Environmental Assessment and Section 4(f) Statement for the Tri-Cities Multimodal Station

Prepared Pursuant to 42 USC §4332, 49 USC § 303, and 64 FR 28545

by the U.S. Department of Transportation –
Federal Railroad Administration

and

Crater Planning District Commission

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PROJECT BACKGROUND AND EXECUTIVE SUMMARY

This is the Environmental Assessment (EA) for the proposed Tri-Cities Area Multimodal Station (Project).

This summary is intended to assist readers in answering these and other important questions:

- What is the Tri-Cities Area Multimodal Station Project?
- What is an EA?
- What goes into an EA?
- How is an EA prepared? Who prepares it?
- What were the steps in the environmental review of the Tri-Cities Area Multimodal Station project?
- What are some areas of controversy related to the Tri-Cities Area Multimodal Station project?
- What are some of the environmental effects related to the Tri-Cities Area Multimodal Station project?

Some of the highlights of this EA are discussed below.

WHAT IS THE TRI-CITIES AREA MULTIMODAL STATION PROJECT?

The Project involves the construction of a new multimodal station in the Tri-Cities area of Virginia, which includes the Cities of Petersburg, Colonial Heights and Hopewell (Tri-Cities). The proposed station will serve existing and future Amtrak regional and long distance trains, which operate at conventional speeds[1] through the Tri-Cities area, and will also support the introduction of higher speed rail[2] service along the Southeast High Speed Rail (SEHSR) Corridor. The SEHSR Corridor extends from the Northeast Corridor (NEC) and Washington, DC through Richmond and the Tri-Cities area, then branching onto two routes extending eastward to Norfolk, VA and westward to Raleigh and Charlotte, NC. Previous SEHSR[3] studies did not evaluate potential environmental impacts of new stations as part of its documentation, including the Tri-Cities area, leaving that analysis to be conducted in conjunction with local jurisdictions such as the Crater Planning District Commission (CPDC), the agency sponsoring this evaluation.

Figure ES 1 shows the Study Area for this Project and includes all localities within Tri-Cities area.

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[1] Not in excess of 80 mph for passenger trains on Class 4 track – 49 CFR 213.9.

[2] Maximum authorized speed of 110 mph – SEHSR Tier II FEIS (2015)

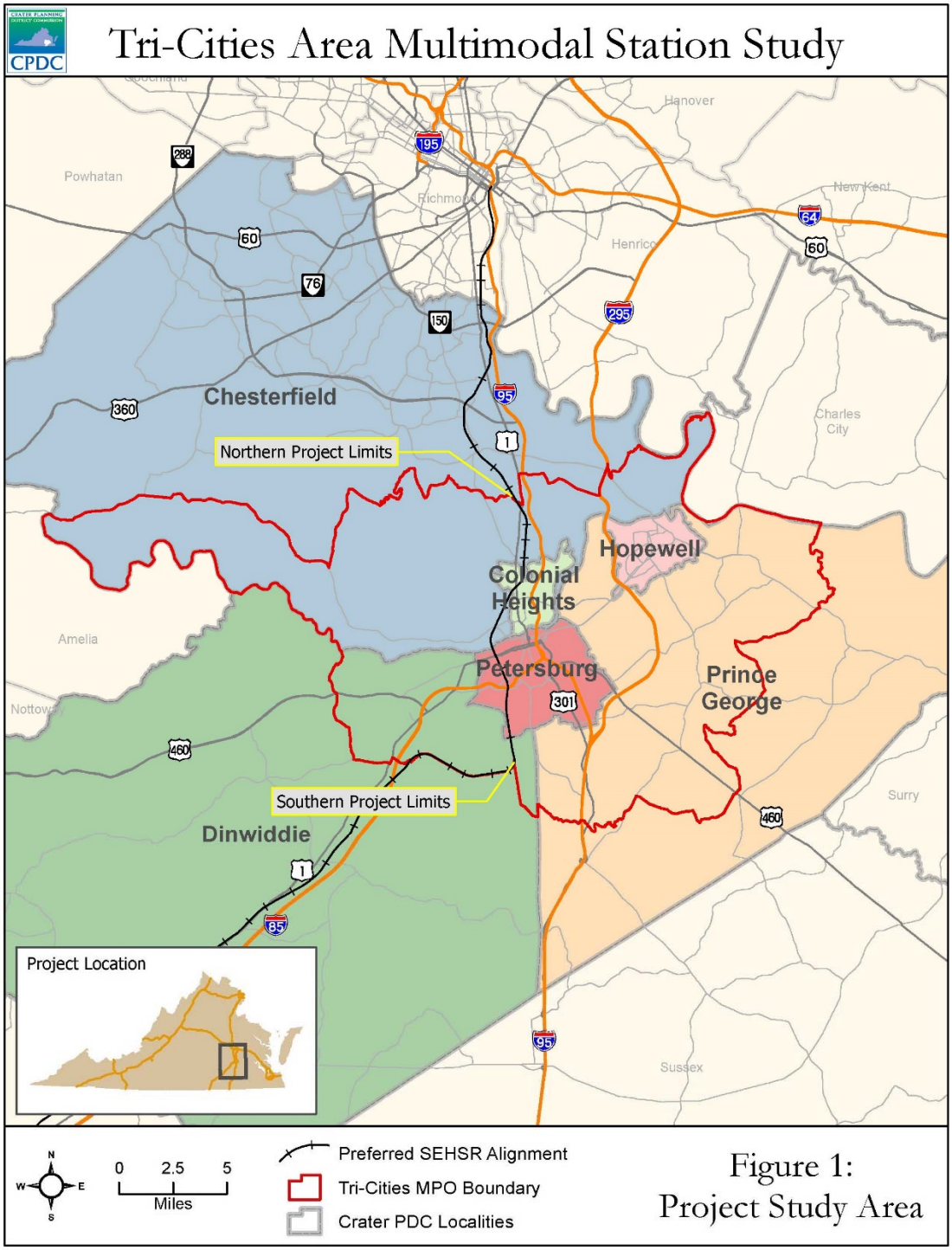
[3] Tier-I EIS, Southeast High Speed Rail Project, Washington D.C. to Charlotte NC, 2002.

Tier-I EIS, Richmond to Hampton Roads Passenger Rail Project, 2012.

Tier-II EIS, Southeast High Speed Rail, Richmond, VA to Raleigh, NC (2015)

The purpose of the Project is to construct the Tri-Cities Area Multimodal Station for current intercity passenger rail service through Petersburg, including the relatively new conventional service to Norfolk, and prepare for the future introduction of higher speed rail service on the SEHSR corridor to Norfolk and North Carolina.

Figure ES 1: Project Study Area



WHAT IS AN ENVIRONMENTAL ASSESSMENT (EA)?

The National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. § 4321, et seq.) requires federal agencies to facilitates public disclosure and establishes policies to study the reasonable range of alternatives and assess environmental impacts of proposed projects.

A NEPA document must be prepared by a federal agency for any major federal action that could potentially affect the quality of the natural and built environment. The appropriate type of NEPA document that a federal agency must prepare for a given project (either a Categorical Exclusion, an EA, or an Environmental Impact Statement (EIS)) is determined by the agency through a thorough review of the proposed project. A "major federal action" might include an agency proposal to approve or implement a project or program, or when an agency provides funding for a project. The term "environment" refers to the natural and physical setting, including resources like animals, plants, buildings, and landscapes, and the relationship of people with that natural and physical setting. When the significance of impacts of an action is uncertain, an EA is prepared to assist in making this determination. If the EA finds that the Project will result in significant, unmitigatable impacts, the preparation of an EIS will be required. If no significant impacts are associated with the action after completing the EA, a finding of no significant impact (FONSI) may be prepared.

An "environmental effect" is any change to the environment resulting from the proposed activity. Environmental effects can be both positive (beneficial) or negative (adverse). An EA typically includes measures to mitigate potential adverse effects.

WHAT GOES INTO AN EA?

NEPA assumes that any proposed goal can be achieved through different means. To this end, NEPA requires that an EA evaluate the environmental effects of a "reasonable range" of project alternatives. NEPA defines a "reasonable alternative" as an option that would feasibly achieve the objectives of a particular proposed action.

NEPA does not require any specific number of alternatives. Instead, the number and type of reasonable alternatives depends on the specific nature of the Project. The reasonable range of alternatives is determined after careful consideration of a number of factors which may include technical and environmental criteria.

Practicality is another consideration in determining whether an alternative is "reasonable"–NEPA allows cost, engineering feasibility, and other factors to be considered.

NEPA does require that an environmental document explicitly note two specific alternatives:

- No Build or No Action Alternative
- Agency Preferred Alternative

Each of the alternatives is discussed in more detail below. Under NEPA, the No Build or No Action Alternative (which will be referred to as the No Build Alternative in this EA) details the environmental effects that would result if no action were taken. In this case, no new multimodal station would be constructed.

The term "Agency Preferred Alternative" refers to the option/alternative that the lead and cooperating agencies believe would best fulfill each agency's statutory mission and responsibilities, in consideration with economic, environmental, and technical factors.

WHAT IS THE PROCESS FOR PREPARING THE EA?

NEPA and the Council on Environmental Quality's (CEQ) implementing regulations[4] define the general framework for preparing an EA. Each federal agency may also have its own, more specific guidelines for implementing NEPA that will influence the contents of an environmental document. For example, the Federal Railroad Administration (FRA) uses its Procedures for Considering Environmental Impacts to supplement the CEQ regulations.[5]

Scoping

The scoping process refers to the early and open process for identifying significant issues related to a proposed action. As part of the scoping process, public agencies and the public are invited to participate and provide comment. Public scoping meetings are held to give agencies and the public a chance to submit comments, discuss the proposed alternatives, and talk about the NEPA guidelines and EA process with project team members. A public workshop was held to initiate this EA process and to help scope out concerns on December 11, 2014. Scoping packages were also distributed to agencies and identified stakeholders at that time. An additional public workshop was held on September 16, 2015 to receive input on project alternatives under consideration.

Appendix K-5 of this EA contains summary reports of the public workshops held.

Environmental Assessment (EA)

The purpose of this EA is to disclose all of the environmental effects associated with the alternatives, whether they are adverse or beneficial and allow for the public to review and comment on the document. The lead agency, FRA, publishes the document and informs citizens and stakeholders of its availability through a variety of means. The EA is used to determine the next step in the NEPA process – either the preparation of an EIS or a FONSI as noted above. If no significant impacts are associated with the action after completing the EA, a FONSI may be prepared and would represent the final step in this process.

Who prepares an EA?

NEPA establishes a framework whereby federal, state, local and tribal agencies as well as the public can have important roles in project development and the environmental review process. FRA is the Lead Agency preparing this EA for the Project. FRA has the authority to regulate the safety of railroads and manages financial assistance programs for rail capital investments. FRA is also the lead agency for the Tier-II EIS for the SEHSR Richmond, VA to Raleigh, NC project, which encompasses the railroad corridor adjacent to the Project and will provide service to the station. FRA has also been identified as the lead agency because it is

[4] See Section 1.5 for applicable regulations and permits

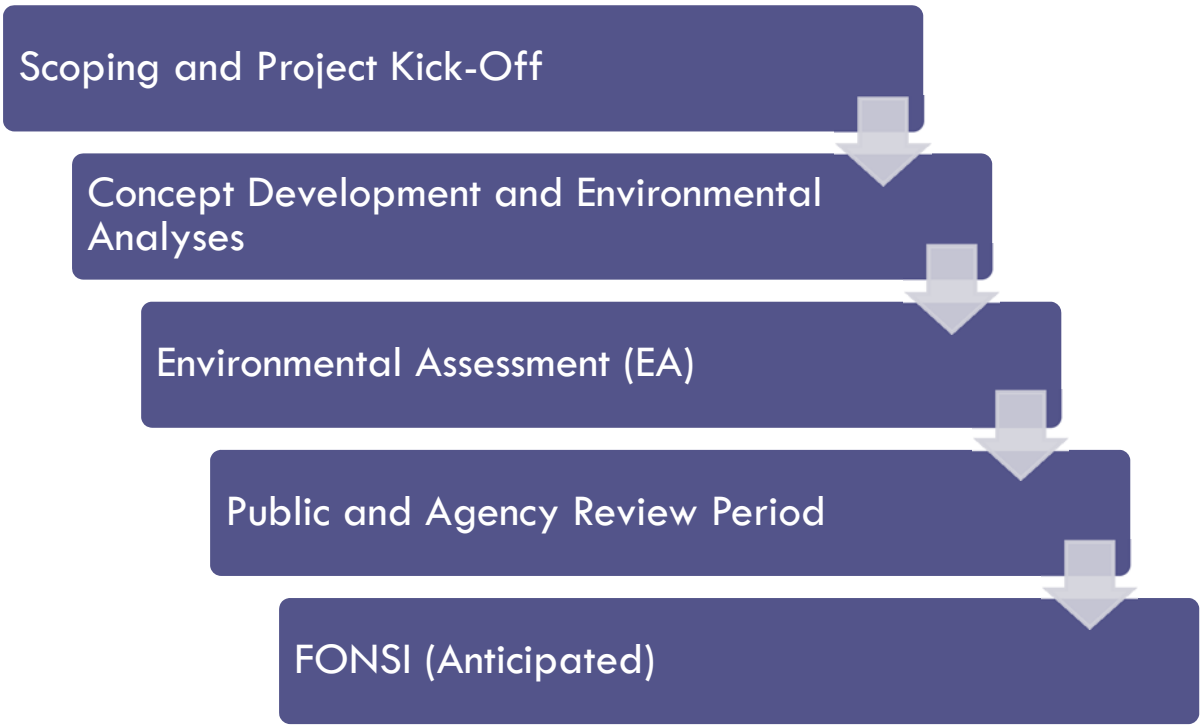
[5] See 64 Fed. Reg. 28545.

anticipated that they could provide funding assistance for station construction. Overall management for the EA was provided by the CPDC, who is FRA's state partner on the Project and was the sponsor for the environmental document. A Study Working Group (SWG) formed by CPDC, which is also described in the EA, consisting of local agencies and stakeholders, provided guidance for the EA process. These agencies reviewed the proposed project and environmental analyses and provided comments and input on the overall process.

For the NEPA process for this Project, FRA has worked with two Cooperating Agencies, the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA). The role of the Cooperating Agencies is to assist the Lead Agency during the scoping process and in developing information and preparing environmental analyses; the specific roles depend on the agency's expertise and relationship to the proposed action. Additional station funding may be available from FTA and FHWA, therefore this EA included their participation. While not considered formal Cooperating Agencies, the Virginia Department of Rail and Public Transportation (DRPT) and the Virginia Department of Transportation (VDOT) also worked closely with FRA throughout the EA process. Chapter 4.0, Coordination and Consultation, of this EA lists all of the agencies that were consulted in the development of these documents.

Figure ES 2 illustrates the Tri-Cities Area Multimodal Station EA process.

Figure ES 2: Environmental Assessment Process



WHAT IS THE PURPOSE OF THE TRI-CITIES AREA MULTIMODAL STATION PROJECT?

One of the most important aspects of NEPA is the requirement to define the "purpose and need" of a project. In other words– what is the objective of the Project? What need will it fulfill?

The purpose of this Project is to construct a multimodal station for current intercity passenger rail service through Petersburg, including the relatively new conventional service to Norfolk, and to prepare for the future introduction of high speed rail service on the SEHSR corridor to Norfolk and North Carolina. While the existing Petersburg Station in Ettrick supports current Amtrak passenger rail service, additional investment is required to attract and accommodate increased ridership, improve accessibility to the local and regional transportation network, improve ADA accessibility, and provide capacity to support future high speed rail service.

The secondary purposes of this Project are to:

- Construct a station in a location that supports the SEHSR goal of diverting trips from air and highway within the travel corridor to passenger rail use, thus reducing the growth rate of congestion on I-95; and

- Construct a station in a location that serves long-distance, regional, business and leisure travelers within and beyond Virginia, including Amtrak's Northeast Corridor (NEC), extending from Washington, DC, to Boston, MA, as well as points south (the SEHSR Tier-II EIS serves as the key link for these travelers to the busy Northeast) and east to the Norfolk and Hampton Roads area.

This EA includes a comparative analysis of potential station locations that would best serve the Tri-Cities area passenger rail market.

The Purpose and Need for the Project are summarized in Chapter 1 of this EA.

WHAT ALTERNATIVES WERE CONSIDERED IN THIS EA?

This EA identifies and evaluates a number of potential station locations relative to the purpose and need requirements supporting the regional SEHSR Corridor as well as the local transportation network in the Tri-Cities. The Tri-Cities MPO (CPDC) and their appointed SWG, in conjunction with input from FRA, were instrumental in the selection and application of the criteria and measures of effectiveness used to evaluate existing and proposed station location alternatives for this study. This work is consistent with the recommendations of the SEHSR Tier-II EIS as mentioned previously. Other than analyzing how potential stations would impact the overall transportation network, the SEHSR Tier-II EIS did not evaluate potential environmental impacts of new stations as part of its documentation, leaving that analysis to be conducted in conjunction with local jurisdictions.

The first step for alternatives evaluation was a preliminary screening evaluating the entire rail corridor within the Study Area. The preliminary screening identified all possible areas with the appropriate track geometry

and available land area to accommodate a rail platform and station. The preliminary screening was a two-step process, resulting in 13 preliminary station location concepts. The 13 concepts are discussed in more detail in Chapter 2 of this EA.

The assessment of 13 preliminary station concepts was an iterative screening process conducted in coordination with the Tri-Cities MPO's SWG. The screening process compared each of the station areas to the established measures of effectiveness that were developed in collaboration with the SWG and based on input received at a public workshop held December 11, 2014. The measures of effectiveness are organized into five different categories, with multiple measures in each category.

A summary of the measures is included below and the complete details of each measure are included in Appendix A.1:

- Design Considerations – platform accommodation, ADA compatibility, and freight integration
- Property Implementation – assessed value, access routes, and relocations
- Environmental Constraints – environmental justice and human/natural resources
- Proximity – distance to interstate, population and employment within 1 mile, and transit access
- Local Compatibility – compatibility with each locality's Comprehensive Plan and locality support

Based on these measures of effectiveness, each station concept was scored and ranked to understand its strengths and weaknesses. The results of the screening indicate that all station sites have advantages and disadvantages; some more so than others.

The five highest ranked preliminary station areas following an initial Screening #1 phase, which were highly conceptual in nature, are presented from north to south in the list below and shown in Chapter 2 of this EA.

- Walthall - the Walthall site in Chesterfield County is one of the farthest north of the 13 potential station sites. This site ranked fourth (tie) overall in the preliminary screening. The Walthall site has some strengths, including design considerations and a large open parcel. However, being so far north, the site is furthest from major population and employment centers[6], with limited supporting land uses surrounding the site. Multiple environmental and cultural resource constraints exist within the parcel, and stakeholders have raised serious security concerns due to the proximity to secured industrial uses.
- Branders Bridge NE – the Chesterfield County site at Branders Bridge ranked second because of its central location to the urban core and population, limited environmental constraints, and favorable design considerations. However, the site is largely in a residential area and the county's comprehensive plans do not incorporate a multimodal station at this location.

[6] Average distance to geographic center of each Tri-City, Fort Lee and VSU. All sites = 5.7mi; Walthall = 8.6mi.

- Boulevard NW – the Boulevard site is the only location in the City of Colonial Heights and ranked third overall in the preliminary screening. The Boulevard site is a relatively inactive commercial site along a multi-use corridor. The site has significant connectivity to population, employment, and transit. The Boulevard site also has direct roadway access and an existing parking area that would facilitate incorporating a station.

- Ettrick – the Chesterfield County site at the existing station ranked the highest among all the potential station sites in the preliminary screening process. Ettrick's biggest strengths are in the design consideration and property implementation categories since it is an existing station on CSXT property, and is also within close proximity to much of the area's population and employment[7], and has limited environmental constraints. In addition, the County recently adopted the Ettrick Virginia State University (VSU) Special Area Plan, a plan for future growth and development of the community of Ettrick and VSU. The County's plan is to promote economic development (i.e., commercial) around the Ettrick Station that supports rail travelers and the surrounding community. The plan promotes multimodal access to the station, as well as enhancement of the station to better serve as a gateway into the county.

- Collier East – the Collier site in the City of Petersburg, just south of Interstate (I-85), tied for the rank of fourth with the Walthall site. Collier East is a large, open parcel owned by the City of Petersburg, making it score highly in property implementation. The site is located just south of the city and somewhat removed from major population and employment centers when compared to the other station locations. In addition, the site has not been included in any adopted plans by the City of Petersburg.

The Screening #2 phase compared conceptual layouts for each of the five station concept locations relative to the sensitive resources within the site. The comparative results were used to evaluate site development feasibility and refine the concepts into more detailed Build Alternatives for evaluation in this EA.

The Walthall Station conceptual site was not carried forward for further evaluation due to the potential impacts to: the operations of a secure, private facility; wetlands and surface waters; designated resource protection areas; and archaeological resources. These potential impacts are greater at this site than at the remaining four sites. In addition, the potential impacts activate issues associated with Section 106 of the National Historic Preservation Act, Section 4(f) of the U.S. DOT Act, and Sections 404 and 401 of the Clean Water Act. In addition to these environmental concerns, Walthall is located the farthest north of the existing urban core and does not have existing or planned transit connectivity, which fails to meet the need for the Project to be within proximity to population and employment centers, and transit access. Thus, it was recommended to be designated as an alternative considered and dismissed from detailed analysis. The SWG affirmed their consent of this designation.

The Collier conceptual location was evaluated in Screening #2 and carried forward for further evaluation in the EA. During the Phase I archaeological survey of the Collier site, sufficient artifacts were identified within the conceptual footprint to warrant a more detailed, Phase II archaeological survey. The Phase II survey

[7] Average distance to geographic center of each Tri-City, Fort Lee and VSU. All sites = 5.7mi; Ettrick = 4.4mi.

uncovered archaeological remains of a mid-nineteenth-century outbuilding believed to be associated with a kitchen or dairy of a large farming operation active during the Antebellum, as well as Civil War and Reconstruction periods of the site. Given the historic significance of the site, the SWG agreed that shifting the Collier site southward, away from the newly discovered archaeological site, would serve as an appropriate avoidance measure. This shifted Collier site, referred to as Collier South was carried forward into the EA.

Of the five conceptual station sites evaluated in Screening #2, four concepts were carried forward for further evaluation in this EA to become the Build Alternatives: Boulevard (NW), Branders Bridge (NE), Ettrick, as well as the shifted location for Collier - Collier South. The No-Build Alternative (maintaining the existing Petersburg Amtrak Station in Ettrick with no improvements to the station) is also a baseline alternative against which the proposed station sites are compared, although it would not meet the purpose and need for this Project.

To test for site development suitability and environmental impacts at each of the four Build Alternatives, a common station concept was developed. Station size, determined by current utilization and anticipated ridership growth, calls for a Small/Medium Station. The typical station footprint is approximately 2.5 acres, although this can vary once design phase is conducted depending on unique site characteristics. Each Build Alternative station and configuration was influenced by topographical constraints and site-specific conditions. Upon identification of a Preferred Build Alternative at the conclusion of this NEPA process, the station site design will be further refined during final design. The sites, as currently assessed, are conceptual in nature and subject to refinement.

At this conceptual stage of design, the typical station features for any of the four Build Alternatives include the following:

- Center platform, to be located between the eastern-most existing mainline track and the future SEHSR third track. The platform would be a minimum of 24 feet wide and extend up to 1,200 feet on tangent/level track. Depending on the site selected, either an overhead bridge or underpass would be constructed to provide access to the center platform.
- 3,600 square foot station building with a minimum of passenger waiting, restrooms, and vending amenities.
- Parking for 30-50 vehicles.
- Automobile access road, and in one case, a new bridge to nearest arterial road.

For each of the four Build Alternatives, the proposed facility was located to best fit the existing topographic conditions; minimize impacts to existing natural and cultural resources; minimize impacts to private property and structures; and minimize grading, related earthwork, and other ground-disturbing activities. If a station site required a new access road, such roads were kept to a minimum length, providing the clearest, most direct access to the site in light of natural and human resource constraints. Vehicular access to the station site that requires or increases travel through primarily residential or neighborhood streets was avoided where possible.

No-Build Alternative (Maintain Existing Ettrick Station)

The No-Build Alternative maintains the existing Petersburg Amtrak Station in Ettrick as it currently exists. Only routine maintenance would be provided at this station (Figure 6). While the No-Build Alternative does not disturb the Project site nor result in any immediate impacts, it would not address the Purpose and Need for the Project.

Boulevard Build Alternative

The central development focus of Colonial Heights is along US 1, known locally as the "Boulevard". The Boulevard Build Alternative is primarily on private property that was once a big-box retail store with a correspondingly large, paved parking area adjacent to Boulevard (US 1). Current use of the site includes a tape slitting operation (Superior Slitting), an equipment rental business (Rent-E-Quip), a carpet sales store (Carpet-N-Floors), and an automatic ice vending booth. As proposed, the platform, station, and parking area would be on the eastern side of the rail line, within the existing paved parking area. The SEHSR Tier-II EIS Preferred Alternative calls for a third track to be constructed on the eastern side of the rail line. A new platform would be provided between the current track and this newly constructed track, necessitating grade-separated pedestrian access. The mainline tracks are above grade at this location (approximately 12 feet to 15 feet), which necessitates retaining walls, as well as ADA ramps/elevator access to the platform from the passenger waiting area. The platform would be constructed within the existing railroad right-of-way, parallel to the existing track, with the new SEHSR track located on the opposite side of the platform for a center island design. Station access would be provided via Boulevard (US 1). See Table 6 in the main EA document for additional details of the station features at the Boulevard conceptual station site as well as the other sites.

Branders Bridge Build Alternative

Located in the Chesterfield County, the Branders Bridge Build Alternative site is on private property that is currently undeveloped. However, the property has been recently purchased and the property owner intends to construct an agri-business and home on the property. The exact location and extent of this development is not available at this time. As proposed, the station and parking area would be on the eastern side of the current rail line. The SEHSR Tier-II EIS Preferred Alternative calls for a third track to be constructed on the eastern side of the rail line. A new platform would be provided between the current track and this newly constructed track, necessitating grade-separated pedestrian access. The SEHSR Tier-II EIS Preferred Alternative also calls for the removal of the existing, at-grade rail crossing of Branders Bridge Road. This crossing would be replaced with a new Branders Bridge Road overpass. The new overpass would span the existing rail, center platform, and proposed new third track. Potential design considerations for a new overpass could include an additional pedestrian (elevator) access point down to the station platform at this location. A new access road to the station would be necessary to connect to the realigned Branders Bridge Road.

Ettrick Build Alternative

Located in Chesterfield County, the Ettrick conceptual station is approximately 220 feet north of the existing Ettrick station, along the eastern side of the rail line. The site is owned by CSXT. The SEHSR Tier-II EIS Preferred Alternative calls for a third track to be constructed to the east of the existing rail line. A new platform would be provided between the current track and this newly constructed track, necessitating grade-

separated pedestrian access. The existing Ettrick station could be replaced in its entirety or incorporated into a plan for adaptive re-use. Access to the station would continue to be via South Street to either James Street then East River Road or to Bessie Lane to Granger Street.

Collier South Build Alternative

Located in the City of Petersburg, the Collier South Build Alternative site, platform, parking lot, and access road are within property owned by the City of Petersburg (See Figure 8 in the EA). This station location must accommodate the switch point location to the Norfolk Connection Track, which provides a connection for passenger trains traveling to and from Norfolk. Ultimately, the optimal station location was chosen with two platforms that enable both Norfolk trains (side platform) and Amtrak long distance trains traveling along the eastern seaboard and SEHSR trains to North Carolina (center platform) to be served. Station locations farther north or south on this property would result in less optimal design/access, such as limited platform length or requirement for a platform on a curve, which does not conform to Amtrak's preferred station design guidelines.

The SEHSR Tier-II EIS Preferred Alternative calls for a third track to be constructed east of the existing rail line. A new platform would be provided between the current track and this newly constructed track, necessitating grade-separated pedestrian access. Given the platform design requirements, the station location requires an approximately 1,800-foot long access road to the south to connect to Route 604 (Halifax Road). To shift the access road to the north and connect to Defense Road would have adverse effects to multiple Civil War resources eligible for the National Register of Historic Places (NRHP): Defense Road, Dimmrock Line/Earthworks, and the Bridge over Defense Road. To avoid these potential Section 106 and Section 4(f) resources, the access road is located to the south and includes a grade separated crossing in order to access the station. A secondary access road from the east remains possible at this location, which would not provide primary access but would allow for additional entry for emergency or service vehicles.

More details about the screening process and the Build Alternatives are provided in Chapter 2 of this EA.

WHAT INPUT WAS RECEIVED DURING THE PROCESS ABOUT THE ALTERNATIVES?

Once the Build Alternatives were defined and preliminary concepts created, these were shared with the SWG and the public in a workshop held on September 16, 2015 in Ettrick. Input on preferences or any remaining concerns about the four Build Alternatives was solicited at that time and are discussed in Chapter 4 of this EA and included in Appendix K5.

At that workshop and during the 30 day comment period that followed, a total of thirty-five (35) comment sheets were received. Of those received during the comment period, thirteen (13) citizens stated their preference for the Ettrick Build Alternative location, eleven (11) preferred the Boulevard Build Alternative location, nine (9) preferred the Collier South Build Alternative, and two (2) did not state a preference. At the workshop, concerns about the Branders Bridge Build Alternative were discussed and it received no preferences. In identifying why citizens selected a preferred location, the two highest benefits cited for any location were consideration of vehicular access to the Build Alternative and consideration of future

development potential of the Build Alternative site and surrounding land uses. After the comment period was closed, seven (7) additional comments and notes of support were submitted stating a preference for the Ettrick Build Alternative.

Members of the SWG, which consists of stakeholders and localities within CPDC, were also asked to identify their preferences of any of the Build Alternatives under consideration. Responses are also included in Appendix K5. The Branders Bridge Build Alternative did not receive any support from the localities or stakeholders in the SWG. The Boulevard Build Alternative was identified as the preferred Build Alternative by Colonial Heights and Prince George County (who identified two preferred Build Alternatives). The Ettrick Build Alternative was identified by Chesterfield County as the preferred location. The Collier South Build Alternative was the preferred location by Dinwiddie County, Hopewell, City of Petersburg, the Petersburg Area Transit authority (PAT) and Prince George County. The resolutions that support these preferences were provided to the FRA, FHWA, and FTA as part of the process and are included in Appendix K5.

WHAT IS THE PREFERRED ALTERNATIVE AND WHY IS IT IMPORTANT?

The Preferred Alternative is the Project alternative that best meets the purpose and need of the Project and is favored by the agencies for approval and future construction. The Preferred Alternative is the alternative which FRA and the Cooperating Agencies, FHWA and FTA, believe would most closely align with their statutory mission and responsibilities, giving consideration to economic, environmental, technical and other factors. As the Lead Federal Agency, FRA is responsible for considering the input from Cooperating Agencies with regard to the selection of the Preferred Alternative. FRA and the Cooperating Agencies have considered the range of alternatives presented in this EA when selecting the Preferred Alternative as well as the input provided throughout the study process. FRA has identified the Boulevard Build Alternative as the Preferred Alternative for the Project for the following reasons:

- The Boulevard site is the most accessible and visible under consideration, as it is located approximately one mile (1.1 miles) from I-95 on a major arterial that provides convenient access to population centers in the region. Furthermore:
    - The site is less than a three minute travel time to I-95. Access to Interstates is a key consideration for Amtrak and inter-regional train service patronage, including potential feeder bus service, such as Amtrak's Thruway connection service[8].
    - Access from I-95 to the proposed site is provided along existing major arterials, Temple Avenue and Boulevard (US 1).
    - Improvements to Temple Avenue access at I-95 are currently under construction by VDOT.

[8] https://www.amtrak.com/thruway-connecting-services-multiply-your-travel-destinations

- The Boulevard site is close to the existing population / activity centers, including Fort Lee, VSU, downtown Petersburg and downtown Colonial Heights.
- Existing transit routes provide access to the site along Boulevard (US 1).
- The site is consistent from a land use perspective as it is proposed in an existing mixed /use and commercial corridor.
- The station could utilize existing parking that is directly accessible from Boulevard (US 1), requiring no new access routes or improvement to routes that provide access to the station.
- The Boulevard Build Alternative is the station site with the highest WalkScore[9], a widely used measure of walkability in the station area that looks at the presence of sidewalks, land use and the overall pedestrian environment and measures how amenable it is to walking. The site is located within a "somewhat walkable" environment – the only station site to receive that category of rating.
- The Boulevard Build Alternative has been endorsed by the locality, the City of Colonial Heights.

  No environmental constraints exist that would preclude implementation of the station in this location.

WHAT ARE SOME OF THE POTENTIAL ENVIRONMENTAL IMPACTS RELATED TO THE TRI-CITIES AREA MULTIMODAL STATION PROJECT?

This EA provides an evaluation of the environmental effects associated with the Build Alternatives. The Build Alternatives would have both negative (adverse) and positive (beneficial) impacts on the environment. Mitigation measures are provided to reduce or eliminate adverse environmental effects, where needed. The potential effects, both beneficial and adverse, of the Build Alternatives are summarized below. Table 1 summarizes the comparable effects of the Build Alternatives. Chapter 4 of this EA includes detailed evaluations for each of the Build Alternatives.

[9] As determined at https://www.walkscore.com/

Table ES-1: Summary of Impacts

Category	Impacts by Build Alternative				
	No-Build (Existing Ettrick Station)	Boulevard	Branders Bridge	Ettrick (New Station)	Collier South
Total Area of Station Footprint (acres)	N/A	2.67	2.57	2.34	4.30
Current Station Parcel Ownership	CSXT*	Private Property	Private Property	CSXT*	City of Petersburg
New Station Access Road (square feet)	N/A	0	14,316	5,056	61,817
Cost (Platform, Station, Parking, Access Road, Bridge, Parcel ($ Millions -2015 Dollars))	N/A	$9 – 12 M	$9 - $11 M	$7 - $9 M	$14 – $17 M
Violations of National Ambient Air Quality Standards (NAAQS)	None	None	None	None	None
Sensitive Noise Receptors Impacted	N/A	Category 3 (Institutional Land Uses): 1 Moderate Impact	Category 2 (Residential Land Uses): 1 Moderate Impact	None	None
Vibration	None	None	None	None	None
Water Quality	None	Minimal	Minimal	Minimal	Minimal
Wetlands (acres)	0	0	0	0	0
Streams (linear feet)	0	0	0	0	0
Threatened & Endangered Species	0	0	Potential: Northern Long-eared Bat** *Federal Threatened*	0	0

Category	Impacts by Build Alternative				
	No-Build (Existing Ettrick Station)	Boulevard	Branders Bridge	Ettrick (New Station)	Collier South
Critical Habitat	None	None	None	None	None
Floodplains (acres)	0	0.3	0	0	0
Visual Resources	N/A	Visually Compatible	Limited Impact	Visually Compatible	Limited Impact
Land Use & Zoning Consistency	Consistent	Consistent	Inconsistent	Consistent	Consistent
Farmland Impacts (acres)	N/A	N/A	N/A	N/A	3.7 acres Prime Farmland NRCS Rating = 141 out of 260 Points
Relocations: Home, Business, Farm, Non-Profit	0	Requires private property. Existing businesses may remain at same location, but, due to center platform track configurations, one business relocation is possible (adjacent to bridge).	Requires private property, but no relocations	0	0
Environmental Justice (EJ) Concerns	EJ Communities Present No disproportionately high and adverse impacts anticipated	EJ Communities Present No disproportionately high and adverse impacts anticipated	No EJ Communities	EJ Communities Present No disproportionately high and adverse impacts anticipated	EJ Communities Present No disproportionately high and adverse impacts anticipated
Public Health Concerns	Minimal	Minimal	Minimal	Minimal	Minimal
Public Safety Concerns	Minimal	Potential Improvement	Potential Improvement	Potential Improvement	Potential Improvement
Contaminated / Hazardous Waste Sites	0	0	0	0	0

Category	Impacts by Build Alternative				
	No-Build (Existing Ettrick Station)	Boulevard	Branders Bridge	Ettrick (New Station)	Collier South
Parks & Recreation Areas	0	0	0	0	0
# Cultural Resource Properties Affected (NRHP Listed or Eligible) ***	0	No Adverse Effect on 2 Properties	No Adverse Effect on 1 Property	No Adverse Effect on 1 Property	No Adverse Effect on 3 Properties
Section 4(f) Property Used ***	0	0	0	0	3 *de minimis* uses
Secondary & Cumulative Development Potential	Higher Potential	Higher Potential	Minimal Potential	Higher Potential	Moderate Potential

Source: Michael Baker International, 2015.

* CSXT is a private entity, but as a transportation services provider it traditionally works in conjunction with passenger rail services in its corridors. In this instance, the building and facilities are the responsibility of Amtrak but land is owned by CSXT.

**Northern Long-eared Bat: The U.S. Fish and Wildlife Service has indicated that station construction at the Branders Bridge site may effect this federally threatened species. Avoidance of impacts to this species is achieved by implementing time-of-year (TOY) restrictions for no tree clearing from April 15 – September 15 of any year at this site.

*** In a February 17, 2016 letter to FRA, SHPO stated concurrence with FRA's determination of effects was premature given that the Project is at the conceptual stage. SHPO asked to see more detailed plans for the preferred alternative, along with written comments from consulting parties [namely, the National Park Service], before providing formal comments on project effects. Because this is a conceptual-level EA, FRA is not conducting detailed engineering design on any alternative until a Preferred Alternative is identified. Therefore, the Section 106 process will not be completed until after the release of the EA and the selection of the Preferred Alternative. Following the selection, FRA will again seek SHPO's concurrence on determinations of effect and incorporate the results in the subsequent FONSI. While a formal determination of effect from SHPO is on hold until more detailed design information is available, SHPO stated that, based on the conceptual-level of information available, the potential for adverse effects appears minimal at each of the four station sites (Appendix H, DHR letter dated February 17, 2016). In addition, if necessary, the next step in the Section 4(f) process is for FRA to provide SHPO, in writing, its intent to make a de minimis impact finding. However, because SHPO is not providing a formal determination of effect until more detailed engineering design is available, FRA is unable to complete the Section 4(f) coordination requirements with SHPO. As with completion of the Section 106 process, the Section 4(f) process will be finalized following FRA's selection of a Preferred Alternative, subsequent coordination with SHPO, and documentation of these efforts and results in the FONSI. For more details on the Section 106 and Section 4(f) procedures, see Section 3.23 and 3.24 of this EA.

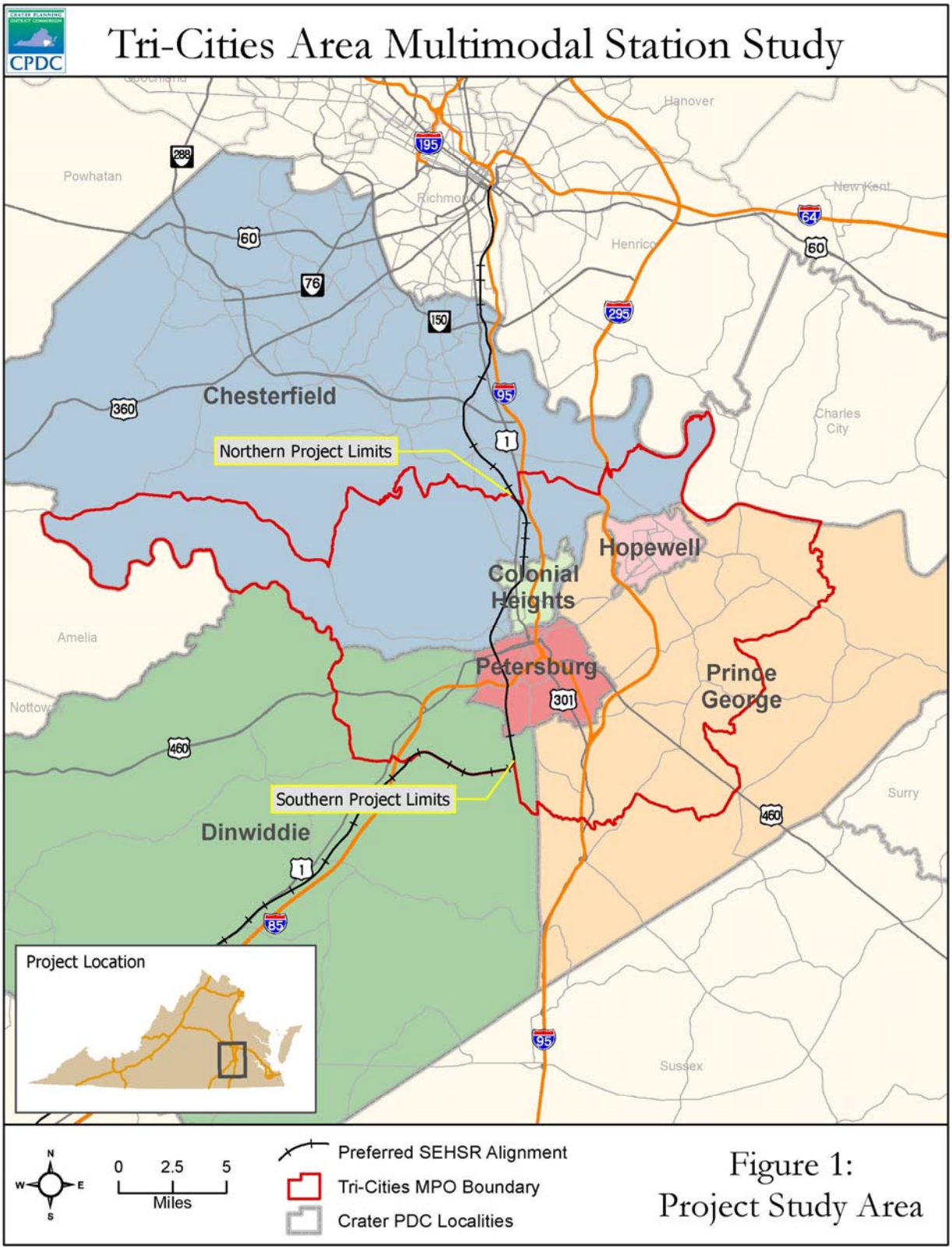
1. INTRODUCTION

The FRA is the lead Federal agency for this EA. The FTA and FHWA are participating as cooperating agencies. On behalf of the Tri-Cities Area Metropolitan Planning Organization (MPO), the CPDC is the lead State agency for this effort. The MPO is comprised of the cities of Colonial Heights, Hopewell, and Petersburg, and portions of the counties of Chesterfield, Dinwiddie, and Prince George (Figure 1). The Tri-Cities Area Multimodal Station EA is needed to document potential impacts from the construction of a new multimodal train station in accordance with NEPA requirements.

The proposed station will serve existing and future Amtrak regional and long distance trains, which operate at conventional speeds through the Tri-Cities, and will also support the introduction of high speed rail service along the SEHSR Corridor. The SEHSR Corridor extends from the NEC and Washington, DC through Richmond and the Tri-Cities area, then branching onto two routes extending eastward to Norfolk, VA and westward to Raleigh and Charlotte, NC. Previous SEHSR studies did not evaluate potential environmental impacts of new stations as part of its documentation, including the Tri-Cities area, leaving that analysis to be conducted in conjunction with local jurisdictions such as the CPDC, the agency sponsoring this evaluation. This EA is consistent with that approach and provides independent documentation of impacts due to the construction of a new multimodal station.

Multimodal passenger rail stations serve more than one mode of transportation, such as combined rail and bus service. At a multimodal station, people switch between transportation systems; they enter the station by way of rail, automobile, carpool, bus, bicycle, or on foot, then exit the station via a different mode of transportation than they entered. Multimodal passenger rail stations support and enhance transit usage by facilitating transfers between modes; they increase transportation options by taking advantage of travel efficiencies; they create a destination and gateway to a region; and they support economic and urban development by providing additional, alternative modes of access to an area.

Figure 1: Project Study Area



1.1. PROJECT PURPOSE

The purpose of this Project is to construct the Tri-Cities Area Multimodal Station for current intercity passenger rail service through Petersburg, including the relatively new conventional service to Norfolk, and prepare for the future introduction of high speed rail service on the SEHSR corridor to Norfolk and North Carolina. While the existing Petersburg Station in Ettrick supports the current Amtrak passenger rail service, additional investment is required to attract and accommodate increased ridership, improve accessibility to the local and regional transportation network, improve ADA accessibility, and provide capacity to support future high speed rail service.

The secondary purposes of this Project are to:

- Construct a station in a location that supports the SEHSR Tier-II EIS goal of diverting trips from air and highway within the travel corridor to passenger rail use, thus reducing the growth rate of congestion on I-95[10]; and
- Construct a station in a location that serves long-distance, regional, business and leisure travelers within and beyond Virginia, including Amtrak's NEC, extending from Washington, DC, to Boston, MA, as well as points south (the SEHSR Tier-II EIS serves as the key link for these travelers to the busy Northeast)[11] and east to the Norfolk and Hampton Roads area.

This EA includes a comparative analysis of potential station locations that would best serve the regional SEHSR Corridor as well as the local Tri-Cities area passenger rail market. Any multimodal station site must address local and regional needs, as well as the station location's interface with state and national transportation goals[12].

1.2. PROJECT NEED

The Project need for a Tri-Cities Area Multimodal Station is based on:

- Existing and projected ridership volumes,
- Size of the station required to meet the needs of those riders,
- Highway access to the station,
- Existing and future transit connectivity, and

[10] Federal Railroad Administration, North Carolina Department of Transportation and Virginia Department of Rail & Public Transportation. Southeast High Speed Rail – Richmond, VA to Raleigh, NC. Tier II Draft Environmental Impact Statement and Section 4(f) Evaluation. May 2010. Accessed on 10/29/14 at http://www.sehsr.org/deis/sehsr_deis_download_files/title_pg.pdf. Page 1-10.

[11] Ibid. Page 1-10.

[12] Ibid. Page 1-10.

- Proximity to the urban core.

Each of these areas of need is summarized in the pages that follow.

1.2.1 Ridership and Rail Service

In 2014, the total ridership, including boardings and alightings, at Amtrak's Petersburg Station in Ettrick reached 29,286.[13] DRPT estimates total annual Tri-Cities ridership will increase to approximately 98,000 passengers per year by 2025 with the addition of SEHSR service from the NEC and Washington, DC to Charlotte, NC as well as to Norfolk in the Hampton Roads region of Virginia..[14] This reflects a total ridership increase of 250 percent over the 12-year period.

Currently, 10 daily trains (5 round-trip) stop at the Amtrak Petersburg Station (i.e. Ettrick) each day. Passenger rail service is provided by Amtrak's Silver Star, Silver Meteor, and Palmetto with service between New York and Florida; Amtrak's Carolinian with service between Charlotte, NC and New York; and Amtrak's new Northeast Regional service with service between Boston, MA and Norfolk, VA[15]. The schedule for existing passenger rail service stopping at the Amtrak Petersburg Station in Ettrick is presented in Table 1.

Table 1: Amtrak Schedule for Petersburg Station in Ettrick

Travel Direction	Amtrak Northeast, Mid-Atlantic, & Virginia Service as of January 2016						
	Silver Meteor	NE Regional			Silver Star	Carolinian	Palmetto
	Daily	*Mon - Fri*	*Sat*	*Sun*	*Daily*	*Daily*	*Daily*
Southbound	10:18 PM	6:58 PM	9:56 PM	6:56 PM	5:51 PM	1:41 PM	12:54 PM
Northbound	3:33 AM	7:37 AM	7:42 AM	7:42 AM	11:28 AM	1:17 PM	4:20 PM

Source: Amtrak. Accessed 05/11/16 at: https://www.amtrak.com/ccurl/894/970/Northeast-Corridor-Schedule-W06-050216,0.pdf

For future passenger rail service, the Richmond to Hampton Roads Tier-I EIS and SEHSR Tier-II EIS assume the operation of 12 daily trains (6 round-trip) along the SEHSR Corridor between Richmond and Norfolk, which will replace the newly initiated conventional service to Norfolk. In addition to the Norfolk service, the SEHSR Tier-II EIS allows for the introduction of 8 new SEHSR daily trains (4 round-trip) travelling through the Tri-Cities to North Carolina. In total, the SEHSR Corridor service will include 20 daily

[13] National Association of Railroad Passengers. *Ridership Statistics By City*. "Amtrak service in Petersburg [Ettrick], VA – PTB". Copyright 2015.

[14] Virginia Department of Rail and Public Transit. *Pre-NEPA Evaluation: Tri-Cities Area Multimodal Station Study*. August 22, 2012.

[15] The Norfolk station provides bus service to Virginia Beach, VA.

trains (10 round-trip), with 12 daily trains (6 round-trip) extending to Norfolk, and 8 daily trains (4 round-trip) extending to North Carolina. As stated previously, DRPT and Amtrak have initiated service for 2 daily trains (1 round-trip) of the SEHSR trains with conventional service to Norfolk, and has begun construction on improvements to expand this service to 6 daily trains (3 round-trip) at conventional speeds in the near future. Under either the Build or No-Build scenarios, Amtrak and SEHSR service will operate up to 28 daily trains (14 round-trip) through the Tri-Cities, which is more than double the existing level of service with 12 daily trains (6 round-trips).

The Tier-II EIS for the SEHSR Richmond, VA to Raleigh, NC project and the Tier-I EIS for the Richmond, VA to Hampton Roads project have planned stops in the Tri-Cities area, but at a station location yet to be determined. This Project assumes the SEHSR service will stop at one station in the Tri-Cities Area consolidated with the existing intercity passenger rail service. Any station and station location must meet the existing and future rail and passenger needs by addressing the physical station requirements, existing and future ridership, multimodal access criteria, and ADA requirements.

1.2.2 Station Size

Table 2 summarizes Amtrak's station classification and feature requirements, and presents the differences between Small and Small/Medium stations. Based on the *Amtrak Station Program and Planning Guidelines* (2013), the Amtrak Petersburg Station in Ettrick is classified as a Class IV Small Station with an unstaffed shelter. A station of this size is intended to serve between 4,000 and 20,000 passengers annually. As previously stated in Section 1.2.1, the total ridership at Amtrak's Petersburg Station in Ettrick reached 29,286 in 2014, and the station has a projected ridership demand of 98,000 by 2025, almost five times the volume of riders the station is designed to serve. Based on Amtrak's station sizing guidelines, the station in Ettrick should currently provide facilities and services for a Class III Small/Medium Station, accommodating between 20,000 and 100,000 passengers annually. The existing station, as currently designed, does not meet existing or projected ridership demand.

1.2.3 Highway Access

The current Amtrak Station at Ettrick is almost two miles west of I-95. The station is accessed from the north by way of the I-95 Temple Road exit in Colonial Heights, south on the Boulevard (US 1), then using short sections of Dupuy Avenue, East River Road and Bessie Lane for a total distance of approximately 3 miles. From the south, the station is accessed from I-95 at the Washington Street exit on the south side of the Appomattox River, and then using sections of N. South Street, Canal Street, and Fleet Street (among many options in downtown Petersburg) and then traveling north along Chesterfield Avenue to Granger Street to Bessie Lane for a distance of approximately 3 miles along local streets. Improvements are planned for the short section of Bessie Lane to provide better access into the station.

Passenger rail use is directly related to the ease of public access to passenger rail stations. Wayfinding to the existing station is provided from I-95 (Temple Exit 54) north and southbound, directing traffic along Temple

Avenue to a left turn south on the Boulevard, and at the intersection of Boulevard and Dupuy Avenue. Two additional east and westbound signs are present at the intersection of Chesterfield Avenue and Granger Street. Generally, the closer and easier a station is to get to by highways, transit and other modes, the greater the ridership. Highway access is also important to provide convenient intercity and regional bus access to the station, such as Amtrak's Thruway service. This service provides "guaranteed connections to Amtrak trains[16]," and is built into the published train schedule. Amtrak also uses a bus service to supplement the published train schedule during planned or unscheduled track outages.

[16] https://www.amtrak.com/thruway-connecting-services-multiply-your-travel-destinations

Table 2: Station Classifications and Features

	Physical Design and Service Features	Classifications				
		I	II	III	IV	V
		Large	Medium	Small/ Medium	Small	
		Staffed	Staffed	Caretaker	Shelter/ Unstaffed	Platform/ Unstaffed
	Projected Ridership Thresholds:	Greater than 400,000	100,000 to 400,000	20,000 to 100,000	4,000 to 20,000	Less than 4,000
Facility Type	Platform	●	●	●	●	●
	Platform canopy	●	●	●	○	
	Sheltered waiting area providing windbreak/weather protection				●	
	Station building with restroom(s) and other amenities in conditioned structure	●	●	●		
Access and Wayfinding Elements	Auto pick-up / drop-off	●	●	●	○	○
	Parking	○	●	●	○	○
	Rental cars	●	○	○		
	Bus access	○	○	○	○	
	Other transit access (bus, light/commuter rail)	○	○	○	○	
	Taxi access	●	●	●	○	
	Bicycle racks	●	●	●	○	
	Station signage (Amtrak Standards)	●	●	●	●	●
	Highway signage	●	●	●	●	●
Customer Service Elements	**Ticketing and Baggage**					
	Quik-Trak/eTicketing	●	●	●	●	○
	Ticket office	●	●			
	Passenger boarding assistance	●	●			
	Checked baggage handling	●	○			
	Caretaker / greeter staff			●		
	Passenger Information					
	Passenger information display system (PIDS)	●	●	●	○	
	Pay telephones	●	●	○	○	
	Information counter	●	○			
	Customer service office	●				
	Security					
	Emergency platform call box	●	●	●	●	
	Security facilities on site	●				
	Security on call / systems		●	○		
	Local police surveillance / call box				○	○

● Generally required for classification
○ Optionally required for classification

Source: Great American Stations. *Amtrak Station Program and Planning Guidelines*, Version 2.2. Accessed 10/29/14 at https://www.greatamericanstations.com/station-planning-guide/downloads/StationClassificationsandFeaturesMatrix_with%20Thresholds_100120.pdf

1.2.4 Transit Connectivity

The City of Petersburg recently constructed a multimodal transit station at the corner of Washington Street and Union Street in downtown Petersburg. This station serves PAT buses, Greater Richmond Transit Corporation (GRTC) express buses (linking Petersburg, VA to Richmond, VA), and Greyhound intercity buses. In addition to fixed-route services, PAT offers paratransit service for senior citizens, Medicare card holders, and persons with disabilities (permanent or temporary) living within Petersburg, Colonial Heights or Hopewell to locations that are within ¾ mile of any PAT fixed-route service area. The paratransit service operates wheelchair equipped vans providing curb to curb (door to door upon request) service for ADA qualified passenger(s). CPDC and PAT intend for multimodal passenger rail service in the Tri-Cities area to integrate with local and regional transit service to provide a variety of transportation options and maximize ridership.

Two transit providers currently operate bus service within the Tri-Cities area: the GRTC Transit System and PAT. One GRTC route provides weekday bus service within the Tri-Cities area, the Richmond/Petersburg Express (Route 95x), between downtown Richmond and the Petersburg Transit Center in downtown Petersburg. PAT provides extensive service throughout Petersburg, Colonial Heights and Hopewell along 12 routes. One of PAT's routes (Unit 35-Track 12) travels between the Petersburg Transit Center, the VSU campus, and town of Ettrick in southern Chesterfield County. The existing bus route does not provide a direct bus stop at the Amtrak Rail Station.[17] However, the closest bus stop is on Granger Street, approximately 0.1 mile from the station. In addition, a new route opened in 2015 between Petersburg Transit Center and South Park Mall provides access along Boulevard (US-1) adjacent to the Boulevard Build Alternative site and through portions of Colonial Heights.

1.2.5 Proximity to the Urban Core

A station's proximity to its urban core is essential to maximize multimodal use and to benefit new or revitalized economic and community development. Joseph Szabo, former FRA Administrator stated, "Station areas are unique places where high-speed and intercity passenger rail can connect seamlessly with intermodal options like public transit. The infill development around the station can boost economic growth and community vitality."[18] FRA's Station Area Planning guidance states that major passenger transport stations work best in existing regional centers. High-speed passenger rail stations located in close proximity to urban cores provide employment and residential densities, a recognizable built environment, walkability, connections to local transportation centers, and existing regional centers. Accommodating car-free access at one or both ends of a trip maximizes the convenience of train travel.[19]

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[17] DRPT *Pre-NEPA Study*. Page 10.

[18] U.S. Department of Transportation, Federal Railroad Administration. *Station Area Planning for High-Speed and Intercity Passenger Rail. June 2011*. https://www.fra.dot.gov/eLib/Details/L03759. Page 1.

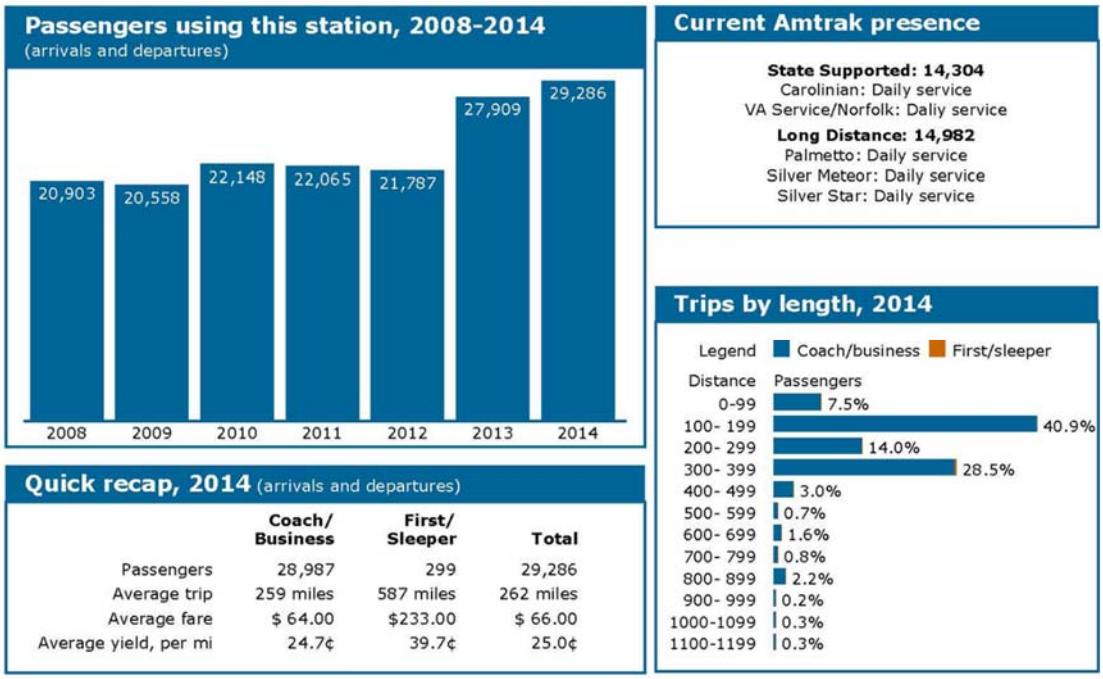
[19] Ibid. Page 6.

The FRA Station Area Planning guidance further states that:

> Once in the regional center, close proximity to destinations can make a big difference in initial ridership and in the continued growth of ridership over time. People will walk from public transport to jobs and major venues when the walk is interesting and not too long. Stations in the "heart" of a place benefit from "location, location, location." Stations located in historically important centers where generations have worked and played can set the stage for revitalization through other infill development. Reinvesting in existing centers makes efficient use of limited societal resources — land and funding for infrastructure.[20]

Available passenger rail ridership information (Table 3) and forecasts for the Tri-Cities area were used to determine the approximate station size for site evaluation. Through the development of the SEHSR Corridor, the total annual Tri-Cities ridership is projected to be approximately 98,000 passengers per year by 2025. By 2025, existing ridership is projected to increase by 40,000 rail passengers per year due to the addition of 8 daily trains (4 round-trip) between the NEC and Washington, DC and Raleigh, NC on the SEHSR (with 3 extending to Charlotte, NC). Simultaneously, by 2022, ridership is projected to increase by an additional 14,000 rail passengers per year due to the addition of 6 daily trains (3 round-trip) from the new rail service from Norfolk to the NEC (initial service started in 2012 with 1 round-trip per day); and by an additional 22,000 rail passengers per year by 2025 with a full service of 12 daily trains (6 round-trip) from Norfolk to the NEC.

Table 3: Petersburg Amtrak Ridership



	Coach/ Business	First/ Sleeper	Total
Passengers	28,987	299	29,286
Average trip	259 miles	587 miles	262 miles
Average fare	$ 64.00	$233.00	$ 66.00
Average yield, per mi	24.7¢	39.7¢	25.0¢

Source: National Association of Railroad Passengers (2015).

[20] Ibid. Page 6.

1.3 PROJECT BACKGROUND

1.3.1 Project History

The United States Department of Transportation (USDOT) has a historical interest in evaluating alternative station sites in the Tri-Cities area. The SEHSR Tier-II EIS includes options for a potential rail station in the Tri-Cities area as part of the alternatives analysis. In 2012 DRPT led a Pre-NEPA Evaluation Tri-Cities Area Multimodal Station Study, which analyzed locations in Ettrick and Collier for fatal flaws to construction.

While the Tri-Cities Area MPO – Policy Committee received DRPT's Pre-NEPA Evaluation on September 13, 2012, the MPO did not endorse any findings from the study, nor was there any request from the DRPT for the MPO, the Commonwealth Transportation Board (CTB), or the FRA to endorse the study findings. During the 2013 calendar year, the MPO – Policy Committee authorized a separate Federal NEPA study (this Tri-Cities Area Multimodal Station EA) to identify passenger rail needs and a suitable station location to support the existing and planned expansion of high speed and intercity passenger rail service through Petersburg, improve accessibility to the local and regional transportation network, and improve ADA accessibility.

1.3.2 Previous Studies

Southeast High Speed Rail Corridor (SEHSR)

FRA is working with DRPT, North Carolina Department of Transportation (NCDOT), South Carolina, and Georgia to advance high speed rail in the southeast. The corridor will connect Washington, D.C., Richmond, Raleigh, Charlotte, and Atlanta with an extension from Richmond to Hampton Roads. In 2002, FRA completed a Tier-I EIS for the SEHSR Corridor from the NEC and Washington, DC to Charlotte, NC, which established the route, speed and operating characteristics of the corridor, and defined the service to include a total of 16 daily trains (8 round-trip) along the corridor, of which 8 daily trains (4 round-trip) will extend from Raleigh, NC to Washington, DC and the NEC. The route and service plan include a station stop in the Tri-Cities area. Separately, FRA and DRPT completed a Tier-I EIS for the Richmond to Hampton Roads Passenger Rail Project in 2012.[21] This EIS established the route, speed and operating characteristics for the extension of the corridor from Richmond to Hampton Roads, and defined the primary corridor for higher speed train service on the Southside of the James River through Petersburg to Norfolk. The Richmond to Norfolk service will include a total of 12 daily trains (6 round-trip) also serving the Tri-Cities area. Based on the Tier-I EIS for the SEHSR Corridor, FRA, DRPT and NCDOT began preparation of the Tier-II EIS for the Richmond, VA to Raleigh, NC section of the SEHSR Corridor in 2003.

The SEHSR Tier-II Draft EIS (DEIS), which covers the portion of the corridor between Richmond and Raleigh, was published for public review and comment in summer 2010. As part of the DEIS, FRA, DRPT

[21] https://www.fra.dot.gov/Page/P0481

and NCDOT, in coordination with Tri-Cities area governments, identified the preferred route for the SEHSR corridor along the CSXT A-Line from Centralia to Collier, where the corridor rejoins with the CSXT S-Line westward toward North Carolina. The DEIS initially included a proposed eastern alignment beginning near the Boulevard Build Alternative station location through downtown Petersburg and rejoining with the CSXT A-Line at Washington Street in Petersburg. This route would have served the old Union Station in Petersburg; however, it was excluded from further consideration based on impacts to historic resources, relocations, constructability, and an increased travel time on the SEHSR Corridor. FRA continued with preparation of the EIS for the Richmond to Raleigh portion of the corridor with completion and signature of the SEHSR Tier-II Final EIS in 2015. FRA anticipates issuing a Record of Decision (ROD) for the Richmond to Raleigh portion in 2016.[22]

The Richmond to Washington, DC segment of the SEHSR is currently undergoing environmental study by DRPT and FRA. In addition to the SEHSR environmental documents, progress has been made on implementing improvements in portions of the corridor in Virginia and North Carolina.

The SEHSR Tier-II EIS did not evaluate environmental impacts related to specific station locations; that effort is left to individual municipalities. However, the SEHSR Tier-II EIS stipulates that all stations (existing and proposed) must accommodate high speed rail operational requirements of 1,000 feet of straight alignment for station platforms at each stop location. The alternative rail designs allow for flexibility in final station designs by ensuring the ability to meet ADA standards for platform design at each stop location.

Pre-NEPA Evaluation Tri-Cities Area Multimodal Station Study

In 2012 DRPT led a Pre-NEPA Evaluation Tri-Cities Area Multimodal Station study (Pre-NEPA Study). The Pre-NEPA Study only analyzed locations in Ettrick and Collier, and did not evaluate the other two potential station locations identified in the SEHSR Tier-II EIS (Dunlop and Washington Street). At the time of the Pre-NEPA Study, officials from both the City of Colonial Heights (Dunlop) and the City of Petersburg (Washington Street) stated they did not support these two locations for station development and asked that they be withdrawn from consideration. The purpose of the Pre-NEPA Study was to identify any potential "fatal flaws" for the Ettrick and Collier station location options, particularly from an environmental, rail operational, or engineering stand point, that would render either site infeasible for a multimodal station. Another purpose was to recommend whether one or both sites should advance to the NEPA process for further study based on a variety of environmental and design considerations. DRPT concluded that both the existing Ettrick station and the three Collier sites are acceptable alternatives for further study, and has included them as potential alternatives in this EA. The Pre-NEPA Study is available online at www.craterpdc.org/transportation/mpo.htm.

[22] Virginia Department of Rail and Public Transportation. *Southeast High Speed Rail Corridor*. Accessed on 4/27/14 at: http://www.drpt.virginia.gov/rail/major-rail-initiatives/southeast-high-speed-rail-corridor/.

Richmond/Hampton Roads Passenger Rail Project

FRA and DRPT completed a Tier-I EIS for the Richmond to Hampton Roads Passenger Rail Project in 2012. This EIS evaluated the feasibility and impacts of the proposed high speed rail passenger service from Richmond to Hampton Roads, with consideration for two primary alignments: one north of the James River from Richmond to Newport News, and a second south of the James River to Norfolk. This EIS defined the route south of the James River for higher speed service from Richmond through the Tri-Cities area to Norfolk with a total of 12 daily trains (six round-trip), with continuation of conventional passenger rail service from Richmond to Newport News with a total of six daily trains (three round-trip). To facilitate the implementation of service to Norfolk, DRPT recently constructed a connection from the CSXT "A" Line to the Southside/Norfolk Southern route at the northeast quadrant of the CSXT/NS off-grade railroad crossing just north of Collier Yard in south Petersburg.[23] Now operational, this connection "provides a direct link to the SEHSR CSXT main line from the Norfolk Southern line from Norfolk and maximizes the dual benefit opportunity of utilizing the SEHSR alignment analysis through Petersburg. The North Collier connection allows the Norfolk trains to use the SEHSR Petersburg routing alternative and station location, limits potential freight and passenger train conflicts within the yard itself, and limits potential conflicts and congestion that arises from Norfolk Southern freight trains stopping and working at Poe Yard, the only other potential access to the Norfolk line."[24]

National Gateway Program, a Public-Private Partnership

In 2008, the CSXT launched the National Gateway program, a $700 million public-private infrastructure initiative to create a highly efficient freight transportation link between the Mid-Atlantic ports and the Midwest.[25] CSXT is partnering with FRA and FHWA on this program.

> The National Gateway is a double stack cleared, state-of-the-art rail corridor linking the East Coast's international deep water ports and major consumption markets with the population and manufacturing centers of the Midwest. With improved clearances, new terminals, and greater capacity, the National Gateway will improve the flow of freight, enhancing consumer options and augmenting the Midwest's ability to deliver manufactured goods to world markets.[26]

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[23] Virginia Department of Rail and Public Transportation. *Richmond/Hampton Roads Passenger Rail Project: Tier I FEIS*. Executive Summary, Page ES-6. Accessed 4/27/15 at: http://rich2hrrail.info/downloads/TierIFinalEIS/Tier%20I%20FEIS%20Executive%20Summary.pdf.

[24] Ibid.

[25] National Gateway. *CSX Announces National Gateway to Improve Flow of Freight*. Accessed on 4/27/15 at: http://nationalgateway.org/news-resources/press-releases/2008/csx-announces-national-gateway-improve-flow-freight.

[26] National Gateway. *FAQ*. Accessed on 4/27/15 at: http://nationalgateway.org/news-resources/faq.

The program addresses several key freight rail corridors as vital links between Mid-Atlantic seaports and key Midwest distribution points and population centers. The National Gateway is enhancing three existing rail corridors that run through Maryland, Virginia, North Carolina, Pennsylvania, Ohio, and West Virginia. Those corridors include:

- The I-70/I-76 Corridor between Washington, D.C. and northwest Ohio via Pittsburgh;
- The I-95 Corridor between North Carolina and Baltimore via Washington, D.C.; and
- The Carolina Corridor between Wilmington and Charlotte, NC.[27]

"When completed, the National Gateway would provide greater capacity for product shipments in and out of the Midwest, reduce truck traffic on already crowded highways, and create thousands of jobs that directly or indirectly support the National Gateway."[28] While no specific projects are planned within the Study Area, the freight rail corridor and passenger rail service operating on the CSXT A-Line through the Tri-Cities shares the route of the National Gateway. The initiative is on-going.

1.3.3 Existing Conditions

The existing Amtrak Station in Ettrick is a one-story brick building constructed in 1955 by the Atlantic Coast Line Railroad. CSXT leases the southern portion of the station to Amtrak and the northern area is unoccupied. The station has not been updated since a few minor renovations in the late 1980s, including mostly interior work in the waiting area, although minor improvements are currently under consideration by Amtrak, including improving ADA deficiencies at the station. For example, while the existing 1,200 foot length platform is adequate for long-distance train service, it lacks a tactile edge along the track side. Other ADA deficiencies include a deteriorated parking area, ramp too steep at station door and no accessible ticket counter. Based on Amtrak's Station Classifications presented in Table 2, the characteristics of the existing station in Ettrick – including the lack of a caretaker or greeter, fit Station Classification IV, Small. However, the station currently handles over 20,000 riders per year. Based on the existing number of riders, the existing station should offer facilities and services that fit Amtrak's Station Classification III, Small/Medium. The existing station in Ettrick lacks multimodal connectivity, has limited passenger information and way-finding, and does not have convenient access to I-95. The station lacks multimodal connectivity such as bus bays, direct and frequent bus access into the site and bicycle and pedestrian access in the form of bike routes or sidewalks into the station.

[27] Ibid.

[28] Ibid.

1.3.4 Other Planned Transportation Improvements in Area

Infrastructure Improvements between Petersburg and Norfolk

DRPT's website (www.drpt.virginia.gov)states,

> Infrastructure improvements relating to Amtrak intercity passenger rail service between Norfolk and Petersburg continue. This includes engineering and construction of a new mainline track, siding tracks, crossovers, and connection track to CSXT track at North Collier. The Project also includes property acquisition, signal systems, and communications upgrades associated with the Amtrak intercity passenger rail service between Petersburg and Norfolk. All aspects of this Project are substantially completed.[29]

These improvements facilitated the introduction of new passenger rail service to Norfolk in 2010 with two daily trains (one round-trip), with additional capacity to increase service up to six daily trains (three round-trip) at conventional speeds.

CSXT Infrastructure Improvements – North Collier to Staples Mill Road Station

DRPT's website (www.drpt.virginia.gov) states,

> Improvements were made to CSXT infrastructure between North Collier in Petersburg and the Amtrak Staples Mill Road Station in Richmond as part of overall improvements to Amtrak intercity passenger rail service to Norfolk. Engineering, construction of new track connecting to Norfolk Southern track at North Collier, property acquisition, signal systems, and communications upgrades associated with the Amtrak Norfolk intercity passenger rail train were part of the project.[30]

This project was completed December 12, 2012 and facilitated the introduction of new passenger rail service to Norfolk in 2010 with two daily trains (one round-trip) at conventional speeds. To build upon the previously constructed capacity, DRPT, in partnership with CSXT, has initiated construction of three new universal crossovers on the CSXT A-Line between Richmond and Petersburg. These improvements, together with other projects on the CSXT network, will allow for the extension of four daily trains (two round-trip) from Richmond through the Tri-Cities to Norfolk for six daily trains (three round-trip) at conventional speeds.

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[29] Virginia Department of Rail and Public Transportation. Infrastructure Improvements Between Petersburg and Norfolk. Accessed on 10/25/16 at http://www.drpt.virginia.gov/rail/major-rail-initiatives/infrastructure-improvements-between-petersburg-and-norfolk/[30] Virginia Department of Rail and Public Transportation. CSX Infrastructure Improvements North Collier to Staples Mill Road Station. Accessed on 4/27/15 at http://www.drpt.virginia.gov/rail/major-rail-initiatives/csx-infrastructure-improvements-north-collier-to-staples-mill-road-station/.

[30] Virginia Department of Rail and Public Transportation. CSX Infrastructure Improvements North Collier to Staples Mill Road Station. Accessed on 4/27/15 at http://www.drpt.virginia.gov/rail/major-rail-initiatives/csx-infrastructure-improvements-north-collier-to-staples-mill-road-station/.

Other Planned Local Roadway Improvements

In addition to the rail improvements noted there are a variety of planned roadway improvements within the Study Area that would improve access. These include improvements to Temple Avenue that consist of access improvements and construction of a new roundabout, widening of Dupuy Avenue and widening of East River Road all anticipated in support of growth at VSU and as stated in the Ettrick/VSU Special Area Plan[31] completed by Chesterfield County that is designed to improve the station area and linkages that provide access to it and the VSU community.

1.4 APPLICABLE REGULATIONS AND PERMITS

The following statutes and orders apply to the proposed action and were considered during the preparation of the EA:

- Endangered Species Act, 7 U.S.C. § 136, 16 U.S.C. § 1531 et seq.
- Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. §§ 1801-1884
- National Environmental Policy Act of 1969, 42 U.S.C. § 4321, et seq.,
- Clean Water Act of 1977, 33 U.S.C. § 1251-1376
- Sections 9 and 10 of the Rivers and Harbors Act of 1899, 33 U.S.C. § 401
- Section 106 of the National Historic Preservation Act of 1966, as amended, 16 U.S.C. § 470
- Section 4(f) of the U.S. Department of Transportation Act of 1966, 49 U.S.C. § 303
- Section 404 of the Federal Water Pollution Control Act (CWA), 33 U.S.C. § 1344
- Section 6(f) of the Land and Water Conservation Act of 1965, 16 U.S.C. § 460
- Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, 42 U.S.C. § 61
- Executive Order 11988, Floodplain Management, 42 FR 26951 and Executive Order 13690, Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input (January 30, 2015)
- Executive Order 11990, Protection of Wetlands, 42 FR 26961

[31] http://www.chesterfield.gov/EttrickVSU/

- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, 59 FR 7629, signed February 11, 1994 and Department of Transportation Order 5610.2(a) clarifying Environmental Justice analyses released May 2, 2012
- Department of Transportation Order 5610.2(a), Final DOT Environmental Justice Order, Department of Transportation Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (May 2, 2012)
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, 65 FR 50121 (August 11, 2000)
- Executive Order 13045, Protection of Children From Environmental Health Risks and Safety Risks (April 23, 1997)
- Federal Railroad Administration Procedures for Considering Environmental Impacts, 64 FR 28545 (May 26, 1999)
- Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act, 40 CFR Parts 1500-1508 (November 29, 1978)
- Federal Register, Use of Locomotive Horns at Highway-Rail Grade Crossings; Final Rule, 49 CFR Parts 222 and 229 (April 27, 2005)

The CPDC and the locality within which the station would be constructed or improved may be required to obtain approvals under the following authorities:

- Section 404 and Section 401 Permits under the Clean Water Act from the U.S. Army Corps of Engineers and the Virginia Department of Environmental Quality (DEQ), respectively. For impacts to wetlands, streams, and other waters of the U.S.
- A construction general permit for the discharges of stormwater from construction activities. This permit is required under the Virginia Stormwater Management Program (VSMP) and is issued by the DEQ.
- Coverage under the National Pollutant Discharge Elimination System (NPDES) Storm Water discharge permit, administered by the Virginia Department of Environmental Quality (DEQ) as the Virginia Pollutant Discharge Elimination System (VPDES).
- Chesapeake Bay Preservation Act and its regulations for Tidewater localities (includes Chesterfield County, City of Colonial Heights, and City of Petersburg)
- Connections to the public water distribution system and sanitary system, as well as a Certificate of Occupancy from the local building department.

2. ALTERNATIVES

The SEHSR Tier-II EIS did not evaluate environmental impacts related to specific station locations (other than general impacts to the transportation system); that effort was left to individual municipalities. However, the SEHSR Tier-II EIS stipulates that all stations (existing and proposed) must accommodate high speed rail operational requirements of 1,000 feet of straight alignment for station platforms at each stop location.[32] The alternative rail designs allow for flexibility in final station designs by ensuring the ability to meet ADA standards for platform design at each stop location.

Per the stipulations of the SEHSR Tier-II EIS for the SEHSR Corridor from Richmond, VA to Raleigh, NC, this EA identifies and evaluates a number of potential station locations relative to the purpose and need requirements supporting the SEHSR Corridor as well as the local transportation network in the Tri-Cities, as set forth in Section 1. The Tri-Cities MPO and their appointed SWG, in conjunction with input from FRA, were instrumental in the selection and application of the criteria and measures of effectiveness used to evaluate existing and proposed station location alternatives for this study. This work is consistent with the recommendations of the SEHSR Tier-II EIS as mentioned previously. This section documents how the local SWG independently considered alternatives for construction of the new multimodal station.

2.1 CRITERIA FOR EVALUATING ALTERNATIVES

2.1.1 Preliminary Screening of Concepts

The first step for alternatives evaluation was a preliminary screening evaluating the entire rail corridor within the Study Area. The preliminary screening identified all possible areas with the appropriate track geometry and available land area to accommodate a rail platform and station. The preliminary screening was a two-step process, resulting in 13 preliminary station locations. The first step identified seven "Scoping Areas" of various lengths. These "Scoping Areas" are shown in Figure 2 and include all locations within the Study Area that contain 1,000 feet or more of tangent track. Tangent track refers to portions of the rail line that have no horizontal or vertical curvature and have zero cross level; therefore, the locations that meets those criteria can accommodate a passenger rail station from a basic design perspective and as noted as a requirement in the SEHSR study.

The second step in the preliminary screening identified general land areas within the seven Scoping Areas that can accommodate a Small/Medium sized Amtrak station. The second step included a review of aerial photography and parcel mapping, resulting in the identification of 13 preliminary station locations and included station areas previously identified and some proposed by the SWG and FRA as part of the coordination process. These 13 stations, also shown in Figure 2, were then evaluated in Screening #1.

[32] Ibid. Page 2-48.

2.1.2 Screening #1

The assessment of 13 preliminary station areas was an iterative screening process conducted in coordination with the Tri-City MPO's SWG. The screening process compared each of the station areas to the established measures of effectiveness that were developed in collaboration with the SWG and based on input received at a public workshop held December 11, 2014. The measures of effectiveness are organized into five different categories, with multiple measures in each category. A summary of the measures is included below and the complete details of each measure are included in Appendix A.1:

- **Design Considerations** – platform accommodation, ADA compatibility, and freight integration
- **Property Implementation** – assessed value, access routes, and relocations
- **Environmental Constraints** – environmental justice and human/natural resources
- **Proximity** – distance to interstate, population and employment within 1 mile, and transit access
- **Local Compatibility** – compatibility with each locality's Comprehensive Plan and locality support

Based on these measures of effectiveness, each station area was scored and ranked to provide a better understanding of its strengths and weaknesses. The results of the screening indicate that all station sites have advantages and disadvantages. The complete details of the process and results of Screening #1 are included in Appendix A.2 and Appendix A-3. Table 4 summarizes the results of the screening.

Figure 2: Scoping Areas and Preliminary Station Concepts

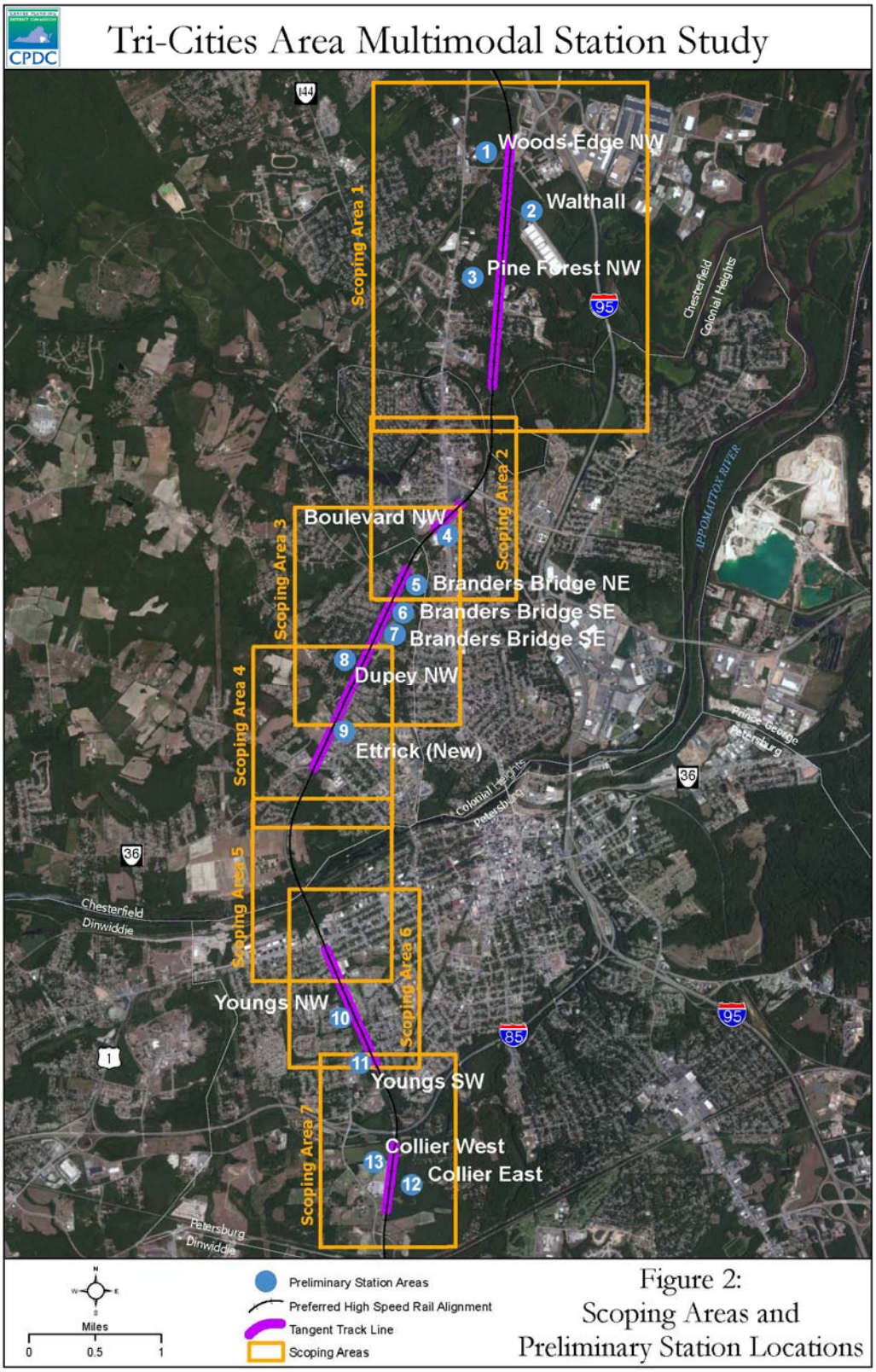


Table 4: Screening #1 Results

Site #	Concept / Site Name	Design Considerations	Property Implementation	Environmental Constraints	Proximity	Local Compatibility	Score	Rank
1	Woods Edge NW	0	0	0	0	1	1	10
2	Walthall	3	1	1	0	-1	4	4
3	Pine Forest NW	0	0	-1	0	1	0	12
4	Boulevard NW	0	0	2	3	0	5	3
5	Branders Bridge NE	3	0	2	3	-2	6	2
6/7	Branders Bridge SE	3	-1	1	2	-2	3	6
8	Dupuy NW	0	0	1	1	-1	1	10
9	Ettrick	3	3	1	1	2	10	1
10	Youngs NW	0	1	1	2	-1	3	6
11	Youngs SW	0	-1	1	2	1	3	6
12	Collier East	3	1	-1	1	0	4	4
13	Collier West	0	0	0	1	1	2	9

Source: Michael Baker International, 2015.

The scoring system was based on comparing each site to several criteria and generally was binary in nature, with sites scoring a "1" if they met a criteria or a "0" if they did not. For example, the design considerations category included three sub-categories: platform accommodation (was there space for the length of platform needed?), ADA compatibility (could the site be made ADA compliant?) and freight integration (would the site be able to be constructed without interfering with freight operations?); resulting in a range of scores from 3 if it met all three or 0 if it meant none. Some criteria did include negative numbers, in this case a -1, if they were not at all suitable. More details are provided in Appendix A. The five highest ranked preliminary station areas are Ettrick, Branders Bridge NE, Boulevard NW, Collier East, and Walthall.

It is important to note that the preliminary rankings in the table were used to identify which sites should be studied in greater detail and do not indicate final recommendations.

- **Walthall** - the Walthall site in Chesterfield County is one of the farthest north of the 13 potential station sites. This site ranked fourth (tie) overall in the preliminary screening. The Walthall site has some strengths, including design considerations and a large open parcel. However, being so

far north, the site is furthest from major population and employment centers[33], with limited supporting land uses surrounding the site. Multiple environmental and cultural resource constraints exist within the parcel, and stakeholders have raised serious security concerns due to the proximity to secured industrial uses.

- **Branders Bridge NE** – the Chesterfield County site at Branders Bridge ranked second because of its central location to the urban core and population, limited environmental constraints, and favorable design considerations. However, the site is largely in a residential area and the county's comprehensive plans do not incorporate a multimodal station at this location.

- **Boulevard NW** – the Boulevard site is the only location in the City of Colonial Heights and ranked third overall in the preliminary screening. The Boulevard site is a relatively inactive commercial site along a multi-use corridor. The site has significant connectivity to population, employment, and transit. The Boulevard site also has direct roadway access and an existing parking area that would facilitate incorporating a station.

- **Ettrick** – the Chesterfield County site at the existing station site, ranked the highest among all the potential station sites in the preliminary screening process. Ettrick's biggest strengths are in the design consideration and property implementation categories since it is an existing station on CSXT property, and is also within close proximity to much of the area's population and employment[34], and has limited environmental constraints. In addition, the County recently adopted the Ettrick VSU Special Area Plan, a plan for future growth and development of the community of Ettrick and VSU. The County's plan is to promote economic development (i.e., commercial) around the Ettrick Station that supports rail travelers and the surrounding community. The plan promotes multimodal access to the station, as well as enhancement of the station to better serve as a gateway into the county.

- **Collier East** – the Collier site in the City of Petersburg, just south of Interstate (I-85), tied for the rank of fourth with the Walthall site. Collier East is a large, open parcel owned by the City of Petersburg, making it score highly in property implementation. The site is located just south of the city and somewhat removed from major population and employment centers when compared to the other station locations. In addition, the site has not been included in any adopted plans by the City of Petersburg.

[33] Average distance to geographic center of each Tri-City, Fort Lee and VSU. All sites = 5.7mi; Walthall = 8.6mi.

[34] Average distance to geographic center of each Tri-City, Fort Lee and VSU. All sites = 5.7mi; Ettrick = 4.4mi.

2.1.3 Screening #2

Screening #2 further assessed the five highest ranked preliminary station areas, from north to south, of Walthall, Boulevard NW, Branders Bridge NE, Ettrick, and Collier East. The conceptual station layout, including platform, station, and parking facilities, are presented in Figure 3 through Figure 7. Screening #2 was based on the detailed analysis of environmental, cultural, and community resources available through the SEHSR Tier-II EIS, including an approximate study area of 500 feet on either side of the CSXT rail corridor. This level of detail is not typically available at this level of screening. The constraints data included:

- Conservations Lands (local, state, federal parks, recreation areas, wildlife and waterfowl refuges)
- Protected Species and Habitat
- Streams, Wetlands, Other Surface Waters, Resource Protection Areas (RPAs)
- Archaeological Resources and Architectural/Historical Resources
- National Park Service Lands

Screening #2 compared conceptual layouts for each of the five station locations relative to the sensitive resources within the site. The comparative results were used to evaluate site development feasibility. The conceptual station layout and resource mapping are included in Appendix A-3.

Figure 3: Walthall Station Concept

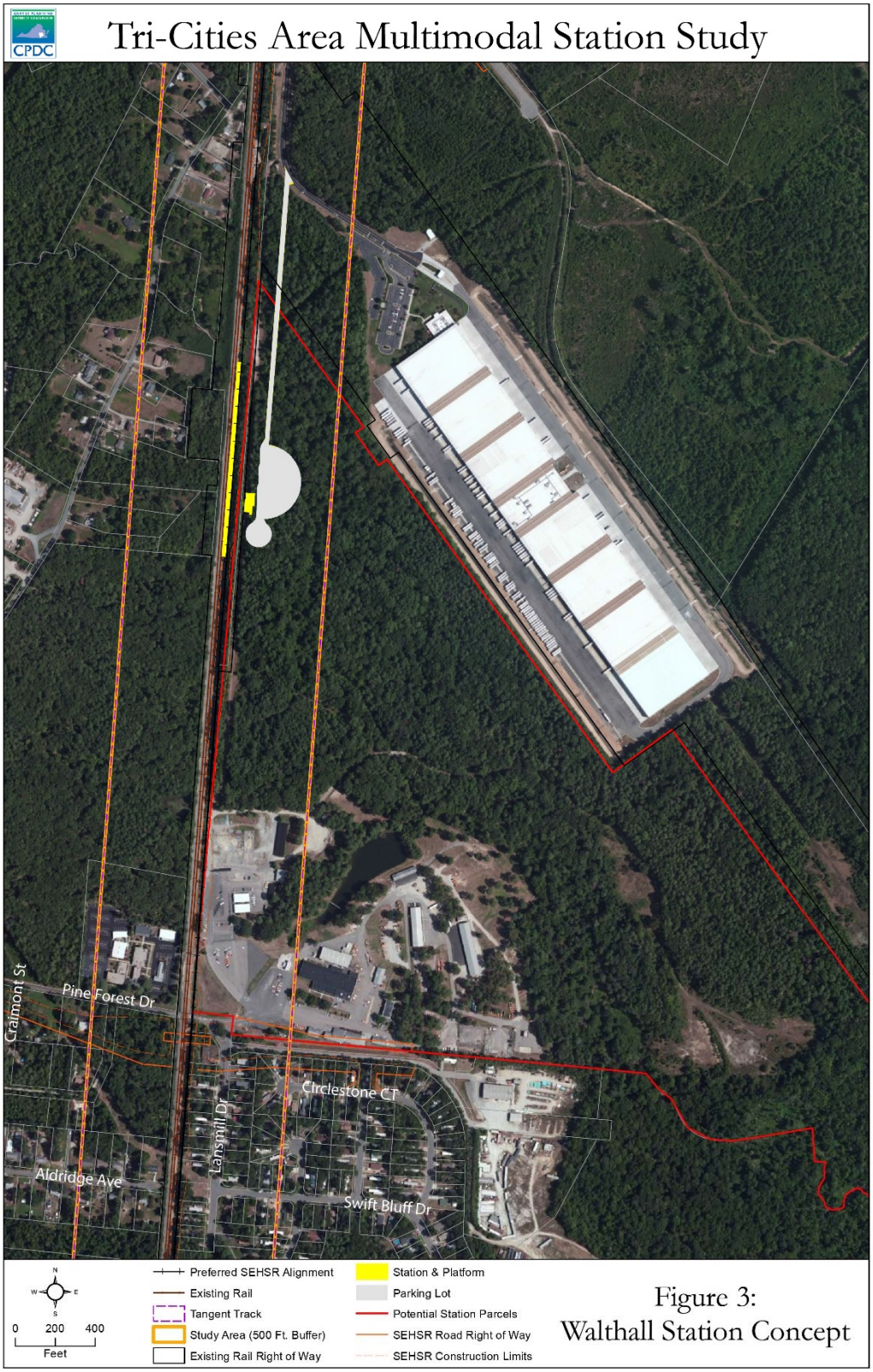


Figure 4: Boulevard Station Concept

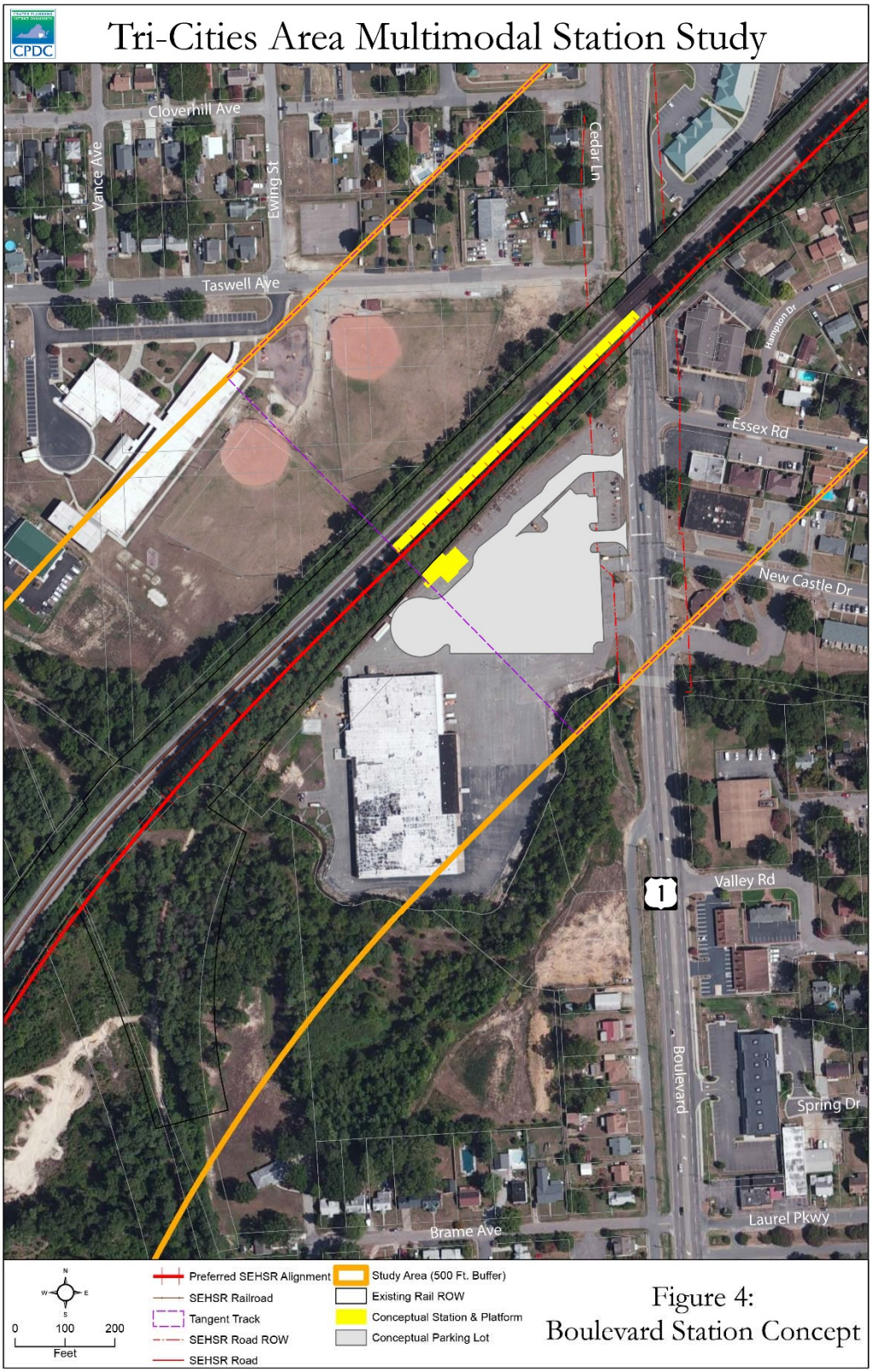
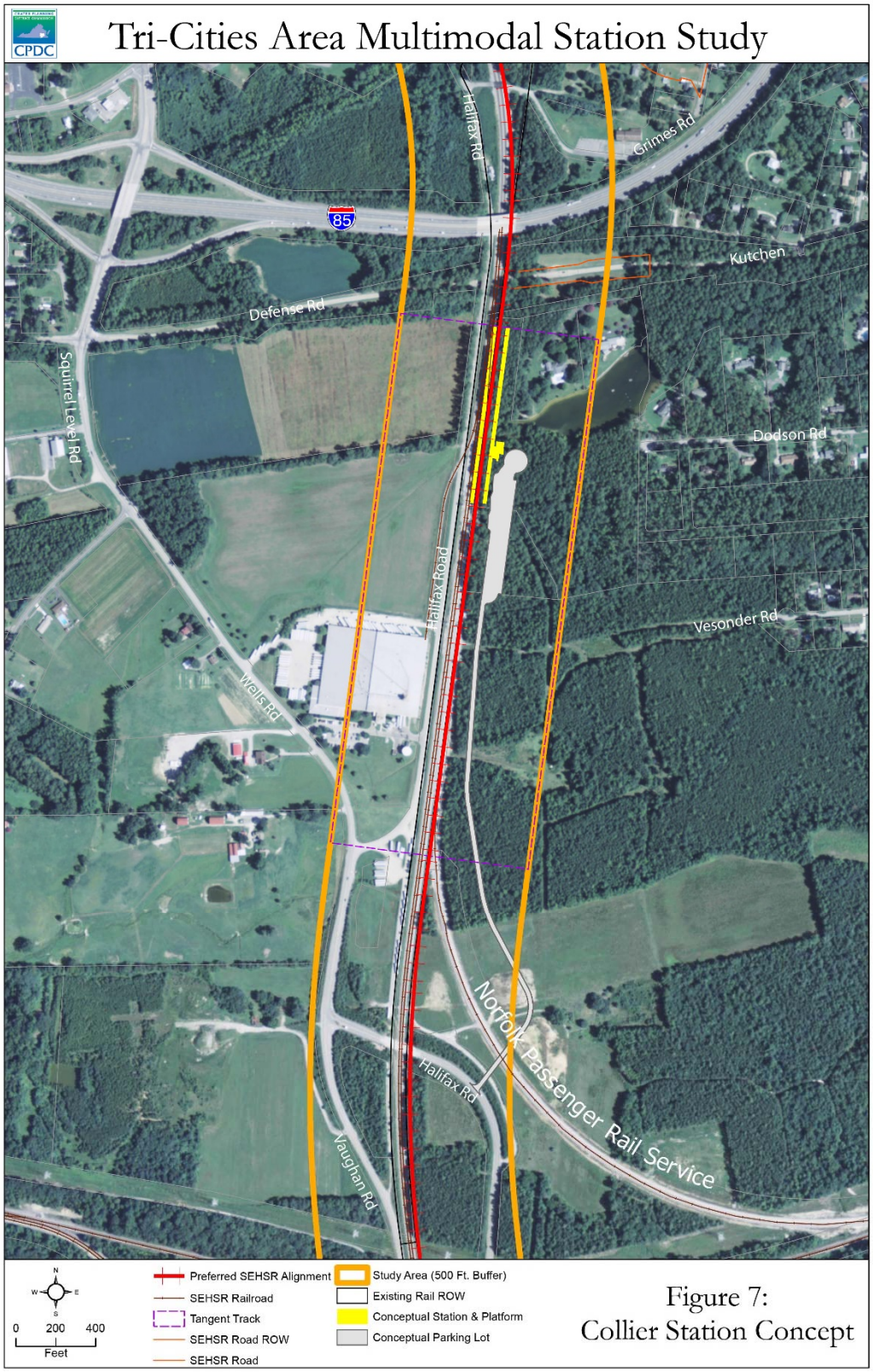


Figure 5: Branders Bridge Station Concept

Figure 6: Ettrick Station Concept

Figure 7: Collier Station Concept



An evaluation of each site is included below:

Walthall Conceptual Station Location

- The station, platform, parking lot, and a portion of the access road would be located within publicly owned property[35].
- The access road would connect to a private road, serving a private, gated business with established security protocols.
- The access road would impact wetlands and crosses several streams. Impacts to these resources will require permits for Section 404 and 401 of the Clean Water Act (i.e., a Joint Permit Application from the Corps, DEQ, and VMRC – where applicable). The Corps will not issue a permit unless it is demonstrated that the preferred alternative is the Least Environmentally Damaging and Practicable Alternative (LEDPA). This may be difficult to demonstrate when other station locations do not have impacts to wetlands and Waters of the U.S.
- Station, platform, and access road are within Chesterfield County's Resource Protection Area (RPA).
- A small portion of the potential station and parking lot are within the Swift Creek Archaeological Site, which was determined eligible for the National Register of Historic Places (NRHP). This activates both Section 106 of the National Historic Preservation Act and Section 4(f) of the U.S. DOT Act.

Boulevard Conceptual Station Location

- A small portion of the potential station and parking lot are near a historic resource, Richmond & Petersburg Electric Railway, a NRHP – Eligible resource. This activates both Section 106 and Section 4(f). In addition a portion of the site is within a floodplain.

Branders Bridge Conceptual Station Location

- No substantive natural or cultural resource issues, although there is potential habitat under existing conditions that could support a federal threatened species, the Northern Long-eared Bat.
- Adjacent neighborhoods may be affected by additional idling train noise.

Ettrick Conceptual Station Location

- No substantive natural or cultural resource issues.
- Adjacent neighborhoods may be affected by additional idling train noise.

[35] Virginia Department of Transportation, Richmond Office

Collier Conceptual Station Location

- Rail switch point, providing connection to passenger service to and from Norfolk, pushes the station footprint outside of land owned by the City of Petersburg and creates impacts to private land.
- Station footprint avoids Defense Road, a NRHP eligible resource.
- Station footprint avoids Civil War archaeological individually eligible NRHP resources.
- Entire station footprint is within the Petersburg Battlefield, which is a Civil War Battlefield and a NRHP – Eligible resource. This activates both Section 106 and Section 4(f).

2.2 ALTERNATIVES CONSIDERED AND DISMISSED FROM DETAILED ANALYSIS

Walthall: The Walthall Station site was not carried forward for further evaluation due to the potential impacts to: the operations of a secure, private facility; wetlands and surface waters; designated resource protection areas; and archaeological resources. These potential impacts are greater at this site than they are at the remaining four sites. In addition, the potential impacts activate issues associated with Section 106 of the National Historic Preservation Act, Section 4(f) of the U.S. DOT Act, and Section 404 and 401 of the Clean Water Act. In addition to these environmental concerns, of all of the alternatives, Walthall is located the farthest north from the existing urban core and does not have existing or planned transit connectivity, which fails to meet the need for the Project to be within proximity to population and employment centers, and transit access. Thus, it was eliminated from consideration by the SWG and CPDC.

Collier: The Collier location depicted in Figure 7 and evaluated in Screening #2 was originally carried forward for further evaluation in the EA. During the Phase I archaeological survey of the Collier site, sufficient artifacts were identified within the conceptual footprint to warrant a more detailed, Phase II archaeological survey. The Phase II survey uncovered archaeological remains of a mid-nineteenth-century outbuilding believed to be associated with a kitchen or dairy of a large farming operation active during the Antebellum, as well as Civil War and Reconstruction periods of the site. Details of the findings are included in Appendix H. The site is being recommended as eligible for listing on the NRHP due to the presence of intact cultural remains. Given the historic significance of the site, the SWG agreed that shifting the Collier site southward, away from the newly discovered archaeological site, would serve as an appropriate avoidance measure. A multi-platform design is required due to moving the Collier station site south of the Norfolk connector track; however, the new site remains operationally feasible. Therefore, the Collier location depicted in Figure 7 was eliminated from further consideration and replaced with a new station location to the south. This shifted Collier site, referred to as Collier South, is described in detail in Section 2.3.5.

2.3 ALTERNATIVES CARRIED FORWARD FOR FURTHER EVALUATION

Of the five conceptual station sites evaluated in Screening #2, four are proposed by the SWG and CPDC for further evaluation in this EA: Boulevard (NW), Branders Bridge (NE), Ettrick, as well as the shifted location for Collier - Collier South. The No-Build Alternative (maintaining the existing Petersburg Amtrak Station in Ettrick with no improvements to the station) is also a baseline alternative against which the proposed station sites are compared, although the existing station would not meet the purpose and need for this Project.

To test for site development suitability and environmental impacts at each of the four potential sites, a common station concept was developed. Station size, determined by current utilization and anticipated ridership growth, calls for a Small/Medium Station. The typical station footprint is approximately 2.5 acres, although these can vary once design phase is conducted depending on unique site characteristics. Each conceptual station area and configuration was influenced by topographical constraints and site-specific conditions. Upon identification of a preferred station location, the station site design will be further refined during final design. The sites, as currently assessed, are conceptual in nature and subject to refinement.

At this conceptual stage of design, the typical station features for any of the four sites include the following:

- Center platform, to be located between the eastern-most existing mainline track and the future SEHSR third track. The platform would be a minimum of 24 feet wide and extend up to 1,200 feet on tangent/level track. Depending on the site selected, either an overhead bridge or underpass would be constructed to provide access to the center platform.
- 3,600 square foot station building with a minimum of passenger waiting, restrooms, and vending amenities.
- Parking for 30-50 vehicles.
- Automobile access road, and in one case, a new bridge to nearest arterial road.

The percentage of multimodal use at the conceptual station locations is based on the programmatic guidelines[36] for a Small/Medium station, current observed passenger arrival/departure behavior, future transit integration, and development potential. Projected multimodal use at the conceptual station contributes to the appropriate sizing of support facilities for passenger drop off, transit/taxi layover, open space, and motorized/pedestrian circulation. The estimated multimodal characteristics for a typical station are presented in Table 5.

[36] Amtrak. *Amtrak Station Program and Planning Guidelines*. 5/01/2012. Page 32.

Table 5: Multimodal Use of Conceptual Station

Mode of Transportation To and From Station	Walk	Bike	Transit/Bus	Taxi	Kiss and Ride (Auto)	Park and Ride (Auto)
Percentage Mode Use	1%	1%	4%	3%	65%	26%

Source: New Tri-Cities Station Access Parameters, Michael Baker International. 2015

For each of the four conceptual station sites, the proposed facility was located to best fit the existing topographic conditions; minimize impacts to existing natural and cultural resources; minimize impacts to private property and structures; and minimize grading, related earthwork, and other ground-disturbing activities. If a station site required a new access road, such roads were kept to a minimum length, providing the clearest, most direct access to the site in light of natural and human resource constraints. Vehicular access to the station site that requires or increases travel through primarily residential or neighborhood streets was avoided where possible.

In consideration of site-specific grading, passenger access to a central platform will be by means of overhead bridge or tunnel connections. No at-grade pedestrian crossings to railroad tracks are under consideration. Operational requirements may also necessitate passenger access to more than two tracks; in such cases an additional side platform (for a total of two platforms) may be situated adjacent the easternmost track and station facility. Side platforms would be 12 to 20 feet wide and, if serving regional/local passenger trains only, would be 600-850 feet in length.

More detailed descriptions of the specific conceptual station locations evaluated in detail are provided in the text that follows.

2.3.1 No-Build Alternative (Maintain Existing Ettrick Station)

The No-Build Alternative maintains the existing Petersburg Amtrak Station in Ettrick as it currently exists. Only routine maintenance would be provided at this station (Figure 6). While the No-Build Alternative does not disturb the Project site nor result in any immediate impacts, it would not address the Purpose and Need for the Project.

2.3.2 Boulevard Build Alternative

The central development focus of Colonial Heights is along US 1, known locally as the "Boulevard". The Boulevard Build Alternative site is primarily on private property that was once a big-box retail store with a correspondingly large, paved parking area adjacent to Boulevard (US 1). Current use of the site includes a

tape slitting operation (Superior Slitting), an equipment rental business (Rent-E-Quip), a carpet sales store (Carpet-N-Floors), and an automatic ice vending booth. As proposed, the platform, station, and parking area would be on the eastern side of the rail line, within the existing paved parking area. The SEHSR Tier-II EIS Preferred Alternative calls for a third track to be constructed on the eastern side of the rail line. A new platform would be provided between the current track and this newly constructed track, necessitating grade-separated pedestrian access. The mainline tracks are above grade at this location (approximately 12 feet to 15 feet), which necessitates retaining walls, as well as ADA ramps/elevator access to the platform from the passenger waiting area. The platform would be constructed within the existing railroad right-of-way, parallel to the existing track, with the new SEHSR track located on the opposite side of the platform for a center island design. To maximize platform length along tangent track at this site, the platform would need to extend over and be incorporated onto a new railroad bridge spanning the Boulevard (Figure 4). Station access would be provided via Boulevard (US 1). Table 6 provides details of the station features at the Boulevard Build Alternative as well as the other alternatives.

2.3.3 Branders Bridge Build Alternative

Located in the Chesterfield County, the Branders Bridge Build Alternative is on undeveloped private property. However, the property was recently purchased, and the property owner intends to construct an agri-business and home on the property. The exact location and extent of this development is not available at this time. As proposed, the station and parking area would be on the eastern side of the current rail line. The SEHSR Tier-II EIS Preferred Alternative calls for a third track to be constructed on the eastern side of the rail line. A new platform would be provided between the current track and this newly constructed track, necessitating grade-separated pedestrian access. The SEHSR Tier-II EIS Preferred Alternative also calls for the removal of the existing, at-grade rail crossing of Branders Bridge Road. This crossing would be replaced with a new Branders Bridge Road overpass. The new overpass would span the existing rail, center platform, and proposed new third track. Potential design considerations for a new overpass could include an additional pedestrian (elevator) access point down to the station platform at this location. A new access road to the station would be necessary to connect to the realigned Branders Bridge Road (Figure 5). Table 6 provides details of the station features at the Branders Bridge Build Alternative.

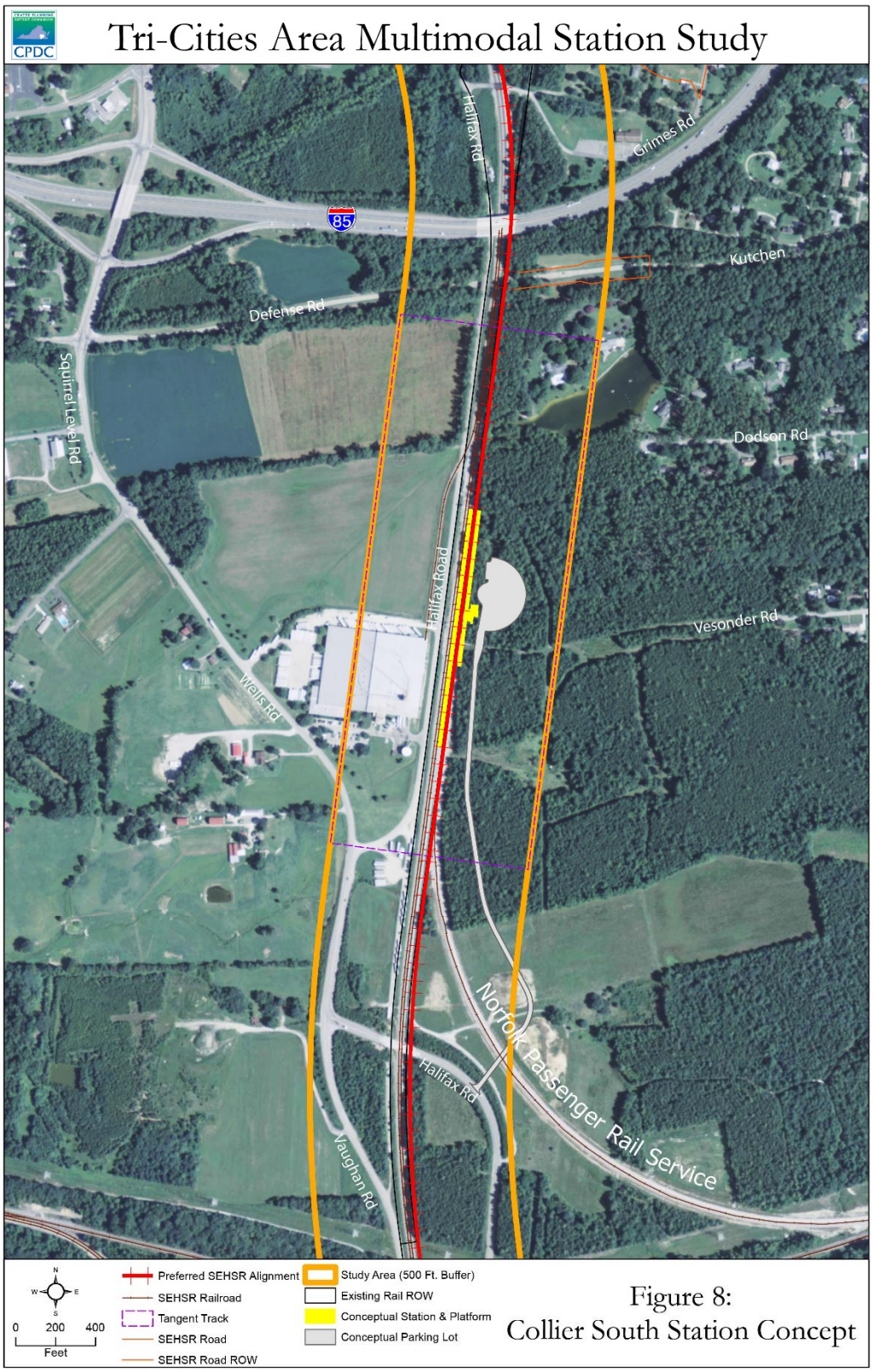
2.3.4 Ettrick Build Alternative

Located in Chesterfield County, the Ettrick Build Alternative is approximately 220 feet north of the existing Ettrick station, along the eastern side of the rail line. The site is owned by CSXT. The SEHSR Tier-II EIS Preferred Alternative calls for a third track to be constructed to the east of the existing rail line. A new platform would be provided between the current track and this newly constructed track, necessitating grade-separated pedestrian access. The existing Ettrick station could be replaced in its entirety or incorporated into a plan for adaptive re-use. Access to the station would continue to be via South Street to either James Street then East River Road or to Bessie Lane to Granger Street (Figure 6). Table 6 provides details of the station features at the Ettrick Build Alternative.

2.3.5 Collier South Build Alternative

Located in the City of Petersburg, the Collier South Build Alternative station, platform, parking lot, and access road are within property owned by the City of Petersburg (See Figure 8). This station location must accommodate the switch point location to the Norfolk Connection Track, which provides a connection for passenger trains traveling to and from Norfolk. Ultimately, the optimal station location was chosen that enables both Norfolk trains (side platform) and Amtrak long distance trains traveling along the eastern seaboard (center platform) to be served. Station locations farther north or south on this property would result in less optimal design/access, such as limited platform length or requirement for a platform on a curve, which does not conform to Amtrak's preferred station design guidelines.

Figure 8: Collier South Build Alternative



The SEHSR Tier-II EIS Preferred Alternative calls for a third track to be constructed east of the existing rail line. A new platform would be provided between the current track and this newly constructed track, necessitating grade-separated pedestrian access. Given the platform design requirements, the station location requires an approximately 1,800-foot long access road to the south to connect to Route 604 (Halifax Road). To shift the access road to the north and connect to Defense Road would have adverse effects to multiple Civil War resources eligible for the National Register of Historic Places (NRHP): Defense Road, Dimmrock Line/Earthworks, and the Bridge over Defense Road. To avoid these Section 106 and Section 4(f) resources, the access road is located to the south and includes a grade separated crossing in order to access the station (Figure 7). Table 6 provides details of the station features at the Collier South site. A secondary access road from the east remains possible at this location, which would allow for additional entry for emergency or service vehicles.

Table 6: Build Alternative Features

Station Features	Location			
	BOULEVARD	BRANDERS BRIDGE	ETTRICK	COLLIER SOUTH
Small/Medium Station (square feet)	3,688	3,688	3,688	3,688
Platform Size* (square feet)	13,548	20,000	20,000	54,711
Parking Lot Size** (square feet)	98,924 170 spaces	74,010 153 spaces	73,389 150 spaces	67,187 135 spaces
Access Road (square feet)	0	14,316	5,056	61,817
TOTAL (square feet of amenities noted above only – additional space could be needed in design)	116,160	112,014	102,133	187,403
TOTAL (acres)	**2.67**	**2.57**	**2.34**	**4.30**

Source: Michael Baker International, 2015

*Platform Size: The SEHSR's planned third track enables a phased implementation of station platforms for the Boulevard, Branders Bridge, or Ettrick sites. Until the SEHSR's third track is in operation, the island platform may be directly accessed from an adjacent station facility. Introduction of the SEHSR third track, between the station building and existing platform, would then require one or more grade-separated access points. Platform size at Boulevard is a function of site constraints and less tangent track. At the Collier South site, because the Norfolk rail line is in operation and would run east and parallel to a future SEHSR track, no phased and no at-grade pedestrian access are possible. Ultimately, the Collier South site requires both a center and a side platform. Hence, the platform length required for Collier South includes the length of two platforms.

**Parking: A parking target of 150 spaces was established to exceed anticipated ridership and conform with Amtrak design guidance[37]. Variations in site constraints resulted in differing parking totals due to the ultimate shape of the parking facility.

[37] http://www.nrvpassengerrail.org/resources/research/national/Amtrak_Station_Program_Planning_Guidelines.pdf

2.4 BUILD ALTERNATIVE COSTS AND CONSIDERATIONS

Conceptual costs were developed for each multimodal station site, based on a basic level of design needs and generalized knowledge of site conditions. As such, documented assumptions for these costs have been conservative, erring on the high side, with an additional 20% cost contingency built into the baseline estimates. The station costs are expressed as a range in 2015 dollars. The range provides more latitude for a potentially lower cost, due to conservative costing already built into these estimates. Design considerations consistent across all stations include:

- $2.5 million = New construction of an approximate 3,700 square foot station. This includes parking lot and related multimodal accommodations.
- $1.8 million to $2.7 million = New platform construction with a partial canopy (between 1,000-1,200 feet) and accessible, grade separated pedestrian access.

Different Build Alternatives have different design assumptions for the grade-separated pedestrian connection to the center platform. The Collier South Build Alternative also requires an additional and separate side platform to service the Norfolk connection track, a unique feature of this location.

Table 7 provides a summary of other site-specific cost differentials by location.

Table 7: Build Alternative Cost Estimates and Considerations

Alternative / Station	Cost Estimate Range *(2015 Dollars)*	Design Elements Driving Cost	Key Assumptions Made
Boulevard	$9M - $12M	• Retaining wall construction (over $1.5M) anticipated due to track elevation on embankment above station site. • Purchase of private property, plus potential relocation of one business.	• Cut-and-cover pedestrian tunnel (with elevator/stair access) to island platform can be installed prior to 3rd track installation (over $1M). • Center platform extends over Boulevard on new railroad bridge for future 3rd track.
Branders Bridge	$9M - $11M	• Additional site prep (utilities, access road, etc.) due to undeveloped nature of site.	• Up-and-over pedestrian crossing (over $2.5M) could be integrated into new roadway bridge for a modest cost savings.
Ettrick	$7M - $9M	• No major cost factors beyond those already identified.	• Cut-and-cover pedestrian tunnel (over $1M). • Demolition of existing station structures vs. renovation for alternate use.
Collier South	$14M - $17M	• Need for new bridge over Norfolk passenger rail connection and access road from Halifax Road (approx. $3.5M). • Second, shorter side platform with canopy required for Norfolk track (over $1M). • Additional site prep (utilities, clearing) due to undeveloped nature of site.	• Up-and-over pedestrian bridge required (over $2.5M), as cut-and-cover not feasible under active rail track. • Relocation of connection to Norfolk passenger rail track to accommodate island platform.

Source: Michael Baker International, 2015.

3. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This chapter identifies the beneficial and adverse impacts of the No-Build and Build Alternatives, as described in Chapter 2. For each subject area, the existing conditions are described, potential impacts identified, and where applicable, potential mitigation measures proposed. Table 8 provides a summary of impacts by alternative.

Table 8: Summary of Impacts

Category	Impacts by Build Alternative				
	No-Build (Existing Ettrick Station)	Boulevard	Branders Bridge	Ettrick (New Station)	Collier South
Total Area of Station Footprint (acres)	N/A	2.67	2.57	2.34	4.30
Current Station Parcel Ownership	CSXT*	Private Property	Private Property	CSXT*	City of Petersburg
New Station Access Road (square feet)	N/A	0	14,316	5,056	61,817
Cost (Platform, Station, Parking, Access Road, Bridge, Parcel ($ Millions -2015 Dollars))	N/A	$9 – 12 M	$9 - $11 M	$7 - $9 M	$14 – $17 M
Violations of National Ambient Air Quality Standards (NAAQS)	None	None	None	None	None
Sensitive Noise Receptors Impacted	N/A	Category 3 (Institutional Land Uses): 1 Moderate Impact	Category 2 (Residential Land Uses): 1 Moderate Impact	None	None
Vibration	None	None	None	None	None
Water Quality	None	Minimal	Minimal	Minimal	Minimal
Wetlands (acres)	0	0	0	0	0
Streams (linear feet)	0	0	0	0	0
Threatened & Endangered Species	0	0	Potential: Northern Long-eared Bat** *Federal Threatened*	0	0
Critical Habitat	None	None	None	None	None

Category	Impacts by Build Alternative				
	No-Build (Existing Ettrick Station)	Boulevard	Branders Bridge	Ettrick (New Station)	Collier South
Floodplains (acres)	0	0.3	0	0	0
Visual Resources	N/A	Visually Compatible	Limited Impact	Visually Compatible	Limited Impact
Land Use & Zoning Consistency	Consistent	Consistent	Inconsistent	Consistent	Consistent
Farmland Impacts (acres)	N/A	N/A	N/A	N/A	3.7 acres Prime Farmland NRCS Rating = 141 out of 260 Points
Relocations: Home, Business, Farm, Non-Profit	0	Requires private property. Existing businesses may remain at same location, but, due to center platform track configurations, one business relocation is possible (adjacent to bridge).	Requires private property, but no relocations	0	0
Environmental Justice (EJ) Concerns	EJ Communities Present No disproportionately high and adverse impacts anticipated	EJ Communities Present No disproportionately high and adverse impacts anticipated	No EJ Communities	EJ Communities Present No disproportionately high and adverse impacts anticipated	EJ Communities Present No disproportionately high and adverse impacts anticipated
Public Health Concerns	Minimal	Minimal	Minimal	Minimal	Minimal
Public Safety Concerns	Minimal	Potential Improvement	Potential Improvement	Potential Improvement	Potential Improvement
Contaminated / Hazardous Waste Sites	0	0	0	0	0
Parks & Recreation Areas	0	0	0	0	0

Category	Impacts by Build Alternative				
	No-Build (Existing Ettrick Station)	Boulevard	Branders Bridge	Ettrick (New Station)	Collier South
# Cultural Resource Properties Affected (NRHP Listed or Eligible) ***	0	No Adverse Effect on 2 Properties	No Adverse Effect on 1 Property	No Adverse Effect on 1 Property	No Adverse Effect on 3 Properties
Section 4(f) Property Used ***	0	0	0	0	3 *de minimis* uses
Secondary & Cumulative Development Potential	Higher Potential	Higher Potential	Minimal Potential	Higher Potential	Moderate Potential

Source: Michael Baker International, 2015

*CSXT is a private entity, but as a transportation services provider it traditionally works in conjunction with passenger rail services in its corridors. In this instance, the building and facilities are the responsibility of Amtrak but land is owned by CSXT.

**Northern Long-eared Bat: Coordination with the U.S. Fish and Wildlife Service states that station construction at the Branders Bridge site may effect this federally threatened species. Avoidance of impacts to this species is to be achieved by implementing time-of-year (TOY) restrictions for no tree clearing from April 15 – September 15 of any year at this site.

*** By letter dated February 17, 2016, SHPO stated its concurrence with FRA's determination of effects is premature given that the Project is at the conceptual stage. SHPO asked to see more detailed plans for the preferred alternative, along with written comments from consulting parties [namely, the NPS], before providing formal comments on project effects. Because this is a conceptual-level EA, FRA is not conducting detailed engineering design on any alternative until a Preferred Alternative is identified. Therefore, the Section 106 process will not be completed until after the release of the EA and the selection of the Preferred Alternative. Following the selection, FRA will again seek SHPO's concurrence on determinations of effect and incorporate the results in the subsequent FONSI. While a formal determination of effect from SHPO is on hold until more detailed design information is available, SHPO stated that, based on the conceptual-level of information available, the potential for adverse effects appears minimal at each of the four station sites (Appendix H, DHR letter dated February 17, 2016).

In addition, if necessary, the next step in the Section 4(f) process is for FRA to provide SHPO, in writing, its intent to make a de minimis impact finding. However, because SHPO is not providing a formal determination of effect until more detailed engineering design is available, FRA is unable to complete the Section 4(f) coordination requirements with SHPO. As with completion of the Section 106 process, the Section 4(f) process will be finalized following FRA's selection of a Preferred Alternative, subsequent coordination with SHPO, and documentation of these efforts and results in the FONSI.

3.1 AIR QUALITY

In accordance with the federal Clean Air Act (CAA) 40 C.F.R. Subchapter C, Parts 50-97, the U.S. Environmental Protection Agency (EPA) established National Ambient Air Quality Standards (NAAQS) for six pollutants considered harmful to public health and the environment. These are carbon monoxide (CO), lead, nitrogen dioxide (NO_2), particulate matter (PM_{10} and $PM_{2.5}$), ozone, and sulfur dioxide (SO_2). Areas that do not meet the standards for these pollutants are designated as nonattainment areas and states must develop a State Implementation Plan (SIP) to improve the air quality in these areas and bring them into attainment by specific deadlines set by the EPA. Federal agencies responsible for an action occurring in a nonattainment area are required to determine if the action conforms to the applicable SIP. Because this Project is sponsored by the FRA, and because FRA is subject to the general conformity requirements of the CAA, this air quality analysis addresses the general conformity regulations [40 CFR Part 93, Subpart B].

Full details of the air quality analysis are provided in the Air Quality Technical Report (Appendix B).

3.1.1 Existing Conditions

The Study Area is located in Chesterfield County and the Cities of Colonial Heights and Petersburg. These areas are currently in attainment with all applicable NAAQS.

3.1.2 Potential Impacts

The No-Build Alternative and the four Build Alternatives were evaluated for possible air quality impacts. Emissions from the locomotives idling and emissions from the parking lot, including automobiles and buses, were evaluated. Based on the idling operations, pollutants are not predicted to exceed 0.5 tons per year, and therefore do not exceed the *de minimus* levels for conformity (100 tons/year).

Neither the No-Build Alternative nor any of the Build Alternative parking lots (automobiles and buses) and their adjacent roadways would have average annual daily traffic (AADT) that exceed the 59,000 AADT threshold that requires a CO analysis in Virginia; therefore, a hot-spot CO analysis is not needed. In accordance with the SIP, the Project is not listed as a project with meaningful impacts on traffic volumes or vehicle mix. As such, the Project is categorized as a project with no meaningful potential Mobile Source Air Toxics (MSAT) effects or exempt projects. Because this Project is in an attainment area, no project level PM2.5 analysis is required.

3.1.3 Mitigation

No air quality mitigation is required, regardless of alternative (No-Build Alternative or any of the four Build Alternatives).

3.2 NOISE AND VIBRATION

Noise and Vibration impacts were determined based on the methods described in FTA's *Transit Noise and Vibration Impact Assessment* (FTA-VA-90-1003-06) manual and FRA's High Speed Ground Transportation Noise and Vibration Impact Assessment (USDOT, 2012). Because ancillary sources are not unique to high-speed train systems, noise from electrical substations, maintenance facilities, yards, and stations are not addressed in the High Speed Rail Manual. These noise sources are substantially the same for any type of rail system and do not have characteristics specific to high-speed train systems. Therefore, the methods described in FTA's *Transit Noise and Vibration Impact Assessment* manual are applicable for the station evaluation. They are founded on well-documented research on community reaction to noise and are based on change in noise exposure using a sliding scale. The amount that rail projects are allowed to change the overall noise environment is reduced with increasing levels of existing noise. Although FTA methodology is used, this is an FRA project and will be subject to FRA impact criteria. The FRA noise impact criteria are applicable to three categories of land use and are summarized in Table 9.

Table 9: Land Use Categories and Metrics for Transit Noise Impact Criteria

Land Use Category	Noise Metric (dBA)	Description of Land Use Category
1	Outdoor L_{eq}(h)*	Tracts of land where quiet is an essential element in their intended purpose. This category includes lands set aside for serenity and quiet, and such land uses as outdoor amphitheaters and concert pavilions, as well as National Historic Landmarks with significant outdoor use. Also included are recording studios and concert halls.
2	Outdoor L_{dn} (DNL)	Residences and buildings where people normally sleep. This category includes homes, hospitals, and hotels where a nighttime sensitivity to noise is assumed to be of utmost importance.
3	Outdoor L_{eq}(h)*	Institutional land uses with primarily daytime and evening use. This category includes schools, libraries, and churches where it is important to avoid interference with such activities as speech, meditation, and concentration on reading material. Places for meditation or study associated with cemeteries, monuments and museums can also be considered to be in this category. Certain historical sites, parks, campgrounds and recreational facilities are also included.

* L_{eq} for the noisiest hour of rail-related activity during hours of noise sensitivity.

Source: DOT/FRA/ORD-12/15.

Details of the noise and vibration analyses are provided in the Noise and Vibration Technical Report (Appendix C).

3.2.1 Existing Conditions

Sensitive receptors, based on the land use categories defined in Table 9, that are adjacent to the four Build Alternative locations consist primarily of residential sites. Noise and vibration field measurements were conducted as part of the SEHSR Tier-II EIS and are used to determine background noise levels. The applicable noise and vibration measurement sites are shown in Table 10 and Table 11.

3.2.2 Potential Impacts

The No-Build Alternative results in no noise and vibration impacts at Ettrick.

The train activity analyzed for the Build Alternatives was limited to station idling. All other train activity has been analyzed as part of the SEHSR Tier-II EIS. At this time, the analysis conducted for this EA does not include track systems modifications, and the analysis also does not include a requirement for horn blowing. Based on FRA guidance, the rail noise criteria are divided into moderate impact and severe impact categories. Locomotive idling noise levels at 50 ft. were calculated and then adjusted based on the Exposure vs. Distance curve in the FTA Manual for stationary sources in order to determine the distance within which there would be a noise impact. Based on this methodology and as shown in Table 10 and Table 11, noise impacts are projected at two of the four proposed station locations.

- The Boulevard Build Alternative is predicted to have one Moderate impact for Category 3 receptors.
- The Branders Bridge Build Alternative is predicted to have one Moderate impact for Category 2 receptors.
- The Ettrick Build Alternative is predicted to have no noise impacts.
- The Collier South Build Alternative is predicted to have no noise impacts.

3.2.3 Mitigation

During the design phase of the Project, a more detailed analysis will be conducted and impacted areas will be evaluated further prior to making a final determination on mitigation. Anticipated impact will be generally defined by the FTA Transit Noise and Vibration Impact Assessment Guidance (2006)[38]. Every reasonable effort will be made to reduce predicted noise to levels deemed acceptable for impacted sensitive land uses and may include the following:

- Barriers/Enclosures: Solid obstructions or baffles placed around noise emitting components of the new station facility.

[38] https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf

- Directing noise away from sensitive areas: Employ methods to narrowly focus public address speakers and internalize their broadcast to cover only the station platform area and minimize propagation away from the facility.
- Vegetation: Planting a sufficient density and height of year-round vegetation to lessen the station noise to surrounding areas.
- Building insulation: For nearby public use and private properties, these measure would include providing new multi-pane windows, sealing existing windows/cracks or installing noise absorbing materials.

Additionally, operational mitigation measures may include reduction in idle/dwell time to reduce spillover noise impacts to surrounding development.

Full details of the noise and vibration analyses are provided in the Noise and Vibration Technical Report (Appendix C).

Table 10: Noise Measurement Sites

Site No.	Location	Location/Site Description	Type of Measurement	Date	Start Time	Duration	L_{eq}[1]	L_{dn}[2*]
N-10	Colonial Heights	31115 Farris Avenue	Long Term	5/26/09	3:49 PM	24 hours	61	63
N-12	Ettrick	3923 River Road	Long Term	5/21/09	9:01 AM	25 hours	72	72

Source: Applicable sties (2) from the SEHSR monitoring effort, .Michael Baker International, 2014.

[1] L_{eq} is the hourly equivalent sound level

[2] L_{dn} is the day night sound level used for long term measurements only

Table 11: Existing Train Pass by Vibration Measurements

Site No.	Location	Side of Alignment	Land Use	Date	Time	Distance to Near Track Centerline, feet	Max RMS Velocity Level, VdB	PPV[1], in/sec
V-4	2801 Boulevard, Colonial Heights, VA	East	COM	5/22/09	12:04 PM	85	79	0.035
V-5	1510 W Washington St Petersburg, VA	East	COM	5/27/09	11:38 AM	63	82	0.048

Source: Michael Baker International, 2015.l

1. The PPV is the highest measured peak particle velocity from all pass by events at a particular location.

Table 12: Summary of Rail Noise Impacts

Build Alternative	Noise Impacts					
	Cat 1		Cat 2		Cat 3	
	Moderate Impact	Severe Impact	Moderate Impact	Severe Impact	Moderate Impact	Severe Impact
Boulevard	0	0	1	0	0	0
Branders Bridge	0	0	0	0	1	0
Ettrick	0	0	0	0	0	0
Collier South	0	0	0	0	0	0

Source: Michael Baker International, 2015.

3.3 WATER QUALITY AND WATER RESOURCES

Water quality and water resources are analyzed in this section. Figure 9 through Figure 12 show the water resources within the Boulevard, Branders Bridge, Ettrick, and Collier South Build Alternatives, respectively.

3.3.1 Existing Conditions

Drainage Basins, RPAs, and RMAs

All waterbodies in the Project area are located within the James River basin and Appomattox River subbasin (Hydrologic Unit Code or HUC 0280207).

Under the Chesapeake Bay Preservation Act (CBPA), § 62.1-44.15:72 localities in Tidewater Virginia are those with waters that drain into the Chesapeake Bay, including the county of Chesterfield and the cities of Colonial Heights and Petersburg. The CBPA requires localities to protect lands that have the potential to impact water quality most directly: Resource Protection Areas (RPAs) and Resource Management Areas (RMAs). RPAs are composed of tidal wetlands, nontidal wetlands connected by surface flow and contiguous to tidal wetlands or water bodies with perennial flow, tidal shores, such other lands considered necessary to protect the quality of state waters and a 100-foot buffer adjacent to and landward of these features. RMAs are lands that, without proper management, have the potential to damage water quality and include highly erodible soils, highly permeable soils, steep slopes, non-tidal wetlands not included in the RPA, lands within the 100-year floodplain, and include at least the 100-foot area contiguous to the RPA.

Surface Waters (Streams)

Surface waters are present on the parcels containing the proposed Boulevard and Branders Bridge Build Alternatives, but absent at the Ettrick and Collier South Build Alternatives. Oldtown Creek forms the southern boundary of the Boulevard parcel. An unnamed tributary (UT) to Oldtown Creek (UT1 to Oldtown Creek) flows from a small pond on the Branders Bridge parcel to Oldtown Creek on the southern boundary of the Boulevard parcel. Another UT (UT2) to Oldtown Creek flows southward from a wetland on the eastern side of the Branders Bridge parcel.

Figure 9: Water Resources – Boulevard Build Alternative

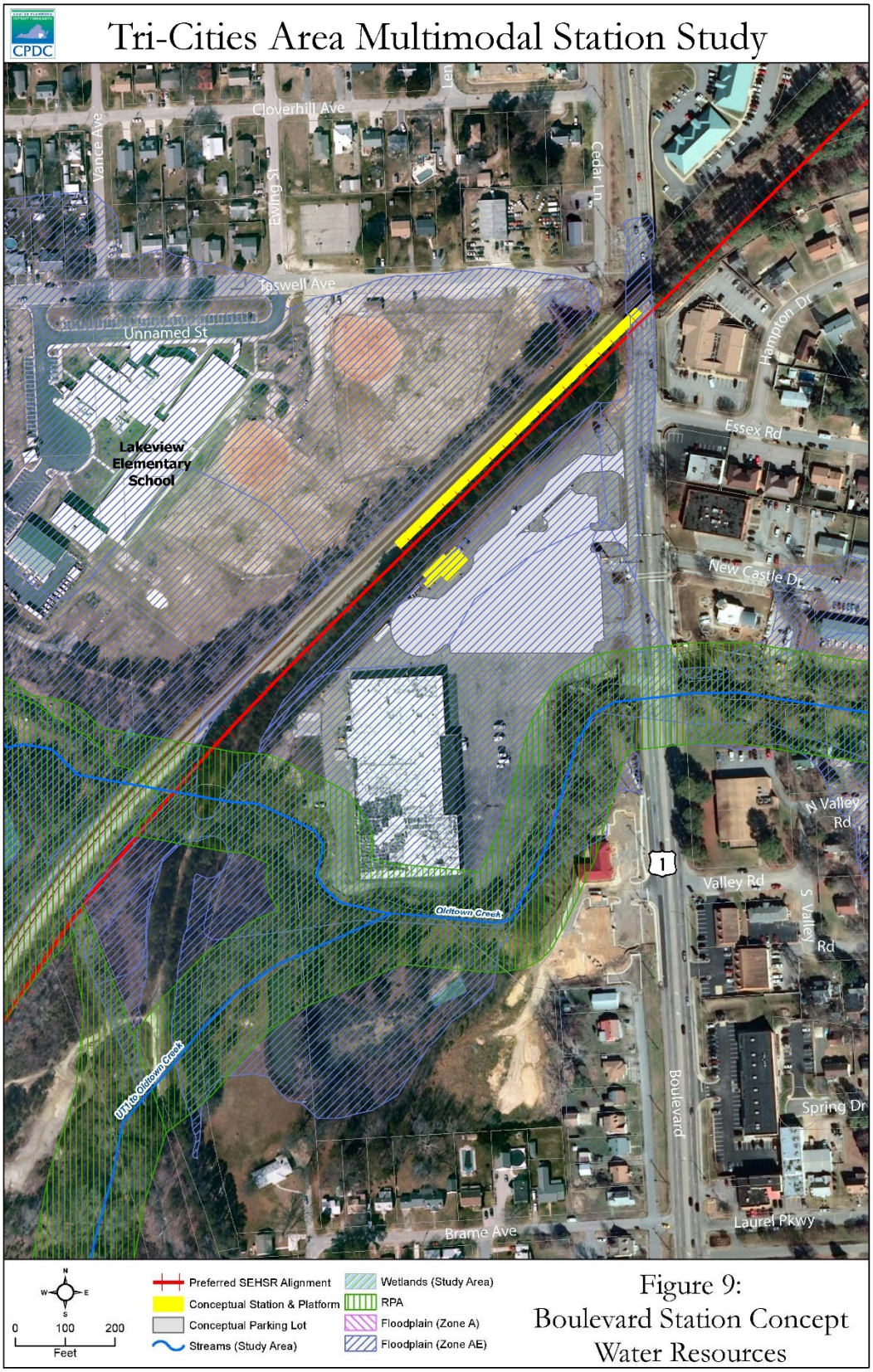


Figure 10: Water Resources – Branders Bridge Build Alternative

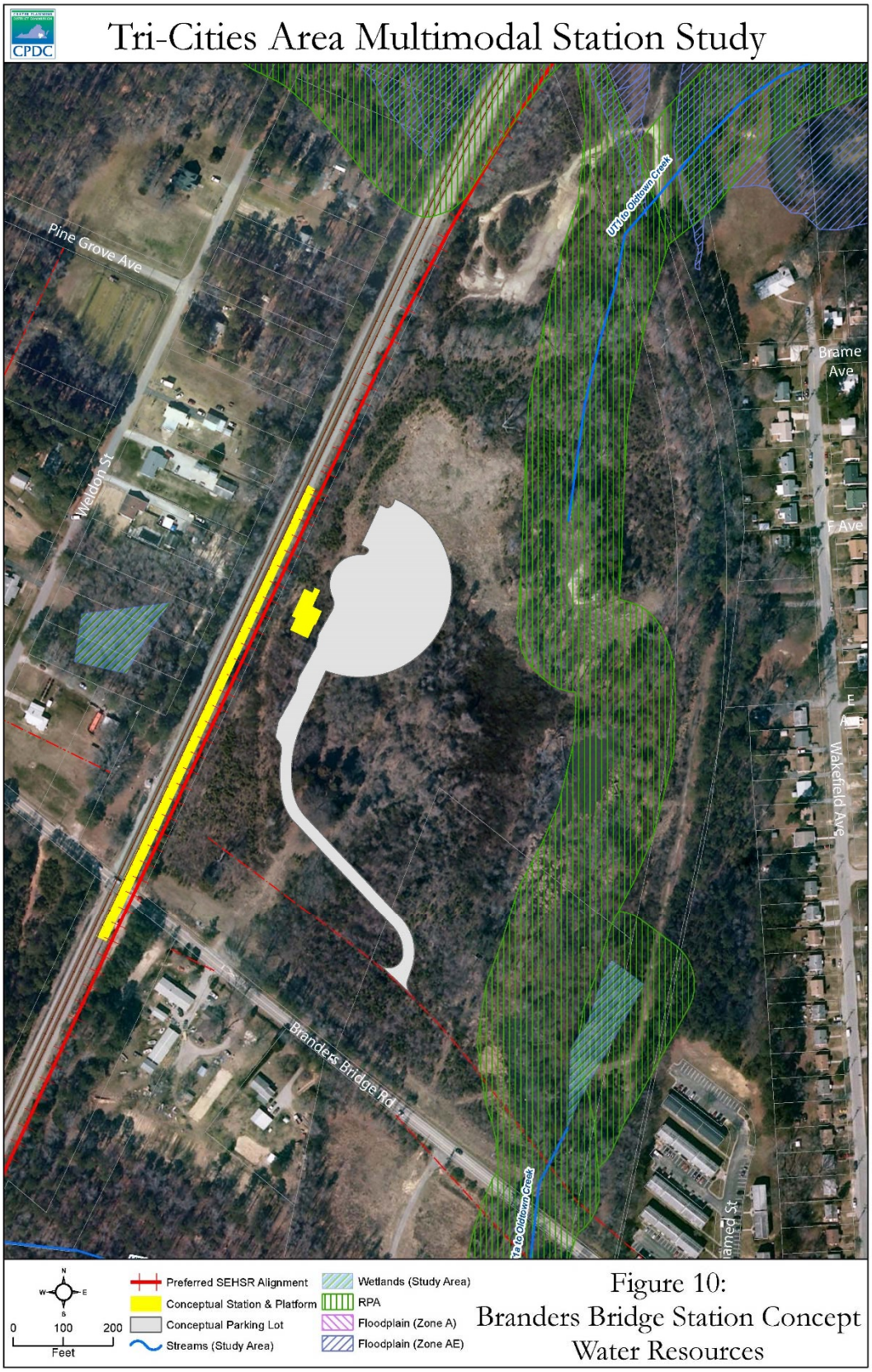
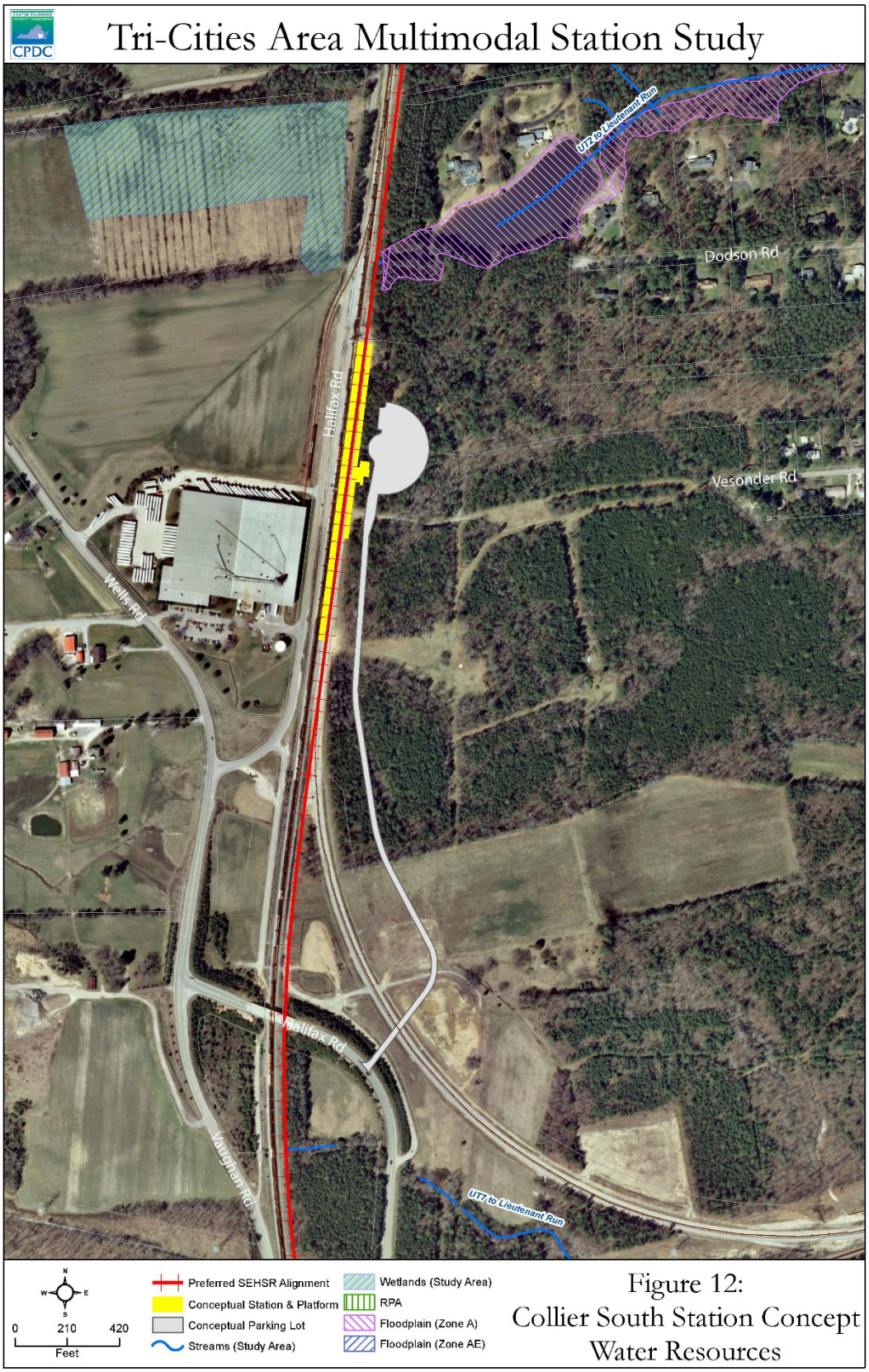


Figure 11: Water Resources – Ettrick Build Alternative

Figure 12: Water Resources – Collier South Build Alternative



Water Quality

Under the Federal Clean Water Act (CWA), as amended in 1972, states are required to develop water quality standards (WQS). These standards are used to identify water quality problems and support efforts to achieve and maintain protective water quality conditions. States are required to assess the health of surface waters and to report the extent to which WQS are met as established under Section 305(b) of the CWA. When a waterbody cannot meet one of more of its assigned designated uses, the waterbody is listed as impaired under Section 303(d) of the CWA. To restore these waters, the state must establish total maximum daily loads (TMDLs) that are designed to reduce contamination to the level where designated uses can be met (Hoskinson et al., 2003).

Surface waters that could be especially sensitive to impacts by the proposed Project include those used for water supplies and impaired waters listed on the CWA Section 303(d) list. Near the Collier South Build Alternative unnamed tributaries to Lieutenant Run are classified as public water supply. Oldtown Creek (near the Branders Bridge and Boulevard Alternatives) and Lieutenant Run are on the Virginia 2012 303(d) list of impaired waters. Oldtown creek is listed as impaired for recreational uses by fecal coliform and *Escherichia coli (E. coli)*, as well as for aquatic life uses based on benthic/macroinvertebrate bioassessments and pH. Lieutenant Run is impaired for recreational uses for *E. coli* (VADEQ, 2013).

3.3.2 Potential Impacts

Water quality impacts are not anticipated for any of the Build Alternatives. The Project is not anticipated to cause or contribute to significant degradation of 303(d) listed streams or other jurisdictional aquatic resources. None of the proposed project sites cause a direct loss of aquatic habitat, erosion and sedimentation which would degrade water quality and aquatic habitats, changes the character of the area, changes downstream water quality and ecology, nor fragments river or stream systems.

3.3.3 Mitigation

Appropriate Best Management Practices would be defined during final design and utilized prior to, during, and after construction as part of the Soil Erosion and Sediment Control Plan for the Project and construction impacts are addressed in Section 3.26 of this EA. No other mitigation is required.

3.4 WETLANDS

Wetland data for this Project was obtained from the SEHSR Tier-II EIS effort. U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) maps, U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle maps, US Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soil surveys, and recent color aerial photography were reviewed prior to field reconnaissance to identify potential wetland locations. Wetlands within the Study Area were delineated from October 2003 to January 2004, from March 2007 to May 2007, and in October and November 2012. Wetlands were

delineated based on criteria established in the United States *Army Corps of Engineers Wetlands Delineation Manual* [39] and the Regional Supplement[40].

Wetland impacts are not anticipated for any of the Build Alternatives. While a wetland is present on the parcel containing the Branders Bridge Build Alternative, the wetland is located more than 350 feet from the closest edge of the station driveway. No wetland resources identified as part of the delineation will be impacted by any of the Build Alternatives, thus no mitigation is required.

Water quality permits will not be needed since none of the four Build Alternatives directly impact wetlands, streams, or other Waters of the U.S. However, as with any land-disturbing activity, of the Project's size, other environmental protection permits will be required. The DEQ, through the State Water Control Board, regulates water resources and water pollution in Virginia. Relative to this Project and any of the four Build Alternatives, permitting for water protection will require the issuance of Virginia Pollutant Discharge Elimination System (VPDES) permits, Virginia Stormwater Management Program (VSMP) permits, and possibly the Virginia Pollution Abatement (VPA) permits for discharges of pollutants to state waters. Where required, these permits would need to be acquired before any land-disturbing activity takes place for the Project.

3.5 THREATENED AND ENDANGERED SPECIES

3.5.1 Existing Conditions

Under Federal law, any action that could potentially have a negative impact on plant or animal species classified as Endangered (E), Threatened (T), Proposed Endangered (PE), or Proposed Threatened (PT) is subject to review by the U.S. Fish and Wildlife Service (USFWS) under Section 7 provisions of the Endangered Species Act (ESA) of 1973 7 (U.S.C. § 136, 16 U.S.C. § 1531 et seq.). The USFWS provides the Information, Planning, and Conservation (IPaC) system to determine the effects to federally threatened and endangered species[41]. In Virginia, the Virginia Fish and Wildlife Information Service database (VaFWIS), maintained by the Virginia Department of Game and Inland Fisheries (DGIF), provides information about Virginia's wildlife resources[42]. The Virginia Department of Conservation and Recreation – Division of Natural Heritage (DCR-DNH) provides project review information related to species with Federal and/or state protected status.[43] These databases were searched for project-specific information on federal and state

[39] U.S. Army Corps of Engineers, Waterways Experiment Station. *Corps of Engineers Wetlands Delineation Manual*. Wetlands Research Program Technical Report Y-87-1 (on-line edition). January 1987 – Final Report.

[40] U.S. Army Corps of Engineers, Engineer Research and Development Center. *Wetlands Regulatory Assistance Program. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (Version 2.0).* November 2010.

[41] http://www.fws.gov/northeast/virginiafield/endangered/projectreviews.html

[42] http://vafwis.org/fwis/

[43] http://www.dcr.virginia.gov/natural-heritage/

listed species that are either threatened or endangered. Details of online project reviews are included in Appendix D.

3.5.2 Potential Impacts

The existing No-Build Alternative does not impact threatened or endangered species.

Initial coordination with USFWS indicated that one endangered species, Northern long-eared bat *(Myotis septentrionalis)*, federally listed as Threatened, and has the potential to be present at the Branders Bridge Build Alternative and the Ettrick Build Alternative. However, DGIF and DCR-DNH reviews indicate no confirmed observances of this species at any of the four sites. Subsequent coordination with USFWS states that, because the Ettrick Build Alternative is lacking forested vegetation, no habitat for the Northern long-eared bat is present at this site. The USFWS concurred that the Branders Bridge Build Alternative has the potential for Northern long-eared bat habitat because it is wooded (Appendix D).

No Critical Habitat was identified at any of the four Build Alternatives.

3.5.3 Mitigation

Should the Branders Bridge Build Alternative be selected for construction, further coordination with USFWS would be necessary to implement strict adherence to a time-of-year (TOY) restriction for no tree clearing from April 15 to September 15 of any year. If selected, the Branders Bridge Build Alternative would not likely adversely affect the Northern long-eared bat as long as the TOY restriction is followed. USFWS has indicated that further consultation pursuant to Section 7 of the ESA will not be necessary.

3.6 VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM

The Virginia Coastal Zone Management Program was established in 1986 to protect and manage Virginia's coastal areas. This program is part of national coastal preservation effort authorized under the Coastal Zone Management Act of 1972 (16 U.S.C. §§ 1451-1464). Virginia's Coastal Zone Management area consists mostly of Tidewater Virginia as defined by the Code of Virginia §28.2-100. The county of Chesterfield and the cities of Colonial Heights and Petersburg are within Virginia's coastal zone. As a result, final design plans for the Project will be subject to a Federal Consistency Review, which outlines any effects to the land, water, or natural resources within Virginia's coastal zone. Because of this requirement, no mitigation would be required if consistency is achieved during the design phase.

3.7 FLOODPLAINS

Executive Order (E.O.) 11988 – *Floodplain Management*, issued May, 24 1977 requires Federal agencies to avoid to the extent possible the long- and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative. E.O. 13690 – *Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input*, issued January 30, 2015,

amended E.O. 11988 and established the Federal Flood Risk Management Standard (FFRMS) to improve the Nation's resilience to current and future flood risks, which are anticipated to increase over time due to the effects of climate change and other threats. E.O. 13690 and the FFRMS reinforce the important tenets and concepts articulated in E.O. 11988, such as avoiding adverse impacts associated with actions in a floodplain and minimizing potential harm if an action must be located in a floodplain. E.O. 13690 and the FFRMS expand upon these tenets and concepts by calling for agencies to use a higher vertical flood elevation and corresponding horizontal floodplain than the base flood for federally funded projects to address current and future flood risk and ensure that projects last as long as intended.[44]

Federal agencies have three approaches for establishing the flood elevation:

- Use data and methods informed by best available, actionable climate science;
- Build two feet above the 100-year (1% annual-chance) flood elevation (three feet for critical buildings); or
- Build to the 500-year (0.2% annual-chance) flood elevation.

3.7.1 Existing Conditions

Data from Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) were analyzed and the FEMA Zone designations were determined for the 100-year FEMA floodplains that cross the parcels containing the conceptual station locations. These flood zones fall into two designations: Zone A or AE. Zone A is the flood insurance rate zone that corresponds to the 1-percent annual chance floodplains determined in the Flood Insurance Study by approximate methods of analysis. Because detailed hydraulic analyses are not performed for such areas, no base flood elevations (BFE) or depths are shown within this zone. Zone AE is the flood insurance rate zone that corresponds to the 1-percent annual chance floodplains determined in the Flood Insurance Study by detailed methods of analysis.

The Boulevard Build Alternative is the only location within the floodplain (Figure 9). Although not considered a fatal flaw for the Boulevard Build Alternative – a hydraulic study would be required during design to determine level of risk associated with the potential station development and coordination with FEMA and State and local government conducted.

3.7.2 Potential Impacts

The Boulevard Build Alternative is the only site within the floodplain, on a parcel designated Zone AE (Figure 9). Almost 98% or 2.3 acres of the Boulevard station and parking area footprint[45] are located within the 100-year floodplain (Zone AE – Annual chance of flood hazard = 1%). Given the site constraints and

[44] Federal Emergency Management Agency. *Guidelines for Implementing Executive Order 11988, Floodplain Management, and Executive Order 13960, Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input.* October 8, 2015. Page 13.

[45] Does not include station platform, which is above grade at track level and therefore outside of the floodplain.

the need for the station to be adjacent to the rail line, avoidance of the floodplain at the Boulevard site is not possible. However, an elevated station and platform would be required at this station due to the height of the track as it passes over Boulevard (Route 1). This elevated structure, which would be refined during the design phase if this site is selected, could be constructed above the 100 year floodplain. In addition, this location is currently developed, contains a parking lot that could be used for the station if the site is selected and the ultimate configuration and final elevation of the station will be reviewed during the design phase to minimize the potential risk from the 100-year floodplain.

The remaining three Build Alternatives (Branders Bridge, Ettrick, and Collier South) avoid the 100-year floodplain.

3.7.3 Mitigation

If the Boulevard Build Alternative is selected, coordination with FEMA and local authorities during preliminary and final design will be necessary to ensure compliance with applicable floodplain management/development ordinances in E.O. 11988 and E.O. 13690. All practicable measures to minimize harm and restore and preserve the natural and beneficial values of the 100-year floodplain will be addressed during preliminary and final design. As noted above, this location is already developed and an existing parking lot is in place, which could mitigate impacts moving forward as construction of a new facility in an undeveloped floodplain would be minimized. Given the existing quantity of impervious surface at this site, design considerations could be incorporated for this build alternative, which extend into the surrounding commercial parking areas to include permeable pavement and stormwater retention measures. These mitigation actions may ultimately reduce the volume and speed of runoff than current conditions. Selection of the Boulevard site will require FRA to post a public notice of the reasons for selection of this site. The public will be provided time for response.

Also, coordination with FEMA will be necessary to determine if a Conditional Letter of Map Revision (CLOMR) and a subsequent final Letter of Map Revision (LOMR) are required for the Project. Floodplain development permits will be obtained from the local jurisdictions and include a no-rise/impact certification for each regulated floodplain/floodway and/or non-encroachment area crossing or a submittal for a CLOMR per 44 CFR §65.12.

3.8 PRIME AND IMPORTANT FARMLAND

The Farmland Protection Policy Act (FPPA) seeks to minimize the impact federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses (7 CFR § 658). The Natural Resources Conservation Service (NRCS) is charged with implementing the FPPA, as well as identifying and protecting lands determined to be Prime, Unique, Statewide Important, and Locally Important based on soil type.

3.8.1 Existing Conditions

The No Build Alternative and three of the four Build Alternatives (Boulevard, Branders Bridge, and Ettrick) are located in urban areas, as determined by the U.S. Census, and are not subject to the FPPA. However, the Collier South Build Alternative is located outside of an urban area and is subject to the FPPA.

3.8.2 Potential Impacts

To evaluate potential impacts under the FPPA, the NRCS assisted the Project team in the development of a Farmland Conversion Rating Form (USDA for AD-1006) for Collier South. Mattaponi Sandy Loam and Slagle Sandy Loam are considered to be Prime Farmland and are located within the footprint for the Collier South Build Alternative. Therefore, the Collier South Build Alternative would impact approximately 3.7 acres of Prime Farmland. The completed AD-1006 form is included in Appendix E.

The NRCS assigns ratings to potential farmland impacts to determine the level of significance of these impacts. The ratings are comprised of two parts. The Land Evaluation Criterion Value represents the relative value of the farmland to be converted and is determined by the NRCS on a scale from 0 to 100 points. The Corridor Assessment, which is rated on a scale of 0 to 160 points, evaluates farmland soil based on its use in relation to the other land uses and resources in the immediate area. The two ratings are combined for a possible total rating of up to 260 points. Sites receiving a total score of less than 160 points should be given a minimal level of protection, and sites receiving a total score of 160 points or more are given increasingly higher levels of consideration for protection (7 CFR § 658.4). The Collier South site received a rating of 141 as shown in Appendix E. Therefore, the farmland impact is considered minor.

3.8.3 Mitigation

No mitigation of potential farmland impacts for the Collier South Build Alternative is anticipated.

3.9 ENERGY USE

This analysis assesses and compares the operational and construction energy expenditures associated with the proposed project. Energy use related to changes in railroad operations is not considered in this analysis, as impacts associated with ridership, diverted travel from other modes, and locomotive operations and future efficiencies are documented in the SEHSR Tier II FEIS. Also, any fuel consumption changes directly resulting from frequency increases of Amtrak service would be the same across the No-Build and Build Alternatives.

The No-Build Alternative would not require construction of a new, multimodal station. As such, no changes in energy consumption are expected.

Construction of any of the four Build Alternatives will require consumption of energy for construction activities and maintenance.

The future station facilities envisioned for the Build Alternatives, while larger than the existing Ettrick Facility, would be assumed to be more energy efficient in design and function with minimal increase in energy

consumption due to their operation. During construction of any Build Alternative, additional non-recoverable energy would be expended beyond what would be used for normal rail operations. This additional energy would be consumed on a short-term basis as a result of construction activities as well as potential construction-related delays for freight and passenger trains in the area.

As a result of this analysis, it is concluded that the operation and construction of all Build Alternatives would result in a very small annual increase in total energy used compared to the No Build Alternative. This increase is determined to not be significant and no mitigation of effects has been identified or recommended beyond following best management practices during construction which may include measures to minimize energy use such as:

- Use of energy-efficient equipment
- Restrictions on unnecessary idling of construction equipment
- Proper maintenance of equipment and machinery to meet original standards
- Consolidation of material delivery when possible, and use of local materials where possible.

3.10 MINERAL RESOURCES

The USGS Mineral Resources Data System (MRDS) online database (USGS, 2014b[46]) was reviewed to determine if any of the potential Build Alternatives were in the vicinity of mines. The Boulevard and Branders Bridge Build Alternatives were within one-half mile of two listed resources, Cook Quarry (FID 4011, a granite surface mine) and Conduit Road Pit No. 4 (FID 3554, as sand and gravel surface mine). Both mines are outside of the proposed area of disturbance. No effects to mineral resources are anticipated and no mitigation is required.

3.11 VISUAL RESOURCES

A visual analysis was conducted for the Project. Appendix F provides details of the analysis, along with representative views of the No-Build Alternative and the four Build Alternatives. Visually sensitive historic resources are addressed separately in Section 3.24.

3.11.1 Existing Conditions

This assessment of the effects of the proposed Project on visual resources is consistent with FRA (FRA, 1999) and FHWA guidance (FHWA, 2015). A field review of the sites was conducted on May 13, 2015 under sunny and clear viewing conditions.

The existing visual elements of the proposed Project include double sets of tracks, the supporting rock ballast, vegetated right-of-way, trains, and associated grade-separated bridge and road crossings. Freight and passenger train activity takes place at all four conceptual site locations. All of the proposed station locations

[46] http://mrdata.usgs.gov/mineral-resources/mrds-us.html

are adjacent to sections of straight railway lines. Terrain can best be described as gently rolling with minor hills and shallow riparian valleys. Most of the biological communities consist of maintained/disturbed lawns, fields, railroad right-of-way planted in trees to provide visual and physical screening, and early successional forests.

The Boulevard Build Alternative is on the west side of highway US 1 in an area of mixed use commercial and residential development. The Branders Bridge Build Alternative is in a largely rural area with no commercial development. The SEHSR Tier-II EIS will construct a grade separation that will take Branders Bridge Road over the existing railroad. This would become a prominent feature for area residents. The Ettrick Build Alternative is an existing Amtrak passenger rail station providing service to the Petersburg, VA area. The Collier South Build Alternative consists of a paper production facility, fields, and woodlands. The paper production facility is a prominent feature in the area.

3.11.2 Potential Impacts

The primary components of the station will be the platform, station building, and parking/access. The proposed station will be visually consistent in the commercial or industrial settings of Boulevard, Ettrick, or Collier South. The degree of visual intrusion would be greater for the Branders Bridge Build Alternative, which is adjacent to rural, residential areas. The No-Build Alternative would result in no impact to visual resources.

Boulevard Build Alternative

The Boulevard Build Alternative would have limited visual impacts. The station would become visible from the south as it would require an elevated structure to reach the current level of the railroad and could feature a platform along the railroad bridge as well. However, the existing viewshed is primarily commercial development along US 1; a train station would not be visually incompatible with this setting.

Branders Bridge Build Alternative

The Branders Bridge Build Alternative would introduce a transportation facility into an area that is predominantly rural residential. However, the SEHSR Tier-II EIS's proposed grade-separated crossing of Branders Bridge Road would elevate the road on fill, essentially blocking the view of the station from residents to the south. Existing vegetation to the north, east, and west would continue to limit views of and from a station at this location.

Ettrick Build Alternative

Construction of a new station at Ettrick would result in little change in visual character. Since a passenger rail station currently operates as this site, a new station remains visually consistent with the current land use.

Collier South Build Alternative

The Collier South Build Alternative would not be a substantial visual impact in the area due to the undeveloped nature of the setting and lack of viewers currently, even though a new overpass would be required to access the station. The predominant features in the landscape are a paper production facility,

railroad siding, and the existing rail. The station would have limited visibility as residences to the east are separated from the station by forested areas and agricultural fields.

3.11.3 Mitigation

Although all Build Alternatives would require some sort of visible elevated structures, there are no significant visual impacts due to the environment in which each station is located. During the design phase, coordination would be conducted with local jurisdictions to consider appropriate landscaping, tree planting, architectural design elements, and exterior treatments that could enhance the visual aesthetics of any site.

3.12 TRANSPORTATION

Multimodal stations serve more than one mode of travel. People switch between modes: enter a station by way of rail, automobile, bus, bicycle, or one foot; exit a station via a different mode. A primary goal of the Project is to incorporate multimodal connectivity between the passenger rail station and other modes of transportation such as automobile, public transit, bicycle, and walking. A comparative analysis of the conceptual station locations and their ability to best serve a full range of transportation modes was conducted. In addition each of the locations was assessed for how well they provided service for long-distance and regional business and leisure travelers who might otherwise use air travel or highways through the Study Area by analyzing ease of access into the sites.

The four Build Alternatives are evaluated based on existing and projected ridership volumes, size of the station in terms of rider needs, highway access to the station, existing and future transit connectivity and proximity to the urban core.

3.12.1 Existing Conditions

Boulevard Build Alternative

The Boulevard site is approximately one mile (1.1 miles) from the nearest interstate; an approximately three-minute drive. Bus service was recently implemented along the Boulevard (US 1) but is limited. Dedicated bicycle access along the Boulevard does not exist. Pedestrian access, however, does exist intermittently on the Boulevard, but ends about a half of mile south of the proposed station site. Sidewalk access then begins again on both sides of the street at three-fourths of a mile from the proposed station site. A few sections exist where sidewalks have been installed, but these are placed only in front of strips of commercial buildings. North of the proposed site along Boulevard, sidewalk access begins right before the train tracks and continues to alternate sides for just over one-fourth of a mile. Then a large gap exists without sidewalks. Overall, pedestrian accommodations are inconsistent and unpredictable in this section of the Boulevard near the proposed site.

Branders Bridge Alternative

For Branders Bridge, access to the interstate is possible when travelling northeast and southeast on Branders Bridge Road. From the station location going northeast, the distance to the interstate is 1.2 miles; an approximately three minute drive. From the southeast, the site location distance to the interstate is 1.9 miles;

an approximately six minute drive. No bus services or dedicated bike lanes exist along Branders Bridge. No pedestrian access exists along the road west of the conceptual station location. Sidewalks east of the site are intermittent. Pedestrian access exists at commercial building areas on Kent Avenue and continuing on James Avenue. Sidewalks are present only at residential areas.

Ettrick (No Build and Build Alternative)

The current Amtrak Station at Ettrick is located to the west of I-95. The station is accessed from the north by way of the I-95 Temple Road exit in Colonial Heights, south on the Boulevard, then using short sections of Dupuy Avenue, River Road and Bessie Lane for a total distance of approximately 3 miles. From the south, the station is accessed from I-95 at the Washington Street exit on the south side of the Appomattox River, and then north along Chesterfield Avenue to Granger Street to Bessie Lane for a distance of approximately 3 miles along local streets. Improvements are planned for the short section of Bessie Lane to provide better access into the station. Travel time from the north is an approximately eight minute drive and from the south is approximately nine minutes.

The streets immediately surrounding the Ettrick site are essentially neighborhood streets. Pedestrian access via sidewalks is present. A sidewalk exists on one side beginning on Granger Street continuing on East River Road for approximately a half mile. From the south, there is also a sidewalk located along Chesterfield Avenue providing access. After the half mile mark, no sidewalks are present. Bus service is provided by PAT's "Ettrick Route". This existing route connects the Amtrak station to the citywide transit network. Dedicated bicycle access around the existing Ettrick station is minimal. Currently, no bicycle lanes exist in the surrounding street network. However, Chesterfield County's *Ettrick VSU Special Area Plan*[47] calls for pedestrian and bicycle facility improvements to transform the existing station in Ettrick into a multimodal center.

Collier South Build Alternative

Interstate access is in close proximity to the Collier South station site. From the west, the interstate is just under a mile away, making the drive about two minutes long. Bus services, bicycle, and pedestrian accesses are nonexistent on Defense Road, Wells Road, and Halifax Road.

3.12.2 Potential Impacts

The existing Ettrick train station served a little over 29,000 riders in 2014 (about 75-100 riders per day). The SEHSR study estimates a multimodal station would serve about 98,000 intercity rail passengers in 2025 (about 270-375 per day). The No Build Alternative would experience this increase in traffic along the local roads that currently provide access to Ettrick.

The existing transportation network at each Build Alternative location can generally accommodate new vehicular traffic generated from increased ridership. New through-lanes and other corridor-focused

[47] Chesterfield County, VA. *Ettrick VSU Special Area Plan.* Adopted by the Chesterfield County Board of Supervisors April 15, 2015. Page EV 25.

infrastructure projects are not necessary based on the introduction of a multimodal transportation center. While public transit (bus service) is not currently provided at two of the Build Alternative locations (Branders Bridge and Collier South), PAT intends to provide such service, regardless of the station location.

In comparing the distance to population centers and major activity generators like Fort Lee; the Boulevard, Branders Bridge and Ettrick Build Alternatives all provide sites that are closer in proximity than the Collier South Build Alternative, although Collier South does have easy access planned to Interstate facilities proposed as part of its concept.

Boulevard Build Alternative

The proposed vehicular access includes two entrances on US 1 – one signalized and one unsignalized. The primary entrance at the US 1/Newcastle Drive intersection is signalized with left- and right-turn lanes into the site. Adding a new full-access point north of US 1/Newcastle Drive would not meet VDOT's access management spacing standards. However, a right-in/right-out entrance as illustrated in Figure 4 may be a useful option north of the full access point, and would meet VDOT spacing requirements. Details would be finalized during the design phase and implemented by VDOT as part of the coordination process but are not currently evaluated as part of this proposed improvement and are not officially part of this Project.

Branders Bridge Build Alternative

One unsignalized entrance is proposed for vehicular access at Branders Bridge (Figure 5). Assuming a standard peak hour factor as commonly developed by FHWA of 10% of the average annual daily traffic occurs during the peak hour, an eastbound left-turn lane may be required from the new grade separated Branders Bridge Road proposed in the SEHSR Tier-II EIS. Adequate spacing exists in both directions to accommodate turn lanes and tapers. The new vehicular traffic generated by a multimodal station is not expected to trigger any transportation infrastructure modifications in the surrounding neighborhoods or commercial areas (widening, acquisitions, etc.).

Ettrick Build Alternative

Vehicular access would presumably be encouraged via the E. River Road/Granger Street intersection to Bessie Lane (Figure 6), which is how people access the Amtrak station today when arriving by automobile. From a traffic operations perspective, repaving of South (Ettrick) Street, Bessie Lane, and modifications within public right-of-way at E. River Road/Granger Street may be adequate rather than a complete realignment project. More visible signage from I-95 to the station would greatly improve the ease with which drivers locate the station as well as construction of improvements planned by Chesterfield County as part of the VSU / Ettrick Special Area Plan. The preceding access and signage improvements would not be part of the multimodal station area investment analyzed in this EA and they would be implemented separately as needed in coordination with VDOT and localities.

Collier South Build Alternative

Halifax Road carries about 2,400 vehicles per day, according to VDOT. The road has plenty of capacity for additional traffic generated by a multimodal station. The access road connection shown in Figure 8 assumes a new T-intersection at Halifax Road, just east of the railroad. This intersection would be designed to

accommodate projected vehicle traffic. Nearby intersections, including the ramps at I-85 on Squirrel Level Road, are adequate for new vehicular traffic generated by a multimodal station.

3.12.3 Mitigation

The following paragraphs describe potential modifications to the transportation network based on a new multimodal station. The Tri-Cities Area MPO has a published long-range transportation plan[48] that includes all modes of travel. While the paragraphs below discuss vehicular mitigation, any future transportation infrastructure projects should be designed to accommodate walking and bicycling. In addition, future bus transit access should be considered when designing stations that currently have limited or no transit connections. Provision of many of these improvements would be by either localities or VDOT.

Boulevard Build Alternative

According to VDOT traffic counts, about 22,000 vehicles per day travel along US 1 (Boulevard). The existing southbound right-turn lane and northbound left-turn lane should be adequate to handle the estimated ridership in 2025. Even if most of the passengers arrived by automobile during one peak period each day, operational details such as signal timing modifications would help with circulation. On-site driveway, such as a right-in, right-out entrance and parking design is the only proposed transportation mitigation for this location (Figure 4).

Branders Bridge Build Alternative

According to VDOT, about 5,600 vehicles per day travel along Branders Bridge Road. The concept for this station assumes construction of a grade separated Branders Bridge Road (labeled "new SEHSR road" on Figure 5). The majority of passengers will access this station from the east, meaning they turn right into the new station driveway. A right-turn lane for that movement is the only expected transportation mitigation in the public right-of-way. The existing turn lanes at the US 1/Brander's Bridge Road intersection meet VDOT requirements. No physical modifications would be required based on vehicular traffic.

Ettrick Build Alternative

Primary vehicular access will continue to enter the station via the E. River Road/Granger Street intersection to Bessie Lane (Figure 6). From a traffic operations perspective, repaving of South (Ettrick) Street, Bessie Lane, and modifications within public right-of-way at E. River Road/Granger Street that are in the Ettrick Special Area Plan should be adequate to accommodate additional vehicular access. Bessie Lane is a narrow street through a small commercial area and does not have curb and gutter. However, given the projected low traffic volume (up to a few hundred trips per day), it should not require reconstruction beyond standard paving maintenance. If determined later that the E. River Road/Granger Street intersection should be modified, a single-lane roundabout could be evaluated. A roundabout is VDOT's preferred at-grade intersection (over a traffic signal).

[48] Adopted June 2012, Available on website at: http://www.craterpdc.org/transportation/documents

Collier South Build Alternative

The station concept for Collier South assumes a new access road connecting to Halifax Road just east of the railroad (See Figure 8). Because Halifax Road is elevated over the existing rail line, the new access road will be designed to accommodate this elevated access point and turning movements. Physical modifications to adjacent roadways and intersections will not be necessary given the projected low traffic volumes generated by a new multimodal station at this location.

3.13 LAND USE AND ZONING

Land use and zoning address the manner in which properties are, and can be, used and developed. Land use and zoning were evaluated by reviewing land use information for the Study Area, including USGS 7.5 minute quadrangle maps, aerial photographs, area zoning maps, and comprehensive plans.

3.13.1 Existing and Future Conditions

Chesterfield County

The No-Build Alternative (existing Ettrick station), the Branders Bridge Build Alternative, and the proposed Build Alternative at Ettrick are within Chesterfield County.

Branders Bridge Build Alternative

The Branders Bridge Build Alternative is located on two parcels under one single private owner with a total area of just over 30 acres. Discussions with the new property owner reveal the owner's plans for a farming operation and a new home on the site. The site is currently undeveloped and presently zoned agricultural. The northern portion of the Branders Bridge Build Alternative site was once a sand mine, but is no longer in operation. The site is bounded by very low density residential use (zoned R-7) to the west and agricultural use to the south in Chesterfield County. To the east of the site is the boundary for the City of Colonial Heights, where lower density residential (zoned RL) is found to the northwest. The area along the Colonial Heights boundary with Chesterfield County immediately north and south of Branders Bridge Road is zoned high and medium density residential, respectively. At this location, the Branders Bridge Apartment community lies just within a ¼ mile radius from the station site. Within a ½ mile radius from this location, the commercial corridor along the Boulevard can be reached. No pedestrian facilities exist along Branders Bridge Road in the vicinity of this location. The county's Comprehensive Plan identifies the area for suburban residential development.[49]

No Build Alternative (and Ettrick Build Alternative) Site

The No-Build Alternative and the Ettrick Build Alternative site are within a single, 9.5 acre parcel owned by CSXT, a portion of which is leased to Amtrak for the station and the platform. The site has been a railroad

[49] County of Chesterfield, VA. *Moving Forward . . . The Comprehensive Plan for Chesterfield County*. "Chapter 10: The Land Use Plan. Adopted by the Chesterfield County Board of Supervisors October 24, 2012. Amended by the Board of Supervisors April 15, 2015. Pages 99 and 112.

station since at least 1942, with construction of the first Atlantic Coast Line Depot. Only about 40% of the parcel has been developed for building/parking purposes. The current station location is bounded by low-density residential development east of the tracks, with Ettrick Park and a commercial/retail plaza opposite the tracks to the west. The existing parcel is zoned Light Industrial (I-1), with adjacent Single Family (R-7) residential and General Business (C-5) commercial zoning. The closest available pedestrian crossing of the tracks is more than ¼ mile from the station, using the River Road (VA 36) overpass and sidewalks. Field observation indicates some evidence of informal and illegal pedestrian paths across the tracks, which offer more direct access to areas west of the station. Within ¼ mile radii of the station, a new VSU convocation center, with seating for 7,500, is expected to open in 2015. Within ½ mile of the station, pedestrians traveling east can reach the western portion of VSU's campus and higher density, off-campus housing can be found just beyond the commercial/retail plaza across the tracks and due west from the station. Sidewalk connections to/from the station are not present.

In April 2015, Chesterfield County amended its Comprehensive Plan by adopting the Ettrick VSU Special Area Plan.[50] The plan describes the current use of the site as follows:

> "The Ettrick Train Station is owned by the CSXT railroad and the current facility was built in 1955. Structures on the site include the active station building, the railroad platform, and warehouse. The station serves the Tri-Cities region and beyond by providing a local stop for passenger rail service to points north and south along the I-95 corridor and now has new service to the east connecting with Norfolk. This station is centrally located in the Tri-Cities region with over 100,000 people living within six (6) miles of the station. Currently the train station serves approximately 28,000 riders annually. Since 2002, ridership has increased by about 70%. Ridership is expected to continue to increase with the continuation of the new Norfolk Rail Service, and with eventual implementation of Southeast High Speed Rail.
>
> The Ettrick Train Station is a hub for regional and nationwide rail destinations. The station is less than a mile from VSU and provides an important transportation link for the students. The VSU student body is predominantly composed of students whose families live within convenient access to the trains operated by AMTRAK along the eastern seaboard.
>
> The station is also located less than eight (8) miles from Fort Lee. Fort Lee has undergone a massive expansion with the Base Realignment and Closure Act and has a daily population of about 34,000. The close proximity of the train station offers a convenient transportation option to military personnel and visitors to Fort Lee."[51]

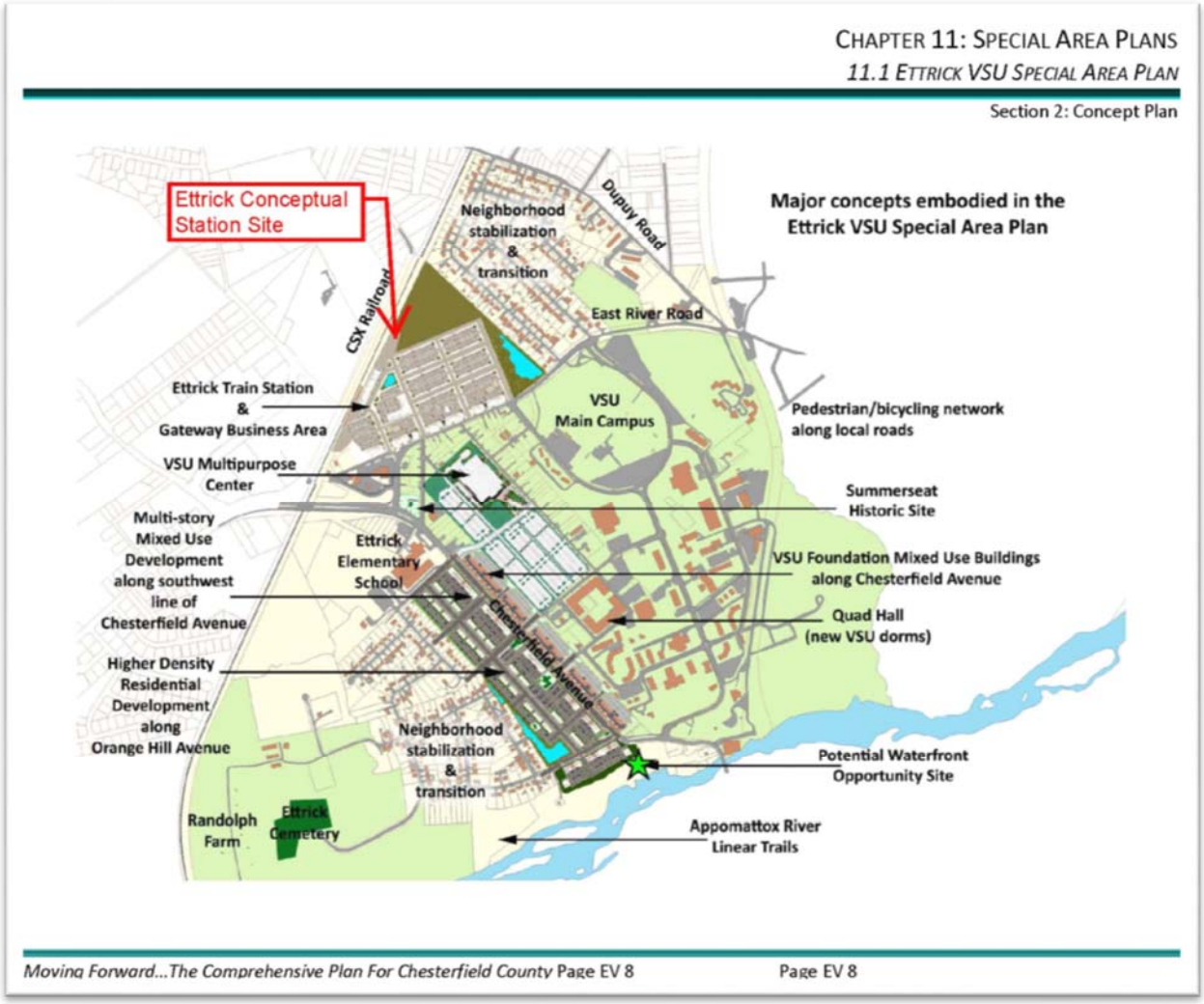
Chesterfield County recognizes that expansion of high speed rail service at the Ettrick location will have a positive impact on economic development in the area. Chesterfield also recognizes that the Ettrick area has great potential for reinvestment and revitalization. The county's concept plan for the Ettrick VSU Special

[50] Chesterfield County. *Ettrick VSU Special Area Plan*. "Section 5: Infrastructure." Adopted by the Chesterfield County Board of Supervisors on April 15, 2015. Pages EV 24 and 25.

[51] Ibid. Pages EV 24 and 25. *Note: proximity to Fort Lee would also be benefit of Branders Bridge and Boulevard Build Alternatives.*

Area is provided in Figure 13. Future land use around the existing or proposed Ettrick Station will focus on economic development that supports VSU, area neighborhoods, and rail passengers. The county is working with CSXT and VSU staff to provide attractive and enhanced multimodal access to the station, including bicycle and pedestrian facilities. These improvements have not been implemented yet, but have been identified as investments in regional and local plans and funding, while not yet identified, is being sought to construct them.

Figure 13: Ettrick/VSU Special Area Plan



Source: Chesterfield County. Moving Forward . . . The Comprehensive Plan for Chesterfield County. April 15, 2015.

City of Colonial Heights (Boulevard Build Alternative)

The Boulevard Build Alternative is located on two, privately-owned parcels predominantly occupied by the ADEC Shopping Center with direct access to Boulevard (US 1). The combined parcel size is approximately 9 acres. More than half of the parcel is a paved parking surface. Three businesses operate in one, single-story

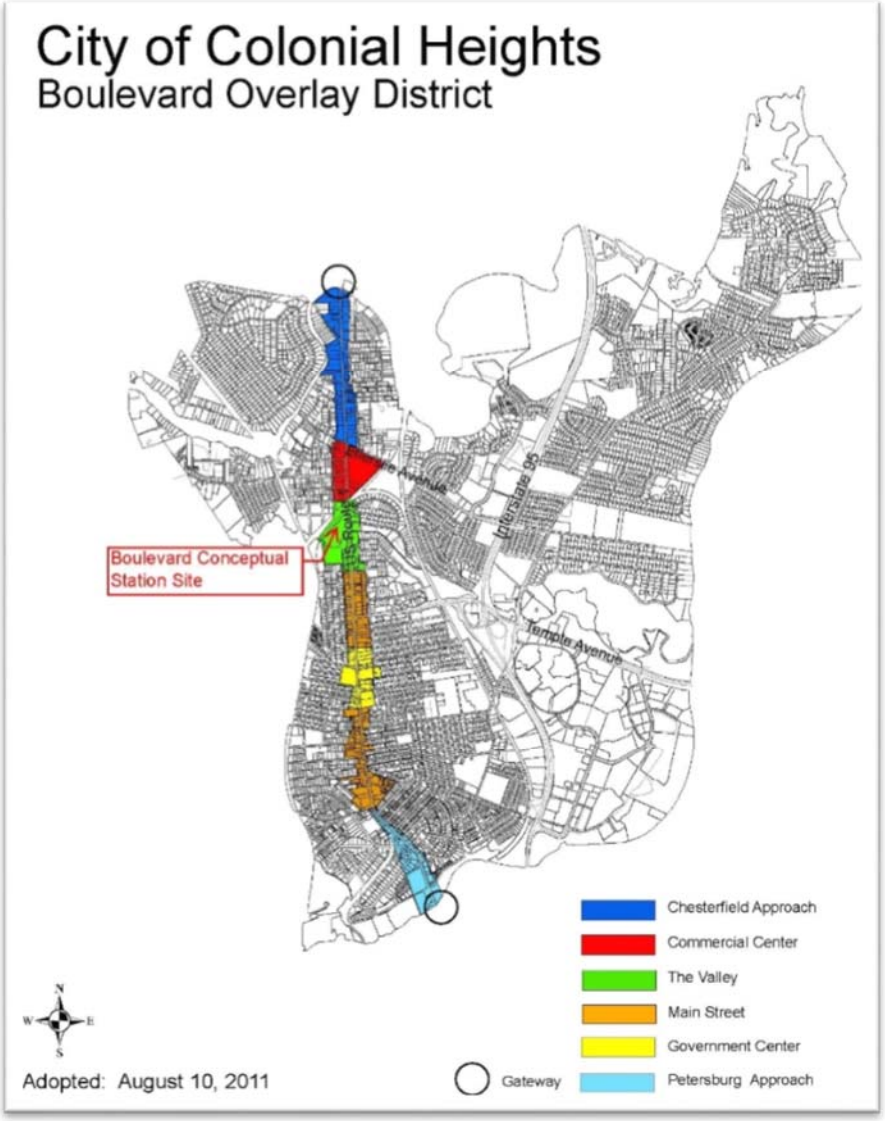
structure. An ancillary self-service ice vending business is located in the northeast corner of this property. The site is bounded by commercial uses across and adjacent to Boulevard. Northwest of the site, on the opposite side of the tracks, is the Lakeview Elementary School. The existing parcels are zoned Boulevard Business (BB), with low-density residential areas (RL) in close proximity. No sidewalks are on the property, but a narrow pedestrian walkway connects under the railroad overpass along the west side of the Boulevard, just north of this location. A former and now abandoned railroad right-of-way enters into the current and active rail corridor 500 feet northeast of this site. Undeveloped wooded land is on the western side of this parcel. Higher density rental townhomes (Old Town Creek Apartments) are located within ¼ mile radius and east of this location. A large, auto-oriented retail plaza (Colonial Square) is within ½ mile radius, north of this location. As shown on Figure 14, the city identifies this portion of the corridor as "The Valley" subarea overlay district within the Boulevard Commercial Strategy Area in its draft Colonial Heights Comprehensive Plan.[52] The Valley subarea is intended to address site constraints, such as location within a 100-year floodplain, Oldtown Creek, and existing development. The plan also calls for improving pedestrian and vehicle circulation. The plan states:

> "The intent of a Boulevard Commercial Strategy Area is to provide the community with convenient commercial uses and services in well-designed, safe, and attractive settings and to create a shopping and service district that makes positive contributions to the City's image and economy. The intent is to focus and concentrate retail, commercial, and service activity within a clearly distinguishable area. It is also intended to prevent negative commercial encroachment into residential neighborhoods. In developing this district, an emphasis should be put on having a strong pedestrian orientation, buildings that front on the street with minimal setbacks and limited off-street parking. Complete street concepts such as landscaping, sidewalks and pedestrian level lighting should be incorporated to help create a sense of place."[32]

[52] City of Colonial Heights. *Colonial Heights Comprehensive Plan - Draft*. June 2014. Page 50.

[32] Ibid.

Figure 14: Colonial Heights – Boulevard Overlay Plan



Source: City of Colonial Heights. Colonial Heights Comprehensive Plan - Draft. June 2014.

City of Petersburg (Collier South Build Alternative)

The Collier South Build Alternative site encompasses two parcels owned by the City of Petersburg. The total area owned by the city is over 180 acres. The site is bounded by an existing industrial use across the tracks to the west (International Paper) and is otherwise completely located in undeveloped woodlands and fields. Several large-lot residential properties are to the northeast of this location. Other than the land uses previously identified, all additional land is undeveloped within ¼ mile of this location. Within a ½ mile radius, higher density residential at the JSOJ Apartments (Halifax and Boydton Plank Road) and the Exit 65 interchange on I-85 can be found to the northwest of this location. Unimproved roads currently provide the

only access into this site. No pedestrian amenities are present either within the site or along adjacent roads. In its draft Comprehensive Plan, the City of Petersburg calls for a combination of medium to high density neighborhoods and mixed use/high density commercial development as the future land use for the Collier South site (Figure 15).[53] The city's plan states:

> "Future land use policies should encourage growth which is urban in nature and reclaims the City of Petersburg's status as a central location for regional industry and trade. Future land use policies should also encourage development that results in a sustainable pattern of land use which creates neighborhood centers and allows for multimodal transportation options. This will involve working with developers and redevelopment to move away from the suburban separation of uses and create neighborhoods with mixed amenities that benefit mixed-income neighborhoods."[33]

3.13.2 Consistency with Existing and Future Land Use

The No Build Alternative consists of leaving the Ettrick station unimproved. Since this would not be a change in land use it would be consistent with existing land use, but not consistent with the future vision for the station area as defined in the Ettrick VSU Special Area Plan which envisions an improved station.

The Boulevard Build Alternative in Colonial Heights is consistent given that the area is already developed and the city plans to improve economic conditions and multimodal access along the Boulevard Corridor.

Since Chesterfield County's plans to maintain the Branders Bridge area for existing agricultural or future suburban low density residential use, construction of the Branders Bridge Build Alternative and a new station is not consistent with future land use.

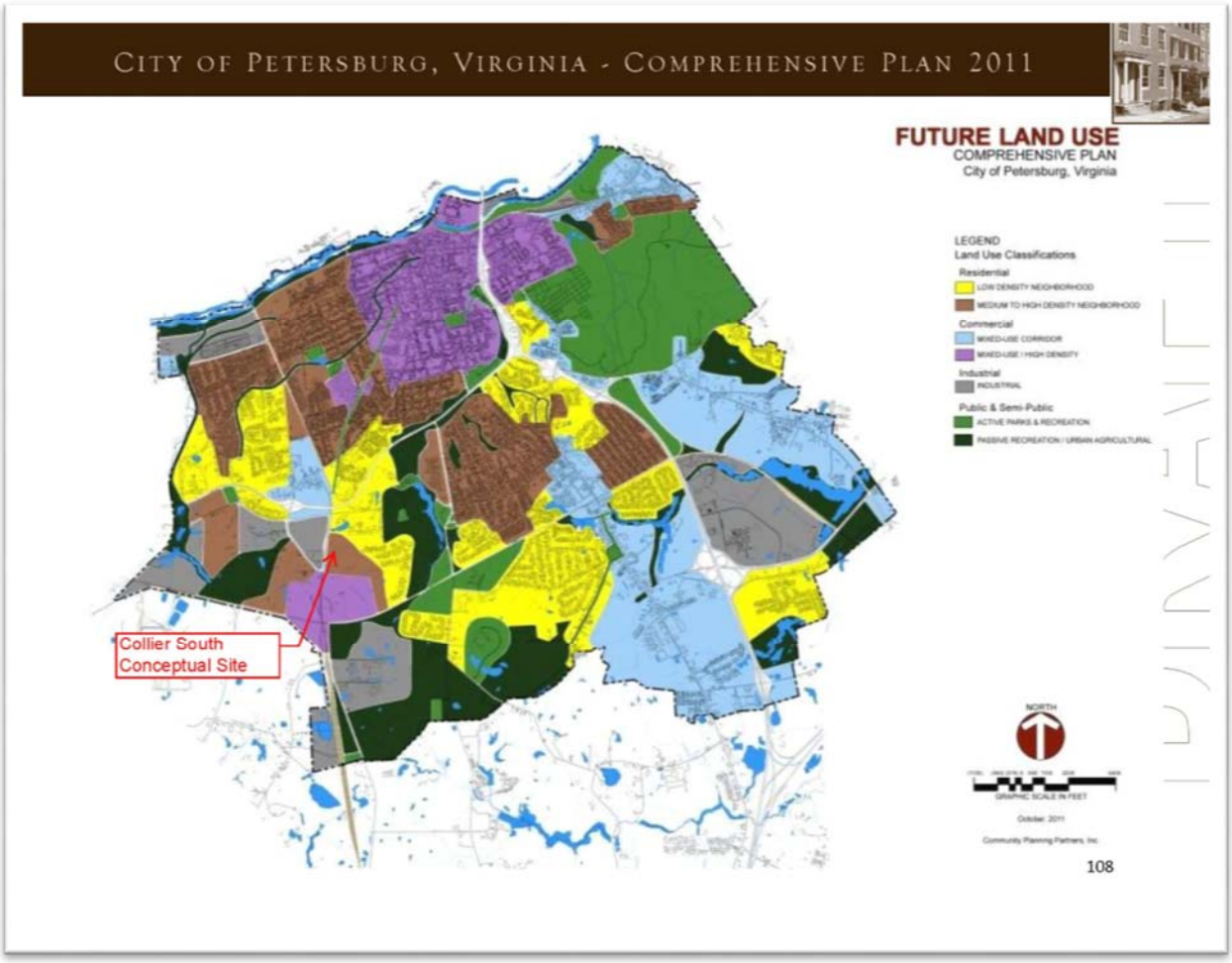
Of the remaining sites, the Ettrick Build Alternative is the most consistent given Chesterfield County's adopted Ettrick VSU Special Area Plan.

While currently vacant, use of the City of Petersburg's property for the Collier South Build Alternative is consistent with future land use plans for medium to high density neighborhoods and mixed-use commercial development. However, unlike the Ettrick and Boulevard Build Alternatives where infrastructure and population area already present, the undeveloped Collier South site lacks both. For potential TOD sites where public infrastructure (e.g. water, stormwater, sanitation, electricity, sidewalks) or road networks are not currently in place, upfront development costs may prove challenging to site development or redevelopment.

[53] City of Petersburg. *City of Petersburg – Comprehensive Plan 2011*. "Section III: Focused Issues. Chapter 8: Future Land Use". Draft, 2/9/2012. Page 108.

[33] Ibid.

Figure 15: City of Petersburg – Future Land Use Plan



Source: City of Petersburg, VA. Comprehensive Plan 2011.

3.14 UTILITIES

3.14.1 Existing Conditions

Utilities run along the existing railroad right-of-way at all four potential station locations, including fiber optic cables and power lines. Site specific conditions are described below.

Boulevard Build Alternative

Fiber optic cable and a sewer line run parallel to the north side of the track. An electrical line crosses perpendicular to the track. The Build Alternative is on the south side of the track and has electrical connections.

Branders Bridge Build Alternative

Fiber optic and electrical lines cross perpendicular to the railroad track and utility sheds with electricity are on either side of the track. These lines are needed as they operate the crossing gates for the at-grade railroad crossing of Branders Bridge Road. Based on Chesterfield County GIS data, the parcel has connections for electricity, as well as a water well and septic connection. Water and sewer connections are available at a housing development approximately 700 feet west of the station site; these connections can be extended if needed.

Ettrick Build Alternative

Fiber optic cable runs parallel to the west side of the track. Electrical lines run to the east of the tracks and may need to be relocated to construct the station. Based on Chesterfield County's GIS data, connections for electricity, water, sewer, and gas are available for the site.

Collier South Build Alternative

Fiber optic cable runs parallel to the east side of the track. Underground electrical connections are available on both sides of the tracks. There is a fire hydrant on the west side of the tracks, indicating that water is available in that area, but no hydrants exist east of the tracks.

3.14.2 Potential Impacts

Utility costs and relocations are included in the cost estimates in Section 2.4. The Boulevard and Ettrick Build Alternatives have all of the utilities required to operate a station (fiber optic, electricity, water, and sewer). For the Branders Bridge Build Alternative, water and sewer utilities could be extended to serve the site; other required utilities are available. The Collier South Build Alternative has fiber optic and electrical connections; but not water and sewer availability yet east of the tracks where the proposed station and any development would be located. Once the preferred alternative is selected, a more complete utilities estimate, including utility relocations, will be developed based on final designs for the Project.

3.14.3 Mitigation

No mitigation for utilities is anticipated.

3.15 PROPERTY ACQUISITIONS AND RELOCATIONS

3.15.1 Existing Conditions

The No-Build Alternative and the Ettrick Build Alternative are on a 9.5 acre parcel owned by CSXT. Both the Boulevard and Branders Bridge Build Alternatives are on privately owned property, approximately 9 acres and 30 acres in size, respectively. The Collier South Build Alternative consists of two parcels totaling 180 acres, both of which are owned by the City of Petersburg. The No-Build Alternative and the Ettrick Build Alternative do not require additional land acquisition. As noted above, the Collier South Build Alternative would be located on publicly owned land so no private property or relocations would be required.

3.15.2 Potential Impacts

Boulevard Build Alternative

The Boulevard Build Alternative requires acquisition of a portion of private property at the ADAC Shopping Center to construct the station within the existing parking area. Privately-owned property may also need to be acquired from the parcel on the eastern side of Boulevard and adjacent to the rail line. The parcel, identified as Towne Centre and leased by Harrison & Barker, houses six small business offices. An acquisition at this location would ultimately be contingent upon the alignment of the new SEHSR track to be placed southeast of the station platform, and design solutions may minimize, if not eliminate, the need for acquisition during subsequent engineering phases for SEHSR.

Branders Bridge Build Alternative

The Branders Bridge Build Alternative requires acquisition of two parcels in private ownership. The current owner is actively pursuing development of this land. No site plans for this development have been made available to Chesterfield County officials; therefore, specific impacts to future structures cannot be assessed. Property is needed south of this site to accommodate the minimum 1,000 foot center platform which would extend under a new Branders Bridge Road overpass.[54] The acquisition appears to be limited to the existing CSXT-owned rail corridor and not the adjacent residential parcel.

Ettrick Build Alternative

Improvements at the Ettrick Build Alternative, such as additional parking, platform extensions/additions, and building footprint modifications to meet anticipated future demand could reasonably be accommodated within the existing CSXT-owned parcel, although additional coordination with CSXT is necessary. As noted previously, only a portion of the site is currently leased to Amtrak for the station, so terms for new property would need to be negotiated with CSXT.

Collier South Build Alternative

The Collier South Build Alternative would be located on City of Petersburg property. The platform, parking area, station, and access road could be accommodated within this property. A portion of the land owned by the City of Petersburg is located within the boundaries of historic battlefields, so additional coordination would be required under Section 4(f) of the Department of Transportation Act and to meet the separate requirements of Section 106 of the National Historic Preservation Act regarding use of historic properties. These impacts are analyzed in the cultural resources portion of this document.

3.15.3 Mitigation

For either the Boulevard or Branders Bridge site, property acquisition would be conducted following the Uniform Relocation Assistance and Real Property Acquisition Act of 1970 (Uniform Relocation Act) (42 USC 4601-4655), as amended. This applies to all federal or federally assisted activities that involve the

[54] The new Branders Bridge Road overpass is an improvement proposed by the SEHSR Tier-II EIS. It will eliminate the current at-grade crossing of Branders Bridge Road and the railroad.

acquisition of real property and ensures that fair and equitable compensatory mitigation will be implemented. The Relocation Act also helps to ensure persons will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole.

When an agreeable price for the property owner cannot be reached, the legal system is used to ensure a fair market price for the property owner. In all cases the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act) will be applied as directed by Federal law.

3.16 SOCIOECONOMIC RESOURCES

3.16.1 Demographics

Demographics are based on the 2000 and 2010 U.S. Census data and American Community Survey (ACS) 5-Year Summary File estimates. The data is used to examine population and demographic data, including race, English-speaking ability, age, income, and poverty. For this Project, the Demographic Study Area (DSA) was defined as the census block groups within 0.5 mile of the parcels containing the station alternative.

Table 13 shows the population change between 2000 and 2010 in the DSA, individual Census Tracts and Block Groups in the DSA, and the city or county in which the DSA is located. For the Boulevard and Branders Bridge Build Alternatives, population growth in the DSAs are similar at 4.2% and 4.9%, respectively. Population growth in the DSAs of the No-Build Alternative and Ettrick Build Alternative is approximately 11%. The population in the Collier South Build Alternative DSA has shrunk by approximately 14%.[55, 56]

3.16.2 Race and Minority Population

Minorities are defined as all race/ethnicity categories except non-Hispanic, white persons. Table 14 and Table 15 present the racial and ethnic breakdowns, respectively, in the DSA, individual Census Tracts and Block Groups in the DSA, and the city or county in which the DSA is located. The minority percentages in the DSAs range from 38.3% for the Boulevard Build Alternative to 78.4% for the Collier South Build Alternative.[57]

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[55] U.S. Census Bureau. 2000. United State Census 2000. Online data. U.S. Department of Commerce, U.S. Census Bureau, Washington, DC. Available online: http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t# (Accessed May 2015).

[56] U.S. Census Bureau. 2010. United States Census 2010. Online data. U.S. Department of Commerce, U.S. Census Bureau, Washington, DC. Available online: http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t# (Accessed May 2015).

[57] U.S. Census Bureau. 2014. 2009-2013American Community Survey 5-Year Estimates. Online data. U.S. Department of Commerce, U.S. Census Bureau, Washington, DC. Available online: http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t# (Accessed May 2015).

3.16.3 Limited English Proficiency

Limited English Proficiency (LEP) as defined by Executive Order 13166 occurs when a person or population speaks English less than "very well." LEP rates vary among the four alternatives and range from no LEP in the Collier South DSA to 5% LEP in the Branders Bridge DSA (Table 16). In the DSAs with LEP populations, Spanish is the most common language for individuals with LEP, followed by Asian/Pacific Islander and Indo-European languages. [58]

Table 13: Population Changes in the Demographic Study Area (DSA) – 2000 to 2010

Build Alternatives	2000 Population (# Persons)	2010 Population (# Persons)	Percent Change (%)
Colonial Heights, VA	16,897	17,411	3.0
Boulevard DSA	11,194	11,666	4.2
CT 830400, BG 1[1] (contains Boulevard site)	1,976	1,811	-8.3
CT 100600, BG 1	756	817	8.1
CT 100701, BG 1	1,667	1,790	7.4
CT 830100, BG 3	792	756	-4.5
CT 830200, BG 1	1,884	2,251	19.5
CT 830200, BG 2	1,205	1,274	5.7
CT 830300, BG 2	1,176	1,160	-1.4
CT 830500, BG 1	1,738	1,807	4.0
Chesterfield County, VA	259,903	316,236	21.7
Branders Bridge DSA	10,402	10,910	4.9
CT 100600, BG 1 (contains Branders Bridge site)	756	817	8.1
CT 100701, BG 1	1,667	1,790	7.4
CT 830200, BG 1	1,884	2,251	19.5
CT 830200, BG2	1,205	1,274	5.7
CT 830300, BG 2	1,176	1,160	-1.4
CT 830400, BG 1	1,976	1,811	-8.4
CT 830500, BG 1	1,738	1,807	4.0
Ettrick DSA	9,126	10,091	10.6
CT 100600, BG 1 (contains Ettrick site)	756	817	8.1
CT 100600, BG 2	2,112	2,495	18.1
CT 100600, BG 3	596	581	-2.5
CT 100701, BG 1	1,667	1,790	7.4
CT 100701, BG 2	958	1,498	56.4
CT 100701, BG 4	1,061	1,099	3.6
CT 830400, BG 1	1,976	1,811	-8.4

[58] U.S. Census Bureau. 2014. 2009-2013American Community Survey 5-Year Estimates. Online data. U.S. Department of Commerce, U.S. Census Bureau, Washington, DC. Available online: http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t# (Accessed May 2015).

Build Alternatives	2000 Population (# Persons)	2010 Population (# Persons)	Percent Change (%)
No-Build[2] DSA	9,126	10,091	10.6
Petersburg, VA	33,740	32,420	-3.9
Collier South DSA	3,411	2,940	-13.8
CT 811000, BG 1 (contains Collier South site)	2,110	2,019	-4.3
CT 810500, BG 1	1,301	921	-29.2

Data Source: U.S. Census Bureau, 2000; 2010.

Notes:

[1] CT = Census Tract; BG = Block Group

[2] The DSA for the No-Build Alternative is the same as the DSA for the Ettrick site and contains the same Census Tracts and Block Groups. For the sake of brevity, Block Group-level data are not repeated.

Table 14: Race in the Demographic Study Area (DSA)

Build Alternatives	Total Pop. (SE)	White		Black or African American		American Indian/Alaska Native		Asian		Native Hawaiian/ Pacific Islander		Other Race		Two or More Races	
		# (SE)	%	# (SE)	%	# (SE)	%	# (SE)	%	# (SE)	%	# (SE)	%	# (SE)	%
Colonial Heights, VA	17,481 (NA)	14,170 (131)	81.1	2,337 (80)	13.4	57 (57)	0.3	584 (43)	3.3	0 (12)	0	195 (116)	1.1	138 (53)	0.8
Boulevard DSA	11,697 (521)	7,603 (453)	65.0	3,433 (352)	29.3	0 (7)	0	386 (110)	3.3	0 (7)	0	188 (122)	1.6	87 (39)	0.7
CT 830400, BG 1[3]	1,817 (238)	1,524 (235)	83.9	210 (80)	11.6	0 (7)	0	0 (7)	0	0 (7)	0	83 (71)	4.6	0 (7)	0
CT 100600, BG 1	1,043 (155)	124 (42)	11.9	919 (160)	88.1	0 (7)	0	0 (7)	0	0 (7)	0	0 (7)	0	0 (7)	0
CT 100701, BG 1	1,760 (236)	807 (204)	45.9	941 (195)	53.5	0 (7)	0	0 (7)	0	0 (7)	0	0 (7)	0	12 (13)	0.7
CT 830100, BG 3	715 (111)	673 (108)	94.1	35 (33)	4.9	0 (7)	0	7 (8)	1.0	0 (7)	0	0 (7)	0	0 (7)	0
CT 830200, BG 1	1,980 (162)	1,391 (164)	70.3	369 (114)	18.6	0 (7)	0	184 (59)	9.3	0 (7)	0	0 (7)	0	36 (28)	1.8
CT 830200, BG 2	1,042 (148)	854 (120)	82.0	146 (88)	14.0	0 (7)	0	12 (13)	1.2	0 (7)	0	0 (7)	0	30 (21)	2.9
CT 830300, BG 2	1,602 (180)	761 (122)	47.5	556 (146)	34.7	0 (7)	0	171 (91)	10.7	0 (7)	0	105 (99)	6.6	9 (6)	0.6
CT 830500, BG 1	1,738 (205)	1,469 (196)	84.5	257 (103)	14.8	0 (7)	0	12 (12)	0.7	0 (7)	0	0 (7)	0	0 (7)	0
Chesterfield County, VA	320,430 (NA)	222,794 (595)	69.5	72,091 (415)	22.5	973 (165)	0.3	11,050 (236)	3.4	133 (47)	<0.1	5,631 (591)	1.8	7,758 (537	2.4
Branders Bridge DSA	10,982 (509)	6,930 (440)	63.1	3,398 (350)	30.9	0 (7)	0	379 (110)	3.5	0 (7)	0	188 (122)	1.7	87 (39)	0.8
CT 100600, BG 1[3]	1,043 (155)	124 (42)	11.9	919 (160)	88.1	0 (7)	0	0 (7)	0	0 (7)	0	0 (7)	0	0 (7)	0
CT 100701, BG 1	1,760 (236)	807 (204)	45.9	941 (195)	53.5	0 (7)	0	0 (7)	0	0 (7)	0	0 (7)	0	12 (13)	0.7

Build Alternatives	Total Pop. (SE)	White		Black or African American		American Indian/Alaska Native		Asian		Native Hawaiian/ Pacific Islander		Other Race		Two or More Races	
		# (SE)	%	# (SE)	%	# (SE)	%	# (SE)	%	# (SE)	%	# (SE)	%	# (SE)	%
CT 830200, BG 1	1,980 (162)	1,391 (164)	70.3	369 (114)	18.6	0 (7)	0	184 (59)	9.3	0 (7)	0	0 (7)	0	36 (28)	1.8
CT 830200, BG2	1,042 (148)	854 (120)	82.0	146 (88)	14.0	0 (7)	0	12 (13)	1.2	0 (7)	0	0 (7)	0	30 (21)	2.9
CT 830300, BG 2	1,602 (180)	761 (122)	47.5	556 (146)	34.7	0 (7)	0	171 (91)	10.7	0 (7)	0	105 (99)	6.6	9 (6)	0.6
CT 830400, BG 1	1,817 (238)	1,524 (235)	83.9	210 (80)	11.6	0 (7)	0	0 (7)	0	0 (7)	0	83 (71)	4.6	0 (7)	0
CT 830500, BG 1	1,738 (205)	1,469 (196)	84.5	257 (103)	14.8	0 (7)	0	12 (12)	0.7	0 (7)	0	0 (7)	0	0 (7)	0
Ettrick DSA	9,575 (536)	3,774 (372)	39.4	5,649 (432)	59.0	0 (7)	0	15 (17)	0.2	0 (7)	0	114 (76)	1.2	23 (20)	0.2
CT 100600, BG 1[3]	1,043 (155)	124 (42)	11.9	919 (160)	88.1	0 (7)	0	0 (7)	0	0 (7)	0	0 (7)	0	0 (7)	0
CT 100600, BG 2	2,194 (238)	136 (52)	6.2	2,058 (236)	93.8	0 (7)	0	0 (7)	0	0 (7)	0	0 (7)	0	0 (7)	0
CT 100600, BG 3	390 (81)	82 (24)	21.0	293 (80)	75.1	0 (7)	0	15 (15)	3.8	0 (7)	0	0 (7)	0	0 (7)	0
CT 100701, BG 1	1,760 (236)	807 (204)	45.9	941 (195)	53.5	0 (7)	0	0 (7)	0	0 (7)	0	0 (7)	0	12 (13)	0.7
CT 100701, BG 2	1,448 (236)	599 (156)	41.4	807 (189)	55.7	0 (7)	0	0 (7)	0	0 (7)	0	31 (26)	2.1	11 (14)	0.8
CT 100701, BG 4	923 (178)	502 (111)	54.4	421 (137)	45.6	0 (7)	0	0 (7)	0	0 (7)	0	0 (7)	0	0 (7)	0
CT 830400, BG 1	1,817 (238)	1,524 (235)	83.9	210 (80)	11.6	0 (7)	0	0 (7)	0	0 (7)	0	83 (71)	4.6	0 (7)	0
No-Build[4] DSA	9,575 (536)	3,774 (372)	39.4	5,649 (432)	59.0	0 (7)	0	15 (17)	0.2	0 (7)	0	114 (76)	1.2	23 (20)	0.2
Petersburg, VA	32,326 (NA)	5,924 (84)	18.3	25,336 (136)	78.4	44 (27)	0.1	281 (44)	0.9	10 (12)	<0.1	190 (57)	0.6	541 (123)	1.7
Collier South DSA	2,804 (378)	622 (153)	22.2	2,099 (319)	74.9	0 (7)	0	76 (56)	2.7	0 (7)	0	0 (7)	0	7 (10)	0.2

Build Alternatives	Total Pop. (SE)	White		Black or African American		American Indian/Alaska Native		Asian		Native Hawaiian/ Pacific Islander		Other Race		Two or More Races	
		# (SE)	%	# (SE)	%	# (SE)	%	# (SE)	%	# (SE)	%	# (SE)	%	# (SE)	%
CT 811000, BG 1[3]	1,899 (330)	547 (148)	28.8	1,269 (263)	66.8	0 (7)	0	76 (56)	4.0	0 (7)	0	0 (7)	0	7 (7)	0.4
CT 810500, BG 1	905 (185)	75 (38)	8.3	830 (181)	91.7	0 (7)	0	0 (7)	0	0 (7)	0	0 (7)	0	0 (7)	0

Data Source: U.S. Census Bureau, 2014a.

Notes:

[1] Pop. = Population; SE = Standard Error; CT = Census Tract; BG = Block Group; NA = Not Available

[2] Standard error was calculated based on U.S. Census Bureau, 2014b.

[3] The parcel on which the alternative would be built is located within this Census Tract and Block Group.

[4] The DSA for the No-Build Alternative is the same as the DSA for the Ettrick site and contains the same Census Tracts and Block Groups. For the sake of brevity, Block Group-level data are not repeated.

Table 15: Ethnicity and Minority Populations in the Demographic Study Area (DSA)

Build Alternatives	Total Population (SE)	Hispanic of Latino		White Alone		Minority	
		# (SE)	%	# (SE)	%	#	%
Colonial Heights, VA	17,481 (NA)	745 (NA)	4.3	13,843 (12)	79.2	3636	20.8
Boulevard DSA	11,697 (521)	666 (208)	5.7	7,218 (436)	61.7	4480	38.3
CT 830400, BG 1[4]	1,817 (238)	111 (73)	6.1	1,496 (236)	82.3	322	17.7
CT 100600, BG 1	1,043 (155)	6 (5)	0.6	118 (42)	11.3	925	88.7
CT 100701, BG 1	1,760 (236)	162 (92)	9.2	674 (202)	38.3	1086	61.7
CT 830100, BG 3	715 (111)	0 (7)	0	673 (108)	94.1	42	5.9
CT 830200, BG 1	1,980 (162)	0 (7)	0	1,391 (164)	70.3	588	29.7
CT 830200, BG 2	1,042 (148)	7 (8)	0.7	854 (120)	82	188	18
CT 830300, BG 2	1,602 (180)	140 (106)	8.7	743 (119)	46.4	859	53.6
CT 830500, BG 1	1,738 (205)	240 (134)	13.8	1,269 (157)	73	469	27
Chesterfield County, VA	320,430 (NA)	23,612 (NA)	7.4	207,449 (148)	64.7	113112	35.3
Branders Bridge DSA	10,982 (509)	666 (208)	6.1	6,545 (422)	59.6	4437	40.4
CT 100600, BG 1[4]	1,043 (155)	6 (5)	0.6	118 (42)	11.3	925	88.7
CT 100701, BG 1	1,760 (236)	162 (92)	9.2	674 (202)	38.3	1086	61.7
CT 830200, BG 1	1,980 (162)	0 (7)	0	1,391 (164)	70.3	588	29.7
CT 830200, BG 2	1,042 (148)	7 (8)	0.7	854 (120)	82	188	18
CT 830300, BG 2	1,602 (180)	140 (106)	8.7	743 (119)	46.4	859	53.6
CT 830400, BG 1	1,817 (238)	111 (73)	6.1	1,496 (236)	82.3	322	17.7
CT 830500, BG 1	1,738 (205)	240 (134)	13.8	1,269 (157)	73	469	27
Ettrick DSA	9,575 (536)	490 (145)	5.1	3,607 (372)	37.7	5965	62.3
CT 100600, BG 1[4]	1,043 (155)	6 (5)	0.6	118 (42)	11.3	925	88.7
CT 100600, BG 2	2,194 (238)	119 (52)	5.4	136 (52)	6.2	2058	93.8
CT 100600, BG 3	390 (81)	0 (7)	0	82 (24)	21	308	79
CT 100701, BG 1	1,760 (236)	162 (92)	9.2	674 (202)	38.3	1086	61.7
CT 100701, BG 2	1,448 (236)	23 (27)	1.6	599 (156)	41.4	849	58.6
CT 100701, BG 4	923 (178)	69 (62)	7.5	502 (111)	41.4	541	58.6
CT 830400, BG 1	1,817 (238)	111 (73)	6.1	1,496 (236)	82.3	322	17.7
No-Build[5] DSA	9,575 (536)	490 (145)	5.1	3,607 (372)	37.7	5965	62.3

Build Alternatives	Total Population (SE)	Hispanic of Latino		White Alone		Minority	
		# (SE)	%	# (SE)	%	#	%
Petersburg, VA	32,326 (NA)	1,272 (NA)	3.9	4,984 (20)	15.4	27348	84.6
Collier South DSA	2,804 (378)	17 (18)	0.6	605 (152)	21.6	2198	78.4
CT 811000, BG 1[4]	1,899 (330)	17 (17)	0.9	530 (147)	27.9	1369	72.1
CT 810500, BG 1	905 (185)	0 (7)	0	75 (38)	8.3	830	91.7

Data Source: U.S. Census Bureau, 2014a.

Notes:

[1] SE = Standard Error; CT = Census Tract; BG = Block Group; NA = Not Available
[2] Standard error was calculated based on U.S. Census Bureau, 2014b.
[3] All Minorities includes both non-white races and Hispanic/Latino ethnicity.
[4] The parcel on which the alternative would be built is located within this Census Tract and Block Group.
[5] The DSA for the No-Build Alternative is the same as the DSA for the Ettrick site and contains the same Census Tracts and Block Groups. For the sake of brevity, Block Group-level data are not repeated.

Table 16: Limited English Proficiency (LEP) in Demographic Study Area (DSA)

ALTERNATIVE	Total Pop. (SE)	Spanish Speakers		Other Indo-European Language Speakers		Asian/Pacific Island Language Speakers		Other Language Speakers		All Individuals with LEP	
		# (SE)	%	# (SE)	%	# (SE)	%	# (SE)	%	# (SE)	%
Colonial Heights, VA	16,530 (26)	160 (56)	1.0	56 (32)	0.3	228 (58)	1.4	104 (51)	0.6	548 (101)	3.3
Boulevard DSA	11,068 (497)	234 (81)	2.1	56 (32)	0.5	163 (52)	1.5	23 (19)	0.2	476 (104)	4.3
CT 830400, BG 1[3]	1,738 (227)	28 (23)	1.6	0 (7)	0	0 (7)	0	0 (7)	0	28 (24)	1.6
CT 100600, BG 1	906 (117)	0 (7)	0	0 (7)	0	0 (7)	0	0 (7)	0	0 (7)	0
CT 100701, BG 1	1,679 (252)	95 (57)	5.7	0 (7)	0	0 (7)	0	0 (7)	0	95 (57)	5.7
CT 830100, BG 3	715 (111)	0 (7)	0	0 (7)	0	7 (11)	1.0	0 (7)	0	7 (13)	1.0
CT 830200, BG 1	1,894 (148)	0 (7)	0	15 (13)	0.8	108 (40)	5.7	23 (18)	1.2	146 (46)	7.7
CT 830200, BG 2	963 (137)	0 (7)	0	5 (9)	0.5	12 (15)	1.2	0 (7)	0	17 (19)	1.8
CT 830300, BG 2	1,519 (163)	10 (14)	0.7	24 (23)	1.6	36 (26)	2.4	0 (7)	0	70 (38)	4.6
CT 830500, BG 1	1,654 (198)	101 (50)	6.1	12 (14)	0.7	0 (7)	0	0 (7)	0	113 (52)	6.8

ALTERNATIVE	Total Pop. (SE)	Spanish Speakers		Other Indo-European Language Speakers		Asian/Pacific Island Language Speakers		Other Language Speakers		All Individuals with LEP	
		# (SE)	%	# (SE)	%	# (SE)	%	# (SE)	%	# (SE)	%
Chesterfield County, VA	300,744 (53)	7,997 (435)	2.7	1,237 (167)	0.4	2,910 (257)	1.0	194 (59)	0.1	12,338 (535)	4.1
Branders Bridge DSA	10,353 (485)	234 (81)	2.3	56 (32)	0.5	156 (50)	1.5	23 (19)	0.2	469 (103)	4.5
CT 100600, BG 1[3]	906 (117)	0 (7)	0	0 (7)	0	0 (7)	0	0 (7)	0	0 (7)	0
CT 100701, BG 1	1,679 (252)	95 (57)	5.7	0 (7)	0	0 (7)	0	0 (7)	0	95 (57)	5.7
CT 830200, BG 1	1,894 (148)	0 (7)	0	15 (13)	0.8	108 (40)	5.7	23 (18)	1.2	146 (46)	7.7
CT 830200, BG 2	963 (137)	0 (7)	0	5 (9)	0.5	12 (15)	1.2	0 (7)	0	17 (19)	1.8
CT 830300, BG 2	1,519 (163)	10 (14)	0.7	24 (23)	1.6	36 (26)	2.4	0 (7)	0	70 (38)	4.6
CT 830400, BG 1	1,738 (227)	28 (23)	1.6	0 (7)	0	0 (7)	0	0 (7)	0	28 (24)	1.6
CT 830500, BG 1	1,654 (198)	101 (50)	6.1	12 (14)	0.7	0 (7)	0	0 (7)	0	113 (52)	6.8
Ettrick DSA	9,187 (523)	125 (62)	1.4	0 (7)	0	15 (15)	0.2	0 (7)	0	140 (64)	1.5
CT 100600, BG 1[3]	906 (117)	0 (7)	0	0 (7)	0	0 (7)	0	0 (7)	0	0 (7)	0
CT 100600, BG 2	2,178 (232)	2 (8)	0.1	0 (7)	0	0 (7)	0	0 (7)	0	2 (11)	0.1
CT 100600, BG 3	380 (83)	0 (7)	0	0 (7)	0	15 (13)	3.9	0 (7)	0	15 (15)	3.9
CT 100701, BG 1	1,679 (252)	95 (57)	5.7	0 (7)	0	0 (7)	0	0 (7)	0	95 (57)	5.7
CT 100701, BG 2	1,393 (231)	0 (7)	0	0 (7)	0	0 (7)	0	0 (7)	0	0 (7)	0
CT 100701, BG 4	913 (175)	0 (7)	0	0 (7)	0	0 (7)	0	0 (7)	0	0 (7)	0
CT 830400, BG 1	1,738 (227)	28 (23)	1.6	0 (7)	0	0 (7)	0	0 (7)	0	28 (24)	1.6
No-Build[4] DSA	9,187 (523)	125 (62)	1.4	0 (7)	0	15 (15)	0.2	0 (7)	0	140 (64)	1.5
Petersburg, VA	29,853 (56)	343 (88)	1.1	31 (23)	0.1	104 (48)	0.3	9 (19)	<0.1	490 (105)	1.6

ALTERNATIVE	Total Pop. (SE)	Spanish Speakers		Other Indo-European Language Speakers		Asian/Pacific Island Language Speakers		Other Language Speakers		All Individuals with LEP	
		# (SE)	%	# (SE)	%	# (SE)	%	# (SE)	%	# (SE)	%
Collier South DSA	2,588 (338)	0 (7)	0	0 (7)	0	0 (7)	0	0 (7)	0	0 (7)	0
CT 811000, BG 1[3]	1,769 (287)	0 (7)	0	0 (7)	0	0 (7)	0	0 (7)	0	0 (7)	0
CT 810500, BG 1	819 (178)	0 (7)	0	0 (7)	0	0 (7)	0	0 (7)	0	0 (7)	0

Data Source: U.S. Census Bureau, 2014a.

Notes:

[1] Pop. = Population; SE = Standard Error; CT = Census Tract; BG = Block Group

[2] Standard error was calculated based on U.S. Census Bureau, 2014b.

[3] The parcel on which the alternative would be built is located within this Census Tract and Block Group.

[4] The DSA for the No-Build Alternative is the same as the DSA for the Ettrick Alternative and contains the same Census Tracts and Block Groups. For the sake of brevity, Block Group-level data are not repeated.

3.16.4 Age

Table 17 shows that approximately 20% of the population in each DSA is under the age of 18, and between 10% and 20% of the population is over 65 (U.S. Census Bureau, 2014a). The age dependency ratio is the number of dependent-age population to the working age population and is derived by dividing the combined under-18 and 65-and-over populations by the 18-to-64 population and multiplying by 100 (US Census Bureau, 2012). The higher the ratio, the greater the support burden is for those working. The age dependency ratio is 71% for the Boulevard and Branders Bridge DSAs, 38% for Ettrick DSA, and 60% for Collier South DSA.[59] By comparison, the age dependency ratio is 55% in Virginia and 59% in the U.S.[60]

Table 17: Age Distribution by County/City and Demographic Study Area (DSA)

ALTERNATIVE	Percent of Population Under 18	Percent of Population 65 or over	Age Dependency Ratio
Colonial Heights, VA	22.4	19.1	71.0
Boulevard DSA	23.2	18.2	70.8
Chesterfield County, VA	25.5	11.1	57.7
Branders Bridge DSA	24.0	17.5	70.9
Ettrick DSA	17.3	10.4	38.4
No-Build[5] DSA	17.3	10.4	38.4
Petersburg, VA	20.9	15.1	56.2
Collier South DSA	22.1	15.3	59.8

Data Source: U.S. Census Bureau, 2014a.

3.16.5 Income and Poverty

The U.S. Department of Transportation (U.S. DOT) recommends the use of the poverty guidelines established by the Department of Health and Human Services (HHS) rather than the poverty thresholds established by the U.S. Census Bureau (U.S. DOT, 2015). The HHS guidelines are based on the number of persons in a family or household and location of the household. For example, the poverty guideline for a family of four is $23,550 (78 FR 5182). The U.S. Census Bureau uses poverty thresholds that are similar to the HHS guidelines, but consider other factors (e.g., family size, number of children). The U.S. Census Bureau poverty threshold for a family of four with two children is $23,624 (U.S. Census Bureau. 2014c).

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[59] U.S. Census Bureau. 2014. 2009-2013American Community Survey 5-Year Estimates. Online data. U.S. Department of Commerce, U.S. Census Bureau, Washington, DC. Available online: http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t# (Accessed May 2015).

[60] U.S. Census Bureau. *Statistical Abstract of the United States: 2012*. "Table 17. Age Dependency Ratios by State: 2000 and 2010".

Neither the U.S. Census Bureau nor HHS publishes data on the number of people below the HHS poverty threshold. HHS recommends the use of U.S. Census Bureau poverty thresholds to determine the best approximation of the number of people below the HHS poverty guidelines in a particular area (HHS, 2015).

Table 18 displays the median household and per capita income by Census Tract Block Group and by city or county, as well as information about the portion of the population below poverty levels by Census Tract Block Group, city or county, and DSA. Income and poverty level vary by site. Collier South DSA has the highest percentage of people below the poverty threshold at 26%, and Petersburg has the lowest median household income. The percentage of the population below the poverty threshold is similar (approximately 10%) in the DSAs for the other alternatives.

Table 18: Income and Poverty in Demographic Study Area (DSA)

ALTERNATIVE	Median Household Income		Per Capita Income		Total Population		Population Below Poverty Threshold		Population Below Poverty Threshold
	$	MoE	$	MoE	#	SE	#	SE	%
Colonial Heights, VA	50,835	3,026	27,610	1,601	17,265	66	1,600	223	9.3
Boulevard DSA	NA	NA	NA	NA	11,507	518	1,149	210	10.0
CT 830400, BG 1[3]	43,139	4,555	21,197	2,939	1,812	238	252	119	13.9
CT 100600, BG 1	43,555	10,849	17,527	3,385	1,009	147	108	49	10.7
CT 100701, BG 1	68,472	15,813	26,163	3,312	1,760	236	32	34	1.8
CT 830100, BG 3	67,596	38,356	46,833	23,684	699	102	31	19	4.4
CT 830200, BG 1	33,762	1,939	21,114	2,903	1,845	167	230	69	12.5
CT 830200, BG 2	34,233	11,989	23,219	5,723	1,042	148	325	135	31.2
CT 830300, BG 2	48,188	3,945	22,761	3,386	1,602	180	67	32	4.2
CT 830500, BG 1	51,484	12,525	25,244	4,502	1,738	205	104	46	6.0
Chesterfield County, VA	72,088	1,012	32,572	436	315,276	315	21,240	1,121	6.7
Branders Bridge DSA	NA	NA	NA	NA	10,808	508	1,118	209	10.3
CT 100600, BG 1[3]	43,555	10,849	17,527	3,385	1,009	147	108	49	10.7
CT 100701, BG 1	68,472	15,813	26,163	3,312	1,760	236	32	34	1.8
CT 830200, BG 1	33,762	1,939	21,114	2,903	1,845	167	230	69	12.5
CT 830200, BG 2	34,233	11,989	23,219	5,723	1,042	148	325	135	31.2
CT 830300, BG 2	48,188	3,945	22,761	3,386	1,602	180	67	32	4.2
CT 830400, BG 1	43,139	4,555	21,197	2,939	1,812	238	252	119	13.9
CT 830500, BG 1	51,484	12,525	25,244	4,502	1,738	205	104	46	6.0
Ettrick DSA	NA	NA	NA	NA	7229	474	679	173	9.4
CT 100600, BG 1[3]	43,555	10,849	17,527	3,385	1,009	147	108	49	10.7

ALTERNATIVE	Median Household Income		Per Capita Income		Total Population		Population Below Poverty Threshold		Population Below Poverty Threshold
	$	MoE	$	MoE	#	SE	#	SE	%
CT 100600, BG 2	24,176	1,866	3,678	913	133	69	0	7	0.0
CT 100600, BG 3	45,288	19,791	21,777	4,626	390	81	56	28	14.4
CT 100701, BG 1	68,472	15,813	26,163	3,312	1,760	236	32	34	1.8
CT 100701, BG 2	56,310	16,967	20,979	8,544	1,202	218	113	72	9.4
CT 100701, BG 4	48,289	17,693	23,833	5,182	923	178	118	78	12.8
CT 830400, BG 1	43,139	4,555	21,197	2,939	1,812	238	252	119	13.9
No-Build[4] DSA	NA	NA	NA	NA	7229	474	679	173	9.4
Petersburg, VA	34,424	2,621	18,936	798	31,621	79	8,439	604	26.7
Collier South DSA	NA	NA	NA	NA	2,804	378	732	247	26.1
CT 811000, BG 1[3]	43,137	5,161	24,279	5,698	1,899	330	445	225	23.4
CT 810500, BG 1	23,986	10,287	17,509	4,708	905	185	287	102	31.7

Data Source: U.S. Census Bureau, 2014a.

Notes:

[1] MoE = Margin of Error; SE = Standard Error; CT = Census Tract; BG = Block Group; NA = Not Available

[2] Standard error was calculated based on U.S. Census Bureau, 2014b.

[3] The parcel on which the alternative would be built is located within this Census Tract and Block Group.

[4] The DSA for the No-Build Alternative is the same as the DSA for the Ettrick Alternative and contains the same Census Tracts and Block Groups. For the sake of brevity, Block Group-level data are not repeated.

3.16.6 Community Economic Profile

The majority of Chesterfield County is located between Richmond and Petersburg/Colonial Heights; however, the portion of the county known as Ettrick is located along the CSXT A-line between Colonial Heights and Petersburg. VSU is located in Ettrick. Chesterfield County, as a whole, is one of the fastest growing counties in the state. The area has attracted a highly skilled labor force and the county has a substantial inventory of available commercial and industrial properties. Government is one of the largest employers, followed by wholesale/retail trade and the service industry.

Colonial Heights abuts Petersburg and these two cities function as a single economic entity. Colonial Heights serves as the retail center for the Tri-Cities area. Government, the service industry, and wholesale/retail trade account for the majority of employment in Colonial Heights. Petersburg serves as the industrial center for the area. As the site of a critical Civil War battle, Petersburg has numerous historic sites and buildings, and heritage tourism is a growing part of the economy. Like Colonial Heights, government, the service industry, and wholesale/retail trade account for the majority of employment. The Fort Lee Army Base is within Petersburg and is the largest employer in the region.

Agriculture is an important element of the state economies. Active agricultural operations are located within all of the DSAs.

3.16.7 Neighborhoods and Communities

Colonial Heights and Petersburg are urbanized areas, with the Ettrick community sandwiched between them along the rail line. Along the rail line, much of the development in Colonial Heights and the Ettrick portions of the Study Area is suburban residential and commercial development. The central development focus of Colonial Heights is along US 1, known locally as the "Boulevard". US 1 is primarily lined with commercial development. Residential development is located along side streets behind the commercial development.

Boulevard Build Alternative

The Boulevard Build Alternative is located along US 1 with neighborhoods to the east, south, and across the rail line to the north. Except where it crosses both Ellerslie Avenue and US 1, the rail line is almost completely hidden from most of the community as it generally runs behind the developed area fronting the Boulevard. The linear development pattern of Colonial Heights is auto-oriented and, thus, shielded by the presence of a rail corridor. City plans indicate future growth may continue to the north and towards the east.

Branders Bridge Build Alternative

The Branders Bridge Build Alternative is a large, undeveloped parcel with single-family subdivisions to the west and south and a combination of multi-family and single family development to the east. Commercial development is minimal in this area.

Ettrick (No Build and Build Alternative)

Ettrick straddles the existing rail corridor. Ettrick's development pattern and demographics have been shaped by VSU to the east, a historically black college of 5,300 students founded in 1882. Fairly dense residential neighborhoods surround the Ettrick area to the east. Neighborhoods are adjacent to the university. Ettrick Park abuts the rail corridor to the west across the rail line from the existing (No-Build Alternative) and the conceptual station site in Ettrick.

Collier South Build Alternative

Petersburg accounts for much of the urban residential and commercial development in the region. However, while within the Petersburg city limits, the Collier South Build Alternative is located in a predominately agricultural and wooded area. To the west of the railroad is a combination of agricultural fields and an International Paper operation. Residential development is located to the east of the Collier South Build Alternative.

3.16.8 Community Facilities and Services

Public Education Facilities

For the Boulevard Build Alternative, North Elementary is located at 3201 Dale Avenue, northeast of and across the railroad tracks from the site. The school serves approximately 300 students in grades kindergarten through fifth grade. Lakeview Elementary is located at 401 Taswell Avenue, across the rail line from the Boulevard site within both the Boulevard and Branders Bridge DSAs. Approximately 350 students attend grades kindergarten through fifth grade at Lakeview Elementary School.

For the Ettrick Build Alternative, VSU is located east of the site within the DSA. The university is governed by the State Council of Higher Education for Virginia and has approximately 5,000 students. Ettrick Elementary is located southeast of the Ettrick site within the DSA. The school is located about two blocks west of VSU. Approximately 550 students attend grade pre-kindergarten through fifth grade at Ettrick Elementary School.

For the Collier South Build Alternative, A.P. Hill Elementary School is located north of the site, on the edge of the DSA. Approximately 500 to 600 students attend kindergarten through fifth grade at the school.

Emergency Services

Emergency management is administered by the Virginia Department of Emergency Management, Division 1. The Virginia hazardous materials emergency response program provides enhanced, state-of-the-art technical response capabilities and extensive, multi-level, broad-based environmental planning and training programs. Team G, based in Henrico County, is responsible for the Study Area.

Policing

Chesterfield County has a sheriff and a police department. Colonial Heights and Petersburg have their own municipal police departments.

Fire and Emergency Medical Services

Chesterfield County's Fire and EMS Department, a combination career/volunteer system, provides fire, rescue and EMS throughout the county through 20 fire and 9 rescue stations. Chesterfield Fire Station 12 is located near VSU within the Ettrick DSA. Colonial Heights' Fire and EMS Department, a combination career/volunteer system, provides fire, rescue and EMS within municipal boundaries through two stations. One of the stations is located along Boulevard within the Branders Bridge DSA. Petersburg's Department of Fire, Rescue, and Emergency Services provides fire, rescue and EMS within municipal boundaries. None of Petersburg's emergency facilities are located within the Collier South DSA; however, Petersburg Company 3 and Company 5 are located nearby.

Health Services

The medical centers that serve the area are Johnston-Willis Hospital and St. Francis Medical Center in Chesterfield County and Southside Regional Medical Center and the John Randolph Medical Center in Petersburg. None of these facilities is located within a DSA.

Places of Worship and Cemeteries

Table 19 displays the places of worship located within each DSA.

Table 19: Places of Worship and Cemeteries in Demographic Study Area (DSA)

ALTERNATIVE	Place of Worship or Cemetery	Address
Boulevard DSA	Church of Nazarene	601 Ellerslie Ave., Colonial Heights
	St. Michael's Episcopal Church	501 Old Town Rd., Colonial Heights
	Woodlawn Baptist Church	3120 Woodlawn Ave., Colonial Heights
Boulevard and Branders Bridge DSAs	The Sanctuary	505 Lakeview Ave., Colonial Heights
Branders Bridge DSA	Living Word Ministries	1620 Snead Ave., Colonial Heights
	Living Word World Outreach Center	1221 Boulevard, Colonial Heights
Ettrick and No-Build[1] DSAs	Fellowship Baptist Church	21000 Chesterfield Ave. Ettrick
	Macedonia Tabernacle Ministries	3615 East River Rd., Ettrick
	God Mission of Faith Church	3718 East River Rd., Ettrick
Collier South DSA	Refuge Temple – Our Lord Jesus	1890 Boydton Plank Rd., Petersburg

Source: Michael Baker International, 2015.

Notes:

[1] The DSA for the No-Build Alternative is the same as the DSA for the Ettrick site and contains the same Census Tracts and Block Groups. For the sake of brevity, Block Group-level data are not repeated.

3.16.9 Potential Impacts

Property Value Impacts

The No Build Alternative is not anticipated to change property values.

The Branders Bridge Build Alternative is currently zoned as agricultural, and the surrounding parcels are zoned low-density residential or agricultural. The value of residential parcels may decrease if this alternative were chosen due to increased traffic and pedestrian activity the new station would generate in what is designed to be a residential development area. If these parcels were rezoned as commercial, their value may increase.

The Collier South Build Alternative is adjacent to low-density residential development to the north and east. The value of these residential parcels is unlikely to be impacted by the station given the forested buffer between the station site and the residential communities. Conceptual station design calls for access to the station be to the south, through an unzoned parcel owned by the City of Petersburg. The potential for induced transit-oriented growth to the south and west may increase the value of these parcels.

In general, a significant loss in adjacent property values is not anticipated from the Project. Along active rail lines in communities with planned stations, often the demand for office, retail, hotel and higher density housing will increase near the proposed stations. As demand for redevelopment and infill opportunities increase, property values may increase over the long-term. This is true for the Boulevard and Ettrick Build Alternatives in particular.

Economic Benefits

Construction Effects

New jobs would be associated with construction and operation of the new station. The secondary impacts of temporary, construction-related employment would be spread throughout the area in which the station is located. The construction related employment benefits would be 115 jobs at the Boulevard Build Alternative, 105 for Branders Bridge, 90 at Ettrick Build Alternative and 180 at the Collier South Build Alternatives and are based on overall construction cost estimates.

Station Development Effects

A real estate analysis conducted as part of this effort predicts growth will occur at any of the proposed Build Alternative station sites. As noted in the Southeast High Speed Rail Study (NCDOT, 1999)[61], construction of high speed rail stations is expected to generate temporary construction jobs associated with both station construction and re/development surrounding the proposed stations. The redevelopment around the station is also expected to create permanent jobs in the hotel, office, retail, and residential management industries. Direct expenditures on system construction and operation, construction of the stations, and induced development around the stations are expected to improve the economy in the vicinity of the chosen alternative.

Multimodal stations are likely to experience higher development potential if already located at an existing center of activity, as is the case for the Boulevard and Ettrick station sites. In contrast, stations located on the periphery of existing activity are less likely to attract new development unless they are located in extremely strong economic markets or receive significant public investment, according to the Center for Transit-Oriented Development[62]. In all cases, the result of the regional and site-specific Transit Oriented Development (TOD) analysis concludes that this station alone is not a sufficient generator to entice additional development. Conversely, the station, regardless of exact location, would serve as a gateway to promote access and general economic development across all Study Area jurisdictions.

The ease of assembling land for development is influenced by a number of factors, including the difficulty of purchasing one or multiple properties, diversity of ownership (dealing with a greater number of owners can

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61 http://connect.ncdot.gov/resources/RailPoliciesDocument/1999%20-%20Archived%20-%20Southeast%20High%20Speed%20Rail%20Corridor.pdf

62 http://ctod.org/pdfs/20130528_DntnsGreenfieldsEtc.FINAL.pdf

be time-consuming and costly), and the relative ease of project implementation. Vacant or publicly-owned properties are considered to be easier to acquire, while private property can be more difficult.

Boulevard Build Alternative

Development could occur at the Boulevard Build Alternative station location. Based on coordination and interviews with the City of Colonial Heights, conducted as part of the real estate assessment for this study, there is potential that the elementary school located across the railroad tracks from the potential station site could be developed as a transit-oriented development in the future. According to the City, it is possible that the school will be underutilized in the future due to a reduction in school aged children overall, and the student population currently using this school could be consolidated with another school property.

Branders Bridge Build Alternative

Development is not projected to occur naturally at the Branders Bridge Build Alternative location. The area is not zoned appropriately for transit oriented, mixed use development and Chesterfield County has indicated that the station area is not planned for future investment to support such development.

Ettrick Build Alternative

As noted in the Special Area Plan for Ettrick, redevelopment could occur in this Build Alternative location. In proximity to the Ettrick Build Alternative, VSU holds a sizeable amount of property and would need to be a willing participant and stakeholder in the development process. In addition to VSU, there are individually owned residential properties also within the station area at Ettrick. Parcel assembly would be required for any larger scale transit oriented development to occur in this area. According to coordination with Chesterfield County, this assembly might be possible due to support for redevelopment and investment in Ettrick by the local community.

Collier South Build Alternative

Development is also potential to occur at the Collier South Build Alternative station area in the future. Collier South, while lacking basic infrastructure, features vacant land that could accommodate a variety of development scenarios. In addition, these parcels are already consolidated and within public ownership which could facilitate future development.

Community Concerns

The four Build Alternatives are located along the existing rail line through Chesterfield County, Colonial Heights, and Petersburg. Because the rail line is active, none of the proposed stations would divide existing communities or create community barriers.

Boulevard Build Alternative

The Boulevard site is located along US 1 in a commercial area. Development of the station is consistent with current land use and resources. Negative community impacts are not anticipated.

Brander Bridge Build Alternative

The Branders Bridge site is located on an undeveloped parcel in a low-density residential area. Increased traffic and induced growth around the station would change the character of the existing neighborhood. The current landowners of the Branders Bridge site do not support the station being located on their property, nor does Chesterfield County.

Ettrick Build Alternative

The Ettrick site is the site of the current Amtrak station. Development of the station is consistent with the current land use. Negative community impacts are not anticipated.

Collier South Build Alternative

The Collier South site is undeveloped. Low-density residential development occurs to the north and east. This alternative will not divide these communities or create community barriers as access to the station will be from the south.

Community Facilities and Services

None of the proposed station sites is expected to impact community facilities and services in the vicinity, with the exception of transit services. Regardless of station location, PAT is committed to providing public transportation services to the existing or new station.

3.16.10 Mitigation

No mitigation for socioeconomic impacts is anticipated.

3.17 ENVIRONMENTAL JUSTICE

Per Executive Order 12898: *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*[63], measures must be taken to avoid disproportionately high adverse impacts on minority or low-income communities.

3.17.1 Existing Conditions

An Environmental Justice analysis was completed based on the most recent FHWA reference guide[64] and the most recent American Community Survey data (U.S. Census Bureau, 2014a). Table 20 identifies the potential Environmental Justice populations in the Study Area. Minority populations were defined as all individuals who define themselves as anything other than non-Hispanic, white individuals. Low-income populations were identified using the U.S. Census Bureau poverty thresholds for 2013.

A census tract was identified as having a potential Environmental Justice population if:

[63] https://www.archives.gov/files/federal-register/executive-orders/pdf/12898.pdf

[64] U.S. Department of Transportation, Federal Highway Administration. *Environmental Justice Reference Guide*. April 1, 2015.

- Minority population or low-income population is 10 or more percentage points higher than the respective county average or
- Minority or low-income population composes at least 50 percent (regardless of the county average) for the population.

The populations in the Boulevard, Ettrick, and Collier South DSAs are considered Environmental Justice populations. The Branders Bridge DSA is not considered an Environmental Justice population. However, four of the seven Census Block Groups within this DSA contain Environmental Justice populations, including the Census Block Group in which the Branders Bridge site is located.

Table 20: Environmental Justice Populations

ALTERNATIVE	Environmental Justice Population Present?	
	Minority	Poverty
Colonial Heights, VA	---	---
Boulevard DSA	Yes	---
CT 830400, BG 1[2]	---	---
CT 100600, BG 1	Yes	---
CT 100701, BG 1	Yes	---
CT 830100, BG 3	---	---
CT 830200, BG 1	---	---
CT 830200, BG 2	---	Yes
CT 830300, BG 2	Yes	---
CT 830500, BG 1	---	---
Chesterfield County, VA	---	---
Branders Bridge DSA	---	---
CT 100600, BG 1[2]	Yes	---
CT 100701, BG 1	Yes	---
CT 830200, BG 1	---	---
CT 830200, BG 2	---	Yes
CT 830300, BG 2	Yes	---
CT 830400, BG 1	---	---
CT 830500, BG 1	---	---
Ettrick DSA	Yes	---
CT 100600, BG 1[2]	Yes	---
CT 100600, BG 2	Yes	---
CT 100600, BG 3	Yes	---
CT 100701, BG 1	Yes	---
CT 100701, BG 2	Yes	---
CT 100701, BG 4	Yes	---

ALTERNATIVE	Environmental Justice Population Present?	
	Minority	Poverty
CT 830400, BG 1	---	---
No-Build[3] DSA	Yes	---
Petersburg, VA	Yes	---
Collier South DSA	Yes	---
CT 811000, BG 1[2]	Yes	---
CT 810500, BG 1	Yes	---

Source: U.S. Census Bureau, 2014a.

Notes:

[1] CT = Census Tract; BG = Block Group

[2] The parcel on which the alternative would be built is located within this Census Tract and Block Group.

[3] The DSA for the No-Build Alternative is the same as the DSA for the Ettrick Alternative and contains the same Census Tracts and Block Groups. For the sake of brevity, Block Group-level data are not repeated.

3.17.2 Potential Impacts

Overall, the study findings demonstrate that, regardless of station location, the Project would not have a disproportionately high and adverse impact on Environmental Justice populations.[65] As shown on the impact summary in Table 8, regardless of the absence or presence of Environmental Justice populations, no impacts are anticipated under the No-Build or Build Alternatives for the following: air quality, severe noise, vibration, wetlands, streams, critical habitat, contaminated/hazardous waste sites, and parks and recreation areas. Table 21 compares the identified Environmental Justice locations to potential project impacts to analyze if these impacts would be disproportionately high and adverse. As shown in the table, no disproportionately high and adverse impact to Environmental Justice locations is anticipated.

All of the proposed sites are located along an active rail corridor; residences, schools, and other sensitive receptors are currently exposed to the noise associated with trains on the railroad track. When stopped at the station, the trains will idle. The noise of this idling would be a change from current conditions at the Boulevard, Branders Bridge, and Collier South Build Alternatives, but is not considered significant overall.

Future high speed rail service will result in an increasing number of trains that are likely to induce increased traffic to a new station relative to the traffic levels at the Ettrick station (the No-Build Alternative). This increased traffic is not likely to have a substantive impact on the populations surrounding the Boulevard and Branders Bridge Build Alternatives as they are located in a heavy-traffic area, or on those populations surrounding the Collier South Build Alternative, which is sparsely populated. Under the No-Build or Build Alternative at the Ettrick site, traffic is likely to increase in the area and result in the need for road

[65] Per US DOT Order 5610.2(a) to asses for disproportionately high and adverse effects to minority and low income populations through Title VI analysis and environmental justice analyses conducted as part of Federal transportation planning and NEPA provisions. -

improvements. Chesterfield County is already in the process of improving local roads as part of its Ettrick VSU Special Area Plan.

Given that one of the Project goals is to improve multimodal connectivity, increased passenger and train activity at a new station should result in more bicycle and pedestrian activity as passengers ride or walk to the station from home or the bus stop or leave the station to ride or walk to a nearby store or restaurant. The Boulevard and Ettrick Build Alternatives are most likely to experience increased foot traffic due to the proximity of homes, stores, restaurants, bus stops, and other origins/destinations. Few, if any, bicycle or pedestrian-friendly destinations are currently available near the Branders Bridge or Collier South Build Alternatives.

Table 21: Environmental Justice Analysis

Category	Alternative				
	No-Build (Existing Ettrick Station)	Boulevard	Branders Bridge	Ettrick (New Station)	Collier South
Environmental Justice Communities Present?	**Yes**	**Yes**	**No**	**Yes**	**Yes**
Sensitive Noise Receptors Impacted	None	Category 3 (Institutional Land Uses): 1 Moderate Impact	Category 2 (Residential Land Uses): 1 Moderate Impact	None	None
Water Quality	None	Minimal	Minimal	Minimal	Minimal
Threatened & Endangered Species	None	None	Northern Long-eared Bat *Federal Threatened*	None	None
Floodplains (acres)	0	0.3 acre	0	0	0
Visual Resources	N/A	Visually Compatible	Limited Impact	Visually Compatible	Limited Impact
Land Use & Zoning Consistency	Consistent	Consistent	Inconsistent	Consistent	Consistent
Farmland Impacts	N/A	N/A	N/A	N/A	Nominal
Relocations: Home, Business, Farm, Non-Profit	0	Requires private property. May require one business relocation	Requires private property, but no relocations	0	0
Public Health Concerns	Minimal	Minimal	Minimal	Minimal	Minimal
Public Safety Concerns	Minimal	Potential Improvement	Potential Improvement	Potential Improvement	Potential Improvement

Category	Alternative				
	No-Build (Existing Ettrick Station)	Boulevard	Branders Bridge	Ettrick (New Station)	Collier South
# Cultural Resource Properties Affected (NRHP Listed or Eligible)	0	No Adverse Effect on 2 Properties	No Adverse Effect on 1 Property	No Adverse Effect on 1 Property	No Adverse Effect on 3 Properties
Section 4(f) Property Used	0	0	0	0	3 *de minimis*
Secondary & Cumulative Development Potential	Higher Potential	Higher Potential	Minimal Potential	Higher Potential	Moderate Potential

Source: Michael Baker International, 2015.

A new station brings localized transit oriented opportunities for economic development, employment, and more convenient access to rail services to Environmental Justice communities. This is especially the case for the Ettrick Build Alternative and Chesterfield County's plans to promote redevelopment and a walkable/livable community in the Ettrick VSU Special Area. Localized development is also likely at the Boulevard Build Alternative given the existing development and mix of commercial and residential uses that surround it. Improved access from I-85 to connect with more distant Environmental Justice communities throughout the Southside Virginia region has been cited as a benefit unique to the Collier South Build Alternative by the City of Petersburg as part of the coordination process with the SWG.

Although construction and operation of a new train station will have a variety of minor impacts, the impacts will not be disproportionately high and adverse. In fact, if transit-oriented development at any of the stations were to occur, the long-term job creation benefits could be considered a positive impact.

The analysis of impacts is based on the construction of a new station, not the loss of a station. In the event that Ettrick were not chosen to remain the location for a station, the closure of the station and the lost opportunity for potential job-creation from development would be considered a negative impact to those populations that now have access to Ettrick.

3.17.3 Mitigation

The disadvantages of increased noise and traffic to the Environmental Justice populations are expected to be offset by the advantages of increased economic development in the vicinity and long term job growth. Public outreach efforts will continue in these communities to ensure that the concerns of Environmental Justice populations are met.

3.18 BARRIERS TO THE ELDERLY AND HANDICAPPED

3.18.1 Existing Conditions

Railroad stations are required to meet ADA accessibility standards. This includes guidance on the construction of stations, as well as boarding platforms. Inside stations, areas subject to ADA compliance include restrooms, ticket windows, water fountains, passenger information display systems (PIDS) that provide visual and audio announcements, signage, entry doors and egress pathways. Outside, ADA compliance extends to the design of platforms, PIDS, signage, parking stalls and accessible routes to include curb cuts, ramps and doorway widths. To comply with ADA requirements, FRA requires level boarding at 48-inch above top-of-rail (ATR) for east coast services. Where passenger service is operated on shared freight corridor, an exception to this requirement with 8-inch ATR platform height is commonly applied.

The current Ettrick Station has ADA-compliant parking, ticket offices, waiting room, restrooms, payphone, water fountain, wheelchair lift, and an accessible platform.[66] Amtrak is also planning to make additional minor ADA improvements. Based on the site visit, access to the parking area from street level is possible. However the parking lot has areas of broken and uneven pavement. The area lacks sidewalks or other pedestrian accommodations, which can be a barrier for access by elderly or disabled populations.

3.18.2 Potential Impacts

Any new station will be constructed to ensure ADA compliance and accessibility for the elderly and disabled, including accessible platforms.

3.18.3 Mitigation

No mitigation to barriers to the elderly and handicapped is necessary.

3.19 PUBLIC HEALTH

3.19.1 Existing Conditions

The primary direct effects to public health associated with the construction and operation of a new station are related to air, noise, and construction impacts. Please see Sections 3.1, 3.2, and 3.25, respectively, for discussions of those effects.

[66] Amtrak. Great American Stations – Petersburg, VA (PTB). http://www.greatamericanstations.com/Stations/PTB. Accessed 8/07/15.

Based on a review of demographics for areas around the proposed station sites (see Section 3.17), there is little difference among sensitive populations (normally considered to include Environmental Justice (EJ) populations and those under 18 or over 65 years of age). Please refer to Section 3.17 for information on EJ populations. The Ettrick Build Alternative DSA, in the vicinity of VSU, has the lowest percentage of the population aged under 18 (17.3%) and 65 or older (10.4%). The Branders Bridge Build Alternative DSA has the highest percentage of the population under 18 (24.0%). The Boulevard Build Alternative DSA has the highest percentage of the population 65 or older (18.2%). These populations tend to be most at risk for the spread of infectious diseases or other environmental stressors. However, none are projected as part of this analysis.

3.19.2 Potential Impacts

Based on a review of the existing and potential sites, no disproportionate impact is anticipated for any of the station sites on sensitive populations. No data suggests the operation of a passenger railroad station poses inherent public health concerns.

3.19.3 Mitigation

No mitigation to public health is necessary.

3.20 PUBLIC SAFETY

3.20.1 Existing Conditions

Rail safety measures are in place along the existing CSXT A-line. The Boulevard Build Alternative has a fully grade-separated railroad crossing over Boulevard (US 1). At the Branders Bridge Build Alternative, four quadrant gates with signals exist at the Branders Bridge Road crossing. At the Ettrick Build Alternative and No Build Alternative location, River Road is grade-separated over the existing CSXT A-line. At the Collier South Build Alternative, the CSXT railroad and Halifax Road are grade separated over Defense Road north of the proposed station and Halifax Road is grade separated over CSXT railroad south of the proposed station. In addition, all the trains operating along the CSXT S-line and A-line are equipped with on-board horns, which are used to warn vehicular and pedestrian traffic of the approach of trains at every at-grade crossing.

Improvements anticipated with the proposed SEHSR Richmond to Raleigh project will greatly improve safety along the railroad corridor by replacing at-grade crossings with grade-separated crossings and implementing other safety changes. The Code of Federal Regulations (CFR) Title 49 (Transportation) requires high speed trains and track to be designed and maintained at a very high standard for safety and ride quality.

3.20.2 Potential Impacts

SEHSR construction may require installation of fencing along existing railroad right-of-way due to the potential for increased pedestrian activity along the areas.

3.20.3 Mitigation

With any of the Build Alternatives, additional fencing may be considered to ensure the safety of the public and to prohibit crossing the tracks except at designated, safe locations. Fencing that would direct pedestrians to bridges/underpasses may be required in some locations. The location and type of fencing will be determined during final design of the Project, based on coordination between the owner of the rail corridor, the operator of the railroad, and adjacent communities. Such fencing may prevent unauthorized access onto the rail corridor in some areas, as well as help direct pedestrians to safe crossings (bridges/underpasses), thereby improving safety along the rail corridor at the existing and proposed station sites.

3.21 HAZARDOUS WASTES AND CONTAMINATED SITES

Hazardous wastes are materials that have the potential to present human health risks and degrade the environment. A contaminated site is a location where surface water, groundwater or soils have been affected by hazardous material use or accidental release. Hazardous wastes can exist as liquids, sludges, solids, dusts and vapors. The level of danger to humans is directly affected by the proximity of humans to the waste and concentrations of the waste that could be contacted.

Other than observable site uses, indicators of potential on-site hazardous waste contaminants may include: above ground storage tanks (ASTs); vent pipes indicating underground storage tanks (USTs); old transformers on poles or concrete pads; stored substances in drums or buckets; discolored soils; stressed or dead vegetation; puddles, pits or ponds of undisclosed liquids; and/or debris piles of undisclosed materials.

Site views of the proposed Branders Bridge, Boulevard, Ettrick, and Collier South Build Alternatives and their adjacent and surrounding areas were conducted to find obvious indicators of hazardous material concerns. In addition, Environmental Data Resources (EDR) provided a search of government environmental databases for each station site and adjacent and surrounding areas. The database search consisted of reviewing federal, state, tribal, local and proprietary databases for sites with recorded environmental concerns within the search radii prescribed for each hazardous material concern type by the American Society of Testing and Materials (ASTM) in their guidance ASTM- E1527-13.

The existing conditions and potential for the presence of hazardous materials are addressed below. Details of the EDR search are provided in Appendix G.

3.21.1 Existing Conditions

Branders Bridge Build Alternative

The proposed Branders Bridge site contains no development and is nearly entirely covered in forest and scrubby bushes. Conditions of environmental concern were not observed on the site, and no resources of concern are listed in any of the government environmental databases reviewed. Therefore, Branders Bridge Build Alternative is considered to have low on-site hazardous material risks.

Boulevard Station Site

Boulevard Station is located in an area that is largely residential, but has commercial and office uses along Boulevard (US 1). The existing uses of the Boulevard Station site include a tape slitting operation (Superior Slitting), an equipment rental business (Rent-E-Quip), and a carpet sales store (Carpet-N-Floors). According to the manager of Rent-E-Quip, Rent-E-Quip maintains one skid-mounted above ground storage tank (AST) on-site that was installed in 2005. The AST is a 500 gallon portable tank that has secondary containment incorporated in its base and is separated in the center of the tank to allow 250 gallons of diesel and 250 gallons of gasoline. No history of spills exists either in the secondary containment or overtopping of the secondary containment. A 250 gallon propane tank is also maintained by Rent-E-Quip. However, propane tanks typically do not represent site environmental hazmat concerns because propane evaporates when leaked. The Boulevard Station site is not listed in the government environmental databases reviewed. Therefore, the Boulevard Build Alternative considered to have low on-site hazardous material risks.

Ettrick Station Site

The Ettrick Station site is located adjacent to the existing Ettrick station. Residential uses are adjacent to the site, but several commercial uses are near its southern boundary. The site contains a single story red brick warehouse building and its offices in the southern portion. The remaining area is undeveloped and covered by grass. The site contains pole mounted transformers on-site and at the site's boundaries. Although many of the transformers were observed to be older, no evidence was observed to indicate that they have leaked cooling oil onto the ground below. The proposed Ettrick Station site is not listed in the government environmental databases reviewed. Therefore, the Ettrick Build Alternative is considered to have low on-site hazardous material risks.

Collier South

The proposed Collier South site is in an area that is largely forested and rural. The site contains no development and is nearly entirely covered in forest. Conditions of environmental concern were not observed on the site, and the site is not listed in the government environmental databases reviewed. Therefore, the Collier South Build Alternative is considered to have low hazardous material risks.

3.21.2 Potential Impacts

Based on the study findings, all four of the proposed Build Alternatives have low hazardous material risks.

3.21.3 Mitigation

No mitigation for hazardous material related environmental concerns is recommended for any of the four station Build Alternatives. If unknown materials are discovered later in the design process, coordination with the Virginia Department of Environmental Quality will be conducted to mitigate any potential impacts.

3.22 PARKS AND RECREATION AREAS

3.22.1 Existing Conditions

Chesterfield County Parks and Recreation Department operates the Ettrick Park and Mayes-Colbert Ettrick Community Building at 20400 Laurel Road in Ettrick. In addition to a community center that is open to the public and available for rent, the park offers multiple athletic fields, tennis courts, and basketball courts. The park is bounded to the east by the CSXT railroad, with the Petersburg Amtrak Station in Ettrick on the eastern side of the tracks. No other park or recreation areas exist near the Build Alternatives. In addition, there are no resources protected by Section 6(f) of the Land and Water Conservation Fund Act near the Build Alternatives.

3.22.2 Potential Impacts

The Project will not impact any parks or recreation areas. As explained above, the Ettrick Build Alternative is the only site with a nearby park. The existing rail line has daily freight and passenger rail traffic that can be heard and seen from the park and community center and train frequencies will not increase as a result of the Project. Neither the No-Build Alternative, nor construction of a new Ettrick station will alter the character, setting, or use of the park.

3.22.3 Mitigation

No mitigation to parks and recreation areas is necessary.

3.23 CULTURAL RESOURCES

Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended (16 U.S.C. 470), requires federal agencies to consider the impacts of their project undertakings on historic architectural and archeological resources that are either listed in or have been determined eligible for listing in the National Register of Historic Places (NRHP) (36 CFR Part 800). This subsection provides an evaluation of historical, architectural, and archaeological resources within the Study Area.

In May 2015, a Phase I cultural resource survey and Phase II archaeological investigation were conducted by Dovetail Cultural Resource Group (Dovetail) for this Project. An additional Phase I cultural resource survey was conducted in August 2015 when the Collier South Build Alternative replaced the Collier conceptual site for potential station locations. The findings are documented in the Cultural Resource Report[67] and in Appendix H, submitted to the Virginia Department of Historic Resources (DHR), which serves as the State Historic Preservation Office (SHPO). The goals of this effort were to identify cultural resources over 50 years in age and to make recommendations on the National Register of Historic Places (NRHP) eligibility for all identified resources. The survey complied with Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR Part 800, as well as satisfying the cultural resource requirements of this Project under the Virginia State Environmental Review Process.

Thirteen groups were contacted regarding the Project to ascertain their interest in becoming consulting parties to the Section 106 process. The groups received introduction letters, were notified of the two public meetings held for the Project, and received copies of the various newsletters distributed throughout the life of the Project. Only the National Park Service (NPS)-Petersburg National Battlefield elected to be a consulting party. In addition, representatives of the Petersburg National Battlefield were invited by the Tri-Cities MPO to be members of the Project's SWG. NPS representatives attended monthly work sessions on the Project, where they were afforded the opportunity to participate in the development of Purpose and Need, the development of Alternatives and measures of effectiveness, and the review of preliminary drafts of this EA. No Native American tribal outreach was conducted due to no communities or tribal land present in the Study Area.

Appendix H contains letters of Section 106 coordination with SHPO, including SHPO's approval of the Project's Area of Potential Effect (APE), SHPO's determinations of eligibility, and SHPO's comments on determinations of effect.

3.23.1 Existing Conditions

For a resource to be considered significant enough to be listed in or eligible for listing in the NRHP, it must meet at least one of the evaluation criteria established by the U.S. Department of Interior, National Park Service (NPS). The NPS guidelines state that:

> "The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:
>
> a. That are associated with events that have made a significant contribution to the broad patterns of our history; or

[67] Dovetail Cultural Resource Group. *Phase I Cultural Resource Survey and Phase II Archaeological Investigation of the Tri-Cities Area Multimodal Station Study Project Area, Chesterfield County and Cities of Colonial Heights and Petersburg, Virginia.* June 2015.

b. That are associated with the lives of significant persons in or past; or

c. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

d. That have yielded or may be likely to yield, information important in history or prehistory."[68]

Descriptions of archaeological and historical and architectural resources within the Area of Potential Effect (APE) that are listed in or eligible for the NRHP are provided in the text that follows. Specific location information for archaeological resources is not provided due to the sensitive nature of such resources. The locations of historical and architectural resources are identified on Figure 16 through Figure 20.

[68] U.S. Department of the Interior, National Park Service. *National Register Bulletin: How to Apply the National Register Criteria for Evaluation.* Accessed on 8/09/15 at http://www.nps.gov/nr/publications/bulletins/nrb15/nrb15_2.htm.

Figure 16: Cultural Resources – Boulevard Build Alternative

Figure 17: Cultural Resources – Branders Bridge Build Alternative

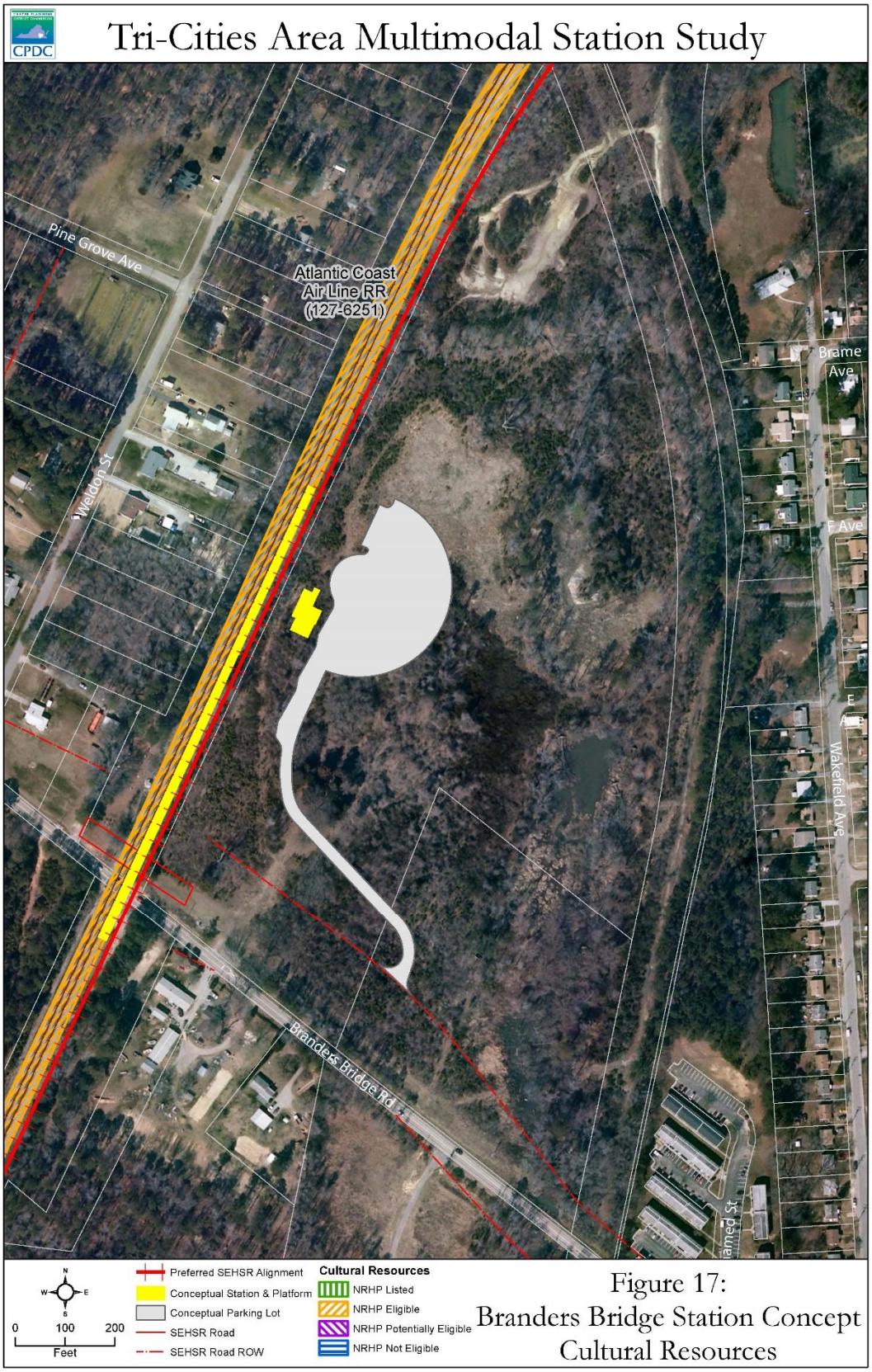


Figure 18: Cultural Resources – Ettrick Build Alternative

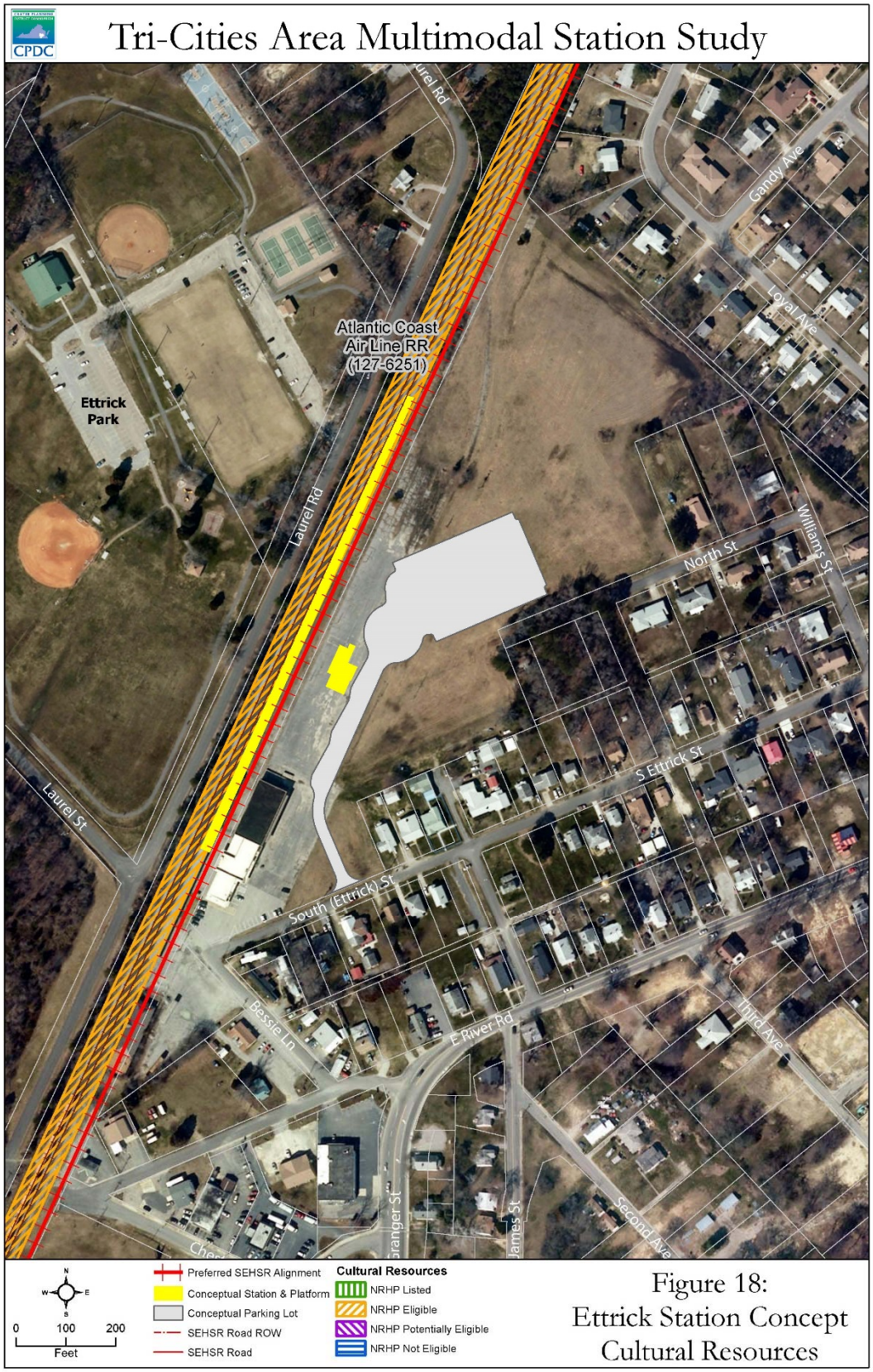


Figure 19: Cultural Resources – Collier South Build Alternative

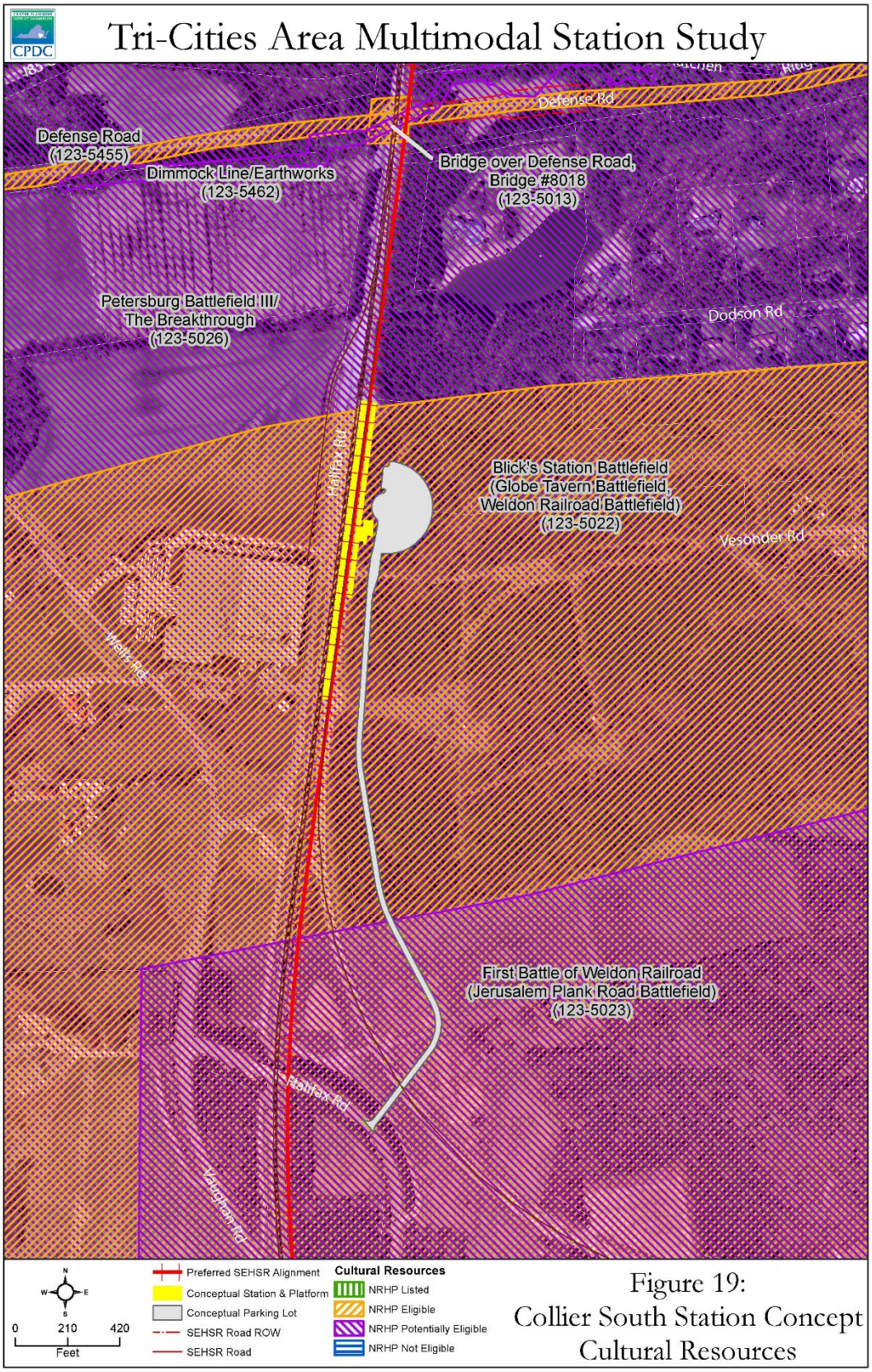
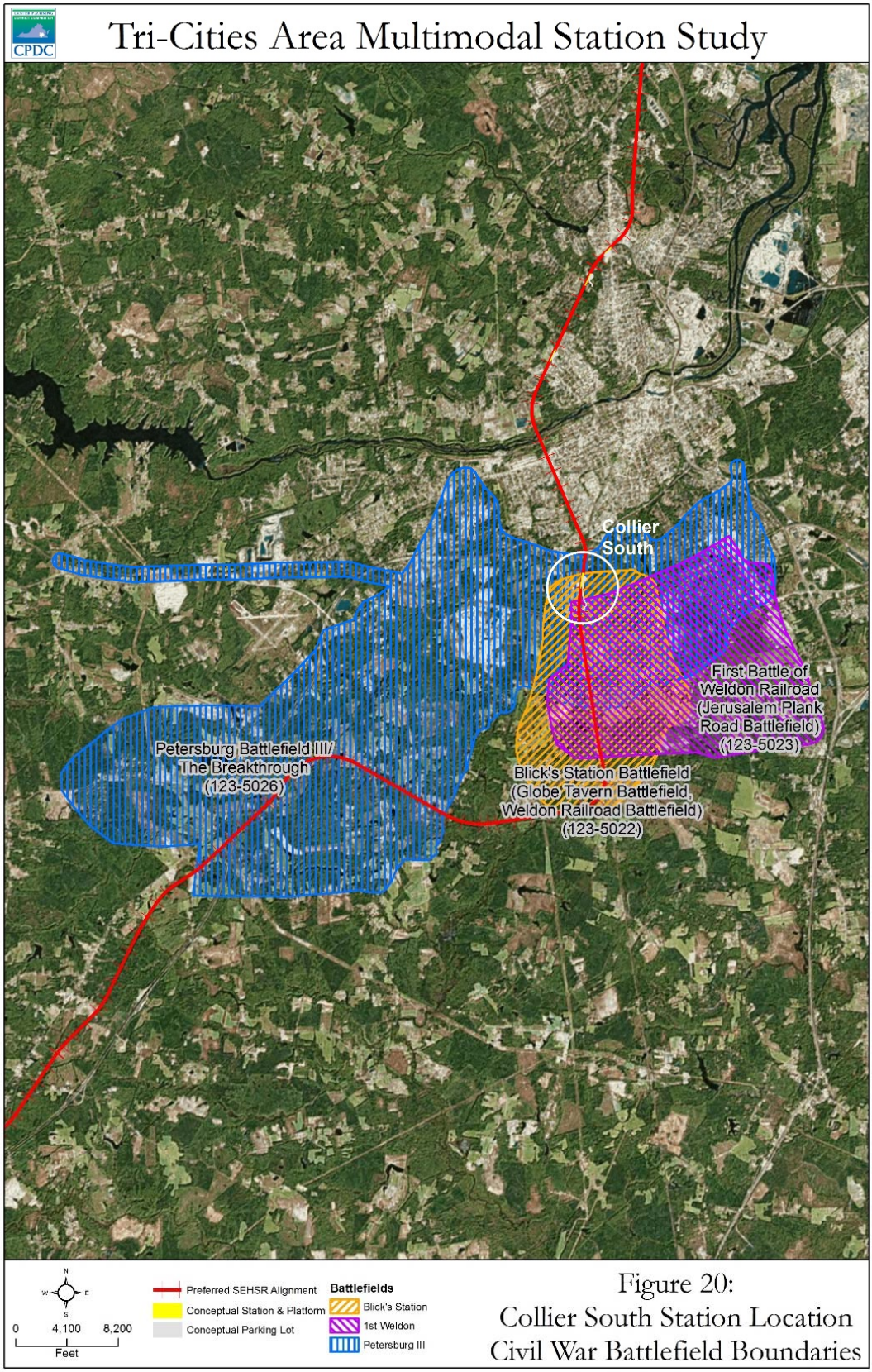


Figure 20: Civil War Battlefield Boundaries – Collier South Build Alternative



Archaeological Resources

The Phase I archaeological investigation at the four Build Alternative sites included pedestrian survey, metal detector survey, and the excavation of 136 shovel tests. Various disturbances prevented the excavation of additional shovel tests. A total of 61 artifacts were recovered from 21 positive shovel tests, resulting in the identification of three archaeological sites.

Two sites, Sites 44CF0801 and 44DW0460, contained low artifact densities. No features were identified, nor did there appear to be potential for intact features in the deposits found within those sites. As such Sites 44CF0801 and 44DW0460 are not eligible for NRHP listing under Criteria A through D. SHPO concurs with this determination (see Appendix H, DHR letter dated December 21, 2015)

One site, Site 44DW0459, is a scatter of nineteenth century artifacts including a large area of dense brick scatter dating from the nineteenth century. Given the large brick scatter, and the proximity to known Civil War resources, Site 44DW0459 was recommended as potentially eligible for NRHP listing under criteria A and D. Criteria B and C were not believed to apply. Dovetail conducted further Phase II investigations at this site in May 2015 to make an assessment of NRHP eligibility.

During the Phase II investigation of Site 44DW0459, 47 additional shovel tests and four test units produced a total of 114 artifacts. An articulated brick floor was identified in two test units, as well as possible features in a third test unit. No artifacts specific to the Civil War were recovered. Dovetail and FRA recommended that Site 44DW0459 is eligible for listing on the NRHP due to the presence of intact cultural remains, including a brick floor. The site has the potential to reveal information on area history (Criterion D). Further information as to the function of the identified features and the site owners could be gleaned with additional work. The site can provide additional information on Antebellum, Civil War, and Reconstruction periods in the Petersburg and Dinwiddie County vicinities. SHPO concurs that this site is potentially eligible for listing in the Virginia Landmarks Register (VLR) and the NRHP (see Appendix H, DHR letters dated December 21, 2015 and February 17, 2016).

Given the historic significance of Site 44DW0459, the SWG agreed that shifting the Collier site southward, away from the newly discovered archaeological site, would serve as an appropriate avoidance measure. Therefore, the Collier location depicted in Figure 7 was replaced with a new station location to the south. This new site is the Collier South Build Alternative. An additional Phase I cultural resource survey was conducted in August 2015 for the Collier South Build Alternative and no archaeological resources were located in the Collier South footprint.

Historical and Architectural Resources

The historical and architectural fieldwork included reconnaissance-level documentation of all aboveground resources over 50 years in age located within the architectural APE, defined as the four conceptual station footprints, plus any areas within the viewshed of the Project where any alterations to a resource's setting and feeling may occur. The architectural survey identified a total of 44 above-ground resources that meet the age requirement. Of these, 14 were previously recorded and 30 were newly recorded as part of this effort. In its December 21, 2015 letter to FRA, SHPO concurred that: eight resources remain eligible or potentially eligible for listing in the Virginia Landmarks Register (VLR) and the NRHP; three resources have been

demolished; and 32 resources are not individually eligible for the NRHP. No resources exist within the APE of the existing or proposed station sites that are listed on the NRHP. Table 22 identifies the architectural resources recorded and the NRHP eligibility determinations. The text that follows describes the resources that are NRHP listed, eligible, and potentially eligible.

Table 22: Historical Properties and NRHP Eligibility

DHR Number	Site Type/Name and Address	Survey Area/Station Site	VLR & NRHP Eligibility
020-0501	Wakefield, 19205 Branders Bridge Road	Area 2/Branders Bridge	Not Eligible
020-5242	Ettrick Depot, 3516 South Street	Area 3/Ettrick	Remains Not Eligible
020-5351	**Richmond & Petersburg Electric Railway**	**Area 1/Boulevard**	**Remains Eligible**
020-5467	House/ Lo Spickerman House, 19206 Branders Bridge Road	Area 2/Branders Bridge	Not Eligible
020-5514	Ruins, 19205 Branders Bridge Road	Area 2/Branders Bridge	Remains Not Eligible
020-5671	House, 3400 North Street	Area 3/Ettrick	Not Eligible
020-5672	House, 3405 North Street	Area 3/Ettrick	Not Eligible
020-5673	House, 3408 North Street	Area 3/Ettrick	Not Eligible
020-5674	House, 3409 North Street	Area 3/Ettrick	Not Eligible
020-5675	House, 3413 North Street	Area 3/Ettrick	Not Eligible
020-5676	House, 3502 South Street	Area 3/Ettrick	Not Eligible
020-5677	House, 3504 South Street	Area 3/Ettrick	Not Eligible
020-5678	House, 3506 South Street	Area 3/Ettrick	Not Eligible
020-5680	House, 3510 South Street	Area 3/Ettrick	Not Eligible
020-5681	House, 3512 South Street	Area 3/Ettrick	Not Eligible
020-5682	Petersburg Train Station, 3516 South Street	Area 3/Ettrick	Not Eligible
020-5683	House, 3600 South Street	Area 3/Ettrick	Not Eligible
020-5684	House, 3602 South Street	Area 3/Ettrick	Not Eligible
020-5685	House, 3603 South Street	Area 3/Ettrick	Not Eligible
020-5686	House, 3604 South Street	Area 3/Ettrick	Not Eligible
020-5687	House, 3605 South Street	Area 3/Ettrick	Not Eligible
020-5688	House, 3607 South Street	Area 3/Ettrick	Not Eligible
020-5689	House, 3611 South Street	Area 3/Ettrick	Not Eligible
020-5690	House, 3615 South Street	Area 3/Ettrick	Not Eligible
020-5691	House, 20218 Loyal Avenue	Area 3/Ettrick	Not Eligible
020-5692	House, 20224 Loyal Avenue	Area 3/Ettrick	Not Eligible
020-5693	House, 20230 Loyal Avenue	Area 3/Ettrick	Not Eligible
020-5694	House, 20236 Loyal Avenue	Area 3/Ettrick	Not Eligible
020-5695	House, 20302 Loyal Avenue	Area 3/Ettrick	Not Eligible
020-5696	House, 20304 Loyal Avenue	Area 3/Ettrick	Not Eligible
020-5697	House, 20306 Loyal Avenue	Area 3/Ettrick	Not Eligible

DHR Number	Site Type/Name and Address	Survey Area/Station Site	VLR & NRHP Eligibility
020-5698	House, 20308 Loyal Avenue	Area 3/Ettrick	Not Eligible
020-5699	House, 20312 William Street	Area 3/Ettrick	Not Eligible
020-5700	House, 19206 Branders Bridge Road	Area 2/Branders Bridge	Not Eligible
020-5701	House, 19300 Branders Bridge Road	Area 2/Branders Bridge	Not Eligible
123-5008	House, 2639 Halifax Road	Area 4/Collier South	Not Eligible
123-5013	**Bridge over Defense Road**	**Area 4/Collier South**	**Remains Eligible**
123-5015	Mikuska House, 2233 Halifax Road	Area 4/Collier South	Remains Not Eligible
123-5022	**Blick's Station Battlefield (Globe Tavern Battlefield, Weldon Railroad Battlefield, Yellow Tavern Battlefield)**	**Area 4/Collier South**	**Remains Eligible**
123-5023	**First Battle of Weldon Railroad (Jerusalem Plank Road Battlefield)**	**Area 4/Collier South**	**Remains Potentially Eligible**
123-5026	**Petersburg Battlefield III (The Breakthrough)**	**Area 4/Collier South**	**Remains Potentially Eligible**
123-5455	**Defense Road**	**Area 4/Collier South**	**Remains Eligible**
123-5462/ 44DW0373	**Dimmock Earthworks**	**Area 4/Collier South**	**Remains Potentially Eligible/Contributing to the Petersburg Battlefield III**
127-6251	**Atlantic Coast Line Railroad Corridor**	**Area 1/Boulevard; Area 2/Branders Bridge; Area 3/Ettrick; Area 4/Collier South**	**Remains Eligible**

Source: Dovetail Cultural Resource Group. 2015.

The Richmond & Petersburg Electric Railway (020-5351)

This railway was constructed in 1902 from Manchester (on the north) to Petersburg (to the south). Popularity decreased throughout the 1930s and all service ended in 1949. The creation of this line was the direct impetus for large-scale modifications to settlement patterns in central Virginia. SHPO determined that this resource was eligible for the NRHP under Criterion A in 2004, and again in 2007 and 2009. This resource remains eligible for the NRHP. As shown on Figure 16 this resource is located within the Boulevard site. The resource is parallel to US 1 and is currently paved over by a shopping center parking lot at the Boulevard site.

The Bridge over Defense Road (123-5013)

This bridge, also known as Bridge #8018, spans across the historic roadway called Defense Road. This structure is a single-span, three-lane, segmental arch bridge that was constructed in 1936 as part of the larger Defense Road parkway project. SHPO initially determined that the Bridge over Defense Road is eligible for

the NRHP in 1998. SHPO concurred that the resource remains eligible for the NRHP. As shown on Figure 19, the bridge is approximately 1,100 feet north of the Collier South Build Alternative.

Blick's Station Battlefield (123-5022)
(Globe Tavern Battlefield, Weldon Railroad Battlefield, Yellow Tavern Battlefield)

This battlefield is the location of an 1864 Civil War battle and is associated with the Battle of Petersburg. Although the battlefield is surrounded by some modern commercial and residential development, SHPO determined that this resource is eligible for the NRHP in 2006 and concurred with this determination three years later in 2009 and again in 2015. Figure 20 shows the Collier South Build Alternative relative to the battlefield in its entirety.

First Battle of Weldon Railroad (123-5023)
(Jerusalem Plank Road Battlefield)

This battlefield is the location of an 1864 Civil War battle and is associated with the Battle of Petersburg. Although the battlefield is surrounded by some modern commercial and residential development, SHPO determined that this resource is eligible for the NRHP in 2006 and concurred with this determination three years later in 2009 and again in 2015. Figure 20 shows the Collier South Build Alternative relative to the battlefield in its entirety.

The Petersburg Battlefield III (123-5026)
(The Breakthrough)

This battlefield is the location of an April 1865 Civil War battle and is associated with the Battle of Petersburg. In recent decades there has been a movement to protect large portions of this battlefield. In 2007, SHPO staff determined that the battlefield is potentially eligible for the NRHP and concurred with this recommendation in 2009 and again in 2015. Figure 20 shows the Collier South Build Alternative relative to the battlefield in its entirety.

Defense Road (123-5455)

This road is located near the southern border of Petersburg, south of I-85. This road was constructed in 1938 as part of the New Deal's Work Relief Plan. The curvilinear roadway is a two-lane road surfaced with aggregate concrete. Defense Road is a Colonial Revival-era public parkway designed by the National Park Service in the 1920s and built by the Civilian Conservation Corps as a means of aiding tourists visiting the numerous Petersburg area Civil War earthworks and forts. It maintains its original white/grey pavement and the surrounding park-like setting. SHPO determined that Defense Road is eligible for the NRHP under Criteria A and C. As shown on Figure 19 the road is approximately 1,100 feet north of the Collier South site.

The Dimmock Earthworks (123-5462/44DW0373)

These earthworks are a set of Confederate-occupied trenches along Defense Road in Petersburg. These earthen mounds range from 2 to 5 feet (0.6 m to1.5 m) high by 8 to 15 feet (2.4 m to 4.5 m) wide. Construction of the earthworks began in 1862; primarily built with slave labor under the guidance of Captain Charles Dimmock. The earthworks are a series of Confederate defenses around Petersburg and remain an excellent example of a trench line used throughout the Civil War. In 2009, this resource was determined

potentially eligible for the NRHP and contributing to the Petersburg Battlefield III (123- 5026). SHPO continues to support this determination. As shown on Figure 19, the earthworks are approximately 1,100 feet north of the Collier South Build Alternative.

The Atlantic Coast Line Railroad Corridor (127-6251)

This railroad was constructed post-1833 as the Richmond and Petersburg Railroad, and currently spans Chesterfield County and the cities of Colonial Heights and Petersburg. The railroad was heavily damaged during the Civil War; however, it was repaired and rebuilt and in 1900 and the name changed to the Atlantic Coast Line Railroad. In 1976, it merged with the Seaboard Air Line Railroad to form the Seaboard Coast Line Railroad. The railroad is an historic corridor that represents the origins and growth of the railroad industry in the Richmond to Petersburg corridor and reflects the post-Civil War trend of merging smaller operations to provide better service while being more economical. Following an intensive survey on the resource in 2009, SHPO determined that the Atlantic Coast Line Railroad is eligible for the NRHP under Criterion A. SHPO continues to maintain the resource's eligibility status for the NRHP. This resource represents the present-day CSXT A-Line alignment north of Petersburg, which traverses the Boulevard Build Alternative, Branders Bridge Build Alternative, and Ettrick Build Alternative, as shown in Figure 16 through Figure 18, respectively.

3.23.2 Potential Effect

In accordance with 36 CFR 800.5(a), Dovetail applied the criteria of adverse effect to historic properties within the APE of the four alternatives. The regulations implementing Section 106 of the National Historic Preservation Act define an effect as an "alteration to the characteristics of a historic property qualifying it for inclusion in or eligible for the National Register" [36CFR800.16(i)]. The effect is adverse when the alteration of a qualifying characteristic occurs in a "manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association" [36 CFR800.5(a)]. Details on Project effect on each station are described below and summarized in Table 23.

Initial effects determination was sent to the SHPO on January 13, 2016. In its February 17, 2016 letter to FRA, SHPO stated concurrence with FRA's determination of effects is premature given that the Project is at the conceptual stage. SHPO asked to see more detailed plans for the preferred alternative, along with written comments from consulting parties [namely, the NPS], before providing formal comments on project effects. Because this is a conceptual-level EA, FRA is not conducting detailed engineering design on any alternative until a Preferred Alternative is identified. Therefore, the Section 106 process will not be completed until after the release of the EA and the selection of the Preferred Alternative. Following the selection, FRA will again seek SHPO's concurrence on determinations of effect and incorporate the results in the subsequent FONSI. While a formal determination of effect from SHPO is on hold until more detailed design information is available, SHPO stated that, based on the conceptual-level of information available, the potential for adverse effects appears minimal at each of the four station sites (See Appendix H for DHR correspondence).

Boulevard Build Alternative

The proposed Boulevard Build Alternative lies in the City of Colonial Heights, almost entirely within a paved warehouse parking lot, approximately 750 feet north of the Colonial Heights/Chesterfield County border.

The footprint for this station includes a platform paralleling the existing railroad line, beginning approximately 600 feet south of Boulevard (US 1) and continuing northeast along the tracks ending just past the eastern side of Boulevard (US 1) at the edge of a parking lot (Figure 16). A small station would protrude from this platform to the south, and to the south of the platform and station are a proposed parking lot and access roads that together form a rough right triangle measuring approximately 400 feet north-south along its eastern leg and approximately 500 feet east-west along its southern leg.

Two historic properties are located within the APE of the Boulevard Build Alternative. The Atlantic Coast Line Railroad Corridor (127-6251) and the Richmond & Petersburg Electric Railway (020-5351) are both linear resources that are eligible for the NRHP under Criterion A. The Atlantic Coast Line Railroad Corridor is still in use; the physical matrix has been repeatedly altered, but the rail corridor still conveys the general parameters of its original orientation. While none of the proposed structures overlap with the resource boundaries, the new platform would be placed adjacent to the tracks, but would not cross the ties. Construction of such a structure is in character with the design of the original rail line and would maintain the use of the resource and surrounding vicinity. Moreover, the Boulevard area has been notably changed over the past 20 years through the construction of several very large industrial buildings which have greatly modified the viewshed. As such, although the Project would alter the resource's materials, workmanship, and design, it would not diminish the characteristics that rendered the property eligible for the NRHP under Criterion A (location, setting, feeling, and association). FRA recommends that construction of the Boulevard Build Alternative would have No Adverse Effect on this resource.

Similarly, while the Project is within the viewshed of the Richmond & Petersburg Electric Railway, the rail lines were removed several decades ago. The general corridor is extant, but there are no above-ground physical elements of the rail system remaining in this area. Construction plans including traversing the corridor in three small areas—two driveways leading into the parking lot from Boulevard (US 1) and extension of the new platform over the resource near the Boulevard (US 1)/railroad intersection. However, the parking lot itself, station, and majority of the platform are all located west of this historic property and do not touch the resource boundaries. The aforementioned new, large industrial buildings in this area have changed the visual composition of the landscape and altered the viewshed of this resource. Because the proposed Project would not diminish the resource's location, design, setting, materials, workmanship, feeling, and association, FRA recommends that construction of the Boulevard Build Alternative would have No Adverse Effect on this resource.

In sum, FRA recommends that the Boulevard Build Alternative would have No Adverse Effect on historic properties.

Branders Bridge Build Alternative

The proposed Branders Bridge Alternative is located approximately 1,700 feet southeast of the Boulevard Station, near the existing rail lines crossing of Branders Bridge Road within the town of Ettrick, in Chesterfield County. The site lies mainly in an undeveloped lot that appears to have been subjected to logging activity. The platform begins just southeast of Branders Bridge Road and extends approximately 900 feet to the north of that road. The parking area forms a semi-circle, with a radius extending approximately 200 feet

to the east of the platform, with an access road which initially parallels the platform before curving to the east and then to back to the south, covering a distance of approximately 700 feet and terminating approximately 200 feet before it reaches Branders Bridge Road.

The only historic property in the APE of the Brander's Bridge Build Alternative is the Atlantic Coast Line Railroad Corridor (127-6251) (Figure 17). As mentioned above, the Atlantic Coast Line Railroad Corridor still conveys the general parameters of its original construction, but the line has been repeatedly rebuilt. The proposed built elements do not overlap with the resource boundaries, but the new platform would be placed parallel to the existing tracks. Such construction is in character with the design of the original railroad and would maintain the rail environment that was developed over a century earlier. While the Project would alter the resource's materials, workmanship, and design, it would not diminish the characteristics that rendered the property eligible for the NRHP (location, setting, feeling, and association). FRA recommends that construction of the Branders Bridge Build Alternative would have No Adverse Effect on this resource.

In sum, FRA recommends that the Branders Bridge Build Alternative would have No Adverse Effect on historic properties.

Ettrick Build Alternative

The proposed Ettrick Build Alternative overlaps the footprint of an existing Amtrak station in Ettrick (Figure 18). The proposed platform and station run from within the existing station approximately 1,000 feet north by northeast through and slightly past the end of an existing parking lot. The roughly rectangular parking area, approximately 175 feet in width, extends approximately 375 feet northeast of the existing parking lot into an open grassy area. The access road parallels the platform along the edge of the existing station for 300 feet before turning to the southeast to meet South Ettrick Street.

Like Branders Bridge, the only historic property located within the APE of this alternative is the Atlantic Coast Line Railroad Corridor (127-6251). Discussed above, the Atlantic Coast Line Railroad Corridor has been physically modified, but the rail line is still in its original location. Three stations have served passengers in this area. The original station was constructed around 1900, but that station was demolished in 1941 to make way for a new facility. This replacement station opened in 1942. A third station was built across the tracks in 1955 to expand passenger and freight capacity. As such, two stations stood in this area for over half a century. The 1942 station was demolished in 2014, thus the construction of a new station would return an element that has been removed—a second station in Ettrick. The proposed build elements do not overlap with the resource boundaries, but the new platform would be placed parallel to the existing tracks. This orientation is in character with the design of the original railroad. The Project would alter the resource's materials, workmanship, and design, but it would not diminish its location, setting, feeling, and association. FRA recommends that construction of the Ettrick Build Alternative would have No Adverse Effect on this resource.

In sum, FRA recommends that the Ettrick Build Alternative would have No Adverse Effect on historic properties

Collier South Build Alternative

Collier South Build Alternative is in the City of Petersburg, VA located approximately 2 miles south of the Appomattox River. The proposed Collier South project area consists of a 1.8- acre parking area on the east side of the CSXT railroad tracks and Halifax Road. The railroad line crosses I-85 approximately 1,600 feet to the north. Three spatially discrete areas form the Collier South Build Alternative: one large semi-circular area with a tail to the south, a smaller semi-circular area, and a rectangular section with a small panhandle at the southern end of the rectangle (Figures 19 and 20).

After an archaeological survey, Dovetail found that site 44DW0459 does not extend into this parcel; however, three battlefields are within the APE. The three battlefields—Blick's Station Battlefield (123-5022), First Battle of Weldon Railroad (123-5023), and Petersburg Battlefield III (123-5026)—are all eligible or potentially eligible under Criterion A. Each battlefield is quite large, covering thousands of acres. The proposed changes associated with the Project are relatively minimal in light of the extensive modifications that have occurred in the Petersburg area since the Civil War, including new roadways, housing developments, industrial complexes, commercial venues, etc. The Project would maintain the use of this area as a railroad facility—its use during the period of significance—and the new one-story structures would not overwhelm the suburban nature of this area. The construction of the Collier South Build Alternative would not diminish the characteristics that render each resource eligible for the NRHP. FRA recommends that the Project would have No Adverse Effect on Blick's Station Battlefield (123-5022), First Battle of Weldon Railroad (123-5023), and Petersburg Battlefield III (123-5026).

Representatives from the Petersburg National Battlefield have attended monthly meetings on the Project and were involved in station design and alternative selection. They reviewed and verbally commented on all ensuing materials at these meetings, including this EA and all associated documents. As such, their feedback has been imbibed into the resulting location and design for the Collier South Build Alternative.

In sum, FRA recommends that the Collier South Build Alternative would have No Adverse Effect on historic properties.

Summary of Recommendations

Five historic properties are located in the APE of the four Build Alternatives currently under consideration. Based on an evaluation of resource significance and integrity in light of Project design and extant conditions, FRA recommends that all four of the proposed Build Alternatives for this Project—Boulevard, Branders Bridge, Ettrick, and Collier South would result in No Adverse Effect to historic properties.

Table 23: Section 106 Recommended Determinations of Effect

V-CRIS Number	Site Type/Name and Address	Boulevard	Branders Bridge	Ettrick	Collier South
127-6251	Atlantic Coast Line Railroad Corridor (*Eligible/Criterion A*)	No Adverse Effect	No Adverse Effect	No Adverse Effect	—
020-5351	Richmond & Petersburg Electric Railway (*Eligible/Criterion A*)	No Adverse Effect	—	—	—
123-5022	Blick's Station Battlefield (Globe Tavern Battlefield, Weldon Railroad Battlefield, Yellow Tavern Battlefield) (*Eligible/Criterion A*)	—	—	—	No Adverse Effect
123-5023	First Battle of Weldon Railroad (Jerusalem Plank Road Battlefield) (*Potentially Eligible/Criterion A*)	—	—	—	No Adverse Effect
123-5026	Petersburg Battlefield III (The Breakthrough) (*Potentially Eligible/Criterion A*)	—	—	—	No Adverse Effect

Source: Michael Baker International, 2015.

3.23.3 Mitigation

The No-Build Alternative and four Build Alternatives would have No Adverse Effect on resources listed in, eligible for, or potentially eligible for the NRHP. Therefore, mitigation of adverse effects is not anticipated. Following the selection of a Preferred Alternative, FRA will coordinate with SHPO to obtain their determination of effects and to develop, if necessary, appropriate mitigation measures. Should SHPO concur with FRA's determination, no mitigation is necessary.

3.24 SECTION 4(F) RESOURCES

Section 4(f) of the Department of Transportation Act of 1966 (Section 4(f)), as set forth in 49 U.S.C. § 1653(f), protects publicly owned parks, recreation areas, and wildlife/waterfowl refuges, as well as historic sites listed or eligible for listing in the NRHP, and archaeological sites that are listed or eligible for inclusion in the NRHP and warrant preservation in place. These lands can only be used for a Federally-funded transportation project if there is no other feasible and prudent alternative, and the Project incorporates all possible planning to minimize harm.

Section 4(f) use, as defined in 23 CFR § 774.17, occurs in the following cases:

- Land is permanently incorporated into a transportation facility through partial or full acquisition (i.e., "use")
- There is temporary occupancy of land that is adverse in terms of the preservationist purpose of Section 4(f) (i.e., "temporary use")
- There is no permanent incorporation of land, but the proximity of a transportation facility results in impacts so severe that the protected activities, features, or attributes that qualify a resource for protection under Section 4(f) are substantially impaired (i.e., "constructive use"). Examples of constructive use include substantial increases in noise levels at an outdoor amphitheater, impairment to aesthetics, and restrictions on access to a resource.

Use of Section 4(f) resources considered minor can be afforded a determination of *de minimis* impact, as long as the official(s) with jurisdiction over those resources concurs in writing. For historic and cultural resources, FRA must inform the SHPO that FRA intends to make a finding of No Historic Properties Affected or No Adverse Effect, and the SHPO must concur with that finding. Use of a Section 4(f) resource having a *de minimis* impact can be approved by FRA without the need to develop and evaluate alternatives that would avoid using the Section 4(f) resource.

FRA may determine an impact to an historic property is *de minimis* if:

- FRA makes either a "no historic properties affected" or "no adverse effect" determination in accordance with Section 106 of the National Historic Preservation Act.
- The State Historic Preservation Officer (SHPO), is notified of the intent to make a *de minimis* impact finding based on their written concurrence in the Section 106 determination, and
- The views of any consulting parties participating in the Section 106 process have been considered.

Once it is determined that a transportation use of Section 4(f) property results in a *de minimis* impact, analysis of avoidance alternatives is not required, and the Section 4(f) process is complete.

3.24.1 Section 4(f) Applicability

No publicly owned parks, recreation areas[70], wildlife or waterfowl refuges would be used by this Project under the No-Build Alternative or any of the four station sites under the Build Alternative. This applies to Ettrick Park and the Mayes-Colbert Ettrick Community Building located within the park.

As addressed in Section 3.23, Cultural Resources, there are nine historic properties either listed on, eligible for, or potentially eligible for listing in the NRHP within the Project area. Table 24 identifies Section 4(f) properties and the FRA's determination of potential use. Of the nine historic properties, the Project will have

[70] There are no properties in the Project area acquired using grants under the Land and Water Conservation Fund Act; therefore, there are no Section 6(f) impacts.

no effect on the following four sites: the archaeological site, Defense Road, Dimmock Line/Earthworks, and the Bridge over Defense Road. Therefore, the Project will not result in a Section 4(f) use of these resources.

With regard to the Atlantic Coast Air Line Railroad Corridor and the Richmond and Petersburg Electric Railway FRA has determined that the Project will have No Adverse Effect on those resources. For historic transportation facilities and properties, a Section 4(f) use will result only when the historic transportation resource is adversely affected by the proposed transportation project (See 23 CFR § 774.13(a)).[71] Given that FRA determined the Project would have No Adverse Effect on either historic property, and that both properties are historic transportation facilities, provided SHPO concurs with FRA's determination, Section 4(f) is not applicable to either.[72]

Of the nine historic properties, three are eligible for protection under Section 4(f). These properties are:

- Blick's Station Battlefield (Globe Tavern Battlefield, Weldon Railroad Battlefield, Yellow Tavern Battlefield) (DHR #123-5022 – NRHP Eligible);
- First Battle of Weldon Railroad (Jerusalem Plank Road Battlefield) (DHR # 123-5023 – NRHP Potentially Eligible); and
- Petersburg III/ The Breakthrough (DHR #123-5026 – NRHP Eligible).

None of the above three historic properties is located within a National Park or National Battlefield. Therefore, the SHPO is the jurisdictional authority for the three properties relative to Section 4(f) regulations. Because these Civil War battlefields are associated with the National Park Service's Petersburg National Battlefield, the National Park Service is a consulting party to the SHPO in the Section 106 process, as well as the Section 4(f) process, where applicable.

[71] 23 CFR 774 is an FHWA regulation and FRA is not required to follow it, although FRA will use 23 CFR 774 as guidance.
[72] Ibid.

Table 24: Section 4(f) Applicability and Use of Historical Resources

DHR # and Resource Name	Station	Locality	Determination of Section 4(f) Resource	Description	Section 106 Determination of Effect	Section 4(f):Applicability and Use Determination
44DW0459 Archaeological Site	Collier South	Petersburg	NHRP Potentially Eligible under CriteriaD	Mid-Nineteenth Century Outbuilding and Artifact Scatter	No Effect	N/A: Station site shifted to south to avoid resource. In addition, only those archaeological resources eligible for NRHP under Criteria A, B, and/or C are subject to Section 4(f).
127-6251: Atlantic Coast Air Line Railroad Corridor	Boulevard, Branders Bridge, Ettrick	Chesterfield, Colonial Heights, Petersburg	Eligible/A	Historic railroad corridor that represents the origins and growth of the railroad industry in the Richmond to Petersburg corridor; reflects the post-Civil War trend of merging smaller operations to provide better service while being more economical.	No Adverse Effect	N/A: Section 4(f) is only applicable to historic transportation facilities and properties when the historic transportation resource is adversely affected by the proposed transportation project (See 23 CFR 774.13(a)).
020-5351: Richmond & Petersburg Electric Railway	Boulevard	Colonial Heights	Eligible/A	Circa 1902, creation of this line was the direct impetus for large-scale modifications to settlement patterns in central Virginia	No Adverse Effect	N/A: Section 4(f) is only applicable to historic transportation facilities and properties when the historic transportation resource is adversely affected by the proposed transportation project (See 23 CFR 774.13(a)).
123-5022: Blick's Station Battlefield (Globe Tavern Battlefield, Weldon Railroad Battlefield, Yellow Tavern Battlefield)	Collier South	Petersburg	Eligible/A	4,506 acre area associated with the Battle of Petersburg	No Adverse Effect	*De minimis* for minor use of Section 106 resource. Use = 4.3 acres or 0.02% of resource.

123-5023: First Battle of Weldon Railroad (Jerusalem Plank Road Battlefield)	Collier South	Petersburg	Potentially Eligible/A	6,389 acre area associated with the Battle of Petersburg	No Adverse Effect	*De minimis* for minor use of Section 106 resource. Use = 0.6 acre or 0.01% of resource.
123-5026 Petersburg III/ The Breakthrough	Collier South	Petersburg	Potentially Eligible/A	20,518 acre area associated with the Battle of Petersburg	No Adverse Effect	*De minimis* for minor use of Section 106 resource. Use = 4.3 acres or 0.02% of resource.
123-5455 Defense Road	Collier South	Petersburg	Eligible/A, C	Colonial Revival-era public parkway designed by the National Park Service in the 1920s and built by the Civilian Conservation Corps as a means of aiding tourists visiting the numerous Petersburg area Civil War earthworks and forts; maintains its original white/grey pavement and the surrounding park-like setting.	No Effect	No Use
123-5462/44DW0373 Dimmock Line/Earthworks	Collier South	Petersburg	Potentially Eligible/A, B, C	Series of Confederate defenses around Petersburg; construction began in 1862 and was primarily built with slave labor under the guidance of Captain Charles Dimmock; great example of a trench line used throughout the Civil War	No Effect	No Use
123-5013 Bridge over Defense Road	Collier South	Petersburg	Eligible/A, C	Single-span, three-lane, segmental arch bridge constructed in 1936 as part of the larger Defense Road parkway project	No Effect	No Use

Source: Michael Baker International, 2015.

Of the No Build and four Build Alternatives, only the Collier South Build Alternative site will result in the use of three Section 4(f) properties.

3.24.2 Section 4(f) Analysis

The FRA determined and SHPO provided preliminary concurrence that the Project would have no adverse effect to any of the three battlefield areas associated with the Collier South Build Alternative.[73] The next step in the Section 4(f) process is for FRA to provide SHPO, in writing, its intent to make a *de minimis* impact finding. However, because SHPO is not providing a formal determination of effect until more detailed engineering design is available, FRA is unable to complete the Section 4(f) coordination requirements with SHPO. As with completion of the Section 106 process, the Section 4(f) process will be finalized following FRA's selection of a Preferred Alternative, subsequent coordination with SHPO and any consulting parties, and documentation of these efforts and results in the FONSI.

The text that follows documents FRA's determination for *de minimis* use of the three historic battlefield properties relative to the Collier South Build Alternative.

Blick's Station Battlefield (Globe Tavern Battlefield, Weldon Railroad Battlefield, Yellow Tavern Battlefield) (DHR #123-5022 – NRHP Eligible)

This 4,506 acre property is the location of an 1864 Civil War battle. Although the battlefield is surrounded by some modern industrial and residential development, the battlefield area remains intact.

Potential Use

The entire Collier South Build Alternative, including construction and operation of the station, parking area, and access road, requires the permanent use of 4.3 acres (0.10%) of this 4,506 acre property (Figure 19 and Figure 20**).** The Collier South site is situated in the northern portion of the battlefield, minimizing segmentation of the historic battlefield. The access road to the Collier South Build Alternative would be elevated to cross over the existing Norfolk passenger rail to connect to Halifax Road, also elevated. The Collier South Build Alternative will have No Adverse Effect on this battlefield under Section 106 of the NHPA.

FRA finds that construction and operation of the Collier South Build Alternative will not substantially impair the activities, features, and attributes that qualify the Blick's Station Battlefield for protection under Section 4(f). While the use will be permanent, it will be at a relatively minor scale (0.10%) relative to the size of the battlefield. The ability of the Blick's Station Battlefield to convey the feeling, setting, and intensity of the battle will not be substantially diminished by the construction and operation of the site. Therefore, FRA has determined that the use from the Collier South Build Alternative is *de minimis*.

[73] Ibid.

First Battle of Weldon Railroad (Jerusalem Plank Road Battlefield) (DHR # 123-5023 – NRHP Potentially Eligible)

This 6,389 acre property is the location of an 1864 Civil War battle and overlaps much of the Blick's and Petersburg III battlefields. Within the Project area, the battlefield is adjacent to modern industrial development with residential development shielded by existing trees and shrubs. However, the battlefield area remains intact.

Potential Use

Only a portion of the Collier South Build Alternative's access road requires the permanent use of 0.6 acre acres (0.01%) of this 6,389 acre property (Figure 19 and Figure 20). The Collier South Build Alternative is situated in the northwestern portion of the battlefield, minimizing segmentation of the historic battlefield. The access road to the Collier South Build Alternative would be elevated to cross over the existing Norfolk passenger rail to connect to Halifax Road, which is also elevated. The Collier South Build Alternative will have No Adverse Effect on this battlefield under Section 106 of the NHPA.

FRA finds that construction and operation of the Collier South Build Alternative will not substantially impair the activities, features, and attributes that qualify the First Battle of Weldon Railroad for protection under Section 4(f). While the use will be permanent, it will be at a relatively minor scale (0.01%) relative to the size of the battlefield. The ability of the First Battle of Weldon Railroad to convey the feeling, setting, and intensity of the battle will not be substantially diminished by the construction and operation of the site. Therefore, FRA has determined that the use from the Collier South Build Alternative is *de minimis*.

Petersburg III/ The Breakthrough (DHR #123-5026 – NRHP Eligible).

This 20,518 acre property is the location of an 1864 Civil War battle and overlaps much of the Blick's Station and the First Battle of Weldon battlefields. Within the Project area, an industrial facility is prominent, but surrounded by fields and forests. Residential development to the north and west is shielded by existing trees and shrubs. However, much of the battlefield area remains intact.

Potential Use

At 20,518 acres, this is the largest of the three battlefields. The entire Collier South Build Alternative, including construction and operation of the station, parking area, and access road, requires the permanent use of 4.3 acres (0.02%) of this property (Figure 19 and Figure 20). The access road to the Collier South Build Alternative would be elevated to cross over the existing Norfolk passenger rail to connect to Halifax Road, also elevated. The Collier South Build Alternative will have No Adverse Effect on this battlefield under Section 106 of the NHPA.

FRA finds that construction and operation of the Collier South site will not substantially impair the activities, features, and attributes that qualify the Petersburg III/The Breakthrough for protection under Section 4(f). While the use will be permanent, it will be at a relatively minor scale (0.01%) relative to the size of the battlefield. The ability of the Petersburg III/The Breakthrough to convey the feeling, setting, and intensity of

the battle will not be substantially diminished by the construction and operation of the site. Therefore, FRA has determined that the use from the Collier South Build Alternative is *de minimis*.

Should FRA select the Collier South Build Alternative as the Preferred Alternative, FRA will include in the final Determination of Effects a *de minimis* finding for all three resources and request SHPO concurrence. FRA will include in the FONSI a description of all SHPO coordination and copies of all correspondence.

3.25 CONSTRUCTION IMPACTS

3.25.1 Existing Conditions

Currently, no substantial construction activities are underway in the immediate vicinity of the proposed Build Alternatives.

3.25.2 Potential Impacts

General Construction Impacts

Impacts associated with station construction would be local and temporary. The most noticeable construction impacts would likely be associated with noise, vibration, and dust. Some traffic disruptions may occur, but these would likely be intermittent.

Construction impacts are caused by the operation of equipment for clearing, grubbing, and grading the parcels prior to paving, and constructing the new station and platform. Traffic may be disrupted when bringing equipment to the site, removing debris, and construction of any new driveways or turn lanes. Traffic disruptions may include temporary lane closures or using flaggers to slow traffic, but are not anticipated to have a substantial impact on the traveling public. Railroad traffic may have to slow when passing through the construction zone, especially during construction of any center platform, which may require adjustments of railroad schedules during temporary construction activity.

Construction of any of the proposed stations would require indirect consumption of energy for processing materials, construction activities, and site management. Delays in traffic caused by construction may lead to temporary increases in vehicle fuel consumption as vehicles idle or drivers choose longer routes to avoid construction activities, although significant construction delays are not anticipated due to the overall small scale of the Build Alternative station footprints.

Employment benefits are anticipated during construction. The construction related employment benefits would be 115 jobs at the Boulevard Build Alternative, 105 for Branders Bridge, 90 at Ettrick Build Alternative and 180 at the Collier South Build Alternatives and are based on overall construction cost estimates.

3.25.3 Site-Specific Construction Impacts

Boulevard Build Alternative

As the Boulevard Build Alternative site is already paved, clearing and grubbing would be limited to the trees lining the railroad right-of-way. Boulevard is a heavily traveled roadway. However, construction-related traffic impacts would have some degree of relief, as Boulevard is a multi-lane facility with dedicated turn lanes onto the property. Lakeside Elementary School is located north of the Project site, and the children at the school would be considered sensitive to construction-related impacts. As part of the coordination with the City of Colonial Heights there was a discussion that due to school age consolidation within the area that this school could be abandoned and a potential site for Transit Oriented Development if this Build Alternative were selected. No timeframe or documentation exists though for this initiative at this time, and it would not be directly related to construction of the new station. The parcel has ample paved area for staging, which would minimize dust generating activities unless it was determined that replacing the pavement was necessary.

Branders Bridge Build Alternative

The parcel is wooded and its topography is not uniform, so substantial clearing, grubbing, and grading would be required prior to construction. Branders Bridge Road is a two-lane facility, so lane closures may be required for material leaving or entering the site. Because Branders Bridge Road has relatively heavy traffic for a two-lane facility, this could cause local traffic disruptions. However, the construction of the Branders Bridge Road grade-separation with the CSXT railroad (part of the SEHSR Tier-II EIS) will eliminate the temporary delays that now happen with the daily, at-grade crossing of Branders Bridge Road at-grade.

Ettrick Build Alternative

As the Ettrick site is already paved, clearing and grubbing would be limited to the trees lining the railroad right-of-way, where necessary. The site is relatively flat, limiting the amount of excavation required. Both Bessie Lane and South Street dead end at the station, so there would be minimal disruption of local traffic. A number of residences are near the construction area, and more than 20 would be within 500 feet of the Project footprint. Also, three places of worship are listed within 800 feet of the Project site (God Mission of Faith Church, Macedonia Tabernacle Industries, and Calvary Outreach Revival Center).

Collier South Build Alternative

The site is relatively flat. The parcels are in timber and agricultural use, requiring extensive clearing and grubbing of trees. To provide access to the site, a connector road more than a half-mile long would be required to connect to Halifax Road. This access road would have to be built on fill and structure to span the existing Norfolk passenger rail connection and align with Halifax Road.

3.25.4 Mitigation

Best management practices (BMPs) will be utilized to reduce construction related temporary impacts such as provision of access routes, signage and wayfinding, provision of detour routes as required and appropriate construction staging to minimize impacts. Construction activities could be timed to minimize effects on

sensitive receptors. Steps could be taken to minimize lane closures or to conduct them during periods of normally lower than average traffic.

As part of the construction process, any potential water quality impacts would be minimized by implementing erosion and sediment control (ESC) measures at the construction site. ESC measures would be designed to prevent soil movement / loss, enhance aesthetics, and to eliminate any appreciable damage to off-site receiving channels, property, and natural resources. To minimize potential impacts to water resources in the Study Area during construction, strict adherence to the most recent edition of DCR's *Erosion Sediment Control Handbook* is required.

3.26 SECONDARY AND CUMULATIVE IMPACTS

Potential secondary and cumulative impacts associated with developing the proposed station alternatives are discussed in the Secondary and Cumulative Effects Technical Report (Appendix J). The following discussion summarizes the anticipated secondary and cumulative effects of past and reasonably foreseeable future actions that could cause land use changes within the Future Land Use Study Area (FLUSA). FRA includes only those actions that are planned and funded as being reasonably foreseeable to be included in this analysis. Based on the anticipated usage of the station, a half-mile FLUSA was evaluated.

- Direct impacts are caused by the action and occur at the same time and place. The Project's direct impacts to human and natural resources are addressed throughout Chapter 3.
- Secondary impacts are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Secondary impacts may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.
- Cumulative impacts are the impact on the environment that result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor, but collectively significant, actions taking place over a period of time.

Depending on location, construction of a new, multimodal passenger rail station will have varying degrees of secondary and cumulative impacts at the regional and local level, but are not likely at the national level. Contributing factors to secondary and cumulative impacts are other major planned actions and the Project's compatibility with future land use and transportation plans. Mitigating factors that could offset any impacts would include locally adopted ordinances and land use controls.

With the forthcoming ROD for the SEHSR Tier-II EIS, implementation of the SEHSR Tier-II EIS is reasonably foreseeable. While funding for construction has yet to be allocated, the SEHSR Tier-II EIS is well on its way to receiving environmental clearances for construction, once funding becomes available. As stated

in the SEHSR Tier-II EIS[74], implementation of SEHSR would enhance the existing transportation network along the SEHSR Corridor in the Tri-Cities area by:

- Linking metropolitan areas where highway and airline travel volumes are the greatest; thereby providing a travel alternative that helps ease congestion on existing highways.
- Increasing the speed and frequency of passenger rail service provides more travel opportunities for people in the area.
- More passenger rail trips means increased passenger capacity and the ability to travel
- Auto trip diversions to the new SEHSR service helps improve air quality throughout the Tri-Cities area.
- Implementation of the SEHSR, combined with a multimodal station, will provide greater access to rural areas and communities through links with additional intercity passenger rail services.

3.26.1 Existing Conditions

All of the potential station areas are located on lands that are currently developed or have been developed in the past. Two of the Build Alternatives, Boulevard and Ettrick, are currently paved and surrounded by mixed residential and commercial uses. The Branders Bridge Build Alternative is located in a residential/agricultural area, and Collier South Build Alternative is located in an area with agricultural and industrial land use.

3.26.2 Potential Impacts

Under the No-Build Alternative the existing Ettrick station would remain in its current location and current configuration. No improvements would occur as part of this Project. With the growth that is projected to occur in ridership due to implementation of additional passenger and high-speed rail service, the station would be inadequate in design to handle additional demand, resulting in potential over-crowding, constrained parking and a lack of station amenities associated with Amtrak's guidance on best practices for station sizing and design. In addition, with potential re-development in the area due to implementation of the Ettrick VSU Special Area plan additional growth pressure and ridership demand could occur. As noted in the transportation discussion previously, travel time and accessibility into and out of the Ettrick station, which is already constrained compared to other Build Alternatives under consideration, would be negatively impacted without improvements.

[74] Federal Railroad Administration, North Carolina Department of Transportation and Virginia Department of Rail & Public Transportation. *Southeast High Speed Rail – Richmond, VA to Raleigh, NC. Tier II Final Environmental Impact Statement and Section 4(f) Evaluation*. May 2015. Accessed on 9/11/15 at http://www.sehsr.org/deis/sehsr_deis_download_files/title_pg.pdf. Page 4-255.

No additional construction or other projects are currently planned and funded in any of the Build Alternative sites that would result in secondary and cumulative impacts. Potential impacts would only be the result of future unspecified development that could result from a new station or improved station and provided through coordination of local land use changes to create future increase in development for the station sites.

Boulevard Build Alternative

Secondary and cumulative development in this area is likely regardless of whether the Boulevard site is chosen. The City of Colonial Heights is planning to develop the Boulevard (US 1) area as a commercial zone and is constructing a number of improvements south of the FLUSA. The site of the proposed station and some surrounding commercial properties appear to be underutilized. Based on coordination with the City of Colonial Heights, nearby Lakeside Elementary School could potentially become available as a Transit Oriented Development site if it were part of a school consolidation effort that could be implemented. If this site were to become available it would have excellent access to a station.

Much of the undeveloped land in the FLUSA is in the floodplain of Oldtown Creek and cannot be developed. The lack of developable land in the FLUSA and regulations on development and redevelopment in Colonial Heights will limit the overall secondary and cumulative effects of the Project on water quality. The Project is anticipated to have potentially positive economic effects; however, the Project is not anticipated to have substantial secondary and cumulative effects.

Branders Bridge Build Alternative

Activities that may cause secondary and cumulative effects would include commercial development or residential development spurred by construction of the proposed station and reasonably foreseeable future development from other sources. Current zoning would support increased residential development. The development of a station at Branders Bridge could encourage minimal commercial development, if any at all. Such development would not be permitted under existing land use regulations.

The station would unlikely attract significant commercial development or higher-density residential development in isolation of other origin/destinations; therefore, substantial secondary or cumulative effects are unlikely.

Ettrick Build Alternative

In April 2015, Chesterfield County amended its Comprehensive Plan by adopting the Ettrick VSU Special Area Plan. The plan notes the anticipated growth of VSU and the multi-use center currently under construction. The plan also proposes to enhance the Ettrick Station area and increase the integration of the Ettrick community and VSU. The plan is consistent with the existing station at the Ettrick site, as well as the development of a new railroad station at this site. Construction of a new train station could spur redevelopment of currently underutilized commercial properties, as well as higher-density residential redevelopment and conversion of nearby agricultural land to residential use.

The station is not easily accessed from surrounding highways and requires multiple turns to access from Boulevard (US 1). Chesterfield County zoning regulations will limit water quality impacts associated with

development. Property value increases would be seen as a positive effect, given that many of the current commercial parcels appear to be underutilized. The Project is anticipated to have potentially positive economic effects; however, Chesterfield County may be more equipped to deal with project-related expenses than Colonial Heights and Petersburg, as it has a much larger budget. Overall, the Project is not anticipated to cause substantial secondary and cumulative effects.

Collier South Build Alternative

Based on the City of Petersburg's Comprehensive Plan, the proposed station is compatible with future goals for the area; however, few of the currently foreseeable projects in the area would complement the proposed vision. The lack of existing commercial development would limit secondary growth, as passengers arriving/departing from the station would conduct commercial activity before reaching the station. While fiscal impact analysis reveals that the Collier South Build Alternative would see the greatest annual fiscal gain associated with proposed transit-oriented development, this gain is offset by the potential cost of the new infrastructure the City of Petersburg may have to implement in order to attract private development. Before advancing with development, local officials may want to consider ways to finance the infrastructure and assess whether acceptable fiscal impacts are still projected for the City. Additionally, nearby commercial facilities lack the proximity to support pedestrian use, but are sufficiently close to potentially limit the attractiveness of the station area for commercial development. Given the lack of origins/destinations in the FLUSA, development of the Collier South Build Alternative is not anticipated to lead to substantial secondary and cumulative impacts to the local economy or natural resources.

If development were to occur, it would be located within the boundaries of the Petersburg III/ The Breakthrough cultural resource site noted above. However, this growth is identified currently within the City of Petersburg Comprehensive Plan and thus permitted with or without the station. Provision of a station could accelerate the growth, but would not be considered an overall cause of the secondary development in this station location.

3.26.3 Mitigation

Note that this potential mitigation discussion provides only recommendations, not commitments. Local land use controls that would implement or permit secondary development, for example, are not beyond the jurisdiction of FRA or the CPDC and are presented here as examples of how mitigation could be implemented locally to mitigate some impacts.

Boulevard Build Alternative

Redevelopment regulations in the current Colonial Heights Zoning Ordinance will mitigate potential secondary and cumulative effects. Oldtown Creek is on the Virginia 303(d) list of impaired waters was available. If a Total Maximum Daily Load (TMDL) is developed, it would limit potential secondary and cumulative effects to water quality. Rent control or other options could be used to limit any secondary or cumulative effects to availability of rental housing.

Branders Bridge Build Alternative

Current Chesterfield County zoning regulations would limit secondary and cumulative effects to natural resources. Sidewalks or trails could be developed to improve pedestrian access to the station.

Ettrick Build Alternative

Chesterfield County has proactively implemented water and sewer improvements, which would assist in mitigating potential secondary and cumulative effects to water quality. Additional water and sewer connections could be offered in areas of new development. Rent control or other options could be used to limit any secondary or cumulative effects to availability of rental housing.

Collier South Build Alternative

Current City of Petersburg zoning regulations would limit secondary and cumulative effects to water quality if development took place. Sidewalks or trails could be developed to improve pedestrian access to the station, encouraging non-vehicular access the station.

4. COORDINATION AND CONSULTATION

Coordination activities were designed to inform residents, public officials, businesses, property owners, stakeholders, and regulatory agencies about the issues involved in evaluating potential station locations for a new multimodal passenger rail station within the Tri-Cities area. In addition, public participation efforts sought community input regarding the alternatives being considered, potential environmental impacts, and other study concerns. Given the prior SEHSR Tier-II EIS public outreach efforts, the Tri-Cities Area Multimodal Station Study was a familiar subject for citizens and agencies alike.

4.1 AGENCY COORDINATION

From the Project's beginning, the study team met monthly with the CPDC's SWG, FRA, and cooperating agencies (FTA and FHWA) to discuss the Project's progress, develop alternatives, and evaluate study findings. These entities were instrumental in guiding the development of the Project and the evaluation of alternatives.

Formal agency scoping was initiated in October 2014. A scoping package was submitted to local, state, and federal agencies and officials, as well as interested parties and organizations, including CSXT and Amtrak. A copy of the scoping package, the distribution list, and a matrix of responses received, is included in Appendix K-1.

Once the study team, in collaboration with the SWG providing guidance throughout this process, established alternatives to be evaluated in detail, site-specific agency coordination was conducted for detailed input. Agencies contacted for project review requests and online project reviews included:

- Virginia Department of Conservation and Recreation – Division of Natural Heritage (DCR-DNH) for information on state and federally protected species.
- Virginia Department of Game and Inland Fisheries (DGIF) for state and federally protected species
- U.S. Fish and Wildlife Service (USFWS) for federally protected species, as well as Bald Eagle nests and concentration areas.
- Virginia Department of Historic Resources (DHR) for historic and archaeological resources. DHR is the State Historic Preservation Office (SHPO) in Virginia.
- Department of the Interior - National Park Service – Petersburg National Battlefield. Representatives from the Petersburg National Battlefield were appointed by the Tri-Cities MPO to be members of the Project's SWG.

Extensive agency coordination and field work for the SEHSR provided a considerable data and site-specific knowledge for the Project from the beginning. Additional agency coordination for this Project is provided in Appendix K-2.

4.2 PUBLIC OUTREACH AND WORKSHOPS

4.2.1 Scoping Package

As noted in Section 4.1, distribution of the Project scoping package included interested parties and organizations. A copy of the scoping package, the distribution list, and a matrix of responses received, is included in Appendix K-1. No other comments were received from interested parties or organizations.

4.2.2 Project Website

On behalf of the Tri-Cities Area MPO, the CPDC maintained a Project website during the course of the study. The site posted direct contact information for questions, newsletters, fact sheets, and advertisements for public workshops. The website's address is:
http://www.craterpdc.org/transportation/NEPA_multimodal.htm.

4.2.3 Newsletters

A series of newsletters were prepared during the course of the study. These newsletters were posted on the Project website. Electronic files were made available to SWG members for distribution to their respective localities, agencies, and organizations. Copies of the newsletters are provided in Appendix K-3.

4.2.4 Press Releases

On behalf of the Tri-Cities Area MPO, the CPDC posted press releases regarding the availability of online newsletters and schedules of upcoming public workshops. Copies of project-related press releases are provided in Appendix K-4.

4.2.5 Public Workshops

A kick-off Public Workshop was held on December 11, 2014 in Petersburg, VA. The workshop offered an opportunity for the public to participate in an interactive way with study team members. Oral, written, and electronic comments were received. Approximately 20 citizens attended the workshop. Copies of the fact sheet, comment sheet, and displays, as well as a summary of comments received, are included in Appendix K-5.

A second Public Workshop was held on September 16, 2015 in Ettrick to present the preliminary study findings to the public in advance of release of this EA, provide an opportunity for citizens to comment on the findings, and allow for the exchange of information between Project team members and citizens. Approximately 30 citizens were in attendance. At the time of the second Public Workshop, no Preferred

Alternative had been identified. Copies of the study findings, comment sheet, and displays, as well as a summary of comments received, are included in Appendix K-5.

A public review period will be implemented in coordination with the release of this EA. Comments received will be addressed as part of the anticipated FONSI.

5. LIST OF PREPARERS

Federal Lead Agency, Cooperating Agencies, Participating Agencies

Name	Federal Agency and Responsibility
Mr. John Winkle	Federal Railroad Administration (FRA) – Lead Agency
Mr. Ryan Long	Federal Transit Administration (FTA) – Cooperating Agency
Ms. Tammye Davis	Federal Highway Administration (FHWA) – Cooperating Agency
Mr. Fritz Brandt	National Park Service (NPS) – Participating Agency

CPDC and Tri-Cities MPO: Study Working Group Members and Voting Status

Jurisdiction or Agency	Name	Voting Status
Chesterfield County	Ms. Barbara Smith	Voting
City of Colonial Heights	Mr. George Schanzenbacher	Voting & Chair
Dinwiddie County	Mr. Mark Bassett	Voting & Vice- Chair
City of Hopewell	Mr. Ed Watson	Voting
City of Petersburg	Mr. Steven Hicks	Voting
Prince George County	Ms. Julie Walton	Voting
Virginia Department of Transportation (VDOT)	Mr. Mark Riblett	Voting
Petersburg Area Transit (PAT)	Ms. Dironna Belton	Voting
Virginia Department of Rail & Public Transportation (DRPT)	Ms. Emily Stock	Voting
Crater Planning District Commission (CPDC)	Mr. Joe Vinsh	Voting
Federal Transit Administration(FTA)	Mr. Ryan Long	Non-Voting
Federal Highway Administration (FHWA)	Ms. Tammye Davis	Non-Voting
U.S. Army - Fort Lee	Mr. Fritz Brandt	Non-Voting
NPS Petersburg National Battlefield Park	Mr. David Shockley	Non-Voting

Michael Baker International

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Jacob Thornton	GIS Specialist
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APPENDIX A

PROJECT SCREENING

APPENDIX A-1

Revised MOE Memo 11/2/14

Michael Baker
INTERNATIONAL

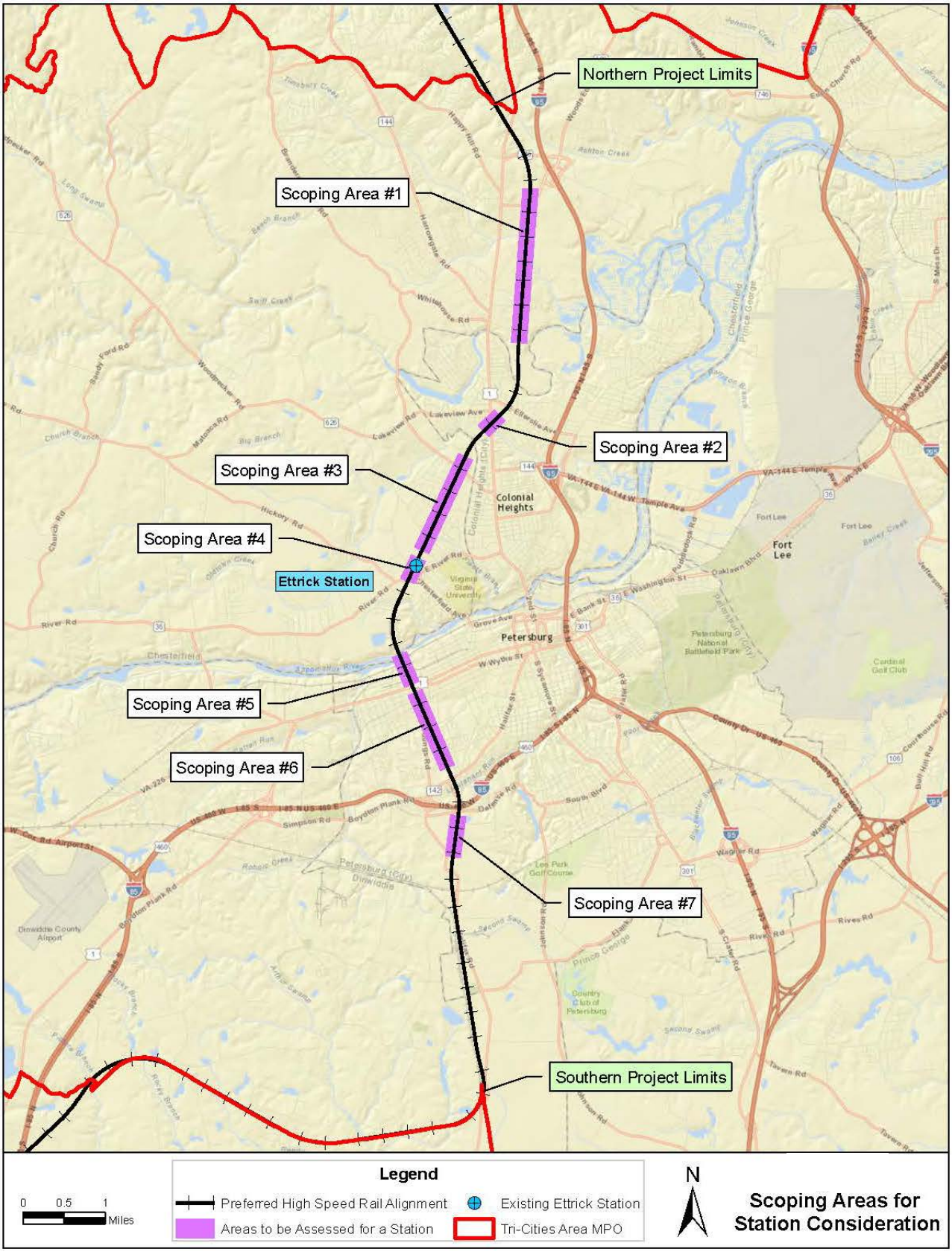
Subject:	**REVISED** Measures of Effectiveness – Tri-Cities Area Multimodal Station Study
From:	Ken Mobley, Project Manager
To:	Study Working Group
Date:	11/25/14
Sponsor:	Crater Planning District Commission (CPDC): Joseph Vinsh, Director of Transportation with FRA as Lead Agency
Location:	Tri-Cities Area –Counties of Chesterfield and Dinwiddie and Cities of Colonial Heights and Petersburg, Virginia

The original Measures of Effectiveness (MOEs) were presented to the Study Working Group (SWG) at the November 7th meeting in Colonial Heights, VA. The SWG provided comments, suggestions, and revisions to the MOEs presented at the meeting and followed up with revisions via e-mail. The following table presents the revised MOEs to be used in the first screening of potential station locations.

One of the first steps identified in the scope of services for the Environmental Assessment is to develop Measures of Effectiveness (MOEs) that can be used to screen potential station locations in advance of the detailed Environmental Assessment. As shown in the attached figure, several potential station locations have been identified, including several that have been previously studied. The goal of the screening process is to determine those station areas that should proceed into full environmental impact analysis and that meet the project's overall purpose and need. This memo presents potential MOEs for review.

The following ***REVISED*** MOEs are proposed. It is important to note that some of the MOEs proposed are comparative in nature for the Study Working Group to consider and do not represent full Fatal Flaws in and of themselves.

The next step, if these MOEs are acceptable, is to prepare comparative data for the seven station scoping areas currently being scoped. The draft results of that comparison, and any conclusions or recommendations, would be presented in the Public Meeting in December for comment.


Northern Project Limits
Scoping Area #1
Scoping Area #2
Scoping Area #3
Scoping Area #4
Ettrick Station
Scoping Area #5
Scoping Area #6
Scoping Area #7
Southern Project Limits
Colonial Heights
Petersburg
Fort Lee
Legend
Preferred High Speed Rail Alignment
Existing Ettrick Station
Areas to be Assessed for a Station
Tri-Cities Area MPO
0 0.5 1 Miles
N
Scoping Areas for Station Consideration

REVISED MEASURES OF EFFECTIVENESS FOR FIRST SCREENING

MOE	Definition / Purpose	Notes
Platform Accommodation	Can the location support a 1000' long platform free of grade or curvature?	Basic rail design requirement, element of purpose and need. Considered a Fatal Flaw if area cannot support platform lengths.
Station Size	Can the location provide space requirements for facilities associated with a Class III"Small/Medium" sized Amtrak station? Is there a potential parcel the size needed or would parcels have to be consolidated?	Based on Amtrak's revised Station Classifications and Features, as well as VDRPT data and SEHSR projections, current ridership volumes call for a Class III Small/Medium facility (see *Tri-Cities Area Multimodal Station Study - Purpose and Need Statement*). Areas that can't accommodate space requirements would be eliminated from consideration. It would not be a Fatal Flaw to consolidate parcels though to create the space required. *Note: No formal area requirements for a Class III station are available.*
New: Assessed Value	Is the assessed value of the parcel(s) cost-prohibitive	A cost-prohibitive threshold to be determined by the SWG.
New: Environmental Justice	Would the new station location affect Environmental Justice populations?	Based on an initial assessment of disproportionately high and adverse impacts to these populations (minority and/or low income). *Note: Presence of EJ populations is considered a constraint and not a Fatal Flaw*.
Distance to Interstate	How far is station from I-95? How far is station from I-85?	This should be based on both travel time and travel distance. Presuming the northern and the southern limits of the NEPA study area are the same as the northern and southern limits of

MOE	Definition / Purpose	Notes
		the MPO study area and are being used to define the Tri-Cities passenger rail market area, travel time would be a better measure of effectiveness than distance from an interstate facility. For example, while Scoping Area #1 (Walthall) is only a short distance from I-95, it is also in the far north side of the Tri-Cities passenger rail market area. A significant portion of the Tri-Cities passenger rail market does not reside near the far northern limits of the MPO study area. The development of travel time information using the scoping area locations and where Tri-Cities residents actually live within the market area would be a more meaningful measure of effectiveness. *Note: The threshold for a negative travel time or distance will be determined by the SWG.*
Proximity to Destination	How far is station key locations and population centers?	Look at distance to major user groups: population centers, downtown areas, businesses, retail, schools, military facilities, etc. *Note: The threshold for a negative travel time or distance to key locations and population centers will be determined by the SWG.*
Environmental Constraints	Does the proposed site have known environmental constraints that could be major obstacles in site selection? This could include station locations that impact: • Properties listed on or eligible	Based on existing information, any constraints would be noted (even if not fatal). *Note: Presence of an environmental constraint is considered a constraint and not a Fatal Flaw. The exception to this is the presence of a protected species and/or habit.*

MOE	Definition / Purpose	Notes
	for the National Register of Historic Places • Section 4(f) resources • Protected species • Wetlands and streams	*This would be a Fatal Flaw.*
Existing Land Use	Would the proposed site be located within or accessed through residential land uses? Would the proposed location create potential impacts to existing residences or residential areas?	Site should not be accessed primarily through residential areas. If located across from residential development, will need to assess impacts in EA, but note potential in preliminary screening. *Note: a site newly located within a residential area is considered a Fatal Flaw.*
Future Land Use	Can the site accommodate future, planned land uses?	FRA needs to establish the future Design Year (2030, 2035, 2040?) Future planned land uses are current adopted local comprehensive plans and/or other local planning activities involving public review and comment. Site should not prohibit or preclude the ability of a locality to implement planned, approved future development. For comparative purposes. *Note: The threshold for consistency with future land use will be determined by the SWG.*
Relocations	To create the station, would full relocations of existing businesses or residential properties be required?	Not a Fatal Flaw necessarily if impacts are minor. If multiple relocations would be needed to meet station site space requirements and provide access to the site then this would be considered a Fatal Flaw and those areas would be eliminated.

MOE	Definition / Purpose	Notes
NEW: Locality Support	Is the site supported by the localities?	Based on input from SWG locality representatives for sites within their jurisdiction. *Note: The threshold for local support will be determined by the SWG.*
Existing and Future Transit Access	How far is the site from existing or proposed transit routes? Could transit be provided to the site?	Based on whether transit providers currently provide or are willing to expand and provide service to an area. This would apply to Petersburg Area Transit (PAT) and Greater Richmond Transit Company (GRTC).Best planning would ensure transit access could be provided. Just a consideration, not a Fatal Flaw to not have transit currently. Transit access would not have to be provided directly to station either – this is for comparative purposes, not a Fatal Flaw.
Access Routes	Would new access routes be needed? How long would they be if required? Could bicycle and pedestrian access be provided?	Indicates potential for impacts, again not a Fatal Flaw if new routes are required. This measure would be important because it directly relates to the cost of constructing a station. *Note: The threshold for this MOE will be determined by the SWG.*
Multimodal Accessibility	How accessible is the station via transit, highway, bike/ped to key population centers, urban centers, shopping centers, businesses, schools, military facilities?	Based on travel time and travel distance. *Note: The threshold for accessibility will be determined by the SWG.*

MOE	Definition / Purpose	Notes
Freight Integration	Does the station/platform location negatively impact freight operations?	All passenger stations will impact freight in some way, used as a comparative measure between potential sites and design considerations. Not a Fatal Flaw, but a design consideration.
NEW: ADA Compliant	Is or can the station be compliant with requirements of ADA?	Yes or no. *Note: If not ADA compliant, then the site has a Fatal Flaw.*

APPENDIX A-2

Station Screening Memo 2/02/15

Michael Baker
INTERNATIONAL

Subject:	**Station Screening Methodology #2** – Tri-Cities Area Multimodal Station Study
From:	Ken Mobley – Project Manager
To:	Study Working Group
Date:	2/2/2015
Sponsor:	Crater Planning District Commission (CPDC): Joseph Vinsh, Director of Transportation with FRA as Lead Agency
Location:	Tri-Cities Area –Counties of Chesterfield and Dinwiddie and Cities of Colonial Heights and Petersburg, Virginia

This memo describes the revised station location screening process for the Tri-Cities Area Multimodal Station Study. Revisions are based on comments and feedback from the Study Working Group (SWG) on Monday, January 5, 2015. This memo is an accompanying document to the Station Screening Methodology memo dated 12/29/14 and is included as an attachment to this memo. A summary of the findings is presented below, followed by a more detailed explanation of revisions made to the methodology of each Measure of Effectiveness (MOE) and the subsequent change in outcome, if any.

One note, in order to avoid confusion: the potential station sites analyzed here have been numbered to coordinate with the numbering sequence used during the public outreach process. Two sites in Scoping Area 3, Sites 6 and 7, have been merged for the purposes of this analysis. This merged site is referred to as 'Site 6/7'.

SUMMARY OF PRELIMINARY FINDINGS & RECOMMENDATIONS

The screening methodology was revised based on feedback from the SWG. The updated methodology yielded results presented on the following pages.

Based on the data and method of analysis, the Top 5 ranked potential station sites include the following locations:

- Walthall – Preliminary Scoping Area 1, Station Site #2
- Boulevard NW – Preliminary Scoping Area 2, Station Site #4
- Branders Bridge NE – Preliminary Scoping Area 3, Station Site #5
- Ettrick Station- Preliminary Scoping Area 4, Station Site #9
- Collier East – Preliminary Scoping Area 7, Station Site #12

Generally, we would recommend that only the Top 5 ranked station sites be considered for detailed analysis and that the remaining sites be eliminated from further consideration. However, the study team recommends not advancing any of the Top 5 ranked stations that lack locality support.

REVISED PRELIMINARY SCREENING RANKING

Preliminary Scoping Area #	Station Site #	Station Site Name	Preliminary Screening Rank
4	Site 9	Ettrick Station	1
3	Site 5	Branders Bridge NE	2
2	Site 4	Boulevard NW	3
1	Site 2	Walthall	4
7	Site 12	Collier East	4
3	Site 6/7	Branders Bridge SE	6
6	Site 10	Youngs NW	6
6	Site 11	Youngs SW	6
7	Site 13	Collier West	9
1	Site 1	Woods Edge NW	10
3	Site 8	Dupuy NW	10
1	Site 3	Pine Forest NW	12
5	*Eliminated due to business relocations and potential for adverse impact to historic resource (Battersea).*		

Comments

The station screening methodology outlined in Memo #1 was presented to the SWG on January 5, 2015. A summary of the comments received as a result of this presentation include the following:

- **Assessment Methodology**
  The first draft of the screening methodology established a high, medium, low spectrum of impacts for each measure to compare potential station sites. The SWG indicated that assessing impacts in a binary way (yes/no, present/absent, 0/1) would be more suitable at this level of analysis. As a result, the methodology for screening several of the measures was updated accordingly, including: transit access, environmental justice, and assessed value.
- **Multimodal Access**
  Previously, multimodal accessibility was assessed through www.walkscore.com. The results indicate that the entire study area is auto oriented and, therefore, the SWG indicated that this measure was not effective in differentiating among the potential station areas. As a result, the multimodal accessibility measurement was removed from the station screening criteria.
- **Land Use**
  The study working group indicated that because the zoning and land use characteristics vary between each jurisdiction, zoning and land use are inconsistent comparison measures. Therefore, the assessment of existing and future land use was combined to assess the compatibility of incorporating a multimodal station within local area plans.
- **Proximity to Population Centers**
  The SWG indicated that measuring the total population and employment within a standard

distance of each potential station site was a more effective measure than measuring each potential station's distance to various activity generators. This measure was revised accordingly.

- **Locality Support**
  Assessing locality support emerged through discussion with the SWG as an important measure and integral to assessing each potential station site.
- **Categorization**
  The screening criteria would benefit by combining similar measures into assessment categories. In particular, the SWG indicated the advantage of combining the platform accommodation, ADA compliance, and freight integration measures because they are all design-based measures. The resulting categories include: Design Considerations, Property Implementation, Environmental Constraints, Proximity, and Local Compatibility.

Methodology

The screening methodology was outlined in detail in Memo #1. As a result, Memo #2 highlights only the changes to the MOE methodology.

Assessed Value

The assessed value measure was updated to reflect the desired binary system of assessment as noted above. Instead of using the value of land, the need to acquire the property in order to incorporate a station was assessed. In this case, the Walthall, Ettrick, and Collier East sites are publicly owned and would not need to be purchased to incorporate a station. These sites received a score of "1", whereas all other sites received a score of "0" because they would require property acquisition.

Environmental Justice

The EJ measure was updated to reflect the desired binary system of assessment, as noted above. Using EPA's EJ View online tool, the presence or absence of an EJ population (minority and/or low income) was assessed for each site. In this case, the Walthall, Boulevard NW, Branders Bridge NE, and the Collier West sites have no EJ populations present and received a score of "1". All other sites received a score of "0" because EJ populations are present.

Distance to Interstate

The distance to the interstate measure was assessed using the same methodology described in Memo #1. The scoring was updated to reflect the desired binary system of assessment, as noted above. All sites less than a 5 minute drive from the interstate received a score of "1". All sites within a 5-10 minute drive of the interstate received a score of "0", these sites include Branders Bridge SE, Dupuy NW, and Ettrick.

Distance to Population Centers

The Tri-Cities MPO provided shapefile data, compatible with ArcGIS, to conduct a population and employment proximity assessment for each potential station site. The data included Census Block boundaries with population data and TAZ boundaries with employment data. The project team merged these data sets based on shared geographic boundaries, and extracted the total population and employment with the 1 mile radius of each potential station location. The sites with less than 5,000 total population and employment received a score of "-1", sites with totals

between 5,000 and 10,000 received a score of "0", and sites with more than 10,000 total population and employment received a score of "1".

Transit Access
The transit access measure was updated to reflect the desired binary system of assessment, as noted above. In this case, each station site that has existing or planned transit service within a half mile received a score of "1", whereas all other stations received a "0". The only stations without transit access are Woods Edge NW, Wathall, and Pine Forest NW.

Land Use
Previously, land use compatibility was assessed for the existing land use and the future/planned land use. Based on discussion with the study working group, these two measures were combined to simply measure compatibility with the existing comprehensive plan. If the comprehensive plan called for future commercial or mixed use development in the area, the potential station site received a score of "1", all other sites received a score of "-1".

Locality Support
Previously, locality support was not assessed as part of the station screening methodology. However, locality support continues to emerge as a vital concern for the placement and feasibility of implementation for a new or redeveloped multimodal station. As a result, locality support was assessed based on stakeholder feedback. Sites that have been expressly noted as favored by a locality received a score of "1", sites that have been expressly noted as not supported by a locality received a score of "-1", and all other sites received a score of "0".

Organization

The organization of the screening matrix was altered to display and communicate the information more logically. Five separate categories were created to organize each of the assessment measures. These categories include:

- **Design Considerations** – platform accommodation, ADA compatibility, and freight integration
- **Property Implementation** – assessed value, access routes, and relocations
- **Environmental Constraints** – environmental justice and human/natural resources
- **Proximity** – distance to interstate, population and employment within 1 mile, and transit access
- **Local Compatibility** – compatibility with each locality's Comprehensive Plan and locality support

Each category is scored and ranked to get a better understanding of the strengths and weaknesses of each station site.

Results and Recommendations

The results of the revised station screening indicate that all station sites have pros and cons. Regarding scores and rankings, the table of results are presented in the pages that follow. The five highest ranked potential station sites include Ettrick, Branders Bridge NE, Boulevard NW, Collier East and Walthall. It is the recommendation of the study team to only consider these station sites further. However, it is also the recommendation of the study team not to analyze any station site further that is expressly not supported by the locality in which it is located.

Ettrick – the existing station site at Ettrick is appropriate for a multimodal station and ranks the highest among all the potential station sites. Ettrick's biggest strengths are in the Design Consideration and Property Implementation categories, but it is also within close proximity to much of the area's population and employment, has limited environmental constraints, and Chesterfield County has incorporated the station into its comprehensive planning efforts.

Branders Bridge NE – another Chesterfield site at Branders Bridge ranks second because of its central location, limited environmental constraints, and favorable design considerations. However, the site is largely in a residential area and the county's comprehensive plans do not account for the incorporation of a multimodal station.

Boulevard NW – the Boulevard site is the only location in Colonial Heights and ranks third overall. The Boulevard site is a relatively inactive commercial site along a multi-use corridor. It has significant connectivity to population, employment, and transit. The Boulevard site also has direct access and an existing parking area that would facilitate incorporating a station. However, Colonial Heights has expressly stated that they do not support a station in this area.

Collier East – the Collier site, just south of I-85, is tied for the rank of 4th/5th with the Walthall site. Collier East is a large, open parcel owned by the City of Petersburg, making it score highly in property implementation. The site is located just south of the City and, therefore, is not within close proximity to any major population or employment centers. In addition, the site has not been included in any adopted plans by the City of Petersburg.

Walthall - the Walthall site is one of the farthest north of the 12 potential station sites. The Walthall site has some strengths, including design considerations, a large open parcel, and limited environmental constraints. However, being so far north, the site is not very close to major population and employment centers, there are limited supporting land uses surrounding the site, and stakeholders have raised serious security concerns due to the proximity with the Walthall industrial site.

Site #	Site Name	Design Considerations	Property Implementation	Environmental Constraints	Proximity	Local Compatibility	Score	Rank
Site 1	Woods Edge NW	0	0	0	0	1	1	10
Site 2	Walthall	3	1	1	0	-1	4	4
Site 3	Pine Forest NW	0	0	-1	0	1	0	12
Site 4	Boulevard NW	0	0	2	3	0	5	3
Site 5	Branders Bridge NE	3	0	2	3	-2	6	2
Site 6/7	Branders Bridge SE	3	-1	1	2	-2	3	6
Site 8	Dupuy NW	0	0	1	1	-1	1	10
Site 9	Ettrick	3	3	1	1	2	10	1
Site 10	Youngs NW	0	1	1	2	-1	3	6
Site 11	Youngs SW	0	-1	1	2	1	3	6
Site 12	Collier East	3	1	-1	1	0	4	4
Site 13	Collier West	0	0	0	1	1	2	9

Accompanying Memo:

Station Screening Methodology - 12/29/14

Michael Baker
INTERNATIONAL

Subject:	**Station Screening Methodology** – Tri-Cities Area Multimodal Station Study
From:	Ken Mobley, Project Manager
To:	Study Working Group
Date:	12/29/14
Sponsor:	Crater Planning District Commission (CPDC): Joseph Vinsh, Director of Transportation with FRA as Lead Agency
Location:	Tri-Cities Area –Counties of Chesterfield and Dinwiddie and Cities of Colonial Heights and Petersburg, Virginia

The following memo describes the process for the initial station location screening for the Tri-Cities Multimodal Station Study. The screening uses the established measures of effectiveness to rank each potential station location. The potential station locations were ranked as either a "+", "±", or "-" (essentially high, medium, or low) for each measure based on their relative scores. The rankings for each measure were calculated into an overall score for each potential station site. In this case, a "+" receives 1 point, a "±" receives no points, and a "-"receives -1 point. The results of the screening are provided in Attachment A and the detailed matrix is included in Attachment B.

Platform Accommodation

The 12 preliminary sites were all chosen because they can accommodate 1,000+ feet of tangent track. In that regard, all potential station locations can accommodate a passenger platform and therefore none of the sites received a low score. However, station sites on the west side of the existing rail corridor may have less design flexibility due to freight activity. As a result, each potential station site on the west side of the rail corridor received a medium score for platform accommodation and each potential station site on the east side of the rail corridor received a high score. The preliminary results are included below.

	Site 1 Woods Edge NW	Site 2 Walthall	Site 3 Pine Forest NW	Site 4 Boulevard NW	Site 5 Branders Bridge NE	Site 6 Branders Bridge SE	Site 7 Dupuy NW	Site 8 Ettrick	Site 9 Youngs NW	Site 10 Youngs SW	Site 11 Collier West	Site 12 Collier East
Platform Accommodation	±	+	±	±	+	+	±	+	±	±	±	+

Is it reasonable to differentiate rankings between west and east side station locations? Should platform accommodation be removed from the preliminary screening?

Station Size

All potential station locations were chosen to accommodate a "Small-Medium" classified station. Therefore, station size has been removed from the preliminary screening.

Assessed Value

The assessed value of each potential station location parcel was calculated by acre from the respective locality's real estate assessment website. Any

site with a value per acre below $10,000 received a high score, between $10,000 and $20,000 received a medium score, and above $20,000 received a low score. The only exception would be Ettrick, since no cost is assumed – it is also rated highly. The preliminary results are included below.

	Site 1 Woods Edge NW	Site 2 Walthall	Site 3 Pine Forest NW	Site 4 Boulevard NW	Site 5 Branders Bridge NE	Site 6 Branders Bridge SE	Site 7 Dupuy NW	Site 8 Ettrick	Site 9 Youngs NW	Site 10 Youngs SW	Site 11 Collier West	Site 12 Collier East
Assessed Value	±	±	+	-	+	+	+	+	+	±	-	+

Environmental Justice

The environmental justice measure of effectiveness was assessed based on the presence of minority and low income populations according to the Environmental Protection Agency's "EJView" online mapping tool; located at epamap14.epa.gov/ejmap/entry.html. EJView uses Census data to map EJ populations; poverty data is from the 2010 American Community Survey by Census Tract and the minority population data is from the 2010 SF1 Demographics by Census Block.

For the purposes of this screening, the presence of EJ populations was assessed as a "Yes/No" calculation. Potential station sites received a high score if neither low income nor minority populations were present or if construction of a station would appear to have no proximity, construction or access road impacts to any residential areas, a medium score if either low income or minority populations were present and there could be some potential for impacts, or a low score if both minority and low income populations were present and impacts could occur. Low income populations were considered present if over 10% of the Census tract was designated as living below the poverty line. Minority populations were considered present if over 40% of the Census Block was designated as a minority (note: all potential sites were either over 40% or below 10%). The preliminary results are included below.

	Site 1 Woods Edge NW	Site 2 Walthall	Site 3 Pine Forest NW	Site 4 Boulevard NW	Site 5 Branders Bridge NE	Site 6 Branders Bridge SE	Site 7 Dupuy NW	Site 8 Ettrick	Site 9 Youngs NW	Site 10 Youngs SW	Site 11 Collier West	Site 12 Collier East
Environmental Justice	+	+	±	+	+	±	±	+	-	±	+	+

Is it an environmental justice issue to add multimodal services? What are the reverse EJ issues of removing service from Ettrick?

Distance to Interstate

Distance to the interstate was measured by both distance and driving time from the potential station location to the nearest interstate on-ramp. In this case, the interstate included either I-95 or I-85. For sites that are currently undeveloped and do not have direct roadway access, the most accessible existing roadway was used to calculate travel time and distance (Note: accessibility includes potential impact to adjacent property owners when new infrastructure is need to access a station).

After conducting the analysis, it was concluded that driving distance and driving time are corollary. Therefore, rankings were based on driving time only. Sites with access in 2.5 minutes or less received a high score, between 2.5 and 5 minutes received a medium score, and above a 5 minute drive to access an interstate received a low score. The preliminary results are included below.

	Site 1 Woods Edge NW	Site 2 Walthall	Site 3 Pine Forest NW	Site 4 Boulevard NW	Site 5 Branders Bridge NE	Site 6 Branders Bridge SE	Site 7 Dupuy NW	Site 8 Ettrick	Site 9 Youngs NW	Site 10 Youngs SW	Site 11 Collier West	Site 12 Collier East
Distance to Interstate	±	±	-	±	±	±	-	-	+	±	+	+

Distance to Population Center

Distance to population centers was measured in the same fashion described above for distance to interstate. Four different population centers were chosen for measurement; downtown Petersburg, downtown Colonial Heights, Virginia State University college campus, and Fort Lee. Distance and time were calculated to the centroid of each population center. The measured distance and time were then averaged amongst the four population centers in order to objectively measure the time/distance across all four centers. The average score for both time and distance were ranked; 2.5 miles/8 minutes or less received a high score, 2.5 to 5 miles/8 to 12 minutes received a medium score, above 5 miles/12 minutes received a low score. The preliminary results are included below.

	Site 1 Woods Edge NW	Site 2 Walthall	Site 3 Pine Forest NW	Site 4 Boulevard NW	Site 5 Branders Bridge NE	Site 6 Branders Bridge SE	Site 7 Dupuy NW	Site 8 Ettrick	Site 9 Youngs NW	Site 10 Youngs SW	Site 11 Collier West	Site 12 Collier East
Distance to Population Center (Miles)	-	-	-	±	±	-	±	+	±	+	±	±
Distance to Population Center (Time)	-	-	-	±	±	±	±	+	±	±	-	-

Are these appropriate population/activity centers? Should one be considered greater than the others? Should both distance and time be considered?

Environmental Constraints

Environmental constraints were assessed using existing data sources collected for the Southeast High Speed Rail Tier II Environmental Impact Statement. These data were compiled in ArcGIS and include historical properties, archaeological and architectural significant areas, wetlands and water features, and sensitive park resources. For the purposes of this analysis, the types of features present at each potential station location were noted and the sites were ranked based on proximity and presence of these resources. Sites that did not have any environmentally sensitive features received a high score, sites adjacent to or with the potential for mitigation of environmentally sensitive features received a medium score, and sites fully within an environmentally sensitive feature received a low score. The preliminary results are included below.

	Site 1 Woods Edge NW	Site 2 Walthall	Site 3 Pine Forest NW	Site 4 Boulevard NW	Site 5 Branders Bridge NE	Site 6 Branders Bridge SE	Site 7 Dupuy NW	Site 8 Ettrick	Site 9 Youngs NW	Site 10 Youngs SW	Site 11 Collier West	Site 12 Collier East
Environmental Constraints	±	±	-	+	+	+	+	+	+	+	-	-

Land Use

The existing land use was assessed based on existing land use mapping and zoning ordinances in each locality. Future land use was assessed based on the future land use map and/or any comprehensive or special area plans for each locality. Any residentially or agriculturally zoned areas received a low score, industrial uses received a medium score (note: Ettrick is currently zoned industrial, but received a high score due to its current use as a rail station), vacant, mixed use or commercially zoned areas received a high score. The preliminary results are included below.

	Site 1 Woods Edge NW	Site 2 Walthall	Site 3 Pine Forest NW	Site 4 Boulevard NW	Site 5 Branders Bridge NE	Site 6 Branders Bridge SE	Site 7 Dupuy NW	Site 8 Ettrick	Site 9 Youngs NW	Site 10 Youngs SW	Site 11 Collier West	Site 12 Collier East
Existing Land Use	±	±	-	+	-	-	-	+	+	+	+	-
Future Land Use	+	±	+	+	-	-	-	+	-	+	+	-

Relocations

For the purposes of this study it is assumed that actively used parcels are excluded to avoid relocations. In order to rank station locations, the relocation measure was ranked by assessing the ease of purchase of property or ease of project implementation. Vacant parcels or those owned by supportive property owners such as the locality, government entity or railroad received a high score, undeveloped parcels with private owners received a medium score, developed but currently underutilized parcels received a low score. The preliminary results are included below.

	Site 1 Woods Edge NW	Site 2 Walthall	Site 3 Pine Forest NW	Site 4 Boulevard NW	Site 5 Branders Bridge NE	Site 6 Branders Bridge SE	Site 7 Dupuy NW	Site 8 Ettrick	Site 9 Youngs NW	Site 10 Youngs SW	Site 11 Collier West	Site 12 Collier East
Relocations	±	+	±	-	±	±	+	+	+	-	±	+

Should the city owned property at Collier West be considered as a more prominent advantage?

Locality Support

Locality support has been excluded from the rankings at this time. Locality support will be further explored when the list of potential station locations has been narrowed.

Transit Access

Transit access was measured to the nearest bus stop, using the same method as with distance to the interstate and population centers. Locations within .5 miles of a transit stop received a high score, locations within 2 miles of a transit stop received a medium score and locations farther than 2 miles from the nearest transit stop received a low score. The preliminary results are included below.

	Site 1 Woods Edge NW	Site 2 Walthall	Site 3 Pine Forest NW	Site 4 Boulevard NW	Site 5 Branders Bridge NE	Site 6 Branders Bridge SE	Site 7 Dupuy NW	Site 8 Ettrick	Site 9 Youngs NW	Site 10 Youngs SW	Site 11 Collier West	Site 12 Collier East
Transit Access	-	-	-	±	±	±	±	+	+	+	±	±

Access Routes

The access route measure refers to site access from existing roads and how easily access to the site could be implemented. In this case, sites with existing access received a high score, sites needing simple driveway construction for access received a medium score and sites that would require a new road or extension of an existing road received a low score. The preliminary results are included below.

	Site 1 Woods Edge NW	Site 2 Walthall	Site 3 Pine Forest NW	Site 4 Boulevard NW	Site 5 Branders Bridge NE	Site 6 Branders Bridge SE	Site 7 Dupuy NW	Site 8 Ettrick	Site 9 Youngs NW	Site 10 Youngs SW	Site 11 Collier West	Site 12 Collier East
Access Routes	±	-	±	+	±	-	-	+	±	±	±	-

Multimodal Accessibility

The multimodal accessibility measure assesses the site's integration with a walkable and bikeable environment. The rankings for multimodal accessibility were calculated from Walk Score (www.walkscore.com), which measures the walkability of any address using a patented system. For each address, Walk Score analyzes hundreds of walking routes to nearby amenities. Points are awarded based on the distance to amenities in each category. Amenities within a 5 minute walk (.25 miles) are given maximum points. A decay function is used to give points to more distant amenities, with no points given after a 30 minute walk.

Walk Score also measures pedestrian friendliness by analyzing population density and road metrics such as block length and intersection density. Data sources include Google, Education.com, Open Street Map, the U.S. Census, Localeze, and places added by the Walk Score user community.

Walk Score uses the following rating system:

Walk Score®	Description
90–100	**Walker's Paradise** Daily errands do not require a car.
70–89	**Very Walkable** Most errands can be accomplished on foot.
50–69	**Somewhat Walkable** Some errands can be accomplished on foot.
25–49	**Car-Dependent** Most errands require a car.
0–24	**Car-Dependent** Almost all errands require a car.

None of the potential sites scored higher than somewhat walkable using the Walk Score rating system. Therefore, sites that were car-dependent (0-49) received a low score, sites that were somewhat walkable (50-69) received a medium score, and no potential site received a high score. The preliminary results are included below.

	Site 1 Woods Edge NW	Site 2 Walthall	Site 3 Pine Forest NW	Site 4 Boulevard NW	Site 5 Branders Bridge NE	Site 6 Branders Bridge SE	Site 7 Dupuy NW	Site 8 Ettrick	Site 9 Youngs NW	Site 10 Youngs SW	Site 11 Collier West	Site 12 Collier East
Multimodal Accessibility	-	-	-	±	-	±	-	-	-	-	-	-

Freight Integration

Freight integration was distinguished between east and west side locations along the rail corridor. West side locations will require multiple crossovers of passenger trains to service a west side platform and, as a result, all west side station location received a low score. East side location received a high score. The preliminary results are included below.

	Site 1 Woods Edge NW	Site 2 Walthall	Site 3 Pine Forest NW	Site 4 Boulevard NW	Site 5 Branders Bridge NE	Site 6 Branders Bridge SE	Site 7 Dupuy NW	Site 8 Ettrick	Site 9 Youngs NW	Site 10 Youngs SW	Site 11 Collier West	Site 12 Collier East
Freight Integration	-	+	-	-	+	+	-	+	-	-	-	+

ADA Compliant

ADA compliance was also distinguished between east and west side locations along the rail corridor. Similar to platform accommodations, all potential station locations can accommodate ADA compliance and therefore none of the sites received a low score. However, station sites on the west side of the existing rail corridor may have less design flexibility due to freight activity. As a result, each potential station site on the west side of the rail corridor received a medium score for ADA compliance and each potential station site on the east side of the rail corridor received a high score. The preliminary results are included below.

	Site 1 Woods Edge NW	Site 2 Walthall	Site 3 Pine Forest NW	Site 4 Boulevard NW	Site 5 Branders Bridge NE	Site 6 Branders Bridge SE	Site 7 Dupuy NW	Site 8 Ettrick	Site 9 Youngs NW	Site 10 Youngs SW	Site 11 Collier West	Site 12 Collier East
ADA Compliant	±	+	±	±	+	+	±	+	±	±	±	+

Attachment A: Screening Results

	Site 1 Woods Edge NW	Site 2 Walthall	Site 3 Pine Forest NW	Site 4 Boulevard NW	Site 5 Branders Bridge NE	Site 6 Branders Bridge SE	Site 7 Dupuy NW	Site 8 Ettrick	Site 9 Youngs NW	Site 10 Youngs SW	Site 11 Collier West	Site 12 Collier East
Platform Accommodation	±	+	±	±	+	+	±	+	±	±	±	+
Station Size												
Assessed Value	±	±	+	-	+	+	+	+	+	±	-	+
Environmental Justice	+	+	±	+	+	±	±	+	-	±	+	+
Distance to Interstate	±	±	-	±	±	±	-	-	+	±	+	+
Distance to Population Center (Miles)	-	-	-	±	±	-	±	+	±	+	±	±
Distance to Population Center (Time)	-	-	-	±	±	±	±	+	±	±	-	-
Environmental Constraints	±	±	-	+	+	+	+	+	+	+	-	-
Existing Land Use	±	±	-	+	-	-	-	+	+	+	+	-
Future Land Use	+	±	+	+	-	-	-	+	-	+	+	-
Relocations	±	+	±	-	±	±	+	+	+	-	±	+
Locality Support												
Transit Access	-	-	-	±	±	±	±	+	+	+	±	±
Access Routes	±	-	±	+	±	-	-	+	±	±	±	-
Multimodal Accessibility	-	-	-	±	-	±	-	-	-	-	-	-
Freight Integration	-	+	-	-	+	+	-	+	-	-	-	+
ADA Compliant	±	+	±	±	+	+	±	+	±	±	±	+
Score	-3	0	-6	2	3	1	-3	11	2	2	-1	1

Attachment B: Detailed Screening Matrix

Scoping Area #1			
MOE Categories	**Site 1** **Woods Edge NW**	**Site 2** **Walthall**	**Site 3** **Pine Forest NW**
Platform Accommodation	*All potential sites were chosen to 1,000+ feet of tangent track and flat grading capable of accommodating an adequate platform construction.*		
Station Size	*All potential sites were chosen to adequate acreage to accommodate a Class III "Small/Medium" sized station.*		
Assessed Value	$12,933 per acre	$11,553 per acre	$7,343 per acre
Environmental Justice	Minority - Yes/Low Income - No	Minority - No/Low Income - No	Minority - Yes/Low Income - No
Distance to Interstate	0.6 Miles/1 Minute Drive	1.2 Miles/4 Minute Drive	1.6 Miles/3 Minute Drive
Distance to Population Center	6.7 Miles/8 Minute Drive (Downtown Petersburg) 6.1 Miles/11 Minute Drive (Colonial Heights) 5.4 Miles/14 Minute Drive (VSU) 11.3 Miles/16 Minute Drive (Fort Lee)	8.0 Miles/13 Minute Drive (Downtown Petersburg) 7.4 Miles/15 Minute Drive (Colonial Heights) 9.5 Miles/17 Minute Drive (VSU) 12.7 Miles/21 Minute Drive (Fort Lee)	5.5 Miles/11 Minute Drive (Downtown Petersburg) 3.5 Miles/10 Minute Drive (Colonial Heights) 4.3 Miles/13 Minute Drive (VSU) 8.7 Miles/20 Minute Drive (Fort Lee)
Miles	7.4	9.4	5.5
Time	12.3	16.5	13.5
Environmental Constraints	Battlefield Grounds	Archaeological Resources	Battlefield Grounds
Existing Land Use	A (Agricultural)/I-2 (General Industrial)	I-2 (General Industrial)	A (Agricultural)
Future Land Use	Industrial/Regional Mixed Use	Industrial	Regional Mixed Use Corporate Office/Research & Development/Light Industrial
Relocations	*All potential sites were chosen to exclude the need for relocations of active commercial or residential establishments.*		
Locality Support	-	-	-
Transit Access	None – Transit Route #10 @ Southpark Mall, 5.2 Miles Away	None – Route 10 @ Southpark Mall, 6.5 Miles Away	None – Route 10 @ Southpark Mall, 3.6 Miles Away
Access Routes	Driveway Access Needed	Extension/allowed public use of industrial access road	Driveway Access Needed
Multimodal Accessibility	WalkScore - 25/100 (Car dependant - most trips require a car)	WalkScore - 1/100 (Car dependent - almost all trips require a car)	WalkScore - 14/100 (Car dependant - almost all trips require a car)
Freight Integration	Multiple crossover movements required for west side station.	East side platform compatible with freight movement	Multiple crossover movements required for west side station.
ADA Compliant	-	-	-
Other Notes	Reconstruction of Woods Edge over proposed rail line could impact feasibility of site or provide oppurtunity for development	Commonwealth of Virginia Department of Transportation owns parcel identified for potential station site	Reconstruction of Pine Forest over proposed rail line could impact feasibility of site or provide oppurtunity for development

Scoping Area #2	
MOE Categories	**Site 4** **Boulevard NW**
Platform Accommodation	*All potential sites were chosen to 1,000+ feet of tangent track and flat grading capable of accommodating an adequate platform construction.*
Station Size	*All potential sites were chosen to adequate acreage to accommodate a Class III "Small/Medium" sized station.*
Assessed Value	$82,570 per acre
Environmental Justice	Minority - No/Low Income - No
Distance to Interstate	01 Miles/3 Minute Drive
Distance to Population Center	6.0 Miles/6 Minute Drive (Downtown Petersburg) 1.5 Miles/5 Minute Drive (Colonial Heights) 2.3 Miles/8 Minute Drive (VSU) 8.2 Miles/15 Minute Drive (Fort Lee)
Miles	4.5
Time	8.5
Environmental Constraints	N/A
Existing Land Use	BB (Boulevard Business)
Future Land Use	Community Commercial
Relocations	*All potential sites were chosen to exclude the need for relocations of active commercial or residential establishments.*
Locality Support	-
Transit Access	None – Transit Route #10 @ Southpark Mall, 1.7 Miles Away
Access Routes	Site Accessible
Multimodal Accessibility	WalkScore - 58/100 (Somewhat Walkable - some trips can be accomplished on foot)
Freight Integration	East side platform compatible with freight movement
ADA Compliant	-
Other Notes	Reconstruction of Woods Edge over proposed rail line could impact feasibility of site or provide oppurtunity for development

Scoping Area #3			
MOE Categories	**Site 5** **Branders Bridge NE**	**Site 6** **Branders Bridge SE**	**Site 7** **Dupuy NW**
Platform Accommodation	*All potential sites were chosen to 1,000+ feet of tangent track and flat grading capable of accommodating an adequate platform construction.*		
Station Size	*All potential sites were chosen to adequate acreage to accommodate a Class III "Small/Medium" sized station.*		
Assessed Value	$6,375 per acre	$4,502 per acre	$3,503 per acre
Environmental Justice	Minority - No/Low Income - No	Minority - Yes/Low Income - No	Minority - Yes/Low Income - No
Distance to Interstate	1.2 Miles/3 Minute Drive	1.9 Miles/6 Minute Drive	2.7 Miles/7 Minute Drive
Distance to Population Center	2.4 Miles/8 Minute Drive (Downtown Petersburg) 1.2 Miles/4 Minute Drive (Colonial Heights) 1.7 Miles/5 Minute Drive (VSU) 8.4 Miles/15 Minute Drive (Fort Lee)	2.1 Miles/8 Minute Drive (Downtown Petersburg) 0.9 Miles/4 Minute Drive (Colonial Heights) 1.2 Miles/4 Minute Drive (VSU) 6.8 Miles/17 Minute Drive (Fort Lee)	2.7 Miles/8 Minute Drive (Downtown Petersburg) 1.5 Miles/4 Minute Drive (Colonial Heights) 1.1 Miles/3 Minute Drive (VSU) 6.8 Miles/18 Minute Drive (Fort Lee)
Miles	3.4	2.8	3.0
Time	8.0	8.3	8.3
Environmental Constraints	N/A	N/A	N/A
Existing Land Use	R-7 (Residential)/A (Agricultural)	R-7 (Residential)/A (Agricultural)	R-7 (Residential)
Future Land Use	Suburban Residential	Suburban Residential	Suburban Residential
Relocations	*All potential sites were chosen to exclude the need for relocations of active commercial or residential establishments.*		
Locality Support	-	-	-
Transit Access	None – Transit Route #6 @ Ettrick, 1.7 Miles Away	None – Transit Route #6 @ Ettrick, 1.2 Miles Away	None – Transit Route #6 @ Ettrick, 1.1 Miles Away
Access Routes	Driveway Access Needed	Extension of residential access road and driveway	Residential access road and driveway needed
Multimodal Accessibility	WalkScore - 30/100 (Car dependant - most trips require a car)	WalkScore - 52/100 (Somewhat walkable - some trips can be accomplished on foot)	WalkScore - 8/100 (Car dependant - almost all trips require a car)
Freight Integration	East side platform compatible with freight movement	East side platform compatible with freight movement	Multiple crossover movements required for west side station.
ADA Compliant	-	-	-
Other Notes	Reconstruction of Branders Bridge over proposed rail line could impact feasibility of site or provide oppurtunity for development	Access need through residential neighborhoods and new roads would be built adjacent to existing homes	Access need through residential neighborhoods and new roads would be built adjacent to existing homes

Scoping Area #4	
MOE Categories	**Site 8** **Ettrick**
Platform Accommodation	*All potential sites were chosen to 1,000+ feet of tangent track and flat grading capable of accommodating an adequate platform construction.*
Station Size	*All potential sites were chosen to adequate acreage to accommodate a Class III "Small/Medium" sized station.*
Assessed Value	$38,445 per acre
Environmental Justice	Minority - Yes/Low Income - No
Distance to Interstate	2.4 Miles/8 Minute Drive
Distance to Population Center	2.3 Miles/8 Minute Drive (Downtown Petersburg) 1.1 Miles/4 Minute Drive (Colonial Heights) 0.2 Miles/1 Minute Drive (VSU) 6.4 Miles/18 Minute Drive (Fort Lee)
Miles	2.5
Time	7.8
Environmental Constraints	N/A
Existing Land Use	I-1 (Industrial)
Future Land Use	Community Mixed-Use
Relocations	*All potential sites were chosen to exclude the need for relocations of active commercial or residential establishments.*
Locality Support	-
Transit Access	Transit Route #6 @ Ettrick, 0.2 Miles Away
Access Routes	Site Accessible
Multimodal Accessibility	WalkScore - 20/100 (Car dependant - almost all trips require a car)
Freight Integration	East side platform compatible with freight movement
ADA Compliant	-
Other Notes	Existing station location

Scoping Area #6		
MOE Categories	**Site 9** **Youngs NW**	**Site 10** **Youngs SW**
Platform Accommodation	*All potential sites were chosen to 1,000+ feet of tangent track and flat grading capable of accommodating an adequate platform construction.*	
Station Size	*All potential sites were chosen to adequate acreage to accommodate a Class III "Small/Medium" sized station.*	
Assessed Value	$7,868 per acre	$18,130 per acre
Environmental Justice	Minority - Yes/Low Income - Yes	Minority - Yes/Low Income - Yes
Distance to Interstate	0.8 Miles/2 Minute Drive	01 Miles/3 Minute Drive
Distance to Population Center	2.3 Miles/7 Minute Drive (Downtown Petersburg) 3.6 Miles/11 Minute Drive (Colonial Heights) 2.2 Miles/6 Minute Drive (VSU) 7.6 Miles/14 Minute Drive (Fort Lee)	2.4 Miles/9 Minute Drive (Downtown Petersburg) 1.1 Miles/5 Minute Drive (Colonial Heights) 0.3 Miles/2 Minute Drive (VSU) 6.5 Miles/19 Minute Drive (Fort Lee)
Miles	3.9	2.6
Time	9.5	8.8
Environmental Constraints	N/A	N/A
Existing Land Use	Vacant	Vacant
Future Land Use	Medium to High Density Residential	Mixed Use Corridor
Relocations	*All potential sites were chosen to exclude the need for relocations of active commercial or residential establishments.*	
Locality Support	-	-
Transit Access	Transit Route #3 @ Lee Avenue, Direct Access	Transit Route #3 @ Lee Avenue, Direct Access Transit Route #2 @ Halifax Street, 0.2 Miles Away
Access Routes	Driveway Access Needed	Driveway Access Needed
Multimodal Accessibility	WalkScore - 21/100 (Car dependant - almost all trips require a car)	WalkScore - 20/100 (Car dependant - almost all trips require a car)
Freight Integration	Multiple crossover movements required for west side station.	Multiple crossover movements required for west side station.
ADA Compliant	-	-
Other Notes		

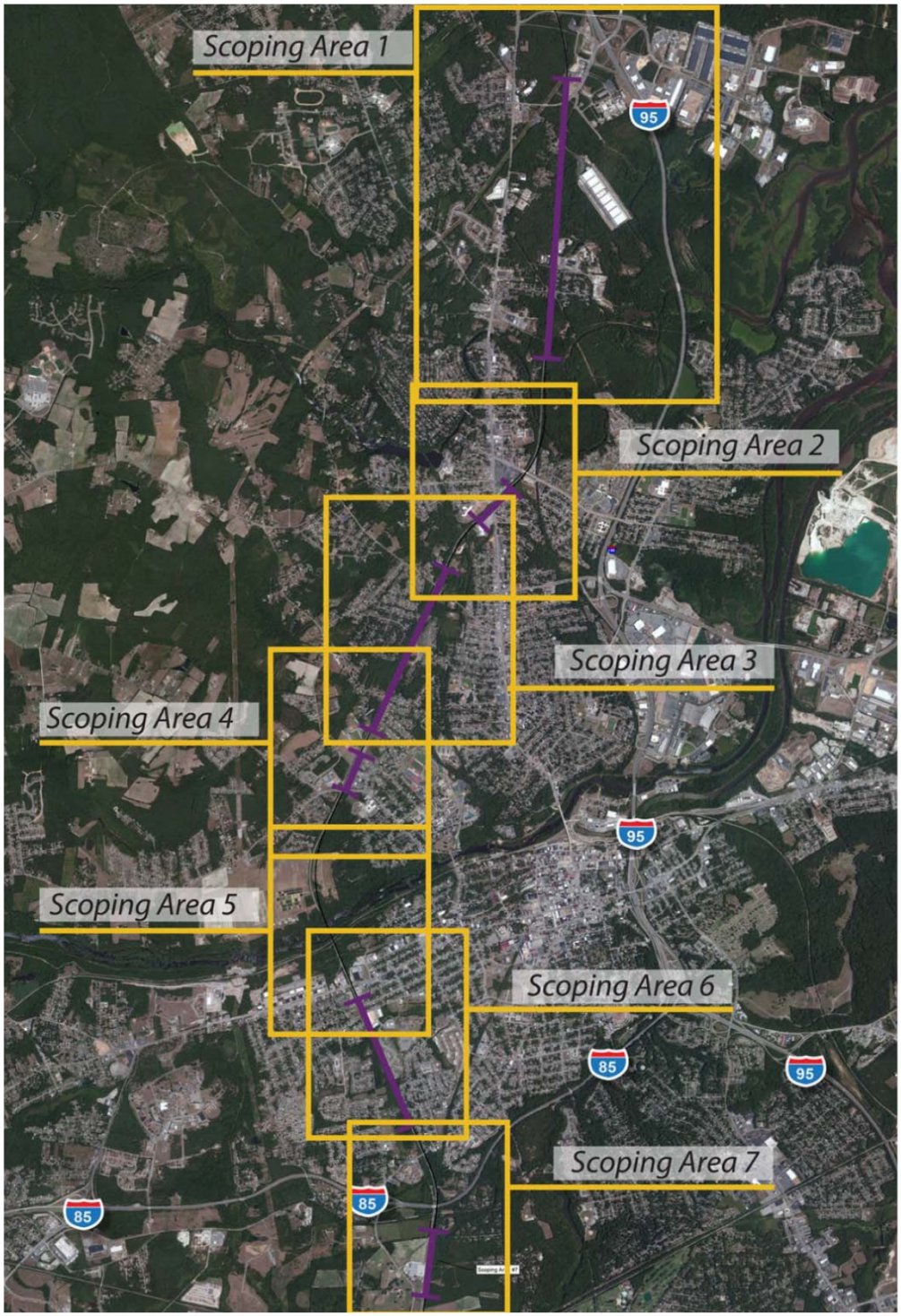
Scoping Area #7		
MOE Categories	**Site 11** **Collier West**	**Site 12** **Collier East**
Platform Accommodation	*All potential sites were chosen to 1,000+ feet of tangent track and flat grading capable of accommodating an adequate platform construction.*	
Station Size	*All potential sites were chosen to adequate acreage to accommodate a Class III "Small/Medium" sized station.*	
Assessed Value	$64,146 per acre	$2,637 per acre
Environmental Justice	Minority - No/Low Income - No	Minority - Yes/Low Income - No
Distance to Interstate	0.5 Miles/1 Minute Drive	0.9 Miles/2 Minute Drive
Distance to Population Center	3.1 Miles/8 Minute Drive (Downtown Petersburg) 4.8 Miles/14 Minute Drive (Colonial Heights) 3.4 Miles/9 Minute Drive (VSU) 7.1 Miles/13 Minute Drive (Fort Lee)	2.8 Miles/7 Minute Drive (Downtown Petersburg) 4.0 Miles/11 Minute Drive (Colonial Heights) 3.1 Miles/8 Minute Drive (VSU) 7.6 Miles/14 Minute Drive (Fort Lee)
Miles	4.6	4.4
Time	11.0	10.0
Environmental Constraints	Battlefield Grounds	Battlefield Grounds
Existing Land Use	Vacant/Industrial	Vacant/Single Family Residential
Future Land Use	Mixed-Use Corridor/Industrial	Low to High Density Neighborhood
Relocations	*All potential sites were chosen to exclude the need for relocations of active commercial or residential establishments.*	
Locality Support	-	-
Transit Access	None - Transit Route #2 @ Halifax Street, 0.9 Miles Away	None - Transit Route #2 @ Halifax Street, 0.6 Miles Away
Access Routes	Driveway Access Needed	Extension of Residential Drive Needed
Multimodal Accessibility	WalkScore - 11/100 (Car dependant - almost all trips require a car)	WalkScore - 0/100 (Car dependant - almost all trips require a car)
Freight Integration	Multiple crossover movements required for west side station.	East side platform compatible with freight movement
ADA Compliant	-	-
Other Notes		CSX and City of Petersburg owned property included

Mapping:

Preliminary Station Areas

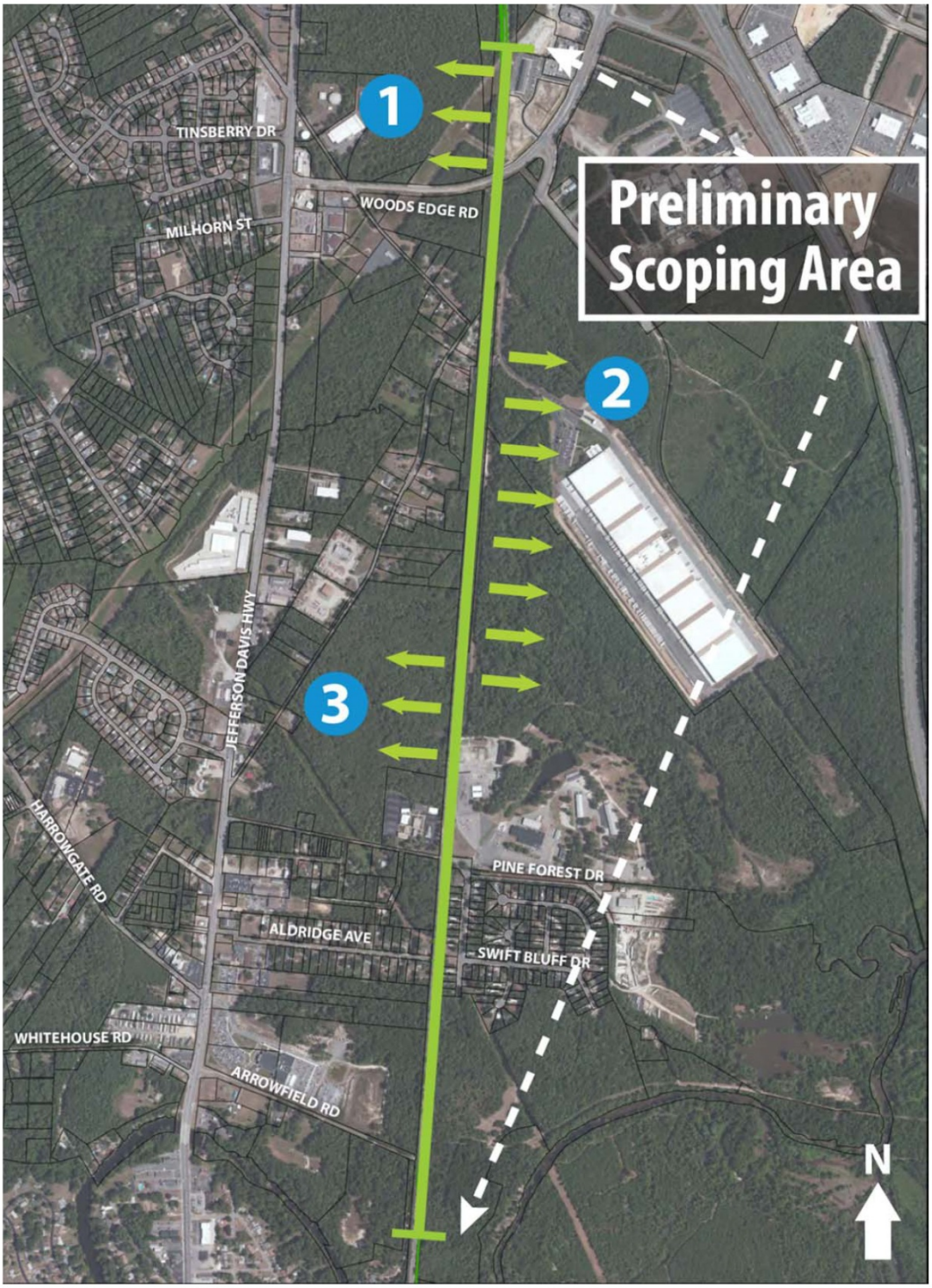
PRELIMINARY STATION AREAS

SCOPING AREA OVERVIEW



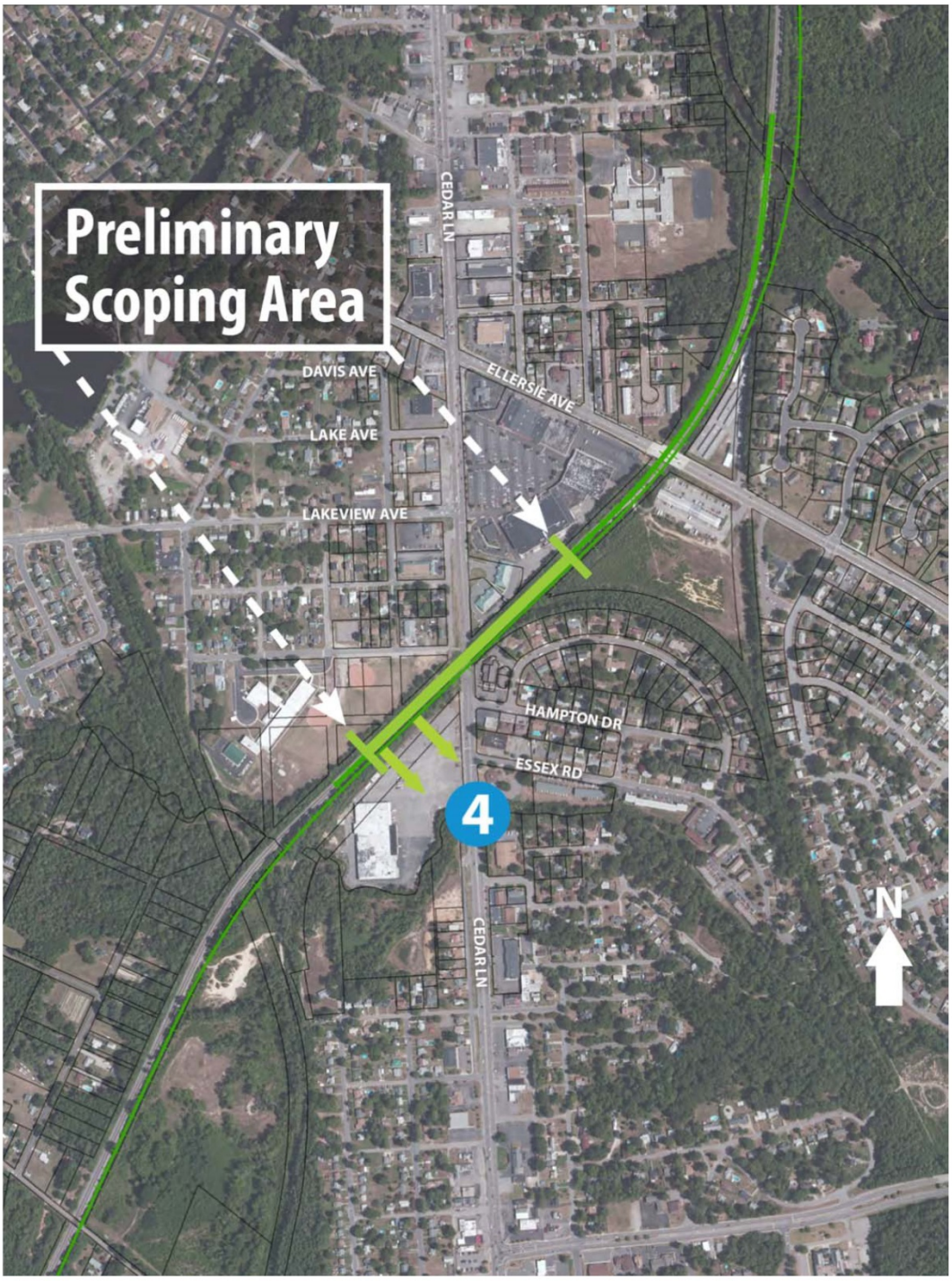
PRELIMINARY STATION AREAS

SCOPING AREA 1



PRELIMINARY STATION AREAS

SCOPING AREA 2



PRELIMINARY STATION AREAS

SCOPING AREA 3

PRELIMINARY STATION AREAS

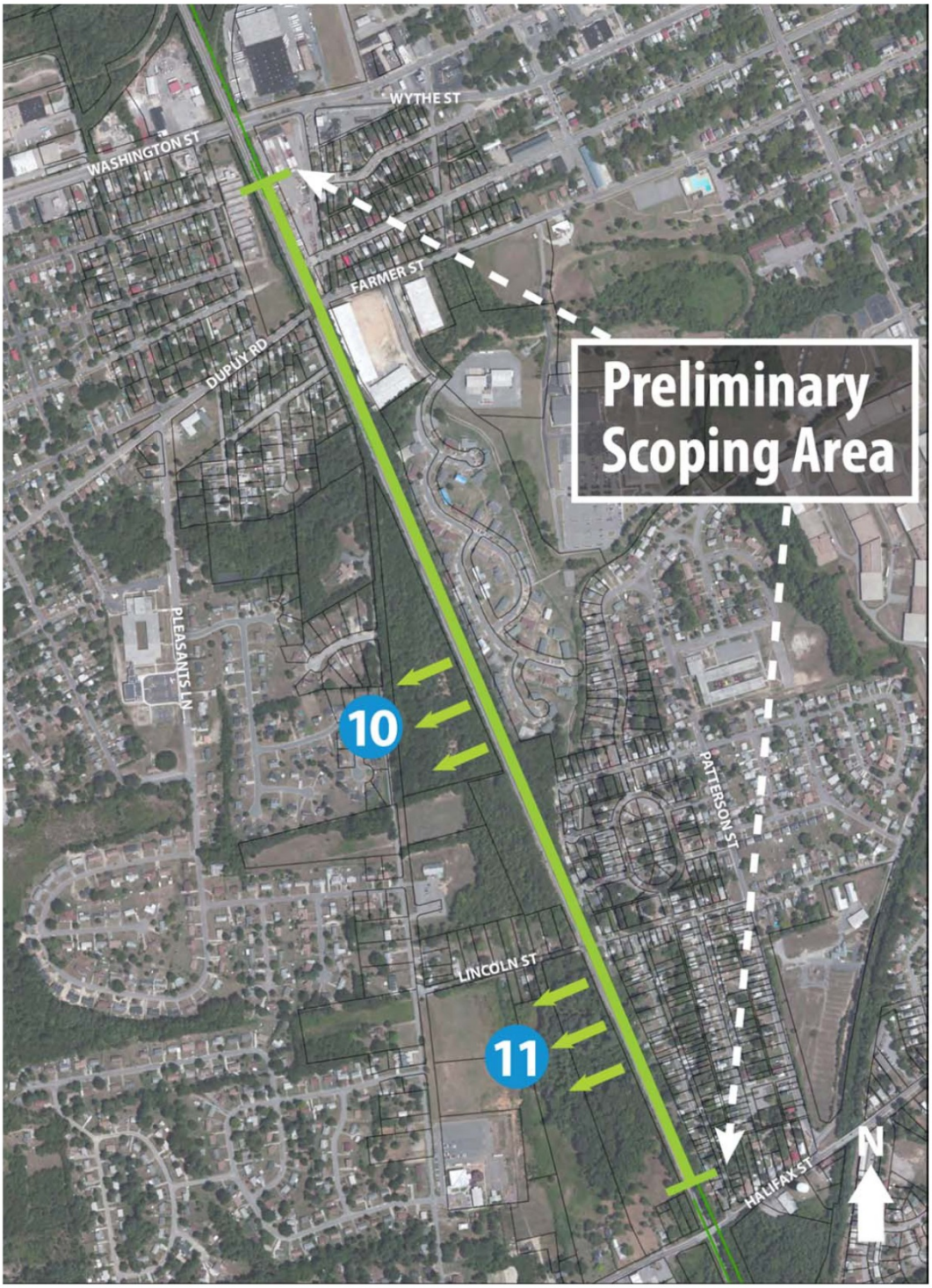
SCOPING AREA 4

PRELIMINARY STATION AREAS

SCOPING AREA 5

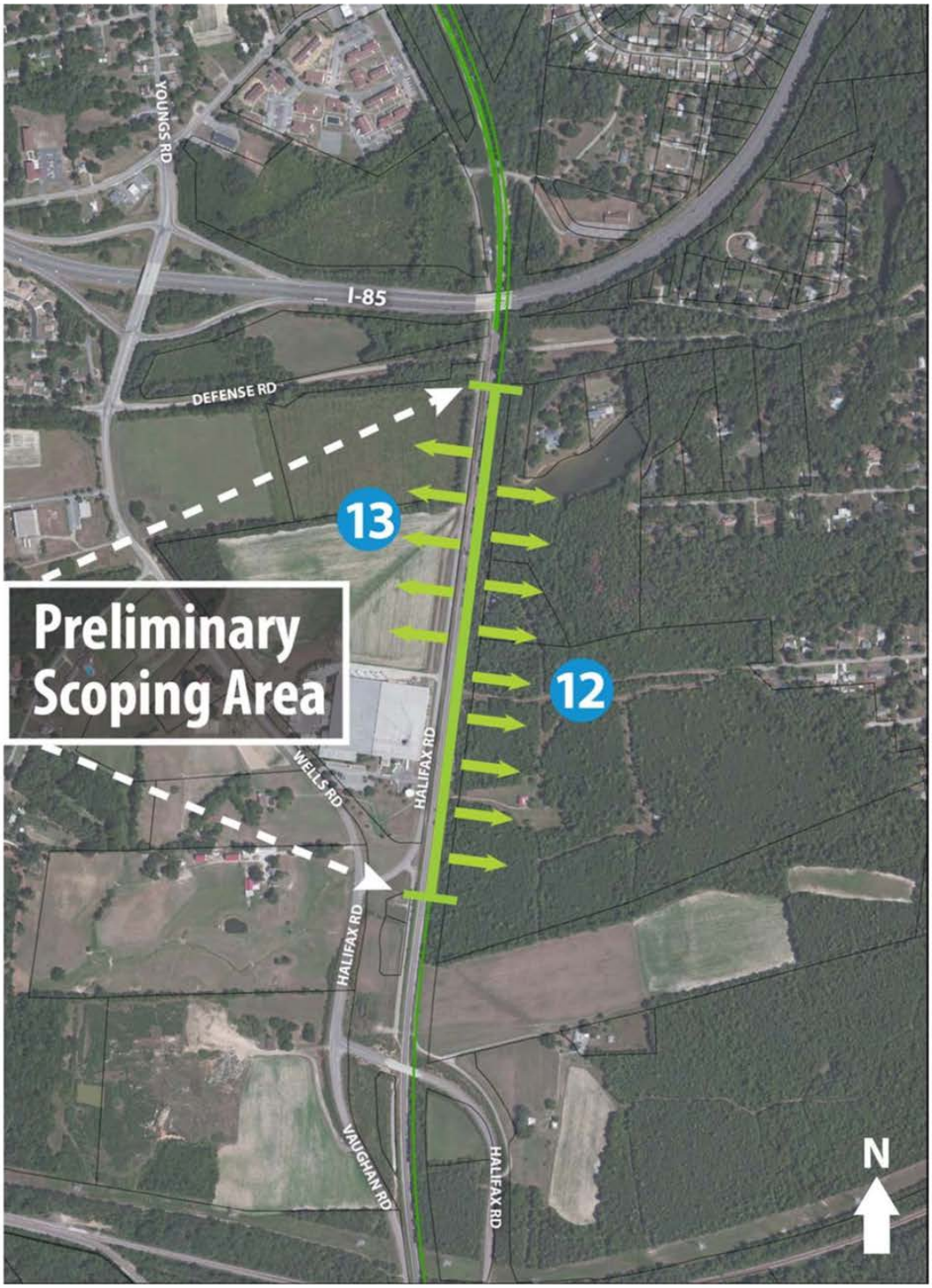
PRELIMINARY STATION AREAS

SCOPING AREA 6



PRELIMINARY STATION AREAS

SCOPING AREA 7



APPENDIX A-3

Tri-Cities Site Constraints Mapping

Tri Cities Rail & Site Design

- Preferred SEHSR Alignment
- Existing Rail
- Tangent Track
- Study Area (500 Ft. Buffer)
- Existing Rail Right of Way
- Station & Platform Concept
- Parking Lot Concept
- Potential Station Parcels
- SEHSR Road Right of Way
- SEHSR Construction Limits

Natural Resources

- DCR - Conservation Lands
- Protected Species
- Streams
- Wetlands
- Other Waters
- Resource Protection Area (RPA)

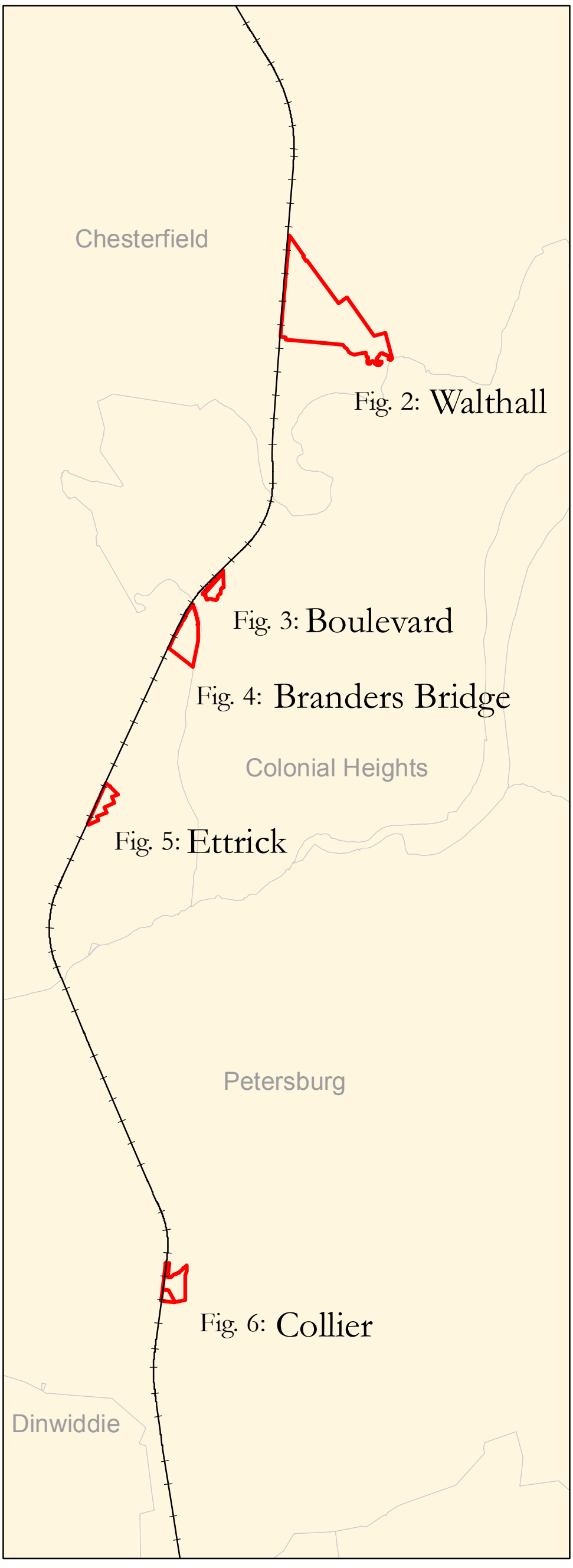
Cultural Resources

- Archaeological
- Architectural/Historical
- NPS Boundary

Community

- Parcel Boundaries

*SEHSR = Southeast High Speed Rail



Tri Cities Multimodal Station Study

Draft Station Location Concepts and Constraints

N W E S

Miles
0 0.5 1

Fig. 1: Map Key

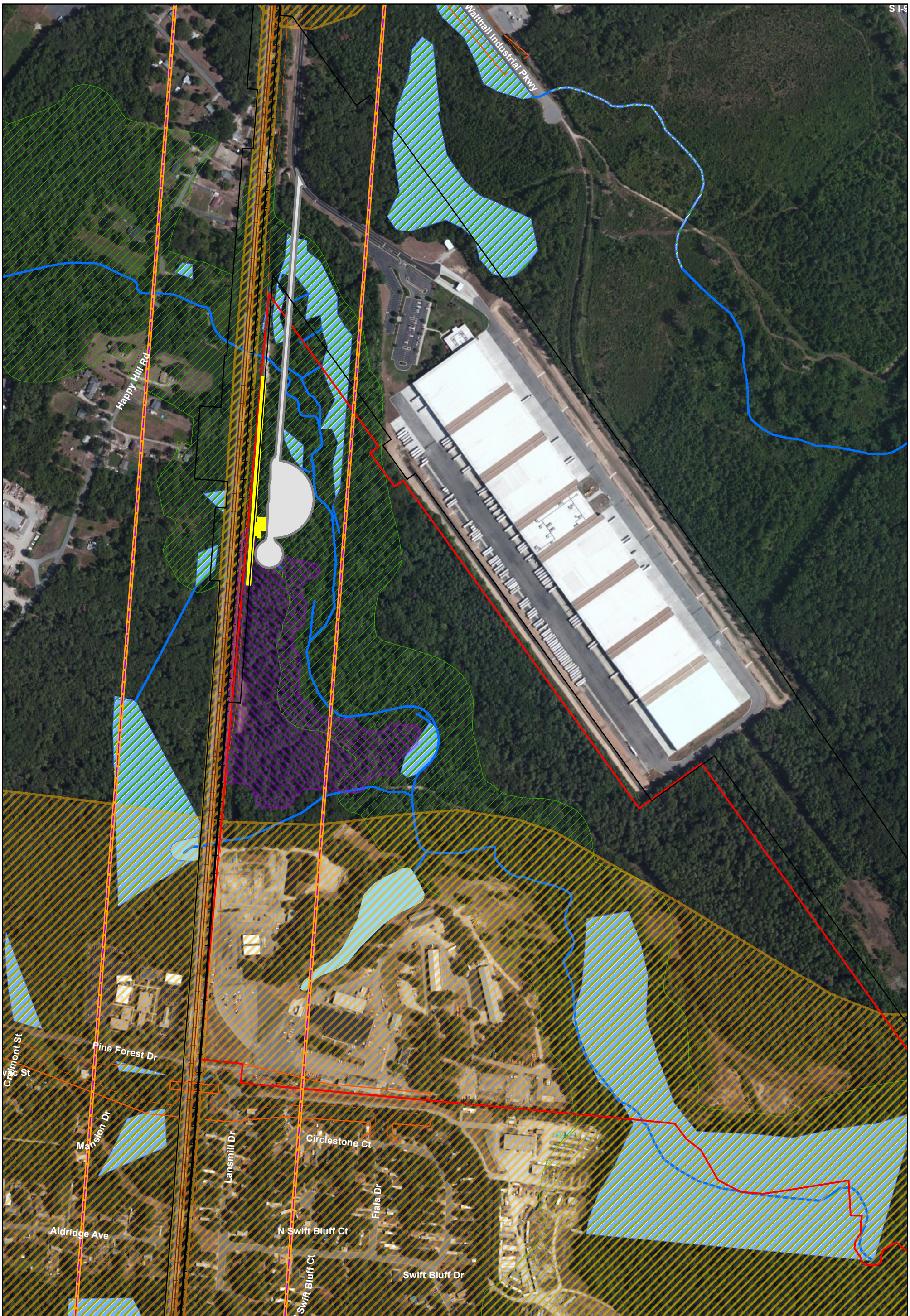


Fig. 2: Walthall Draft Concept

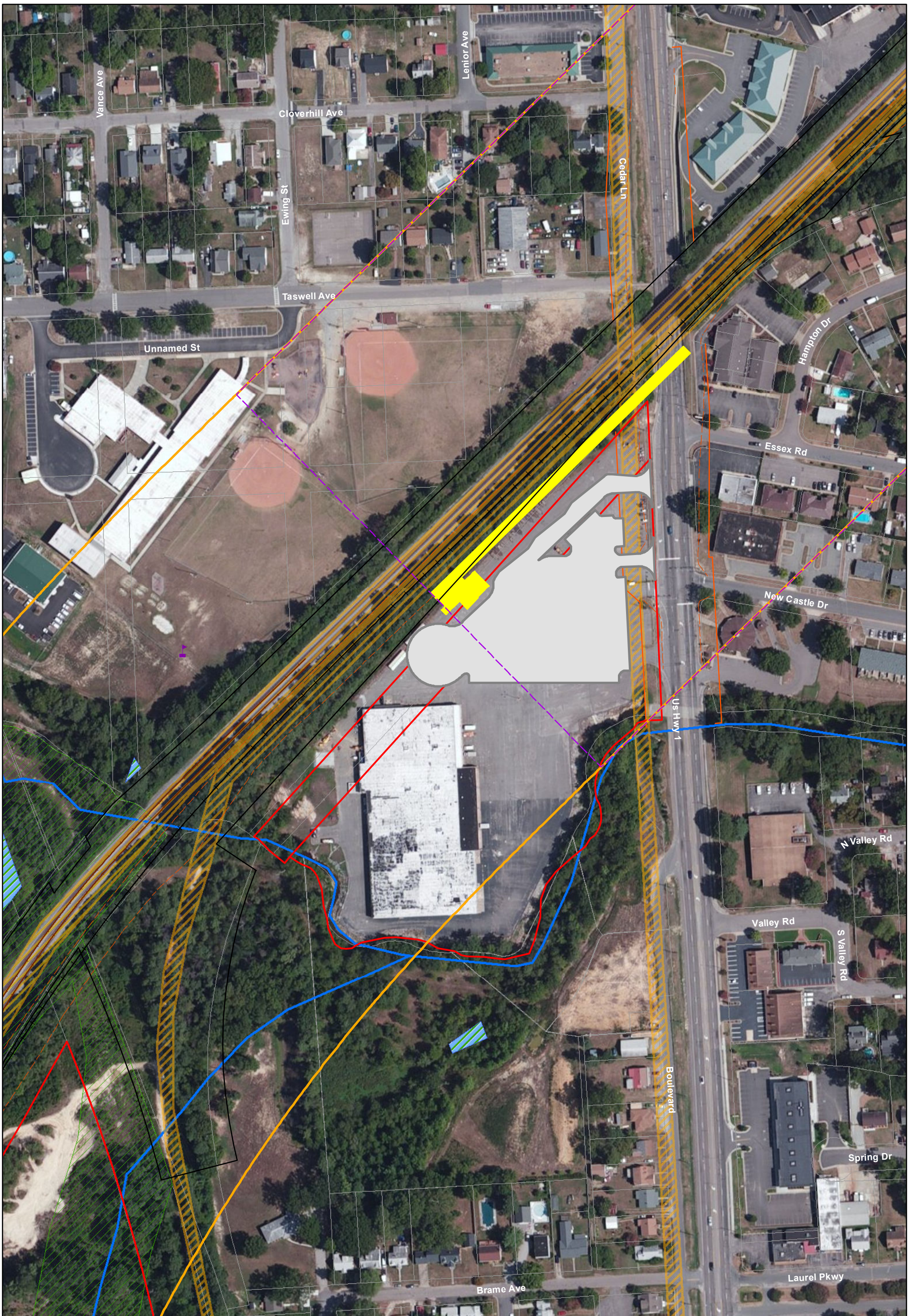


Fig. 3: Boulevard Draft Concept

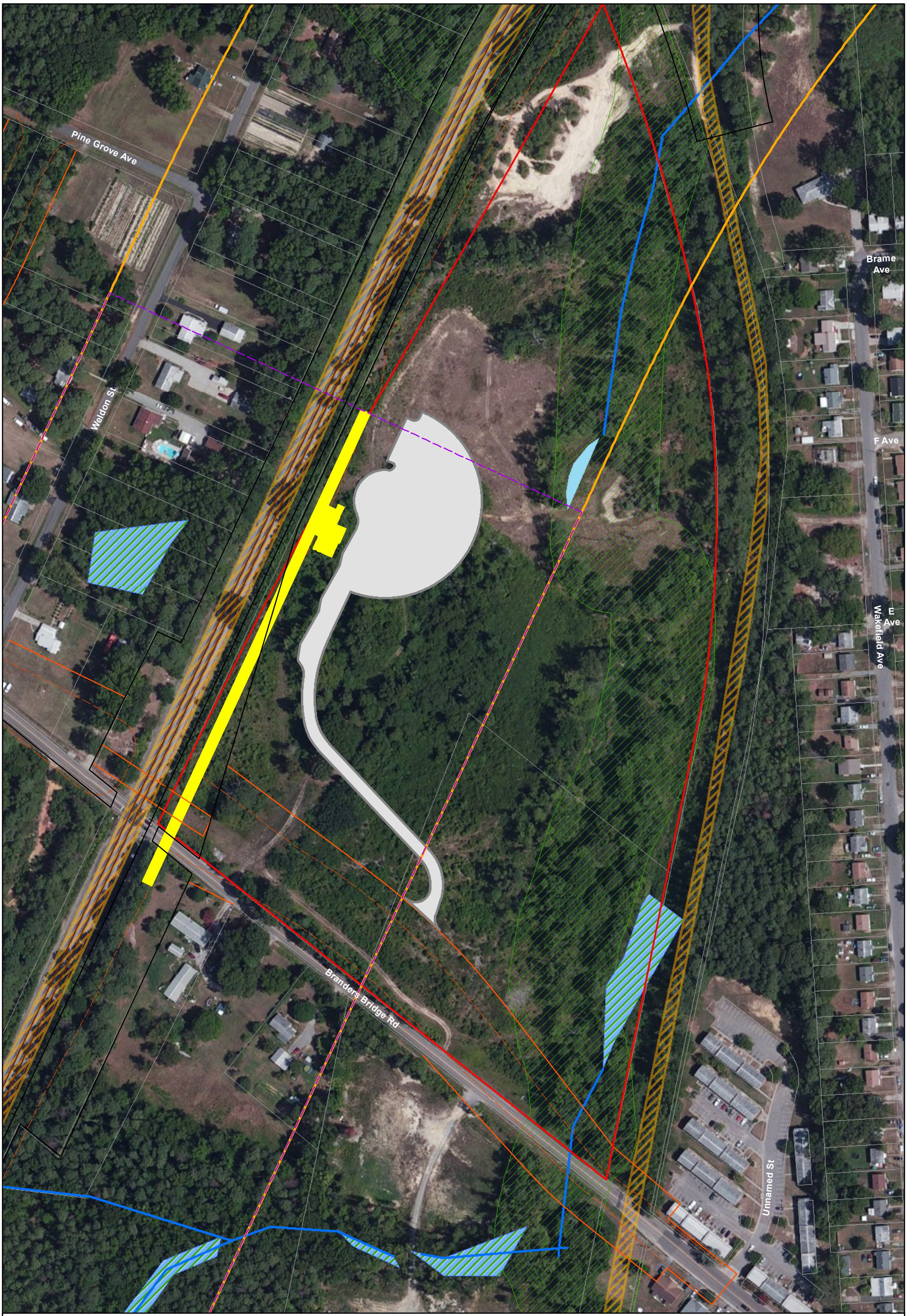
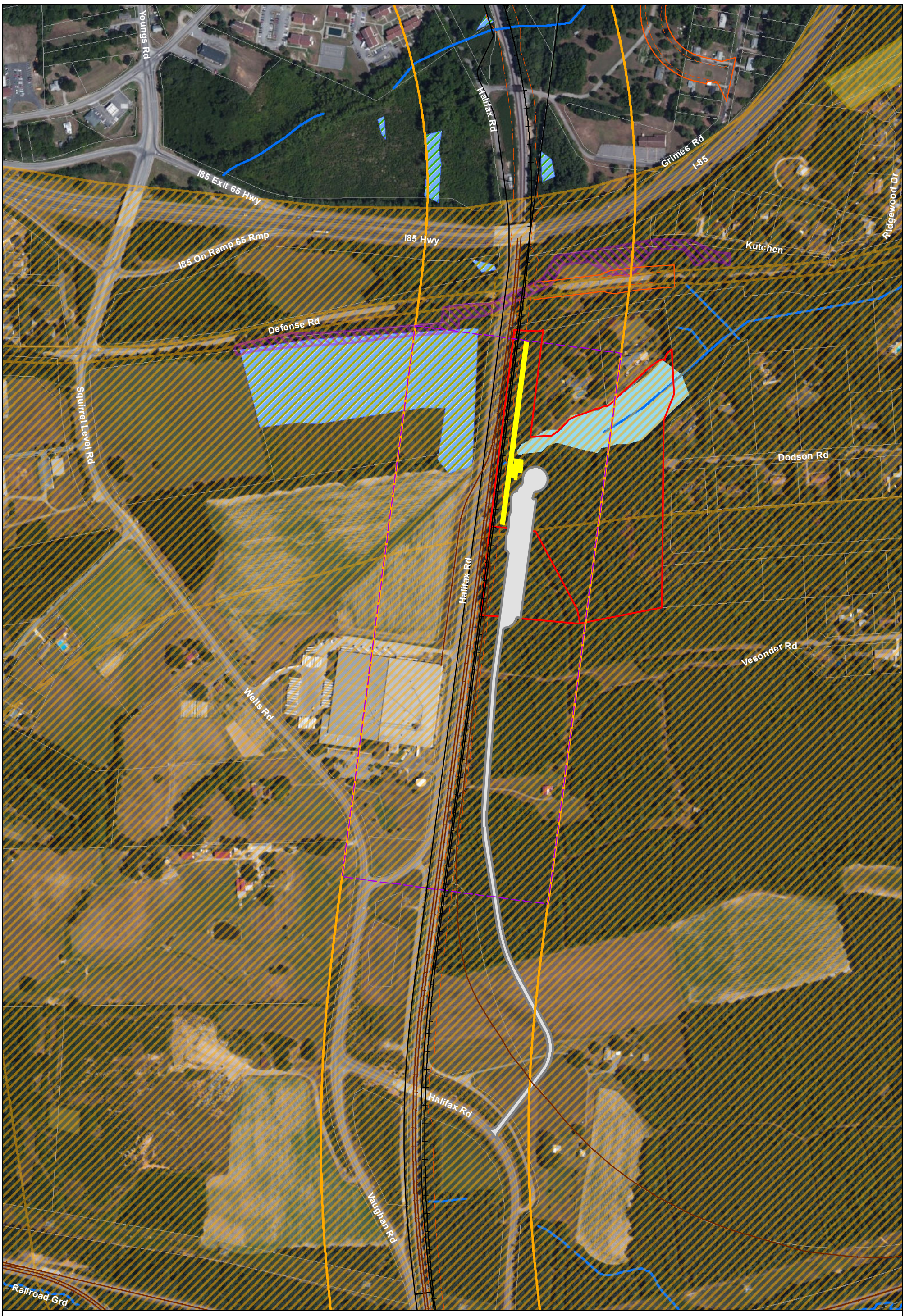


Fig. 4: Branders Bridge Draft Concept

Fig. 5: Ettrick Draft Concept



Feet
0 200 400

N
W E
S

Fig. 6: Collier Draft Concept

APPENDIX B

AIR QUALITY TECHNICAL REPORT

AIR QUALITY TECHNICAL REPORT

DRAFT: August 7, 2015

Tri-Cities Area Multimodal Station Study Environmental Assessment

1.0 INTRODUCTION

On behalf of the Tri-Cities Area Metropolitan Planning Organization (MPO), the Crater Planning District Commission (CPDC) is the lead State agency to prepare a study to select a location for a Tri-Cities Area Multimodal Passenger Station. The Tri-Cities Area Multimodal Station Study (Project) includes the preparation of an Environmental Assessment through the National Environmental Policy Act (NEPA). The MPO is comprised of the cities of Colonial Heights, Hopewell, and Petersburg, and portions of the counties of Chesterfield, Dinwiddie, and Prince George (Figure 1). While a station is not under consideration in all of the above localities, each is participating in this location study. The Federal Railroad Administration (FRA) is serving as the lead Federal agency for this Project, with support from the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA) acting as cooperating agencies.

The Project is a component of the Southeast High Speed Rail Corridor providing multimodal intercity passenger rail service[1] to the Tri-Cities area. Multimodal passenger rail stations serve more than one mode of transportation, such as combined rail and bus service. At a multimodal station, people switch between transportation systems; they enter the station by way of rail, automobile, carpool, bus, bicycle, or on foot, then exit the station via a different mode of transportation than which they entered. Multimodal passenger rail stations support and enhance transit usage by facilitating transfers between modes; they increase transportation options by taking advantage of travel efficiencies; they create a destination and gateway to a region; and they support economic and urban development by providing additional, alternative modes of access to an area.

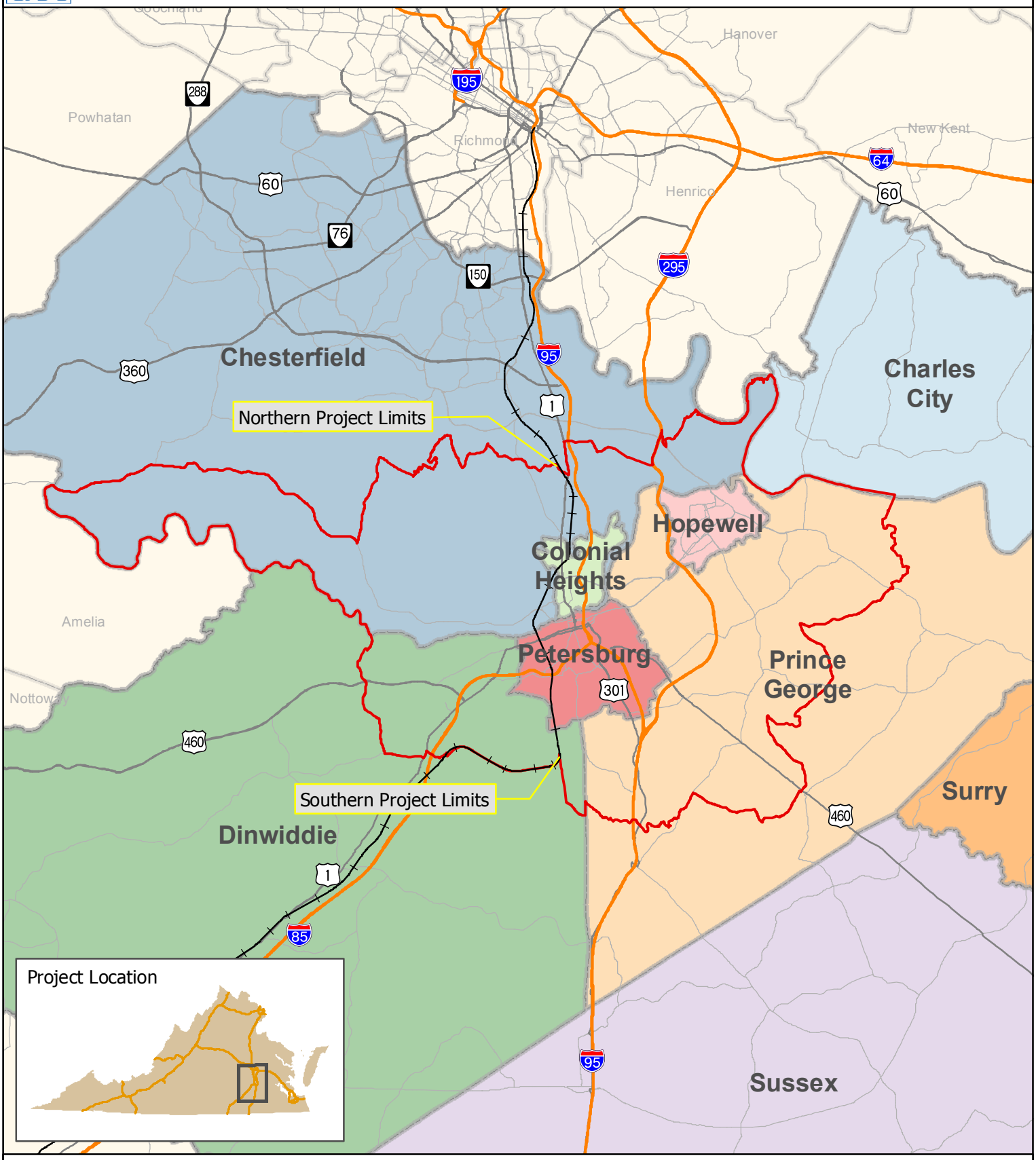
The primary Project purpose is to identify a Tri-Cities multimodal intercity passenger rail station that best meets the needs of the current intercity passenger rail service through Petersburg, including the relatively new service to Norfolk, and prepares for the future introduction of high speed rail service on the SEHSR corridor to Norfolk and North Carolina. While the existing Petersburg Station in Ettrick supports the current Amtrak passenger rail service, additional investment is required to attract and accommodate increased ridership, improve accessibility to the local and regional transportation network, improve ADA accessibility, and provide capacity to support future high speed rail service.

The multiple purposes of this project are to:

- Fully define the Tri-Cities area passenger rail market;
- Establish local and regional station needs in light of existing and future passenger rail demands;

[1] The Federal Railroad Administration (FRA) defines Intercity Passenger Rail service as "a group of one or more scheduled trains (roundtrips) that provide Intercity Passenger Rail transportation between bona fide travel markets (not constrained by State or jurisdictional boundaries), generally with similar quality and level-of-service specifications, within a common (but not necessarily exclusive or identical) set of identifiable geographic markets." Intercity Passenger Rail is not the same as Commuter Rail. Commuter rail is defined as "shorthaul rail passenger transportation in metropolitan and suburban areas usually having reduced fare, multiple ride, and commuter tickets and morning and evening peak period operations" (49 U.S.C. 24102(3)); Federal funding for commuter rail projects is available from Federal Transit Administration (FTA) programs, whereas Federal funding for Intercity Passenger Rail is available from FRA. FRA Docket No. FRA-2009-0045. *High-Speed Intercity Passenger Rail (HISPR) Program*. 2006. Page 14.

Tri-Cities Area Multimodal Station Study



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Preferred SEHSR Alignment
Tri-Cities MPO Boundary
Crater PDC Localities

Figure 1:
Project Study Area

- Identify state and national transportation goals as they relate to passenger rail service in the Tri-Cities area;
- Identify a station location that supports the SEHSR goal of diverting trips from air and highway within the travel corridor to passenger rail use, thus reducing the growth rate of congestion on I-95[2];
- Identify a station location that serves both long-distance business and leisure travelers within and beyond Virginia, including Amtrak's Northeast Corridor, which extends from Washington, DC, to Boston, MA, as well as points south (the SEHSR project serves as the key link for these travelers to the busy Northeast)[3] and east to the Norfolk and Hampton Roads area; and
- Conduct a comparative analysis of potential station locations that would best serve the Tri-Cities area passenger rail market. Any multimodal station site must address local and regional needs, as well as the station location's interface with state and national transportation goals[4].

The Tri-Cities MPO, in conjunction with input from FRA, will be instrumental in the selection and application of the criteria and measures of effectiveness used to evaluate existing and proposed station location alternatives for this study.

1.1 PRELIMINARY SCREENING OF ALTERNATIVES

The first step for alternatives evaluation was a preliminary screening evaluating the entire rail corridor within the study area. It identified all possible areas with the appropriate track geometry and available land area to accommodate a rail platform and station. The preliminary screening was a two-step process, resulting in 14 preliminary station locations. The first step identified seven scoping areas of various lengths. These scoping areas are shown in Figure 2. The second step included a desktop review of aerial photography and parcel mapping, resulting in the identification of 14 preliminary station locations. These 14 stations, also shown in Figure 2, were further evaluated, with four conceptual station locations identified for detailed study in the EA.

1.2 ALTERNATIVES ADVANCED FOR FURTHER STUDY

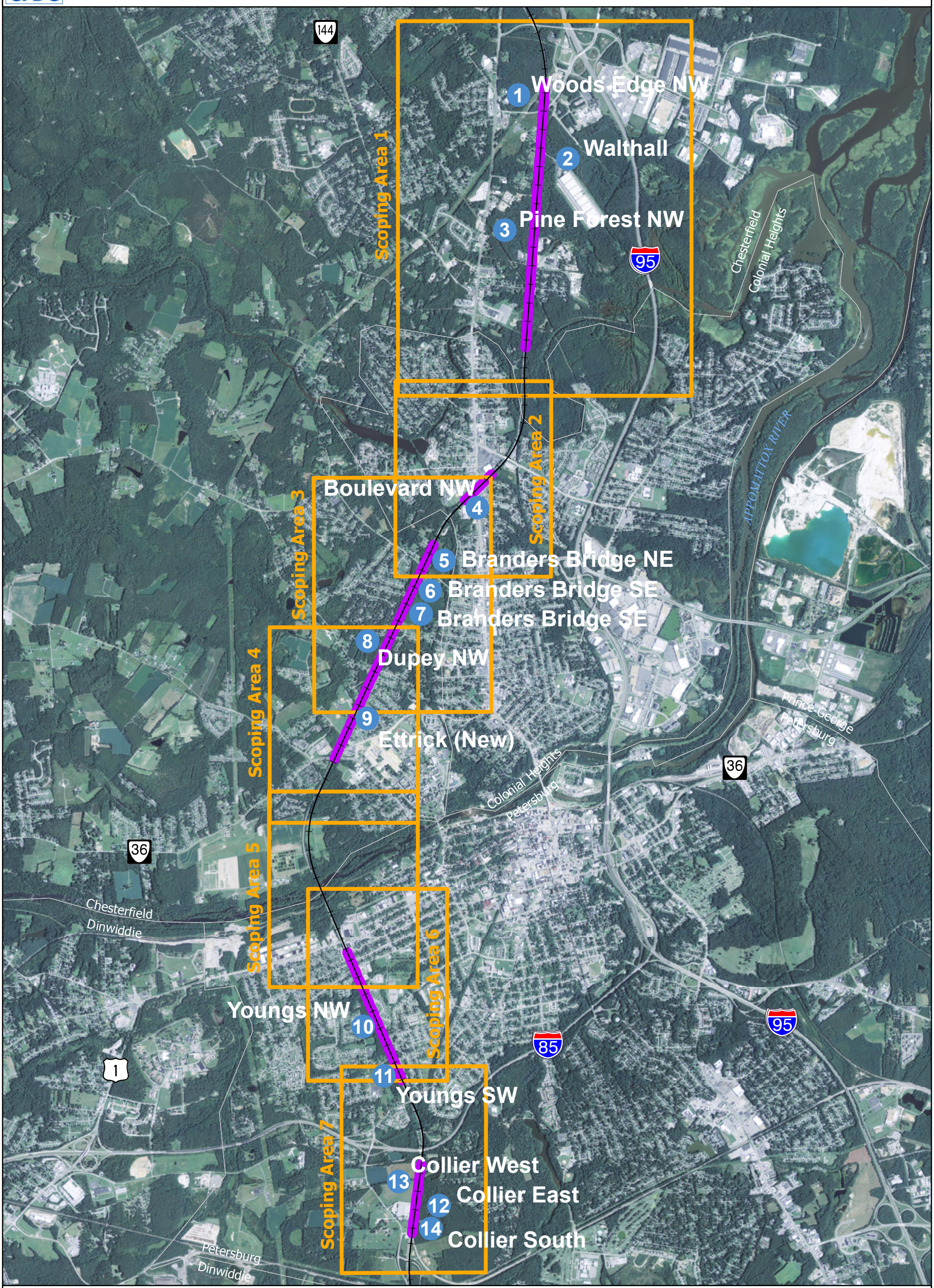
These four conceptual station locations are: Boulevard, Branders Bridge, Ettrick, and Collier South (Figures 3 – 6, respectively). In addition, the No-Build Alternative will also be given equal consideration and evaluation in the EA. The No-Build Alternative consists of maintaining the existing Petersburg Amtrak station in Ettrick. The EA provides details on the screening process, development of alternatives, and descriptions of station amenities.

[2] Federal Railroad Administration, North Carolina Department of Transportation and Virginia Department of Rail & Public Transportation. Southeast High Speed Rail – Richmond, VA to Raleigh, NC. Tier II Draft Environmental Impact Statement and Section 4(f) Evaluation. May 2010. Accessed on 10/29/14 at http://www.sehsr.org/deis/sehsr_deis_download_files/title_pg.pdf. Page 1-10.

[3] Ibid. Page 1-10.

[4] Ibid. Page 1-10.

Tri-Cities Area Multimodal Station Study



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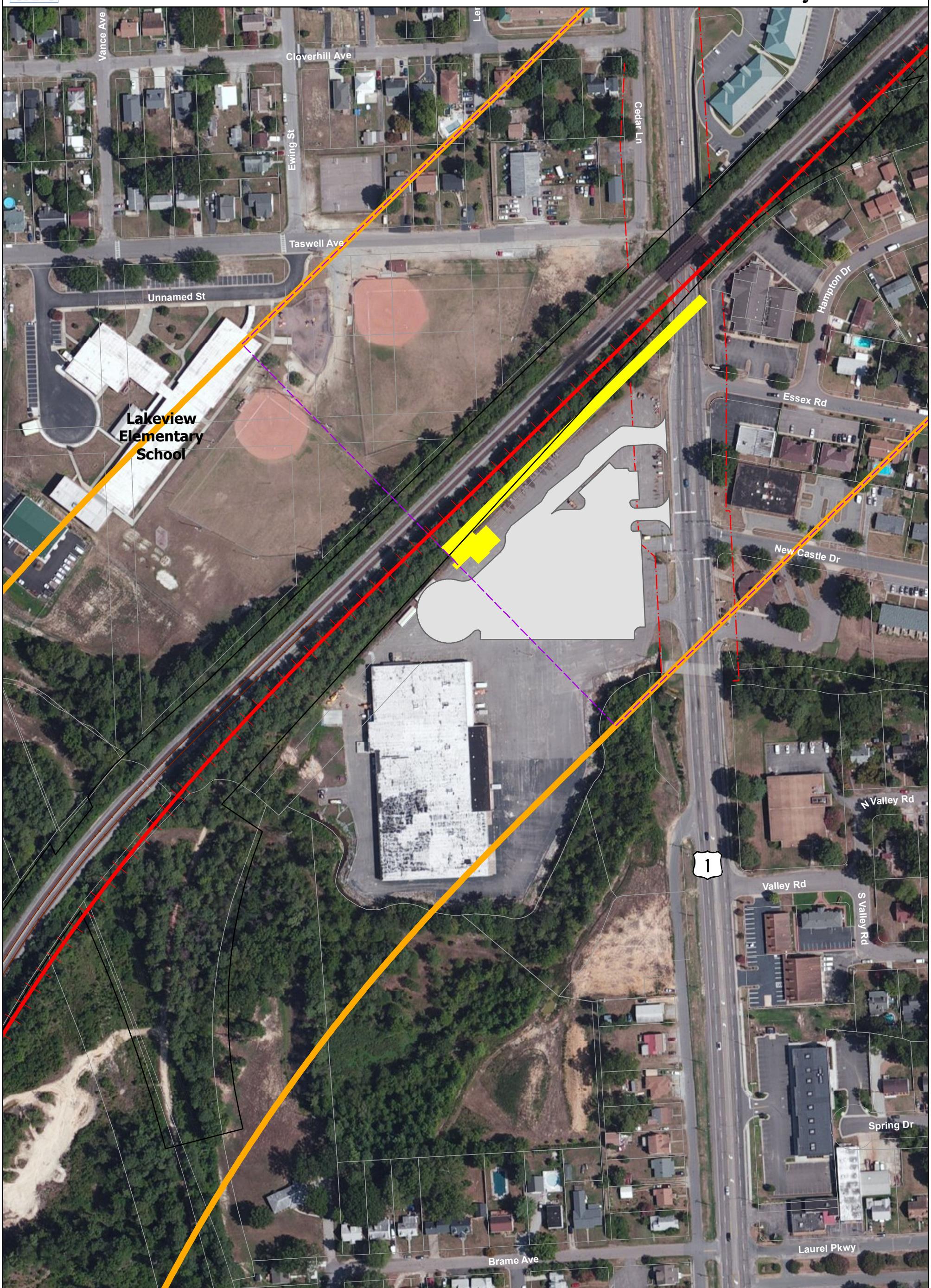
Preliminary Station Areas
Preferred High Speed Rail Alignment
Tangent Track Line
Scoping Areas

Figure 2:
Scoping Areas and
Preliminary Station Locations

Tri-Cities Area Multimodal Station Study



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Preferred SEHSR Alignment
SEHSR Railroad
Tangent Track
SEHSR Road ROW
SEHSR Road
Study Area (500 Ft. Buffer)
Existing Rail ROW
Conceptual Station & Platform
Conceptual Parking Lot

Figure 3:
Boulevard Station Concept

Tri-Cities Area Multimodal Station Study

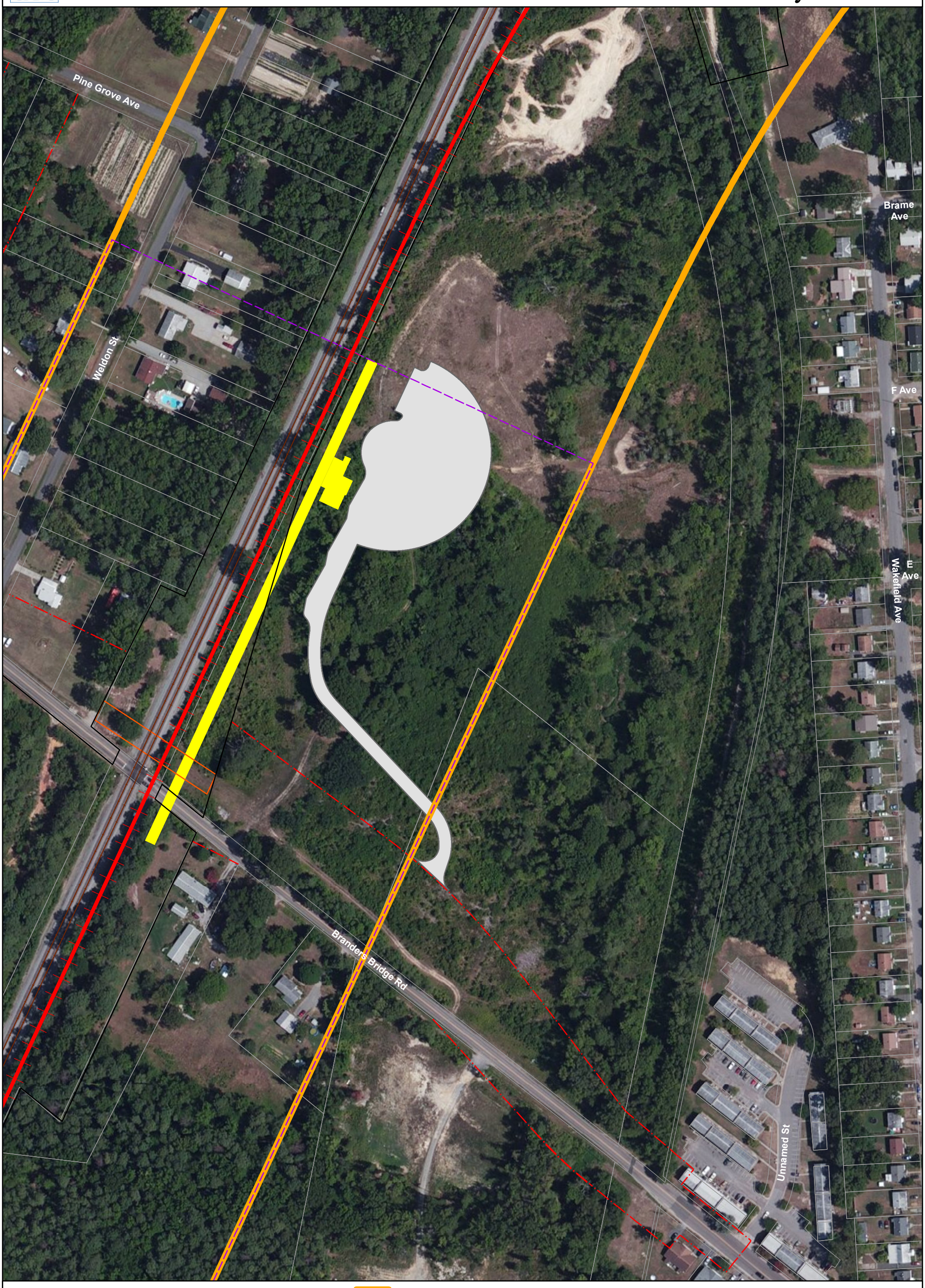
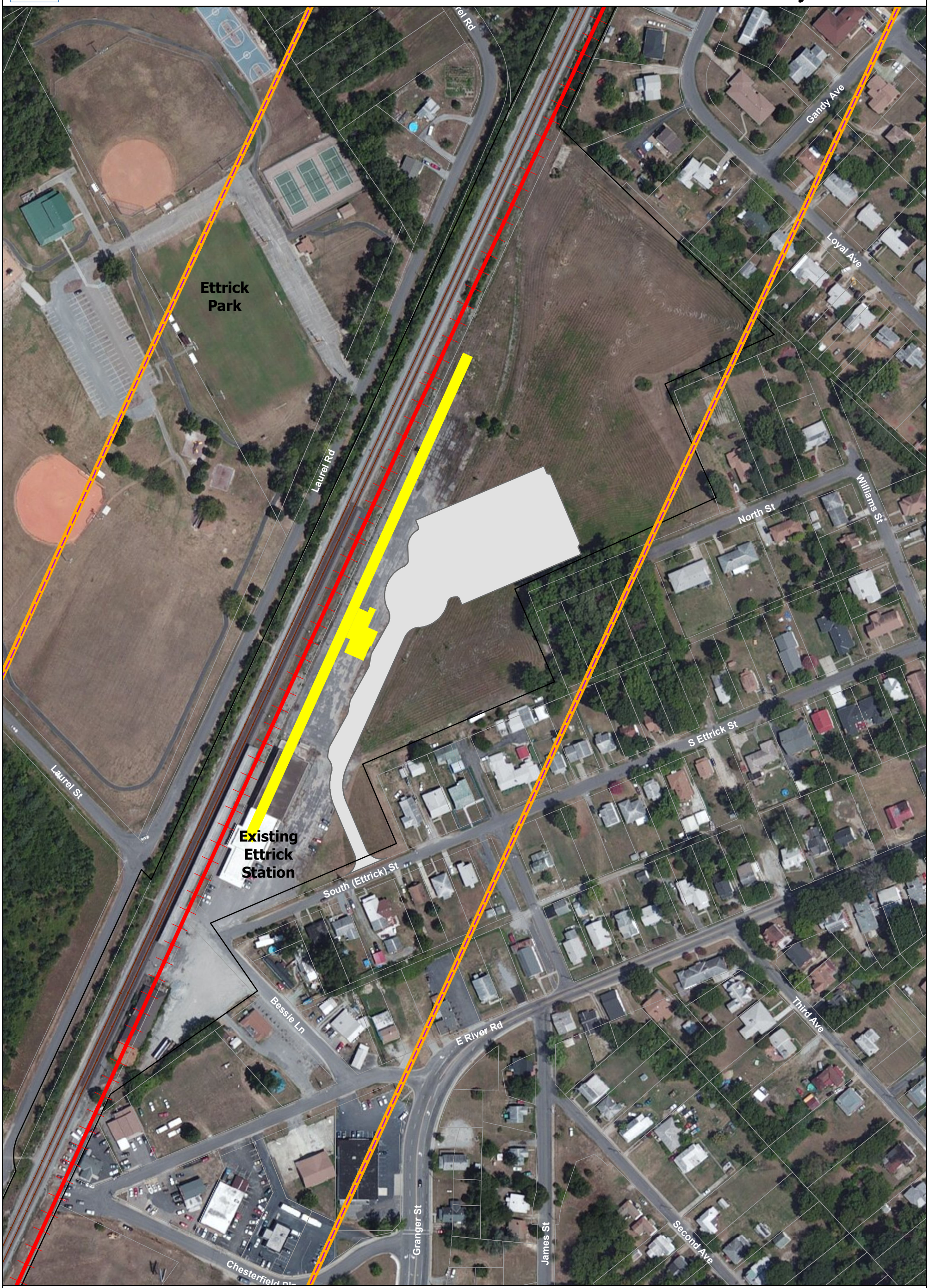


Figure 4:
Branders Bridge Station Concept

Tri-Cities Area Multimodal Station Study



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Preferred SEHSR Alignment
SEHSR Railroad
Tangent Track
SEHSR Road ROW
SEHSR Road
Study Area (500 Ft. Buffer)
Existing_Rail_ROW
Conceptual Station & Platform
Conceptual Parking Lot

Figure 5:
Ettrick Station Concept

Tri-Cities Area Multimodal Station Study

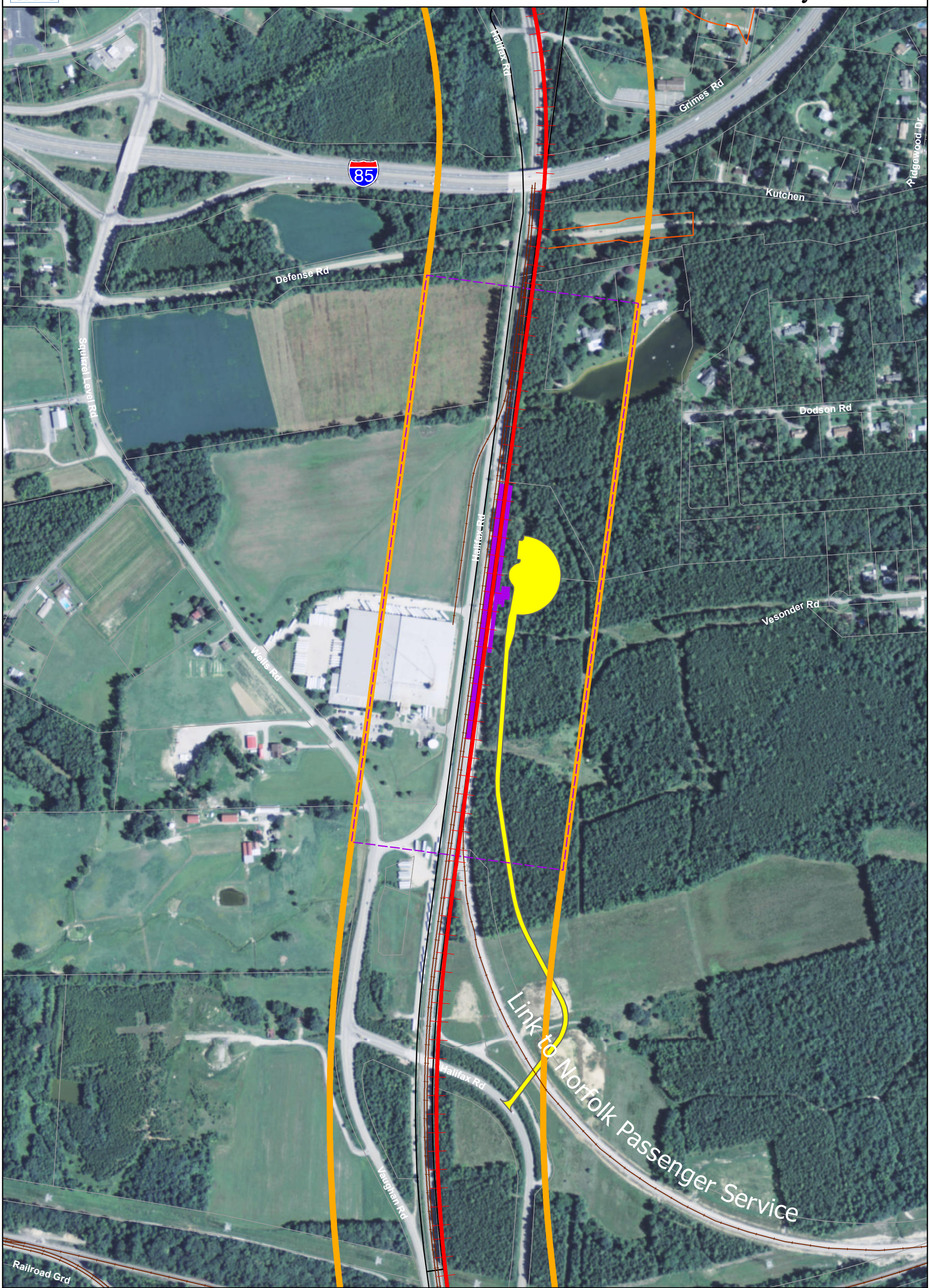

Figure 6:
Collier South Station Concept

2.0 AIR QUALITY BACKGROUND INFORMATION

This section presents the guidelines, criteria, and regulations used to assess air quality associated with the proposed project.

Transportation sources generate varying amounts of ozone (O_3) and its precursors; nitrogen oxides (NO_X); hydrocarbons (HC) (specifically volatile organic compounds (VOCs)); particulate matter (PM); and/or carbon monoxide (CO) emissions, all of which are concerns for human and environmental health.

Ozone is a highly reactive pollutant that damages lung tissue, causes congestion, reduces vital lung capacity, and can also damage vegetation. Nitrogen oxides are an important precursor both to ozone and acid rain, and may affect both terrestrial and aquatic ecosystems. The major mechanism for the formation of NO_2 in the atmosphere is the oxidation of the primary air pollutant nitric oxide (NO). NO_X plays a major role with VOCs to produce O_3. The two major emissions sources are transportation and stationary fuel combustion sources, such as electric utilities and industrial boilers.

PM is the term for particles found in the air, including dust, dirt, soot, smoke, and liquid droplets. Particles less than 10 micrometers in diameter (PM_{10}) pose a health concern because they can be inhaled into and accumulate in the respiratory system. Particles less than 2.5 micrometers in diameter ($PM_{2.5}$) are referred to as "fine" particles and are believed to pose the largest health risks. CO is a colorless, odorless and poisonous gas produced by incomplete burning of carbon in fuels. Exposure to elevated CO levels can cause impairment of visual perception, manual dexterity, learning ability and performance of complex tasks (USEPA, undated).

The Clean Air Act (CAA) and 1990 Clean Air Act Amendments (CAAA) required the USEPA to establish NAAQS for pollutants considered harmful to public health and the environment. The NAAQS are implemented by USEPA in the Code of Federal Regulations (CFR) under 40 CFR Part 50. The CAA established two types of national air quality standards. Primary standards set limits to protect public health, including the health of “sensitive” populations such as asthmatics, children, and the elderly. Secondary standards set limits to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation, and buildings. Table 1 lists the primary and secondary standards.

2.1 CLEAN AIR ACT AMENDMENTS

Title I of the CAAA addresses nonattainment issues related to O_3, CO, and PM_{10}. Nonattainment areas are progressively ranked according to the severity and type of their air pollution problems. Each category of nonattainment has a label such as severe or moderate and a date for meeting the NAAQS.

Title II of the CAAA addresses mobile sources and stipulates more stringent emission standards for cars, trucks, and buses. This title also regulates fuel quality (such as gasoline volatility and diesel sulfur content); requires reformulated gasoline in the highest O_3 areas and oxygenated fuels in the highest CO areas; and requires clean-fueled vehicles for certain fleets and other pilot programs.

Table 1: National Ambient Air Quality Standards

Pollutant [final rule cite]		Primary/ Secondary	Averaging Time	Level	Form
Carbon Monoxide [76 FR 54294, Aug 31, 2011]		Primary	8-hour	9 ppm	Not to be exceeded more than once per year
			1-hour	35 ppm	
Lead [73 FR 66964, Nov 12, 2008]		Primary and Secondary	Rolling 3 month average	0.15 µg/m^3 (1)	Not to be exceeded
Nitrogen Dioxide [75 FR 6474, Feb 9.2010] [61 FR 52852, Oct 8, 1996]		Primary	1-hour	100 µg/m^3	98th percentile, averaged over 3 years
		Primary and Secondary	Annual	53 ppb (2)	Annual mean
Ozone [73 FR 16436, Mar 27, 2008]		Primary and Secondary	8-hour	0.075-hour (3)	Annual fourth-highest daily maximum 8-hr concentration, averaged over 3 years
Particle Pollution Dec 14, 2012	$PM_{2.5}$	Primary	Annual	12 µg/m^3	Annual mean, averaged over 3 years
		Secondary	Annual	15 µg/m^3	Annual mean, averaged over 3 years
		Primary and Secondary	24-hour	35 µg/m^3	98th percentile, averaged over 3 years
	PM_{10}	Primary and Secondary	24-hour	150 µg/m^3	Not to be exceeded more than once per years on average over 3 years
Sulfur Dioxide [75 FR 35520, Jun 22, 2010] [38 FR 25678, Sept 14, 1973]		Primary	1-hour	75 ppb (4)	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years
		Secondary	3-hour	0.5 ppm	Not to be exceeded more than once per year

Source: USEPA; May 14, 2015

(1) Final rule signed October 15, 2008. The 1978 lead standard (1.5 µg/m3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

(2) The official level of the annual NO_2 standard is 0.053 ppm, equal to 53 ppb, which is shown here for the purpose of clearer comparison to the 1-hour standard.

(3) Final rule signed March 12, 2008. The 1997 ozone standard (0.08 ppm, annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years) and related implementation rules remain in place. In 1997, USEPA revoked the 1-hour ozone standard (0.12 ppm, not to be exceeded more than once per year) in all areas, although some areas have continued obligations under that standard ("anti-backsliding"). The 1-hour ozone standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above 0.12 ppm is less than or equal to 1.

(4) Final rule signed June 2, 2010. The 1971 annual and 24-hour SO_2 standards were revoked in that same rulemaking. However, these standards remain in effect until one year after an area is designated for the 2010 standard, except in areas designated nonattainment for the 1971 standards, where the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standard are approved

2.2 CLEAN AIR ACT CONFORMITY

The CAAA require Federal agencies to ensure that their actions conform to the appropriate State Implementation Plan (SIP). States are required to develop SIPs that explain how they will meet the requirements of the CAA. The SIP is a plan for implementation, maintenance, and enforcement of the NAAQS, and includes emission limitations and control measures to attain the standards. States must involve the public in the development of the SIP through hearings and opportunities to comment. In Virginia, the State Air Pollution Control Board administers the SIP.

Conformity to a SIP, as defined in the CAAA, means conformity to a SIP's purpose of reducing the severity and number of violations of the NAAQS to achieve attainment of such standards. The Federal agency responsible for the action is required to determine if its action conforms to the applicable SIP. The USEPA has developed two sets of conformity regulations:

- Transportation projects developed or approved under the Federal Aid Highway Program or Federal Transit Act are governed by the "transportation conformity" regulation (40 CFR Part 3, Subpart A)

Other projects, which include the Federal action planned for the Project, are governed by the "general conformity" regulations. The regulations for *Determining Conformity of General Federal Actions to State or Federal Implementation Plans* were published in the *Federal Register* on November 30, 1993. The general conformity regulation (40 CFR Part 93, Subpart B) became effective January 31, 1994. In Virginia, general conformity criteria and procedures are set forth in 9VAC5-10-20.

The conformity regulations apply to Federal actions occurring in air basins designated as nonattainment areas for pollutants in the NAAQS (Table 1) or in attainment areas subject to maintenance plans (maintenance areas). Federal actions occurring in air basins that are in attainment with criteria pollutants are not subject to the conformity rule.

The regulations require that funding for construction be identified before a project can be included in a conformity analysis. Projects that are "Exempt from Regional Emissions Analysis" are listed in 40 CFR Part 93.126, Tables 2 and 3, and include "Planning and technical studies." Because the Project is currently funded only at the planning level and does not have a dedicated funding source for construction, it falls under the exempt status. Once funding is secured for ROW purchase and construction, conformity analyses will be performed in accordance with 40 CFR Part 93.

2.3 CLEAN AIR NONROAD DIESEL RULE

In June 2004, as part of the Clean Air Nonroad Diesel Rule, USEPA finalized new requirements for nonroad diesel fuel that will decrease the allowable levels of sulfur in fuel used in locomotives by 99%. Because sulfur damages exhaust emission control devices, these fuel improvements will reduce PM from existing engines. Diesel fuel currently has a sulfur content of about 3,000 ppm. The new rule cut that amount to 15 ppm in 2014.

2.4 MOBILE SOURCE AIR TOXICS (MSATS) RULE

In February 2007, USEPA finalized a rule to reduce hazardous air pollutants from mobile sources

(*Control of Hazardous Air Pollutants from Mobile Sources*, February 26, 2007). The rule limited the benzene content of gasoline and reduced toxic emissions from passenger vehicles and gas cans. At that time, USEPA estimated that in 2030, this rule would reduce total emissions of mobile source air toxics by 330,000 tons and VOC emissions (precursors to ozone and $PM_{2.5}$) by over 1 million tons.

USEPA has adopted many mobile source emission control programs that, in addition to controlling pollutants such as hydrocarbons, particulate matter, and nitrogen oxides, will also result in large air toxic reductions. Examples of these control programs include the following:

- Heavy-duty Onboard Diagnostic Rule (PDF) (74 FR 8310, 119 pp, 825K, published February 24, 2009)
- Small SI and Marine SI Engine Rule (PDF) (73 FR 59034, 347 pp, 3.69MB, October 8, 2008)
- Locomotive and Commercial Marine Rule (PDF) (73 FR 25098, 255 pp, 2.08MB, published May 6, 2008)
- Clean Air Nonroad Diesel Rule (PDF) (69 FR 38957, 316 pp, 1,87K, published June 29, 2004)
- Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements (PDF) (66 FR 5002, 192pp, 1.71MB, published January 18, 2001)
- Tier 2 Motor Vehicle Emissions Standards and Gasoline Sulfur Control Requirements (PDF) (65 FR 6698, 173 pp, 1.14MB, published February 10, 2000)

USEPA has developed additional diesel-related programs to reduce diesel particulate matter under the National Clean Diesel Campaign, which encompasses a variety of programs to reduce diesel emissions.

2.5 LOCOMOTIVE AND COMMERCIAL MARINE RULE

In May 2008, USEPA published the final rule adopting a comprehensive program to dramatically reduce pollution from locomotives, applying to all types of locomotives. This final rule completes an important step in USEPA's ongoing National Clean Diesel Campaign (NCDC) by adding new programs for locomotives and marine diesel engines to the clean diesel initiatives that have already been undertaken for highway, other nonroad, and stationary diesel engines in 2004. It significantly strengthens the locomotive and marine diesel programs proposed in April 2007, especially in controlling emissions during the critical early years through the early introduction of advanced technologies and the more complete coverage of existing engines. When fully implemented, this coordinated set of new programs will reduce harmful diesel engine emissions to a small fraction of their previous levels.

Today, locomotives and marine diesel engines account for about 20% of mobile source NO_X emissions and 25% of mobile source diesel $PM_{2.5}$ emissions in the U.S. Absent this final action, by 2030 the relative contributions of NOx and $PM_{2.5}$ from these engines would have grown to 35% and 65%, respectively.

On a nationwide annual basis, these reductions will amount to 800,000 tons of NO_X and 27,000 tons of PM by the year 2030. For locomotives, the reduction from existing standards in PM Tiers 0 through 4 locomotives will be approximately 60%, 50%, 50%, 50%, and 90%, respectively. The reduction in NO_X for range year Tiers 0 through 4 will be approximately 20%, 20%, 20%, 20%, and 80%, respectively. All Tier idle emissions are predicted to be reduced by

50% for both PM and NO_X.

2.6 PM HOT-SPOT ANALYSIS

On March 10, 2006, USEPA published a final rule (40 CFR 93.116) that establishes transportation conformity criteria and procedures for determining which transportation projects must be analyzed for local air quality impacts in $PM_{2.5}$ and PM_{10} nonattainment and maintenance areas. The rule was followed by a March 29, 2006, guidance document issued jointly by USEPA and the Federal Highway Administration (FHWA), which provides information for state and local agencies to meet the hot-spot requirements established in the final transportation conformity rule. The USEPA published a final rule on January 15, 2013 (effective March 13, 2013), making revisions to $PM_{2.5}$ standards. The annual standard was lowered from 15.0 micrograms per cubic meter to 12.0. Corresponding revisions were also made to the data handling conventions and to the ambient air monitoring, reporting, and network design requirements.

Hot-spot analyses are not required for projects in $PM_{2.5}$ or PM_{10} attainment area or if they are exempt from regional transportation conformity according to 40 CFR 93.126 or 93.128.

3.0 EXISTING ENVIRONMENT

The proposed project is located in central Virginia, in Chesterfield County and the Cities of Colonial Heights and Petersburg. The area is best categorized as a humid subtropical climate that averages approximately 43 inches of precipitation per year. The average daily high temperature in July is 90 degrees Fahrenheit while the average daily low temperature in January is 22 degrees Fahrenheit.

Chesterfield, Colonial Heights, and Petersburg are currently in attainment for all applicable NAAQS.

4.0 NO-BUILD

The No-Build Alternative maintains the existing Petersburg Amtrak Station in Ettrick as it currently exists. Only routine maintenance would be provided at this station. While the No-Build Alternative does not disturb the project site nor result in any immediate impacts, it would not generate the benefits that Build Alternatives would generate nor does it address the Purpose and Need for the project.

5.0 EMISSIONS CALCULATIONS

This section discusses the emissions resulting from the proposed station locations for the various pollutants.

5.1 LOCOMOTIVE IDLING EMISSIONS

Locomotive operations are subject to Federal air quality conformity regulations (40 CFR 51.853). In 2008, USEPA proposed a comprehensive program to dramatically reduce emissions from locomotives, including line-haul, switch, and passenger engines (see 73 FR 25097 (May 6, 2008) and 40 CFR, Part 92). The program establishes emission standards with applicability dependent on the date a locomotive is first manufactured. The first set of standards (Tier 0) applies to most locomotives originally manufactured before 2001. The most stringent set of standards (Tier 4) applies to locomotives originally manufactured in 2015 and later.

Locomotives contribute to air pollution by generating notable emissions of fine particulate matter ($PM_{2.5}$) and nitrogen oxides (NO_X). USEPA estimates that by using the new standards to control the exhaust emission standards and idle reduction requirements of diesel locomotives of all types (line-haul, switch, and passenger), that PM reductions of 90% and NO_X reductions of 80% would be possible by the year 2030, as compared to the engine emissions that would be encountered under the previous guidance. To advance this goal, Motive Power (located in Boise, ID) designed and developed the MP40 locomotive, which is anticipated to be used for SEHSR Corridor service and, therefore, was used for the Project air quality analysis. With improved fuel efficiency, a diesel oxidation catalyst, and a diesel particulate filter, this locomotive provides the advanced emissions reduction technology currently required to be Tier 2 compliant and the company estimates that their engines will be Tier 3 compliant in 2015. Tier 2 emission rates for this locomotive are assumed to be the following (in grams/brake horsepower-hour) as referenced in the Federal Register listed above.

- CO - 1.5*
- PM - 0.2
- NOX - 5.5
- HC - 0.3

*USEPA did not propose new standards for CO. Emissions of CO are relatively low in diesel engines compared to non-diesel pollution sources. Locomotives are already subject to relatively stringent CO standards in Tier 2 compared to the former heavy-duty highway diesel engine CO standard of 15.5. Additionally, even though USEPA did not set more stringent standards for CO (for Tier 4), note that after-treatment devices using precious metal catalysts projected to be employed to meet Tier 4 PM, NOX and HC standards will provide meaningful reductions in CO emissions as well.

Based on the above emission rates and the projected train operating characteristics shown in Table 2, the total annual emissions as a result of these additional trains idling does not exceed 0.5 tons per year. With the exception of NO_x, the total annual emissions do not exceed 0.01 tons per year.

Table 2: Projected Train Operating Characteristics

Total Number of Daily Trains	14
Number of Trains - Day	14
Number of Peak Hour Trains	2
Idling Duration (Minutes)	20

5.2 PARK AND RIDE LOTS

At this time, there is limited information available about the proposed park and ride lots associated with station locations. Each proposed station location will have parking for 30 to 50 vehicles. However,

based on VDOT and FHWA criteria, a CO hot-spot is only required for projects involving roadway AADTs exceeding 59,000. Due to the low parking capacity, it is not anticipated that the park and ride lot or any adjacent roadways would exceed 59,000 AADT, however once in the final design stage, this will be revisited.

5.3 MOBILE SOURCE AIR TOXICS (MSAT)

In addition to the criteria air pollutants for which there are National Ambient Air Quality Standards (NAAQS), the US Environmental Protection Agency (USEPA) also regulates air toxics. Most air toxics originate from human-made sources, including on-road mobile sources, non-road mobile sources (e.g., airplanes), area sources (e.g., dry cleaners), and stationary sources (e.g., factories or refineries). Mobile Source Air Toxics (MSAT) are a subset of the 188 air toxics defined by the Clean Air Act. MSAT are compounds emitted from highway vehicles and non-road equipment. Some toxic compounds are present in fuel and are emitted to the air when the fuel evaporates or passes through the engine unburned. Other toxics are emitted from the incomplete combustion of fuels or as secondary combustion products. Metal air toxics also result from engine wear or from impurities in oil or gasoline.

This Project should be considered as a project with no meaningful potential MSAT effects because this project is best categorized as one that would have no meaningful impacts on traffic volumes or vehicle mix.

6.0 CONCLUSION

The Tri-Cities Area Multi-modal Station EA Project evaluates the possible air quality impacts based on four possible station locations. Emissions from the locomotives idling and emissions from the park and ride lots have been evaluated. Based on the idling operations, pollutants are not predicted to exceed 0.5 tons per year, and therefore do not exceed the de minimus levels for conformity (100 tons/year). In addition, it is anticipated that the park and ride lots and their adjacent roadways would not have an AADT exceeding 59,000 and therefore not require a hot-spot CO analysis. In addition, the Project is assumed to be considered one with no meaningful impacts on traffic volumes or vehicle mix and so can be categorized as a project with No meaningful potential MSAT effects or exempt projects. Finally, because the Project is in an attainment area, no project level $PM_{2.5}$ analysis is required.

7.0 REFERENCES

Virginia. Department of Transportation. *Consultant Guide Air Quality Project-Level Analysis* Richmond, Virginia. Department of Transportation [2009].

8.0 PREPARERS

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APPENDIX C

NOISE & VIBRATION TECHNICAL REPORT

NOISE AND VIBRATION TECHNICAL REPORT

DRAFT: August 7, 2015

Tri-Cities Area Multimodal Station Study Environmental Assessment

1.0 INTRODUCTION

On behalf of the Tri-Cities Area Metropolitan Planning Organization (MPO), the Crater Planning District Commission (CPDC) is the lead State agency to prepare a study to select a location for a Tri-Cities Area Multimodal Passenger Station. The Tri-Cities Area Multimodal Station Study (Project) includes the preparation of an Environmental Assessment through the National Environmental Policy Act (NEPA). The MPO is comprised of the cities of Colonial Heights, Hopewell, and Petersburg, and portions of the counties of Chesterfield, Dinwiddie, and Prince George (Figure 1). While a station is not under consideration in all of the above localities, each is participating in this location study. The Federal Railroad Administration (FRA) is serving as the lead Federal agency for this Project, with support from the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA) acting as cooperating agencies.

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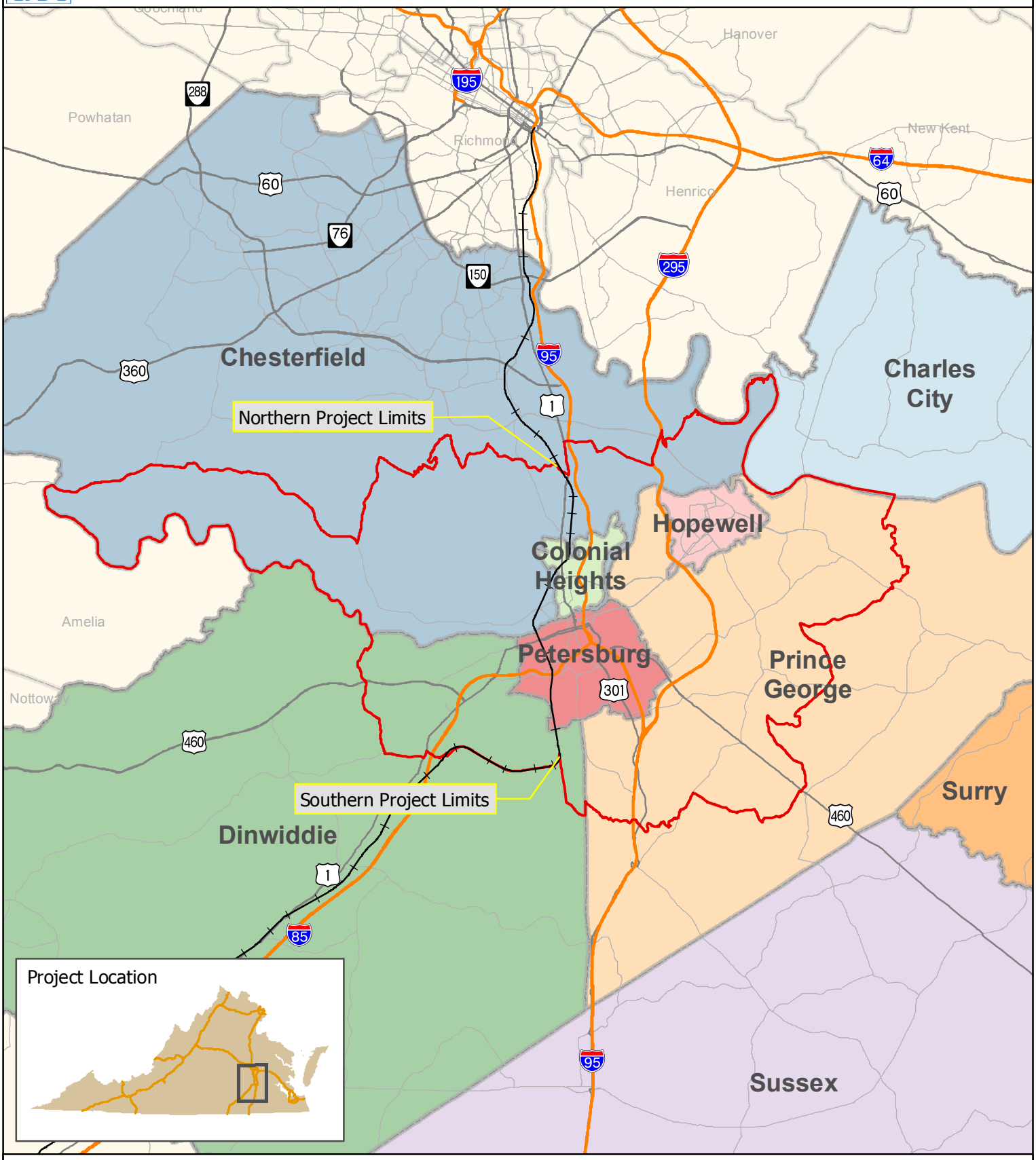
[1] The Federal Railroad Administration (FRA) defines Intercity Passenger Rail service as "a group of one or more scheduled trains (roundtrips) that provide Intercity Passenger Rail transportation between bona fide travel markets (not constrained by State or jurisdictional boundaries), generally with similar quality and level-of-service specifications, within a common (but not necessarily exclusive or identical) set of identifiable geographic markets." Intercity Passenger Rail is not the same as Commuter Rail. Commuter rail is defined as "shorthaul rail passenger transportation in metropolitan and suburban areas usually having reduced fare, multiple ride, and commuter tickets and morning and evening peak period operations" (49 U.S.C. 24102(3)); Federal funding for commuter rail projects is available from Federal Transit Administration (FTA) programs, whereas Federal funding for Intercity Passenger Rail is available from FRA. FRA Docket No. FRA-2009-0045. *High-Speed Intercity Passenger Rail (HISPR) Program.* 2006. Page 14.

Tri-Cities Area Multimodal Station Study



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Miles

Preferred SEHSR Alignment
Tri-Cities MPO Boundary
Crater PDC Localities

Figure 1:
Project Study Area

- Identify state and national transportation goals as they relate to passenger rail service in the Tri-Cities area;
- Identify a station location that supports the SEHSR goal of diverting trips from air and highway within the travel corridor to passenger rail use, thus reducing the growth rate of congestion on I-95[2];
- Identify a station location that serves both long-distance business and leisure travelers within and beyond Virginia, including Amtrak's Northeast Corridor, which extends from Washington, DC, to Boston, MA, as well as points south (the SEHSR project serves as the key link for these travelers to the busy Northeast)[3] and east to the Norfolk and Hampton Roads area; and
- Conduct a comparative analysis of potential station locations that would best serve the Tri-Cities area passenger rail market. Any multimodal station site must address local and regional needs, as well as the station location's interface with state and national transportation goals[4].

The Tri-Cities MPO, in conjunction with input from FRA, is instrumental in the selection and application of the criteria and measures of effectiveness used to evaluate existing and proposed station location alternatives for this study.

The Tri-Cities MPO, in conjunction with input from FRA, will be instrumental in the selection and application of the criteria and measures of effectiveness used to evaluate existing and proposed station location alternatives for this study.

1.1 Preliminary Screening of Alternatives

The first step for alternatives evaluation was a preliminary screening evaluating the entire rail corridor within the study area. It identified all possible areas with the appropriate track geometry and available land area to accommodate a rail platform and station. The preliminary screening was a two-step process, resulting in 14 preliminary station locations. The first step identified seven scoping areas of various lengths. These scoping areas are shown in Figure 2. The second step included a desktop review of aerial photography and parcel mapping, resulting in the identification of 14 preliminary station locations. These 14 stations, also shown in Figure 2, were further evaluated, with four conceptual station locations identified for detailed study in the EA.

1.2 Alternatives Advanced for Further Study

These four conceptual station locations are: Boulevard, Branders Bridge, Ettrick, and Collier South (Figures 3 – 6, respectively). In addition, the No-Build Alternative will also be given equal consideration and evaluation in the EA. The No-Build Alternative consists of maintaining the existing Petersburg Amtrak station in Ettrick. The EA provides details on the screening process, development of alternatives, and descriptions of station amenities.

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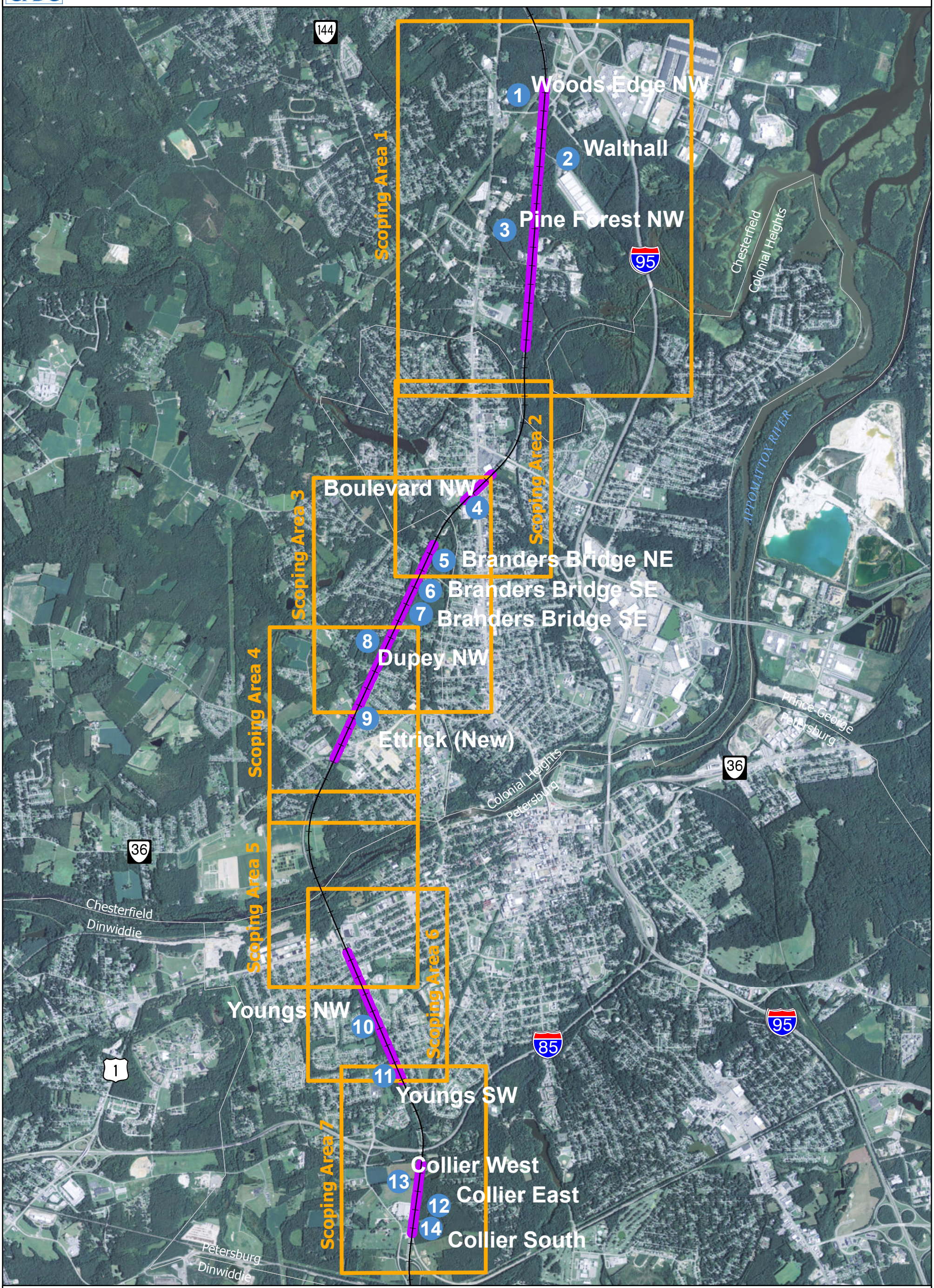
[2] Federal Railroad Administration, North Carolina Department of Transportation and Virginia Department of Rail & Public Transportation. Southeast High Speed Rail – Richmond, VA to Raleigh, NC. Tier II Draft Environmental Impact Statement and Section 4(f) Evaluation. May 2010. Accessed on 10/29/14 at http://www.sehsr.org/deis/sehsr_deis_download_files/title_pg.pdf. Page 1-10.

[3] Ibid. Page 1-10.

[4] Ibid. Page 1-10.

Tri-Cities Area Multimodal Station Study



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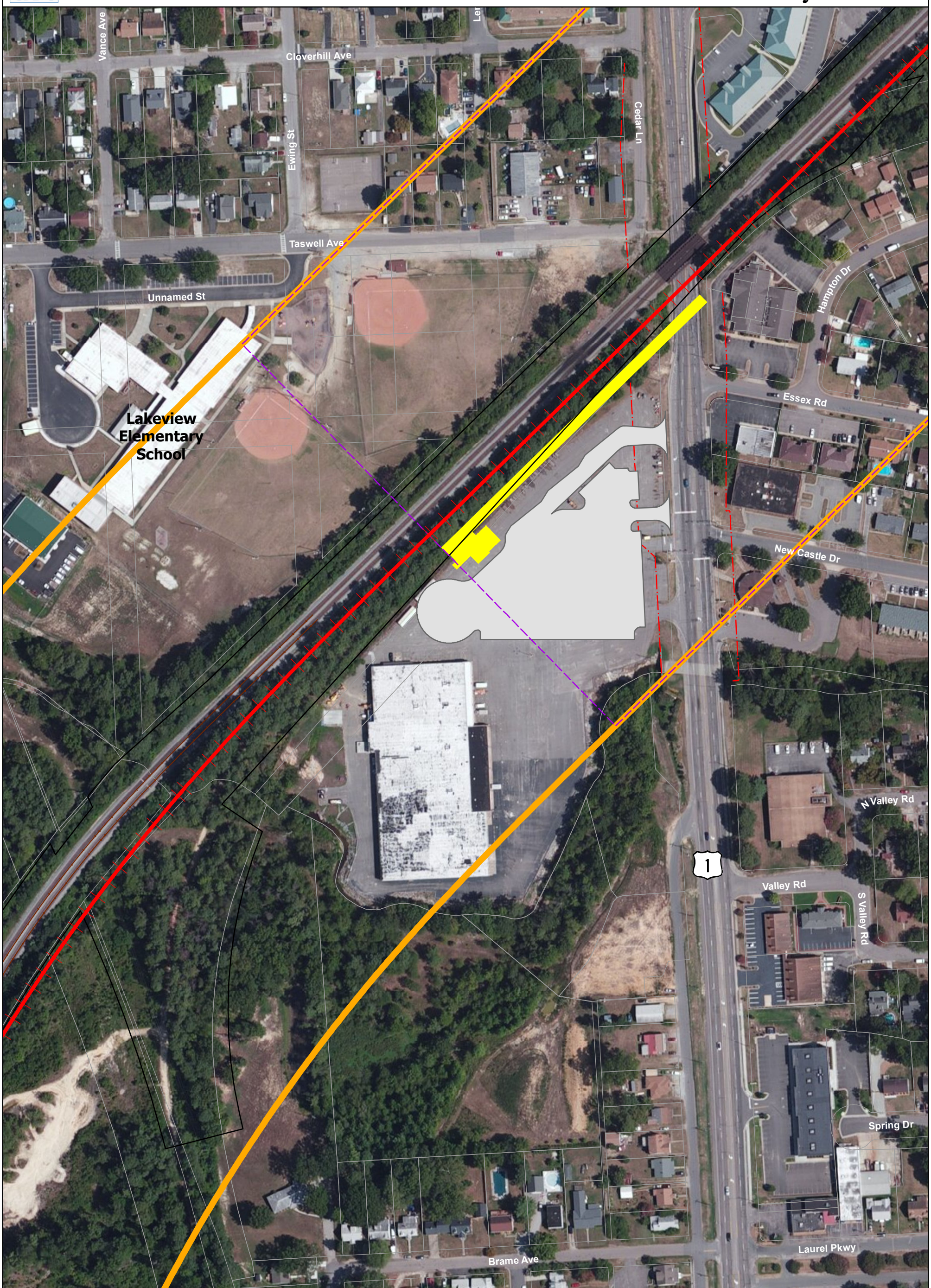
Preliminary Station Areas
Preferred High Speed Rail Alignment
Tangent Track Line
Scoping Areas

Figure 2:
Scoping Areas and
Preliminary Station Locations

Tri-Cities Area Multimodal Station Study



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Preferred SEHSR Alignment
SEHSR Railroad
Tangent Track
SEHSR Road ROW
SEHSR Road
Study Area (500 Ft. Buffer)
Existing Rail ROW
Conceptual Station & Platform
Conceptual Parking Lot

Figure 3:
Boulevard Station Concept

Tri-Cities Area Multimodal Station Study

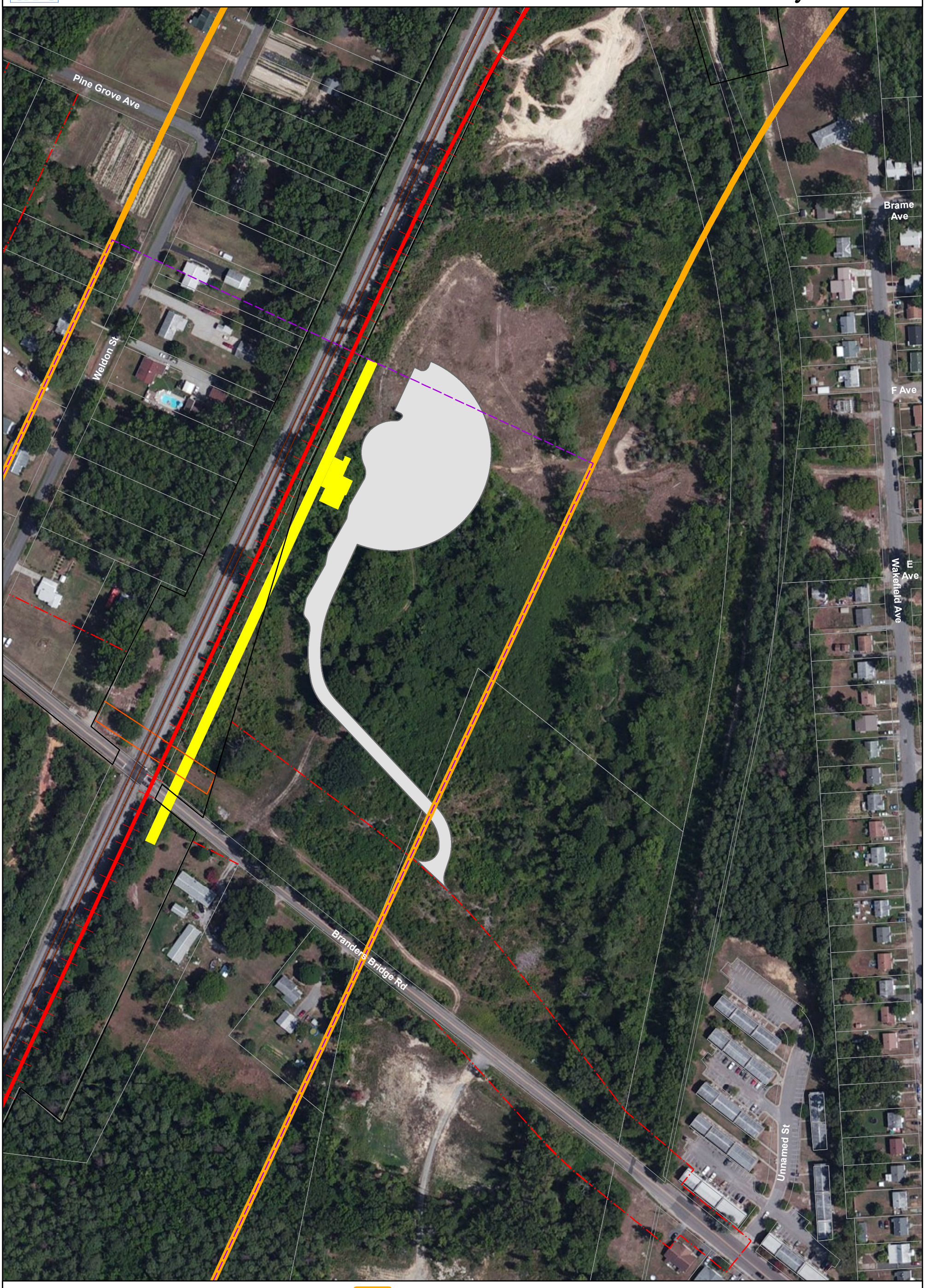
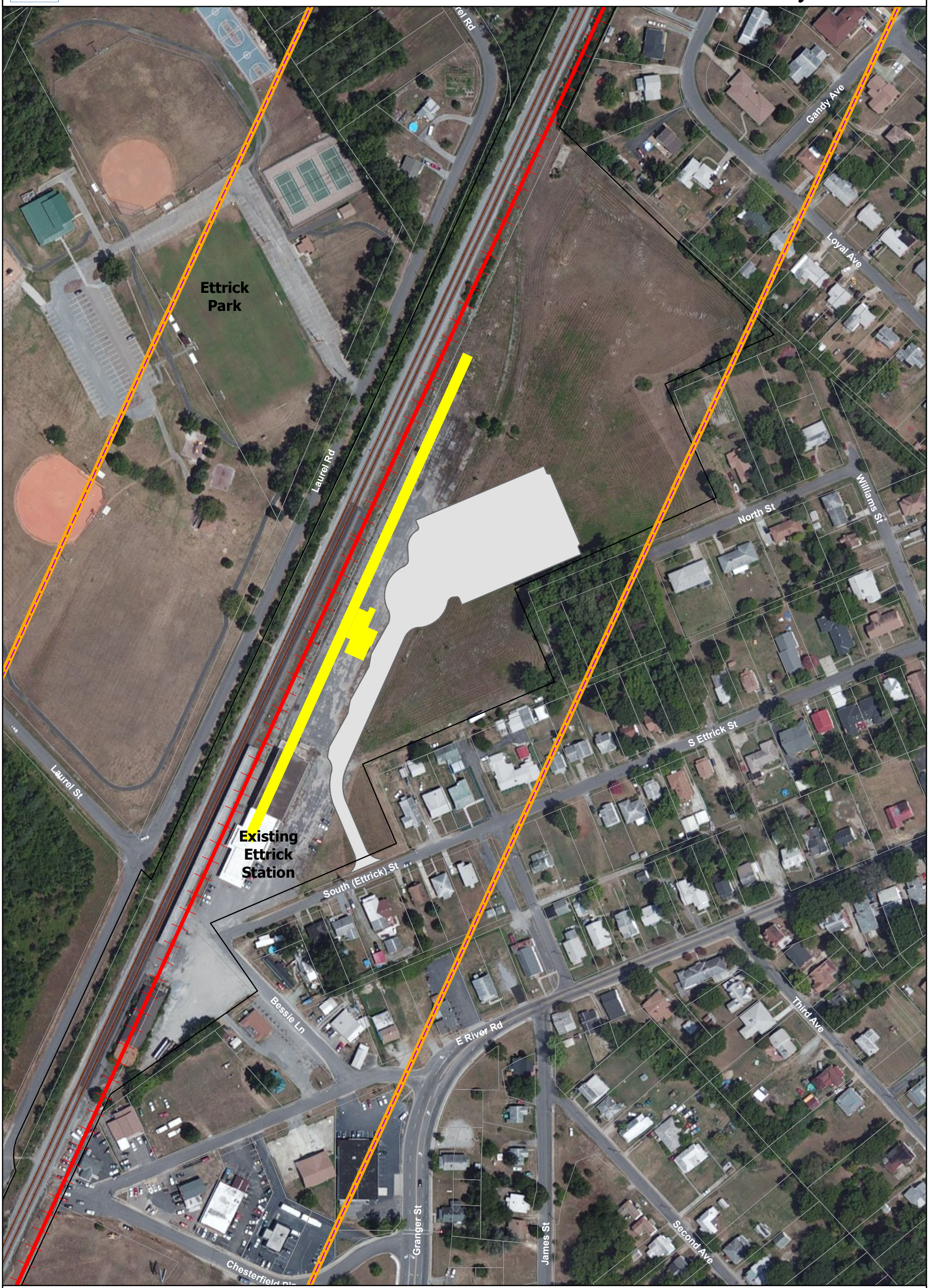


Figure 4:
Branders Bridge Station Concept

Tri-Cities Area Multimodal Station Study



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Preferred SEHSR Alignment
SEHSR Railroad
Tangent Track
SEHSR Road ROW
SEHSR Road
Study Area (500 Ft. Buffer)
Existing_Rail_ROW
Conceptual Station & Platform
Conceptual Parking Lot

Figure 5:
Ettrick Station Concept

Tri-Cities Area Multimodal Station Study

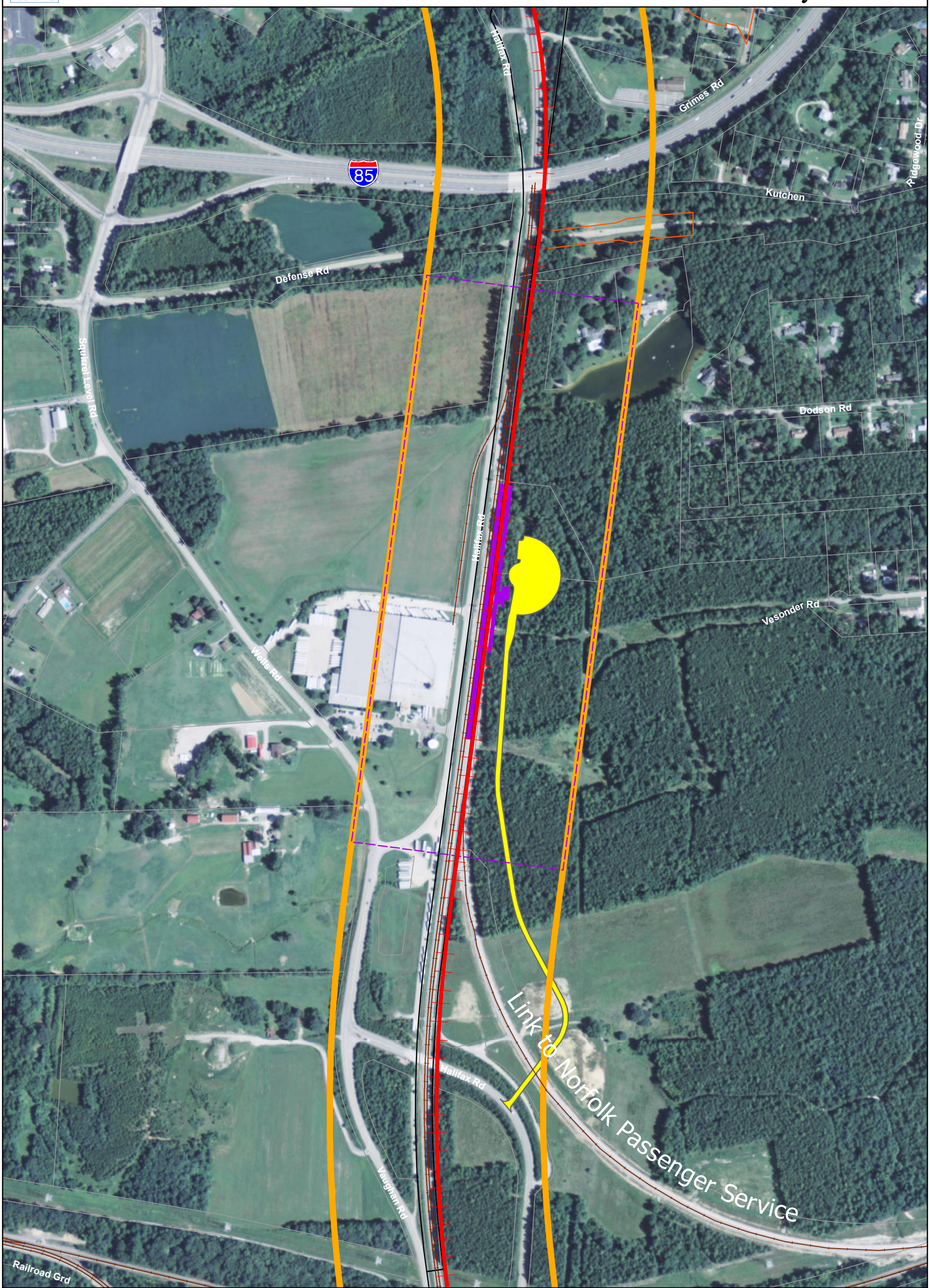


Figure 6:
Collier South Station Concept

2.0 NOISE AND VIBRATION BACKGROUND INFORMATION

This section describes the basic terminologies of noise and vibration used in this report. This information will provide background for the assessment procedures described in the later sections.

2.1 Noise Descriptors

Noise is usually defined as sound that is undesirable because it interferes with speech communication and hearing, or is otherwise annoying. Under certain conditions, noise may cause hearing loss, interfere with human activities, and in various ways may affect people's health and well-being.

The decibel (dB) is the accepted standard unit for measuring the amplitude of sound because it accounts for the large variations in sound pressure amplitude. When describing sound and its effect on a human population, A-weighted (dBA) sound pressure levels are typically used to account for the response of the human ear. The term "A-weighted" refers to a filtering of the noise signal in a manner corresponding to the way the human ear perceives sound. The A-weighted noise level has been found to correlate well with people's judgments of the noisiness of different sounds and has been used for many years as a measure of community noise. Figure 7 illustrates typical A-weighted sound pressure levels for various noise sources.

Community noise levels usually change continuously during the day. The equivalent continuous A-weighted sound pressure level (L_{eq}) is normally used to describe community noise. The L_{eq} is the equivalent steady-state A-weighted sound pressure level that would contain the same acoustical energy as the time-varying A-weighted sound pressure level during the same time interval. The maximum sound pressure level (L_{max}) is the greatest instantaneous sound pressure level observed during a single noise measurement interval.

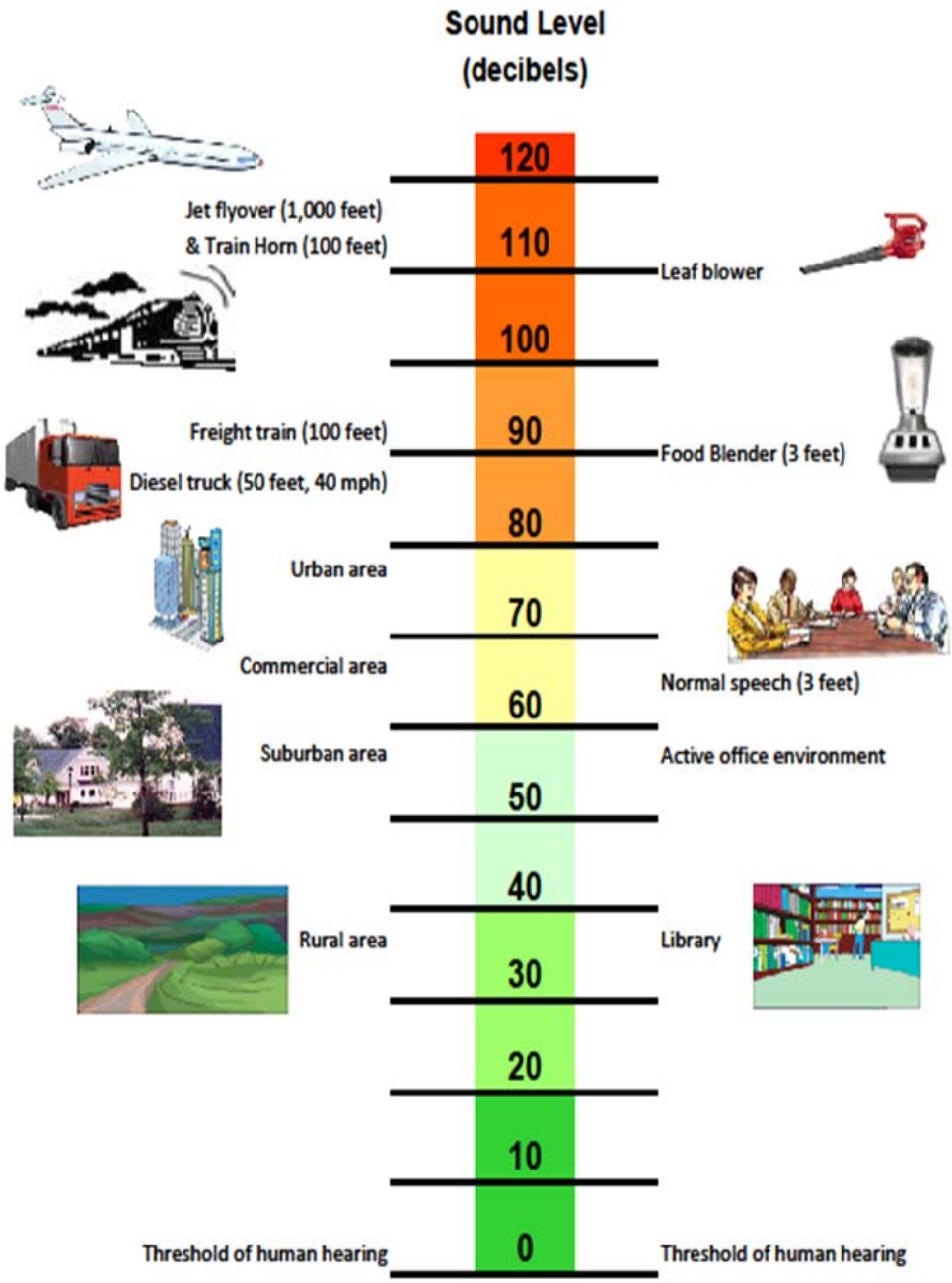
Another descriptor, the day-night average sound pressure level (L_{dn} or DNL), was developed to evaluate the total daily community noise environment. The L_{dn} is a 24-hour average sound pressure level with a 10-dB time-of-day weighting added to sound pressure levels that occur during the nine nighttime hours from 10:00 p.m. to 7:00 a.m. This nighttime 10-dB adjustment is an effort to account for the increased sensitivity to nighttime noise events. The FRA uses L_{dn} and L_{eq} to evaluate train noise impacts at the surrounding communities (2012)[5].

2.2 Vibration Descriptors

Vibration is an oscillatory motion, which can be described in terms of displacement, velocity, or acceleration. Displacement, in the case of a vibrating floor, is simply the distance that a point on the floor moves away from its static position. The velocity represents the instantaneous speed of the floor movement, and acceleration is the rate of change of the speed. The response of humans, buildings, and equipment to vibration is normally described using velocity or acceleration. In this report, velocity will be used in describing ground-borne vibration.

[5] Hanson, Carl E., and Jason C. Ross and David A. Towers. *High Speed Ground Transportation Noise and Vibration Impact Assessment.* U.S. Department of Transportation and Federal Railroad Administration, 2012. DOT/FRA/ORD-12/15

Figure 7: Typical A-Weighted Sound Levels

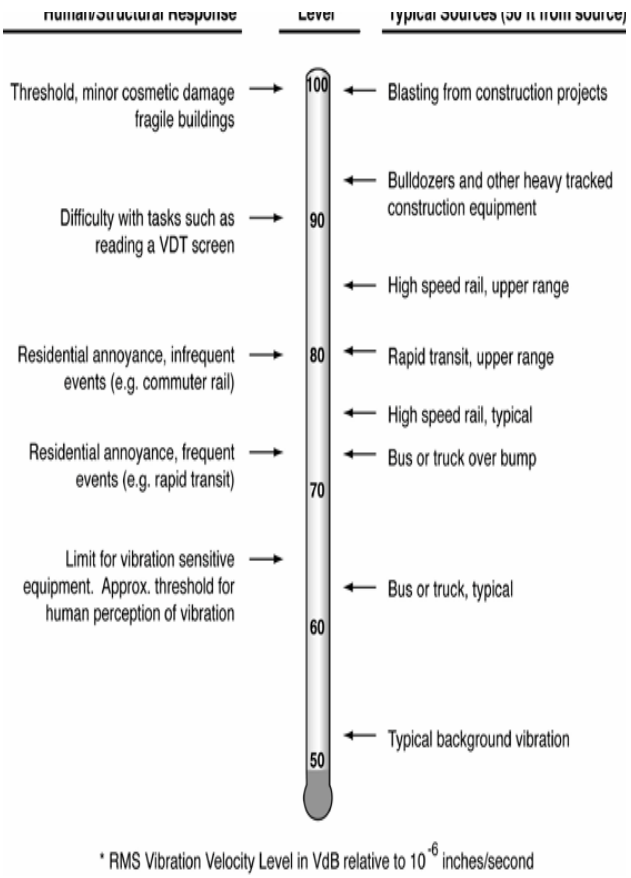


Vibration amplitudes are usually expressed as either peak particle velocity (PPV) or the root mean square (RMS) velocity. PPV is used to evaluate the potential for building damage. It is defined as the maximum instantaneous peak of the vibration signal. PPV is not considered the appropriate measurement for evaluating the human response to vibration as it is typically used for construction noise monitoring. RMS is used to evaluate human response, since it takes some time for the human body to respond to vibration signals. The RMS of a signal is the average of the squared amplitude of the signal. For sources such as trucks or motor vehicles, PPV levels are typically 6 to 14 dB higher than RMS levels. FRA uses the abbreviation "VdB" for vibration decibels to reduce the potential for confusion with sound decibel (USDOT, 2005).

Decibel notation acts to compress the range of numbers required in measuring vibration. Similar to the noise descriptors, L_{eq} and L_{max} can be used to describe the average vibration and the maximum vibration level observed during a single vibration measurement interval.

Figure 8 illustrates common vibration sources and the human and structural responses to ground-borne vibration. As shown in Figure 8, the threshold of perception for human response is approximately 65 dB; however, human response to vibration is not usually significant unless the vibration exceeds 70 dB. Vibration tolerance limits for sensitive instruments such as MRI or electron microscopes could be much lower than the human vibration perception threshold.

Figure 8:
Typical Levels of Ground-Borne Vibration



3.0 NOISE & VIBRATION IMPACT CRITERIA

This section presents the guidelines, criteria, and regulations used to assess noise and vibration impacts associated with the proposed project.

3.1 Operation Noise Impact Criteria

The Southeast High Speed Rail (SEHSR) EIS data was used as the basis for this Project. Because ancillary sources are not unique to high-speed train systems, noise from electrical substations, maintenance facilities, yards, and stations are not addressed in the High Speed Rail Manual. These noise sources are substantially the same for any type of rail system and do not have characteristics specific to high-speed train systems. Therefore, the methods described in FTA's *Transit Noise and Vibration Impact Assessment* (FTA-VA-90-1003-06) manual are applicable for the station evaluation. They are founded on well-documented research on community reaction to noise and are based on change in noise exposure using a sliding scale. The amount that rail projects are allowed to change the overall noise environment is reduced with increasing levels of existing noise. The FTA noise impact criteria are applicable to three categories of land use and are summarized in Table 1.

Table 1: Land Use Categories and Metrics for Transit Noise Impact Criteria

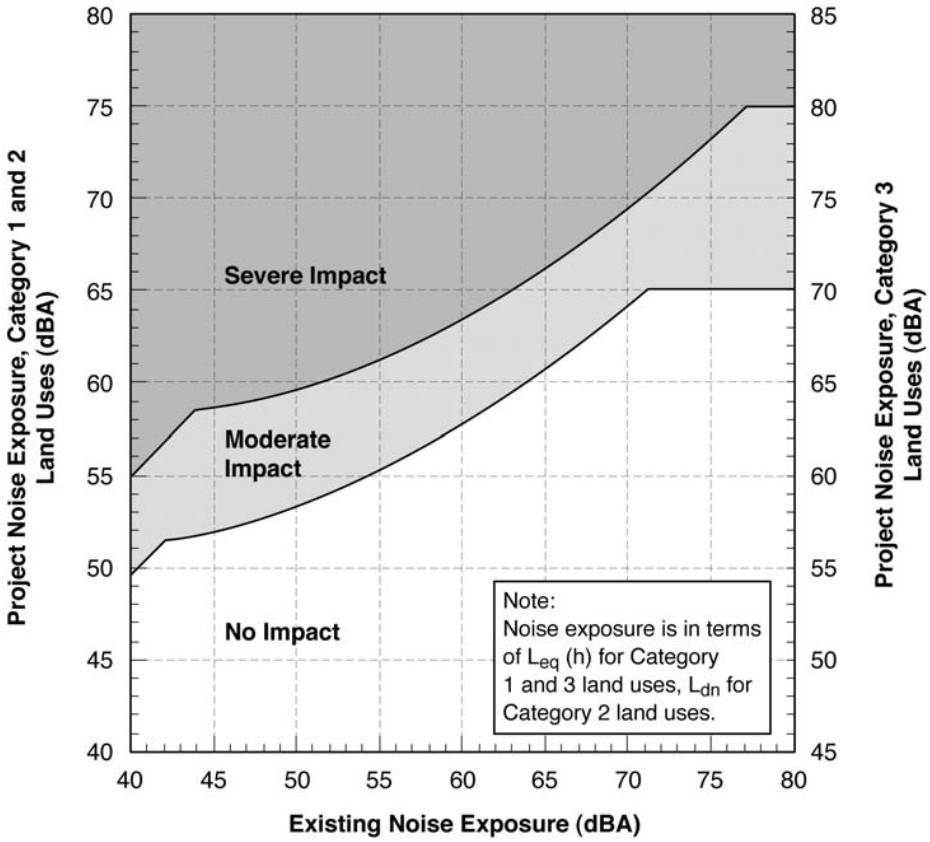
Land Use Category	Noise Metric (dBA)	Description of Land Use Category
1	Outdoor $L_{eq}(h)$*	Tracts of land where quiet is an essential element in their intended purpose. This category includes lands set aside for serenity and quiet, and such land uses as outdoor amphitheaters and concert pavilions, as well as National Historic Landmarks with significant outdoor use. Also included are recording studios and concert halls.
2	Outdoor L_{dn} (DNL)	Residences and buildings where people normally sleep. This category includes homes, hospitals, and hotels where a nighttime sensitivity to noise is assumed to be of utmost importance.
3	Outdoor $L_{eq}(h)$*	Institutional land uses with primarily daytime and evening use. This category includes schools, libraries, and churches where it is important to avoid interference with such activities as speech, meditation, and concentration on reading material. Places for meditation or study associated with cemeteries, monuments and museums can also be considered to be in this category. Certain historical sites, parks, campgrounds and recreational facilities are also included.

* L_{eq} for the noisiest hour of rail-related activity during hours of noise sensitivity.
Source: FTA-VA-90-1003-06.

L_{dn} is used to characterize noise exposure for areas where people normally sleep, such as residential areas and hotels (Category 2). The maximum 1-hour L_{eq} during the period that the facility is in use is used for other noise sensitive land uses such as National Historic Landmarks with significant outdoor use (Category 1) or schools (Category 3). There are two levels of impact included in the FTA criteria, as shown in Figure 9. The interpretation of these two levels of impact is summarized below:

- **Severe**: Severe noise impacts are considered "significant" as this term is used in the National Environmental Policy Act (NEPA) and implementing regulations. Noise mitigation will normally be specified for severe impact areas unless there is no practical method of mitigating the noise.
- **Moderate Impact**: In this range, other project-specific factors must be considered to determine the magnitude of the impact and the need for mitigation. These other factors can include the predicted increase over existing noise levels, the types and number of noise-sensitive land uses affected, existing outdoor-indoor sound insulation, and the cost-effectiveness of mitigating noise to more acceptable levels.

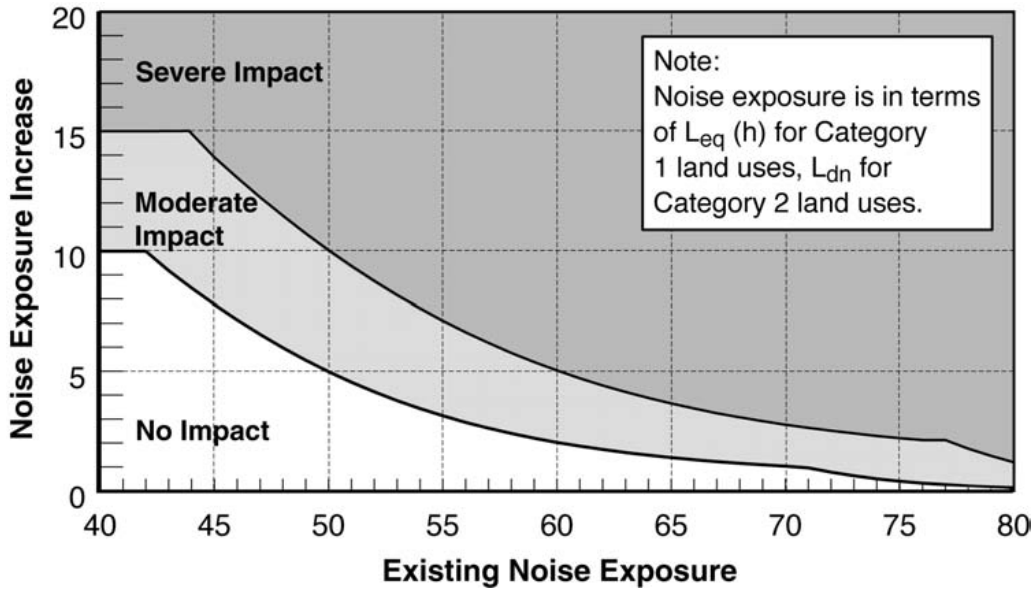
Figure 9: Noise Impact Criteria for Transit Projects



Source: FTA-VA-90-1003-06.

Although the curves in Figure 9 are defined in terms of the project noise exposure and the existing noise exposure, it is important to emphasize that the increase in the cumulative noise – when the project noise is added to existing noise – is the basis for the criteria. Figure 10 shows the noise impact criteria for Category 1 and 2 land uses in terms of cumulative noise exposure increase.

Figure 10: Increase in Cumulative Noise Levels Allowed by Criteria



Source: FTA-VA-90-1003-06.

Figure 10 shows that the criterion for impact allows a noise exposure increase of 10 dBA if the existing noise exposure is 42 dBA or less, but only a 1 dBA increase when the existing noise exposure is 70 dBA. As the existing level of ambient noise increases, the allowable level of project noise increases, but the total allowable increase in community noise exposure is reduced. As a result, project noise exposure levels that are less than the existing noise exposure can still cause an impact.

3.2 Operation Vibration Impact Criteria

The criteria in High Speed Ground Transportation Noise and Vibration Impact Assessment (USDOT, 2012) were used to evaluate vibration impacts from train operations. The evaluation of vibration impacts can be divided into two categories: (1) human annoyance, and (2) building damage.

Human Annoyance Criteria. Table 2 presents the criteria for various land use categories, as well as the frequency of events. The criteria are related to ground-borne vibration/ground-borne noise causing human annoyance or interfering with the use of vibration sensitive equipment. The criteria for acceptable ground-borne vibration are expressed in terms of RMS velocity levels in VdB and are based on the maximum levels for a single event (L_{max}).

All of the sensitive receptors within the vicinity of the Tri-Cities Area conceptual station locations fall under Land Use Category 2 or 3.

Building Damage Criteria. Normally, vibration resulting from a train passby would not cause building damage. However, damage to fragile historic buildings located near the right-of-way can be a concern.

Vibrations generated by surface transportation are mainly in the form of surface or Raleigh waves. Studies have shown that the vertical component of transportation-generated vibrations is the strongest, and that peak particle velocity (PPV) correlates best with building damage.

Table 2: Ground-Borne Vibration (GVB) and Ground Borne Noise (GBN) Impact Criteria for General Assessment

Land Use Category	Ground-Borne Vibration Impact Levels (dB re 1 micro-inch/sec)					
	GBV Impact Levels (VdB re 1 µin/s)			GBN Impact Levels (dB re 20 µPa)		
	Frequent[1] Events	Occasional[2] Events	*Infrequent[2] Events*	*Frequent[1] Events*	Occasional[2] Events	Infrequent[2] Events
Category 1: Buildings where vibration would interfere with interior operations.	65 VdB[3]	65 VdB[3]	65 VdB[3]	N/A[5]	N/A[5]	N/A[5]
Category 2: Residences and buildings where people normally sleep.	72 VdB	75 VdB	80 VdB	35 VdB	38 VdB	43 VdB
Category 3: Institutional land uses with primarily daytime use.	75 VdB	78 VdB	83 VdB	40 VdB	43 VdB	48 VdB

Source: USDOT, 2012.

Notes:

1. *Frequent* Events is defined as more than 70 vibration events of the same kind per day.
2. *Occasional* Events is defined as between 30 and 70 vibration events of the same kind per day.
3. *Infrequent* Events is defined as fewer than 30 vibration events of the same kind per day.
4. This criterion limit is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes. Vibration-sensitive manufacturing or research will require detailed evaluation to define the acceptable vibration levels. Ensuring lower vibration levels in a building often requires special design of the HVAC systems and stiffened floors.
5. Vibration-sensitive equipment is not sensitive to ground-borne noise.

Note: It is preferable that ambient vibration be characterized in terms of the RMS velocity level and not the PPV, which is commonly used to monitor construction vibration. As discussed in the FRA Manual, RMS velocity level is considered to be better correlated to human response than PPV.

The FRA provides a vibration damage threshold criterion of 13 mm/s (0.50 in/sec, approximately 102 VdB) PPV for fragile buildings and 3 mm/s (0.12 in/sec, approximately 90 VdB) PPV for extremely fragile historic buildings, for typical construction equipment operation (USDOT, 2005). The FRA recommends these criteria be used as a damage threshold for the fragile structures located near the right-of-way of a high speed rail project.

4.0 EXISTING SETTING

Sensitive receptors adjacent to the proposed station locations consist primarily of residential sites. Noise and vibration field measurements were conducted as part of the SEHSR EIS and are used to determine background noise levels. Figure 11 illustrates the SEHSR EIS noise and vibration measurement sites that are applicable to the Tri-Cities Area Multimodal Station Study EA. Although the measurements were conducted in 2009 they are still considered representative of the existing noise environment as there has not been significant development in these locations. In locations where there were no nearby monitoring locations, or the sites do not reflect the existing noise environment at the proposed station area, values from the FTA Manual's Table 5-7 *Estimating Existing Noise Exposure for General Assessment* were used. The results of the ambient noise and vibration measurement, as well as the existing train passby vibration measurements sites, are presented in Table 3 through Table 5, respectively.

Tri-Cities Area Multimodal Station Study

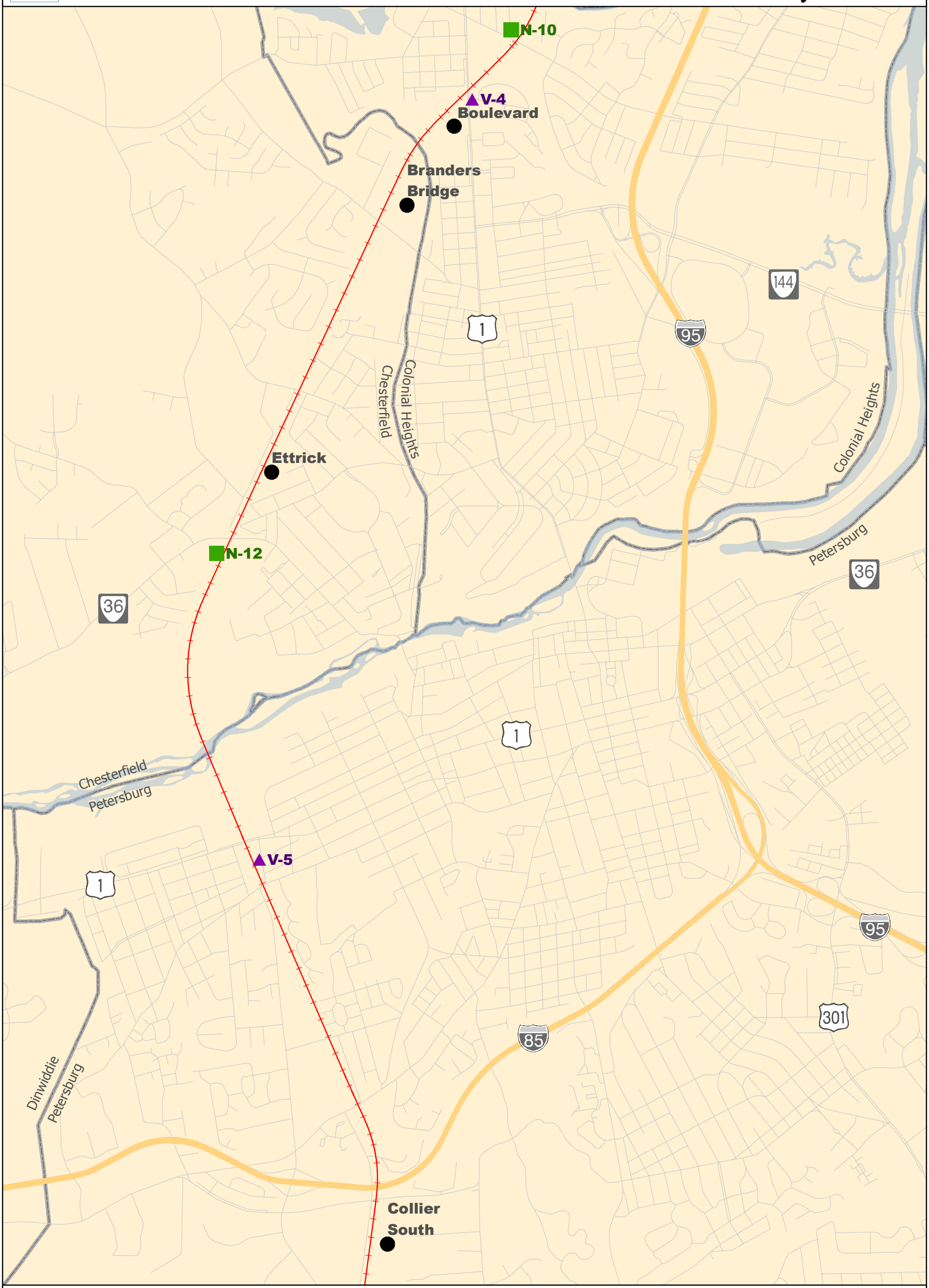


Figure 11:
Noise and Vibration
Measurement Sites

Table 3: Noise Measurement Sites

Site No.	Location	Location/Site Description	Type of Measurement	Date	Start Time	Duration	L_{eq}	L_{dn}[1]
N-10	Colonial Heights	31115 Farris Avenue	Long Term	5/26/09	3:49 PM	24 hours	61	63
N-12	Ettrick	3923 River Road	Long Term	5/21/09	9:01 AM	25 hours	72	72

Note:
1. L_{dn} for long-term measurements only

Table 4: Vibration Sensitive Receptor Sites with Background Vibration Measurements

Site No.	Site Description/Location	Side of Alignment	Land Use[1]	Date	Time	Distance to Near Track Centerline, feet	Max RMS Velocity Level, VdB	PPV in/sec		
								Long	Vert	Trans
V-4	2801 Boulevard, Colonial Heights, VA	East	COM	Existing Train Passby Vibration Measurement – See Table 5						
V-5	1510 W Washington St Petersburg, VA	East	COM	Existing Train Passby Vibration Measurement – See Table 5						

Note:
1. SFR = Single Family Residences; COM = Commercial Property; HST = Historic Site.

Table 5: Existing Train Passby Vibration Measurements

Site No.	Location	Date	Time	Distance to Near Track Centerline, feet	Max RMS Velocity Level, VdB	PPV[1], in/sec
V-4	2801 Boulevard, Colonial Heights, VA	5/22/09	12:04 PM	85	79	0.035
V-5	1510 W Washington St Petersburg, VA	5/27/09	11:38 AM	63	82	0.048

Notes:

1. The PPV is the highest measured peak particle velocity from all passby events at a particular location.
2. Train passby measurement was taken at a train exchange yard with the engine moving at low speeds.

5.0 OPERATION-RELATED IMPACTS

Noise and vibration impacts from operation and construction activities related to the proposed project are presented in this section.

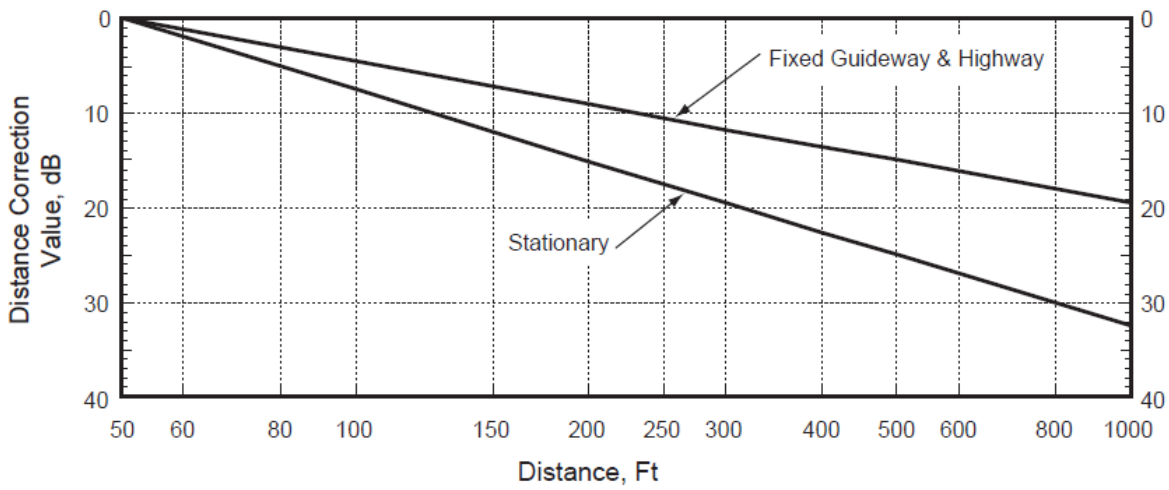
5.1 No Build Operations

Under the No-Build Option the existing station in Ettrick would continue to be used for rail service. Since this is an existing station, it is already part of the existing noise and vibration environment and therefore does not create any impacts.

5.2 Rail Operation Noise

Train noise impacts were evaluated using the Exposure vs Distance curve (Figure 12) for stationary sources in order to determine noise contours showing moderate and severe impacts. Depending upon the land use, this increase was measured in terms of either one-hour equivalent sound level ($L_{eq}(h)$) or the day-night sound level L_{dn}. The Project noise exposure was calculated based on the operating characteristics listed in Table 6. Nosie exposure is only calculated for the proposed high speed rail at the stations.

Figure 12: Curves for Estimating Exposure vs. Distance in General Noise Assessment



Source: FTA-VA-90-1003-06.

Table 6: Projected Train Operating Characteristics

Total Number of Daily Trains	14
Number of Trains - Day	14
Number of Peak Hour Trains	2
Idling Duration (Seconds)	1,200

Source: Michael Baker International

In addition to the operating assumptions listed above, it was also assumed that there would be no track modifications and no horn blowing associated with the proposed station locations. Based on these assumptions, distance-to-impact contours were developed for the different land use categories and existing noise levels. These distances were then used to tabulate the rail noise impacts that would occur as a result of the proposed Project. A summary of projected noise impacts for this project is provided in Table 7. Figures 13 – 14 show the locations of the impacts. Because there are no noise impacts at either the Collier South or Ettrick sites, figures for these sites were not prepared.

Table 7: Summary Total of Rail Noise Impacts

Conceptual Station Location	Noise Impacts					
	Cat 1		Cat 2		Cat 3	
	Moderate Impact	Severe Impact	Moderate Impact	Severe Impact	Moderate Impact	Severe Impact
Branders Bridge	0	0	1	0	0	0
Boulevard	0	0	0	0	1	0
Ettrick	0	0	0	0	0	0
Collier South	0	0	0	0	0	0

Source: Michael Baker International

The results in Table 7 represent a fairly conservative estimate in terms of the number of projected impacts. This is mainly due to the fact that an idle time of 1,200 seconds (20 minutes) was assumed. During the design phase of the project, more detailed noise analysis will be conducted for the preferred station location. At this point, mitigation measures will be evaluated, if warranted.

In addition to the noise from idling, new parking lots are proposed at each station location. Using the same approach as was used to determine impacts for the station idling, distance to impact contours were developed for the park and ride lots. Each parking lot is assumed to contain at most 50 spaces. With such limited parking, the predicted Ldn or Leq is lower than the impact level, therefore the parking lots will not contribute any additional impacts to the totals above.

Tri-Cities Area Multimodal Station Study

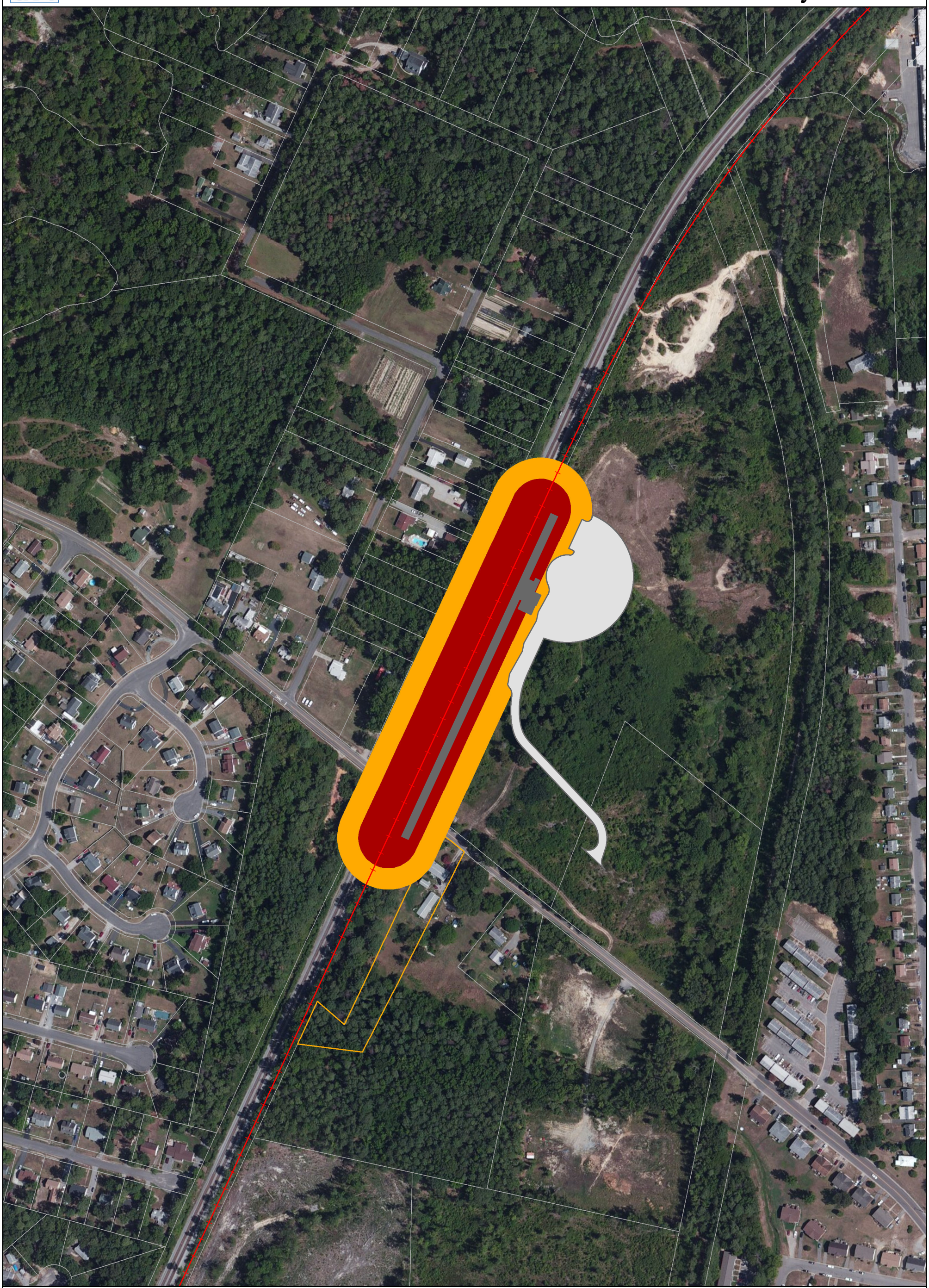
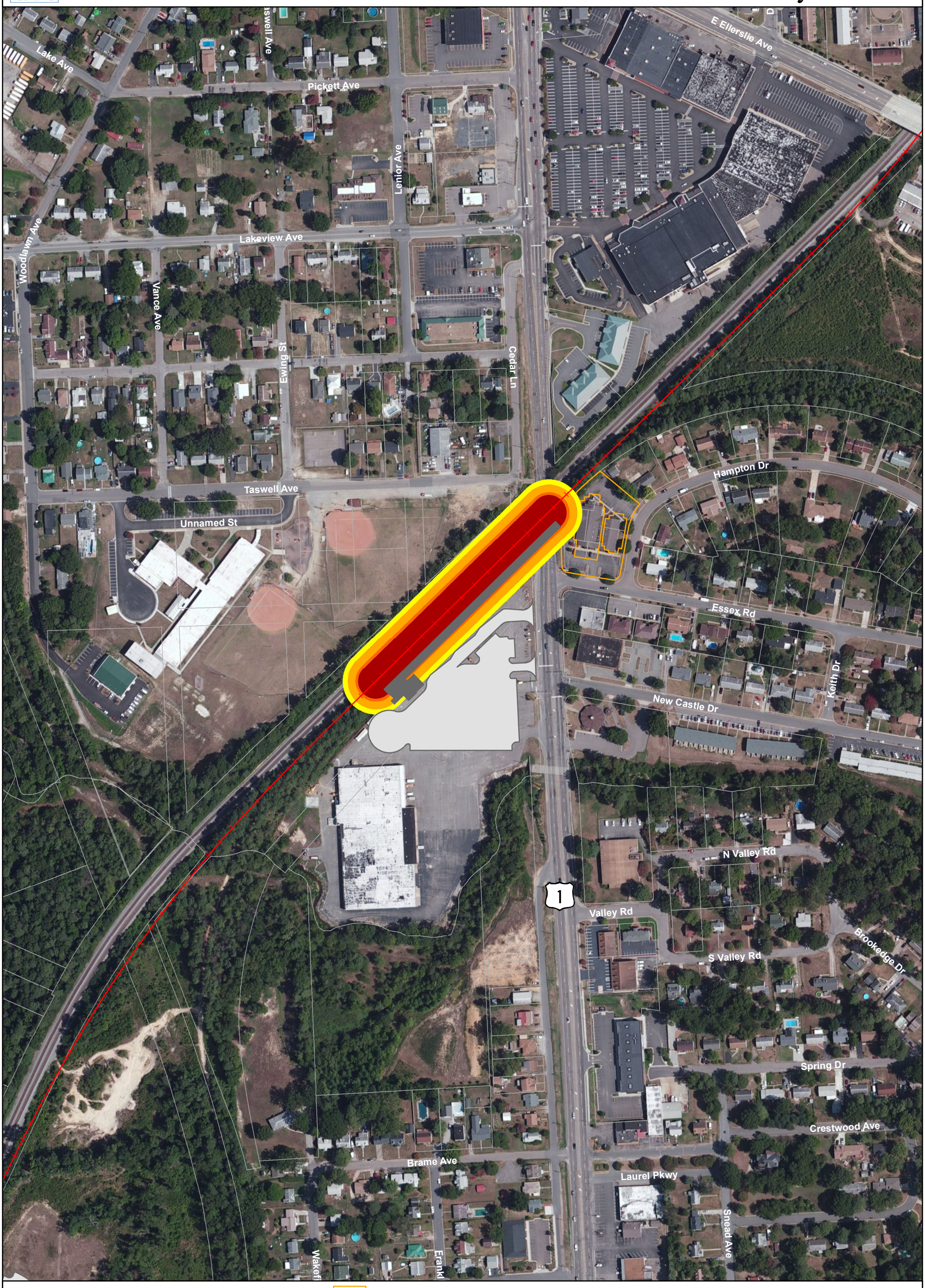


Figure 13:
Branders Bridge Station Concept
Noise Impacts

Tri-Cities Area Multimodal Station Study



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Noise Impacts

- Category 2 - Severe
- Category 3 - Severe
- Category 2 - Moderate
- Category 3 - Moderate
- Impacted Parcels
- Preferred SEHSR Alignment
- Station & Platform Concept
- Parking Lot Concept

Figure 14:
Boulevard Station Concept
Noise Impacts

5.3 Operation Vibration

The train activity analyzed was limited to station idling. All other train activity has been analyzed as part of the SEHSR EIS. At this time, it is assumed that the track system will not be modified as part of this station evaluation. Therefore, the project does not have the potential for vibration impact.

5.4 Conclusion

The effects of the proposed action were evaluated based on the number and type of impact. The following impacts were identified for the Project's conceptual station locations:

- **Rail Noise**

  The rail noise criteria is divided into moderate impact and severe impact categories. None of the proposed conceptual station locations would result in a severe noise impact. However, two of the four proposed station locations would have a moderate impact: Branders Bridge and Boulevard.

  Based on FTA criteria, the Branders Bridge sites is predicted to have one moderate impact, to a Category 2 receptor. The Boulevard site is predicted to have one moderate impact for a Category 3 receptor.

  During the design phase of the project, a more detailed analysis will be conducted and impacted areas will be evaluated further prior to making a final determination on mitigation.

- **Rail Vibration**

  Because the project is limited to evaluating potential station locations, at this time only station idling has been analyzed. Because it is assumed that the track system will not be modified as part of the proposed station, the project does not have any potential for vibration impact. However, when the project reaches final design, any special track work, if applicable, will be evaluated for vibration impacts.

6.0 CONSTRUCTION-RELATED IMPACTS

6.1 Construction Noise

The predominant construction activities associated with this Project are expected to be earth removal, hauling, grading, and paving. Temporary and localized construction noise impacts may occur as a result of these activities. Table 8 illustrates the dBA associated with various construction activities.

During daytime hours, the effects of these impacts may be temporary speech interference for passers-by and those individuals living, working, or attending school near the project. During evening and nighttime hours, if applicable, steady-state construction noise emissions such as paving operations may be audible, and may cause impacts to activities such as sleep. Sporadic evening and nighttime construction equipment noise emissions such as from backup alarms, lift gate closures (slamming of dump truck gates), etc., may be perceived as distinctly louder than the steady-state acoustic environment, and may cause severe impacts to the general peace and usage of noise-sensitive areas. Extremely loud construction noise activities such as usage of pile-drivers and impact-hammers (jack hammer, hoe-ram) will provide sporadic and temporary construction noise impacts in the near vicinity of those activities. It is suggested that construction activities that will produce extremely loud noises be scheduled during times of the day when such noises will create as minimal disturbance as possible.

Generally, low-cost and easily implemented construction noise control measures should be incorporated into the project plans and specifications. These measures include, but are not limited to, work-hour limits, exhaust muffler requirements, haul-road locations, elimination of tail gate banging, ambient-sensitive backup alarms, construction noise complaint mechanisms, and consistent and transparent community communication.

While discrete construction noise level prediction is difficult for a particular receiver or group of receivers, it can be assessed in a general capacity with respect to distance from known or likely project activities. Although construction noise impact mitigation should not place an undue burden upon the financial cost of the project or the project construction schedule, it is suggested that:

- Earth removal, grading, hauling, and paving activities in the vicinity of residences should be limited to weekday daytime hours.
- If meeting the project schedule requires that earth removal, grading, hauling and / or paving must occur during evening, nighttime and/or weekend hours in the vicinity of residences, the Contractor shall notify the appropriate state agency as soon as possible. In such instance(s), all reasonable attempts shall be made to notify and to make appropriate arrangements for the mitigation of the predicted construction noise impacts upon the affected property owners and/or residents.
- If construction noise activities must occur during context-sensitive hours in the vicinity of noise-sensitive areas, discrete construction noise abatement measures including, but not limited to portable noise barriers and/or other equipment-quieting devices shall be considered.
- Some construction activities may create extreme noise impacts for nearby noise-sensitive land uses. It is the recommendation of this analysis that considerations be made for any nearby residences for all evening and/or nighttime periods (7:00 p.m. – 7:00 a.m.), and for all weekend hours throughout which extremely loud construction activities might occur.

For additional information on construction noise, please refer to the FHWA's *Construction Noise Handbook* (FHWA-HEP-06-015) and the *Roadway Construction Noise Model (RCNM),* available online at: http://www.fhwa.dot.gov/environment/noise/cnstr_ns.htm.

Table 8: Construction Equipment typical Noise Level Emissions

Equipment	Typical Noise Level (dBA) 50 ft from Source
Air Compressor	81
Backhoe	80
Ballast Equalizer	82
Ballast Tamper	83
Compactor	82
Concrete Mixer	85
Concrete Pump	82
Concrete Vibrator	76
Crane, Derrick	88
Crane, Mobile	83
Dozer	85
Generator	81
Grader	85
Impact Wrench	85
Jack Hammer	88
Loader	85
Paver	89
Pile-driver (Impact)	101
Pile-driver (Sonic)	96
Pneumatic Tool	85
Pump	76
Rail Saw	90
Rock Drill	98
Roller	74

Source: U.S. Environmental Protection Agency, "Noise from Construction Equipment and Operations, Building Equipment and Home Appliances," NTID300.1, December 31, 1971.

6.2 Construction Vibration

Two types of construction vibration impact were analyzed: (1) human annoyance and (2) building damage. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time. Building damage can be cosmetic or structural. Fragile buildings such as historical structures are generally more susceptible to damage from ground vibration. Normal buildings that are not particularly fragile would not experience any cosmetic damage (e.g., plaster cracks) at distances beyond 30 feet based on typical construction equipment vibration levels. This distance can vary substantially depending on the soil composition and underground geological layer between vibration source and receiver. In addition, not all buildings respond similarly to vibration generated by construction equipment. The potential for vibration annoyance and building damage was analyzed for major vibration producing construction equipment that would be used on this Project.

Vibration levels produced by construction equipment were obtained from FRA's *High Speed Ground Transportation Noise and Vibration Impact Assessment* (USDOT, 2012) and from field measurements (see Table 9). Based on the typical vibration levels listed, calculations were performed to determine the distances at which vibration impacts would occur according to the criteria discussed in Section 3.2. Table 10 shows the results of those calculations. The distances shown in Table 10 are the maximum distances at which short-term construction vibration impacts may occur. Mitigation measures would need to be considered if construction equipment were to operate near wood-framed buildings within the distances shown in Table 10.

Table 9: Vibration Source Levels for Construction Equipment

Equipment (projected use)	PPV [1] at 25 feet (in/sec)	Approximate Velocity Level [2] at 25 ft (VdB)
Large bulldozer	0.089	87
Loaded trucks	0.076	86
Vibratory compactor/roller	0.210	94

Source: USDOT, 2012.
Notes:
1. Peak particle ground velocity measured at 25 feet unless noted otherwise.
2. RMS ground velocity in decibels (VdB) referenced to 1 micro-inch/second.

Table 10: Construction Equipment Vibration Impact Distances

Equipment	Distance to Vibration Annoyance Impact [1] feet	Distance to Vibration Building Damage [2] feet
Large bulldozer	43	15
Loaded trucks	40	13
Small bulldozer	<10	<10
Auger/drill rigs	45	<10
Vibratory hammer	130	25
Vibratory compactor/roller	73	26

Notes:

1. This is the distance at which the RMS velocity level is 80 VdB or less at the inside of the building structure. When propagating from the ground surface to the building structure foundation, there is a vibratory coupling loss of approximately 5 dB; however, this loss is offset by the building amplification in light-frame construction. Thus, no additional adjustments are applied.
2. This is the distance at which the peak particle velocity is 0.20 inch/sec or less.

7.0 MITIGATION

This section discusses the possible mitigation measures that can be implemented to either reduce or mitigate the impacts generated by the construction and operation of the proposed project.

7.1 Mitigation during Construction

Noise and vibration impacts caused by construction activities are temporary. However, standard construction mitigation measures may be required to minimize these impacts. Construction activities conducted during daytime hours will have a lesser impact than nighttime construction. However, there may be locations where nighttime construction would be unobtrusive, such as commercial areas where the land use is unoccupied during nighttime hours, or industrial areas that are generally not sensitive to noise and vibration. Nighttime construction may be necessary to avoid unacceptable disruptions to current rail operations or street traffic during daytime hours. Once details of the construction activities become available, the contractor would need to work with local authorities to develop an acceptable approach to minimize interference with the business and residential communities, traffic disruptions, and the total duration of the construction.

There are a number of measures that can be taken to minimize intrusion without placing unreasonable constraints on the construction process or substantially increasing costs. These include noise and vibration monitoring to ensure that contractors take all reasonable steps to minimize impacts when near sensitive areas; noise testing and inspection of equipment to ensure that all equipment on the site is in good condition and effectively muffled; and an active community liaison program. The community liaison program should keep residents informed about construction plans so they can plan around periods of particularly high noise or vibration levels and should provide a conduit for residents to express any concerns or complaints.

The following are possible control measures that can be implemented in order to minimize noise and vibration disturbances at sensitive areas during construction:

- Use newer equipment with improved noise muffling and ensure that all equipment items have the manufacturers' recommended noise abatement measures, such as mufflers, engine covers, and engine vibration isolators intact and operational. Newer equipment will generally be quieter in operation than older equipment. All construction equipment should be inspected at periodic intervals to ensure proper maintenance and presence of noise control devices (e.g., mufflers and shrouding, etc.).
- Perform all construction in a manner to minimize noise and vibration. Utilize construction methods or equipment that will provide the lowest level of noise and ground vibration impact, e.g., avoid impact pile driving near residences and consider alternative methods that are also suitable for the soil condition. The contractor should be required to select construction processes and techniques that create the lowest noise levels.
- Perform independent noise and vibration monitoring to demonstrate compliance with the noise limits, especially in particularly sensitive areas. Require contractors to modify and/or reschedule their construction activities if monitoring determines that maximum limits are exceeded at residential land uses.
- Conduct truck loading, unloading and hauling operations so that noise and vibration are kept to a minimum by carefully selecting routes to avoid going through residential neighborhoods to the greatest extent possible.
- Construction lay-down or staging areas should be selected in industrially zoned districts. If industrially zoned areas are not available, commercially zoned areas may be used, or locations that are at least 100 feet from any noise sensitive land use such as residences, hotels and motels. Ingress and egress to and from the staging areas should be on collector streets or greater (higher street designations are preferred).
- Turn off idling equipment.
- Minimize construction activities during evening, nighttime, weekend, and holiday periods. Permits may be required in some cities before construction can be performed in noise sensitive areas between 7:00 p.m. and 7:00 a.m.
- The construction contractor should be required by contract specification to comply with all local noise and vibration ordinances and obtain all necessary permits and variances.

It is expected that ground-borne vibration from construction activities would cause only intermittent localized intrusion along the rail corridor. Processes such as earth moving with bulldozers, the use of vibratory compaction rollers, and the operation of vibratory pile drivers can create annoying vibration. There are cases where it may be necessary to use this type of equipment in close proximity to residential buildings. Following are some procedures that can be used to minimize the potential for annoyance or damage from construction vibration:

- When possible, limit the use of construction equipment that creates high vibration levels, such as vibratory rollers and hammers, operating within 130 feet of building structures.
- Require vibration monitoring during vibration-intensive activities.

- Restrict the hours of vibration-intensive equipment or activities such as vibratory rollers so that impacts to residents are minimal (e.g., weekdays during daytime hours only when as many residents as possible are away from home).

A combination of the mitigation techniques for equipment noise and vibration control as well as administrative measures, when properly implemented, can be selected to provide the most effective means to minimize the effects of construction activity impacts. Application of the mitigation measures will reduce the construction impacts; however, temporary increases in noise and vibration would likely occur at some locations.

7.2 Mitigation for Station Operations

The results shown in Table 7 represent a fairly conservative estimate in terms of the number of projected impacts because a conservative estimate of 20 minutes idle time was used. During the design phase of the project, a more detailed analysis will be conducted.

Because this project involves a station location and vehicle idling, there are few mitigations options available except to reduce the idle time. Noise barriers are more appropriate for a linear source, such as the rail line itself, and not an idling station, however the following mitigation measure could also be considered and applied as appropriate per federal and state regulations:

> **Building Insulation –** In cases where rights-of-way are restricted, the only practical noise mitigation measure may be to provide sound insulation for the building. The most effective treatments are to caulk and seal gaps in the building and to install windows that are specially designed to meet acoustical transmission-loss requirements.

8.0 REFERENCES

FHWA, 2004. Federal Highway Administration, *FHWA Traffic Noise Model User's Guide (Version 2.5 Addendum),* Final Report, April, 2004.

USDOT, 2012. U.S. Department of Transportation, Federal Railroad Administration, *High-Speed Ground Transportation Noise and Vibration Impact Assessment, Final Report*, Office of Railroad Policy and Development, DOT/FRA/ORD-12/15, September 2012.

USEPA, 1974. U.S. Environmental Protection Agency, *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety*. Environmental Protection Agency Office of Noise Abatement and Control, Report No. 550/9-74-004, March 1974.

9.0 PREPARERS

Robyn Hartz
17 years' experience
Environmental Specialist II
Michael Baker International

Andrew Kutcha
32 years' experience
Air Quality and Noise Technical Manager
Michael Baker International

APPENDIX D

NATURAL RESOURCES COORDINATION

Michael Baker
INTERNATIONAL

Innovation Done Right...We Make a Difference

From: Emaly Simone
Michael Baker Engineering, Inc.
8000 Regency Parkway, Suite 600
Cary, NC 27518
Email: Emaly.Simone@mbakerintl.com
Phone: 919-481-5721

To: U.S. Fish and Wildlife Service
Virginia Field Office
6669 Short Lane
Gloucester, Virginia 23061

June 11, 2015

Re: Online Project Review Request, TriCities Station – Branders Bridge Alternative, Chesterfield County, Virginia

We have reviewed the referenced project using the Virginia Field Office's online project review process and have followed all guidance and instructions in completing the review. We completed our review on June 10, 2015, and are submitting our project review package in accordance with the instructions for further review.

Our proposed action consists of: construction of a multimodal station on this undeveloped parcel to serve the Tri-Cities area. The proposed project would use 2.57 acres of the site and include a station, train platform, parking area, and access road. Associated utilities (fiberoptic, electricity, water, sewer) would be required to support the station.

The location of the project and the action area are identified on the enclosed map. The approximate location of this project is 37.259603, -77.417199.

This a planning-level project and the completion date is to be determined.

This project review is needed in support of the Environmental Assessment prepared for this project though the National Environmental Policy Act (NEPA). The Federal Railroad Administration (FRA) is serving as the lead Federal agency for this Project, with support from the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA) acting as cooperating agencies.

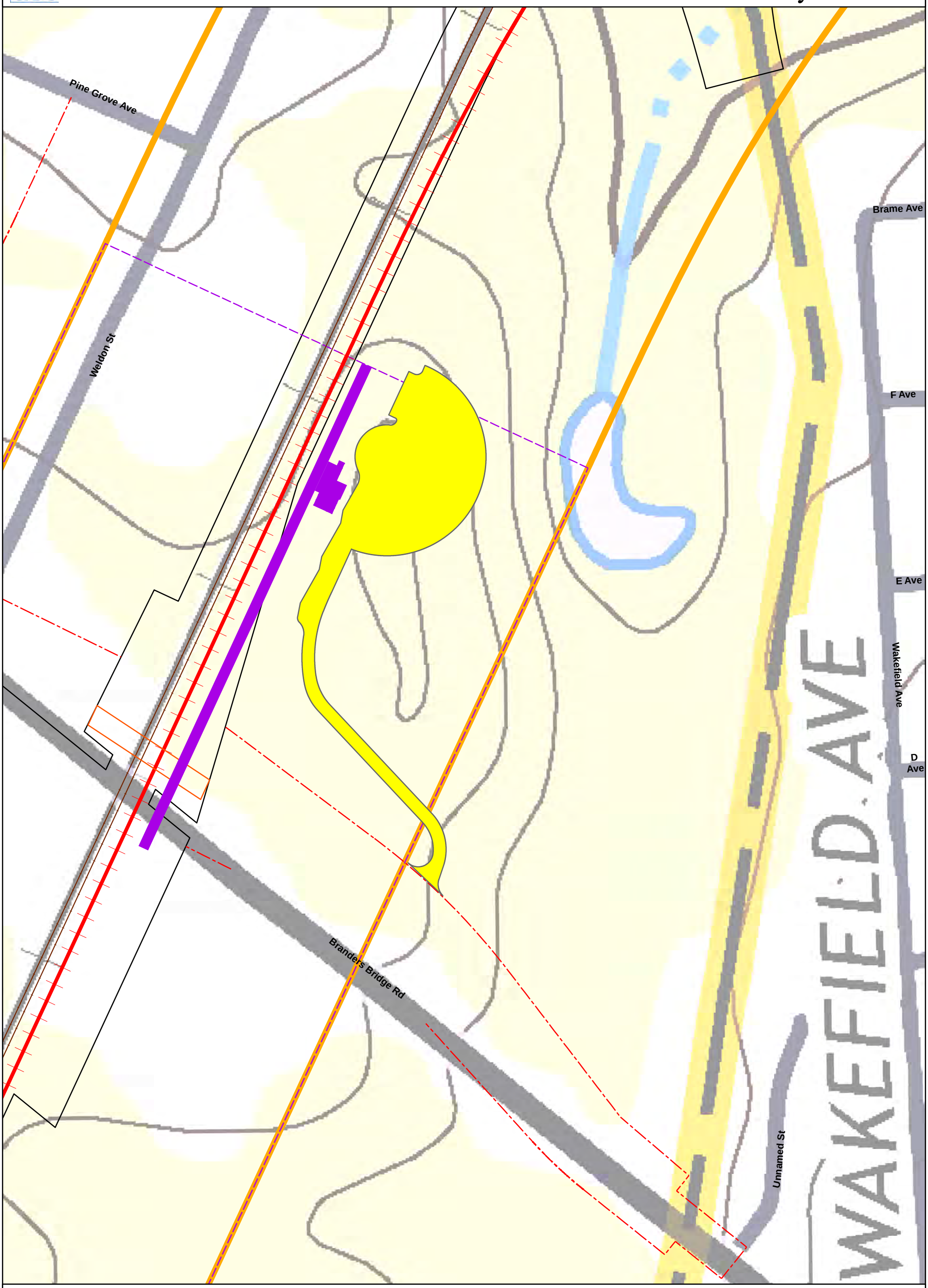
The enclosed project review package provides the information about the species, critical habitat, and bald eagles considered in our review, and the species conclusions table included in the package identifies our determinations for the resources that may be affected by the project.

For additional information, please contact Emaly Simone at the address listed above.

Sincerely,

Emaly Simone
Environmental Scientist/Planner
Michael Baker Engineering, Inc.

Tri-Cities Area Multimodal Station Study



N
W E
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0 100 200
Feet

Preferred SEHSR Alignment
SEHSR Railroad
Tangent Track
SEHSR Road ROW
SEHSR Road

Study Area (500 Ft. Buffer)
Existing Rail ROW
Conceptual Station & Platform
Conceptual Parking Lot

Branders Bridge Station Concept

SEHSR - Southeast High Speed Rail

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Virginia Ecological Services Field Office
6669 SHORT LANE
GLOUCESTER, VA 23061
PHONE: (804)693-6694 FAX: (804)693-9032
URL: www.fws.gov/northeast/virginiafield/

Consultation Code: 05E2VA00-2015-SLI-2174 May 30, 2015
Event Code: 05E2VA00-2015-E-02199
Project Name: TriCities Station - Branders Bridge Alternative

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment

United States Department of Interior
Fish and Wildlife Service

Project name: TriCities Station - Branders Bridge Alternative

Official Species List

Provided by:

Virginia Ecological Services Field Office
6669 SHORT LANE
GLOUCESTER, VA 23061
(804) 693-6694
http://www.fws.gov/northeast/virginiafield/

Consultation Code: 05E2VA00-2015-SLI-2174
Event Code: 05E2VA00-2015-E-02199

Project Type: DEVELOPMENT

Project Name: TriCities Station - Branders Bridge Alternative
Project Description: The station footprint is estimated at 2.57 acres. This planning-level NEPA study examines sites for a future high speed rail station.

Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.

Project Location Map:

Project Coordinates: MULTIPOLYGON (((-77.4170172214508 37.261484637616114, -77.4167490005493 37.26127116548587, -77.41654515266418 37.260801524669574, -77.41652369499207 37.260485582836395, -77.41700649261475 37.25998178095543, -77.41745710372925 37.25975122642838, -77.41744637489319 37.259477975704655, -77.41699576377869 37.25847889430797, -77.41698503494263 37.25819709972323, -77.41714596748352 37.258000696813454, -77.4172854423523 37.25796653973341, -77.4175214767456 37.25814586423092, -77.41756439208984 37.25823979594018, -77.41760730743408 37.25864113919671, -77.41783261299133 37.258794844558444, -77.41811156272888 37.25934988908668, -77.41837978363036 37.25919618485755, -77.41904497146605 37.25826541365875, -77.41913080215454 37.258256874420205, -77.4191951751709 37.258308109836996, -77.41890549659729 37.258888775458445, -77.41877675056458 37.259068097760405, -77.41806864738464 37.260314802915325, -77.41770386695862 37.26084421941024, -77.41730690002441 37.26155294857001, -77.4170172214508 37.261484637616114)))

Project Counties: Chesterfield, VA

Endangered Species Act Species List

There are a total of 1 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Mammals	Status	Has Critical Habitat	Condition(s)
Northern long-eared Bat *(Myotis septentrionalis)*	Threatened		

Critical habitats that lie within your project area

There are no critical habitats within your project area.

Virginia Department of Game and Inland Fisheries

Fish and Wildlife Information Service

VaFWIS Search Report Compiled on 4/30/2015, 4:33:09 PM

Help

Known or likely to occur within a **2 mile radius around point 37.2598500 -77.4163728** in **041 Chesterfield County, 570 Colonial Heights City, 730 Petersburg City, VA**

View Map of Site Location

497 Known or Likely Species ordered by Status Concern for Conservation
(displaying first 26) (26 species with Status* or Tier I** or Tier II**)

BOVA Code	Status*	Tier**	Common Name	Scientific Name	Confirmed	Database(s)
010032	FESE	II	Sturgeon, Atlantic	Acipenser oxyrinchus		BOVA
040096	ST	I	Falcon, peregrine	Falco peregrinus		BOVA
040129	ST	I	Sandpiper, upland	Bartramia longicauda		BOVA
040293	ST	I	Shrike, loggerhead	Lanius ludovicianus		BOVA
040385	ST	I	Sparrow, Bachman's	Aimophila aestivalis		HU6
020002	ST	II	Treefrog, barking	Hyla gratiosa		BOVA
060081	ST	II	Floater, green	Lasmigona subviridis	Yes	TEWaters,Habitat,HU6

040292	ST		Shrike, migrant loggerhead	Lanius ludovicianus migrans		BOVA
050022	FP		Bat, northern long-eared	Myotis septentrionalis		BOVA
010038	FC	IV	Alewife	Alosa pseudoharengus	Yes	BOVA,SppObs,HU6
010045	FC		Herring, blueback	Alosa aestivalis	Yes	BOVA,SppObs,HU6
040093	FS	II	Eagle, bald	Haliaeetus leucocephalus		BOVA,HU6
060029	FS	III	Lance, yellow	Elliptio lanceolata		BOVA,HU6
070105	FS	III	Crayfish, Chowanoke	Orconectes virginiensis		BOVA
100001	FS	IV	fritillary, Diana	Speyeria diana		BOVA
030063	CC	III	Turtle, spotted	Clemmys guttata		BOVA,HU6
010077		I	Shiner, bridle	Notropis bifrenatus		BOVA
040225		I	Sapsucker, yellow-bellied	Sphyrapicus varius		BOVA
040319		I	Warbler, black-throated green	Dendroica virens		BOVA
040052		II	Duck, American black	Anas rubripes		BOVA,HU6
040029		II	Heron, little blue	Egretta caerulea caerulea		BOVA
040036		II	Night-heron, yellow-crowned	Nyctanassa violacea violacea		BOVA
040213		II	Owl, northern saw-whet	Aegolius acadicus		BOVA
040105		II	Rail, king	Rallus elegans	Potential	BOVA,Habitat,HU6
040320		II	Warbler, cerulean	Dendroica cerulea		BOVA,HU6
040266		II	Wren, winter	Troglodytes troglodytes		BOVA

To view **All 497 species** View 497

* FE=Federal Endangered; FT=Federal Threatened; SE=State Endangered; ST=State Threatened; FP=Federal Proposed; FC=Federal Candidate; FS=Federal Species of Concern; 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

View Map of All Query Results from All Observation Tables

Bat Colonies or Hibernacula: **Not Known**

Anadromous Fish Use Streams (4 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**	
C73	Swift Creek	Confirmed	4	FC	IV	Yes
C86	Appomattox River 2	Confirmed	3	FC	IV	Yes

C89	Appomattox River 1	Confirmed	6	FC	IV	Yes
P4	Appomattox River 3	Potential	0			Yes

Impediments to Fish Passage (4 records)

View Map of All Fish Impediments

ID	Name	River	View Map
809	BATTERSEA DAM	APPOMATTOX RIVER	Yes
810	HARVELL DAM	APPOMATTOX RIVER	Yes
1018	LAKEVIEW DAM	SWIFT CREEK	Yes
812	SWIFT CREEK MILL DAM	SWIFT CREEK	Yes

Colonial Water Bird Survey

N/A

Threatened and Endangered Waters (1 Reach)

View Map of All Threatened and Endangered Waters

Stream Name	T&E Waters Species						View Map
	Highest TE*	BOVA Code, Status*, Tier**, Common & Scientific Name					
Appomattox River (02080207)	ST	060081	ST	II	Floater, green	Lasmigona subviridis	Yes

Managed Trout Streams

N/A

Bald Eagle Concentration Areas and Roosts

N/A

Bald Eagle Nests

N/A

Species Observations (111 records - displaying first 68 , 68 Observations with Threatened or Endangered species)

View Map of All Query Results Species Observations

				N Species	

obsID	class	Date Observed	Observer	Different Species	Highest TE*	Highest Tier**	View Map
615838	SppObs	Oct 17 2012	Wayne; Starnes	20	FC	IV	Yes
340786	SppObs	May 6 2004	WWS DGIF Augustine, Skelton	4	FC	IV	Yes
339321	SppObs	Apr 30 2002	MTF & AJM	3	FC	IV	Yes
339319	SppObs	Apr 9 2002	MTF & AJM	4	FC	IV	Yes
340744	SppObs	Mar 27 2002	WWS DGIF MTF & CM	2	FC	IV	Yes
339276	SppObs	Mar 27 2002	MTF & CM	2	FC	IV	Yes
339219	SppObs	Mar 15 2002	MTF & LAW	1	FC	IV	Yes
339316	SppObs	Mar 15 2002	MTF & LAW	2	FC	IV	Yes
339315	SppObs	Mar 7 2002	MTF & CM	1	FC	IV	Yes
339242	SppObs	Apr 9 2001	Boshers and fisher	3	FC	IV	Yes
339214	SppObs	Mar 19 2001	Weaver, Boshers, Fisher	2	FC	IV	Yes
339240	SppObs	Mar 19 2001	WEAVER, Boshers, FISHER	1	FC	IV	Yes
339213	SppObs	May 1 2000	Boshers, Moore, Augustine	3	FC	IV	Yes
340644	SppObs	May 1 2000	WWS DGIF Moore, Boshers, Augustine	2	FC	IV	Yes
339270	SppObs	May 1 2000	Moore, Boshers, Augustine	2	FC	IV	Yes
339211	SppObs	Mar 22 2000	Augustine, Moore, Boshers	2	FC	IV	Yes
339210	SppObs	Mar 16 2000	Weaver, Augustine	1	FC	IV	Yes
340645	SppObs	Mar 16 2000	WWS DGIF Weaver, Augustine	1	FC	IV	Yes
339268	SppObs	Mar 16 2000	Weaver, Augustine	1	FC	IV	Yes
339237	SppObs	Mar 16 2000	Weaver, Augustine	2	FC	IV	Yes
339209	SppObs	Mar 10 2000	Boshers, Moore, Augustine	2	FC	IV	Yes
339236	SppObs	Mar 10 2000	Boshers, Moore, Augustine	2	FC	IV	Yes
339308	SppObs	Mar 10 2000	Moore, Boshers, Augustine	3	FC	IV	Yes
339266	SppObs	Apr 6 1999	Augustine, Miederhoff	2	FC	IV	Yes
339207	SppObs	Apr 6 1999	Augustine, Miederhoff	2	FC	IV	Yes
340636	SppObs	Apr 6 1999	WWS DGIF Augustine, Miederhoff	2	FC	IV	Yes
339304	SppObs	Apr 6 1998	R. Simmonds & C. Routh	15	FC	IV	Yes
339297	SppObs	Apr 6 1998	R. Simmonds & C. Routh	16	FC	IV	Yes
339233	SppObs	Apr 9 1997	Ways, Showalter	3	FC	IV	Yes
339200	SppObs	Apr 17 1995	Weaver, Falls	4	FC	IV	Yes
11640	SppObs	May 25 1990	ANGERMEIER ET AL	23	FC	IV	Yes
339224	SppObs	May 17 2002	MTF & AJM	2	FC		Yes
339257	SppObs	May 17 2002	MTF & AJM	3	FC		Yes
339256	SppObs	May 9 2002	MTF & AJM	2	FC		Yes

339322	SppObs	May 9 2002	MTF & AJM	2	FC		Yes
339223	SppObs	May 9 2002	MTF & AJM	2	FC		Yes
339255	SppObs	Apr 30 2002	MTF & AJM	4	FC		Yes
339222	SppObs	Apr 30 2002	MTF & AJM	3	FC		Yes
339254	SppObs	Apr 16 2002	MTF & AJM	2	FC		Yes
339320	SppObs	Apr 16 2002	MTF & AJM	3	FC		Yes
339253	SppObs	Apr 9 2002	AJM & MTF	2	FC		Yes
339231	SppObs	May 29 2001	B. Boshers, M. fisher	1	FC		Yes
339248	SppObs	May 29 2001	B. Boshers, M. fisher	2	FC		Yes
339218	SppObs	May 29 2001	B. Boshers, M. fisher	2	FC		Yes
339247	SppObs	May 21 2001	B. Boshers, M. Fisher	2	FC		Yes
339246	SppObs	May 15 2001	B. Boshers, M. Fisher	2	FC		Yes
339312	SppObs	May 15 2001	B. Boshers, M. Fisher	2	FC		Yes
339273	SppObs	May 7 2001	B. Boshers, M. Fisher	2	FC		Yes
339245	SppObs	May 7 2001	B. Boshers, M. Fisher	2	FC		Yes
339311	SppObs	May 7 2001	B. Boshers, M. Fisher	3	FC		Yes
339310	SppObs	Apr 30 2001	B. Boshers, M. Fisher	2	FC		Yes
339244	SppObs	Apr 30 2001	B. Boshers, M. Fisher	2	FC		Yes
339243	SppObs	Apr 24 2001	B. Boshers, M. Fisher	2	FC		Yes
339309	SppObs	Apr 24 2001	b. Boshers, M. Fisher	1	FC		Yes
339217	SppObs	Apr 18 2001	B. Boshers, M. Fisher	1	FC		Yes
339216	SppObs	Apr 9 2001	BB +MF, MF + BB	2	FC		Yes
339212	SppObs	Apr 11 2000	Weaver, Augustine	2	FC		Yes
339267	SppObs	Apr 21 1999	Augustine, Miederhoff, Augustine, Meiderhoff	2	FC		Yes
339208	SppObs	Apr 21 1999	Augustine, Miederhoff	1	FC		Yes
339305	SppObs	Jul 23 1998	R. Simmonds & C. Routh	12	FC		Yes
339415	SppObs	May 13 1998	R. Simmonds & C. Routh	22	FC		Yes
339206	SppObs	May 28 1997	Ways, Hawk	2	FC		Yes
339235	SppObs	May 28 1997	Ways, Hawk	2	FC		Yes
339234	SppObs	May 13 1997	Ways	1	FC		Yes
339205	SppObs	May 13 1997	Ways	1	FC		Yes
339204	SppObs	Apr 9 1997	Ways, Showalter	2	FC		Yes
339226	SppObs	May 12 1995	Weaver	1	FC		Yes
339201	SppObs	May 12 1995	weaver	1	FC		Yes

Displayed 68 Species Observations

Selected 111 Observations View all 111 Species Observations

Habitat Predicted for Aquatic WAP Tier I & II Species (3 Reaches) View Map Combined Reaches from Below of Habitat Predicted for WAP Tier I & II Aquatic Species

Stream Name	Tier Species						View Map
	Highest TE*	BOVA Code, Status*, Tier**, Common & Scientific Name					
Appomattox River (20802071)	ST	060081	ST	II	Floater, green	Lasmigona subviridis	Yes
Appomattox River (20802072)	ST	060081	ST	II	Floater, green	Lasmigona subviridis	Yes
Swift Creek (20802072)	ST	060081	ST	II	Floater, green	Lasmigona subviridis	Yes

Habitat Predicted for Terrestrial WAP Tier I & II Species

BOVA Code	Status*	Tier**	Common Name	Scientific Name	View Map
040105		II	Rail, king	Rallus elegans	Yes

Virginia Breeding Bird Atlas Blocks (3 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**	
51076	Chester, SE	56		IV	Yes
51062	Petersburg, NE	1		III	Yes
51061	Petersburg, NW	3			Yes

Public Holdings:

N/A

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
041	Chesterfield	397	FESE	I
570	Colonial Heights City	324	FPST	I
730	Petersburg City	332	FPST	I

USGS 7.5' Quadrangles:
Petersburg
Chester

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
JA40	Appomattox River-Oldtown Creek	67	FCST	I
JA44	Swift Creek-Franks Branch	60	FCST	II

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PixelSize=64; Anadromous=0.024544; BBA=0.082993; BECAR=0.023784; Bats=0.027036; Buffer=0.177779; County=0.131422; HU6=0.160825; Impediments=0.030704; Init=0.220888; PublicLands=0.037751; Quad=0.089349; SppObs=0.467281; TEWaters=0.05306; TierReaches=0.080708; TierTerrestrial=0.096718; Total=1.870107; Trout=0.033758; huva=0.094761

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Molly Joseph Ward
Secretary of Natural Resources

Clyde E. Cristman
Director

Joe Elton
Deputy Director of Operations

Rochelle Altholz
Deputy Director of Administration
and Finance

COMMONWEALTH of VIRGINIA

DEPARTMENT OF CONSERVATION AND RECREATION

600 East Main Street, 24th Floor
Richmond, Virginia 23219
(804)786-6124

June 5, 2015

Emaly Simone
Michael Baker International
8000 Regency Parkway, Suite 600
Cary, NC 27518

Re: 1427002, Tri-Cities Area Multimodal Station Study

Dear Ms. Simone:

The Department of Conservation and Recreation's Division of Natural Heritage (DCR) has searched its Biotics Data System for occurrences of natural heritage resources from the area outlined on the submitted map. Natural heritage resources are defined as the habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations.

Boulevard Station and Branders Bridge Station

Biotics documents the presence of natural heritage resources within two miles of the project areas. However, due to the scope of the activity and the distance to the resources, we do not anticipate that these projects will adversely impact these natural heritage resources.

Ettrick Station and Collier Station

According to the information currently in our files, and Yellow lampmussel (*Lampsilis cariosa*, G3G4/S2/NL/NL) has been historically documented downstream from the Ettrick Station and Collier Station sites in the Appomattox River. In addition, the Green floater (*Lasmigona subviridis*, G3/S2/NL/LT) has been historically documented downstream from the Ettrick Station site and within 2 miles of the Collier Station site in the Appomattox River.

The Yellow lampmussel ranges from Nova Scotia to Georgia in Atlantic slope drainages (NatureServe, 2009). In Virginia, it is recorded from the Roanoke, Chowan, James, York, and Potomac drainages. It is found in larger streams and rivers where good currents exist over sand and gravel substrates and in small creeks and ponds (Johnson, 1970).

The Green floater, a rare freshwater mussel, ranges from New York to North Carolina in the Atlantic Slope drainages, as well as the New and Kanawha River systems in Virginia and West Virginia (NatureServe, 2009). In Virginia, there are records from the New, Roanoke, Chowan, James, York, Rappahannock, and Potomac River

drainages. Throughout its range, the Green floater appears to prefer the pools and eddies with gravel and sand bottoms of smaller rivers and creeks, smaller channels of large rivers (Ortman, 1919) or small to medium-sized streams (Riddick, 1973). Please note that this species has been listed as state threatened by the Virginia Department of Game and Inland Fisheries (VDGIF).

Considered good indicators of the health of aquatic ecosystems, freshwater mussels are dependent on good water quality, good physical habitat conditions, and an environment that will support populations of host fish species (Williams et al., 1993). Because mussels are sedentary organisms, they are sensitive to water quality degradation related to increased sedimentation and pollution. They are also sensitive to habitat destruction through dam construction, channelization, and dredging, and the invasion of exotic mollusk species.

To minimize adverse impacts to the aquatic ecosystem as a result of the proposed activities, DCR recommends the implementation of and strict adherence to applicable state and local erosion and sediment control/storm water management laws and regulations. Due to the legal status of the Green floater, DCR recommends coordination with Virginia's regulatory authority for the management and protection of this species, the VDGIF, to ensure compliance with the Virginia Endangered Species Act (VA ST §§ 29.1-563 – 570).

Under a Memorandum of Agreement established between the Virginia Department of Agriculture and Consumer Services (VDACS) and the DCR, DCR represents VDACS in comments regarding potential impacts on state-listed threatened and endangered plant and insect species. The current activity will not affect any documented state-listed plants or insects.

There are no State Natural Area Preserves under DCR's jurisdiction in the project vicinity.

New and updated information is continually added to Biotics. Please re-submit a completed order form and project map for an update on this natural heritage information if the scope of the project changes and/or six months has passed before it is utilized.

A fee of $395.00 has been assessed for the service of providing this information. Please find enclosed an invoice for that amount. Please return one copy of the invoice along with your remittance made payable to the Treasurer of Virginia, **DCR - Division of Natural Heritage, 600 East Main Street, 24th Floor, Richmond, VA 23219.** Payment is due within thirty days of the invoice date. Please note the change of address for remittance of payment as of July 1, 2013. Late payment may result in the suspension of project review service for future projects.

The Virginia Department of Game and Inland Fisheries (VDGIF) maintains a database of wildlife locations, including threatened and endangered species, trout streams, and anadromous fish waters that may contain information not documented in this letter. Their database may be accessed from http://vafwis.org/fwis/ or contact Angela Weller at 804-364-8747 or Angela.Weller@dgif.virginia.gov.

Should you have any questions or concerns, feel free to contact me at (804) 692-0984. Thank you for the opportunity to comment on this project.

Sincerely,

Alli Baird

Alli Baird, LA, ASLA
Coastal Zone Locality Liaison

Cc: Amy Ewing, VDGIF

Literature Cited

Johnson, R.I. 1970. The systematics and zoogeography of the Unionidae (Mullusca: Bilvava) of the southern Atlantic slope region. Bulletin Museum of Comparative Zoology vol 140(6): 362-365.

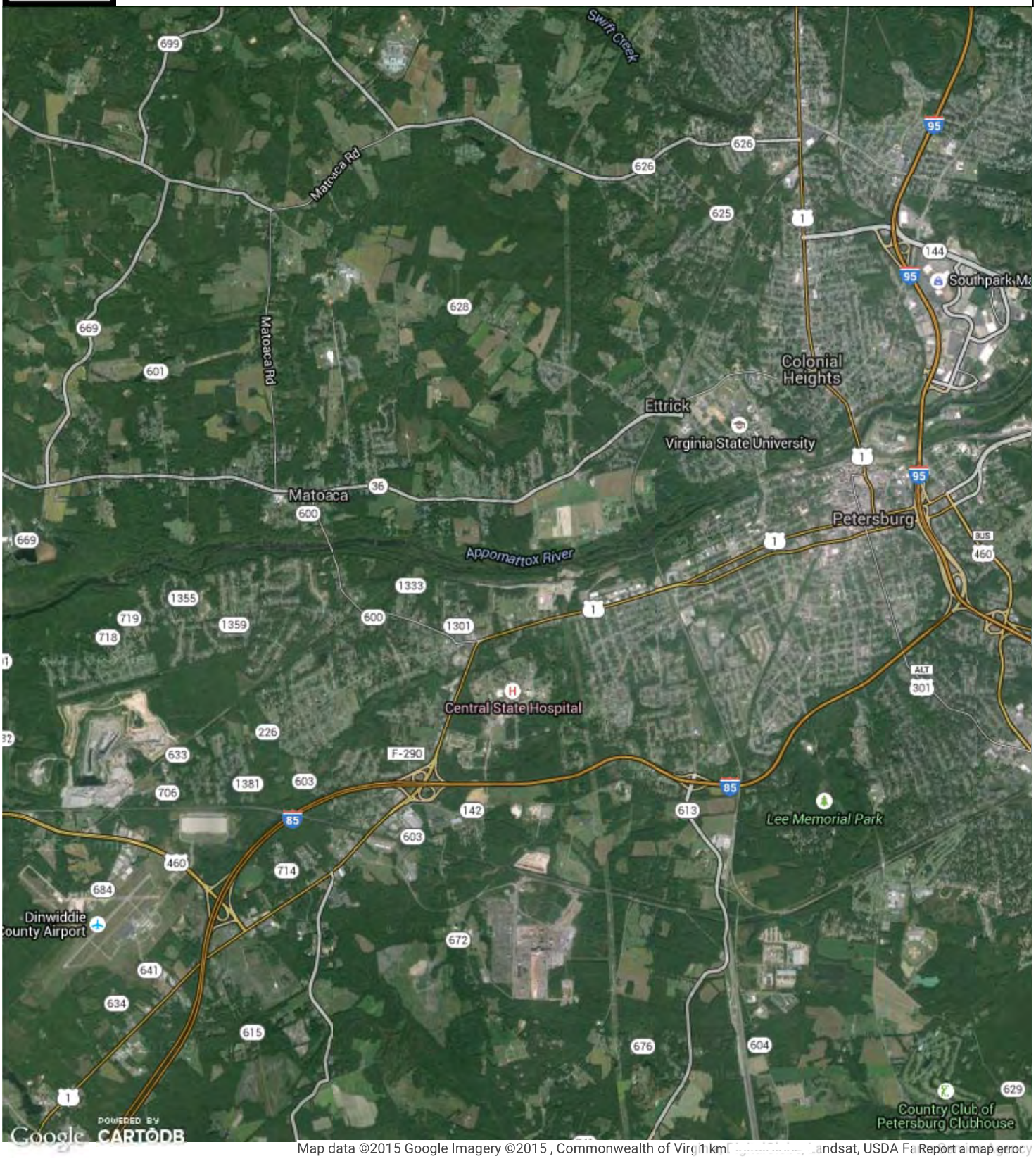
NatureServe. 2009. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. Available http://www.natureserve.org/explorer. (Accessed: April 27, 2010).

Ortman, A.E. 1919. A monograph of the naiades of Pennsylvania, Part 3: Systematic account of the genera and species. Mem. Carnegie Mus. 8:1-384.

Riddick, M.B. 1973. Freshwater mussels of the Pamunkey River system, Virginia. M.S. Thesis, Virginia Commonwealth University, Richmond, VA 105pp.

Williams, J.D., M.L. Warren, Jr., K.S. Cummings, J.L. Harris, and R.J. Neves. 1993. Conservation status of freshwater mussels of the United States and Canada. Fisheries 18: 6-9.

CCB encourages the use of CCB data sets in wildlife conservation and management applications. This data is protected by intellectual property laws. All users are reminded to view the data use agreement on ccbbirds.org to ensure compliance with our data use policies. Metadata can be found on the data portal on ccbbirds.org
Direct questions to info@ccbbirds.org or 757-221-1645.



Map data ©2015 Google Imagery ©2015 , Commonwealth of Virginia, Landsat, USDA Farm Report a map error

Species Conclusions Table

Project Name: TriCities Station – Branders Bridge Alternative

Date: 6-10-15

Species / Resource Name	Conclusion	ESA Section 7 / Eagle Act Determination	Notes / Documentation
Northern Long-eared Bat (*Myotis septentrionalis*)	Potential habitat present, and no current survey conducted	May effect	
Critical Habitat	No critical habitat present	No effect	
Bald Eagle	Unlikely to disturb besting bald eagles	No Eagle Act permit required	
Bald Eagle	Does not intersect with an eagle concentration area	No Eagle Act permit required	

Manes, Susan

From: Simone, Emaly
Sent: Monday, June 22, 2015 11:07 AM
To: Manes, Susan
Cc: Darling, Richard
Subject: FW: Online Project Review Request Letter - TriCities Station, Branders Bridge Alternative

FWS review results for Branders Bridge are below.

From: mary_morrison@fws.gov [mailto:mary_morrison@fws.gov] **On Behalf Of** Virginia Field Office, FW5
Sent: Monday, June 22, 2015 10:20 AM
To: Simone, Emaly
Subject: Re: Online Project Review Request Letter - TriCities Station, Branders Bridge Alternative

Good Morning:

We have reviewed the project package received on June 11, 2015 for the referenced project. The following comments are provided under provisions of the Endangered Species Act of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884), as amended, and Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c, 54 Stat. 250), as amended.

We have reviewed the determinations provided in the Species Conclusion Table dated June 10, 2015 and concur with the determinations for the Northern long-eared bat (*Myotis septentrionalis*).

This project involves tree clearing and project modification can be made that would avoid the likelihood of adverse effects to Northern long-eared bat (*Myotis septentrionalis*). This modification is:

1. Implement a time-of-year (TOY) restriction for no tree clearing from April 15 – September 15 of any year.

If the proposed activity is modified as described above, through changes in project design or incorporation into permit conditions, the Service believes that the project would not likely adversely affect listed species and that further consultation pursuant to section 7 of the ESA is not necessary. If the above project modifications are not adopted, further consultation with the Service will be necessary pursuant to 50 CFR 402.13 and 402.14. We recommend bat surveys if winter tree clearing is not feasible. Follow the most recent survey guidelines at http://www.fws.gov/northeast/virginiafield/pdf/endspecies/2015IndianaBatSummerSurveyGuidelines01April2015.pdf.

Should project plans change or if additional information on the distribution of listed species or critical habitat becomes available, this determination may be reconsidered. If you have any questions, please contact Sumalee Hoskin @sumalee_hoskin@fws.gov

Best,

Mary Anne Morrison

On Thu, Jun 11, 2015 at 4:13 PM, Simone, Emaly <Emaly.Simone@mbakerintl.com> wrote:

> Hello,
>
> Attached please find the review request and package for the TriCities Station Project, Branders Bridge Alternative.
>
> If you have any questions, please feel free to contact me.
>
> Thank you,
>
> **Emaly Simone** | Environmental Specialist | Michael Baker International
> 8000 Regency Parkway, Suite 600 | Cary, NC | [O] 919-481-5721
> emaly.simone@mbakerintl.com | www.mbakerintl.com
>
> Michael Baker INTERNATIONAL
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APPENDIX E

FARMLAND CONVERSION IMPACT RATING

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I *(To be completed by Federal Agency)*	Date Of Land Evaluation Request 7/14/15
Name Of Project Tri-Cities Environmental Assessment	Federal Agency Involved FRA
Proposed Land Use Rail Transportation	County And State Dinwiddie County, VA
PART II *(To be completed by NRCS)*	Date Request Received By NRCS 7/14/15

Does the site contain prime, unique, statewide or local important farmland? *(If no, the FPPA does not apply -- do not complete additional parts of this form).*	Yes ☑	No ☐	Acres Irrigated / Average Farm Size
Major Crop*(s)* corn, soybeans	Farmable Land In Govt. Jurisdiction Acres: 324,746 % 99		Amount Of Farmland As Defined in FPPA Acres: 282,895 % 86
Name Of Land Evaluation System Used LE of LESA	Name Of Local Site Assessment System		Date Land Evaluation Returned By NRCS 7/15/15

PART III *(To be completed by Federal Agency)*	Alternative Site Rating Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly	4.3			
B. Total Acres To Be Converted Indirectly				
C. Total Acres In Site	4.3	0.0	0.0	0.0
PART IV *(To be completed by NRCS)* Land Evaluation Information				
A. Total Acres Prime And Unique Farmland	3.7			
B. Total Acres Statewide And Local Important Farmland	0.0			
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted	0.0			
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value	0.0			
PART V *(To be completed by NRCS)* Land Evaluation Criterion Relative Value Of Farmland To Be Converted *(Scale of 0 to 100 Points)*	73	0	0	0

PART VI *(To be completed by Federal Agency)* Site Assessment Criteria *(These criteria are explained in 7 CFR 658.5(b)*	Maximum Points	Site A	Site B	Site C	Site D
1. Area In Nonurban Use		8			
2. Perimeter In Nonurban Use		7			
3. Percent Of Site Being Farmed		4			
4. Protection Provided By State And Local Government		20			
5. Distance From Urban Builtup Area		6			
6. Distance To Urban Support Services		0			
7. Size Of Present Farm Unit Compared To Average		5			
8. Creation Of Nonfarmable Farmland		3			
9. Availability Of Farm Support Services		2			
10. On-Farm Investments		2			
11. Effects Of Conversion On Farm Support Services		2			
12. Compatibility With Existing Agricultural Use		9			
TOTAL SITE ASSESSMENT POINTS	160	68	0	0	0
PART VII *(To be completed by Federal Agency)*					
Relative Value Of Farmland *(From Part V)*	100	73	0	0	0
Total Site Assessment *(From Part VI above or a local site assessment)*	160	68	0	0	0
TOTAL POINTS *(Total of above 2 lines)*	260	141	0	0	0

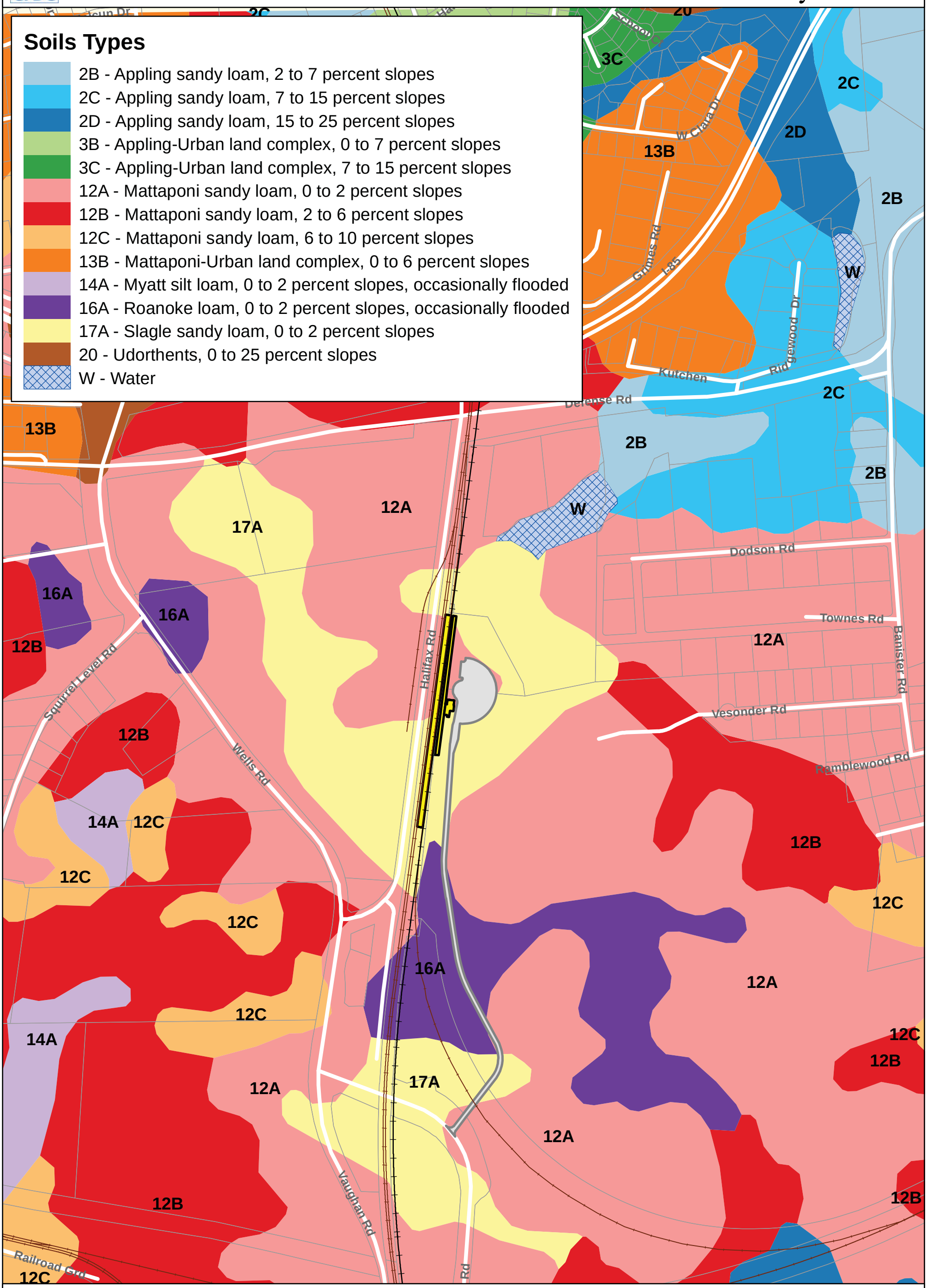
Site Selected:	Date Of Selection	Was A Local Site Assessment Used? Yes ☐ No ☐

Reason For Selection:

(See Instructions on reverse side) **Form AD-1006 (10-83)**

This form was electronically produced by National Production Services Staff

Tri-Cities Area Multimodal Station Study



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Parking
Station & Platform
SEHSR Alignment
Existing Rail

Collier South Station Concept Soils

APPENDIX F

VISUAL ANALYSIS TECHNICAL MEMO

Michael Baker
INTERNATIONAL

Technical Memo

To: Project File

From: Ken Gilland, CPG (Baker)

cc: Susan Manes (Baker)

Date: July 1, 2015

Re: Tri-Cities Area Multimodal Station Study: Visual Analysis

---

A visual analysis was conducted for the Tri-Cities Area Multimodal Station Study. The analysis is documented in the pages that follow. The information contained herein is to be summarized for inclusion in the associated Environmental Assessment (EA) prepared for this study. As support documentation for the EA, the reader is directed to the body of the EA for a complete discussion of the purpose of and need for the Project, the alternatives under consideration, potential impacts to the human and natural environment, and agency coordination.

VISUAL ANALYSIS:

TRI-CITIES AREA MULTIMODAL STATION STUDY

This assessment of the effects of the proposed project on visual resources is consistent with FRA (FRA, 1999) and FHWA guidance (FHWA, 2015). A field review of the sites was conducted on May 13, 2015 under sunny and clear viewing conditions. Representative views of the existing environment for each site are shown in Photolog Sheets 1, 2, and 3 at the end of this memo. The visual environment of each proposed station is described in the text that follows. Visually sensitive historic resources are addressed in the cultural resources assessment prepared for this project.

1 EXISTING CONDITIONS

SETTING

The existing visual elements of the proposed Project include double sets of tracks, the supporting rock ballast, vegetated ROW, trains, and associated grade-separated bridge and road crossings. Train activity takes place at all four conceptual site locations. All of the proposed station locations are adjacent to sections of straight railway lines. Terrain can best be described as gently rolling with minor hills and shallow riparian valleys. Most of the biological communities consist of maintained/disturbed lawns, fields, railroad ROW planted in trees to provide visual and physical screening, and early successional forests.

At the Boulevard and Branders Bridge sites, passing trains are a frequent part of the visual environment, as are automobiles. The Boulevard site, along Route 1, has heavier traffic. Branders Bridge Road has an at-grade railroad crossing, so traffic is stopped when trains are passing through the area, increasing the visual, as well as the physical, exposure to railroad traffic. The Ettrick site has both passing trains and trains that stop at the station, so trains are a more common component of the landscape. The Collier South site has an active railway siding associated with a paper production facility.

EXISTING VISTA

The degree of visibility will vary for the proposed stations. At the Boulevard site, the existing railroad overpass is a dominant foreground visual feature for those viewing the area from the south. Currently, the railroad overpass of Route 1 can be seen from approximately half a mile to the south and at a distance of approximately 1,500 feet from the north.

At the Branders Bridge site, the station area is largely obscured by heavy vegetation. Future SEHSR construction of the proposed overpass of Branders Bridge Road will further limit the viewshed area of the proposed station to a minor foreground feature. Currently, the maximum distance from which the existing railroad can be seen is approximately 400 feet from the west and 250 feet from the east.

At the Ettrick site, the current station is a dominant foreground feature. The maximum distance from which the existing station can be viewed is approximately 500 feet north from the current parking area. Buildings to the east and south, and trees to the west, limit vistas in those directions.

At the Collier South site, the area proposed for the station is largely obscured by trees except for those traveling on Halifax Road, for whom the station area would be a mid-ground to background feature. Given the surrounding vegetation, it is unlikely that residences to the east of the site will the station, platform, or access road.

CURRENT DEVELOPMENT

The Boulevard site is on the west side of Route 1 in an area of mixed use commercial and residential development. The existing railroad tracks are elevated and lined with trees and are a prominent landscape feature. On the side of the tracks where the proposed station will be located is a former large box retail facility that now serves as a vehicle equipment rental center with a self-service ice vending machine. To the north of the proposed facility there are commercial properties and a school with an athletic field. The passenger viewshed consists of the former retail facility, the highway, and houses and businesses to the south and west of the site. The view north of the proposed station is limited due to the trees on the north side of the tracks.

The Branders Bridge site is in a largely rural area with no commercial development. The SEHSR project proposes to develop a grade-separation that will take Branders Bridge Road over the existing railroad. This would become a prominent feature for area residents. Housing in the area appears to be generally smaller, single-family, one-story houses. The passenger viewshed consists largely of residences, grass fields, and wooded areas. A local park is north of the parcel on which the proposed station would be located. During the site review, an area resident stated that he lived in the area because of its rural, residential character.

The Ettrick site is an active railroad station. The current station is a one-story brick structure constructed in 1955. Houses in the area appear to have been built more recently and consist of one-story houses in the immediate vicinity of the station with larger, multi-story homes in a development to the north of the station. The site is currently in use by Amtrak for passenger rail service to the Petersburg, Virginia area. Local residents are accustomed to the sites associated with railroad stations, passing and stopped trains, parking areas, unloading of materials from trains, etc. The surrounding landscape consists of homes, farmland, some commercial development, and an athletic field to the west of the site. The passenger viewshed would consist of the existing station, fields, and residential development. The athletic field to the west of the site is largely obstructed by trees.

The Collier site consists of a paper production facility, fields, and woodlands. The paper production facility is a prominent feature in the area. The structures within the City of Petersburg properties (as shown on current aerial imagery) are no longer present. The passenger viewshed would consist of the paper production facility, the new station, fields, and woodlands.

2. POTENTIAL IMPACTS

The FRA Procedures for Considering Environmental Impacts states that an EA should identify any significant changes likely to occur in the natural landscape and in the developed environment (64 FR 28545, May 26, 1999). FHWA regulations (FHWA, 2015) state that visual impacts are simply changes to the environment measured by the compatibility of the impact or to viewers (based on their sensitivity to the impact).

SITE-SPECIFIC IMPACTS

The Boulevard station would have limited visual impacts. The station would become a prominent feature as viewed from the south as it would require an elevated structure to reach the current level of the railroad. However the existing viewshed is primarily commercial development along Route 1 and a train station would not be visually incompatible with this setting. While there is a school and a recreational field to the north of the site, the vegetated ROW would serve to minimize effects and the station would not be inconsistent with the viewshed from the school and field, which consists of commercial development. If the construction of the station site encourages revitalization of the existing development, that would be considered a beneficial impact as it would improve the visual quality of the area by replacing a degraded resource.

The Branders Bridge station would introduce a transportation facility into an area that is predominantly rural residential. However, the SEHSR Project's proposed grade-separated crossing of Branders Bridge Road would elevate the road on fill, essentially blocking the view of the station from residents to the south. Existing vegetation to the north, east, and west would limit views of and from a station at this location, minimizing the visual impact at this site.

There would be little change in visual character associated with constructing a new Ettrick station. Given that a passenger rail station currently operates at this site, a new station remains consistent with the current land use. The station as currently designed would be visible from several residences and commercial facilities, but the vegetated ROW would limit the view of the station from the recreational field to the west of the existing tracks. If additional commercial development were encouraged by the construction of the station, it would most likely be considered a beneficial visual impact, it would improve the visual quality of commercial facilities in the study area, replacing degraded and underutilized commercial development.

The Collier South station would not be a substantial visual impact in the area. The predominant features in the landscape are the paper production facility, railroad siding, and the existing rail. The station would have limited visibility as residences to the east are separated from the station by forested areas and agricultural fields.

3. MITIGATION

Appropriate landscaping and tree planting could be developed for any of the conceptual station sites to enhance the visual aesthetics of any site.

Sheet 1: Tri-Cities Station Locations Photolog

Boulevard, view of railroad crossing and US 1

Boulevard, view to south showing shopping area

Boulevard, view of track level towards proposed station

Boulevard, view of houses to east of US 1

Branders Bridge, view of house to west of tracks

Branders Bridge, view south along tracks

Sheet 2: Tri-Cities Area Station Locations Photolog

Branders Bridge, view from tracks of houses to west

Branders Bridge, view of house to east of landing

Branders Bridge, view area proposed for station

Ettrick, view of existing Ettrick Station

Ettrick, view of area proposed for station

Ettrick, view of houses east of station

Sheet 3: Tri-Cities Area Station Locations Photolog

Ettrick, view of business south of station

Collier South, view of pond east of proposed landing

Collier South, view west from area proposed for station

Collier South, view southwest of proposed station

Collier South, view of station area from northwest

Collier South, view north of proposed station

APPENDIX G

HAZARDOUS MATERIALS – EDR SEARCH

Note: The definitions and explanations of the acronyms shown in this table are presented at the end of this appendix.

Table 1 – Government Environmental Database Listed Sites near the Proposed Branders Bridge Station

Site Name	Address	Government Databases Listed In	Topographic Relationship to Boulevard Station Site	Distance and Direction	Risk Level to Branders Bridge Station Site
Proposed Branders Bridge Station Site	Unaddressed	None	Site	Site	None – The site has no government environmental database listings.
Unnamed	2314 Boulevard	EDR US Hist Auto Stat	Upgradient	0.183 Mile SSE	Low – This site was listed as an automotive service facility in 2003, but has no environmental database listed incidents of hazardous material release.
E.A. Small Funeral Home	2213 Boulevard	UST, Financial Assurance	Upgradient	0.218 Mile SSE	Low – This site had one gasoline UST that has been removed.
Chesapeake & Potomac Telephone Co.	2501 Boulevard	RCRA NonGen / NLR	Upgradient	0.059 Mile SE	Low – This site handles, but does not generate hazardous wastes and has no violations found.
Johnson's Laundry Corporation	1919 Boulevard	EDR US Hist Cleaners, RCRA-CESQG, US AIRS, DRYCLEANERS	Upgradient	0.238 Mile ESE	Low – This site is listed in the EDR Hist Cleaners, DRYCLEANERS and US AIRs environmental databases for being a state regulated dry-cleaning facility and federally regulated facility for air emissions, respectively. None of these databases indicate a release, all show that this facility has been in compliance with their procedures, and no violations were found. The site is also listed in the RCRA-CESQG database for being a facility that generates small quantities of hazardous wastes (spent halogenated solvents) and has no record of violations.
Old Hundred LLC Property	1701 Franklin Ave.	LUST, LTANKS	Upgradient	0.242 Mile SSE	Low – This site's LUST and LTANKS cases were closed in 2008.
Unnamed	2501 Boulevard	EDR US Hist Auto Stat	Downgradient	0.02 Mile East	Low – This site would not have the potential to flow onto the project site.
Staples Automotive	1907 Boulevard	LUST, LTANKS, UST	Upgradient	0.456 Mile SSE	Low – This site's LUST and LTANKS cases were closed in 1999 and its UST (contents unknown) has been removed.
Choi Chevron, Chevron 135614	1604 Boulevard	LUST, LTANKS, UST, Financial Assurance	Upgradient	0.279 Mile SE	Low – This site's LUST and LTANKS cases were closed in 2000 and its five USTs (containing used oil, gasoline and diesel) have been removed.
Apex Auto Service	1501 Boulevard	LUST, LTANKS, UST	Upgradient	0.358 Mile SSE	Low – This site's LUST and LTANKS cases were closed in 1992 and its four USTs (all containing gasoline) have been removed.
Rickman, Alicia Residence	215 Fairfax Ave.	LUST, LTANKS, SPILLS	Upgradient	0.360 Mile SSE	Low – This site's LUST and LTANKS cases were closed in 2001. The incident that is listed in the SPILLS database is for a leak of 100 gallons of residential heating oil. The spill occurred and was cleaned up between December 16 and 17, 2001. The SPILLS case was closed on December 17, 2001.
Johnson Oil Company	1401 Boulevard	LUST, LTANKS	Upgradient	0.398 Mile SE	Low – This site's LUST and LTANKS cases were closed in 2007.
Friendly's Restaurant	2960 Boulevard	LUST, LTANKS	Upgradient	0.130 Mile North	Low – The site's environmental case was closed in 2002.
Note: The hazardous material sites presented below are "Orphan" sites. Orphan sites are sites that are included in environmental databases, but have errors in their site location and other data. The sites shown below have been researched using Google Earth™ to locate them with the information provided for their locations in the EDR Report.					
Colonial Heights Landfill (Northern Portion)	Unaddressed on Temple Ave., Colonia Hts.	VCP	Undetermined	1.5 Miles SE	Low – This site is located too far away from the Boulevard Station site to be an environmental concern.

Site Name	Address	Government Databases Listed In	Topographic Relationship to Boulevard Station Site	Distance and Direction	Risk Level to Branders Bridge Station Site
South Plains Pumping Station	301 Richland Rd., Petersburg	LUST, LTANKS, RGA	Undetermined	6.5 Miles South	Low – This site is located too far away from the Boulevard Station site to be an environmental concern.

Table 2 – Government Environmental Database Listed Sites near the Proposed Boulevard Station

Site Name	Address	Government Databases Listed In	Topographic Relationship to Boulevard Station Site	Distance and Direction	Risk Level to Boulevard Station Site
Proposed Boulevard Station Site	2600 Boulevard	None	Site	Site	None – The site has no government environmental database listings.
Unnamed	2501 Boulevard	EDR US Hist Auto Stat	Downgradient	0.02 Mile East	Low – This site would not have the potential to flow onto the project site.
Unnamed	116 Taswell Ave.	EDR US Hist Auto Stat	Upgradient	0.027 Mile NNE	Low – This site has been an automotive facility since at least 2000, but has no environmental database listed incidents of hazardous material release.
Chesapeake & Potomac Telephone Co.	2501 Boulevard	RCRA NonGen / NLR	Upgradient	0.059 Mile SE	Low – This site handles, but does not generate hazardous wastes and has no violations found.
Unnamed	111 Essex Rd.	EDR US Hist Auto Stat	Upgradient	0.096 Mile ENE	Low – This site was listed as an automotive facility in 2001. However, aerial photo analysis going back to 1994 reveals that the site is a residence. Therefore, it is likely that this listing in in error.
Martins Food Store 6494	2960 Boulevard	UST, Financial Assurance	Upgradient	0.125 Mile NNE	Low – This site does contain three gasoline and diesel underground storage tanks (USTs), but has no record of release.
Friendly's Restaurant	2960 Boulevard	LUST, LTANKS	Upgradient	0.130 Mile North	Low – The site's environmental case was closed in 2002.
Unnamed	2314 Boulevard	EDR US Hist Auto Stat	Upgradient	0.183 Mile SSE	Low – This site was listed as an automotive service facility in 2003, but has no environmental database listed incidents of hazardous material release.
Colonial Square Shopping Center	3107 Boulevard	UST	Upgradient	0.213 Mile NNE	Low – This site had one used oil UST that has been removed.
Colonial Square Shopping Center	3107 Boulevard	LUST, LTANKS	Upgradient	0.213 Mile NNE	Low –This site's environmental case was closed in 1997.
E.A. Small Funeral Home	2213 Boulevard	UST, Financial Assurance	Upgradient	0.218 Mile SSE	Low – This site had one gasoline UST that has been removed.
Spain & Thomas Inc.	3115 Boulevard	RCRA-SQG	Upgradient	0.222 Mile North	Low – This site generates between small quantities of hazardous wastes (ignitable waste, lead, benzene & tetrachloroethylene) and has no record of violations.
Colonial Square Texaco	3115 B Boulevard	LUST, LTANKS	Upgradient	0.222 Mile North	Low – This site's environmental case was closed in 1994.
Unnamed	3115 Boulevard	EDR US Hist Auto Stat	Upgradient	0.222 Mile North	Low – This database listing shows the site name as Colonial Square Exxon. See more detail in the next row below.
Colonial Square Exxon	3115 Boulevard	LUST, LTANKS, UST	Upgradient	0.222 Mile North	Low – This site's environmental case was closed in 2002 and all of its gasoline USTs have been removed.
Sunoco Service Station	3115 Boulevard	RCRA NonGen / NLR	Upgradient	0.222 Mile North	Low – This site handles, but does not generate hazardous waste and has no violations found.
Unnamed	431 E. Ellerslie Ave.	EDR US Hist Auto Stat	Upgradient	0.233 Mile NE	Low – This site has been an automotive facility since at least 2003, but has no environmental database listed incidents of hazardous material release.

Site Name	Address	Government Databases Listed In	Topographic Relationship to Boulevard Station Site	Distance and Direction	Risk Level to Boulevard Station Site
Unnamed	405 E. Ellerslie Ave.	EDR US Hist Auto Stat	Upgradient	0.233 Mile NE	Low – This site was an automotive facility between 2010 and 2012, but has no environmental database listed incidents of hazardous material release.
Londes Texaco	3102 Boulevard	UST, Financial Assurance	Upgradient	0.237Mile North	Low – This site has four USTs (contents unknown, but assumed gasoline or diesel based on the sites use) that have been closed in-ground.
Landa Walter Estate	3104 Boulevard	LUST, LTANKS	Upgradient	0.252 Mile North	Low – This site's environmental cases was closed in 1990.
North Elementary School	3201 Dale Ave.	FINDS, LUST, LTANKS, UST	Upgradient	0.370 Mile NNE	Low – This site's FINDS listing is attributed to its being included in air pollutant monitoring databases, its LUST and LTANKS cases were closed in 1990, and its UST (contents unknown) has been removed.
Staples Automotive	1907 Boulevard	LUST, LTANKS, UST	Upgradient	0.456 Mile SSE	Low – This site's LUST and LTANKS cases were closed in 1999 and its UST (contents unknown) has been removed.
Mary E. Love Estate	3220 Glenview Ave.	LUST, LTANKS	Upgradient	0.470 Mile North	Low – This site's environmental cases were closed in 2004.
Exxon 24831 (Former)	3300 Boulevard	LUST, LTANKS	Downgradient	0.498 Mile North	Low – This site is downgradient from the Boulevard Station site and its environmental cases were closed in 1998.
Note: The hazardous material sites presented below are "Orphan" sites. Orphan sites are sites that are included in environmental databases, but have errors in their site location and other data. The sites shown below have been researched using Google Earth™ to locate them with the information provided for their locations in the EDR Report.					
Colonial Heights Landfill	Unaddressed on Charles H. Dimmock Pkwy., Colonial Hts.	ENG Controls, INST Control	Undetermined	1.75 Miles SE	Low – This site is located too far away from the Boulevard Station site to be an environmental concern.
Colonial Heights Landfill (Northern Portion)	Unaddressed on Temple Ave., Colonia Hts.	VCP	Undetermined	1.75 Miles SE	Low – This site is located too far away from the Boulevard Station site to be an environmental concern.
Shell Service Station	I-85 at US Hwy.1, Petersburg	RGA LUST	Undetermined	3.5 Miles South	Low – This site is located too far away from the Boulevard Station site to be an environmental concern.
South Plains Pumping Station	301 Richland Rd., Petersburg	LUST, LTANKS, RGA	Undetermined	7 Miles South	Low – This site is located too far away from the Boulevard Station site to be an environmental concern.
East Coast Service Station	Routes 1 & 460 off I-85, Petersburg	SPILLS	Undetermined	7 Miles South	Low – This site is located too far away from the Boulevard Station site to be an environmental concern.

Table 3 – Government Environmental Database Listed Sites near the Proposed Ettrick Station

Site Name	Address	Government Databases Listed In	Topographic Relationship to Boulevard Station Site	Distance and Direction	Risk Level to Ettrick Station Site
Proposed Ettrick Station Site	Unaddressed	None	Site	Site	None – The site has no government environmental database listings.
Unnamed	20713 Bessie Ln.	EDR US Hist Auto Stat	Upgradient	0.016 Mile SSW	Low – This site is listed for being an auto service facility between 2010 and 2012, but no hazardous material releases or violations are cited for it.
Kain, John Residence	20200 Laurel Rd.	LUST, LTANKS	Downgradient	0.069 Mile North	Low – This site's LUST and LTANKS cases were closed in 2004 and 2006.
Unnamed	3714 E. River Rd.	EDR US Hist Auto Stat	Upgradient	0.071 Mile SSW	Low – This site is listed for being an auto service facility, but no hazardous material releases or violations are cited for it.
Unnamed	3401 E. River Rd.	LUST, LTANKS	Downgradient	0.143 Mile ESE	Low – This site's LUST and LTANKS cases were closed in April 2014.
Unnamed	20811 Chesterfield Ave.	EDR US Hist Auto Stat	Upgradient	0.145 Mile SSW	Low – This site is listed for being an auto service facility between 2003 and 2009, but no hazardous material releases or violations are cited for it.
Unnamed	20801 Chesterfield Ave.	EDR US Hist Auto Stat	Upgradient	0.161 Mile SSW	Low – This site is listed for being an auto service facility between 2002 and 2006, but no hazardous material releases or violations are cited for it.
Irv's Mobile Auto Repair	20801 Chesterfield Ave.	LUST, LTANKS, UST	Upgradient	0.161 Mile SSW	Low – This site's LUST and LTANKS cases were closed in 1992 and 2000, and its five USTs (containing gasoline) have been removed.
VDOT Gulf Station (Former)	20900 Chesterfield Ave.	LUST, LTANKS, UST	Upgradient	0.194 Mile South	Low – This site's LUST and LTANKS cases were closed in 1988. The site also contained eight USTs. Two have been removed. Six have been closed in ground. The contents included used oil, kerosene and gasoline.
Ettrick Elementary	20910 Chesterfield Ave.	RCRA-CESQG, ICIS, FINDS	Upgradient	0.196 Mile South	Low – The site is listed in the RCRA-CESQG database for being a facility that generates small quantities of hazardous wastes (ignitable, corrosive and reactive wastes) and has no record of violations. This site is listed in the ICIS database for a formal enforcement action in October 2006. However, a detailed facility report from the Environmental Protection Agency (EPA) (found at http://echo.epa.gov/detailed-facility-report?fid=110005250209) does not include the 2006 action and shows no enforcement actions since 2006. It is listed in the FIND database because of its listing in the RCRA-CESQG and ICIS databases.
Julien, Francis Residence	20709 Third Ave.	LUST, LTANKS	Downgradient	0.228 Mile SE	Low – This site's LUST and LTANKS cases were closed in 2006.
Shorty's Ice Cream (Former)	20911 Chesterfield Ave.	LUST, LTANKS, UST	Upgradient	0.229 Mile South	Low – This site's LUST and LTANKS cases were closed in 2011. The site also contained one UST that has been removed.
Food Lion Store 1157	20821 Woodpecker Rd.	UST	Upgradient	0.233 Mile WSW	Low – This site contained two USTs that have been removed.
Rite Aid #11299	20825 Woodpecker Rd.	RCRA-CESQG, FINDS	Upgradient	0.237 Mile WSW	Low – The site is listed in the RCRA-CESQG database for being a facility that generates small quantities of hazardous wastes (ignitable and corrosive wastes and metals and other elements related to pharmaceutical operations) and has no record of violations. It is listed in the FIND database because of its listing in the RCRA-CESQG database.
Townes Residence	20009 Oakland Ave,	LUST, LTANKS	Downgradient	0.445 Mile NE	Low – This site's LUST and LTANKS cases were closed in 1999.
Liberty	3000 E. River Rd.	LUST, LTANKS	Downgradient	0.448 Mile East	Low – This site's LUST and LTANKS cases were closed in 2010.
VSU	20917 Third Ave.	LUST, LTANKS	Downgradient	0.463 Mile SE	Low – This site's LUST and LTANKS cases were closed in April 2014.

Site Name	Address	Government Databases Listed In	Topographic Relationship to Boulevard Station Site	Distance and Direction	Risk Level to Ettrick Station Site
Dinwiddie Lumber Company	Unaddressed	LUST, LTANKS, UST, Financial Assurance	Downgradient	0.490 Mile East	Low – This site's LUST and LTANKS cases were closed in 1994. The site also contained two diesel USTs that have been removed.
Note: The hazardous material sites presented below are "Orphan" sites. Orphan sites are sites that are included in environmental databases, but have errors in their site location and other data. The sites shown below have been researched using Google Earth™ to locate them with the information provided for their locations in the EDR Report.					
Virginia State University – Randolph Farm	River Rd., Chesterfield	LUST, LTANKS, CERC-NFRAP	Undetermined	1 Mile SW	Low – This site is located too far away from the Ettrick Station site to be an environmental concern.
Dolan/Naworal Inc.	184 South Park Blvd., Colonial Heights	Drycleaners	Undetermined	2 Miles ENE	Low – This site is located too far away from the Ettrick Station site to be an environmental concern.
Petersburg National Battlefield	Route 36, Petersburg	LUST, LTANKS, UST	Undetermined	4 Miles East	Low – This site is located too far away from the Ettrick Station site to be an environmental concern.
Main Station	Bridge Street, Petersburg	LUST, LTANKS, SPILLS	Undetermined	1.5 Miles ESE	Low – This site is located too far away from the Ettrick Station site to be an environmental concern.
Tarmax Petersburg Ready-Mix	SR 36 and SR 645, Petersburg	LUST	Undetermined	3.25 Miles East	Low – This site is located too far away from the Ettrick Station site to be an environmental concern.

Table 4 – Government Environmental Database Listed Sites near the Proposed Collier Station

Site Name	Address	Government Databases Listed In	Topographic Relationship to Boulevard Station Site	Distance and Direction	Risk Level to Collier Station Site
Inland Container Corporation	2333 Wells Rd.	RCRA-SQG, US AIRS FINDS, NY Manifest,	Upgradient	0.230 Mile WSW	Low – The site is listed in the RCRA-SQG database for being a facility that generates small quantities of hazardous wastes (ignitable, barium, cadmium, lead, benzene and tetrachloroethylene) and has no record of violations. This site's US AIRS listing is for its participation in the federal air pollutant tracking system. It's FINDS listing is because it is listed on other government environmental databases (all shown herein). The NY Manifest listing is for manifested shipments of (unknown, hydrazine, non-listed and ignitable and corrosive wastes) that were shipped in 1996. No violations or release events are recorded for this site.
Temple Inland	2333 Wells Rd.	VA AST	Upgradient	0230 Mile WSW	Low – This site is listed for having an above ground storage tank (AST). The tank contained heating oil, was dismantled and no leaks were detected.
Marshall Residence	2637 Halifax Rd.	VA LUST, VA LTANKS	Downgradient	0.374 Mile SSW	Low – This site's VA LUST and VA LTANKS cases were closed in 1996.
Zip Mart 90	1740 Boydton Plank Rd.	VA LUST, VA LTANKS	Upgradient	0.422 Mile NNW	Low – This site's VA LUST and VA LTANKS cases were closed in 1994 and 2005.
Try Me Market	1614 Halifax St.	VA LUST, VA LTANKS, VA UST	Upgradient	0.493 Mile North	Low – This site's VA LUST and VA LTANKS cases were closed in 1995. The site also contained three USTs. One (containing kerosene) was removed. Two (containing gasoline) are permanently out of use.
Petersburg Box and Lumber	1400 S. West St.	VA LUST, VA LTANKS	Upgradient	0.496 Mile North	Low – This site's VA LUST and VA LTANKS cases were closed in 2000.
Note: No "Orphan sites" were identified for in the proposed Collier Station area. Orphan sites are sites that are included in environmental databases, but have errors in their site location and other data.					

Explanation of Databases Included in the Above Tables

Database	Type	Definition
CERC-NFRAP	Federal	CERCLIS No Further Remedial Action Planned. The CERLIS database is the Comprehensive Environmental Response, Compensation, and Liability Information System
Drycleaners	State & Other	Drycleaner List - A listing of registered drycleaners.
EDR US Hist Auto Stat	EDR Proprietary	EDR Exclusive Historic Gas Stations - EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.
ENG Controls	State	Engineering Controls Sites List - A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.
Financial Assurance	Other	Financial Assurance Information Listing - A listing of financial assurance information for underground storage tank facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.
FINDS	Federal & State	Facility Index System/Facility Registry System - Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).
INST Control	State	Voluntary Remediation Program Database - A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.
LTANKS	State	Leaking Petroleum Storage Tanks - Includes releases of petroleum from underground storage tanks and aboveground storage tanks.
LUST and VA LUST	State	Leaking Underground Storage Tank Sites around various counties within Virginia.
NY Manifest	State	Facility and Manifest Data - Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.
RCRA NonGen / NLR	Federal	RCRA Non-Generators - Resource Conservation and Recovery Act (RCRA) is a database that includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste. The NLR (No Longer Reporting) database is a compilation of the facilities not currently classified by the EPA but are still included in the RCRA database.
RCRA-CESQG,	Federal	RCRA - Conditionally Exempt Small Quantity Generator - RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.
RCRA-SQG	Federal	RCRA - Small Quantity Generators - RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.
RGA LUST	State	Recovered Government Archive Leaking Underground Storage Tank - The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Quality in Virginia and at the Regional VA Levels.

Database	Type	Definition
US AIRS	Federal	Aerometric Information Retrieval System Facility Subsystem - The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.
UST and VA UST		Registered Underground Storage Tanks - The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Environmental Quality's Underground Storage Tank Data Notification Information. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

APPENDIX H

SECTION 106 COORDINATION

COMMONWEALTH of VIRGINIA

Molly Joseph Ward
Secretary of Natural Resources

Department of Historic Resources
2801 Kensington Avenue, Richmond, Virginia 23221

Julie V. Langan
Director

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February 17, 2016

Mr. John Winkle
Federal Railroad Administration
1200 New Jersey Avenue SE
Washington, D.C. 20590

Re: Tri-Cities Multimodal Passenger Station Study – Determination of Effects
Cities of Petersburg, Colonial Heights, and Hopewell; Prince George, Dinwiddie, and Chesterfield Counties
DHR File No. 2014-1255

Dear Mr. Winkle,

On January 19th, 2016, the Virginia Department of Historic Resources (DHR) received a determination of effects regarding the above-referenced project for our review and comment pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended. We understand that the Federal Railroad Administration (FRA), in cooperation with the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA), is evaluating four (4) sites for a new rail station intended to serve the Southeast High Speed Rail (SEHSR) and other local transportation services. FRA and DHR previously concurred that this undertaking is a separate federal action from the SEHSR.

The undertaking consists of four (4) alternatives located in Chesterfield County, the City of Petersburg, and the City of Colonial Heights. From north to south, the alternatives include the proposed Boulevard Station within Colonial Heights – Alternative 1; the proposed Branders Bridge Station in Chesterfield County – Alternative 2; the proposed Ettrick Station in Ettrick Chesterfield County – Alternative 3; and the proposed Collier Station in Petersburg – Alternative 4. During our last correspondence, it was revealed that Alternative 4 – Collier Station – may impact site 44DW0459, which is potentially eligible for listing in the Virginia Landmarks Register (VLR) and the National Register of Historic Places (NRHP). As such, an avoidance alternative has been proposed – Alternative 4b, Collier Station South – instead of the original Collier Station site.

Within the four alternatives, there are a total of five (5) historic properties:

DHR ID #	Resource Name/Address	Alternative	Eligibility Concurrence
020-5351	Richmond & Petersburg Electric Railway	Alt. 1	Eligible

Administrative Services
10 Courthouse Ave.
Petersburg, VA 23803
Tel: (804) 862-6416
Fax: (804) 862-6196

Capital Region Office
2801 Kensington Ave.
Richmond, VA 23221
Tel: (804) 367-2323
Fax: (804) 367-2391

Western Region Office
962 Kime Lane
Salem, VA 24153
Tel: (540) 387-5443
Fax: (540) 387-5446

Northern Region Office
5357 Main Street
P.O. Box 519
Stephens City, VA 22655
Tel: (540) 868-7029
Fax: (540) 868-7033

DHR ID #	Resource Name/Address	Alternative	Eligibility Concurrence
123-5022	Blick's Station Battlefield	Alt. 4b	Eligible
123-5023	First Battle of Weldon Railroad	Alt. 4b	Potentially Eligible
123-5026	Petersburg Battlefield III	Alt. 4b	Potentially Eligible
127-6251	Atlantic Coastline Railroad Corridor	Alt. 1/2/3/4b	Eligible

We have not received information on station design, such as elevations or renderings, for any of the four proposed alternatives. It is our understanding that the designs are still conceptual at each site to include a new station, a narrow platform, parking areas, and access roads. At such a conceptual stage, and without a preferred alternative selected yet, we feel that our concurrence with a determination of effects is premature. Based on the limited information available, the potential for adverse effects appears minimal at each of the four sites; however we would like to see more developed designs for a preferred alternative and written comments from consulting parties [namely the National Park Service], before we comment on effects. Furthermore, we request that the final determination of effects come directly from the FRA.

We look forward to continuing consultation. For questions regarding archaeology, please contact Roger Kirchen at (804) 482-6091 or via email at roger.kirchen@dhr.virginia.gov. For any additional questions, please contact me at (804) 482-6084, or via email at andrea.burke@dhr.virginia.gov.

Sincerely,

Andrea Burke

Andrea Burke
Architectural Historian, Review and Compliance Division

Cc: Kerri Barile, Dovetail
Joe Vinsh, CPDC
Susan Manes, Michael Baker Intl.
Ryan Long, FTA
Tammy Davis, FHWA

DOVETAIL
CULTURAL RESOURCE GROUP

Knowing the Past—Building the Future

January 13, 2016

Ms. Andrea Burke
Division of Resource Services and Review
Virginia Department of Historic Resources
2801 Kensington Avenue
Richmond, Virginia 23221

SUBJECT: Tri-Cities Multimodal Passenger Station Study
DHR File No.: 2014-1255
Cities of Petersburg, Colonial Heights, and Hopewell; Prince George, Dinwiddie, and Chesterfield Counties
EFFECT RECOMMENDATIONS

Dear Ms. Burke:

In accordance with the National Environmental Policy Act, the Federal Railroad Administration (FRA) is the lead Federal agency for an environmental study that will select the location for a new Tri-Cities Area Multimodal Passenger Station (Project). The Crater Planning District Commission (CPDC) and the Tri-Cities Metropolitan Planning Organization (MPO) are FRA's State partners, and the Federal Transit Administration (FTA) and Federal Highway Administration (FHWA) are Federal Cooperating Agencies. By letter dated December 11, 2014, and in accordance with 36 CFR § 800(c)(4), FRA authorized the CPDC and MPO to conduct certain consultations with your office. Dovetail Cultural Resource Group (Dovetail) acted as the Project cultural resource consultants for the Project; however, FRA made all recommendations on effects presented herein.

FRA and CPDC are preparing an Environmental Assessment (EA) studying several different potential station locations. Four station alternatives were originally under consideration. Three of the locations - Boulevard, Brander's Bridge and Collier - involve the construction of entirely new facilities, while the Ettrick location involves a plan to replace Amtrak's existing Petersburg Station in Ettrick. As noted by John Winkle (FRA) in his October 27, 2015 correspondence with the Department of Historic Resources (DHR), this Project is related to the Southeast High Speed Rail (SEHSR) project in that the new Tri-Cities station will be a stop for SEHSR trains, but the two projects are separate undertakings. As such, the effects of this Project under Section 106 of the National Historic Preservation Act are being coordinated with DHR separately.

Project Overview

A Phase I reconnaissance cultural resource survey and Phase II archaeological testing for the Project were conducted in August 2015. DHR reviewed the ensuing reports from these studies and rendered determinations on all properties over 50 years in age within the Area of Potential Effects (APE) for each of the four alternatives. One archaeological site located in the Collier

Station area (44DW0459) was recommended to be eligible for listing on the National Register of Historic Places (NRHP) due to the presence of intact cultural remains including a brick floor. In a letter dated December 21, 2015, DHR concurred that the site may be eligible under Criterion D pending additional investigation. Given this, the Project team elected to remove the Collier Station from consideration and instead study an avoidance alternative located south of the original Collier Station area to avoid this archaeological site. This avoidance option is referred to as the Collier South Station. This avoidance alternative plus three of the original four station alternatives under study—Boulevard, Branders Bridge, and Ettrick—were thus advanced for further consideration in the EA. In total, five historic properties are located within the alternatives under consideration: Atlantic Coast Line Railroad Corridor (127-6251; Eligible/Criterion A); Richmond & Petersburg Electric Railway (020-5351; Eligible/Criterion A); Blick's Station Battlefield (Globe Tavern Battlefield, Weldon Railroad Battlefield, Yellow Tavern Battlefield) (123-5022; Eligible/Criterion A); First Battle of Weldon Railroad (Jerusalem Plank Road Battlefield) (123-5023; Potentially Eligible/Criterion A); and Petersburg Battlefield III (The Breakthrough) (123-5026; Potentially Eligible/Criterion A). All five of these resources will be discussed below.

Consulting Parties

The Project team contacted 13 groups regarding the Project to ascertain their interest in becoming consulting parties to the Section 106 process. The groups received introduction letters, were notified of the two public meetings held for the Project (the first meeting was related to scoping and the second to release the Draft EA), and received copies of the various newsletters distributed throughout the life of the Project. These groups included:

- Chesterfield County Preservation Committee
- Chesterfield County Historical Society
- City of Colonial Heights Historical Society
- Dinwiddie County Historical Society
- Ettrick Historical Society (letter returned by USPS)
- Historic Petersburg Foundation, Inc.
- Historical Hopewell Foundation
- Prince George County Regional Heritage Center
- US DOI NPS – Petersburg National Battlefield
- US DOI Office of Environmental Policy and Compliance
- Virginia Historical Society
- Virginia Department of Historic Resources
- Bureau of Indian Affairs

Of the groups listed above, only the National Park Service (NPS)-Petersburg National Battlefield elected to be a consulting party. In addition, representatives of the Petersburg National Battlefield were invited by the Tri-Cities MPO to be members of the Project's Study Working Group. NPS representatives attended monthly work sessions on the Project whereby they were afforded the opportunity to participate in the development of Purpose and Need, the development of Alternatives and measures of effectiveness, and the review of the preliminary Draft EA.

Project Effect

In accordance with 36 CFR 800.5(a), Dovetail has applied the criteria of adverse effect to historic properties within the APE of the four alternatives. The regulations implementing Section 106 of the National Historic Preservation Act define an effect as an "alteration to the characteristics of a historic property qualifying it for inclusion in or eligible for the National Register" [36CFR800.16(i)]. The effect is adverse when the alteration of a qualifying characteristic occurs in a "manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association" [36 CFR800.5(a)]. Details on Project effect on each station are described below and illustrated in Table 1 (p. 7).

Boulevard Station (Area 1, see Figure 1)

The proposed Boulevard Station (Area 1) lies in the City of Colonial Heights, almost entirely within a paved warehouse parking lot, approximately 750 feet (228.6 m) north of the Colonial Heights/Chesterfield County border. The footprint for this station includes a platform paralleling the existing railroad line, beginning approximately 600 feet (182.9 meters) south of U.S. Route 1 (Boulevard) and continuing northeast along the tracks ending just past the eastern side of Boulevard at the edge of a parking lot (Figure 1, p. 8). A small station would protrude from this platform to the south, and to the south of the platform and station are a proposed parking lot and access roads that together form a rough right triangle measuring approximately 400 feet (121.9 m) north-south along its eastern leg and approximately 500 feet (152.4 m) east-west along its southern leg.

Two historic properties are located within the APE of the Boulevard Station. The Atlantic Coast Line Railroad Corridor (127-6251) and the Richmond & Petersburg Electric Railway (020-5351) are both linear resources that are eligible for the NRHP under Criterion A. The Atlantic Coast Line Railroad Corridor is still in use; the physical matrix has been repeatedly altered, but the rail corridor still conveys the general parameters of its original orientation. While none of the proposed structures overlap with the resource boundaries, the new platform would be placed adjacent to the tracks, but would not cross the ties. Construction of such a structure is in character with the design of the original rail line and would maintain the use of the resource and surrounding vicinity. Moreover, the Boulevard area has been notably changed over the past 20 years through the construction of several very large industrial buildings which have greatly modified the viewshed. As such, although the Project would alter the resource's materials, workmanship, and design, it would not diminish the characteristics that rendered the property eligible for the NRHP under Criterion A (location, setting, feeling, and association). FRA recommends that construction of the Boulevard Station would have No Adverse Effect on this resource.

Similarly, while the Project is within the viewshed of the Richmond & Petersburg Electric Railway, the rail lines were removed several decades ago. The general corridor is extant, but there are no above-ground physical elements of the rail system remaining in this area. Construction plans including traversing the corridor in three small areas—two driveways leading into the parking lot from Route 1 and extension of the new platform over the resource near the Route 1/railroad intersection. However, the parking lot itself, station, and majority of the platform are all located west of this historic property and do not touch the resource boundaries. The aforementioned new, large industrial buildings in this area have changed the visual composition of the landscape and altered the viewshed of this resource. Because the proposed Project would not diminish the resource's location, design, setting, materials, workmanship, feeling, and

association, FRA recommends that construction of the Boulevard Station would have No Adverse Effect on this resource.

In sum, FRA recommends that the Boulevard Station/Area 1 alternative of the Tri-Cities Multimodal Project would have No Adverse Effect on historic properties.

Branders Bridge Station (Area 2, see Figure 2)

The proposed Branders Bridge Station (Area 2) is located approximately 1,700 feet (518.2 m) southeast of the Boulevard Station, near the existing rail lines crossing of Branders Bridge Road within the town of Ettrick, in Chesterfield County. It lies mainly in an undeveloped lot that appears to have been subjected to logging activity. The platform begins just southeast of Branders Bridge and extends approximately 900 feet (274.3 m) to the north of that road (Figure 2, p. 9). The parking area forms a semi-circle, with a radius extending approximately 200 feet (61.0 m) to the east of the platform, with an access road which initially parallels the platform before curving to the east and then to back to the south, covering a distance of approximately 700 feet (213.4 m) and terminating approximately 200 feet (61.0 m) before it reaches Branders Bridge Road.
The only historic property in the APE of the Brander's Bridge Station is the Atlantic Coast Line Railroad Corridor (127-6251). As mentioned above, the Atlantic Coast Line Railroad Corridor still conveys the general parameters of its original construction, but the line has been repeatedly rebuilt. The proposed built elements do not overlap with the resource boundaries, but the new platform would be placed parallel to the existing tracks. Such construction is in character with the design of the original railroad and would maintain the rail environment that was developed over a century earlier. While the Project would alter the resource's materials, workmanship, and design, it would not diminish the characteristics that rendered the property eligible for the NRHP (location, setting, feeling, and association). FRA recommends that construction of the Branders Bridge Station would have No Adverse Effect on this resource.

In sum, FRA recommends that the Branders Bridge Station/Area 2 alternative of the Tri-Cities Multimodal Project would have No Adverse Effect on historic properties.

Ettrick Station (Area 3, see Figure 3)

The proposed Ettrick Station (Area 3) overlaps the footprint of an existing Amtrak station in Ettrick. The proposed platform and station run from within the existing station approximately 1,000 feet (304.8 m) north by northeast through and slightly past the end of an existing parking lot (Figure 3, p. 10). The roughly rectangular parking area, approximately 175 feet (53.3 m) in width, extends approximately 375 feet (114.3 m) northeast of the existing parking lot into an open grassy area. The access road parallels the platform along the edge of the existing station for 300 feet (91.4 m) before turning to the southeast to meet South Ettrick Street.

Like Branders Bridge, the only historic property located within the APE of this alternative is the Atlantic Coast Line Railroad Corridor (127-6251). Discussed above, the Atlantic Coast Line Railroad Corridor has been physically modified, but the rail line is still in its original location. Three stations have served passengers in this area. The original station was constructed around 1900, but that station was demolished in 1941 to make way for a new facility. This replacement station opened in 1942. A third station was built across the tracks in 1955 to expand passenger and freight capacity. As such, two stations stood in this area for over half a century. The 1942 station was demolished in 2014, thus the construction of a new station would return an element that has been removed—a second station in Ettrick. The proposed built elements do not overlap

with the resource boundaries, but the new platform would be placed parallel to the existing tracks. This orientation is in character with the design of the original railroad. The Project would alter the resource's materials, workmanship, and design, but it would not diminish its location, setting, feeling, and association. FRA recommends that construction of the Ettrick Station would have No Adverse Effect on this resource.

In sum, FRA recommends that the Ettrick Station/Area 3 alternative of the Tri-Cities Multimodal Project would have No Adverse Effect on historic properties.

Collier South Station (Area 4b, see Figure 4)

Collier South Station is in the City of Petersburg, Virginia located approximately 2 miles (3.2 km) south of the Appomattox River. The proposed Collier South project area consists of a 1.8-acre (0.73-ha) parking area on the east side of the CSX Railroad tracks and Halifax Road. The railroad line crosses Interstate 85 (I-85) approximately 1,600 feet (487.7 m) to the north. Three spatially discrete areas form the Collier South Station: one large semi-circular area with a tail to the south, a smaller semi-circular area, and a rectangular section with a small panhandle at the southern end of the rectangle (Figure 4, p. 11).

After an archaeological survey, Dovetail found that site 44DW0459 does not extend into this parcel; however, three battlefields are within the APE (Figure 5). The three battlefields—Blick's Station Battlefield (123-5022), First Battle of Weldon Railroad (123-5023), and Petersburg Battlefield III (123-5026)—are all eligible or potentially eligible under Criterion A. Each battlefield is quite large, covering thousands of acres. The proposed changes associated with the Project are relatively minimal in light of the extensive modifications that have occurred in the Petersburg area since the Civil War, including new roadways, housing developments, industrial complexes, commercial venues, etc. The Project would maintain the use of this area as a railroad facility—its use during the period of significance—and the new one-story structures would not overwhelm the suburban nature of this area. It is believed that construction of the Collier South Station would not diminish the characteristics that render each resource eligible for the NRHP. FRA recommends that the Project would have No Adverse Effect on Blick's Station Battlefield (123-5022), First Battle of Weldon Railroad (123-5023), and Petersburg Battlefield III (123-5026).

Representatives from the Petersburg National Battlefield have attended monthly meetings on the Project and were involved in station design and alternative selection. They reviewed and verbally commented on all ensuing materials at these meetings, including the Draft EA and all associated documents. As such, their feedback has been imbibed into the resulting location and design for the Collier South Station.

In sum, FRA recommends that the Collier South Station/Area 4b alternative of the Tri-Cities Multimodal Project would have No Adverse Effect on historic properties.

Summary of Recommendations

Five historic properties are located in the APE of the four alternatives currently under consideration. Based on an evaluation of resource significance and integrity in light of Project design and extant conditions, FRA recommends that all four of the proposed stations for this Project—Boulevard (Area 1), Branders Bridge (Area 2), Ettrick (Area 3), and Collier South (Area 4b)—would result in No Adverse Effect to historic properties.

We invite you to concur with our findings by completing the signature block below and returning it to my attention within 30 days of receipt. Please feel free to contact me at (540) 899-9170 or John Winkle of the FRA at (202) 493-6067 with any questions.

Sincerely,

Kerri S. Barile, Ph.D.
President

Cc: John Winkle, FRA
Ryan Long, FTA
Joe Vinsh, MPO/CPDC
Ken Mobley, Michael Baker International
Susan Manes, Michael Baker International

****

The Virginia State Historic Preservation Officer (SHPO) concurs that the Tri-Cities Multimodal Project would have No Adverse Effect on the Boulevard (Area 1), Branders Bridge (Area 2), Ettrick (Area 3), and Collier South (Area 4b) project alternatives.

_____ _____

Julie Langan Date
Director, Virginia Department of Historic Resources
Virginia State Historic Preservation Officer

Table 1: Summary of Historic Properties within the Tri-Cities Multimodal Alternatives.

V-CRIS Number	Site Type/Name and Address	Boulevard (Area 1)	Branders Bridge (Area 2)	Ettrick (Area 3)	Collier South (Area 4b)
127-6251	Atlantic Coast Line Railroad Corridor (*Eligible/Criterion A*)	No Adverse Effect	No Adverse Effect	No Adverse Effect	—
020-5351	Richmond & Petersburg Electric Railway (*Eligible/Criterion A*)	No Adverse Effect	—	—	—
123-5022	Blick's Station Battlefield (Globe Tavern Battlefield, Weldon Railroad Battlefield, Yellow Tavern Battlefield) (*Eligible/Criterion A*)	—	—	—	No Adverse Effect
123-5023	First Battle of Weldon Railroad (Jerusalem Plank Road Battlefield) (*Potentially Eligible/Criterion A*)	—	—	—	No Adverse Effect
123-5026	Petersburg Battlefield III (The Breakthrough) (*Potentially Eligible/Criterion A*)	—	—	—	No Adverse Effect

Figure 1: Boulevard Station (Area 1) Showing the Atlantic Coast Line Railroad (127-6251) and the Petersburg & Richmond Electric Railway (020-5351).

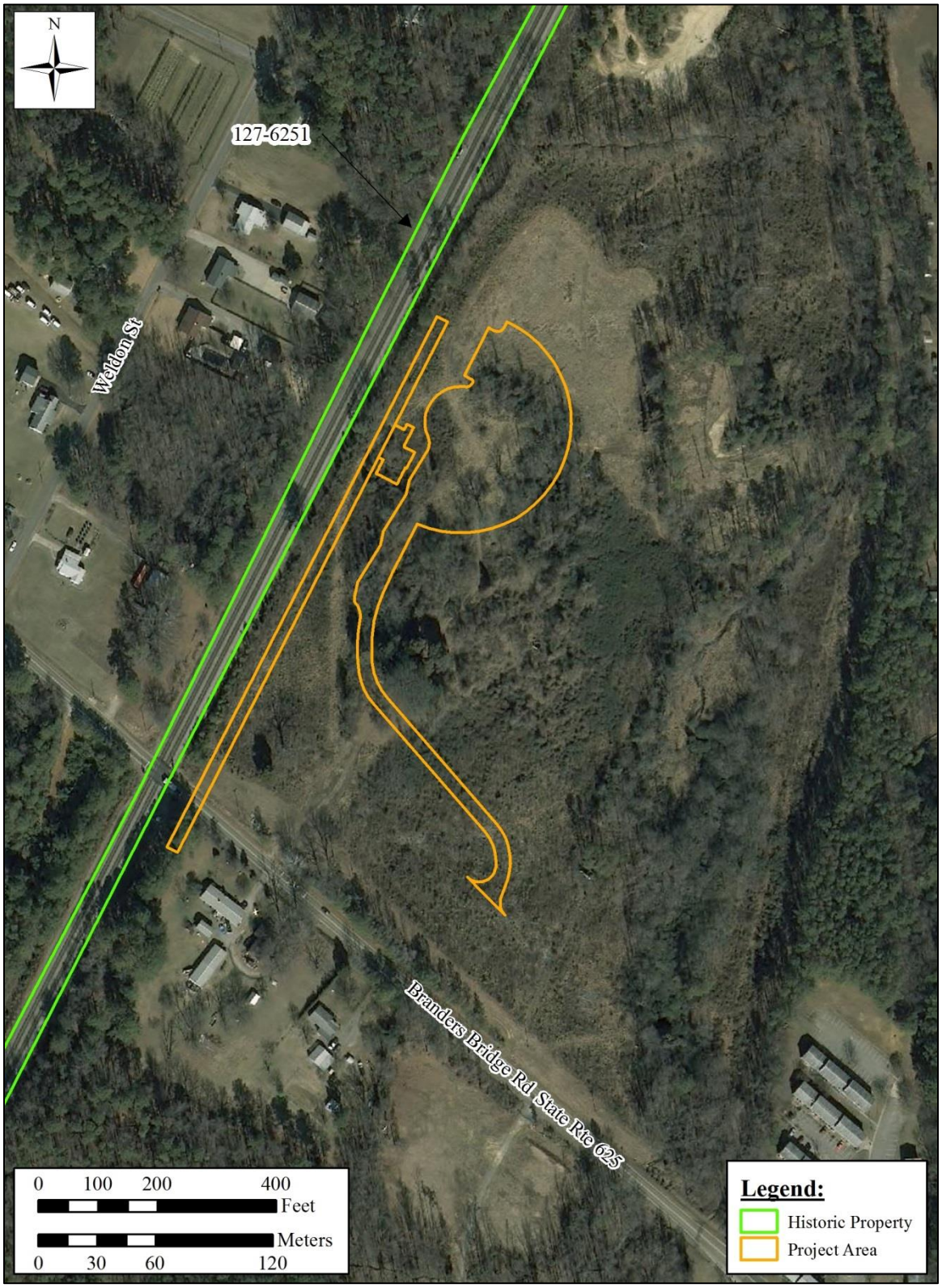

Figure 2: Branders Bridge Station (Area 2) Showing the Atlantic Coast Line Railroad (127-6251).

Figure 3: Ettrick Station (Area 2) Showing the
Atlantic Coast Line Railroad (127-6251).

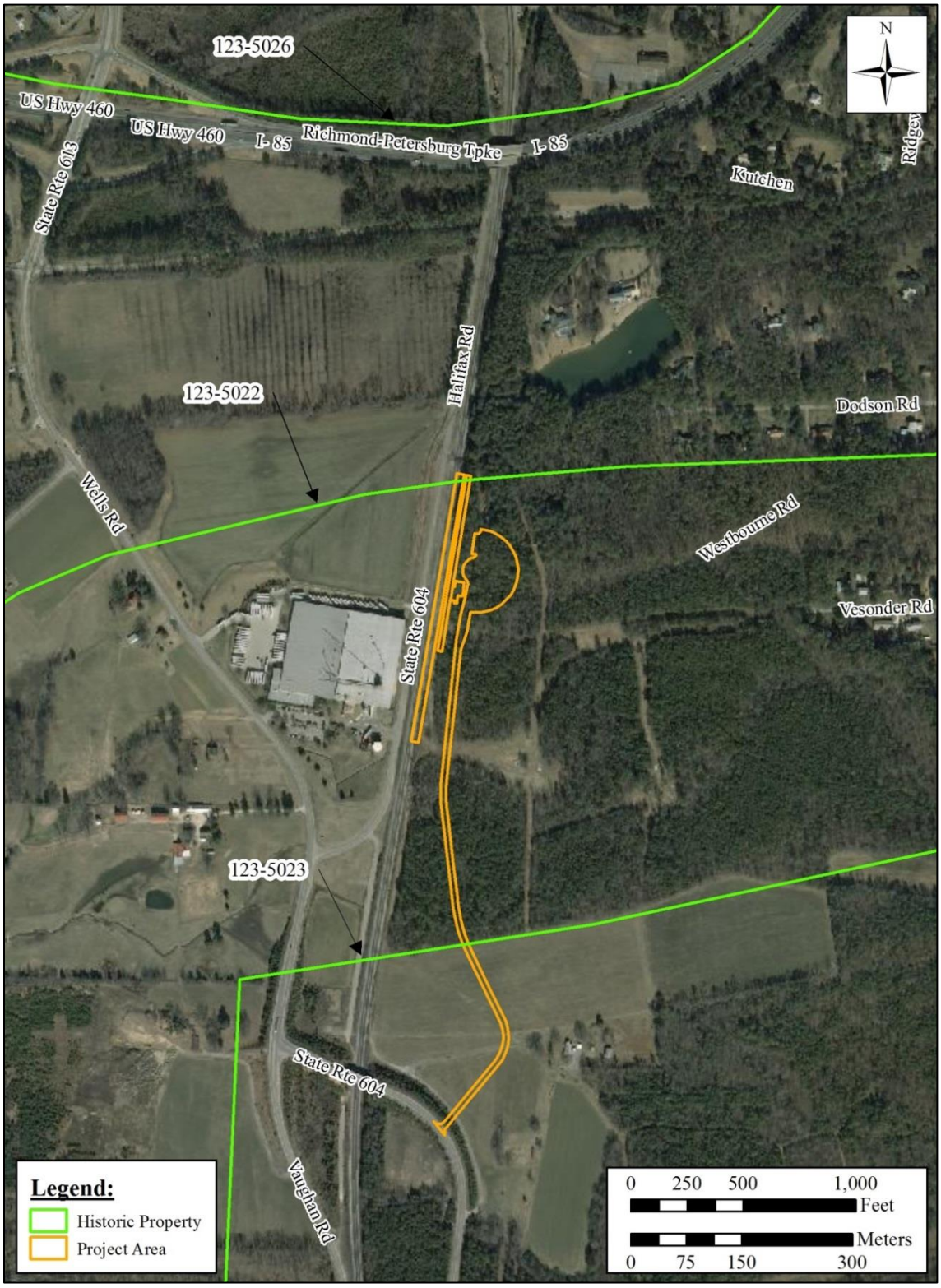

Figure 4: Detail of Collier South Station (Area 4b) Showing the Blick's Station Battlefield (123-5022), First Battle of Weldon Railroad (123-5023), and Petersburg Battlefield III (123-5026).

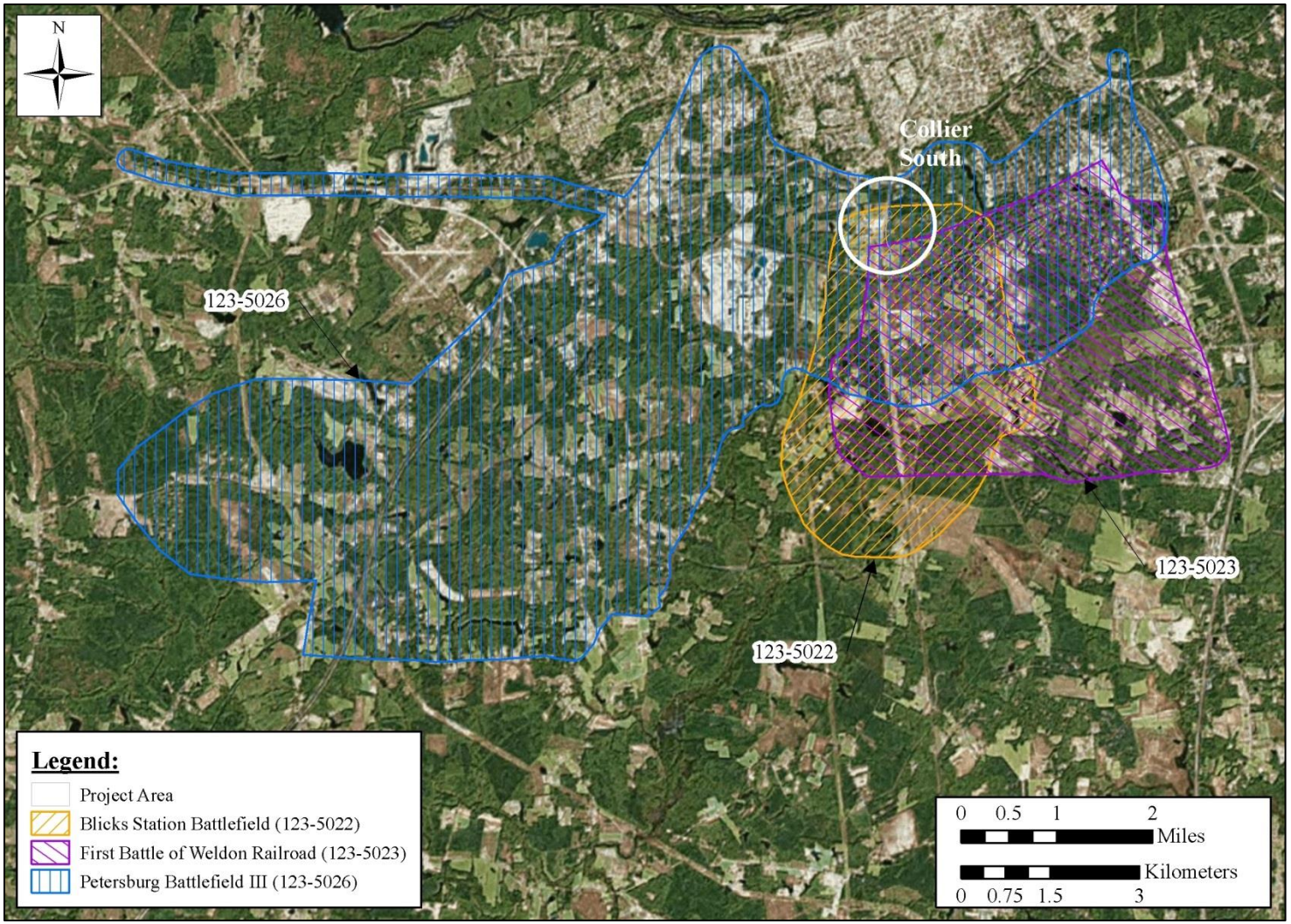

Figure 5: Overview of Collier South Station (Area 4b) Showing the Blick's Station Battlefield (123-5022), First Battle of Weldon Railroad (123-5023), and Petersburg Battlefield III (123-5026).

COMMONWEALTH of VIRGINIA

Molly Joseph Ward
Secretary of Natural Resources

Department of Historic Resources
2801 Kensington Avenue, Richmond, Virginia 23221

Julie V. Langan
Director

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TDD: (804) 367-2386
www.dhr.virginia.gov

December 21, 2015

Mr. John Winkle
Federal Railroad Administration
1200 New Jersey Avenue SE
Washington, D.C. 20590

Re: Tri-Cities Multimodal Passenger Station Study – Phase I and II Cultural Resource Survey, rev.
Cities of Petersburg, Colonial Heights, and Hopewell; Prince George, Dinwiddie, and Chesterfield Counties
DHR File No. 2014-1255

Dear Mr. Winkle,

On November 20th and December 10th, 2015, the Virginia Department of Historic Resources (DHR) received the revised cultural resource reports regarding the above-referenced project for our review and comment pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended. We understand that the Federal Railroad Administration (FRA), in cooperation with the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA), is evaluating four (4) sites for a new rail station intended to serve the Southeast High Speed Rail (SEHSR) and other local transportation services. FRA and DHR previously concurred that this undertaking is a separate federal action from the SEHSR.

The undertaking consists of four (4) alternatives located in Chesterfield County, the City of Petersburg, and the City of Colonial Heights. From north to south, the alternatives include the proposed Boulevard Station within Colonial Heights – Alternative 1; the proposed Branders Bridge Station in Chesterfield County – Alternative 2; the proposed Ettrick Station in Ettrick Chesterfield County – Alternative 3; and the proposed Collier Station in Petersburg – Alternative 4. Conceptually, each of the proposed sites includes a new station, a narrow platform, parking areas, and access roads.

We have reviewed the report, *Phase I Cultural Resources Survey and Phase II Archaeological Investigation of the Tri-Cities Area Multi-Modal Project Area, Chesterfield County and Cities of Colonial Height and Petersburg, Virginia*, and the *Addendum*, prepared by Dovetail Cultural Resource Group in August 2015, and revised in November 2015. We are pleased to inform you that the report and forms met our quality control standards for architecture on August 19, 2015. It is our opinion that the fieldwork and reporting are consistent with applicable standards and guidelines.

In total for all four alternatives, the architectural survey identified **14** previously surveyed architectural resources and **30** newly recorded architectural resources within the Area of Potential Effects (APE) for indirect effects. Of the **14** previously surveyed resources, **10** were surveyed as part of the SEHSR project. Of the **44** total surveyed resources, the consultant recommends, and DHR concurs that **8** resources should remain eligible and/or potentially eligible for listing in the Virginia Landmarks Register (VLR) and the National Register of Historic Places (NRHP), **3** resources have been demolished, and **32** resources are not individually eligible. Please see the attached tables for a detailed breakdown of the **44** architectural resources.

Regarding archaeological resources, the archaeological surveys identified **3** sites – 44CF0801, 44DW0459, and 44DW0460 – and one isolated find. The isolated find is, by definition, not eligible for listing in the National Register of Historic Places. No further work at this resource is warranted. Based on the information provided, we concur that sites 44CF0801 and 44DW0460 are not eligible for listing in the National Register.

Following the archaeological survey, Dovetail recommended site 44DW0459 as potentially eligible for National Register listing and completed Phase II evaluation of the resource. On December 18, 2015, the archaeological subcommittee of our Department's National Register Eligibility Evaluation Team met to consider the eligibility of site 44DW0459. Based on the information provided, it is the committee's opinion that the National Register eligibility of the site cannot be fully evaluated separately from the entirety of the site which would include the main dwelling to which this presumed outbuilding would relate. As such, we recommend that site 44DW0459 be considered *potentially eligible* for listing in the National Register and warrants further delineation. The *Addendum* presents an alternative that avoids site 44DW0459; as such, no further work is warranted at the site in support of this project.

We look forward to continuing consultation. For questions regarding archaeology, please contact Roger Kirchen at (804) 482-6091 or via email at roger.kirchen@dhr.virginia.gov. For any additional questions, please contact me at (804) 482-6084, or via email at andrea.burke@dhr.virginia.gov.

Sincerely,

Andrea Burke
Architectural Historian, Review and Compliance Division

Cc: Kerri Barile, Dovetail
Joe Vinsh, CPDC
Susan Manes, Michael Baker Intl.

ATTACHMENT A – PREVIOUSLY SURVEYED & NEWLY RECORDED RESOURCES
December 21, 2015
DHR File No. 2014-1255

DHR ID #	Resource Name/Address	Alternative	Eligibility - Dovetail November 2015	Eligibility - DHR December 2015
020-0501	Wakefield, 19205 Branders Bridge Rd.	Alt. 2/Branders Bridge	Not individually eligible	**Demolished**
020-5242	Ettrick Depot, 3516 South Street	Alt. 3/Ettrick	Not individually eligible	**Demolished**
020-5351	Richmond & Petersburg Electric Railway	Alt. 1/ Boulevard	Eligible	Eligible
020-5467	House, 19206 Branders Bridge Rd.	Alt. 2/Branders Bridge	Not individually eligible	Not individually eligible
020-5514	Ruins, 19205 Branders Bridge Rd.	Alt. 2/Branders Bridge	Not individually eligible	Not individually eligible
020-5671	House, 3400 North Street	Alt. 3/Ettrick	Not individually eligible	Not individually eligible
020-5672	House, 3405 North Street	Alt. 3/Ettrick	Not individually eligible	Not individually eligible
020-5673	House, 3408 North Street	Alt. 3/Ettrick	Not individually eligible	Not individually eligible
020-5674	House, 3409 North Street	Alt. 3/Ettrick	Not individually eligible	Not individually eligible
020-5675	House, 3413 North Street	Alt. 3/Ettrick	Not individually eligible	Not individually eligible
020-5676	House, 3502 South Street	Alt. 3/Ettrick	Not individually eligible	Not individually eligible
020-5677	House, 3504 South Street	Alt. 3/Ettrick	Not individually eligible	Not individually eligible
020-5678	House, 3506 South Street	Alt. 3/Ettrick	Not individually eligible	Not individually eligible
020-5680	House, 3510 South Street	Alt. 3/Ettrick	Not individually eligible	Not individually eligible
020-5681	House, 3512 South Street	Alt. 3/Ettrick	Not individually eligible	Not individually eligible
020-5682	Petersburg Train Station, 3516 South Street	Alt. 3/Ettrick	Not individually eligible	Not individually eligible
020-5683	House, 3600 South Street	Alt. 3/Ettrick	Not individually eligible	Not individually eligible
020-5684	House, 3602 South Street	Alt. 3/Ettrick	Not individually eligible	Not individually eligible
020-5685	House, 3603 South Street	Alt. 3/Ettrick	Not individually eligible	Not individually eligible
020-5686	House, 3604 South Street	Alt. 3/Ettrick	Not individually eligible	Not individually eligible
020-5687	House, 3605 South Street	Alt. 3/Ettrick	Not individually eligible	Not individually eligible
020-5688	House, 3607 South Street	Alt. 3/Ettrick	Not individually eligible	Not individually eligible
020-5689	House, 3611 South Street	Alt. 3/Ettrick	Not individually eligible	Not individually eligible

ATTACHMENT A – PREVIOUSLY SURVEYED & NEWLY RECORDED RESOURCES
December 21, 2015
DHR File No. 2014-1255

DHR ID #	Resource Name/Address	Alternative	Eligibility - Dovetail November 2015	Eligibility - DHR December 2015
020-5690	House, 3615 South Street	Alt. 3/Ettrick	Not individually eligible	Not individually eligible
020-5691	House, 20218 Loyal Ave	Alt. 3/Ettrick	Not individually eligible	Not individually eligible
020-5692	House, 20224 Loyal Ave	Alt. 3/Ettrick	Not individually eligible	Not individually eligible
020-5693	House, 20230 Loyal Ave	Alt. 3/Ettrick	Not individually eligible	Not individually eligible
020-5694	House, 20236 Loyal Ave	Alt. 3/Ettrick	Not individually eligible	Not individually eligible
020-5695	House, 20302 Loyal Ave	Alt. 3/Ettrick	Not individually eligible	Not individually eligible
020-5696	House, 20304 Loyal Ave	Alt. 3/Ettrick	Not individually eligible	Not individually eligible
020-5697	House, 20306 Loyal Ave	Alt. 3/Ettrick	Not individually eligible	Not individually eligible
020-5698	House, 20308 Loyal Ave	Alt. 3/Ettrick	Not individually eligible	Not individually eligible
020-5699	House, 20312 William Street	Alt. 3/Ettrick	Not individually eligible	Not individually eligible
020-5700	House, 19206 Branders Bridge Rd.	Alt. 2/Branders Bridge	Not individually eligible	Not individually eligible
020-5701	House, 19300 Branders Bridge Rd.	Alt. 2/Branders Bridge	Not individually eligible	Not individually eligible
123-5008	House, 2639 Halifax Rd.	Alt. 4/Collier	Not individually eligible	**Demolished**
123-5013	Bridge over Defense Rd.	Alt. 4/Collier	Eligible	Eligible
123-5015	Mikuska House, 2233 Halifax Rd.	Alt. 4/Collier	Not individually eligible	Not individually eligible
123-5022	Blick's Station Battlefield	Alt. 4/Collier	Eligible	Eligible
123-5023	First Battle of Weldon Railroad	Alt. 4/Collier	Potentially Eligible	Potentially Eligible
123-5026	Petersburg Battlefield III	Alt. 4/Collier	Potentially Eligible	Potentially Eligible
123-5455	Defense Road	Alt. 4/Collier	Eligible	Eligible
123-5462/44DW0373	Dimmock Earthworks	Alt. 4/Collier	Potentially Eligible/Contributing to Petersburg Battlefield III	Potentially Eligible/Contributing to Petersburg Battlefield III
127-6251	Atlantic Coastline Railroad Corridor	Alt. 1/2/3/4	Eligible	Eligible
44CF0801	20th Century Domestic Scatter	Alt. 2/Branders Bridge	Not eligible	Not eligible

ATTACHMENT A – PREVIOUSLY SURVEYED & NEWLY RECORDED RESOURCES
December 21, 2015
DHR File No. 2014-1255

DHR ID #	Resource Name/Address	Alternative	Eligibility - Dovetail November 2015	Eligibility - DHR December 2015
44DW0459	Mid-19th Century Outbuilding & Artifact Scatter	Alt. 4/Collier	Eligible under Criterion D	*Potentially Eligible*
44DW0460	Lithic Scatter	Alt. 4/Collier	Not eligible	Not eligible

Manes, Susan

From: Burke, Andrea (DHR) <Andrea.Burke@dhr.virginia.gov>
Sent: Tuesday, November 03, 2015 12:38 PM
To: Kerri Barile (kbarile@dovetailcrg.com)
Cc: john.winkle@dot.gov; Manes, Susan
Subject: Tri-Cities Multi-Modal Passenger Station Study- DHR File No. 2014-1255

Hello Kerri,

After some discussion on our end and with the federal agencies involved on this project, we are satisfied with the definition of the undertaking as being separate from the SEHSR. With that said, will you please expand the APE maps to include the APE for indirect effects for each alternative? Also, I asked John Winkle to begin contacting consulting parties. I suggested looking into using the ACHP's guidance on coordinating Section 106 and NEPA, if the timing works out: http://www.achp.gov/nepa106.html

Let me know if you have any other questions.

Thank you,

Andrea

Andrea Burke
Architectural Historian, Review and Compliance Division
Virginia Department of Historic Resources
2801 Kensington Avenue
Richmond, VA 23221
(804) 482-6084
Fax: (804) 367-2391
andrea.burke@dhr.virginia.gov

Manes, Susan

From: john.winkle@dot.gov
Sent: Tuesday, October 27, 2015 7:54 AM
To: Andrea.Burke@dhr.virginia.gov
Cc: ryan.long@dot.gov; Tammye.Davis@dot.gov; jvinsh@craterpdc.org; Manes, Susan; kbarile@dovetailcrg.com
Subject: RE: Tri-Cities Multimodal Passenger Station Study - DHR File No. 2014-1255

Hi Andrea –

Thank you for your response. To address your question, this project is related to SEHSR in that this station will be a stop for SEHSR trains, but they are separate undertakings. Not only will this station be used by trains other than SEHSR trains (and will replace the existing Amtrak Ettrick Station), but in the SEHSR Richmond to Raleigh EIS (R2R), FRA specifically excluded from that analysis the impacts from potential station locations because we wanted to leave open the exact station locations to be decided by local jurisdictions, which is what's happening here with the Tri-Cities project. R2R modeled five cities where stations would potentially be located – Raleigh, Petersburg and Richmond, which have existing stations, and La Crosse, VA and Henderson, NC which do not have existing passenger service – but did not analyze all impacts related to individual station locations. As stated in the EIS:

This EIS does not evaluate impacts related to specific station locations. Potential station locations are evaluated generally in terms of accessibility to the larger transportation network. Station locations within municipalities will be determined in the future by the respective municipalities and passenger service operator, and appropriate environmental documentation will be undertaken at that time.

I hope this answers your question. If you need anything else, please respond to this message or call me at 202-493-6067.

Thank you,
John Winkle
Transportation Industry Analyst

From: Burke, Andrea (DHR) [mailto:Andrea.Burke@dhr.virginia.gov]
Sent: Monday, October 26, 2015 4:34 PM
To: Winkle, John (FRA)
Cc: Long, Ryan (FTA); Davis, Tammye (FHWA); Vinsh, Joe J., Jr.; Susan Manes; Kerri Barile (kbarile@dovetailcrg.com)
Subject: Tri-Cities Multimodal Passenger Station Study - DHR File No. 2014-1255

Mr. Winkle,

Please see the attached letter for the above referenced project. A hard copy will not follow so please print the attachment for your records. Should you have any additional questions, I can be reached at the phone number or email address listed below.

Regards,

Andrea Burke

Andrea Burke
Architectural Historian, Review and Compliance Division
Virginia Department of Historic Resources
2801 Kensington Avenue
Richmond, VA 23221
(804) 482-6084
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andrea.burke@dhr.virginia.gov

COMMONWEALTH of VIRGINIA

Department of Historic Resources

Molly Joseph Ward
Secretary of Natural Resources

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www.dhr.virginia.gov

October 26, 2015

Mr. John Winkle
Federal Railroad Administration
1200 New Jersey Avenue SE
Washington, D.C. 20590

Re: Tri-Cities Multimodal Passenger Station Study – Area of Potential Effects
Cities of Petersburg, Colonial Heights, and Hopewell; Prince George, Dinwiddie, and Chesterfield Counties
DHR File No. 2014-1255

Dear Mr. Winkle,

On October 5, 2015, the Virginia Department of Historic Resources (DHR) received additional information regarding the above-referenced project for our review and comment pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended. We understand that the Federal Railroad Administration (FRA), in cooperation with the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA), is evaluating four (4) sites for a new rail station. Alternatives include improving the existing Amtrak station in Ettrick, Virginia, or constructing a new station.

Thank you for submitting your proposed Area of Potential Effects (APE). Unfortunately, we are unable to concur with your APE until we have a better understanding of the proposed undertaking. Per our letter dated September 8th, 2015, it seems that there is a very close relationship between this project and the Southeast High Speed Rail project. We would like to discuss the relationship between these two projects with FRA and the cooperating federal agencies, to resolve why they are being treated as separate undertakings. Please contact me at your earliest convenience to set up a time to discuss this project and the process for Section 106 consultation. You can contact me at (804) 482-6084, or via email at andrea.burke@dhr.virginia.gov.

Sincerely,

Andrea Burke

Andrea Burke
Architectural Historian, Review and Compliance Division

Cc: Ryan Long, FTA; Tammy Davis, FHWA; Joe Vinish, MPO/CPDC; Susan Manes, Michael Baker, Jr.; Kerri Barile, Dovetail CRG

DOVETAIL
CULTURAL RESOURCE GROUP

Knowing the Past—Building the Future

October 5 2015

Ms. Andrea Burke
Division of Review and Compliance
Department of Historic Resources
2801 Kensington Avenue
Richmond, Virginia 22802

Re: Project Area of Potential Effect
Tri-Cities Area Multimodal Passenger Station Study, Cities of Petersburg, Colonial Heights, Hopewell, and the Counties of Prince George, Dinwiddie, and Chesterfield (DHR #2014-1255)

Dear Ms. Burke:

The Federal Railroad Administration (FRA), the Federal Transit Administration (FTA), and the Federal Highway Administration (FHWA), with involvement of the Tri-Cities Area Metropolitan Planning Organization (MPO) and the Crater Planning District Commission (CPDC), have commenced environmental studies associated with the selection of a location for a Tri-Cities Area Multimodal Passenger Station (Project). The Project will include the evaluation of multiple sites for a new station location. Due to the involvement of several federal entities, the undertaking requires compliance with the National Environmental Policy Act and Section 106 of the National Historic Preservation Act (NHPA), as amended.

The purpose of this letter is to define the undertaking's Area of Potential Effects (APE) in consultation with the State Historic Preservation Officer (SHPO) as required by 36 CFR 800.4(a)(1). Four alternatives are currently under consideration. Three of the locations (Boulevard, Brander's Bridge and Collier) involve the construction of entirely new facilities, while the Ettrick location involves a plan to replace Amtrak's existing Petersburg Station in Ettrick. The APE defined herein will guide historic property identification efforts conducted on this project and be used to assess the effect of this undertaking on historic properties through the Section 106 process. Based on the project parameters, the FRA and associated agencies recommends that the APE for subsurface resources include the footprint of physical improvements associated with the project, inclusive of both the station locations and any associated roadwork. The APE for above-ground resources includes all areas where direct or indirect alteration to a resource's setting and feeling could occur. This includes the project footprint plus the surrounding viewshed, including any areas that would be within the sightline of the station location.

It is recognized that the APE may need to be adjusted as project development proceeds. General maps of the four areas under consideration are appended to this letter, and additional mapping will be included in all subsequent reports.

We invite your agency to concur with this APE recommendation within 30 days of receipt of this letter; a signature block has been provided below should you concur with this recommendation. If you have questions about the APE or cultural resource studies for this project, please do not hesitate to contact me at (540) 899-9170 or via email at kbarile@dovetailcrg.com.

Sincerely,

Kerri S. Barile, Ph.D.
President, Dovetail Cultural Resource Group

CC: Emily Stock, DRPT
John Winkle, FRA
Joe Vinsh, CPDC
Ken Mobley, Michael Baker International
Susan Manes, Michael Baker International

****

The Virginia State Historic Preservation Officer (SHPO) concurs with the Area of Potential Effect (APE) as proposed (DHR #2014-1255).

_____ _____

Julie Langan Date
Director, Virginia Department of Historic Resources
Virginia State Historic Preservation Officer

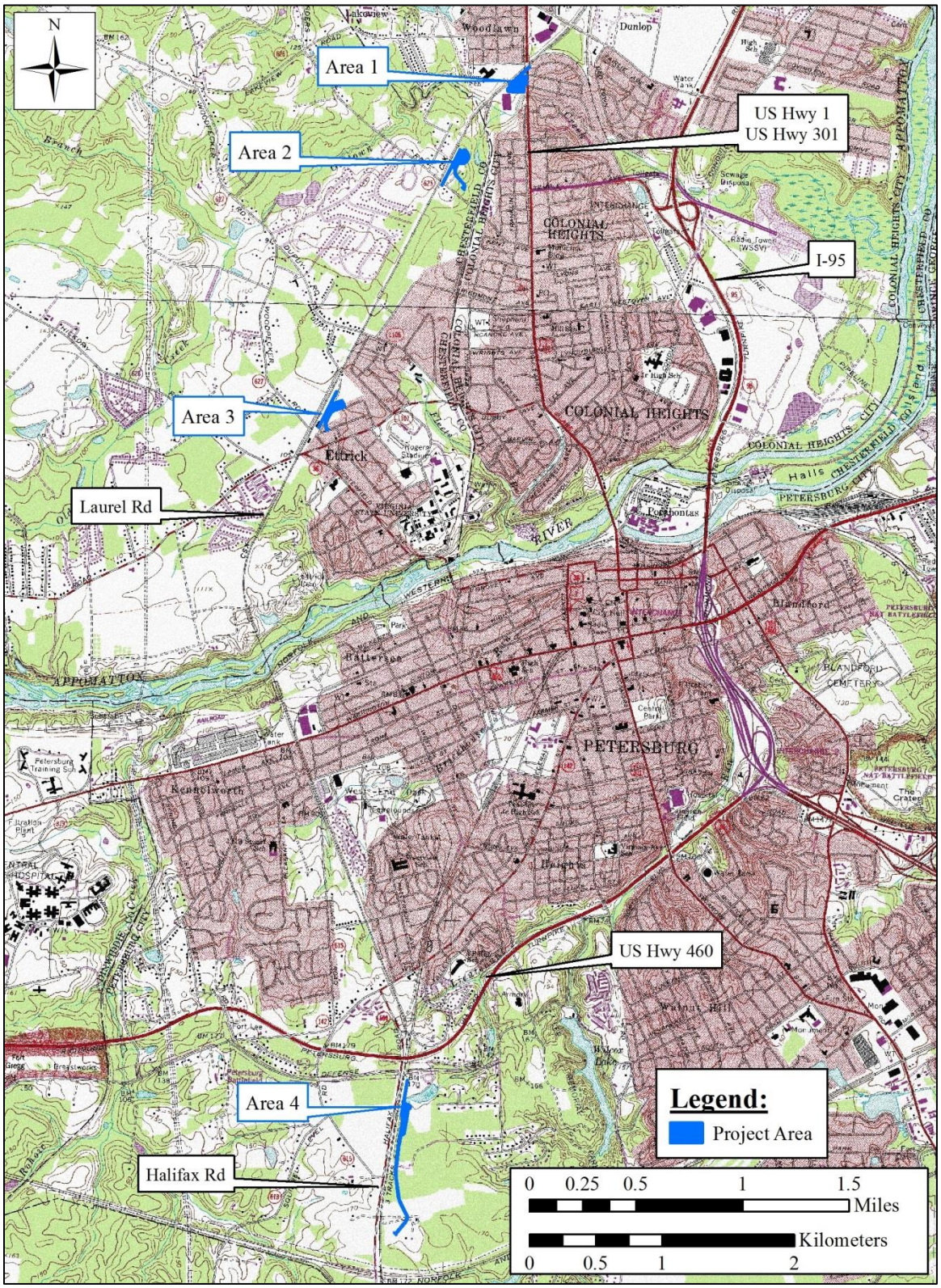

Figure 1: Overview of Four Areas Under Consideration for the Tri-Cities Multimodal Project.

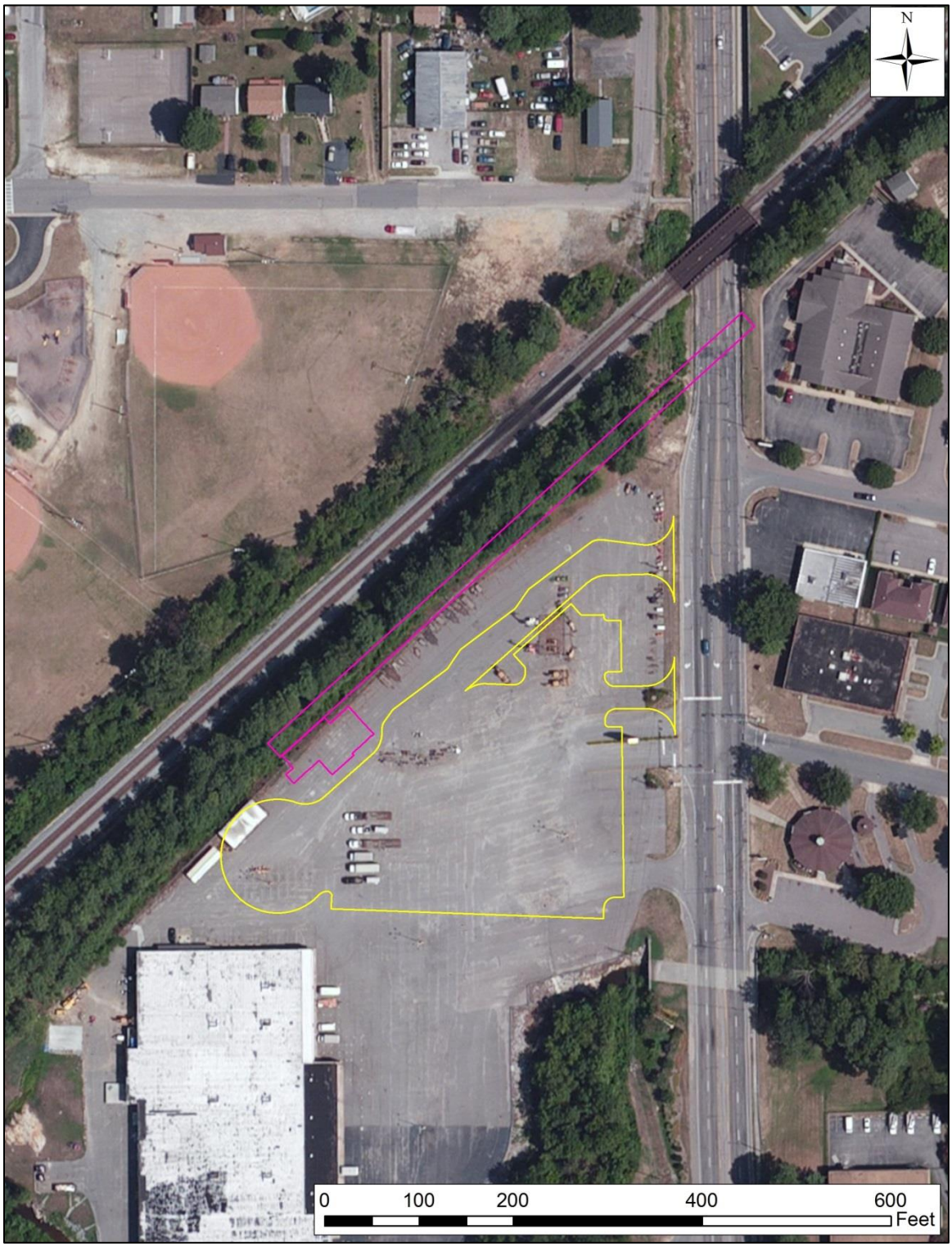

Figure 2: Area 1, Boulevard. The proposed parking lot and roadway/driveways are shown in yellow, and the proposed station/platform is shown in pink.

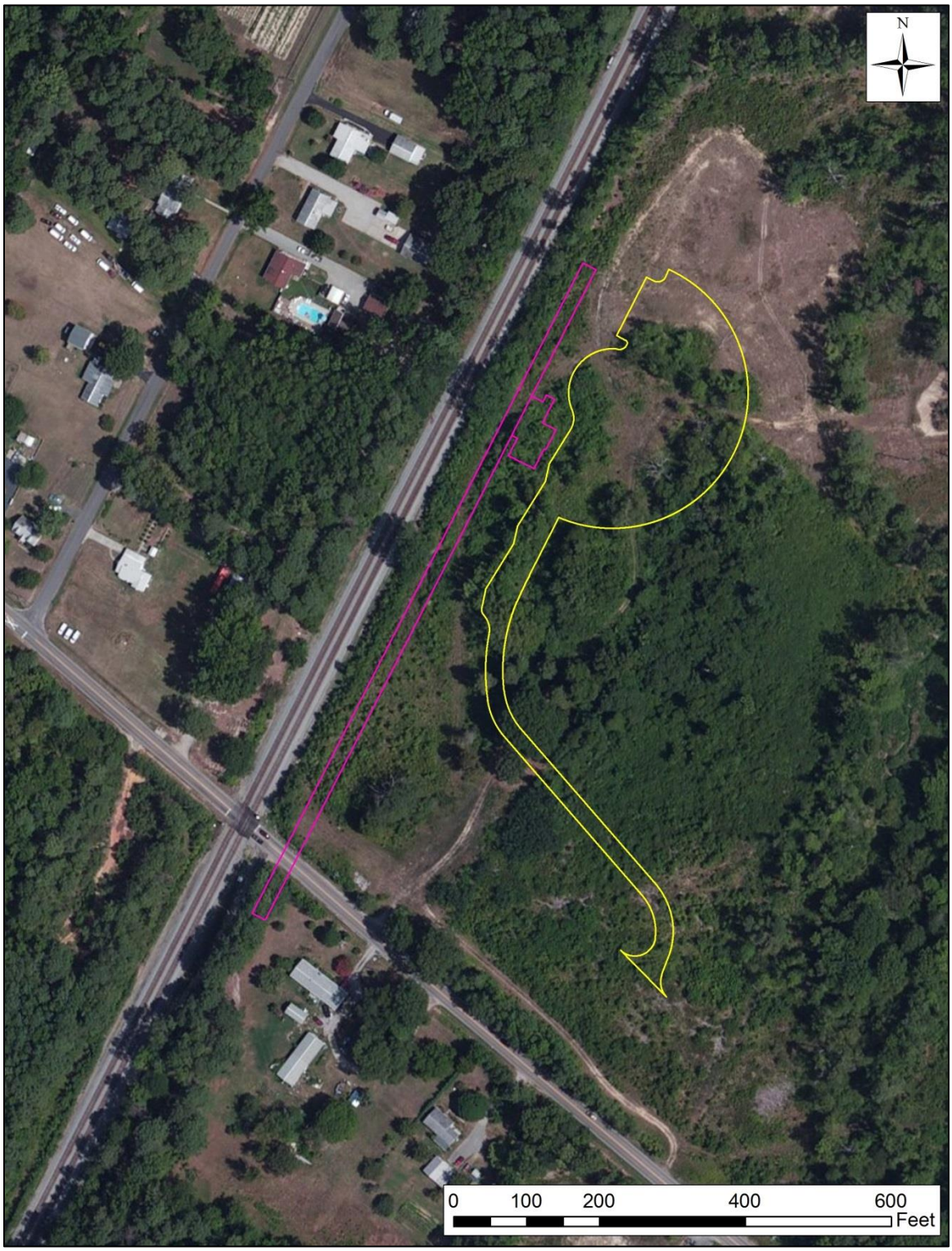

Figure 3: Area 2, Brander's Bridge. The proposed parking lot and roadway/driveways are shown in yellow, and the proposed station/platform is shown in pink.

Figure 4: Area 3, Ettrick. The proposed parking lot and roadway/driveways are shown in yellow, and the proposed station/platform is shown in pink.

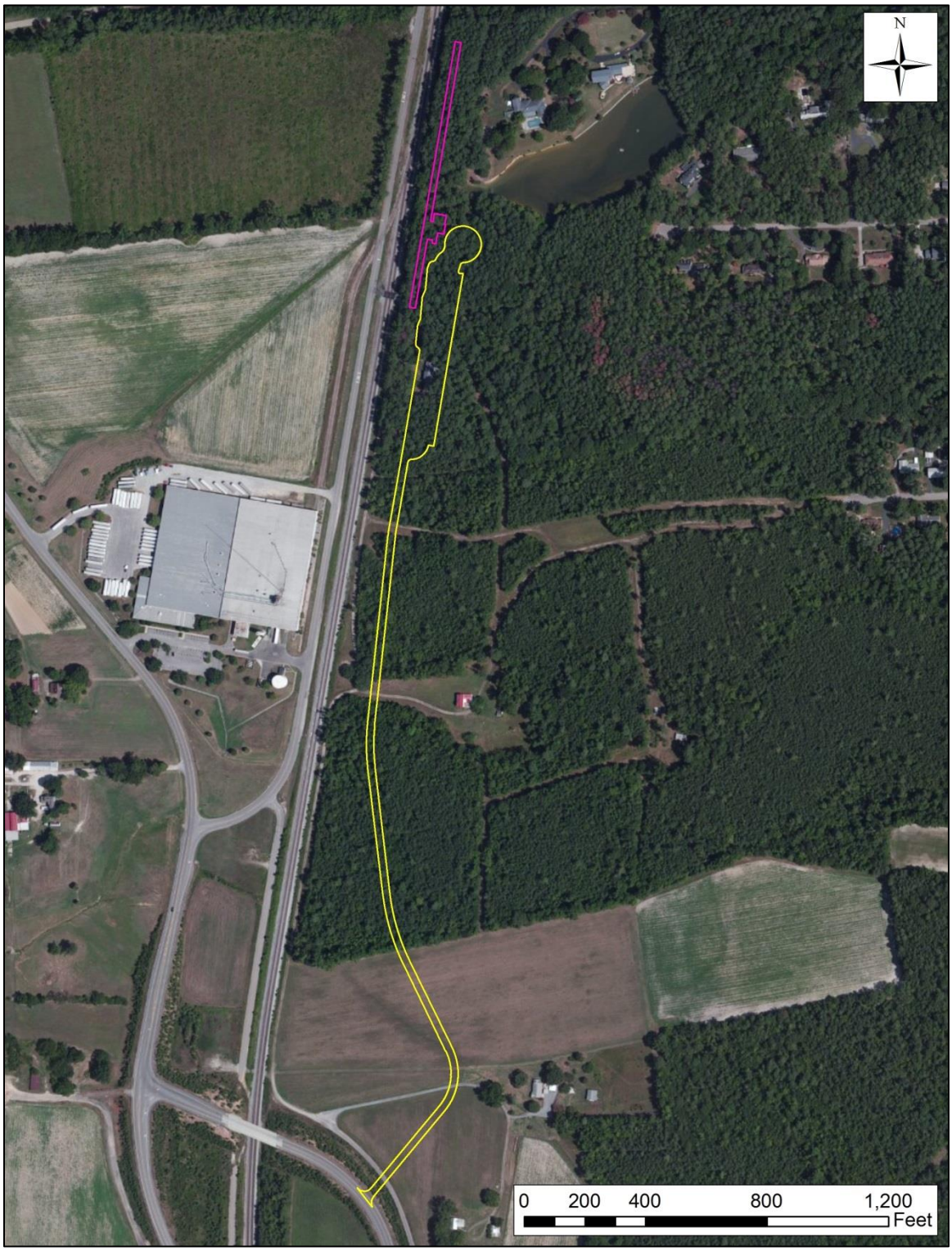

Figure 5: Area 4, Collier. The proposed parking lot and roadway/driveways are shown in yellow, and the proposed station/platform is shown in pink.

COMMONWEALTH of VIRGINIA

Department of Historic Resources

Molly Joseph Ward
Secretary of Natural Resources

2801 Kensington Avenue, Richmond, Virginia 23221

Julie V. Langan
Director
Tel: (804) 367-2323
Fax: (804) 367-2391
www.dhr.virginia.gov

September 8, 2015

Mr. John Winkle
Federal Railroad Administration
1200 New Jersey Avenue SE
Washington, D.C. 20590

Re: Tri-Cities Multimodal Passenger Station Study – Phase I and II Cultural Resource Survey
Cities of Petersburg, Colonial Heights, and Hopewell; Prince George, Dinwiddie, and Chesterfield Counties
DHR File No. 2014-1255

Dear Mr. Winkle,

On August 13, 2015, the Virginia Department of Historic Resources (DHR) received information regarding the above-referenced project for our review and comment pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended. We understand that the Federal Railroad Administration (FRA), in cooperation with the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA), is evaluating four (4) sites for a new rail station. Alternatives include improving the existing Amtrak station in Ettrick, Virginia, or constructing a new station. Consultation under Section 106 was initiated in December 2014; however per our letter dated January 14, 2015, we had some concerns regarding FRA's prescribed consultation process.

We have reviewed the report, *Phase I Cultural Resources Survey and Phase II Archaeological Investigation of the Tri-Cities Area Multi-Modal Project Area, Chesterfield County and Cities of Colonial Height and Petersburg, Virginia*, prepared by Dovetail Cultural Resource Group in August 2015. We are pleased to inform you that the report and forms met our quality control standards on August 19, 2015. Unfortunately, we cannot comment on the report at this time. Since the initiation of this project, we have not concurred with an Area of Potential Effects (APE) or a list of identified consulting parties.

As we mentioned in our January letter, we would like the FRA to take a more active role in the Section 106 process for this undertaking. From our very limited understanding of the scope of work for this project, it seems that there is a very close relationship between this project and the Southeast High Speed Rail project. We would like to discuss the relationship between these two projects with the lead federal agency and why they are being treated as separate undertakings. Should this project

continue under Section 106 as a separate undertaking from the Southeast High Speed Rail, then we would like to see the following:

1. Project description for each alternative;
2. Delineate an Area of Potential Effects (APE) for direct and indirect effects with justification for our concurrence; and
3. List of identified consulting parties.

Please contact me at your earliest convenience to set up a time to discuss this project and the process for Section 106 consultation. You can contact me at (804) 482-6084, or via email at andrea.burke@dhr.virginia.gov.

Sincerely,

Andrea Burke

Andrea Burke
Architectural Historian, Review and Compliance Division

Cc: Ryan Long, FTA
Tammy Davis, FHWA
Amy Inman, DRPT
Joe Vinish, MPO/CPDC
Susan Manes, Michael Baker, Jr.
Kerri Barile, Dovetail CRG

COMMONWEALTH of VIRGINIA

Department of Historic Resources

Molly Joseph Ward
Secretary of Natural Resources

2801 Kensington Avenue, Richmond, Virginia 23221

Julie V. Langan
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January 14, 2015

Mr. John Winkle
Federal Railroad Administration
1200 New Jersey Avenue SE
Washington, D.C. 20590

Re: Tri-Cities Multimodal Passenger Station Study – Section 106 Initiation
Cities of Petersburg, Colonial Heights, and Hopewell; Prince George, Dinwiddie, and Chesterfield Counties
DHR File No. 2014-1255

Dear Mr. Winkle,

On December 15, 2014, the Virginia Department of Historic Resources (DHR) received information regarding the above-referenced project for our review and comments pursuant to Section 106 of the National Historic Preservation Act of 1966. We understand that the Federal Railroad Administration (FRA), in cooperation with the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA), proposes to evaluate multiple sites for a new station location – including improving the existing Amtrak station in Ettrick, Virginia, or a new station.

Thank you for inviting us to participate in Section 106 consultation. We understand that the FRA will be the lead agency during consultation, however we have concerns with some of the delegations listed in your letter. While we are happy to work with the Tri-Cities Area Metropolitan Planning Organization (MPO) and the Crater Planning District Commission (CPDC), we need to ensure that a qualified architectural historian and/archaeologist will be participating on behalf of the FRA. Furthermore, certain steps in the process should be coordinated with the FRA – especially delineation of the Area of Potential Effects (APE), and most importantly, *any consultation* with Native American tribes. Per the regulations, tribal consultation must be a government to government line of communication. We are unsure of your intentions from your letter. Please consider a more active role in consultation, or advisory through some of the other steps, at minimum.

That being said, we look forward to working with the FRA, FTA, FHWA, and the other consulting parties in this consultation. Should you have additional questions, please contact me at (804) 482-6084, or via email at andrea.kampinen@dhr.virginia.gov.

Mr. John Winkle
January 14, 2015
DHR File No. 2014-1255

Sincerely,

Andrea Kampinen

Andrea Kampinen
Architectural Historian, Review and Compliance Division

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U.S. Department
of Transportation
**Federal Railroad
Administration**

1200 New Jersey Ave, SE
Washington, DC 20590

DEC 11 2014

Ms. Andrea Kampinen
Division of Review and Compliance
Department of Historic Resources
2801 Kensington Avenue
Richmond, Virginia 22802

**Re: Initiation of Project/Section 106 Review
Tri-Cities Area Multimodal Passenger Station Study, Cities of Petersburg, Colonial Heights, Hopewell, and the Counties of Prince George, Dinwiddie, and Chesterfield**

Dear Ms. Kampinen:

The Federal Railroad Administration (FRA), the Federal Transit Administration (FTA), and the Federal Highway Administration (FHWA), with involvement of the Tri-Cities Area Metropolitan Planning Organization (MPO) and the Crater Planning District Commission (CPDC), have commenced environmental studies associated with the selection of a location for a Tri-Cities Area Multimodal Passenger Station (Project). The Project will include the evaluation of multiple sites for a new station location. There are three basic options under consideration:

- The No-Build Alternative, which serves as a basis of comparison for other alternatives and remains a viable alternative throughout the study;
- The Improve Existing Station Alternative, which involves improving Amtrak's existing Petersburg station in Ettrick; and
- The New Station Alternative, which involves constructing a new station at a new location to replace Amtrak's existing Petersburg station in Ettrick.

The FRA is the lead federal agency for this project. The FTA and FHWA are cooperating agencies. Due to the involvement of several federal entities, the undertaking requires compliance with the National Environmental Policy Act and Section 106 of the National Historic Preservation Act (NHPA), as amended.

The purpose of this letter is to formally initiate the project review process with the Virginia Department of Historic Resources (DHR), as required by 36 CFR 800 and its implementing regulations. To facilitate timely completion of the environmental review, in accordance with 36 CFR § 800.2(c)(4), FRA has authorized the MPO and CPDC to conduct consultations with your office regarding the consistency of the Project with the NHPA. Specific activities FRA is delegating to the MPO and CPDC include, but are not limited to, coordination of the project's Area of Potential Effects (APE), consultation with consulting parties and with Native American tribes (excluding issues implicating FRA's government–to-government responsibilities), preparation and review of technical reports, and preparation and review of DHR coordination

letters on resource eligibility. FRA will retain review over project effect on historic properties determinations, consultation with the Advisory Council on Historic Preservation, and reviewing any project agreement documents. This authorization shall remain in effect until such time as either FRA or the DHR requests a renewal of the delegation. In the coming weeks, representatives of the Project team will follow up with your agency to commence a dialogue on consulting parties and the project's APE.

If you have any questions on this delegation or on the Project, please contact Mr. John Winkle at (202) 493-6067 or John.Winkle@DOT.Gov.

Sincerely,

FOR

David Valenstein
Chief, Environment
and Planning Division

CC: John Winkle, FRA
Ryan Long, FTA
Tammye Davis, FHWA
Joe Vinsh, MPO/CPDC
Ken Mobley, Michael Baker, Jr.
Susan Manes, Michael Baker, Jr.
Kerri Barile, Dovetail Cultural Resource Group

APPENDIX I

SECTION 4(F) COORDINATION

Formal consultation pending SHPO concurrence with

Section 106 determination of effect

APPENDIX J

SECONDARY & CUMULATIVE IMPACTS TECHNICAL REPORT

SECONDARY AND CUMULATIVE EFFECTS TECHNICAL REPORT

DRAFT June 4, 2015

Tri-Cities Area Multimodal Station Study Environmental Assessment

1.0 INTRODUCTION

On behalf of the Tri-Cities Area Metropolitan Planning Organization (MPO), the Crater Planning District Commission (CPDC) is the lead State agency to prepare a study to select a location for a Tri-Cities Area Multimodal Passenger Station. The Tri-Cities Area Multimodal Station Study (Project) includes the preparation of an Environmental Assessment through the National Environmental Policy Act (NEPA). The MPO is comprised of the cities of Colonial Heights, Hopewell, and Petersburg, and portions of the counties of Chesterfield, Dinwiddie, and Prince George (Figure 1). Although a station is not under consideration in all of the above localities, each is participating in this location study. The Federal Railroad Administration (FRA) is serving as the lead Federal agency for this Project, with the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA) acting as cooperating agencies.

The Project is a component of the Southeast High Speed Rail Corridor providing multimodal intercity passenger rail service[1] to the Tri-Cities area. Multimodal passenger rail stations serve more than one mode of transportation, such as combined rail and bus service. At a multimodal station, people switch between transportation systems; they enter the station by way of rail, automobile, carpool, bus, bicycle, or on foot, then exit the station via a different mode of transportation than which they entered. Multimodal passenger rail stations support and enhance transit usage by facilitating transfers between modes; they increase transportation options by taking advantage of travel efficiencies; they create a destination and gateway to a region; and they support economic and urban development by providing additional, alternative modes of access to an area.

The primary Project purpose is to identify a Tri-Cities multimodal intercity passenger rail station that best meets the needs of the current intercity passenger rail service through Petersburg, including the relatively new service to Norfolk, and prepares for the future introduction of high speed rail service on the SEHSR corridor to Norfolk and North Carolina. The existing Petersburg Station in Ettrick supports the current Amtrak passenger rail service; however, additional investment is required to attract and accommodate increased ridership, improve accessibility to the local and regional transportation network, improve ADA accessibility, and provide capacity to support future high speed rail service.

The multiple purposes of this project are to:

- Fully define the Tri-Cities area passenger rail market;
- Establish local and regional station needs in light of existing and future passenger rail demands;

[1] The Federal Railroad Administration (FRA) defines Intercity Passenger Rail service as "a group of one or more scheduled trains (roundtrips) that provide Intercity Passenger Rail transportation between bona fide travel markets (not constrained by State or jurisdictional boundaries), generally with similar quality and level-of-service specifications, within a common (but not necessarily exclusive or identical) set of identifiable geographic markets." Intercity Passenger Rail is not the same as Commuter Rail. Commuter rail is defined as "shorthaul rail passenger transportation in metropolitan and suburban areas usually having reduced fare, multiple ride, and commuter tickets and morning and evening peak period operations" (49 U.S.C. 24102(3)); Federal funding for commuter rail projects is available from Federal Transit Administration (FTA) programs, whereas Federal funding for Intercity Passenger Rail is available from FRA. FRA Docket No. FRA-2009-0045. *High-Speed Intercity Passenger Rail (HISPR) Program*. 2006. Page 14.

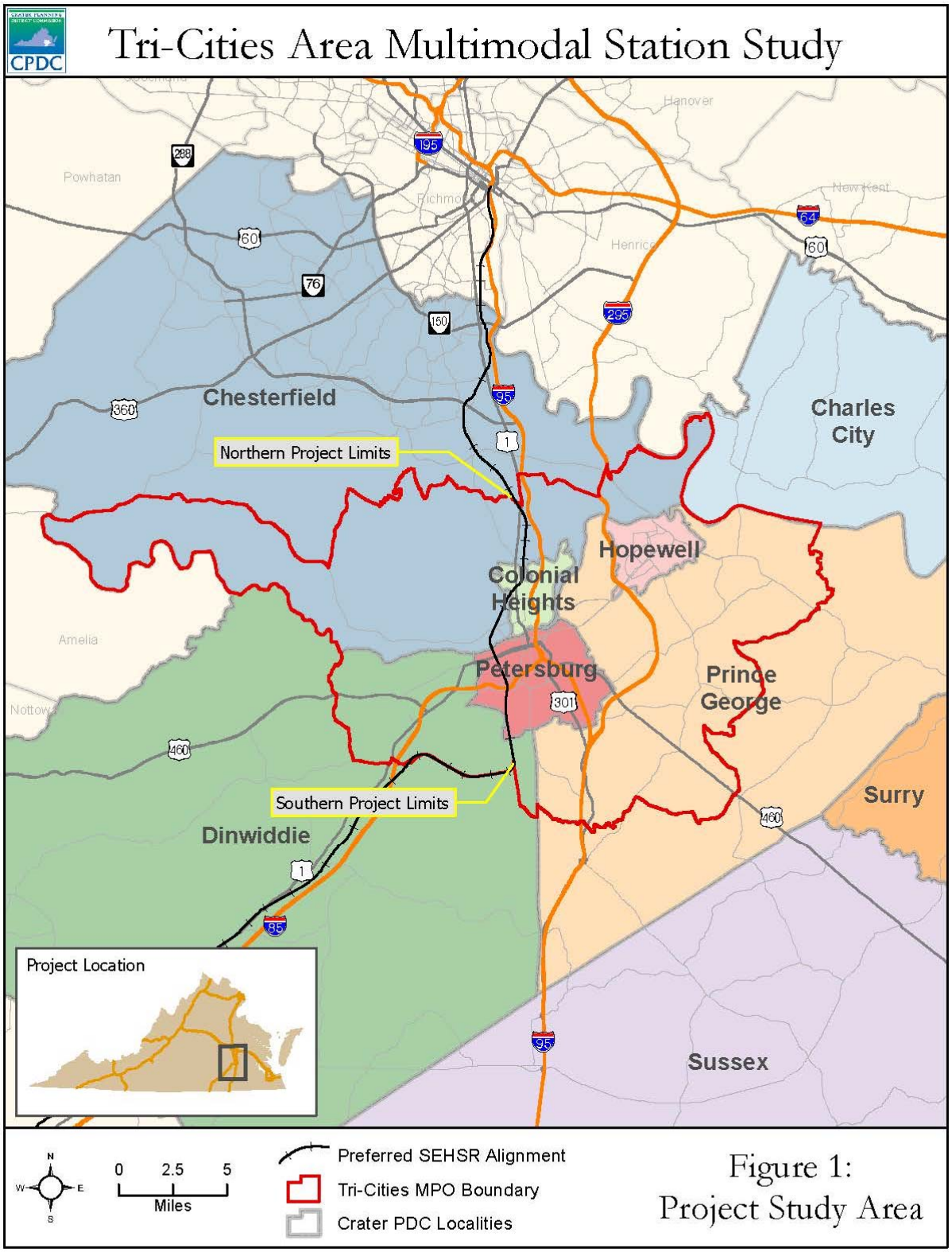


Figure 1: Project Study Area

- Identify state and national transportation goals as they relate to passenger rail service in the Tri-Cities area;
- Identify a station location that supports the SEHSR goal of diverting trips from air and highway within the travel corridor to passenger rail use, thus reducing the growth rate of congestion on I-95[2];
- Identify a station location that serves both long-distance business and leisure travelers within and beyond Virginia, including Amtrak's Northeast Corridor, which extends from Washington, DC, to Boston, MA, as well as points south (the SEHSR project serves as the key link for these travelers to the busy Northeast)[3] and east to the Norfolk and Hampton Roads area; and
- Conduct a comparative analysis of potential station locations that would best serve the Tri-Cities area passenger rail market. Any multimodal station site must address local and regional needs, as well as the station location's interface with state and national transportation goals[4].

The Tri-Cities MPO, in conjunction with input from FRA, will be instrumental in the selection and application of the criteria and measures of effectiveness used to evaluate existing and proposed station location alternatives for this study.

1.1 PRELIMINARY SCREENING OF ALTERNATIVES

The first step for alternatives evaluation was a preliminary screening evaluating the entire rail corridor within the study area. It identified all possible areas with the appropriate track geometry and available land area to accommodate a rail platform and station. The preliminary screening was a two-step process, resulting in 14 preliminary station locations. The first step identified seven scoping areas of various lengths. These scoping areas are shown in Figure 2. The second step included a desktop review of aerial photography and parcel mapping, resulting in the identification of 14 preliminary station locations. These 14 stations, also shown in Figure 2, were further evaluated. Four conceptual station locations were identified for detailed study in the EA.

1.2 ALTERNATIVES ADVANCED FOR FURTHER STUDY

These four conceptual station locations are: Boulevard, Branders Bridge, Ettrick, and Collier South (Figures 3 – 6, respectively). In addition, the No-Build Alternative will also be given equal consideration and evaluation in the EA. The No-Build Alternative consists of maintaining the existing Petersburg Amtrak station in Ettrick. The EA provides details on the screening process, development of alternatives, and descriptions of station amenities.

[2] Federal Railroad Administration, North Carolina Department of Transportation and Virginia Department of Rail & Public Transportation. Southeast High Speed Rail – Richmond, VA to Raleigh, NC. Tier II Draft Environmental Impact Statement and Section 4(f) Evaluation. May 2010. Accessed on 10/29/14 at http://www.sehsr.org/deis/sehsr_deis_download_files/title_pg.pdf. Page 1-10.

[3] Ibid. Page 1-10.

[4] Ibid. Page 1-10.

Figure 1: Scoping Areas and Preliminary Station Locations

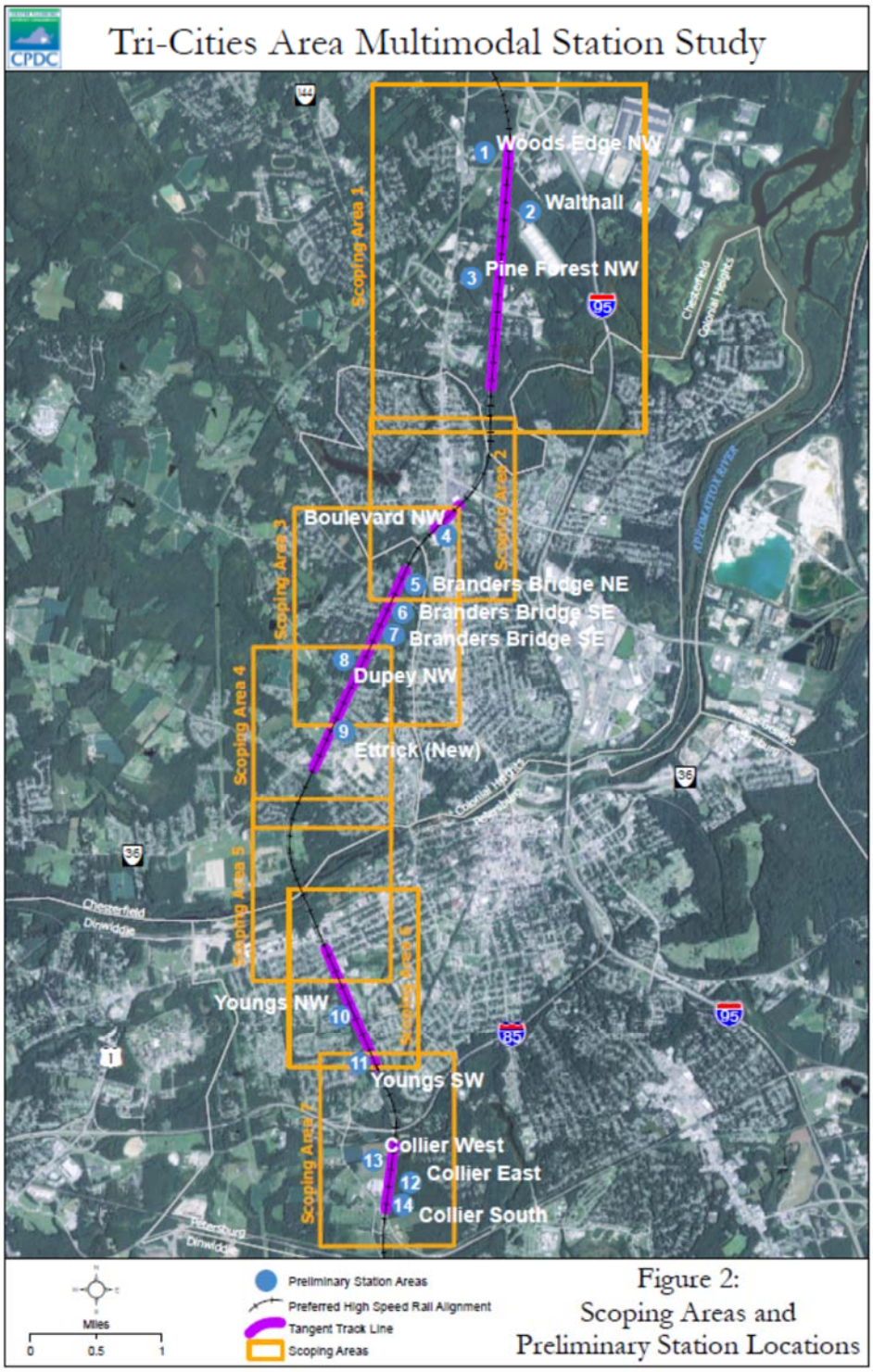


Figure 3: Boulevard Station Concept

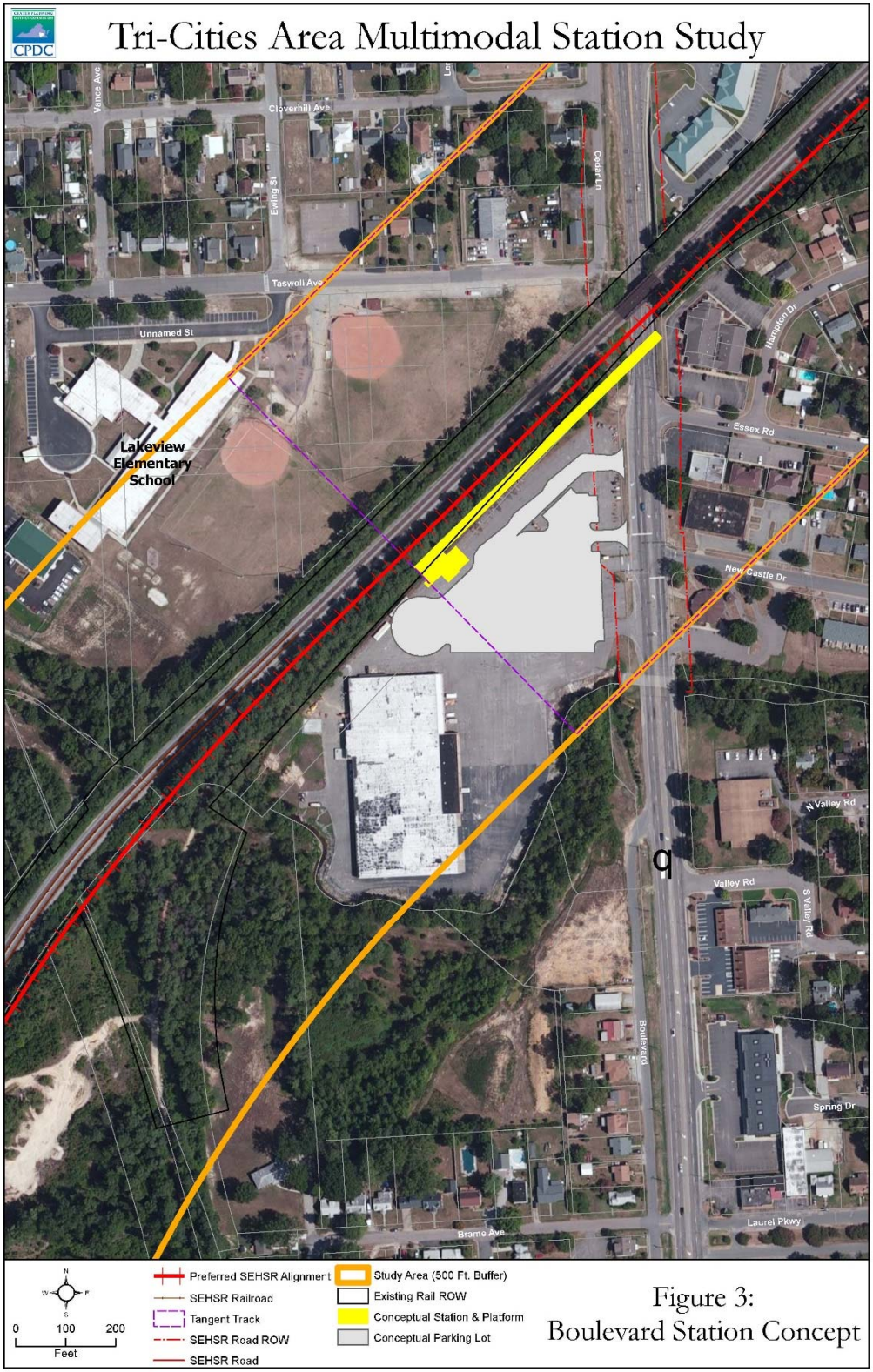


Figure 4: Branders Bridge Station Concept

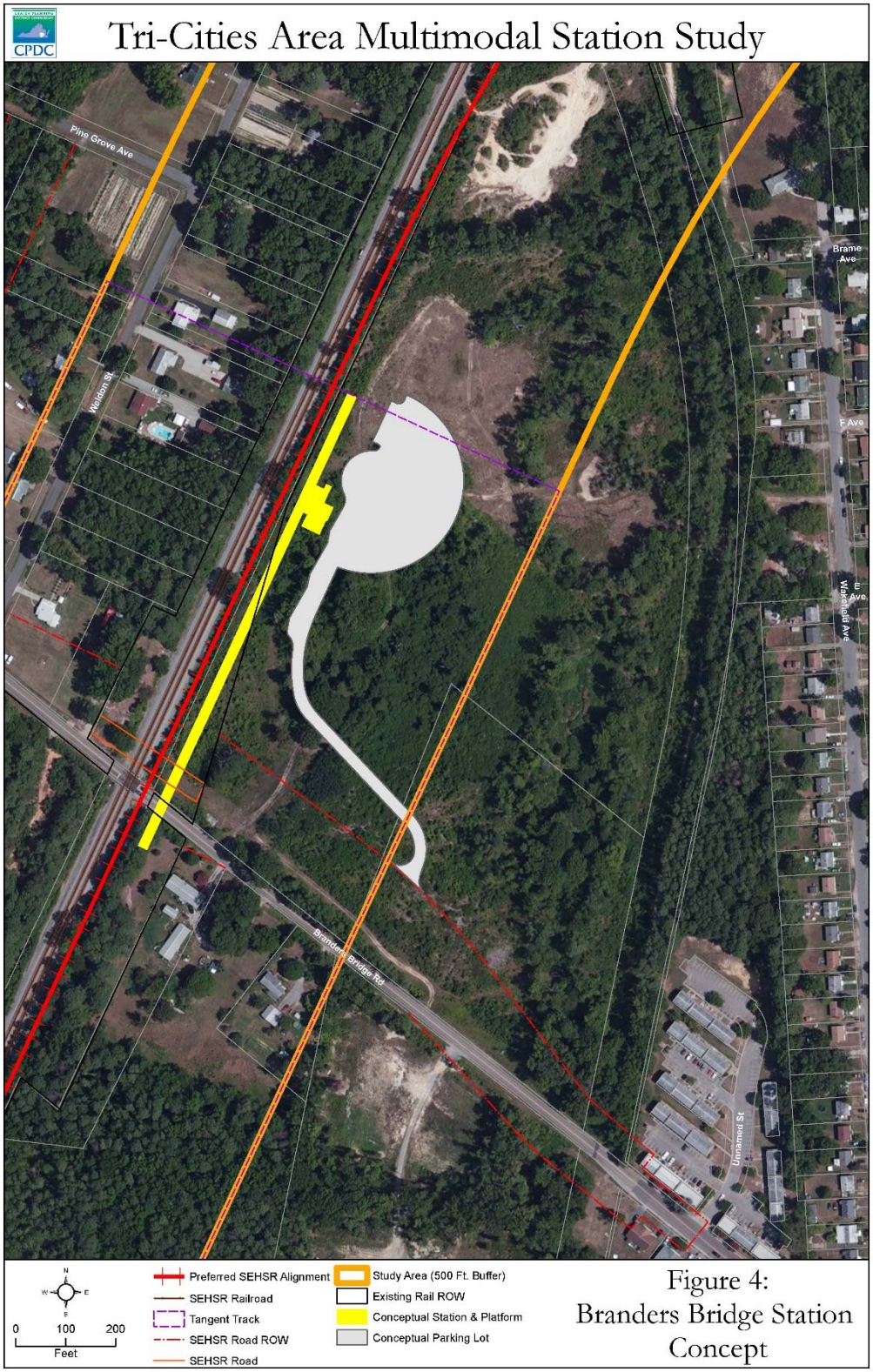


Figure 5: Ettrick Station Concept

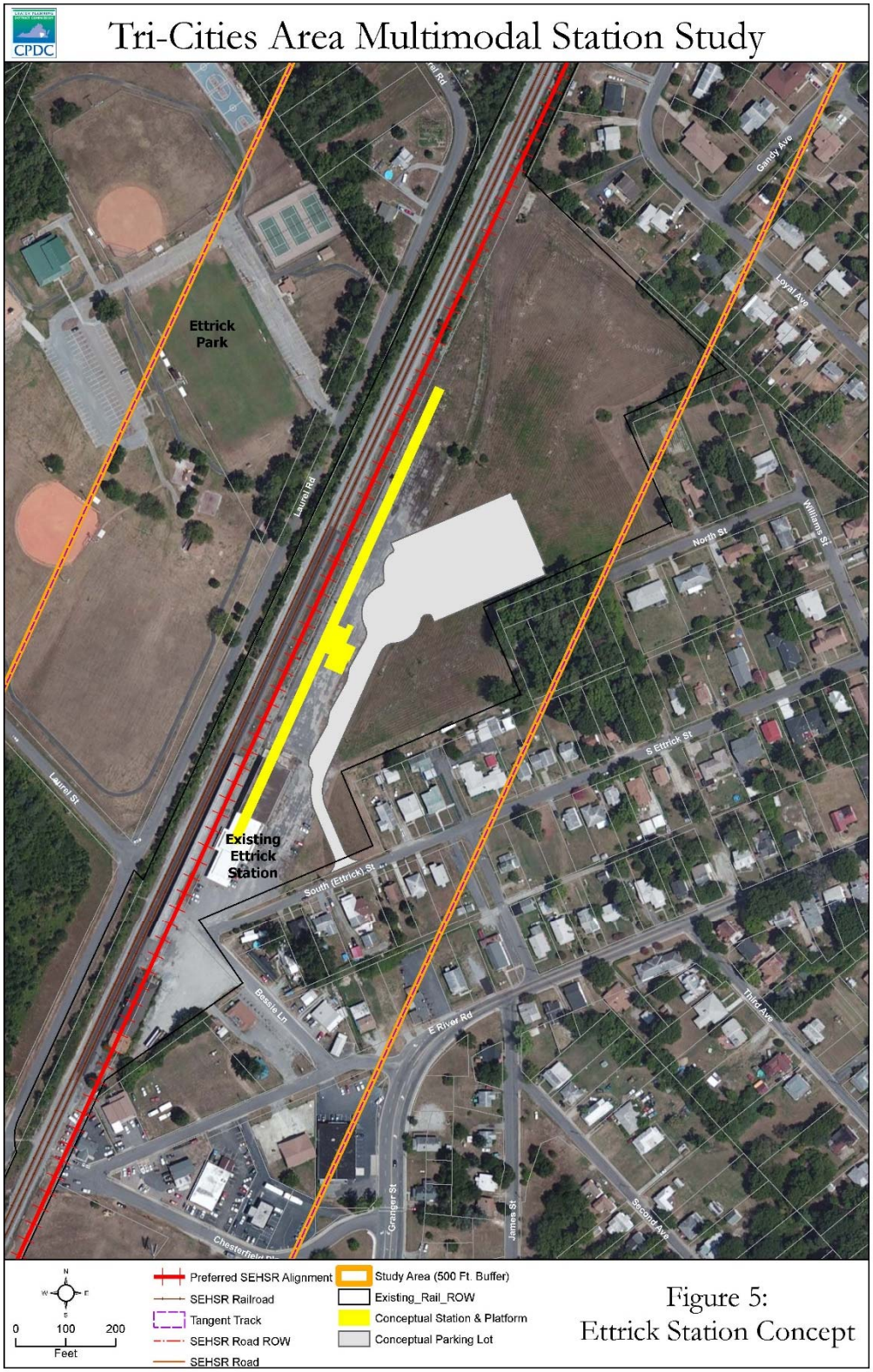
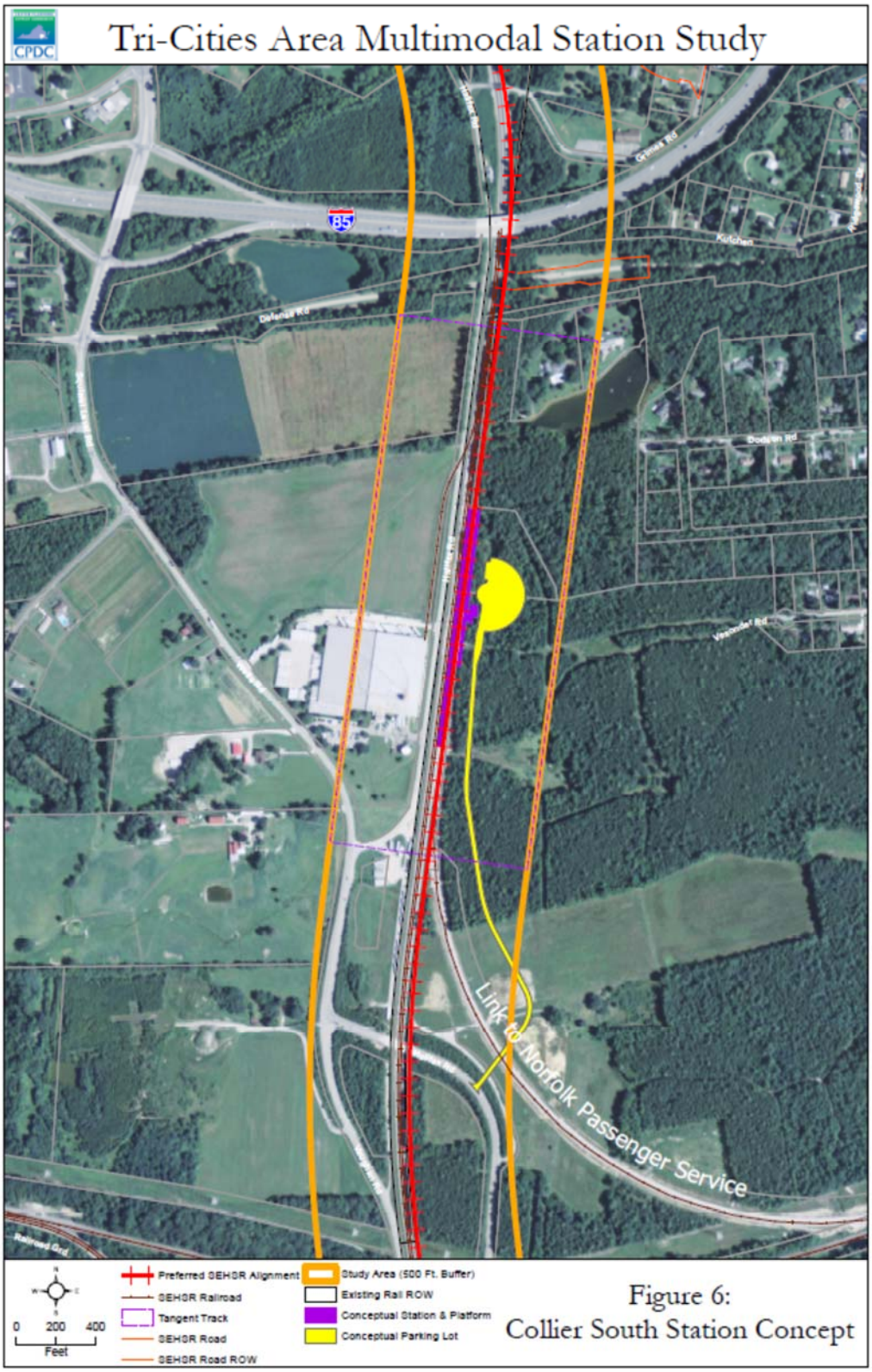


Figure 6: Collier South Station Concept



2.0 SECONDARY AND CUMULATIVE EFFECTS BACKGROUND INFORMATION

Following the identification of important cause-and-effect relationships, the Council on Environmental Quality (CEQ) guidance recommends discussion of the magnitude and significance of cumulative effects. The following discussion summarizes the anticipated secondary and cumulative effects of past and reasonably foreseeable future actions that could cause land use changes within the Future Land Use Study Area (FLUSA). Based on the current state of development of the FLUSA, a qualitative assessment was conducted to determine if a more robust qualitative analysis was needed. The following process was used for this analysis:

Step 1: Definition of the FLUSAs (assumed to be within a half-mile radius of each site)

Step 2: Identification of the FLUSA's Direction and Goals

Step 3: Inventory of Notable Features

Step 4: Identification of Important Impact-Causing Activities

Step 5: Identification and Analysis of Potential Secondary/Cumulative Effects

Step 6: Analyze Secondary/Cumulative Effects

Step 7: Evaluate Analysis Results

Step 8: Assess the Consequences and Develop Appropriate Mitigation and Enhancement Strategies.

The following discussion takes each potential station through this eight-step review and summarizes potential secondary and cumulative effects.

2.1 BOULEVARD SITE

Step 1 (FLUSA Development). Current land use within one-half mile of the Boulevard site consists of mixed commercial, residential, and educational uses (see Figure 3).

Step 2 (FLUSA Goals). According to the Colonial Heights Comprehensive Plan (2015), "The Boulevard (U.S. Route 1/301) provides goods and services for City residents and surrounding communities." Based on the zoning for Colonial Heights, the Boulevard site is in The Valley District Sub-Area of the Boulevard Design Overlay District. The development of a train station is consistent with land use goals in this area. It should be noted that area zoning requires that all new development construct five-foot-wide Virginia Department of Transportation (VDOT) standard sidewalks within the Boulevard right-of-way (ROW) and install street trees. In addition, Colonial Heights requires redevelopment to conform to applicable erosion, sediment control, and stormwater management criteria.

Efforts are underway to improve traffic flow along Boulevard south of the proposed site. The Boulevard Modernization Project has several phases:

- Westover Avenue to Windsor Avenue (scheduled completion May 2015)
- Windsor Avenue to Pickwick Avenue (scheduled completion May 2015)
- Boulevard and Dupuy Avenue (scheduled completion May 2015).

The Boulevard Modernization Project will add sidewalks and center turn lanes and is designed to improve transportation, safety, and mobility. This project will improve the function of Boulevard and may provide cumulative transportation benefits to the Boulevard site.

Step 3 (Notable Features). Notable features in the area include Boulevard (U.S. 1), the railroad overpass north of the proposed station, the ADEC Center, an underutilized former retail facility on the parcel in which the proposed station would be located, Oldtown Creek to the south of the proposed station, Lakeview Elementary School and recreational fields, Colonial Square Shopping Center, single-building commercial development south of the site, and residential development.

Step 4 (Impact Causing Activities). Secondary impacts would include additional commercial development to support the new station. The Richmond to Raleigh SEHSR Project will modify the existing bridge over Boulevard. This station may have potential for secondary growth given the surrounding, busy commercial/commuter corridor and the stated goal of Colonial Heights to emphasize commercial land use in the area. Limited developable land is available; however, some of the commercial properties in the FLUSA appear to be underused and provide opportunities for commercial redevelopment. The floodplain of Oldtown Creek limits land use development potential. Colonial Heights constraints on redevelopment would potentially increase pervious cover in currently developed but underutilized commercial parcels; however, any conversion of residential properties to higher-density housing will increase in impervious cover in those parcels.

Step 5 (Potential Secondary and Cumulative Effects). The FLUSA is easily accessible from Boulevard (U.S. 1), which could encourage use of the facility, as well as limited secondary development effects. North of the project site, the Lakeview Avenue improvements will add lanes and sidewalks to the facility, potentially encouraging residential development; however parcels on Lakeview Avenue in the FLUSA have achieved residential build out. Additional funds have been dedicated for water and sewer line relocations on Lakeview Avenue.

Secondary and cumulative development in the area is likely regardless of whether the Boulevard site is chosen. The current and reasonably foreseeable future projects will encourage commercial redevelopment and may potentially increase residential housing density. Increased development can lead to increased impervious surface, which can increase runoff and contaminant loads in area streams.

Step 6 (Analysis of Secondary and Cumulative Effects). The Colonial Heights Zoning Ordinance requires stormwater and nonpoint source pollution control for redevelopment, limiting the overall secondary and cumulative effects of the project. Secondary or cumulative effects may impact the historic trolley ROW to the west of Boulevard, if owners of commercial properties plant roadside trees as part of their redevelopment efforts. Redevelopment activities in the FLUSA have the potential to raise property values, which could have impacts to homeowners and renters in the FLUSA. However, these impacts are anticipated to be localized to the immediate station area.

Step 7 (Evaluate Analysis Results). The lack of developable land in the FLUSA and regulations on development and redevelopment in Colonial Heights will limit the overall secondary and cumulative effects of the project on water quality. Significant secondary or cumulative effects are not anticipated on other natural resources, and cultural resource impacts should be minimal. The project is anticipated to

have potentially positive secondary and cumulative economic effects. Based on this analysis, a station at this site is not anticipated to have substantial secondary and cumulative effects.

Step 8 (Mitigation/Enhancement Strategies). Station development at the Boulevard site is consistent with current plans for the FLUSA. Redevelopment regulations in the current Colonial Heights Zoning Ordinance will mitigate potential secondary and cumulative effects within the Boulevard site FLUSA. Oldtown Creek is on the Virginia 303(d) list of impaired waters; however, no information on a Total Maximum Daily Load (TMDL) was available. If a TMDL is developed, it would further serve to limit potential secondary and cumulative effects to water quality. Rent control or other options could be used to limit any secondary or cumulative effects to availability of rental housing. Note that this potential mitigation discussion provides only recommendations, not commitments. Some items may be beyond the jurisdiction of FRA or the Crater PDC.

2.2 BRANDERS BRIDGE SITE

Step 1 (FLUSA Development). Current land use within one-half mile of the Branders Bridge site consists of residential and agricultural uses (see Figure 4).

Step 2 (FLUSA Goals). Zoning in the FLUSA is listed by Chesterfield County as single-family residential (R-7 and R-9), and agricultural (A). The Boulevard Modernization Project, located southeast of this station, is designed to improve mobility through the Boulevard commercial corridor.

Step 3 (Notable Features). Notable features in the area include the existing railroad line, an at-grade rail crossing, rural residential development including homes with gardens or managed fields, a neighborhood park on Wakefield Avenue, and Oldtown Creek to the northwest of the site. The Richmond to Raleigh SEHSR project proposes to replace the at-grade rail crossing with a grade-separated crossing that will take Branders Bridge Road over the CSX railroad. This will create a prominent visual feature.

Step 4 (Impact Causing Activities). Activities that may cause secondary and cumulative effects would include commercial development or residential development spurred by construction of the proposed station and reasonably foreseeable future development from other sources. The Richmond to Raleigh SEHSR project will require road modifications on Branders Bridge Road, Maurer Road, and Pine Grove Avenue. Current zoning would support increased residential development. If zoning were changed, it is possible that the development of a station at Branders Bridge could encourage minimal commercial development (e.g., convenience store or similar facility).

Step 5 (Potential Secondary and Cumulative Effects). Although the site is relatively accessible from Boulevard (U.S. 1), the area currently lacks commercial destinations. Current zoning would support increased residential development, and there is the potential for minimal commercial development; such development has the potential to increase impervious surface in the watershed. The 2015 Colonial Heights Capital Improvement Program has funded the construction of a right turn lane for Branders Bridge Road at Boulevard. This will potentially improve mobility for the Branders Bridge Station.

Step 6 (Analysis of Secondary and Cumulative Effects). Current zoning does not support additional commercial development or an increased density of residential development in the Branders Bridge FLUSA. Although zoning can be amended, it is unlikely that the station, in isolation of other origin/destinations, would attract significant commercial development or higher-density residential

development. An increase in traffic is likely along Branders Bridge Road to support use of the station.

Step 7 (Evaluate Analysis Results). Development regulations in Chesterfield County will limit the potential secondary and cumulative effects on natural resources. Given the lack of origin/destinations in the FLUSA, development of a station at the Branders Bridge site is not anticipated to induce substantial secondary and cumulative impacts.

Step 8 (Mitigation/Enhancement Strategies). Station development at the Branders Bridge site is not consistent with current plans for the FLUSA. Current Chesterfield County zoning regulations would limit secondary and cumulative effects to natural resources. Sidewalks or trails could be developed to improve pedestrian access to the station. Note that the potential mitigation discussion provides only recommendations, not commitments. Some items may be beyond the jurisdiction of FRA or the Crater PDC.

2.3 ETTRICK SITE

Step 1 (FLUSA Development). Current land use within one-half mile of the Ettrick site includes the existing Amtrak station in a mixed-use, urban setting near Virginia State University (see Figure 5). Current land use at Ettrick consists of light industrial, commercial, residential, and agricultural uses.

Step 2 (FLUSA Goals). In April 2015, Chesterfield County amended its Comprehensive Plan by adopting the Ettrick VSU Special Area Plan.[5] The plan notes the anticipated growth of Virginia State University (student body of 10,000 by 2020) and the development of a multi-use center (8,000 seats and 1,500 new parking places) currently under construction. The plan also proposes to enhance the Ettrick Station area and increase the integration of the Ettrick community and the university. The plan includes construction of a hotel and a dormitory (Simms Hall), relocation of a fire station and elementary school, and revising infrastructure to improve traffic flow. These plans are consistent with the existing station at the Ettrick site, as well as the development of a new railroad station at this site.

Step 3 (Notable Features). Notable features in the area include Virginia State University, the multi-use center (currently under construction); Rogers Stadium; Ettrick Park; Ettrick Station; Ettrick Elementary School; three religious institutions; residential development along North Street, South Street, and Loyal Avenue; and Fleets Branch.

Step 4 (Impact Causing Activities). The station is not easily accessed from surrounding highways and requires multiple turns to access from Boulevard (U.S. 1). Several projects currently underway have the potential to cause cumulative effects, including the new multi-use facility and transportation improvements. These improvements will add to the existing origin/destination network and improve station accessibility. The Richmond to Raleigh SEHSR project will cause limited change in this area.

The Boulevard Modernization Project and improvements of Dupuy Avenue from Chesterfield Avenue/Boulevard to the western city limits (west of Meridian Avenue), will improve mobility from Ettrick Station to Boulevard. In addition, the Colonial Heights Capital Improvement Plan has dedicated funds to improving the storm drain system along Dupuy Avenue from Boulevard to the west of Meridian

[5] Chesterfield County. *Ettrick VSU Special Area Plan.* "Section 5: Infrastructure." Adopted by the Chesterfield County Board of Supervisors on April 15, 2015.

Avenue. The city also upgraded and replaced water and sanitary sewer utilities on Dupuy Avenue from Boulevard through Battery Place. Construction of a new train station could spur redevelopment of currently underutilized commercial properties, as well as higher-density residential redevelopment and conversion of nearby agricultural land to residential use.

Step 5 (Potential Secondary and Cumulative Effects). The anticipated secondary effects associated with developing the Ettrick site, combined with the cumulative effects of new facilities and infrastructure improvements, have the potential to cause increases in impervious surface, reduction of wildlife habitat and increased habitat fragmentation, and increases in property values. Increased impervious surfaces could increase contaminant loads to streams in the FLUSA. Increased property values have the potential to impact those who own or rent residential or commercial property.

Step 6 (Analysis of Secondary and Cumulative Effects). Although several factors would encourage secondary and cumulative effects, some current projects could serve to limit negative effects. Water and sewer upgrades on Dupuy Avenue replaced deficient subsurface infrastructure, reducing future utility costs and the possibility of infrastructure failures. Chesterfield County zoning has stormwater management protocols in place, which would limit water quality impacts associated with development. Property value increases would be seen as a positive effect, given that many of the current commercial parcels appear to be underutilized.

Step 7 (Evaluate Analysis Results). The project is not anticipated to have significant secondary or cumulative effects on other natural resources or cultural resources. The project is anticipated to have potentially positive secondary and cumulative economic effects. Based on this analysis, a station at this site is not anticipated to have substantial secondary and cumulative effects.

Step 8 (Mitigation/Enhancement Strategies). Chesterfield County has proactively implemented water and sewer improvements, which would assist in mitigating potential secondary and cumulative effects to water quality. Additional water and sewer connections could be offered in areas of new development. If growth encourages development of any land currently in farm use, rezoning should be protective of water quality and other potential indirect and cumulative effects to water quality. Note that the potential mitigation discussion provides only recommendations, not commitments. Some items may be beyond the jurisdiction of FRA or the Crater PDC.

2.4 COLLIER SOUTH SITE

Step 1 (FLUSA Development). Current land use within one-half mile of the Collier South site consists of mixed residential, agricultural, and industrial uses (see Figure 6).

Step 2 (FLUSA Goals). Based on the City of Petersburg Comprehensive Plan, future land use in the corridor includes industrial uses to the west side of the CSX railroad ROW adjacent to the proposed station, medium- to high-density neighborhoods in the proposed station area, and mixed commercial use south of the station site and north of Halifax Road. The proposed station would be compatible with this vision.

Step 3 (Notable Features). Notable features include Defense Road/Dimmock Line Earthworks (approximately 1,000 feet north of the proposed station), the paper production facility (International Paper) and railroad crossing, agricultural fields, early successional forests, and a pond to the northeast of

the proposed station.

Step 4 (Impact Causing Activities). Secondary and cumulative effects associated with this project could include conversion of land from agricultural to residential and commercial uses. The recent construction of the Norfolk railroad connection and the Richmond to Raleigh SEHSR improvements will add impervious surface to the area. The FLUSA currently lacks suitable origins/destinations that might be supportive of secondary commercial development.

Step 5 (Potential Secondary and Cumulative Effects). The site is easily accessible from I-85, which could encourage its use. Conversion of any wooded or agricultural land would add to the cumulative loss of such features in the FLUSA. Changes in the site's hydrological regime could result in a cumulative increase in runoff and pollution to surface waters in the FLUSA.

Step 6 (Analysis of Secondary and Cumulative Effects). The lack of nearby commercial development would be a major limitation on potential development, as passengers arriving/departing from the proposed station would be more likely to conduct any commercial activity before reaching the facility. The Squirrel Level Road exit off I-85 has one convenience store/gas station north of the exit, and a similar facility is located at the northern terminus of Halifax Road. These facilities lack the proximity to support pedestrian use, but are sufficiently close to potentially limit the attractiveness of the station area for commercial development. It is unlikely that secondary and reasonably foreseeable future projects would impact water quality.

Step 7 (Evaluate Analysis Results). Development regulations in the City of Petersburg will limit the potential secondary and cumulative effects on water quality. Given the lack of origins/destinations in the FLUSA, it is not anticipated that development of a station at the Collier South site would lead to substantial secondary and cumulative impacts to the local economy or natural resources.

Step 8 (Mitigation/Enhancement Strategies). Current City of Petersburg zoning regulations would limit secondary and cumulative effects to water quality if development took place. Sidewalks or trails could be developed to improve pedestrian access to the station. Note that the potential mitigation discussion provides only recommendations, not commitments. Some items may be beyond the jurisdiction of FRA or the Crater PDC.

3.0 CONCLUSIONS

The potential for secondary and cumulative effects vary for the proposed station sites; however, none of the sites is anticipated to have substantial secondary and cumulative effects. The Boulevard and Ettrick sites are most likely to have positive economic effects. Development at the Branders Bridge site is not consistent with current and planned land use in the area, and the lack of commercial development would limit the positive secondary and cumulative effects of constructing an improved railroad station. Development of the Collier South site is encouraged by the City of Petersburg; however, the lack of current commercial development or other origins/destinations would limit the potential for positive economic effects.

4.0 REFERENCES

Chesterfield County, Virginia, 2012. Moving Forward…The Comprehensive Plan for Chesterfield

County, Virginia. Adopted October 2012.

-- 2014. Chesterfield County Virginia Zoning Ordinance. Revised September 2014.

-- 2015a. Chesterfield County, Virginia Annual Financial Plan, FY 2015. Capital Improvement Program, FY 2015-FY2019.

--2015b. Chesterfield County, Virginia Zoning Map. Revised February 2015.

Colonial Heights, Virginia, 2014b. City of Colonial Heights, VA Comprehensive Plan, June 2014 draft.

-- 2014b. City of Colonial Heights, VA Zoning Ordinance. Revised August 2014.

-- 2015. City of Colonial Heights Proposed 2015 Five-Year Capital Improvement Program Capital Projects. March 2015.

Petersburg Virginia, 2011. City of Petersburg, Virginia: Comprehensive Plan, 2011. October, 2011.

-- 2014. City of Petersburg Zoning Ordinance, Revised September 2014.

Urban Land Institute, 2013. Technical Assistance Panel: The Revitalization of Ettrick Village at Virginia State University. February 2013.

Virginia Department of Water Quality. Impaired Waters Map, James River Basin (Lower). Updated July 2014.

5.0 PREPARERS

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Project Manager
Michael Baker Engineering, Inc.

Bill Rice, REA, CEI
25 years' experience
Cary NC Planning Group Leader
Michael Baker Engineering, Inc.

APPENDIX K

AGENCY & PUBLIC CORRESPONDENCE

APPENDIX K-1

Scoping Package and Responses

Michael Baker
INTERNATIONAL

Subject:	Draft – Summary of Scoping Responses, as of 12-03-14
From:	Susan Manes, Assistant Project Manager
To:	Study Working Group
Date:	12/03/14
Sponsor:	Crater Planning District Commission (CPDC): Joseph Vinsh, Director of Transportation with FRA as Lead Agency
Location:	Tri-Cities Area –Counties of Chesterfield and Dinwiddie and Cities of Colonial Heights and Petersburg, Virginia

In accordance with the requirements of NEPA, scoping letters were distributed to approximately 133 individuals, agencies, and organizations. A project-specific e-mail address was created by Baker staff for the distribution of these scoping letters and for future mailings (TriCitiesStationStudy@mbakerintl.com). All but four were distributed electronically via e-mail. Lacking e-mail addresses, the remaining four were distributed via the U.S. Postal Service. Of the four letters mailed, two were returned as "undeliverable" (Ettrick Historical Society and Federal Correctional Complex). The scoping letter package and the list of recipients are included at the end of this summary.

As of December 3, 2014, the following individuals, agencies, and organizations responded to the scoping letter and request for input. Copies of these responses are included at the end of this summary. The table that follows provides a summary of the comments received and action required, if any.

Scoping Comments as of 12/03/14

Name	Date	Comments	Action Required
DHR Roger Kirchen, Director Review Compliance Div.	11/04/14	• Identified Andrea Kampinen as Virginia SHPO representative	• Contact with Ms. Kampinen is underway
DEQ Ellie Irons, Program Mgr Office Env Impact Review	11/07/14	• Federal consistency under Coastal Zone Mgmt Act & Virginia Coastal Zone Mgmt Program • Provided list of databases for additional info	• Compliance with regs • Submit Federal Consistency Certification (FCC) to DEQ (beyond scope of this study) • Submit 19 copies of EA (3 printed & 16 CDs) & downloadable site via eFTP to Ellie Irons
DEQ Valerie Fulcher, Sr Executive Secretary Office Env Impact Review	11/07/14	• Distributed scoping letter to sister agencies (DEQ, DGIF, VMRC, VDH, VDHR, VDOF, VDRPT, VDOT) for their input	• Respond as necessary upon receipt of scoping comments
FWS Troy Anderson	11/14/14	• Directed us to the FWS online project review system	• Complete the FWS online project review
DEQ Piedmont Regional Office Mark Alling, Water Monitoring & Planning Mgr	11/25/14	• Guidance on Water, Waste, & Air during construction process	• Commit to following standard procedures for E&S, BMPs, HazMat regulations, and Air Quality standards
VMRC Mark Eversole Env. Engineer	11/25/14	• Permit may be required by VMRC if project encroaches in, on, or over State-owned submerged lands	• VMRC Permit required for such encroachments over non-tidal streams with a contributing drainage area greater than 5 square miles or with an average instream flow of at least 5 cfs.

CRATER PLANNING DISTRICT COMMISSION

Monument Professional Building • 1964 Wakefield Street • Post Office Box 1808 • Petersburg, Virginia 23805
PHONE: (804) 861-1666 • FAX: (804) 732-8972 • E-MAIL: info@craterpdc.org • WEBSITE: www.craterpdc.org
Dennis K. Morris, Executive Director

October 31, 2014

RE: Tri-Cities Area Multimodal Passenger Station Study
From: The northernmost limits of the Tri-Cities Area MPO, adjacent to the CSX A-line
To: The southernmost limits of the Tri-Cities Area MPO, adjacent to the CSX A-line

To Whom It May Concern:

On behalf of the Tri-Cities Area Metropolitan Planning Organization (MPO), the Crater Planning District Commission (CPDC) is performing a National Environmental Policy Act (NEPA) study to select a location for a Tri-Cities Area Multimodal Passenger Station. The MPO is comprised of the cities of Petersburg, Colonial Heights, Hopewell, and the counties of Prince George, Dinwiddie, and Chesterfield (see Figure 1). The Federal Railroad Administration (FRA) is serving as the lead federal agency for this project, with support from the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA).

The objective of this Tri-Cities Area Multimodal Passenger Station Study is to evaluate the beneficial and adverse direct, indirect, and cumulative impacts associated with a multimodal passenger rail station in the Tri-Cities area. There are three basic options under consideration:

- The No-Build Alternative, which serves as a basis of comparison for other alternatives and remains a viable alternative throughout the study;
- The Improve Existing Station Alternative, which involves improving the existing Amtrak station in Ettrick; and
- The New Station Alternative, which involves constructing a new station at a new location to replace the existing Amtrak station in Ettrick.

As part of the New Station Alternative, this study will include the evaluation of multiple sites for a new station location. An initial evaluation of the CSX A-line within the study area was conducted to determine general areas where a new station might be possible, taking into consideration new station requirements such as acceptable degree of curvature in the rail line, horizontal and vertical grades, minimum length of straight platform, and distance to an interstate facility. Figure 2 shows the locations that might be suitable for a new station.

In accordance with the requirements of NEPA, we are seeking your input on how the proposed project might affect resources under the jurisdiction of your agency or organization. We would appreciate a response from you by **November 18, 2014**.

Any other comments you wish to make on the project are appreciated. If you need additional information, please contact me at 804-861-1666 x227) or e-mail me at jvinsh@craterpdc.org. Thank you very much for your assistance.

County of Charles City • County of Chesterfield • City of Colonial Heights • County of Dinwiddie • City of Emporia
County of Greensville • City of Hopewell • City of Petersburg • County of Prince George • County of Surry • County of Sussex

Sincerely,

Joe Vinsh

Joe Vinsh, Director of Transportation
Crater Planning District Commission

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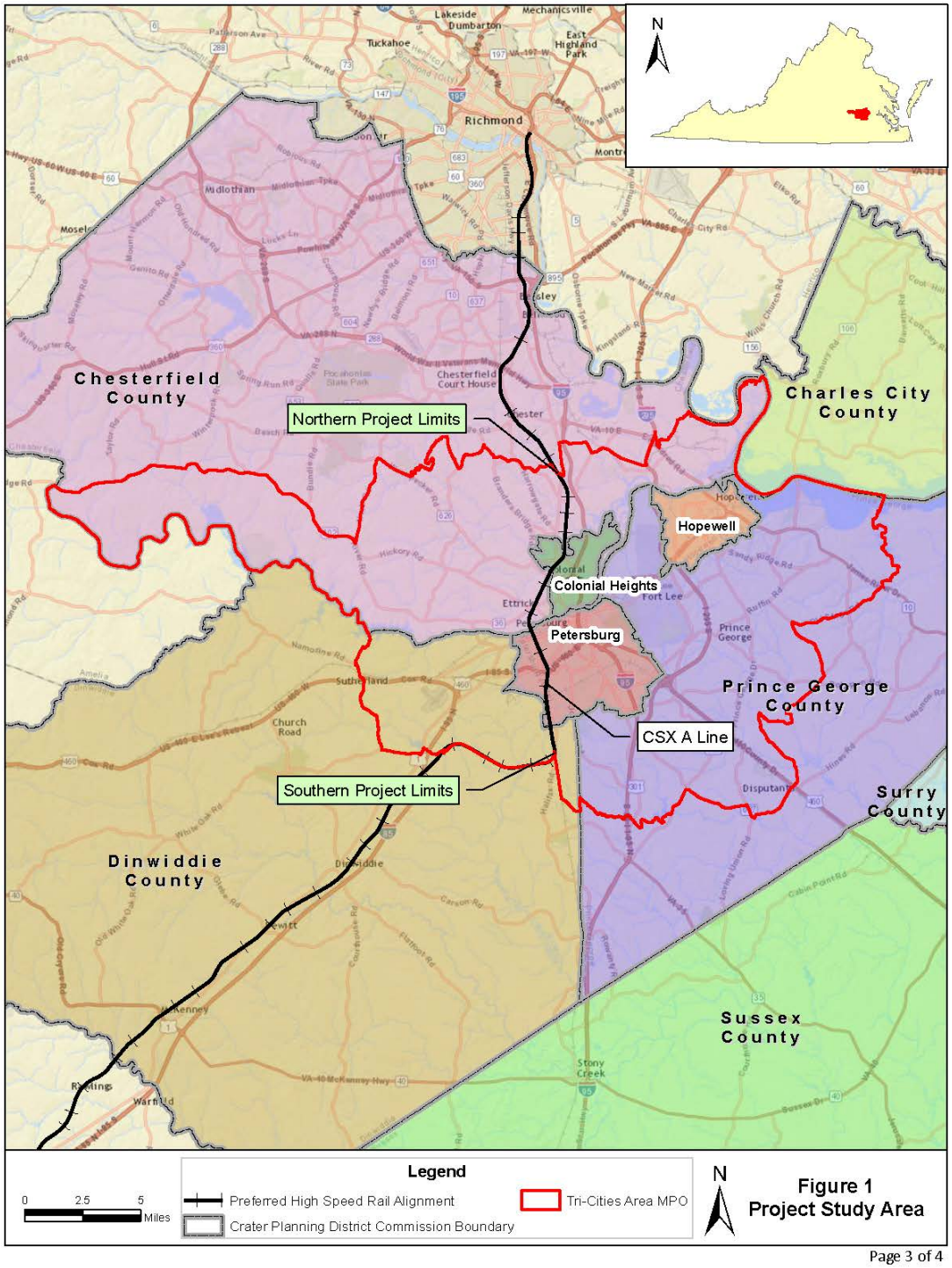

Figure 1
Project Study Area

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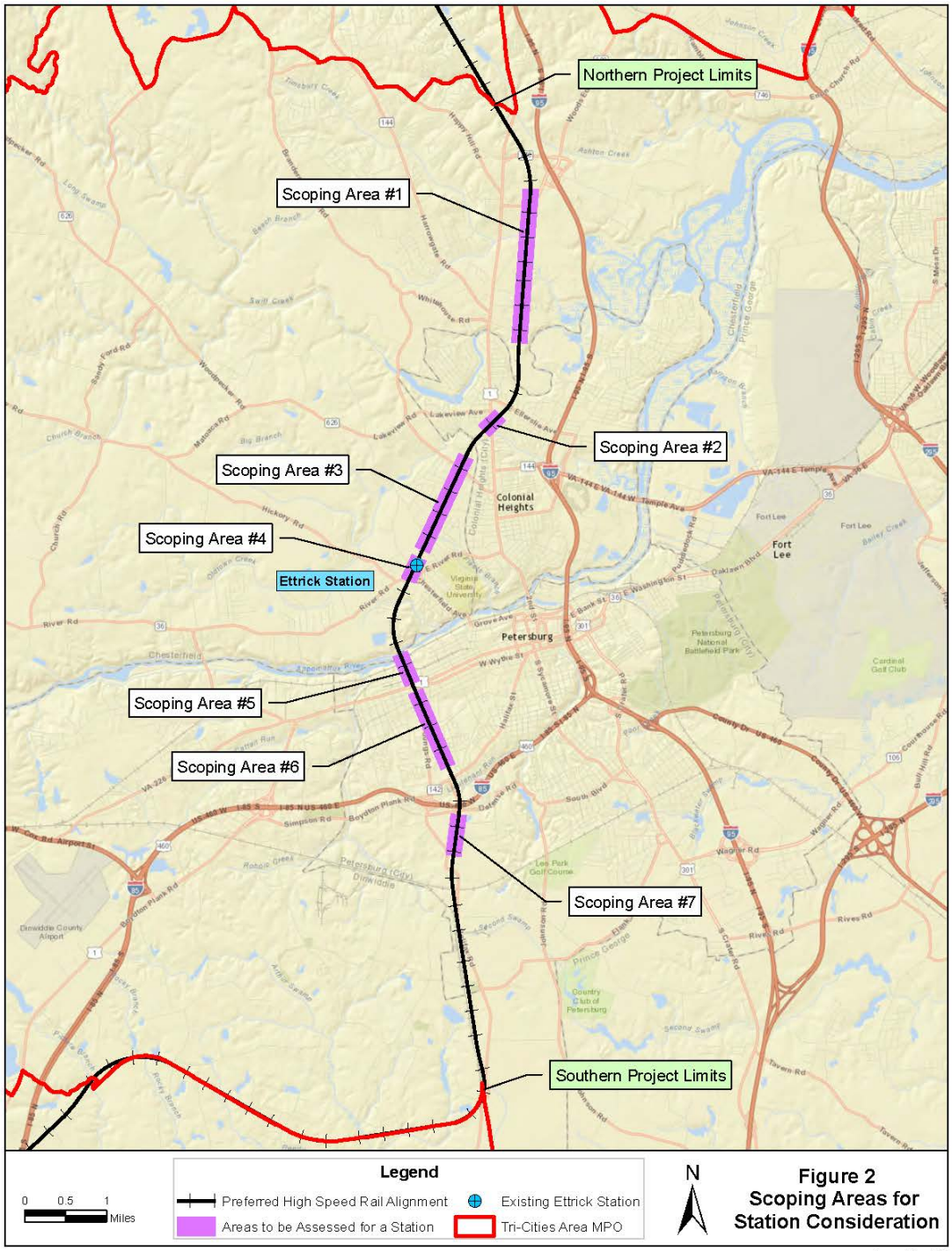

Figure 2
Scoping Areas for Station Consideration

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11/04/14

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11/04/14

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VMRC - Marine Resources Commission	Mark Eversole	Environmental Engineer - Chesterfield	
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Colonial Heights Chamber of Commerce	Roger Green	Executive Director	roger.green@colonialheightschamber.com
Hopewell-Prince George Chamber of Commerce	Becky McDonough	Executive Vice-President	becky@hpgchamber.org
Petersburg Chamber of Commerce	Danielle Fitz-Hugh	Executive Vice-President	danielle@petersburgvachamber.com
Chesterfield County Chamber of Commerce	Danna Geisler		danna@chesterfieldchamber.com
Dinwiddie County Chamber of Commerce	Tanya Hale	Director	Info@dinwiddiechamber.org
Tri-Cities Organizer	Fancy Greenwood - Terrell	Tri-Cities Community Organizer	fancy@Virginia-Organizing.org
VDHR - Department of Historic Resources	Andrea Kampinen		Andrea.Kampinen@dhr.virginia.gov

U.S. Postal Service Mail Recipients: Sent 11/17/14 with Deadline of 12/3/14

Bureau of Indian Affairs (BIA)
Mr. Franklin Keel, Regional Director
Eastern Regional Office
Bureau of Indian Affairs
545 Marriott Drive, Suite 700
Nashville, TN 37214

Ettrick Historical Society
Mary E. Anderson, President
21101 Chesterfield Avenue
South Chesterfield, VA 23803

Federal Correctional Complex, Petersburg
Robert Nannery, Safety Manager
1100 RIVER ROAD
HOPEWELL, VA 23860

Virginia Marine Resources Commission
Mr. Ben Stagg, Environmental Engineer, CPDC Area
Mr. Mark Eversole, Environmental Engineer - Chesterfield
Habitat Management Division
2600 Washington Avenue, 3rd floor
Newport News, VA 23607

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
Street address: 629 East Main Street, Richmond, Virginia 23219
Mailing address: P.O. Box 1105, Richmond, Virginia 23218
www.deq.virginia.gov

Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4000
1-800-592-5482

November 7, 2014

Mr. Joe Vinsh
Director of Transportation
Crater Planning District Commission
P.O. Box 1808
Petersburg, Virginia 23805

RE: Tri-Cities Area Multi-modal Passenger Station Study

Dear Mr. Vinsh:

This letter responds to your letter and enclosures dated October 13, 2014, which was sent to us by Susan Manes of Michael Baker International via e-mail on November 5. In that letter, you provide information on the proposed study and ask for information concerning the effect of the proposed project on the responsibilities of our agency.

The Department of Environmental Quality (DEQ) is responsible for coordinating Virginia's review of federal environmental documents prepared pursuant to the National Environmental Policy Act and responding to appropriate federal officials on behalf of the Commonwealth. DEQ is similarly responsible for coordinating Virginia's review of federal consistency determinations and certifications, and responding on behalf of the Commonwealth.

DESCRIPTION OF PROPOSED ACTION

According to your letter and its enclosures, the Crater Planning District Commission ((PDC) is performing a study to evaluate the impacts associated with a multi-modal passenger rail station in the Tri-Cities area (Petersburg, Colonial Heights, Hopewell, and the counties of Prince George, Dinwiddie, and Chesterfield). The Federal Railroad Administration is the lead agency for the project, supported by the Federal Transit Administration and the Federal Highway Administration.

Three alternatives are under consideration:

- The No-build Alternative;

- The Improve Existing Station Alternative, which would improve the existing Amtrak station in Ettrick; and
- The New Station Alternative, which would involve building a new station at a new location, to replace the existing Amtrak station at Ettrick. This alternative would involve evaluation of multiple sites for a new station location, taking into consideration new station requirements.

The study of the New Station Alternative will include evaluation of multiple sites for a new station, including consideration requirements such as acceptable degree of curvature in the rail line, horizontal and vertical grades, minimum length of straight platform, and distance to an interstate highway. (Letter, page 1.)

ENVIRONMENTAL REVIEW UNDER THE NATIONAL ENVIRONMENTAL POLICY ACT: PROJECT SCOPING AND AGENCY INVOLVEMENT

As you know, the National Environmental Policy Act (PL 91-190, 1969) (NEPA) and its implementing regulations (Title 40, *Code of Federal Regulations*, Parts 1500-1508) require draft and final Environmental Impact Statements (EISs) for federal, federally licensed, or federally funded undertakings which will or may give rise to significant impacts upon the human environment. EISs carry more stringent public participation requirements than EAs and provide more time and detail for comments and public decision-making. The possibility that an EIS may be required for any of the three alternatives should not be overlooked in your planning for these projects. Accordingly, we refer to "NEPA document" in the remainder of this letter.

While this Office does not participate in scoping efforts beyond the advice given herein, other agencies are free to provide scoping comments concerning the preparation of the NEPA document. Accordingly, we are sharing our response to the Notice with selected state and local Virginia agencies which have responsibilities bearing on the proposed projects. These agencies are likely to include the following (note: starred (*) agencies administer one or more of the enforceable policies of the Virginia Coastal Zone Management Program; see "Federal Consistency..." heading, next):

Department of Environmental Quality:
- Office of Environmental Impact Review
- Piedmont Regional Office*
- Division of Air Program Coordination*
- Division of Land Protection and Revitalization (formerly Waste Division)
- Office of Stormwater Management*

Department of Conservation and Recreation
Department of Health*
Department of Game and Inland Fisheries*
Virginia Marine Resources Commission*
Department of Historic Resources
Department of Forestry

Department of Rail and Public Transportation
Department of Transportation
Crater Planning District Commission
City of Colonial Heights
City of Hopewell
City of Petersburg
Chesterfield County
Dinwiddie County
Prince George County.

FEDERAL CONSISTENCY UNDER THE COASTAL ZONE MANAGEMENT ACT

Pursuant to the Coastal Zone Management Act of 1972, as amended, and the *Federal Consistency Regulations* (15 CFR Part 930), activities requiring a federal permit, license, or approval that can have reasonably foreseeable effects on Virginia's coastal uses or resources must be conducted in a manner which is consistent with the Virginia Coastal Zone Management Program (VCP). The VCP is comprised of a network of programs administered by several agencies.

To comply with the Coastal Zone Management Act and the VCP, the applicant must submit a federal consistency certification (FCC) to DEQ's Office of Environmental Review. The FCC must include an analysis of the activities in light of the enforceable policies of the VCP (first enclosure), and a commitment to comply with the enforceable policies. In addition, we invite the applicant's attention to the advisory policies of the VCP (second enclosure). Requirements for the contents of FCCs are found in the *Federal Consistency Regulations* (15 CFR Part 930, Sub-part D, sections 930.57 and 930.58) and also in DEQ's Federal Consistency Information Package (available on line at http://www.deq.virginia.gov/Portals/0/DEQ/EnvironmentalImpactReview/FederalConsistencyManual.7.27.11.pdf .

The *Federal Consistency Regulations* allow up to six months for review of an FCC (15 CFR Part 930, Sub-part D, section 930.62(a)).

DATABASES

Below is a list of databases that may assist you in the preparation of a NEPA document:

- DEQ Online Database: Virginia Environmental Geographic Information Systems

  Information on Permitted Solid Waste Management Facilities, Impaired Waters, Petroleum Releases, Registered Petroleum Facilities, Permitted Discharge (Virginia Pollution Discharge Elimination System Permits) Facilities, Resource Conservation and Recovery Act (RCRA) Sites, Water Monitoring Stations, National Wetlands Inventory
    - www.deq.virginia.gov/ConnectWithDEQ/VEGIS.aspx

- DEQ Virginia Coastal Geospatial and Educational Mapping System (GEMS)

  Virginia's coastal resource data and maps; coastal laws and policies; facts on coastal resource values; and direct links to collaborating agencies responsible for current data
  - http://128.172.160.131/gems2/

- DEQ Permit Expert

  Helps determine if a DEQ permit is necessary
  - www.deq.virginia.gov/permitexpert/

- DHR Data Sharing System

  Survey records in the DHR inventory
  - www.dhr.virginia.gov/archives/data_sharing_sys.htm

- DCR Natural Heritage Search

  Produces lists of resources that occur in specific counties, watersheds or physiographic regions
  - www.dcr.virginia.gov/natural_heritage/dbsearchtool.shtml

- DGIF Fish and Wildlife Information Service

  Information about Virginia's Wildlife resources
  - http://vafwis.org/fwis/

- Environmental Protection Agency (EPA) Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) Database: Superfund Information Systems

  Information on hazardous waste sites, potentially hazardous waste sites and remedial activities across the nation, including sites that are on the National Priorities List (NPL) or being considered for the NPL
  - www.epa.gov/superfund/sites/cursites/index.htm

- EPA RCRAInfo Search

  Information on hazardous waste facilities
  - www.epa.gov/enviro/facts/rcrainfo/search.html

- EPA Envirofacts Database

  EPA Environmental Information, including EPA-Regulated Facilities and Toxics Release Inventory Reports
  - www.epa.gov/enviro/index.html

- EPA NEPAssist Database

Facilitates the environmental review process and project planning http://nepaassisttool.epa.gov/nepassist/entry.aspx

DOCUMENTS SUBMISSION

In order to ensure an effective coordinated review of the environmental document, we will require at least 19 copies of it when it is published. This submission may include at least 3 printed copies and 16 CDs, or at least 3 printed copies and an electronic copy available for download at a web site or ftp site. The document should include one or more U.S. Geological Survey topographic maps as part of its information. We recommend, as well, that project details unfamiliar to people outside FRA and the applicant be adequately described in the EIS (and the FCC as well).

If you have questions about the environmental review process and/or the federal consistency review process, please feel free to contact me (telephone (804) 698-4325 or e-mail ellie.irons@deq.virginia.gov) or John Fisher of this Office (telephone (804) 698-4339 or e-mail john.fisher@deq.virginia.gov).

I hope this information is helpful to you.

Sincerely,

Ellie L. Irons, Program Manager
Environmental Impact Review

Attachments

ec: Mark Alling, DEQ-PRO
Kotur S. Narasimhan, DEQ-DAPC
G. Stephen Coe, DEQ-DLPR
Larry Gavan, DEQ-OSM
Holly Sepety, DEQ-OSM
Daniel Moore, DEQ-OSM
Roberta Rhur, DCR
Amy M. Ewing, DGIF
Tony Watkinson, VMRC
Barry E. Matthews, VDH
Roger W. Kirchen, DHR
Everett Kline, DOF
Steven Hennessee, DRPT
Alfred Ray, VDOT
Elizabeth Jordan, VDOT
Dennis Morris, Crater PDC

James J.L. Stegmaier, Chesterfield County
W. Kevin Massengill, Dinwiddie County
Jeff Stoke, Prince George County
Thomas L. Mattis, City of Colonial Heights
Mark Haley, City of Hopewell
William E. Johnson III, City of Petersburg
Susan Manes, Michael Baker International

From:	Fulcher, Valerie (DEQ)
To:	Alling, Mark (DEQ); Narasimhan, Kotur (DEQ); Coe, Stephen (DEQ); Gavan, Larry (DEQ); Sepety, Holly (DEQ); Moore, Daniel (DEQ); Rhur, Robbie (DCR); dgif-ESS Projects (DGIF); Watkinson, Tony (MRC); odwreview (VDH); Kirchen, Roger (DHR); Kline, Everette (DOF); Evans, Gregory (DOF); Hennessee, Steven (DRPT); Ray, Alfred C. (VDOT); Cromwell, James R. (VDOT); Jordan, Elizabeth (VDOT); dmorris@craterpdc.org; countyadministrator@chesterfield.gov; Massengill, kevin k w; jstoke@princegeorgeva.org; Manes, Susan; mattist@colonialheightsva.gov; mhaley@hopewellva.gov; wjohnson@petersburg-va.org
Cc:	Fisher, John (DEQ)
Subject:	Tri-Cities Multi-Modal Scoping
Date:	Friday, November 07, 2014 5:19:18 PM
Attachments:	TRI-CITIES MULTI-MODAL SCOPING.PDF

Good afternoon—attached is a request for scoping comments on the following:

Tri-Cities Area Multi-Modal Passenger Station Study

If you choose to make comments, please send them directly to the project sponsor (see attached) and copy the DEQ Office of Environmental Impact Review. We will coordinate a review when the federal consistency certification document is completed.

If you have any questions regarding this request, please call John at 804/698-4339; email John.Fisher@deq.virginia.gov

Valerie

Valerie A. Fulcher, CAP-OM, Executive Secretary Sr.

Department of Environmental Quality

Environmental Enhancement - Office of Environmental Impact Review

629 E. Main St., 6th Floor

Richmond, VA 23219

804/698-4330

804/698-4319 (Fax)

email: Valerie.Fulcher@deq.virginia.gov

www.deq.virginia.gov

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

PIEDMONT REGIONAL OFFICE
4949-A Cox Road, Glen Allen, Virginia 23060
(804) 527-5020 Fax (804) 527-5106
www.deq.virginia.gov

Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

Michael P. Murphy
Regional Director

November 25, 2014

Mr. Joe Vinsh
Director of Transportation
Crater Planning District Commission
P.O. Box 1808
Petersburg, Virginia 23805

RE: Tri-Cities Area Multi-Modal Passenger Station Study

Dear Director Vinsh:

I have reviewed the Scoping for the above referenced project proposed by the Crater Planning District Commission to evaluate the impacts associated with a multi-modal passenger rail station in the Tri-Cities area. There are three alternatives under consideration: the No-build Alternative, the Improve Existing Station Alternative and the New Station Alternative. PRO comments for this project are as follows:

Water: For improvements to the Ettrick station and the construction of a new station at a new location, erosion and sediment controls should be properly implemented and maintained throughout all phases of construction. E & S controls and Best Management Practices (BMPs) should be inspected/repaired before and after rain events. Please follow all standards and specifications under the DCR Erosion & Sediment Controls Handbook (1992, 3rd Edition). DEQ recommends maximizing pervious surface areas and green spaces in the construction design to reduce runoff and the environmental impact associated with urban runoff.

Waste: The generation of hazardous or solid waste materials should be tested and removed in accordance with the Virginia Hazardous Waste Management Regulations (9 VAC 20-60) and/or the Virginia Solid Waste Management Regulations (9 VAC 20-80). Please understand that it is the generator's responsibility to determine if a solid waste meets the criteria of a hazardous waste and as a result be managed as such. In addition, asbestos waste, lead waste, or contaminated residues generated must be handled and disposed of in accordance with the VSWMR or VHWMR as applicable. DEQ recommends that pollution prevention principles be implemented to reduce the amount of wastes at the source, such as the re-use and recycling of waste materials.

If you have any questions concerning hazardous/solid waste management, please contact Jason Miller at (804)527-5028.

Air: DEQ recommends following all air quality standard and specifications to reduce or avoid the emissions of VOCs, especially during periods of high ozone. Fugitive dust should be kept to a minimum, (9 VAC 5-40-5630 *et seq*). Permits may be required for any boilers or fuel-burning equipment. For further questions, please contact James Kyle at (804) 527-5047.

Sincerely,

Mark S. Alling

Mark S. Alling
Water Monitoring and Planning Manager

From:	Troy Andersen
To:	Joe Vinsh
Cc:	Manes, Susan
Subject:	RE: Tri-Cities Area Multimodal Station Study: Request for Input
Date:	Friday, November 14, 2014 10:08:01 AM
Attachments:	image004.png 20130204_Letter_Service to Interested Parties_directing to VAFO website.pdf

Mr. Vinsh:

We do not provide individual responses to requests for environmental reviews. Instead, we utilize an online project review system to handle most reviews. The attached letter provides a good overview/explanation. Below is the link mentioned in the letter so you don't have to manually enter it into your web browser. If after completing the online steps you still have questions on how to minimize impacts to any trust resources present, give me call at any of the numbers listed below in my signature block.

https://www.fws.gov/northeast/virginiafield/endangered/projectreviews.html

V/R
Troy

From: Tri-Cities_StationStudy [mailto:TriCitiesStationStudy@mbakerintl.com]
Sent: Tuesday, November 04, 2014 10:22 AM
To: Manes, Susan; Mobley, Ken; Joe Vinsh (jvinsh@craterpdc.org); 'Andy Boenau'
Cc: Todd, Michael
Subject: Tri-Cities Area Multimodal Station Study: Request for Input

Dear Recipient,

On behalf of the Tri-Cities Area Metropolitan Planning Organization (MPO), the Crater Planning District Commission (CPDC) is performing a National Environmental Policy Act (NEPA) study to select a location for a Tri-Cities Area Multimodal Passenger Station.

Michael Baker International is leading the consultant team undertaking this study and we are looking for your input. Attached is a formal request for your thoughts, questions, and considerations as we assess a full range of alternatives and identify potential adverse or beneficial impacts to this project.

Thank you for your participation in this effort.

Sincerely,
The Tri-Cities Area Multimodal Station Study Team

Susan Manes | Project Manager/Senior Environmental Planner | Michael Baker International
1801 Bayberry Court, Hillcrest Building, Suite 101 | Richmond, VA 23226 | [O] 804-287-3174

smanes@mbakerintl.com | www.mbakerintl.com

Michael Baker
INTERNATIONAL

Innovation Done Right...We Make a Difference

From:	Kirchen, Roger (DHR)
To:	Manes, Susan
Cc:	Kampinen, Andrea (DHR)
Subject:	RE: Tri-Cities Area Multimodal Station Study: Request for Input
Date:	Tuesday, November 04, 2014 1:35:21 PM
Attachments:	image004.png

Please note that Andrea Kampinen will represent the Virginia SHPO in this consultation. All correspondence should be directed to her attention. Thanks.

Roger W. Kirchen, Director
Review and Compliance Division
Department of Historic Resources
2801 Kensington Avenue
Richmond, VA 23221
phone: 804-482-6091
fax: 804-367-2391
roger.kirchen@dhr.virginia.gov

From: Tri-Cities_StationStudy [mailto:TriCitiesStationStudy@mbakerintl.com]
Sent: Tuesday, November 04, 2014 10:22 AM
To: Manes, Susan; Mobley, Ken; Vinsh, Joe J., Jr.; 'Andy Boenau'
Cc: Todd, Michael
Subject: Tri-Cities Area Multimodal Station Study: Request for Input

Dear Recipient,

On behalf of the Tri-Cities Area Metropolitan Planning Organization (MPO), the Crater Planning District Commission (CPDC) is performing a National Environmental Policy Act (NEPA) study to select a location for a Tri-Cities Area Multimodal Passenger Station.

Michael Baker International is leading the consultant team undertaking this study and we are looking for your input. Attached is a formal request for your thoughts, questions, and considerations as we assess a full range of alternatives and identify potential adverse or beneficial impacts to this project.

Thank you for your participation in this effort.

Sincerely,
The Tri-Cities Area Multimodal Station Study Team

Susan Manes | Project Manager/Senior Environmental Planner | Michael Baker International
1801 Bayberry Court, Hillcrest Building, Suite 101 | Richmond, VA 23226 | [O] 804-287-3174
smanes@mbakerintl.com | www.mbakerintl.com

11/25/14

COMMONWEALTH of VIRGINIA

Marine Resources Commission
2600 Washington Avenue
Third Floor
Newport News, Virginia 23607

We have reviewed the information you submitted concerning the proposed locations of a Tri-Cities Area Multimodal Passenger Station, as requested in your letter of November 17, 2014.

The Marine Resources Commission, pursuant to Chapter 12 of Title 28.2 of the Code of Virginia, is responsible for issuing permits for encroachments in, on, or over State-owned submerged lands throughout the Commonwealth. Accordingly, authorization may be required from the Marine Resources Commission for projects that involve encroachments below the ordinary high water mark along natural rivers and streams west of the fall line or channelward of mean low water mark in tidal areas. We generally require permits for encroachments in, on, or over non-tidal streams with a contributing drainage area greater than five (5) square miles or with an average instream flow of at least five (5) cubic feet per second.

Based on a desktop review of the two maps provided, it appears that a permit may be required by the Marine Resources Commission for the project described above. Once a site has been selected, a Joint Permit Application should submitted to this agency for review and permitting consideration by Local, State and Federal environmental agencies.

Thank you for the opportunity to comment on this project. If we may be of further assistance, please do not hesitate to contact me at (757) 247-8028.

Mark Eversole
Environmental Engineer
Virginia Marine Resources Commission

APPENDIX K-2

Additional Agency Correspondence

CHESTERFIELD COUNTY
BOARD OF SUPERVISORS
AGENDA

Meeting Date: January 22, 2014 **Item Number:** 8.B.1.c.

Subject:

Resolution of Support for Ettrick Multimodal Station Improvement Project and Rail Enhancement Fund Grant Request

County Administrator's Comments:

County Administrator:_____

Board Action Requested:

The Board is requested to: 1) adopt a resolution of support for the Ettrick Multimodal Station Improvement Project and Rail Enhancement Fund Grant request; 2) upon notification of grant award, appropriate up to $4.2 million in state reimbursements and appropriate/transfer up to $1.8 million in local matching funds; and 3) authorize the County Administrator to enter into agreements and proceed with the project.

Summary of Information:

The Virginia Department of Rail and Public Transportation (VDRPT) administers the Rail Enhancement Fund, a state-funded, reimbursable grant program. VDRPT's Rail Enhancement Funds are offered for capital investments in railways or railroad equipment infrastructure and are awarded on a competitive basis. According to guidance provided by VDRPT, projects most likely to receive consideration are those that: provide an accelerated investment in Virginia rail projects, address the needs of state, regional and/or local plans, encourage competition and economic development, and limit funding liability through achievable schedules and budgets. The Rail Enhancement Fund is financed with 70 percent state funds and requires a minimum 30 percent local match. The match can be provided from county funds or from other private or public sources. February 3, 2014 is the deadline for applications.

Preparer: Barbara K. Smith Title: Interim Director of Transportation
Preparer: Allan M. Carmody Title: Director, Budget & Management

Attachments: ■ Yes ☐ No #

Summary of Information: (Continued)

A first phase of the Ettrick Multimodal Station Improvement Project can be funded with Rail Enhancement Funds. These funds could be used to acquire the property, construct a new station, provide onsite improvements (including parking, lighting and utilities), and provide minor renovations to the existing station, including removal of the existing platform. The estimate for the project is $6.0 million: $4.2 million Rail Enhancement Funds and $1.8 million in county matching funds.

The $1.8 million county match could be provided from a combination of the sources as follows:

- Value of station property, if donated to the county by CSX
- Community Development Block Grant (CDBG) funds
- In-kind match
- Industrial Access Account funds
- Reserve for Future Capital Projects

In May 2013, the Board adopted a similar resolution of support for improvements to the Ettrick Train Station and surrounding area to accommodate its function as a multimodal station. The resolution related to funding associated with the TIGER Discretionary Grant. The County was not awarded funding in connection with the TIGER Discretionary Grant application.

The Board is requested to reconfirm support for the Ettrick Multimodal Station Improvement Project by adopting a resolution of support, which guarantees the county will provide the local match of $1.8 million. Upon notification of grant award by VDRPT, staff is also requesting appropriation/transfer of the required match and appropriation of the VDRPT reimbursement.

Recommendation:

Staff recommends the Board take the following actions:

1. Adopt the proposed resolution of support for the Ettrick Multimodal Station Improvement project and Rail Enhancement Fund Grant request; and

2. Upon notification of grant award by VDRPT, staff is also requesting appropriation/transfer of the required match and appropriation of the VDRPT reimbursement; and

3. Upon approval notification from VDRPT, authorize the County Administrator to enter into the necessary county/state agreements/contracts, permits/mitigation agreements, and surety agreements, acceptable to the County Attorney, for the project; and

4. Authorize the County Administrator to proceed with the design and right-of-way acquisition, including advertisement of an eminent domain public hearing, if necessary; and

5. Authorize the Chairman of the Board of Supervisors and County Administrator to execute easement agreements for relocation of utilities; and

6. Authorize the County Administrator to proceed with the advertisement for construction of the project.

District: Matoaca

WHEREAS, the Ettrick Train Station provides daily Amtrak service between major cities along the east coast including Boston, New York, Washington D.C., Charlotte, Orlando and Miami; and

WHEREAS, 22,000 riders use the Ettrick station annually for their travel; and

WHEREAS, Amtrak's new Northeast Regional service began in December of 2012, resulting in increased ridership using the Ettrick Train Station; and

WHEREAS, the Ettrick Train Station is centrally located to the Tri-Cities region which includes southern and eastern Chesterfield County, Hopewell, Colonial Heights, Petersburg, Prince George and Dinwiddie; and

WHEREAS, over 100,000 residents of the Tri-Cities region are within a six-mile radius of the Ettrick Train Station; and

WHEREAS, the Ettrick Train Station is located less than one mile from Virginia State University which currently has over 6,000 students enrolled, and is expected to have over 10,000 students enrolled by 2020; and

WHEREAS, the Ettrick Train Station is located less than eight miles from Fort Lee where 75,000 soldiers train annually; and

WHEREAS, the Ettrick Train Station is located on one of five original national high-speed rail corridors: the Southeast High Speed Rail (SEHSR) corridor, which runs from Washington D. C. to Raleigh, North Carolina; and

WHEREAS, ridership is expected to increase to 98,000 annually by 2025 with the implementation of the SEHSR service; and

WHEREAS, the Ettrick Train Station has been determined to be adequate to meet near-term increases in ridership per Virginia Department of Rail and Public Transportation's Pre-NEPA Evaluation, Tri-Cities Area Multimodal Station Study, dated August 22, 2012; and

WHEREAS, Chesterfield County has committed to widening East River Road to improve access to the Ettrick Train Station as noted in the Southeast High Speed Rail Tier II Draft Environmental Impact Study, and the road improvements are expected to be in place by 2015; and

WHEREAS, implementation of the SEHSR will require track expansions resulting in the need to shift the station away from the new track; and

WHEREAS, improvements to the Ettrick Train Station can be phased to benefit the growth in ridership and potential for high-speed rail service.

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of Chesterfield County requests the Virginia Department of Rail and Public Transportation provide funding for the Ettrick Train Station Improvement Project.

AND, BE IT FURTHER RESOLVED that the Board hereby agrees to pay 30 percent of the total estimated grant request of $6,000,000 for the Ettrick Train Station Improvement Project.

Ettrick Multimodal Station Improvement Project

Project Estimate

Construction	
Site work, parking and utilities	$975,000
New 5,500 sq. ft. building	$1,200,000
Specialty Allowance (Kiosk, Ticket Counter, Electronic Message Board, etc.)	$150,000
Construction Subtotal	**$2,325,000**
Design and Construction Administration	
A/E Design Fees	$290,000
Environmental Permitting	$150,000
Construction Administration Fees	$100,000
Testing, Commissioning & CPM	$165,000
Design and Construction Administration Subtotal	**$705,000**
Additional Costs	
Platform: Covered, High-Level ADA Compliant	$700,000
Landscaping	$97,500
Other Capital Fixtures, Furniture & Equipment	$450,000
CSX Coordination & Oversight	$350,000
Additional Costs Subtotal	**$1,597,500**
Project Subtotal	**$4,627,500**
20% Contingency	$928,500
Property Purchase: 120% of 2013 Assessment Value $370,000	$444,000
PROJECT TOTAL	**$6,000,000**

VDRPT Rail Enhancement Fund Request

Total Rail Enhancement Fund Request	$6.0 M
30% Local Match (pending Rail Enhancement Funds approval)	***($1.8 M)***
70% Rail Enhancement Funds (pending)	***($4.2 M)***
Balance	$0

ATTACHMENT A

Concerned Citizens of Ettrick
21302 Chesterfield Avenue
Ettrick, Virginia 23803

Mr. Joseph J. Vinsh
Secretary of the Crater Planning District Commission
1964 Wakefield Street
Petersburg, Virginia 23805

Dear Mr. Vinsh,

The Concerned Citizens of Ettrick, CCE, would like to express its support of a New Station to replace the existing Village of Ettrick Train Station. The CCE is comprised of several members including residents of the Village of Ettrick, several businesses such as Appomattox Drugs, the Ettrick United Methodist Church, The Ettrick Neighborhood and Business Foundation, CAPAAMD, United Campus Ministries at Virginia State University, and non-profit organizations such as Guardians.

Although Collier Yard has been determined by TOD to have the largest positive fiscal impact of the remaining potential sites for the new train station, the Village of Ettrick located in south Chesterfield County has proven its commitment to train ridership as the numbers have indicated that there has been a marked increase of 40% from 2008 to 2014 to nearly 30,000 riders per year. With the addition of an $84 million multipurpose center developed by Virginia State University, athletic events, farm conventions, and entertainment are projected to increase the ridership of the Ettrick Train Station. This center would afford participants of the events the opportunity to walk from the train station to the center without the need for additional transportation.

In addition, Chesterfield County has already begun to funnel funds into the village by widening the roads and adding sidewalks around the village. The county has made a $12.5 million commitment. The Village of Ettrick has been designated as the first plan for "special area planning" in the County of Chesterfield which sets in motion its ability to have first choice in grant funding. It is also estimated that 26,666 people live within two miles of the Ettrick Train Station compared with 1,317 in the Collier Yard location. There is also a higher population in the six mile radius around Ettrick according to the Richmond Times Dispatch Metro in the September 21, 2015 issue.

With all of these factors taken into consideration, we strongly encourage support of the New Station in the Village of Ettrick. Please join the Concerned Citizens of Ettrick and "Get On Board" with the effort to take our community to the destination of an exciting future. We extend a warm welcome and invitation to our meeting at 10:00 am on Monday, November 16, 2015 at the Ettrick United Methodist Church at 21302 Chesterfield Avenue, Ettrick, VA 23803. For correspondence, please feel free to use my address below.

Concerned Citizens of Ettrick
21302 Chesterfield Avenue
Ettrick, Virginia 23803

Sincerely,

Nancy S. Ross on behalf of the Concerned Citizens of Ettrick
6203 Glenlivet Drive
South Chesterfield, Virginia 23803

City of Petersburg

Petersburg Area Transit
100 W. Washington Street
PETERSBURG, VA 23803
(804) 733-2450

WILLIAM E. JOHNSON, III
CITY MANAGER

DIRONNA MOORE BELTON
TRANSIT GENERAL MANAGER

November 30, 2015

Dear Tri-Cities Metropolitan Organization

Petersburg Area Transit (PAT) would like to make a recommendation in the support of the Collier Yard site as the preferred location for the regional passenger rail station for the Tri-Cities area. PAT understands that the Federal Railroad Administration identified in 2010, that a larger rail station for the Southeast High Speed Rail was needed, due to the accessibility difficulties with the existing station at Ettrick. PAT also understands that the Tri-Cities Area Metropolitan Planning Organization (MPO) serves as the project sponsor for the National Environmental Policy Act (NEPA) study.

Petersburg Area Transit have chosen this site as the preferred location because the Collier Yard site is most accessible based on the visibility of the station and its ability to be reached by both I-95, I-85 and to provide a potential regional rail hub for the second largest population in Virginia, Hampton Roads; and the Collier site has the most ability to create a high intensity activity area, which would be conducive to Transit Oriented Development; which may grow and benefit PAT.

The Collier Yard site will support existing industries and foster the growth of new businesses and attract more riders, workers and visitors' from the southern region of Virginia (i.e. Emporia and Dinwiddie) which will significantly expand this region's economy. It will also encourage large businesses to distribute their operations more widely into smaller, highly accessible communities and provide a higher quality of life for all of our residents.

As the General Manager of Petersburg Area Transit, PAT presents this letter as our support and recommendation of the Collier Yard site. We understand that this information will be forwarded to the Federal Railroad Administration for consideration for the City of Petersburg as the preferred station location recommendation.

Your consideration is greatly appreciated for the City of Petersburg's Collier Site as the preferred site, for the Tri-Cities Multi-Modal Rail Station.

Sincerely,

DMoore Belton

Dironna Moore Belton
Petersburg Area Transit

The Greater
Southport Association

MIRR
Midlothian Initiative to Revitalize Rights of Way

November 30, 2015

Joe Vinsh, Director of Transportation
Tri-Cities MPO
P.O. Box 1808
Petersburg, VA 23805

Dear Mr. Vinsh:

The Greater Southport Business Association, a networking and advocacy organization serving local businesses in Chesterfield County since 1980, supports plans for multimodal infrastructure and continued study of high speed rail for Chesterfield County and the Tri-Cities region. The existing Ettrick Train Station accommodates nearly 30,000 boardings and alightings annually and ridership is expected to increase to 98,000 annually by 2025 with the implementation of the Southeast High Speed Rail service.

The Ettrick Train Station already provides a valuable transportation mode for the Tri-Cities region, with over 100,000 residents within a six-mile radius of the Ettrick site. The existing Ettrick Train Station serves Virginia State University which currently has 5,000 students enrolled, and is expected to have over 10,000 students enrolled by 2020. Virginia State University's new Multipurpose Center, a regional venue for concerts, sporting events and conventions, is within walking distance and Fort Lee, where 70,000 soldiers train annually, is located less than eight miles from the Ettrick site.

Because there is an existing station at the proposed site, improvements for the Tri-Cities Multimodal Station at the Ettrick site can be phased to benefit the growth in ridership and potential for high-speed rail service.

The Ettrick Station is a key component to the revitalization of Ettrick, a substantial area ripe for development and redevelopment, as reflected in the "Ettrick-VSU Special Area Plan" of the Chesterfield County Comprehensive Plan.

The Greater Southport Business Association, therefore, offers its support of the Ettrick site serving as the future Tri-Cities Multimodal Station.

Best regards,

Ray Birk

Ray Birk
President
Great Southport Business Association

City of Hopewell
300 North Main Street
Hopewell, VA 23860

November 12, 2015

Dear Tri-Cities Metropolitan Organization

The City of Hopewell would like to make a recommendation in the support of the Collier Yard site as the preferred location for the regional passenger rail station for the Tri-Cities area. The City understands that the Federal Railroad Administration identified in 2010, that a larger rail station for the Southeast High Speed Rail was needed, due to the accessibility difficulties with the existing station at Ettrick. The City also understands that the Tri-Cities Area Metropolitan Planning Organization (MPO) serves as the project sponsor for the National Environmental Policy Act (NEPA) study, which is the first step in constructing the future regional passenger rail station.

The City chose this site as the preferred location because the Collier Yard site is most accessible based on the visibility of the station and its ability to be reached by both I-95, I-85 and to provide a potential regional rail hub for the second largest population in Virginia, Hampton Roads; and the Collier site has the most ability to create a high intensity activity area as well as ranked the best site in the Baker 2015 Transit Oriented Development analysis.

The Collier site has the most feasible development potential based on the City of Petersburg owning all of the proposed site creating an ease of land assemblage and there are minimal environmental disturbances, socio-economic impacts, and environmental justice considerations, as determined the draft Cultural resource report.

The Collier Yard site will support existing industries and foster the growth of new businesses and attract more riders, workers and visitors' from the southern region of Virginia (i.e. Emporia and Dinwiddie) which will significantly expand this region's economy. It will also encourage large businesses to distribute their operations more widely into smaller, highly accessible communities and provide a higher quality of life for all of our residents.

As the Mayor of the City of Hopewell, we present this letter as our support and recommendation of the Collier Yard site. We understand that this information will be forwarded to the Federal Railroad Administration for consideration for the City of Petersburg as the station location recommendation.

Your consideration is greatly appreciated for the City of Petersburg's Collier Site as the preferred site, for the Tri-Cities Multi-Modal Rail Station.

City of Hopewell
300 North Main Street
Hopewell, VA 23860

Sincerely,

Mayor Brenda Pelham
City of Hopewell

BSP/rakIII

Chesterfield County, Virginia

James J. L. Stegmaier, County Administrator
9901 Lori Road – P.O. Box 40 – Chesterfield, VA 23832-0040
Phone: (804) 748-1211 – Fax: (804) 717-6297 – Internet: chesterfield.gov

BOARD OF SUPERVISORS
STEPHEN A. ELSWICK, CHAIRMAN
Matoaca District
ARTHUR S. WARREN, VICE CHAIRMAN
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DOROTHY JAECKLE
Bermuda District
JAMES M. "Jim" HOLLAND
Dale District
DANIEL A. GECKER
Midlothian District

November 11, 2015

Joe Vinsh, Secretary
Tri-Cities MPO
P. O. Box 1808
Petersburg, VA 23805

RE: Tri-Cities Multimodal Station NEPA Study

Dear Joe:

On October 28, 2015, the Chesterfield County Board of Supervisors adopted the attached resolution of support for the Ettrick Train Station to serve as the future Tri-Cities Multimodal Station.

As noted in the resolution, the county feels strongly that the Ettrick station will best serve the residents of the Tri-Cities region for many reasons, including the following:

- It is the least expensive option.
- It has the least environmental impacts.
- It requires minimal operational changes from AMTRAK as it is the current station location.
- It is consistent with the Ettrick-VSU Special Area Plan and a key component to the revitalization of Ettrick.
- It is within walking distance of Virginia State University and the Multipurpose Center, providing students, faculty and visitors with easy access to train service.
- It is closer to the urban core; therefore, is more accessible by the majority of the population.
- It requires minimal investment towards public infrastructure.

In recent years, Chesterfield County has worked to improve the existing station (see attached summary) and the county will continue to work to transform the station into the Tri-Cities Multimodal Station envisioned for the region. We look forward to working with regional, state and federal partners on this important project.

Sincerely,

James J. L. Stegmaier
County Administrator

Attachments

Cc: Steve Elswick
Dorothy Jaeckle
Bill Dupler
Jesse Smith

Chesterfield County Support for the Ettrick Train Station

Norfolk Service Kick-off Event (2012): The county provided support for VDRPT's "Whistle Stop Tour" at the Ettrick Station celebrating the resumption of train service between Richmond and Norfolk. The county spruced up the station prior to the event, decorated for the event, provided displays of artwork by county students and arranged musical entertainment by county band and orchestra students.

TIGER Grant (2013): $12.5-million DOT TIGER grant requested. The Board of Supervisors' adopted resolution, which includes the county commitment to pay 20% of the total TIGER grant request, is attached (Attachment 1). Letters of support for improvements to the train station were received from Colonial Heights, VSU, Congressman Forbes and Chesterfield Business Council (Attachments 2-5). The grant was not awarded.

Demolition of Abandoned Depot (2013): At the county's request, CSX secured and subsequently demolished an abandoned train depot adjacent to the existing station that had become unsafe due to years of neglect.

VDRPT Rail Enhancement Funds (2014): $6-million VDRPT Rail Enhancement grant requested by the county. The Board of Supervisors' adopted resolution, which includes the county commitment to pay 30% of the total grant, is attached (Attachment 6). The grant was not awarded.

Ettrick VSU Special Area Plan (2015): The Board of Supervisors adopted a special area plan to the county's Comprehensive Plan on April 15, 2015. The plan supports transit oriented development with the train station as a key component for successful revitalization of the area. The plan is available at www.chesterfield.gov/ettrickplan/.

East River Road Widening Project (underway): East River Road is the main access to the train station. $4.75 million in county funds, matched dollar-for-dollar by state revenue sharing funds, are being used to widen East River Road from Granger Street to the Colonial Heights City Line. A rendering of the completed road improvement is attached (Attachment 7). This project is currently under construction.

CHESTERFIELD COUNTY: At a regular meeting of the Board of Supervisors held in the Public Meeting Room at the Chesterfield Administration Building on May 22, 2013 at 3:00 p.m.

*On motion of Mr. Holland, seconded by Mr. Warren, the Board adopted the following resolution:

WHEREAS, the Ettrick Train Station provides daily Amtrak service between major cities along the east coast including Boston, New York, Washington D.C., Charlotte, Orlando and Miami; and

WHEREAS, 22,000 riders use the Ettrick station annually for their travel; and

WHEREAS, Amtrak's new Northeast Regional service began in December of 2012, resulting in increased ridership using the Ettrick Train Station; and

WHEREAS, the Ettrick Train Station is centrally located to the Tri-Cities region which includes southern and eastern Chesterfield County, Hopewell, Colonial Heights, Petersburg, Prince George and Dinwiddie; and

WHEREAS, over 100,000 residents of the Tri-Cities region are within a six-mile radius of the Ettrick Train Station; and

WHEREAS, the Ettrick Train Station is located less than one mile from Virginia State University which currently has over 6,000 students enrolled, and is expected to have over 10,000 students enrolled by 2020; and

WHEREAS, the Ettrick Train Station is located less than eight miles from Fort Lee where 75,000 soldiers train annually; and

WHEREAS, the Ettrick Train Station is located on one of five original national high-speed rail corridors: the Southeast High Speed Rail (SEHSR) corridor, which runs from Washington D. C. to Raleigh, North Carolina; and

WHEREAS, ridership is expected to increase to 98,000 annually by 2025 with the implementation of the SEHSR service; and

WHEREAS, the Ettrick Train Station has been determined to be adequate to meet near-term increases in ridership per Virginia Department of Rail and Public Transportation's Pre-NEPA Evaluation, Tri-Cities Area Multimodal Station Study, dated August 22, 2012; and

WHEREAS, Chesterfield County has committed to widening East River Road to improve access to the Ettrick Train Station as noted in the Southeast High Speed Rail Tier II Draft Environmental Impact Study and these road improvements are expected to be in place by 2015; and

Attachment 1

WHEREAS, implementation of the SEHSR will require track expansions resulting in the need to shift the station away from the new track; and

WHEREAS, improvements to the Ettrick Train Station can be phased to benefit the growth in ridership and potential for high-speed rail service.

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of Chesterfield County requests the federal Department of Transportation provide funding for the Ettrick Train Station Multimodal Improvement Project.

AND, BE IT FURTHER RESOLVED that the Board hereby agrees to pay 20 percent of the total estimated grant request of $12,500,000 for the Ettrick Train Station Multimodal Improvement Project.

Ayes: Jaeckle, Elswick, Warren, Holland and Elswick.
Nays: None.

Certified by:

Sara Hall

Sara Hall
Clerk to the Board of Supervisors

***DRAFT MINUTES TO BE APPROVED AT THE REGULARLY SCHEDULED MEETING ON JUNE 26, 2013.**

Attachment 1

CITY OF COLONIAL HEIGHTS
OFFICE OF THE CITY COUNCIL

C. Scott Davis, Mayor
Diane H. Yates, Vice Mayor
Milton E. Freeland, Jr.
Kenneth B. Frenier
W. Joe Green, Jr
T. Gregory Kochuba
John T. Wood

June 5, 2013

The Honorable J. Randy Forbes
Member, United States House of Representatives
2135 Rayburn House Office Building
Washington, D.C. 20515

Dear Congressman Forbes:

I am aware that Chesterfield County officials are seeking federal support for improvements to Amtrak's Petersburg stop at the train station located in Ettrick, VA. As you know, this station provides a local stop for passenger rail service to points north and south along the I-95 corridor and now has new service to the east connecting with Norfolk. This provides an important transportation link for the citizens of Colonial Heights for travel by Amtrak along the eastern seaboard.

The City of Colonial Heights participated as a key stakeholder in a planning study co-sponsored by Virginia State University (VSU) and Chesterfield County to identify unique opportunities to further advance a vision for public and private land uses within the Village of Ettrick. This plan included an examination of all transportation modes, including access to the train station for pedestrians, the motoring public, bus and cab stops. Currently, the City of Colonial Heights and Chesterfield County are improving access to the train station and VSU with widening projects for Dupuy Road in Colonial Heights and East River Road in Chesterfield.

The County is seeking support for federal funding to improve passenger rail and multi-modal transportation service at the Petersburg Amtrak Station located in Ettrick, Virginia. The consensus of a majority of the City of Colonial Heights City Council is in support of the passenger service at this location and believes it is an essential component of needed transportation infrastructure. We fully support the County's efforts to seek federal assistance to increase passenger rail service and make infrastructure improvements at this station and respectfully request your consideration of the request.

Sincerely,

C. Scott Davis
Mayor

CSD/pbw

Cc: The Honorable Members of the City of Colonial Heights City Council
The Honorable Members of the Chesterfield County Board of Supervisors
Mr. Ronald White, Congressman Forbes Office, Chesterfield District Representative

CITY HALL • 201 JAMES AVENUE • P.O. BOX 3401 • COLONIAL HEIGHTS, VA 23834
804.520.9360 • FAX 804.524.8734 • WWW.COLONIALHEIGHTSVA.GOV

Attachment 2

VIRGINIA STATE UNIVERSITY

VIRGINIA STATE UNIVERSITY, VIRGINIA 23806

OFFICE OF THE PRESIDENT
(804) 524-5070

FAX (804) 524-6506
TDD (804) 524-5487

June 11, 2013

The Honorable J. Randy Forbes
Member, United States House of Representatives
2135 Rayburn House Office Building
Washington, D.C. 20515

Dear Congressman Forbes:

I am aware that Chesterfield County officials are seeking federal support for improvements to the Amtrak's Petersburg stop at the train station located in Ettrick, VA. As you know, this station provides a local stop for passenger rail service to points north and south along the I-95 corridor and now has new service to the east connecting with Norfolk. This station is nearly adjacent to Virginia State University and provides an important transportation link for our students, faculty, staff, and alumni, who utilize the train to travel to and from the university community. As you may be aware, our student body is composed of many students whose families live within convenient access to the trains operated by Amtrak along Virginia's "Golden Crescent" and the Eastern Seaboard.

The university has a strong partnership with Chesterfield County and the City of Petersburg. We work effectively to share resources between the municipalities and the university. An example includes leasing an elevated water tank that will be constructed to provide public water to both the university and area residents. Virginia State University will be constructing a 5,000 seat multipurpose center that will allow shared use for county, city and other functions. The center is planned to open during the fall of 2015.

Further, the university and county are discussing a planning study to identify unique opportunities to further advance a vision for public and private land uses within the Village of Ettrick. This plan includes an examination of multimodal transportation options, including greater access to the train station for pedestrians, the motoring public, public transit and taxi stops. The City of Colonial Heights is partnering with Chesterfield County to improve access to the train station with widening projects for Dupuy Road in Colonial Heights and East River Road in Chesterfield. The university and Chesterfield County have significant plans to work together and mutually support projects beneficial to the county, our student body and faculty.

The county is seeking support for federal funds to improve passenger rail and multi-modal transportation service at the Petersburg Amtrak Station located in Ettrick, Virginia. The university believes passenger service is an essential component to the area's transportation infrastructure. We fully support the county's efforts to seek federal assistance to increase passenger rail service and make infrastructure improvements and respectfully request your consideration of the request.

Sincerely,

Keith T. Miller

Keith T. Miller, Ph.D.
President

c: Virginia State University Board of Visitors
The Honorable Members of the Chesterfield Board of Supervisors
Ron White, Congressman Forbes Office, Chesterfield District Representative

Attachment 3

COMMITTEES:
ARMED SERVICES
SUBCOMMITTEE ON READINESS – CHAIRMAN
SUBCOMMITTEE ON SEAPOWER AND EXPEDITIONARY FORCES

JUDICIARY
SUBCOMMITTEE ON CRIME, TERRORISM, AND HOMELAND SECURITY
SUBCOMMITTEE ON THE CONSTITUTION

J. Randy Forbes
United States Congress
4th District, Virginia

2438 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515
(202) 225-6365

139 AIRPORT DRIVE
EMPORIA, VA 23847
(434) 634-5575

9401 COURTHOUSE ROAD, SUITE 201
CHESTERFIELD, VA 23832
(804) 318-1363

505 INDEPENDENCE PARKWAY
LAKE CENTER II—SUITE 104
CHESAPEAKE, VA 23320
(757) 382-0080

June 25, 2013

Mr. Robert Letteney
Deputy Asst. Secy for Govt. Affairs
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590-0001

Dear Mr. Letteney:

I would like to express my interest in the grant application for the Transportation Investment Generating Economic Recovery Grant, DTOS59-13-RA-TIGER5, submitted by Chesterfield County.

In preparing this grant application, Chesterfield County cited many factors contributing to the need for this funding in my congressional district. A dramatic growth in ridership due to the implementation of the Norfolk Service in 2012 and the expansion of Virginia State University have highlighted the need for improvements at the Ettrick Amtrak train station. A recent planning study, co-funded by Chesterfield County and Virginia State University identified the need for better access to the train station for vehicles, pedestrians and bicyclists. While Chesterfield County and other localities in the region have begun work on this long-term project, the county is seeking support through a TIGER Grant to implement additional improvements necessary to transform the existing train station in Ettrick into The Ettrick Multimodal Station.

I ask that you give this grant application your most thoughtful and serious consideration. If there is any additional information that my office can provide, please contact my Chesterfield District Director, Mr. Ron White, at 804-318-1363.

I would very much appreciate it if you would acknowledge receipt of this letter and keep me apprised of your action on this application when review is complete. You should respond to Mr. Ron White, care of my Chesterfield District Office.

Thank you very much for your time and attention to this matter. I look forward to hearing from you.

With kind personal regards, I am

Yours truly,

J. RANDY FORBES
Member of Congress

RECEIVED
JUN 26 2013
COUNTY ADMINISTRATOR
CHESTERFIELD, VA

JRF:CJ

Cc: Jay Stegmaier, County Administrator
~~Dorothy Jaeckle, Chairman, Board of Supervisors~~

CONGRESSIONAL PRAYER CAUCUS CHAIRMAN
CONGRESSIONAL CHINA CAUCUS CHAIRMAN
CONGRESSIONAL NAVY-MARINE CORPS CAUCUS CHAIRMAN
CONGRESSIONAL MODELING AND SIMULATION CAUCUS CHAIRMAN

PRINTED ON RECYCLED PAPER

Attachment 4

WHERE BUSINESS STARTS...
CHESTERFIELD
CHAMBER of COMMERCE

GREATER RICHMOND CHAMBER
CHESTERFIELD BUSINESS COUNCIL

July 29, 2013

Mr. Robert Letteney
Deputy Assistant Secretary for Government Affairs
U. S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Mr. Letteney,

On behalf of the Chesterfield Business Council of the Greater Richmond Chamber and the Chesterfield County Chamber of Commerce, we are writing to share the support of these two business organizations for Chesterfield County's application for a Transportation Investment Generating Economic Recovery Grant (TIGER5). The grant opportunity number is DTOS59-13-RA-TIGER5, and the name of the grant is the FY 2013 National Infrastructure Investments.

Chesterfield County seeks this grant funding to transform the existing Amtrak train station in Ettrick, Virginia, to the Ettrick Multimodal station. This station provides a stop for passenger rail service to points north and south along the I-95 corridor and service to the east, connecting with Norfolk. This passenger rail service provides an important transportation link for the citizens of Chesterfield County, Virginia State University, Fort Lee, and the Richmond Region.

The business community is strongly in support of efforts to revitalize the Ettrick Train Station for two primary reasons. One, we recognize the value added to the community both in terms of tax base and economic opportunity from this revitalization effort. Second, we are in favor of additional, multi-modal transportation solutions that help address the challenges experienced by drivers on the I-95 corridor. As more individuals opt to use the train, there will hopefully be less congestion on that road.

In addition, we believe new business opportunities will continue to arise with growth in the student population at Virginia State University, a major workforce development and employment asset to the region, and the increasing numbers of soldiers who come to Fort Lee for training. It will be beneficial, in our opinion, for additional transportation options in the region, and the investment will have an expansive return for the local and regional economy.

The Chesterfield Business Council and the Chesterfield Chamber of Commerce appreciate your serious consideration of this grant application.

With best regards,

D. Brennen Keene
Chairman
Chesterfield County Chamber of Commerce

John J. Bennett
Chairman
Chesterfield Business Council of the Greater Richmond Chamber

cc: The Honorable Members of the Board of Supervisors

Attachment 5

CHESTERFIELD COUNTY: At a regular meeting of the Board of Supervisors, held in the Public Meeting Room at the Chesterfield Administration Building on January 22, 2014, at 3:00 p.m.

*On motion of Ms. Jaeckle, seconded by Mr. Elswick, the Board approved, upon notification of grant award by VDRPT, appropriation/transfer of the required match and appropriation of the VDRPT reimbursement; and upon approval notification from VDRPT, authorized the County Administrator to enter into the necessary county/state agreements/contracts, permits/mitigation agreements, and surety agreements, acceptable to the County Attorney, for the Ettrick Train Station project; and authorized the County Administrator to proceed with the design and right-of-way acquisition, including advertisement of an eminent domain public hearing, if necessary; and authorized the Chairman of the Board of Supervisors and County Administrator to execute easement agreements for relocation of utilities; and authorized the County Administrator to proceed with the advertisement for construction of the project.

And, further, the Board adopted the following resolution:

WHEREAS, the Ettrick Train Station provides daily Amtrak service between major cities along the east coast including Boston, New York, Washington D.C., Charlotte, Orlando and Miami; and

WHEREAS, 22,000 riders use the Ettrick station annually for their travel; and

WHEREAS, Amtrak's new Northeast Regional service began in December of 2012, resulting in increased ridership using the Ettrick Train Station; and

WHEREAS, the Ettrick Train Station is centrally located to the Tri-Cities region which includes southern and eastern Chesterfield County, Hopewell, Colonial Heights, Petersburg, Prince George and Dinwiddie; and

WHEREAS, over 100,000 residents of the Tri-Cities region are within a six-mile radius of the Ettrick Train Station; and

WHEREAS, the Ettrick Train Station is located less than one mile from Virginia State University which currently has over 6,000 students enrolled, and is expected to have over 10,000 students enrolled by 2020; and

WHEREAS, the Ettrick Train Station is located less than eight miles from Fort Lee where 75,000 soldiers train annually; and

Attachment 6

WHEREAS, the Ettrick Train Station is located on one of five original national high-speed rail corridors: the Southeast High Speed Rail (SEHSR) corridor, which runs from Washington D. C. to Raleigh, North Carolina; and

WHEREAS, ridership is expected to increase to 98,000 annually by 2025 with the implementation of the SEHSR service; and

WHEREAS, the Ettrick Train Station has been determined to be adequate to meet near-term increases in ridership per Virginia Department of Rail and Public Transportation's Pre-NEPA Evaluation, Tri-Cities Area Multimodal Station Study, dated August 22, 2012; and

WHEREAS, Chesterfield County has committed to widening East River Road to improve access to the Ettrick Train Station as noted in the Southeast High Speed Rail Tier II Draft Environmental Impact Study, and the road improvements are expected to be in place by 2015; and

WHEREAS, implementation of the SEHSR will require track expansions resulting in the need to shift the station away from the new track; and

WHEREAS, improvements to the Ettrick Train Station can be phased to benefit the growth in ridership and potential for high-speed rail service.

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of Chesterfield County requests the Virginia Department of Rail and Public Transportation provide funding for the Ettrick Train Station Improvement Project.

AND, BE IT FURTHER RESOLVED that the Board hereby agrees to pay 30 percent of the total estimated grant request of $6,000,000 for the Ettrick Train Station Improvement Project.

Ayes: Holland, Elswick, Jaeckle, Warren and Gecker.
Nays: None.

Certified by:

Janice Blakley

Janice Blakley, Clerk to the
Board of Supervisors

***DRAFT MINUTES TO BE APPROVED AT THE REGULARLY SCHEDULED MEETING ON FEBRUARY 12, 2014.**

Attachment 6

PROPOSED IMPROVEMENTS
LOOKING TOWARDS CHESTERFIELD AVE. STA. 20+00

Attachment 7

CHESTERFIELD COUNTY: At a regular meeting of the Board of Supervisors, held in the Public Meeting Room at the Chesterfield Administration Building on October 28, 2015, at 3:00 p.m.

8.B.1.b. SUPPORTING THE ETTRICK SITE AS THE FUTURE LOCATION OF THE TRI-CITIES MULTIMODAL STATION

*On motion of Ms. Jaeckle, seconded by Mr. Gecker, the Board adopted the following resolution:

WHEREAS, the Tri-Cities Transportation Planning Organization has conducted an Environmental Assessment of potential station locations to serve as the region's future Multimodal Station; and

WHEREAS, three locations have been identified as viable alternatives: the Boulevard site in Colonial Heights, the S. Collier site in Petersburg and the Ettrick site in Chesterfield; and

WHEREAS, the existing Ettrick Train Station is located on the Ettrick site and provides a valuable transportation mode for the Tri-Cities region; and

WHEREAS, the Ettrick Train Station provides daily Amtrak service between major cities along the east coast including Boston, New York, Washington D.C., Charlotte, Orlando and Miami; and

WHEREAS, the Ettrick site is centrally located to the Tri-Cities region which includes southern and eastern Chesterfield County, Hopewell, Colonial Heights, Petersburg, Prince George and Dinwiddie; and

WHEREAS, over 100,000 residents of the Tri-Cities region are within a six-mile radius of the Ettrick site; and

WHEREAS, the Ettrick site is within walking distance of Virginia State University which currently has 5,000 students enrolled, and is expected to have over 10,000 students enrolled by 2020; and

WHEREAS, the Ettrick site is within walking distance of Virginia State University's Multipurpose Center, a regional venue for concerts, sporting events and conventions; and

WHEREAS, the Ettrick site is located less than eight miles from Fort Lee where 70,000 soldiers train annually; and

WHEREAS, the Ettrick site is located on one of five original national high-speed rail corridors: the Southeast High Speed Rail (SEHSR) corridor, which runs from Washington D. C. to Raleigh, North Carolina; and

WHEREAS, the existing Ettrick Train Station accommodates nearly 30,000 boardings and alightings annually and ridership is expected to increase to 98,000 annually by 2025 with the implementation of the SEHSR service; and

WHEREAS, according to AMTRAK's "Great American Station" guidelines the existing Ettrick Train Station should be upgraded to a small-medium facility to accommodate existing and future ridership; and

WHEREAS, the future implementation of the SEHSR will require track expansions resulting in the need to move the Ettrick Train Station away from the new track; and

WHEREAS, improvements for the Tri-Cities Multimodal Station at the Ettrick site can be phased to benefit the growth in ridership and potential for high-speed rail service; and

WHEREAS, the Ettrick Station has served and should continue to serve Tri-Cities residents and visitors for many years to come; and

WHEREAS, the Ettrick Station is a key component to the revitalization of Ettrick, a substantial area ripe for development and redevelopment, as reflected in the "Ettrick-VSU Special Area Plan" of the Chesterfield County Comprehensive Plan.

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of Chesterfield County supports the Ettrick site serving as the future Tri-Cities Multimodal Station.

AND, BE IT FURTHER RESOLVED that the Board of Supervisors understands that local contributions are an important funding source for the future Tri-Cities Multimodal Station.

Ayes: Elswick, Warren, Jaeckle, Holland and Gecker.
Nays: None.

Certified by: Sara Hall

Sara Hall, Deputy Clerk to the
Board of Supervisors

***DRAFT MINUTES TO BE APPROVED AT THE REGULARLY SCHEDULED MEETING ON NOVEMBER 18, 2015.**

15-R-63
Adopted: 11/17/15

A RESOLUTION OF THE CITY OF PETERSBURG IN SUPPORT OF COLLIER YARD AS THE PREFERRED SITE RECOMMENDATION FOR THE FUTURE TRI-CITIES REGIONAL RAIL STATION

WHEREAS, in May 2010, the Federal Railroad Administration identified a need for a larger rail station for the Southeast High Speed Rail in the Tri-Cities Area, due to the accessibility difficulties with the existing station at Ettrick; and

WHEREAS, on December 12, 2013, the Tri-Cities Area Metropolitan Planning Organization (MPO) took action to authorize the Crater Planning District Commission to sponsor a National Environmental Policy Act (NEPA) study for a future passenger rail station in the Tri-Cities Area; and

WHEREAS, upon request by the Crater Planning District Commission, the Federal Railroad Administration agreed to be the lead federal agency for the NEPA Study; and

WHEREAS, the NEPA Study effort has identified three potential sites for a future passenger rail station location, including Boulevard, Collier, Ettrick; and

WHEREAS, the NEPA study project sponsor, has requested each of the six local governments and four agencies participating in this NEPA Study to indicate to the Crater Planning District Commission by resolution or by letter the preference for station location before the end of November 2015; and

WHEREAS, Collier site is most accessible of the three sites based on the visibility of the station and its ability to be reached by both I-95, I-85 and to provide a potential regional rail hub for the second largest population in Virginia, Hampton Roads; and

WHEREAS, the Collier site has the most ability to create an high intensity activity area as well as ranked the best site in the Baker 2015 Transit Oriented Development analysis; and

WHEREAS, the Collier site has the most feasible development potential based on the City of Petersburg owning all of the proposed site creating an ease of land assemblage; and

WHEREAS, there are minimal environmental disturbances, socio-economic impacts, and environmental justice considerations, as determined the draft Cultural resource report; and

WHEREAS, the Collier site's compatibility with adopted plans, surrounding future land use and support for increased multimodal/transit access exists in local and regional economic development plans; and

WHEREAS, the construction complexity, costs, and long-term fiscal impact have not been considered for the other two site, the Collier site has been considered both in the NEPA study but also mitigated by the City's submittal of $11.5 million dollars HB2 application for funding of a Collier's Yard Access Rd, which will allow for even lower station costs; and

WHEREAS, the Collier Yard site will support existing industries and foster the growth of new businesses and attract more riders, workers and visitors' from the southern region of Virginia (i.e. Emporia) which will significantly expand this region's economy.

WHEREAS, the Collier site will encourage large businesses to distribute their operations more widely into smaller, highly accessible communities and provide a higher quality of life for our residents; and

WHEREAS, this information will be forwarded to the Federal Railroad Administration for consideration as the City of Petersburg's station location recommendation; and

WHEREAS, City staff requests that Council takes under consideration a resolution in support of Collier Yard as the preferred site for the future Tri-Cities Regional Rail Station.

NOW, THEREFORE, BE IT RESOLVED that the City of Petersburg hereby supports Collier Yard as the preferred site recommendation for the future Tri-Cities Regional Rail Station.

W. Howard Myers, Mayor

ATTEST:

Nykesha D. Jackson, Clerk to Council

Adopted by the Council of Petersburg, Virginia, this 17th day of November, 2015.

Resolution 15-R-63
Adopted by the City of Petersburg
Council of the City of Petersburg on:
11/17/15

Clerk of City Council

A RESOLUTION NO. 15-43

Resolution of the City of Colonial Heights indicating preferences regarding the location of a future passenger rail station for the Tri-Cities Area.

WHEREAS, in May 2010, the Federal Railroad Administration identified a need for consideration of alternate station locations in the Tri-Cities Area in the Tier II Draft Environmental Impact Statement and Draft Section 4(f) Evaluation for the Southeast High Speed Rail Study "due to accessibility difficulties with the existing station at Ettrick"; and

WHEREAS, on December 12, 2013, the Tri-Cities Area Metropolitan Planning Organization (MPO) took action to authorize the Crater Planning District Commission to sponsor a National Environmental Policy Act (NEPA) study for a future passenger rail station in the Tri-Cities Area; and

WHEREAS, upon request by the Crater Planning District Commission, the Federal Railroad Administration agreed to be the lead federal agency for this NEPA Study; and

WHEREAS, consultant services have been procured and a Study Working Group formed for a Tri-Cities Area Passenger Rail Station NEPA Study; and

WHEREAS, the NEPA Study effort has identified three potential sites for a future passenger rail station location, including the Boulevard, Collier, and Ettrick; and

WHEREAS, the Crater Planning District Commission, as the NEPA study project sponsor, has requested each of the six local governments and four agencies participating in this NEPA Study to indicate to the Crater Planning District Commission by resolution or by letter their first, second, and third preferences for station location before the end of November 2015; and

WHEREAS, information for the resolutions and letters will be summarized and forwarded to the Federal Railroad Administration for consideration; NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF COLONIAL HEIGHTS:

1. That the City of Colonial Heights hereby recommends to the Federal Railroad Administration the following:

First Preference:	Boulevard site
Second Preference:	Ettrick site
Third Preference:	S. Collier site

2. That this resolution shall be in full force and effect upon its passage.

Approved:

Mayor

Attest:

City Clerk

****

I certify that the above resolution was:

Adopted on November 10, 2015.

Ayes: 6. Nays: 1. Absent: 0. Abstain: 0.

The Honorable Kenneth B. Frenier, Councilman: Aye.

The Honorable W. Joe Green, Jr., Councilman: Aye.

The Honorable Elizabeth G. Luck, Councilwoman: Aye.

The Honorable John E. Piotrowski, Councilman: Aye.

The Honorable John T. Wood, Councilman: Nay.

The Honorable Diane H. Yates, Vice Mayor: Aye.

The Honorable T. Gregory Kochuba, Mayor: Aye.

City Clerk

Approved as to form:

City Attorney

I, Pamela B. Wallace, City Clerk, attest this is a true copy of Resolution No. 15-43 signed by members of the Colonial Heights City Council on November 10, 2015.

Pamela B. Wallace, City Clerk

County of Dinwiddie Board of Supervisors

MINUTES

Regular Meeting – November 17, 2015, 3:00 PM
Board Meeting Room, Pamplin Administration Building
14016 Boydton Plank Road, Dinwiddie, Virginia

Supervisors Present:		Administration Present:
Daniel D. Lee, *Chair*	Election District 4	W. Kevin Massengill, *County Administrator*
Brenda Ebron-Bonner, *Vice Chair*	Election District 5	Anne Howerton, *Deputy County Administrator, Finance and General Services*
Harrison A. Moody	Election District 1	
Dr. Mark E. Moore	Election District 2	Tyler Southall, *County Attorney*
William D. Chavis	Election District 3	

Extract

7.A. RESOLUTION: LOCATION PREFERENCE FOR FUTURE PASSENGER RAIL STATION

Upon motion of Dr. Moore, seconded by Mr. Chavis,

RESOLUTION OF THE COUNTY OF DINWIDDIE INDICATING PREFERENCES REGARDING THE LOCATION OF A FUTURE PASSENGER RAIL STATION FOR THE TRI-CITIES AREA

WHEREAS, on May 2010, the Federal Railroad Administration identified a need for consideration of alternate station locations in the Tri-Cities Area in the Tier II Draft Environmental Impact Statement and Draft Section 4(f) Evaluation for the Southeast High Speed Rail Study "due to accessibility difficulties with the existing station at Ettrick"; and

WHEREAS, on December 12, 2013, the Tri-Cities Area Metropolitan Planning Organization (MPO) took action to authorize the Crater Planning District Commission to sponsor a National Environmental Policy Act (NEPA) study for a future passenger rail station in the Tri-Cities Area; and

WHEREAS, upon request by the Crater Planning District Commission, the Federal Railroad Administration agreed to be the lead federal agency for this NEPA Study; and

WHEREAS, consultant services have been procured and a Study Working Group formed for a Tri-Cities Area Passenger Rail Station NEPA Study; and

WHEREAS, the NEPA Study effort has identified three potential sites for a future passenger rail station location, including Boulevard, Collier, Ettrick; and

WHEREAS, the Crater Planning District Commission, as the NEPA study project sponsor, has requested each of the six local governments and four agencies participating in this NEPA Study to indicate to the Crater Planning District Commission by resolution or by letter their first, second, and third preferences for station location before the end of November 2015; and

WHEREAS, information from the resolutions and letters will be summarized and forwarded to the Federal Railroad Administration for consideration as the station location recommendation from the NEPA Study project sponsor.

NOW, THEREFORE, BE IT RESOLVED that the County of Dinwiddie hereby recommends to the Federal Railroad Administration the following:

First Preference: Collier

Second Preference: Boulevard

Third Preference: Ettrick

AYES: Mr. Chavis, Dr. Moore, Mr. Lee, Mr. Moody
NAYES: None

A Copy TESTE:

W. Kevin Massengill
County Administrator/Clerk to the Board

/sbw

R-15-104

Board of Supervisors
County of Prince George, Virginia

Resolution

At a regular meeting of the Board of Supervisors of the County of Prince George held in the Boardroom, Third Floor, County Administration Building, 6602 Courts Drive, Prince George, Virginia this 24th day of November, 2015:

Present:	Vote:
William A. Robertson, Jr., Chairman	Aye
Jerry J. Skalsky, Vice-Chairman	Aye
Alan R. Carmichael	Aye
William F. Gandel	Aye
Melvin C. Jones, Sr.	Aye

A-4

On motion of Mr. Gandel, seconded by Mr. Skalsky, which carried unanimously, the following Resolution was adopted:

RESOLUTION OF THE COUNTY OF PRINCE GEORGE INDICATING PREFERENCES REGARDING THE LOCATION OF A FUTURE PASSENGER RAIL STATION FOR THE TRI-CITIES AREA

WHEREAS, in May 2010, the Federal Railroad Administration identified a need for consideration of alternate station locations in the Tri-Cities Area in the Tier II Draft Environmental Impact Statement and Draft Section 4(f) Evaluation for the Southeast High Speed Rail Study "due to accessibility difficulties with the existing station at Ettrick"; and

WHEREAS, on December 12, 2013, the Tri-Cities Area Metropolitan Planning Organization (MPO) took action to authorize the Crater Planning District Commission to sponsor a National Environmental Policy Act (NEPA) study for a future passenger rail station in the Tri-Cities Area; and

WHEREAS, upon request by the Crater Planning District Commission, the Federal Railroad Administration agreed to be the lead federal agency for this NEPA Study; and

WHEREAS, consultant services have been procured and a Study Working Group formed for a Tri-Cities Area Passenger Rail Station NEPA Study; and

WHEREAS, the NEPA Study effort has identified three potential sites for a future passenger rail station location, including Boulevard, Collier, Ettrick; and

WHEREAS, the Crater Planning District Commission, as the NEPA study project sponsor, has requested each of the six local governments and four agencies participating in this NEPA Study to indicate to the Crater Planning District Commission by resolution or by letter their first, second, and third preferences for station location before the end of November 2015; and

WHEREAS, information from the resolutions and letters will be summarized and forwarded to the Federal Railroad Administration for consideration as the station location recommendation from the NEPA Study project sponsor.

NOW, THEREFORE, BE IT RESOLVED that the County of Prince George hereby recommends to the Federal Railroad Administration the following:

First Preference: Boulevard or Collier Yard South
Second Preference: Etrrick

A Copy Teste:

Percy C. Ashcraft
County Administrator

APPENDIX K-3

Newsletters

WHERE WE'VE BEEN

The United States DOT has an historical interest in evaluating alternative station sites in the Tri-Cities area. In 2010, the FRA released its Tier II DEIS for high-speed rail between Richmond, VA and Raleigh, NC. The study determined that each high-speed train will stop at a station in the Tri-Cities area and that the high-speed rail will use the CSX A-line through the area. The study identified four potential station locations, including the existing Amtrak Petersburg station at Ettrick, as well as three alternative station locations: Collier, Dunlop, and Washington Street. The Richmond to Raleigh Tier II DEIS stated that a preferred station location in the area would be determined based on a separate study to be conducted by local authorities. No station location was selected as part of the DEIS. While the FEIS for SEHSR is currently in the final stages of completion and is anticipated to be released by early 2015, the Tri-Cities area station location is the subject of this study. This Tri-Cities area station study is not limited to the station locations identified in the Tier II DEIS.

WHERE WE'RE HEADED

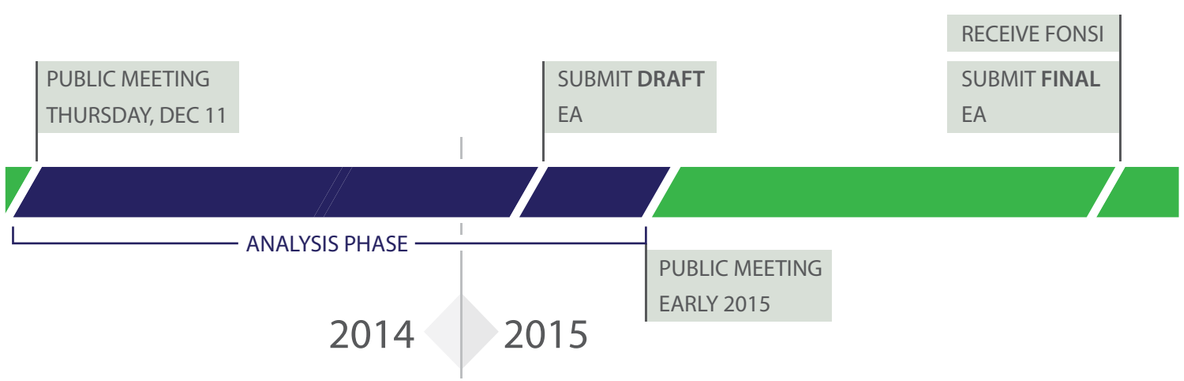
For this Tri-Cities Area Multimodal Station Study, potential station locations will be evaluated relative to accessibility to the larger transportation network, ability of each station site to accommodate required amenities and services, and the adverse and beneficial impacts to the human and natural environment.

All stations (existing and proposed) must accommodate high speed rail operational requirements of 1000 feet of straight alignment for station platforms. FRA guidance allows for flexibility in station designs to ensure the ability to meet Americans with Disabilities Act (ADA) standards for platform design at each location.

Please let us know if there are ways we can help clarify the scope or technical issues involved in the study.

For additional information, contact:
Mr. Joseph Vinsh, Director of Transportation, CPDC
at (804) 861-1666 or jvinsh@craterpdc.org.

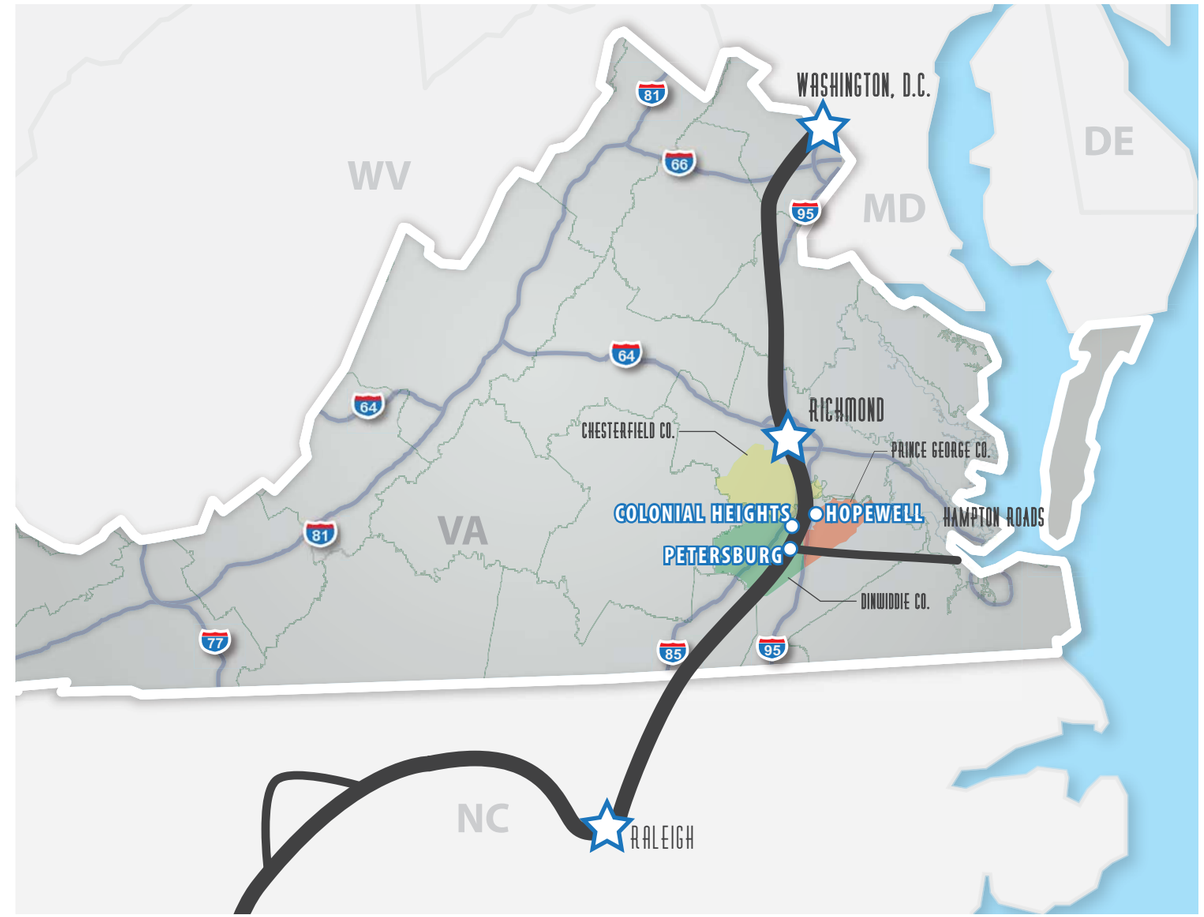
SCHEDULE



STUDY AREA

The study area includes the cities of Colonial Heights, Hopewell, Petersburg, and the counties of Chesterfield, Dinwiddie, and Prince George.

Study area map:



TERMINOLOGY

MPO	Metropolitan Planning Organization
NEPA	National Environmental Policy Act
DOT	Department of Transportation
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
FHWA	Federal Highway Administration
DRPT	Department of Rail & Public Transportation
SEHSR	Southeast High-Speed Rail
DEIS	Draft Environmental Impact Statement
FEIS	Final Environmental Impact Statement
EA	Environmental Assessment
FONSI	Finding of No Significant Impact

TRI-CITIES AREA MULTIMODAL STATION STUDY

TRI-CITIES AREA MULTIMODAL STATION STUDY

PUBLIC MEETING

A public meeting is being held:

Date: **Thursday, December 11**
When: **5:00 PM – 7:00 PM**
Where: **Union Station**
103 River Street
Petersburg, Virginia 23803

The study team will be available to discuss the purpose and need of the project and criteria for evaluating potential station sites. You will also have an opportunity to participate in a low-stress, interactive workshop. We hope to see you at Union Station!

No formal presentation will be made.

CONTACT US

Joseph Vinsh
Crater Planning District Commission
804.861.1666
jvinsh@craterpdc.org

WELCOME

On behalf of the Tri-Cities Area Metropolitan Planning Organization (MPO), the Crater Planning District Commission (CPDC) is performing a National Environmental Policy Act (NEPA) study to select a location for a Tri-Cities Area Multimodal Passenger Station. The MPO is comprised of the cities of Colonial Heights, Hopewell, and Petersburg, and portions of the counties of Chesterfield, Dinwiddie, and Prince George. While a station is not under consideration in all of the above localities, each is participating in this location study. The Federal Railroad Administration (FRA) is serving as the lead federal agency for this project, with support from the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA).

This is the first of a series of newsletters intended to keep you informed about the site selection process, study progress, opportunities for feedback, and more. There are a lot of agencies and technical jargon involved, so we've put together a list of some common acronyms inside this newsletter.

PURPOSE & NEED

The purposes of this study are to:

- Document potential impacts due to construction of a "Medium" sized passenger train station in the Tri-Cities area, as defined by Amtrak standards
- Identify a passenger train station location that best accommodates multiple modes of transportation, including car, bus, bicycle, and pedestrian access; and
- Obtain input from citizens in the identification of the station locations.

The station is needed to accommodate existing and future passenger demand due to:

- **Increasing Amtrak ridership**
- **New passenger rail service to the Hampton Roads area**
- **Future high speed rail service from Richmond to Raleigh**
- **Future high speed rail service to Hampton Roads**

The existing station as currently designed will not meet future demand. Station access will also be assessed as part of the site selection process.

TRI-CITIES AREA MULTIMODAL STATION STUDY

WELCOME BACK: Newsletter #2

Thank you for your interest in the Tri-Cities Multimodal Station Study. The Tri-Cities Area Metropolitan Planning Organization (MPO) and the Crater Planning District Commission (CPDC) are performing a National Environmental Policy Act (NEPA) study to select a location for a Tri-Cities Area Multimodal Passenger Station. In addition to serving existing passenger rail needs in the Tri-Cities area, the station will accommodate future high speed passenger rail service. The Federal Railroad Administration (FRA) is serving as the lead federal agency for this project, with support from the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA). This is the second in a series of informal newsletters meant to keep you informed of the study's site selection progress, public outreach efforts, and project milestones.

Please let us know if there are ways we can help clarify scope of the technical issues involved in this study. Additional information is available at the CPDC's website:
www.craterpdc.org/transportation /NEPA multimodal.htm

PURPOSE & NEED

The purpose of and need for a larger passenger rail station is based on the following:

- Currently, 10 Amtrak trains stop at the Amtrak Petersburg Station in Ettrick each day that serve three long-distance routes: NY to Charlotte, NY to Miami, Boston to Hampton Roads.
- In the future, the Southeast High Speed Rail corridor will be added to rail service options in the Tri-Cities area.
- The existing station in Ettrick was designed to accommodate up to 20,000 passengers per year.
- In 2013, there were almost 28,000 on-and-offs at the Ettrick Station
- Current studies indicate that, with addition of the Southeast High Speed Rail, ridership from the Etrrick Station will increase to approximately 98,000 passengers per year by 2025

To accomodate current and future rail passenger needs, either the existing Amtrak Petersburg Station in Ettrick needs to be improved or a new, larger station constructed to service the Tri-Cities area.

CONTACT US // Joseph Vinsh *Crater Planning District Commission // 804.861.1666 // jvinsh@craterpdc.org*

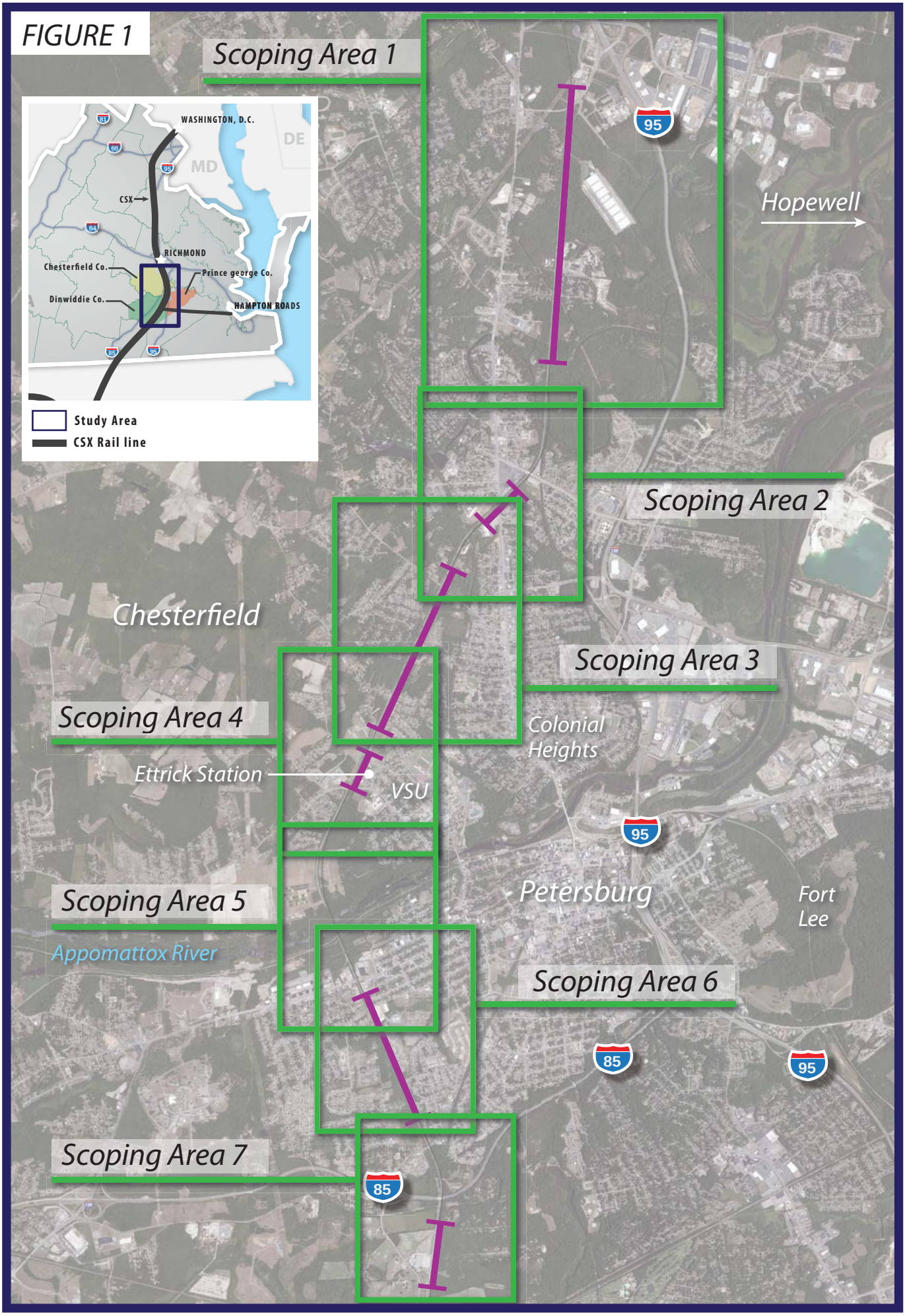


FIGURE 1
Scoping Area 1
Scoping Area 2
Scoping Area 3
Scoping Area 4
Scoping Area 5
Scoping Area 6
Scoping Area 7
Hopewell
Chesterfield
Colonial Heights
Petersburg
Fort Lee
Ettrick Station
VSU
Appomattox River
95
85
WASHINGTON, D.C.
DE
MD
CSX
RICHMOND
Chesterfield Co.
Prince george Co.
Dinwiddie Co.
HAMPTON ROADS
Study Area
CSX Rail line

CITIZEN INPUT

A public meeting was held Thursday, December 11, at Union Station in downtown Petersburg. The study team was on hand to discuss the purpose of and need for the project, as well as the criteria for evaluating potential station sites. Attendees had an opportunity to participate in informal, one-on-one workshop. The list below summarizes citizen input, as of December 29, 2014.

Issues to Consider

- Accessibility to lower income communities may be increased with a station in Petersburg.
- A more southern station location would be more accessible to Dinwiddie, Prince George, and Sussex Counties.
- Consider upgrading the existing Petersburg station (Union Station).
- A location closer to Fort Lee and the interstate may be best if vision is service to Northern Virginia.
- Economic growth of small business should be prominent in decision-making.
- Bus accommodations at train station are important.
- Station should be as far from the existing Staples Mill Road (Richmond) station as possible.

Screening Process Comments

- Consider which locations could realistically be funded and staffed.
- Access to downtown Petersburg should be a high priority.
- Consider the future ridership projections relative to station locations.
- Considering opportunities for redevelopment and revitalization.
- Long-term land use possibilities (i.e. development) should be a major consideration.

PRELIMINARY STATION SCREENING

As defined by Amtrak standards, the current and future ridership at the Petersburg Station in Ettrick warrants a "Small-Medium" sized train station (the current station in Ettrick is considered a "Small" sized station). Given that the existing station is too small, new sites that can accommodate a Small-Medium sized station, as well as the possibility of enlarging the existing station in Ettrick, are being evaluated. The first step in this evaluation process is to screen the potential locations to identify the most suitable station areas. "Screening" is a process used to rank potential train station areas based on certain measures of effectiveness. For the first screening, seven scoping areas were identified for station consideration (see Figure 1). These preliminary station areas will be ranked according to how well each area fares according to the established measures of effectiveness. The measures of effectiveness include the following considerations: Design, Property, Environmental, Proximity, and Local Compatibility.

Those station areas that are the most effective will be studied in detail in the Environmental Assessment (EA), whereas those that are the least effective will be eliminated from further consideration. The study team will update the public with the results of the preliminary screening in Newsletter #3 and on the CPDC website at: *http://www.craterpdc.org/transportation/NEPA_multimodal.htm.*

Design Considerations
- Platform Accommodation
- Freight Integration
- ADA Compatibility

Property Considerations
- Assessed Value
- Access Routes
- Relocations

Environmental Constraints
- Environmental Justice
- Environmental Resources

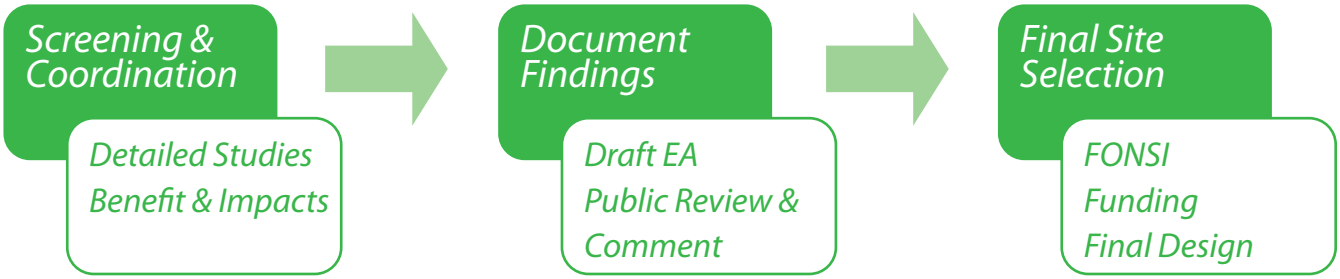
Proximity Considerations
- Distance to Interstate
- Population/Employment
- Transit Access

Local Compatibility
- with Comprehensive Plans
- Locality Support

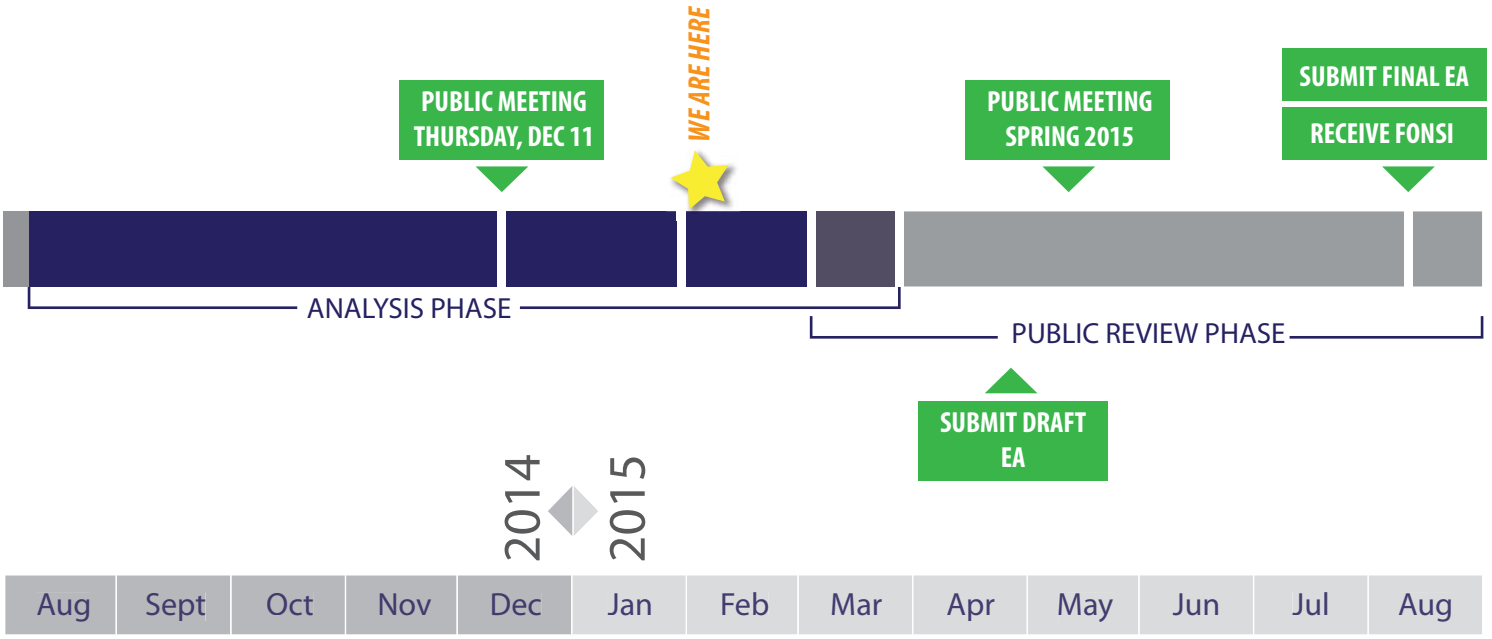
WHAT'S NEXT ?

The study team identified numerous locations for consideration as a future station site. As previously noted, these locations were presented at the December 11th Public Workshop and subjected to a preliminary evaluation. To date, only one site has been eliminated from further consideration: Scoping Area #5 (Washington Street Location). This site is not being evaluated further because it would require the displacement of businesses and could adversely affect Battersea, a significant historic site within Scoping Area #5. As the ongoing screening process gets more detailed, more sites will likely be dropped from consideration.

As illustrated below, the next steps in the study process are to: continue with the screening process; conduct detailed studies on potential areas of impact to the human and natural environment; continue coordination with agencies and local authorities; document the study findings in the draft EA; allow for the public to review and comment on the draft EA; then identify the preferred alternative in the Finding of No Significant Impact (FONSI), assuming the preferred alternative does not have significant negative impacts. After a preferred alternative is approved by FRA, the CPDC MPO will focus on funding sources and final design.



SCHEDULE



TRI-CITIES AREA MULTIMODAL STATION STUDY

PROJECT UPDATE: Newsletter #3

Thank you for your continued interest in the Tri-Cities Multimodal Station Study. The Tri-Cities Area Metropolitan Planning Organization (MPO) and the Crater Planning District Commission (CPDC) continues in their effort to perform a National Environmental Policy Act (NEPA) study to select a location for a Tri-Cities Area Multimodal Passenger Station.

The station will accommodate future high speed passenger rail service in addition to serving existing passenger rail needs in the Tri-Cities area. The Federal Railroad Administration (FRA) is the lead federal agency for this project, with support from the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA).

This is the third in a series of informal newsletters meant to keep you informed of the study's site selection progress, public outreach efforts, and project milestones. See Figure 1 for a map of the project's location.

There are a lot of agencies and technical jargon involved, so we've put together a list of some common acronyms.

TERMINOLOGY

MPO	Metropolitan Planning Organization
NEPA	National Environmental Policy Act
DOT	Department of Transportation
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
FHWA	Federal Highway Administration
DRPT	Department of Rail & Public Transportation
SEHSR	Southeast High-Speed Rail
DEIS	Draft Environmental Impact Statement
FEIS	Final Environmental Impact Statement
EA	Environmental Assessment
FONSI	Finding of No Significant Impact

Please let us know if there are ways we can help clarify scope of the technical issues involved in this study. Additional information is available at the CPDC's website:
www.craterpdc.org/transportation /NEPA multimodal.htm

CONTINUED STATION AREA SCREENING

After receiving comments at the December 2014 Public Workshop, the study team further evaluated potential station locations based on screening criteria such as design, property ownership, proximity, land use compatibility, and community and environmental impacts.

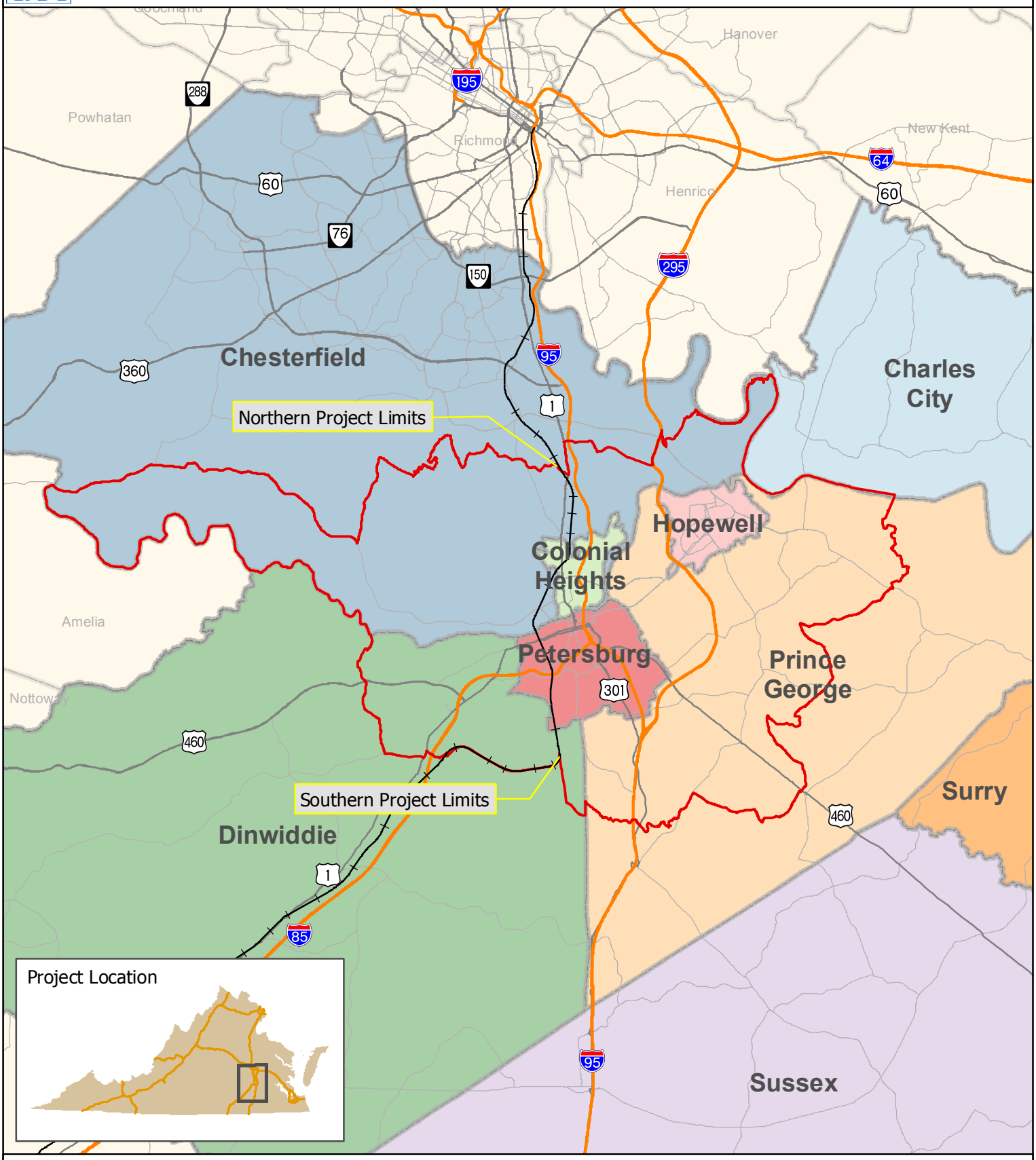
Figure 2 identifies the 13 preliminary stations initially evaluated and presented at the Public Workshop. Through further screening efforts, those 13 sites were narrowed down to five. Of the five potential station locations, the Walthall site (Site 2) in Chesterfield County was eliminated from further study. The Walthall site would likely have considerable impacts on wetlands and archaeological resources – more so than any of the other four sites under consideration.

The Environmental Assessment (EA) will document the detailed evaluations of the four remaining conceptual station sites illustrated in Figures 3 – 6:

- Boulevard (Site 4 in Colonial Heights) - fig. 3
- Branders Bridge (Site 5 in Chesterfield) - fig. 4
- Ettrick (Site 9 in Chesterfield) - fig. 5
- Collier (Site 12 in Petersburg) - fig. 6

The graphic below illustrates several of the areas of study to be addressed in the EA. The study findings will be documented in the Environmental Assessment (EA), due out later this spring.

Tri-Cities Area Multimodal Station Study



N
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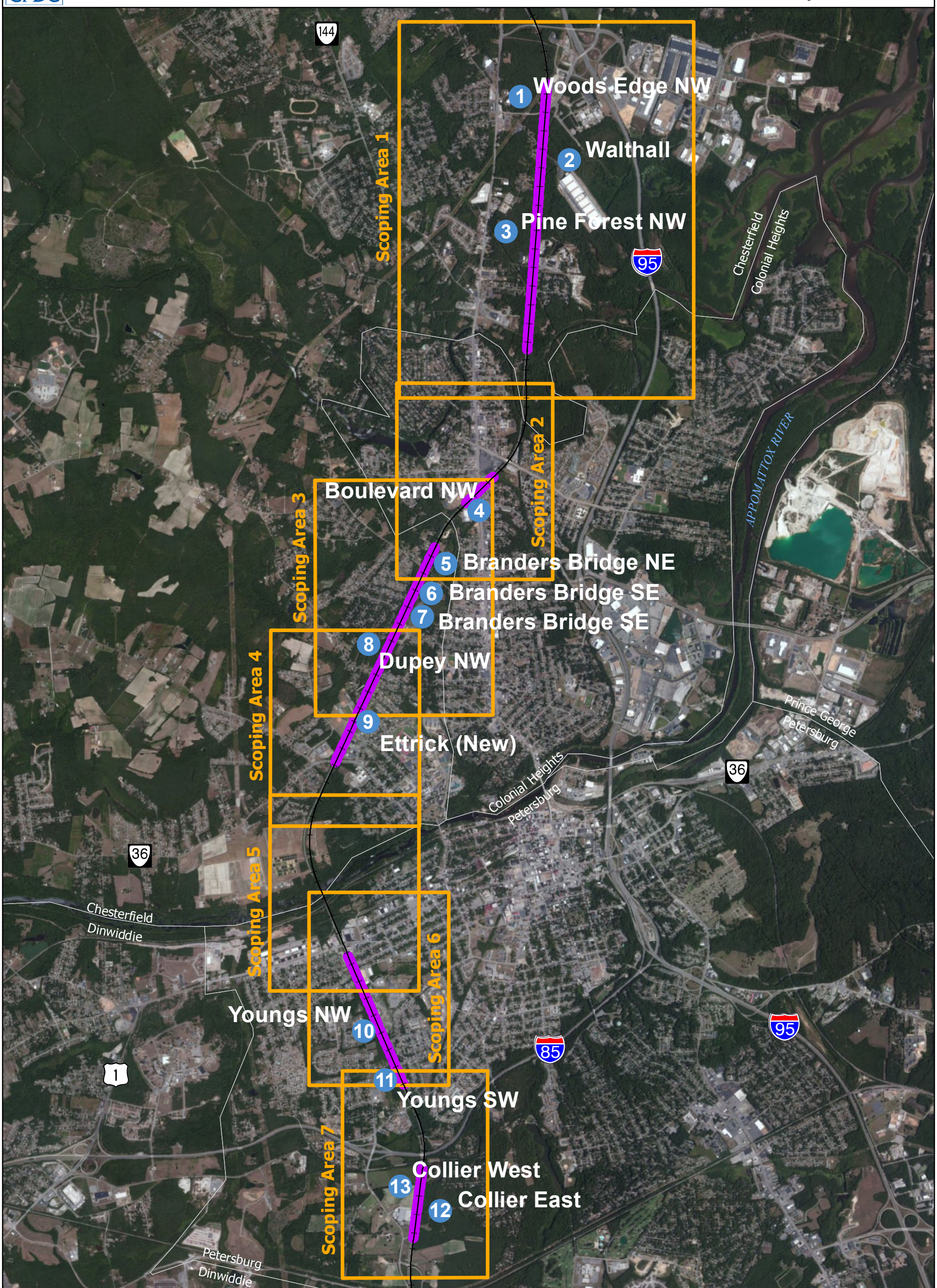
0 2.5 5
Miles

Preferred SEHSR Alignment
Tri-Cities MPO Boundary
Crater PDC Localities

Figure 1:
Project Study Area

Tri-Cities Area Multimodal Station Study



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Preliminary Station Areas
Preferred High Speed Rail Alignment
Tangent Track Line
Scoping Areas

Figure 2:
Scoping Areas and
Preliminary Station Locations

Tri-Cities Area Multimodal Station Study

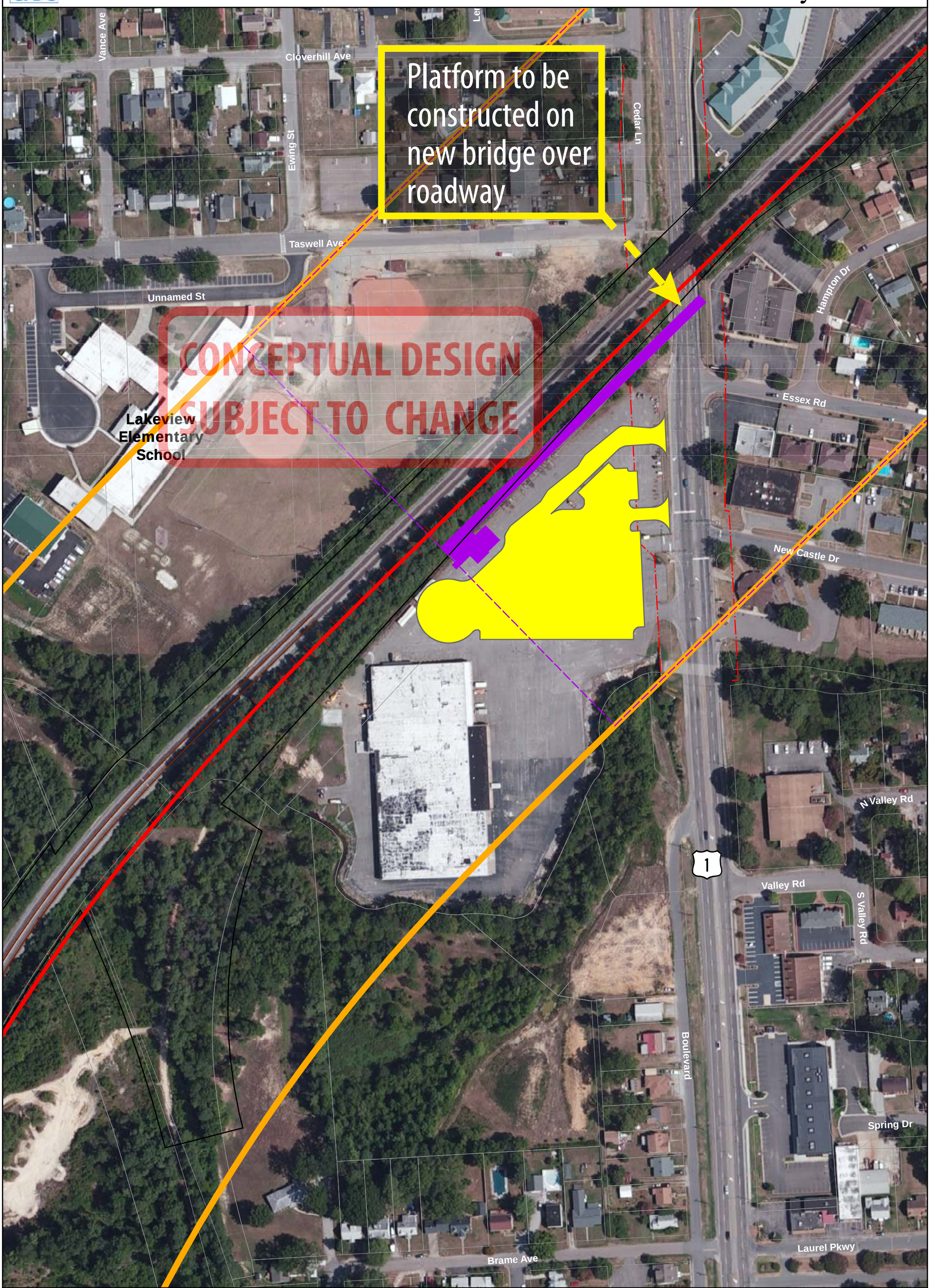
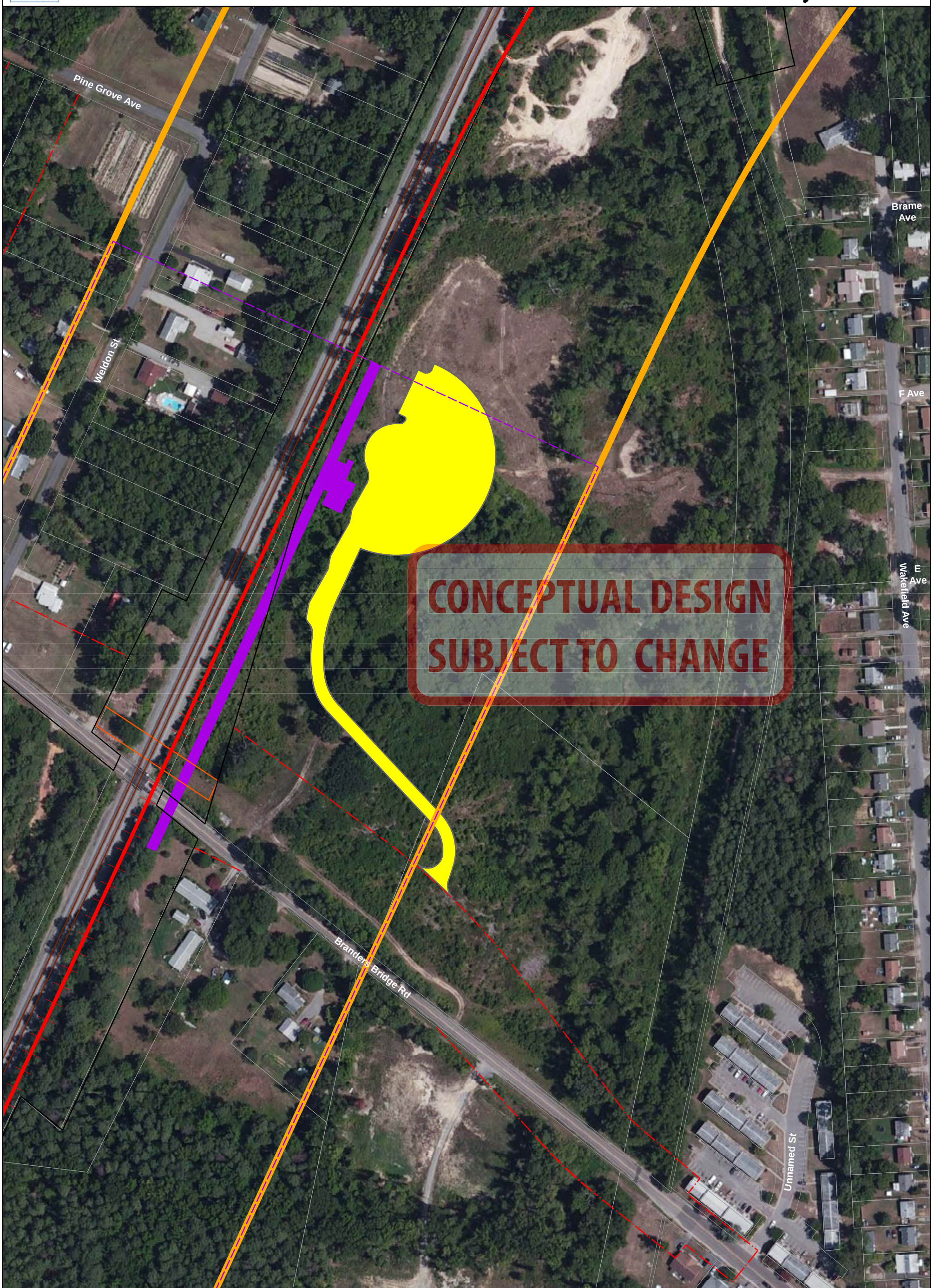


Figure 3:
Boulevard Station Concept

Tri-Cities Area Multimodal Station Study



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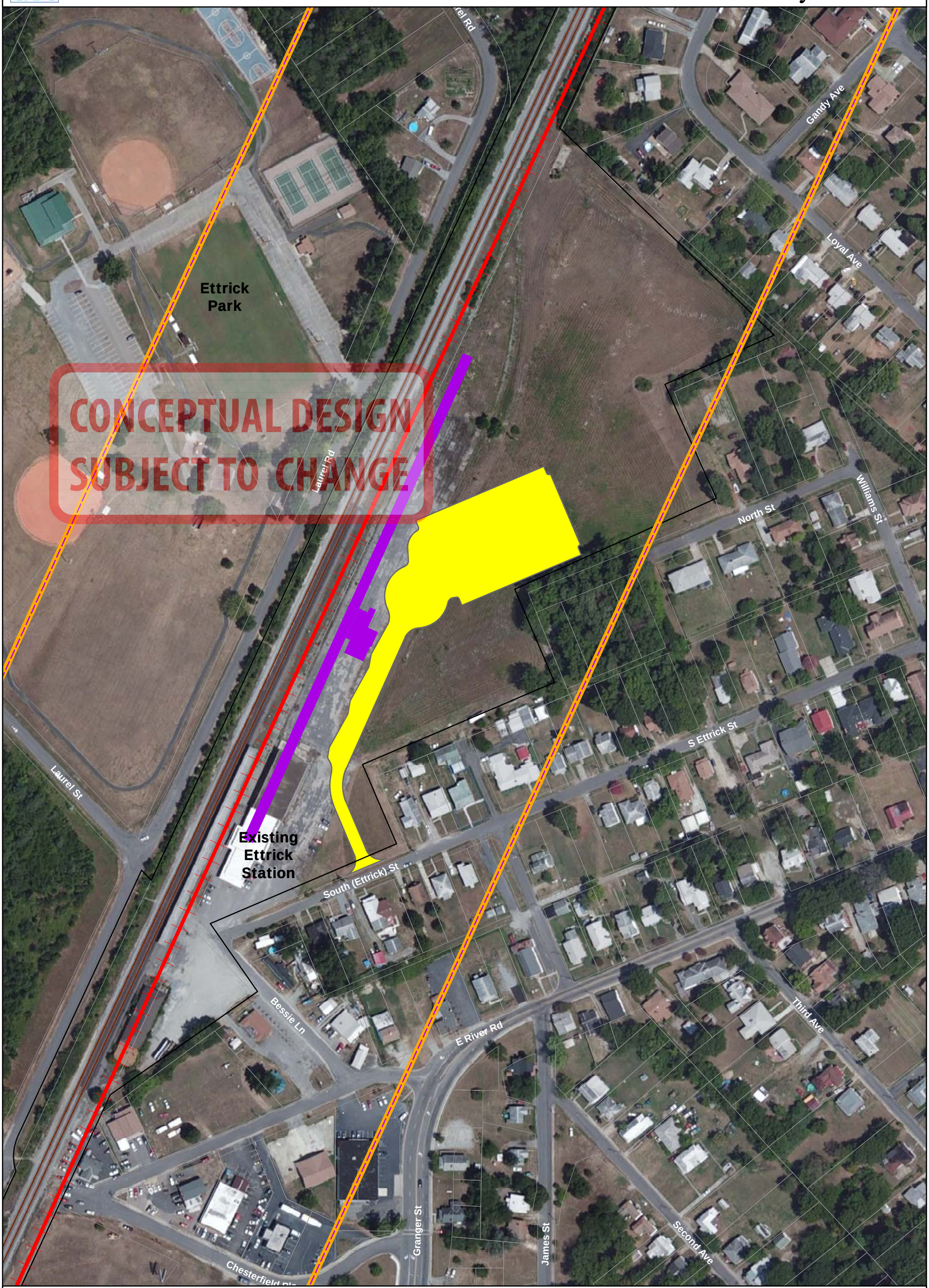
Preferred SEHSR Alignment
SEHSR Railroad
Tangent Track
SEHSR Road ROW
SEHSR Road
Study Area (500 Ft. Buffer)
Existing Rail ROW
Conceptual Station & Platform
Conceptual Road and Parking Lot

Figure 4:
Branders Bridge Station
Concept

Tri-Cities Area Multimodal Station Study



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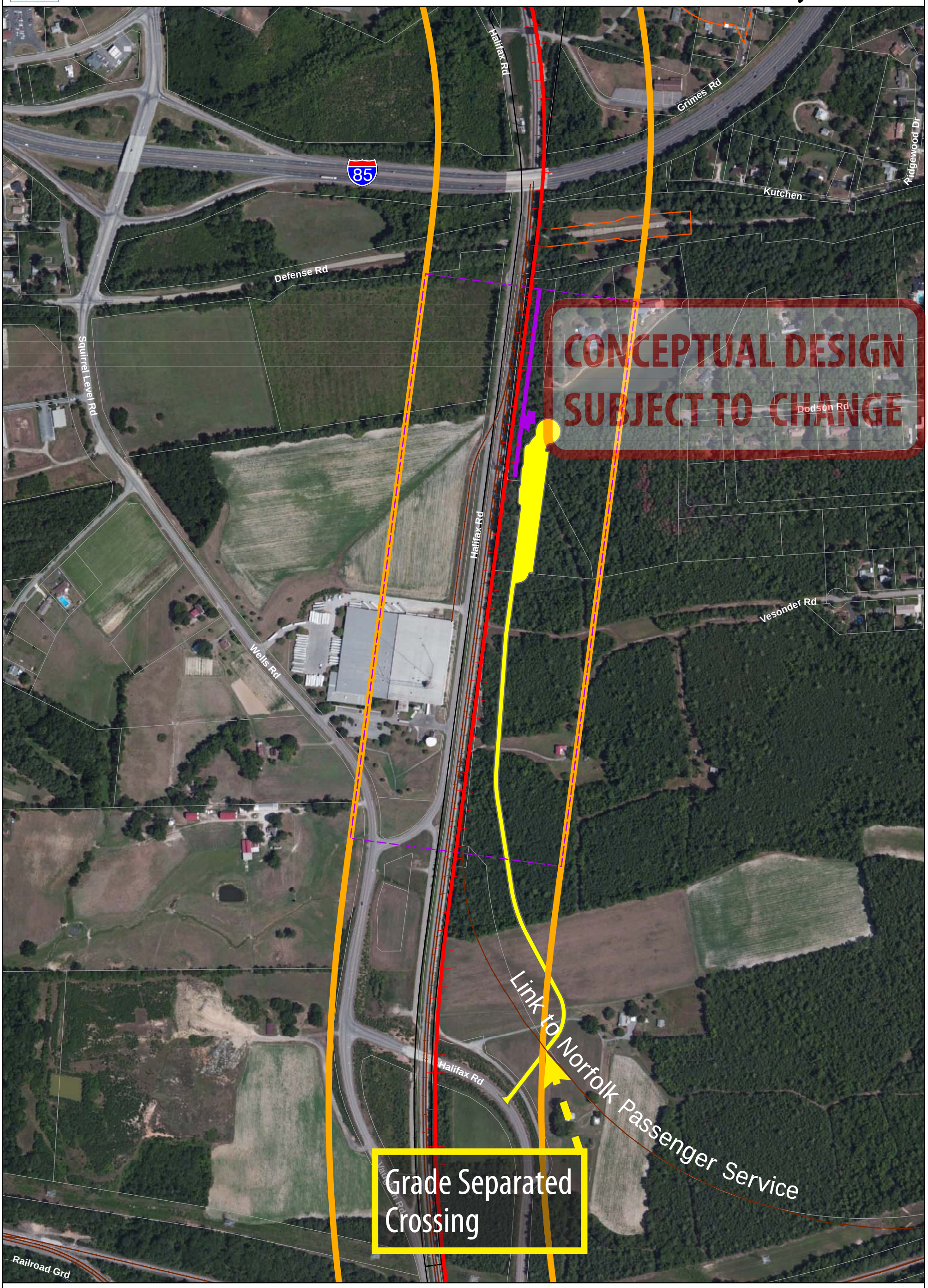
Feet

- Preferred SEHSR Alignment
- SEHSR Railroad
- Tangent Track
- SEHSR Road ROW
- SEHSR Road
- Study Area (500 Ft. Buffer)
- Existing_Rail_ROW
- Conceptual Station & Platform
- Conceptual Road and Parking Lot

Figure 5:
Ettrick Station Concept

Tri-Cities Area Multimodal Station Study



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Feet

Preferred SEHSR Alignment
SEHSR Railroad
Tangent Track
SEHSR Road ROW
SEHSR Road

Study Area (500 Ft. Buffer)
Existing Rail ROW
Conceptual Station & Platform
Conceptual Road and Parking Lot

Figure 6:
Collier Station Concept

CONCEPTUAL STATION AREA DESIGN

As stated in previous newsletters, the current and future ridership at the Petersburg Station in Ettrick warrants a "Small-Medium" sized train station (the current station in Ettrick is considered a "Small" sized station).

A common station was developed to test for development suitability and environmental impacts at each potential site. Sizing was determined by current utilization and anticipated ridership growth. The typical station footprint is sized at just over 2.5 acres. Local site conditions affected the ultimate station size and conceptual configuration due to geographical constraints. Anticipated design variations will be further detailed for each location in the estimated station facility costing component of this study.

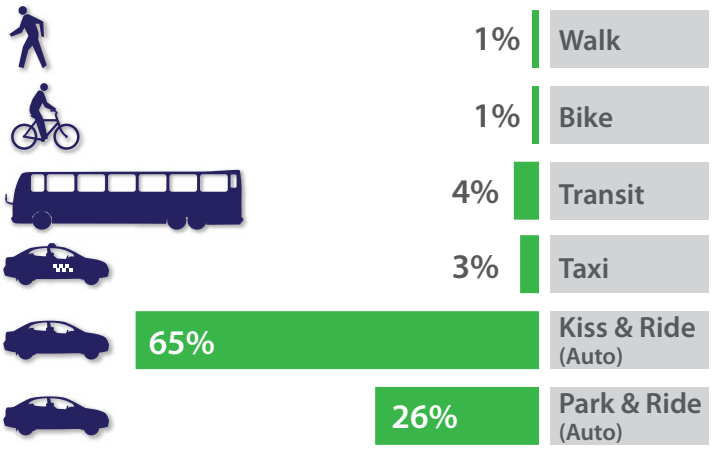
The typical station features developed at the sketch planning level for all sites included the following:

1. Island Platform, to the east of mainline, with up to 1,200 feet maximum (based on available space) on tangent/level track.
2. 3,600 square foot station building with minimum of passenger waiting, restrooms, and vending amenities.
3. Parking for 30-50 vehicles.
4. Automobile access road to nearest arterial road, via least obtrusive and environmentally sensitive route.

Ideal multimodal usage was based upon programmatic guidelines for a station of the forecast size, current observed passenger arrival/departure behavior, and future transit integration and development potential.

This will ultimately increase station size through appropriate ancillary facilities for passenger drop off, transit/taxi layover, open space, and motorized/pedestrian circulation.

The estimated multimodal characteristics for a typical station, in hierarchical order and based on a percentage of overall utilization include:



In all cases, each station site that utilized these characteristics was situated as best to respect the existing topographic conditions, including existing natural vegetation, with the goal of minimizing grading and the destruction of the existing natural conditions, as well as any existing structures.

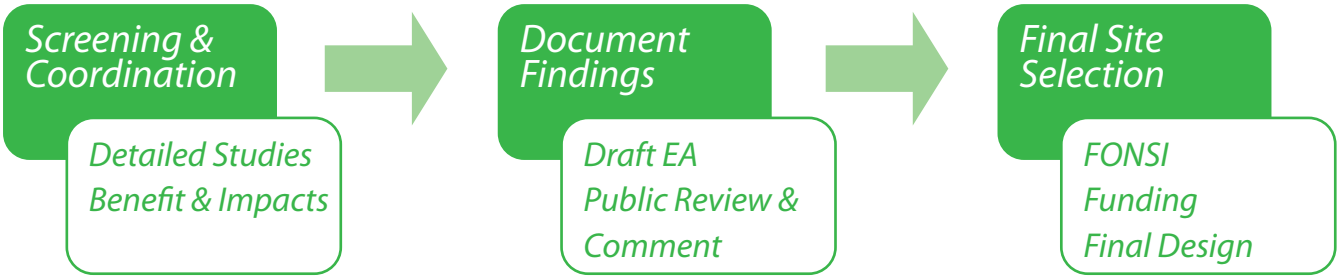
All access roads were kept to a minimum, providing the clearest, most direct access to a site facility. Vehicular access to the station site that requires or increases travel through primarily residential or neighborhood streets was avoided wherever possible.

Finally, should site specific grading or operational requirements require passenger access to multiple tracks, alternate configurations would necessitate one central platform or two platforms connected to the station by means of overhead or tunnel connections. No at-grade pedestrian crossings to railroad tracks are considered.

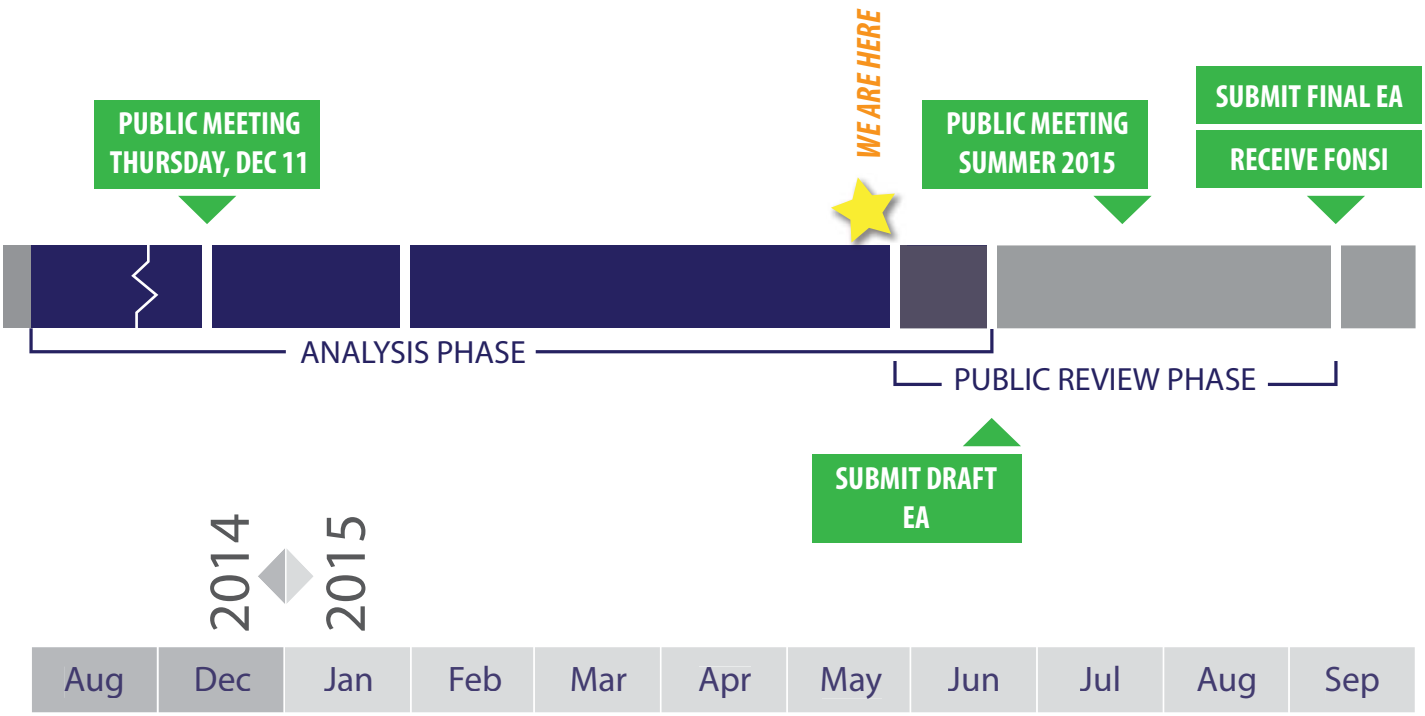
WHAT'S NEXT?

The next steps in the study process are to: continue detailed studies on potential areas of impact to the human and natural environment; continue coordination with agencies and local authorities; document the study findings in the draft EA and share for public review and comment.

Finally, the team will identify the preferred alternative in the Finding of No Significant Impact (FONSI), assuming the preferred alternative does not have significant negative impacts. After a preferred alternative is approved by FRA, the CPDC MPO will focus on funding sources and final design.



SCHEDULE



CONTACT US

Joseph Vinsh
Crater Planning District Commission
804.861.1666
jvinsh@craterpdc.org

APPENDIX K-4

Press Releases

FOR IMMEDIATE RELEASE

Tri-Cities Area Metropolitan Planning Organization (MPO)
September 17, 2014
Contact: Joseph Vinsh, Secretary, Tri-Cities MPO
804-861-1666
jvinsh@craterpdc.org

Location Study for Multimodal Passenger Station

The Tri-Cities MPO recently hired a consultant team to study site locations for a regional multimodal passenger station. The study will follow the National Environmental Policy Act (NEPA) process, documenting impacts and trade-offs associated with each potential location. Michael Baker International will be supported by Timmons Group, Dovetail Cultural Resources, and 4ward Planning.

The Federal Railroad Administration (FRA) managed a separate NEPA study for the Southeast High Speed Rail project from Richmond, VA to Raleigh, NC. That project assumed high-speed trains would stop at a station in the Tri-Cities area. FRA will also have a prominent role in this study. Other active agencies will include Federal Transit Administration, Federal Highway Administration, Virginia Department of Transportation, and Virginia Department of Rail and Public Transportation.

The study area includes the cities of Petersburg, Colonial Heights, Hopewell, and the counties of Prince George, Dinwiddie, and Chesterfield.

Tri-Cities MPO expects to hold a public information meeting in November. A screening analysis of various sites would likely be completed in early 2015, with a second public meeting in early spring.

More information about the multimodal station site location and the NEPA process can be found online at www.craterpdc.org/transportation/mpo.

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FOR IMMEDIATE RELEASE

Tri-Cities Area Metropolitan Planning Organization (MPO)
August 18, 2015
Contact: Joseph Vinsh, Secretary, Tri-Cities MPO
804-861-1666
jvinsh@craterpdc.org

Help Select a Location for Multimodal Passenger Station

The Tri-Cities MPO is completing a study of site locations for a regional multimodal passenger station. The study follows the National Environmental Policy Act (NEPA) process, documenting impacts and trade-offs associated with each potential location.

The study area includes the cities of Petersburg, Colonial Heights, Hopewell, and the counties of Prince George, Dinwiddie, and Chesterfield.

Tri-Cities MPO is hosting a public workshop on **September 16, 5:00 – 7:00 PM**.

Ettrick Elementary School
20910 Chesterfield Ave
Petersburg, VA 23803

This is an important meeting to attend. You will have an opportunity to review the candidate locations and provide input *before* the study team makes a final recommendation to the Federal Railroad Administration.

Public comments about a station location will be part of the formal decision making process.

Other active agencies include Federal Transit Administration, Federal Highway Administration, Virginia Department of Transportation, and Virginia Department of Rail and Public Transportation. Information about the multimodal station site locations and the NEPA process can be found online at www.craterpdc.org/transportation/mpo.

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FOR IMMEDIATE RELEASE
January 13, 2016

Contact: Joseph Vinsh
Phone: (804) 861-1666
Email: jvinsh@craterpdc.org

Tri-Cities Multimodal Station Environmental Assessment Final Report Release Date Update

Petersburg, VA – The Crater Planning District Commission is providing an update on the completion of a final report to document findings from the Tri-Cities Multimodal Station Environmental Assessment (EA). Stakeholder comments and station location preferences from local jurisdictions were received for inclusion in the document through a variety of outreach and information events conducted in the Fall/Winter of 2015. Additional information regarding the cultural resource analysis is still forthcoming, following prescribed processes and review periods. The final document will be released upon full concurrence on this remaining environmental matter, anticipated by the end of January 2016.

To date, a specific station location preference has not been identified, with three final sites (Boulevard, Ettrick, and Collier South) having been identified as feasible per environmental considerations. The Federal Railroad Administration (FRA), as the lead federal agency for this study, is anticipated to state single location preference in the Environmental Assessment, and will announce the selected alternative upon the Finding of No Significant Impact (FONSI). FRA and CDPC will consider all comments and public input, and responses will be included the FONSI.

Upon release, official notice will be given that the final Environmental Assessment document is available for a public review and comment period. We thank you for you continued interest in this study and welcome your thoughtful consideration of the analysis upon release of the final report.

About the Crater Planning District Commission:
The Crater Planning District Commission is comprised of 11 local governments in south central Virginia. These are the cities of Colonial Heights, Emporia, Hopewell and Petersburg, and the counties of Charles City, Chesterfield, Dinwiddie, Greensville, Prince George, Surry and Sussex. The major focus of the Commission's Work program is economic, industrial and small business development, reflecting the priorities which have been established by the member localities.

http://craterpdc.org/transportation/NEPA_multimodal.htm

# # #

APPENDIX K-5

Public Workshops

ALL ABOARD !

Please join us for a public information meeting about the

TRI-CITIES MULTIMODAL PASSENGER STATION STUDY

Union Station

103 River Street
Petersburg, VA

Thursday, Dec. 11, 5 - 7:00 PM

For details:

Contact Joseph Vinsh
804.861.1666 or *jvinsh@craterpdc.org*

PUBLIC NOTICE

Pursuant to 23 CFR, Part 450 and 40 CFR Part 51, the Tri-Cities Area Metropolitan Planning Organization hereby provides area citizens an opportunity to participate in an interactive workshop for the Tri-Cities Area Multimodal Station Study. This study is being conducted in accordance with the National Environmental Policy Act for the purpose of addressing options for a potential high speed passenger station stop in the Tri-Cities. The workshop will be held from 5 to 7 pm. on December 11, 2014 in the Union Train Station located 103 River Street in Petersburg, Virginia.

Written comments should be addressed Crater Planning District Commission, P.O. Box 1808, Petersburg, Virginia 23805 or sent via email jvinsh@craterpdc.org before 12/22/14.

The Tri-Cities Metropolitan Planning Organization and the Crater Planning District Commission fully comply with Title VI of the Civil Rights Act of 1964 and related statutes and regulations in all programs and activities. For more information, see http://www.craterpdc.org/transportation/mpo.htm or call 804-861-1666. Hearing impaired may call the Virginia Relay Center at 1-800-828-1120.

Tri-Cities Multimodal Station Environmental Assessment Public Meeting #1

SIGN-IN SHEET

(Please Print Your Information)

Name	Organization Represented (if applicable)	Email Address
Mike Knott	Moffatt & Nichol	mknott@moffattnichol.com
Joe Green	City Council, Colonial Heights	greenj@colonialhtsva.gov
John Hubert	Self	johnandcurrie4@yahoo
KEVIN PAGE	DRPT	Kevin.Page@DRPT.VIRGINIA.GOV
JERRY GROSSHANS	Oldtown Chapter NRHS	NONE
Amin Vera	The Progress - Index	— avera@progress-index.com
Pat Rae	"	"
Paul Agnello	VDOT	
DOUGLAS MILES	PGC PLANNING	DMILES@PRINCEGEORGECOUNTYVA.GOV
Celie & Glenn Dean		pampier@verizon.net
Ben Zegel		
Edgar V. Walline	Chesterfield Planning	Walline@chesterfield.gov

Tri-Cities Multimodal Station Environmental Assessment Public Meeting #1

SIGN-IN SHEET

(Please Print Your Information)

Name	Organization Represented (if applicable)	Email Address
Richard Nordlund	Public	RSNORDLUND@GMAIL.COM
Brandon Martin	citizen	abjemart@hotmail.com
Barb Smith	Chesterfield	
David Wiggins	Weichert, Realtors - Brockwell + Portwood	dcwiggins@aol.com
Mark R. Butt	VDOT	mark.r.butt@vdot.virginia.gov
CAREY BURCH	HDR	CAREY.BURCH@HDRINC.COM
Danny Plaugher	VHSR	Danny@VHSR.com,
Dironna Belton	Petg. Area Transit	dbelton@petersburg-va.org
Dean McCray	Dinwiddie Planning Commission	deanmccray@earthlink.net
WILLIAM CHACK	DN Willie	

Tri-Cities Multimodal Transit Station Environmental Assessment

Public Workshop Factsheet

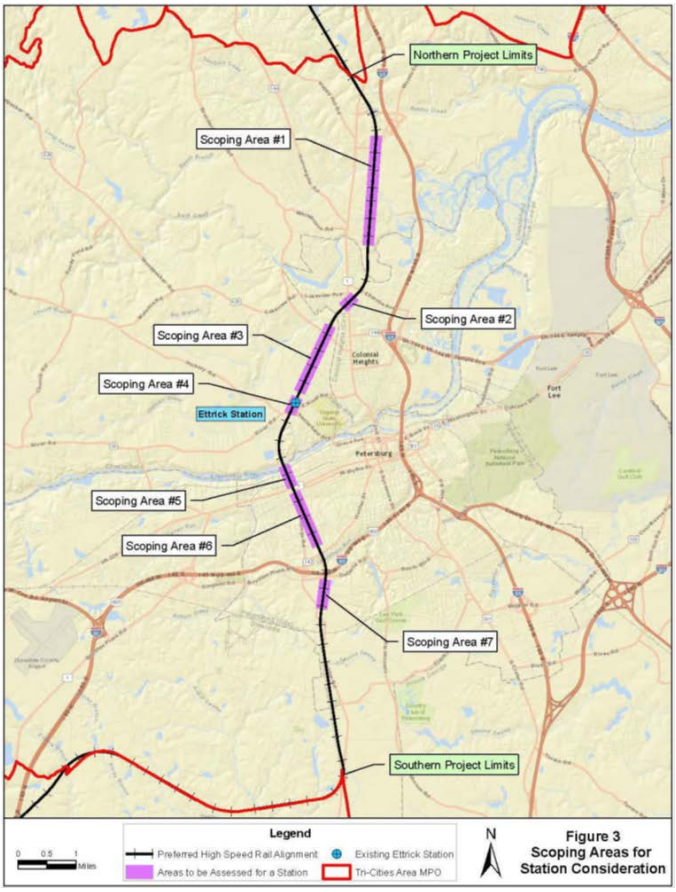
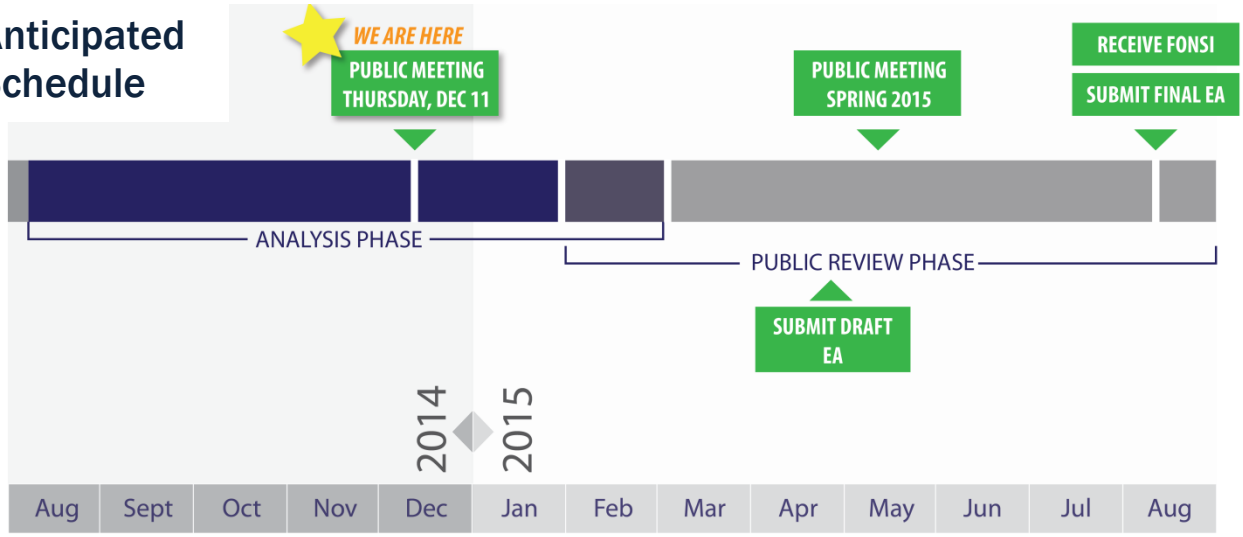


Figure 3 Scoping Areas for Station Consideration

Project Scoping Areas

The Crater Planning District Commission is studying the need for an improved Multimodal Transit Station in the Tri-Cities area. Currently, passenger train service in the area is provided at the Ettrick Station. As passenger rail service increases over time, and with the potential introduction of new High Speed Rail service that stops in the Tri-Cities area, there is demand for either improving the Ettrick Station or possibly relocating that station within the study area in order to expand services. This expansion is needed not only for increased passenger rail demand that has occurred recently, but also needed to meet future demand. The impacts of an improved station will be documented in an Environmental Assessment (EA) which is required under the National Environmental Policy Act (NEPA).

Anticipated Schedule



http://www.craterpdc.org/transportation/NEPA_multimodal.htm

Elements of Need for an Improved Multimodal Station

- Increasing Amtrak ridership, including passenger rail service to the Hampton Roads area;
- Future high speed rail service from Richmond to Raleigh being considered as part of the Southeast High Speed Rail project; and
- Future high speed rail service into Hampton Roads.

What is an Environmental Assessment (EA)?

An Environmental Assessment is required under the National Environmental Policy Act (NEPA) in order for the station to receive Federal funding in the future. The EA will document the potential impacts associated with improvement of the Ettrick Station or construction of a new station on new location. The EA will include analyses of traffic impacts, socioeconomic impacts, cultural resource impacts, and impacts to the natural environment. It will be used to determine the best location for an improved station.

How can I participate?

Comments from citizens and interested groups are welcome throughout the study process. You can submit comments at the workshop tonight by using the e-mail address shown below. Additional information is also available via this e-mail address. There will be a formal public hearing for the EA once it is in draft form. You will be able to review the Draft EA and provide comments.

Connection to SEHSR

This study is related to the Southeast High Speed Rail project which is evaluating new high speed rail service between Richmond and Raleigh and that is in the final stage of the NEPA process. A station in the Tri-Cities area has been identified as a component of that service, but was not assessed for environmental impacts. That is one of the reasons that this study is proceeding as a regional initiative.

More Information

More information about the EA can be found online at the address shown below or by contacting the study team at TriCitiesStationStudy@mbakerintl.com

WELCOME

Welcome to tonight's public workshop for the Tri-Cities Multimodal Station Environmental Assessment(EA). **Your input will be used to help us complete a study for an improved passenger rail station in the Tri-Cities area.**

At tonight's meeting you can learn about our study, share any concerns that you might have as we kickoff this environmental process, and talk with members of the study team.

In addition, you can leave comments on the study with us tonight using the provided comment sheet, take them home with you and mail them to us later, or fill them in on-line at **http://www.craterpdc.org/transportation/NEPA_multimodal.htm**

We are here to listen to you as we start this process and look forward to working with you as we complete the EA.

CRATER PLANNING DISTRICT COMMISSION
CPDC

HOW YOU CAN HELP US TONIGHT

1. *Review the Purpose and Need for an Improved Station in Tri-Cities*
2. *Help us Develop Criteria that will Evaluate Potential Station Sites*
3. *Identify any Resources within Our Study Area that are Important to You*
4. *Review Preliminary Station Area Maps and Discuss Any Concerns*

CRATER PLANNING DISTRICT COMMISSION
CPDC

WHY ARE WE DOING THIS STUDY?

The purpose of this study is to document potential impacts due to construction of a "Medium" sized train station, as defined by Amtrak standards, in the Tri-Cities area.

The station is needed to accommodate existing and future passenger demand due to:

- Increasing Amtrak ridership, including passenger rail service to the Hampton Roads area,
- Future high speed rail service from Richmond to Raleigh being considered as part of the Southeast High Speed Rail project,
- Future high speed rail service into Hampton Roads.

The existing station at Etrick has ridership today that indicates a need for expansion and the number of riders is projected to increase in the future as service expands. Improvements are needed to support existing and future demand for rail service.

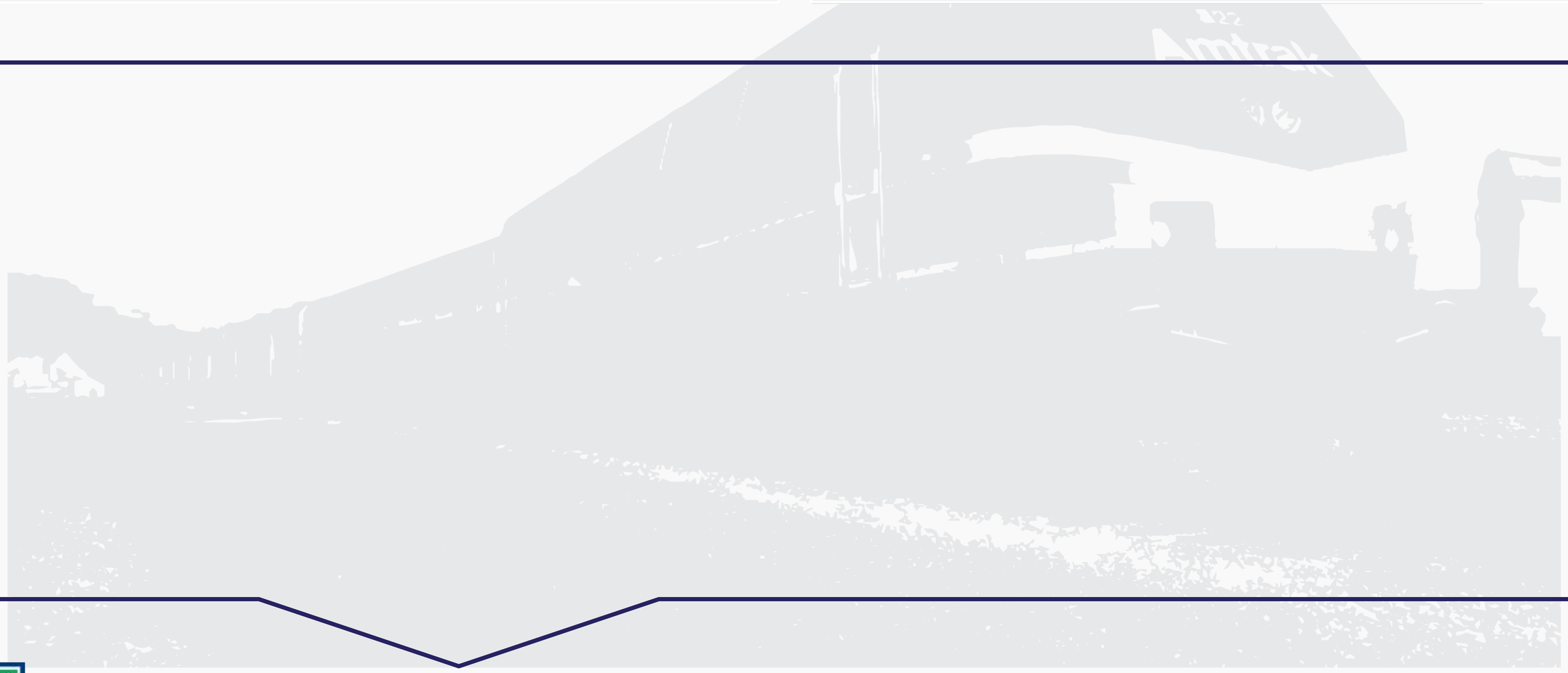
Access to the improved station will also be assessed as part of the site selection process. Several sites will be assessed as part of the environmental process.

CRATER PLANNING DISTRICT COMMISSION
CPDC

PLEASE HELP US!

1 *Do you understand why we are completing this study?*

2 *Do you have any concerns about the purpose of this study or do you know of other needs that should be considered?*



CRATER PLANNING DISTRICT COMMISSION
CPDC

MEASURES OF EFFECTIVENESS

1

One of the first steps in our process will be to identify several potential sites for an improved station, including using the existing location.

2

We will conduct a preliminary screening of those sites to determine if some of them have fatal flaws or are not suitable for the more detailed studies that will follow in the EA document.

3

Each station will be assessed based on a list of Physical Attributes and Potential Impacts shown on the following board.

CRATER PLANNING DISTRICT COMMISSION
CPDC

MEASURES OF EFFECTIVENESS

Each station will be assessed for:

PHYSICAL ATTRIBUTES

Platform Accommodation
Station Size
Assess Value of Property
Distance to Interstate
Distance to Destinations
Transit Access
Bicycle & Pedestrian Access
ADA Compliance

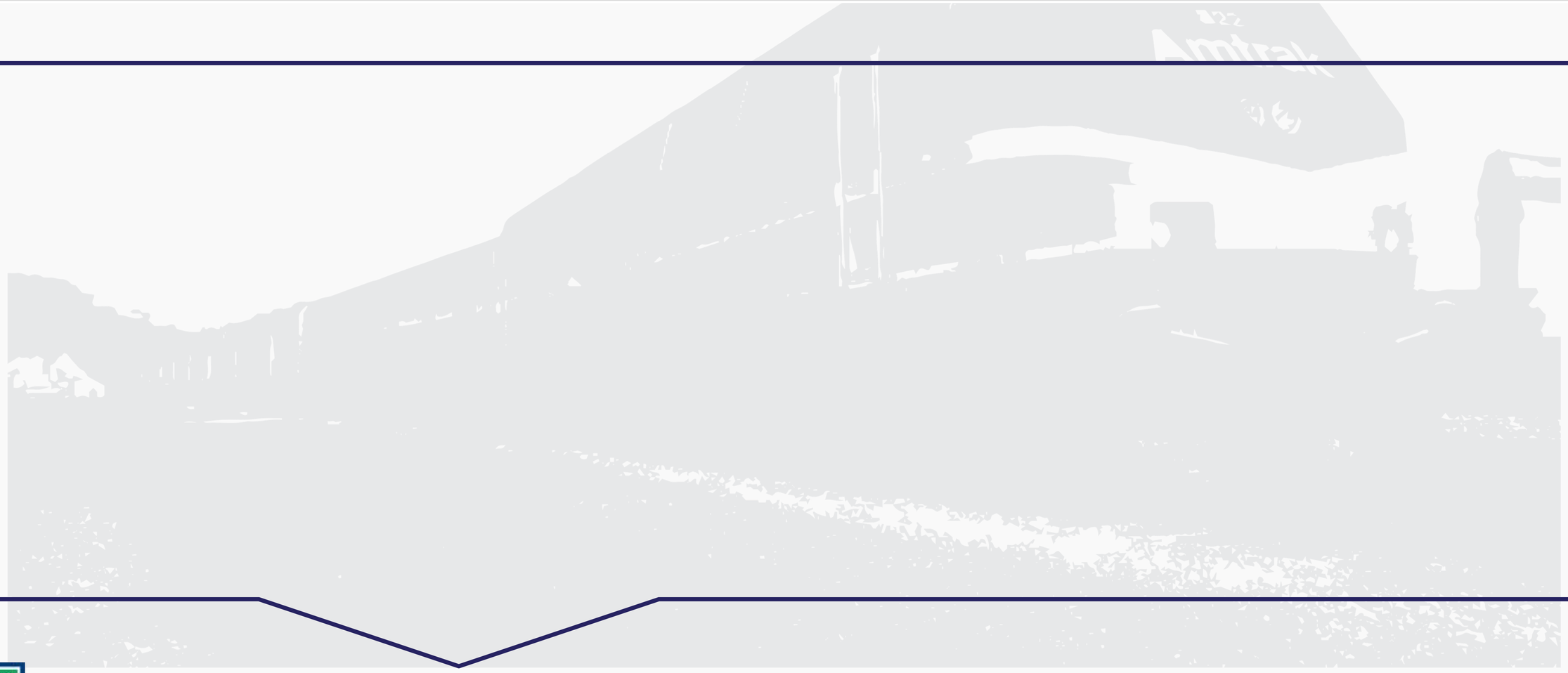
POTENTIAL IMPACTS

Residential and Business Relocations
Environmental Justice
Historic Properties and Battlefields
Protected Species
Wetlands and Streams
Existing & Future Land Use

CRATER PLANNING DISTRICT COMMISSION
CPDC

PLEASE HELP US!

1 *Do you have other criteria or measures that we should consider in looking at potential station sites?*



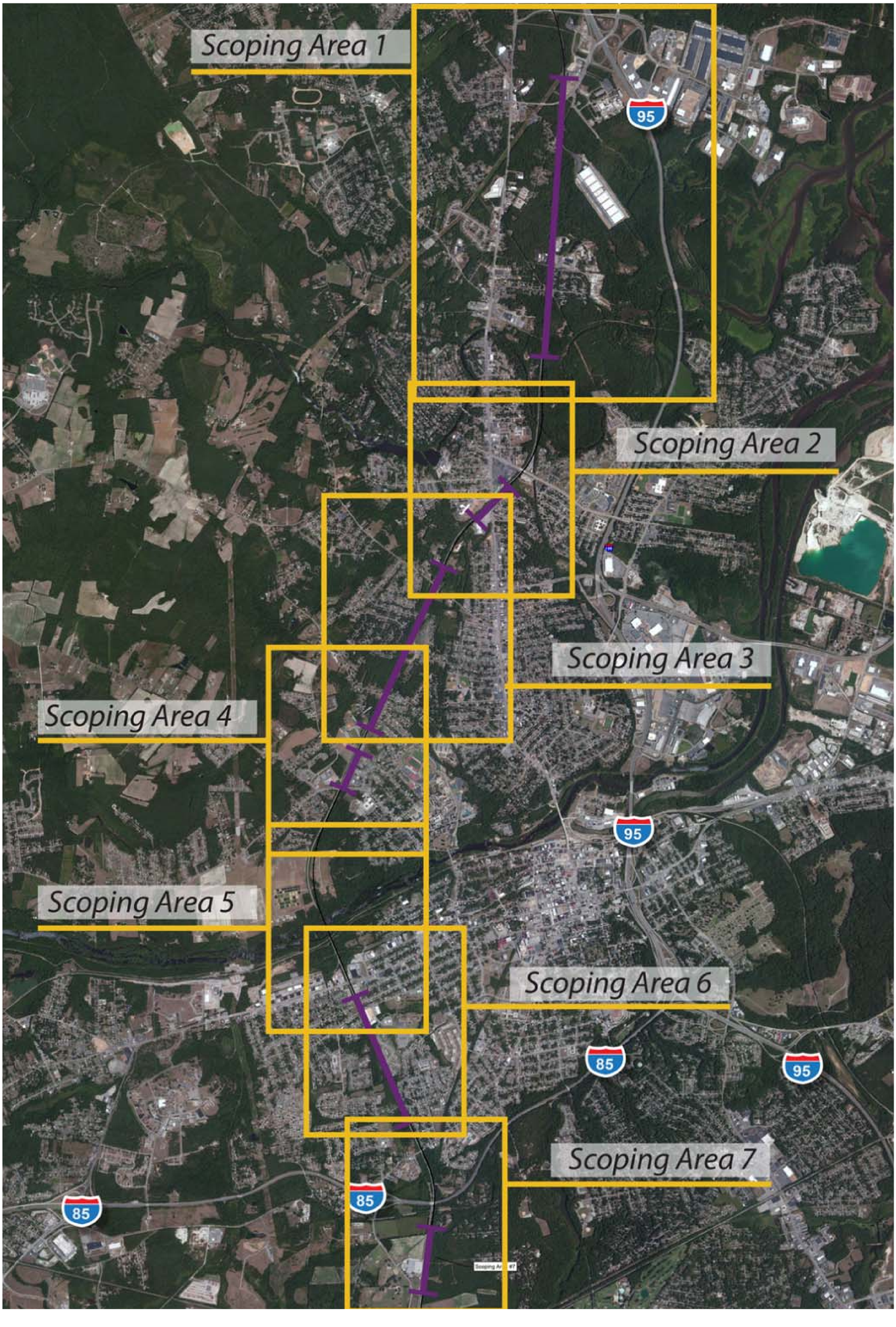
PRELIMINARY STATION SITES

The following maps show the preliminary areas along the rail line where a platform could be constructed and have been used to gather input on potential resources (a process known as scoping in an EA).

In addition, some potential more specific locations are noted in each broader scoping area. These are the areas most suited for potential stations. Please provide any comments you have on these more specific locations.

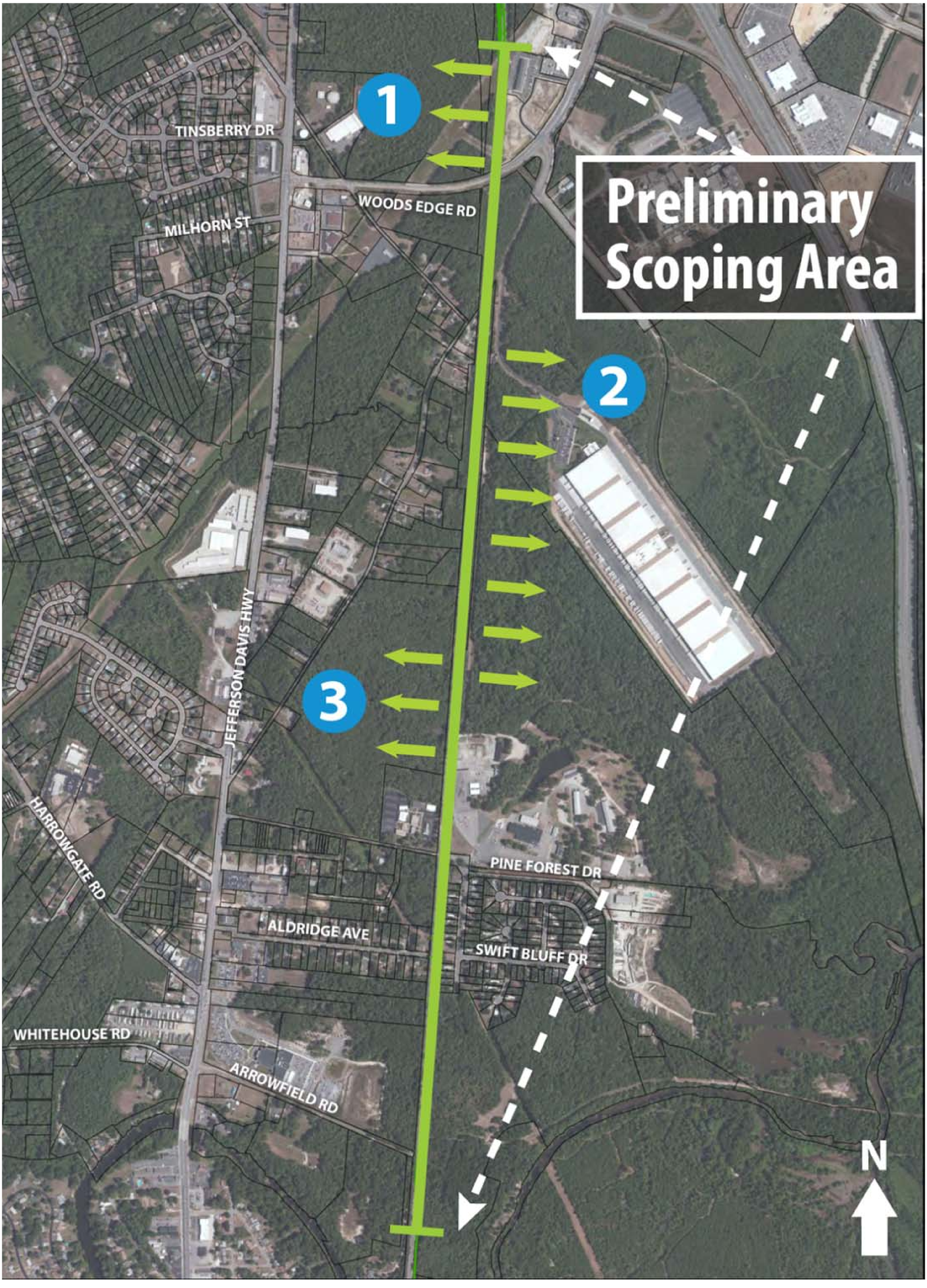
PRELIMINARY STATION AREAS

SCOPING AREA OVERVIEW



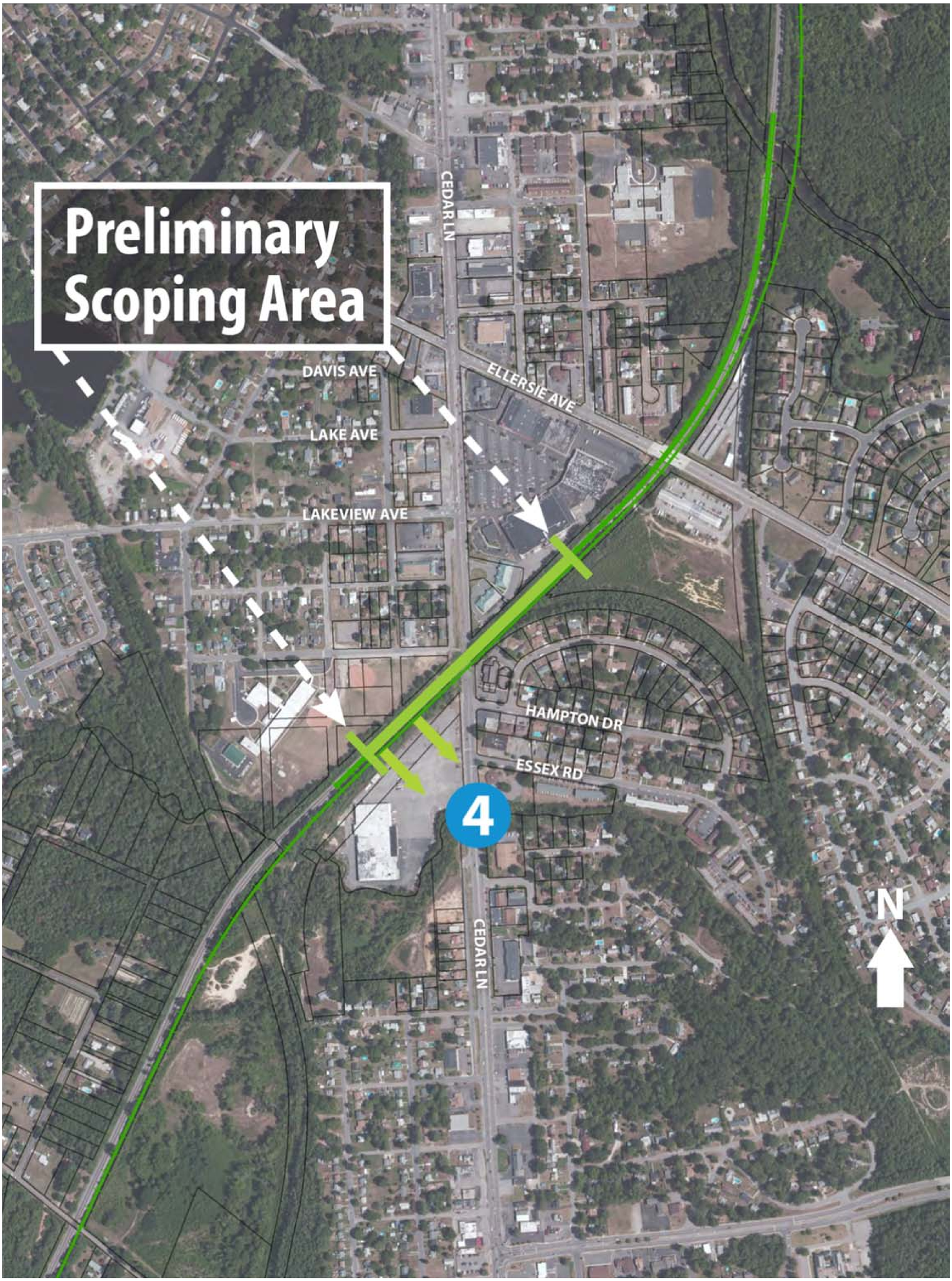
PRELIMINARY STATION AREAS

SCOPING AREA 1



PRELIMINARY STATION AREAS

SCOPING AREA 2



PRELIMINARY STATION AREAS

SCOPING AREA 3

PRELIMINARY STATION AREAS

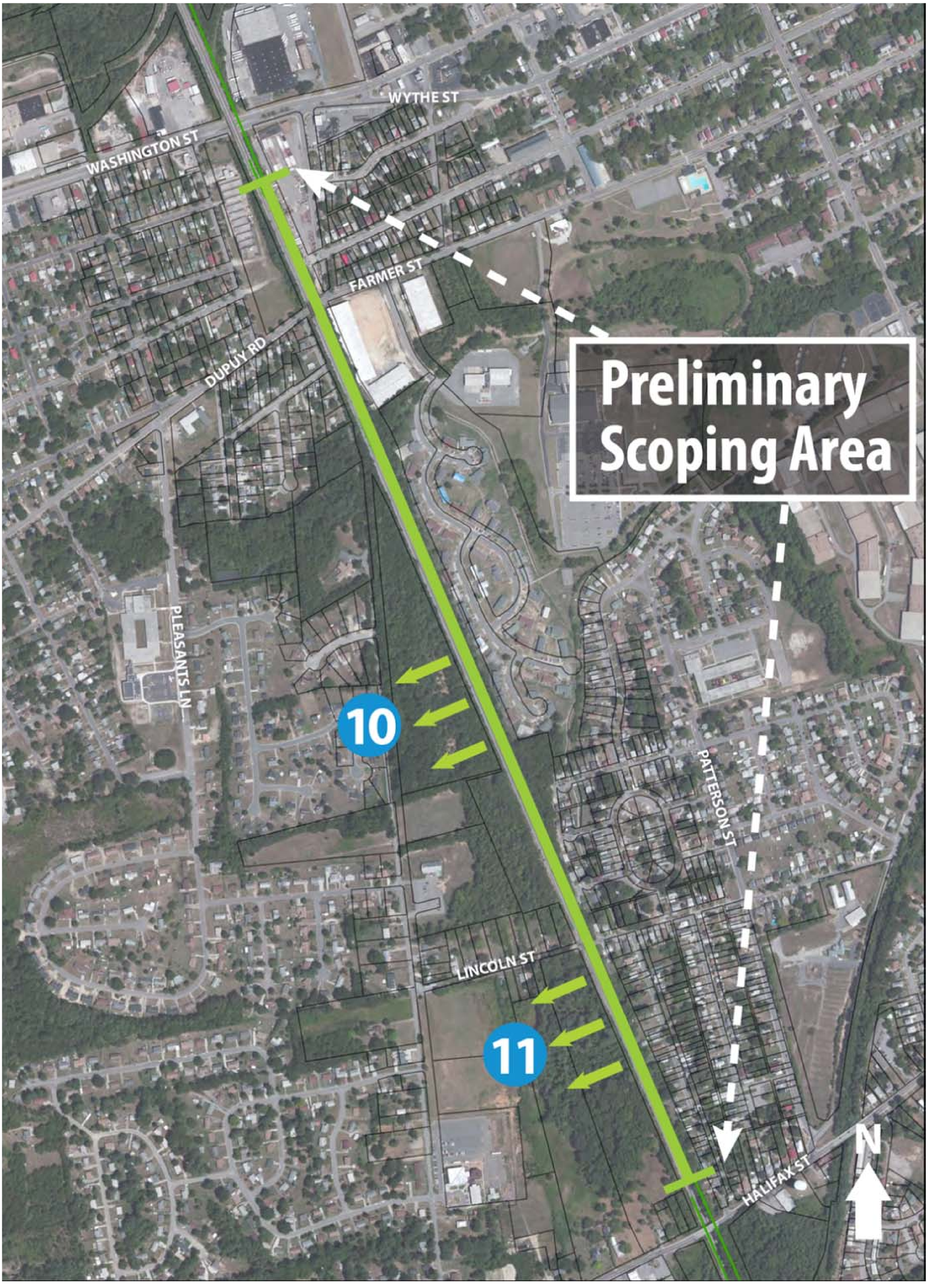
SCOPING AREA 4

PRELIMINARY STATION AREAS

SCOPING AREA 5

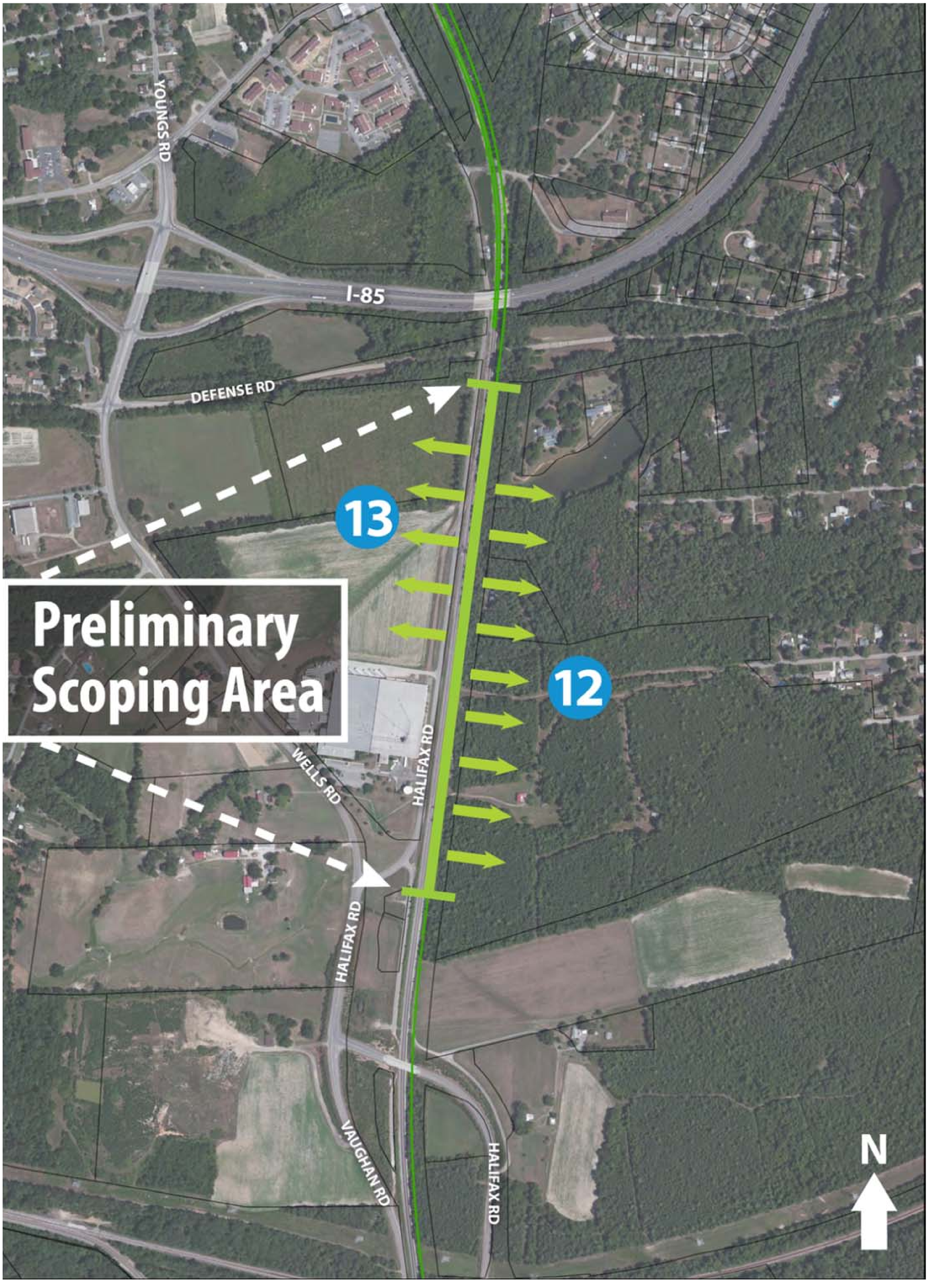
PRELIMINARY STATION AREAS

SCOPING AREA 6



PRELIMINARY STATION AREAS

SCOPING AREA 7



SCREENING PROCESS

EA will include full analysis of station sites.

Preliminary Scoping Areas Identified

Identify Potential Station Sites

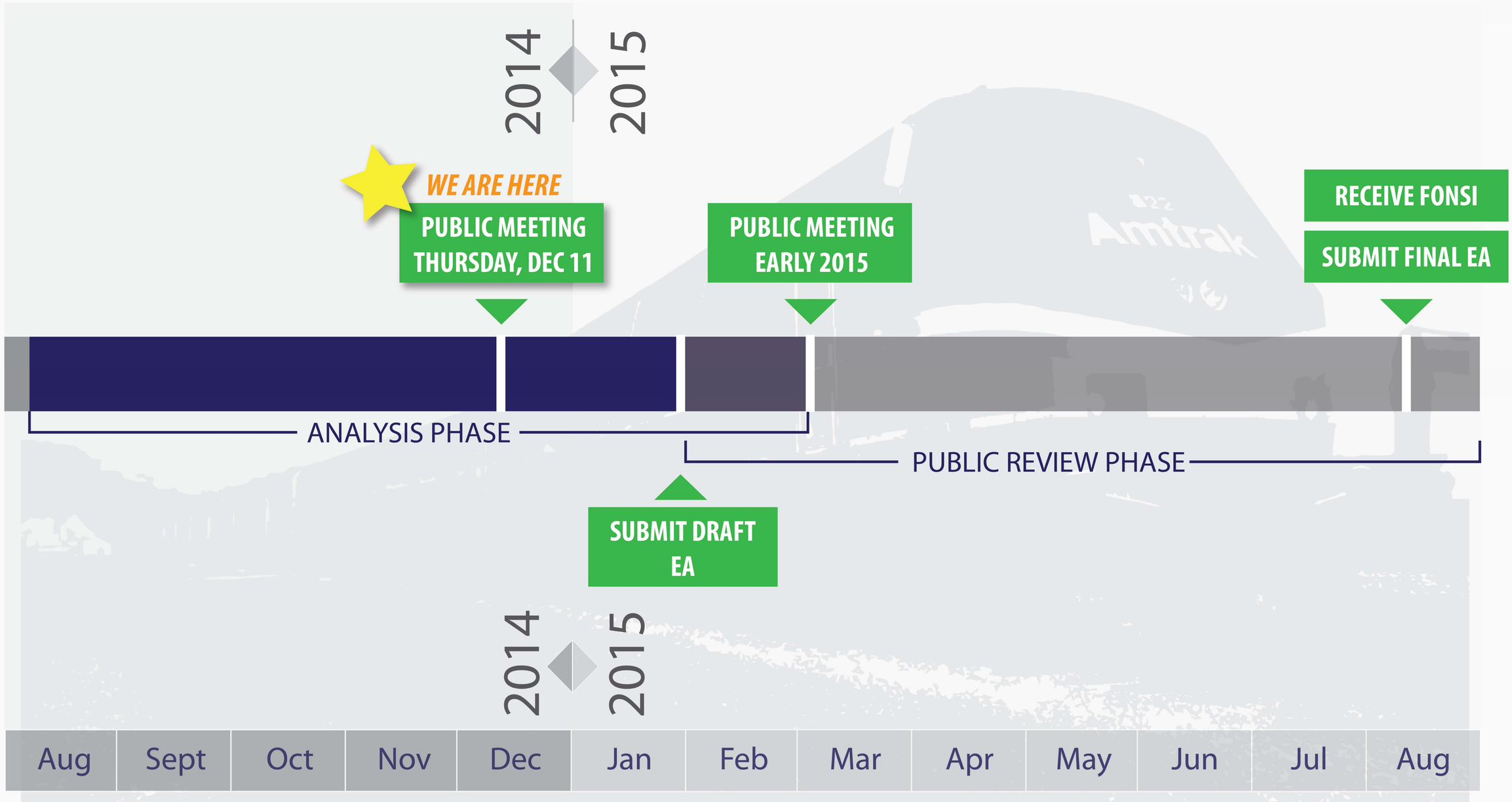
Conduct Preliminary Screening for Fatal Flaws or Other Concerns

Alternatives Carried Forward in EA*

Preferred Station Site in Final EA

* Some station sites eliminated before full EA analysis. Reasons for elimination documented in EA.

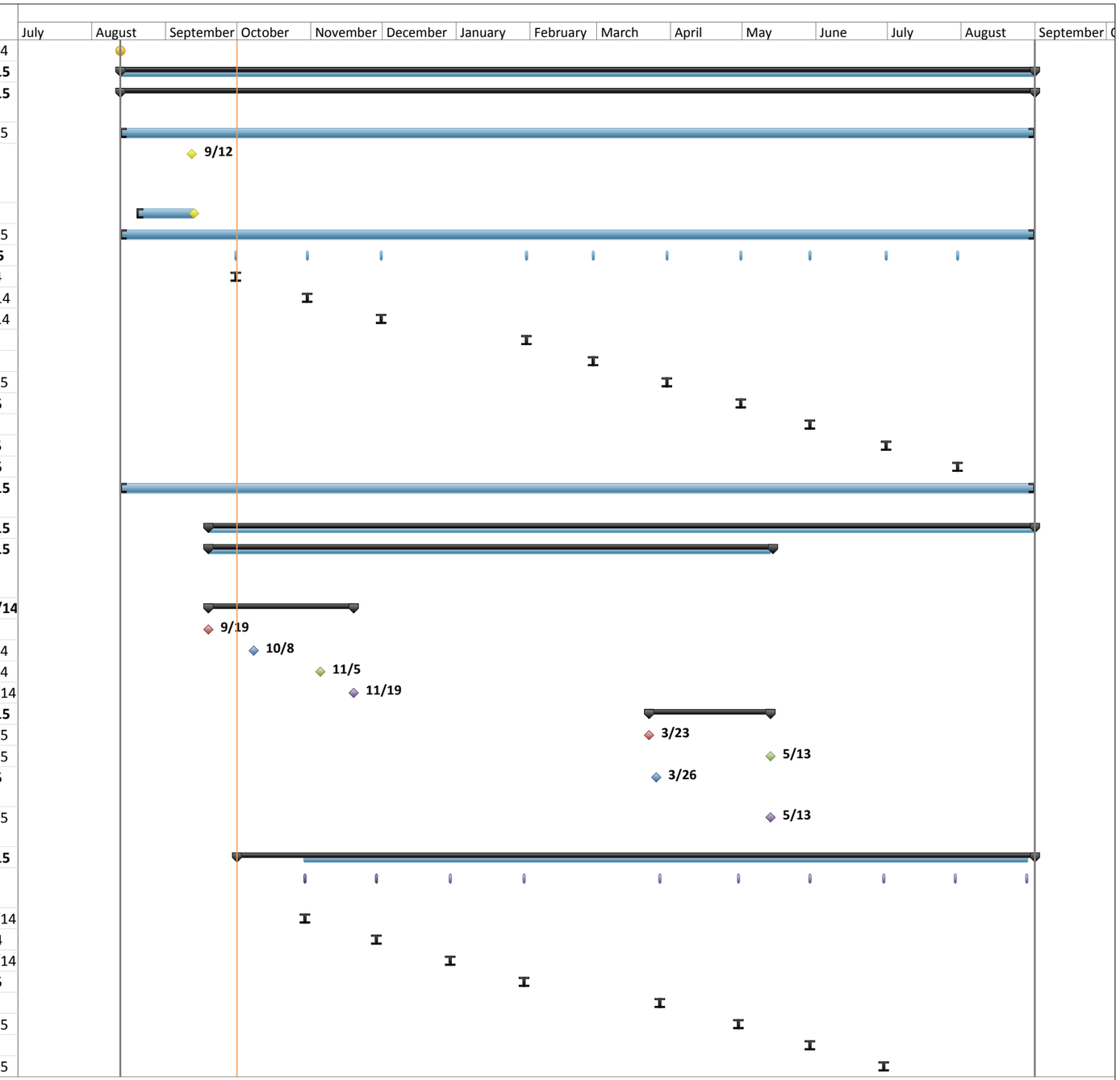
PROPOSED SCHEDULE



NEXT STEPS

1. Finalize Purpose and Need based on comments received
2. Finalize screening based on comments received
3. Begin preliminary field work on sites to be studied in greater detail

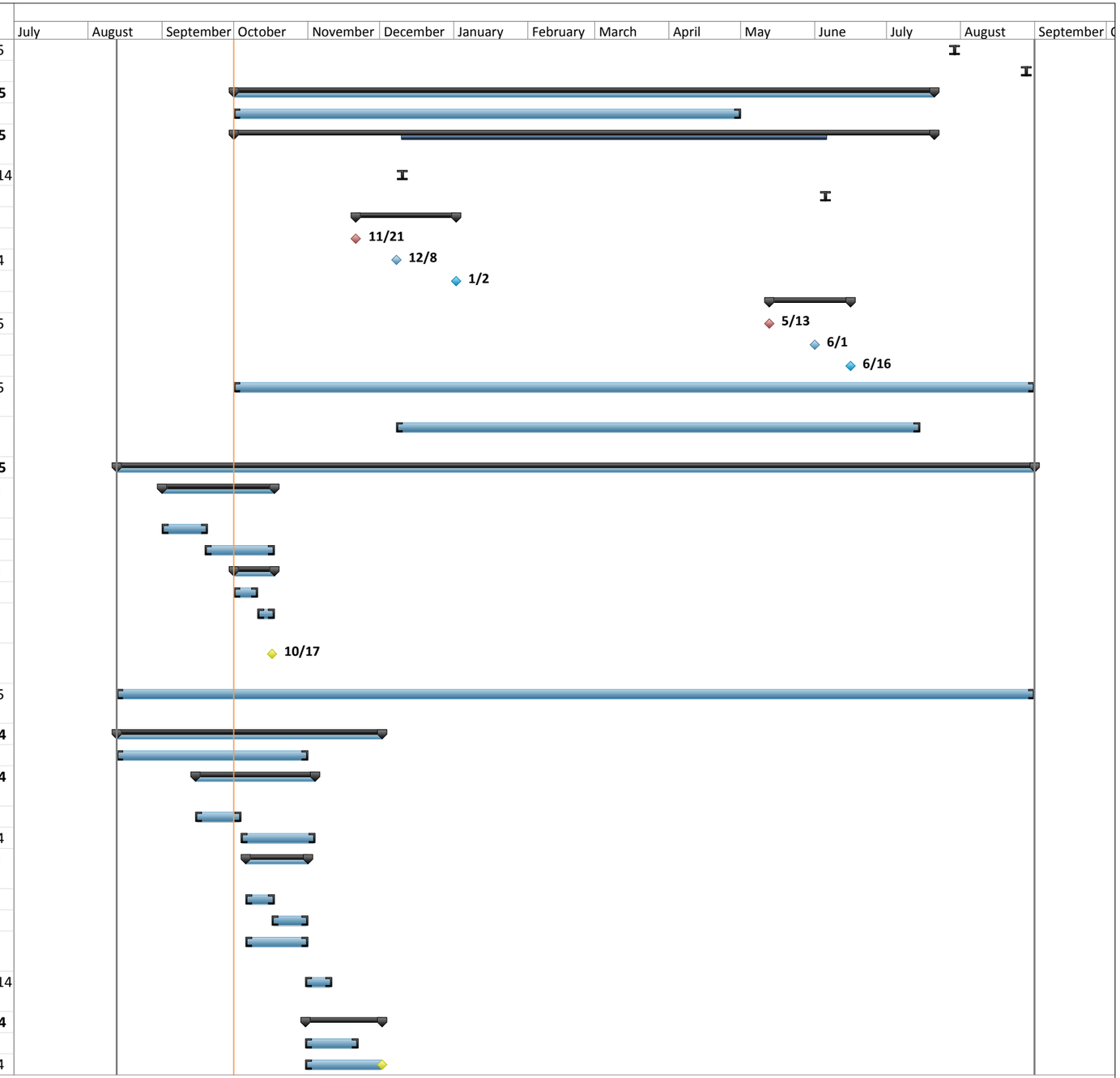
ID	Task Mode	Task Name	Flag1	Duration	Start	Finish
1		Notice to Proceed	No	1 day	Wed 8/13/14	Wed 8/13/14
2		**Task 1: Project Management**	**No**	**274 days**	**Wed 8/13/14**	**Mon 8/31/15**
3		**1.1 Project Management**	**No**	**274 days**	**Wed 8/13/14**	**Mon 8/31/15**
4		Project Management	No	274 days	Wed 8/13/14	Mon 8/31/15
5		Project Management Plan Deliverable	Yes	0 days	Fri 9/12/14	Fri 9/12/14
6		1.2 Project Work Plan	No	18 days	Wed 8/20/14	Fri 9/12/14
7		1.3 Coordination and Meetings	No	274 days	Wed 8/13/14	Mon 8/31/15
8		**1.4 Study Working Group**	**No**	**218 days**	**Tue 9/30/14**	**Thu 7/30/15**
9		Study Working Group September	No	1 day	Tue 9/30/14	Tue 9/30/14
10		Study Working Group October	No	1 day	Thu 10/30/14	Thu 10/30/14
11		Study Working Group November	No	1 day	Sun 11/30/14	Sun 11/30/14
12		Study Working Group January	No	1 day	Fri 1/30/15	Fri 1/30/15
13		Study Working Group February	No	1 day	Fri 2/27/15	Fri 2/27/15
14		Study Working Group March	No	1 day	Mon 3/30/15	Mon 3/30/15
15		Study Working Group April	No	1 day	Thu 4/30/15	Thu 4/30/15
16		Study Working Group May	No	1 day	Fri 5/29/15	Fri 5/29/15
17		Study Working Group June	No	1 day	Tue 6/30/15	Tue 6/30/15
18		Study Working Group July	No	1 day	Thu 7/30/15	Thu 7/30/15
19		**1.5 Records Management**	**No**	**274 days**	**Wed 8/13/14**	**Mon 8/31/15**
20		**Task 2: Public Involvement**	**No**	**247 days**	**Fri 9/19/14**	**Mon 8/31/15**
21		**2.1 Press Releases and Public Announcements**	**No**	**169 days**	**Fri 9/19/14**	**Wed 5/13/15**
22		**First Set**	**No**	**43 days**	**Fri 9/19/14**	**Wed 11/19/14**
23		Draft Press Release	No	0 days	Fri 9/19/14	Fri 9/19/14
24		Final Press Release	No	0 days	Wed 10/8/14	Wed 10/8/14
25		Draft Newspaper Ads	No	0 days	Wed 11/5/14	Wed 11/5/14
26		Final Newspaper Ads	No	0 days	Wed 11/19/14	Wed 11/19/14
27		**Second Set**	**No**	**37 days**	**Mon 3/23/15**	**Wed 5/13/15**
28		Draft Press Release	No	0 days	Mon 3/23/15	Mon 3/23/15
29		Final Press Release	No	0 days	Wed 5/13/15	Wed 5/13/15
30		Draft Newspaper Ads	No	0 days	Thu 3/26/15	Thu 3/26/15
31		Final Newspaper Ads	No	0 days	Wed 5/13/15	Wed 5/13/15
32		**2.2 Newsletters**	**No**	**239 days**	**Wed 10/1/14**	**Mon 8/31/15**
33		**Monthly Newsletter**	**No**	**218 days**	**Wed 10/29/14**	**Fri 8/28/15**
34		Monthly Newsletter October	No	1 day	Wed 10/29/14	Wed 10/29/14
35		Monthly Newsletter November	No	1 day	Fri 11/28/14	Fri 11/28/14
36		Monthly Newsletter December	No	1 day	Mon 12/29/14	Mon 12/29/14
37		Monthly Newsletter January	No	1 day	Thu 1/29/15	Thu 1/29/15
38		Monthly Newsletter March	No	1 day	Fri 3/27/15	Fri 3/27/15
39		Monthly Newsletter April	No	1 day	Wed 4/29/15	Wed 4/29/15
40		Monthly Newsletter May	No	1 day	Fri 5/29/15	Fri 5/29/15
41		Monthly Newsletter June	No	1 day	Mon 6/29/15	Mon 6/29/15



Project: Tri-Cities MPO
Date: Wed 10/1/14

Task		Project Summary		Inactive Milestone		Manual Summary Rollup		Deadline	
Split		External Tasks		Inactive Summary		Manual Summary		Critical	
Milestone		External Milestone		Manual Task		Start-only		Critical Split	
Summary		Inactive Task		Duration-only		Finish-only		Progress	

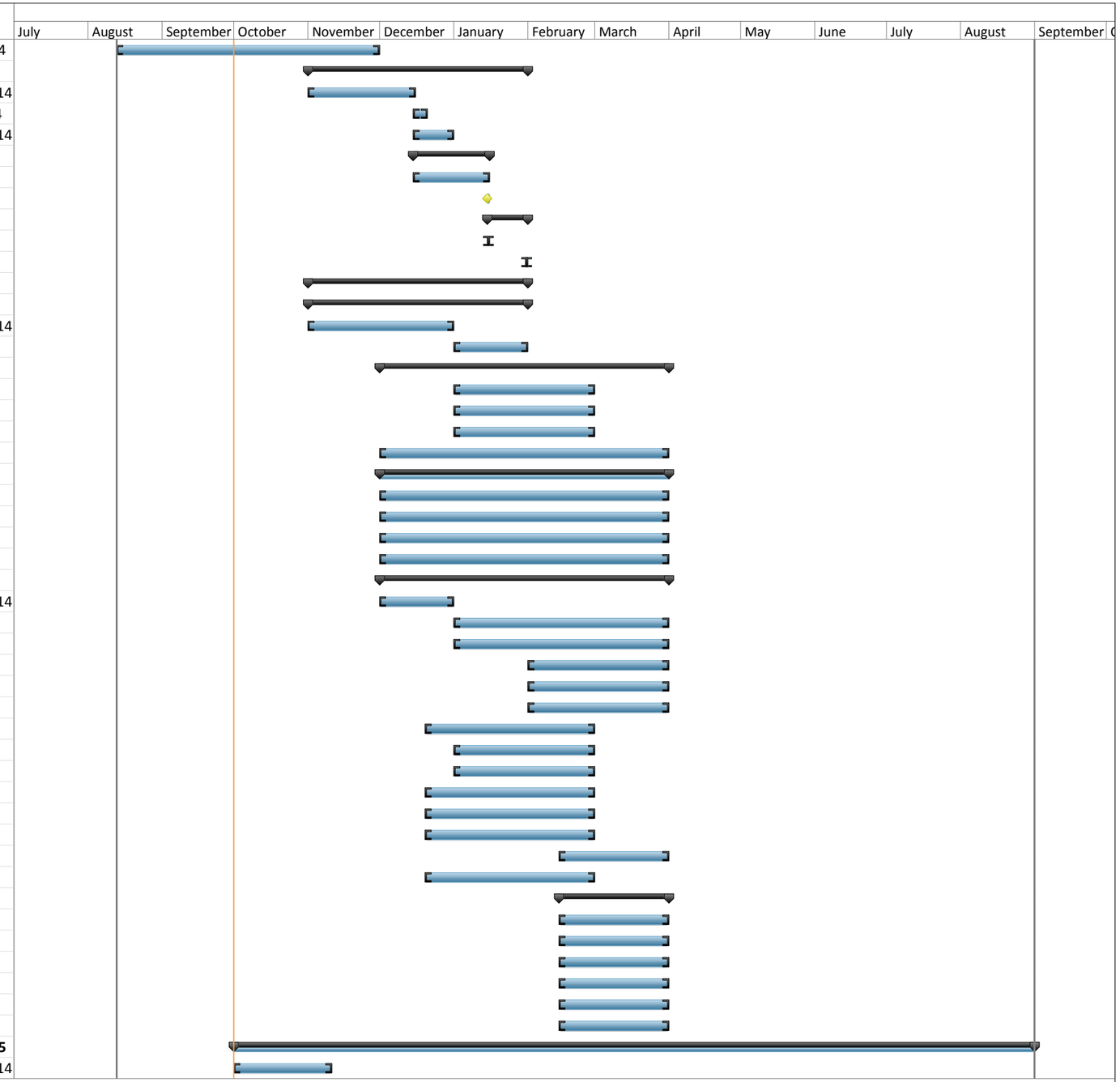
ID	Task Mode	Task Name	Flag1	Duration	Start	Finish
42		Monthly Newsletter July	No	1 day	Wed 7/29/15	Wed 7/29/15
43		Monthly Newsletter August	No	1 day	Fri 8/28/15	Fri 8/28/15
44		**2.3 Public Information Events**	**No**	**209 days**	**Wed 10/1/14**	**Mon 7/20/15**
45		List of FAQs	No	152 days	Wed 10/1/14	Thu 4/30/15
46		**Preparations for Meetings**	**No**	**209 days**	**Wed 10/1/14**	**Mon 7/20/15**
47		Meeting 1	No	1 day	Wed 12/10/14	Wed 12/10/14
48		Meeting 2	No	1 day	Fri 6/5/15	Fri 6/5/15
49		**First Set**	**No**	**30 days**	**Fri 11/21/14**	**Fri 1/2/15**
50		Draft materials due	No	0 days	Fri 11/21/14	Fri 11/21/14
51		Final Materials Completed	No	0 days	Mon 12/8/14	Mon 12/8/14
52		Transcripts	No	0 days	Fri 1/2/15	Fri 1/2/15
53		**Second Set**	**No**	**24 days**	**Wed 5/13/15**	**Tue 6/16/15**
54		Draft Materials due	No	0 days	Wed 5/13/15	Wed 5/13/15
55		Final Materials Completed	No	0 days	Mon 6/1/15	Mon 6/1/15
56		Transcripts	No	0 days	Tue 6/16/15	Tue 6/16/15
57		2.4 Mailing List Database	No	239 days	Wed 10/1/14	Mon 8/31/15
58		2.5 Public Summary Report	No	157 days	Mon 12/8/14	Tue 7/14/15
59		**Task 3: Scoping and Agency Coordination**	**No**	**274 days**	**Wed 8/13/14**	**Mon 8/31/15**
60		**3.1 level of Document Report**	**No**	**35 days**	**Mon 9/1/14**	**Fri 10/17/14**
61		Draft	No	15 days	Mon 9/1/14	Fri 9/19/14
62		Final	No	21 days	Fri 9/19/14	Fri 10/17/14
63		**3.2 Scoping Letters**	**No**	**13 days**	**Wed 10/1/14**	**Fri 10/17/14**
64		Draft Package	No	8 days	Wed 10/1/14	Fri 10/10/14
65		Final/Distribute Package	No	6 days	Sat 10/11/14	Fri 10/17/14
66		Property Owner Letters	No	0 days	Fri 10/17/14	Fri 10/17/14
67		3.3 Ongoing Meetings	No	274 days	Wed 8/13/14	Mon 8/31/15
68		**Task 4: Purpose and Need**	**No**	**79 days**	**Wed 8/13/14**	**Mon 12/1/14**
69		4.1 Data Collection	No	58 days	Wed 8/13/14	Fri 10/31/14
70		**4.2 Prepare Purpose and Need Statement**	**No**	**36 days**	**Mon 9/15/14**	**Mon 11/3/14**
71		Draft	No	15 days	Mon 9/15/14	Fri 10/3/14
72		Final	No	22 days	Sat 10/4/14	Mon 11/3/14
73		**4.3 Evaluation of Alternative Sites**	**No**	**20 days**	**Mon 10/6/14**	**Fri 10/31/14**
74		Develop MOEs	No	10 days	Mon 10/6/14	Fri 10/17/14
75		Finalize MOEs	No	11 days	Fri 10/17/14	Fri 10/31/14
76		Develop Evaluation Matrix	No	20 days	Mon 10/6/14	Fri 10/31/14
77		4.4 Initial Screening	No	7 days	Fri 10/31/14	Mon 11/10/14
78		**4.5 Range of Alternatives Considered**	**No**	**22 days**	**Fri 10/31/14**	**Mon 12/1/14**
79		Range of Alternatives Considered	No	16 days	Fri 10/31/14	Fri 11/21/14
80		Final Evaluation Matrix / Summary Memo	No	22 days	Fri 10/31/14	Mon 12/1/14



Project: Tri-Cities MPO
Date: Wed 10/1/14

Task		Project Summary		Inactive Milestone		Manual Summary Rollup		Deadline	
Split		External Tasks		Inactive Summary		Manual Summary		Critical	
Milestone		External Milestone		Manual Task		Start-only		Critical Split	
Summary		Inactive Task		Duration-only		Finish-only		Progress	

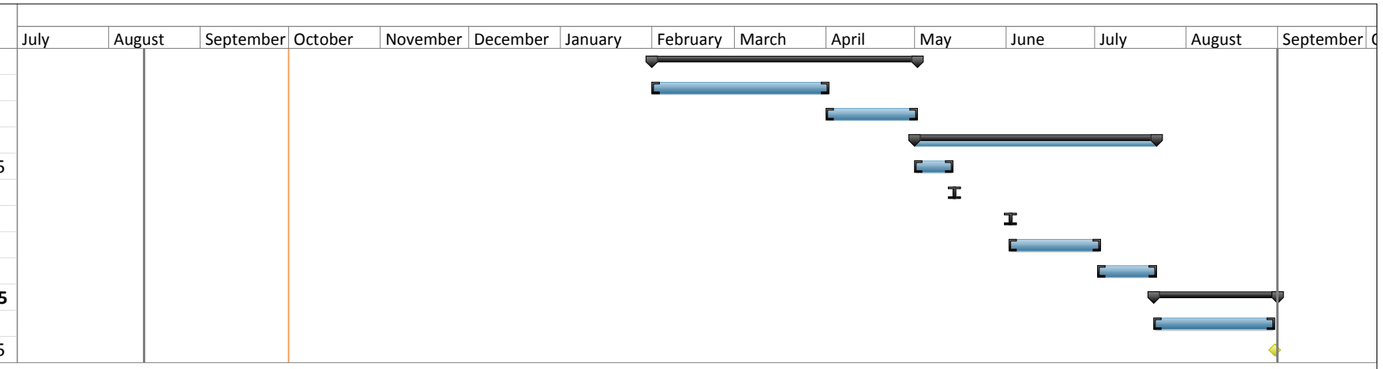
ID	Task Mode	Task Name	Flag1	Duration	Start	Finish
81		4.6 Prepare Base Mapping	No	79 days	Wed 8/13/14	Sun 11/30/14
82		**Task 5: Alternatives Analysis**	**No**	**65 days**	**Sat 11/1/14**	**Sat 1/31/15**
83		5.1 Range of Alternatives Considered	No	32 days	Sat 11/1/14	Mon 12/15/14
84		5.2 Prepare Base Mapping	No	6 days	Mon 12/15/14	Sat 12/20/14
85		5.3 Alternative development elements	No	13 days	Mon 12/15/14	Wed 12/31/14
86		**5.4 Funding Analysis**	**No**	**24 days**	**Mon 12/15/14**	**Thu 1/15/15**
87		Funding Analysis	No	24 days	Mon 12/15/14	Thu 1/15/15
88		Cash flow model	No	1 day	Thu 1/15/15	Thu 1/15/15
89		**5.5 Summary of Alternatives Analysis**	**No**	**12 days**	**Thu 1/15/15**	**Sat 1/31/15**
90		Draft report	No	1 day	Thu 1/15/15	Thu 1/15/15
91		Final report	No	1 day	Sat 1/31/15	Sat 1/31/15
92		**Task 6: Impact on Transportation**	**No**	**65 days**	**Sat 11/1/14**	**Sat 1/31/15**
93		**6.1 Station Location Capacity Study**	**No**	**65 days**	**Sat 11/1/14**	**Sat 1/31/15**
94		Draft multimodal report	No	44 days	Sat 11/1/14	Wed 12/31/14
95		Final multimodal report	No	23 days	Thu 1/1/15	Sat 1/31/15
96		**Task 7: Environmental Impacts**	**No**	**87 days**	**Mon 12/1/14**	**Tue 3/31/15**
97		7.1 Air Quality	No	43 days	Thu 1/1/15	Sat 2/28/15
98		7.2 Noise	No	43 days	Thu 1/1/15	Sat 2/28/15
99		7.3 Vibration	No	43 days	Thu 1/1/15	Sat 2/28/15
100		7.4 Natural Resources	No	87 days	Mon 12/1/14	Tue 3/31/15
101		**7.5 Cultural Resources**	**No**	**87 days**	**Mon 12/1/14**	**Tue 3/31/15**
102		Phase I archaeology	No	87 days	Mon 12/1/14	Tue 3/31/15
103		Phase I architecture	No	87 days	Mon 12/1/14	Tue 3/31/15
104		Phase II archaeology testing	No	87 days	Mon 12/1/14	Tue 3/31/15
105		Phase II architecture evaluations	No	87 days	Mon 12/1/14	Tue 3/31/15
106		**7.6 Station Area Land Use and Economics**	**No**	**87 days**	**Mon 12/1/14**	**Tue 3/31/15**
107		Background analysis	No	23 days	Mon 12/1/14	Wed 12/31/14
108		Regional Market Evaluation	No	64 days	Thu 1/1/15	Tue 3/31/15
109		Area Evaluation	No	64 days	Thu 1/1/15	Tue 3/31/15
110		Station Area Analysis	No	43 days	Sun 2/1/15	Tue 3/31/15
111		Financial Modeling	No	43 days	Sun 2/1/15	Tue 3/31/15
112		Impact Analysis	No	43 days	Sun 2/1/15	Tue 3/31/15
113		7.7 Social and Economic Impacts	No	52 days	Sat 12/20/14	Sat 2/28/15
114		7.8 ROW and Relocations	No	43 days	Thu 1/1/15	Sat 2/28/15
115		7.9 Farmland	No	43 days	Thu 1/1/15	Sat 2/28/15
116		7.10 Energy	No	52 days	Sat 12/20/14	Sat 2/28/15
117		7.11 Hazardous Materials	No	52 days	Sat 12/20/14	Sat 2/28/15
118		7.12 Visual Resources	No	52 days	Sat 12/20/14	Sat 2/28/15
119		7.13 Indirect Impacts	No	33 days	Sat 2/14/15	Tue 3/31/15
120		7.14 Section 4(f) Resources	No	52 days	Sat 12/20/14	Sat 2/28/15
121		**Task 8: Other Resources**	**No**	**32 days**	**Sat 2/14/15**	**Tue 3/31/15**
122		8.1 Elderly and Handicapped Barriers	No	33 days	Sat 2/14/15	Tue 3/31/15
123		8.2 Mineral resources	No	33 days	Sat 2/14/15	Tue 3/31/15
124		8.3 Public Health	No	33 days	Sat 2/14/15	Tue 3/31/15
125		8.4 Public Safety	No	33 days	Sat 2/14/15	Tue 3/31/15
126		8.5 Utilities	No	33 days	Sat 2/14/15	Tue 3/31/15
127		8.6 Construction Impacts	No	33 days	Sat 2/14/15	Tue 3/31/15
128		**Task 9: NEPA Study**	**No**	**239 days**	**Wed 10/1/14**	**Mon 8/31/15**
129		Notice of Intent	No	29 days	Wed 10/1/14	Mon 11/10/14



Project: Tri-Cities MPO
Date: Wed 10/1/14

Task		Project Summary		Inactive Milestone		Manual Summary Rollup		Deadline	
Split		External Tasks		Inactive Summary		Manual Summary		Critical	
Milestone		External Milestone		Manual Task		Start-only		Critical Split	
Summary		Inactive Task		Duration-only		Finish-only		Progress	

ID		Task Mode	Task Name	Flag1	Duration	Start	Finish
130			**9.1 Prepare Preliminary Draft EA**	**No**	**65 days**	**Sun 2/1/15**	**Fri 5/1/15**
131			Prepare Preliminary Draft EA	No	44 days	Sun 2/1/15	Wed 4/1/15
132			Review period	No	23 days	Wed 4/1/15	Fri 5/1/15
133			**9.2 Prepare Revised Preliminary Draft EA**	**No**	**58 days**	**Fri 5/1/15**	**Tue 7/21/15**
134			Finalize and Sign Draft EA	No	9 days	Fri 5/1/15	Wed 5/13/15
135			Notice of Availability	No	1 day	Thu 5/14/15	Thu 5/14/15
136			Public Hearing	No	1 day	Tue 6/2/15	Tue 6/2/15
137			Review period	No	23 days	Tue 6/2/15	Thu 7/2/15
138			Respond to comments / Revise EA	No	14 days	Thu 7/2/15	Tue 7/21/15
139			**9.3 Final Review and Distribution**	**No**	**30 days**	**Tue 7/21/15**	**Mon 8/31/15**
140			Finalize and Sign EA	No	30 days	Tue 7/21/15	Sun 8/30/15
141			Finding of No Significant Impact (FONSI)	No	1 day	Mon 8/31/15	Mon 8/31/15



Project: Tri-Cities MPO
Date: Wed 10/1/14

Task		Project Summary		Inactive Milestone		Manual Summary Rollup		Deadline	
Split		External Tasks		Inactive Summary		Manual Summary		Critical	
Milestone		External Milestone		Manual Task		Start-only		Critical Split	
Summary		Inactive Task		Duration-only		Finish-only		Progress	

Tri-Cities Multimodal Station Environmental Assessment

Public Comments

Current as of December 29, 2014

Concerns We Should Consider

- Economic growth from the standpoint of small business should take a leading role
- Petersburg's locations would be very accessible to residents in Dinwiddie, Prince Georges and Sussex Counties. A southern station is needed for African Americans to economically have access to jobs and healthcare.
- I am in the real estate business. I believe improving / upgrading the current station would be the best. Petersburg would benefit from this more than Colonial Heights.
- If the vision is to extend service to NOVA – Fort Lee, Colonial Heights and Chester traffic would be new ridership if station is closer to the interstate and Fort Lee. Petersburg, Dinwiddie will be cheaper to build initially but I don't see the ridership in those areas unless socioeconomics of the area change.

Screening Process / Criteria Comments

- Access to the city center of Petersburg
- It should be considered what locations will move the station forward with funding and staff – a factor should be written commitment to fund the station using local match if location is selected
- Existing routes to and from for station access to current
- Future ridership
- Utilizing undeveloped or properties in need of revitalization is a win-win for the rail, transit and localities being considered
- Study should give major consideration to the potential long-term development opportunities for the future station.

General Comments

- I liked #6 site (just south of Branders Bridge Road)
- Transit needs to be given 400-500 square feet in the selected facility
- Area 3 – most value – EVM for ridership, location and access without loss of current VSU. Local traffic, open property with access to Dupuy and Branders Bridge Road provide access from 4 directions and relatively close to I-95 / I-85. Area 2 – second choice for similar reasons but more populated area unless part of Superior Splitting / Rent Equip parking lot property is accessible. School on the other side minimizes neighbor noise / traffic issues.
- The new station should be as far from Richmond / Staples Mill as possible. Interstate access to the "Tri Cities" I-85, Squirrel Level Road location will benefit the total Tri-Cities and give easy access.

- The development of a master plan that allows for phasing of improvements is important and should be evaluated for each option.
- I believe that the Train Station should be relocated back to the Petersburg City, VA, area. In fact, I believe that the Old Train Station could be opened up and utilized with modifications as the future Train Station. Currently, the Bus Transit Station in Petersburg services parts of the Tri Cities areas. Citizens, if need, could easily utilize the public transportation system offered in Petersburg, VA. The Bus Depot would not be that far from the Train Station. Therefore, there would be easy access to Train Train, via Interstate 95 / Route 301 / Highway 36. Consquently, by having a train station in Petersburg, VA, that would be easy access serving residents in the Tri Cities area.

Tri-Cities Multimodal Transit Station Environmental Assessment (EA)

Comment Form – Public Workshop #1

This form is provided to receive your comments regarding the Tri-Cities Multimodal Station Study. Please use the space provided below for your comments; you may use additional pages if necessary. You may leave this form at the meeting, mail it to the Crater Planning District Commission, c/o Joe Vinsh, P.O. Box 1808 Petersburg, VA 23805, or email the form by December 31, 2014 to TriCitiesStationStudy@mbakerintl.com. We appreciate your interest and value your input.

Do you have any resources that the study team should be aware of as we kick off this study? Please describe them and how they relate to the potential station sites.

_____

_____

_____

_____

_____

_____

Do you have comments about the screening process or criteria that should be considered in this study?:_____

_____

_____

_____

_____

_____

General Comments:

_____

_____

_____

_____

_____

_____

Full Name (please print): _____

Address (please print): _____

City: _____ **State**: _____ **Zip Code**: _____

CRATER PLANNING DISTRICT COMMISSION
CPDC

Tri-Cities Multimodal Transit Station Environmental Assessment (EA)

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Do you have any concerns that the study team should be aware of as we kick off this study? Please describe them and how they relate to the potential station sites.

ECONOMIC GROWTH FROM THE STAND POINT OF SMALL BUSINESS SHOULD TAKE A LEADING ROLE

Do you have comments about the screening process or criteria that should be considered in this study?: ACCESS TO THE CITY CENTER OF PETERSBURG

General Comments:

I LIKED THE #6 SITE

Full Name (please print): Richard S. Nordlund

Address (please print): RSNordlund@Gmail.com

City: 401 390 4139 **State**: _____ **Zip Code**: _____

CRATER PLANNING DISTRICT COMMISSION

CPDC

Tri-Cities Multimodal Transit Station Environmental Assessment (EA)

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Do you have any concerns that the study team should be aware of as we kick off this study? Please describe them and how they relate to the potential station sites.

Petersburg locations would be very accessible to residents in Dinwiddie & Prince George & Sussex Counties. a northern station is needed for African Americans to economically have access to jobs & healthcare.

Do you have comments about the screening process or criteria that should be considered in this study?: It should be considered what locations will move the station forward with funding & staff. a factor should be written ammithment to fund station (local match) if location is selected.

General Comments:

Transit needs to be given between 400-600 square feet in the selected facility.

Full Name (please print): Dionna Betton

Address (please print): 14412 Arwood Rd.

City: Disputanta **State**: VA **Zip Code**: 23842

CRATER PLANNING DISTRICT COMMISSION

CPDC

Tri-Cities Multimodal Transit Station Environmental Assessment (EA)

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Do you have any concerns that the study team should be aware of as we kick off this study? Please describe them and how they relate to the potential station sites.

I am in the real estate business, I believe improving/upgrading the current station would be best. Petersburg would benefit from this more than Colonial Heights.

Do you have comments about the screening process or criteria that should be considered in this study?:

General Comments:

Full Name (please print): David Wiggins

Address (please print): 4524 RIDGECREST LN.

City: Colonial Heights **State**: VA **Zip Code**: 23834

CRATER PLANNING DISTRICT COMMISSION

CPDC

Tri-Cities Multimodal Transit Station Environmental Assessment (EA)

Comment Form – Public Workshop #1

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Do you have any concerns that the study team should be aware of as we kick off this study? Please describe them and how they relate to the potential station sites.

If the vision is to extend service to NOVA - Fort Lee, Colhts & Chester traffic would be new ridership if station is close to Interstate & Fort Lee. Petersburg, Dinwiddie will be cheaper to build initially but I don't see the ridership in those area unless socio economics of area change.

Do you have comments about the screening process or criteria that should be considered in this study?: existing routes to/from for station access to current & future ridership.

Utilizing undeveloped or properties in need of revitalization is a win-win for the Rail Transit & localities being considered

General Comments:

area 3 - most value - EVM for ridership & location access w/o loss of current VSU & local traffic, open property of access to Duprey & Branden Bridge Rd provide access from & directions & relatively close to I-95/I-85.

AREA 2 - 2nd choice for similar reasons but more populated area unless part of Superior Shutting/Rent-E-Guys parking lot property is accessible. School on other side minimizes neighbor noise/traffic issues

Full Name (please print): WILFORD L GREEN Sr.

Address (please print): 514 WALNUT AVE

City: Colonial Heights **State**: VA **Zip Code**: 23834

CRATER PLANNING DISTRICT COMMISSION

CPDC

Tri-Cities Multimodal Transit Station Environmental Assessment (EA)

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Do you have any concerns that the study team should be aware of as we kick off this study? Please describe them and how they relate to the potential station sites.

Do you have comments about the screening process or criteria that should be considered in this study?:

General Comments:

The new station should be as far from Richmond / Staples Mill as possible. Interstate access to the "Tri Cities" I85 Squirrel Level Rd location will benifit the total Tri Cities and give easy access.

Full Name (please print): M. Dean McCray

Address (please print): 2600 Oxford Drive

City: Sutherland **State**: VA **Zip Code**: 23885

Thanks to all for the meeting

Tri-Cities Multimodal Station

Public Workshop: Sep. 16, 5:00—7:00 PM

The Tri-Cities MPO is completing a study of site locations for a regional multimodal passenger station. The study follows the National Environmental Policy Act (NEPA) process, documenting impacts and trade-offs associated with each potential location.

The study area includes the cities of Petersburg, Colonial Heights, Hopewell, and the counties of Prince George, Dinwiddie, and Chesterfield.

Tri-Cities MPO is hosting a public workshop on **September 16, 5:00 – 7:00 PM**.

Ettrick Elementary School

20910 Chesterfield Ave

Petersburg, VA 23803

This is an important meeting to attend. You will have an opportunity to review the candidate locations and provide input before the study team makes a final recommendation to the Federal Railroad Administration.

Public comments about a station location will be part of the formal decision making process.

CONTACT US // **Joseph Vinsh** *Crater Planning District Commission* // 804-861-1666 // jvinsh@craterpdc.org

Manes, Susan

From: Andy Boenau <Andy.Boenau@timmons.com>
Sent: Thursday, September 10, 2015 2:35 PM
Cc: Mobley, Ken; Manes, Susan; Joe Vinsh (jvinsh@craterpdc.org)
Subject: PUBLIC MEETING: Tri-Cities Multimodal Station Study

A public meeting will be held **Wednesday, September 16, 2015 from 5:00-7:00 pm at Ettrick Elementary School** regarding the Tri-Cities Multimodal Station Study. This study is an assessment of potential train station locations to serve the Tri-Cities area.

The purpose of the meeting is to present information and obtain public input about the locations being considered. Information about the following locations will be presented at the meeting:

- Boulevard
- Branders Bridge
- Collier South
- Ettrick (existing train station location)

The format of the meeting is an "open house". There will be short overview presentations made by the study consultant at 5:30, 6:00 and 6:30 pm.

Additional information about the study can be found at www.craterpdc.org.

We encourage you to share this information with others who may be interested and look forward to seeing you at the meeting!

Andy Boenau, AICP
Urban Planning Practice Leader

TIMMONS GROUP | www.timmons.com
117 South 14th Street, Suite 303, Richmond, VA 23219
Office: 804.200.6383 | Fax: 804.560.1016
Mobile: 804.291.6853 | andy.boenau@timmons.com

http://www.linkedin.com/in/boenau
http://twitter.com/boenau

TRI-CITIES AREA MULTIMODAL STATION STUDY

Public Meeting SIGN IN SHEET

NAME	ADDRESS	PHONE # / EMAIL
Mayor W Howard Myers	135 N Union St Petersburg VA	804 733 2323
Mike Nanney	Chesterfield DPU	751-4442
Amir Vera	15 Franklin St. Petersburg, VA	804-722-5155
John Ramsey	Richmond Times-Dispatch	917-357-4025
Danny Plaughn	VA HDR	Danny @ VHDR
Julie Walton	609 N. Bacons Chase N. Prince George 23860	jwalton@princegeorgeva.org

TRI-CITIES AREA MULTIMODAL STATION STUDY

Public Meeting SIGN IN SHEET

NAME	ADDRESS	PHONE # / EMAIL
Ron Svejkovsky	VDOT-Richmond Dist.	524-6002

Ettrick Elementary School, 5:00pm-7:00pm

9/15/2015

TRI-CITIES AREA MULTIMODAL STATION STUDY

Public Meeting SIGN IN SHEET

NAME	ADDRESS	PHONE # / EMAIL
Ashley McLeod	News-Patriot	540-840-0644 ashley@hpcmedia.net
Robert Turner	VSU Foundation	rturner@vsu.edu
Joe Green	Col Hts (City Council)	804 426 2250 greenj@colonialheightsva.gov
Dironna Moore Belton	100 W. Washington	dbelton@petersburg-va.org 804.733.2461
Vice Mayor Sam Parham	3261 Penise Rd. Petersburg, VA 23805	sparham@petersburg-va.org 804-733-2323
Alice Johnson	3766 Colonnade Dr S Chesterfield, VA 23234	tenjohn32@aol.com
Rasheedah Farid	18 Jarratt CT Petersburg, Va 23803.	(804) 732.7760.
Y. Stuart Billips	20433 S. CHESTERFIELD VA 23803	804-590-2006 billipstnc@hotmail.com
Bryan V. Wallin	6901 Woodpecker Rd. Chesterfield, Va. 23838	804-712-1429 bryanwallin@comcast.net

TRI-CITIES AREA MULTIMODAL STATION STUDY

Public Meeting SIGN IN SHEET

NAME	ADDRESS	PHONE # / EMAIL
BEN SESSOMS	20218 LOYAL AVE ETTRICK, VA. 23803	
Michael EDWARDS	409 Grove Ave Petersburg VA 23803	BLS michael Edwards@aol.com.
Howard H. Mares, Sr.	3702 Colonnade Dr. Colonial Hgts, VA. 23834	804-519-1570
DENAY MOTTS	19603 Johnson Rd Petersburg, VA. 23805	804-862-3224
James Vance	205 Orchard Ave. Colonial Hts, Va.	804-526-1052
Adolph Brown		757-409-8891
TINA McCray	19407 BRAEBROOK DR South Chesterfield	804-526-2741
JASMINE AMADIN	VDOT	
Chuck Epps	2380 Williamson Rd Dinwiddie Va	804 520 2482

TRI-CITIES AREA MULTIMODAL STATION STUDY

Public Meeting SIGN IN SHEET

NAME	ADDRESS	PHONE # / EMAIL
Brian Moore	328 Claremont St. Petersburg, VA 23805	804-733-2323 bmoore@petersburg-va.org
Jerry Skalsky	6405 W. Quaker Rd Disputanta Va 23842	804-733-4985 JSkalskyprgerge@aol.com
Joyce Henderson	4810 J. Mitchell Jones Dr PETERSBURG, VA 23803	804-691-4744 joyce_henderson@msn.com
Rita M. Williams	20400 Parkscourt Dr. So. Chesterfield, Va. 23803	MAE RMW@Comcast.net 804-526-8738
Mike Knott	Richmond, VA	mknott@moffattnichol.com
Ronald Harwell	3407 Dupuy Rd. South Chesterfield	IAMROCK@netzero.net 804 898-9847
Mary Harwell	1121 West Booker Circle Petersburg VA.	Amary4h@comcast.net 804 732-0383
Adam Baghetti (NPS)	1539 Hickory Hill Rd Petersburg, VA 23803	804-732-3571 x301 adam_baghetti@nps.gov
Barb Smith	Chesterfield Co.	smithbk@chesterfield.gov 748 1037

What is a Transit-Oriented Development?

A **transit-oriented development** (TOD) is a planned mixed-use residential and commercial area designed to maximize access to rail stations, and promotes both transit ridership and economic development. This study looked into the TOD potential, based upon the connections, current regional market, anticipated new investment, and financial feasibility for each potential station site.

STUDY TIMELINE

- *Study Kickoff*
- *Initial Public Meeting 12.11.2014*
- *Screening/ Coordination Analysis Phase*
- *WE ARE HERE* — *PUBLIC MEETING 09.16.2015*
- *Public Comment Period Closes* — *09.30.2015*
- *Study Working Group Ranks Locations* — *10.2-31.2015*
- *Draft Environmental Assessment Published* — *11.06.2015*
- *Public Comment Period Closes* — *12.06.2015*
- *Final Environmental Assessment Published* — *12.21.2015*

CRATER PLANNING DISTRICT COMMISSION
CPDC

PLEASE TELL US WHAT IS IMPORTANT TO YOU!

Website: *www.craterpdc.org*

Contact Us:
Joseph Vinsh *Crater Planning District Commission // 804.861.1666 // jvinsh@craterpdc.org*

TRI-CITIES AREA MULTIMODAL STATION STUDY

PUBLIC MEETING

WELCOME

On behalf of the Tri-Cities Area Metropolitan Planning Organization and the Crater Planning District Commission, we are pleased to have you join us for a public meeting to review study progress that has been investigating potential new sites for a multimodal passenger rail station in conjunction with anticipated Southeast High Speed Rail Improvements. This meeting preceeds a public comment period on this project and we look forward to your input

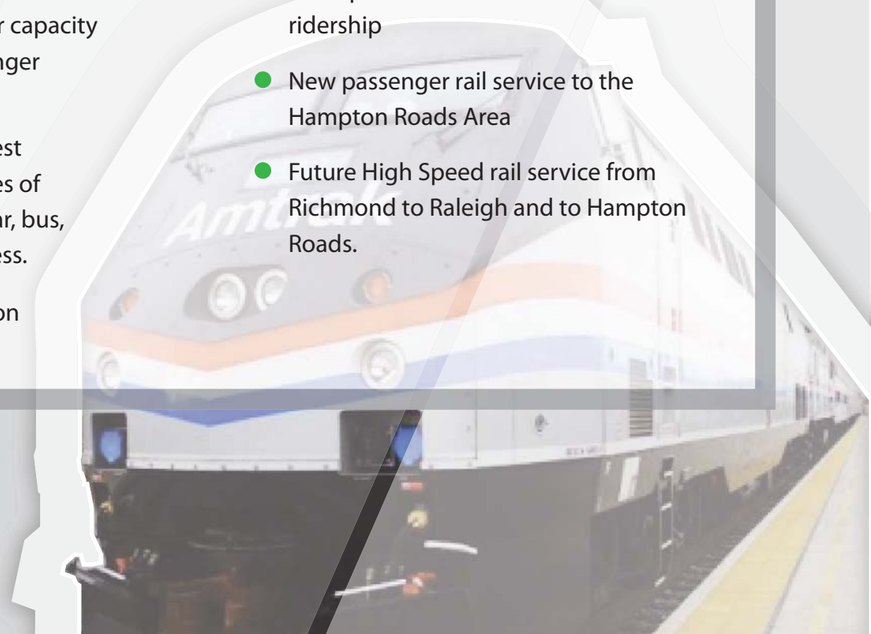
PURPOSE & NEED

The study's purposes are to:

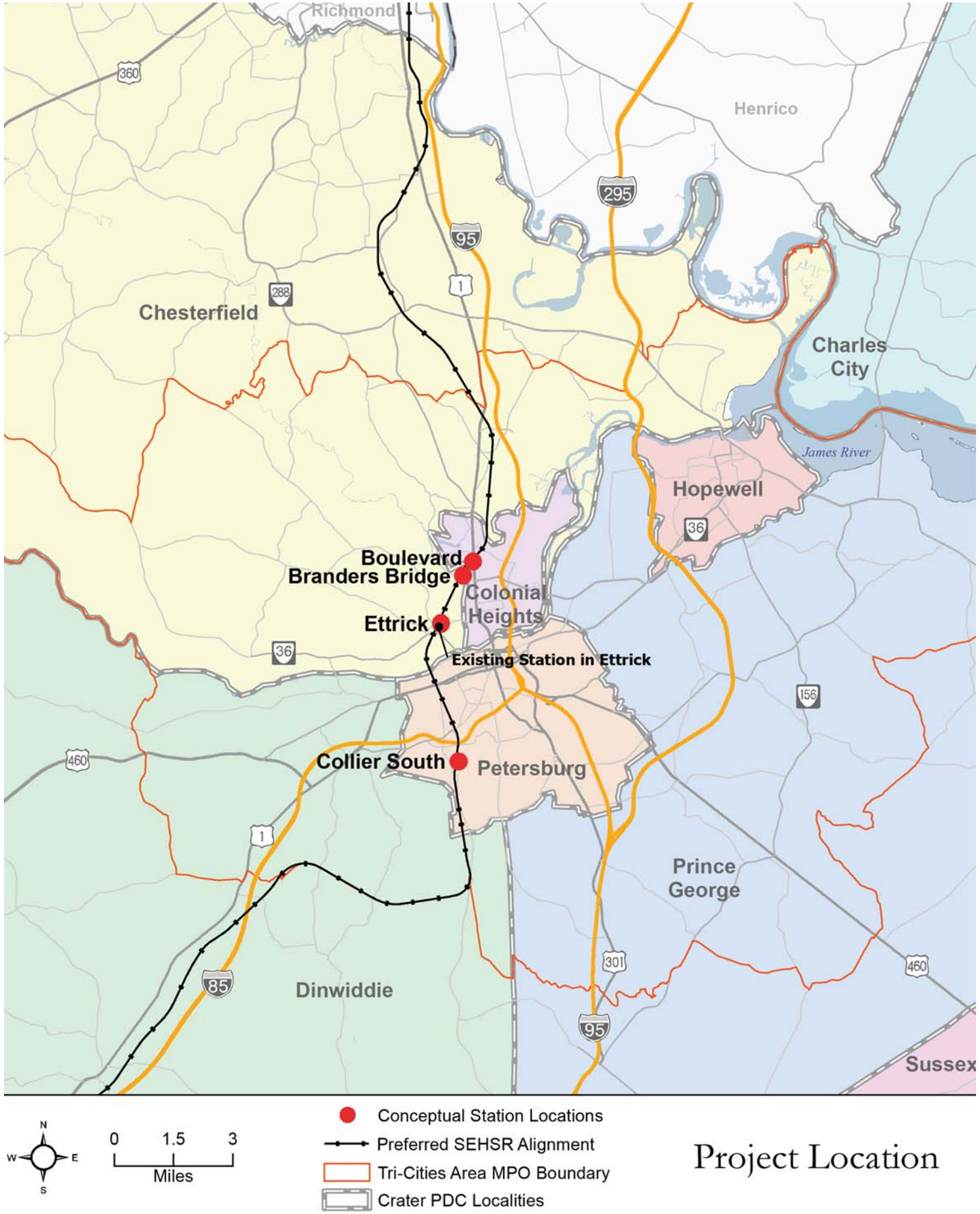
- Document potential impacts due to the construction of a higher capacity and more functional passenger station.
- Identify station sites that best accomodate multiple modes of transportation, including car, bus, bicycle and pedestrian access.
- Obtain input from citizens on potential station locations.

The station needs include:

- Anticipated increase in Amtrak ridership
- New passenger rail service to the Hampton Roads Area
- Future High Speed rail service from Richmond to Raleigh and to Hampton Roads.



Study Area Map



Project Location

Environmental Matrix

CATEGORY	IMPACTS BY STATION LOCATION				
	No-Build (Existing Ettrick Station)	Boulevard	Branders Bridge	Ettrick (New Station)	Collier South
Total Area of Station Footprint (new acres)	N/A	2.67	2.57	2.34	4.30
Current Station Parcel Ownership	CSXT	Private Property	Private Property	CSXT	City of Petersburg
New Station Access Road (square feet)	N/A	0	14,316	5,056	61,817
Cost (Platform, Station, Parking, Access Road, Parcel ($ Millions-2015 Dollars)	N/A	$9 – 12 M	$9 - $11 M	$7 - $9 M	$14 – $17 M
Sensitive Noise Receptors Impacted	N/A	Category 3 (Institutional Land Uses): 1 Moderate Impact	Category 2 (Residential Land Uses): 1 Moderate Impact	None	None
Water Quality	None	Minimal	Minimal	Minimal	Minimal
Threatened & Endangered Species	0	0	Northern Long-eared Bat* Federal Threatened	0	0
Floodplains (acres)	0	0.3	0	0	0
Visual Resources	N/A	Visually Compatible	Limited Impact	Visually Compatible	Limited Impact
Land Use & Zoning Consistency	Consistent	Consistent	Inconsistent	Consistent	Consistent
Farmland Impacts (acres)	N/A	N/A	N/A	N/A	3.7 acres Prime NRCS Rating = 141 out of 260 Points
Relocations: Home, Business, Farm, Non-Profit	0	Requires private prop. Existing businesses may remain at same location, but due to center platform track configura-tions, one business relocation is possible (adjacent to bridge).	Requires private property, but no relocations	0	0
Environmental Justice (EJ) Concerns	EJ Communities Present No disproportionately high and adverse impacts anticipated	EJ Communities Present No disproportionately high and adverse impacts anticipated	No EJ Communities	EJ Communities Present No disproportionately high and adverse impacts anticipated	EJ Communities Present No disproportionately high and adverse impacts anticipated
Public Health Concerns	Minimal	Minimal	Minimal	Minimal	Minimal
Public Safety Concerns	Minimal	Potential Improvement	Potential Improvement	Potential Improvement	Potential Improvement
# Cultural Resource Properties Affected (NRHP Listed or Eligible)	0	No Adverse Effect on 2 Properties	No Adverse Effect on 1 Property	No Adverse Effect on 1 Property	No Adverse Effect on 3 Properties
Section 4(f) Property Used	0	0	0	0	3 *de minimis* uses
Secondary & Cumulative Developement Potential	Higher Potential	Higher Potential	Minimal Potential	Higher Potential	Moderate Potential

Text highlighted in yellow indicates the findings are preliminary and a formal opinion by the Virginia Department of Historic Resources (DHR) is pending.

Impact categories included in the study that returned "No Impact / Not Found Items": Violations of National Ambient Air Quality Standards (NAAQS), Vibrations, Critical Habitat, Wetlands, Streams, Contaminated/Hazardous Waste Sites, Parks & Recreation Sites

Project Process

Thanks for attending tonight's workshop!

You have an opportunity to review the proposed station locations for an improved Tri-Cities Multimodal Station. The input you provide comes before the study team identifies any preferred station locations in a Draft Environmental Assessment that will be released shortly.

Public comments about a station location will be part of the formal decision making process that includes local jurisdictions, state and Federal partners, CSXT, and Amtrak. Your comments will be provided to our Study Working Group formed by the Crater Planning District Commission.

Multimodal Station Overview

- Identify preferred location for a Tri-Cities area multimodal intercity passenger rail station
- Prepare for the future introduction of high speed rail service on the Southeast High-Speed Rail corridor and increasing over-all rail ridership

Provide a station….

- to meet ridership needs,
- with convenient highway access,
- connecting to bus operations, and
- close to the urban core.

Sep 16, 2015 Public workshop	Sep 30, 2015 Public comment period closes	Oct 2-31, 2015 Study Working Group ranks locations	Nov 6, 2015 Draft Environmental Assessment published	Dec 6, 2015 Public comment period closes	Dec 21, 2015 Final Environmental Assessment published

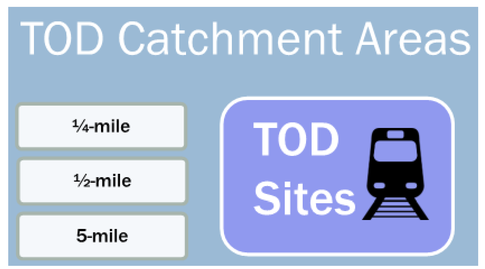
Transit Oriented Development (TOD)

Background Review & Site Tour

Data analyses, stakeholders consultation, and tours of each of the station sites under consideration.

Site Analysis

Examined the Ettrick, Collier, and Boulevard sites including demographic characteristics and employment profiles.



Economic data gathered for TOD catchment areas: real estate market areas, as well as Tri-Cities region, Richmond metropolitan statistical area, and the Commonwealth of Virginia.

Best Case Practice Research

Details notably successful TOD projects and describes specific factors that contribute to project success. Research included similar small stations in Deland, FL and Meridian, MS, and large successful TOD stations in Cleveland, OH, Arlington, VA, and Pittsburgh, PA.

Findings included the need for support of multiple stakeholders, long-term planning and investment to support TOD, and zoning and land use controls that support mixed-use developments.

Real Estate Analysis

Profiled the market trends for commercial, residential, work/live and/or mixed-use developments within the Tri-Cities area's base, primary, and secondary market areas. Specifically analyzed:

- Multi-family residential supply and demand—1,600 net new units could be in TOD.
- Commercial office supply and demand, especially for Class A and medical office buildings.
- Retail supply and demand; additional service businesses like health & beauty and eating & drinking establishments within TOD.
- Market development potential—Collier has highest potential, followed by Boulevard, then Ettrick.

Station Level Analysis

Opportunities were analyzed for transit-oriented development (TOD) at each of the station study areas. Findings included the need for local support for TOD and need for increasing access to existing transit. All stations could support mixed-income residential development, and modest station-oriented retail and services.

Financial Feasibility Analysis

Determine the minimum development density and land use mix, and the financially viable scenario likely to require the least amount of public subsidy. All sites would need debt and public financial assistance to succeed.

Impact Analysis of Feasible Station Alternatives

Compared the estimated annual local revenues and expenses associated with the proposed development. Positive fiscal impacts for all sites, with Collier having the largest.

ENVIRONMENTAL IMPACTS

CATEGORY	IMPACTS BY STATION LOCATION				
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Violations of National Ambient Air Quality Standards (NAAQS)	None	None	None	None	None
Sensitive Noise Receptors Impacted	N/A	Category 3 (Institutional Land Uses): 1 Moderate Impact	Category 2 (Residential Land Uses): 1 Moderate Impact	None	None
Vibration	None	None	None	None	None
Water Quality	None	Minimal	Minimal	Minimal	Minimal
Wetlands (acres)	0	0	0	0	0
Streams (linear feet)	0	0	0	0	0
Threatened & Endangered Species	0	0	Northern Long-eared Bat* *Federal Threatened*	0	0
Critical Habitat	None	None	None	None	None
Floodplains (acres)	0	0.3	0	0	0
Visual Resources	N/A	Visually Compatible	Limited Impact	Visually Compatible	Limited Impact
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Relocations: Home, Business, Farm, Non-Profit	0	Requires private property. Existing businesses may remain at same location, but, due to center platform track configura-tions, one business relo-cation is possible (adjacent to bridge).	Requires private property, but no relocations	0	0
Environmental Justice (EJ) Concerns	EJ Communities Present No disproportionately high and adverse impacts anticipated	EJ Communities Present No disproportionately high and adverse impacts anticipated	No EJ Communities	EJ Communities Present No disproportionately high and adverse impacts anticipated	EJ Communities Present No disproportionately high and adverse impacts anticipated
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Contaminated / Hazardous Waste Sites	0	0	0	0	0
Parks & Recreation Areas	0	0	0	0	0
# Cultural Resource Properties Affected (NRHP Listed or Eligible)	0	No Adverse Effect on 2 Properties	No Adverse Effect on 1 Property	No Adverse Effect on 1 Property	No Adverse Effect on 3 Properties
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NOTE: Text highlighted in yellow indicates the findings are preliminary and a formal opinion by the Virginia Department of Historic Resources (DHR) is pending.

Tri-Cities Multimodal Transit Station Environmental Assessment (EA)

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There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?

Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?

Ettrick because of the convenience for the students + Convention Center events. People from out of state + other areas would not have to drive to Conv. Center, games + etc. from Ettrick station they can walk.

Are there any station locations under consideration that you would not support? If so, why not?

Collier

Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?

Do you have any other comments that you would like to share with the study team?

Full Name (please print): Rita M. Williams

Address (please print): 20400 Ravensbourne Dr.

City: So. Chesterfield **State:** Va **Zip Code:** 23803-1709

Tri-Cities Multimodal Transit Station Environmental Assessment (EA)

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Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?

Proximity To VSU
Proximity To Convention Center
Easier to access
Historical Nature
Student/Parent Access to VSU

Are there any station locations under consideration that you would not support? If so, why not?

Collier South
Station needs To Remain close to VSU
and its Connection

Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?

Do you have any other comments that you would like to share with the study team?

Full Name (please print): Janice C. Johnson

Address (please print): 3706 Colonnade Drive

City: Chesterfield **State:** VA **Zip Code:** 23834

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There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?

Boulevard, Branders Bridge And Ettrick. All of these Areas Are Already High Traffic Congestion, And Do not Have Quick Easy Access To The interstate. In Already High Traffic Areas Adding A High Speed Rail Station will Add To An Already Problematic Situation. Adding more inconvience to already inconvienced Citizens will Create more Problems.

Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?

Collier South would be The most Beneficial of The Sites. With Quick easy access To The interstate, And with not Having To Purchase Any Private or Commercial Property. This Site is within 10 minutes from VSU and will Be on a Transit Bus line. This Site will Benefit all Surrounding localities, and will Have Ample Parking And very Spacious Surroundings. Petersburg has always Been A Strong Transportation Hub.

Are there any station locations under consideration that you would not support? If so, why not?

Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?

Collier is The most Cost effective, It will Spur more Jobs and Potential Development and it will Be more Spacious And have Ample Parking. Also Petersburg has been Home To 3 Passenger Stations in the Past, Union Station, Atlantic Coastline and Commere street. History Always Repeats itself.

Do you have any other comments that you would like to share with the study team?

Collier South, will Be the Prime Location for a multimodel Train station. The Site will Be Adequate for Ample Parking, Easy Access to the interstate system and increased Development for the Surrounding localities. The other Stations Have more than A 5 minute Travel time to an interstate whereas this site is less than 5. This will Be a major investment not only To the City of Petersburg But for the entire Region. Petersburg has a Rich History of Transportation And it has Proven Effective through the years. I Strongly Encourge This site to Be The one Chosen. We need And Want this In PETERSBURG!!!

Full Name (please print): Michael Edwards (804-720-0314)

Address (please print): 409 Grove Avenue

City: Petersburg **State:** VA **Zip Code:** 23803

Tri-Cities Multimodal Transit Station Environmental Assessment (EA)

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There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?

Brander's Bridge should not be considered b/c property owner does not want ε of endangered species.
Ettrick should not be considered because of access to station.
Colonial Heights should not be considered b/c of improvements needed to locate station there and impact to traffic / congestion.

Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?

Preferred Station is the Collier yard. This site would allow for planned development and transit oriented development to occur. A more up to date development for dense larger growth needed for Petersburg and the Tri-Cities area.

Are there any station locations under consideration that you would not support? If so, why not?

Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?

The Collier site allows for the opportunity for a huge hub for the future growth of Hampton Roads.

Do you have any other comments that you would like to share with the study team?

Full Name (please print): GaJuan Clarke

Address (please print): Petes

City: _____ **State**: VA **Zip Code**: 23803

Tri-Cities Multimodal Transit Station Environmental Assessment (EA)

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There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?

Compared to Collier South, the other potential locations are much more difficult to reach by motor vehicle.

Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?

Yes. I greatly prefer Collier South. Access by motor vehicle trumps all other concerns, and Collier South has easy access to both I-85 and I-95.

Are there any station locations under consideration that you would not support? If so, why not?

I cannot support Branders Bridge, Boulevard, or Ettrick (new station). They lack the available land and they are not readily accessible to the interstate

Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?

Do you have any other comments that you would like to share with the study team?

Full Name (please print): Charles H. Cuthbert, Jr.

Address (please print): 132 South Adams Street

City: Petersburg **State**: VA **Zip Code**: 23803

Tri-Cities Multimodal Transit Station Environmental Assessment (EA)

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There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?

No.

Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?

Collier South. It allows for greater connectivity to Hampton Roads and North Carolina, as well as expanded growth.

Are there any station locations under consideration that you would not support? If so, why not?

Ettick Station. limited ability to grow with the growth of Rail industry

Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?

Future growth, and connectivity to other regions

Do you have any other comments that you would like to share with the study team?

No

Full Name (please print): Danny Playgrou

Address (please print): 5101 Monument Ave.

City: Richmond **State:** VA **Zip Code:** 23230

Tri-Cities Multimodal Transit Station Environmental Assessment (EA)

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There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?

Other than Collier south the stations could and very posibly create congested and traffic Disadvantages

Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?

My Preference is Collier South the assecebility to freeway access as well as potential Development Expansion, Economic growth expanded access without complication

Are there any station locations under consideration that you would not support? If so, why not?

Ettrick - Possible congestion Access to multiple by + freeways

Brandons Bridge - Adjacent to closely to residential Development

Boulevard - privately owned / Flood plain

Delayed Transfers ($)

Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?

Collier South is the main and valuable choice for consideration
It is own by the city of Petersburg with a vested interest
in the Entire region

Do you have any other comments that you would like to share with the study team?

the city of Petersburg with its intersecting highways
will allow for immediate economic growth, Job creation,
200 Acre Developable site for expansion

Full Name (please print): Mayor A Howard Myers

Address (please print): 135 N union St.

City: Petersburg **State:** VA **Zip Code:** 23803

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There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?

I would not want to increase traffic on the boulevard for a station site.

Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?

Are there any station locations under consideration that you would not support? If so, why not?

Boulevard due to increase traffic
Collier South due to distant away from cities and students
also the industrial complex would be an interference

Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?

I would like the train station to remain in Chesterfield County

Do you have any other comments that you would like to share with the study team?

Ettrick location would ~~boost~~ increase the businesses in the area
I would not want a bridge over pass along the Branders bridge area at all.

Full Name (please print): TINA C. MCCRAY

Address (please print): 19407 Brookbrook Dr.

City: South Chesterfield **State**: VA. **Zip Code**: 23834

CRATER PLANNING DISTRICT COMMISSION

CPDC

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There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?

Three of the station -- Branders Bridge, Boulevard, and Ettrick -- has no major access to any interstate roadway.

Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?

I prefer the Collier South Location for the station. It has more land that can be developed, a longer entrance road that would enhance mixed-use development, and is the only location with an Interstate located within close proximity.

Are there any station locations under consideration that you would not support? If so, why not?

I would not support a Brander's Bridge station location, as it is under private ownership, Boulevard as it would require purchasing private property, and Ettrick has no major roads into the station. The area is also now highly congested with development by VSU

Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?

Collier South would be my choice for the station based on the study information provided. The station would be larger, there is more land for mixed use development, and it is the only location with major interstate access.

Do you have any other comments that you would like to share with the study team?

Thank you for this opportunity to comment on this very important issue for our region.

Full Name (please print): Brian A. Moore

Address (please print): 328 Claremont St

City: Petersburg **State**: VA **Zip Code**: 23805

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There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?

Concern of congestion at the Branders Bridge and Boulevard locations. The size and access to city owned land is better served.

Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?

Collier South is clearly the best location to serve the entire region. For the cost of additional land for growth and easy access to highways 460 95 and 85, will give riders ~~easy~~ many transportation options

Are there any station locations under consideration that you would not support? If so, why not?

Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?

Petersburg is known for its location to connect transportation access since the civil war, which still makes Petersburg's collier south the transportation hub for the region

Do you have any other comments that you would like to share with the study team?

Full Name (please print): Samuel Parham

Address (please print): 3261 Denise Rd

City: Petersburg **State**: VA **Zip Code**: 23805

CRATER PLANNING DISTRICT COMMISSION

CPDC

Tri-Cities Multimodal Transit Station Environmental Assessment (EA)

Comment Form – Public Workshop #2

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There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?

No concerns per se. Overall objective should be an increase ridership for rail transportation and spur economic development and economic growth.

Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?

Preference for Ettrick and its proximity to the Virginia State University campus. The new Multi-purpose Center would help drive economic activity if visitors have a convenient train stop thereby avoiding the need to drive. Frequency of trains will be critical; in other words, schedule will be critical. It is also central to the other locations.

Are there any station locations under consideration that you would not support? If so, why not?

Not sure I would put Brander's Bridge and the Boulevard so close together; seems one or the other should go. Brander's Bridge is probably better choice than Boulevard.

Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?

Need to clearly look at the traffic patterns (to and from each station) for each station

Do you have any other comments that you would like to share with the study team?

Transit-oriented development could work well for Petersburg especially as a hotel is placed within walking distance

Full Name (please print): JOYCE HENDERSON

Address (please print): 4010 J. MITCHELL JONES DRIVE

City: PETERSBURG **State**: VA **Zip Code**: 23803

Tri-Cities Multimodal Transit Station Environmental Assessment (EA)

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There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?

My concern with Ettrick is the somewhat limited parking available at this time.

Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?

No strong thoughts for any of the proposed locations. If I had to choose, I would go for Collier's Hill because of its proximity to Prince George Co & Ft. Lee.

Are there any station locations under consideration that you would not support? If so, why not?

Would prefer the more southern locations.

Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?

No.

Do you have any other comments that you would like to share with the study team?

No

Full Name (please print): Jerry J. Skalsky

Address (please print): 6405 W. Quaker Rd.

City: Disputanta **State:** Va **Zip Code:** 23842

CRATER PLANNING DISTRICT COMMISSION

CPDC

Tri-Cities Multimodal Transit Station Environmental Assessment (EA)

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There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?

I have used the station located in Ettrick many times and I have always found it to be convenient. Given its proximity to the new Convocation Center and the campus of VSU, the Ettrick station will serve students, visitors, and the community as long as it continues to be functional

Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?

For reasons stated, I would prefer the Ettrick station remain in operation and upgraded with a cafe.

Are there any station locations under consideration that you would not support? If so, why not?

I could not support the other locations. I think it would be more ~~extensive~~ expensive to build versus funding for

moderate renovation.

Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?

Do you have any other comments that you would like to share with the study team?

Full Name (please print): Nelson Jefferson

Address (please print): P.O. Box 397, Chesterfield

City: _____ **State:** VA **Zip Code:** 23832

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Tri-Cities Multimodal Transit Station Environmental Assessment (EA)

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There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?

I would like it to stay where it is, I use the train to visit family up north

Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?

In Ettrick,

Are there any station locations under consideration that you would not support? If so, why not?

none if they are moving from Ettrick

Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?

Don't move it from Ettrick

Do you have any other comments that you would like to share with the study team?

~~Lets~~ This station is important to me and every body in the Village of Ettrick.

Full Name (please print): Ashton A. Evans Jr

Address (please print): 21403 Chesterfield Ave

City: S. Chesterfield, **State:** Va **Zip Code:** 23803

Tri-Cities Multimodal Transit Station Environmental Assessment (EA)

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There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?

I support the Ettrick station

Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?

Ettrick because it is centrally located serving over 100,000 residents with in a 6 mile radius. It is also within walking distance of VA State University and also close to Fort Lee

Are there any station locations under consideration that you would not support? If so, why not?

Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?

Do you have any other comments that you would like to share with the study team?

Full Name (please print): GLEN BESA

Address (please print): 4896 Burnham Rd

City: No Chesterfield **State**: VA **Zip Code**: 23234

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Tri-Cities Multimodal Transit Station Environmental Assessment (EA)

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There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?

I have concerns that the Ettrick train station allows students from Virgina State University be able to go home without spending tons of money to take a cabi 2 or 3 miles away, if the train is moved.

Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?

Ettrick train station is by a urban society, So it will be smart to keep this location. That you will have alot of business geing on because you are by a college. where students can have the option of taking the train home.

Are there any station locations under consideration that you would not support? If so, why not?

I dont support the movement of location of Ettrick because it provides a easy walking distance from VSU where students and staff can go home

Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?

I would prefer to think of the students. They are paying about 14,000 instate and 31,000 outstate plus funds for food and supplies. They dont want to spend more money on taxi services to go to a further train location.

Do you have any other comments that you would like to share with the study team?

No. I dont just to think about the students of VSU.

Full Name (please print): Patricia Comrie

Address (please print): 595 Northfield Ave, APT 72

City: West orange **State:** NJ **Zip Code:** 07052

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There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?

Ettrick station is being moved and it should not be.

Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?

Ettrick because it is convienient to the students at VSU.

Are there any station locations under consideration that you would not support? If so, why not?

Ettrick should not be moved.

Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?

N/A

Do you have any other comments that you would like to share with the study team?

N/A

Full Name (please print): Paris Cotman

Address (please print): Virginia State University

City: Petersburg **State:** VA **Zip Code:** 23806

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There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?

Ettrick

Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?

Ettrick - I prefer Ettrick station because it in close to VSU and convenient

Are there any station locations under consideration that you would not support? If so, why not?

Ettrick, it should not be moved

Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?

N/A

Do you have any other comments that you would like to share with the study team?

N/A

Full Name (please print): Richard Cook

Address (please print): VSU

City: Petersburg **State:** VA **Zip Code:** 23803

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There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?

I would not want to increase traffic on the boulevard for a station site.

Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?

Are there any station locations under consideration that you would not support? If so, why not?

Boulevard due to increase traffic
Collier South due to distance away from cities and students
also the industrial complex would be an interference

Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?

I would like the train station to remain in Chesterfield County

Do you have any other comments that you would like to share with the study team?

Ettrick location would ~~boost~~ increase the businesses in the area
I would not want a bridge over pass along the Brandons bridge Area at all.

Full Name (please print): Tina C. McCray

Address (please print): 19407 Brookbrook Dr.

City: South Chesterfield **State**: VA **Zip Code**: 23834

CPDC

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There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?

Recommend that station remain in Ettrick. Many college students & military members use the transit services frequently. Parking is adequate & the community is not congested & crowded. The station has served & been used by local community residences for many years.

Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?

Ettrick Station Only

Are there any station locations under consideration that you would not support? If so, why not?

Yes. Branders Bridge, Boulevard & Collier South.

process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?

Please consider the College - VSU proximity to Ettrick Station & many local Residents who disabled & without vehicles in the community

Do you have any other comments that you would like to share with the study team?

Ask the team to conduct a thorough assessment of residents - Door to Door Survey. Also solicit feedback from local businesses & church officials in the local community.

Full Name (please print): A. Baugh

Address (please print):

City: Petersburg, VA **State:** VA **Zip Code:** 23805

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There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?

yes. We feel the Amtrak station should remain in the Ettrick community because it is centrally located for the VA State University students and is essential to build up the Ettrick Area. we need to build Ettrick up not take businesses away from the community.

Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?

we prefer the Amtrak station to remain in Ettrick because the students and community need transportation back & forth to jobs & school. most of the students walk to the train station. VSU is right here in Ettrick & students can travel to Washington, DC, Raleigh, NC + Hampton area

Are there any station locations under consideration that you would not support? If so, why not?

we do not support any other site such as Brandersbridge, Boulevard or Collier because we want the Ettrick area to thrive & grow. This area has not had any improvements.

process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?

most of the students attending VSU do not own cars so the train station is vital to the students to travel from home to school & from school back home. therefore we hope this station will not be moved. you just need to renovate present station.

Do you have any other comments that you would like to share with the study team?

we think Va State University have invested so much in this community such as the 85 million dollar multipurpose building the new water tower, the new 4 lane highway. They have been purchasing properties in this area in order to make this area better. Now to take away the train station will destroy this community. There were plans for a grocery store & shopping center near the train station what has happen to all the previous plans?

Full Name (please print): Charles + Brenda Epps

Address (please print): 23801 Williamson Road

City: Dinwiddie **State:** Va **Zip Code:** 23803

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Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?

I think Ettrick would be the best location because of the newly constructed conference center. Also, student can arrive and depart from Ettrick more conveniently when attending college. More business will likely locate near the train station and the college

Are there any station locations under consideration that you would not support? If so, why not?

I would not support the other locations because I feel Ettrick is the best location.

Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?

Do you have any other comments that you would like to share with the study team?

Full Name (please print): Evelyn S. Tucker

Address (please print): 20243 Sheffield Place

City: Ettrick **State**: VA **Zip Code**: 23803

CRATER PLANNING DISTRICT COMMISSION

CPDC

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There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?

Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?

Ettrick - the most complete site among the listed. Cost among the other sites are too costly (prohibitive)!! — Build on the Ettrick location - improve what is in place already!!

Are there any station locations under consideration that you would not support? If so, why not?

NO

Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?

Consider Ettrick and what is already in place!!

Do you have any other comments that you would like to share with the study team?

Full Name (please print): Delvris G. Jordan

Address (please print): 20107 Oakland Ave

City: S. Chesterfield **State:** VA **Zip Code:** 23834

CRATER PLANNING DISTRICT COMMISSION

CPDC

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There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?

Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?

Ettrick - the most complete site among the listed. Cost among the other sites are too costly (prohibitive)!! — Build on the Ettrick location - improve what is in place already!!

Are there any station locations under consideration that you would not support? If so, why not?

NO

Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?

Consider Ettrick and what is already in place!!

Do you have any other comments that you would like to share with the study team?

Full Name (please print): Delvris G. Jordan

Address (please print): 20107 Oakland Ave

City: S. Chesterfield **State:** VA **Zip Code:** 23834

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There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?

1. Branders Bridge - too residential
2. Boulevard - Not most easily accessible due to high traffic and concentration of businesses on the Boulevard
3. Collier South - Distant from the general Tri-City areas

Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?

I prefer the Ettrick location. Currently the station is located there and has served the area well. It is easily convenient and in walking distance for VSU students. With the opening of the Chesterfield Co. - VSU Sports Center there is sure to be more events attractive to out-of-town patrons. The entire Old Towne area and many loft type housing in Petersburg attracts young professional persons who could easily travel from Ettrick. Also this location compliment the transit station on Washington St. and the Petersbu

Are there any station locations under consideration that you would not support? If so, why not?

Trolly service would compliment the Ettrick location of the station also by providing a centralized transportation hub.

See answer to first question

process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?

Comments Regarding my opinions on the options under consideration are expressed on the first page which asked for Reasons for preferring my choice, which is Ettrick

Do you have any other comments that you would like to share with the study team?

Thanks for requesting input and I look forward to hearing that Ettrick is the final choice.

Full Name (please print): Edith C. Brown

Address (please print): 3041 Wright Rd.

City: Petersburg **State:** VA **Zip Code:** 23805

#1

COMPLETE

- **Collector:** Web Link 1 (Web Link)
- **Started:** Thursday, September 24, 2015 12:56:04 PM
- **Last Modified:** Thursday, September 24, 2015 12:58:37 PM
- **Time Spent:** 00:02:32
- **IP Address:** 150.174.34.1

PAGE 1: Public Comment Form - Sep 16, 2015

Q1: **There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?**

I believe the proposed Ettrick station is the best option.

Q2: **Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?**

Ettrick! I believe it is the most strategically located site to take advantage of regional ridership.

Q3: **Are there any station locations under consideration that you would not support? If so, why not?**

Collier Yard. I feel that it is a remote location and difficult to reach.

PAGE 2: Public Comment Form - Sep 16, 2015

Q4: **Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?**

n/a

Q5: **Do you have any other comments that you would like to share with the study team?**

n/a

#2

COMPLETE

- **Collector:** Web Link 1 (Web Link)
- **Started:** Friday, September 25, 2015 12:29:17 PM
- **Last Modified:** Friday, September 25, 2015 12:32:52 PM
- **Time Spent:** 00:03:35
- **IP Address:** 150.174.34.1

PAGE 1: Public Comment Form - Sep 16, 2015

Q1: **There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?**

I would like to have the station stay in the ettrick area because it serves the community and it's a historical site for the ettrick community. It is close to Virginia State University and alot of our students use this station at various times.

Q2: **Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?**

Ettrick

Q3: **Are there any station locations under consideration that you would not support? If so, why not?**

Branders Bridge, Boulevard, Collier(refer back to #1

PAGE 2: Public Comment Form - Sep 16, 2015

Q4: **Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?**

Refer to #1

Q5: **Do you have any other comments that you would like to share with the study team?**

Refer to #1

#3

COMPLETE

- **Collector:** Web Link 1 (Web Link)
- **Started:** Friday, September 25, 2015 10:05:04 AM
- **Last Modified:** Friday, September 25, 2015 3:16:29 PM
- **Time Spent:** 05:11:24
- **IP Address:** 150.174.34.1

PAGE 1: Public Comment Form - Sep 16, 2015

Q1: **There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?**

My concern is not a concern if the train station remains at Ettrick VA

Q2: **Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?**

Ettrick. The train station in the Village of Ettrick has served the Tri-cities for many years and continues to cater to The Lord's Church on Third Avenue (visitors, congregation), Virginia State University (students, visitors, parents) and businesses. A multipurpose center is under construction on behalf of Virginia State Univerity and East River Road is being widened (both adjacent to the Ettrick train station). Because of activities at The Lord's Church, future activities planned at the multipurpose center and businesses already established, traffic volume for usage of the train will increase. Enhancements made to the Ettrick train station would compliment the present Ettrick Village and enhancements on the horizon. People in the Tri-cities know where the Ettrick train station is located and with GPS, a visitor would easily locate the Ettrick train station. Enhancements to the Ettrick Train Station is the best decision. Everything is already in place. My family and friends use Ettrick train station.

Q3: **Are there any station locations under consideration that you would not support? If so, why not?**

All but Ettrick for the reasons mentioned in Bullet 2

PAGE 2: Public Comment Form - Sep 16, 2015

Q4: **Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?**

See Bullet 2

Q5: **Do you have any other comments that you would like to share with the study team?**

See Bullet 2

#4

COMPLETE

- **Collector:** Web Link 1 (Web Link)
- **Started:** Monday, September 28, 2015 11:54:28 AM
- **Last Modified:** Monday, September 28, 2015 12:00:06 PM
- **Time Spent:** 00:05:38
- **IP Address:** 70.88.186.209

PAGE 1: Public Comment Form - Sep 16, 2015

Q1: There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?

No

Q2: Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?

Boulevard. Re-vitalize Colonial Heights

Q3: Are there any station locations under consideration that you would not support? If so, why not?

No

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Q4: Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?

No

Q5: Do you have any other comments that you would like to share with the study team?

No

#5

COMPLETE

- **Collector:** Web Link 1 (Web Link)
- **Started:** Monday, September 28, 2015 1:15:11 PM
- **Last Modified:** Monday, September 28, 2015 1:19:59 PM
- **Time Spent:** 00:04:47
- **IP Address:** 70.197.135.239

PAGE 1: Public Comment Form - Sep 16, 2015

Q1: There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?

Yes. ettrick collier and Branders bridge are inferior locations

Q2: Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?

Yes. Colonial heights blvd. structure in place. Many access points and immediate supporting amenities

Q3: Are there any station locations under consideration that you would not support? If so, why not?

Yes. The three poor locations mentioned above

PAGE 2: Public Comment Form - Sep 16, 2015

Q4: Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?

Respondent skipped this question

Q5: Do you have any other comments that you would like to share with the study team?

Respondent skipped this question

#6

COMPLETE

- **Collector:** Web Link 1 (Web Link)
- **Started:** Monday, September 28, 2015 1:55:24 PM
- **Last Modified:** Monday, September 28, 2015 2:01:04 PM
- **Time Spent:** 00:05:40
- **IP Address:** 73.152.167.2

PAGE 1: Public Comment Form - Sep 16, 2015

Q1: **There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?**

I am concerned about the lack of any other retail or pedestrian business near the Collier South location.

Q2: **Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?**

YES, I prefer the Boulevard location.

Q3: **Are there any station locations under consideration that you would not support? If so, why not?**

I would not support the Collier South location due to it's lack of retail and pedestrain business nearby.

PAGE 2: Public Comment Form - Sep 16, 2015

Q4: **Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?**

No

Q5: **Do you have any other comments that you would like to share with the study team?**

No

#7

COMPLETE

- **Collector:** Web Link 1 (Web Link)
- **Started:** Monday, September 28, 2015 1:51:19 PM
- **Last Modified:** Monday, September 28, 2015 2:01:52 PM
- **Time Spent:** 00:10:33
- **IP Address:** 71.207.104.145

PAGE 1: Public Comment Form - Sep 16, 2015

Q1: **There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?**

I am in favor of the Colonial Heights Boulevard

Q2: **Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?**

The Boulevard location

Q3: **Are there any station locations under consideration that you would not support? If so, why not?**

As a resident of Colonial Heights I would not support the Branders Bridge, Ettrick or the Collier station locations.

PAGE 2: Public Comment Form - Sep 16, 2015

Q4: Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?

Respondent skipped this question

Q5: Do you have any other comments that you would like to share with the study team?

Respondent skipped this question

#8

COMPLETE

- **Collector:** Web Link 1 (Web Link)
- **Started:** Monday, September 28, 2015 11:57:52 AM
- **Last Modified:** Monday, September 28, 2015 2:02:59 PM
- **Time Spent:** 02:05:07
- **IP Address:** 50.204.73.210

PAGE 1: Public Comment Form - Sep 16, 2015

Q1: There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?

The Ettrick stop seems somewhat pushed back into an existing neighborhood and access seems more difficult than the other proposed stations. The Collier stop is not as centrally located, not giving access to most residents regionally.

Q2: Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?

The proposed Boulevard station is directly off of Route 1 and will be highly visible, making this station accessible and creates a nice gateway into the Tri-Cities area.

Q3: Are there any station locations under consideration that you would not support? If so, why not?

No

PAGE 2: Public Comment Form - Sep 16, 2015

Q4: Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?

Respondent skipped this question

Q5: Do you have any other comments that you would like to share with the study team?

Respondent skipped this question

#9

COMPLETE

- **Collector:** Web Link 1 (Web Link)
- **Started:** Monday, September 28, 2015 2:11:31 PM
- **Last Modified:** Monday, September 28, 2015 2:17:15 PM
- **Time Spent:** 00:05:43
- **IP Address:** 70.197.135.239

PAGE 1: Public Comment Form - Sep 16, 2015

Q1: **There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?**

Yes. Poor access and infrastructure to all but the colonial heights location

Q2: **Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?**

Blvd location

Q3: **Are there any station locations under consideration that you would not support? If so, why not?**

Yes. ettrick and collier yard locations are in inferior locations

PAGE 2: Public Comment Form - Sep 16, 2015

Q4: **Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?**

Boulevard in colonial heights would be the best choice. Many supporting amenities with many arterial roads and entry points for traffic

Q5: **Do you have any other comments that you would like to share with the study team?**

The city offers many roads and easy access to subdivisions and land for future mixed use development

#10

COMPLETE

- **Collector:** Web Link 1 (Web Link)
- **Started:** Monday, September 28, 2015 12:12:40 PM
- **Last Modified:** Monday, September 28, 2015 2:30:33 PM
- **Time Spent:** 02:17:52
- **IP Address:** 70.88.186.209

PAGE 1: Public Comment Form - Sep 16, 2015

Q1: There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?

no

Q2: Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?

Boulevard

Q3: Are there any station locations under consideration that you would not support? If so, why not?

no

PAGE 2: Public Comment Form - Sep 16, 2015

Q4: Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?

no

Q5: Do you have any other comments that you would like to share with the study team?

no

#11

COMPLETE

- **Collector:** Web Link 1 (Web Link)
- **Started:** Monday, September 28, 2015 7:56:42 PM
- **Last Modified:** Monday, September 28, 2015 8:02:43 PM
- **Time Spent:** 00:06:01
- **IP Address:** 73.147.78.94

PAGE 1: Public Comment Form - Sep 16, 2015

Q1: **There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?**

Yes

Q2: **Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?**

Colonial Heights appears to offer the greatest potential for location due to the immediate access to interstate highways

Q3: **Are there any station locations under consideration that you would not support? If so, why not?**

I am open minded about arguments for and against each proposed site

PAGE 2: Public Comment Form - Sep 16, 2015

Q4: **Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?**

The City of Colonial has the best potential, in my view, to integrate train passenger travel with other transportation modes. It is closest to interstates and I believe the suggested location within the city of Colonial Heights is closer to the multi-modal transportation center on Washington Street in Petersburg

Q5: **Do you have any other comments that you would like to share with the study team?**

All locations deserve consideration. As a member of the Colonial Heighrs Planning Commission I would like to see our group consulted during these deliberations

#12

COMPLETE

- **Collector:** Web Link 1 (Web Link)
- **Started:** Monday, September 28, 2015 10:08:20 PM
- **Last Modified:** Monday, September 28, 2015 10:09:09 PM
- **Time Spent:** 00:00:48
- **IP Address:** 73.31.49.28

PAGE 1: Public Comment Form - Sep 16, 2015

Q1: There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?

Respondent skipped this question

Q2: Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?

Boulevard, I think it's a good location

Q3: Are there any station locations under consideration that you would not support? If so, why not?

Respondent skipped this question

PAGE 2: Public Comment Form - Sep 16, 2015

Q4: Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?

Respondent skipped this question

Q5: Do you have any other comments that you would like to share with the study team?

Respondent skipped this question

#13

COMPLETE

- **Collector:** Web Link 1 (Web Link)
- **Started:** Tuesday, September 29, 2015 2:36:56 AM
- **Last Modified:** Tuesday, September 29, 2015 2:40:00 AM
- **Time Spent:** 00:03:04
- **IP Address:** 73.40.95.150

PAGE 1: Public Comment Form - Sep 16, 2015

Q1: **There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?**

Collier south is inferior location and doesnt have infrastructure

Q2: **Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?**

Colonial Heights site. Location and access appears best

Q3: **Are there any station locations under consideration that you would not support? If so, why not?**

Ettrick and Collier. Both do not appear suitable for max movement and convenience

PAGE 2: Public Comment Form - Sep 16, 2015

Q4: **Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?**

City of Colonial Heights offers best access for park/ride and kiss/ride folks

Q5: **Do you have any other comments that you would like to share with the study team?**

From viewing the plans, Colonial Heights has less impact on environment and best infrastructure plus most convenient

#14

COMPLETE

- **Collector:** Web Link 1 (Web Link)
- **Started:** Tuesday, September 29, 2015 3:59:32 PM
- **Last Modified:** Tuesday, September 29, 2015 4:32:45 PM
- **Time Spent:** 00:33:12
- **IP Address:** 173.167.51.69

PAGE 1: Public Comment Form - Sep 16, 2015

Q1: There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?

Boulevard would be fantastic!

Q2: Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?

Boulevard for convenient access & walking distance for future development

Q3: Are there any station locations under consideration that you would not support? If so, why not?

I don't like any of the other choices. Ettrick is only convenient to Va State. Collier yard is convenient to no one. Branders Bridge, the neighbors don't want, that's too disruptive to housing. Boulevard is the only choice.

PAGE 2: Public Comment Form - Sep 16, 2015

Q4: Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?

The Boulevard is the logical choice. The station would bring desirable development, where it is desired. Win / win.

Q5: Do you have any other comments that you would like to share with the study team?

Respondent skipped this question

#15

COMPLETE

- **Collector:** Web Link 1 (Web Link)
- **Started:** Tuesday, September 29, 2015 7:59:23 PM
- **Last Modified:** Tuesday, September 29, 2015 8:29:07 PM
- **Time Spent:** 00:29:43
- **IP Address:** 69.243.217.80

PAGE 1: Public Comment Form - Sep 16, 2015

Q1: **There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?**

Branders Bridge, Boulevard and Ettrick

Q2: **Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?**

Collier South is more center located to the Tri-Cities area: Dinwiddie, Prince George, South Cheasterfield and Petersburg, also you have I-95,I-85,US460, US 301 and US1.

Q3: **Are there any station locations under consideration that you would not support? If so, why not?**

The Boulevard, Ettreick and Branders Bridge, because of their location will not suport the Tri-Cities Area .

PAGE 2: Public Comment Form - Sep 16, 2015

Q4: **Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?**

I am a property owner in South Chesterfield and Petersburg and when deciding the location you need to look at how would it service the whole Tri-CITIES Area. As far as the Virginia State University the students bring their cars with them, so the University should not be in the picture. We need to look at the whole Tri-Cities Area. Collier South would do this for us and do justice for all concern.

Q5: **Do you have any other comments that you would like to share with the study team?**

Looking at the map you have Collier South serving all of the Tri-Cities area, with it locatin in the middle of all of the major interstates and highways ; I-85, I95, US 1, Us 301 and US 460. Thes are all important to the Tri_Cities. You also have the train coming from the Tidewater area that can connect to the Great Station. This area has enough land to support growth, bus serve, cabs and add to the whole community and will beable to serve all of the Tri-Cities

#16

COMPLETE

- **Collector:** Web Link 1 (Web Link)
- **Started:** Tuesday, September 29, 2015 8:47:36 PM
- **Last Modified:** Tuesday, September 29, 2015 9:01:24 PM
- **Time Spent:** 00:13:47
- **IP Address:** 71.63.45.9

PAGE 1: Public Comment Form - Sep 16, 2015

Q1: **There are currently four proposed station sites still under consideration (Branders Bridge, Boulevard, Ettrick and Collier South). Do you have concerns about any of these stations that you would like to share with the study team?**

excluding Ettrick, the other sites will not give VSU students direct excess to station.

Q2: **Do you have a preference for any of the stations under consideration (Branders Bridge, Boulevard, Ettrick and Collier South)? If so, why do you prefer this proposed station location?**

Ettrick station to stay in its location.

Q3: **Are there any station locations under consideration that you would not support? If so, why not?**

yes, everyone exceot Ettrick.

PAGE 2: Public Comment Form - Sep 16, 2015

Q4: **Your input will be provided to Crater Planning District Commission as part of the decision making process in determining a preferred station location. Do you have comments that you would like to share with the study team as they enter into this decision making process?**

Ettrick station have given access to travel not just to VSU students but to the surrounding communites

Q5: **Do you have any other comments that you would like to share with the study team?**

I believe that Ettrick will continue to grow and prosper from this new station.

Manes, Susan

From: Lynn M. Crump <lmc_cla@verizon.net>
Sent: Wednesday, September 16, 2015 3:00 PM
To: Tri-Cities_StationStudy
Subject: Rail stations in Chesterfield

I think adding more stations in Chesterfield will go far to reducing the I-95 traffic.
I do not think we need 4 stations however,
It seems to me that the Branders Bridge and the existing Ettrick ones are the most 'useful'.
Insuring that there is enough parking is key, unless there are comparable plans for connecting bus lines.
I do wonder how these relate tot he stations that there used to be along the historic rail that connected Richmond to Petersburg....
I also think there should be a lot of consideration for any of the stations that are proposed for pedestrians or cyclists to get to the station and park a bike.
If this effort is developed separately from bike-ped facilities it will not be successful.
Is there an opportunity for rail with trail along the corridor so it can be used for long-distance cycling? A lot of this is done in new England.

Thank you for your consideration of my comments.
Lynn Crump, PLA
3311 West Grove Ave.
Chester, VA 23831

Manes, Susan

From: FHill113@aol.com
Sent: Sunday, March 06, 2016 5:31 PM
To: Tri-Cities_StationStudy
Subject: Train Station Location

Dear Sir,

This is to advise you that I am in favor of keeping the train station in Ettrick as it supports the VSU stations who do not have transportation to someplace else and it is convenient for other residence without having to travel a longer distance.

Thank you.

Frances Hill
Colonial Heights, VA

Manes, Susan

From: Linda Cheives <lindamaec@yahoo.com>
Sent: Friday, March 11, 2016 12:55 AM
To: Tri-Cities_StationStudy
Subject: Support

To Whom It May Concern:

This email is sent to support keeping the train station in Ettrick because it adds historical enhancement to the area and would bring tourism and other opportunities for economic growth in the Ettrick community.

Linda Cheives