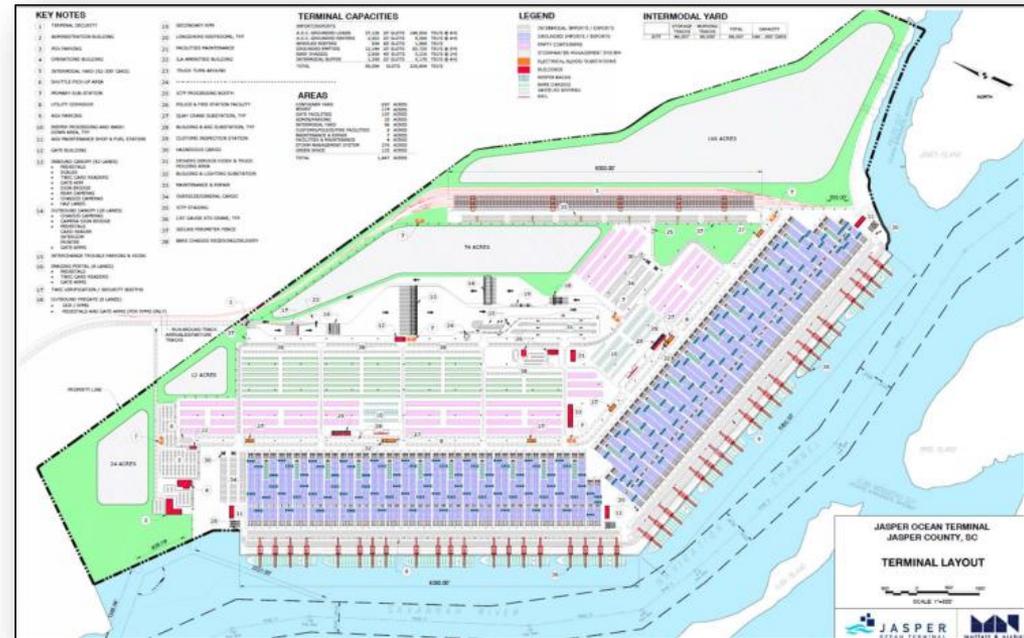


## Outline:

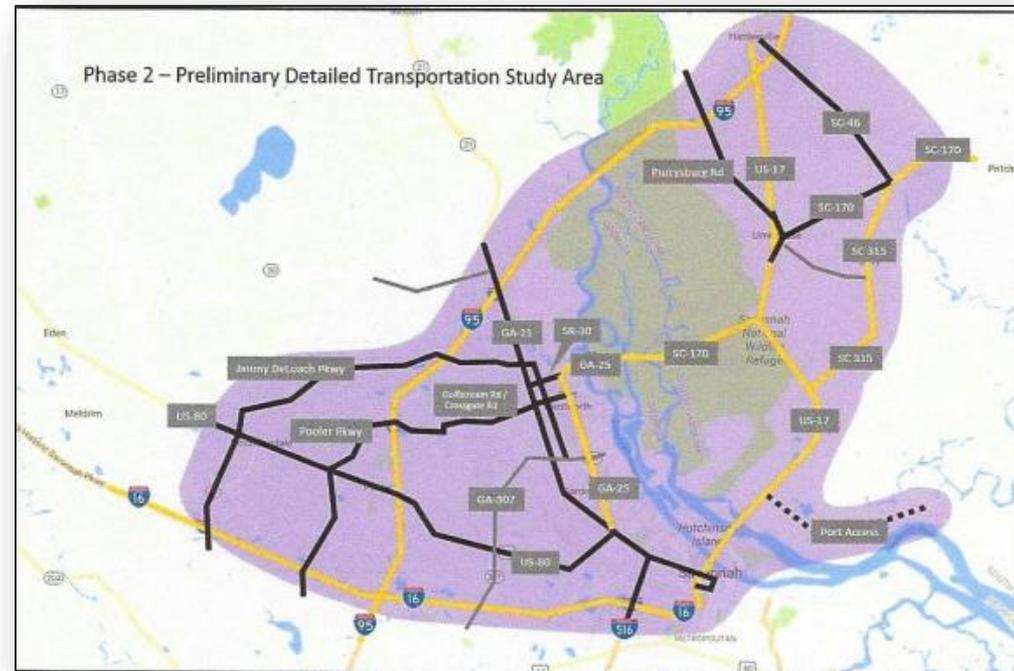
- Ongoing Environmental Impact Statement Work
- Basis of Concept – TBA Simulation
- Landside Infrastructure Needs
- Waterway Infrastructure Needs
- Timeline for Completion



# Jasper Ocean Terminal

## Environmental Impact Statement (EIS) Scope:

- **Brief Description:** Atkins North America, Inc. is the Third-Party Contractor working with the U.S. Army Corps of Engineers, Charleston District to prepare the EIS for the proposed JOT. The scope of work for FY 19 includes the following tasks:
  - Alternative Sites Screening Technical Report
  - Phase II Transportation Analysis
  - Cultural Resources Investigations
- **FY19 Budget:** \$900,000
- **Projected FY 19 expenses:** \$675,000
- **Projected FY 20 expenses:** \$830,000
- **Funding source:** JOT Joint Venture
- **Status update:** All tasks are ongoing. Cultural Resources Survey Report and Traffic Analysis will carry over to FY20

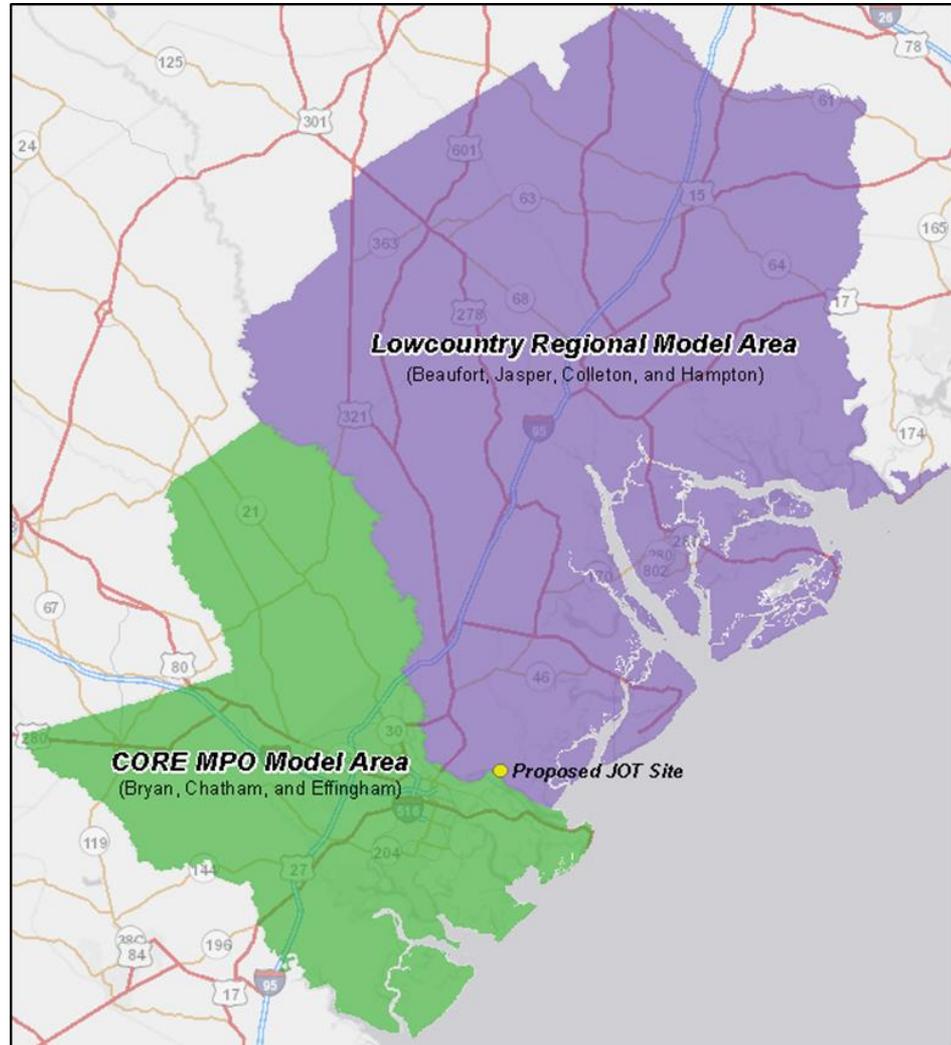


# JOT Environmental Impact Statement – Transportation

## Analysis Task Status

Phase II Transportation Analysis (July 2018  
June 2019)

- Completed development and calibration of JOT EIS regional travel demand model.
- Initial model runs completed for the No Action Alternative and Proposed Project Full Design Year 2055.
- Met with the JOT EIS Transportation Analysis Working Group (DOTs, LATS, CORE MPO) in November to provide a project/modeling update and next steps.
- All traffic counts have been collected May 2018
- Data processing to determine AM and PM peak hours
- Transportation study area expanded beyond original assumptions

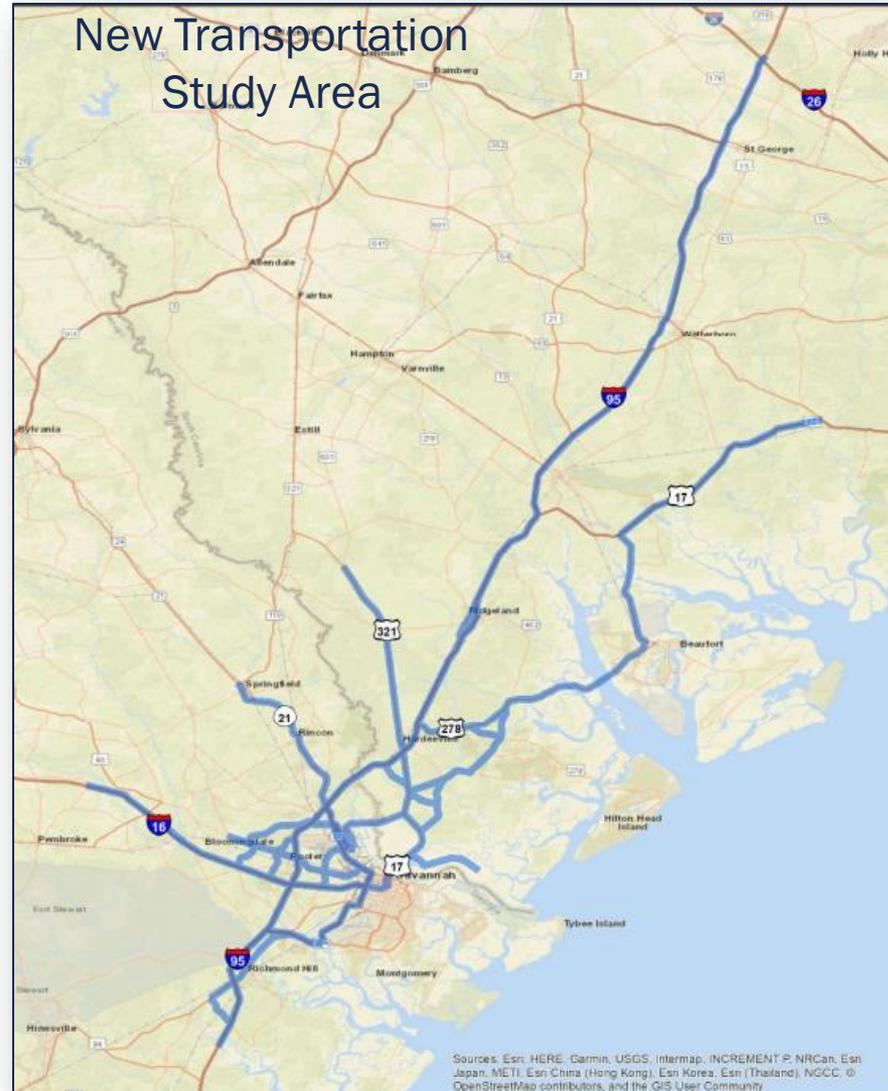


# JOT Environmental Impact Statement – Transportation

## Analysis Next Steps

### Phase II Transportation Analysis (July 2019 – October 2019)

- Perform traffic counts within expanded study area
- Perform a traffic operations capacity analysis.
- Prepare Transportation Analysis Technical Memo to document the findings of the analysis.



# JOT Environmental Impact Statement – Cultural Resources Investigations Status

## Cultural Resources Investigations (January - October 2019)

- Final Research Design approved by the JOT EIS Cultural Resources Working Group (SHPOs, USFWS, NPS, GA & SC DOTs).
- Conducted fieldwork on the proposed JOT site and the associated road and rail corridors.
- Rights of Entry obtained for all SC property and most GA property.
- Field work is ongoing
- Prepare the Cultural Resources Survey Report.



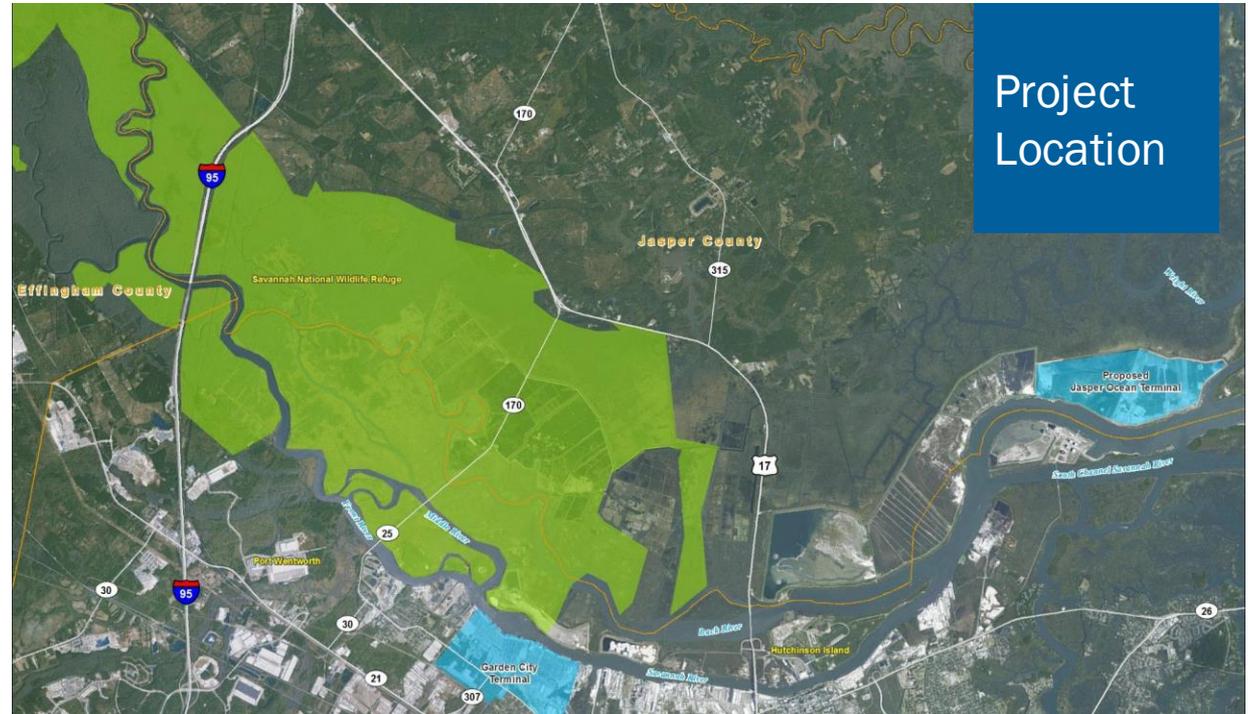
# JOT Environmental Impact Statement – Alternative Sites Screening Process

## Alternative Sites Screening Process - Status

- Coordinated with JOT JV on the project assumptions (i.e., open year/design year, annual throughput capacity of JOT, design vessel size, truck/rail shares, etc.) to be applied to the alternative sites analysis and transportation analysis.
- Atkins sent USACE the draft Alternatives Site Screening Analysis in April 2018.

## Alternative Sites Screening Process – Next Steps

- USACE complete review of Screening Analysis
- Send JOT JV the report for review.



# JOT Environmental Impact Statement – FY 20 Scope of Services

## Alternative Road and Rail Corridor Analysis

- Coordinate with JOT JV on the project assumptions
- Coordinate meetings with Cooperating Agencies (USFWS, NPS, USEPA, USCG, and NMFS) as well as other agencies and interested parties.
- Prepare report document alternatives.

## Affected Environment Report

- Describes existing conditions of the potentially affected environment
- Report will identify data gaps

## Finalize Cultural Resources and Traffic Analysis Reports

## Shoreline Erosion Preliminary Research

## Groundwater Analysis



# JOT Environmental Impact Statement – Schedule Overview

- Prepare Draft EIS ( ~3 years)
- Prepare Final EIS/ROD (~2 years)
- Schedule drivers:
  - Section 408 review and approval of impacts to Savannah Harbor and existing Dredged Material Containment Areas
  - Section 203 Feasibility Study (deepening and widening of Savannah Harbor appears to be required to achieve the JOT JV’s project purpose)
  - Compatibility Determination from USFWS for proposed impacts to Savannah National Wildlife Refuge

A

**Section 10** – Rivers and Harbors Act of 1899 (33 U.S.C. 403), USACE Guidance

**Section 404** – Federal Water Pollution Control Act Amendments of 1972 (P.L. 92-500; 33 U.S.C. 1344), as amended by the Clean Water Act of 1977 (P.L. 95-217; 33 U.S.C. 1251 et seq.), Environmental Protection Agency (EPA)’s 404(b)(1) Guidelines

Regulatory Division Actions

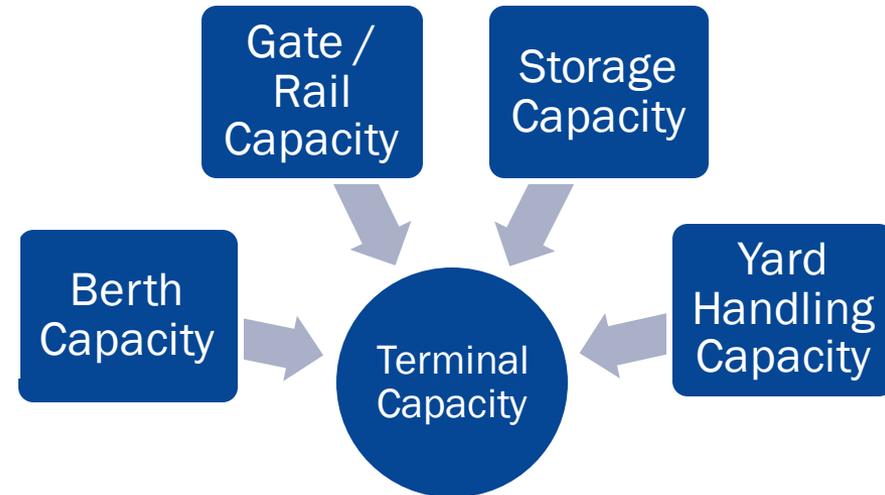
B

**Section 408** – Section 14 of the Rivers and Harbors Act of 1899 and codified in 33 USC 408 (commonly referred to as “Section 408”) and Engineer Circular (EC) 1165-2-216, *Policy and Procedural Guidance for Processing Requests to Alter U.S. Army Corps of Engineers Civil Works Projects Pursuant to 33 USC 408*

Planning Division Actions

# JOT Capacity Basis of Concept – TBA Analysis

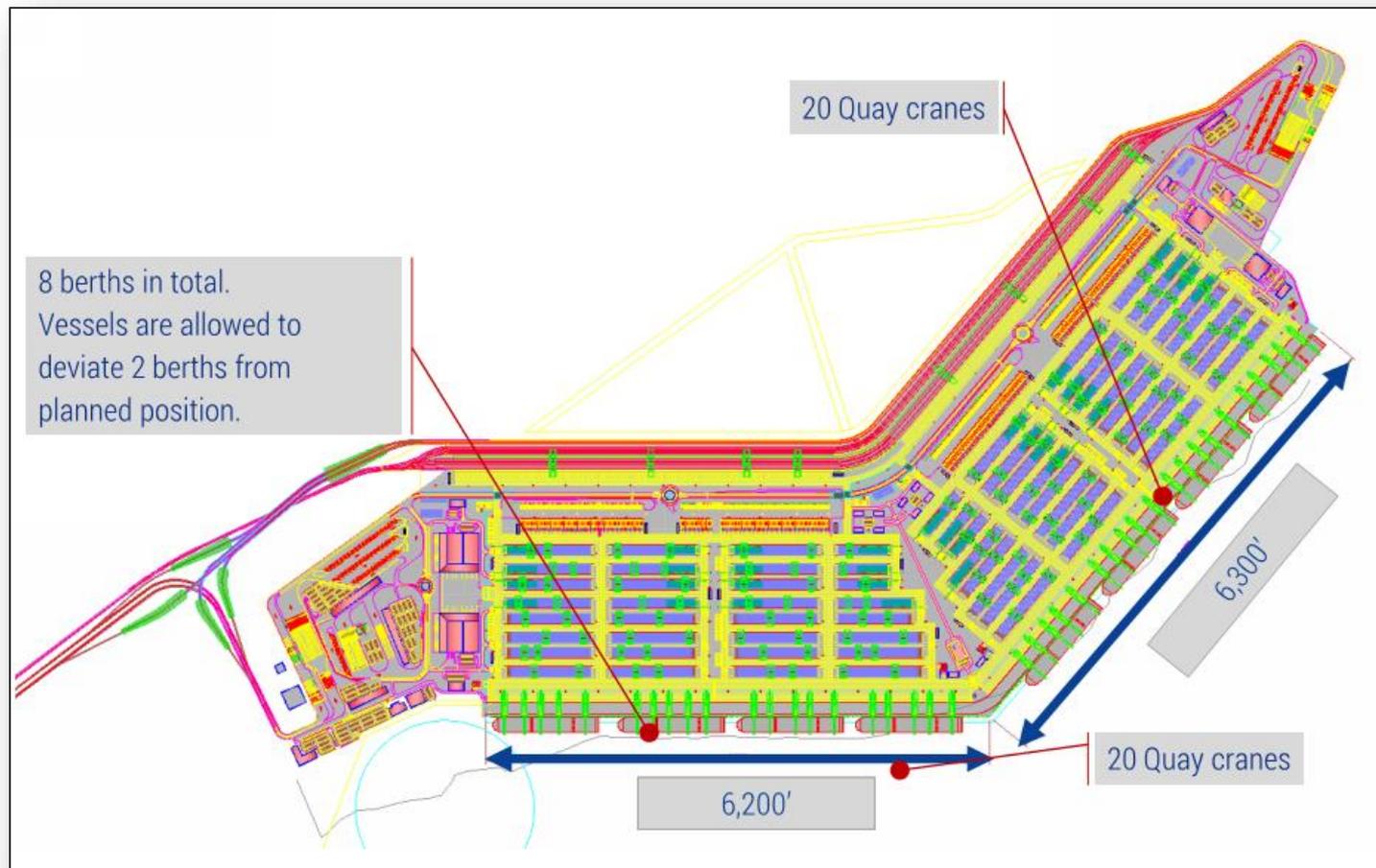
- TBA reevaluated the Basis of Concept design to verify capacity
- Evaluated 5 operational concepts using variations of parallel and perpendicular yard arrangements for manual and automated transport equipment
  - Option 0: E-RTG + terminal truck (reference design)
  - Option 1: Parallel cantilever RMG + terminal truck
  - Option 2: Parallel RMG + automated shuttle carrier
  - Option 3: Perpendicular RMG + manual shuttle carrier
  - Option 4: Perpendicular RMG + Battery Lift AGV
- All options achieve approximately 8.0M TEU operational capacity at full build out
  - RTG option limited by storage capacity
  - RMG options limited by handling capacity



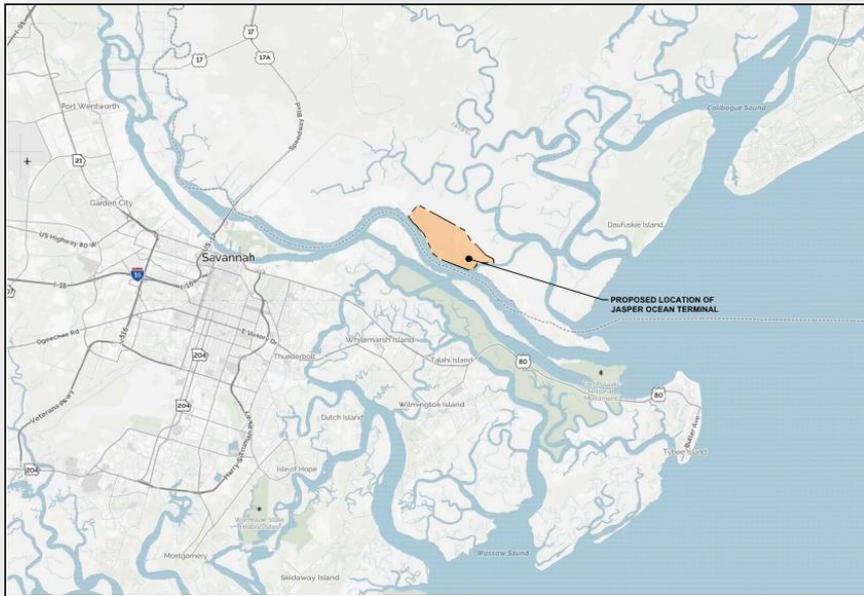
*RTG = Rubber Tire Gantry Crane*  
*RMG = Rail Mounted Gantry Crane*

# JOT - TBA Terminal Simulation Recommendation

- A perpendicular RMG yard layout
- Both manual shuttle carrier and Lift AGV are suitable

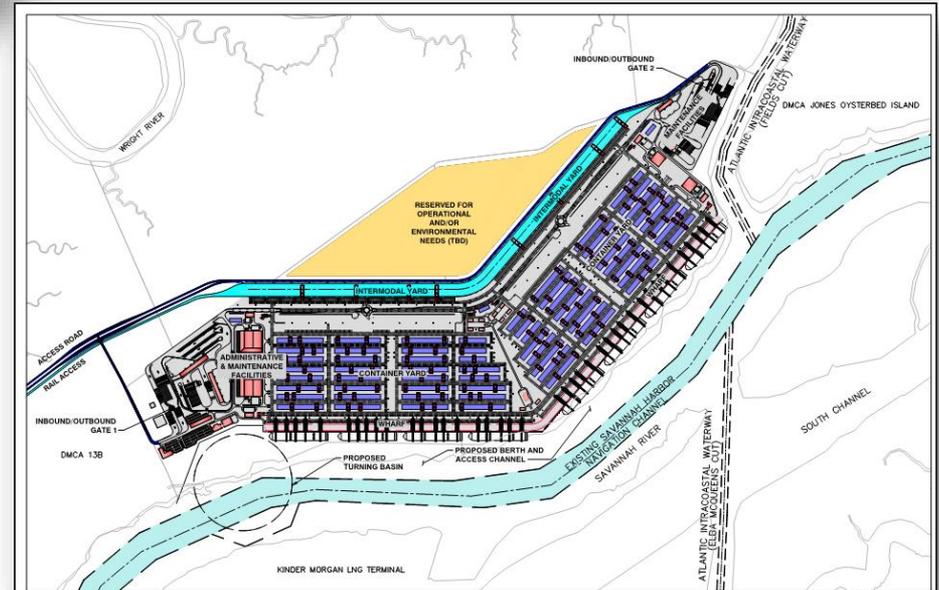


# Joint Venture Agreement Goals and Objectives



- JOT shall have handling capacity of 8 million TEU
- JOT shall accommodate draft and beam requirements of a fully loaded 14k – 20k TEU vessel without tidal restriction

- Savannah River channel shall be modified as authorized in future WRDA to provide for 2 way traffic
- Dual rail access on terminal
- Sufficient highway access



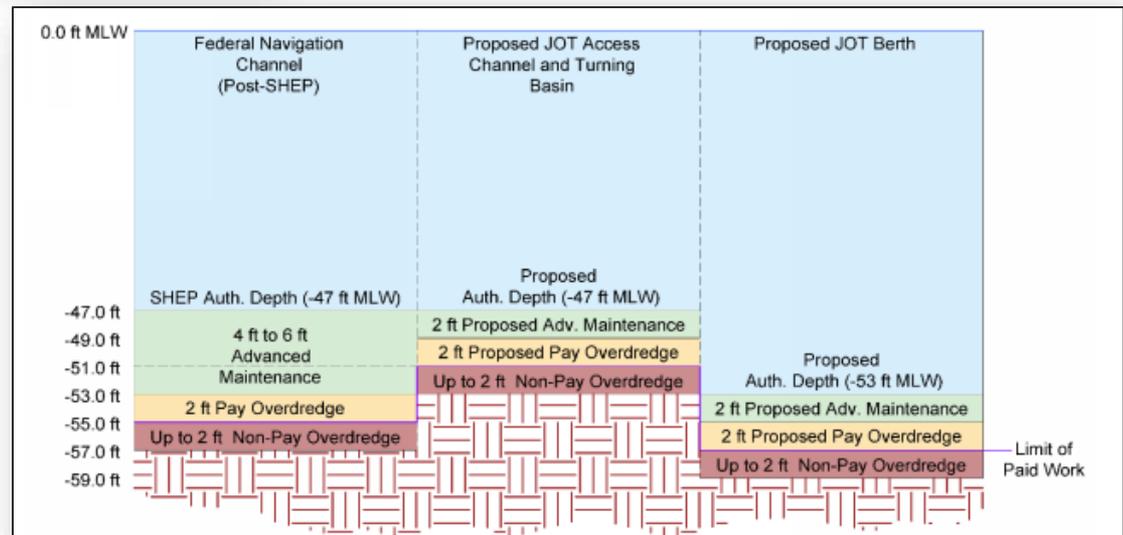


# Waterway Infrastructure Needs



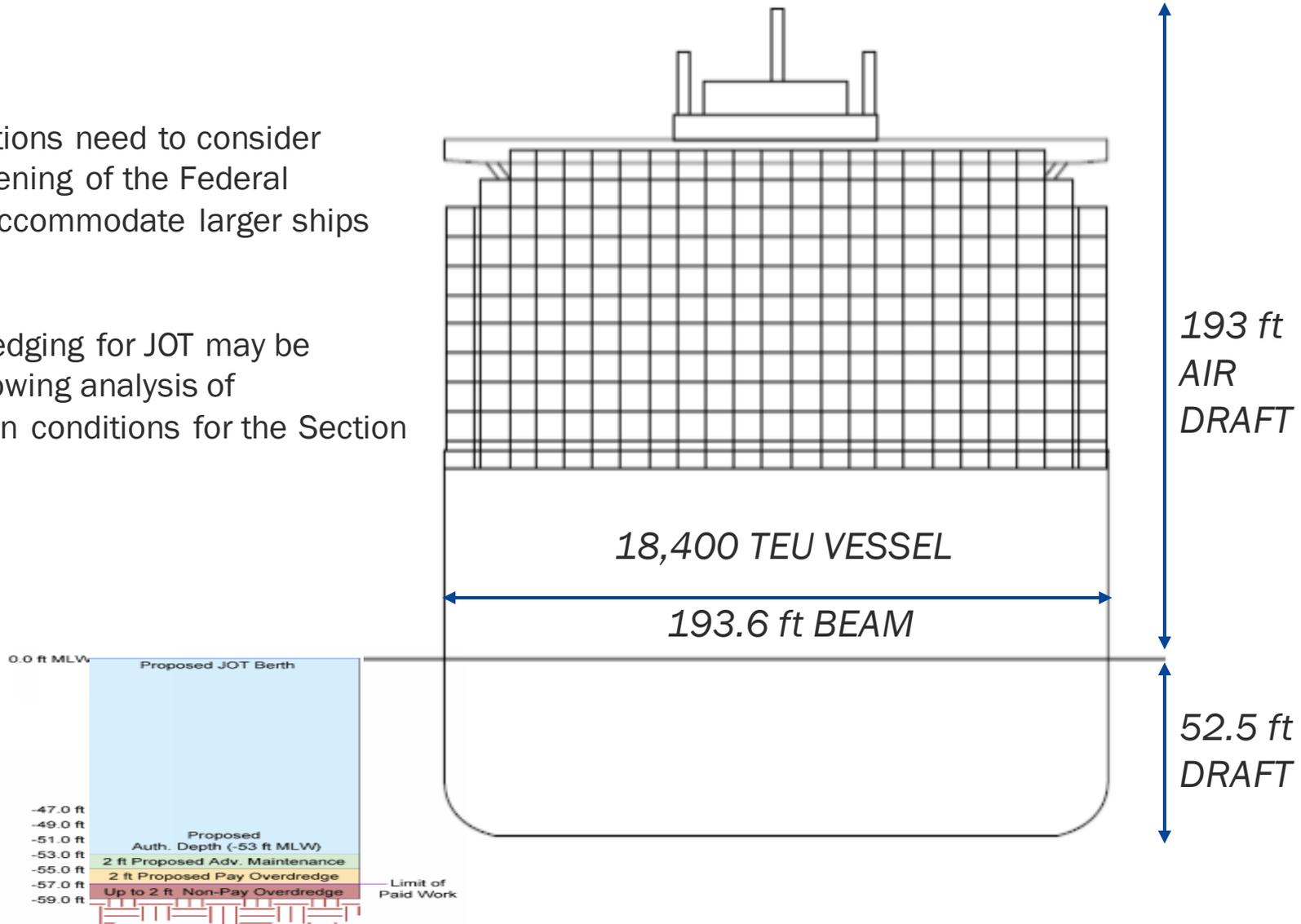
- JOT needs include additional dredging for:
  - Access channel
  - berth area
  - Turning basin

- The without project condition is the Post – SHEP channel conditions (e.g., -47ft MLW)



# Waterway Infrastructure Needs

- Future conditions need to consider further deepening of the Federal Channel to accommodate larger ships
- Proposed dredging for JOT may be updated following analysis of sedimentation conditions for the Section 408 Study



# SCPA Facilities Construction Timeline

## 2003

- Filed permit application for Navy Base Terminal

## 2007

- Permit received for Navy Base Terminal

## 2008

- Intergovernmental Agreement for JOT signed by SCPA/GPA
- Lawsuit by CCL against Navy Base Terminal

## 2009

- Due to loss of container volumes, delays need for Navy Base Terminal

## 2010

- Navy Base Terminal lawsuit settled

## 2012

- Original intended opening date of Navy Base Terminal
- Savannah Harbor Expansion Chief's Report

## 2015

- First Federal funding for SHEP
- JOT Intergovernmental Agreement replaced by JV Agreement
- Pre-permitting initiated with US Army Corps

## 2017

- Pre-permitting studies continue on JOT

## 2018

- GPA announces 8 Million TEU capacity goal at September State of the Port address

## 2020

- Late Fall opening of Navy Base Terminal Phase One in Charleston

## 2025

- Estimated Charleston out of capacity based on 2003 volume track

## 2026

- Phase Two Navy Base Terminal

## 2032

- Phase Three Navy Base Terminal

## 2035

- Phase One JOT
- Estimated Charleston out of capacity based on existing volume track