



COLLEGE CREEK WATER MAIN CROSSING PROJECT

ENVIRONMENTAL INVENTORY AND CONSTRAINTS

JANUARY 2019

1. INTRODUCTION

The James City Service Authority (JCSA) proposes to provide a new primary supply line across College Creek, along the south side of the Humelsine Parkway (State Route 199) eastbound (EB) bridge, as part of the College Creek Water Main Crossing Project in James City County, Virginia. The Study Area for the project is shown in **Figure 1-1**.

Horizontal Directional Drilling (HDD) under College Creek is expected to be the method of construction for the new pipeline. The length of the pipeline would be approximately 1,062 feet (ft) from the entry and exit points. The entry point is proposed to be approximately 200 ft west and 50 ft south of the western end of the EB bridge. The exit point is proposed to be approximately 200 ft east and 50 ft south of the eastern end of the bridge.

2. PURPOSE

The purpose of this report is to document the existing environmental resources and potential constraints within the Study Area to obtain a Special Use Permit from James City County. JCSA completed the constraints analysis to assist James City County in identifying those key environmental issues that should be given consideration during the planning and design phase of the proposed water main crossing. It is intended to facilitate the project planning process, assist the engineering team in evaluating various alternatives, define a preferred project, and assess potential permitting and mitigation requirements. The resources evaluated herein include water resources, threatened and endangered species and species habitat, forested habitat, soils, floodplains, and topography.

3. METHODS

Natural resources in the Study Area were identified based on several sources including: review of existing available literature; Geographic Information System (GIS) databases; and mapping and field reconnaissance of the Study Area which occurred on January 9, 2019. The Study Area was established as an area in which the existing conditions would be assessed using GIS overlays of the Study Area and the geographic limits of the resources being analyzed. Database information was obtained from federal, state, and/or local agencies for each resource assessed in the following sections.

A limit-of-disturbance (LOD) has been developed for the project. The LOD is based on design-level engineering which accommodates potential temporary and permanent impacts, and construction access. The LOD was used to quantify the environmental impacts of the project and is shown on the Master Plan mapping included with the application submittal.

4. ENVIRONMENTAL INVENTORY AND CONSTRAINTS

The following sections provide details on the existing natural resources, and potential constraints, considered in this analysis. Environmental criteria are natural features or areas identified as important habitats that may interact with construction or operational activities of the JCSA College Creek Water Main Crossing Project.

Figure 1-1: Vicinity-Location Map



Water Resources

The river basin including the Study Area was identified through use of the Watershed Boundary Dataset (WBD) maintained by the U.S. Geological Survey (USGS, 2018). The WBD defines the aerial extent of surface water drainage to a point, accounting for all land and surface areas, and identifies hydrologic units representing the watershed boundaries. Each hydrologic unit is given a Hydrologic Unit Code (HUC) as an identifier. According to the data, the Study Area includes a section of College Creek, a tidal tributary of the James River, and occurs entirely within HUC 020802060801 (College Creek).

Navigable waters in the Study Area were identified based on their flow regime (tidal vs. non-tidal), inclusion on the most recent (March 5, 2010) Navigable Waters of the United States (Section 10 of the Rivers and Harbors Act) list produced by the USACE Norfolk District (USACE, 2010a), or inclusion within the Navigable Waterways dataset, as of October 24, 2018, as part of the US Department of Transportation (USDOT)/Bureau of Transportation Statistics' National Transportation Atlas Database (USDOT, 2018).

No waterways within the Study Area are included as navigable waters on the USACE or USDOT lists. However, the USACE, by definition, considers all tidal waters as navigable. Tidal waters in the Study Area include College Creek. Therefore, the total channel length of navigable waters in the Study Area is approximately 63 linear ft.

Waters of the US (WOUS), including wetlands, located within the Study Area were delineated in the field on January 9, 2019 in accordance with the Routine Determination Method as outlined in the *1987 Corps of Engineers Wetland Delineation Manual* (USACE, 1987) and methods described in the *2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region* (Version 2.0) (USACE, 2010). Wetland flags were placed in the field at the determined jurisdictional boundaries and sequentially numbered to provide an on-site record of the delineation. The limits of WOUS, including wetlands, were then field located by means of a sub-meter capable GPS unit. Wetland systems were classified in accordance with the USFWS Classification of Wetlands and Deepwater Habitats in the United States (Cowardin et al. 1979).

WOUS, other than wetlands, were investigated in accordance with the limits defined in 33 C.F.R. § 328. The boundaries of non-tidal waters were set at the ordinary high-water mark (OHW). The OHW was determined in the field using physical characteristics established by the fluctuations of water (e.g., change in plant community, changes in the soil character, and shelving), in accordance with the USACE Regulatory Guidance Letter No. 05-05. The boundaries of tidal WOUS, other than wetlands, were set at the high-tide line (HTL); defined in 33 C.F.R. § 328.3(c)(7) as “the line of intersection of the land with the water’s surface at the maximum height reached by a rising tide”. The HTL was determined in the field by locating one or more of the following: the line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, and differences in vegetation.

A total of approximately 0.06 acre of emergent wetlands (PEM), 0.05 acre of scrub/shrub wetlands, and 0.03 acre of tidal shore wetlands (PUS) were identified within the 1.8-acre Study Area during this

investigation. The location of delineated wetlands is depicted on **Figure 4-1**. Dominant species observed within the wetlands include southern bayberry (*Morella cerifera*) and lamp rush (*Juncus effusus*). The JCSA proposes locating the drill entry and exit pits outside of delineated wetland areas. Therefore, no impacts to wetlands are anticipated with this project.

As mentioned above, approximately 63 linear ft of College Creek, a tidal tributary of the James River, occurs in the Study Area. As such, pipeline installation under the creek would be subject to regulation under Section 10 of the Rivers and Harbors Act. In addition, as the waterway is tidal, the Virginia Marine Resources Commission has jurisdiction over the project, and any activities which occur over, in, or under tidal waters and subaqueous bottoms.

Although no impacts are anticipated to WOUS as a result of this project, agency permits would be required from the USACE, VDEQ, and VMRC. The JCSA would apply for, and obtain, the necessary permits prior to initiation of construction activities. As no impacts are anticipated, no mitigation is proposed for the project.

The *Final 2016 305(b)/303(d) Water Quality Assessment Integrated Report* was released by the Virginia Department of Environmental Quality (VDEQ) on April 2, 2018. The report summarizes water quality conditions in Virginia from January 1, 2009 through December 31, 2014 (VDEQ, 2018b). Data from this report is available as GIS shapefiles (VDEQ, 2018c) and this data was used to determine the location and extent of impaired waters in the Study Area. According to the report, College Creek is listed as impaired for aquatic life (**Figure 4-1**). The source of the impairment is unknown. The JCSA would construct the project in accordance with the Virginia Erosion & Sediment Control Law and Regulations. Adherence to the law and regulations would reduce or eliminate pollutants before they are discharged into the impaired water body. Therefore, the project is not expected to contribute to the further impairment of College Creek.

Resource Protection Areas

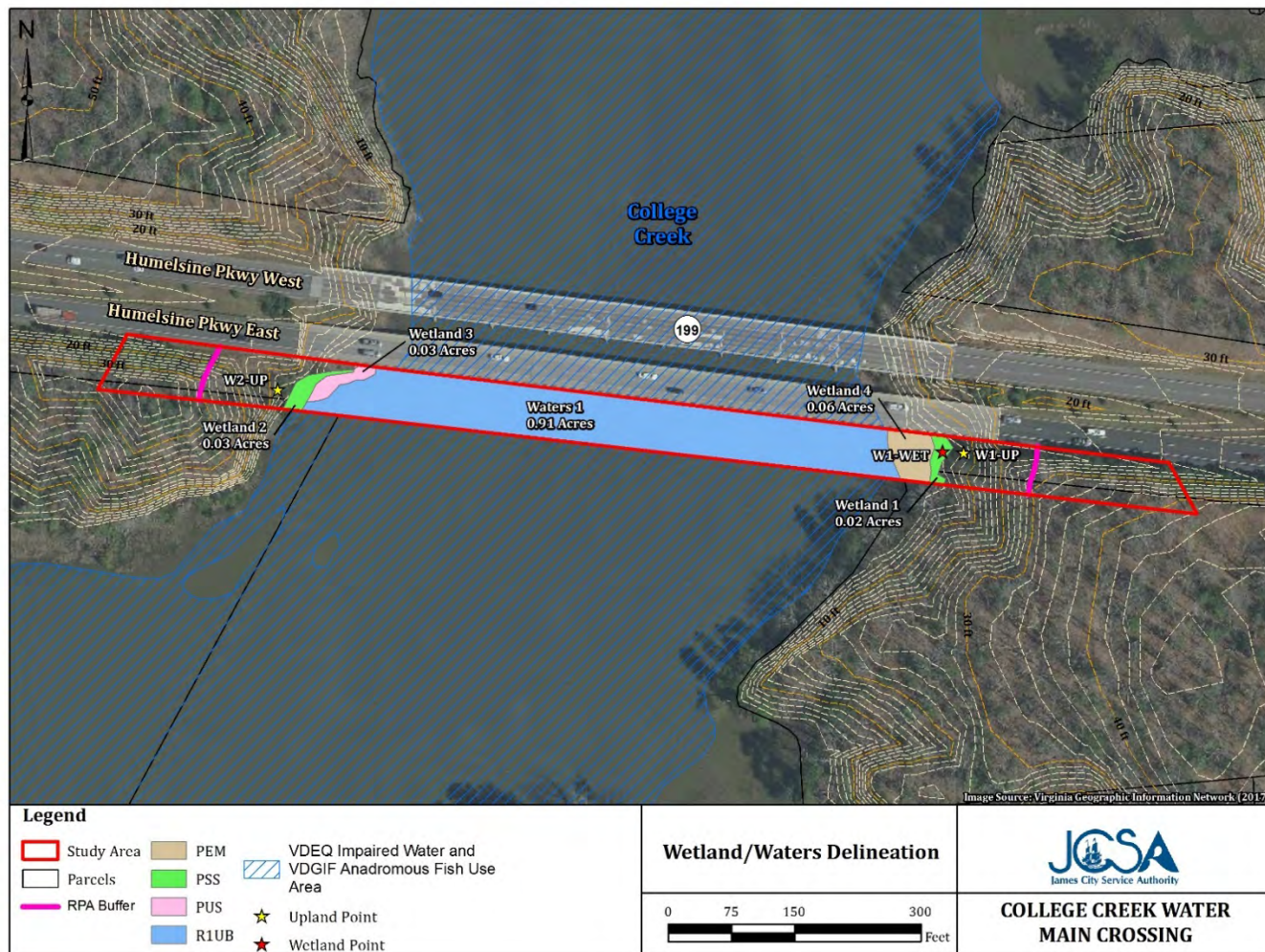
Within the Chesapeake Bay watershed of coastal counties, Resource Protection Areas (RPA) include tidal wetlands, tidal shores, waterbodies with perennial flow, and non-tidal wetlands connected by surface flow and contiguous to tidal wetlands or perennial water bodies, as well as a 100-foot vegetated buffer area located adjacent to and landward of these features. The RPAs preserve water quality by removing excess sediment, nutrients, and potentially harmful substances from groundwater and surface water prior to their entrance into the Chesapeake Bay watershed. The RPAs also serve as protected habitat and corridors for wildlife use and movement.

The RPA limits for the Study Area includes a 100-foot buffer of the upland edge of the delineated PSS wetlands which occur in the Study Area. The limits are shown on **Figure 4-1** and are included on the Master Plan mapping included with the Special Use Permit submittal.

Threatened, Endangered, and Special Status Species and Species Habitat

State- and federally-listed species that are reported to occur within the vicinity of the Study Area were identified through use of the Virginia Department of Game and Inland Fisheries (VDGIF's) Virginia Fish and

Figure 4-1: Wetland/Waters Delineation



Wildlife Information Service (VaFWIS) database and the Virginia Department of Conservation and Recreation-Division of Natural Heritage's (VDCR-DNH's) Natural Heritage Database Explorer (NHDE). JCSA attempted to obtain an official species list for federally-listed species using the United States Fish and Wildlife Services' Information for Planning and Conservation (IPaC) database, however, the database system is not operational due to the government shutdown. The IPaC database would be queried during the permitting phase of the project. At this point, JCSA assumes that the IPaC official species list would include the Northern Long-eared Bat (NLEB) (*Myotis septentrionalis*). Supporting documentation from appropriate agencies with authority over threatened and endangered species is included as **Appendix A** to this report. A list of confirmed federal and/or state-listed species is included with **Table 4-1**. VDGIF's VaFWIS Coordination Recommendations indicate that coordination is required only for those species listed as "confirmed" in the Study Area search results. No species were confirmed for the Study Area using the VaFWIS database (VDGIF, 2019a).

Table 4-1: Threatened and Endangered Species Mapped within the Vicinity of the Study Area

Species	Status	Source of Listing
Atlantic Sturgeon (<i>Acipenser oxyrinchus</i>)	Federally and State Endangered	NHDE
Northern Long-eared Bat (<i>Myotis septentrionalis</i>)	Federally and State Threatened	IPaC ¹
Small Whorled Pogonia (<i>Isotria medeoloides</i>)	Federally Threatened and State Endangered	NHDE

¹Although not validated with use of the IPaC database, it is anticipated that an official species list for the Study Area would include the NLEB.

Northern Long-Eared Bat – On April 2, 2015, the USFWS determined that the NLEB should be listed as federally threatened under the Section 4d provision (80 FR 17974 – 18033) of the Endangered Species Act. The final ruling to list the NLEB took effect on May 4, 2015. A final 4d rule was issued and became effective as of February 15, 2016. The species was also listed as Threatened in Virginia subsequent to the federal listing.

The NLEB is a medium-sized bat in the genus *Myotis* that can be found throughout the eastern and midwestern US and southern Canada. Roosting habitat includes forested areas with live trees and/or snags with a diameter at breast height (dbh) of at least 3 inches with exfoliating bark, cracks, crevices, and/or other cavities. Trees are considered suitable if they meet those requirements and are located within 1,000 ft of the nearest suitable roost tree, woodlot, or wooded fencerow. Maternity habitat is defined as suitable summer habitat that is used by juveniles and reproductive females.

According to the VDGIF Northern Long-Eared Bat Winter Habitat and Roost Trees Application, no confirmed maternity roost trees or hibernacula are located within the vicinity of the Study Area (VDGIF, 2019b). The trees in the Study Area have the potential to serve as roost trees based on their size. However, trees in the Study Area are all unlikely to be utilized as roosts by NLEB as roosts would not be expected in close proximity to the existing transportation corridor. Therefore, harm to roosting NLEB from tree removal would be unlikely as a result of the project. Further, the JCSA would limit tree removal to the minimum necessary to complete the directional drill of the pipeline. **Appendix B** of this report contains

photographs of the Study Area and existing forested cover in the areas proposed for tree clearing at the drill pit locations.

Small Whorled Pogonia – On October 6, 1994, the USFWS reclassified the small whorled pogonia as a threatened species. It is a member of the orchid family which grows in older hardwood stands of beech, birch, maple, oak, and hickory and prefers slopes near small streams (USFWS, 2018). The portion of the Study Area which would be cleared to enable the directional drill of the pipeline does not contain older hardwood species, it contains a younger stand of pine saplings and small trees (See **Appendix B** photographs). In addition, the area of clearing occurs upslope of the stream bank, and no disturbance would occur to the bank or stream edge with project activities. Therefore, it is believed that the project would not have a negative effect on the listed species.

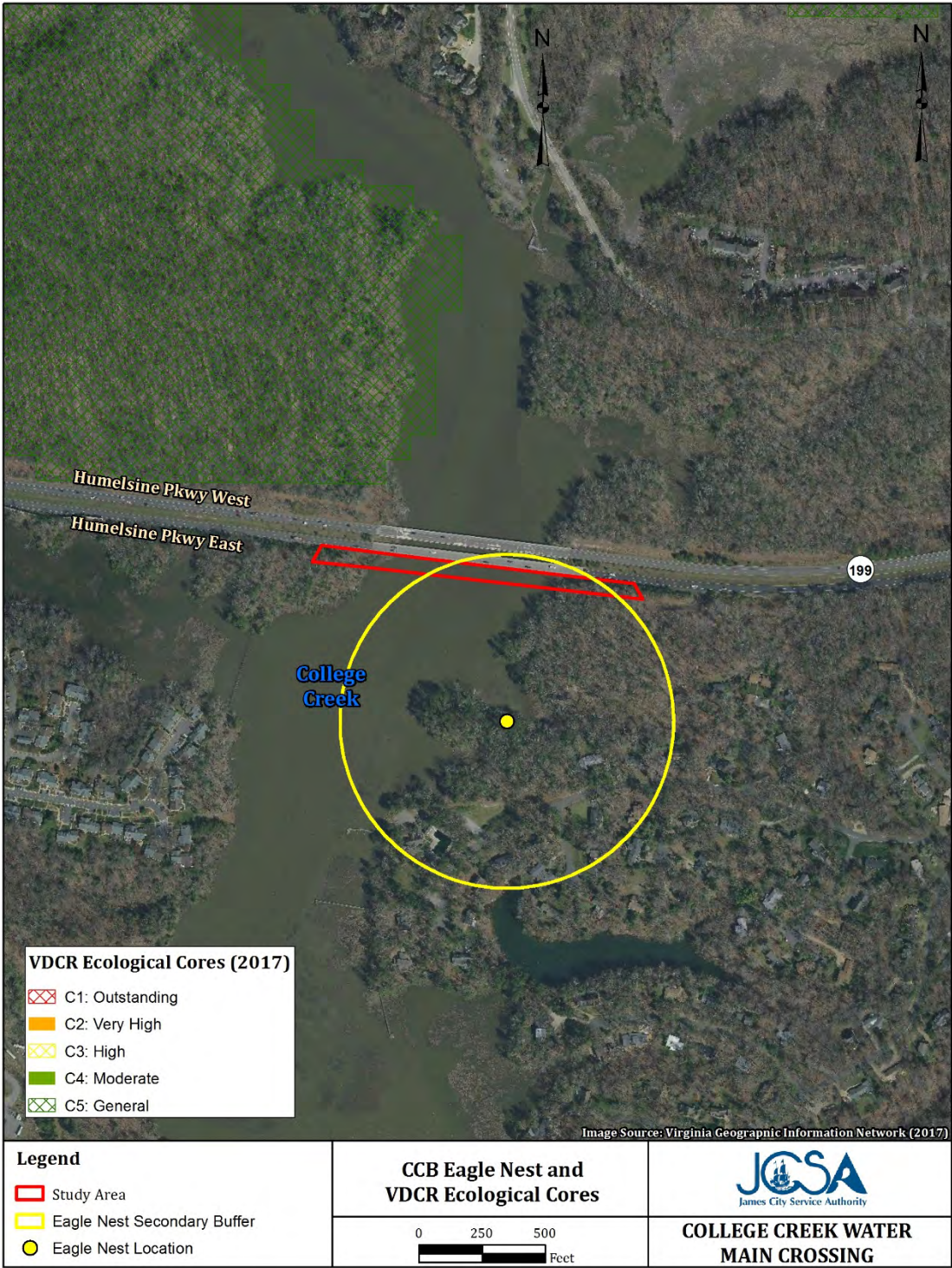
Atlantic Sturgeon – The Atlantic sturgeon is a Federal and State Endangered species. It is an anadromous fish species which has the potential to be present within College Creek in the Study Area. Juveniles may spend several years in rivers or estuaries before migrating to the ocean. Adult Atlantic sturgeons are benthic feeders and consume mainly worms, aquatic insects, shellfish, crustaceans, snails, sand lances, and large amounts of mud and debris (NMFS, 2019).

On September 18, 2017, the National Marine Fisheries Service issued a final rule designating critical habitat for the Chesapeake Bay Distinct Population Segment which included the following rivers in Virginia: Potomac, Rappahannock, York, Pamunkey, Mattaponi, and James. However, the critical habitat area for the James River does not include College Creek. Therefore, the project would not affect designated critical habitat for the species. Further, as no instream work is proposed with the project, no impacts to the species are anticipated with installation of the proposed water line.

Bald Eagle – Although bald eagles (*Haliaeetus leucocephalus*) are no longer federally- or state-listed, bald eagles currently are protected under the Bald and Golden Eagle Protection Act. As such, the USFWS' Virginia Field Office's Bald Eagle Map Tool and The Center for Conservation Biology (CCB) VaEagles Nest Locator were utilized to inform this report. The Bald Eagle Map tool indicates that Bald Eagle concentration areas do not occur in the Study Area. The CCB VaEagles Nest Locator (CCB, 2019) indicates that a known eagle nest occurs south of the Study Area, on the eastern side of College Creek (**Figure 4-2**). Nest sites such as this one are protected with primary and secondary buffers. The smaller 330' "primary buffer" is where human activities are considered to be detrimental to breeding pairs (e.g. residential/commercial development). The larger 660' "secondary buffer" is where human activities are considered to impact the integrity of the "primary buffer" (e.g. construction, multi-story buildings, and new roadways).

The Study Area occurs outside of the primary buffer but it does include a portion of the secondary buffer. JCSA contacted the Northeastern Region Eagle Coordinator (Tom Wittig) with the USFWS to determine the project's potential effect on the eagle nest. As detailed in the correspondence included in **Appendix A**, the USFWS indicated that noise and visibility would be mitigated by both distance and topography, as such, the USFWS believed an Eagle Act Permit would not be required for the project. Therefore, it is anticipated that the project would not have a negative effect on the species.

Figure 4-2: CCB Eagle Nest and VDCR Ecological Cores



Anadromous Fish Use Areas – Under the Fish & Wildlife Coordination Act, the VDGIF and VMRC, in combination with the NMFS, oversee anadromous fish in Virginia. The NMFS has jurisdiction over anadromous fish listed under the Endangered Species Act through their Office of Protected Resources. The VDGIF restricts instream work in designated anadromous fish use areas during certain times of the year. The VaFWIS database was queried to determine if confirmed anadromous fish use areas occur in the Study Area. The database indicates that College Creek, in the Study Area, is a confirmed anadromous fish use stream for striped bass (*Morone saxatilis*) and yellow perch (*Perca flavescens*) (VDGIF, 2019b). However, as no instream work is proposed with the project, no impacts to anadromous fish species are anticipated with installation of the proposed water line.

Essential Fish Habitat – The federal Magnuson-Steven Fisheries Conservation and Management Act of 1976, as amended, provides for the conservation and management of the nation’s fishery resources through the preparation and implementation of fishery management plans. Federal agencies are required to consult with the NMFS on proposed actions that may affect essential fish habitat (EFH); that is, waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity. According to data obtained from the NMFS, the Study Area does not contain waters designated as EFH (NMFS, 2019).

Submerged Aquatic Vegetation – Submerged aquatic vegetation (SAV) includes an assemblage of underwater plants found in shallow waters of the Chesapeake Bay and its river tributaries as well as coastal bays of Virginia. According to the Virginia Administrative Code (VAC), 4 VAC 20-337-30, any removal of SAV from State bottom or planting of nursery stock SAV for any purpose, other than pre-approved research or scientific investigation, would require prior approval by VMRC. Any request to remove SAV from, or plant SAV upon, State bottom would need to be accompanied by a complete Joint Permit Application submitted to the VMRC. Consideration of SAV may be coupled with EFH concerns and require coordination with NMFS. According to data obtained from the Virginia Institute of Marine Science for the 2017 survey year, no SAV beds were mapped in the Study Area (Orth et al. 2018). In addition, as no instream work is proposed with the project, no impacts to SAV beds are anticipated with installation of the proposed water line.

Conservation Habitat – The VDCR-DNH NHDE was queried for occurrences of natural heritage resources, including Conservation Sites and Stream Conservation Units, located within the Study Area. The data indicates that no Conservation Sites or Stream Conservation Units occur in the Study Area. Results of the database query are included in **Appendix A**. The VDCR Conservation Lands Database (12/18/18 version) was queried to determine if lands in public or private protective management, or conservation easements, occur in the Study Area. The data indicated that no conservation lands or easements occur in the Study Area (VDCR, 2018).

James City County requires that Special Use Permit applicants determine if their project areas coincide with mapped areas with natural heritage rankings of S1, S2, S3, G1, G2, or G3 as listed in the *Conservation Planning for the Natural Areas of the Lower Peninsula of Virginia* (VDCR, 1993). A review of the project area determined that it does not contain a natural heritage area with one of these rankings.

Ecological Cores – The VDCR-DNH Natural Landscape Assessment (VDCR, 2017) identifies the ecological integrity of habitat in the region as depicted on **Figure 4-2**. These areas are identified as ecological cores and receive a designation based upon an assessment of 50 attributes including information on rare species and habitats, environmental diversity, species diversity, patch characteristics, patch context, and water quality benefits. Larger, more biologically-diverse areas are generally given higher scores. According to

the data, no scored areas occur in the Study Area.

Soils

Soil composition determines the suitability of land for farming and development. Its physical and chemical properties establish its appropriateness for these uses. Some soils have the best combination of properties for agricultural use, while the physical properties of others may cause land slippage and slope instability, poor foundation support, and poor drainage.

Agricultural lands, including those underlain with prime, unique, or important farmland soils are considered sensitive terrestrial resources. Soils data acquired using the Natural Resources Conservation Service (NRCS) Web Soil Survey was used to identify “prime farmland,” “farmland of statewide importance,” or “farmland of unique importance” soils in the Study Area. However, those lands not subject to the Farmland Protection Policy Act include:

- 1) Lands that receive a combined score of less than 160 points from the Land Evaluation and Site Assessment criteria;
- 2) Lands identified as an “urbanized area” on US Census Bureau maps;
- 3) Land with a “tint overprint” on the USGS topographical map;
- 4) Areas shown as white (not farmland) on US Department of Agriculture (USDA) Important Farmland Maps;
- 5) Areas shown as “urban-built up” on USDA Important Farmland Maps;
- 6) Land in water storage, including lands that have been acquired or planned for water storage prior to August 5, 1984;
- 7) Lands that are used for national defense; and
- 8) Private land where no federal funds or technical assistance is utilized.

According to the data obtained from the NRCS, prime farmland soils, and soils of statewide importance occur in the Study Area (**Figure 4-3**). However, the entire land-based portion of the Study Area occurs within an urbanized area as designated by the US Census Bureau (US Census Bureau, 2017). Therefore, as discussed above, these lands are not subject to the Farmland Protection Policy Act.

The hydrologic soil group for study area soils was determined using the Web Soil Survey. The Study Area contains soils within hydrologic groups B and D (**Figure 4-4**). James City County requires that the location of highly erodible soils be identified during the site planning process. **Figure 4-5** indicates that highly erodible and potentially highly erodible soils occur in the Study Area. As discussed above for water quality, the JCSA would construct the project in accordance with the Virginia Erosion & Sediment Control Law and Regulations. Adherence to the law and regulations would reduce or eliminate pollutants before they are discharged from the construction site as a result of eroding soils during construction. Therefore, the project is not expected to contribute to the further impairment of College Creek or to negatively affect State waters.

Floodplains

The Federal Emergency Management Agency (FEMA) is required to identify and map the nation’s flood-prone areas through the development of Flood Insurance Rate Maps. Digital floodplain data was obtained from the FEMA Flood Map Service Center and plotted within the Study Area to determine the extent of

Figure 4-3: Farmland Soils

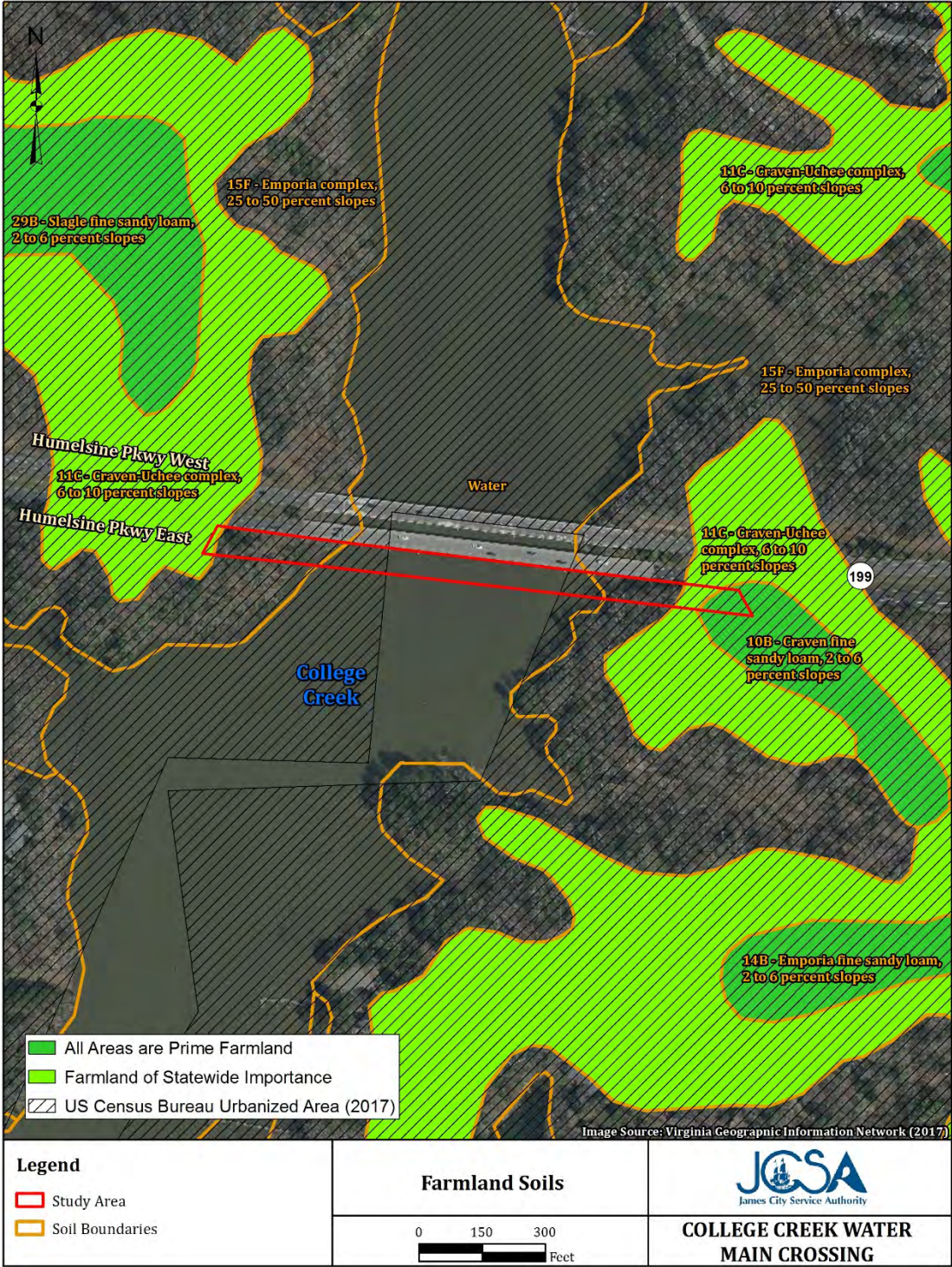


Figure 4-4: Hydrologic Soil Groups

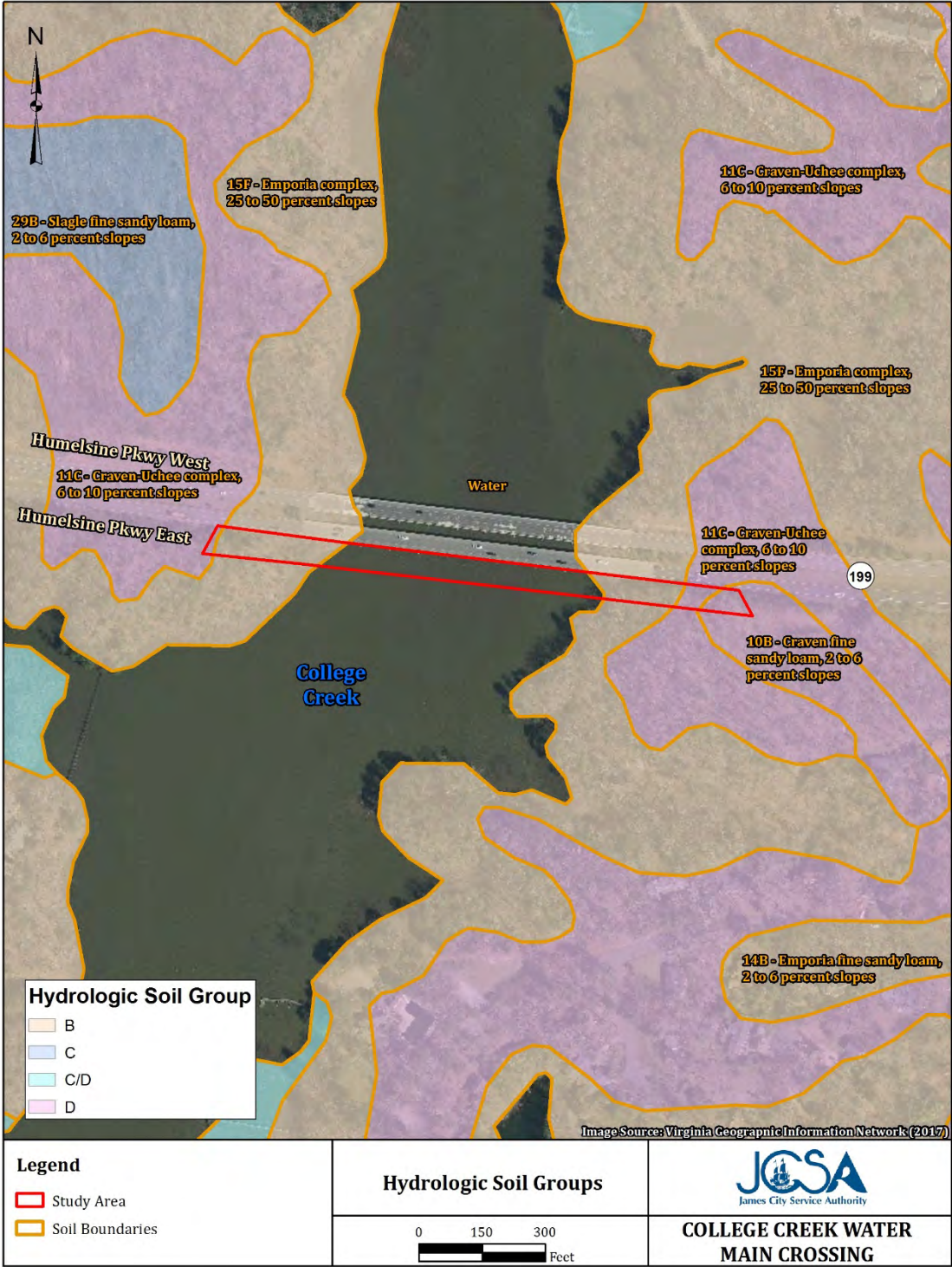
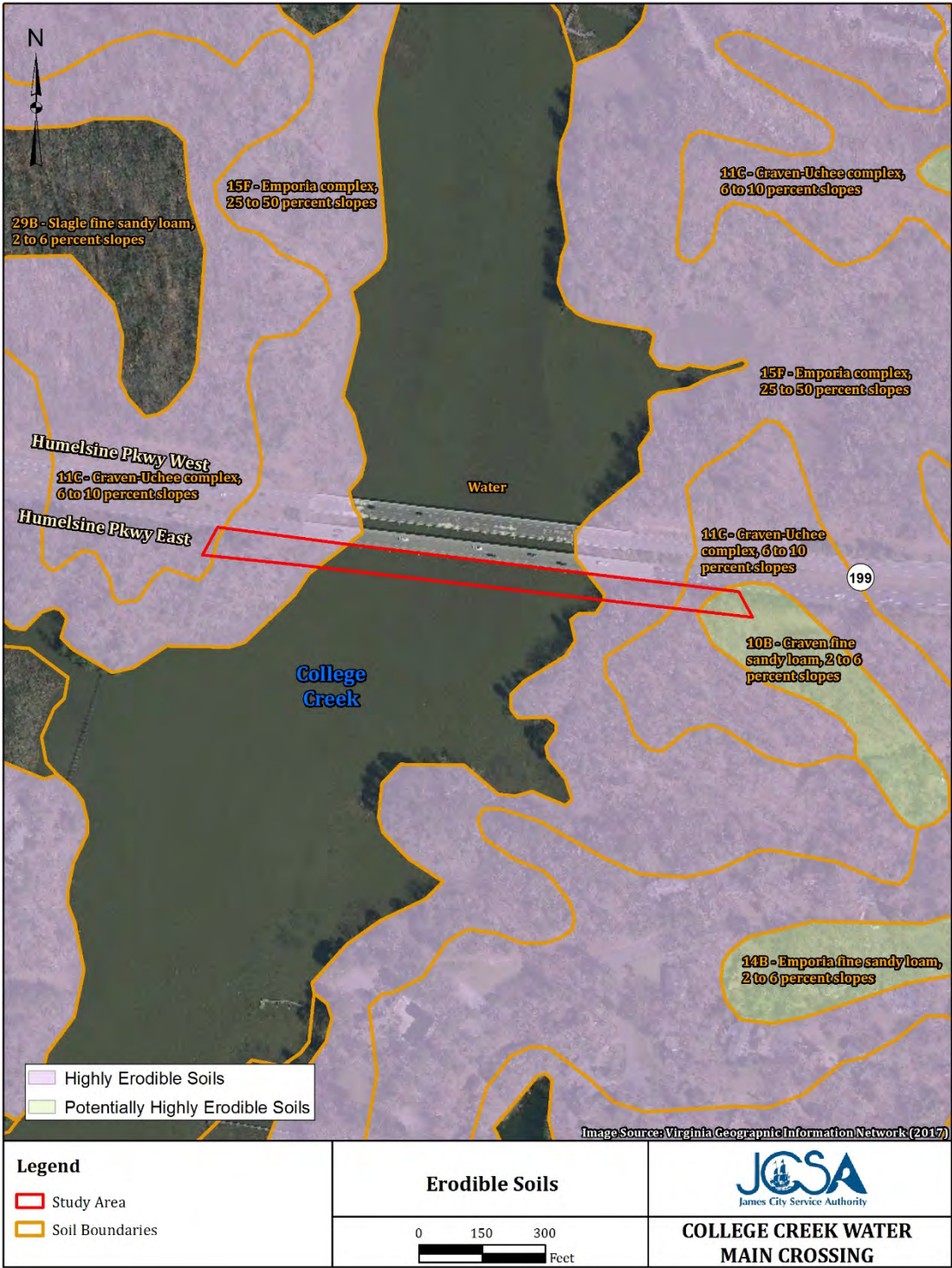


Figure 4-5: Erodible Soils



floodplain areas (FEMA, 2018). Floodplain areas were associated with the waterbody that controls hydrology affecting the floodplain elevation associated with the floodplain area.

The Study Area contains 100-year floodplains as designated by FEMA (FEMA, 2018). The 100-year floodplain includes those areas that statistically have a one percent chance of being flooded in any given year. The floodplains occurring within the Study Area are associated with College Creek (**Figure 4-6**). The entry and exit points would occur outside of the floodplain area and the proposed pipeline is not anticipated to affect upstream or downstream floodplain elevations.

Steep Slopes

Terrain constraints are naturally occurring features of the landscape that can affect the construction or operation of the project, such as steep slopes. The approximate location of steep slopes greater than 25 percent were identified using James City County's GIS contour data, coupled with National Elevation Dataset information obtained from the USGS, and soil data descriptions provided from the Web Soil Survey. As shown on **Figure 4-7**, steep slopes occur in the Study Area along the shoreline of College Creek. These steep slopes areas are generally associated with the Emporia Complex soils shown on **Figure 4-3**. As with erodible soils, JCSA would construct the project in accordance with the Virginia Erosion & Sediment Control Law and Regulations to minimize negative effects resulting from disturbance of soils along steep slopes. Adherence to the law and regulations would reduce or eliminate pollutants before they are discharged from the construction site as a result of eroding soils during construction. Therefore, the project is not expected to contribute to the further impairment of College Creek or to negatively affect State waters.

5. CULTURAL RESOURCES

The project has the potential to affect historic properties and therefore meets the definition of an undertaking as defined by 36 CFR 800.16. **Figure 5-1** shows the archaeological and historic architectural area of potential effects (APE) that is approximately 1,315 ft long by 60 ft wide along the south edge of the eastbound bridge. This area is generally the area of direct effects of the undertaking. Surrounding land use is largely undeveloped forest immediately adjacent to the crossing, with suburban developments approximately 1,500 ft south of the bridge. The City of Williamsburg boundary is just north of the College Creek Bridge, and the Colonial National Historic Parkway is approximately a half-mile east of the bridge. James City County online parcel data indicates adjacent parcels with a view to the bridge south of the crossing were developed in the early 1980s (Williamsburg Landing on the southwest side of the crossing) and the early 2000s (Kingsport Club) on the southeast side of the crossing. Adjacent parcels on the north side of the crossing are undeveloped with continuous forestland extending at least 0.25 mile north from the College Creek bridges.

The historic architectural APE of this undertaking is the same as the archaeological APE. The project as proposed does not have the potential to indirectly affect historic architectural properties in the long-term. Because the waterline would be buried, no potential long-term indirect effects to historic architectural properties, if any were in the viewshed of the project, could occur. In addition, the temporary construction impacts would not be very visible to the surrounding areas because of heavy tree cover adjacent to the right-of-way. Therefore, only long-term direct effects could occur to historic architectural properties, if present.

Figure 4-1: Floodplains

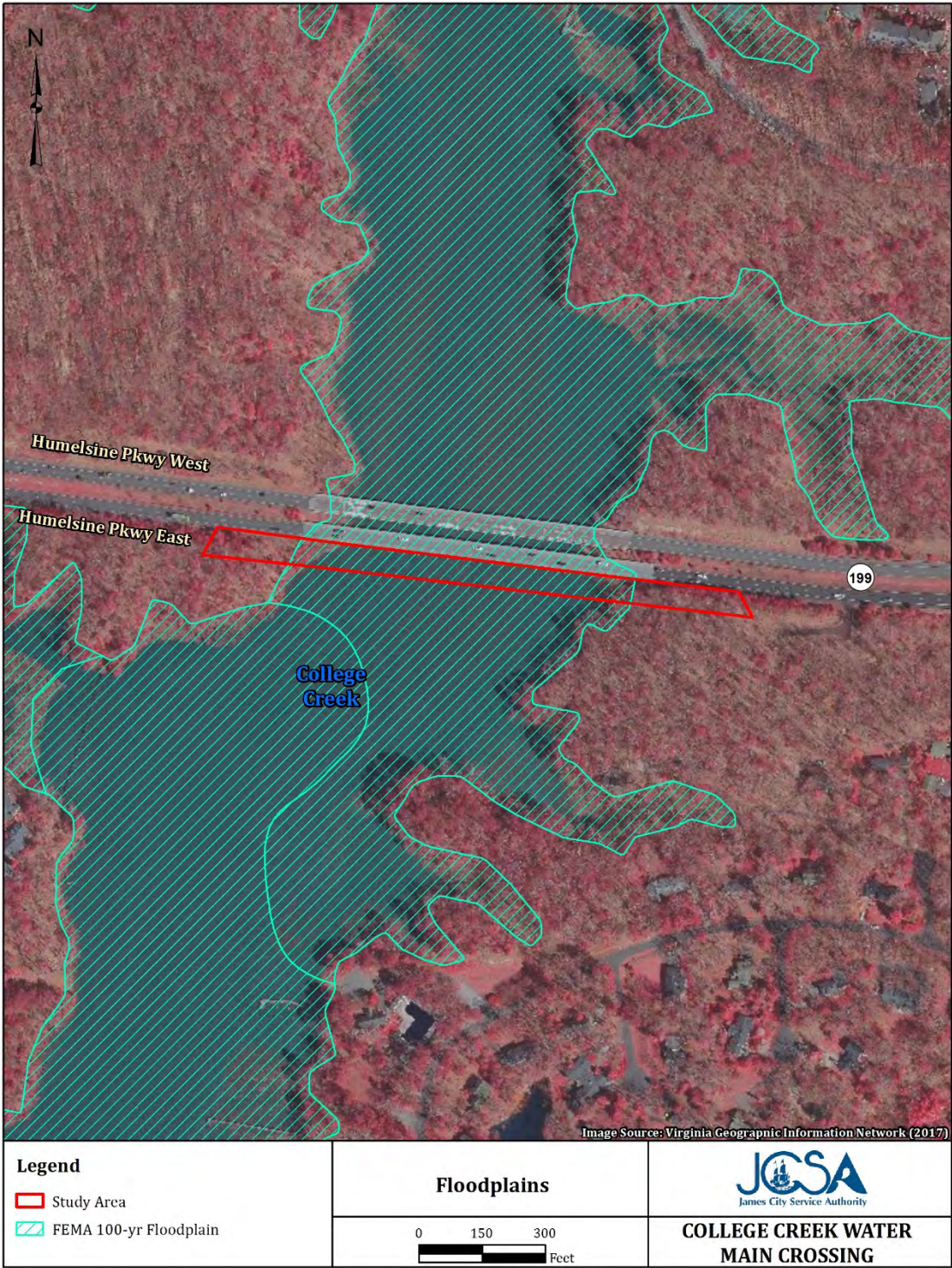


Figure 4-2: Topography

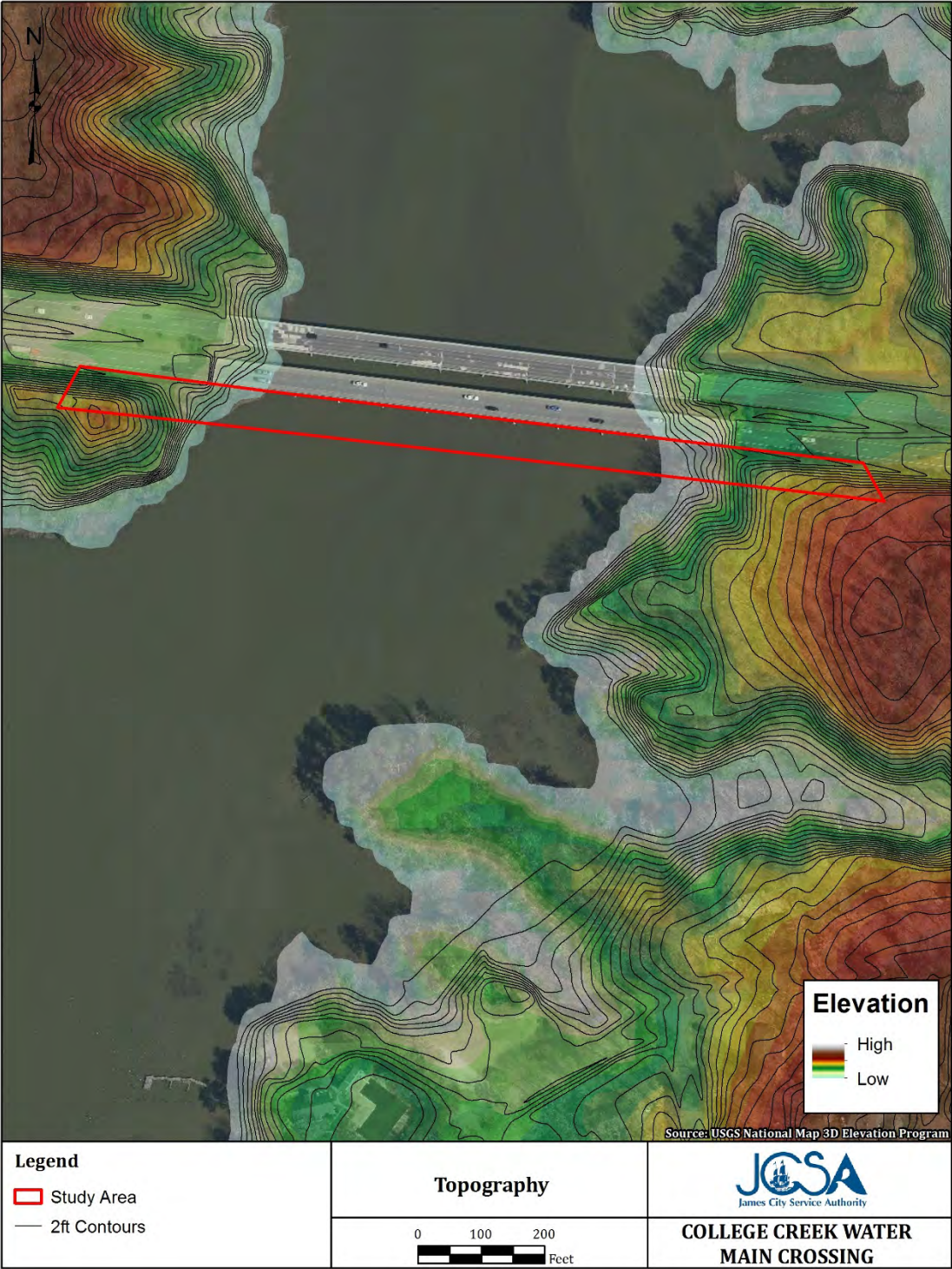
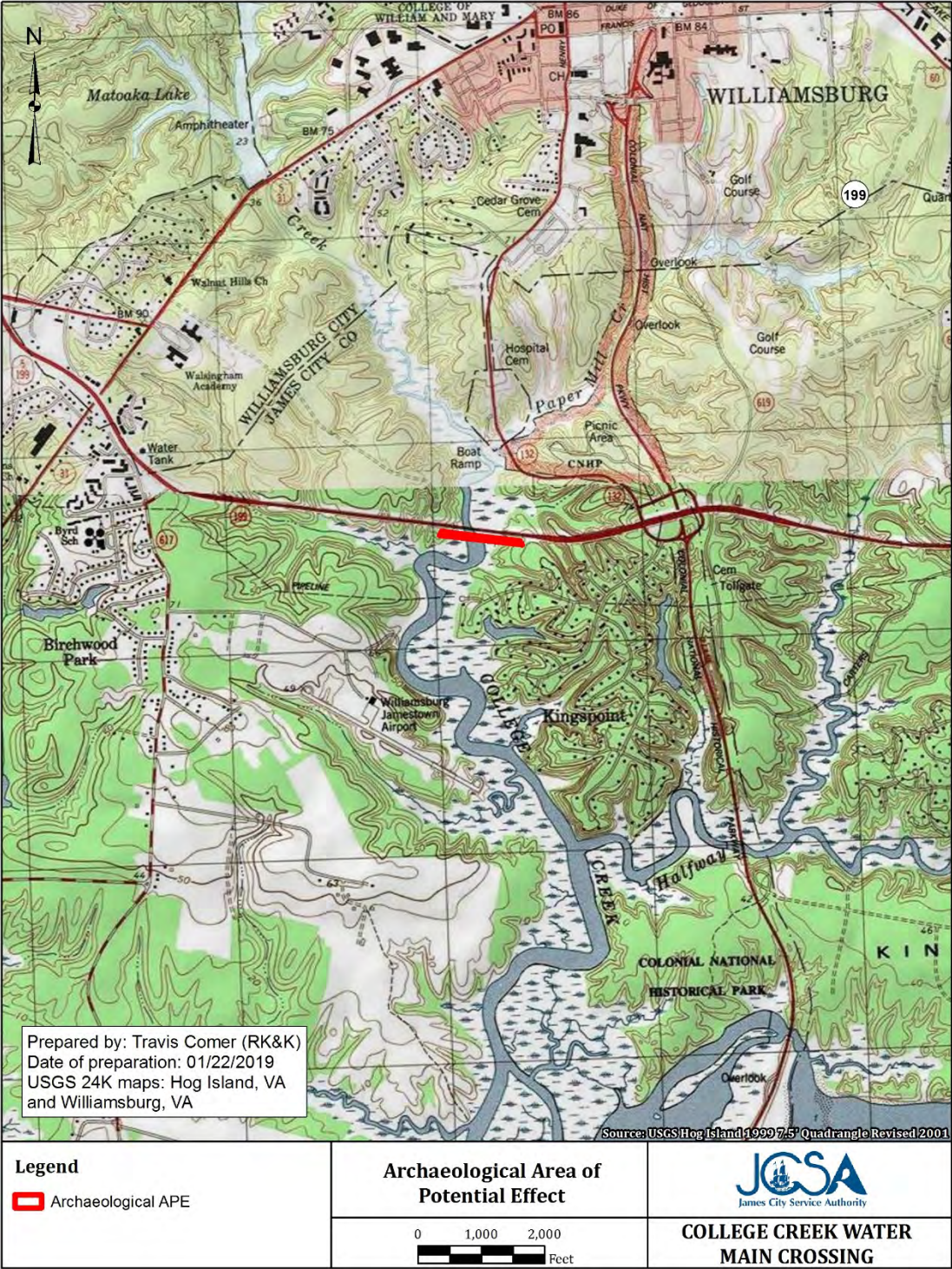


Figure 5-3: Archaeological Area of Potential Effect



The Virginia Cultural Resources Information System (V-CRIS) database of previously documented surveys and sites maintained by the Department of Historic Resources (DHR) was checked on January 17, 2019. **Figure 5-2** shows the V-CRIS search results for previous Phase I archaeological surveys within the current APE. In 1997, the College of William and Mary Center for Archaeology Research (WMCAR) completed a Phase I pedestrian and limited testing archaeological survey approximately 500-ft wide centered on SR-199, reported in *Archaeological Survey of Proposed Route 199 Widening Project, James City County* (DHR Report No. JC-129) (Higgins and Gray, 1997). No cultural resources were found in the current APE.

In 2003, WMCAR completed a Phase I archaeological survey approximately 225-ft wide extending slightly further south than the earlier 1997 survey. This effort is reported in *An Archaeological Survey of Expanded Right of Way, Proposed Route 199 Improvements Project (Segment II), James City County, Virginia* (DHR Report No. JC-171) (Jensen et al., 2003). Archaeological site 44JC1110 was documented in the extreme eastern extent of the APE in VDOT right-of-way (**Figure 5-3**). Limited testing found a low density, undiagnostic aboriginal lithic scatter partially disturbed by previous utility and waterline construction. Site 44JC1110 was evaluated not eligible for the National Register of Historic Places (NRHP) in consultation with DHR.

According to V-CRIS, the APE is not within any American Battlefield Protection Program site.

DHR's *Guidelines for Conducting Historic Resources Survey in Virginia* (rev. 2017) specify resources for which existing survey data is five years of age or older may need to be resurveyed. Although the current APE was surveyed for archaeological resources about 15 years ago, no further archaeological investigations are recommended in the APE. This is based on the degree of previous disturbance in the APE. The proposed project would abandon an existing waterline and replace it with a new waterline drilled approximately 35-40 ft below the bottom of College Creek. The new waterline would be offset approximately 10 ft from the existing line (see included Master Plan mapping). The former line was originally constructed by trenching, which disturbed all sediments above it. Further, the terrestrial surface of the APE was also previously disturbed by the construction of the College Creek bridges and approaches, as well as maintenance, as seen in **Appendix B** images.

Humelsine Parkway (State Route 199) and the College Creek original span were constructed circa 1975 as a concrete single span with two travel lanes. This structure was converted to westbound use only after completion of the new concrete trestle eastbound span circa 2003-2004. Therefore, both spans are more recent than 50 years before present and are considered modern. No other historic architectural resources are within the area of direct effect for the waterline.

Based on the above determinations, a finding of no historic properties affected is recommended for the undertaking in accordance with 36 CFR 800.4(d).

Figure 5-2: Previous Phase I Archaeological Surveys in the Study Area

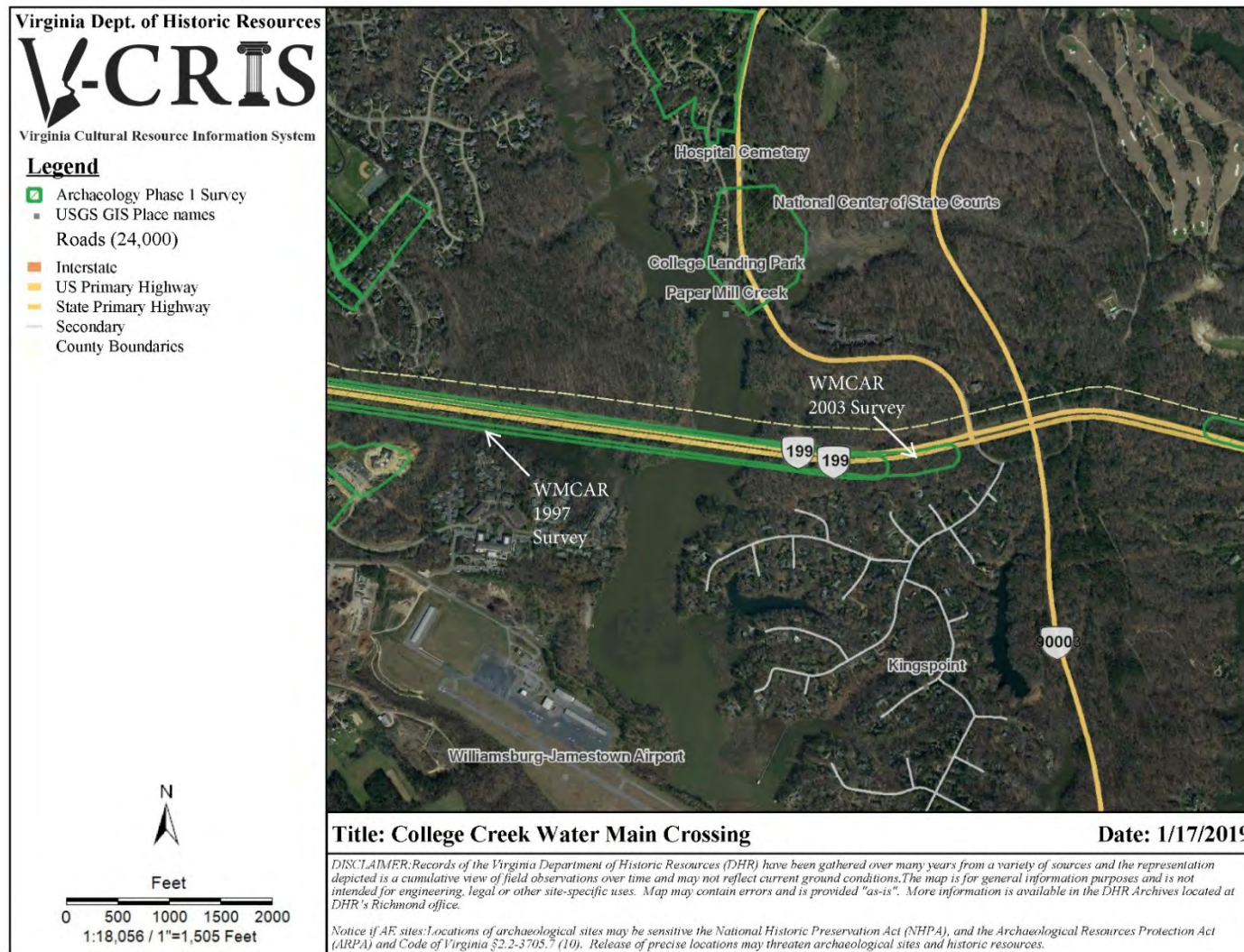
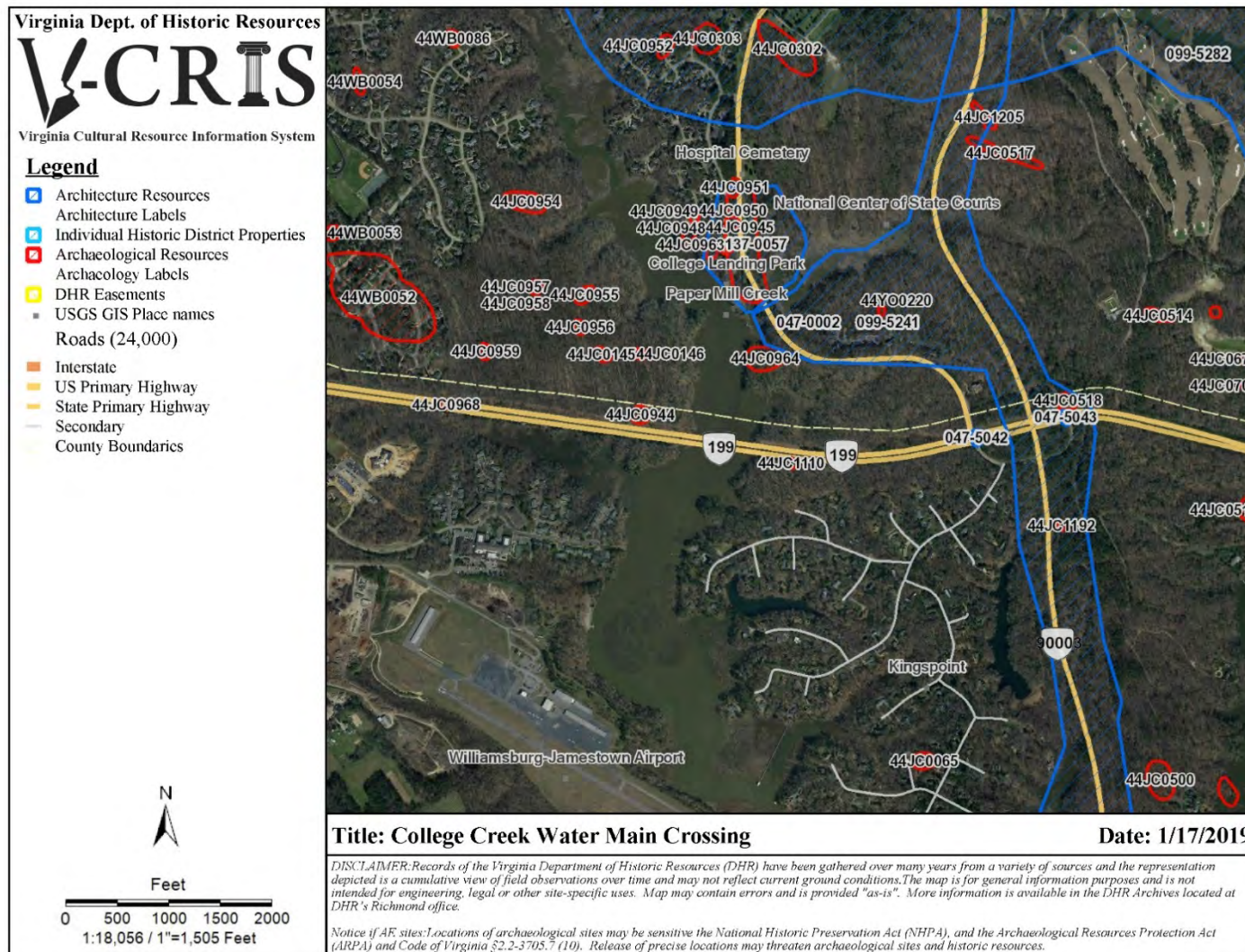


Figure 5-3: Recorded Resources in the Study Area



6. EXISTING AND PROPOSED CHANGES TO THE SITE

The Study Area for the project consists of undeveloped and forested lands separated by College Creek. It is bounded to the north by Humelsine Parkway. An existing residential development occurs approximately 300 ft to the south of the Study Area, along Meadow Rue Court, on the east side of College Creek. Another existing development occurs approximately 680 ft south of the western end of the Study Area along Williamsburg Landing Drive. No impacts are anticipated to these existing properties and neighborhoods as a result of this project.

No existing impervious surface occurs in the Study Area and no impervious surface is proposed with construction of the project. The installed pipeline would exist below grade. As such, an increase in stormwater discharge is not anticipated with the project. The project's LOD and limits of clearing are shown on the included Master Plan mapping.

7. MITIGATION MEASURES

The JCSA proposes to construct the water main using HDD. The HDD method is a minimal impact trenchless method of installing underground pipe. Best management practices would be followed to avoid accidental spills of fuel, oils, chemicals, concrete leachate, and sediments into aquatic habitats. These practices include proper storage, use, and cleanup of all construction-related chemicals. Construction routes would be carefully selected to avoid sensitive riparian and wetland area.

A summary of impact minimization strategies include:

- Minimize construction impacts on College Creek by implementing an erosion and sediment control plan and following best management practices.
- Limit vegetation clearing to what is necessary to construct the water main. Only trees and shrubs within the limits of clearing and tree limbs extending into the clearance area would be removed. Using and maintaining vegetative cover appropriately during construction would minimize soil erosion.
- Limit grading, excavation, and filling activities to what is necessary for construction.
- Use HDD construction methods to minimize sediment and soil disturbance.

8. SUPPLEMENTAL INFORMATION

Required supplemental information has been included with the submitted Special Use Permit application. This information includes:

- An *Application and Authorization for the VESCP and VSMP Authority Permit for Land Disturbing and Stormwater Construction Activity* form. The Study Area is owned by the Commonwealth of Virginia, and is under the control of the Virginia Department of Transportation (VDOT). An easement from VDOT is not required to construct the proposed pipeline. Therefore, a signature was not obtained from VDOT for the form.
- An *Original Signature EnerGov* form. The Original Signature EnterGOV document is included but a signature was not obtained as the Study Area is owned by the Commonwealth of Virginia.

- A completed *Rezoning and Special Use Permit Submittal Requirements Checklist*.

JCSA reviewed the supplemental requirements for Special Use Permit submittals adopted by the Board of Supervisors of James City County on December 1, 1999 to determine their applicability to the project. In addition, through consultation with James City County planning staff (Terry Costello) it was determined that these supplemental requirements do not apply to the project and that the JCSA would not have to comply by these requirements to construct the project.

James City County requires that each person or entity submitting an application for a Special Use Permit attach to such application a signed statement from the county treasurer certifying that, for the property listed in the application, all real estate taxes owed to the county have been paid in full. The required statement from the county treasurer was not retrieved as the owner of the project area is the Commonwealth of Virginia. Due to the project being within VDOT right of way, no taxes are obtained from this area, so the required statement does not apply.

9. REFERENCES

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Appendix A

VaFWIS Search Report Compiled on 1/22/2019, 12:14:16 PM[Help](#)

Known or likely to occur within a **2 mile radius around point 37.2478710 -76.7110125**
 in **095 James City County, 830 Williamsburg City, VA**

[View Map of Site Location](#)

513 Known or Likely Species ordered by Status Concern for Conservation
 (displaying first 29) (29 species with Status* or Tier I** or Tier II**)

BOVA Code	Status*	Tier**	Common Name	Scientific Name	Confirmed	Database(s)
010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus		BOVA,HU6
040144	FTST	Ia	Knot, red	Calidris canutus rufa		HU6
050022	FTST	Ia	Bat, northern long-eared	Myotis septentrionalis		BOVA
040110	FPSE	Ia	Rail, eastern black	Laterallus jamaicensis jamaicensis		BOVA
050020	SE	Ia	Bat, little brown	Myotis lucifugus		BOVA
050034	SE	Ia	Bat, Rafinesque's eastern big-eared	Corynorhinus rafinesquii macrotis		HU6
050027	SE	Ia	Bat, tri-colored	Perimyotis subflavus		BOVA
030013	SE	IIa	Rattlesnake, canebrake	Crotalus horridus		HU6
040096	ST	Ia	Falcon, peregrine	Falco peregrinus		BOVA
040293	ST	Ia	Shrike, loggerhead	Lanius ludovicianus		BOVA
020044	ST	IIa	Salamander, Mabee's	Ambystoma mabeei	Potential	BOVA,Habitat,HU6
020002	ST	IIa	Treefrog, barking	Hyla gratiosa		HU6
040292	ST		Shrike, migrant loggerhead	Lanius ludovicianus migrans		BOVA
030067	CC	IIa	Terrapin, northern diamond-backed	Malaclemys terrapin terrapin	Yes	BOVA,SppObs,HU6
030063	CC	IIIa	Turtle, spotted	Clemmys guttata	Yes	BOVA,SppObs,HU6
010077		Ia	Shiner, bridle	Notropis bifrenatus		BOVA
040040		Ia	Ibis, glossy	Plegadis falcinellus		HU6
020063		IIa	Toad, oak	Anaxyrus quercicus		HU6
040052		IIa	Duck, American black	Anas rubripes	Potential	BOVA,BBA,HU6
040033		IIa	Egret, snowy	Egretta thula	Potential	BOVA,BBA
040029		IIa	Heron, little blue	Egretta caerulea caerulea		BOVA
040036		IIa	Night-heron, yellow-crowned	Nyctanassa violacea violacea		BOVA
040181		IIa	Tern, common	Sterna hirundo		BOVA,HU6
040320		IIa	Warbler, cerulean	Setophaga cerulea		BOVA,HU6
040140		IIa	Woodcock, American	Scolopax minor		BOVA,HU6
040203		IIb	Cuckoo, black-billed	Coccyzus erythrophthalmus		BOVA
040105		IIb	Rail, king	Rallus elegans		BOVA
040304		IIc	Warbler, Swainson's	Limnothlypis swainsonii		HU6
100003		IIc	Skipper, rare	Problemata bulenta		HU6

To view **All 513 species** [View 513](#)

*FE=Federal Endangered; FT=Federal Threatened; SE=State Endangered; ST=State Threatened; FP=Federal Proposed; FC=Federal Candidate;
 CC=Collection Concern

**I=VA Wildlife Action Plan - Tier I - Critical Conservation Need; II=VA Wildlife Action Plan - Tier II - Very High Conservation Need;
 III=VA Wildlife Action Plan - Tier III - High Conservation Need; IV=VA Wildlife Action Plan - Tier IV - Moderate Conservation Need
 Virginia Wildlife Action Plan Conservation Opportunity Ranking:

a - On the ground management strategies/actions exist and can be feasibly implemented.;

b - On the ground actions or research needs have been identified but cannot feasibly be implemented at this time.;

c - No on the ground actions or research needs have been identified or all identified conservation opportunities have been exhausted.

[View Map of All Query Results from All Observation Tables](#)

Bat Colonies or Hibernacula: **Not Known**

Anadromous Fish Use Streams (3 records)

[View Map of All Anadromous Fish Use Streams](#)

Stream ID	Stream Name	Reach Status	Anadromous Fish Species			View Map
			Different Species	Highest TE*	Highest Tier**	
C14	College creek	Confirmed	2			Yes
C32	Halfway creek	Confirmed	1			Yes
C92	James River 1	Confirmed	6		IV	Yes

Impediments to Fish Passage (2 records)

[View Map of All Fish Impediments](#)

ID	Name	River	View Map
404	MOTOAKA DAM	COLLEGE CREEK	Yes
416	TUTTERS NECK POND DAM	TR-HALFWAY CREEK	Yes

Colonial Water Bird Survey (5 records)

[View Map of All Query Results Colonial Water Bird Survey](#)

Colony_Name	N Obs	Latest Date	N Species			View Map
			Different Species	Highest TE*	Highest Tier**	
Western Shore, Hog Island, James City	2	May 4 2013	1			Yes
Western Shore, Williamsburg, Williamsburg	1	May 4 2013	1			Yes
Lake Matoaka	1	May 4 2003	1			Yes
College Creek	1	Apr 28 2003	1			Yes
College Creek at Rt. 31	1	Jun 1 1993	1			Yes

Displayed 5 Colonial Water Bird Survey

Threatened and Endangered Waters

N/A

Managed Trout Streams

N/A

Bald Eagle Concentration Areas and Roosts

are present. [View Map of Bald Eagle Concentration Areas and Roosts](#)

(3 records)

BECAR ID	Observation Year	Authority	Type	Comments	View Map
25	2009	Jeannette Parker (VDGIF)	Roost	Count 2	Yes
49	2006 - 2007	Center for Conservation Biology at the College of William and Mary/Virginia Commonwealth University	Summer Concentration Area	Eagle_use Moderate	Yes
52	2006 - 2007	Center for Conservation Biology at the College of William and Mary/Virginia Commonwealth University	Winter Concentration Area	Eagle_use Moderate	Yes

Bald Eagle Nests (8 records)
[View Map of All Query Results](#)
[Bald Eagle Nests](#)

Nest	N Obs	Latest Date	DGIF Nest Status	View Map
JC0102	10	Apr 26 2007	HISTORIC	Yes
JC0501	2	Mar 3 2011	Unknown	Yes
JC0605	13	Apr 18 2011	Unknown	Yes
JC0804	8	Apr 18 2011	UNKNOWN	Yes
JC0905	4	Apr 18 2011	Unknown	Yes
JC1003	2	Mar 3 2011	UNKNOWN	Yes
JC1105	2	Apr 18 2011	Unknown	Yes
JC1106	2	Apr 18 2011	Unknown	Yes

Displayed 8 Bald Eagle Nests

Species Observations (160 records - displaying first 20 , 3
Observations with Threatened or
Endangered species)
[View Map of All Query Results](#)
[Species Observations](#)

obsID	class	Date Observed	Observer	N Species			View Map
				Different Species	Highest TE*	Highest Tier**	
50916	SppObs	May 13 1996	Michael Odom, USFWS, David Peterson, Edward Darlington	17	CC	II	Yes
50917	SppObs	Oct 3 1995	Michael Odom, USFWS, David Peterson, Edward Darlington	20	CC	II	Yes
29731	SppObs	Jan 1 1900	Mitchell, J. C.	1	CC	III	Yes
618534	SppObs	Jul 23 2012	Angela; Zappalla Benjamin; Proshek	2		III	Yes
603998	SppObs	Sep 24 2008	Ashley; Haines	13		III	Yes
339348	SppObs	May 3 2000	D. FOWLER, B. MEHL	3		III	Yes
339375	SppObs	Apr 19 2000	D. FOWLER, B. MEHL	11		III	Yes
339349	SppObs	Apr 19 2000	D. FOWLER, B. MEHL	12		III	Yes
339368	SppObs	Apr 7 2000	D. FOWLER, B. MEHL	7		III	Yes
339341	SppObs	Sep 14 1999	Greenlee, RLH	7		III	Yes
339364	SppObs	Nov 20 1998	R. Simmonds & J. Graber	11		III	Yes
339183	SppObs	Nov 20 1998	R. Simmonds & J. Graber	9		III	Yes
339324	SppObs	Nov 18 1998	R. Simmonds & J. Graber	12		III	Yes
339182	SppObs	May 28 1998	R. Simmonds & C. Routh	14		III	Yes
339295	SppObs	May 26 1998	R. Simmonds & C. Routh	16		III	Yes
339323	SppObs	May 26 1998	R. Simmonds & C. Routh	15		III	Yes
50919	SppObs	Oct 2 1995	Michael Odom, USFWS, David Peterson, Edward Darlington	19		III	Yes
365654	SppObs	Jan 1 1900		7		III	Yes
29824	SppObs	Jan 1 1900	Mitchell, J. C.	1		III	Yes
29825	SppObs	Jan 1 1900	Mitchell, J. C.	1		III	Yes

Displayed 20 Species Observations

Selected 160 Observations [View all 160 Species Observations](#)

Habitat Predicted for Aquatic WAP Tier I & II Species

N/A

Habitat Predicted for Terrestrial WAP Tier I & II Species

BOVA Code	Status*	Tier**	Common Name	Scientific Name	View Map
020044	ST	IIa	Salamander, Mabee's	Ambystoma mabeei	Yes

Virginia Breeding Bird Atlas Blocks (4 records)
[View Map of All Query Results](#)
[Virginia Breeding Bird Atlas Blocks](#)

BBA ID	Atlas Quadrangle Block Name	Breeding Bird Atlas Species			View Map
		Different Species	Highest TE *	Highest Tier **	
57062	Hog Island, NE	105		II	Yes
57061	Hog Island, NW	80		II	Yes
57076	Williamsburg, SE	38		III	Yes
57075	Williamsburg, SW	14		IV	Yes

Public Holdings: (1 names)

Name	Agency	Level
Colonial National Historical Park	National Park Service	Federal

Summary of BOVA Species Associated with Cities and Counties of the Commonwealth of Virginia:

FIPS Code	City and County Name	Different Species	Highest TE	Highest Tier
095	James City	420	FESE	I
830	Williamsburg City	361	FTSE	I

USGS 7.5' Quadrangles:

Hog Island
Williamsburg

USGS NRCS Watersheds in Virginia:

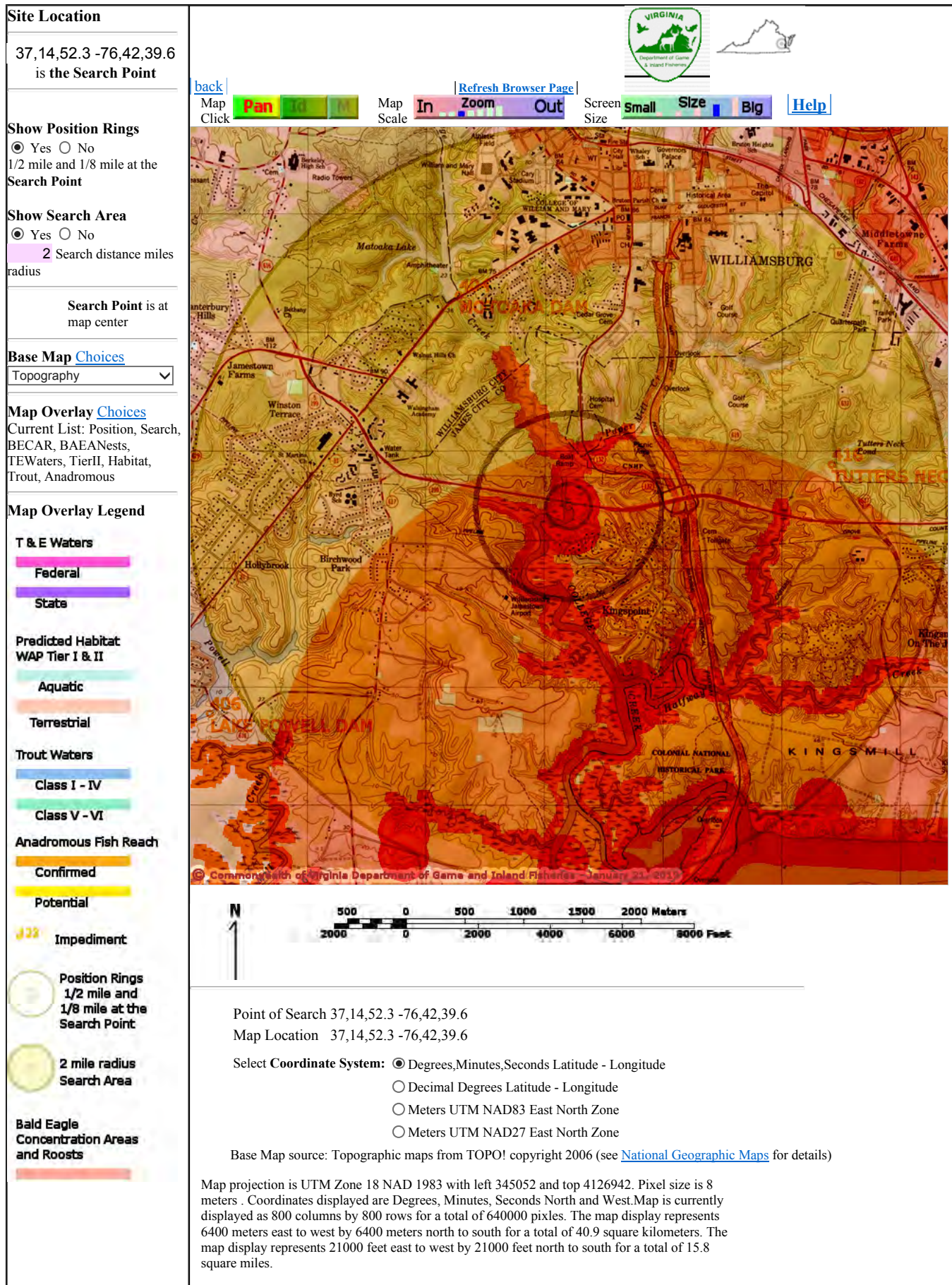
N/A

USGS National 6th Order Watersheds Summary of Wildlife Action Plan Tier I, II, III, and IV Species:

HU6 Code	USGS 6th Order Hydrologic Unit	Different Species	Highest TE	Highest Tier
JL33	James River-Lower Chippokes Creek	85	FESE	I
JL34	College Creek	76	FTST	I
JL35	James River-Skiffes Creek	98	FESE	I
YO67	Queen Creek	72	FTST	I

Compiled on 1/22/2019, 12:14:16 PM 1955622.0 report=all searchType= R dist= 3218 poi= 37.2478710 -76.7110125

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Topographic maps and Black and white aerial photography for year 1990+-
are from the United States Department of the Interior, United States Geological Survey.
Color aerial photography aquired 2002 is from Virginia Base Mapping Program, Virginia
Geographic Information Network.
Shaded topographic maps are from TOPO! ©2006 National Geographic
<http://www.national.geographic.com/topo>
All other map products are from the Commonwealth of Virginia Department of Game and Inland
Fisheries.

map assembled 2019-01-21 10:55:07 (qa/qc March 21, 2016 12:20 - tn=955511.0 dist=3218
I)
\$poi=37.2478710 -76.7110128

| [DGIF](#) | [Credits](#) | [Disclaimer](#) | Contact vafwis_support@dgif.virginia.gov | Please view our [privacy policy](#) |
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NHDE Search Results



Virginia Department of Conservation and Recreation

Log In

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- Species/Communities Search
- Terms & Conditions
- About Us
- Contact Us
- Help

Natural Heritage Resources

Your Criteria

Taxonomic Group: Select All
Global Conservation Status Rank: Select All
State Conservation Status Rank: Select All
Federal Legal Status: Select All
State Legal Status: Select All
Watershed (8 digit HUC): 02080206 - Lower James River
Subwatershed (12 digit HUC): JL34 - College Creek
Search Run: 1/22/2019 10:59:01 AM

Result Summary

Total Species returned: 2
Total Communities returned: 0

Click scientific names below to go to NatureServe report.

Click column headings for an explanation of species and community ranks.

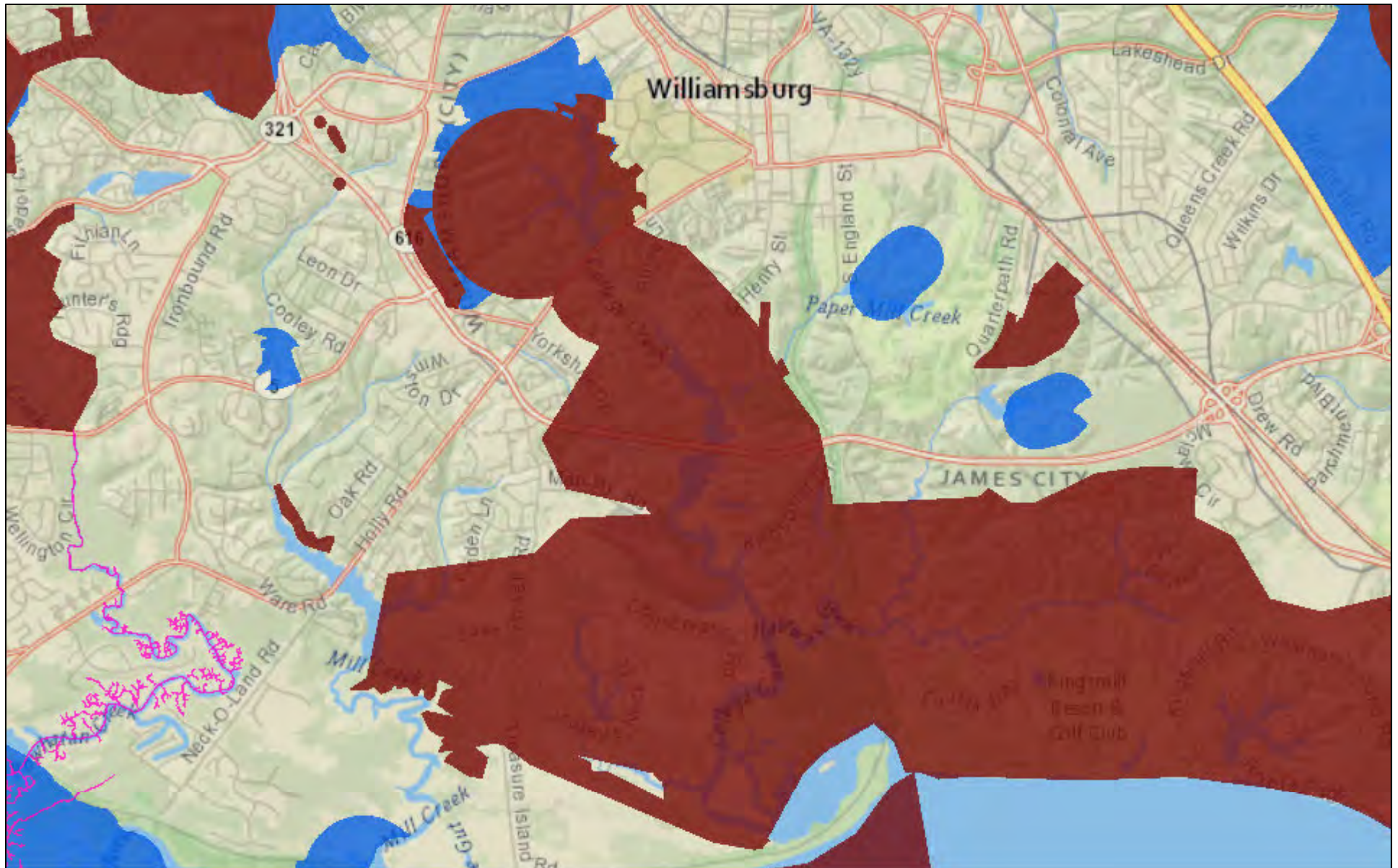
Common Name/Natural Community	Scientific Name	Global Conservation Status Rank	State Conservation Status Rank	Federal Legal Status	State Legal Status	Statewide Occurrences	Virginia Coastal Zone
Lower James							
College Creek							
FISH							
Atlantic Sturgeon	<i>Acipenser oxyrinchus</i>	G3	S2	LE	LE	2	Y
VASCULAR PLANTS							
Small Whorled Pogonia	<i>Isotria medeoloides</i>	G2?	S2	LT	LE	55	Y

Note: On-line queries provide basic information from DCR's databases at the time of the request. They are NOT to be substituted for a project review or for on-site surveys required for environmental assessments of specific project areas.

For Additional Information on locations of Natural Heritage Resources please submit an [information request](#).

To Contribute information on locations of natural heritage resources, please fill out and submit a [rare species sighting form](#).

JCSA College Creek Water Line Crossing



January 21, 2019

NH Screening Layer

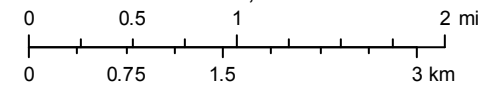
Conservation Site

GLNHR

SCU

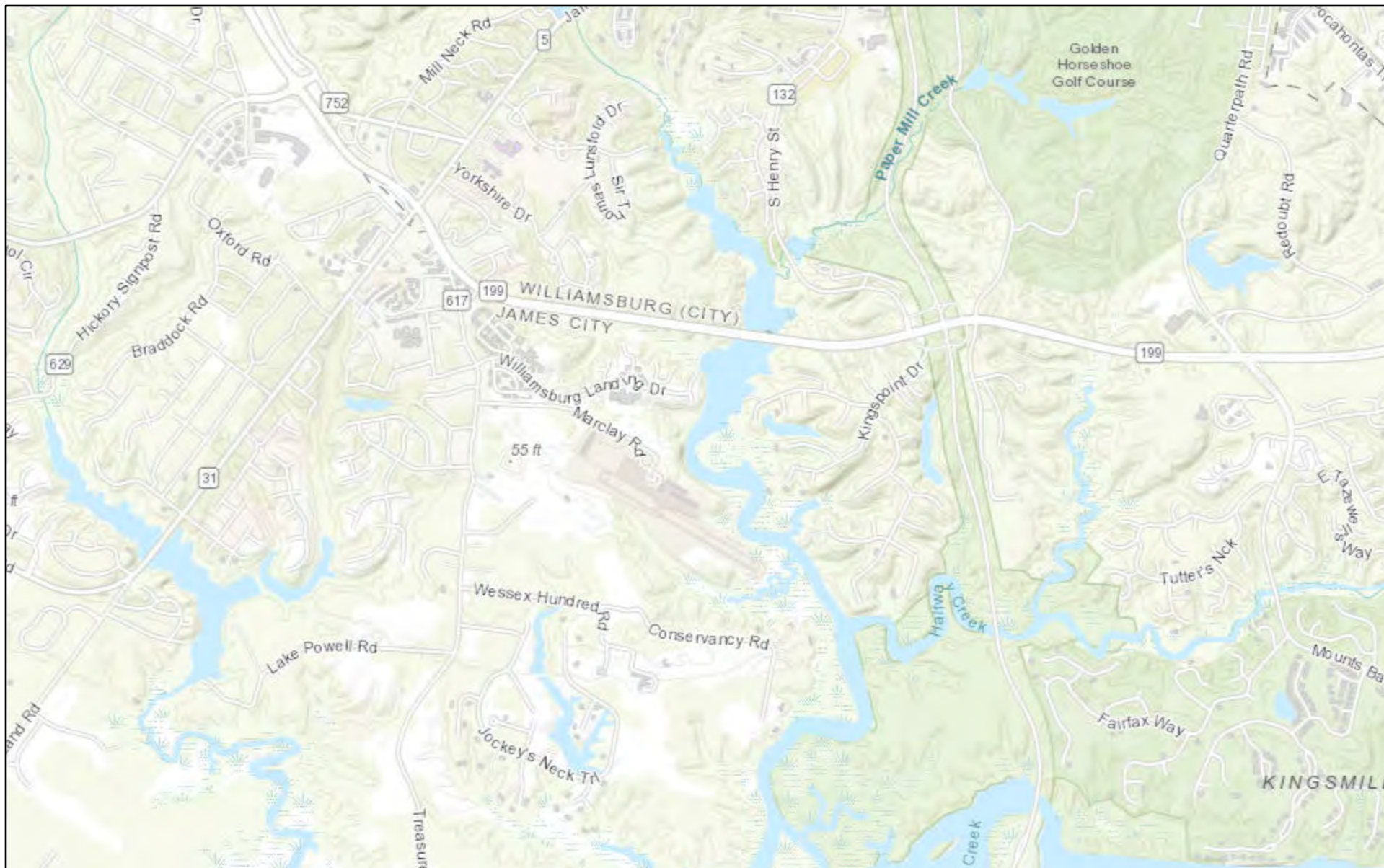
Adjacent States

1:58,381



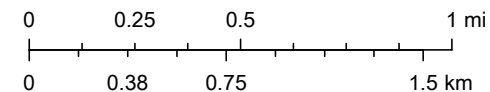
Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA,

NLEB Locations and Roost Trees



1/21/2019 11:21:58 AM

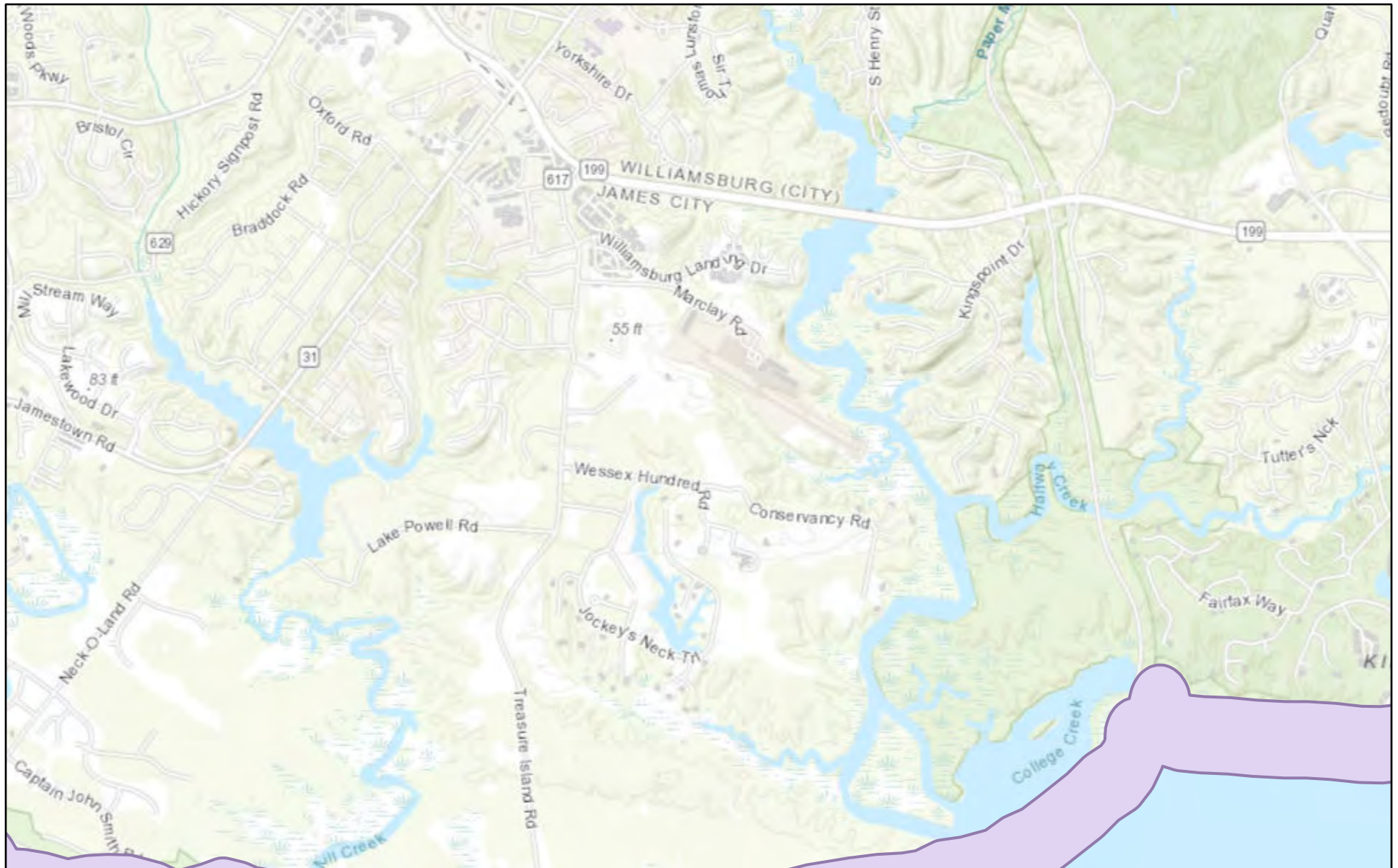
1:36,112



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS,

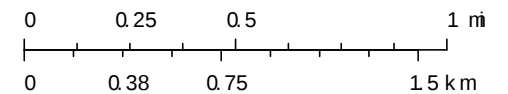
VA Dept. Game & Inland Fisheries
VITA, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA |

College Creek Water Main Crossing



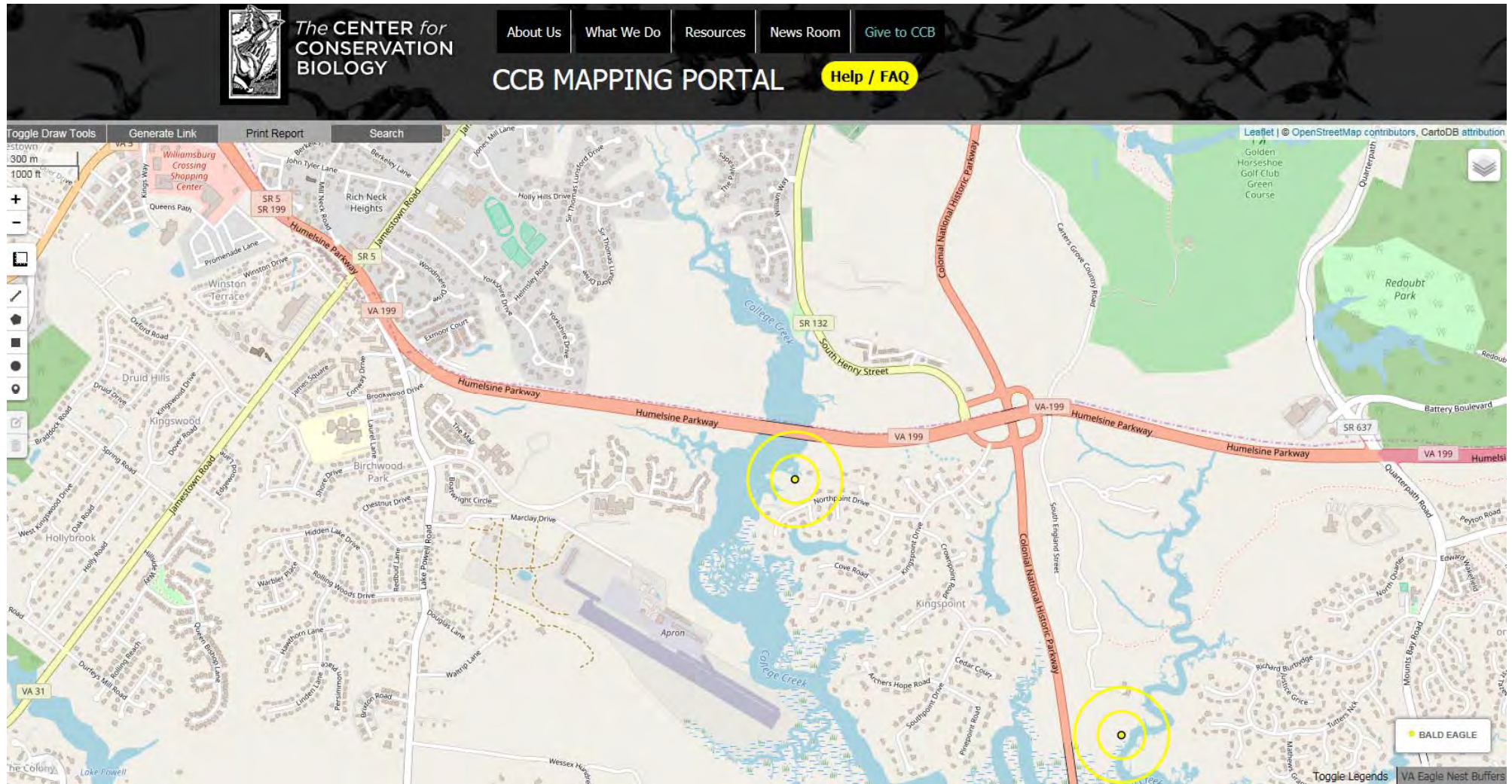
January 21, 2019

1:36,112



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS

CCB Eagle Nest Locations



From: [Wittig, Thomas](#)
To: [Travis R. Comer](#)
Subject: Re: [EXTERNAL] James City Waterline
Date: Thursday, September 27, 2018 4:17:55 PM
Attachments: [image001.png](#)
[image005.png](#)

Hello Travis,

Thanks again for calling. As discussed, the entry point for HDD drilling under College Creek will be on the west side of the creek and the exit on the east side, both outside the 660-foot nest management buffer. Where the pipeline passes within this buffer, it will be beneath the creek and imperceptible to the nest. The noise and visibility of drilling will be mitigated by both distance and topography. Additionally, the volume of regular traffic on Virginia Route 199, which passes within the outer management buffer, likely creates a level of ambient noise which is comparable to what the project will introduce.

The Center for Conservation Biology Roost Registry does not report any bald eagle roosts with 660 feet of the project. The project also lies outside what the Service generally considers as concentration area along the mid and lower stretches of the James River.

Please let me know if I can provide any further assistance.

Best,
Tom

On Thu, Sep 27, 2018 at 11:41 AM Travis R. Comer <tcomer@rkk.com> wrote:

Topo map attached.

TRAVIS COMER, PWS, CSE

Project Planner



11827 Canon Boulevard, Suite 402

Newport News, Virginia 23606

757.320.1037 D | 757.846.0783 C
www.rkk.com



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--

Tom Wittig

Northeast Region Eagle Coordinator
US Fish and Wildlife Service
Division of Migratory Birds
300 Westgate Center Drive
Hadley, MA 01035
(413)253-8577 phone
(413)253-8424 fax

We have a new mailing address:

***US Fish and Wildlife Service
Migratory Bird Permit Office
[300 Westgate Center Dr.](#)
[Hadley, MA 01035](#)***

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Appendix B



Location: 1 Company: RK&K
Date: 01/04/2019 Photographer: T. Comer
Description: Facing west towards drill entry area



Location: 2 Company: RK&K
Date: 01/04/2019 Photographer: T. Comer
Description: Facing east towards College Creek



Location: 3 Company: RK&K
Date: 01/04/2019 Photographer: T. Comer
Description: Facing east towards drill exit area



Location: 4 Company: RK&K
Date: 01/04/2019 Photographer: T. Comer
Description: Facing west towards College Creek

Special Use Permit Application Supplemental Materials



Application and Authorization for the VESCP and VSMP Authority Permit for Land Disturbing and Stormwater Construction Activity

This local permit application and authorization is for the following land disturbing activity (LDA):

☐ Land Disturbing

☐ Stormwater Construction

Date: _____

Landowner/Permittee: _____

Mailing Address: _____

(Street)

(City)

(State)

(Zip)

Phone: _____ Fax: _____ Email: _____

Contact: _____ Phone: _____ Fax: _____

Email: _____

Project Name: _____

Project Street Address: _____

County Plan No.: _____ Parcel ID(s): _____

Total Size of Tract or Lot (acres): _____ Total Area to Be Disturbed (acres): _____

Description of Land Disturbing Activity (LDA): _____

Owner's Certification and Right of Entry

The undersigned owner/permittee hereby grants employees of James City County, Virginia and its agents, as local VESCP and VSMP authority, the right to enter the above referenced property for the purpose of inspecting or monitoring for compliance with any component of an approved stormwater pollution prevention plan SWPPP ("Plan") for the above-referenced project and further certifies that they understand the provisions of the Virginia Erosion and Sediment Control and Virginia Stormwater Management Act and Regulations and the local Erosion and Sediment Control/VSMP ordinance and agrees to carry out the approved Plan for the above-referenced project. Further, the permittee understands that one year after issuance of this permit annual local permit maintenance fees apply unless the general permit coverage is appropriately terminated.

N/A

(Print Name and Title of Landowner)

(Signature of Landowner)

Evidence of registration and general permit coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities (VAR10), if applicable, is required prior to local VESCP or VSMP permit issuance. If applicable, a Certificate to Construct stormwater facilities and fees should be submitted with this application.

This permit does not authorize a Certificate to Construct public water and sewer utilities which is issued separately by the James City Service Authority, 757-253-6805.

(For Office Use Only) Reviewed by: _____ Date: _____

Permit No.: _____ Surety Amount: \$ _____

Permit Conditions: _____

Approved by: _____ Date: _____

(Administrator – VESCP and/or VSMP Authority)

Project Code: _____ HUC: _____ Planner: _____ Proffer: _____ Treasurer: _____

CGP Registration No.: _____ VSMP fee: _____ CC fee: _____ DOC: _____

REZONING AND SPECIAL USE PERMIT SUBMITTAL REQUIREMENTS CHECKLIST

Please complete the following checklist to ensure that your application meets the requirements of the Zoning Ordinance. Any section not completed can delay processing of this application and the date of the Planning Commission hearing.

Please note that this checklist is only a guide to facilitate the application process. Section 24-23 of the James City County Zoning Ordinance should be reviewed for a complete list of submittal requirements required with any application for a rezoning or request for a special use permit.

Any request for a waiver to any submittal requirement should be made in accordance with Section 24-23 of the Zoning Ordinance at least one week prior to submittal of any application.

Traffic Impacts:

1. How many weekday peak hour trips to and from the site during hours of operation will your project generate? 0
2. What level of service does the roadway have where your project will enter or exit? B - Principal Arteri

If your answer to #1 is greater than 100, or if your answer to #2 is "D" or lower, a Traffic Impact Analysis must be submitted pursuant to the Traffic Impact Analysis Submittal Requirement Policy.

Water and sewer impact study:

1. What is the anticipated average daily flow of water and sewer volume, in gallons? 0
2. How many residential lots are proposed? None

If your answer to #1 is greater than 15,500 gallons, or if your answer to #2 is greater than 50 lots, a water and sewer impact study must be submitted.

Environmental Constraints Analysis:

1. Have you provided the environmental information required in accordance with the Environmental Constraints Analysis? Yes ☒ No ☐

Adequate public facilities:

1. Have you attached an adequate public facilities report to include sewer, water, schools, fire stations, libraries, and other major locally-financed facilities? Yes ☐ No ☒

Historic and archaeological study:

1. Is the property identified as being a highly sensitive area on the James City County archaeological assessment? Yes ☐ No ☒

If yes, a Phase IA historic and archaeological study is required.

Environmental inventory:

1. Have you provided an environment inventory in accordance with the James City County Natural Resource policy? Yes ☒ No ☐

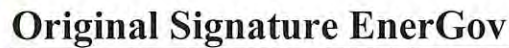
Fiscal impacts:

1. Does your proposal include residential dwelling units? Yes ☐ No ☒

If yes, a fiscal impact analysis is required, using the worksheet and assumptions provided by the planning division.

Parks and recreation facilities:

1. Have you provided parks and recreation information based on the Parks and Recreation Master Plan Proffer Guidelines? Yes ☐ No ☒



Master Plan:

1. Does your master plan depict the approximate boundaries and general location of all principal land uses and their building square footage and height, roads, rights-of-ways (with an indication of whether public or private), accesses, open spaces, public uses, and other features located on the site for which approval is sought? Yes ☒ No ☐
2. Has your master plan been prepared by a licensed surveyor, engineer, architect, landscape architect or planner? Yes ☒ No ☐

A total of 12 copies of the master plan should be submitted along with an application for rezoning or special use permit; if necessary, additional copies of the master plan may be required for submittal.

Supplemental Information:

1. Supplemental information should be submitted in accordance with the "Supplemental Submittal Requirements for Special Use Permits and Rezoning" policy as adopted by the Board of Supervisors and any additional policies as deemed necessary by the planning director.
Is this information attached? Yes ☒ No ☐

I attest that this checklist is filled out in full. Any section not completed can delay processing of this application and the date of the Planning Commission public hearing.


Applicant Signature

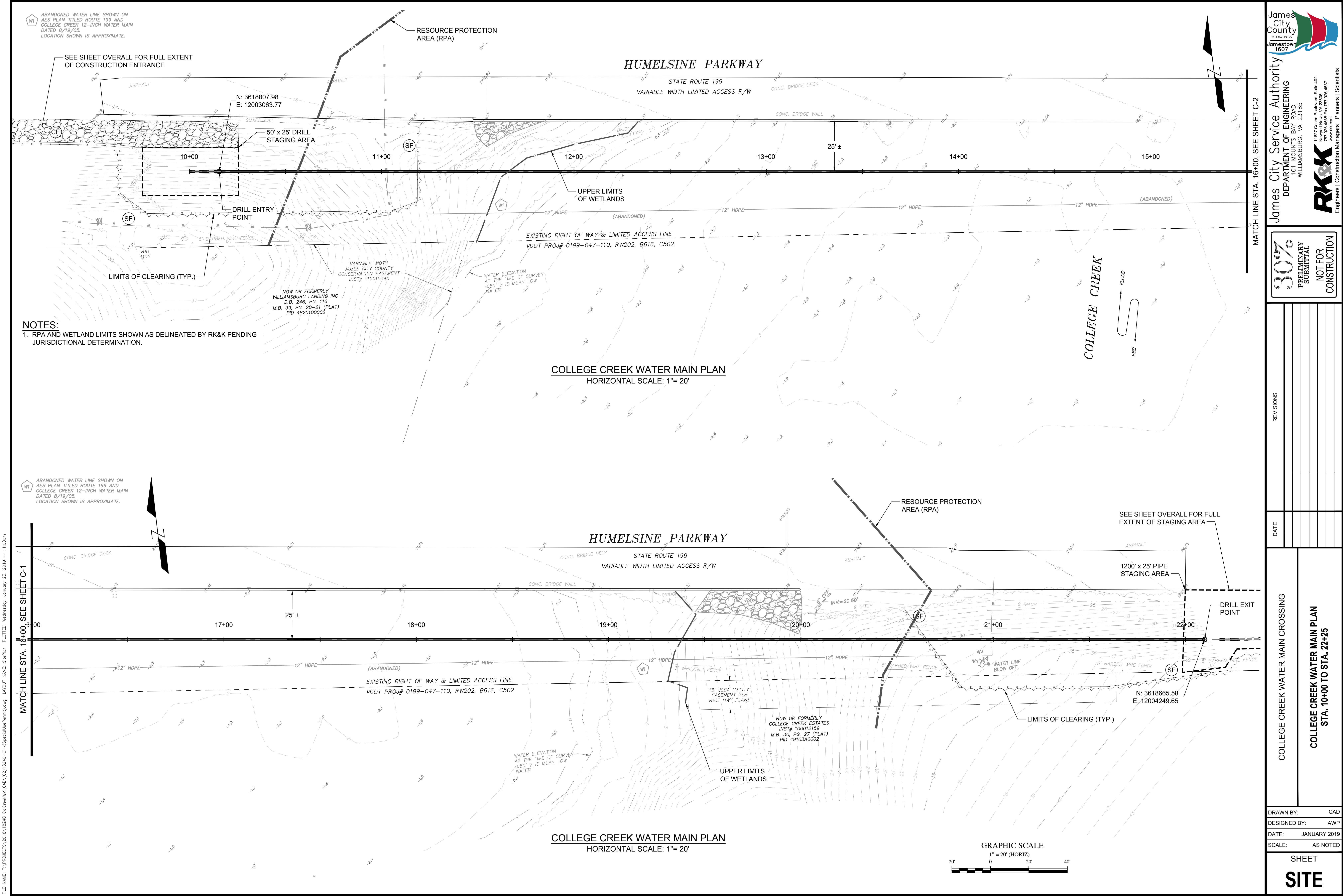
1/23/2019
Date

Please note that before accepting this application, County staff will verify that all real estate taxes owed for the subject properties have been paid in full in accordance with Section 24-24. If you are unsure if your payments are up-to-date, please contact the County Treasurer at 757-253-6705.

Attachments to this application (please check off):

- ☐ Traffic Impact Study
- ☐ Water/Sewer Impact Study
- ☒ Environmental Constraints Analysis
- ☐ Adequate Public Facilities
- ☒ Historical and Archaeological Study
- ☒ Environmental Inventory
- ☐ Fiscal Impact Analysis
- ☐ Parks and Recreation Information
- ☒ Master Plan
- ☒ Supplemental Information

Master Plan Mapping



FILE NAME: T:\PROJECTS\2018\18240 CoCreek\MM\CAD\02\18240-C-C-(SpecialUserPermit).dwg LAYOUT NAME: SitePlan PLOTTED: Wednesday, January 23, 2019 - 11:00am

James City
County
VIRGINIA
Jamestown
1607

James City Service Authority
DEPARTMENT OF ENGINEERING
101 MOUNTS BAY ROAD
WILLIAMSBURG, VA 23185
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www.jcsa.net

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NOT FOR
CONSTRUCTION

REVISIONS	DATE

COLLEGE CREEK WATER MAIN CROSSING

COLLEGE CREEK WATER MAIN PLAN
STA. 10+00 TO STA. 22+25

DRAWN BY: CAD

DESIGNED BY: AWP

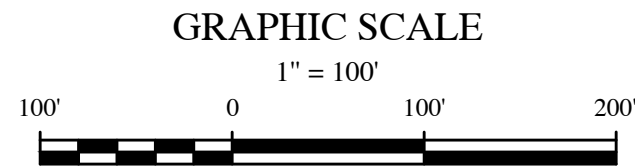
DATE: JANUARY 2019

SCALE: AS NOTED

SHEET

SITE

FILE NAME: T:\PROJECTS\2018\18240 ColCreek\MM\CAD\02\18240-C-(SpecialUsePermit).dwg LAYOUT NAME: C-3 PLOTTED: Wednesday, January 23, 2019 - 10:56am



COLLEGE CREEK WATER MAIN LAYOUT PLAN
SCALE: 1"= 20'

NOTES:
1. HDPE PIPE LAYOUT SHALL BE COORDINATED WITH INGRESS/EGRESS REQUIREMENTS.

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Virginia
Jamestown
1607

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DATE	REVISIONS

COLLEGE CREEK WATER MAIN CROSSING	WATER MAIN LAYOUT PLAN

DRAWN BY:	CAD
DESIGNED BY:	AWP
DATE:	JANUARY 2019
SCALE:	AS NOTED

SHEET
OVERALL