
Wetland Preservation	273.8 ac.	273.8 ac.	273.8 ac.
Upland Buffer Preservation	43.08 ac.	43.08 ac.	43.08 ac.
Wetland Enhancement	169.35 ac.	169.35 ac.	169.35 ac.
Wetland Restoration	11.25 ac.	11.25 ac.	11.25 ac.
Wetland Creation	31.77 ac.	N/A	N/A
Mitigation Credit Purchase	50 credits	50 credits	282.4 credits (including 50 credits for original project and 232.4 credits additional for proposed project)

6.0 ALTERNATIVE ANALYSIS:

As part of the overall project, the applicant completed a thorough alternatives analysis. A review of the 404(b)1 guidelines indicates that “(a) Except as provided under section 404(b)(2), 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, so long as the alternative does not have other significant adverse environmental consequences.” The guidelines define practicable alternatives as “(q) The term *practicable* means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.”

The guidelines outline further consideration of practicable alternatives: “(1) For the purpose of this requirement, practicable alternatives include, but are not limited to: (i) Activities which do not involve a discharge of dredged or fill material into the waters of the United States or ocean waters; (ii) Discharges of dredged or fill material at other locations in waters of the United States or ocean waters; (2) An alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes. If it is otherwise a practicable alternative, an area not presently owned by the applicant which could reasonably be obtained, utilized, expanded or managed in order to fulfill the basic purpose of the proposed activity may be considered.”

As part of the original permit application and Interagency Review Team (IRT) coordination, a detailed review of off-site alternatives was completed. However, as part of this current permit application, an updated off-site alternatives analysis was completed to confirm that the proposed project site remained the most practicable and least damaging alternative. The following provides a description of off-site alternatives considered during the development plan review process.

6.1 Site Screening Criteria: The following site screening criteria were applied to the overall project.

- **Geographic Location.** As previously discussed, the Georgia Department of Industry, Trade and Tourism, determined that the establishment of a mega industrial site within Chatham County was needed in order to attract industry to the state and more specifically within Region 12. For this reason, the Geographic Location was restricted to the Chatham County area.

- **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. The cost associated with development and infrastructure needed to support a mega industrial site is significantly higher than typical development projects; therefore 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 500 acres and a maximum of 1500 acres.
- **Zoning.** Land use restrictions associated with current zoning are a major consideration in all industrial projects. Industrial traffic, road frontage, interstate access, adjoining land use, buffers, etc. make the current zoning a critical component. 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 were considered if utilities were not already available.
- **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.
- **Availability.** Only sites listed for sale or available for purchase were considered as part of the alternatives analysis.

6.2 Summary of Alternative Sites Screened for Practicability: Considering the site screening criteria above, the applicant reviewed development alternatives for 7 tracts. These alternatives include 6 alternative sites which are currently listed for sale, as well as the applicant’s preferred alternative (proposed site). Based on the site analysis above, a total of four sites were determined to be practicable including the Preferred Alternative, Alternative Site 1, Alternative 3, and Alternative 6. Table 3. provides an overall summary of site screening criteria to each alternative site.

Table 3. Summary of Practicable Alternative Assessment

Site Screening Selection Criteria	Applicant's Preferred	Alt1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6
Geographic Location	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Size	Yes	Yes	No	Yes	No	No	Yes
Zoning	Yes	Yes	Yes	Yes	Yes	No	Yes
Utilities	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Access	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Availability	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Practicable Alternative	Yes	Yes	No	Yes	No	No	Yes

6.3 Review of Practicable Alternatives: Following consideration of alternative sites based on 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 environmental factors which could impact development of the site. The environmental factors included:

Environmental Factors:

- Stream Impacts (quantitative). The estimated linear footage of potential stream impact was evaluated for each practicable alternative.
- Stream Impacts (qualitative). The functional value of potential stream impact areas were evaluated for each practicable alternative. A low, medium, high value was assigned based on current structure and hydrologic conditions. Examples of high value would be stable geomorphology and diverse biological community. Examples of low value would be evidence of full impairment such as extensive culverting, piping, or impoundment within the stream.
- Wetland Impacts (quantitative). The estimated acreage of potential wetland impact was evaluated for each practicable alternative.
- Wetland Function (qualitative). The functional value of potential wetland impact areas were evaluated for each practicable alternative. A low, medium, or high value was assigned based on current vegetative structure and hydrologic conditions. Examples of high value would be mature canopy, no evidence of ditching, rare habitats, etc. Examples of low value would be evidence of habitat manipulation through ditching, clear cutting, diking, fragmentation, etc.
- 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 were evaluated for each practicable alternative. A low, medium, or high value was assigned based on habitat type and condition. Examples of high value would be lakes, impoundments, and/or features occurring naturally. Examples of low value would be man-made features which have not naturalized and provide little to no biological support (i.e. borrow pit).
- 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 Chatham County, Georgia (Appendix F):

Plants

- Pondberry (*Lindera melissifolia*)

Mammals

- Humpback Whale (*Megaptera novaeanglie*)
- Northern Atlantic Right Whale (*Eubalaena glacialis*)
- Manatee (*Trichechus manatus*)

Birds

- Bachman's Warbler (*Vermivora bachmanii*)
- Piping Plover (*Charadrius melodus*)
- Red-Cockaded Woodpecker (*Picoides borealis*)
- Wood Stork (*Mycteria americana*)

Reptiles

- Eastern Indigo Snake (*Drymarchon corais couperi*)
- Green Sea Turtle (*Chelonia mydas*)
- Hawksbill Sea Turtle (*Eretmochelys imbricate*)
- Kemp's Ridley Sea Turtle (*Lepidochelys kempii*)
- Leatherback Sea Turtle (*Dermochelys coriacea*)
- Loggerhead Sea Turtle (*Caretta caretta*)

Amphibians

- Flatwoods Salamander (*Ambystoma cingulatum*)

Fish

- 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/>. (Appendix G). Potential impacts to sites listed or eligible for listing on the National Register of Historic Places was noted for each alternative.
- Flood Plain Impact. The estimated acreage of potential flood plain impact was evaluated for each practicable alternative.
- Stream Buffer Impact. The estimated linear footage of potential stream buffer impact was evaluated for each practicable alternative.

As stated above, a total of four sites were determined to be practicable and each environmental factor was assessed and considered for each practicable alternative. The applicant then evaluated other practicable alternatives that fit within the preliminary screening parameters prescribed in Section 6.1 for construction of a mega 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 and are considered practicable. A summary of the review of environmental factors for each alternative is provided below.

6.3.1 No Action Alternative: Obviously with every project, a "no action" alternative must be considered. The proposed project has been initiated to facilitate the completion of a previously permitted mega site industrial park within Region 12 of the State of Georgia. The State of Georgia, Georgia Ports Authority, and Savannah Economic Development Authority all continue to pursue and solicit new businesses, attempt to create jobs, and improve the overall economy for the State of Georgia. Today, industries review numerous sites throughout the southeast prior to construction of new manufacturing and industrial facilities 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, zoning, utilities, development costs, etc. However, the most critical factor is often permitting requirements and timeframe for construction. In order for the Chatham County Economic Development Site to become a viable mega industrial site candidate for any prospective business, all entitlements must be in place. Without permit authorization and completion of this project, this site will continue to be at a competitive disadvantage and will continue to be eliminated from the candidate site list for many large multinational industries and corporations.

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 the State of Georgia with loss of tax revenue and job creation. For this reason, the “no-action” alternative is not feasible.

6.3.2 Summary of Off-Site Alternatives Analysis: When comparing the practicable alternatives and considering environmental impacts, the Applicant’s Preferred Alternative represents the least environmentally damaging. Table 4 provides a summary of the practicable alternatives and the values for each factor.

Table 4. Summary of Least Environmentally Damaging Practicable Alternative Assessment

FACTORS	No Action Alternative	Applicant’s Preferred	Alt1	Alt 3	Alt 6
Stream Impacts (Linear Feet)	None	None	None	None	None
Loss in Stream Function	None	None	None	None	None
Wetland Impacts (Acres)	None	49.82 ac	>150 ac	160 ac (16 acres tidal)	>200 ac
Functional Value of Impacted Wetland	None	Medium/Low	Medium/Low	High (tidal) Medium (non-tidal)	Medium/Low
Impacts to Other Waters (Acres)	None	0.93	12	22	None
Loss of Other Waters Functions	None	Low	Low	Medium/Low	None
Federal Endangered Species	N/A	No	No	No	No
Cultural Resources	N/A	No	No	Yes	No
Flood Plain	N/A	>15	No	>200 ac.	>200 ac.
Stream Buffer	N/A	No	Yes	Yes	Yes
LEDPA	No	Yes	No	No	

6.3.3 On-Site Alternatives: In addition to considering off-site alternatives/alternative properties, the applicant considered on-site alternatives in an effort to further avoid and minimize jurisdictional area impacts to the greatest extent practicable. As documented in the original permit application and USACE authorization, on-site alternatives included a review of opportunities to reduce the wetland impact footprint, evaluated opportunities for bridging, considered alternative construction techniques, and proposed implementation of erosion control techniques that would avoid secondary impacts.

Specifically, several alternative access routes for the facility were considered including entering from Interstate 95, Interstate 16, Dean Forest Road, and Pine Barren Road. Curb cuts from the two interstates were not practicable and because access was needed from both ends of the property for vehicular traffic, the entrance roads would have to be constructed to the site from both Pine Barren and Dean Forest Roads.

While flexibility in access points were limited, the project avoided impacts to wetlands by minimizing the road and utility right of way width. Wetland crossings are proposed at the narrowest practicable location in wetlands to minimize impacts to wetlands. In addition, the applicant proposes to reduce the width of the road to the minimum allowable county standard within wetlands and to increase side slopes to reduce wetland fill as much as possible. Rail access could only be provided from the Georgia Central Railroad; however, the applicant was able to position the proposed rail corridor in such a way that crossed the wetland

area at the narrowest point feasible.

The applicant also reviewed opportunities to reduce the wetland impact footprint during review of site development alternatives. Since the applicant's basic purpose and need is to have 500 acres of contiguous developable land alternative site plans were limited. However, since issuance of the original permit, the applicant has avoided an additional 21.28 acres of wetland that were previously authorized for impact. Approximately 10.54 acres were avoided as part of the 2003 permit modification and 10.74 acres have been avoided as part of this project. Were it not for the additional wetlands associated with the 2014 delineation, the overall project would have resulted in a 16 percent reduction in project related impacts.

In summary, through the 2002 permit process, 2003 permit modification process, and the current permit application, the applicant has continued to reduce the footprint of wetland impacts within the project area and has avoided and minimized impacts to wetlands and waters to the greatest extent practicable.

7.0 STORM WATER MANAGEMENT:

A storm water management plan has been designed by Thomas & Hutton and implemented as part of the overall site development. This master storm water management plan accommodates for any development associated with this parcel. In addition to meeting the storm water management requirements for the project, the applicant has proposed flood plain mitigation. No impacts to wetlands were proposed as a result of the construction of the storm water detention ponds.

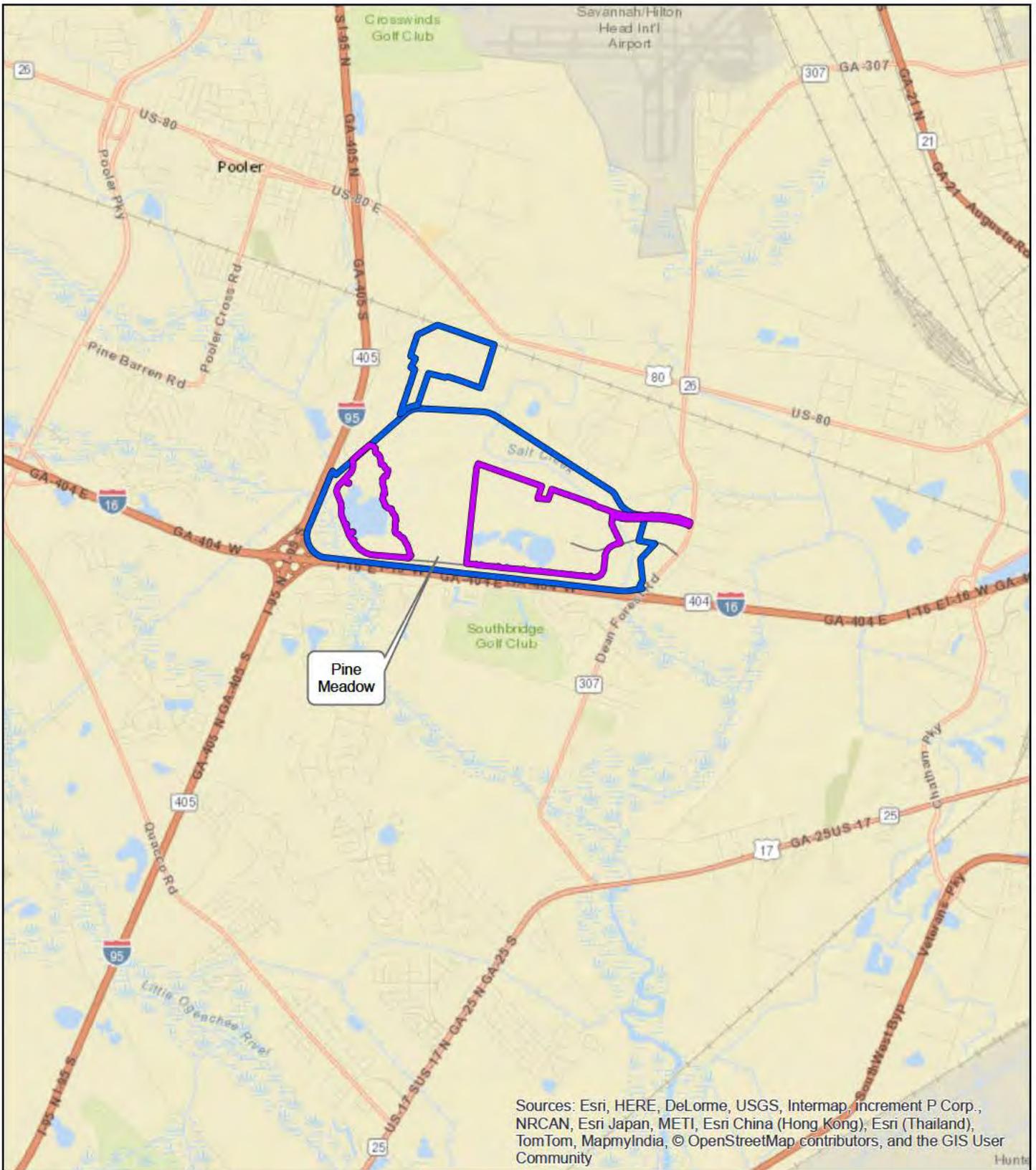
8.0 COMPENSATORY MITIGATION:

As required by the USACE permit and subsequent modification, compensatory mitigation for the original project included 284.34 acres of on-site wetland preservation (273.8 acres of preservation plus 10.54 acres of additional preservation following the 2003 modification), 100 acres of off-site wetland preservation at Mulberry Grove Planation, 169.35 acres of on-site wetland enhancement, 11.25 acres of on-site wetland restoration, 43.08 acres of upland buffer preservation, and purchase of 50 wetland credits. While all the impacts authorized under the original permit have not occurred, 100% of the compensatory mitigation requirements have been fulfilled including recording of restrictive covenants, initiation and completion of wetland restoration and enhancement activities, completion of mitigation monitoring, and purchase of the 50 mitigation credits.

Completion of the mega site project will require impacts to 50.75 acres of wetland including 33.45 acres of newly delineated wetland, 13.1 acres of isolated wetland previously authorized for impact, and 4.2 acres of jurisdictional wetland previously authorized for impact. Since the 13.1 acres and 4.2 acres were fully mitigated for under the previous permit action, SOP calculations for this project included a total impact acreage of 33.45 (only the recently delineated wetland area that did not exist in 2002). Using the Savannah District Standard Operating Procedure for Compensatory Mitigation, SOP calculations indicate that 237.5 wetland credits are required to compensate for the proposed wetland impacts (Appendix H). The applicant is proposing to acquire wetland credits from a USACE approved primary service area mitigation bank. Credits will be purchased from one or more of the following primary service area bank: Black Creek, Margin Bay, Yam Grandy, Old Thorn Pond, and/or Wilhelmina Morgan. Upon approval of the proposed project and prior to initiation of authorized wetland impacts, the applicant will provide documentation of credit conveyance to the USACE.

9.0 CONCLUSION:

In summary, GPA is proposing to complete the development of the Chatham County Economic Development Site. The proposed project was previously permitted by the USACE and development of the entire site and completion of the authorized impacts were not completed prior to expiration. Neither the project scope nor project area have changed from that originally review by the Interagency Review Team and approved by the USACE. As compensatory mitigation for unavoidable wetland impacts, the applicant has developed a compensatory mitigation plan using the Savannah District mitigation credit calculation SOP and has proposed to purchase wetland mitigation credits from USACE approved primary service area mitigation banks.



 Tract Boundary  Project Limits

FIGURE 1: Project Location Map

DATE: 23 July 2014

MAP SCALE: 1inch = 1mile

PREPARED BY: TS

RLC PROJECT NO. 14-130

**Chatham County Economic Development Site
Pooler, Chatham County, Georgia**

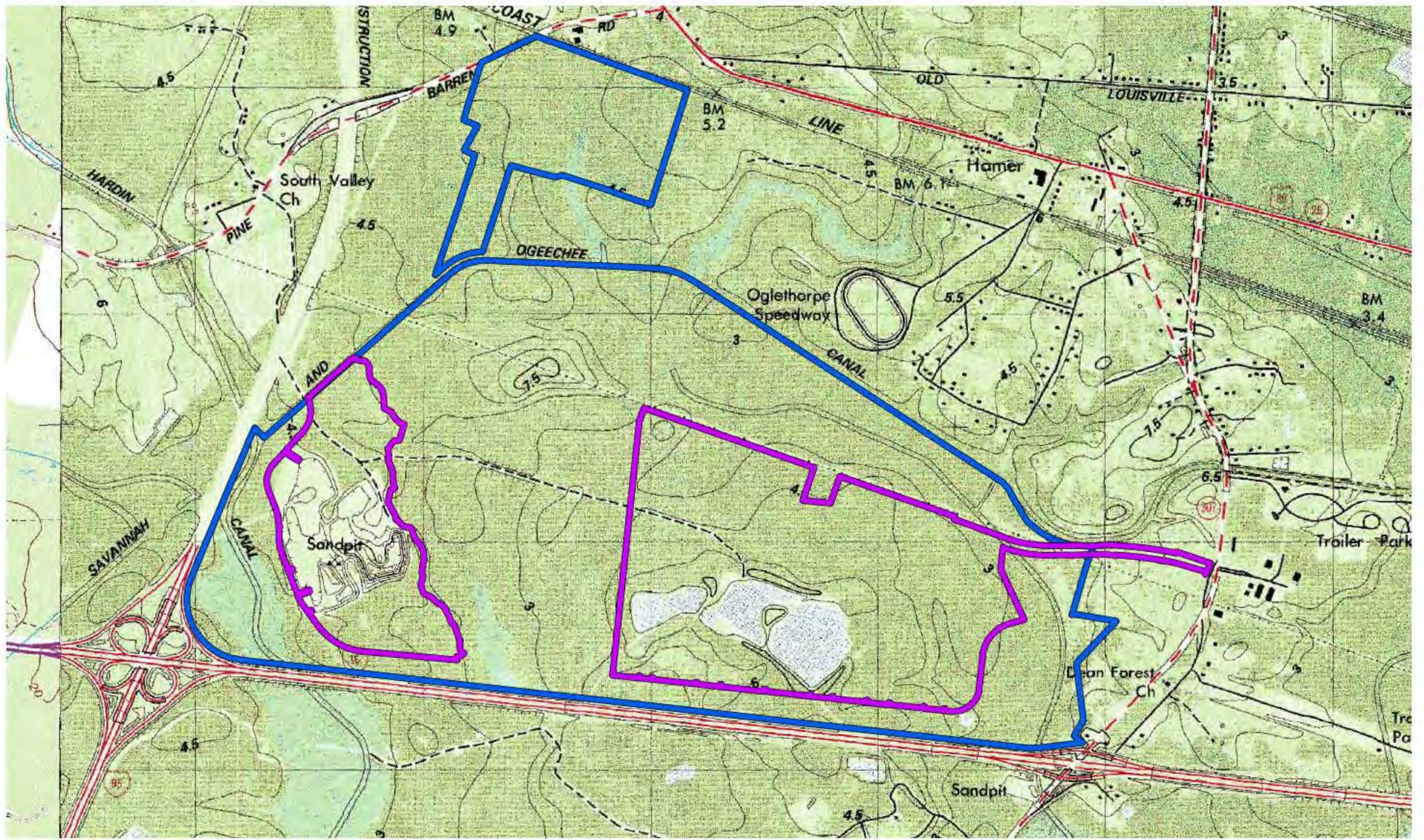
PREPARED FOR
Georgia Ports Authority and
Savannah Economic Development Authority



**RESOURCE+LAND
CONSULTANTS**

41 Park of Commerce Way, Ste. 303
Savannah, Georgia 31405
912.443.5896 www.rlandc.com

Source(s): ESRI Basemap, World_Street_Map



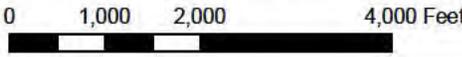
Tract Boundary
 Project Limits

FIGURE 2: Topographic Map
SKETCH DATE: 23 July 2013
MAP SCALE : 1 inch = 2,000 feet
PREPARED BY: TS
RLC PROJECT NO.: 14-130

Chatham County Economic Development Site
Pooler, Chatham County, Georgia

PREPARED FOR:
 Georgia Ports Authority and Savannah Economic Development Authority



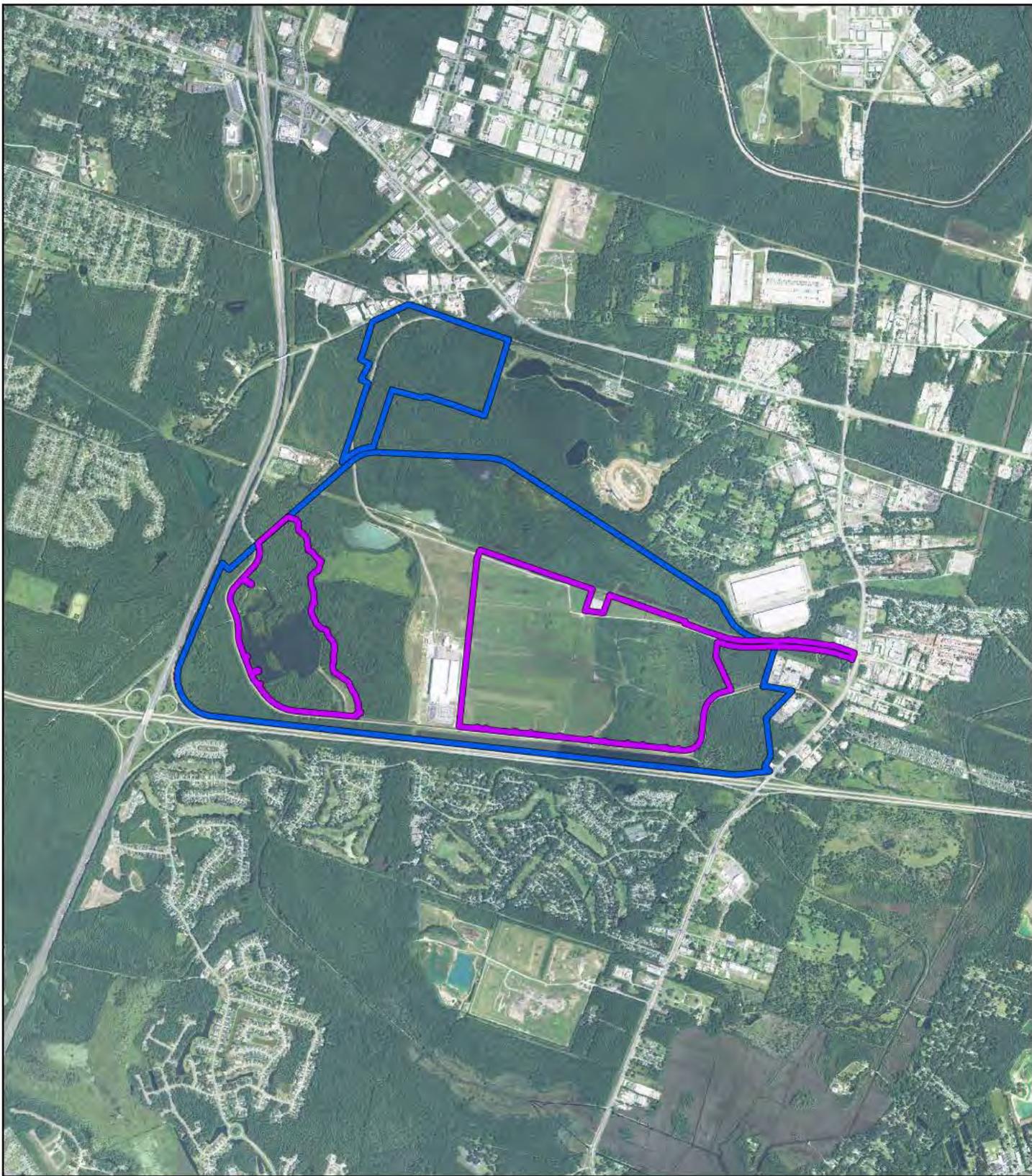


RLC

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 Savannah, Georgia 31405
 912.443.5896 www.rlandc.com

Source(s): USGS Topographic Survey Garden City Quadrangle



Tract Boundary
 Project Limits

FIGURE 3: Otho Photo

DATE: 23 July 2014

MAP SCALE: 1inch = 1mile

PREPARED BY: TS

RLC PROJECT NO. 14-130

**Chatham County Economic Development Site
Pooler, Chatham County, Georgia**

PREPARED FOR
Georgia Ports Authority and
Savannah Economic Development Authority



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Savannah, Georgia 31405
912.443.5896 www.rlandc.com

Source(s): ESRI Resource World Street Map

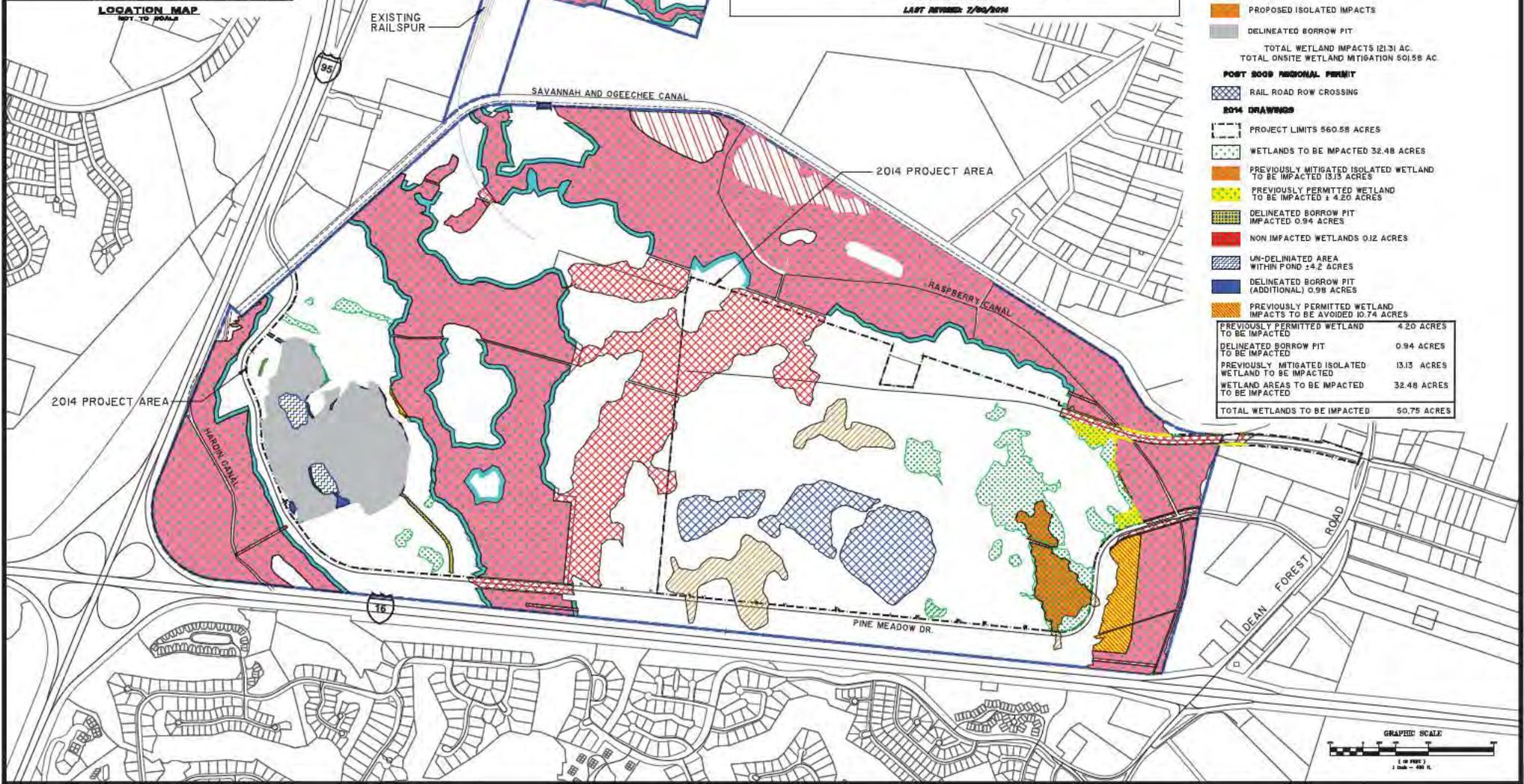
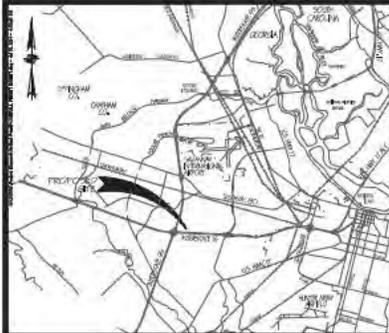
CHATHAM COUNTY ECONOMIC DEVELOPMENT SITE
CHATHAM COUNTY, GEORGIA

OVERALL PERMIT EXHIBIT

GPA/SEDA

PREPARED BY
THOMAS & HUTTON ENGINEERING CO.
SAVANNAH, GEORGIA

WETLAND & ECOLOGICAL CONSULTANTS
UNDERFORD, BRADY
GA. DEPT. OF INDUSTRY TRADE & TOURISM
ATLANTA, GEORGIA
GA POWER COMMUNITY & ECONOMIC DEVELOPMENT
ATLANTA, GEORGIA
JOB # 004 SCALE: 1" = 400' DATE: MAY 31, 2004
REVISED: 6/16/2005
LAST REVISED: 7/20/2004



POST 2002 REVISIONS

- TRACT BOUNDARY
- UPLAND BUFFER
- WETLAND MITIGATION & PRESERVATION
- FLOOD PLAIN MITIGATION
- FILLED BARROW PIT
- JURISDICTIONAL IMPACTS
- ISOLATED IMPACTS
- PROPOSED JURISDICTIONAL IMPACTS
- PROPOSED JURISDICTIONAL IMPACTS
- PROPOSED ISOLATED IMPACTS
- DELINEATED BORROW PIT

TOTAL WETLAND IMPACTS 121.31 AC.
TOTAL ONSITE WETLAND MITIGATION 50.58 AC.

POST 2002 REGIONAL PERMIT

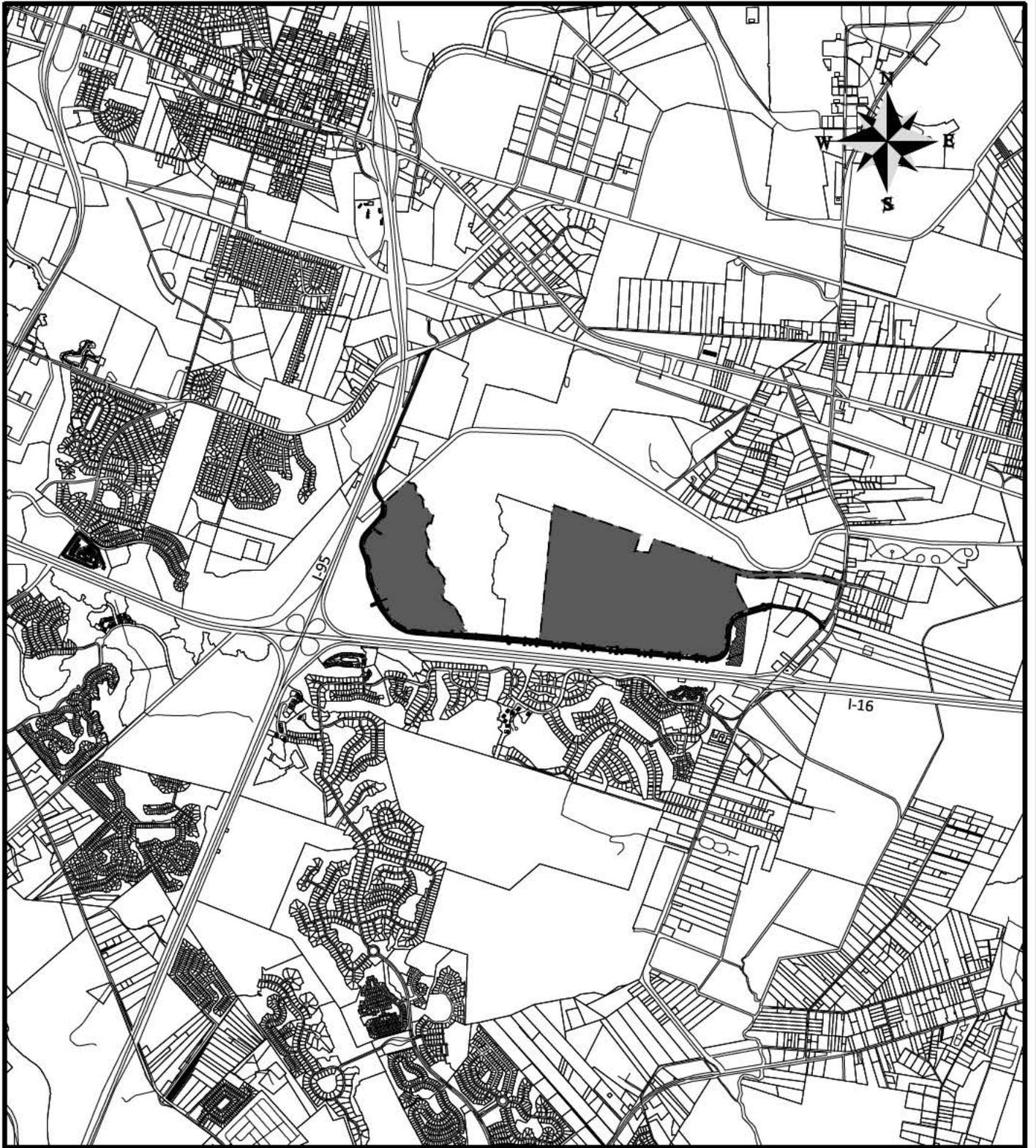
- RAIL ROAD ROW CROSSING

2014 DRAWINGS

- PROJECT LIMITS 560.58 ACRES
- WETLANDS TO BE IMPACTED 32.48 ACRES
- PREVIOUSLY MITIGATED ISOLATED WETLAND TO BE IMPACTED 13.13 ACRES
- PREVIOUSLY PERMITTED WETLAND TO BE IMPACTED ± 4.20 ACRES
- DELINEATED BORROW PIT IMPACTED 0.94 ACRES
- NON IMPACTED WETLANDS 0.12 ACRES
- UN-DELINEATED AREA WITHIN FOND ± 4.2 ACRES
- DELINEATED BORROW PIT (ADDITIONAL) 0.98 ACRES
- PREVIOUSLY PERMITTED WETLAND IMPACTS TO BE AVOIDED 10.74 ACRES

PREVIOUSLY PERMITTED WETLAND TO BE IMPACTED	4.20 ACRES
DELINEATED BORROW PIT TO BE IMPACTED	0.94 ACRES
PREVIOUSLY MITIGATED ISOLATED WETLAND TO BE IMPACTED	13.13 ACRES
WETLAND AREAS TO BE IMPACTED	32.48 ACRES
TOTAL WETLANDS TO BE IMPACTED	50.75 ACRES





CHATHAM COUNTY ECONOMIC DEVELOPMENT SITE

PROPOSED ACTIVITY:
LOCATION MAP

CLIENT:
GEORGIA PORTS AUTHORITY / SAVANNAH ECONOMIC DEVELOPMENT AUTHORITY

LOCATION: CHATHAM COUNTY, GEORGIA
DATE: JULY 25, 2014
JOB NUMBER: J - 09814

SHEET: 1 OF 12
SCALE: 1" = 400'

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LEGEND

ACREAGE SUMMARY TABLE

	TOTAL PROJECT ACREAGE	560.58 AC
	TOTAL JURISDICTIONAL WETLAND AREA	100.85 AC.
	TOTAL UN-DELINEATED AREA WITHIN POND	± 4.20 AC.
	TOTAL ISOLATED NON-JURISDICTIONAL WETLAND AREA	0.00 AC.
	TOTAL UPLAND AREA	455.55 AC.

WETLAND IMPACTS

JURISDICTIONAL WETLANDS IMPACTS

	ROAD R/W IMPACT	0.00 AC.
	SITE IMPACT	50.13 AC.
	UTILITY EASEMENT IMPACT	0.62 AC.
<hr/>		
	TOTAL JURISDICTIONAL WETLAND IMPACTS	50.75 AC.

PREVIOUSLY PERMITTED WETLAND IMPACTS TO BE AVOIDED

	SITE/ROAD IMPACTS	10.74 AC.
--	-------------------	-----------

CHATHAM COUNTY ECONOMIC DEVELOPMENT SITE

PROPOSED ACTIVITY:

LEGEND

CLIENT:

GEORGIA PORTS AUTHORITY / SAVANNAH ECONOMIC DEVELOPMENT AUTHORITY

LOCATION: CHATHAM COUNTY, GEORGIA

DATE: JULY 25, 2014

JOB NUMBER: J - 09814

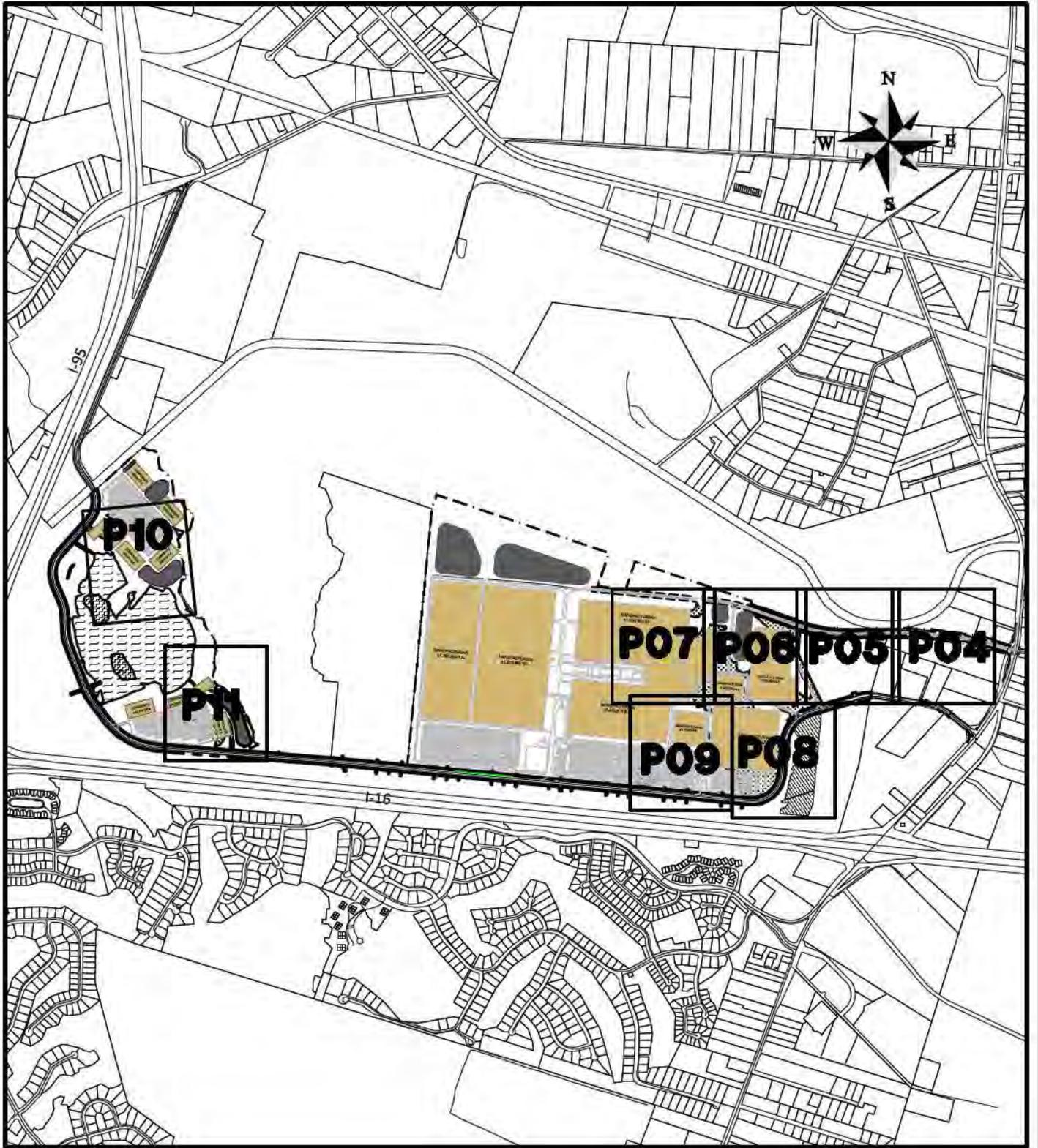
SHEET: 2 OF 12

SCALE: N.T.S.



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CHATHAM COUNTY ECONOMIC DEVELOPMENT SITE

PROPOSED ACTIVITY:
SHEET INDEX

CLIENT:
GEORGIA PORTS AUTHORITY / SAVANNAH ECONOMIC DEVELOPMENT AUTHORITY

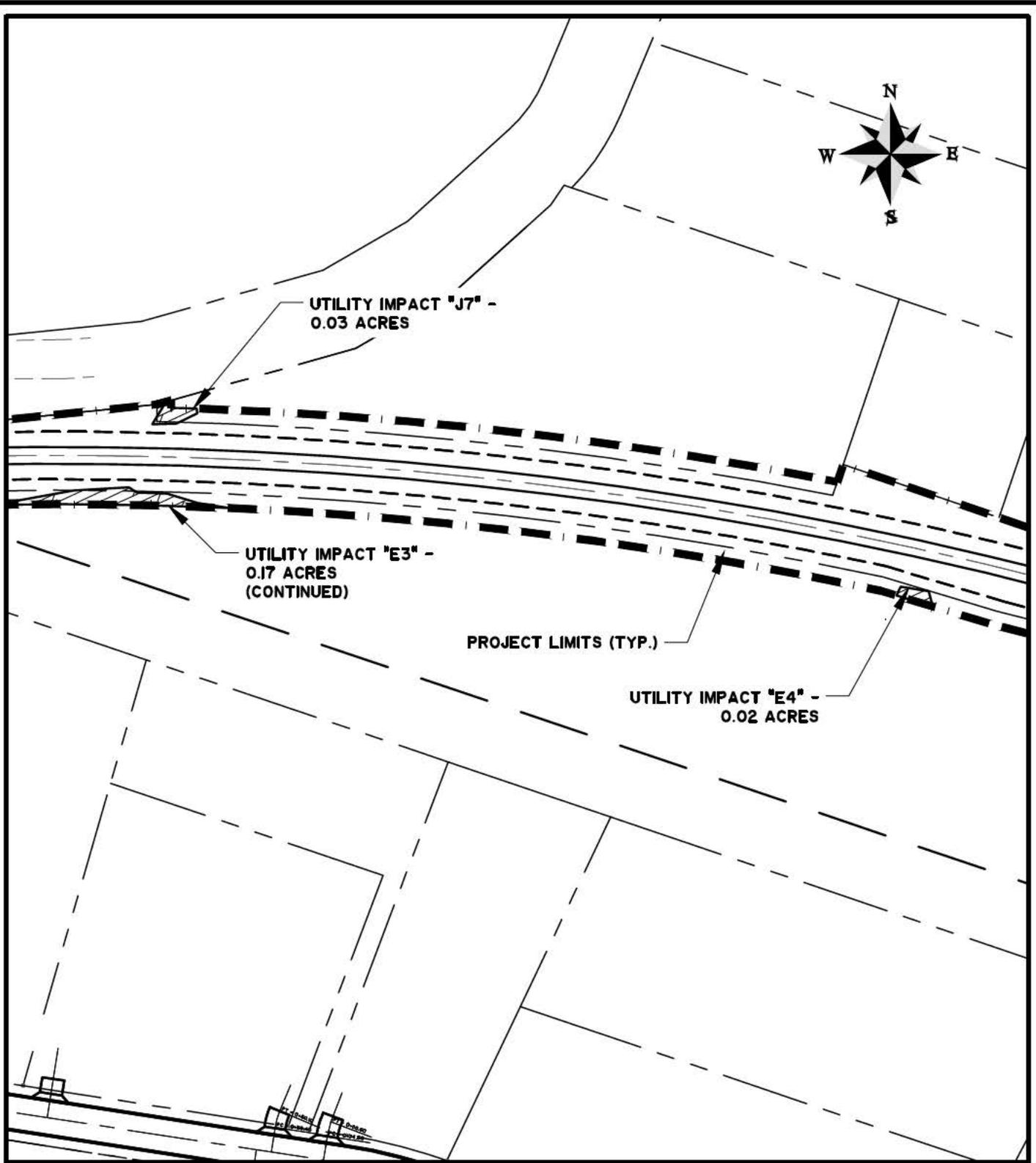
LOCATION: CHATHAM COUNTY, GEORGIA
DATE: JULY 25, 2014
JOB NUMBER: J - 09814

SHEET: 3 OF 12
SCALE: 1" = 2000'

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CHATHAM COUNTY ECONOMIC DEVELOPMENT SITE

PROPOSED ACTIVITY:
WETLAND PERMIT

CLIENT:
GEORGIA PORTS AUTHORITY / SAVANNAH ECONOMIC DEVELOPMENT AUTHORITY

LOCATION: CHATHAM COUNTY, GEORGIA
DATE: JULY 25, 2014
JOB NUMBER: J - 09814

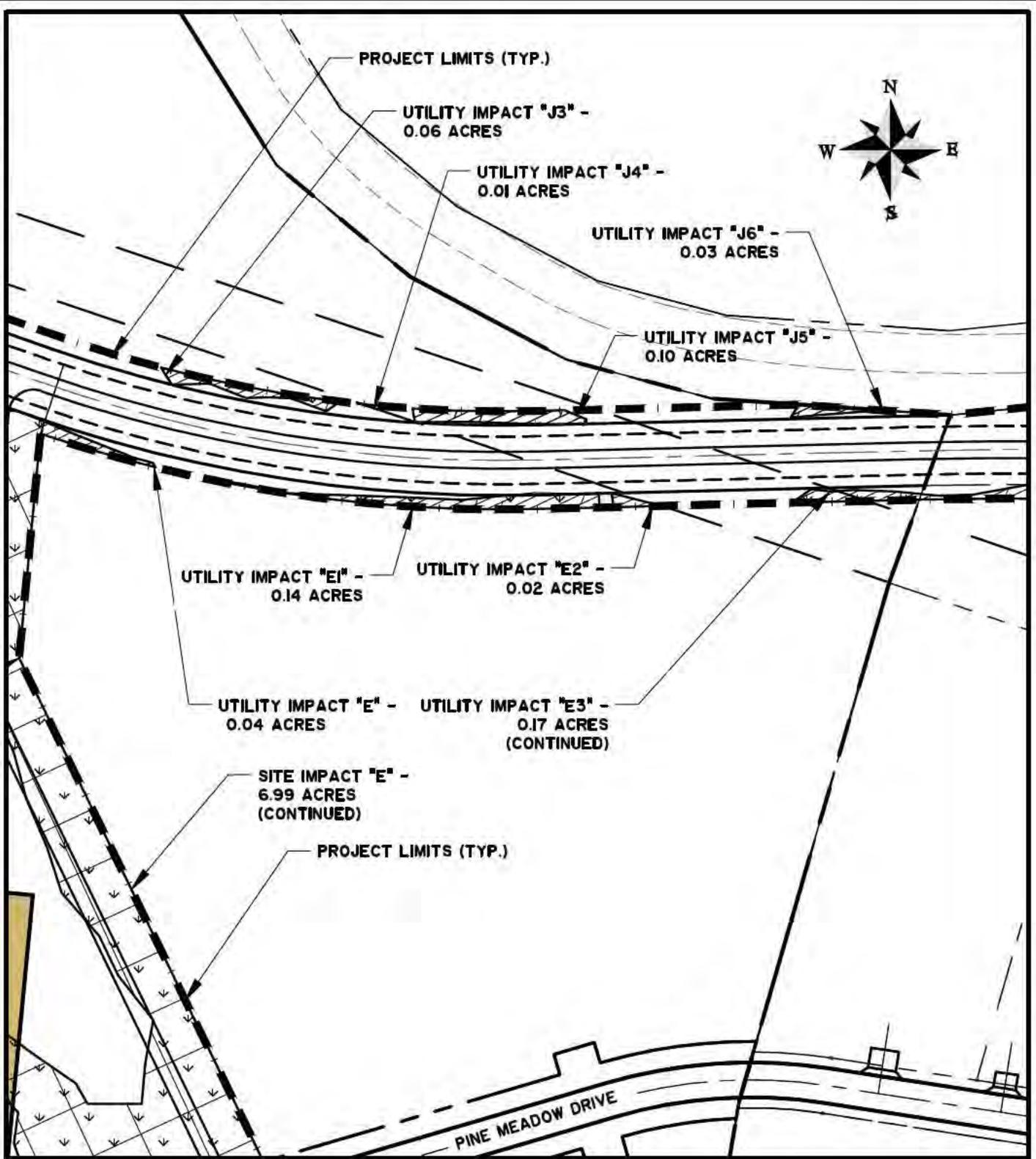
SHEET: 4 OF 12
SCALE: 1" = 200'

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0:\20852\Project_Diamond\Wetland_Permit\09814 - Wetland Impacts (CCEDS).dwg - Jul 29, 2014 - 3:35:53 PM



CHATHAM COUNTY ECONOMIC DEVELOPMENT SITE

PROPOSED ACTIVITY:
WETLAND PERMIT

CLIENT:
GEORGIA PORTS AUTHORITY / SAVANNAH ECONOMIC DEVELOPMENT AUTHORITY

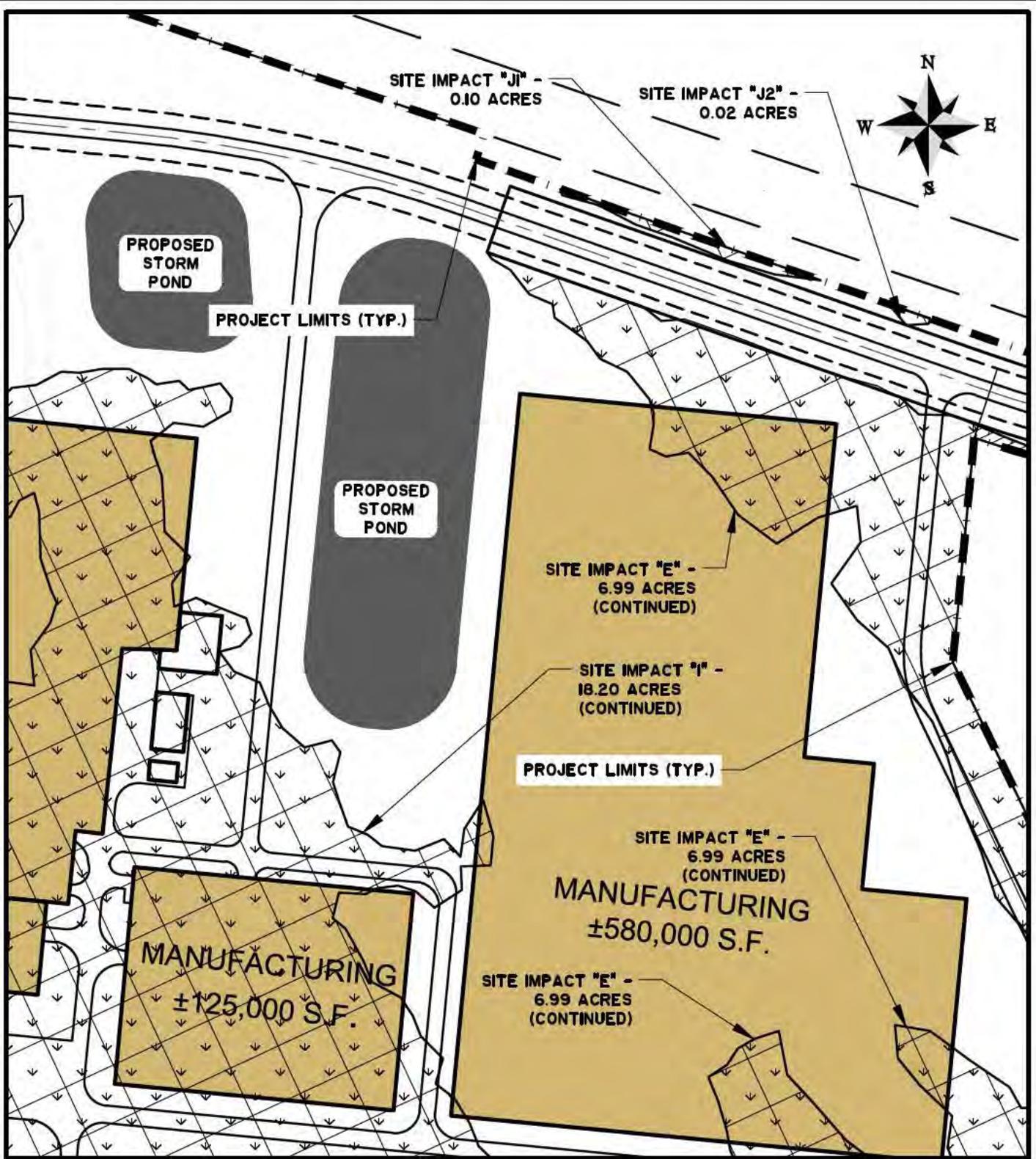
LOCATION: CHATHAM COUNTY, GEORGIA
DATE: JULY 25, 2014
JOB NUMBER: J - 09814

SHEET: 5 OF 12
SCALE: 1" = 200'

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CHATHAM COUNTY ECONOMIC DEVELOPMENT SITE

PROPOSED ACTIVITY:
WETLAND PERMIT

CLIENT:
GEORGIA PORTS AUTHORITY / SAVANNAH ECONOMIC DEVELOPMENT AUTHORITY

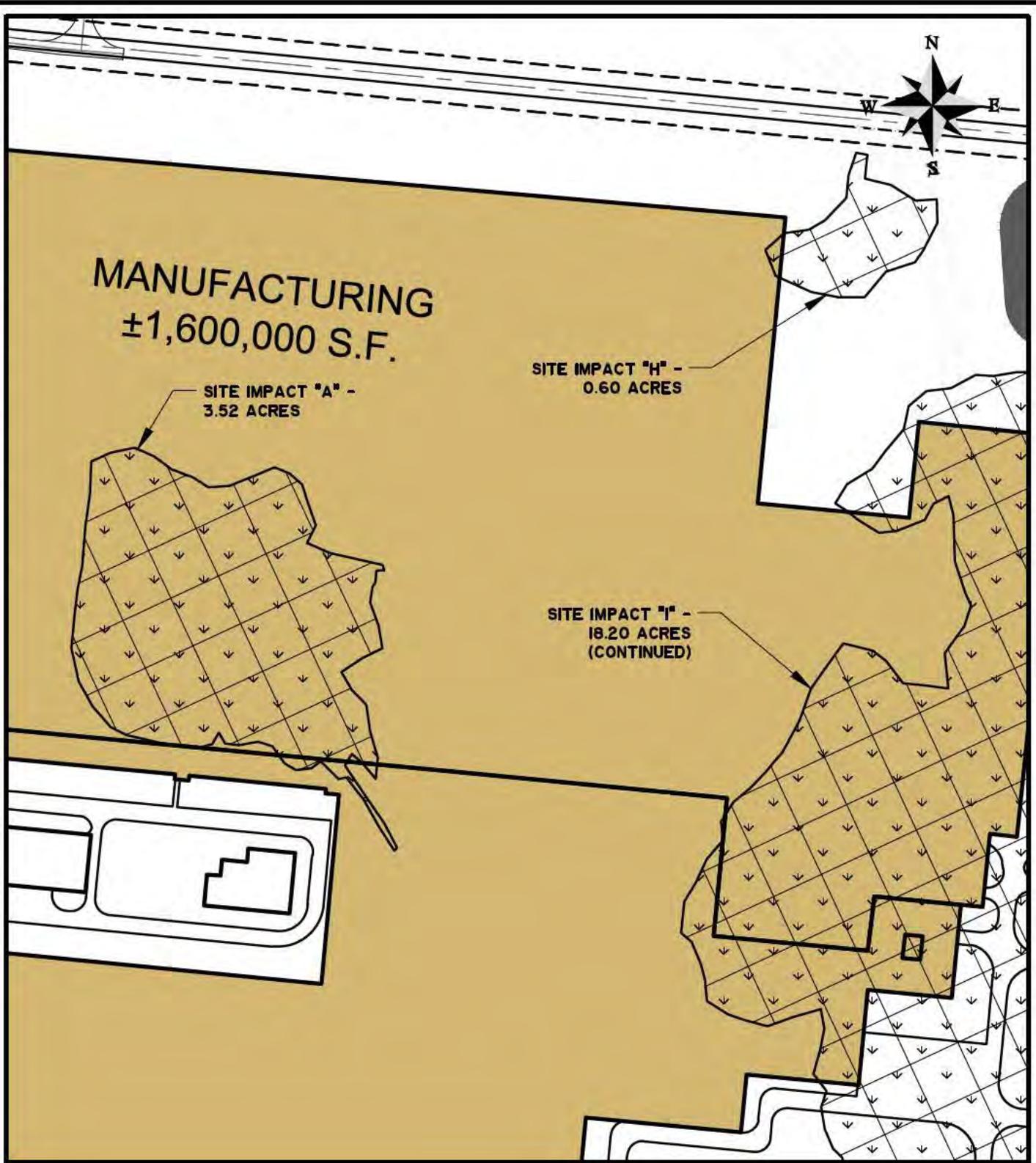
LOCATION: CHATHAM COUNTY, GEORGIA
DATE: JULY 25, 2014
JOB NUMBER: J - 09814

SHEET: 6 OF 12
SCALE: 1" = 200'

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CHATHAM COUNTY ECONOMIC DEVELOPMENT SITE

PROPOSED ACTIVITY:
WETLAND PERMIT

CLIENT:
GEORGIA PORTS AUTHORITY / SAVANNAH ECONOMIC DEVELOPMENT AUTHORITY

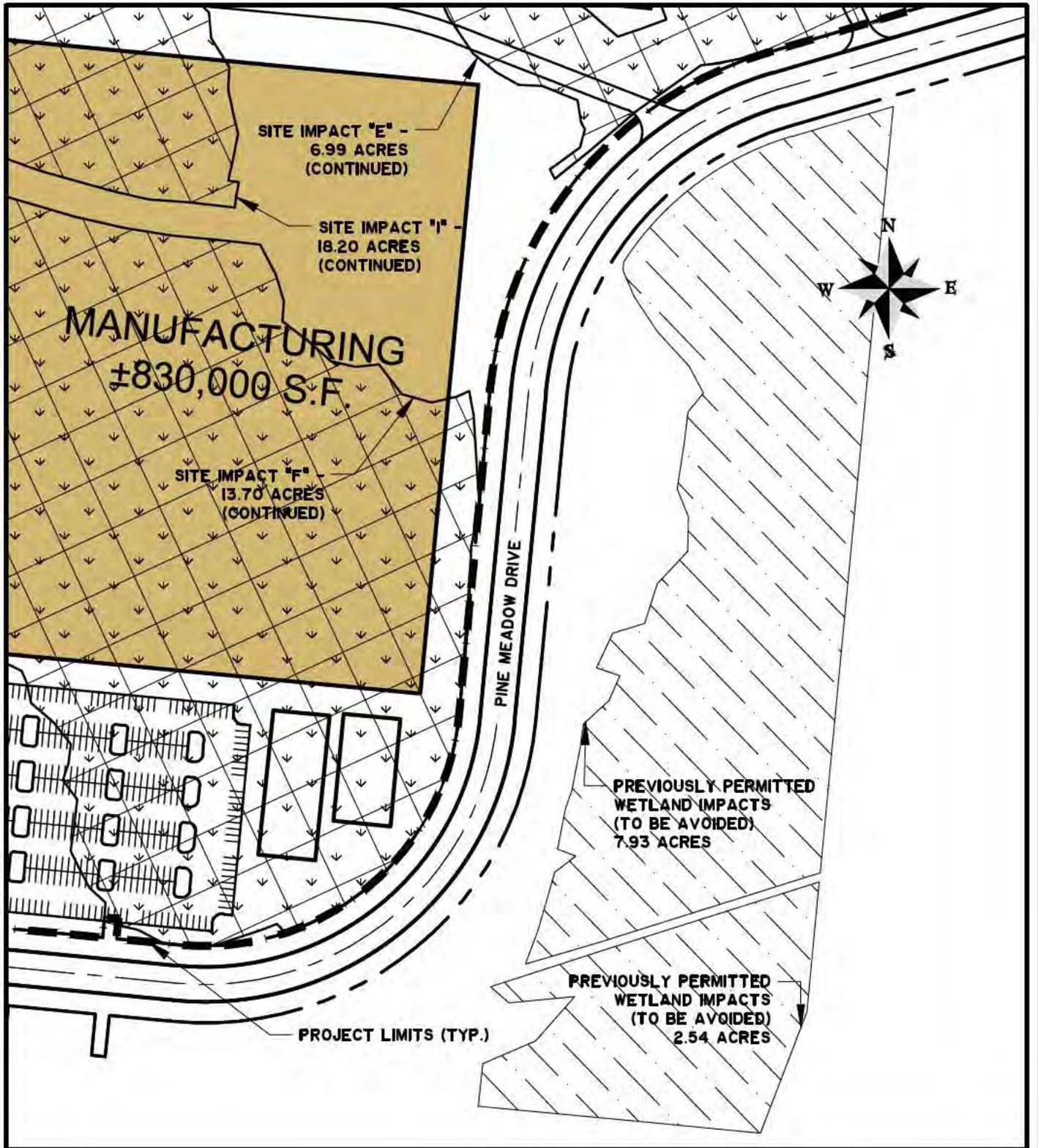
LOCATION: CHATHAM COUNTY, GEORGIA
DATE: JULY 25, 2014
JOB NUMBER: J - 09814

SHEET: 7 OF 12
SCALE: 1" = 200'

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CHATHAM COUNTY ECONOMIC DEVELOPMENT SITE

PROPOSED ACTIVITY:
WETLAND PERMIT

CLIENT:
GEORGIA PORTS AUTHORITY / SAVANNAH ECONOMIC DEVELOPMENT AUTHORITY

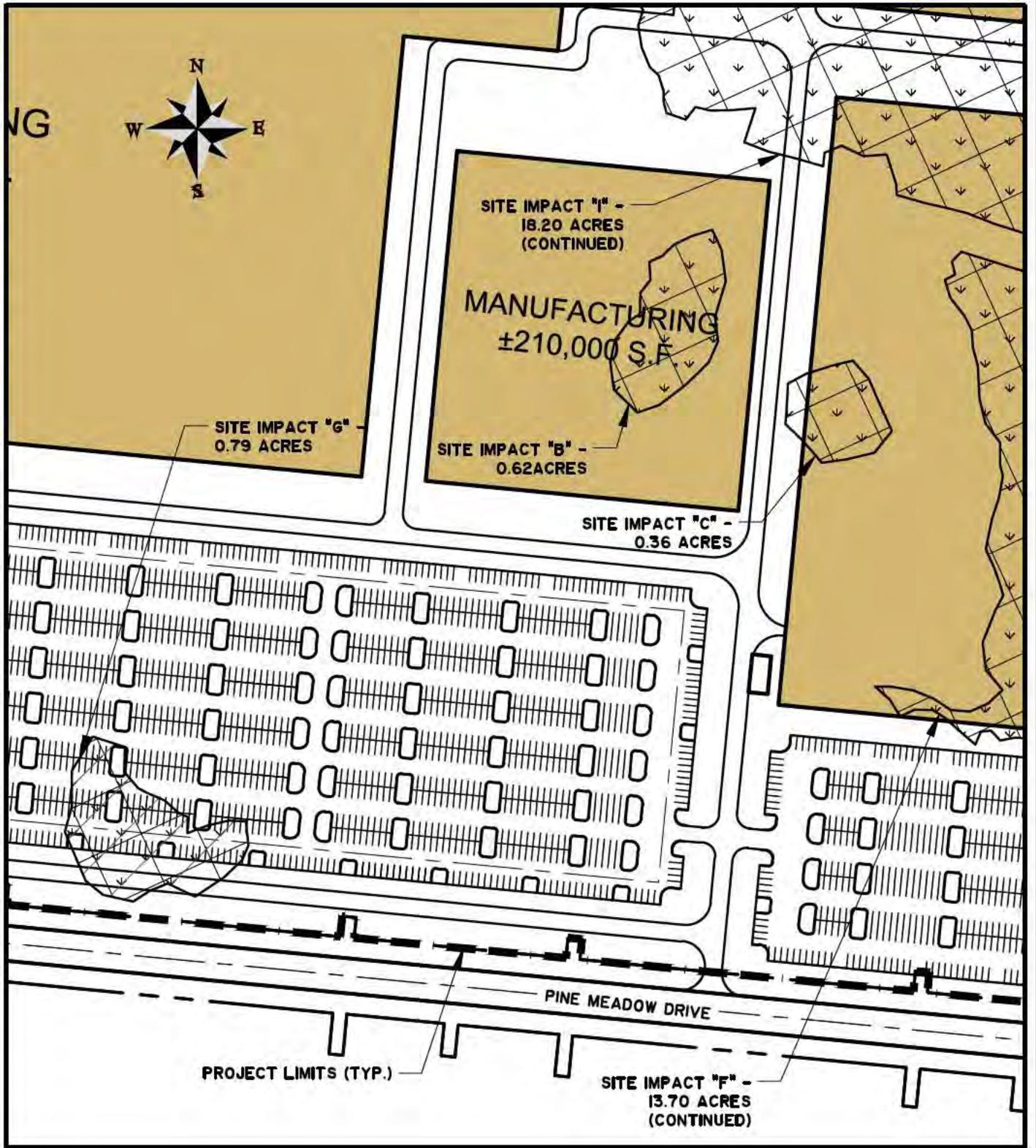
LOCATION: CHATHAM COUNTY, GEORGIA
DATE: JULY 25, 2014
JOB NUMBER: J - 09814

SHEET: 8 OF 12
SCALE: 1" = 200'

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CHATHAM COUNTY ECONOMIC DEVELOPMENT SITE

PROPOSED ACTIVITY:
WETLAND PERMIT

CLIENT:
GEORGIA PORTS AUTHORITY / SAVANNAH ECONOMIC DEVELOPMENT AUTHORITY

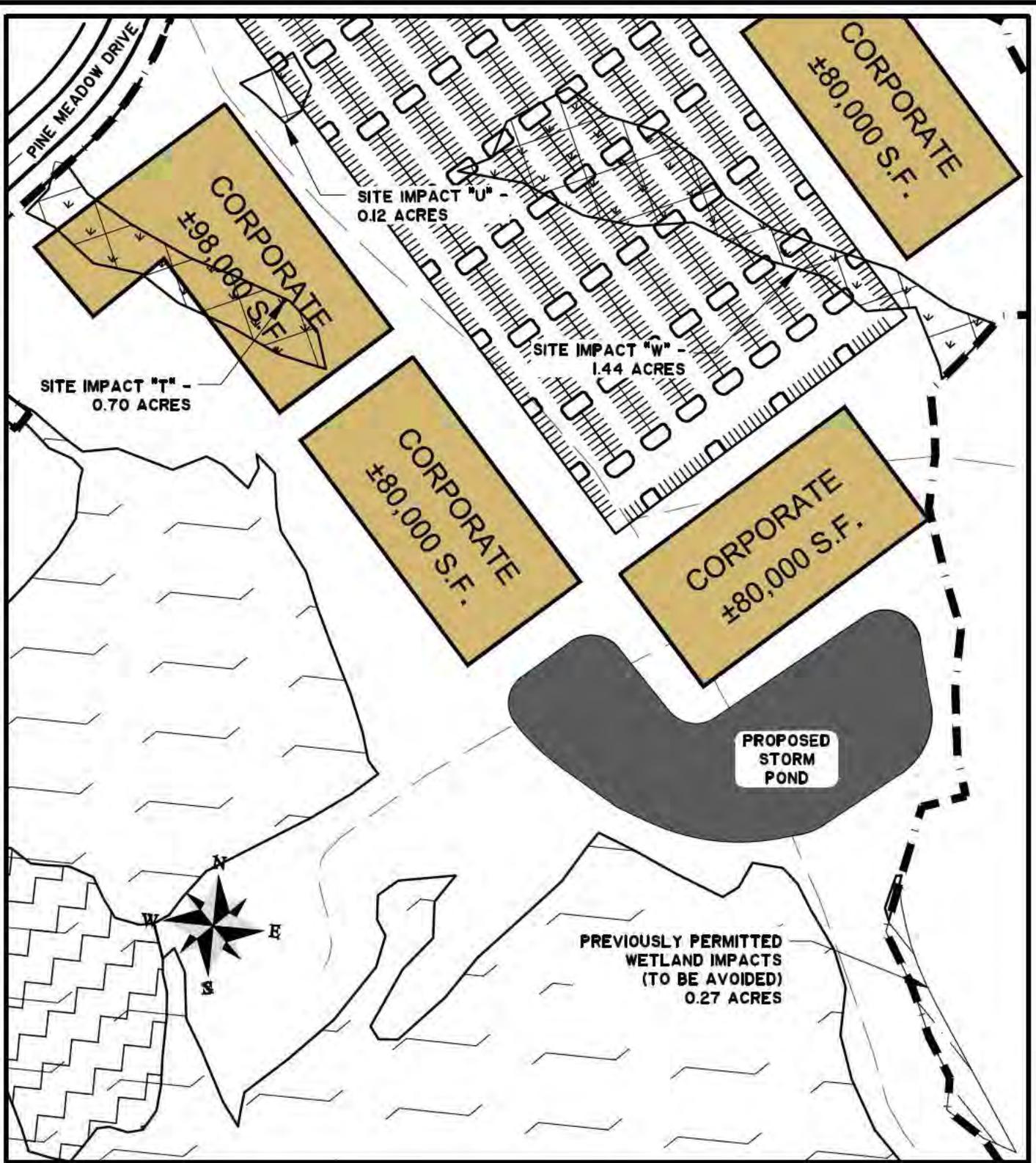
LOCATION: CHATHAM COUNTY, GEORGIA
DATE: JULY 25, 2014
JOB NUMBER: J - 09814

SHEET: 9 OF 12
SCALE: 1" = 200'

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CHATHAM COUNTY ECONOMIC DEVELOPMENT SITE

PROPOSED ACTIVITY:
WETLAND PERMIT

CLIENT:
GEORGIA PORTS AUTHORITY / SAVANNAH ECONOMIC DEVELOPMENT AUTHORITY

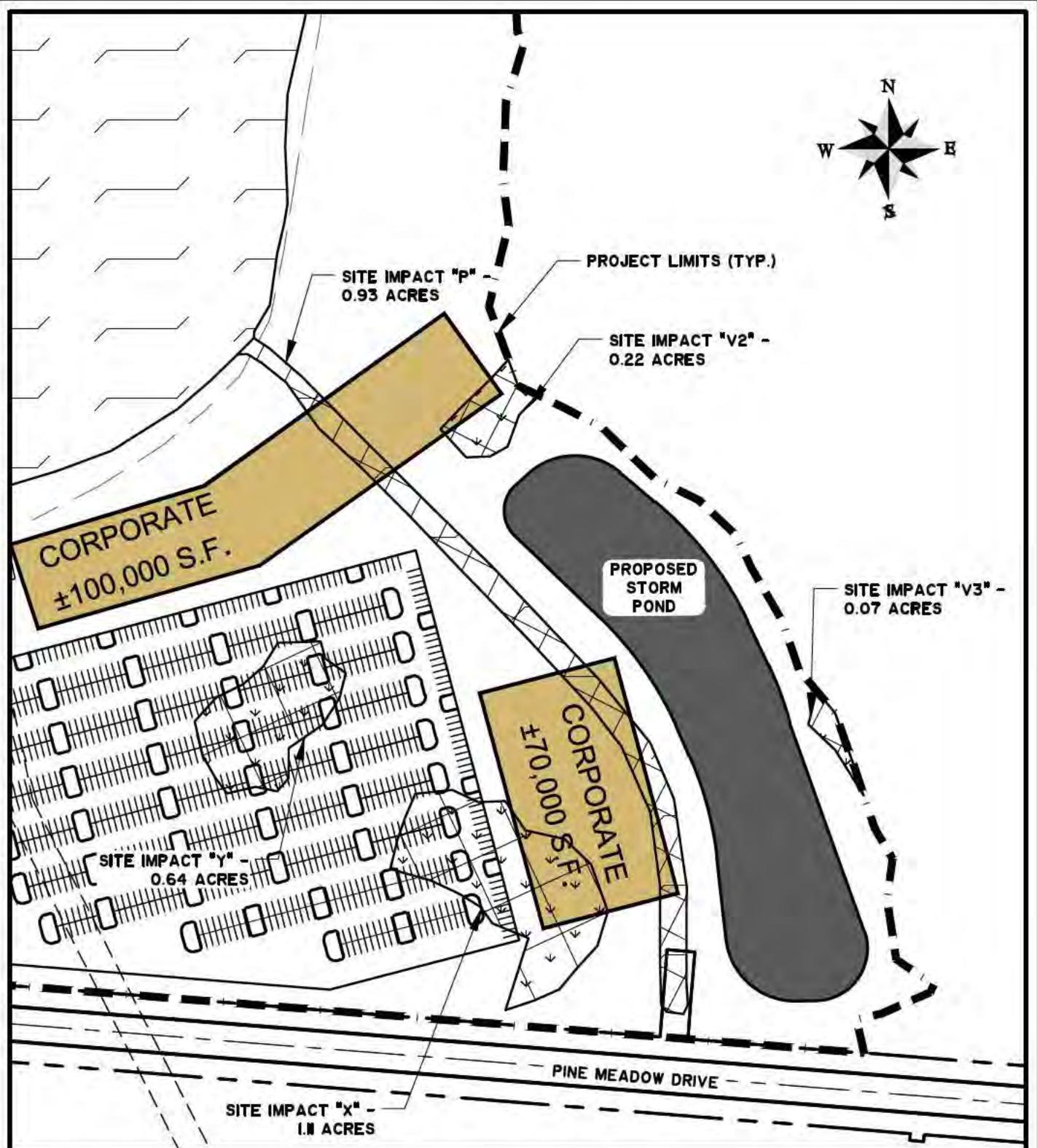
LOCATION: CHATHAM COUNTY, GEORGIA
DATE: JULY 25, 2014
JOB NUMBER: J - 09814

SHEET: 10 OF 12
SCALE: 1" = 200'

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CHATHAM COUNTY ECONOMIC DEVELOPMENT SITE

PROPOSED ACTIVITY:
WETLAND PERMIT

CLIENT:
GEORGIA PORTS AUTHORITY / SAVANNAH ECONOMIC DEVELOPMENT AUTHORITY

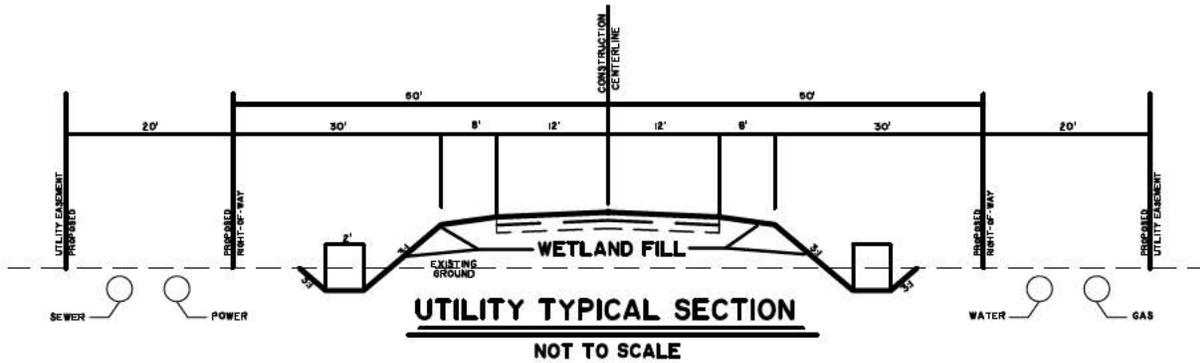
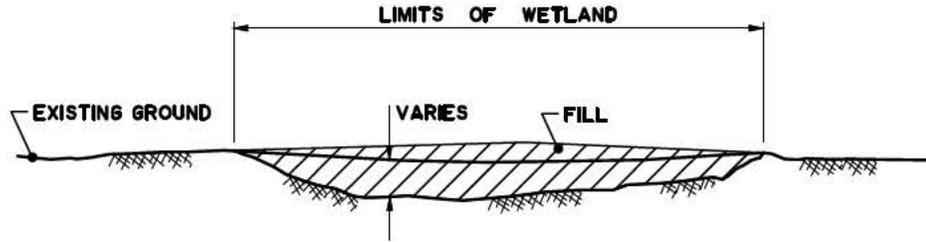
LOCATION: CHATHAM COUNTY, GEORGIA
DATE: JULY 25, 2014
JOB NUMBER: J - 09814

SHEET: 11 OF 12
SCALE: 1" = 200'

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CHATHAM COUNTY ECONOMIC DEVELOPMENT SITE

PROPOSED ACTIVITY:
TYPICAL SECTIONS

CLIENT:
GEORGIA PORTS AUTHORITY / SAVANNAH ECONOMIC DEVELOPMENT AUTHORITY

LOCATION: CHATHAM COUNTY, GEORGIA
DATE: JULY 25, 2014
JOB NUMBER: J - 09814

SHEET: 12 OF 12
SCALE: N.T.S.

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