The Value of Outreach

Key Crossing Reliability Initiative

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Key to Success

- Identifying key stakeholders
- Establishing Relationships
- Telling Our Story; Outreach
- Listening to concerns
- Engaging with stakeholders
- Being Responsive
- Addressing concerns/questions
- Incorporating feedback into design
- Keeping stakeholders informed throughout the process

Large Multi Year Projects; Doing it a little different

- Strategy for outreach must be multi faceted
- Multi year projects are challenging to keep key stakeholders engaged and informed
- Various tools of engagement/education
  - Fact Sheet/sheets
  - Open houses
  - Stakeholder meetings
  - Renderings of before/after
  - Website
  - Social Media
  - Video
  - Outreach PowerPoint/decks

BGE Outreach: Project Success

Educate the public on the project

Provide a forum to receive feedback

Evaluate any potential concerns with the alternatives being presented

Refine alternatives and re-engage stakeholders

Outreach Strategies

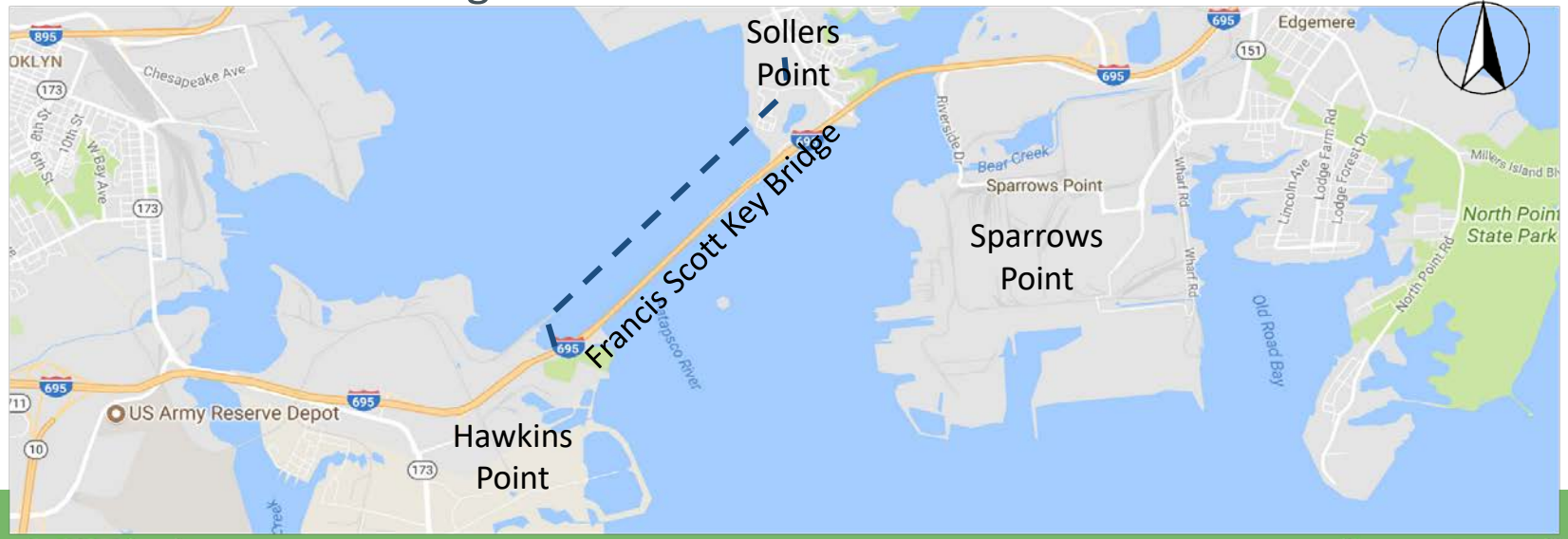
- Keep Local and State Elected and Appointed Officials updated throughout the project
- Attend meetings with key community organizations to provide project information
- Work with agencies to understand and satisfy permitting requirements ;share project information and solicit feedback incorporate changes
- Meet with large business customers such as Port Covington and Tradepoint Atlantic
- Coordinate meetings with Environmental Interest Groups

PROJECT BACKGROUND

www.bge.com/keycrossing

Project Background

- In the early 1970's, BGE put into service two 230kV transmission circuit segments that run under the Patapsco River adjacent to the Key Bridge
- The segments are composed of high voltage cables that run from Hawkins Point to Sollers Point inside of steel pipes pressurized with mineral oil
- The cables are exhibiting symptoms of degradation and approaching the end of their useful service life
- The system was installed in cooperation with Baltimore City's installation of a water main and a BGE gas main



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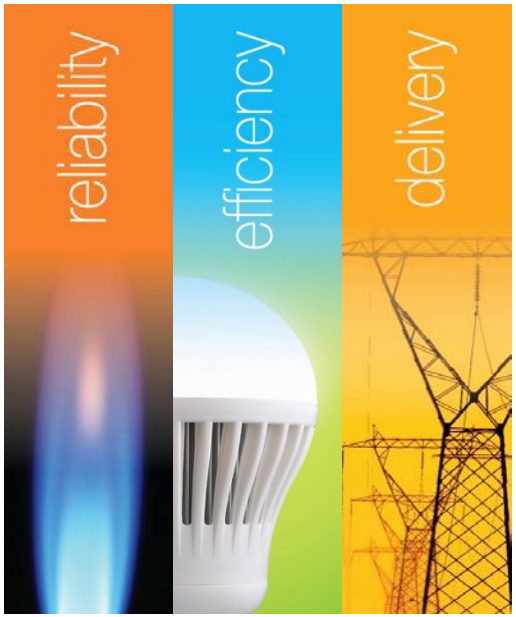
Project Background – 230kV Transmission Ring

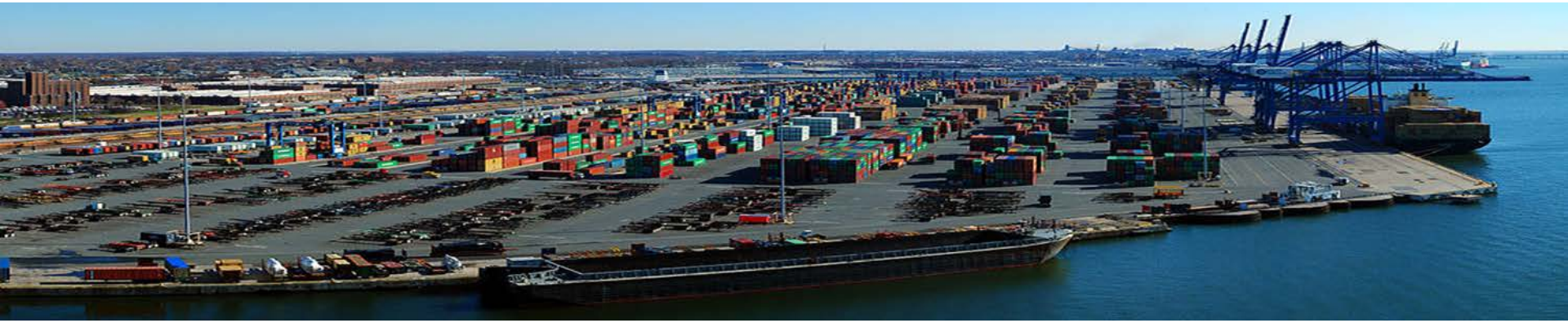
The existing cables are a critical link in the networked electrical system and failure could result in operational restrictions



Underground Cable Replacement Option

BGE studied replacing the existing transmission cables underground. This option:

- **Significant environmental impacts** within the Chesapeake Bay Critical Area and Patapsco River
- **Impacts waterway activities** including Port of Baltimore commercial and recreational traffic
- No visual impact to the waterway
- Will have the **highest cost impact** for BGE ratepayers
- Meets operational requirements
- Would have the **least opportunity for job creation** in Maryland and domestically
- Highest impact to **current and future shipping channel**



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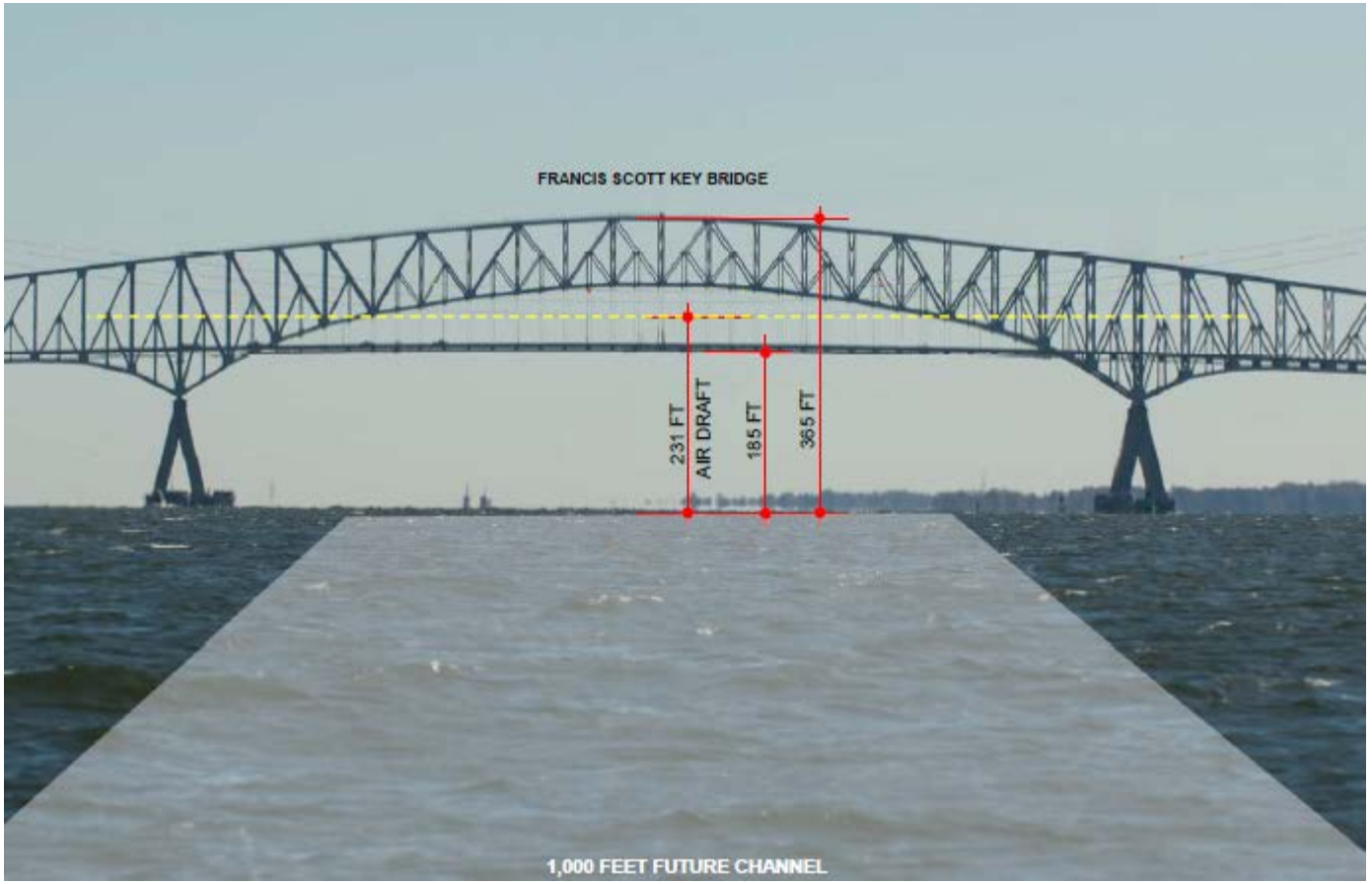
Overhead Transmission Line

BGE proposes replacing the existing cables with overhead transmission lines. This solution:

- **Minimizes temporary and permanent impacts** to the Patapsco River/Chesapeake Bay Critical Area
- **Limited disruption to waterway activities** including Port of Baltimore/commercial and recreational
- Visual impact to the waterway
- Will have the **lowest cost impact** for BGE ratepayers
- Meets operational requirements
- Has the greatest **potential for local and domestic job creation**
- Uses **proven technology** for the foundations, towers, conductors & collision protection structures

Overhead Transmission Line: Route

Overhead Transmission Line:



Overhead Transmission Line: Tower Spacing

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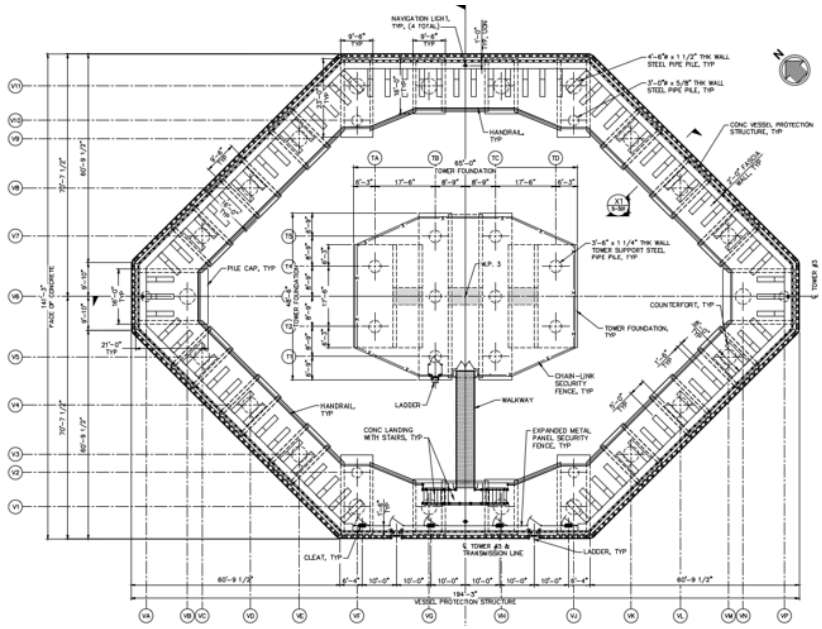
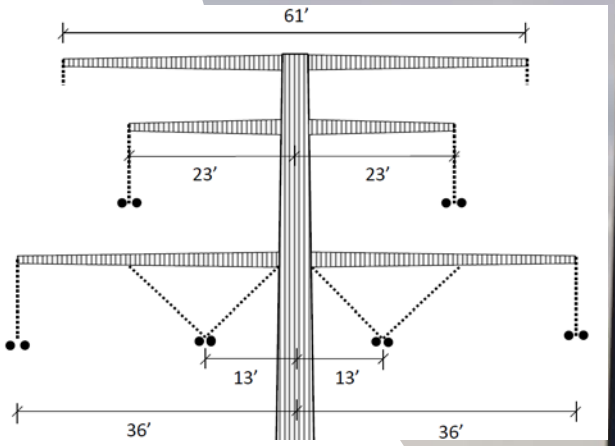
Monopole

- Smaller footprint in river
- Least environmentally impactful
- Elevation range 165’ to 397’



194’-3” X 141’-3”



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Overhead Transmission Line

Monopole Concept Rendering

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Overhead Transmission Line

Monopole Concept Rendering

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Overhead Transmission Line

Overhead Transmission Line

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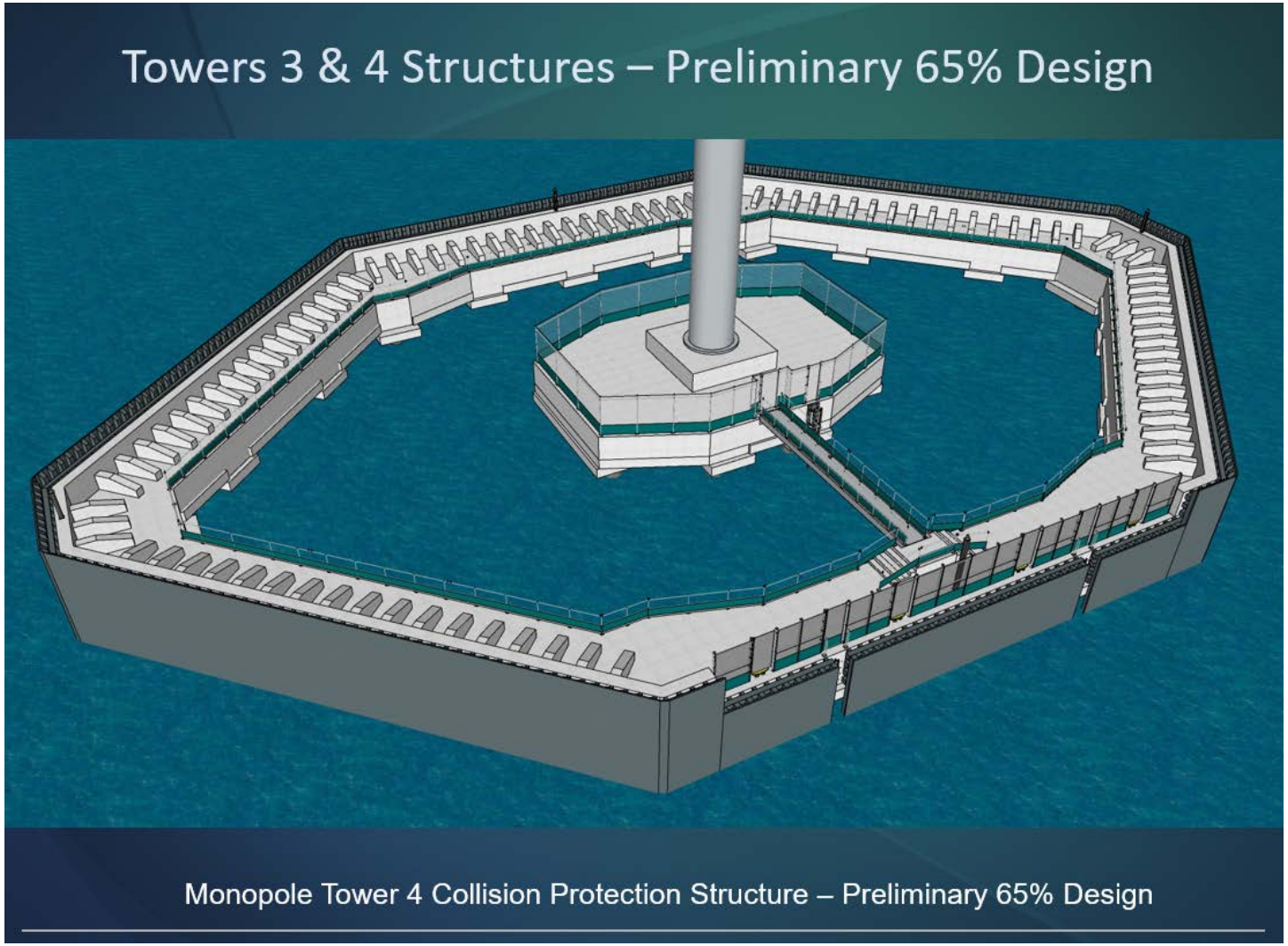
Construction Planning

- Based upon the marine nature of the proposed construction work BGE has engaged Cianbro for constructability analysis
  - Recognized leader in complex civil infrastructure projects specializing in marine fixed structures, pile driving and deep foundations
  - Recognized leader in the electrical transmission & distribution, electrical substation, and wind and solar industries
  - Operates in more than 40 states (including MD), maintains corporate offices in Pittsfield Maine, and maintains a local presence in Curtis Bay
- Objectives of the constructability analysis include:
  - Definition / validation of construction means and methods
    - Construction sequencing and activity durations
    - Equipment requirements – vehicles, cranes, barges, etc.
    - Validation of construction material estimates
    - Validation of construction assumptions applied to permitting efforts

Innovative Overhead Opportunities



Innovative Overhead Opportunities

- BGE is exploring **innovative** ideas to mitigate the impacts of an overhead solution including:
  - Collision protection structures around foundations
  - Approaches to avian issues
  - Tidal wetland mitigation
  - Creating oyster habitat
- Strategic Stakeholder Partnerships
  - State Agencies (MDTA, MPA, MHT)
  - Environmental Groups
  - Local Jurisdictions
  - Environmental Regulators
  - Community Groups

Project Timeline

Environmental Regulatory Process

BGE must assess the environmental impacts of constructing this line including:

- Evaluating the existing conditions of the river bottom
- Investigating soil conditions at proposed transmission tower locations
- Reviewing natural resources, protected species, and habitats
- Identifying hazardous and environmentally sensitive materials
- Identifying historical and cultural resources

Final design and construction requires BGE to secure the following regulatory approvals:

Joint Permit Application (JPA)

US Army Corps of Engineers

Maryland Department of the Environment

Certificate of Public Convenience & Necessity (CPCN)

MARYLAND Public Service Commission

Tidal Wetland License

Chesapeake Bay Critical Area Compliance

Baltimore City & County Environmental Compliance

CITY OF BALTIMORE

BALTIMORE COUNTY MARYLAND

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Environmental Regulatory Process Update Summary

- Early identification of stakeholders and coordination with regulatory agencies
- Participated in over 50 meetings with project stakeholders over 3-year period
- Ongoing coordination with regulatory agencies has helped with the project development and streamlined permit application efforts
- All necessary permit applications have been filed with regulators

Environmental Regulatory Process Permit Update

Permits Required	Status
Federal Aviation Administration (FAA) Permit - Determination of no hazard	Received initial determination letters w/ instruction for towers 1-7. Resubmit within one year of construction. No unexpected requirements
Chesapeake Bay Critical Area Commission	Approved August 2019
MDE Nontidal Wetlands Authorization - Peige Wetland Bank Mitigation	Under review; Expected Fall 2019
Maryland Historic Trust	Recommended “Finding of No Adverse Impact” – 08/2019
MD Board of Public Works - Tidal Wetland License	Awaiting recommendation from MDE Tidal; Expected Fall 2019
US Army Corps of Engineers Authorization - Chestnut Hill Cove Mitigation Permit - Section 408 Permit - Public Hearing	 Submitted August 2019 Under review Held 07.2019; No outstanding issues identified
Baltimore County Grading Permit	Submitted August 2019
Baltimore City - Building Permit - Erosion & Sediment Control & SWM Plans	Submitted August 2019
MD Port Administration Construction Permit	Submitted August 2019; No impact expected

Outreach Coordination Meetings (to date)

- AA County DPW Director – May 2017; October 2018
- Baltimore City DPW – June 2016; January 2017 ; November 2018
- Baltimore City Elected Officials – May 2017 ; October 2018
- Baltimore City Planning - CHAP – July 2017 ; November 2018
- Baltimore County Public Works – January 2017; May 2019
- Baltimore County Elected Officials – May 2017; October 2018; March/April 2019
- Baybrook Alliance – September 2017; February 2019
- Locust Point Civic Association – January 2018; November 2018
- MD Transportation Authority – January 2018; October 2018
- U.S. Fish and Wildlife – January 2018; April 2019
- Canton Community Association – February 2018
- Baltimore City Community Council – March 2018
- Blue Water Baltimore – April 2018; October 2018
- Chesapeake Bay Foundation – April 2018 ; October 2018
- Audubon Society – May 2018
- Department of Natural Resources (JE) – May 2018; September 2018; May 2019

Outreach Coordination Meetings (continued)

- Maryland Port Administration (MPA) – April 2015; June 2016; January 2018
- PPRP (w/ ACOE, NOAA, MHT, MDE) – August 2015; September 2016; February 2017; November 2017 ; September 2018; February 2019
- Maryland Board of Public Works (BPW) – April 2016
- Maryland Department of the Environment (MDE) – April 2016; September 2018
- Environmental Agency Summit – June 2016
- National Park Service – June 2016; October 2018; March 2019
- Fort McHenry – June 2016; January 2018; October 2018; March 2019
- Maryland Historic Trust – September 2016; October 2018; May 2019
- Harbor Pilots – September 2016; December 2017
- Governor's Office – June 2017
- JE – May 2017; November 2017; September 2018
- Baltimore City Planning – Env. Review – July 2017;
- Army Core of Engineers – April 2016; September 2018
- Anne Arundel (AA) County State & Local Elected Officials – May 2017; October 2018
- AA Local Community Council – December 2017
- AA County Public Works – January 2017; October 2018

Outreach Coordination Meetings (continued)

- Chestnut Hill Cove Community Association; February 2019
- Turner Station Community Association Open House; March 2019
- PPRP/MDE/CORE Site Visit; March 2019
- National Park Conservation Association; March 2019
- Oyster Recovery Partnership; April 2019
- National Marine Fishery; May 2019
- PSC Engineer Staff Tour; May 2019
- Baltimore County State Elected Officials District 6; May 2019
- Chesapeake Bay Foundation; June 2019
- Marine Trade Association Baltimore County; June 2019
- Baltimore City State Elected Officials District 46; June 2019
- Blue Water Baltimore; June 2019
- PPRP/OPC/PSC Meeting; July 2019

Upcoming Outreach Efforts

- Continue to work with agencies throughout permit process; JPA/CPCN
- Continue listening to stakeholders and work with them
- Circling back with stakeholders previously met with to update on the project
- CPCN Public Hearings September 2019
- Outreach to new/expanded stakeholders
- www.bge.com/keycrossing

Questions?

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