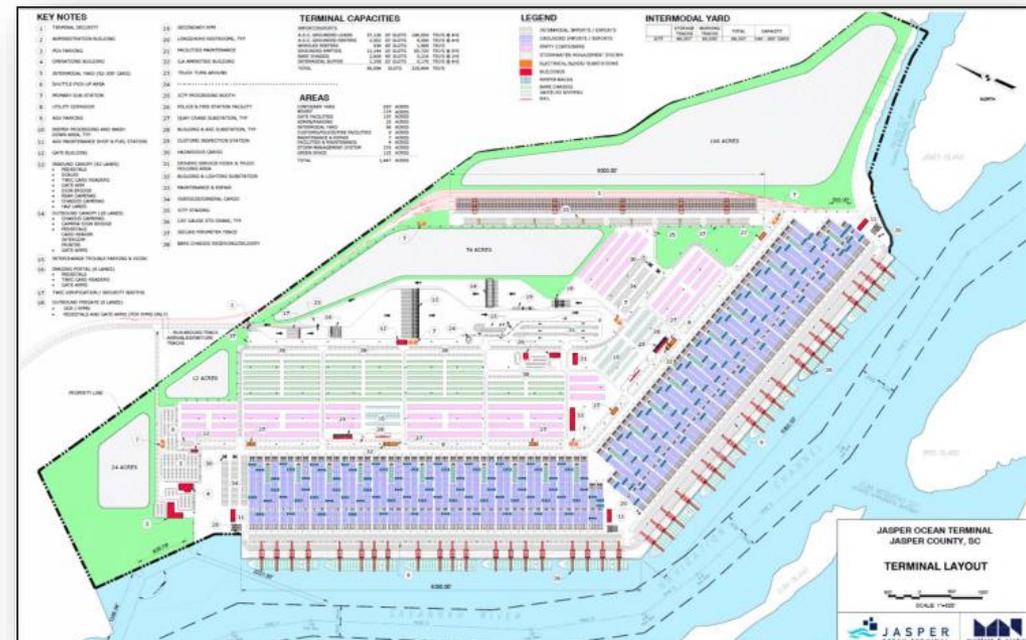


Jasper Ocean Terminal (JOT) SC General Assembly - Biannual Report



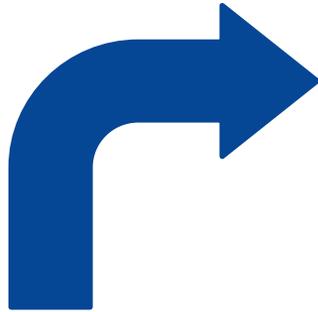
Outline:

- Cost Information
- Ongoing Environmental Impact Statement Work
- Proposed FY21 EIS Work
- Section 408 Agreement
- SCPA Capacity
- Containerized Cargo Forecast
- Timeline for Completion
- Basis of Concept – TBA Simulation
- Landside Infrastructure Needs
- Waterway Infrastructure Needs

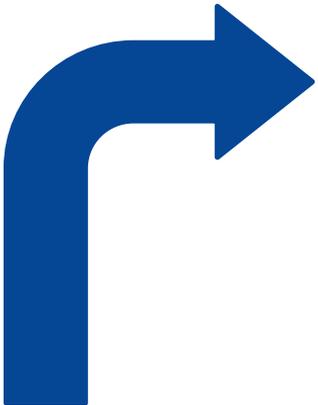


June 2020

Fiscal Year 2020 Budget



Total Operating Revenue for FY 2020 is \$1,294,000



Estimated Budget Spent is \$758,000

Operating Expenses	FY 2020
Program Mgmt/Consolidation	
Task 1 - Basis of Design	\$100,000
Task 2 - Easement Release Plan - Sediment Tracing	
Task 3 - Access Corridor, Alt 4	
Task 4 - Geotechnical Test Embankment Monitoring	
Task 5 - Economic Impact Study	
Task 6 - Third-Party Contractor Solicitation	
Task 7 - Channel Modifications	
Task 8 - Property Management & Geotechnical Support	
Task 9 - Section 10/404 Review Process Support	\$829,000
Task 10 - Section 408 Review Process Support	
Task 11 - Section 408/204 Review Process Support	
Task 12 - Planning and Design	
Task 13 - Geotechnical Investigation	
Task 14 - Section 203	
Total Development Expenses	\$929,000
Total Office & Admin Expenses	\$365,000
Total Operating Expenses	\$1,294,000

JOT Joint Venture – Expenses to Date



FY11 Contributions From Sponsors	\$3,800,000
FY12 Contributions	\$800,000
FY13 Contributions	\$800,000
FY14 Contributions	\$600,000
FY15 Contributions	\$2,100,000
FY16 Contributions	\$2,000,000
FY17 Contributions	\$3,750,000
FY18 Contributions	\$2,850,000
FY19 Contributions	\$1,000,000
FY20 Contributions	\$800,000
Total	\$18,500,000

JOT FY 2020 Scope-of-Work & Budget Overview



JOT EIS - USACE Charleston District Section 10/404 Scope:

- Brief Description: The scope-of-work for FY 2020 included the following tasks:

- Transportation Analysis and Technical Memo
- Cultural Resources Phase I Report
- Shoreline Erosion and Groundwater Assessments
- Project Alternative Sites Screening Analysis and Evaluation of Alternative Road and Rail Corridors
- Affected Environmental (Existing Conditions) Report for Draft EIS
- Public Outreach

■ FY 20 Budget: **\$829,000**

■ Estimated Budget Spent: **\$758,000**

■ Funding Source: JOT JV



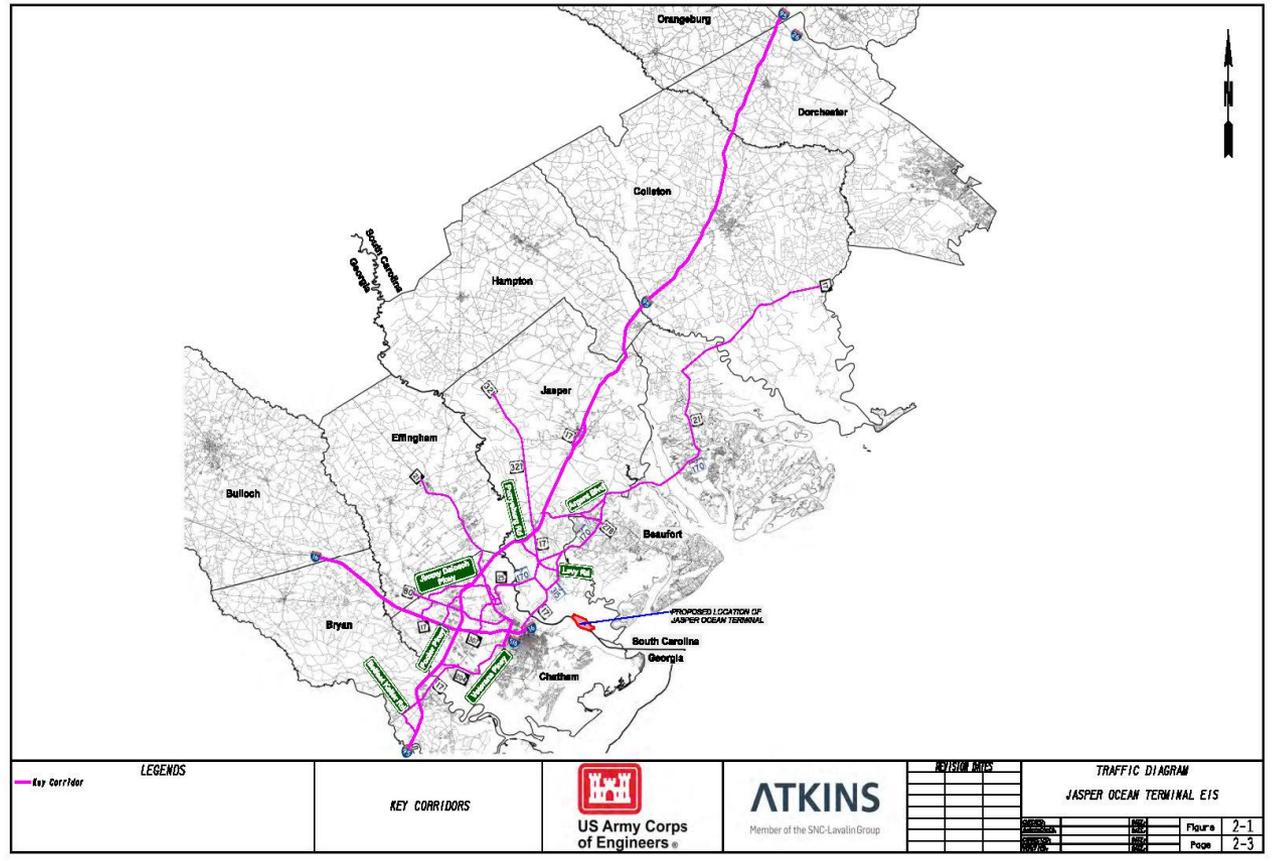
JOT EIS – USACE Charleston Section 10/404

Summary of Work Completed – FY 2020



■ Transportation Analysis and Tech Memo for Proposed JOT

- Modeling and analysis of baseline conditions, Open Year (2035), Design Year (2055) with inclusion of Savannah Container Terminal, a change to the original scope-of-work– 100% complete
- Preparation of Draft Tech Memo of results and distribution to the USACE, Working Group (DOTs, LATS, MPO), and Ports by 6/30/2020 – 100% complete
- Overall task – 95% complete



JOT EIS – USACE Charleston Section 10/404

Summary of Work Completed – FY 2020



- Cultural Resources Phase I Survey and Report for Proposed JOT
 - Preparation and coordination of Management Summary of 2018/2019 cultural resources field work conducted to date – 100% complete
 - Preparation of Draft Phase I Cultural Resources Assessment Summary report and distribution to the USACE by 6/30/2020 – 100% complete
 - Overall task – 75% complete



JOT EIS – USACE Charleston Section 10/404 Summary of Work Completed – FY 2020



■ Shoreline Erosion and Groundwater Assessments

- Independent review of recent shoreline erosion studies and recommendations to USACE Charleston District on potential paths forward – 100% complete
- Testing and refinement of the USGS groundwater model not conducted because report and model update files not yet released by USGS – 0% complete
- **Overall task – 10% complete**

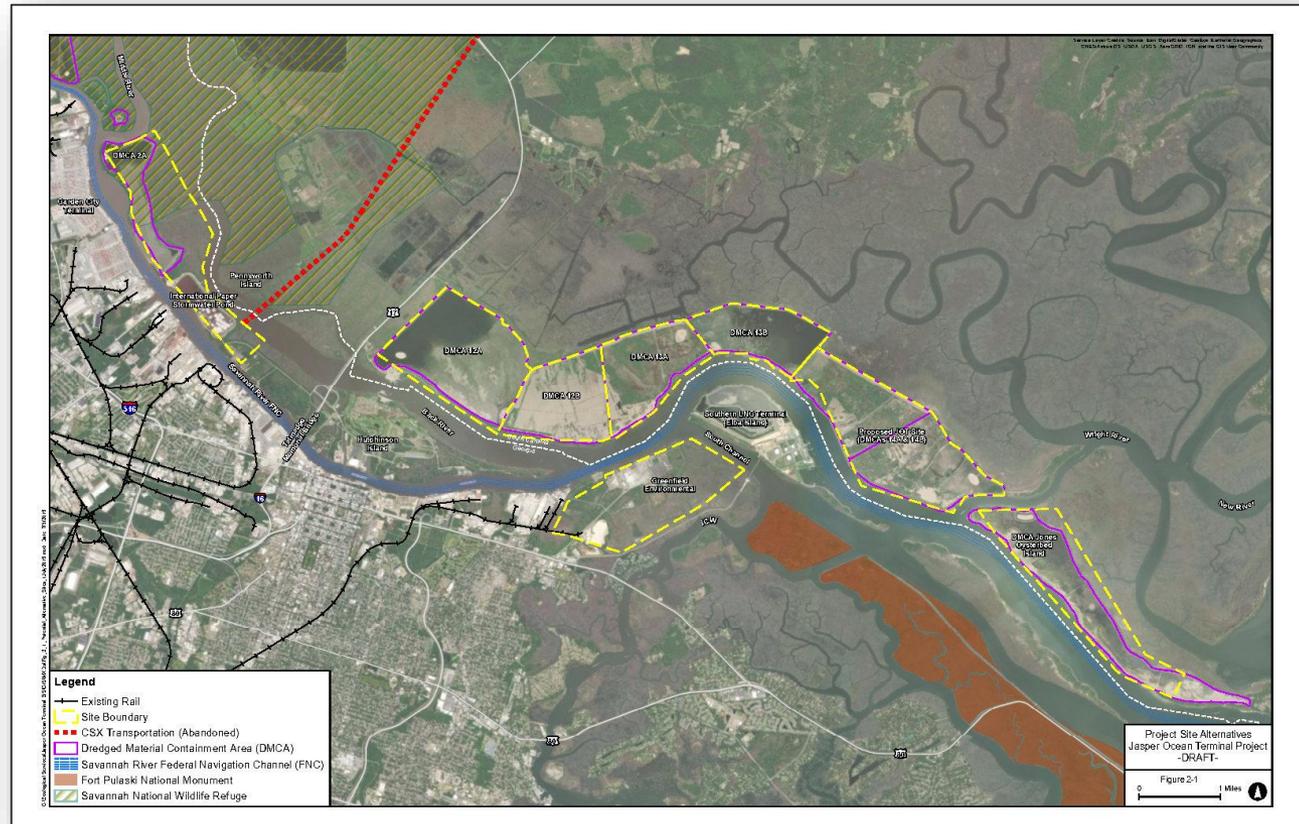


JOT EIS – USACE Charleston Section 10/404

Summary of Work Completed – FY 2020



- Project Alternative Sites Screening Analysis and Evaluation of Alternative Road and Rail Corridors
 - Completion of Draft Summary of Project Alternatives Identification and Screening Process Report (carry over task from FY 19) and distribution to the JOT JV – 100% complete
 - Identification of potential alternative road and rail access corridors by JOT JV – 0% complete
 - Overall task – 45% complete



JOT EIS – USACE Charleston Section 10/404 Summary of Work Completed – FY 2020



- Affected Environment (Existing Conditions) Report and Public Outreach
 - Preparation of Preliminary Draft of Existing Conditions Report and distribution to the USACE Charleston District by 6/30/2020 – 75% complete
 - Overall task – 50% complete
- Preparation of a newsletter or mass email to stakeholders on status of proposed JOT – 0% complete



JOT FY 2021

Proposed Scope-of-Work & Budget



JOT EIS – USACE Charleston District Section 10/404 Scope:

- Brief Description: The scope-of-work for FY 2021 includes the following tasks:
 - Continued Studies and Work:
 - Transportation Analysis (Tech Memo coordination)
 - Cultural Resources Investigations (Phase I report coordination and optional field work)
 - Affected Environment (existing conditions)
 - New Studies (to characterize existing environment):
 - Natural Resources (field work)
 - Noise and Vibration (field work and modeling)
 - Visual Resources (site assessment and 3D visualization model development)
 - Air Quality (Hot-Spot Analysis Traffic-related)
- FY 21 Budget: **\$667K or \$758K** [w/optional cultural resources field work]
- Funding Source: JOT JV

As proposed for FY21 (July 1, 2020 through June 30, 2021)		
Task #	Task Name	Budget (\$)
	Project Management Services (coordination mtgs. w/USACE Savannah District, JOT JV Board mtgs., Working Group mtgs., bi-weekly/monthly calls, administrative record, financials)	\$135,049
1		
2	Public/Stakeholder Outreach (newsletter, project website, stakeholder contact list)	\$17,113
3	Affected Environment (existing conditions) Chapter Development	\$88,240
4	Studies/Investigations for Development of the EIS	
4.1	Traffic/Transportation Tech Memo	\$106,399
4.2	Cultural Resources (coordination only with resource agencies)	\$21,364
4.3	Natural Resources Fieldwork	\$72,224
4.4	Noise/Vibration Fieldwork and Modeling	\$156,829
4.5	Visual Resources (site assessment and 3D model development)	\$16,719
4.6	CO and PM Hot-Spot Analysis (projected traffic only)	\$52,215
	TOTAL	\$667,000
	Optional Tasks	
4.2a	Cultural Resources Field Surveys (rail corridor not previously surveyed)	\$91,000
	TOTAL	\$91,000
	TOTAL w/Optional Tasks	\$758,000
	COST ASSUMPTIONS:	
2	Cost includes monthly hosting fee	
4.1	Cost includes additional budget (~\$59,780) to revise the transportation analysis if needed based on comments received from the Transportation Working Group	
4.3	Cost includes one week of field work plus travel for two Atkins staff, survey field equipment, and supplemental commercial imagery as needed	
4.4	Cost includes three days of field work plus travel for three Atkins staff and subconsultant costs (Wyle Labs) for rail noise monitoring and modeling	
4.5	Cost includes one day of field work plus travel for one Atkins staff	

JOT EIS

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 (according to JOT JV deepening and widening of Savannah Harbor would 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

***Section 103** – Marine Protection, Research, and Sanctuaries Act of 1972

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

- Section 408 review and approval of impacts to Savannah Harbor and existing Dredged Material Containment Areas
- From Section 1165(a)(2) of the Water Resources Development Act 2016
- Section 408 Agreement - Authorizes acceptance and expenditure of funds received from non-federal entities to evaluate requests under Section 408
- Start scoping 408 and other studies needed to complete the EIS
- USACE can define scope, schedule, milestones, oversight, review, and approval – Cannot perform studies or produce documents
- USACE Savannah District has \$240,800 available once agreement is signed

AGREEMENT BETWEEN
THE DEPARTMENT OF THE ARMY
AND
[FULL NAME OF CONTRIBUTOR]

THIS AGREEMENT is entered into this ___ day of _____, 2020, by and between the Department of the Army (hereinafter the "Government"), represented by the U.S. Army Engineer, **Savannah District, hereinafter "District Engineer"** and the **Jasper Ocean Terminal Joint Venture** (hereinafter the "Contributor"), together ("the Parties").

WITNESSETH, THAT:

WHEREAS, the Contributor considers it to be in its own interest to contribute funds voluntarily to be used by the Government to evaluate a request under 33 U.S.C 408 (hereinafter "Section 408") to alter **The Savannah Harbor Navigation Channel and 14A and 14B disposal areas** ("hereinafter the "Project(s)");

WHEREAS, the Government is authorized pursuant to Section 408 to accept and expend funds to evaluate such requests;

NOW, THEREFORE, the Government and Contributor agree as follows:

1. The Contributor plans to contribute funds to the Government to pay costs associated with evaluation of engineering plans and other information prepared by Contributor related to a request under Section 408. The Contributor shall provide funds in accordance with the provisions of this paragraph:

a. The Government and Contributor shall develop a scope of work for activities that will be undertaken with funds provided by the Contributor. The scope of work shall provide a detailed description of activities to be undertaken, including a detailed estimate of cost for each activity and schedules, and identification of travel by Government personnel that may be necessary to the activities covered under this Agreement, with such travel to be undertaken in accordance with the Federal Travel Regulations and estimated separately. The Government and Contributor shall review and update, as necessary, the scope of work.

b. Prior to the Government initiating any activities identified in the scope of work, the Contributor shall provide to the Government funds to cover the estimated cost of activities under the scope of work through the current and next fiscal year quarter of the Government. No later than fifteen calendar days before the beginning of each subsequent fiscal year quarter, the Contributor shall provide to the Government funds for all estimated costs of activities to be accomplished during that quarter.

c. If at any time the Government determines that additional funds are needed, the Government shall notify the Contributor in writing and no later than fifteen calendar days from

SCPA CONTAINER CAPACITY BY EARLY 2030



WANDO WELCH TERMINAL
2.4 MILLION TEU
(READY 2020)

HUGH K. LEATHERMAN, SR. TERMINAL
2.4 MILLION TEU
(2021-2032)

NORTH CHARLESTON TERMINAL
0.5 MILLION TEU
(NOW)

TOTAL CAPACITY
5.3 MILLION TEU

GPA and SCPA Combined Capacity and Cargo Forecast



Year	Containerized Cargo Forecast (TEU)	Annual Throughput Capacity of Existing and Planned GPA Marine Container Terminals	Annual Throughput Capacity of Existing and Planned SCPA Marine Container Terminals
2015	5,782,412	6,500,000	2,625,000
2020	7,285,493	6,500,000	3,200,000
2025	8,801,607	9,000,000	3,700,000
2030	10,551,446	11,000,000	4,100,000
2035	12,234,796	12,000,000	5,300,000
2040	14,065,731	12,000,000	5,300,000
2045	16,074,054	12,000,000	5,300,000
2050	18,281,593	12,000,000	5,300,000

New Facilities Timeline



2003

- Filed permit application for Hugh Leatherman Terminal

2007

- Permit received for Hugh Leatherman Terminal

2008

- Intergovernmental Agreement for JOT signed by SCPA/GPA
- Lawsuit by CCL against Hugh Leatherman Terminal

2009

- SC Ports completes loss of 40% of container volume and delays need for Hugh Leatherman Terminal

2010

- Hugh Leatherman Terminal lawsuit settled

2012

- Original intended opening date of Hugh Leatherman
- Savannah Harbor Expansions Chief's Report

2015

- First Federal funding for SHEP
- JOT Intergovernmental Agreement replaced by JV Agreement

2017

- Begin pre-permitting effort on JOT

2019

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

2021

- March opening of Hugh Leatherman Terminal Phase One in Charleston

2025 (projected)

- Opening of Savannah Container Terminal

2026 (based on demand)

- Phase Two Hugh Leatherman Terminal

2032 (based on demand)

- Phase Three Hugh Leatherman Terminal

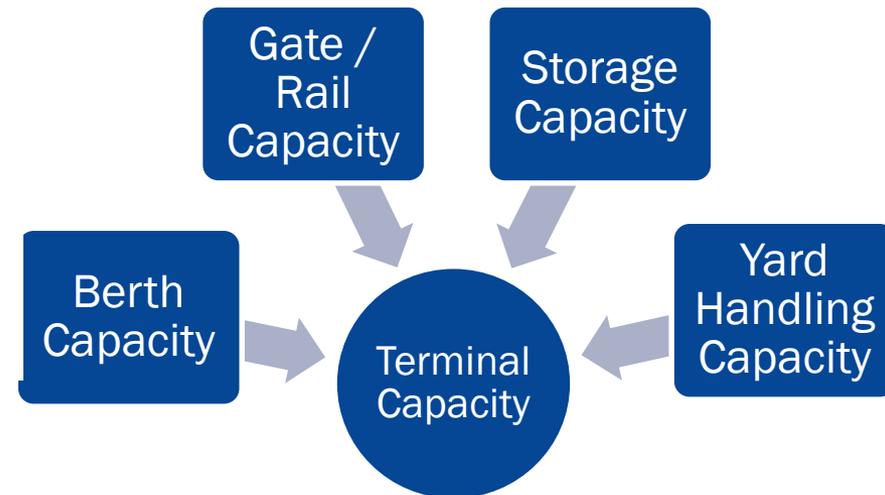
2035 (based on demand)

- Phase One JOT

JOT Capacity Basis of Concept – TBA Analysis



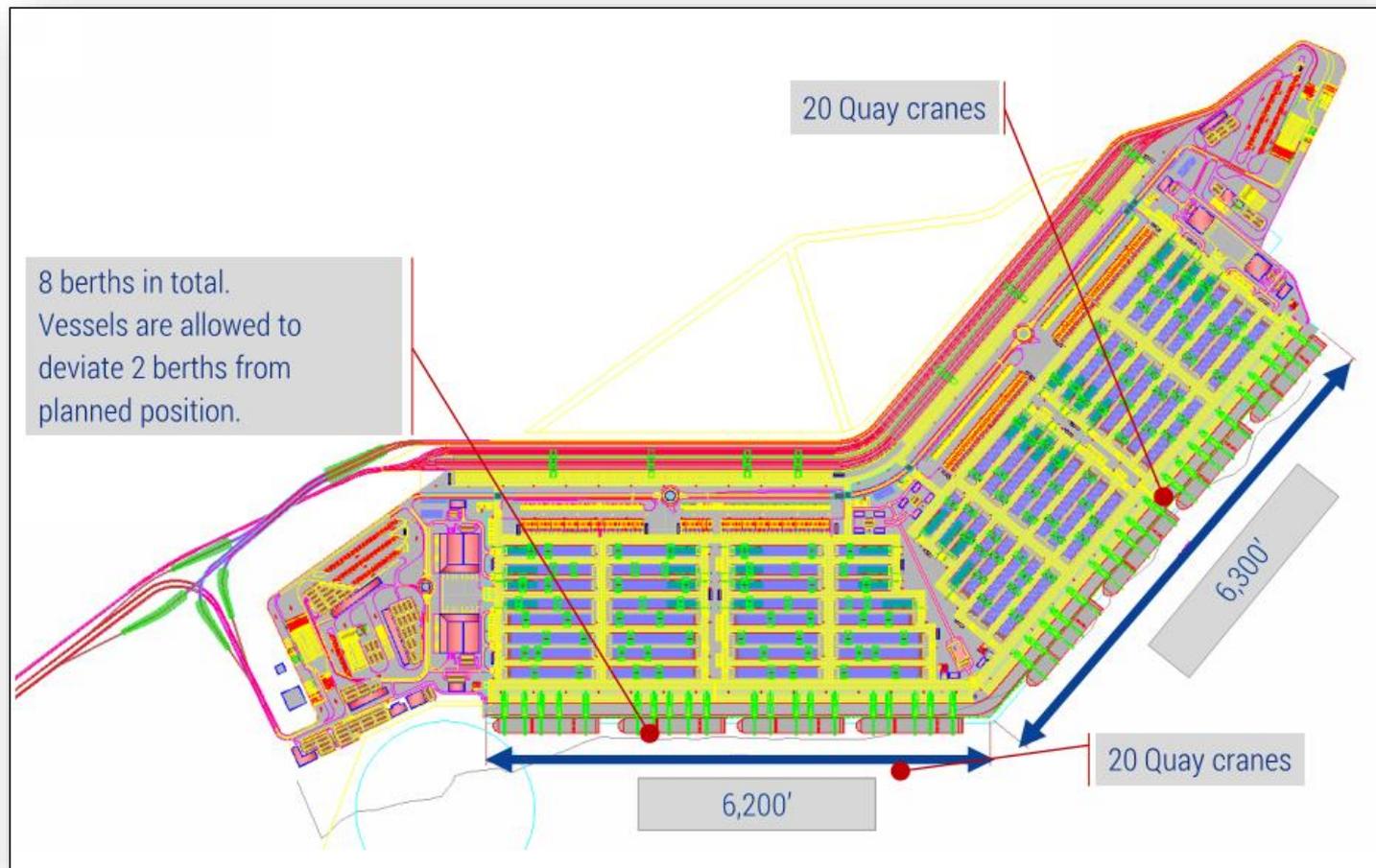
- TBA reevaluated the Basis of Concept design to verify capacity
- Evaluated 5 operational concepts using variations of parallel and perpendicular yard arrangements for manual and automated transport equipment
 - Option 0: E-RTG + terminal truck (reference design)
 - Option 1: Parallel cantilever RMG + 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 Recommendation

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

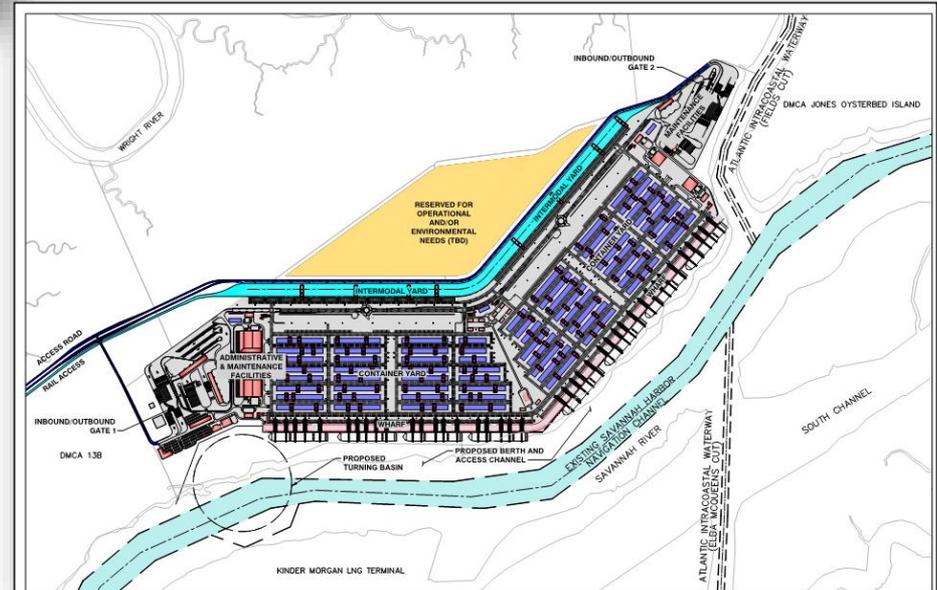


Joint Venture Agreement Goals and Objectives



- JOT shall have handling capacity of 7 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

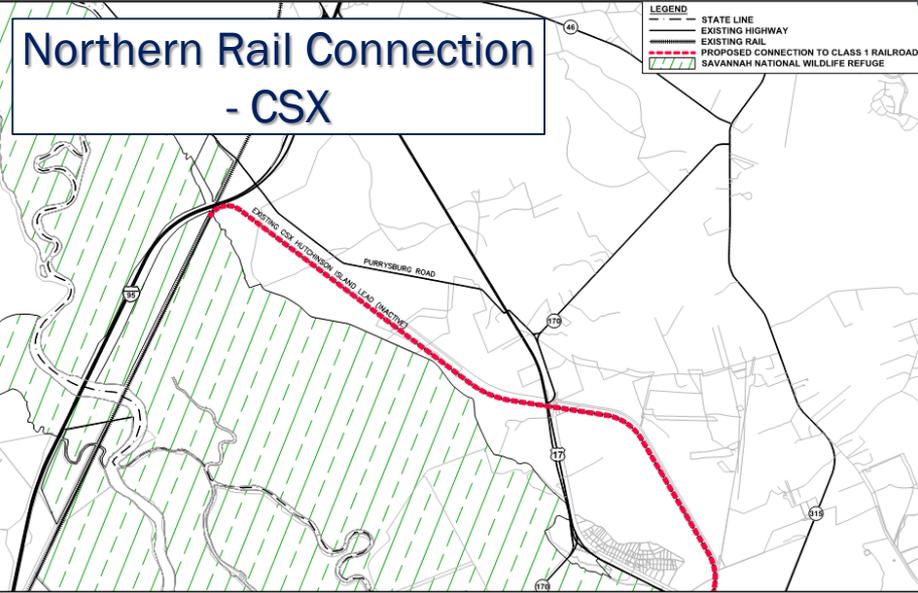


Landside Infrastructure Needs – Road and Rail

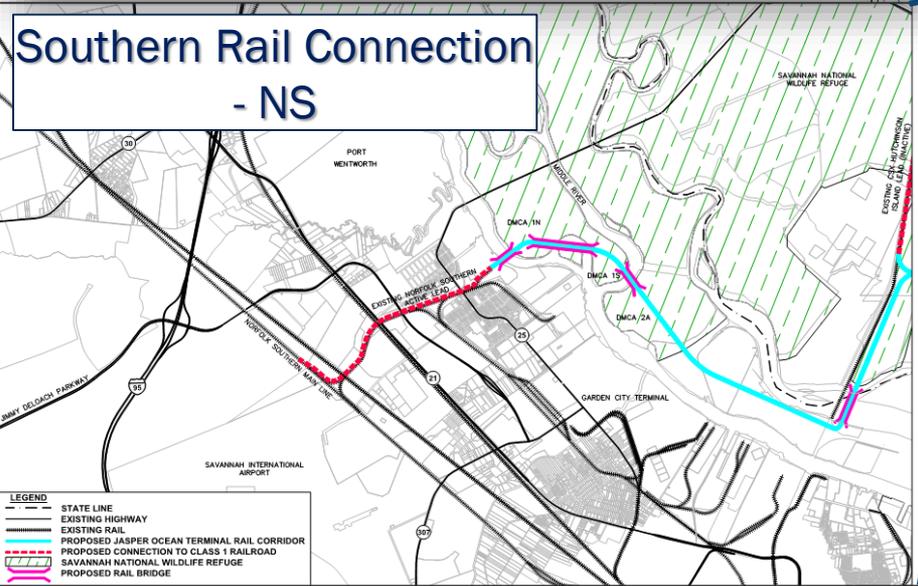


Northern Rail Connection - CSX

- LEGEND**
- STATE LINE
 - EXISTING HIGHWAY
 - EXISTING RAIL
 - PROPOSED CONNECTION TO CLASS 1 RAILROAD
 - SAVANNAH NATIONAL WILDLIFE REFUGE

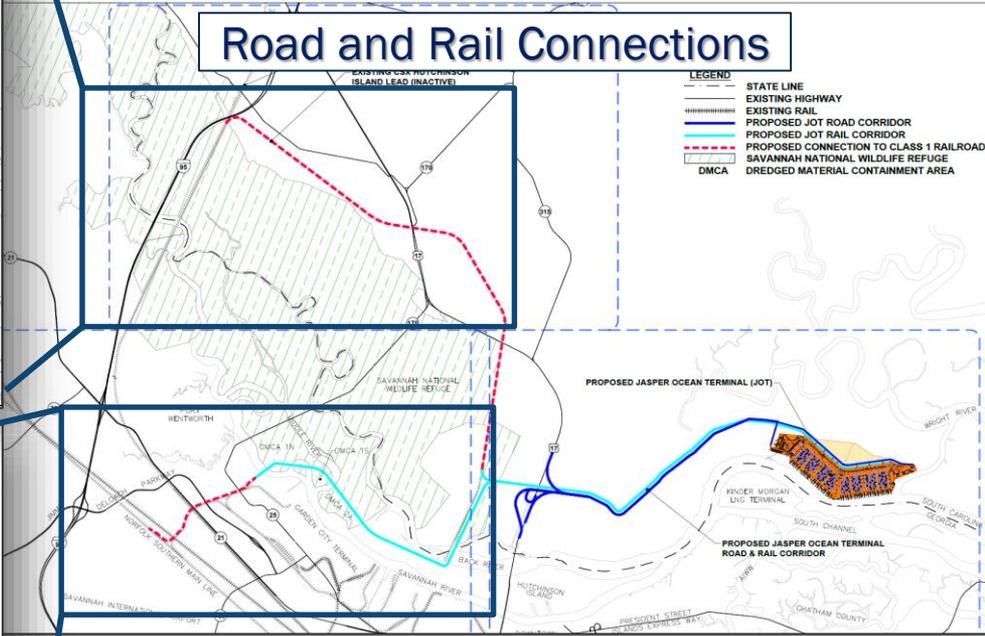


Southern Rail Connection - NS



Road and Rail Connections

- LEGEND**
- STATE LINE
 - EXISTING HIGHWAY
 - EXISTING RAIL
 - PROPOSED JOT ROAD CORRIDOR
 - PROPOSED JOT RAIL CORRIDOR
 - PROPOSED CONNECTION TO CLASS 1 RAILROAD
 - SAVANNAH NATIONAL WILDLIFE REFUGE
 - DMCA
 - DREDGED MATERIAL CONTAINMENT AREA



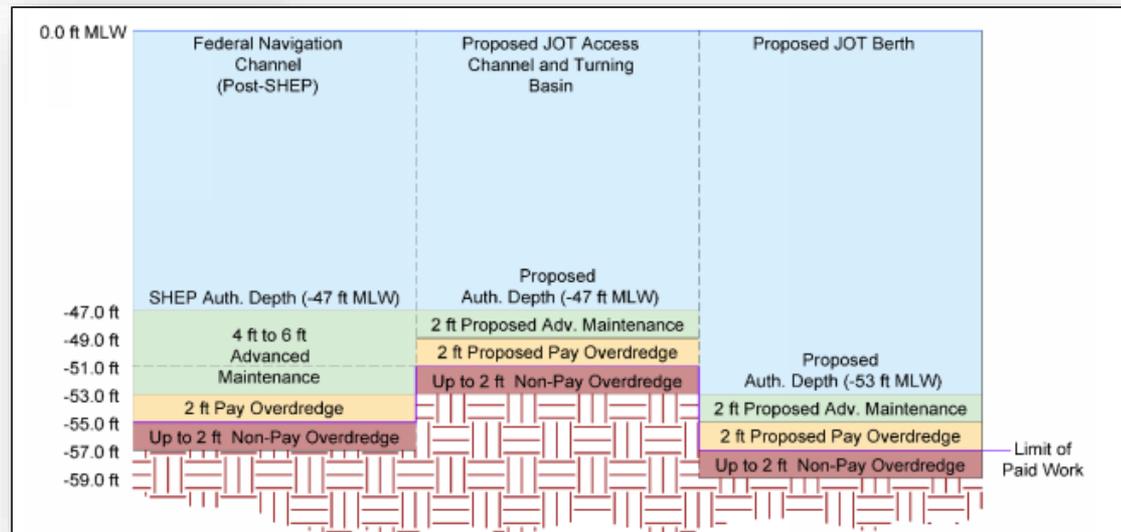
Atkins is preparing a traffic analysis during FY 19-20 to address any road network deficiencies

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

