

OCTOBER 2014

INTERSTATE 64 / HIGH RISE BRIDGE CORRIDOR STUDY



CITY OF CHESAPEAKE, VA | STATE PROJECT #: 0064-131-783 | UPC: 104366

NAVIGATIONAL EVALUATION
TECHNICAL MEMORANDUM



INTERSTATE 64 / HIGH RISE BRIDGE CORRIDOR STUDY

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VOLUME 1:
NAVIGATIONAL EVALUATION STUDY

Volume I

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1.0 INTRODUCTION

The Virginia Department of Transportation (VDOT), in cooperation with the Federal Highway Administration (FHWA) as the lead federal agency, is evaluating options to improve transportation conditions along the Interstate 64 (I-64) corridor between the Interstate 464 (I-464) interchange and the Interstate 664 (I-664) interchange and Interstate 264 (I-264) interchange at Bowers Hill in the City of Chesapeake, Virginia (Chesapeake) (**Figure 1**). Pursuant to the National Environmental Policy Act of 1969, as amended, (NEPA) (42 USC § 4332(c)) and in accordance with FHWA regulations (23 CFR § 771), VDOT is currently preparing an Environmental Assessment (EA) to analyze the potential social, economic, and environmental effects associated with the proposed project. The purpose of this *Navigational Evaluation Technical Memorandum* is to comprise an accurate picture of current and prospective vessel navigation on the Southern Branch of the Elizabeth River. This document was prepared in accordance with the United States Coast Guard's (USCG) White Paper "Reasonable Needs of Navigation" (USCG Office of Bridge Programs, 2012) and the USCG Bridge Permit Application Guide (USCG Office of Bridge Programs, 2011).

Early in the Interstate 64 / High Rise Bridge Corridor Study process, VDOT began coordination with USCG. It is a responsibility of the USCG to preserve the public right of navigation and ensure the safe and unencumbered passage of navigation on the nation's waterways; an objective met via the USCG's Bridge Program, authorized with approving the location and plans of all new bridges and modification of existing bridges in or over navigable waterways of the United States (USCG Office of Bridge Programs, 2012). The agencies jointly determined that a discussion of waterway characteristics, waterway usage, and perspective long term navigational impacts of the proposed project be developed to document the appropriate vertical clearance for a fixed bridge that could be included in the EA. VDOT has followed the guidance provided in the USCG White Paper, Reasonable Needs of Navigation, to develop this technical memorandum. The White Paper recommends initiating a navigation evaluation early in the planning process and updating the findings of that evaluation throughout the design and permitting process. In accordance with this guidance, VDOT has completed this technical memorandum to inform the EA. This technical memorandum would be revisited as part of any future design and permitting activities. The final bridge height would be determined per issuance of a bridge permit by the USCG. This permit would be informed by a Design Public Hearing and appropriate level of design drawings.

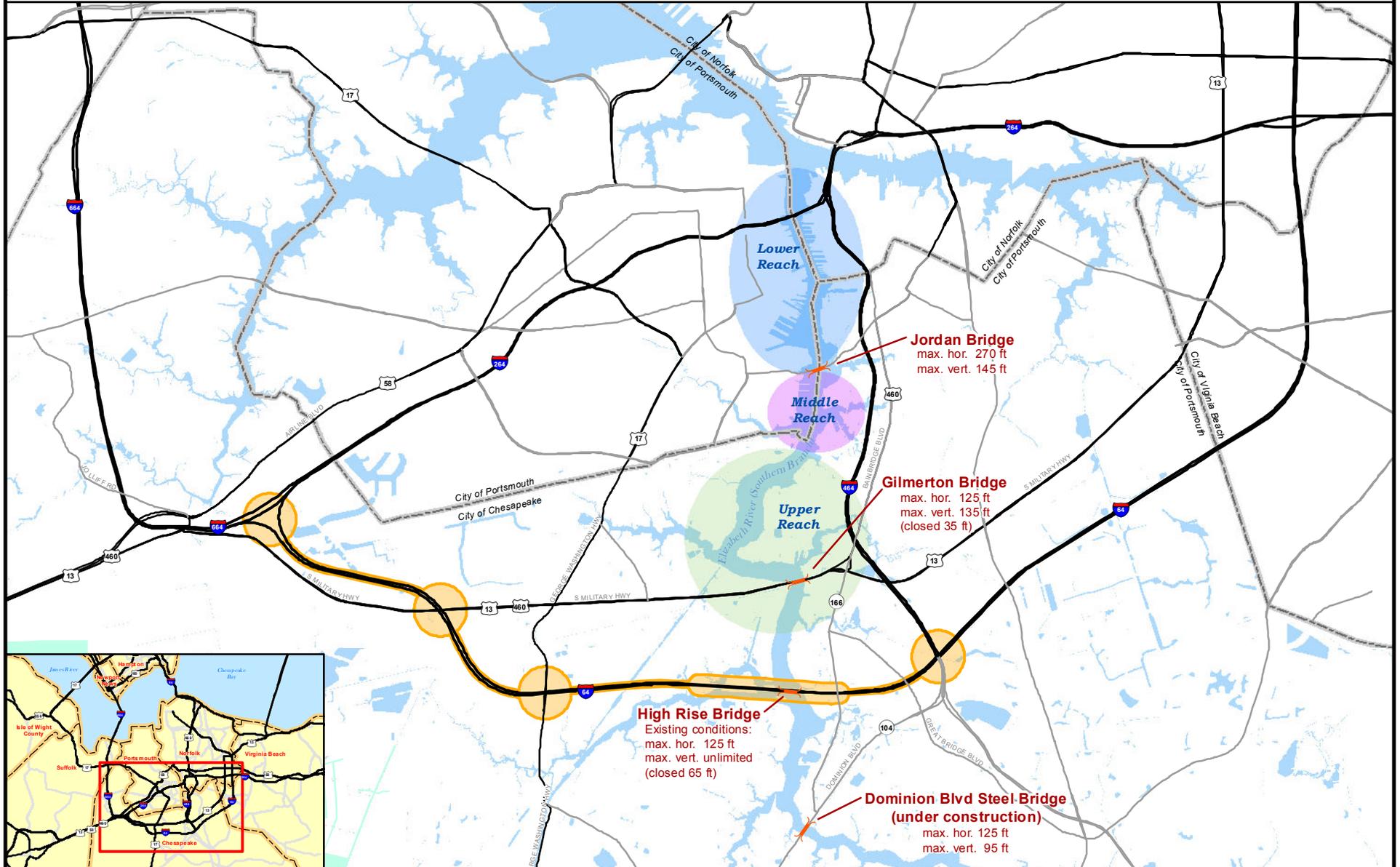
Figure 1 Southern Branch of the Elizabeth River and the High Rise Bridge

Interstate 64 / High Rise Bridge Corridor Study
Environmental Assessment
City of Chesapeake



- Study Area
- Lower Reach
- Middle Reach
- Upper Reach
- Bridge
- City Boundary
- Water Bodies
- Railroad

Mapping Source: VDOT, City of Chesapeake, City of Portsmouth, City of Norfolk



2.0 DESCRIPTION OF EXISTING BRIDGE

2.1 High Rise Bridge Location

I-64 is part of the National Highway System (NHS)¹, the Strategic Highway Network (STRAHNET)², and was designated as a Corridor of Statewide Significance³ (CoSS) in *Virginia's Multimodal Long-Range Transportation Policy Plan* (Office of Intermodal Planning and Investment, 2010). The G. A. Treacle Memorial Bridge (High Rise Bridge), a four-lane double-leaf drawbridge commonly referred to as the High Rise Bridge, carries a mile-long portion of the I-64 corridor across the Southern Branch of the Elizabeth River (**Figure 1**) which flows through Norfolk, Portsmouth, and Chesapeake. The bridge crosses a section of the Southern Branch of the Elizabeth River at mile marker 7.1 of the Atlantic Intracoastal Waterway (AICW). It is located in Chesapeake, south of the South Norfolk Jordan and Gilmerton bridges and north of the Dominion Boulevard Bridge (commonly referred to as the Steel Bridge). With average daily vehicle traffic of approximately 84,000, the High Rise Bridge portion of I-64 is a heavily trafficked route.

2.2 Bridge Age and Structure Type

Originally constructed in 1969, the bridge structure is a double-leaf bascule bridge (drawbridge) made of concrete and steel, carrying four lanes of I-64 over the Southern Branch of the Elizabeth River. Owned and operated by VDOT, the bridge opens upon vessel demand approximately 25 times a year. It remains closed during peak travel hours from 6:00 a.m. to 9:00 a.m. and from 3:00 p.m. to 6:00 p.m., Monday through Friday, except on federal holidays. If a vessel requires an opening during peak travel hours, three (3) days' notice is required (VDOT, 2013a). Because the High Rise Bridge would be 71 years of age and nearing the end of its anticipated service life at the Interstate 64 / High Rise Corridor Study's build-out year of 2040, alternatives included for analysis in this study must consider the replacement of the bridge.

3.0 NAVIGATIONAL CHARACTERISTICS

Independent from vertical and horizontal clearances set forth by the High Rise Bridge, vessel navigation through the Southern Branch of the Elizabeth River is limited by several additional parameters related to waterway characteristics, which include channel width and depth.

3.1 Channel Geometry

River channels exist in a variety of geometries, which are inherently related to the movement of water and vessels through the channel. Channel geometry includes characteristics such as channel width, depth, and velocity and flow direction. The channel dimensions of the Southern Branch of the Elizabeth River are described using three reaches; Lower, Middle, and Upper (also known as the Gilmerton Bridge Reach) (**Figure 1**). The High Rise Bridge spans the Elizabeth River approximately 0.6 miles south of the portion

¹ NHS consists of major roadways important to the nation's economy, defense, and mobility. The NHS includes the interstate highway system as well as other roads connecting to major ports, airports, public transportation facilities, or other intermodal transportation services.

² STRAHNET is a system of highways important to the United States' strategic defense policy providing defense access, continuity and emergency capabilities for defense purposes.

³ CoSS are considered to be integrated, multimodal systems of transportation facilities that connect activity centers within the Commonwealth.

of the channel known as the Upper (Gilmerton Bridge) Reach. All three reaches lie between the location of the High Rise Bridge and the Elizabeth River's connection with the Chesapeake Bay; thus, the limiting factors within each reach restrict vessel mobility between the Bay and destinations south of the High Rise Bridge. The elements of channel geometry for the Southern Branch of the Elizabeth River are discussed in further detail below.

3.1.1 Channel Width

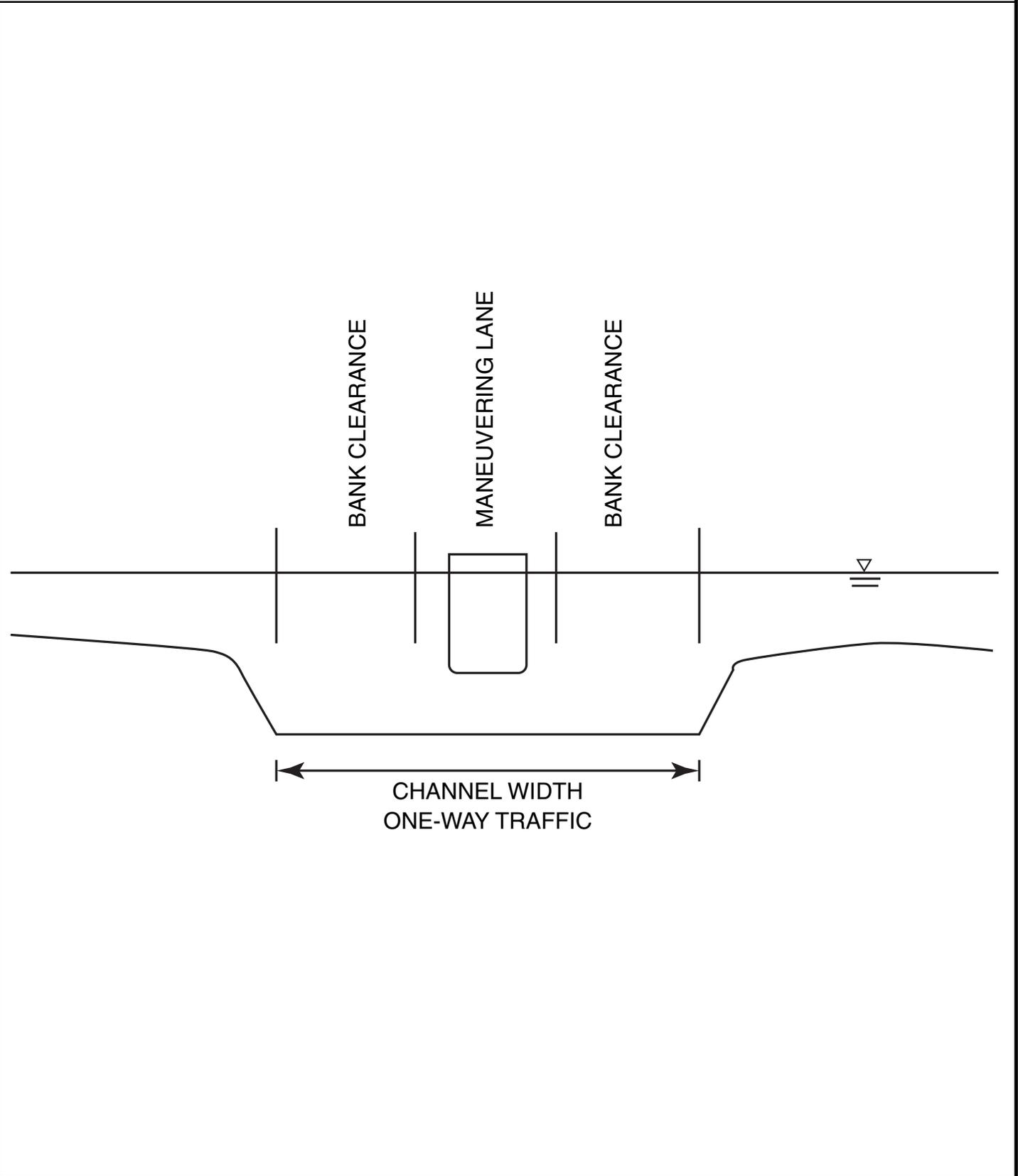
Channel width is designed for a target vessel, typically the largest vessel that the waterway can expect to accommodate safely and efficiently. The minimum channel width depends on the summation of a number of factors, including the size and maneuverability of the vessels, channel shape and alignment, traffic congestion, wind, waves, currents, and whether one-way or two-way traffic is required. A typical channel cross-section for one-way traffic is shown in **Figure 2**.

Based on the current United States Army Corps of Engineers (USACE) authorized channel dimensions, the narrowest point of authorized channel proximate to the High Rise Bridge along the Elizabeth River is the horizontal clearance of the bridge itself, at 125 feet wide (National Oceanic and Atmospheric Administration, 2012). Channel widths must provide for the width of the maneuvering lane, the portion of the channel width within which the vessel might deviate from a straight line without encroaching on the safe bank clearance. The width of the maneuvering lane within a typical channel cross-section is influenced by vessel controllability. Standard practice defines this range from "Very Good" (1.6 times the vessel beam width, B) to "Poor" (2.0B) (Moffatt & Nichol, 2009). For the purposes of this report, standard bank clearance is considered to be the horizontal distance between the maneuvering lane and the bottom of the channel side slope (**Figure 2**). Accounting for a standard bank clearance of 0.6B on either side of the maneuvering lane, the total channel width as a function of vessel beam ranges from 2.8B to 3.2B. Thus, based on the equation for channel width requirements, this would limit traffic in the narrowest point (125 feet) along the Southern Branch of the Elizabeth River to vessels with maximum beams ranging from 39 to 45 feet, depending on vessel controllability.

A 1995 USACE vessel simulation study was conducted to examine proposed improvements to the Southern Branch of the Elizabeth River. These improvements included deepening the authorized channel from 35 to 40 feet, widening several of the bends, and constructing a turning basin opposite Milldam Creek. The study concluded that the channel should be deepened and widened, as proposed, from the Norfolk and Western Railway Bridge (NWRB) south to the Gilmerton Bridge, terminating approximately 1.2 miles north of the High Rise Bridge. The Gilmerton Bridge requires such a turning basin to allow for vessel turning movements in this section of the Elizabeth River, but the geometry of the river at the High Rise Bridge does not. Furthermore, the study suggested increasing the horizontal clearance of the High Rise Bridge to a width of 135 feet (Webb, 1995). This recommendation would be included in the analysis of alternatives in the EA. Applying the formula described above, should the channel be widened in the future to accommodate vessels with wider beams, the 135-foot horizontal clearance of the bridge would restrict total vessel beam width to approximately 42 to 48 feet, depending on vessel controllability.

Figure 2 Channel Width Elements

Interstate 64 / High Rise Bridge Corridor Study
Environmental Assessment
City of Chesapeake



Clearance restrictions in the river not only restrict the maximum allowable vessel width, but also maximum vessel length. Sufficient turning basins must be designed for outbound vessel transit. Industry standards recommend a turning basin be a minimum of 1.2 times the length of the vessel. A USACE vessel simulation study (Webb, 1995) examined the ability of the Milldam Creek turning basin, located approximately 1.25 miles north of the High Rise Bridge within the Southern Branch of the Elizabeth River, to support a 775-foot long vessel. The simulation revealed that, while the design vessel used in the study exceeds recommended design criteria for turning basin clearances, the vessel was able to successfully turn within the limits of the proposed basin; thus 775 feet is the maximum possible vessel length that could safely navigate the Upper Reach of the river.

3.1.2 Channel Depth

The depth of the Elizabeth River channel beneath the High Rise Bridge is approximately 35 feet (NOAA, 2012). The depth of a channel must be adequate to safely accommodate ships with the deepest drafts permitted to use the waterway. Several factors can influence channel depth required for safe navigation of a vessel including motion from waves, vessel squat while underway, and safety clearance. The two main influences in the Southern Branch channel are vessel squat and safety clearance. This portion of the river is protected from an open water wave environment; therefore, ship motion from waves is considered negligible.

Vessel squat is influenced by vessel dimension and speed. A design vessel of 60,000 deadweight tonnage (dwt), 775 feet long, and 106 feet wide traveling at five (5) knots was used to calculate maximum squat. This vessel is representative of the design vessel used to determine initial channel dimensions and utilized in subsequent USACE studies along the river. Squat for a vessel of this type was found to be 0.5 feet and a minimum safety clearance of two (2) feet is recommended for a channel with a soft bottom (Moffatt & Nichol, 2009). The resulting maximum vessel draft for safe navigation in the authorized 35-foot channel beneath the High Rise Bridge is approximately 32.5 feet.

During the surveying process for vessel users of the Southern Branch of the Elizabeth River, described in further detail in **Section 4.2** below, a public comment was received suggesting that the potential dredging of the Southern Branch of the Elizabeth River channel, currently under consideration by the USACE, would allow for taller ships to access the channel. Initial USACE studies have assumed that should the channel approaching the High Rise Bridge be dredged to achieve its authorized 45-foot depth, such an action would not result in providing access to taller vessels along the channel, but allow for existing vessels to carry heavier loads (Personal communication, VDOT/Robert Pretlow, November 14, 2013). Therefore, it is assumed that any dredging action taken by USACE near the High Rise Bridge would not introduce vessels that would exceed the heights of those already navigating the waterway.

3.2 Channel Velocity and Flow Direction

The Southern Branch of the Elizabeth River is a primarily tidal river with a generally slow-moving current. Annual tidal current velocity ranges from 0.2 knots or 0.23 miles per hour (mph) to 1.4 knots (1.6 mph). Currents are influenced by several factors; most notably, wind and runoff from heavy precipitation. On average, the velocity of flow in the Elizabeth River is approximately 0.6 knots (0.69 mph). The Southern Branch of the Elizabeth River flows northerly from its southern terminus at the AICW to its confluence with the Eastern Branch and main body of the greater Elizabeth River (USGS 2014).

3.3 Additional Limiting Considerations

Additional existing conditions restrict vessels of certain dimensions from navigating the Southern Branch of the Elizabeth River. They include:

3.3.1 Bridge Crossings

- **Dominion Boulevard Bridge (Fixed Span - currently under construction):** Located approximately 1.5 miles south of the High Rise Bridge, reconstruction on the Dominion Boulevard (formerly “Route 104”) Bridge began in January 2013, further restricting clearances along the river channel. The Dominion Boulevard Bridge was a double-leaf bascule bridge that was constructed in 1962. A “Route 104 Feasibility Study” was initiated by VDOT in 1997, which sought to identify a practicable means for addressing the aging bridge. The study concluded that a 95-foot fixed span bridge was the appropriate replacement option. Construction on the Dominion Boulevard Bridge has an estimated completion date of early 2017. As a result, no southbound vessel requiring a vertical clearance of more than 95 feet will be able to navigate the Southern Branch of the Elizabeth River south of the newly fixed Dominion Boulevard Bridge; nor can such a vessel move north of the bridge from the AICW.
- **Gilmerton Bridge (Lift Span):** The Gilmerton Bridge, located approximately 1.2 miles north of the High Rise Bridge, recently reopened to traffic in November 2013, after undergoing replacement construction. Originally constructed in 1938 as a double-leaf bascule bridge with a seven (7) foot vertical clearance in the closed position, the Gilmerton was replaced with a lift span bridge with a 35-foot vertical clearance in the closed position and up to 135-feet in the open position. The 135-foot vertical clearance of the Gilmerton Bridge was designed to accommodate vessels traveling to the Dominion Chesapeake Energy Center (CEC), located south of the Gilmerton Bridge and north of the High Rise Bridge. The CEC is scheduled for shutdown by 2015 (Dominion Energy, 2013).

3.3.2 Power Lines

Dominion Virginia Power services Chesapeake’s electricity needs through a network of overhead and below-ground power line cables, a number of which are located within the study area associated with the High Rise Bridge. Existing overhead conductors vary in height, but stand at least 18-feet tall. The study area is crossed perpendicularly on the western side of the bridge by an overhead utility, stemming from a tower approximately 85 feet north of I-64 to a tower approximately 90 feet south of the roadway. It intersects I-64 approximately 1,030 feet west of the High Rise Bridge. The study area is crossed a second time by an overhead power line stemming from a tower located approximately 40 feet south of the I-64 roadside and approximately 1,320 feet east of the High Rise Bridge (Personal communication, VDOT/Preston Sudduth, January 6, 2014). Due to their relative distance from the eastern and western termini of the High Rise Bridge, these power lines are unlikely to be impacted by High Rise Bridge replacement or maintenance options.

4.0 VESSEL TRAFFIC

4.1 Historic Vessel Traffic

VDOT maintains historic bridge logs documenting openings of the High Rise Bridge for vessel passage. These logs are included as Volume II of the Navigational *Evaluation Technical Memorandum*.

4.2 Existing Vessel Traffic

As the segment of the AICW providing the link between the Albemarle and Chesapeake Canal and the Hampton Roads Harbor, the majority of port facilities in Chesapeake are located along the Southern Branch of the Elizabeth River. Land use surrounding the Southern Branch of the Elizabeth River is guided by Chesapeake's comprehensive plan, *Moving Forward-Chesapeake 2035 (2035 Comprehensive Plan Update)*. Within the *2035 Comprehensive Plan Update*, the area south of the High Rise Bridge is zoned for Industrial/Logistics uses east of the River and Low-Density Residential as well as Suburban Mixed Use to the west. Pockets of conservation areas exist south of the High Rise Bridge in the *2035 Comprehensive Plan Update* as well, both east and west of the Southern Branch of the Elizabeth River (Chesapeake Planning Department, 2013).

In an effort to identify the needs of navigation for existing vessel traffic along the Southern Branch of the Elizabeth River, VDOT initiated surveying efforts of industries adjacent to the river. These efforts are described in greater detail below.

4.2.1 Methodology

To comply with the USCG's White Paper Version 1.1, every effort must be made to involve members of the navigational community and other interested or affected parties early in the consideration of navigational needs. During initial discussions about the study, the USCG stated that only vessels that currently require an opening would need to be documented in this *Navigational Evaluation Technical Memorandum*. In an effort to identify vessels that required an opening of the High Rise Bridge, VDOT initiated surveying efforts of industries adjacent to the river, identified through a preliminary review of GIS mapping and parcel ownership data. In total, 34 vessel owners were contacted as part of this survey.

Initial surveying efforts included attempts to reach each business by phone. Follow-up e-mails were sent to confirm that each conversation had been correctly documented. Those businesses that could not be reached by phone were contacted via e-mail and invited to respond. Additionally, a USCG Preliminary Public Notice (PPN) was mailed to each business that had been identified at the time of the mailing in order to solicit comments. Copies of the PPN are included in *Appendix A: USCG Preliminary Public Notice*.

In response to VDOT inquiries and issuance of the USCG PPN, the Chesapeake City Council provided a resolution in January 2014 in support of replacing the High Rise Bridge with a fixed structure at 95-feet. A signed copy of this resolution can be found in *Appendix B: USCG Preliminary Public Notice Comments*.

As part of the NEPA process, a Citizen Information Meeting for the Interstate 64 / High Rise Bridge Corridor Study was held in Chesapeake on September 18, 2013. Comment forms were made available to interested parties both at the meeting and online at the project website and included a question pertaining to the height of any vessels owned or operated by these parties along the Southern Branch of the Elizabeth

River. FHWA and VDOT used these commenting tools to solicit input on vessels requiring an opening of the High Rise Bridge (*Appendix C: Citizen Information Meeting Public Comment Sheets*).

In addition to the surveys and comment forms, at USCG request, VDOT maintained video monitoring of all openings at the High Rise Bridge from August 24, 2013 to November 29, 2013. The purpose of this work was to photo document ship movements through the bridge and to ensure all vessels requiring an opening were included in the surveying efforts and study results. The timeframe for this study was selected to ensure that any seasonal movement of tall sailboats along the AICW was captured. All businesses identified through video monitoring efforts were surveyed through the same means described above. VDOT's video logs will be made available to the USCG as Volume III of this *Navigational Evaluation Technical Memorandum*.

The identified commercial users were surveyed for information regarding the current and projected vertical clearances their vessels require, as well as current and projected frequency of vessel trips necessary beneath the High Rise Bridge, to meet industrial and commercial needs. Businesses surveyed are identified in **Figure 3** and listed in **Table 1**.

4.2.2 Results

Over the three month period, a total of ten (10) openings of the High Rise Bridge were recorded to allow for the passage of vessels requiring greater than the 65-foot vertical clearance offered by the closed bridge. In each case, the vessel requiring an opening of the High Rise Bridge was either a barge mounted crane or dredge pushed by a boat that would not otherwise require an opening of the bridge. A portion of these barge mounted crane passages can be attributed to the significant amount of ongoing tunnel and bridge construction currently underway in the Hampton Roads region, such as the Downtown Tunnel/Midtown Tunnel/MLK Extension project. Four (4) vessel owners, including Crofton Industries, McLean Contracting, Norfolk Dredging Company, and Tidewater Skanska were identified through VDOT's video collection efforts, and all four were included in surveying efforts as indicated on **Table 1**.

Figure 3 Commercial and Industrial Properties Surveyed

Interstate 64 / High Rise Bridge Corridor Study
Environmental Assessment
City of Chesapeake



- Parcel
- 164/High Rise Study Area
- City Boundary
- Water Bodies
- Interstate
- US Highway
- State Highway
- County or Local Road
- Railroad

Mapping Source: VDOT, City of Chesapeake, City of Portsmouth, City of Norfolk

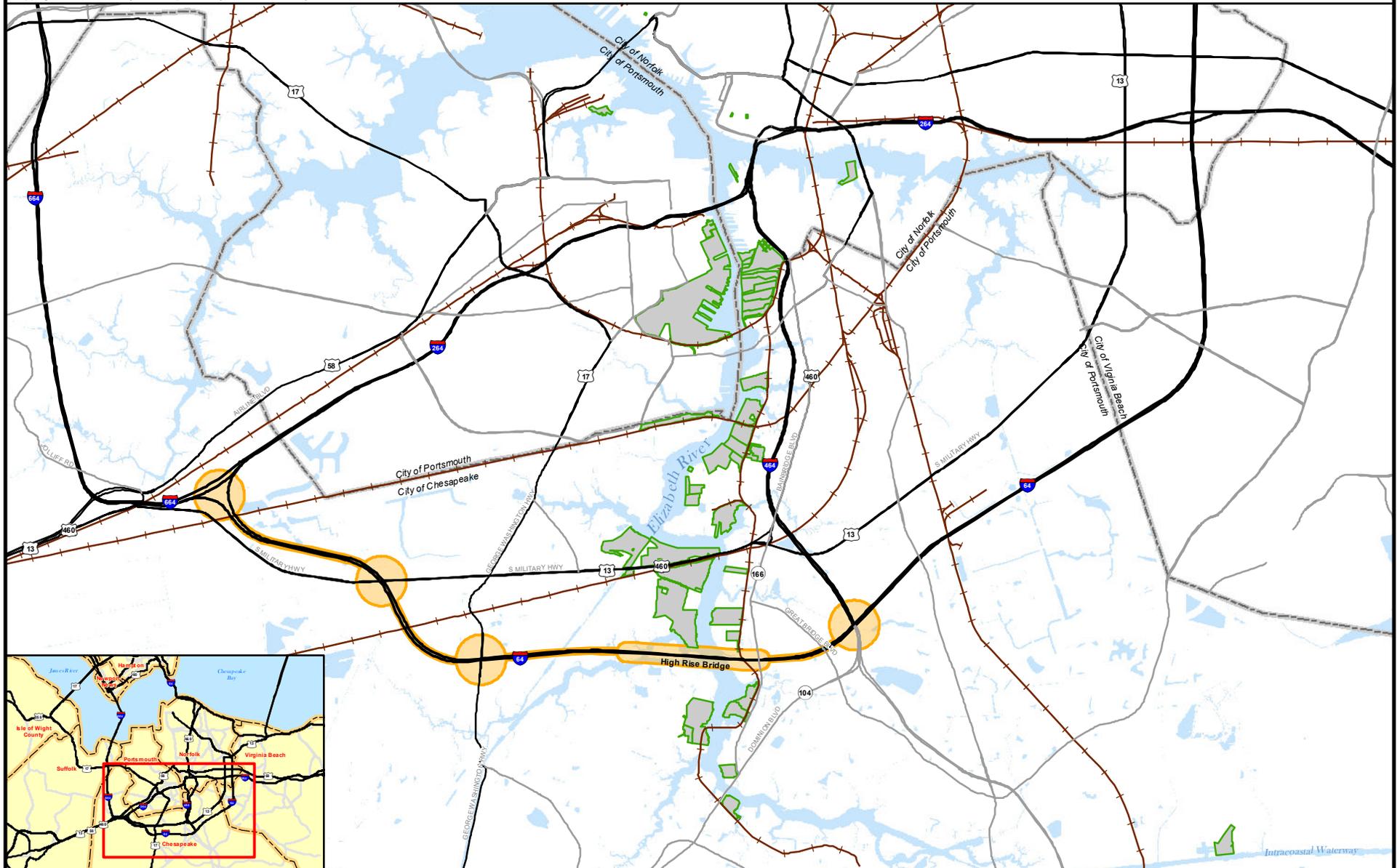


Table 1: Identified Commercial Users Surveyed

| Businesses Surveyed | Initial Date of Contact | Response Received |
|---|--------------------------------|--------------------------|
| Allied Concrete Products | 10/17/2013 | 11/06/2013 |
| Amerada Hess Corporation (Hess Oil) | 10/03/2013 | 10/17/2013 |
| Arc Terminals Holdings LLC | 10/03/2013 | 10/03/2013 |
| Atlantic Energy, Inc. | 10/03/2013 | 10/08/2013 |
| Capes Shipping Agencies | 10/21/2013 | N/A |
| ChemRes | 12/16/2013 | N/A |
| Concrete Precast Systems | 10/21/2013 | 10/21/2013 |
| Crofton Industries | 11/25/2013 | 11/26/2013 |
| Dominion Chesapeake Energy Center (CEC) Coal Terminal | 10/17/2013 | 10/25/2013 |
| Enviva Port of Chesapeake LLC | 10/03/2013 | 10/03/2013 |
| Higgerson-Buchanan, Inc. | 10/03/2013 | 10/03/2013 |
| IMTT (International-Matex Tank Terminals) | 10/17/2013 | 10/17/2013 |
| Inchcape Shipping Services, Inc. | 10/22/2013 | 10/25/2013 |
| Kerneos, Inc. | 10/03/2013 | N/A |
| Kinder Morgan Elizabeth River Terminals, Inc. | 10/07/2013 | 10/07/2013 |
| Marine Oil Service, Inc. | 10/03/2013 | 10/03/2013 |
| McLean Contracting | 10/03/2013 | 10/03/2013 |
| Norfolk Dredging Company | 01/06/2014 | 01/06/2014 |
| Norfolk Naval Shipyard, Portsmouth | 10/04/2013 | 10/16/2013 |
| Ocean Marine Yacht Center, Ocean Marine LLC | 10/03/2013 | 10/03/2013 |
| Oceaneering International, Inc. | 10/03/2013 | 10/03/2013 |
| PCL Civil Constructors, Inc. | 10/07/2013 | 10/07/2013 |
| Peck Marine Terminals | 10/03/2013 | 10/04/2013 |
| Perdue Farms, Inc. | 11/05/2013 | 11/05/2013 |
| Precon Marine, Inc. | 10/22/2013 | 11/04/2013 |
| Roanoke Cement | 10/03/2013 | 10/03/2013 |
| Sims Metal Management | 10/03/2013 | 10/25/2013 |
| T. Parker Host | 10/21/2013 | 10/28/2013 |
| Tidewater Skanska | 10/03/2013 | 10/04/2013 |
| Top Rack Marina, Chesapeake Marina LLC | 10/03/2013 | 10/03/2013 |
| TransMontaigne Terminals, Inc. | 10/03/2013 | 10/03/2013 |
| Tri-Port Terminals, Inc. | 10/03/2013 | 10/03/2013 |
| United States Gypsum Company | 10/03/2013 | 10/07/2013 |

| Businesses Surveyed | Initial Date of Contact | Response Received |
|--------------------------|-------------------------|-------------------|
| Vulcan Materials Company | 10/03/2013 | 10/03/2013 |

Shaded cells indicate businesses who responded as currently requiring openings of the High Rise Bridge to meet commercial or industrial needs.

Of the 34 companies surveyed, the majority stated they either do not require vessel use to meet current or prospective commercial and industrial needs; do not send vessels south of the High Rise Bridge; or that the High Rise Bridge’s existing closed vertical clearance of 65 feet meets their needs of navigation for current and prospective commercial and industrial needs. Four (4) responded as owning a vessel that has required openings of the High Rise Bridge in the past. These include the same four (4) companies that were dually identified through video collection efforts: Crofton Industries, McLean Contracting, Norfolk Dredging Company, and Tidewater Skanska. Additional survey respondents acknowledged having rented barge mounted cranes from these companies in the past for construction purposes, at which times openings of the High Rise Bridge were required. These responses were documented on USCG Waterway User Questionnaires and are included in *Appendix D: Survey Respondent Spreadsheet and Completed USCG Waterway User Questionnaires* of this report. No container ships or users of recreational vessels requiring openings of the High Rise Bridge were identified through survey of marinas, video monitoring, or public notice.

According to responses submitted in the USCG Waterway User Questionnaire, McLean Contracting estimates that it requires approximately one one-way passage underneath the High Rise Bridge in a typical month. McLean Contracting’s tallest barges, the Centennial and the Baltimore, both measure 91.5 feet in height; their Cape Fear stands at 75 feet and the Annapolis at 64.5 feet. Tidewater Skanska estimates that it requires four to six one-way passages beneath the High Rise Bridge in a typical month. Tidewater Skanska requires openings for its cranes Rig 15, at 66 feet in height, Rig 18 at 70 feet in height and the Samson at 95 feet in height. Norfolk Dredging Company reported that their tallest vessel navigating the waterway has a 90-foot air draft but stated their scheduled trips upriver vary depending on workload. Crofton Industries reported requiring approximately three to four passages beneath the High Rise Bridge each year. The tallest crane that Crofton Industries currently tows through the High Rise Bridge is 75 feet tall at its highest fixed point.

As a result of VDOT’s surveying efforts and initial study findings, the USCG issued a 30-day Preliminary Public Notice (PPN) on November 13, 2013 to solicit additional input on this Navigational Study. A copy of the PPN was mailed to each of the vessel survey respondents who had been identified at the time of the mailings. Additionally, the PPN was posted online and distributed independently by the USCG. The PPN acknowledged a proposed vertical clearance of at least 95-feet above MHW while maintaining the existing 125-foot horizontal clearance, and requested that the USCG be provided with navigational information of vessels presently owned and operated on the Southern Branch of the Elizabeth River as they relate to the proposed vertical and horizontal clearances. The initial comment period ended December 13, 2013. However, to accommodate interested stakeholders requesting additional time, USCG issued an extension to the comment period for the PPN on December 16, 2013. The extension of the PPN lengthened the comment period by 30-days to January 17, 2014. Copies of both the initial and extended PPN are included in *Appendix A: USCG Preliminary Public Notice*.

Four (4) public comments were submitted to the USCG in response to the second issuance of the PPN. Precon Marine Inc. stated in its response that it does not foresee an impact to current or future marine

operations should the High Rise Bridge be rebuilt as a fixed structure with a vertical clearance of 95 feet. T. Parker Host responded with a recommendation that the High Rise Bridge match the maximum vertical clearance of the Gilmerton Bridge at 135-feet. However, T. Parker Host's mooring locations, listed on the response form as the terminal at Perdue and the Dominion CEC Coal Terminal are both located upriver of the High Rise Bridge. A third comment was submitted on behalf of the Chesapeake City Council, and included Chesapeake's approved resolution in favor of replacing the High Rise Bridge with a 95-foot fixed structure. The resolution is supported by resolutions passed by the Hampton Roads Chamber of Commerce and the Chesapeake Port Authority. A fourth comment was submitted by the Virginia Maritime Association (VMA), expressing the need for replacement of the High Rise Bridge with a fixed structure of 135-feet or greater, identifying the Southern Branch of the Elizabeth River as a critical link in the nation's supply chain and citing the need to provide for future development that would support imports and exports of the state. Copies of the USCG PPN comment responses can be found in **Appendix B: USCG Preliminary Public Notice Comments**.

Following the completion of the PPN comment period, USCG held a meeting with VMA and VDOT to discuss VMA's comments. During the meeting, VMA members and staff highlighted potential business growth and technological advances that could bring taller vessels south of the existing High Rise Bridge. At this time, these developments are considered speculative. Programmed improvements at Craney Island (see **Section 5.2**) along with lightering opportunities upriver from the existing High Rise Bridge, would mitigate any impacts a fixed structure less than 135-feet may impose on future freight movement.

4.3 Projected Future Traffic

According to the Elizabeth River Project, the land that constitutes the Elizabeth River watershed is currently 90% developed, leaving only 10% of land undeveloped for potential future economic development in the adjacent vicinity of the waterway (Virginia Natural Resources Leadership Institute, 2013). Land use north of the High Rise Bridge, as identified within the *2035 Comprehensive Plan Update*, is designated for Light Industrial/Logistic uses both east and west of the river, except in the location of the Norfolk Naval Shipyard, which is zoned for Institution/Government use. In this classification, logistics generally refers to heavier operations and transport such as rail and/or water-based shipping, often associated with the ports of Hampton Roads. South of the High Rise Bridge, land east of the river is designated for Industrial/Logistic use and land west of the river is zoned for a mix of Low-Density Residential and Suburban Mixed Use. Conservation-designated areas speckle land both north and south of the High Rise Bridge adjacent to the River (Chesapeake Planning Department, 2013).

Vessel survey respondent Tri-Port Terminals indicated both verbally and on the USCG Waterway User Questionnaire that current fleet characteristics and operating procedures do not necessitate openings of the High Rise Bridge, but acknowledged the potential of acquiring property south of the High Rise Bridge in the future. A contact at Tri-Port Terminals stated that the existing clearances of the Gilmerton and Jordan Bridges occasionally limit vessels Tri-Port Terminals can receive at their port for business. Tri-Port terminals indicated that restrictions down river of the 135-foot limits of the Jordan and Gilmerton bridges could change their interest in acquiring property south of the High Rise Bridge.

Additionally, vessel survey respondent T. Parker Host stated that while their company's current business activities with existing terminals do not require openings of the High Rise Bridge, they foresee future regional industrial development expanding primarily south of the High Rise Bridge due to the scarce availability of waterfront property elsewhere. So as not to impede this potential future development, T.

Parker Host suggested a vertical clearance of 135 feet for the High Rise Bridge, to match the Gilmerton Bridge. A representative from T. Parker Host recommended that VDOT contact USACE to discuss the agency's ongoing studies for deepening the channel along the Southern Branch of the Elizabeth River. VDOT made contact with the USACE project manager and confirmed that USACE is studying the possibility of dredging the channel approaching the High Rise Bridge to achieve its authorized 45-foot depth. The initial USACE studies have assumed that such an action would not result in providing access to taller vessels along the channel but allowing existing vessels to carry heavier loads (Personal communication, VDOT/Robert Pretlow, November 14, 2013). Therefore, it is assumed that any dredging action taken by USACE near the High Rise Bridge would not introduce vessels that would exceed the heights of those documented in this study. Additionally, given the variety in types of dredge vessels available, a 95-foot fixed structure would not preclude future dredge action along the Southern Branch of the Elizabeth River.

As discussed in **Section 4.2.2**, potential business growth and technological advances could bring taller vessels south of the existing High Rise Bridge, but at this time, these developments are considered speculative. Programmed improvements and lightering opportunities upriver from the existing High Rise Bridge would mitigate any impacts a fixed structure less than 135 feet may impose on future freight movement. On January 14, 2014 the Chesapeake City Council passed a resolution identifying the replacement of the High Rise Bridge with a fixed structure at 95 feet as one that would enhance economic development at the Port of Virginia. The resolution indicated that as part of Chesapeake's *2035 Comprehensive Plan Update*, a number of meetings were held relative to future land use along the portion of the Southern Branch of the Elizabeth River adjacent to the High Rise Bridge. Based on feedback received while updating the *2026 Comprehensive Plan*, Chesapeake is not aware of any demands for navigational clearances that would exceed 95 feet. A signed copy of the resolution can be found in *Appendix B: USCG Preliminary Public Notice Comments*.

5.0 COMMERCE AND ECONOMICS

5.1 Existing Conditions

As set forth in Chesapeake's *2050 Master Transportation Plan: Comprehensive Plan Update*, adopted March 9, 2005, the Southern Branch of the Elizabeth River to the north of the Dominion Boulevard Bridge is a traditionally heavy industrial waterfront corridor with easy access to the Port of Hampton Roads and the Chesapeake Bay. This segment of the AICW provides a vital connection between the Albemarle Sound and points south, and to the Chesapeake Bay and points north.

The majority of companies along the Southern Branch of the Elizabeth River handle construction materials and other bulk commodities that are transported in parcel-type consignments or small individual consignments. As a result, the bulk fleet Handysize or Handymax class vessels are the most common method of cargo transport along the corridor. The bulk carrier fleet is divided into four classes by size as indicated in **Table 2**. The largest vessel by class, the Post-Panamax / Capesize Bulk Carrier, is restricted to deep-water ports due to vessel draft limitations. Additionally, there are no cruise ship terminals or Post-Panamax ports south of the High Rise Bridge and north of the Dominion Boulevard Bridge.

Table 2: Average Bulk Carrier Fleet Dimensions by Class

| Vessel Class | DWT | Length (feet) | Draft (feet) | Beam (feet) |
|---------------------------|---------------|---------------|--------------|-------------|
| Handysize | >29,999 | 505 | 31 | 78 |
| Handymax | 35,000-59,999 | 618 | 38 | 100 |
| Panamax | 60,00- 79,999 | 738 | 44 | 106 |
| Post-Panamax/ Capesize | 80,000< | 887 | 54 | 140 |

Source: Clarkson Research, *The Bulk Carrier Register 2013*.

5.2 Future Conditions

As indicated within the *2035 Comprehensive Plan Update*, Chesapeake will continue to preserve and promote its waterfront amenities which contribute to the industrial character of the area and facilitate Chesapeake’s commerce. Stated within the *2035 Comprehensive Plan Update* is the goal of preserving key portions of waterfront areas in their natural states, while developing other portions for compatible commercial and recreational development (Chesapeake Planning Department, 2013). In an effort to meet this goal, the Virginia Port Authority (VPA) and the USACE are partnering to revitalize Craney Island through the Craney Island Eastward Expansion (CIEE) project, located in Portsmouth, Virginia, approximately 13 miles north of the High Rise Bridge at the confluence of the Elizabeth and James Rivers. The project is intended to extend the life of Craney Island as a dredged material placement area while simultaneously providing land for the construction of a new marine terminal. Upon completion, the CIEE will be able to accept dredged material beyond its original capacity, ensuring that river channels within Hampton Roads remain passable and offer a safe navigation system for maritime vessels. Additionally, the CIEE will increase the Port of Virginia’s cargo-handling capacity by creating land on which to construct a new marine terminal. The CIEE is expected to prepare the Hampton Roads area for an increase in Post-Panamax cargo ship traffic, support international trade initiatives and the country’s economic and global competitiveness, and increase imports and exports (Port of Virginia, 2014).

The assessment of the current channel dimensions in *Section 3.1 Channel Geometry* indicate that vessel traffic along the portion of the Southern Branch of the Elizabeth River adjacent to the High Rise Bridge is limited to Handysize or small Handymax vessels for current authorized channel dimensions, most restricted by draft. As indicated within the *2035 Comprehensive Plan Update*, Chesapeake acknowledges the goal of continuing to partner with the USACE and the United States Navy to explore deepening the shipping channel of the Southern Branch of the Elizabeth River (Chesapeake Planning Department, 2013), which would allow existing vessel fleets to carry heavier loads at a lower risk.

Surveying efforts did not identify vessels, current or future, which would be precluded from traveling beneath a fixed structure at 95-feet, nor were any formally documented plans identified that would be hindered by such a bridge. Thus, a 95-foot fixed structure is not anticipated to have an adverse effect on commerce and economics as they relate to vessel navigation along the Southern Branch of the Elizabeth River.

On January 14, 2014 the Chesapeake City Council passed a resolution identifying the replacement of the High Rise Bridge with a fixed structure at 95-feet as one that would enhance economic development at

the Port of Virginia. In a letter of support submitted to the members of the Chesapeake City Council, Chairman David Ropp, of the Chesapeake Division of the Hampton Roads Chamber of Commerce identified replacement of the High Rise Bridge with a 95-foot fixed span bridge as a “crucial” need and one that is supported by the business community of Chesapeake and the greater region. A signed copy of the resolution and associated letter from Chairman David Ropp are included in *Appendix B: USCG Preliminary Public Notice Comments*.

6.0 DESCRIPTION OF PROPOSED BRIDGE

6.1 Purpose and Need of the Proposed Interstate 64 / High Rise Bridge Corridor Study

As described in further detail in *Chapter 1.0 Purpose and Need* of the associated EA for the Proposed Interstate 64 / High Rise Bridge Corridor Study, the purpose for the project includes the needs to:

- **Improve Capacity:** Highway congestion and traffic volumes are expressed in terms of Level of Service (LOS), which is a qualitative measure of operational conditions within a traffic stream, based on criteria such as speed and travel time, freedom to maneuver, traffic interruptions, comfort, and convenience. An analysis of existing level of service (LOS) and average daily traffic (ADT) along roadway segments within the study area reveals high levels of traffic and inhibited travel, indicative of severe congestion. The current LOS within the study area is D or worse for the I-64 freeway facility based on peak hour volumes, and therefore ranks below the American Association of State Highway and Transportation Official’s (AASHTO) guidance standard value of LOS C for this type of roadway facility during existing peak hour volumes. In addition, upgrades to the I-64 roadway facility would provide for system and lane continuity and would support intermodal connectivity, connecting not only the workplace with home, but also providing opportunities to connect with various transportation modes in the region including Park and Ride lots, high-occupancy vehicle (HOV)/ride sharing lanes, local and regional bus systems, freight rail, and airports;
- **Enhance Corridor Safety:** The most recent average annual crash rates on I-64 east exceed regional average rates in certain areas of the study area. The capacity and lane continuity conditions described above contribute to safety conditions within the study area, specifically along the I-64 corridor as it approaches the High Rise Bridge;
- **Improve Emergency Evacuation:** According to FHWA’s Emergency Transportation Operations (ETO), emergency evacuations occur on a daily basis throughout the US. Because the study area is located within a coastal region, emergency evacuation plans are critical to ensuring public safety particularly as it relates to potential hurricanes. In the event of a major storm occurrence, I-64 has been identified in the *VDOT Hurricane Evacuation Guide* as an evacuation route for Virginia Beach, Chesapeake, Suffolk, Norfolk, and Portsmouth (VDOT, 2013b). The existing population of Hampton Roads is expected to increase significantly by the 2040 design year, resulting in higher volumes of evacuees utilizing the designated evacuation routes during hurricanes and other emergency events. Because I-64 is the only interstate providing access to and from Hampton Roads, there is a need to ensure it continues to provide adequate evacuation opportunities for a growing population;

- **High Rise Bridge Improvements:** The High Rise Bridge was originally constructed in 1969. Bridges of that era were designed for an approximate 50 years of life. Modern technologies and methods have allowed the service life of these bridges to be extended up to 75 years. Since its construction, the High Rise Bridge has received routine maintenance and repairs in order to maintain a safe structure and achieve an extended service life. These maintenance and repair activities add lengthy travel delays to a facility that currently experiences moderate to severe LOS when traffic is moving without incident. In addition to delays and detours related to maintenance activities, the High Rise Bridge opens approximately 25 times per year. Openings can result in interstate traffic being halted for an average of 17 minutes to allow for the passage of a single vessel.

6.2 Suggested Navigational Clearance

A fixed bridge with a 95-foot vertical clearance at mean high tide is adequate to meet the reasonable needs of navigation along the Southern Branch of the Elizabeth River. This finding is the result of surveying efforts of commercial users of the Southern Branch of the Elizabeth River, existing and foreseeable limiting factors of the channel both north and south of the High Rise Bridge, and initial project scoping and screening efforts, including public and agency involvement. Surveying efforts did not identify any vessels that would be precluded from traveling beneath a fixed bridge at 95 feet. A bridge of this height is feasible from an economic and engineering standpoint, would meet the vertical clearance needs of navigation for users of the Southern Branch of the Elizabeth River, and allow the I-64 High Rise Bridge to continue to serve as a primary east-west interstate in Hampton Roads.

6.3 Other Bridge Alternatives Considered

As noted in **Section 4.2.2**, VMA responded to the USCG PPN with a request that any improvements made to the existing High Rise Bridge accommodate a vertical clearance of at least 135-feet. This request is based on speculation about future economic development downriver of the existing High Rise Bridge and advances in marine technology. Any impacts imposed by a 95-foot fixed structure could be mitigated through the use of programmed expansion of Craney Island or lightering activities upriver of the bridge. However, for the purposes of the NEPA analysis, it is recommended that 95-foot and 135-foot fixed structures be considered.

7.0 CONCLUSION

In order to comply with the USCG’s White Paper, Version 1.1, entitled “Reasonable Needs of Navigation”, with the input and support of the USCG, and in compliance with the requirements of the USCG Bridge Permit Application , analyses were conducted to examine the current and authorized channel of the Southern Branch of the Elizabeth River, the types of vessels that travel or are expected to travel the river, the principal methods of handling traffic within the river, the navigational properties of existing structures crossing the river and the effects of the proposed project on navigation. After full consideration of the above, it can be concluded that a fixed structure of 95 feet at mean high tide meets both current and future reasonable needs of navigation for vessel users while simultaneously allowing I-64 to continue to serve as a primary east-west interstate in Hampton Roads. A bridge of this height is feasible from an economic and engineering standpoint and is unlikely to significantly impact current or future vessel navigation along the Southern Branch of the Elizabeth River. For the purposes of the

forthcoming NEPA analysis, however, it is recommended that a fixed structure of 135 feet at mean high tide be considered as well.

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Appendix A: USCG Preliminary Public Notice

U.S. Department of
Homeland Security

United States
Coast Guard



Commander
United States Coast Guard
Fifth Coast Guard District

431 Crawford Street
Portsmouth, Va. 23704-5004
Staff Symbol: (dpb)
Phone: (757) 398-6227
Fax: (757) 398-6334
Email: Kashanda.l.booker@uscg.mil

16591
13 NOV 13

AVAILABILITY OF PRELIMINARY PUBLIC NOTICE

The purpose of this notice is to notify mariners, adjacent property owners, and government agencies that the Federal Highway Administration (FHWA) and the Virginia Department of Transportation (VDOT) propose plans for a modification to a bridge constructed across navigable waters of the United States. FHWA and VDOT are developing alternative solutions to improve transportation conditions along Interstate 64 (I-64) between the Interstate 464 interchange and the Interstate 264/664 interchange at Bowers Hill. This corridor includes the I-64 (High Rise) Bridge, at AICW mile 7.1, across the Southern Branch of the Elizabeth River, in Chesapeake, VA. The alternative analysis would include fixed bridge options proposing a vertical clearance of at least 95 feet above mean high water, while maintaining the existing 125-foot horizontal clearance. These plans will not affect the safe, efficient movement of recreational or commercial navigation nor will it create an obstruction to the free navigation of the navigable waters. It is requested that the Coast Guard be provided with navigational information such as the sizes and types of vessels presently owned and operated on the Southern Branch of the Elizabeth River along the AICW as they relate to the proposed vertical and horizontal clearances. Comments on this proposal should be forwarded to the above address no later than **December 13, 2013**. A copy of **Preliminary Public Notice 5-1319** which describes the proposal in detail can be obtained by calling (757) 398-6227 or by viewing at **<http://www.navcen.uscg.gov/?pageName=pnBridges>**.

A handwritten signature in blue ink that reads "Waverly W. Gregory, Jr.".

WAVERLY W. GREGORY, JR.
Bridge Program Manager
By direction of the Commander
Fifth Coast Guard District

U.S. Department of
Homeland Security

United States
Coast Guard



Commander
United States Coast Guard
Fifth Coast Guard District

431 Crawford Street
Portsmouth, Va. 23704-5004
Staff Symbol: (dpb)
Phone: (757) 398-6227
Fax: (757) 398-6334
Email: Kashanda.L.Booker@uscg.mil

16591A
13 NOV 13

PRELIMINARY PUBLIC NOTICE 5-1319

TO WHOM IT MAY CONCERN:

The purpose of this notice is to notify mariners, adjacent property owners, and government agencies that the Federal Highway Administration (FHWA) and the Virginia Department of Transportation (VDOT) propose plans for a modification to a bridge constructed across navigable waters of the United States.

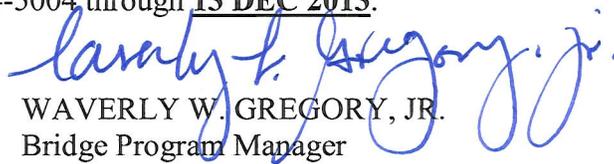
WATERWAY AND LOCATION: Across the Southern Branch of the Elizabeth River, at Atlantic Intracoastal Waterway (AICW) mile 7.1, in the City of Chesapeake, VA.

CHARACTER OF WORK: FHWA and VDOT are developing alternative solutions to improve transportation conditions along Interstate 64 (I-64) between the Interstate 464 interchange and the Interstate 264/664 interchange at Bowers Hill. This corridor includes the I-64 (High Rise) Bridge. The alternative analysis would include fixed bridge options proposing a vertical clearance of at least 95 feet above mean high water, while maintaining the existing 125-foot horizontal clearance. These plans will not affect the safe, efficient movement of recreational or commercial navigation nor will it create an obstruction to the free navigation of the navigable waters.

It is requested that the Coast Guard be provided with navigational information such as the sizes and types of vessels presently owned and operated on the Southern Branch of the Elizabeth River along the AICW as they relate to the proposed vertical and horizontal clearances. Please submit the attached form in response to this preliminary public notice.

SOLICITATION OF COMMENTS:

It is further requested that mariners and adjacent property owners express their views from a navigational standpoint, in writing, on the proposed project giving sufficient detail to establish a clear understanding of their reasons for support of or opposition to this project. Comments will be received for the record at the office of Commander (dpb), Fifth Coast Guard District, 431 Crawford Street, Portsmouth, VA 23704-5004 through **13 DEC 2013**.


WAVERLY W. GREGORY, JR.
Bridge Program Manager
By direction of the Commander
Fifth Coast Guard District

I-64 (High Rise) Bridge
 Over the Southern Branch of the Elizabeth River
Preliminary Public Notice
 Response Form

It is requested that anyone having an interest in this proposed project, from the standpoint of navigation, submit vessel information, comments, and recommendations on this form to the Office of Commander (dpb), Fifth Coast Guard District, 431 Crawford Street, Portsmouth, VA 23704-5004 by **13 DEC 2013**.

| Vessel Information | Please provide all requested information: |
|---|---|
| Vessel Type | |
| <i>Use – Commercial or Recreational</i> | |
| Vessel Height | |
| Draft | |
| Length | |
| Beam | |
| Tonnage | |
| Mooring Location | |

Name (Optional): _____

Address (Optional): _____

Phone (Optional): _____

Comments and Recommendations: _____

U.S. Department of
Homeland Security

United States
Coast Guard



Commander
United States Coast Guard
Fifth Coast Guard District

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16591
16 DEC 13

AVAILABILITY OF PRELIMINARY PUBLIC NOTICE

The Coast Guard is extending the period for public comment concerning the proposed plans by the Federal Highway Administration (FHWA) and the Virginia Department of Transportation (VDOT) for modification to a bridge constructed across navigable waters of the United States. Several port partners have expressed interest on making comments and are in the process of collecting information to support their positions. The purpose of extending this preliminary public notice will provide an opportunity for adjacent property owners, area residents and businesses to make additional comments. FHWA and VDOT are developing alternative solutions to improve transportation conditions along Interstate 64 (I-64) between the Interstate 464 interchange and the Interstate 264/664 interchange at Bowers Hill. This corridor includes the I-64 (High Rise) Bridge, at AICW mile 7.1, across the Southern Branch of the Elizabeth River, in Chesapeake, VA. The alternative analysis would include fixed bridge options proposing a vertical clearance of at least 95 feet above mean high water, while maintaining the existing 125-foot horizontal clearance. These plans will not affect the safe, efficient movement of recreational or commercial navigation nor will it create an obstruction to the free navigation of the navigable waters. It is requested that the Coast Guard be provided with navigational information such as the sizes and types of vessels presently owned and operated on the Southern Branch of the Elizabeth River along the AICW as they relate to the proposed vertical and horizontal clearances. A survey is available at the link below. Comments on this proposal should be forwarded to the above address no later than **January 17, 2014**. A copy of **Preliminary Public Notice 5-1319 (a)** which describes the proposal in detail can be obtained by calling (757) 398-6227 or by viewing at <http://www.navcen.uscg.gov/?pageName=pnBridges>.

A handwritten signature in blue ink that reads "Waverly W. Gregory, Jr.".

WAVERLY W. GREGORY, JR.
Bridge Program Manager
By direction of the Commander
Fifth Coast Guard District

U.S. Department of
Homeland Security

United States
Coast Guard



Commander
United States Coast Guard
Fifth Coast Guard District

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16591A
16 DEC 2013

PRELIMINARY PUBLIC NOTICE 5-1319(a)

TO WHOM IT MAY CONCERN:

The Coast Guard is extending the period for public comment concerning the proposed plans by the Federal Highway Administration (FHWA) and the Virginia Department of Transportation (VDOT) for modification to a bridge constructed across navigable waters of the United States. Several port partners have expressed interest on making comments and are in the process of collecting information to support their positions. The purpose of extending this preliminary public notice will provide an opportunity for adjacent property owners, area residents and businesses to make additional comments.

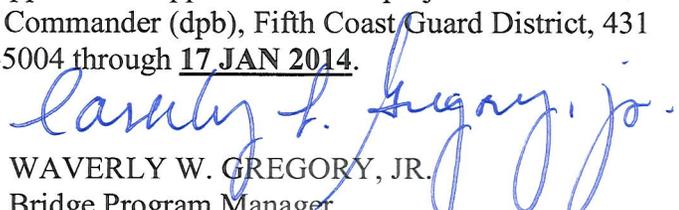
WATERWAY AND LOCATION: Across the Southern Branch of the Elizabeth River, at Atlantic Intracoastal Waterway (AICW) mile 7.1, in the City of Chesapeake, VA.

CHARACTER OF WORK: FHWA and VDOT are developing alternative solutions to improve transportation conditions along Interstate 64 (I-64) between the Interstate 464 interchange and the Interstate 264/664 interchange at Bowers Hill. This corridor includes the I-64 (High Rise) Bridge. The alternative analysis would include fixed bridge options proposing a vertical clearance of at least 95 feet above mean high water, while maintaining the existing 125-foot horizontal clearance. These plans will not affect the safe, efficient movement of recreational or commercial navigation nor will it create an obstruction to the free navigation of the navigable waters.

It is requested that the Coast Guard be provided with navigational information such as the sizes and types of vessels presently owned and operated on the Southern Branch of the Elizabeth River along the AICW as they relate to the proposed vertical and horizontal clearances. Please submit the attached form in response to this preliminary public notice.

SOLICITATION OF COMMENTS:

It is further requested that mariners and adjacent property owners express their views from a navigational standpoint, in writing, on the proposed project giving sufficient detail to establish a clear understanding of their reasons for support of or opposition to this project. Comments will be received for the record at the office of Commander (dpb), Fifth Coast Guard District, 431 Crawford Street, Portsmouth, VA 23704-5004 through **17 JAN 2014**.


WAVERLY W. GREGORY, JR.
Bridge Program Manager
By direction of the Commander
Fifth Coast Guard District

I-64 (High Rise) Bridge
 Over the Southern Branch of the Elizabeth River
Preliminary Public Notice 1319(a)
 Response Form

It is requested that anyone having an interest in this proposed project, from the standpoint of navigation, submit vessel information, comments, and recommendations on this form to the Office of Commander (dpb), Fifth Coast Guard District, 431 Crawford Street, Portsmouth, VA 23704-5004 by **17 JAN 2014**.

| Vessel Information | Please provide all requested information: |
|---|---|
| Vessel Type | |
| <i>Use – Commercial or Recreational</i> | |
| Vessel Height | |
| Draft | |
| Length | |
| Beam | |
| Tonnage | |
| Mooring Location | |

Name (Optional): _____

Address (Optional): _____

Phone (Optional): _____

Comments and Recommendations: _____

Appendix B: USCG Preliminary Public Notice Comments

I-64 (High Rise) Bridge
 Over the Southern Branch of the Elizabeth River
Preliminary Public Notice 1319(a)
 Response Form

It is requested that anyone having an interest in this proposed project, from the standpoint of navigation, submit vessel information, comments, and recommendations on this form to the Office of Commander (dpb), Fifth Coast Guard District, 431 Crawford Street, Portsmouth, VA 23704-5004 by 17 JAN 2014.

| Vessel Information | Please provide all requested information: |
|----------------------------------|---|
| Vessel Type | Tugs, crewboats, Barges & Barges w/ Equipment |
| Use - Commercial or Recreational | Commercial |
| Vessel Height | Max 50' |
| Draft | Max 10' |
| Length | Max 65' |
| Beam | Max 32' |
| Tonnage | 132 |
| Mooring Location | Precon Marine Waterfront Yard |

Name (Optional): HARRY JOHNSON, Precon Marine, Inc

Address (Optional): 1401 Precon Drive Suite 102 Chesapeake VA 23320

Phone (Optional): (757) 449-8126

Comments and Recommendations: We currently do not foresee an impact to current or future marine operations should the I-64 "High Rise" Bridge be rebuilt to fixed bridge with a vertical clearance of 95'



I-64 (High Rise) Bridge
 Over the Southern Branch of the Elizabeth River
Preliminary Public Notice
 Response Form

It is requested that anyone having an interest in this proposed project, from the standpoint of navigation, submit vessel information, comments, and recommendations on this form to the Office of Commander (dpb), Fifth Coast Guard District, 431 Crawford Street, Portsmouth, VA 23704-5004 by **13 DEC 2013**.

| Vessel Information | Please provide all requested information: | | | |
|----------------------------------|---|--------|--------|--------|
| Vessel Type | Bulk | Bulk | Bulk | Bulk |
| Use – Commercial or Recreational | Comm | Comm | Comm | Comm |
| Vessel Height | 135 ft | 135 ft | 132 ft | 132 ft |
| Draft | 40 ft | 40 ft | 35 ft | 35 ft |
| Length | 715 ft | 640 ft | 643 ft | 574 ft |
| Beam | 105 ft | 105 ft | 95 ft | 95 ft |
| Tonnage | 69,999 | 61,448 | 33,373 | 38,760 |
| Mooring Location | Perdue | Perdue | CEC | CEC |

Name (Optional): Bobby Scott - T. Parker Host

Address (Optional): 500 Plume St, Norfolk, VA

Phone (Optional): 757-627-6286

Comments and Recommendations: _____

We recommend the High Rise Bridge to match the maximum verticle clearance of the Gilmerton Bridge at 135 feet.

RESOLUTION SUPPORTING THE IMPROVEMENT OF THE INTERSTATE 64 CORRIDOR FROM I-664/I-264 TO I-464, INCLUDING REPLACEMENT OF THE HIGH RISE BRIDGE.

WHEREAS, the Virginia Department of Transportation is currently conducting an Environmental Assessment for the Improvement of Interstate 64 from I-664/I-264 to I-464, including replacement of the High Rise Bridge; and

WHEREAS, the Chesapeake City Council has identified the improvement of this portion of I-64 as the City's highest priority Interstate System project for more than a decade; and

WHEREAS, the current traffic volume of 84,000 vehicles per day causes severe congestion along this corridor, particularly during morning and afternoon peak commuting times, delaying traffic, increasing air pollution, and slowing emergency response; and

WHEREAS, congestion is exacerbated by openings of the High Rise Bridge; and

WHEREAS, the High Rise Bridge carries 49% of all truck traffic crossing the Southern Branch of the Elizabeth River, compared to 27% at the Downtown Tunnel and 11% at the Midtown Tunnel; and

WHEREAS, the 2012 Hampton Roads Regional Freight Study indicates congestion in this corridor is the second highest source of truck delay in Hampton Roads; and

WHEREAS, the Hampton Roads Transportation Planning Organization's study titled "Preparing Corridors for Midtown Tunnel – Downtown Tunnel – MLK Project" indicates tolls at those facilities will potentially divert 35,000 additional vehicles per day to the High Rise Bridge; and

WHEREAS, as a non-tunnel route, I-64 and the High Rise Bridge are vital to military mobility, the movement of goods and services throughout the region, and hurricane evacuation for northeastern North Carolina and Southside Hampton Roads; and

WHEREAS, an improved I-64 corridor with a 95 foot fixed-span bridge would reduce delays, improve mobility, and support economic growth at the Port of Virginia and beyond; and

WHEREAS, by resolution adopted November 15, 1994, the Chesapeake City Council expressed opposition to construction of an 85 foot fixed-span bridge that was under consideration at that time; and

WHEREAS, the Virginia General Assembly, through House Bill 2313, established new revenues for transportation, a portion of which began to be deposited to a newly established Hampton Roads Transportation Fund on July 1, 2013; and

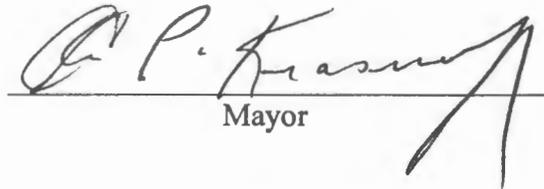
WHEREAS, the Hampton Roads Transportation Planning Organization adopted a resolution on October 17, 2013, supporting a regional package of projects, including I-64 Southside widening and replacement of the High Rise Bridge, to be funded, in whole or in part, with Hampton Roads Transportation Fund revenues.

NOW THEREFORE BE IT RESOLVED by the Council of the City of Chesapeake, Virginia, that it hereby supports the improvement of Interstate 64 from I-664/I-264 to I-464, including replacement of the High Rise Bridge with a 95 foot fixed-span bridge, and requests the Virginia Department of Transportation expeditiously advance this project.

BE IT FURTHER RESOLVED that a copy of this resolution be forwarded to the Office of the Commander, Fifth Coast Guard District, Portsmouth, Virginia, and to the appropriate officials in the Virginia Department of Transportation.

ADOPTED by the Council of the City of Chesapeake, Virginia, this 14th day of
January, 2014.

APPROVED:

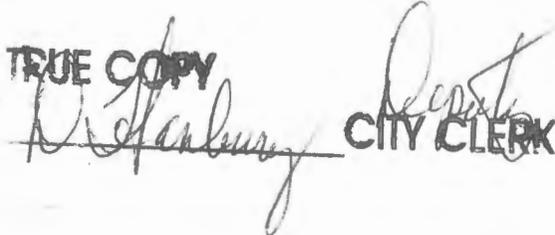


Mayor

ATTEST:



Clerk of the Council

TRUE COPY


CITY CLERK

RESOLUTION SUPPORTING THE IMPROVEMENT OF THE INTERSTATE 64 CORRIDOR FROM I-664/I-264 TO I-464, INCLUDING REPLACEMENT OF THE HIGH RISE BRIDGE.

WHEREAS, the Virginia Department of Transportation is currently conducting an Environmental Assessment for the Improvement of Interstate 64 from I-664/I-264 to I-464, including replacement of the High Rise Bridge; and

WHEREAS, the Chesapeake City Council has identified the improvement of this portion of I-64 as the City's highest priority Interstate System project for more than a decade; and

WHEREAS, the current traffic volume of 84,000 vehicles per day causes severe congestion along this corridor, particularly during morning and afternoon peak commuting times, delaying traffic, increasing air pollution, and slowing emergency response; and

WHEREAS, congestion is exacerbated by openings of the High Rise Bridge; and

WHEREAS, the High Rise Bridge carries 49% of all truck traffic crossing the Southern Branch of the Elizabeth River, compared to 27% at the Downtown Tunnel and 11% at the Midtown Tunnel; and

WHEREAS, the 2012 Hampton Roads Regional Freight Study indicates congestion in this corridor is the second highest source of truck delay in Hampton Roads; and

WHEREAS, the Hampton Roads Transportation Planning Organization's study titled "Preparing Corridors for Midtown Tunnel – Downtown Tunnel – MLK Project" indicates tolls at those facilities will potentially divert 35,000 additional vehicles per day to the High Rise Bridge; and

WHEREAS, as a non-tunnel route, I-64 and the High Rise Bridge are vital to military mobility, the movement of goods and services throughout the region, and hurricane evacuation for northeastern North Carolina and Southside Hampton Roads; and

WHEREAS, an improved I-64 corridor with a 95 foot fixed-span bridge would reduce delays, improve mobility, and support economic growth at the Port of Virginia and beyond; and

WHEREAS, by resolution adopted November 15, 1994, the Chesapeake City Council expressed opposition to construction of an 85 foot fixed-span bridge that was under consideration at that time; and

WHEREAS, the Virginia General Assembly, through House Bill 2313, established new revenues for transportation, a portion of which began to be deposited to a newly established Hampton Roads Transportation Fund on July 1, 2013; and

WHEREAS, the Hampton Roads Transportation Planning Organization adopted a resolution on October 17, 2013, supporting a regional package of projects, including I-64 Southside widening and replacement of the High Rise Bridge, to be funded, in whole or in part, with Hampton Roads Transportation Fund revenues; and

WHEREAS, the Chesapeake City Council is expected to consider a resolution in support of the replacement of the High Rise Bridge with a 95 foot fixed-span bridge on January 14, 2014.

NOW THEREFORE BE IT RESOLVED by the Chesapeake Port Authority, that it hereby supports the improvement of Interstate 64 from I-664/I-264 to I-464, including replacement of the High Rise Bridge with a 95 foot fixed-span bridge.

ADOPTED by the Chesapeake Port Authority, this 8th day of January, 2014.

APPROVED:



CHAIRPERSON

MAIN: 757-622-2312
FAX: 757-622-5563
WWW.HAMPTONROADSCHAMBER.COM

500 EAST MAIN STREET
SUITE 700
NORFOLK, VA 23510

CHAMBERSOLUTIONS
HAMPTON ROADS CHAMBER FOUNDATION
HAMPTON ROADS SPORTS COMMISSION
LEAD HAMPTON ROADS
SMALL BUSINESS DEVELOPMENT CENTER
OF HAMPTON ROADS, INC.
SYNC757

January 14, 2014

The Honorable Mayor and
Members of the Chesapeake City Council:

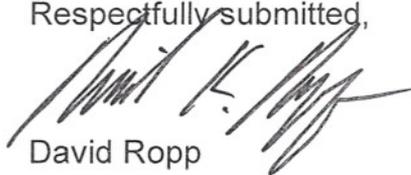
RE: City Manager Agenda Item 12

On behalf of the Chesapeake Division of the Hampton Roads Chamber of Commerce, we want to express our strong support to the City Council and the Virginia Department of Transportation for the proposed improvements to the Interstate 64 Corridor from I – 664/I- 264 and the crucial replacement of the High Rise Bridge. The business community in Chesapeake and the region stands behind this decade old effort to alleviate congestion in this critical transportation corridor.

The Hampton Roads Chamber of Commerce and the region's localities worked relentlessly over the last decade for the passage of new transportation funding and we applaud everyone for moving forward on this vital river crossing. Furthermore, for the record, we support the replacement of the present High Rise Bridge with a 95 foot fixed-span bridge and urge the Commonwealth of Virginia to move expeditiously as possible on the environmental permitting, design and construction of this infrastructure.

The Hampton Roads Chamber stood proudly with our regional and state leaders when the new Jordan Bridge was opened recently and we stand ready to work to bring the High Rise Bridge project to completion in the next decade.

Respectfully submitted,



David Ropp
2014 Chairman

Chesapeake Division of the Hampton Roads Chamber of
Commerce

VIRGINIA MARITIME ASSOCIATION

P.O. Box 3487
Norfolk, Virginia 23514
757-622-2639
FAX 757-622-6302
vma@portofhamptonroads.com
www.VAMaritime.com

January 17, 2014

Commander (dpb)
Fifth Coast Guard District
431 Crawford Street
Portsmouth, VA 23704-5004

Re: I-64 (High Rise) Bridge Replacement – Elizabeth River, Chesapeake, VA
U.S. Coast Guard Preliminary Public Notice 5-1319(a)

The Virginia Maritime Association (VMA) represents over 400 businesses directly and indirectly engaged in the flow of waterborne commerce through the ports of Virginia. As the “Voice of the Port”, representing these interested parties, we write to express the need for a I-64 (High Rise) Bridge replacement over the Southern Branch of the Elizabeth River that will allow for a vertical clearance of 135 feet, or greater, above mean high water. Horizontal clearance should be 135 feet, or greater.

First, we regret that we find it necessary to state our concern about the unnecessary inclusion of the following language in the Preliminary Public Notice: “The alternative analysis would include fixed bridge options proposing a vertical clearance of at least 95 feet above mean high water, while maintaining the existing 125-foot horizontal clearance. These plans will not affect the safe, efficient movement of recreational or commercial navigation nor will it create an obstruction to the free navigation of the navigable waters.” It suggests the Coast Guard has already come to a hasty conclusion and may have discouraged public evaluation and comment.

The federal navigation channel of the Southern Branch is currently authorized and maintained to a draft of 35 feet deep from 0.6 mile downstream from the Gilmerton Bridge to a point 0.8 mile upstream of the I-64 Bridge. Our members report existing vessel traffic transiting the Southern Branch with 35-foot draft and 132-foot vertical height requirements. All existing bridges crossing commercial portions of the Southern Branch provide vertical clearance of at least 135 feet. Therefore, any bridge over 35-foot draft portions of the river that does not maintain 135 feet of vertical clearance will restrict navigation. To provide for future development that will support growth in the imports and exports that support the economies of the state and the nation the I-64 (High Rise) Bridge replacement must allow for a vertical clearance of 135 feet, or greater.

Regarding horizontal clearance and the need for appropriate evaluation, we cite the U.S. Army Corps of Engineers' Ship Navigation Simulation Study, Southern Branch of the Elizabeth River, Gilmerton and Interstate 64 Bridges (Technical Report HL-95-17, December 1995): "If a new span is considered (on the same alignment as the existing bridge), it should have a horizontal clearance of 135 ft. Consideration of additional studies to evaluate bridge realignment and a change in ship traffic should be made during the planning and design of the future bridge."

The Southern Branch is a critical link in our nation's supply chain, supporting domestic and international commerce. Every year hundreds of deep draft ships transit the Southern Branch carrying millions of tons of cargo to and from marine cargo terminals along this vital portion of the Marine Transportation System. These products are used in manufacturing, agriculture and power generation, as well as scrap steel exports for recycled steel products. According to a report published for the U.S. Maritime Administration in January of 2009 (An Evaluation of Maritime Policy in Meeting the Commercial and Security Needs of the United States) the import and export of these various commodities is estimated to grow by as much as 75% between 2008 and 2038. It is in the public's best interest to maintain and expand our capacity to move these commodities.

Prior to making any decisions that will obstruct navigation and constrict commerce, a full, and public, evaluation of the commercial and economic development potential and supporting navigation requirements must be performed.

The VMA appreciates the opportunity to comment on this Preliminary Public Notice and we hope we will have the opportunity to provide input and support to a new bridge that will provide for the current and future needs of both waterborne and vehicular traffic. Please call us if there are any questions or additional information we can provide.

Sincerely,

A handwritten signature in black ink, appearing to read "D. White", written in a cursive style.

David White
Vice President

Appendix C: Citizen Information Meeting Public Comment Sheets



www.VirginiaDOT.org

CITIZEN INFORMATION MEETING

I-64 Widening and High Rise Bridge Replacement
City of Chesapeake, VA

Wednesday, September 18, 2013
4:30pm - 7:30pm

Deep Creek High School
2900 Margaret Booker Drive
Chesapeake, Virginia 23323



COMMENT SHEET

STATE PROJECT: 0064-131-783, P101

Name (optional): JIM HOLTSE
Address: 621 CALEB DRIVE
CHESAPEAKE, VA 23322

1. How do current openings of the High Rise Bridge affect your daily travel?
THEY DON'T. OPENINGS ARE NOT VERY COMMON. CONGESTION OCCURS DAILY IN AFTERNOON DUE TO BOTTLENECK FROM I-64 NEAR BATTLEFIELD HEADING TOWARDS THE HIGH RISE.

2. Do you own, operate, or are aware of a boat that requires the High Rise Bridge to open? Please provide details.
WE OPERATE CONSTRUCTION EQUIPMENT (CRANES) WHICH OCCASIONALLY REQUIRE RESERVATIONS FOR OPENINGS.

3. Please provide any additional information which you believe will assist VDOT in this study.
KEEP UP THE GOOD WORK GUYS! THANKS.

Please leave this comment sheet at the designated location or mail your comments within 11 days (postmarked by September 29, 2013) to the addressee on the reverse side.

To complete this comment form electronically, please visit the project website at:
http://www.vdot.virginia.gov/projects/hamptonroads/i-64_high_rise_bridge_replacement.asp

From: [Wiegand, Jordan](#)
To: [Smizik, Scott \(VDOT\)](#)
Subject: I-64 Widening/High Rise Bridge
Date: Tuesday, September 10, 2013 3:35:17 PM

Scott,

I received the information about the September 18th meeting in Chesapeake. Unfortunately I will be unable to attend but was wondering if there are any media items or schedules identified for that project. My company will certainly be interested in the construction aggregate needed for the project but also how it could impact our marine traffic through the local waterway.

Any information would be appreciated.

*Jordan C. Wiegand
Area Sales Manager-Eastern Virginia
Vulcan Materials Company
757-647-7151*

**Appendix D: Survey Respondent Spreadsheet and Completed USCG
Waterway User Questionnaires**

| Parcel ID | Company | Description of Industry | POC | Survey Confirmation Sent | USCG PPN 1 Mailed | USCG PPN 2 Mailed | Notes |
|-------------------|---|---|---|--------------------------|-------------------|-------------------|---|
| 198 | Allied Concrete Products, LLC (formerly Southern Aggregates, LLC) | Manufacture standard grey and architectural masonry units, as well as concrete pavers and segmental retaining walls | Robert Ley | 11/7/2013 | 11/8/2013 | 12/12/2013 | Mr. Smizik spoke to Mr. Ley who reported that Allied Concrete sold their waterfront facilities to Kinder Morgan long ago. Thus, Allied Concrete operations are not/would not be affected by the High Rise Bridge. |
| 190 191 192 | Amerada Hess Corporation (Hess Oil) | A large American-based integrated oil company that explores, produces, transports and refines crude oil and natural gas | Tony Propst | 11/4/2013 | 11/8/2013 | 12/12/2013 | Mr. Propst was a property owner in the study area and had received our right of entry notices. He had several questions regarding the project, was directed to the project website for more information. |
| 221 | Arc Terminals Holdings LLC | Independent terminal company that receives and distributes petroleum and petrochemical products throughout the US via marine, pipeline, rail and truck | John Blanchard | 11/4/2013 | 11/8/2013 | 12/12/2013 | Vessels arrive and depart to and from Arc Terminal Holdings; however, none require the opening of the High Rise Bridge, as they do not travel south on the Elizabeth River. |
| 95 | Atlantic Energy, Inc. (acquired by DCP Midstream in 2010) | Marine import terminal with 20 million gallons of above ground storage in the Port of Chesapeake; supply point for propane customers in the mid-Atlantic region | Kevin Grey, General Manager | 11/4/2013 | 11/8/2013 | 12/12/2013 | No vessel use along the Southern Branch of the Elizabeth River that requires an opening of the High Rise Bridge. |
| | Capes Shipping Agency | Ship agency, freight forwarding, and logistics transportation management | Kevin Clappsaddle, Vice President of Operations | 11/4/2013 | 11/8/2013 | 12/12/2013 | Contact suggested by IMTT |
| | ChemRes | Global supplier of commodity and engineering resins | Jeanine Jackson | | 11/8/2013 | 12/12/2013 | Site of hazardous material concern in the 1995 EA for this project |
| 171 | Concrete Precast Systems | Provides precast for highway, rail, and marine construction | John Pridgen, Project Manager | 11/4/2013 | 11/8/2013 | 12/12/2013 | Potentially renting the Samson Crane next summer, rented from Tidewater Skanska, which will require an opening, but do not own any vessels requiring openings themselves. |
| | Crofton Industries | Commercial diving services, heavy marine construction, design, inspection, consulting services, maritime logistics, heavy lift operations, crane rental and rigging services. | Mike Frohnapfel, Equipment Resources Manager | 12/9/2013 | N/A | 12/12/2013 | Required an opening of the High Rise Bridge during video monitoring timeframe. |
| 110 111 113 | Dominion Chesapeake Energy Center (CEC) Coal Terminal | Power station which generates about 7% of all the power used by homes, businesses and industries in the company's 30,000 square mile service area | Ken Lazzaro, Operations Manager | 11/4/2013 | 11/8/2013 | 12/12/2013 | CEC vessels do not go south of their site and would not be affected by the High Rise Bridge; station is commissioned to close and stop all fleet traffic by 2015. |

| | | | | | | | |
|--|--|---|---|-----------|-----------|------------|--|
| 92 | Enviva Port of Chesapeake LLC (formerly "Giant Cement Co") | Provides clean, sustainable, renewable woody biomass to industrial-scale customers | Tammara Baker | 11/4/2013 | 11/8/2013 | 12/12/2013 | No vessel use along the Southern Branch of the Elizabeth River that requires an opening of the High Rise Bridge. |
| 135 136 159 160 161 | Higgerson-Buchanan, Inc. | Provide excavation, heavy highway, site development, lake dredging and landfill management services | Ivan L. Higgerson- President | 11/4/2013 | 11/8/2013 | 12/12/2013 | Own a small boat which has not been in the water for 6 years, do not require openings of the High Rise Bridge to meet commercial needs |
| 107 108 | IMTT (International-Matex Tank Terminals) | Stores and handles petroleum products, vegetable and tropical oils, renewable fuels, and various chemicals | Shanon Naquin, Terminal Manager | 11/4/2013 | 11/8/2013 | 12/12/2013 | No ships incoming or outbound along towards Intercoastal Waterway. Suggested calling T. Parker Host in addition to Capes Shipping, who serve as barge and large shipping agents for the larger vessels on the Elizabeth River. |
| | Inchcape Shipping Services, Inc | Leading maritime service provider to oil, cruise, container and bulk commodity sectors as well as naval, government and inter-governmental clients. ISS provides landside commercial and humanitarian logistics, transit, offshore support and other associated marine services | Steve Hagen, Port Manager | 11/4/2013 | 11/8/2013 | 12/12/2013 | No vessel use along the Southern Branch of the Elizabeth River that requires an opening of the High Rise Bridge. However, agents of vessel users that may travel that way- email sent to invite clientele's clearance information. |
| | Kereos, Inc. | Leading manufacturer of calcium aluminate cements and finished products | Thomas Green, President | | 11/8/2013 | 12/12/2013 | |
| 195 197 200 202 203 204 | Kinder Morgan/Elizabeth River Terminals, Inc. | Transport natural gas, refined petroleum products, crude oil, carbon dioxide (CO2) and more. Store or handle a variety of products and materials at terminals such as gasoline, jet fuel, ethanol, coal, petroleum coke and steel. | Phil Stedfast | 11/4/2013 | 11/8/2013 | 12/12/2013 | Vessels arrive and depart to and from Kinder Morgan; however, none require the opening of the High Rise Bridge, as they do not travel south on the Elizabeth River. Should they travel south (unusual), the current clearances meet all needs and openings have not been required. |
| 226 | Marine Oil Service, Inc. | Delivers marine, aviation and industrial lubricants, cylinder oils, specialty and military lubricants and greases | Nick Szoke, Operations Manager | 11/4/2013 | 11/8/2013 | 12/12/2013 | No vessel use along the Southern Branch of the Elizabeth River that requires an opening of the High Rise Bridge. |
| 199 | McLean Contracting | Construction yard to support field operation including heavy construction, pile driving, steel erections, timber structures, marine demolition, dredging, heavy lifts, movable bridges, materials handling equipment | Dan Miller, Director of Safety | 11/4/2013 | 11/8/2013 | 12/12/2013 | Barge mounted crane "Cape Fear" requires openings of the High Rise Bridge for commercial purposes |
| | Norfolk Dredging Company | Maintenance and new work dredging, with specialties in projects involving sub-aqueous trench and tunnel excavation, backfill and hydraulic landfill. | Paul Knowles, Vice President | 1/7/2013 | | | Tallest vessel has an air draft height of 90 feet |
| 80 81 | Norfolk Naval Shipyard, Portsmouth | NNSY is one of the world's largest shipyards specializing in building, repair, and remodeling the Navy's maritime fleet. | Jeff Cunningham, Congressional and Public Affairs Officer | 11/4/2013 | 11/8/2013 | 12/12/2013 | Vessels arrive and depart to and from port at Norfolk Naval Shipyard; however, none require the opening of the High Rise Bridge, as they do not travel south on the Elizabeth River. |
| 78 | Ocean Marine Yacht Center, Ocean Marine LLC | A world class, state-of-the-art repair and refit yacht yard, indoor dry storage facility, and marina complex | | 11/4/2013 | 11/8/2013 | 12/12/2013 | Third party marina; customers who use the marina are responsible for scheduling openings of the High Rise, not marina employees. |

| | | | | | | | |
|--------------------------|---|---|--|-----------|-----------|------------|--|
| 205 | Oceaneering International, Inc. | A global oilfield provider of engineered services and products, primarily to the offshore oil and gas industry | Greg Wilson, Materials Supervisor | 11/4/2013 | 11/8/2013 | 12/12/2013 | No vessel use along the Southern Branch of the Elizabeth River that requires an opening of the High Rise Bridge. |
| | PCL Civil Constructors, Inc. | Organization active in the commercial, institutional, multi-family residential, renewable energy, heavy industrial, historical restorations, and civil construction sectors | Jim Holtje | 11/4/2013 | 11/8/2013 | 12/12/2013 | company referenced on Jim Holtje's CIM #1 Comment Sheet-- does not own boats that require an opening of the High Rise Bridge, rented Cape Fear from McLean Contracting in past |
| 205 | Peck Marine Terminals | Serves limited-schedule, heavy-lift, unusual and break-bulk cargo shipments in and out of the Port of Hampton Roads, Virginia | Jim Duncan, Site Manager | 11/4/2013 | 11/8/2013 | 12/12/2013 | Vessels arrive and depart to and from Peck Marine Terminals; however, none require the opening of the High Rise Bridge, as they do not travel south on the Elizabeth River. |
| 206 | Perdue Farms | Agribusiness, grain receiving and storage, soybean and oilseed processing and refining, feed ingredient, poultry and agricultural commodities | Christopher Garcia, Manager of Ocean Vessel Transportation | 11/5/2013 | 11/8/2013 | 12/12/2013 | No vessel use south of High Rise Bridge |
| 168 | Precon Marine, Inc. | A diversified marine contractor specializing in heavy marine construction, waterfront construction and related services as well as major bridge, pier, and bulkhead rehabilitation work, subaqueous utility installation, etc. | Harry Johnson | 11/4/2013 | 11/8/2013 | 12/12/2013 | Vessel use along the Southern Branch of the Elizabeth River, but none requiring an opening of the High Rise Bridge. |
| 215 | Roanoke Cement | Manufacturers of building material | Ted Marousas, Terminal Manager | 11/4/2013 | 11/8/2013 | 12/12/2013 | No vessel use along the Southern Branch of the Elizabeth River that requires an opening of the High Rise Bridge. |
| 182 | Sims Metal Management | Recover and recycle surplus metal and electronics | Ron Chandler | 11/4/2013 | 11/8/2013 | 12/12/2013 | Do not own an vessels that require an opening of the High Rise Bridge. |
| | Skanska (Tidewater Construction) USA Civil Inc. | A world-leading project development and construction group. | Jack Liles, Project Manager | 11/4/2013 | 11/8/2013 | 12/12/2013 | Owns vessels that do require openings of the High Rise Bridge |
| | T. Parker Host | Full service ship agency firm, providing vessel protection and husbandry, cargo supervision, transportation and logistics coordination. | David Host, Executive Vice President | 11/4/2013 | 11/8/2013 | 12/12/2013 | T. Parker Host initially stated that they do not do a substantial amount of business south of the High Rise Bridge and does not foresee a 95' fixed bridge limiting current or future business opportunities; later stated via e-mail and PPN comment that they request a vertical clearance to match the Gilmeron Bridge at 135 feet. |
| 150 | Top Rack Marina, Chesapeake Marina LLC | Offers dry dock boat storage, trailer storage, transient wet slips, fuel, boat repairs and winterization | Brian McKown, Marina Manager | 11/4/2013 | 11/8/2013 | 12/12/2013 | Top Rack Marina does not have the infrastructure to support a vessel of the size that would require an opening of the High Rise Bridge. The maximum vessel size that Top Rack Marina currently can put in dry storage is a 20,000 pound, 40' LOA, 16' high yacht |
| 217 218 219 220 | TransMontaigne Terminals, Inc. | A terminaling and transportation master limited partnership providing integrated terminaling, storage, transportation and related services for customers engaged in the distribution and marketing of petroleum products, crude oil, chemicals, fertilizers and other liquid products | Michael J. Steele, Terminal Manager | 11/4/2013 | 11/8/2013 | 12/12/2013 | No vessel use along the Southern Branch of the Elizabeth River that requires an opening of the High Rise Bridge. |

| | | | | | | | |
|--------------------------|------------------------------|---|---|-----------|-----------|------------|--|
| 176 | Tri-Port Terminals, Inc. | Receipt of nitrogenized liquid fertilizer; and miscella- neous liquid-bulk commodities. | Mr. Sidney Camden, VP | 11/4/2013 | 11/8/2013 | 12/12/2013 | Follow up phone call indicated that current fleet characteristics and operating procedures do not necessitate the use of the Southern Branch of the Elizabeth River beyond the Gilmerton Bridge |
| 222 223 224 225 | United States Gypsum Company | A leading manufacturer of building materials for the construction and remodeling industries including sheetrock and durock products. | David Bunch | 11/4/2013 | 11/8/2013 | 12/12/2013 | Vessels coming to this facility do not go under the I-64 High Rise Bridge. Located near the mouth of the southern branch of the Elizabeth river just downstream of the I-264 Norfolk to Portsmouth tunnel and upstream of the Jordan bridge. |
| 244 245 247 248 | Vulcan Materials Company | Nation's largest producer of construction aggregates—primarily crushed stone, sand and gravel—and a major producer of aggregates-based construction materials, including asphalt and ready-mixed concrete | Jordan C. Wiegand Area Sales Manager Eastern Virginia | 11/4/2013 | 11/8/2013 | 12/12/2013 | No vessel use south of High Rise Bridge |

Waterway User Questionnaire: *Bridge Project*

User Data Sheet

By: Halie Stannard Date: 11/6/2013

1. Company Name and/or Vessel and Contact Information

Name of Company Allied Concrete Products, LLC

Name of Contact Mr. Robert Ley

Phone Number (Office): (757) 494-5200 (Cell): _____

Email: arley25@msn.com

Address: 120 Republic Road

City Chesapeake State VA Zip Code 23324

2. Vessel Information

2a. Vessel Name _____

2b. Vessel Type _____

2c. US Coast Guard Document Number _____

3. Length Overall (LOA), feet: _____ 3b. Beam (width), feet: _____

4. Draft (depth of hull below waterline, fully laden), feet: _____

5. Air gap for Vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge) _____

6. Frequency of one way passage underneath the Bridge (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

7. Frequency of one way passage underneath the Bridge (other historic events):

8. Do you have a Business Plan? (e.g. 10 or 20 year plan) _____

a. What does it say regarding vessels transiting under the Bridge?

b. May we have a copy? _____

c. Are there any plans for expansion and/or acquisition of larger vessels? (if yes, please explain) _____

9. Other Miscellaneous _____ Allied Concrete Products has sold their waterfront facility to Kinder Morgan;

thus, Allied Concrete Products does not require openings of the High Rise Bridge to meet current or future
commercial or industrial needs.

Waterway User Questionnaire: *Bridge Project*

User Data Sheet

By: Caleb Parks Date: 10/17/2013

1. Company Name and/or Vessel and Contact Information

Name of Company Amerada Hess Corporation

Name of Contact Tony Propst

Phone Number (Office): (757) 545-0245 (Cell): _____

Email: apropst@hess.com

Address: 4020 Buell Street

City Chesapeake State Virginia Zip Code 23324

2. Vessel Information

2a. Vessel Name _____

2b. Vessel Type _____

2c. US Coast Guard Document Number _____

3. Length Overall (LOA), feet: _____ 3b. Beam (width), feet: _____

4. Draft (depth of hull below waterline, fully laden), feet: _____

5. Air gap for Vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge) _____

6. Frequency of one way passage underneath the Bridge (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

7. Frequency of one way passage underneath the Bridge (other historic events):

8. Do you have a Business Plan? (e.g. 10 or 20 year plan) _____

a. What does it say regarding vessels transiting under the Bridge?

b. May we have a copy? _____

c. Are there any plans for expansion and/or acquisition of larger vessels? (if yes, please explain) _____

9. Other Miscellaneous _____ No vessel use along the Southern Branch of the Elizabeth River that requires an opening of the High Rise Bridge.

Waterway User Questionnaire: *Bridge Project*

User Data Sheet

By: Halie Stannard Date: 10/3/2013

1. Company Name and/or Vessel and Contact Information

Name of Company Arc Terminals Holdings LLC

Name of Contact John Blanchard

Phone Number (Office): (757) 545-0245 (Cell): _____

Email: John.Blanchard@lightfootcapital.com

Address: 801 Butt Street

City Chesapeake State VA Zip Code 23324

2. Vessel Information

2a. Vessel Name _____

2b. Vessel Type _____

2c. US Coast Guard Document Number _____

3. Length Overall (LOA), feet: _____ 3b. Beam (width), feet: _____

4. Draft (depth of hull below waterline, fully laden), feet: _____

5. Air gap for Vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge) _____

6. Frequency of one way passage underneath the Bridge (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

7. Frequency of one way passage underneath the Bridge (other historic events):

8. Do you have a Business Plan? (e.g. 10 or 20 year plan) _____

a. What does it say regarding vessels transiting under the Bridge?

b. May we have a copy? _____

c. Are there any plans for expansion and/or acquisition of larger vessels? (if yes, please explain) _____

9. Other Miscellaneous _____ Vessels arrive and depart to and from Arc Terminals Holdings LLC; however, none require openings of the High Rise Bridge, as they do not travel to points south of the High Rise Bridge along the Elizabeth River. _____

Waterway User Questionnaire: *Bridge Project*

User Data Sheet

By: Halie Stannard Date: 10/8/2013

1. Company Name and/or Vessel and Contact Information

Name of Company Atlantic Energy, Inc.

Name of Contact Mr. Kevin Grey, General Manager

Phone Number (Office): (757) 485-1018 (Cell): _____

Email: kmgrey@dcpmidstream.com

Address: 2901 South Military Hwy

City Chesapeake State VA Zip Code 23323

2. Vessel Information

2a. Vessel Name _____

2b. Vessel Type _____

2c. US Coast Guard Document Number _____

3. Length Overall (LOA), feet: _____ 3b. Beam (width), feet: _____

4. Draft (depth of hull below waterline, fully laden), feet: _____

5. Air gap for Vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge) _____

6. Frequency of one way passage underneath the Bridge (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

7. Frequency of one way passage underneath the Bridge (other historic events):

8. Do you have a Business Plan? (e.g. 10 or 20 year plan) _____

a. What does it say regarding vessels transiting under the Bridge?

b. May we have a copy? _____

c. Are there any plans for expansion and/or acquisition of larger vessels? (if yes, please explain) _____

9. Other Miscellaneous _____ Atlantic Energy, Inc. does not require openings of the High Rise Bridge to meet current or future vessel fleet needs.

Waterway User Questionnaire: *Bridge Project*

User Data Sheet

By: Halie Stannard Date: 10/25/2013

1. Company Name and/or Vessel and Contact Information

Name of Company Capes Shipping Agency

Name of Contact Kevin Clappsaddle

Phone Number (Office): (757) 625-3658 (Cell): _____

Email: shipops@capesshipping.net

Address: 1128 West Olney Road

City Norfolk State VA Zip Code 23507

2. Vessel Information

2a. Vessel Name _____

2b. Vessel Type _____

2c. US Coast Guard Document Number _____

3. Length Overall (LOA), feet: _____ 3b. Beam (width), feet: _____

4. Draft (depth of hull below waterline, fully laden), feet: _____

5. Air gap for Vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge) _____

6. Frequency of one way passage underneath the Bridge (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

7. Frequency of one way passage underneath the Bridge (other historic events):

8. Do you have a Business Plan? (e.g. 10 or 20 year plan) _____

a. What does it say regarding vessels transiting under the Bridge?

b. May we have a copy? _____

c. Are there any plans for expansion and/or acquisition of larger vessels? (if yes, please explain) _____

9. Other Miscellaneous _____ Unresponsive to phone calls and e-mail.

Waterway User Questionnaire: *Bridge Project*

User Data Sheet

By: Halie Stannard Date: _____

1. Company Name and/or Vessel and Contact Information

Name of Company ChemRes

Name of Contact Jeanine Jackson

Phone Number (Office): (609) 520-0000 (Cell): _____

Email: _____

Address: 5100 Bainbridge Boulevard

City Chesapeake State VA Zip Code 23320-6502

2. Vessel Information

2a. Vessel Name _____

2b. Vessel Type _____

2c. US Coast Guard Document Number _____

3. Length Overall (LOA), feet: _____ 3b. Beam (width), feet: _____

4. Draft (depth of hull below waterline, fully laden), feet: _____

5. Air gap for Vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge) _____

6. Frequency of one way passage underneath the Bridge (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

7. Frequency of one way passage underneath the Bridge (other historic events):

8. Do you have a Business Plan? (e.g. 10 or 20 year plan) _____

a. What does it say regarding vessels transiting under the Bridge?

b. May we have a copy? _____

c. Are there any plans for expansion and/or acquisition of larger vessels? (if yes, please explain) _____

9. Other Miscellaneous _____

Waterway User Questionnaire: *Bridge Project*

User Data Sheet

By: Halie Stannard Date: 10/21/2013

1. Company Name and/or Vessel and Contact Information

Name of Company Concrete Precast Systems

Name of Contact Mr. John Pridgen, Project Manager

Phone Number (Office): (757) 545-5215 (Cell): _____

Email: jpridgen@cpsprecast.com

Address: 1316 Yacht Drive, Suite 307

City Chesapeake State VA Zip Code 23320

2. Vessel Information

2a. Vessel Name _____

2b. Vessel Type _____

2c. US Coast Guard Document Number _____

3. Length Overall (LOA), feet: _____ 3b. Beam (width), feet: _____

4. Draft (depth of hull below waterline, fully laden), feet: _____

5. Air gap for Vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge) _____

6. Frequency of one way passage underneath the Bridge (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

7. Frequency of one way passage underneath the Bridge (other historic events):

8. Do you have a Business Plan? (e.g. 10 or 20 year plan) _____

a. What does it say regarding vessels transiting under the Bridge?

b. May we have a copy? _____

c. Are there any plans for expansion and/or acquisition of larger vessels? (if yes, please explain) _____

9. Other Miscellaneous _____ Concrete Precast Systems may potentially rent the Samson Crane from Tidewater

Skanska next summer, which would require an opening of the High Rise Bridge; however, Concrete Precast

Systems does not foresee requiring additional openings of the High Rise Bridge to meet... (cont'd)

Waterway User Questionnaire: *Bridge Project*

User Data Sheet

By: Halie Stannard Date: 10/21/2013

1. Company Name and/or Vessel and Contact Information

Name of Company Concrete Precast Systems (cont'd)

Name of Contact Mr. John Pridgen, Project Manager

Phone Number (Office): (757) 545-5215 (Cell): _____

Email: jpridgen@csprecast.com

Address: 1316 Yacht Drive, Suite 307

City Chesapeake State VA Zip Code 23320

2. Vessel Information

2a. Vessel Name _____

2b. Vessel Type _____

2c. US Coast Guard Document Number _____

3. Length Overall (LOA), feet: _____ 3b. Beam (width), feet: _____

4. Draft (depth of hull below waterline, fully laden), feet: _____

5. Air gap for Vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge) _____

6. Frequency of one way passage underneath the Bridge (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

7. Frequency of one way passage underneath the Bridge (other historic events):

8. Do you have a Business Plan? (e.g. 10 or 20 year plan) _____

a. What does it say regarding vessels transiting under the Bridge?

b. May we have a copy? _____

c. Are there any plans for expansion and/or acquisition of larger vessels? (if yes, please explain) _____

9. Other Miscellaneous _____ current or future vessel fleet needs.

Waterway User Questionnaire: *Bridge Project*

User Data Sheet

By: Halie Stannard Date: 11/26/2013

1. Company Name and/or Vessel and Contact Information

Name of Company Crofton Industries

Name of Contact Mr. Mike Frohnapfel

Phone Number (Office): (757)-397-1131 (Cell): 757-544-0623

Email: MikeF@croftondiving.com

Address: 16 Harper Avenue, P.O. Box 7756

City Portsmouth State VA Zip Code 23707

2. Vessel Information

2a. Vessel Name Bunny C

2b. Vessel Type Tug boat

2c. US Coast Guard Document Number CG579612

3. Length Overall (LOA), feet: 50 3b. Beam (width), feet: 22

4. Draft (depth of hull below waterline, fully laden), feet: 7

5. Air gap for Vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge) 10 feet

6. Frequency of one way passage underneath the Bridge (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

7. Frequency of one way passage underneath the Bridge (other historic events):

typically we tow crane barges through 3-4 times a year

8. Do you have a Business Plan? (e.g. 10 or 20 year plan) not with changes that affect the bridge

a. What does it say regarding vessels transiting under the Bridge?

b. May we have a copy? _____

c. Are there any plans for expansion and/or acquisition of larger vessels? (if yes, please explain) _____

9. Other Miscellaneous _____ the tallest crane that we currently tow through the bridge is 75 feet to its highest

fixed point.

Waterway User Questionnaire: *Bridge Project*

User Data Sheet

By: Halie Stannard Date: 10/25/2013

1. Company Name and/or Vessel and Contact Information

Name of Company Dominion Chesapeake Energy Center (CEC) Coal Terminal

Name of Contact Mr. Ken Lazzaro, Operations Manager

Phone Number (Office): (757) 485-6800 (Cell): _____

Email: kenneth.lazzaro@dom.com

Address: 2701 Vepco Street

City Chesapeake State VA Zip Code 23323

2. Vessel Information

2a. Vessel Name _____

2b. Vessel Type _____

2c. US Coast Guard Document Number _____

3. Length Overall (LOA), feet: _____ 3b. Beam (width), feet: _____

4. Draft (depth of hull below waterline, fully laden), feet: _____

5. Air gap for Vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge) _____

6. Frequency of one way passage underneath the Bridge (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

7. Frequency of one way passage underneath the Bridge (other historic events):

8. Do you have a Business Plan? (e.g. 10 or 20 year plan) _____

a. What does it say regarding vessels transiting under the Bridge?

b. May we have a copy? _____

c. Are there any plans for expansion and/or acquisition of larger vessels? (if yes, please explain) _____

9. Other Miscellaneous _____ CEC vessels do not travel south of their property and do not require openings of the

High Rise Bridge to meet current or future industrial or commercial needs.

Waterway User Questionnaire: *Bridge Project*

User Data Sheet

By: Halie Stannard Date: 10/3/2013

1. Company Name and/or Vessel and Contact Information

Name of Company Enviva Port of Chesapeake LLC

Name of Contact Ms. Tammara Baker

Phone Number (Office): (757) 485-3300 (Cell): _____

Email: tammarabaker@envivabiomass.com

Address: 1000 Giant Cement Drive

City Chesapeake State VA Zip Code 23323

2. Vessel Information

2a. Vessel Name _____

2b. Vessel Type _____

2c. US Coast Guard Document Number _____

3. Length Overall (LOA), feet: _____ 3b. Beam (width), feet: _____

4. Draft (depth of hull below waterline, fully laden), feet: _____

5. Air gap for Vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge) _____

6. Frequency of one way passage underneath the Bridge (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

7. Frequency of one way passage underneath the Bridge (other historic events):

8. Do you have a Business Plan? (e.g. 10 or 20 year plan) _____

a. What does it say regarding vessels transiting under the Bridge?

b. May we have a copy? _____

c. Are there any plans for expansion and/or acquisition of larger vessels? (if yes, please explain) _____

9. Other Miscellaneous _____ Enviva Port of Chesapeake does not require openings of the High Rise Bridge

to meet current commercial or industrial needs; nor does Enviva Port of Chesapeake have foreseeable plans
to expand vessel fleet to a size that would require openings in the future.

Waterway User Questionnaire: *Bridge Project*

User Data Sheet

By: Halie Stannard Date: 10-3-2013

1. Company Name and/or Vessel and Contact Information

Name of Company Higgerson-Buchanan, Inc.

Name of Contact Don Higgerson, Jr.

Phone Number (Office): (757) 543-1637 (Cell): _____

Email: office@higgersonbuchanan.com

Address: 5300 Bainbridge Blvd

City Chesapeake State VA Zip Code 23320

2. Vessel Information

2a. Vessel Name _____

2b. Vessel Type _____

2c. US Coast Guard Document Number _____

3. Length Overall (LOA), feet: _____ 3b. Beam (width), feet: _____

4. Draft (depth of hull below waterline, fully laden), feet: _____

5. Air gap for Vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge) _____

6. Frequency of one way passage underneath the Bridge (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

7. Frequency of one way passage underneath the Bridge (other historic events):

8. Do you have a Business Plan? (e.g. 10 or 20 year plan) _____

a. What does it say regarding vessels transiting under the Bridge?

b. May we have a copy? _____

c. Are there any plans for expansion and/or acquisition of larger vessels? (if yes, please explain) _____

9. Other Miscellaneous _____ Higgerson-Buchanan, Inc. does not require openings of the High Rise Bridge to meet current commercial or industrial needs; nor have plans to expand vessel fleet to a size that would require _____ openings in the future. _____

Waterway User Questionnaire: *Bridge Project*

User Data Sheet

By: Halie Stannard Date: 10/17/2013

1. Company Name and/or Vessel and Contact Information

Name of Company IMTT (International-Matex Tank Terminals)

Name of Contact Mr. Shannon Naquin, Terminal Manager

Phone Number (Office): _____ (Cell): _____

Email: shanonnaquin@imtt.com

Address: 2801 S. Military Highway

City Chesapeake State VA Zip Code 23323

2. Vessel Information

2a. Vessel Name _____

2b. Vessel Type _____

2c. US Coast Guard Document Number _____

3. Length Overall (LOA), feet: _____ 3b. Beam (width), feet: _____

4. Draft (depth of hull below waterline, fully laden), feet: _____

5. Air gap for Vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge) _____

6. Frequency of one way passage underneath the Bridge (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

7. Frequency of one way passage underneath the Bridge (other historic events):

8. Do you have a Business Plan? (e.g. 10 or 20 year plan) _____

a. What does it say regarding vessels transiting under the Bridge?

b. May we have a copy? _____

c. Are there any plans for expansion and/or acquisition of larger vessels? (if yes, please explain) _____

9. Other Miscellaneous _____ IMTT does not require openings of the High Rise Bridge to meet current commercial or industrial needs; nor does IMTT have foreseeable plans to expand vessel fleet to a size that _____ would require openings in the future. _____

Waterway User Questionnaire: *Bridge Project*

User Data Sheet

By: Halie Stannard Date: 10/22/2013

1. Company Name and/or Vessel and Contact Information

Name of Company Inchcape Shipping Services

Name of Contact Steve Hagen

Phone Number (Office): (757) 625-6145 (Cell): _____

Email: Steve.Hagen@iss-shipping.com

Address: 201 E City Hall Avenue

City Norfolk State VA Zip Code _____

2. Vessel Information

2a. Vessel Name _____

2b. Vessel Type _____

2c. US Coast Guard Document Number _____

3. Length Overall (LOA), feet: _____ 3b. Beam (width), feet: _____

4. Draft (depth of hull below waterline, fully laden), feet: _____

5. Air gap for Vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge) _____

6. Frequency of one way passage underneath the Bridge (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

7. Frequency of one way passage underneath the Bridge (other historic events):

8. Do you have a Business Plan? (e.g. 10 or 20 year plan) _____

a. What does it say regarding vessels transiting under the Bridge?

b. May we have a copy? _____

c. Are there any plans for expansion and/or acquisition of larger vessels? (if yes, please explain) _____

9. Other Miscellaneous _____ No vessel use along the Southern Branch of the Elizabeth River that requires an opening of the High Rise Bridge, nor plans to expand vessel fleet to a size that would require openings of the Bridge in the foreseeable future. _____

Waterway User Questionnaire: *Bridge Project*

User Data Sheet

By: _____

Date: _____

1. Company Name and/or Vessel and Contact Information

Name of Company Kerneos, Inc. _____

Name of Contact _____

Phone Number (Office): (757) 494-1947 (Cell): _____

Email: _____

Address: _____

City _____ State _____ Zip Code _____

2. Vessel Information

2a. Vessel Name _____

2b. Vessel Type _____

2c. US Coast Guard Document Number _____

3. Length Overall (LOA), feet: _____ 3b. Beam (width), feet: _____

4. Draft (depth of hull below waterline, fully laden), feet: _____

5. Air gap for Vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge) _____

6. Frequency of one way passage underneath the Bridge (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

7. Frequency of one way passage underneath the Bridge (other historic events):

8. Do you have a Business Plan? (e.g. 10 or 20 year plan) _____

a. What does it say regarding vessels transiting under the Bridge?

b. May we have a copy? _____

c. Are there any plans for expansion and/or acquisition of larger vessels? (if yes, please explain) _____

9. Other Miscellaneous Unable to make contact. _____

Waterway User Questionnaire: *Bridge Project*

User Data Sheet

By: Halie Stannard Date: 10-7-2013

1. Company Name and/or Vessel and Contact Information

Name of Company Kinder Morgan Elizabeth River Terminals, Inc.

Name of Contact Phil Stedfast

Phone Number (Office): (757) 543-0335 (Cell): _____

Email: phil_stedfast@kindermorgan.com

Address: 4100 Buell Street

City Chesapeake State VA Zip Code 23324

2. Vessel Information

2a. Vessel Name NA

2b. Vessel Type NA no vessels under bridge

2c. US Coast Guard Document Number _____

3. Length Overall (LOA), feet: _____ 3b. Beam (width), feet: _____

4. Draft (depth of hull below waterline, fully laden), feet: _____

5. Air gap for Vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge) _____

6. Frequency of one way passage underneath the Bridge (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

7. Frequency of one way passage underneath the Bridge (other historic events):

8. Do you have a Business Plan? (e.g. 10 or 20 year plan) _____

a. What does it say regarding vessels transiting under the Bridge?

We deal with ocean going vessels, they do not transit beneath the High Rise Bridge,

should we deal with a vessel coming from the south (under the bridge) it would be a tug/barge

combo which needs no more clearance than the current bridge.

b. May we have a copy?

c. Are there any plans for expansion and/or acquisition of larger vessels? (if yes, please explain)

9. Other Miscellaneous

Waterway User Questionnaire: *Bridge Project*

User Data Sheet

By: Halie Stannard Date: 10/3/2013

1. Company Name and/or Vessel and Contact Information

Name of Company Marine Oil Service, Inc.

Name of Contact Nick Szoke, Operations Manager

Phone Number (Office): (757) 543-1446 (Cell): _____

Email: nick@marineoilservice.com

Address: 1421 South Main Street

City Norfolk State VA Zip Code 23523

2. Vessel Information

2a. Vessel Name _____

2b. Vessel Type _____

2c. US Coast Guard Document Number _____

3. Length Overall (LOA), feet: _____ 3b. Beam (width), feet: _____

4. Draft (depth of hull below waterline, fully laden), feet: _____

5. Air gap for Vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge) _____

6. Frequency of one way passage underneath the Bridge (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

7. Frequency of one way passage underneath the Bridge (other historic events):

8. Do you have a Business Plan? (e.g. 10 or 20 year plan) _____

a. What does it say regarding vessels transiting under the Bridge?

b. May we have a copy? _____

c. Are there any plans for expansion and/or acquisition of larger vessels? (if yes, please explain) _____

9. Other Miscellaneous Marine Oil Service, Inc. does not send vessels that far south along the ICW _____

and does not require openings of the High Rise Bridge to meet current or foreseeable future vessel needs.

Waterway User Questionnaire: *Bridge Project*

User Data Sheet

By: Halie Stannard Date: 10/3/2013

1. Company Name and/or Vessel and Contact Information

Name of Company McLean Contracting

Name of Contact Dan Miller, Director of Safety

Phone Number (Office): (757) 543-1676 (Cell): (757) 620-0671

Email: dmiller@mcleancont.com

Address: 100 Republic Road

City Chesapeake State VA Zip Code 23324

2. Vessel Information

2a. Vessel Name 1. Cape Fear, 2. Centennial, 3. Baltimore 4. Annapolis

2b. Vessel Type Whirley (Floating Crane)

2c. US Coast Guard Document Number 1. 987610, 2. 110675, 3. Waiting for paper work.

3. Length Overall (LOA), feet: 1.176', 2.140', 3.140' 3b. Beam (width), feet: 1. 68', 2. 70', 3. 70'

4. Draft (depth of hull below waterline, fully laden), feet: 1. 4'6", 2. 6'6", 3. 6'6"

5. Air gap for Vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge) 5 ft

6. Frequency of one way passage underneath the Bridge (typical per month):

Jan 1 Feb 1 Mar 1 Apr 1 May 1 Jun 1 Jul 1 Aug 1 Sep 1 Oct 1 Nov 1 Dec 1

7. Frequency of one way passage underneath the Bridge (other historic events):

none

8. Do you have a Business Plan? (e.g. 10 or 20 year plan) No

a. What does it say regarding vessels transiting under the Bridge?

b. May we have a copy? _____

c. Are there any plans for expansion and/or acquisition of larger vessels? (if yes, please explain) _____

Not at this time

9. Other Miscellaneous 2-C, 4. 999008 3. 126' 3.B 42' 4. 4' _____

The highest point on the whirley is 91' 6"

Stannard, Halie

From: Smizik, Scott (VDOT) <Scott.Smizik@vdot.virginia.gov>
Sent: Monday, March 10, 2014 10:19 AM
To: Nies, Nicholas; Stannard, Halie
Subject: FW: Follow-Up with McLean Contracting

From: Long III, James W. (VDOT)
Sent: Tuesday, November 12, 2013 3:52 PM
To: Smizik, Scott (VDOT)
Cc: Correa, Ricardo, PE (VDOT)
Subject: Follow-Up with McLean Contracting

Scott,

I spoke with Clayton Jensen and Dan Miller from McLean Contracting this afternoon. They noted that the large cranes that need 91'-6" vertical clearance do traverse the High Rise Bridge, typically to do work at the Great Bridge Locks, but they are currently working one of these large cranes at the Dominion Blvd project. I discussed with McLean that we would match the vertical clearance of the new Dominion Blvd bridge and they noted that the High Rise Bridge having the same vertical clearance as the Dominion Blvd bridge under construction would be adequate for their needs along the waterway. Please let me know if you have any questions.

Thanks,

James (Jim) W. Long, III, P.E.

District Structure & Bridge Engineer
VDOT - Hampton Roads District
1700 N. Main Street
Suffolk, VA 23434
Phone: (757) 925-2691
Fax: (757) 925-3636
Cell: (757) 274-1347
www.virginiadot.org

Waterway User Questionnaire: *Bridge Project*

User Data Sheet

By: Halie Stannard Date: 1-16-2013

1. Company Name and/or Vessel and Contact Information

Name of Company Norfolk Dredging Company

Name of Contact Mr. Paul Knowles

Phone Number (Office): 757-547-9391 (Cell): _____

Email: pknowles@norfolkdredging.com

Address: 110 Centerville Turnpike N.

City Chesapeake State VA Zip Code 23320

2. Vessel Information

2a. Vessel Name _____

2b. Vessel Type _____

2c. US Coast Guard Document Number _____

3. Length Overall (LOA), feet: _____ 3b. Beam (width), feet: _____

4. Draft (depth of hull below waterline, fully laden), feet: _____

5. Air gap for Vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge) _____

6. Frequency of one way passage underneath the Bridge (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

7. Frequency of one way passage underneath the Bridge (other historic events):

8. Do you have a Business Plan? (e.g. 10 or 20 year plan) _____

a. What does it say regarding vessels transiting under the Bridge?

b. May we have a copy? _____

c. Are there any plans for expansion and/or acquisition of larger vessels? (if yes, please explain) _____

9. Other Miscellaneous _____ Our tallest air draft is 90'. I can't tell you how many trips we will make thru the

bridge in the next 12 months without knowing what work we will have.

Waterway User Questionnaire: *Bridge Project*

User Data Sheet

By: Caleb Parks Date: 10/16/2013

1. Company Name and/or Vessel and Contact Information

Name of Company Norfolk Naval Shipyard (NNSY)

Name of Contact Jeff Cunningham, Congressional and Public Affairs Officer

Phone Number (Office): 757-396-8122 (Cell): _____

Email: jeffery.r.cunningham@navy.mil

Address: Norfolk Naval Shipyard

City Portsmouth State Virginia Zip Code 23709-5000

2. Vessel Information

2a. Vessel Name _____

2b. Vessel Type _____

2c. US Coast Guard Document Number _____

3. Length Overall (LOA), feet: _____ 3b. Beam (width), feet: _____

4. Draft (depth of hull below waterline, fully laden), feet: _____

5. Air gap for Vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge) _____

6. Frequency of one way passage underneath the Bridge (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

7. Frequency of one way passage underneath the Bridge (other historic events):

8. Do you have a Business Plan? (e.g. 10 or 20 year plan) _____

a. What does it say regarding vessels transiting under the Bridge?

b. May we have a copy? _____

c. Are there any plans for expansion and/or acquisition of larger vessels? (if yes, please explain) _____

9. Other Miscellaneous _____ NNSY serves as one of the world's largest shipyards for incoming and outbound ocean-faring military vessels. However, none require travel beyond the shipyard south on the Elizabeth River; _____ therefore, NNSY does not require the opening of the High Rise Bridge to meet current or future fleet needs. _____

Waterway User Questionnaire: *Bridge Project*

User Data Sheet

By: Halie Stannard Date: 10/3/2013

1. Company Name and/or Vessel and Contact Information

Name of Company Ocean Marine Yacht Center, Ocean Marine LLC

Name of Contact _____

Phone Number (Office): (757) 399-2920 (Cell): _____

Email: dockmaster@oceanmarinellc.com

Address: 1 Crawford Circle

City Portsmouth State VA Zip Code _____

2. Vessel Information

2a. Vessel Name _____

2b. Vessel Type _____

2c. US Coast Guard Document Number _____

3. Length Overall (LOA), feet: _____ 3b. Beam (width), feet: _____

4. Draft (depth of hull below waterline, fully laden), feet: _____

5. Air gap for Vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge) _____

6. Frequency of one way passage underneath the Bridge (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

7. Frequency of one way passage underneath the Bridge (other historic events):

8. Do you have a Business Plan? (e.g. 10 or 20 year plan) _____

a. What does it say regarding vessels transiting under the Bridge?

b. May we have a copy? _____

c. Are there any plans for expansion and/or acquisition of larger vessels? (if yes, please explain) _____

9. Other Miscellaneous _____ No vessel use along the Southern Branch of the Elizabeth River that requires an opening of the High Rise Bridge, nor plans to expand vessel fleet to a size that would require openings of the High Rise Bridge in the foreseeable future.

Waterway User Questionnaire: *Bridge Project*

User Data Sheet

By: Halie Stannard Date: 10-3-2013

1. Company Name and/or Vessel and Contact Information

Name of Company Oceaneering International, Inc.

Name of Contact Mr. Greg Wilson, Materials Supervisor

Phone Number (Office): (757) 545-2200 (Cell): _____

Email: gjwilson@oceaneering.com

Address: 700 Rosemont Avenue

City Chesapeake State VA Zip Code 23324

2. Vessel Information

2a. Vessel Name _____

2b. Vessel Type _____

2c. US Coast Guard Document Number _____

3. Length Overall (LOA), feet: _____ 3b. Beam (width), feet: _____

4. Draft (depth of hull below waterline, fully laden), feet: _____

5. Air gap for Vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge) _____

6. Frequency of one way passage underneath the Bridge (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

7. Frequency of one way passage underneath the Bridge (other historic events):

8. Do you have a Business Plan? (e.g. 10 or 20 year plan) _____

a. What does it say regarding vessels transiting under the Bridge?

b. May we have a copy? _____

c. Are there any plans for expansion and/or acquisition of larger vessels? (if yes, please explain) _____

9. Other Miscellaneous _____ Oceaneering International, Inc. does not require openings of the High Rise Bridge

to meet current commercial or industrial needs; nor have plans to expand vessel fleet to a size that would
require openings in the future.

Waterway User Questionnaire: *Bridge Project*

User Data Sheet

By: Halie Stannard Date: 10-21-2013

1. Company Name and/or Vessel and Contact Information

Name of Company PCL Civil Constructors, Inc

Name of Contact Jim Holtje

Phone Number (Office): (757) 487-1136 (Cell): _____

Email: jholtje@pcl.com

Address: 800 East Indian River Road

City Norfolk State VA Zip Code 23523

2. Vessel Information

2a. Vessel Name _____

2b. Vessel Type _____

2c. US Coast Guard Document Number _____

3. Length Overall (LOA), feet: _____ 3b. Beam (width), feet: _____

4. Draft (depth of hull below waterline, fully laden), feet: _____

5. Air gap for Vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge) _____

6. Frequency of one way passage underneath the Bridge (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

7. Frequency of one way passage underneath the Bridge (other historic events):

8. Do you have a Business Plan? (e.g. 10 or 20 year plan) _____

a. What does it say regarding vessels transiting under the Bridge?

b. May we have a copy? _____

c. Are there any plans for expansion and/or acquisition of larger vessels? (if yes, please explain) _____

9. Other Miscellaneous _____ PCL Civil Constructors has rented Cape Fear from McLean Contracting in the past, which has necessitated an opening of the High Rise Bridge; however PCL does not own a vessel requiring an _____ opening; nor have foreseeable plans to expand vessel fleet to include a vessel that would...(cont'd) _____

Waterway User Questionnaire: *Bridge Project*

User Data Sheet

By: Halie Stannard Date: 10-21-2013

1. Company Name and/or Vessel and Contact Information

Name of Company PCL Civil Constructors, Inc (cont'd)

Name of Contact Jim Holtje

Phone Number (Office): (757) 487-1136 (Cell): _____

Email: jholtje@pcl.com

Address: 800 East Indian River Road

City Norfolk State VA Zip Code 23523

2. Vessel Information

2a. Vessel Name _____

2b. Vessel Type _____

2c. US Coast Guard Document Number _____

3. Length Overall (LOA), feet: _____ 3b. Beam (width), feet: _____

4. Draft (depth of hull below waterline, fully laden), feet: _____

5. Air gap for Vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge) _____

6. Frequency of one way passage underneath the Bridge (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

7. Frequency of one way passage underneath the Bridge (other historic events):

8. Do you have a Business Plan? (e.g. 10 or 20 year plan) _____

a. What does it say regarding vessels transiting under the Bridge?

b. May we have a copy? _____

c. Are there any plans for expansion and/or acquisition of larger vessels? (if yes, please explain) _____

9. Other Miscellaneous _____ ...require such an opening.

Waterway User Questionnaire: *Bridge Project*

User Data Sheet

By: Halie Stannard Date: 10-4-2013

1. Company Name and/or Vessel and Contact Information

Name of Company Peck Marine Terminals, Portsmouth

Name of Contact Jim Duncan, Site Manager

Phone Number (Office): (757) 373-4295 (Cell): _____

Email: david@thepeckcompany.com

Address: 700 Rosemont Avenue

City Chesapeake State VA Zip Code 23324

2. Vessel Information

2a. Vessel Name _____

2b. Vessel Type _____

2c. US Coast Guard Document Number _____

3. Length Overall (LOA), feet: _____ 3b. Beam (width), feet: _____

4. Draft (depth of hull below waterline, fully laden), feet: _____

5. Air gap for Vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge) _____

6. Frequency of one way passage underneath the Bridge (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

7. Frequency of one way passage underneath the Bridge (other historic events):

8. Do you have a Business Plan? (e.g. 10 or 20 year plan) _____

a. What does it say regarding vessels transiting under the Bridge?

b. May we have a copy? _____

c. Are there any plans for expansion and/or acquisition of larger vessels? (if yes, please explain) _____

9. Other Miscellaneous _____ Vessels arrive and depart to and from Peck Marine Terminals; however, none require an opening of the High Rise Bridge, as they do not travel south of the bridge on the Elizabeth River.

Waterway User Questionnaire: *Bridge Project*

User Data Sheet

By: Halie Stannard Date: 11/5/2013

1. Company Name and/or Vessel and Contact Information

Name of Company Perdue Farms

Name of Contact Christopher Garcia

Phone Number (Office): (757) 494-5566 (Cell): _____

Email: Chris.Garcia@perdue.com

Address: 505 Barnes Road

City Chesapeake State VA Zip Code 23324

2. Vessel Information

2a. Vessel Name _____

2b. Vessel Type _____

2c. US Coast Guard Document Number _____

3. Length Overall (LOA), feet: _____ 3b. Beam (width), feet: _____

4. Draft (depth of hull below waterline, fully laden), feet: _____

5. Air gap for Vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge) _____

6. Frequency of one way passage underneath the Bridge (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

7. Frequency of one way passage underneath the Bridge (other historic events):

8. Do you have a Business Plan? (e.g. 10 or 20 year plan) _____

a. What does it say regarding vessels transiting under the Bridge?

b. May we have a copy? _____

c. Are there any plans for expansion and/or acquisition of larger vessels? (if yes, please explain) _____

9. Other Miscellaneous _____ Perdue Farms does not require openings of the High Rise Bridge as they do not travel south of the High Rise Bridge along the Elizabeth River, currently or in the foreseeable future.

Waterway User Questionnaire: *Bridge Project*

User Data Sheet

By: Halie Stannard Date: 11/4/2013

1. Company Name and/or Vessel and Contact Information

Name of Company Precon Marine, Inc.

Name of Contact Harry Johnson

Phone Number (Office): (757) 545-4400 (Cell): _____

Email: Hjohnson@preconmarine.com

Address: 1401 Precon Drive

City Chesapeake State VA Zip Code _____

2. Vessel Information

2a. Vessel Name _____

2b. Vessel Type _____

2c. US Coast Guard Document Number _____

3. Length Overall (LOA), feet: _____ 3b. Beam (width), feet: _____

4. Draft (depth of hull below waterline, fully laden), feet: _____

5. Air gap for Vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge) _____

6. Frequency of one way passage underneath the Bridge (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

7. Frequency of one way passage underneath the Bridge (other historic events):

8. Do you have a Business Plan? (e.g. 10 or 20 year plan) _____

a. What does it say regarding vessels transiting under the Bridge?

b. May we have a copy? _____

c. Are there any plans for expansion and/or acquisition of larger vessels? (if yes, please explain) _____

9. Other Miscellaneous _____ No vessel use along the Southern Branch of the Elizabeth River that requires an opening of the High Rise Bridge, nor plans to expand vessel fleet to a size that would require openings of the Bridge in the foreseeable future. _____

Waterway User Questionnaire: *Bridge Project*

User Data Sheet

By: Halie Stannard Date: 10-3-2013

1. Company Name and/or Vessel and Contact Information

Name of Company Roanoke Cement

Name of Contact Mr. Ted Marousas

Phone Number (Office): (757) 494-1325 (Cell): _____

Email: tmarousas@titanamerica.com

Address: 1332 Priority Lane

City Chesapeake State VA Zip Code 23320

2. Vessel Information

2a. Vessel Name _____

2b. Vessel Type _____

2c. US Coast Guard Document Number _____

3. Length Overall (LOA), feet: _____ 3b. Beam (width), feet: _____

4. Draft (depth of hull below waterline, fully laden), feet: _____

5. Air gap for Vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge) _____

6. Frequency of one way passage underneath the Bridge (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

7. Frequency of one way passage underneath the Bridge (other historic events):

8. Do you have a Business Plan? (e.g. 10 or 20 year plan) _____

a. What does it say regarding vessels transiting under the Bridge?

b. May we have a copy? _____

c. Are there any plans for expansion and/or acquisition of larger vessels? (if yes, please explain) _____

9. Other Miscellaneous _____
Roanoke Cement does not require openings of the High Rise Bridge to
meet current commercial or industrial needs; nor does Roanoke Cement have plans to expand vessel
_____ fleet to a size that would require openings in the foreseeable future.

Waterway User Questionnaire: *Bridge Project*

User Data Sheet

By: Halie Stannard Date: 10-25-2013

1. Company Name and/or Vessel and Contact Information

Name of Company SIMS Metal Management

Name of Contact Mr. Ron Chandler

Phone Number (Office): (757) 543-2006 (Cell): _____

Email: Ronnie.Chandler@SIMSmm.com

Address: 4300 Buell Street

City Chesapeake State VA Zip Code 23324

2. Vessel Information

2a. Vessel Name _____

2b. Vessel Type _____

2c. US Coast Guard Document Number _____

3. Length Overall (LOA), feet: _____ 3b. Beam (width), feet: _____

4. Draft (depth of hull below waterline, fully laden), feet: _____

5. Air gap for Vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge) _____

6. Frequency of one way passage underneath the Bridge (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

7. Frequency of one way passage underneath the Bridge (other historic events):

8. Do you have a Business Plan? (e.g. 10 or 20 year plan) _____

a. What does it say regarding vessels transiting under the Bridge?

b. May we have a copy? _____

c. Are there any plans for expansion and/or acquisition of larger vessels? (if yes, please explain) _____

9. Other Miscellaneous _____ SIMS Metal Management does not require openings of the High Rise Bridge to meet current commercial or industrial needs; nor have plans to expand vessel fleet to a size that would require _____ openings in the future. _____

Waterway User Questionnaire: *Bridge Project*

User Data Sheet

By: Halie Stannard Date: 10/4/2013

1. Company Name and/or Vessel and Contact Information

Name of Company Skanska USA Civil, Inc.

Name of Contact Jack Liles, Project Manager

Phone Number (Office): (757) 547-2153 (Cell): _____

Email: jack.liles@skanska.com

Address: 121 Dominion Blvd. South

City Chesapeake State Va Zip Code 23322

2. Vessel Information

2a. Vessel Name Rig 15, Rig 18, Samson

2b. Vessel Type Fixed crane on barges

2c. US Coast Guard Document Number na

3. Length Overall (LOA), feet: 120', 150', 165' 3b. Beam (width), feet: 50', 70', 44'

4. Draft (depth of hull below waterline, fully laden), feet: 3', 2', 4'

5. Air gap for Vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge) Rig 15 - 66' Tall + 8' Clearance, Rig 18 - 70' Tall + 8' Clearance, Samson - 95' Tall + 8' Clearance

6. Frequency of one way passage underneath the Bridge (typical per month):

Jan 4 Feb 4 Mar 4 Apr 4 May 4 Jun 6 Jul 6 Aug 6 Sep 4 Oct 4 Nov 4 Dec 4

7. Frequency of one way passage underneath the Bridge (other historic events):

0

8. Do you have a Business Plan? (e.g. 10 or 20 year plan) no

a. What does it say regarding vessels transiting under the Bridge?

b. May we have a copy? _____

c. Are there any plans for expansion and/or acquisition of larger vessels? (if yes, please explain) not in the immediate future _____

9. Other Miscellaneous _____

Waterway User Questionnaire: *Bridge Project*

User Data Sheet

By: Halie Stannard Date: 11-6-2013

1. Company Name and/or Vessel and Contact Information

Name of Company T. Parker Host

Name of Contact David Host

Phone Number (Office): (757) 627-6286 (Cell): _____

Email: david.host@tparkerhost.com

Address: 500 Plume Street East, Suite 600

City Norfolk State VA Zip Code 23510

2. Vessel Information

2a. Vessel Name _____

2b. Vessel Type _____

2c. US Coast Guard Document Number _____

3. Length Overall (LOA), feet: _____ 3b. Beam (width), feet: _____

4. Draft (depth of hull below waterline, fully laden), feet: _____

5. Air gap for Vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge) _____

6. Frequency of one way passage underneath the Bridge (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

7. Frequency of one way passage underneath the Bridge (other historic events):

8. Do you have a Business Plan? (e.g. 10 or 20 year plan) _____

a. What does it say regarding vessels transiting under the Bridge?

b. May we have a copy? _____

c. Are there any plans for expansion and/or acquisition of larger vessels? (if yes, please explain) _____

9. Other Miscellaneous _____ So as not to impede any further development in the future, we feel the I-64 High

Rise Bridge should have a vertical clearance of 135 feet which would coincide with the vertical clearance of _____
the Gilmerton Bridge. This would allow future expansion for ships to access waterfront...(cont'd)

Waterway User Questionnaire: *Bridge Project*

User Data Sheet

By: Halie Stannard Date: 11-6-2013

1. Company Name and/or Vessel and Contact Information

Name of Company T. Parker Host (cont'd)

Name of Contact David Host

Phone Number (Office): (757) 627-6286 (Cell): _____

Email: david.host@tparkerhost.com

Address: 500 Plume Street East, Suite 600

City Norfolk State VA Zip Code 23510

2. Vessel Information

2a. Vessel Name _____

2b. Vessel Type _____

2c. US Coast Guard Document Number _____

3. Length Overall (LOA), feet: _____ 3b. Beam (width), feet: _____

4. Draft (depth of hull below waterline, fully laden), feet: _____

5. Air gap for Vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge) _____

6. Frequency of one way passage underneath the Bridge (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

7. Frequency of one way passage underneath the Bridge (other historic events):

8. Do you have a Business Plan? (e.g. 10 or 20 year plan) _____

a. What does it say regarding vessels transiting under the Bridge?

b. May we have a copy? _____

c. Are there any plans for expansion and/or acquisition of larger vessels? (if yes, please explain) _____

9. Other Miscellaneous _____ ...terminal beyond the High Rise Bridge

Waterway User Questionnaire: *Bridge Project*

User Data Sheet

By: Halie Stannard Date: 10/3/2013

1. Company Name and/or Vessel and Contact Information

Name of Company Top Rack Marina, Chesapeake Marina LLC

Name of Contact Mr. Brian McKown

Phone Number (Office): (757) 227-3041 (Cell): _____

Email: embark@toprackmarina.com

Address: 5532 Bainbridge Boulevard

City Chesapeake State VA Zip Code _____

2. Vessel Information

2a. Vessel Name _____

2b. Vessel Type _____

2c. US Coast Guard Document Number _____

3. Length Overall (LOA), feet: _____ 3b. Beam (width), feet: _____

4. Draft (depth of hull below waterline, fully laden), feet: _____

5. Air gap for Vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge) _____

6. Frequency of one way passage underneath the Bridge (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

7. Frequency of one way passage underneath the Bridge (other historic events):

8. Do you have a Business Plan? (e.g. 10 or 20 year plan) _____

a. What does it say regarding vessels transiting under the Bridge?

b. May we have a copy? _____

c. Are there any plans for expansion and/or acquisition of larger vessels? (if yes, please explain) _____

9. Other Miscellaneous _____
Top Rack Marina does not have the infrastructure to support a vessel of the size
that would require an opening of the High Rise Bridge; the maximum vessel that Top Rack Marina can
_____ currently house in dry storage is a 16' high yacht.

Waterway User Questionnaire: *Bridge Project*

User Data Sheet

By: Halie Stannard Date: 10/3/2013

1. Company Name and/or Vessel and Contact Information

Name of Company TransMontaigne Terminaling, Inc.

Name of Contact Michael J. Steele, Terminal Manager

Phone Number (Office): (757) 545-8455 (Cell): _____

Email: _____

Address: 1310 Priority Lane

City Chesapeake State VA Zip Code 23324

2. Vessel Information

2a. Vessel Name _____

2b. Vessel Type _____

2c. US Coast Guard Document Number _____

3. Length Overall (LOA), feet: _____ 3b. Beam (width), feet: _____

4. Draft (depth of hull below waterline, fully laden), feet: _____

5. Air gap for Vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge) _____

6. Frequency of one way passage underneath the Bridge (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

7. Frequency of one way passage underneath the Bridge (other historic events):

8. Do you have a Business Plan? (e.g. 10 or 20 year plan) _____

a. What does it say regarding vessels transiting under the Bridge?

b. May we have a copy? _____

c. Are there any plans for expansion and/or acquisition of larger vessels? (if yes, please explain) _____

9. Other Miscellaneous _____ TransMontaigne Terminaling, Inc. does not send or receive vessels south of the High Rise Bridge along the Elizabeth River and does not require openings of the High Rise Bridge to meet current or foreseeable future vessel needs. _____

Waterway User Questionnaire: *Bridge Project*

User Data Sheet

By: Halie Stannard Date: 10-16-2013

1. Company Name and/or Vessel and Contact Information

Name of Company Tri-Port Terminals, Inc

Name of Contact Mr. Sidney Camden

Phone Number (Office): (757) 545-1406 (Cell): (910) 617-0083

Email: ast1870@aol.com

Address: 1324 McCloud Road

City Chesapeake State VA Zip Code 23320

2. Vessel Information

2a. Vessel Name Customer Chartered Vessels

2b. Vessel Type _____

2c. US Coast Guard Document Number _____

3. Length Overall (LOA), feet: 700' plus 3b. Beam (width), feet: 106'

4. Draft (depth of hull below waterline, fully laden), feet: 32'

5. Air gap for Vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge) 135'

6. Frequency of one way passage underneath the Bridge (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

7. Frequency of one way passage underneath the Bridge (other historic events):

Vessels currently berth between the Gilmerton and High Rise Bridges.

8. Do you have a Business Plan? (e.g. 10 or 20 year plan) Yes.

a. What does it say regarding vessels transiting under the Bridge?

Future expansion may require vessels to transit under the High Rise Bridge.

Property available for purchase south of the High Rise Bridge, which may potentially be acquired
by Tri-Ports, contingent upon customers and contracts.

b. May we have a copy?

c. Are there any plans for expansion and/or acquisition of larger vessels? (if yes, please explain)

Existing bridge restrictions already limit expansion opportunities. If expansion to
property south of High Rise Bridge, would require occasional bridge openings.

9. Other Miscellaneous Current fleet characteristics and operating procedures do not necessitate the use
of the Southern Branch of the Elizabeth River south of the Gilmerton Bridge.

Waterway User Questionnaire: *Bridge Project*

User Data Sheet

By: Halie Stannard Date: 10-21-2013

1. Company Name and/or Vessel and Contact Information

Name of Company United States Gypsum Company

Name of Contact David Bunch

Phone Number (Office): (757) 494-8100 (Cell): _____

Email: dbunch@usg.com

Address: 1424 South Main Street

City Norfolk State VA Zip Code 23523

2. Vessel Information

2a. Vessel Name _____

2b. Vessel Type _____

2c. US Coast Guard Document Number _____

3. Length Overall (LOA), feet: _____ 3b. Beam (width), feet: _____

4. Draft (depth of hull below waterline, fully laden), feet: _____

5. Air gap for Vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge) _____

6. Frequency of one way passage underneath the Bridge (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

7. Frequency of one way passage underneath the Bridge (other historic events):

8. Do you have a Business Plan? (e.g. 10 or 20 year plan) _____

a. What does it say regarding vessels transiting under the Bridge?

b. May we have a copy? _____

c. Are there any plans for expansion and/or acquisition of larger vessels? (if yes, please explain) _____

9. Other Miscellaneous _____ United States Gypsum Co. does not require openings of the High Rise Bridge to meet current commercial or industrial needs; nor have plans to expand vessel fleet to a size that would require _____ openings in the future. _____

Waterway User Questionnaire: *Bridge Project*

User Data Sheet

By: Halie Stannard Date: 10/3/2013

1. Company Name and/or Vessel and Contact Information

Name of Company Vulcan Materials Company

Name of Contact Steven Magdeburger

Phone Number (Office): 4103659960 (Cell): 4103659960

Email: magdeburgerst@vmcmail.com

Address: 938 Quarry Road

City Baltimore State MD Zip Code 21078

2. Vessel Information

2a. Vessel Name Fort Pike

2b. Vessel Type Tug

2c. US Coast Guard Document Number 524596

3. Length Overall (LOA), feet: 65.5 3b. Beam (width), feet: 24.5

4. Draft (depth of hull below waterline, fully laden), feet: 8.5

5. Air gap for Vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge) 10 feet

6. Frequency of one way passage underneath the Bridge (typical per month):

Jan 8 Feb 8 Mar 8 Apr 8 May 12 Jun 16 Jul 16 Aug 14 Sep 10 Oct 8 Nov 8 Dec 8

7. Frequency of one way passage underneath the Bridge (other historic events):

8. Do you have a Business Plan? (e.g. 10 or 20 year plan) NA

a. What does it say regarding vessels transiting under the Bridge?

NA

b. May we have a copy? NA

c. Are there any plans for expansion and/or acquisition of larger vessels? (if yes, please explain) NA

9. Other Miscellaneous



INTERSTATE 64 / HIGH RISE BRIDGE CORRIDOR STUDY

CITY OF CHESAPEAKE, VA | STATE PROJECT #: 0064-131-783 | UPC: 104366

VOLUME 2 :
VIRGINIA DEPARTMENT OF
TRANSPORTATION BRIDGE LOGS

Commonwealth of Virginia Department of Transportation

DRAW TENDER'S LOG

Hi-Rise

BRIDGE Elizabeth

RIVER

RECORD OF THIS SHEET COVERS PERIOD FROM

July

2

| DATE | DRAW OPERATION | | | | VESSEL INFORMATION | | | | | | | | TIDES | | WEATHER CONDITIONS | |
|----------|----------------|-------|--------------|----------------------------------|---------------------------------|---------------|----------------------|-----------------|-------------------------|-------------------|--------------------------|--------------------------------|-----------|----------------|------------------------|---------------------------------|
| | A.M. | P.M. | Minutes Open | Operate Satisfactorily Yes or No | Name | Type of Power | Direction Up or Down | Loaded or Empty | Clear Fenders Yes or No | Delayed Yes or No | Signal Correct Yes or No | Complaint by Captain Yes or No | In or Out | High or Low | Wind Dir. Mod. or High | Fog Clear or Rainy (Cloudy) Sno |
| 7/10/13 | | 12:00 | 21 min | Yes | Atlantic Frost | 3 TUGS | UP | Ship | Yes | NO | Yes | NO | High | | | |
| 7/11/13 | 10:00 | | 13 min | YES | HOSS / CRANE BARGE | TUG | UP | LOAD | YES | NO | YES | NO | High | 6 MPH / SUNNY | | |
| 7/31/13 | 10:30 | | 14 min | YES | ALBERT FINE CRANE BARGE | TUG | DOWN | LOAD | YES | NO | YES | NO | Low | 3 MPH / CLOUDY | | |
| 8/24/13 | | 3:30 | 17 min | YES | ATLANTIC DREDGE CRANE BARGE | MISSGATE | UP | LOAD | YES | NO | YES | NO | High | 9 MPH / CLOUDY | | |
| 9/7/13 | 8:00 | | 18 min | YES | MCLAN CRANE BARGE | FORT MACON | UP | LOAD | YES | NO | YES | NO | High | 1 MPH / CLEAR | | |
| 9/8/13 | 7:23 | | 20 min | YES | MCLAN CRANE BARGE | FORT MACON | DOWN | LOAD | YES | NO | YES | NO | Low | 4 MPH / CLEAR | | |
| 9/26/13 | | 7:00 | 20 min | YES | Fort Maccon | TUG | UP | LOAD | YES | NO | YES | NO | Low | 13 MPH / CLEAR | | |
| 9/27/13 | | 7:00 | | YES | Fort Maccon | TUG | DOWN | CRANE | YES | NO | YES | NO | High | 12 / P. CLOUDY | | |
| 10/19/13 | | | 20 min | NO REASON | DREDGE ATLANTIC | TUGS | UP | CRANE | YES | NO | YES | NO | High | 4 MPH / CLOUDY | | |
| 10/29/13 | | 2:00 | 20 min | YES | MCCALLISTER CRANE BARGE | TUGS | UP | CRANE | YES | NO | YES | NO | Low | 6 MPH / CLEAR | | |
| 11/4/13 | 9:00 A.M. | | 20 min | NO REASON | CRITICAL TENDY C W.B. 39 | TUGS | DOWN | CRANE | YES | NO | YES | NO | Low | 6 MPH / CLEAR | | |
| 11/18/13 | 9:00 | | 16 | NO REASON | MCCANN CRANE BARGE | TUGS | DOWN | CRANE | YES | NO | YES | NO | High | 4 MPH / CLEAR | | |
| 11/19/13 | 9:00 | | 14 | YES | BONNIE C | CRANE | UP | CRANE | YES | NO | YES | NO | High | 5 MPH / CLEAR | | |
| 11/22/13 | 11:00 AM | | 4 | YES | SKANSKA RIGS (GOOSE CREEK TUGS) | TUGS | UP | CRANE | YES | NO | YES | NO | High | 8 MPH / CLEAR | | |
| 12/2/13 | 11:00 AM | 1 | 13 | YES | GOOSE CREEK | | UP | CRANE | YES | NO | YES | NO | High | 2 MPH / CLEAR | | |

Note: This report shall be filed in the Residency office.
 If draw does not operate satisfactory write out reasons on first line under the other information.
 If vessel is delayed write out reasons on first line under other information.
 If there is a complaint by captain or owner write our reason on first line under other information.

Commonwealth of Virginia
Department of Transportation

DRAW TENDER'S LOG

High Rise

BRIDGE

ELIZABETH

RIVER

RECORD OF THIS SHEET COVERS PERIOD FROM

DECEMBER

1

| DATE | DRAW OPERATION | | | | VESSEL INFORMATION | | | | | | | | | TIDES | | WEATHER CONDITIONS | | |
|----------|----------------|------|--------------|----------------------------------|--------------------|---------------|----------------------|-----------------|-------------------------|-------------------|--------------------------|--------------------------------|-----------|-------------|-----------|--------------------|--------------|---------|
| | A.M. | P.M. | Minutes Open | Operate Satisfactorily Yes or No | Name | Type of Power | Direction Up or Down | Loaded or Empty | Clear Fenders Yes or No | Delayed Yes or No | Signal Correct Yes or No | Complaint by Captain Yes or No | In or Out | High or Low | Wind Dir. | Mod. or High | Clear Cloudy | Rai Snr |
| 12/1/13 | 9:15 | | 16 min | YES | Hoss | TUG | DOWN | CRANE | YES | NO | YES | NO | LOW | | 2 MPH | | | CLEAR |
| 12/23/13 | 12:15 | | 13 min | YES | Hoss | TUG | UP | CRANE | YES | NO | YES | NO | HIGH | | 10 MPH | | | RAIN |
| 1-4-14 | 6:00 | | 14 min | NO | MERRIMAC | TUG | DOWN | CRANE | YES | NO | YES | | HIGH | | 1 MPH | | | |
| | | | | | | | | | | | | | | | | | | |
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Note: This report shall be filed in the Residency office.
 If draw does not operate satisfactory write out reasons on first line under the other information.
 If vessel is delayed write out reasons on first line under other information.
 If there is a complaint by captain or owner write our reason on first line under other information.



INTERSTATE 64 / HIGH RISE BRIDGE CORRIDOR STUDY

CITY OF CHESAPEAKE, VA | STATE PROJECT #: 0064-131-783 | UPC: 104366

VOLUME 3 :
VIDEO MONITORING RESULTS

VDOT Video Monitoring Results

| Date | Name | Vessel Type |
|------------|---|--------------|
| 09/07/2013 | McLean Contracting Cape Fear | Crane Barge |
| 09/08/2013 | McLean Contracting Cape Fear | Crane Barge |
| 09/26/2013 | McLean Contracting Cape Fear | Crane Barge |
| 09/27/2013 | McLean Contracting Cape Fear | Crane Barge |
| 10/19/2013 | Norfolk Dredging Company Dredge Atlantic | Dredge Barge |
| | American Eagle* | Crane Barge |
| 10/29/2013 | Piquet* | Sailboat |
| | McLean Contracting Baltimore | Crane Barge |
| | Tidewater Skanska Rig 18 | Crane Barge |
| 11/14/2013 | Crofton Industries Crofton I | Crane Barge |
| | McLean Contracting Annapolis | Crane Barge |
| 11/18/2013 | McLean Contracting Annapolis | Crane Barge |
| 11/19/2013 | Crofton Industries Crofton I | Crane Barge |
| 11/22/2013 | Tidewater Skanska Rig 18 | Crane Barge |

*Denotes vessels whose vertical clearances do not require an opening of the High Rise Bridge, but opted to wait for a scheduled opening to pass.