

**FEDERAL HIGHWAY ADMINISTRATION**

**FINDING OF NO SIGNIFICANT IMPACT**

**FOR**

**ROUTE:** Skiffes Creek Connector  
**LOCATION:** James City County, Virginia  
**STATE PROJECT:** 0060-047-627, P101, R201, C501; UPC 100200  
**FEDERAL PROJECT:** STP-5A03(455)

The Federal Highway Administration has determined that this project will have no significant impact on the environment. This Finding of No Significant Impact is based on the approved Environmental Assessment and the Virginia Department of Transportation's February 19, 2019 letter requesting a Finding of No Significant Impact, which have been independently evaluated by the Federal Highway Administration and determined to adequately and accurately discuss the need, environmental issues, and impacts of the proposed project. It provides sufficient evidence and analysis for determining that an Environmental Impact Statement is not required.

3/29/19

Date

*John Jenkins*

for: FHWA Division Administrator

## **Rationale for the Finding of No Significant Impact**

### **Skiffes Creek Connector**

State Project Number: 0060-047-627, P101, R201, C501; UPC 100200

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We have reviewed the Virginia Department of Transportation's February 19, 2019 letter requesting a Finding of No Significant Impact (FONSI Request Letter), which includes comments from the Location Public Hearing. The EA and FONSI Request Letter are attached to the Finding of No Significant Impact (FONSI) and is hereby incorporated by reference into this rationale supporting the FONSI.

U.S. Route 60 and VA Route 143 are the two primary routes running east/west through the Skiffes Creek Connector (SCC) study area. There is a distance of more than six miles between the existing connections linking U.S. 60 and VA 143 at VA 199 and VA 238.

Currently, there are no connection points between U.S. 60 and VA 143 in or near the SCC study area. Residents, employees, large freight trucks, and visitors to the area are required to take non-direct routes to travel between U.S. 60 and VA 143. Work force travel patterns demonstrate that James City County's population exhibits a high commuting exchange with the Cities of Williamsburg, Newport News, and York County, with the majority of these commuters likely using U.S. 60 and VA 143 for a portion of their commute. Additionally, five pedestrian-related crashes were reported, all of which occurred along U.S. 60. Two fatalities were reported, which also occurred along U.S. 60 including one of the pedestrian-related crashes. Furthermore, there is a large number of crashes along VA 238, specifically concentrated at the intersections of U.S. 60 / VA 238 and VA 143 / VA 238, which serve as the connection between U.S. 60 and VA 143. At the U.S. 60 / VA 238 intersection, there were ten reported crashes, including four angle crashes and five crashes involving injuries. At the VA 143 / VA 238 intersection, there were 23 reported crashes, including 12 angle crashes and 13 crashes involving injuries.

Since the SCC study area is located within a coastal region, emergency evacuation plans are critical to ensuring public safety, particularly as it relates to potential hurricanes. With the potential for nearly 1.1 million residents to use the I-64, U.S. 60, and VA 143 evacuation routes during a major evacuation event, the lack of efficient connectivity west of, and within the SCC study area, may result in severely congested, slower evacuation events; particularly if there is a major traffic incident on I-64, US 60, or VA 143. Utilizing the supporting information, the purpose of the SCC is to create efficient local connectivity between U.S. 60 and VA 143, in the area between VA 199 and VA 238, in a manner that improves safety, emergency evacuation, and the movement of goods along the two primary roadways.

### **Environmental Impacts**

The environmental impacts for the Preferred Alternative (PA) that involves improvements on new location were described in the approved Environmental Assessment (EA). The EA was transmitted to numerous federal and state environmental resource agencies and

was made available for public review prior to and at the Public Hearing. Substantive comments were addressed in the FONSI Request Letter. No comments were received from the environmental resource agencies or any member of the public that suggested that the project would have a significant environmental impact.

The following is a summary of the project's environmental impacts.

### Land Use

The SCC study area is comprised mainly of undeveloped, residential, institutional/public land, and industrial land. The southwest portion of the study area contains two residential areas bisected north to south by the inactive rail spur that lines up with BASF Drive, west of Green Mount Parkway. A second rail line, the CSX Transportation (CSXT) railroad, runs west to east, separating the northern third of the study area from the southern portion.

The PA would require the acquisition of approximately 14.6 acres from six parcels. The acquisition would consist of 7.7 acres of undeveloped land, 5 acres of public land, 1 acre of transportation land, 0.7 acres of industrial land, 0.11 acres of institutional land, and 0.11 acres of farmland. There would be no relocations. Compensation in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (as amended, 1987) would be provided. The PA is in conformance with the James City County Comprehensive Plan and consistent with future land use plans.

The study area contains 133.4 acres of land classified as having prime farmland soils or soils of statewide importance. The PA would impact 9.7 acres of soils mapped by Natural Resources Conservation Service (NRCS) as prime farmland soil and/or soils of statewide importance that are subject to the FPPA (of the 133.4 acres within the study area), which is approximately seven percent of the overall amount of prime farmland soil and soils of statewide importance subject to the Farmland Protection Policy Act of 1981 (FPPA) within the study area.

A United States Department of Agriculture (USDA) NRCS Farmland Conversion Impact Rating Form has been completed and submitted to USDA NRCS to determine impact ratings to prime farmland soils and soils of statewide importance. The PA scored below 160 because it is located in an urbanized area and there is a low percentage of farmland protected by FPPA within the study area. Therefore, in accordance with the regulations implementing the FPPA, other alternatives do not need to be considered.

FHWA finds that the impacts to land use are not significant.

### Social

*Community Facilities/Services.* The study area is located within the Grove Community of James City County, which generally encompasses the area between Grove Creek and Skiffes Creek. The study area contains the following four neighborhoods: Windy Hill, Whispering Pines, Skiffes Creek Terrace, and Carter's Village. A small portion of the land

within the Poplar Hall neighborhood is located within the study area; however, none of the residences are within the study area. Two government service facilities, Virginia Peninsula Regional Jail and Merrimac Juvenile Detention Center, and one church, Morning Star Church, are located within the study area. No emergency services facilities are located within the study area.

The PA would not have any divisive or disruptive effect on the community and would not hinder the accessibility of the public to any of the essential community or public services (schools, churches, shopping centers or medical facilities/hospitals) or police/fire and rescue emergency response services. The new connection between US 60 and VA 143 would increase access options for emergency vehicles, improve access options to/from the existing study area communities, and improve access to other community facilities located along US 60 and VA 143 both east and west of the study area. Through traffic would have a direct connection between the employment centers and truck origin and destination (O/D) locations and VA 143, reducing the potential for vehicle/pedestrian incidents.

FHWA finds that the social impacts are not significant.

### Environmental Justice

This project has been developed in accordance with Title VI of the Civil Rights Act of 1964 as amended, and Executive Order 12898 - Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.

*Public Participation.* A comprehensive and ongoing public participation program has been established for this project to allow affected parties to review the proposed project concepts and provide comments. A Location Public Hearing (LPH) for the Skiffes Creek Connector Study Environmental Assessment (EA) was held July 18, 2018, from 6 p.m. to 8 p.m. at James River Elementary School in Williamsburg, VA. Advertisements for the LPH were published in local newspapers and a notice for the LPH was provided on VDOT's website and VDOT's Facebook page. All LPH materials were posted to the website prior to the meeting date. Additionally, VDOT reached out to the Grove Outreach Center, the Colonial Manor Senior Community, and the community through mailing lists. The attendance sign-in sheets show that at least 22 people attended the hearing. One email was received prior to the LPH; three comment sheets were submitted at the LPH; and six online survey forms were completed. While the public input at this stage was limited, it was consistent with what VDOT has heard at the previous Citizen Information Meetings: the public was in favor of Build Alternative 1 (PBA). No public comments specific to environmental related issues were received. No changes have been made to the proposed action or associated mitigation measures as a result of comments received on the EA.

*Environmental Justice Impacts.* In light of Executive Order 12898, a review of the potential disproportionately high and adverse effects of the PA was conducted. The minority population (including Hispanic/Latino populations) for each Census block group was found to be "meaningfully greater" than the surrounding Census block groups if the Census block was greater than James City County's percentage of minority population (24

percent). Both Census block groups 801.02-1 and 801.02-2 are above the 24 percent minority threshold and are thus considered EJ communities.

The benefits of improved local connectivity and access between communities, community facilities, and for emergency vehicles, would be borne by all residents, including minority and low-income populations. No residents would be relocated. During construction, short-term road closures and detours would be limited to construction connecting to the two existing roadways. Since construction would be limited in duration, there would be no short-term accessibility effects to or from the EJ communities. Therefore, in accordance with the provisions of Executive Order 12898 and FHWA Order 6640.23, the PA would not result in a disproportionate and adverse impact to EJ populations.

FHWA finds that the Preferred Alternative would not have disproportionately high and adverse effects on minority and low-income populations, and finds that the impacts would not be significant.

### Historic Properties

The PA's potential effects on historic archaeological and architectural resources were analyzed in accordance with Section 106 of the National Historic Preservation Act (NHPA) of 1966 (as amended) (54 U.S.C. § 306108) and its implementing regulations at 36 CFR § 800.

VDOT initiated Section 106 consultation for the SCC Study with the State Historic Preservation Officer (SHPO) in March 2013, but the project was later placed on hold. In October 2017, the project was re-started and VDOT reinitiated Section 106 consultation with the SHPO. Additionally, VDOT and FHWA conducted outreach in October 2017 to two federally-recognized Indian tribes (Pamunkey Indian Tribe and Delaware Nation) and four local governments (James City and York Counties, Cities of Williamsburg and Newport News) to determine whether they desired to participate in Section 106 consultation for the SCC Study. The Pamunkey Indian Tribe responded that it is not aware of any site of cultural or religious significance that would be affected by the project but asked to be notified in the event of an inadvertent discovery. York County declined the opportunity to participate in the Section 106 consultation, and none of the other potential consulting parties responded.

VDOT defined the Area of Potential Effects (APE) for effects to archaeological resources and direct effects to architectural resources within the 225-foot corridor associated with the PA. The indirect APE extends outward 500 feet from the 225-foot-wide PA, with the exception that at the north end of the PA, the northern boundary of the indirect APE is the Interstate 64 corridor.

VDOT conducted archaeological survey of the 225-foot corridor associated with the PA. In 2013, an initial survey was conducted of the 2012 alternatives known as Build Alternative 1 (formerly identified as Alternative A) and Build Alternative 2 (formerly Alternative A1). VDOT's archaeological surveys located five archaeological sites within

the APE for direct effects. Two sites, 44JC0664 and 44JC1024, previously had been identified by other surveyors. Site 44JC0664, manifested by a broad scatter of domestic and architectural artifacts and surface features, likely represents an eighteenth- and nineteenth-century farmstead. Site 44JC1024, manifested by a scatter of domestic artifacts, likely represents an eighteenth- and nineteenth-century residence. In 2001, after these sites were first identified by others, the SHPO determined each site to be potentially eligible for the National Register of Historic Places (NRHP).

The two archaeological sites (44JC0664 and 44JC1024) potentially eligible for the NRHP are located within the planning level Limits of Disturbance (LOD) for the PA and likely would be affected by the project. While each site requires further evaluation to establish conclusively its NRHP eligibility, based on available information VDOT has concluded that the sites likely are important chiefly for the information they contain, which could be retrieved through data recovery, and have minimal value for preservation in place.

The planning level LOD for PA also contains a section of the CSXT/Peninsula Subdivision of the Chesapeake and Ohio Railroad. VDOT is assuming the railroad is eligible for the NRHP for the purposes of applying Section 106 to the SCC Study. VDOT has applied the Section 106 criteria of effect [36 CFR §800.16(i), 36 CFR §800.5(a)(1)] and concluded that the PA will not alter any of the characteristics of the CSXT/Peninsula Subdivision of the Chesapeake and Ohio Railroad that might qualify it for inclusion in the NRHP. The project will not directly impact the resource because the proposed highway will be carried by a bridge over the railroad and, as planned, all substructure elements of the proposed bridge will be placed outside of CSXT right of way. Furthermore, the original late nineteenth-century setting of the railroad in the project area has already been substantially modified by the addition in the mid-twentieth century of VA 143, a VDOT maintenance facility, an asphalt plant, and a regional jail facility, and new highway infrastructure is not incompatible with the original industrial nature of the railroad.

At least some portions of archaeological sites 44JC0664 and 44JC1024 likely would be directly impacted by construction of the PA in a manner that would diminish the integrity of the sites. If further study of either site indicates it is indeed eligible for the NRHP, and a portion of the site contributing to its eligibility is within the direct effects APE, then the effect of the SCC project on historic properties as a whole would be adverse.

VDOT has completed the Section 106 process for the SCC through execution of a Programmatic Agreement pursuant to §800.14(b)(3) of the Section 106 regulations. As drafted, the Programmatic Agreement stipulates the process VDOT would follow to complete efforts to determine whether site 44JC0664 or site 44JC1024 is eligible for the NRHP, assess the undertaking's effect on the site if determined NRHP eligible, and implement measures that would resolve any adverse effects on the site through avoidance, minimization, or mitigation. Based on available information, VDOT has concluded that in relation to their potential historical significance sites 44JC0664 and 44JC1024 likely are important chiefly for the information they contain, which could be retrieved through data recovery, and have minimal value for preservation in place.

The SHPO concurred with the findings presented by VDOT in regard to the PA on December 28th, 2018. The Programmatic Agreement was executed February 11<sup>th</sup>, 2019.

FHWA finds that the impacts to historic properties are not significant.

#### Right of Way / Relocation

Construction of the Preferred Alternative assumes that property access would not be affected and therefore right-of-way negotiations would be limited to partial acquisitions rather than complete acquisitions. The right-of-way cost estimate assumes partial takes of seven (7) parcels within the limits of disturbance (LOD) of the PA.

The acquisition and relocation program will be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. Relocation resources are available to all residential and business relocatees without discrimination.

FHWA finds that the right-of-way impacts are not significant.

#### Air Quality

This project is located in James City County, an Attainment area for all of the National Ambient Air Quality Standards (NAAQS).

The proposed project falls within the project types and conditions listed in the current FHWA – VDOT “Programmatic Agreement for Project –Level Air Quality Analyses for Carbon Monoxide” for streamlining the project level air quality analysis process for carbon monoxide. It has been determined that projects, such as this one, for which the conditions are not exceeded, would not significantly impact air quality and would not cause or contribute to a new violation, or delay timely attainment of the NAAQS for CO.

The worst-case alternative under the build condition occurs at the intersection of the proposed SCC and VA 143, which has the highest forecast traffic conditions based on the traffic forecasts noted in the Skiffes Creek Connector Environmental Traffic Data Report. The modeled CO concentrations for this type of project, excluding the background concentrations, is 6.5 parts per million (ppm) for the one-hour and, using a persistence factor of 0.77, an eight-hour concentration of 5.0 ppm. When the background concentrations of 2.0 ppm and 1.1 ppm are included, the one-hour and eight-hour concentrations increase to 8.5 ppm and 6.1 ppm, respectively. These predicted values are well below the one-hour and eight-hour CO NAAQS of 35 ppm and 9 ppm, respectively. This configuration would give a much worst-case scenario than that of the proposed T-intersection improvements that include no more than 4 approach lanes in each direction and an approach speed greater than 15 mph.

The project is best characterized as one with “low potential MSAT effects” since design year traffic is projected to be significantly less than 140,000 to 150,000 AADT thresholds that are provided in the FHWA MSAT guidance. Additionally, the USEPA’s vehicle and

fuel regulations are expected to result in substantially lower MSAT levels in the future than exist today due to cleaner engine standards coupled with fleet turnover, similar to the No Build Alternative, the MSAT emissions in the study area would be substantially lower under the PA than they are today, even accounting for vehicle miles traveled (VMT) growth.

On February 16, 2018, the U.S. Court of Appeals for the D.C. Circuit issued a decision in *South Coast Air Quality Management District v. EPA*, No. 15-1115, which struck down portions of the 2008 Ozone NAAQS SIP Requirements Rule concerning the ozone NAAQS. These portions of the 2008 Ozone NAAQS SIP Requirements Rule addressed implementation requirements for the 2008 ozone NAAQS as well as the anti-backsliding requirements associated with the revocation of the 1997 ozone NAAQS. On April 23, 2018, the FHWA/FTA issued guidance concerning the Court ruling that states in part, “NEPA approvals for FHWA/FTA projects (40 CFR 93.101) may not proceed unless the existing Metropolitan Plan and TIP include the project.” This project is already included in the current HRTPO’s FY 2018-2021 TIP for preliminary engineering. The project is located in a volatile organic compounds (VOC) and nitrogen oxides (NO<sub>x</sub>) Emissions Control Area. As such, all reasonable precautions should be taken to limit the emissions of VOC and NO<sub>x</sub>. The following Virginia Department of Environmental Quality’s (VDEQ) air pollution regulations must be adhered to during the construction of this project: 9 VAC 5-130, Open Burning restrictions; 9 VAC 5-45, Article 7, Cutback Asphalt restrictions; and 9 VAC 5-50, Article 1, Fugitive Dust precautions.

The assessment indicates that the project would meet all applicable air quality requirements of NEPA and federal and state transportation conformity regulations. As such, the project will not cause or contribute to a new violation, increase the frequency or severity of any violation, or delay timely attainment of the NAAQS established by the USEPA.

FHWA finds that the air quality impacts are not significant.

### Noise

The noise impacts are not significant in the context of NEPA.

A preliminary traffic noise study was completed which evaluated potential traffic noise impacts and abatement measures associated with the project.

A screening noise analysis for the SCC project was completed in accordance with the State Noise Abatement Policy that was developed to implement the requirements of 23 CFR Part 772, Procedures for Abatement of Highway Traffic Noise and Construction Noise (July 13, 2011), FHWA’s Highway Traffic Noise Analysis and Abatement Policy and Guidance (December 2011), and the noise related requirements of NEPA. As part of this screening noise analysis one detailed existing case noise model and two detailed build alternative noise models were developed using the FHWA Traffic Noise Model (TNM 2.5). AM and PM peak hour traffic volumes for the existing year (2017) and design year (2043) were produced for this study. The PM peak hour was selected as the worst-case hour as this hour

had a higher volume of traffic along the proposed alignments with the same percentage of heavy and medium trucks as the AM peak hour.

One Common Noise Environment (CNE) (CNE A), containing two noise sensitive land uses, is within the 500-foot noise study area. Both noise sensitive sites are associated with the Virginia Peninsula Regional Jail, approximately 450 feet from both proposed Skiffes Creek Connector alignments. The interior of this public institutional structure was evaluated as a Noise Abatement Criteria (NAC) category D and an outdoor seating area associated with the structure was evaluated as a category C. The design year 2043 exterior noise levels are predicted to be 67 dB(A) which exceed the NAC for category C receptors and therefore this site is considered to be impacted. The jail interior is not predicted to exceed the category D NAC due to the noise reduction factor of 25 dB(A) for a masonry structure with single glazed windows as shown in table 6 of the FHWA Highway Traffic Noise Analysis and Abatement Guidance Manual (2011) and is not considered impacted.

According to the VDOT Highway Traffic Noise Impact Analysis Guidance Manual, not all impacted noise sensitive receptors within 500 feet of the project area may qualify for noise abatement as noise abatement is typically evaluated for noise impacts caused primarily by the proposed roadway improvements. While the outdoor seating area associated with the jail is considered to be impacted by highway traffic noise in the design year 2043, the dominant noise source at this site has been determined to be I-64. Additional noise modeling determined that the predicted design year noise level at this site does not change when traffic noise is excluded from the proposed SCC. Noise abatement for the PA is not considered warranted.

FHWA finds that the noise impacts are not significant.

### Wildlife and Habitat

The majority of remaining habitat is located in the study area's only wildlife corridor along Skiffes Creek. This corridor is intersected by utility easements, which fragment the corridor, but do not prevent continued use of the corridor. The wildlife in the study area primarily consists of species that are adapted to forest and developed lands. However, the forested riparian corridor along Skiffes Creek supports fauna more typically found in less disturbed floodplain forests, including neotropical migrant birds.

Construction of the PA would result in some effects to the general ecology of the roadway's surroundings. The PA would affect wildlife communities and habitat through conversion of existing land cover to paved road surfaces and maintained right-of-way. The PA would impact an estimated 14.6 acres of land cover, of which approximately 6.4 acres is forested habitat. This conversion would result in loss of wildlife habitat and could affect existing wildlife migration patterns as a result of this new north-south road barrier, inhibiting wildlife movement east and west. The proposed bridges over the CSXT railroad and VA 143 would prevent full habitat fragmentation by providing wildlife passages. In addition, the bridge over Skiffes Creek, that would be developed during final design and Section 404/401 permitting, would also provide a wildlife passage.

The PA would also increase the amount of impervious surface within the study area, thereby increasing stormwater runoff. The stormwater runoff associated with the PA has the potential to carry roadway pollutants that impact aquatic biology and habitat. However, installation of stormwater BMPs would help mitigate the effect of roadway runoff pollutants on aquatic biology by treating stormwater. BMPs would also attenuate flows, reducing the potential for downstream erosion and impacts to the hydrologic regime.

FHWA finds that the impacts to wildlife and habitat are not significant.

### Water Quality & Aquatic Resources

The study area is located within the James River – Skiffes Creek subwatershed. The streams and wetlands within the study area ultimately drain to the James River.

Water Quality Assessment Integrated Report classifies these streams (totaling approximately 1.6 miles) as Category 5A impaired waters where a Total Maximum Daily Load (TMDL) is required. Aquatic life is impaired due to dissolved oxygen deficiencies.

In accordance with Virginia's State Water Control Law and implementing Virginia Stormwater Management Program (VSMP) regulations, the PA would maintain water quality and quantity post-development equal to or better than pre-development. Stormwater design would conform with VSMP regulations, which maintain, protect, or improve the physical, chemical, biological, and hydrologic characteristics, as well as water quality and quantity, of the receiving state waters. Implementation of the PA would not impact public surface water quality. Although the City of Newport News' Skiffes Creek Reservoir surface water intake is approximately 0.5 miles downstream of the PA, the reservoir is only used to store raw water. Drinking water is treated and stored at the Newport News City Reservoir. Due to the off-site treatment of Skiffes Creek Reservoir water, contamination of public drinking water is not a major concern.

Implementation of the PA is not expected to impact public drinking water wells. The PA is over two miles away from public drinking water wells; therefore, the wellhead protection radius set forth in the Virginia Wellhead Protection Plan and the 100-foot wellhead setback zone specified in Virginia Waterworks Regulations for public groundwater supply wells would not be impacted. The PA would introduce impervious surface to an otherwise undeveloped area. Consequently, stormwater runoff would also increase. The stormwater associated with the PA has the potential to carry roadway pollutants that would impact water quality. However, permanent stormwater BMPs would be designed as the project progresses and implemented to minimize the negative impacts of various pollutants that can be carried by runoff into the groundwater and receiving waters in accordance with Virginia's State Water Control Law.

The portion of the study area mapped by the Federal Emergency Management Agency (FEMA) contains approximately 11 acres of 100-year floodplain. The PA would not directly impact floodplains. A hydrologic and hydraulic analysis would be conducted to minimize potential effects to floodplains.

In accordance with Executive Order 11988, *Floodplain Management*, floodplain encroachments would be avoided or minimized to the maximum extent practicable. Crossings will be designed such that the project would not appreciably increase, directly or indirectly, flood levels or the risks of flooding. Therefore, no impacts to floodplains should result from project construction and operation.

FHWA finds that the impacts to water quality and aquatic resources are not significant.

#### Wetlands and Waters of the U.S.

Waters of the U.S. are defined by US Army Corps of Engineers (COE) and EPA regulations, and are described generically in EPA's 404 (b) (1) Guidelines as rivers, streams, ponds, and special aquatic sites, (e.g., sanctuaries and refuges, wetlands, mud flats, vegetated shallows, coral reefs, and riffle and pool complexes).

In order to identify potential Waters of the U.S. (WOUS) that could be present within the study area, an in-office review of available resource information was conducted in January 2018. Data reviewed included U.S. Geological Survey (USGS) topographic mapping, National Wetland Inventory (NWI) mapping, the National Hydrography Dataset (NHD), U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soils mapping and data, and aerial imagery.

To provide a more refined estimate of potential wetland and stream impacts that may result from the project, field investigations were conducted in June 2013 and March 2018 within a 225-foot Inventory Corridor. The Inventory Corridor, which encompasses the PA, provides the ability for future alignment shifts or refinements. Per the concurred methods with resources agencies, only the Inventory Corridor was studied in the field investigation; the rest of the study area was approximated with NWI and NHD.

Approximately 9,519 linear feet of regulated stream channels (combined NHD and 2013/2018 wetland investigation data) were identified within the study area, including 9,332 linear feet of perennial/intermittent channel and 187 linear feet of ephemeral channel. No jurisdictional ditches were identified. Approximately 32.04 acres of wetlands were identified within the study area, including 18.86 acres of palustrine forested (PFO) wetlands, 1.69 acres of palustrine emergent (PEM) wetlands, 1.76 acres of palustrine unconsolidated bottom (PUB) wetlands, 7.03 acres of lacustrine wetlands, and 2.70 acres of riverine wetlands.

Additionally, VDEQ's Wetland Condition Assessment Tool (WetCAT) was run on January 5, 2018 to provide additional documentation on the condition of wetlands in the study area. According to WetCAT, wetland habitat stress levels and water quality stress levels range from somewhat stressed to severely stressed. These results indicate that all wetland habitats and water quality within the study area experience a degree of stress that is not consistent with pristine environments.

Since the initiation of the SCC Study in 2012, VDOT has refined the design to reduce impacts to WOUS. The original four-lane divided freeway facility options were reduced to a two-lane facility, reducing the LOD from 225 feet to 140 feet. In addition, the design speed was reduced from 50 mph to 35 mph. By reducing the design speed, the alignment for the PA could be shifted to cross Skiffes Creek at a perpendicular angle, which is generally the least impactful way to cross a wetland or stream and is preferred by the regulatory agencies with purview over these resources. The design refinements reduced impacts to streams and wetlands by 869 linear feet (lf) and 1.84 acres. The current alignment of the PA would result in impacts to an estimated 0.85 acres of wetlands and an estimated 673 linear feet of stream (impacts assume no bridging of Skiffes Creek). These impacts would require approximately 1.60 wetland credits and 796.13 stream credits. Compensatory mitigation for wetlands was determined using the typical wetland compensatory mitigation impact ratios. Compensatory mitigation for streams was determined by multiplying the average USM RCI for representative stream reaches by the length of stream impact. In the SCC study area, the average RCI for ephemeral streams is 0.74 and the average RCI for intermittent and perennial streams is 1.31.

Based on the preliminary impact analysis, there are sufficient mitigation bank credits available for purchase within the same or adjacent HUC, watershed, and physiographic province as the SCC project. If, at the time of project permitting and construction, there are not enough compensatory mitigation credits available, the remaining credits could be purchased from an approved in-lieu fee fund (i.e. Virginia Aquatic Resources Trust Fund (VARTF)), as prescribed in the 2008 Mitigation Rule. All wetland and stream mitigation would be coordinated with resource agencies.

An additional design element that would further reduce impacts to wetlands and streams is a bridge crossing over Skiffes Creek. The extent of impact reduction would depend upon the final configuration of the bridge which would be developed during final design and CWA Section 404/401 permitting. The impact reductions from the bridge over Skiffes Creek were not included in the avoidance and minimization analysis.

FHWA finds that the impacts to wetlands and waters of the U.S. are not significant.

### Groundwater

The potential for non-point source pollutants to enter groundwater or surface water from storm water runoff would be managed by implementing an erosion and sediment control plan and a storm water management plan (including a pollution prevention plan) in accordance with VDOT's most current *Road and Bridge Specifications*. These specifications prohibit contractors from discharging any contaminants that could affect water quality. In the event of accidental releases, the contractor will be required to immediately notify all appropriate local, state, and federal agencies and take immediate action to contain and remove contaminants in accordance with the approved pollution prevention plan.

### Threatened and Endangered Species

Section 7 of the Endangered Species Act outlines consultation procedures for federal interagency cooperation to conserve federally listed species and designated critical habitats.

Database searches identified two federally listed species within the vicinity of the project study area: Atlantic sturgeon and northern long-eared bat. Databases identified three state listed species in the vicinity of the project study area: little brown bat, Mabee's salamander, and tri-colored bat. No Anadromous Fish Use Streams, Critical Habitat, bald eagles, or Threatened and Endangered Waters are present in the study area. The field investigation determined no suitable habitat for Mabee's salamander or Atlantic sturgeon. Suitable habitat is present for the three bats, however the Virginia Department of Game and Inland Fisheries (VDGIF's) northern long-eared bat winter habitat and roost trees mapper indicates that there are no known hibernacula or roost trees within 40 miles of the study area.

Conservation and protection measures for the northern long-eared bat would be in accordance with the final 4(d) rule and the Programmatic Biological Assessment for Transportation Projects in the Range of the Indiana Bat and Northern Long-eared Bat. Additional conservation measures may be implemented depending upon the outcome of agency coordination.

No impacts to threatened, endangered, or special status species are anticipated. Further coordination with agencies and final Section 7 effect determinations would be conducted as a part of the Clean Water Act Section 401/404 permitting process.

FHWA finds that the impacts to threatened and endangered species are not significant.

### Hazardous Materials

Environmental Data Resources, Inc. (EDR) was utilized to perform a search of federal and state regulatory agency databases within a 1-mile radius from the study area to identify potential sites with recognized environmental conditions (RECs). A total of five sites of elevated environmental concern were identified; four of these sites are within the study area and one of these sites is located approximately 140 feet north of the study area.

Based on the EDR Database Report, no "Open" Pollution Complaint (PC) cases or current corrective action efforts are associated with any of the sites identified within the study area. Four sites were identified within the study area with PC cases that have been closed by the VDEQ. One site (VDOT Skiffes Creek Headquarters) was identified to have historic petroleum releases associated with leaking underground storage tanks and is located within close proximity (50 feet) of the LOD for the PA. Additionally, the Yorktown Naval Weapon Station is located outside of the study area but is identified as a National Priorities List (NPL) Superfund Site with extensive corrective action efforts and land use controls associated with subsurface soil and groundwater. The USEPA indicated that there are numerous areas of concern within the Yorktown Naval Weapons Station and that there is insufficient data to make conclusions as to whether the migration of contaminated

groundwater is under control. Since the southernmost border of the Yorktown Naval Weapons Station is located approximately 340 feet north of the proposed LOD for the PA (bordering I-64 to the north), there is potential for impacted groundwater to have migrated from Yorktown Naval Weapons Station to the subsurface of the project site.

Should the project advance, prior to or during right-of-way acquisition, a Phase I Environmental Site Assessment (ESA), consistent with the American Society for Testing and Materials (ASTM) method E1527-13 is recommended. Findings from the ASTM Phase I ESA would be used to determine the applicability for an ASTM Phase II ESA. Any necessary remediation would be conducted in compliance with federal and state environmental laws and would be coordinated with the USEPA, VDEQ, and other regulatory agencies, as necessary.

Undocumented hazardous materials that may be encountered during construction efforts would be managed, handled, and disposed of in accordance with federal, state, and local regulations.

FHWA finds that the hazardous materials impacts are not significant.

### Construction Impacts

During construction, temporary environmental impacts can occur but can be controlled, minimized or mitigated through careful attention to prudent construction practices and methods. Potential temporary construction impacts and preventive practices are summarized below.

*Air quality.* Construction-related air quality impacts such as emissions from diesel-powered equipment, burning of debris, fugitive dust, and the use of cutback asphalt would be temporary. The project is located in a volatile organic compounds (VOC) and nitrogen oxides (NO<sub>x</sub>) Emissions Control Area. As such, all reasonable precautions should be taken to limit the emissions of VOC and NO<sub>x</sub>. The following Virginia Department of Environmental Quality's (VDEQ) air pollution regulations must be adhered to during the construction of this project: 9 VAC 5-130, Open Burning restrictions; 9 VAC 5-45, Article 7, Cutback Asphalt restrictions; and 9 VAC 5-50, Article 1, Fugitive Dust precautions.

*Noise.* Construction activity may cause intermittent fluctuations in noise levels. Temporary noise impacts would be attenuated through implementation of the VDOT-developed and FHWA-approved noise limit specification for construction activities (as specified in VDOT's most recent *Road and Bridge Specifications*). The contractor will be required to conform to this specification to reduce the impact of construction noise on the surrounding community.

*Hazardous Materials.* Undocumented hazardous materials that are encountered during construction efforts would be managed, handled, and disposed of in accordance with federal, state, and local regulations.

FHWA finds that the construction impacts would not be significant.

### Indirect Impacts

Existing communities and community facilities, primarily on U.S. 60, are likely to experience less through truck movement due to the increased travel efficiency to/from employment centers and truck O/D locations and would benefit from additional access to VA 143 as an access route to other neighborhoods and community facilities. The improved local connectivity could increase the desirability of living or working within the area, which would have a positive indirect impact on businesses and residents throughout the Socioeconomic Resources Indirect and Cumulative Effects (ICE) Study Area. During construction, short-term road closures and detours would be limited to construction connecting to the two existing roadways. Since construction would be limited in duration, there would be little short-term indirect effects to access between neighborhoods and community facilities.

The PA would create a road on a new alignment which allows land that was previously less accessible to be developed; however, James City County's comprehensive plans have consistently identified the SCC study area and much of the surrounding area as a growth area with particular potential for industrial development and mixed use areas. A similar alignment to the PA is included in transportation plans of James City County, and additional infill development and redevelopment is anticipated in York County and the City of Newport News. The majority of the total acres outside of designated growth areas are shown on James City County's 2035 Comprehensive Plan Land Use Map and the City of Newport News' 2030 *Framework for the Future* and *Transportation Map* as federal, state, or county land, mixed use, limited industry, or residential land uses. The future land use and zoning plans are designed to accommodate this development. Therefore, no induced growth is anticipated under the PA. Additionally, since the PA is not anticipated to encourage or accelerate any changes in land use that are not already expected in the localities within the study area, the construction of the PA is unlikely to create pressure on city councils and boards of supervisors to make changes to their land use plans to allow types of development in areas not currently approved for it or to allow greater development densities.

Potential indirect effects to waters, wetlands, and water quality could result from increased stormwater runoff due to an increase in impervious surface. Increased downstream pollution and sedimentation could also occur as a result of construction, use, and maintenance of the road. Implementation of strict erosion and sediment control and stormwater measures during construction would minimize permanent and temporary impacts to waters, wetlands and water quality, and thereby minimize indirect effects as well. Construction of stormwater management facilities would also minimize permanent indirect effects to water quality. Although the PA would not directly impact FEMA floodplains, flood flow elevations and hydrology could be altered through the placement of fill, culverts, and bridges. All construction activities would be designed to ensure that culverts and bridges are adequately sized and do not impede floodwater passage.

Indirect effects to wildlife and threatened, endangered, and special status species could occur due to increased noise, increased pollution, potential for introduction of invasive species, changes in vegetative composition due to changes in light and hydrologic regimes, and habitat fragmentation. However, bridges and culverts would be designed and installed to prevent habitat fragmentation and changes in hydrologic regime. During construction, the contractor would adhere to VDOT's Road and Bridge Specifications manual, Chapter 40 of Title 3.2 of the Code of Virginia, 2VAC-5-390-20, and other applicable regulations to prevent the introduction and establishment of invasive species.

Archaeological resources in the Historic Resources ICE Study Area may be indirectly impacted should additional areas in the vicinity of the PA be developed.

No induced growth would be expected as a result of the PA. The ICE Study Areas and surrounding localities are already developing or are planned and/or approved for development and anticipated growth would continue regardless of the conditions of the surrounding roadway network.

FHWA finds that the indirect impacts from the project would not be significant.

#### Cumulative Impacts

Cumulative impacts are the impact on the environment resulting from the incremental impact of the project when added to other past, present, and reasonably foreseeable future actions.

Although the overall roadway network connectivity and community cohesion has increased, the CSXT railroad and I-64 have and continue to fragment communities and destinations within these areas. Without a new connection between U.S. 60 and VA 143, population growth and economic development would continue; however, existing and future communities and businesses would continue to be poorly connected, causing negative economic and social consequences.

Past development has produced a steady decline in natural and historic resource conditions, including the creation of reservoirs, expansion of road and rail networks, and land use changes in the area. Intense land use has resulted in reduced water quality, impairment of waters for human and wildlife use; loss of wetlands, streams, and floodplains; loss of terrestrial wildlife population from over-exploitation; habitat loss, fragmentation, and degradation; and removal or impact to historic resources.

Access to businesses and destinations has also been hindered by fragmentation throughout the ICE Study Areas. The PA would have a moderate beneficial long-term cumulative impact by improving connectivity between neighborhoods, enhancing evacuation routes, and improving access to other community facilities located along US 60 and VA 143. Additionally, the PA would provide efficient connectivity for local truck movements, which would result in less trucks passing by neighborhoods and community facilities. Present and future local comprehensive planning allows for development and land use strategies that enhance accessible and efficient transportation systems to allow for

convenient and efficient movement of people and goods. The proposed project would add some beneficial impacts to otherwise adverse cumulative impacts on community cohesion.

The impacts to waters, wetlands, and water quality; floodplains, wildlife habitat; and threatened, endangered, and special status species from the PA would contribute to the cumulative effects that have occurred in the past to natural resources within the study area, although the effects should be minimized through implementation of best management practices, compensatory mitigation, and environmental regulations.

In order to infer present and reasonably foreseeable impacts to wetlands and streams, VDOT analyzed data provided by the USACE that reports Section 404 permits issued by the USACE over the last five years (data provided by the USACE to VDOT) within the sub-basin (HUC 02080206) where the project would be constructed. Based on current and projected land use and growth in the HUC, it is reasonable to assume that the trend of impacts to wetlands and streams over the last five years would continue into the reasonably foreseeable future. Therefore, the impact of less than 1 acre of wetlands and 673 linear feet of streams from the PA impact would have a minor cumulative effect.

All of these actions have had or will have an impact on the environment. For purposes of cumulative impact analysis for this EA, the primary issue is whether or not the proposed project would significantly impact the same resources as the actions listed above, resulting in an accumulation of impacts to the resource in question. Given that the impacts from the project on individual environmental resources are relatively minor, the effects of the PA would not significantly contribute to adverse cumulative impacts.

FHWA finds that the cumulative impacts would not be significant.

### **Council on Environmental Quality's Regulations**

The Council on Environmental Quality's regulations requires consideration of a project's context and intensity in determining whether the project will have a significant impact (40 C.F.R. 1508.27). Regarding context, the regulations state, "Context means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant." Since this project is a site-specific action, significance depends upon the effects of the project on the project area.

Regarding intensity, the regulations identify issues that should be considered in determining if the intensity of a project's impacts is substantial enough to warrant the preparation of an environmental impact statement (40 C.F.R. 1508.27(b)(1-10)). These issues are considered in the determination of whether there is a significant impact. The issues are addressed as follows:

*1. Impacts that may be both beneficial and adverse* – The project would result in a few beneficial impacts on the human environment. The project would create efficient local connectivity between U.S. 60 and VA 143, in the area between VA 199 and VA 238, in a manner that improves safety, emergency evacuation, and the movement of goods along the two primary roadways. The project would provide an enhanced emergency evacuation route along the primary routes (US 60 and VA 143). Should an accident or other backup occur on one of the primary routes, traffic could connect to the other route without interfering with traffic trying to get to or from I-64 and its connecting ramps. We find that these beneficial impacts, when taken in conjunction with the adverse impacts, do not reach the level of significant requiring the preparation of an environmental impact statement.

*2. The degree to which the project affects public health or safety* – It is not anticipated that the project will adversely affect public health and safety. By having a direct connection between the SCC and Green Mount Parkway, the PA minimizes the number of conflict points and turns required by trucks traveling between Green Mount Parkway and VA 143, thereby resulting in improved safety. Also, the project will not cause or contribute to an exceedance of the National Ambient Air Quality Standards.

*3. Unique characteristics of the geographical area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers or ecologically critical area* – No park lands, wild and scenic rivers, or ecologically critical areas would be impacted by the project. The effects to historic properties would be addressed via the stipulations in the executed Section 106 Programmatic Agreement and they would not be significant. As discussed earlier, the impacts to prime farmlands and wetlands are not significant.

*4. The degree to which the effects on the environment are expected to be highly controversial* – The term “controversial” refers to cases where substantial dispute exists as to the size, nature, or effect of the action rather than to the existence of opposition to a use, the effect of which is relatively undisputed. On this project, there has been no documented dispute regarding the size, nature, or effect of the project from the state or federal environmental resource agencies or any other entity. Further, no environmental resource agency has opposed the project. Based on the above, we find that the degree to which the effects on the environment are expected to be highly controversial does not require an environmental impact statement for this project.

*5. The degree to which the effects on the quality of human environment are highly uncertain or involve unique or unknown risks* – There are no known impacts on the quality of the human environment that can be considered highly uncertain or involve unique or unknown risks. The PA would require the partial acquisition of approximately seven parcels. No community facilities, services or access would be adversely affected by the project. The project will not cause or contribute to an exceedance of the National Ambient Air Quality Standards.

*6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future*

*consideration* – This action will not set a precedent for future actions with significant effects or represent a decision in principle about a future consideration. FHWA’s regulations at 23 CFR 771.115(a) list the types of actions that normally have a significant effect on the environment thereby requiring the preparation of an Environmental Impact Statement. Construction of a two-lane roadway facility on new location is not on the list. The project has logical termini and independent utility and represents a reasonable expenditure; it does not force additional improvements to be made to the transportation system. This decision will not establish a precedent regarding the requirements of NEPA as they will be applied to future projects.

*7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts* - This action has logical termini and independent utility and does not force additional transportation improvements to be made to the transportation system. Cumulative impacts were addressed in the EA and in this document, and we find that they are not significant.

*8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss of significant scientific, cultural, or historic resources* – No districts, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places would be adversely affected by the project. Two archaeological sites that are potentially eligible for the National Register of Historic Places may be adversely affected by the PA, but any adverse effects would be resolved through avoidance, minimization, or mitigation and in accordance with the Section 106 Programmatic Agreement.

*9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act* – No impacts to threatened, endangered, or special status species are anticipated and critical habitat would not be affected. Further coordination with agencies and final Section 7 effect determinations would be conducted as a part of the Clean Water Act Section 401/404 permitting process.

*10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment* – The proposed action does not knowingly threaten a violation of any Federal, State, or local law for the protection of the environment. All applicable permits will be acquired prior to construction.

### **Conclusion**

Based on the foregoing information and other supporting information, we find that the proposed project will not have a significant impact on the environment. Therefore, an environmental impact statement is not warranted, and the Finding of No Significant Impact is being issued accordingly. The Finding of No Significant Impact will be reevaluated as appropriate pursuant to 23 C.F.R. 771.129(c) as major approvals are requested from FHWA.