



**THE PORT OF
VIRGINIA**

Capital Outlay Program & Facilities

Maintenance Overview

Board of Commissioners

Session 354

September 24, 2013

THE Port OF VIRGINIA

Kevin Abt

Chief Engineer

Virginia Port Authority



➤ VPA Projects

- NIT Gate Improvements
- NIT 6th Street Repairs
- NIT Marshaling Yard
- APMT Reefer Plugs
- Port of Richmond
- Craney Island Eastward Expansion

➤ VDOT Projects

- I-564 Connector
- Route 460 – Commonwealth Connector

➤ CBBT Thimble Shoal Parallel Tunnel

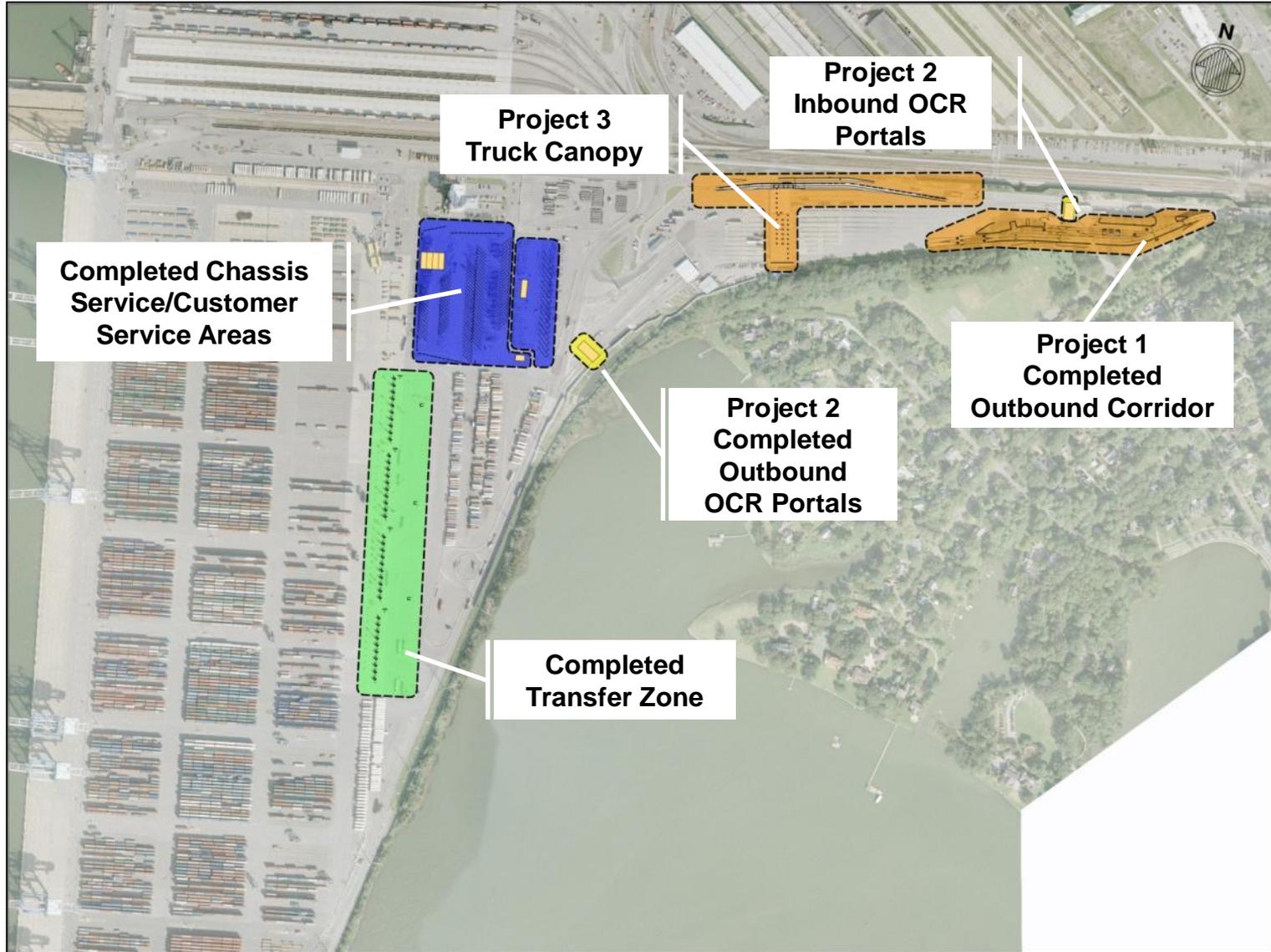


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VPA Projects

- **Security, interchange, and transfer zone automation, personnel shifted to remote facility**
- **Automation, appointment system and remote processing**
 - **Improves cargo velocity, safety & efficiency**
- **Estimated combined project cost: \$10 M**
 - **Includes \$4.1 M software**

NIT Gate Improvements



NIT Gate Improvements

- **Complete: Inbound portal building structure, scale lane, outbound OCR Portal building turned over to VIT**
- **Underway: Siding, asphalt tie-in at east end of bypass lane, pouring slab tie-ins at west**
- **Estimated project cost : \$3.5 M**
- **Contractor: EV Williams**
- **Construction is 95% complete**
- **Implementation anticipated early CY14**

NIT Gate Improvements



Inbound OCR Portal Building Construction

NIT 6th Street Repairs

- **Two deteriorated segments will be replaced with heavier pavement sections to support operations**
- **Contractor: Branscome**
- **Estimated project cost : \$1 M**
- **Construction start October 1st**

NIT Marshaling Yard

- **Constructing 6,000 lf of track on former Norfolk-Portsmouth Beltline rail yard site**
- **Will improve overall rail operations at NIT**
- **Yard work is complete; remaining work pending connection to VDOT project lead**
- **Contractor: H&B Railroad**
- **Estimated project cost : \$3.2 M**
- **Project is 98% complete**

NIT Marshaling Yard



Completed VPA tracks

NIT Marshaling Yard



VDOT rail ladder

APMT Projects



APMT Reefer Plugs

- **Installation of 60 reefer plugs**
- **Negotiations with APM ongoing to gain final approval so construction can begin**
- **Estimated project cost : \$915,000**
- **Contractor: JC Driskell**

- **Rail being rehabilitated to support CSX rail delivery of Perdue agricultural products for barge shipment to Chesapeake**
- **On-terminal improvements underway**
- **Lead track work to correct FRA discrepancies**
- **VPA in discussions with City to add 3.5 mile rail lead track outside the gate to lease**
- **Estimated project cost: \$2.3 M**
 - **VPA: \$0.7 M; DRPT: \$1.63 M**

Port of Richmond



Overview



Port of Richmond close-up

Craney Island Eastward Expansion Cross Dike Construction

- **Truck haul contract advertised**
September 15th, bids due October 15th
 - **Will raise dike elevation 4 feet, start this fall for total fill of 300,000 cubic yards**
- **Bid package for PVD installation on cross under final review**
 - **Tentative October advertisement**
 - **Construction start early 2014**

Craney Island Eastward Expansion Mitigation Plan

- **Oyster reef restoration**
- **\$3.6 M contract**
- **All shell material is stockpiled at CIDMMA**
 - **Mined from James River**
- **Next steps:**
 - **Moving shell this week**
 - **Scheduled for May 2014 completion**



Assistant Secretary of the Army Jo-Ellen Darcy visited to observe oyster project



Ragged Island



8 acres of coastal habitat that will include four acres of marsh and four acres of wetland and shallow water habitat

Hoffer Creek



1 acre of oyster ground is to be constructed within the Hoffer Creek Wildlife Preserve, which is located adjacent to Hoffer Creek, a tributary to the James River.

**Lafayette River
Oyster Reef Creation**

Scuffletown Creek



Sediment remediation will be conducted at Scuffletown Creek in the Elizabeth River watershed. The U.S. Army Corps of Engineers, Norfolk District has completed the sampling and design phases for this site.

**Jones & Gilligan
Creek**

This site abutting Jones and Gilligan Creeks exhibits favorable conditions for wetlands creation. There is potential for approximately 21 acres of tidal mitigation. Oyster reefs will be created at Gilligan Creek.

Paradise Creek Park

The Elizabeth River Project is overseeing this site's development. 11 acres of tidal wetlands creation will be constructed at this site.

Republic



The 52-acre site is considered a primary site for sediment remediation.

**Western Branch
Oyster Reef Creation**

**Gilmerton Bridge
Oyster Reef Creation**

Deep Creek

These sites abut Deep Creek, approximately 1 mile from the mainstem of the Southern Branch. Approximately 10 acres of marsh are proposed for this site.

Money Point North

The Living River Restoration Trust has completed a conceptual remediation plan for this site. The Craney Island Mitigation Plan will clean about 10 acres at this site.



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VDOT Projects

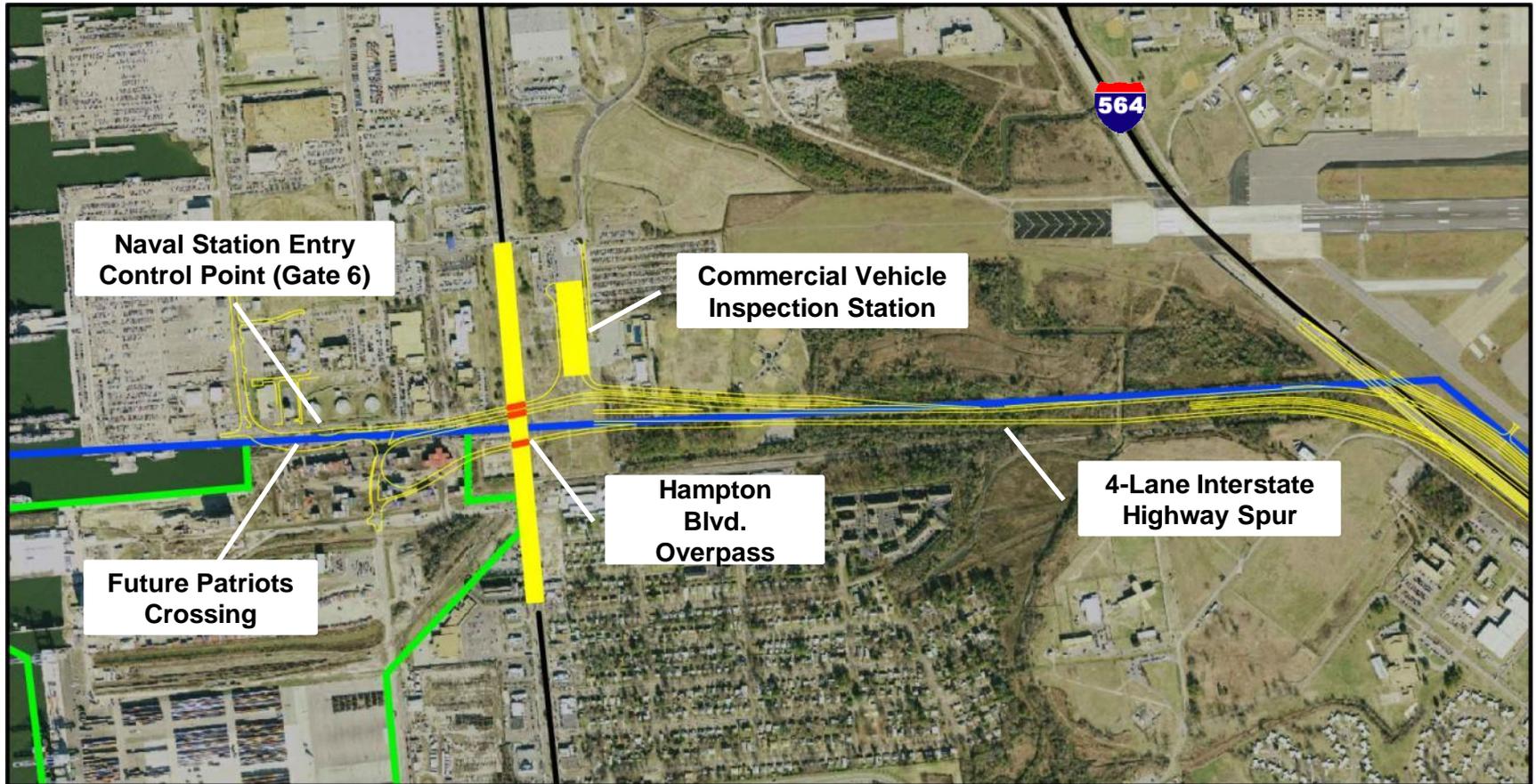
I-564 Connector

- **4-lane direct interstate access from I-564 to Naval Station and NIT**
- **Increases gate capacity/velocity by providing separate gate for NIT North, which relieves truck volume at NIT South gate**
- **Allows NIT North truck gate to operate 24/7**
- **Enhances military readiness**
- **Sets up future Patriot's Crossing**
- **Design-Build proposals due October 1st**
- **2014 construction start**

I-564 Intermodal Connector



I-564 Intermodal Connector



- **New 4-lane limited access tollway parallel to existing 460**
 - **Improves economic development potential, land for distribution centers**
 - **Reliable alternative to I-64 and travel time for commuters, Port, military, tourism**
 - **Improves safety**
 - **Enhances evacuation routes**
- **Permits filed with USACE last week**

460 – Commonwealth Connector





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Chesapeake Bay Bridge Tunnel Project

- **CBBT Commission approval to construct a second Thimble Shoal Tunnel**
 - **2016 construction**
 - **\$795 M**
 - **Accelerated schedule**
 - **65 ft deep**

CBBT Thimble Shoal Parallel Tunnel

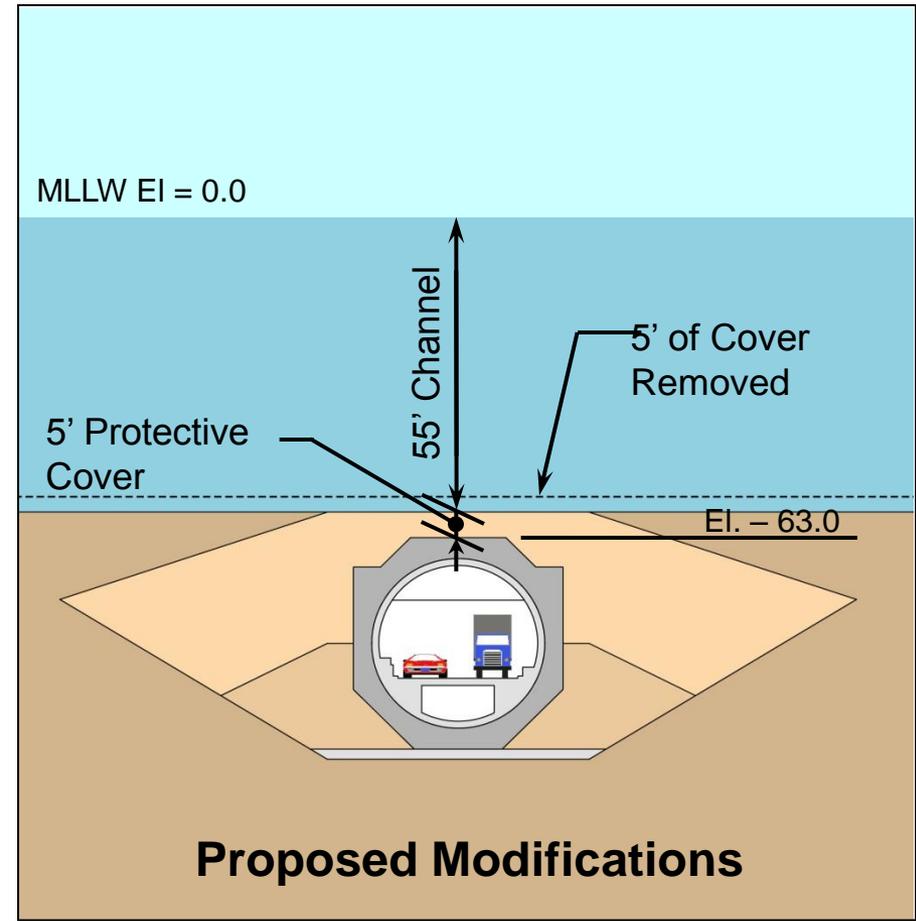
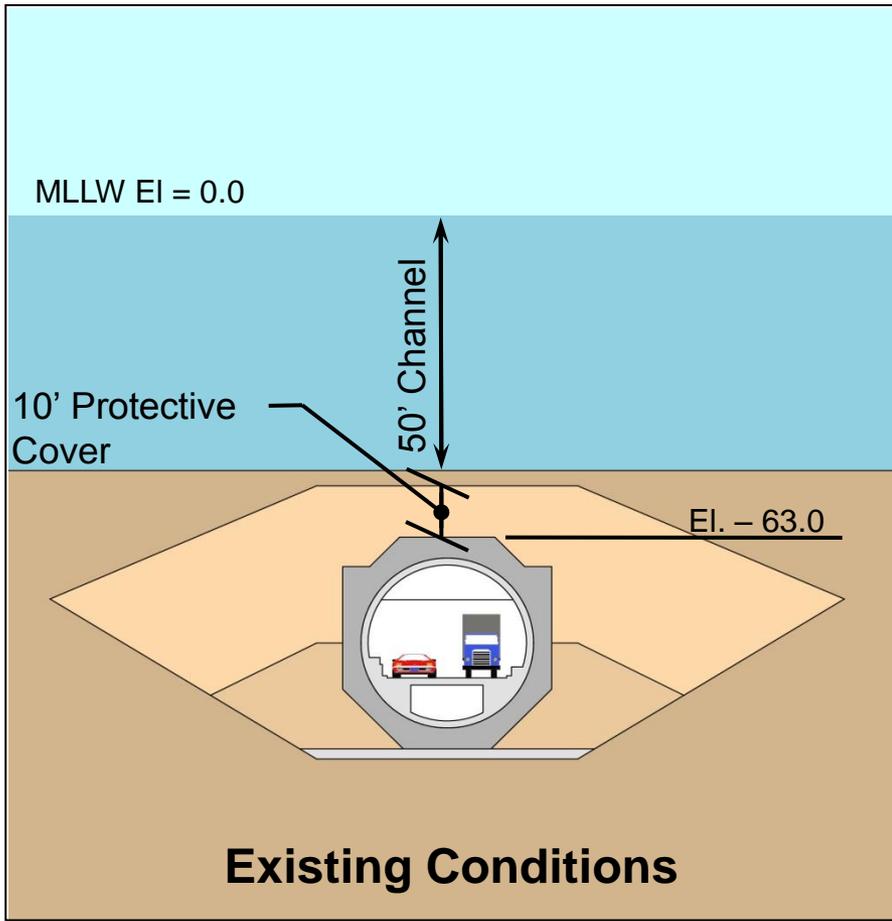


CBBT Thimble Shoal Parallel Tunnel

- **VPA coordinated with CBBT in 2004**
 - **Analyzed world's container & dry bulk fleets**
 - **Evaluated current and emerging vessel sizes and drafts**
 - **Evaluated necessary under keel clearances, over-dredge allowances, total channel depth**
 - **Determined available channel depths based on existing tunnel limitations**
 - **Evaluated alternative channel improvements**
 - **Recommend preferred alternatives for future channel and tunnel improvements**

CBBT Thimble Shoal Tunnel

With 50' and 55' Channel



*From 2004 VPA study

➤ Project Need

- Existing tunnels are 50 years old
- Increased crossing times due to oversized escort loads create an average of 338 lane closures per year
- Regular maintenance work creates 1,400 hours of tunnel lane closures per year
- Improvement in levels of service and safety for customers to experience tunnel without contraflow

➤ Accelerated schedule

- Municipal market interest rates historically low**
- Aggressive bidding environment for major infrastructure projects**
- TIFIA financing available for up to 49% of costs**
- Accelerating project from 2020 to 2016 decreases construction by \$200 M**
- Accelerating project from 2025 to 2016 decreases construction by \$341 M**
- Contractors mobilized for similar local projects creates potential economies of scale**



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Thank You

