

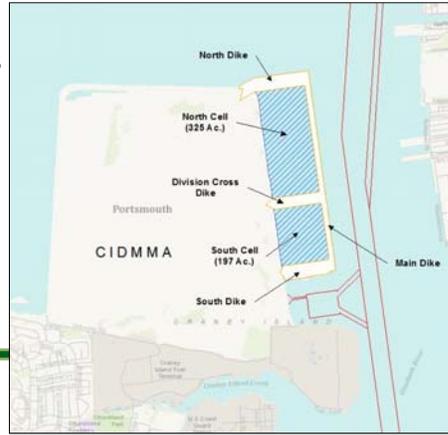


# Craney Island Eastern Expansion

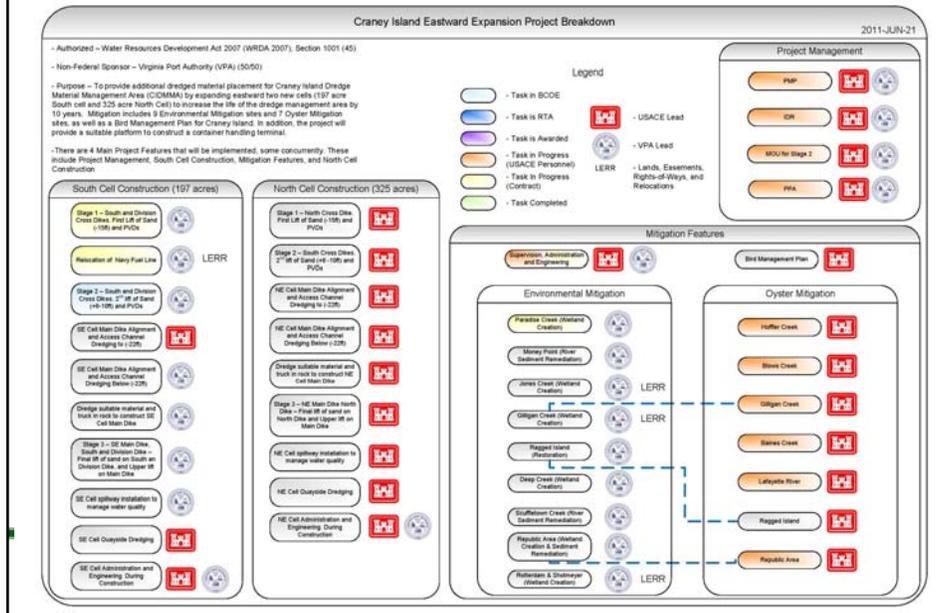
- Project includes expanding CI to the East by 522 Acres.
  1. Extend useful life of Craney Island by 10 years
  2. Suitable platform for a Port Facility
  3. Construction scheduled to be completed by 2021, \$940M

- Primary Mitigation Components include:

1. Creating or restoring 56 acres of wetlands within the Elizabeth River Watershed.
2. Three Sediment Remediation Sites
3. Creating 16 Acres of Oyster Reefs



## Project Breakdown - IDR



## CIEE Project Cost Share

Table 3 – Non-Federal Sponsor Contributions – IDR Approved by ASA CW on 20 July 2011

Type of Contribution`	Amount
LERRs	\$15,319,000
Cash already provided for PED	\$1,980,000
Cash and Other Non-Federal Contributions (Audits; HTRW work; Design/Project Coordination Teams)	\$4,413,500
Total Cash and Other Contributions	\$6,393,500
In-Kind Contributions (Engineering and Construction Features)	\$448,202,000
<b>Total Non-Federal Contribution</b>	<b>\$469,914,500</b>
50% Cost Share (per Sect 1001(45) WRDA 2007)	\$469,914,500



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## Project Challenges/Opportunities

- **Funding (State and Federal)**
- **Project Partnership Agreement**
- **Project Management Plan**
- **Roles and Responsibilities**
- **Transparency and Communication**



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## Project Purpose

- **Virginia Port Authority (VPA) & the U.S. Army Corps of Engineers Partnering for Craney Island Eastward Expansion**
  - **Extends the Life of Craney Island as a Dredged Material Placement Area**
  - **Provides Land for Construction of a 4<sup>th</sup> State-Owned Marine Terminal**

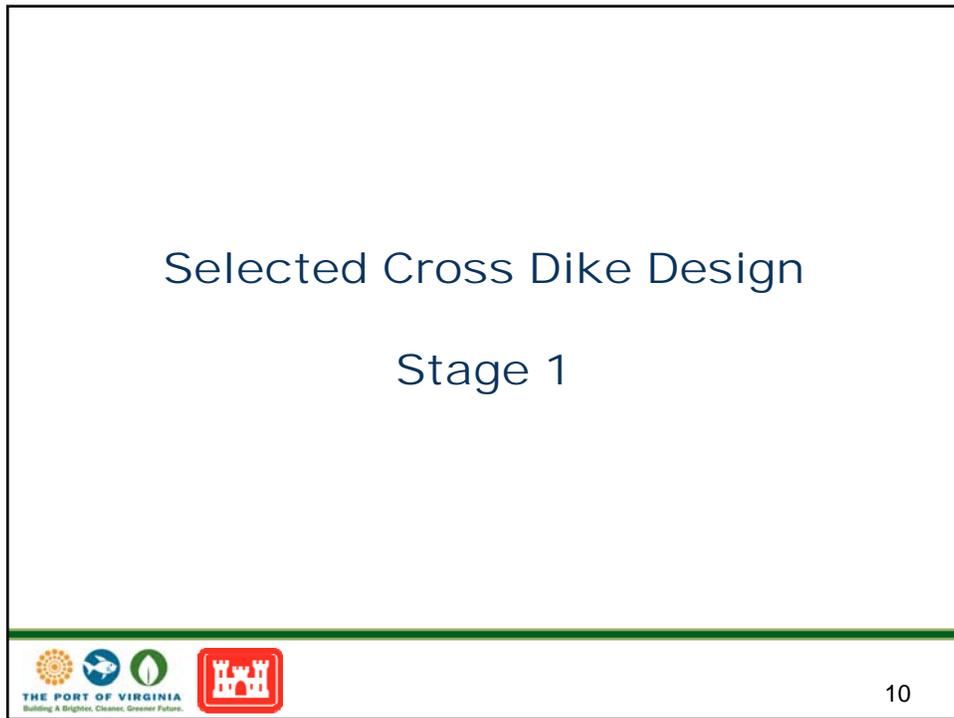
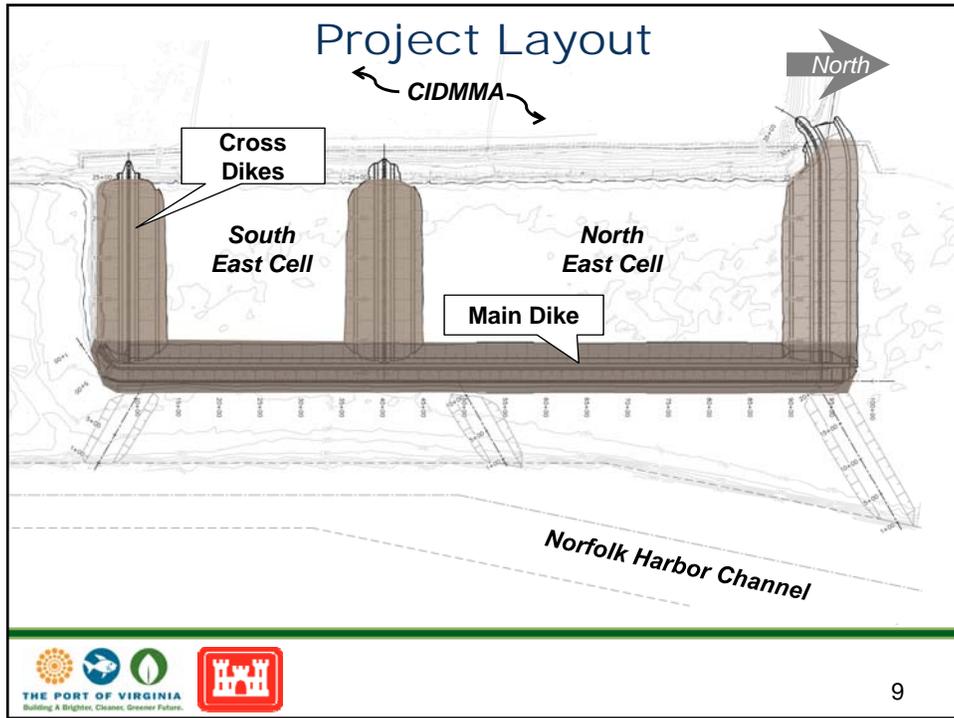


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## Craney Island Eastward Expansion

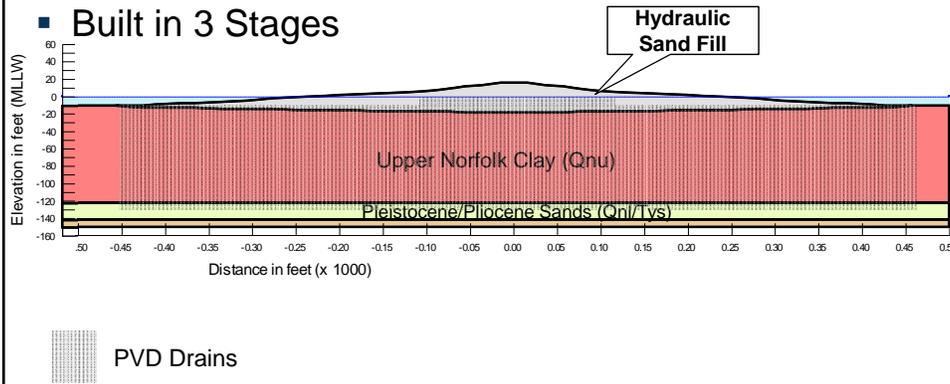


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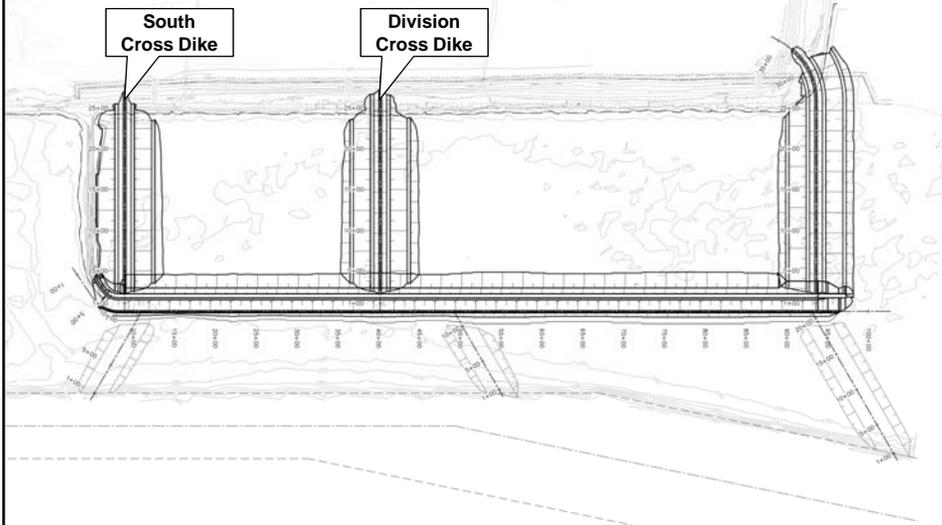
## Typical Cross Dike

- Final target elevation = +18 ft (MLLW)
- 900 ft Wide
- Built in 3 Stages



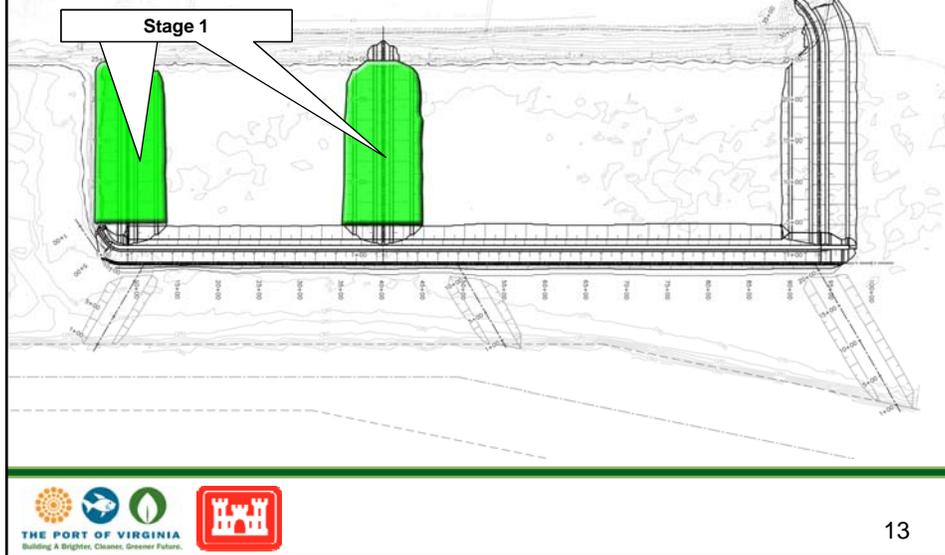
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## South and Division Dike Stage 1

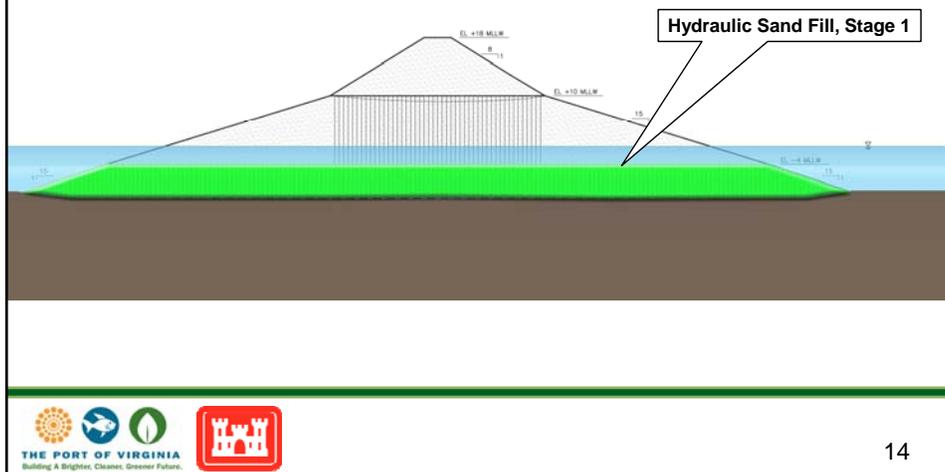


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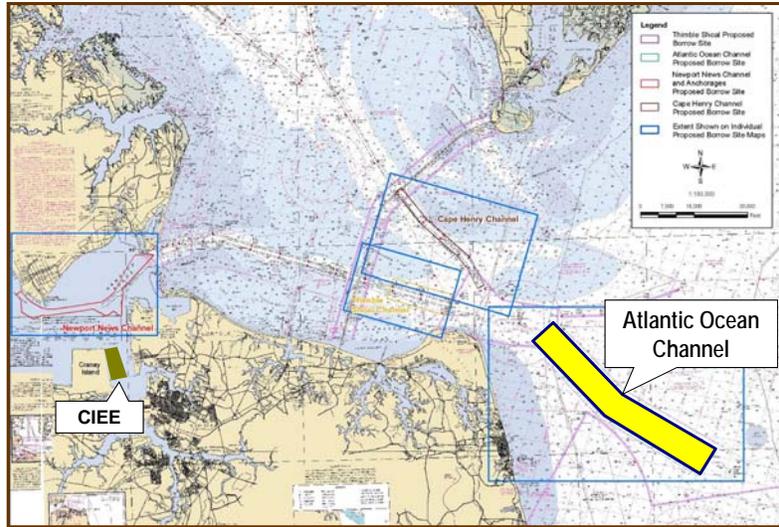
## South and Division Cross Dikes Stage 1 - Hyd Sand Fill



## Cross Dike - Stage 1



# Borrow Source - AOC



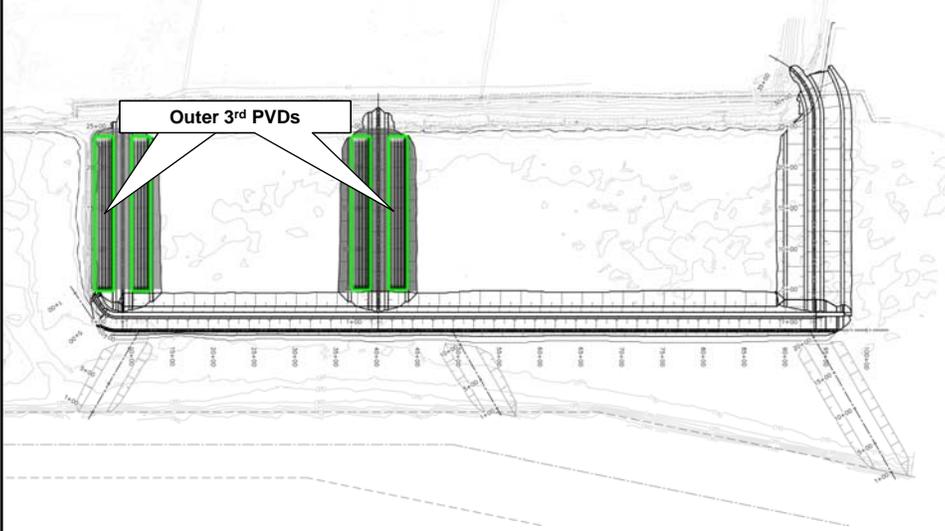
# Sand Placement



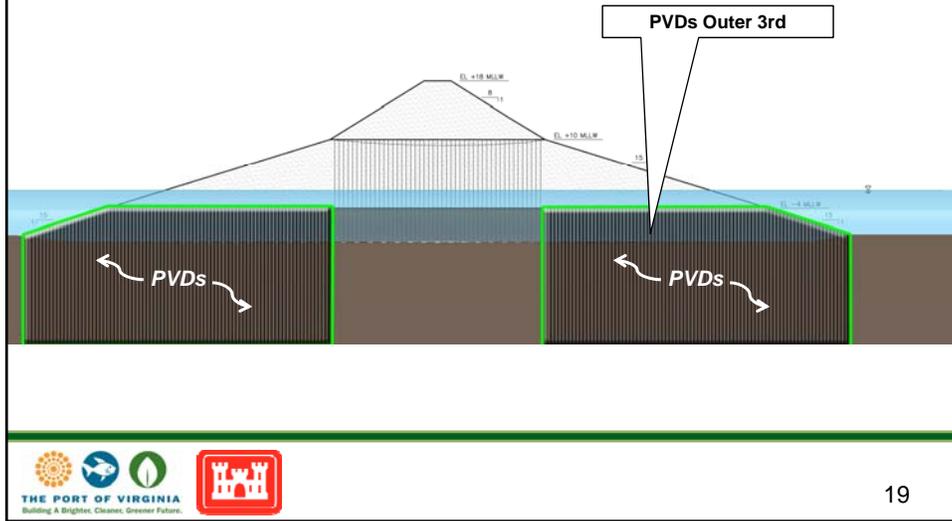
# Sand Placement



# Stage 1 - Marine PVDs (Wicks)



## Stage 1 – Marine PVDs



## PVD Installation



## South and Division Dike Stage 1

- **Summary**
- **GLDD**
- **Sand Fill Borrow from Atlantic Ocean Channel**
- **Placed ~580,000 Cys**
- **Fill Placement: December 2010 through February 2011**
- **PVDs: Ongoing**

## Surveying and Monitoring

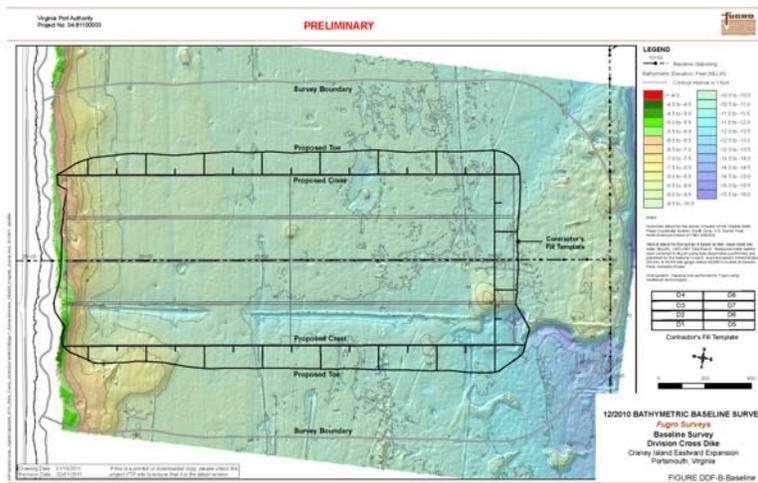
## Surveys – Division Dike

- Multi-Beam Surveys
- Verify Lift Thickness
- Verify No Mudwaves

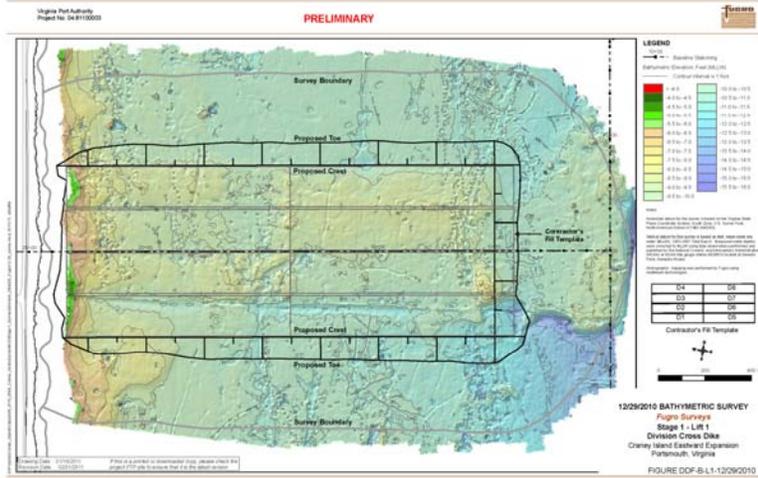


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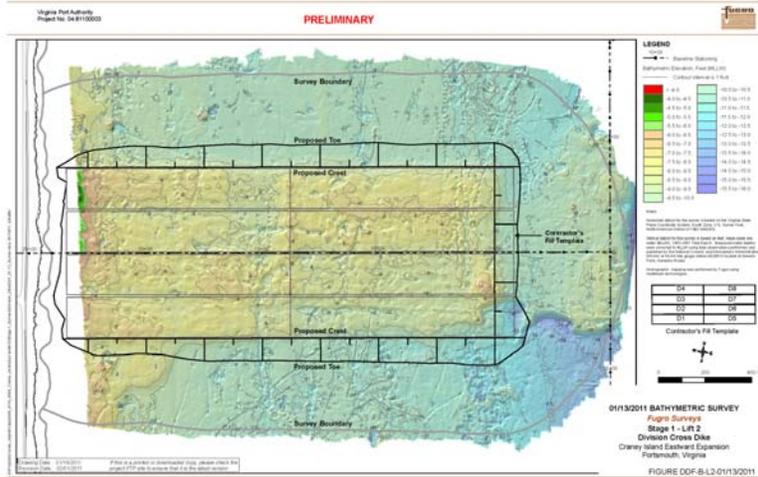
## Surveys – Division Dike



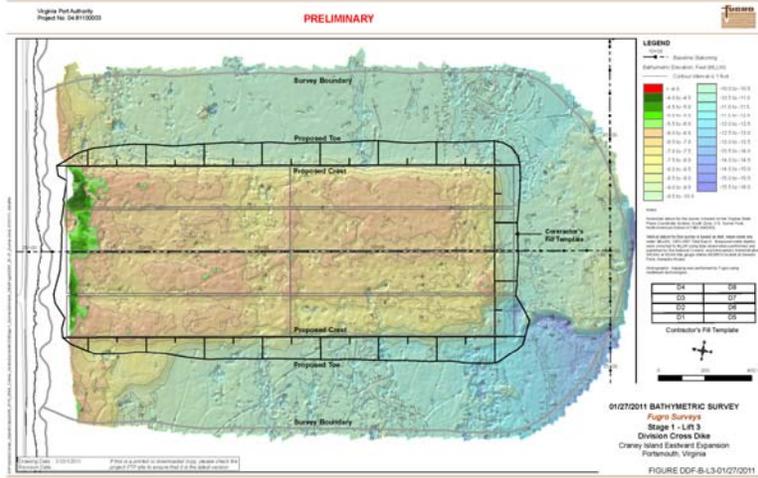
# Surveys - Division Dike



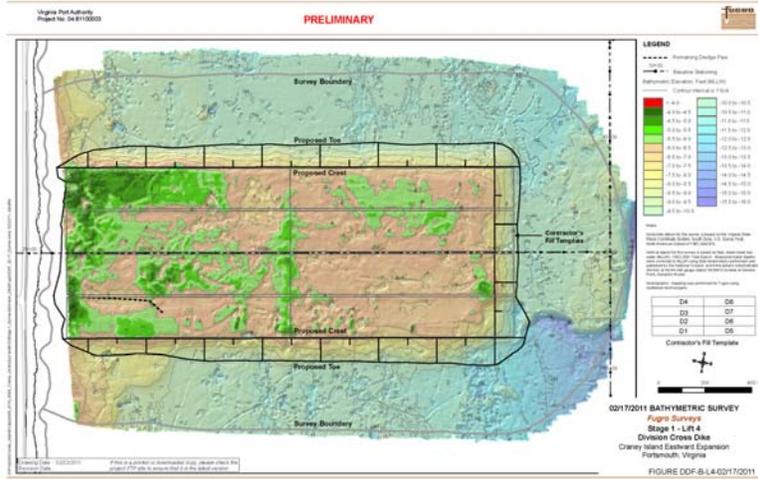
# Surveys - Division Dike



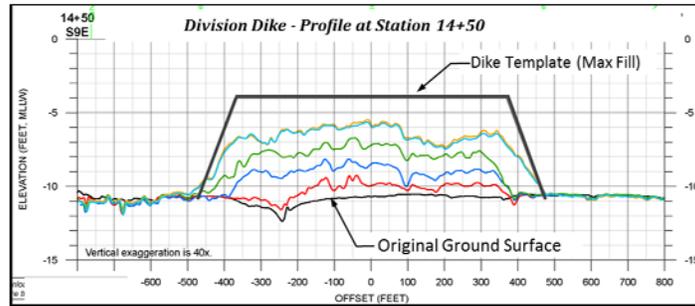
# Surveys - Division Dike



# Surveys - Division Dike



# Monitoring



## Selected Cross Dike Design

### Stage 2

## South and Division Cross Dikes Stage 2A - Hyd Sand Fill

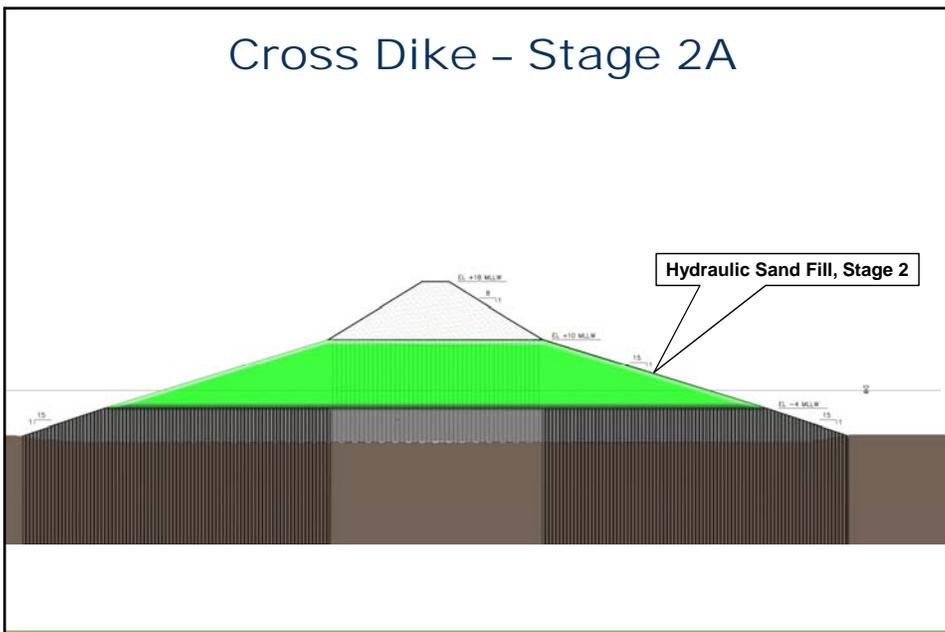


▪ Bids Received, Award by December 2011



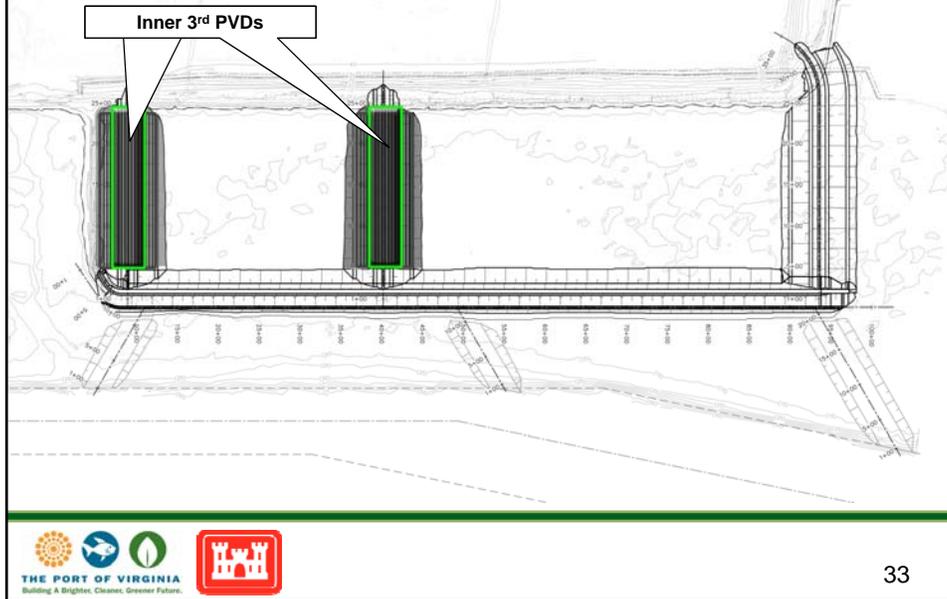
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## Cross Dike - Stage 2A



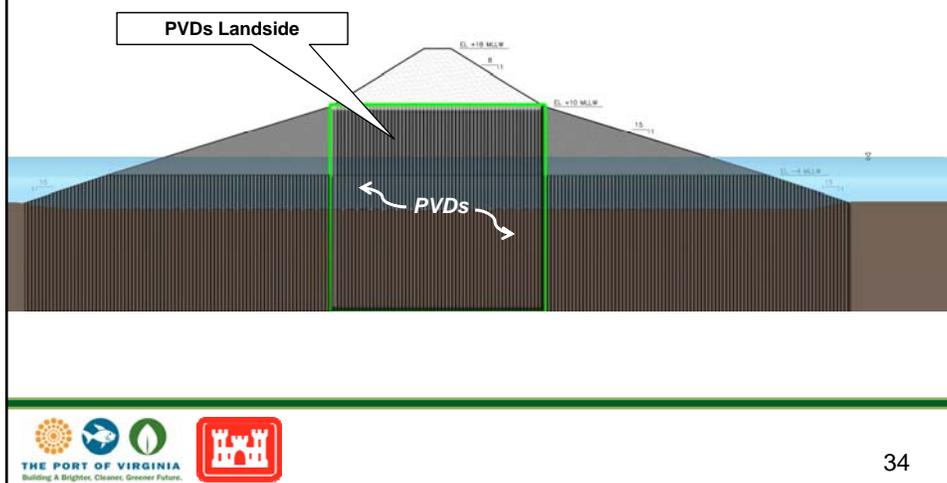
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## South and Division Cross Dikes Stage 2B - Land PVDs



## Cross Dike - Stage 2B Land PVDs

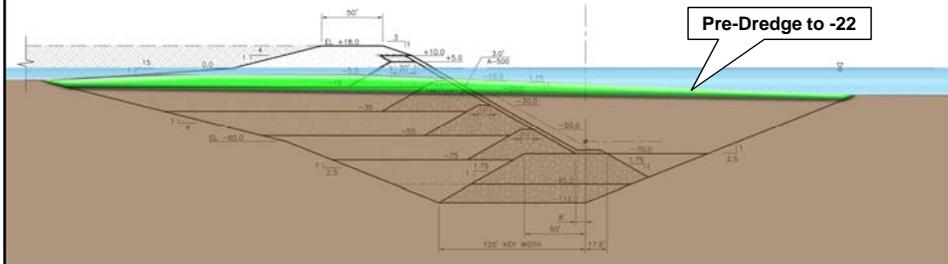
- Bid in 2012, ~ 6 MLF





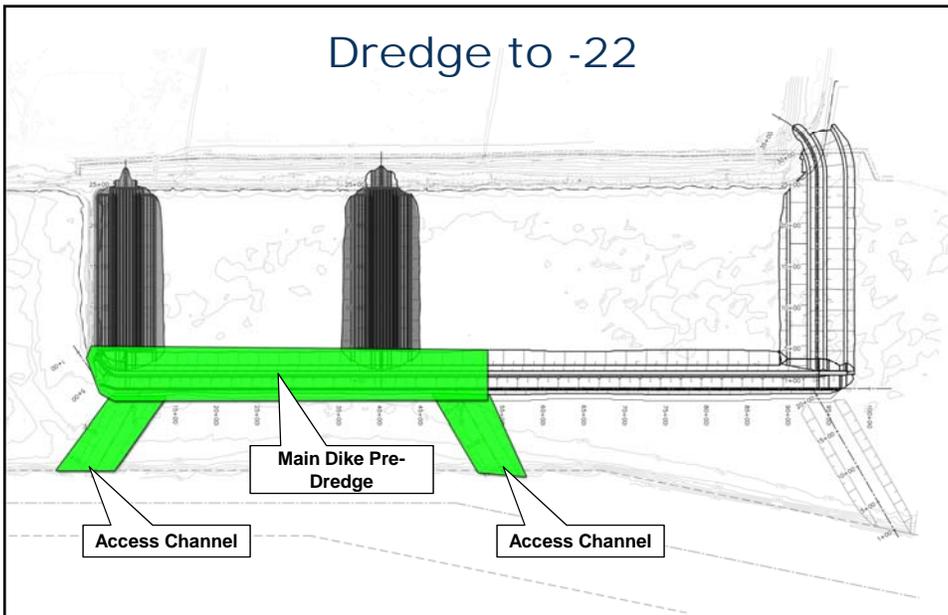
## Pre-Dredge to El -22

- Hydraulically Dredged
- Placed in Existing CIDMMA
- South East Cell: 2013



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## Dredge to -22



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## Anticipated Contracts



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## Overview of Anticipated Contracts

- **2011/2012**
  - **CIEE: Stage 2A (Sand Fill) of South and Division Cross Dikes**
  
- **2012/2013**
  - **CIEE: Stage 2B (PVDs) of South and Division Cross Dikes**
  - **Initial Pre-Dredging**



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## Overview of Anticipated Contracts

- **2014/2015**
  - **CIEE: Southeast Cell Main Dike Dredging**
- **2016/2017**
  - **CIEE: Southeast Cell Main Dike (Rock/Sand)**



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## Craney Island Marine Terminal



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# CRANEY ISLAND EASTWARD EXPANSION

