



THE PORT OF
VIRGINIA®

The Port of Virginia


&

The Wind Energy Hub of the Future

Pat Kinsman
VP, Offshore Wind Development

November 28th, 2022





PMT Staging Port Project



**SGRE Blade Finishing
Facility Project**

Port of Virginia Marine Terminals

NEWPORT NEWS MARINE TERMINAL (NNMT)

NORFOLK INTERNATIONAL TERMINALS (NIT)

FUTURE CRANEY ISLAND MARINE TERMINAL (CIMT)

VIRGINIA INTERNATIONAL GATEWAY (VIG)

PORTSMOUTH MARINE TERMINAL (PMT)



Virginia
Inland Port

Richmond
Marine
Terminal



Newport News Marine Terminal
Norfolk International Terminals
Virginia International Gateway
Portsmouth Marine Terminal



Market Reach within 48 Hours



Economic Impact



23.5 Million
Tons of cargo moved

6% Increase



27.2 Billion
In labor income

18% Increase



436,667
Jobs in Virginia

10% Increase



100.1 Billion
In spending

9% Increase



2.7 Billion
In State & Local Taxes and Fees

29% Increase

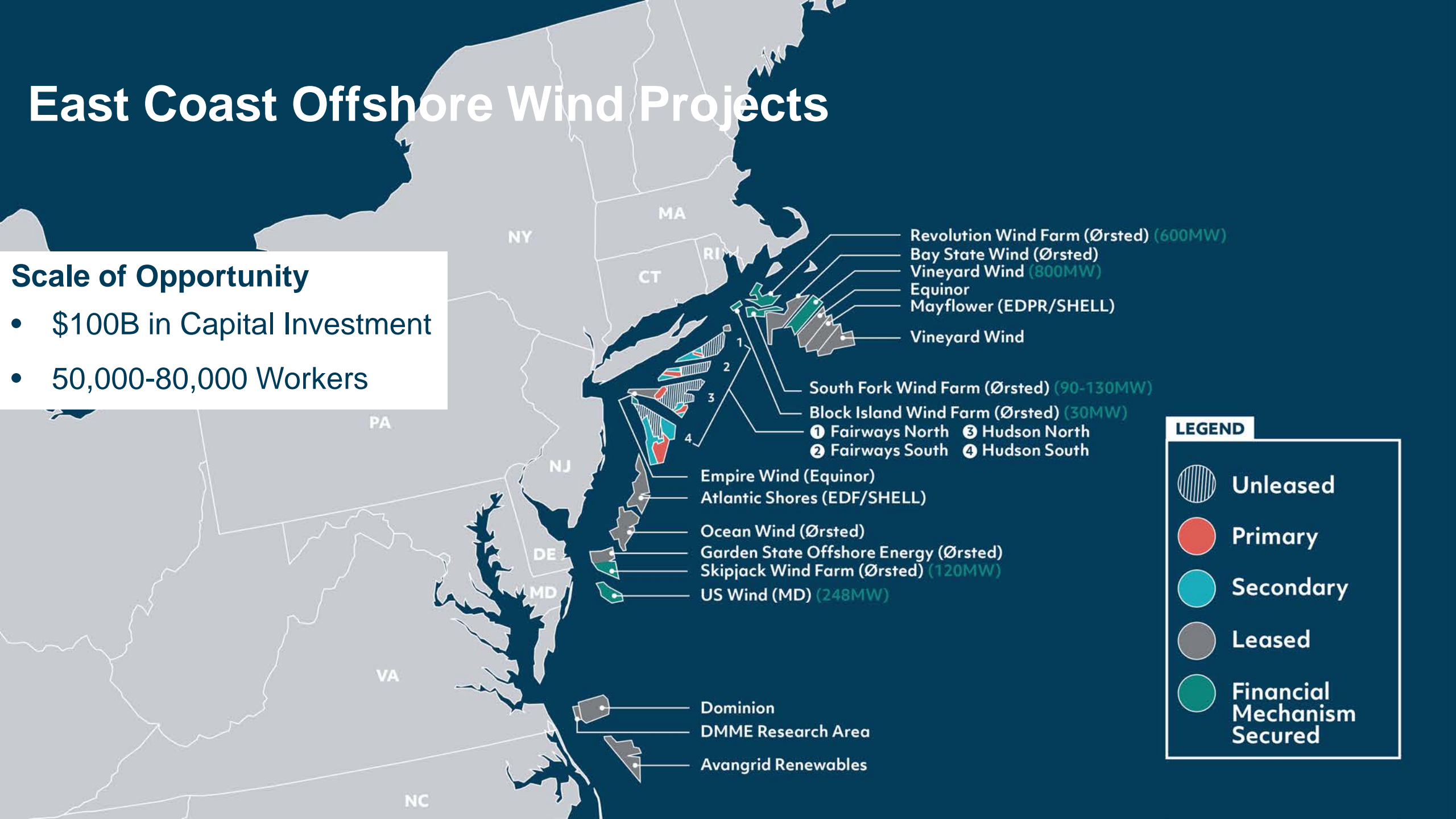


OSW Overview

East Coast Offshore Wind Projects

Scale of Opportunity

- \$100B in Capital Investment
- 50,000-80,000 Workers

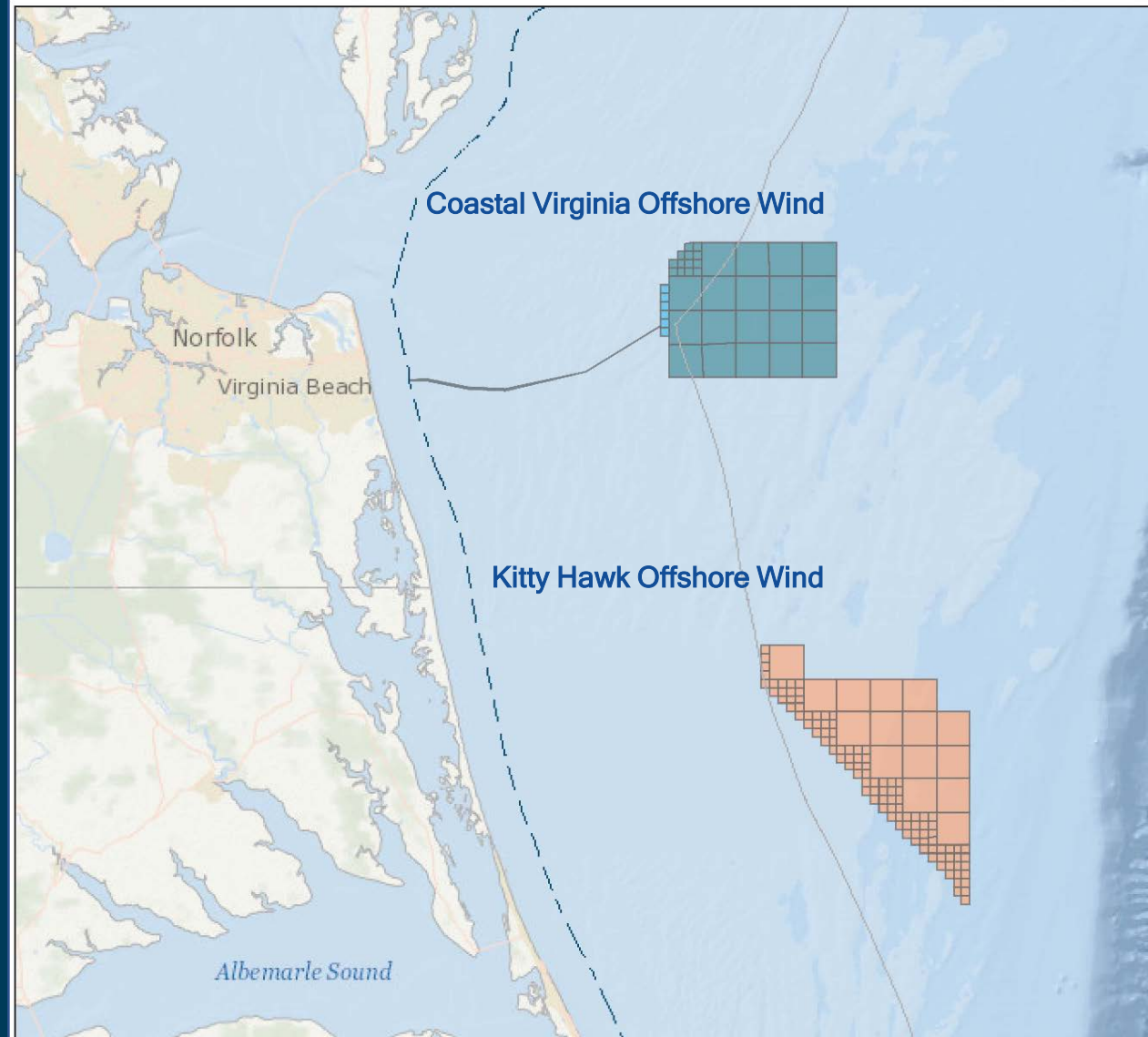


Coastal Virginia Offshore Wind

- Dominion Energy
- 2,640 MW
- 27 miles off the coast of Virginia Beach

Kitty Hawk Offshore Wind

- Avangrid Renewables
- 2,500 MW
- 36 miles off the coast of Virginia Beach



Coastal Virginia Offshore Wind (CVOW)



Dominion Energy

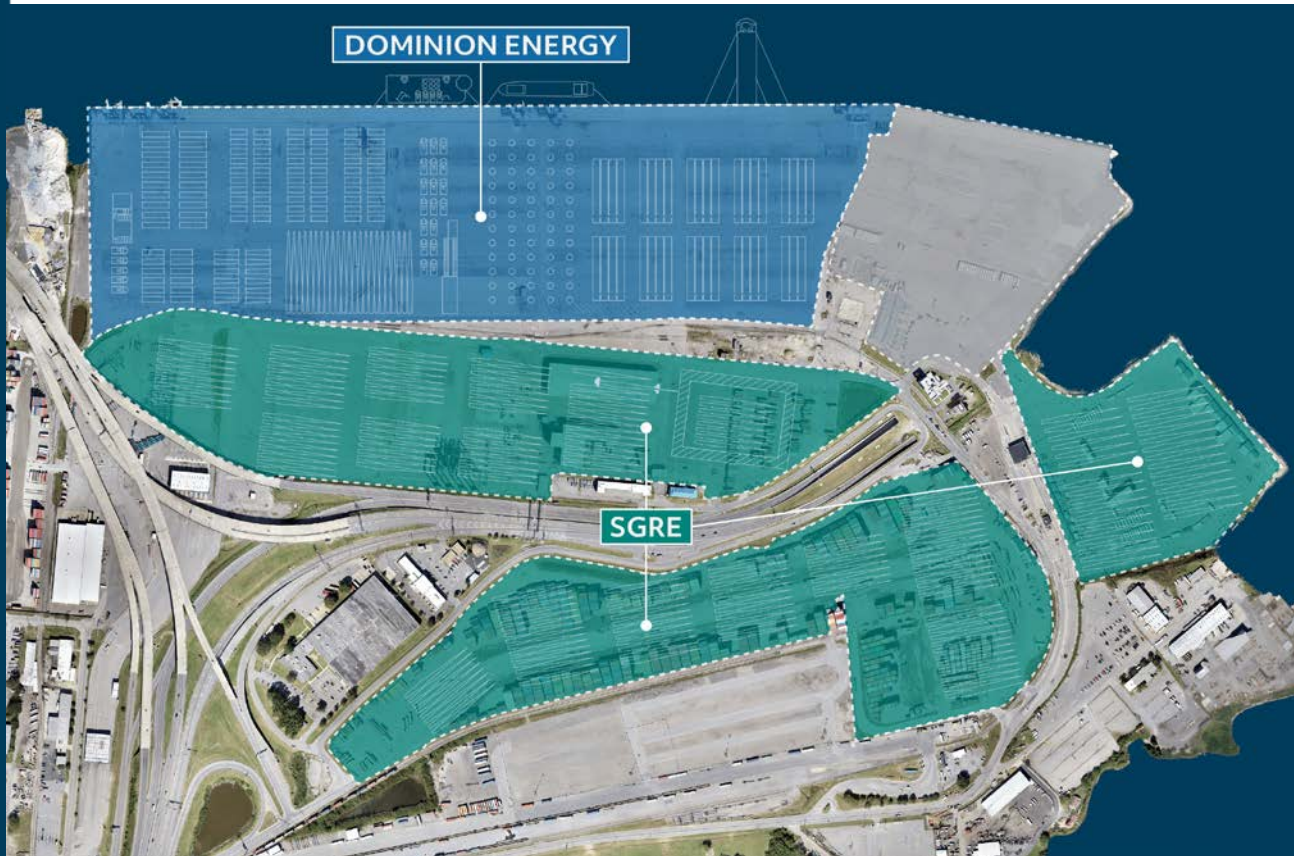
- Phase 1
 - 2 pilot turbines completed OCT 2020
- Phase 2
 - Largest OSW project in the U.S.
 - 176 planned turbines – 2.6-gigawatts
 - Offshore construction to begin 2024

Siemens Gamesa Renewable Energy (SGRE)



- **Second largest manufacturer of turbines**
- **Leading OSW turbine manufacturer in Europe**
- **Through 2020: 68% installations and 3,674 turbines**
 - Planned U.S. supply
 - CVOW (Dominion, 176WTG)
 - South Fork (Orsted, 12WTG)
 - Revolution (Orsted, 65WTG)
 - Sunrise (Orsted, 80WTG)

Transformation into Offshore Wind Staging Port



Redevelopment into offshore wind hub, including:

- Wharf upgrades to accommodate turbine component delivery and installation vessels
- Upland storage, staging, and pre-assembly of turbine components
- Import and finishing of turbine blades in new blade finishing facility



Dominion – POV PMT Staging Port Project



Project Overview



Dredging

Installation Berth

Delivery Berth

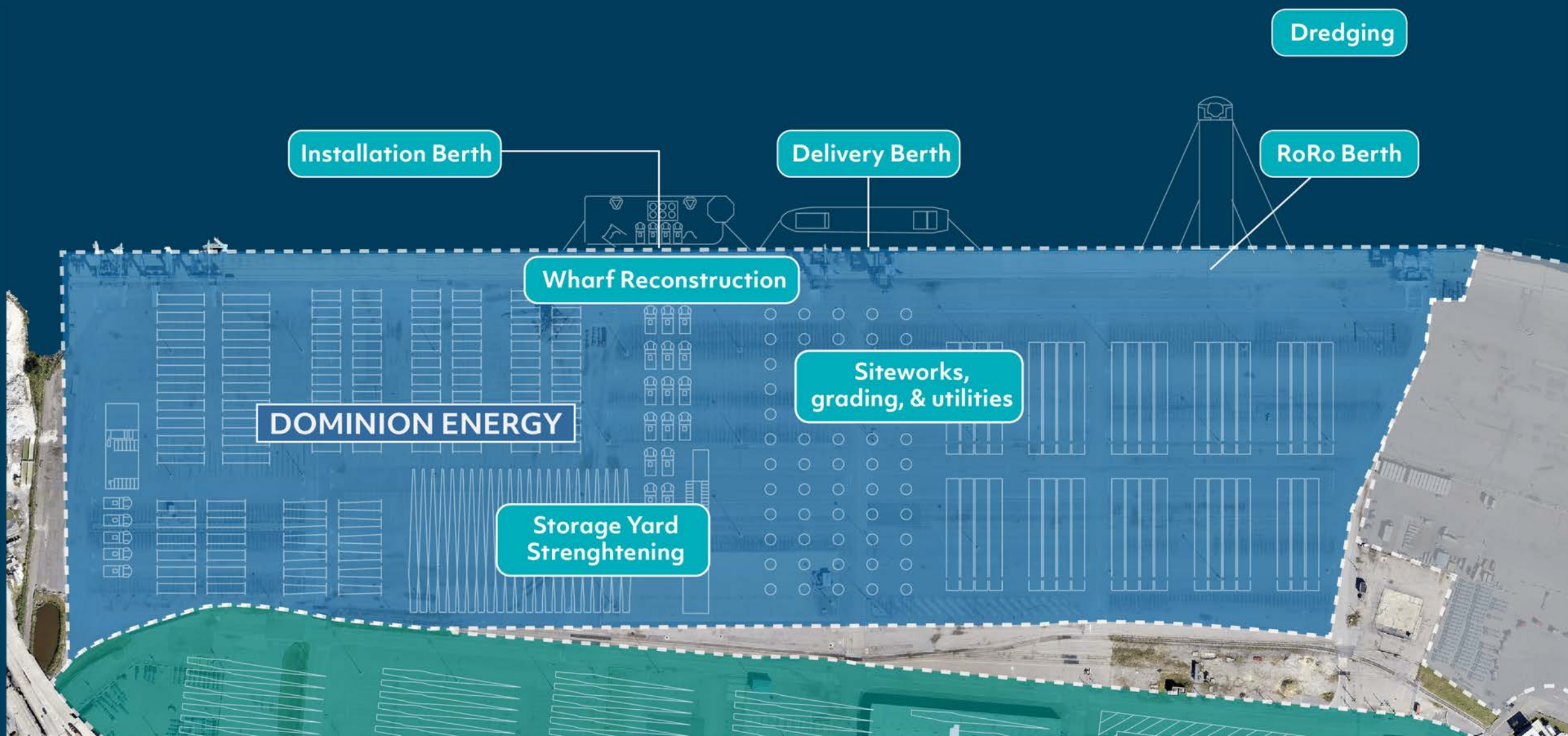
RoRo Berth

Wharf Reconstruction

Siteworks,
grading, & utilities

DOMINION ENERGY

Storage Yard
Strengthening



PMT Offshore Wind Staging Port





PMT Offshore Wind Staging Port - Update



Onsite work began mid-September

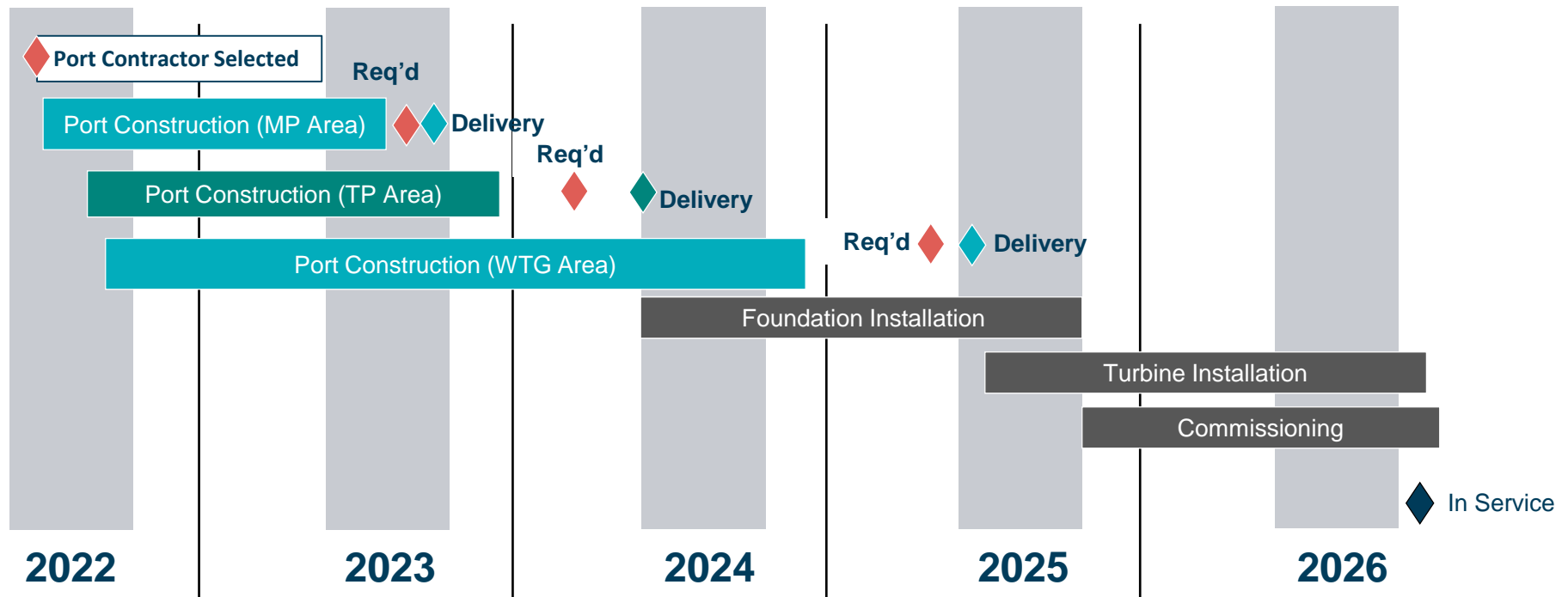
1st of 1300+ Piles installed 10/5; load test underway

8 Test Piles on site; 1st Marine piles to start in Nov

First monopiles arrive at PMT in the 3rd QTR of '23



CVOW Schedule



Allowed Offshore Foundation Construction Window (May – Oct)

 SG

SGRE Blade Finishing Facility

Project Overview

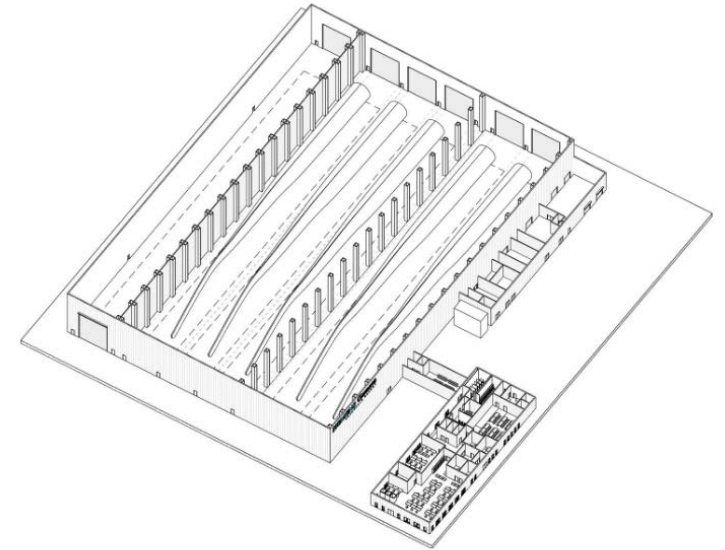


- **Second largest manufacturer of turbines**
- **Leading OSW turbine manufacturer in Europe**
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 - Revolution (Orsted, 65WTG)
 - Sunrise (Orsted, 80WTG)

Funding



- **SGRE**
 - Self-funding Blade Finishing Facility Building
- **MEI Grant – Commonwealth of Virginia**
 - \$17M grant awarded in 2020 and earmarked for Site Readiness Improvements
 - Site Readiness invoices will be validated by VPA, and reimbursed through the VPBA (Virginia Public Building Authority)



NW PERSPECTIVE



Conclusion

Takeaways



- **Offshore Wind – the very beginning of a new industry**
 - **AND - a Multi-decade Opportunity for the PoV, the Commonwealth of Virginia, and the Hampton Roads Maritime Community**
- **PoV Agility & Asset management → Business Success**
 - **Investments by the Commonwealth in technology and asset optimization at the Port’s primary container terminals (NIT & VIG) have enabled Virginia to create one of the “first to market” and premier OSW staging and load out facility on the USEC at Portsmouth Marine Terminal**
- **OSW provides the PoV and Virginia’s maritime industry with increased cargo diversification**



Thank you!

Questions?



Movement and Display of USS Iowa 16-inch/50 Battleship Barrel #270 at Cape Henry/JEB Fort Story



16-inch/50 barrel on the move at St. Juliens Creek Annex

Movement and Display of USS Iowa 16-inch/50 Battleship Barrel #270 at Cape Henry/JEB Fort Story



The display of 16-inch/50 Barrel #270 will be similar to these existing memorials located in San Pedro and the Philadelphia Naval Shipyard.

This project needs MEDAC's endorsement so the City of Virginia Beach Resort Investment Fund can provide a grant to help cover the remaining transportation costs.

USS Iowa 16-inch/50 Battleship Barrel Project

- The Veterans Association of the USS Iowa and the Coast Defense Study Group (www.cdsg.org) have been working with the US Navy to save the remaining 16-inch/50 barrel located at St. Julians Creek Naval Annex.
- CDSG has been able to find “good homes” for seven of the eight barrels at St. Julians (see photo on the next page). If a “good home” cannot be located, the NAVSEA will offer the remaining barrel (Barrel #270 which is the first production Mark 7 barrel) for sale as scrap, so time is of essence to move this barrel to a good home.
- The Navy Region Mid-Atlantic approved a memorial site for Barrel #270 near the Old Cape Henry Lighthouse in Virginia Beach, VA on JEB Little Creek-Fort Story so the public could visit the historic barrel when visiting the lighthouse. Both RADM Christopher Gray (C.O. of the Navy Region Mid Atlantic) and Captain Michael Witherspoon (C.O. of JEB Little Creek-Fort Story) support the placement of the USS Iowa Barrel #270 at JEB Fort Story.
- The project calls for moving the Navy owned asset from a Navy controlled facility (St. Julians) to a Navy controlled facility (JEB Fort Story), which are about 25 miles apart. The barrel and its cradle (and 16-inch projectiles) would be displayed near the Old Cape Henry Lighthouse on concrete footings and feature display signs so tourists coming to see the old lighthouse could also learn of JEB Fort Story’s military history. Themes for these signs would be the USS Iowa and its heritage, the role of the Army’s coast artillery (and this type of 16-inch barrel was installed within 400 yards of the display location at nearby Battery Ketchum) during WW2 at Fort Story, and to honor the both sailors and soldiers that served in the Hampton Roads area since WW2.

16"/50 Mark VII Guns Identified at St. Juliens Creek Annex on May 11, 2011



All of these guns saw action during World War Two. Gun 270 was the first 16"/50 Mark VII gun built and guns 371, 387 and 393 were aboard USS Missouri during the surrender ceremony of the Empire of Japan on September 2, 1945. It is important to note that none of the 16" guns that are currently installed on the Iowa class battleships saw action during WWII or Korea as all four ships were re-gunned in the mid 1950's.

Purpose of this Presentation

- The Navy Region Mid-Atlantic does not have the organic resources to move Barrel #270 from St. Juliens Creek Annex (see photo on the next page) to JEB Fort Story nor can the Navy fund the construction of memorials. Heavy Lift assets, Heavy Duty trucks and trailers, and other equipment will needed to be procured from contractors, along with the manpower to operate them and to provide project management as the barrel and cradle weighs in at 120 tons and is 70 feet long.
- The USS Iowa Veterans and the CDSG, along with other organizations, such as City of Virginia Beach and other civic groups will need to fundraise to pay these contractors or seek donations in-kind from these contractors. After several years of effort, the Navy accepted this project on October 12, 2021 (approval sign-off was required all the way up to the Pentagon). This process started with a October 4, 2019 letter from RADM Charles Rock, Commander, Navy Region Mid-Atlantic, and other supporting correspondence.
- Based on the other 16-inch barrel movement from St. Juliens Creek over the last several years, it is estimated that about \$150k is needed to fund the movement of the barrel from St. Juliens Creek and prepare the Cape Henry display site. Both the USS Iowa Veterans and the CDSG have been fundraising for several years, both from their members and other donors. So far this charitable project has raised \$90k through both cash donations and donations in kind. Several pledges and requests for corporate sponsorship are outstanding. This leaves \$60k to be raised to cover the remaining projected costs.
- Contracting for this project has already started as the construction of concrete foundations at Cape Henry has been completed. Metal stanchions for projectiles have been fabricated and a route permitting is underway to move the barrel and cradle. A contract with a specialized painting firm has been signed to prep/coat the barrel, cradle, and 16-inch projectiles. Pricing for the lifting and transport has been agreed. Scheduling for the movement to painting facilities is underway. Final movement will need to wait until we have raised the remaining \$60k.

Movement and Display of USS Iowa 16-inch/50 Battleship Barrel #270 at Cape Henry/JEB Fort Story



USS Iowa Barrel #270 today at St. Juliens Creek Annex in Chesapeake, VA

16-inch/50 Barrel Movement and Display Requirements

Let me describe in summary, in based on the seven other barrel movements, the current thinking on how to complete the movement and display of USS Iowa 16-inch barrel project at JEB Little Creek-Fort Story:

Phase One is the preparation of construction drawings for the three concrete foundation pads and two 16-inch projectile pads. The Navy approved these plans and construction was undertaken this summer at Cape Henry and the pads awaits the barrel and projectiles. (Phase One is completed).

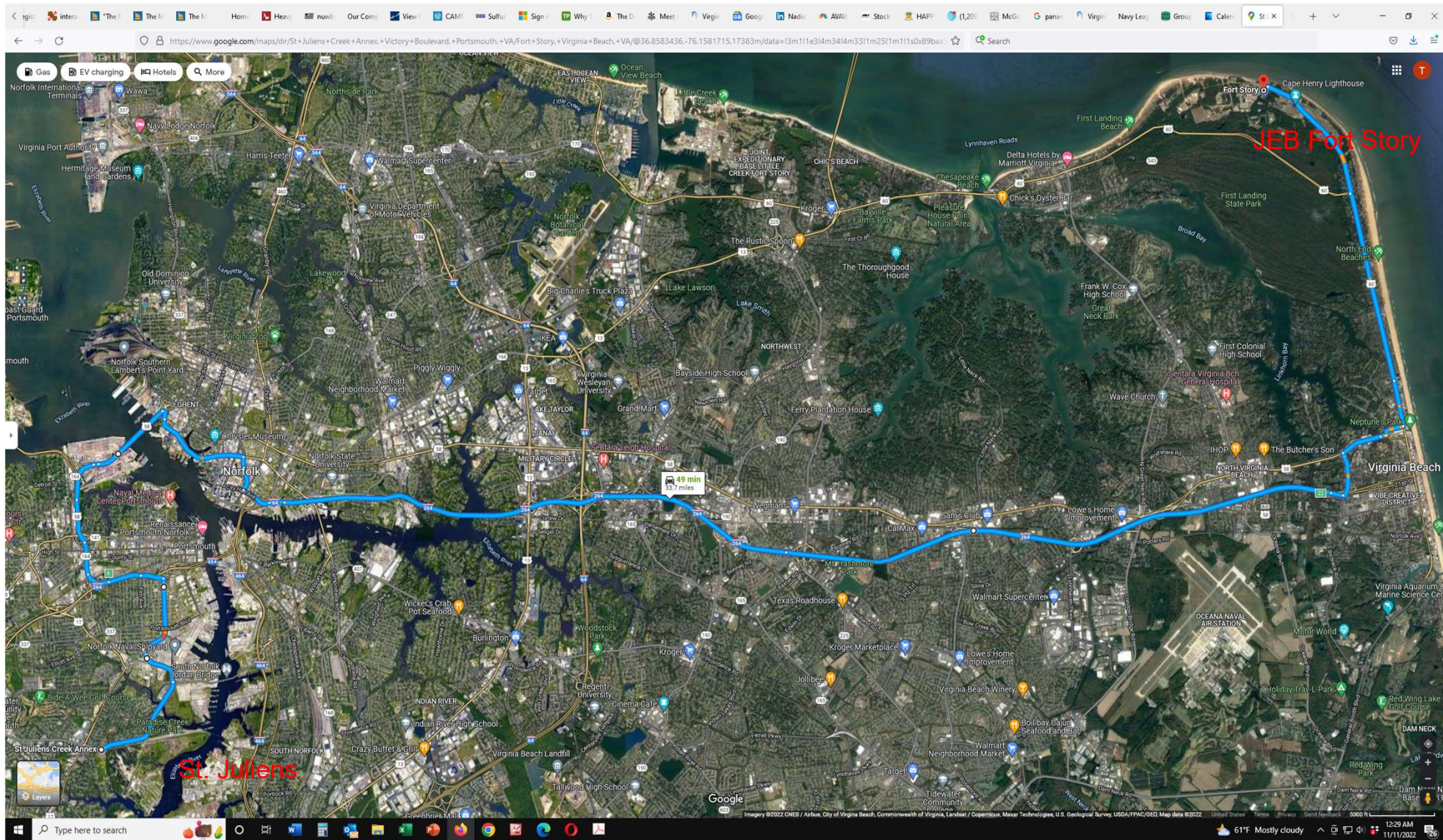
Phase Two would be the placement of barrel and cradle (remember it is 70 feet long and weighs in at 120 tons) on a specialized heavy-duty truck trailer. CDSG/USS Iowa Assn has arranged for this heavy lift from St. Julians Annex in Chesapeake to Marine Specialty Painting's facility in Portsmouth as the Navy does not own such assets. Once route permitting is approved the barrel and cradle will be moved about 2 miles.

Phase Three would be to remove the top of the lifting cradle, prep and paint the barrel and cradle while still on the heavy duty trailer. Also, steel stanchions have been construed for the projectiles. The 16-inch projectiles will also be prep and painted and mated with their steel stanchions at this facility. It is assumed the stayover at this facility to do this work would be about a month.

Phase Four has the barrel (and its lifting cradle) and 16-inch projectiles transported via the road network to JEB Fort Story in Virginia Beach. The heavy duty truck and trailer would move the barrel the 25 miles to JEB Fort Story (see the map on the next page). The ground transport will require permitting from VDOT as well as from the City of Portsmouth, City of Norfolk and City of Virginia Beach to allow this road transport. This heavy lift transport is projected to enter through Gate 8 and move down Atlantic Avenue to the Old Cape Henry Lighthouse area. **Gaining route permitting has been difficult, MEDAC endorsement should help.**

Phase Five would be where a heavy lift crane has been mobilized to be on site at JEB Fort Story to lift the barrel and cradle off the trailer on to the already prepared three foundation pads and two projectile foundation pads. The final action would be to design, construct, and erect display signs.

Possible Movement Route of USS Iowa 16-inch/50 Battleship Barrel #270 to Cape Henry/JEB Fort Story



16-inch/50 Barrel Movement - Proposed Step by Step Plan

Phase One



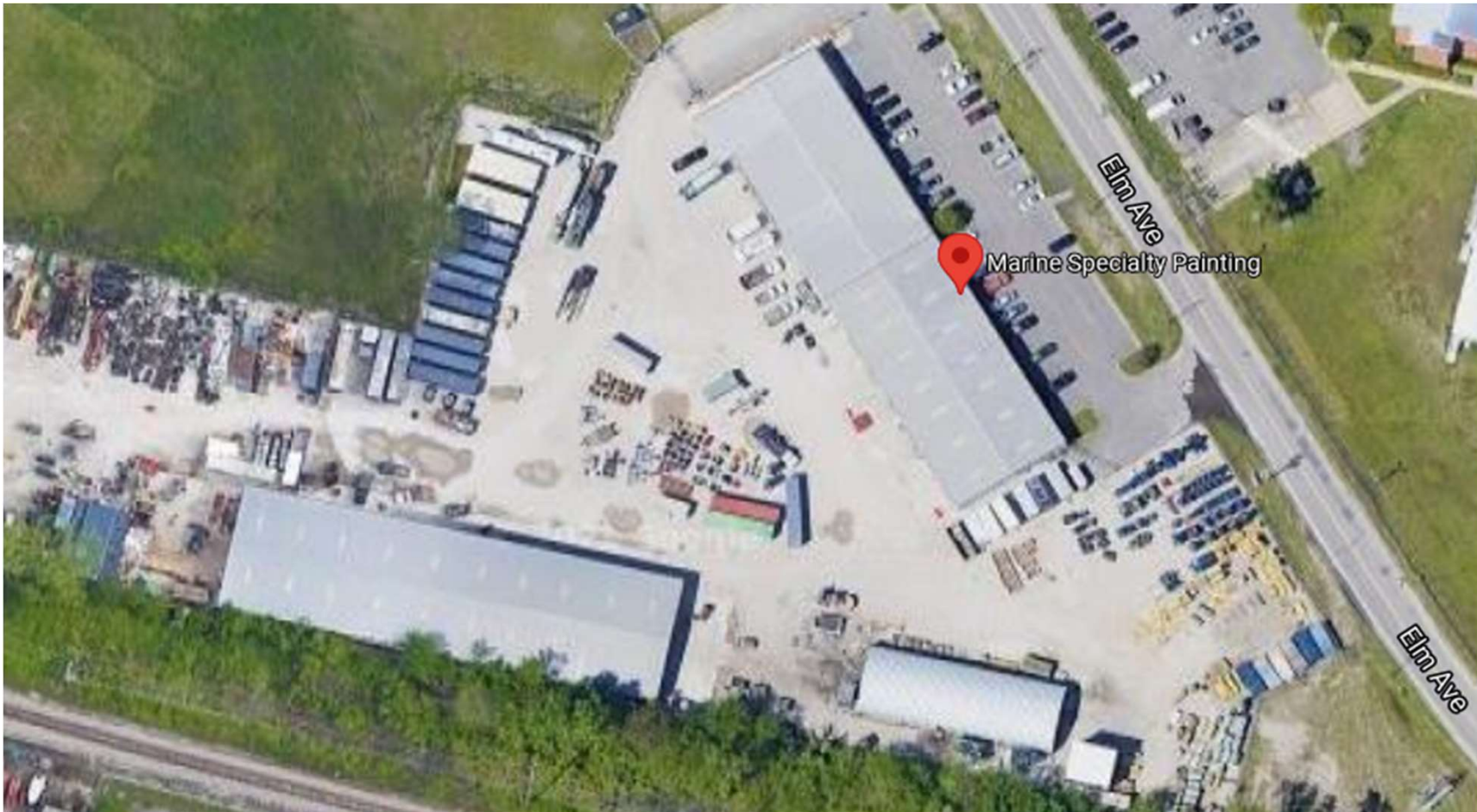
Phase One: Above are photos of the foundation to support the three steel cradle supports and the two steel stanchions for the 16-inch projectiles. We will use the existing steel cradle to support the barrel, while constructing the steel stanchions for the projectiles.

16-inch/50 Barrel Movement - Proposed Step by Step Plan Phase Two



Phase Two: One of the USS Missouri's barrels placed on specialized heavy duty trailer in March 2015. Barrel #270 and its cradle (total weight about 130 tons) on the trailer will be driven on the local road network about 2 miles to the specialty painting facility for prep/coating. The barrel will be offload and treated over a 30 day period.

16-inch/50 Barrel Movement - Proposed Step by Step Plan Phase Three



Phase Three: The specialty painting facility will prep/coat the barrel and cradle while on the heavy duty trailer. The upper cradle will be removed and the 16-inch projectiles with their stanchions (recently fabricated) be loaded on to the trailer for the final leg to JEB Fort Story.

16-inch/50 Barrel Movement - Proposed Step by Step Plan Phase Three



Phase Three: Above are photographs of display of the 16-inch projectiles on steel stanchions at San Pedro, CA and the newly constructed stanchions at MSP in Portsmouth, VA. 16-inch shells were recently transferred from the Battleship New Jersey to our specialty painting facility for prep/painting and placement on the steel stanchions.

16-inch/50 Barrel Movement - Proposed Step by Step Plan Phase Four



Phase Four: Contractors will use specialized a heavy duty trailer to move Barrel #270 and its lifting cradle on a pre-approved route through the Cities of Portsmouth, Norfolk and Virginia Beach. This special load bearing trailer will allow the weight to be distributed so lessen the weight on the roadbed so to meet permitting requirements from VDOT and each jurisdiction. This movement will attract media attention and coverage.

16-inch/50 Barrel Movement - Proposed Step by Step Plan Phase Five



Phase Five: Barrel #270 will be displayed next to the Old Cape Henry Lighthouse to allow the public to visit the barrel when they take the shuttle from Gate 8. The Navy has approved the final location and the completed concrete foundations for the cradle and projectiles.

16-inch/50 Barrel Movement - Proposed Step by Step Plan Phase Five



Phase Five: Above is shown the final display of the 16-inch/50 battleship barrel at the Philadelphia Naval Shipyard. The upper cradle has been removed and the barrel and cradle have been prepped and painted. Display signage has been installed to explain the history of the barrel and its relationship to the Philadelphia Naval Shipyard.

16-inch/50 Barrel Movement and Display - Resources Needed and Costs

The movement and display of the USS Iowa 16-inch/50 will need an array of equipment and manpower. Key items are the following and associated estimated cost:

1. Rental of Heavy Lift Crane and Crew at St. Juliens	\$25,500
2. Transport using Special Heavy Duty Trailer and Heavy Duty Truck	\$18,000
3. Removal of Upper Cradle and Prep/Paint Barrel, Cradle, and Projectiles	\$30,000 Donated
4. Permitting for road transport to VDOT and local cities	\$ 9,500
5. Rental of Heavy Life Crane and Crew at JEB Fort Story	\$28,000
6. Construction of Cradle and Projectiles Foundation	\$31,000
7. Contingency (5%)	\$ 8,000
	<hr/>
Total Resources Need and Estimated Costs	\$150,000
Total Less In-Kind Services	\$120,000

Some of these cash costs can be reduced if contractors make in-kind donations to the CDSG or USS Iowa Assn (both Section 501(c)(3) charitable organizations).

Funds Raised: The USS Iowa Veterans Association's has raised about \$25k to date and have arranged a donation in kind (valued at \$30k) while the CDSG has raised \$35k from its members and other donors. Two corporate sponsors have pledged \$20k so far.

16-inch/50 Barrel Movement and Display - Fundraising

Fundraising: Now that the barrel movement and display plan is agreed upon with the Navy, as well as their acceptance of our “movement and display” gift to the Navy, the following actions are underway:

- A new fundraising campaign to our memberships.
- Discussions with our contractors if they will provide their services at cost or provide them as in-kind donations (for tax deduction plus goodwill and PR in the Hampton Roads area) - \$30k committed.
- Selected outreach to large defense contractors that work with the Navy (for tax deduction plus goodwill and PR with the Navy).
- Targeted fundraising campaign to local business, such as Huntington Ingalls Industries, Sentara Healthcare, Atlantic Diving Supply, Bank of America, GEICO Direct, STIHL, Inc., BAE Systems Norfolk Ship Repair, SAIC, Navy Federal Credit Union, etc.
- Engagement with non-profit and veterans organizations, such as The Hampton Roads Military Advisory Council, Veterans of Foreign Wars, American Legion, Navy League, Fleet Reserve Assn, Virginia Ship Repair Association, Virginia Maritime Association, Virginia Beach Hotel Association, Hampton Road Chamber of Commerce, etc.
- Outreach to the City of Virginia Beach through the City Council, Virginia Beach Historical Commission, MEDAC, and Virginia Beach Resort Advisory Commission.
- Select outreach to large donors to military history and US history preservation projects.

Fundraising Goal: Raise the remaining \$60k to cover the projected cash costs.

City of Virginia Beach Resort Advisory Commission has approved a grant for this project from the Resort Investment Fund. The City Council needs to approve this grant and has requested the VA Beach MEDAC review and endorsement of this project before they vote on this grant. We ask that you endorse the project, as well provide guidance on possible donors to this Navy charitable project.

16-inch/50 Barrel Movement and Display - Partners

Veterans Association of the USS Iowa (www.ussiwavetassn.com) is a nonprofit organization dedicated to ensuring our brotherhood lives on. We share information about current events associated with the USS IOWA, host a regular reunion, and sell merchandise allowing you to celebrate and identify your membership as a part of the crew. The organization was started by shipmates from the 1950s crew in the late 1970s. What began as an organization of just a few has now reached several thousand. We're dedicated to getting our shipmates together, having fun, and sharing experiences through our yearly reunions.

Gerald Costin — 2nd Vice President, PO Box 195271, Winter Springs, FL 32719 – 321-759-BB61

Coast Defense Study Group (www.CDSG.org) is a non-profit corporation dedicated to the study of seacoast fortifications. CDSG's purpose is to promote education about and preservation of seacoast defenses, primarily those of the United States. The study of coast defenses and fortifications include their history, architecture, technology, strategic and tactical employment and evolution. Our key missions include the preservation of coast defense sites, equipment, and records, and conducting charitable activities that promote this preservation.

Terry McGovern, Secretary/Treasurer, 1700 Oak Lane, McLean, VA 22101 - 571-228-4193

Crofton Industries (www.crofton.com) Crofton offers comprehensive solutions including heavy lifting, barge & tug services, and specialized hauling in addition to commercial diving and marine construction. Crofton is proud to still be a family owned and operated business and serves as an employer to over 120 individuals including many third generation family members.

Kenny Crofton, Owner, President: Crofton Construction, 16 Harper Rd, Portsmouth, VA 23707 - 757-397-1131

The Mahan Collection Foundation (www.themahancollection.org) The purpose of our organization is to acquire, preserve, maintain, restore, and hold for display to the public directly or through other organizations antique and historic vehicles, especially Mack Trucks, equipment and machinery. We were formed for the preservation of our mechanical history and to educate the public of such items. We acquire such items through donation and purchases and restore those in need of repair.

Gary Mahan P.O. Box 367 Millington, NJ 07946 – 908-672-8255

Preservation Virginia. Preservation Virginia owns historic sites across Virginia including Historic Jamestowne, site of the first permanent English settlement in North America, and the Cape Henry Light, one of the first public works projects of the United States of America.

Sonja Ingram 583 Atlantic Avenue Fort Story, VA 23459 – 434-770-1209

Link to video on moving the USS New Jersey barrels:

<https://youtu.be/MSgxpZD2qRw>



16-inch/50 Barrel Movement and Display - Partners

Inactive Ships Office, SEA 21I, Naval Sea Systems The Navy Inactive Ships Office (SEA 21I) is responsible for managing the inactivation, storage, and disposal of conventionally powered U.S. Navy ships and crafts that have reached the end of their service life. SEA21I is committed to supporting the fleet by developing ship inactivation plans, supporting inactivation availabilities and transitioning the ships from the fleet. SEA21I ensures that the inactive ship inventory is managed in a manner most advantageous to the Government to include ship dismantlement, support for weapons effects testing, foreign military sales transfer, and donations.

Mr. Gary Kitchen, Naval Sea Systems Command ATTN: SEA 21I, 1333 Isaac Hull Ave, SE Washington Navy Yard, DC 20376 – 202-781-0682

Joint Expeditionary Base Little Creek-Fort Story (JEB Little Creek-Fort Story) JEB Little Creek-Fort Story employs 18,091 military and civilian personnel making it the largest military employer in the City of Virginia Beach. The base covers nearly 4,000 acres of land with 7.6 miles of beachfront area. There are 18 large ships home ported there with an additional mix of 126 smaller craft. On October 1, 2009, the JEB Little Creek-Fort Story was established, the first Joint Base in Hampton Roads. JEB Little Creek-Fort Story is the country's premier installation for housing and training the nation's Expeditionary Forces. It is one command with two properties: JEB Fort Story and JEB Little Creek. The Joint Expeditionary Base is comprised of the former Naval Amphibious Base Little Creek and the Army Post of Fort Story.

Capitan Michael Witherspoon, Commanding Officer, 2600 Tarawa Court, Ste 100, Virginia Beach, VA 23459-3297 – 757-462-7231

Navy Region Mid-Atlantic Region Commander, Navy Region Mid-Atlantic (CNRMA) is the regional coordinator for all shore-based naval personnel and shore activities in the Mid-Atlantic region, which encompasses 20 states, 14 installations, and 50 Naval Operational Support Centers (NOSCs). As the naval shore installation management headquarters for the Mid-Atlantic region, CNRMA provides coordination of base operating support functions for operating forces throughout the region in support of the Fleet, Fighter and Family.

RADM Christopher Gray, Commander, Navy Region Mid Atlantic, 1510 Gilbert St., Norfolk, VA 23511 – 757-322-2800

City of Virginia Beach is home to more than 456,000 people, Virginia Beach is the largest city in Virginia and the 39th largest city in the United States. A dynamic community strengthened by a diverse mix of industry, attractions and people, Virginia Beach is recognized globally as one of the best places to live, work and do business. With 38 miles of beaches and 79 miles of scenic waterways, this vibrant East Coast city is situated along the shores of the Atlantic Ocean and the Chesapeake Bay, in the southeastern corner of the state, about a four-hour drive by car to Washington D.C., and within a day's drive or less from two-thirds of the U.S. population.

Military Economic Development Advisory Committee (MEDAC) - 4525 Main Street, Suite 700, Virginia Beach, VA
RADM Fenton Priest, SC, USN (Ret.) Chair - Charlie Bauman Direct: (757) 385-6498

Virginia Beach Historic Preservation Commission - 2101 Parks Avenue, Suite 500, Virginia Beach VA 23451

James Wood, Chair - Mark Reed, Historic Preservation Planner Direct: (757) 385-8573

Resort Advisory Commission - 2101 Parks Avenue, Suite 302, Virginia Beach, VA 23451

BJ Baumann, Chair - Mike Eason, Resort Administrator Direct: (757) 385-6639



Movement and Display of USS Iowa 16-inch/50 Battleship Barrel #270 at Cape Henry/JEB Fort Story



16-inch/50 Battleship Barrel display at Philadelphia Naval Shipyard. Model for the JEB Fort Story display.

Honoring Falling Shipmate and Veterans from the US Navy's WW2, Korean War, and Cold War Era



25th Anniversary Ceremony at Iowa Point