



West Virginia
Department of Transportation



Supplemental Draft Environmental Impact Statement

US 340 Improvement

Jefferson County, West Virginia

July 2016

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State Project U219-340-0.00(02)

US 340 IMPROVEMENT STUDY
Jefferson County, West Virginia

SUPPLEMENTAL
DRAFT ENVIRONMENTAL IMPACT STATEMENT
SECTION 4(F) EVALUATION

Submitted Pursuant to 42 USC 4332(2)(c) and 49 USC 303
by the U.S. Department of Transportation
Federal Highway Administration
and
West Virginia Department of Transportation
Division of Highways



Date of Approval

JUL 08 2016

For West Virginia Division of Highways



Date of Approval

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This Supplemental Draft Environmental Impact Study evaluates the engineering aspects and social, economic, and environmental impacts associated with Alternatives for an improved US 340 transportation corridor in Jefferson County. The Build Alternatives include improvements along US 340 and new location corridors east and west of existing US 340.

Comments on this Supplemental Draft Environmental Impact Statement are due by SEP 30 2016
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SECTION I

Summary

I. SUMMARY

A. PROPOSED ACTION

The West Virginia Department of Highways (WVDOH) and the Federal Highway Administration (FHWA) propose to improve the existing two-lane section of US 340 from the existing four-lane section just south of the state boundary in Clarke County, Virginia to the existing four-lane section of the Charles Town Bypass in Jefferson County, West Virginia. The project is included within the Hagerstown/Eastern Panhandle Metropolitan Planning Organization.

The project is being funded in its entirety by federal and state monies administered by the WVDOH. The Virginia Department of Transportation (VDOT) is not contributing any funding to the project. Because the project will require construction within the existing right of way in Virginia to tie to the existing 4-lane roadway, more formal discussions with VDOT will be necessary prior to construction. Up to now, coordination with VDOT has been “informal.” They have requested the opportunity to review the SDEIS when completed. Communication with resource agencies in both West Virginia and Virginia has occurred. For a list of these agencies and their responses, please refer to Section VII and Appendix B, respectively.

The purpose and need for the proposed improvements to US 340 is to address traffic operations and improve safety deficiencies along the existing facility. Currently, intersections along US 340 in West Virginia operate at an unacceptable Level of Service (LOS) D or worse with the exception of US 340 at CR 38 which operates at LOS C during daily peak travel periods. By the design year of 2033, the entire two-lane facility will operate over capacity during peak travel periods with a Level of Service E or worse. Existing and inconsistent roadway elements that are considered substandard using current design standards also create undesirable driving conditions along these sections of US 340. These deficiencies include variable shoulder widths, narrow travel lanes, limited passing zones, steep side slopes, lack of turn lanes, and unprotected fixed objects such as culvert headwalls and trees. The existing facility within the project area is a two-lane rural arterial highway with numerous access points from both residential and commercial properties. The adjoining segments of US 340 north and south of the project area are four-lane divided highways. The proposed project is needed to improve traffic operations, increase capacity, eliminate deficiencies, and improve safety.

The proposed facility is approximately 4.5 miles in length and will be a four-lane divided highway. The facility is designed in accordance with the American Association of State Highway and Transportation Officials, *A Policy on Geometric Design of Highways and Streets*. Design elements include a 60 mile per hour design speed with a 40-foot depressed median throughout the length of the project.

B. PROJECT BACKGROUND

A Draft Environmental Impact Statement (DEIS) was approved on November 9, 2001. The DEIS was circulated to all resource agencies for review and comments. Eight build alternates (Alternates 1-8) were presented in the DEIS and six (Alternates 1, 3-6, and 8) were evaluated in detail. Alternates 6 and 8 were presented at a Public Hearing in January 2002 as the recommended alternates for implementation.

In response to public input received from the 2002 hearing, an additional concept, Alternate 9, was developed. An Informational Public Workshop in July 2002 was conducted to present Alternate 9 along with Alternates 6 and 8.

Following the 2002 Workshop, further evaluations related to the federally-protected historic resources west of US 340 were completed. The Bullskin Run Rural Historic District was found to be eligible for the National Register of Historic Places. Alternate 6 was eliminated due to the total number of business and residential relocations (10) and the impacts on historic resources including Rippon Lodge, Wheatland Farm, Kabletown Rural Historic District, and the Bullskin Run Rural Historic District. The elimination of Alternate 8 was due to total number of business and residential relocations (8), the impacts on historic resources, including Kabletown Rural Historic District, Bullskin Run Rural Historic District, William Grubb Farm, and the Norfolk Southern Railroad, and the high costs of both construction and long-term maintenance associated with two grade separation structures over the railroad. Alternate 9 was eliminated from further consideration due to having a high number of business and residential relocations (14 total), impacts on historic resources, including Kabletown Rural Historic District, Bullskin Run Rural Historic District, William Grubb Farm, and the Norfolk Southern Railroad, and the highest cost of construction due to relocating 17,000 feet of the Norfolk Southern Railroad. Every Build Alternate, including those previously eliminated, will impact historic properties and/or districts, therefore all alternatives were once again reviewed and Alternate 4, originally

eliminated due to its impact on the Kabletown Rural Historic District, was chosen as the Preferred Alternate.

As a result of decreased available funding, the US 340 project was placed on hold. During this time, the project study area experienced residential growth and development. Due to the growth and development within the area of Alternate 4, and a desire to potentially further minimize impacts to historic resources, two modifications of Alternate 4 (Alternates 4A and 4B) were developed. These modifications include a slight westerly shift of Alternate 4, identified as Alternate 4A, to further minimize impacts to the Byrdland Historic Property and residential properties, as well as an easterly shift of Alternate 4, identified as Alternate 4B, to further minimize impacts to the Village of Rippon Historic District and residential properties. A Public Information Workshop was held on September 24, 2012, to present these modifications to Alternate 4 to the public, update the public on the project status, and gather input and feedback from the public. Verbal and written comments received at the workshop expressed opposition to Alternates 4, 4A, and 4B due to their impacts to the Ryan's Glen subdivision and the proposed Oak Hill subdivision and a desire by the public for all previous alternatives to be re-evaluated using current data and conditions.

Additional build alternates (Alternates 4C, 10A, 10B, and 11) were created in response to public input received at the 2012 workshop. These alternates, along with Alternates 4, 4A, and 4B, were presented at a Public Hearing in June 2013. WVDOH and FHWA have agreed that these alternates should be discussed in a Supplemental Draft Environmental Impact Statement (SDEIS). FHWA placed a Notice of Intent in the Federal Register on January 14, 2014 to prepare a Supplemental Draft Environmental Impact Statement.

C. ALTERNATIVES CONSIDERED

The **No-Build Alternative** would involve maintenance of the existing facility but no capacity improvements to the roadway are made. This alternative does not address the many roadway deficiencies that currently exist along the facility, nor does it address operations based on future travel demand, therefore, it does not meet the needs of this project. However, it is retained for comparative purposes.

The **Build Alternative** will address roadway deficiencies in the corridor and utilize available right of way where possible in combination with alignments on new location to avoid and/or

minimize impacts on sensitive resources. The seven build alternates considered for evaluation in this SDEIS are described below and shown in Exhibit I-1 III-2.

Alternate 4 begins at the four-lane section of US 340 in Clarke County, Virginia and ends approximately 600 feet south of CR 340/3 in Jefferson County, West Virginia. The proposed alignment generally follows the existing roadway with the exception that the new alignment bypasses the community of Rippon to the east. The total length of Alternate 4 is 4.6 miles. Exhibit III-3 shows the location of Alternate 4.

Alternate 4A (Preferred) begins at the existing four-lane section of US 340 in Clarke County, Virginia and ends at the four-lane section of the Charles Town Bypass in Jefferson County, West Virginia, approximately 0.4 miles north of CR 340/2. It generally follows the existing alignment, bypassing the community of Rippon to the east, just west of Alternate 4. The approximate length of Alternate 4A is 4.5 miles. Exhibit III-4 shows the location of Alternate 4A.

Alternate 4B begins at the existing four-lane section of US 340 in Clarke County, Virginia and ends at the four-lane section of the Charles Town Bypass in Jefferson County, West Virginia, approximately 0.4 miles north of CR 340/2. It generally follows the existing alignment, bypassing the community of Rippon to the east just east of Alternate 4. The approximate length of Alternate 4B is 4.6 miles. Exhibit III-5 shows the location of Alternate 4B.

Alternate 4C begins at the existing four-lane section of US 340 in Clarke County, Virginia and ends at the four-lane section of the Charles Town Bypass in Jefferson County, West Virginia, approximately 0.4 miles north of CR 340/2. It follows the existing alignment in the south, swings to the west near CR 340/1, bypasses Rippon to the east, and rejoins the existing alignment approaching Wheatland. The approximate length of Alternate 4C is 4.6 miles. Exhibit III-6 shows the location of Alternate 4C.

Alternate 10A begins at the existing four-lane section of US 340 in Clarke County, Virginia and ends at the four-lane section of the Charles Town Bypass in Jefferson County, West Virginia, approximately 300 feet south of CR 340/3. It runs west of the existing US 340 alignment, crossing the existing rail line twice then rejoining the existing alignment between Rippon and Wheatland. The approximate length of Alternate 10A is 5.3 miles. Exhibit II-87 shows the location of Alternate 10A.

Alternate 10B begins at the existing four-lane section of US 340 in Clarke County, Virginia and ends at the four-lane section of the Charles Town Bypass in Jefferson County, West Virginia, approximately 0.4 miles north of CR 340/3. It runs west of the existing US 340 alignment, running along the existing railroad right of way between Scooter Lane and Rippon. The rail line would have to be relocated in this alternate. The approximate length of Alternate 10B is 5.2 miles. Exhibit III-8 shows the location of Alternate 10B.

Alternate 11 begins at the existing four-lane section of US 340 in Clarke County, Virginia and ends at the four-lane section of the Charles Town Bypass in Jefferson County, West Virginia, approximately 0.4 miles north of CR 340/3. It runs east of the existing alignment for the majority of the project area, approaching its eastern boundary before rejoining the existing alignment between Rippon and Wheatland. The approximate length of Alternate 11 is 5.1 miles. Exhibit III-9 shows the location of Alternate 11.

D. ENVIRONMENTAL IMPACTS

Details of the specific impacts associated with the Build and No-Build Alternatives are included in Section IV. Table I-1 contains a comparative summary of the quantifiable impacts of the No-Build and Build Alternatives.

According to the *Envision Jefferson 2035 Comprehensive Plan*, adopted January 14, 2015, Jefferson County recognizes the need to improve accessibility to Virginia and Maryland where a large percentage of Jefferson County's high-wage, high-skill residents are employed. The adjoining states also serve as the primary market for the County's tourism and economic development efforts. At present, the primary roadway that connects Jefferson County to Virginia (WV Route 9) and the roadway that connects Jefferson County to Maryland (US 340) narrows from four lanes to two lanes near the state lines.

The County is part of the Hagerstown/Eastern Panhandle Metropolitan Planning Organization (HEPMPO), which is based on the US Census "Urbanized Areas (UAs)" definition. This allows the County to closely coordinate transportation planning with Hagerstown and Washington County, MD. The proposed US 340 Improvement project, from the VA State Line to the Charles Town Bypass, is included in the HEPMPO Transportation Improvement Program (TIP) FY 2014-2017 (Revision 6 – June 29, 2015) and *Direction 2040 Long Range Transportation Plan Update* (July 1, 2014).

Impacts to biotic resources, including natural communities and wildlife, by any of the alternates will be minimal due to the historical conversion of the majority of the area to agricultural uses. Physical resources within the project area include three streams, three springs, three ponds, one floodplain, and soils which are associated with Prime, Unique, and Statewide important farmlands. The three streams are Bullskin Run and two unnamed tributaries of Long Marsh Run. The springs include Lippett spring, Henry Baker Farm spring, and Joseph Bell Farm spring. Two of the three ponds are located along CR 21 (Meyerstown Road). The third pond is located east of the railroad, south of Access Road. The single floodplain impacted is associated with Bullskin Run. Additional topics of concern include wetlands and protected species. The streams in the project vicinity have associated wetland systems. Two of the three will be affected by the build alternates. Surveys and biological assessments for federally protected species were completed for Indiana bat, northern long-eared bat, and Madison Cave Isopod.

Impacts associated with the build alternates include relocating up to 14 residences and up to five businesses. Noise impacts affect two residential properties. Farmland impacts are between 123 acres and 178 acres. Wetland impacts within the conceptual right-of-way range between 1.0 and 2.0 acres. Between 5.1 acres and 6.3 acres of floodplains are crossed by the alternates under consideration. All the build alternates impact Section 4(f) properties which are on or eligible for the National Register of Historic Places. Between one and three hazardous material sites are located within or near the alternates. The estimated right-of-way and construction costs vary from \$47,100,000 to \$76,970,000.

Table I-1: Comparative Summary

Category	Units	No-Build	Build Alternates Remaining			Build Alternates Eliminated from Further Consideration			
			4	4A (Preferred)	4B	4C	10A	10B	11
Roadway Length	Miles	0.0	4.6	4.5	4.6	4.6	5.3	5.2	5.1
Residential Relocations	Total / Minority	0 / 0	10 / 0	3 / 0	5 / 0	14 / 1	12 / -	8 / -	8 / -
Business Relocations	Total / Minority	0 / 0	4 / 0	4 / 0	4 / 0	3 / 0	3 / 0	4 / 0	5 / 0
Non-Profit Relocations	Total	0	0	0	0	0	0	0	0
Right-of-Way	Parcels / Acres	0 / 0	49 / 112	49 / 116	44 / 120	42 / 140	30 / 153	30 / 156	30 / 137
Environmental Justice Impacts	Yes or No	No	No	No	No	No	No	No	No
Potential Hazardous Material Sites	Each	0	3	3	3	3	3	3	3
Historic Architectural Resources	Resources / Acres	0 / 0	8 / 153	8 / 153	8 / 159	8 / 156	8 / 107	8 / 130	7 / 171
Archaeological Resources (Predictive Model)	Sites	0	0	0	0	0	0	0	0
Public Recreational Resources	Sites	0	0	0	0	0	0	0	0
Wetlands	Acres	0.0	1.0	1.1	1.3	1.2	2.0	2.0	2.0
T&E – Indiana Bat / Northern Long Eared Bat / <i>Madison Cave Isopod</i> Known Occurrence in Jefferson Co. Suitable Habitat in Project Area Biological Assessment	Yes or No Yes or No Effect (E) or No Effect (NE)	No / No / <u>Yes</u> ¹ No / No / <u>No</u> NE / NE / <u>E</u> ⁴	No / No / <u>Yes</u> ¹ Yes / Yes / <u>Yes</u> NE / NE / <u>E</u> ⁴	No / No / <u>Yes</u>¹ Yes / Yes / <u>Yes</u> NE / NE / <u>E</u>⁴	No / No / <u>Yes</u> ¹ Yes / Yes / <u>Yes</u> NE / NE / <u>E</u> ⁴	No / No / <u>Yes</u> ¹ Yes / Yes / <u>Yes</u> NE / NE / <u>E</u> ⁴	- - -	- - -	- - -
Floodplains	Acres	0.0	5.1	6.1	6.3	6.3	6.0	6.0	6.0
Streams – UNT to Long Marsh Run	Linear Feet	0	465	465	465	751	154	173	245
Streams – Bullskin Run ²	Linear Feet	0	883	850	944	1022	1,006	1,006	902
Farmlands – Prime & Unique	Acres (Active/Total)	0 / 0	19 / 74	18 / 80	23 / 84	27 / 87	17 / 90	16 / 115	36 / 94
Farmlands – Statewide & Locally Important	Acres (Active/Total)	0 / 0	15 / 49	13 / 54	14 / 54	14 / 62	12 / 54	8 / 63	18 / 56
Noise Impacts	# of Properties	4	2	2	1	1	-	-	-
Air Quality Carbon Monoxide Concentrations (Design Year)	PPM (1-hour / 8-hour)	0.9 / 0.7	0.7 / 0.6	0.7 / 0.6	0.7 / 0.6	0.7 / 0.6	2.3 / 1.4	2.3 / 1.4	2.3 / 1.4
Mobile Source Air Toxics (MSAT) ³	Low or High Potential	Low Potential	Low Potential	Low Potential	Low Potential	Low Potential	Low Potential	Low Potential	Low Potential
Right-of-Way & Utility Cost	Dollars	\$0	\$ 10,600,000	\$ 13,820,000	\$ 15,250,000	\$ 16,375,000	\$ 14,900,000	\$ 20,310,000 ⁵	\$ 13,560,000
Construction Cost	Dollars	\$0	\$ 36,500,000	\$ 36,100,000	\$ 35,600,000	\$ 37,600,000	\$ 62,070,000	\$ 42,380,000 ⁵	\$ 39,640,000
Total Cost	Dollars	\$0	\$ 47,100,000	\$ 49,920,000	\$ 50,850,000	\$ 53,975,000	\$ 76,970,000	\$ 62,690,000 ⁵	\$ 53,200,000

¹ The known occurrences are outside of the project study area.

² The entire length of Bullskin Run is included in the *West Virginia Department of Environmental Protection Draft Section 303(d) List of impaired waters for 2014*.

³ The project falls under MSAT Tier 2 for qualitative analysis. Vehicle Miles Traveled and fleet mix under each build alternate are similar therefore no appreciable difference in expected in overall MSAT emissions among the alternates. EPA initiatives on vehicle emissions standards and fuel regulations are projected to reduce annual MSAT emissions despite growth in VMT. Thus the alternates under consideration are given a “Low Potential” to effect MSAT.

⁴ The USFWS has made a “may affect but not likely to adversely affect” determination for the Madison Cave isopod.

⁵ Cost does not reflect relocation 12,500± linear feet of railroad.

E. BUILD ALTERNATES ELIMINATED

In the SDEIS, four build alternates, Alternates 4C, 10A, 10B, and 11 were eliminated from consideration because these alternates required more right-of-way, would impact Prime and Unique Farmlands, would impact property from the historic architectural resources eligible for the National Register of Historic Places, and have a higher total cost when compared to Alternates 4, 4A, and 4B. Refer to Section III.B for a full comparison of the Build Alternatives.

F. AREAS OF CONTROVERSY

Coordination with various governmental agencies, property owners, and local groups identified impacts to historical properties as an area of controversy. As shown on Exhibit I-1, there are numerous historic resources in the project area. The resources listed on the National Register of Historic Places include the Long Marsh Run Rural Historic District, Ripon Lodge, the Beverly Farm, and the William Grubb Farm. In addition, three historic districts and thirteen individual properties are eligible for listing on the National Register. These eligible properties include Kabletown Rural Historic District, Bullskin Run Rural Historic District, Village of Rippon Historic District, Olive Boy Farm, Glenwood, Wayside Farm, Byrdland, Straithmore, Berry Hill, Shenandoah Railroad and the Wheatlands Archaeological site.

In addition to being individually eligible for the National Register, the Village of Rippon and the eligible properties named above are contributing elements to one or both of the Kabletown Rural Historic District or Bullskin Run Rural Historic District. The Kabletown Rural Historic District encompasses approximately 18 square miles, and the Bullskin Run Rural Historic district encompasses approximately 20 square miles. The property within both of these districts surrounds and includes over 90 percent of the project study area. The boundaries for these two districts are shown on Exhibit I-2 and Exhibit I-3.

G. OTHER GOVERNMENT ACTIONS REQUIRED

A Section 404 Dredge and Fill Permit will be required from the U.S. Army Corps of Engineers for construction of the proposed facility. A Section 401 Water Quality Certification permit and National Pollutant Discharge Elimination System (NPDES) permit will be required from the West Virginia Department of Environmental Protection.

In June 2015, an architectural survey update and historic property boundary review for the overall project's Study Area encompassing the various alternates and the current variations of

Alternate 4 (Alternates 4, 4A, 4B, and 4C). The assessment is part of compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966 and its implementing regulations, 36 CFR Part 800, as amended. The investigations were conducted according to the Secretary of the Interior's Standards and Guidelines for Historic Preservation Projects (Federal Register, Vol. 48, No. 190, September 1983, P. 44716-44742, et seq.), and the scope and products of the investigation meet the guidelines issued by the West Virginia Division of Culture and History, State Historic Preservation Office (WVSHPO) (WVSHPO 2001, 2005). The WVSHPO concurred with the findings of this assessment in a letter dated October 9, 2015. Once the preliminary findings regarding the effects on historic resources have been finalized in consultation with the SHPO, additional coordination to resolve any adverse effects will be undertaken. This process will conclude with a Memorandum of Agreement (MOA).

H. ENVIRONMENTAL COMMITMENTS

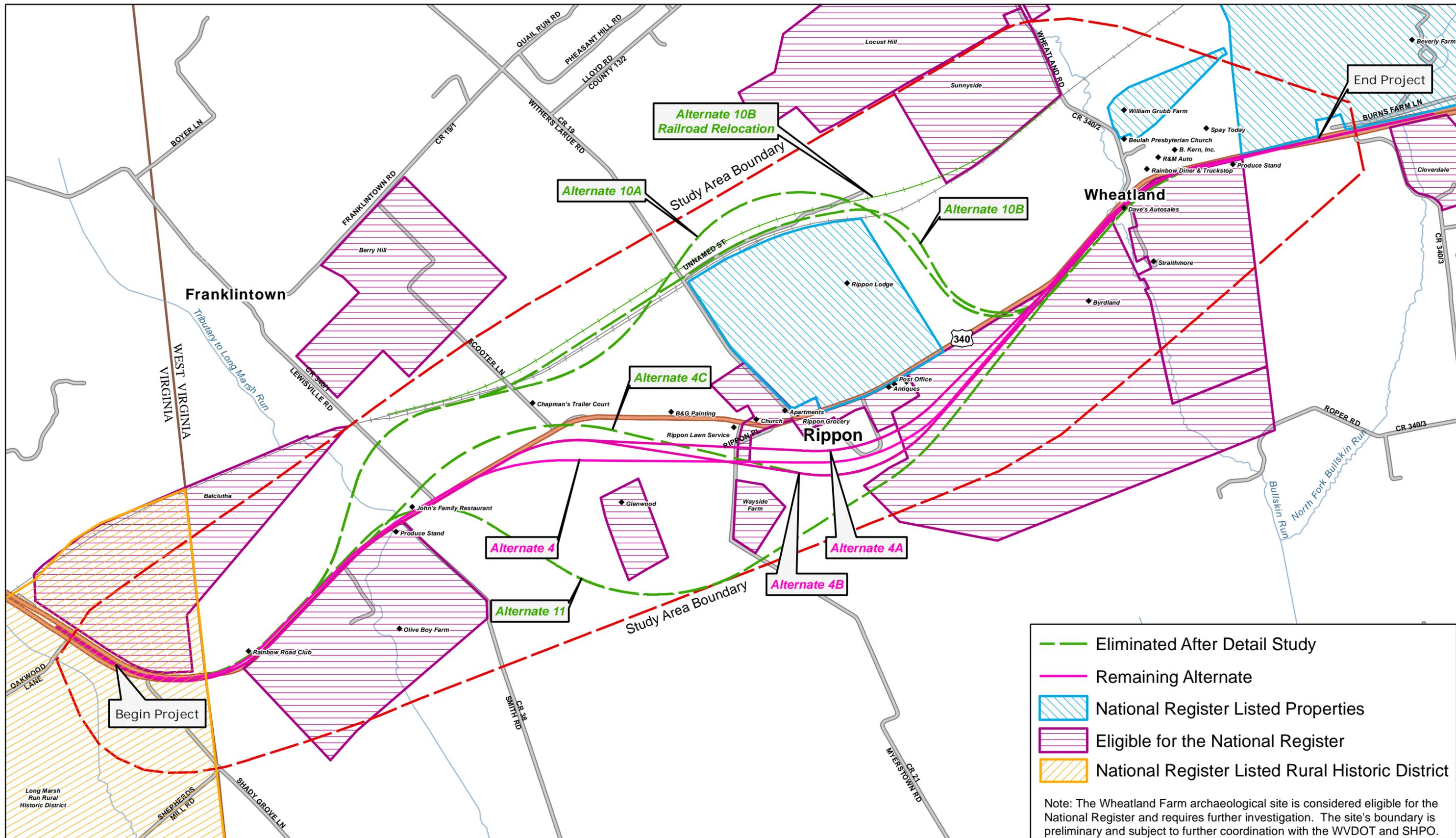
The West Virginia Division of Highways will make every effort to minimize impacts on the natural environment. Impact minimization will be accomplished by adhering to strict guidelines and specifications adopted by the State of West Virginia.

1. Wetland avoidance is considered during all phases of the project. If wetlands cannot be avoided, every effort will be made to minimize the impacts through the location and design of the roadway facility within the selected corridor. Mitigation of unavoidable wetland impacts will be coordinated through the appropriate state and federal agencies.
2. For floodplain encroachments, the West Virginia Department of Transportation will coordinate with the community and with the Federal Emergency Management Agency during the design phase of the project.
3. When the proposed centerline is established and the right-of-way limits determined, a hazardous materials site assessment will be performed to the degree necessary to determine levels of contamination at any potential hazardous materials sites along the Preferred Alternative. The assessment will be made prior to right of way acquisition. Resolution of problems associated with contamination will be coordinated with appropriate agencies.

4. Measures to minimize visual impacts from historic resources will be taken into consideration during design of the roadway. Overall, visual impacts may be mitigated through a variety of actions such as alignment modifications during design, landscaping, screening, embankments, and selective clearing of natural materials. These measures will be coordinated with SHPO and included in the Programmatic Agreement.

5. A Phase I archaeological survey of the Preferred Alternative will be conducted prior to Final EIS approval. This survey will be coordinated with the State Historic Preservation Office. An MOA will be established for the effects to historic properties on the project and included in the Final Environmental Impact Statement (FEIS).

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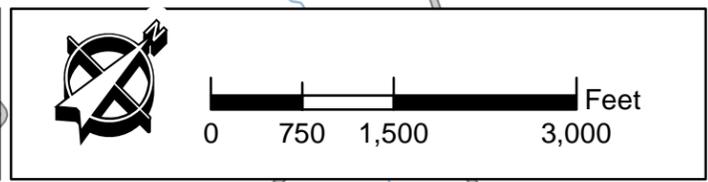


Legend

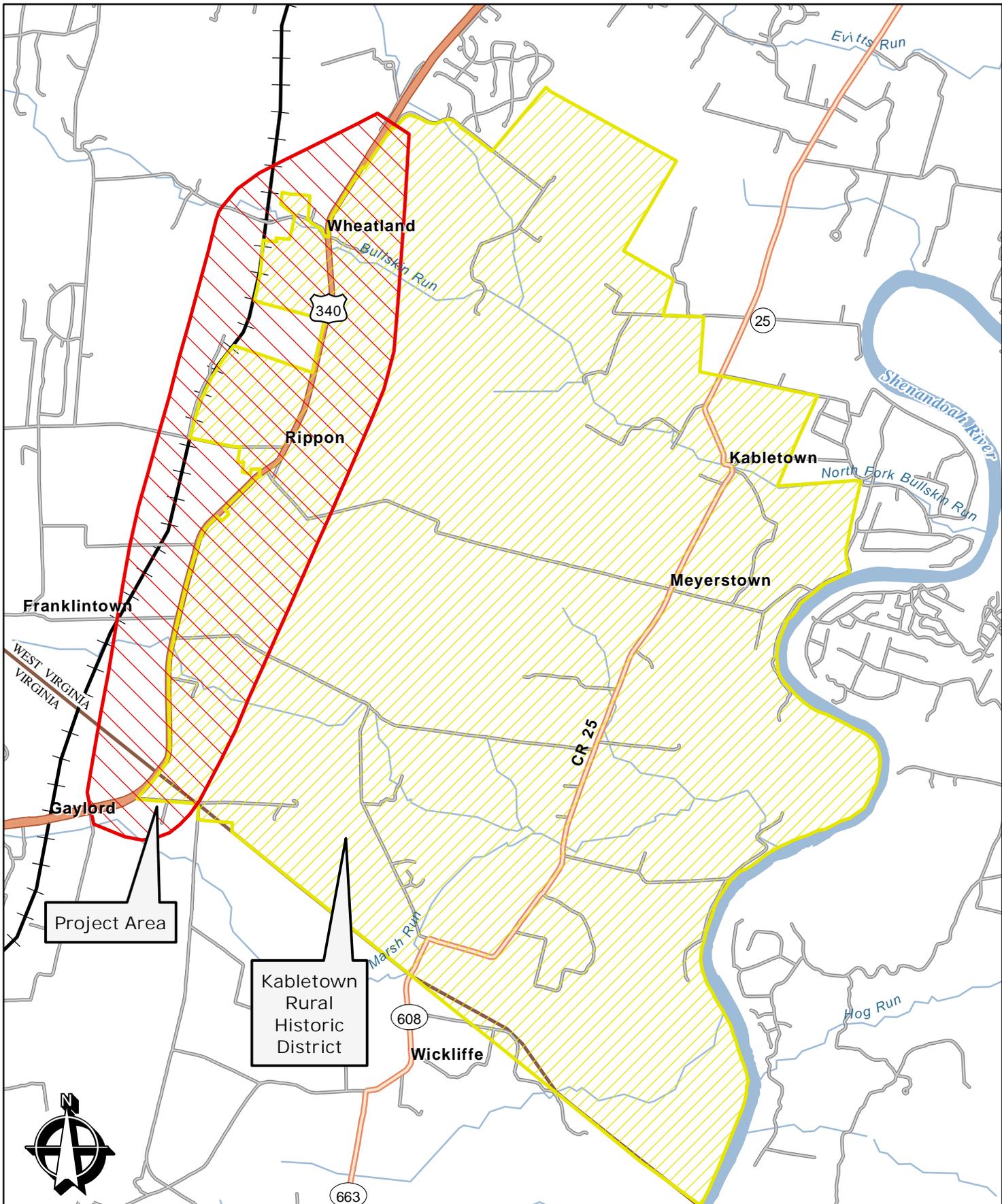
- Eliminated After Detail Study
- Remaining Alternate
- National Register Listed Properties
- Eligible for the National Register
- National Register Listed Rural Historic District

Note: The Wheatland Farm archaeological site is considered eligible for the National Register and requires further investigation. The site's boundary is preliminary and subject to further coordination with the WVDOT and SHPO.

US 340 IMPROVEMENT STUDY

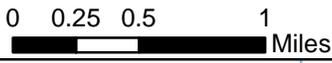


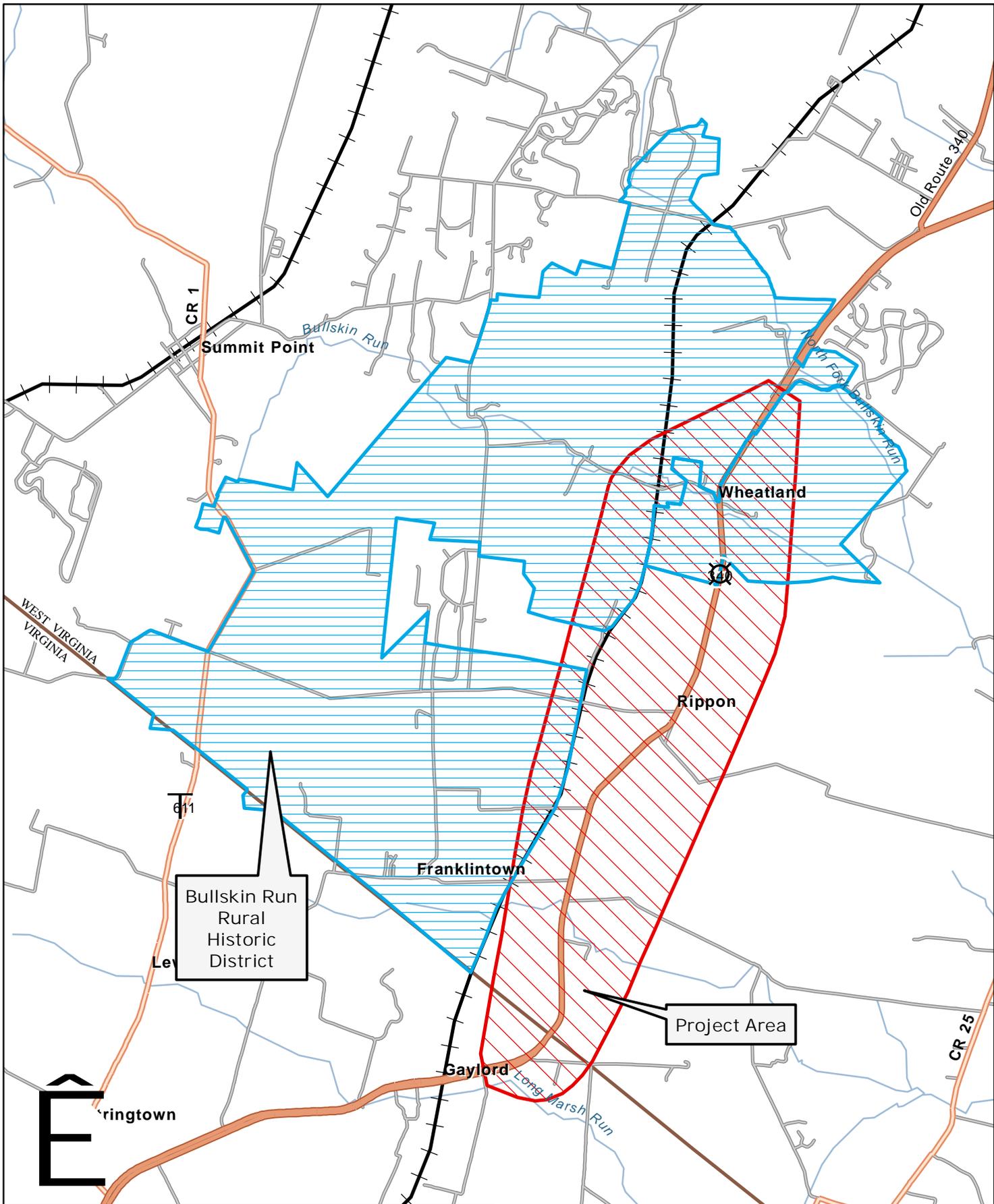
Historic Resource Impacts



**US 340
IMPROVEMENT
STUDY**

**Kabletown Rural
Historic District
Boundaries**





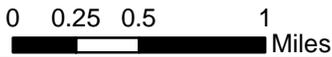
Bullskin Run
Rural
Historic
District

Project Area



**US 340
IMPROVEMENT
STUDY**

**Bullskin Run Rural
Historic District**



SECTION II

Project Purpose and Need

II. PROJECT PURPOSE AND NEED

WVDOH in conjunction with the FHWA, is proposing to improve the existing two-lane section of US 340 in Jefferson County, West Virginia from 1,000 feet south of the state line between Virginia and West Virginia to approximately 2 miles north of the community of Rippon in Jefferson County. The total project length is approximately 4.5 miles. The project is included within the Hagerstown/Eastern Panhandle Metropolitan Planning Organization. Exhibit II-1 shows the location of the proposed project.

The project is being funded in its entirety by federal and state monies administered by the WVDOH. The Virginia Department of Transportation (VDOT) is not contributing any funding to the project. Because the project will require construction within the existing right of way in Virginia to tie to the existing 4-lane roadway, more formal discussions with VDOT will be necessary prior to construction. Up to now, coordination with VDOT has been “informal.” They have requested the opportunity to review the SDEIS when completed (see email dated 10/27/2015 in Appendix B). Communication with resource agencies in both West Virginia and Virginia has occurred. For a list of these agencies and their responses, please refer to Section VII and Appendix B, respectively.

The existing facility within the project area is a two-lane rural arterial highway with numerous access points from both residential and commercial properties. The adjoining segments of US 340 north and south of the project area are four-lane divided highways. Roadway deficiencies, such as limited sight distance, narrow travel lanes and shoulder widths, steep side slopes, and unprotected fixed objects, can make driving the existing two-lane section of US 340 hazardous. The proposed project is needed to improve traffic operations, increase capacity, eliminate deficiencies, and improve safety.

The project area is composed of gentle to low-lying hills and ridges. Two tributaries to Long Marsh Run and Bullskin Creek are crossed by the existing roadway. Open fields, row crops, orchards, and livestock grazing areas border US 340 within the project area. Exhibit II-2 shows the project study area.

The project area is rural with sporadic development concentrated around the communities of Rippon and Wheatland. Development consists mainly of residential properties and farm

complexes. Commercial properties consisting of a few restaurants and small businesses exist along the project area.

Approaching the project area from the south in Virginia, US 340 is a four-lane divided facility. Approximately 1,000 feet south of the West Virginia state line in Clark County, Virginia, the four-lane roadway transitions to a two-lane facility. Continuing north on US 340, travelers pass the Rainbow Road Club, John's Family Restaurant, Chapman's Trailer Park, and B & G Painting. Along US 340 in the community of Rippon are private residences, a church, old storage buildings, the Rippon Grocery, an antique store, the Rippon Post Office, St. John's Episcopal Church, and the entrance to the historic Ripon Lodge. Development immediately north of Rippon is sparse and consists of single family homes and farms. As US 340 continues north, it passes through the community of Wheatland where Dave's Auto Service, the Rainbow Diner Truck Stop, Thomas B. Kern, Inc., the Briggs Animal Adoption Center, and a seasonal produce stand are located adjacent to the road. Leaving the project area, two-lane US 340 transitions back to a four-lane facility and continues north to Charles Town, West Virginia.

The purpose and need for the proposed improvements to US 340 is to address traffic operations and improve safety deficiencies along the existing facility. Currently, US 340 in in the project area operates at an unacceptable Level of Service (LOS) E. By the design year of 2033, travel conditions will continue to deteriorate as traffic volumes continue to increase. Existing roadway elements, which would be considered substandard using current design standards, also create undesirable driving conditions along this section of US 340. These deficient roadway elements include variable shoulder widths, narrow travel lanes, limited passing zones, steep side slopes, lack of turn lanes, and unprotected fixed objects such as culvert headwalls and trees. The existing facility within the project area is a two-lane rural arterial highway with numerous access points from both residential and commercial properties. The proposed project is needed to improve traffic operations and safety.

A. PROJECT STATUS

The WVDOH has recognized the potential need for improvements to the two-lane portion of US 340 in southern Jefferson County. As a result, it has initiated the US 340 Improvement Study. WVDOH began coordination with state and federal agencies in order to investigate and evaluate planning issues, environmental constraints, and areas of special concern.

Upon reviewing comments received from agencies contacted during the scoping process, a *Purpose and Need Report* was prepared in October 1996 illustrating the need to improve the two-lane section of US 340 from 0.5 mile south of the Virginia/West Virginia state line to the existing four-lane section just south of the Charles Town Bypass. Traffic operational and safety factors were taken into consideration and then presented for review and comment by agencies, who concurred with the proposed purpose and need.

The *Draft Environmental Impact Statement* (DEIS) was approved on November 9, 2001. The DEIS was circulated to all resource agencies for review and comments. Eight build alternates (Alternates 1-8) were presented in the DEIS and six (Alternates 1, 3-6, and 8) were evaluated in detail. Alternates 6 and 8 were presented at a Public Hearing in January 2002 as the recommended alternates for implementation. A copy of the original approved DEIS is provided in Portable Document Format (PDF) on a compact disc that can be found inside the back cover of this document.

In response to public input received from the January 15, 2002 hearing, an additional concept, Alternate 9, was developed. An Informational Public Workshop on July 23, 2002 was conducted to present Alternate 9 along with Alternates 6 and 8.

Following the July 23, 2002 Workshop, further evaluations related to the federally-protected historic resources west of US 340 were completed. The Bullskin Run Rural Historic District and Shenandoah Valley Railroad (Norfolk Southern Railroad) were found to be eligible for the National Register of Historic Places. Alternate 6 was eliminated due to the total number of business and residential relocations (10) and the impacts on historic resources including Rippon Lodge, Wheatland Farm, Kabletown Rural Historic District, and the Bullskin Run Rural Historic District. The elimination of Alternate 8 was due to total number of business and residential relocations (8), the impacts on historic resources, including Kabletown Rural Historic District, Bullskin Run Rural Historic District, William Grubb Farm, and the Norfolk Southern Railroad, and the high costs of both construction and long-term maintenance associated with two grade separation structures over the railroad. Alternate 9 was eliminated from further consideration due to having a high number of business and residential relocations (14 total), impacts on historic resources, including Kabletown Rural Historic District, Bullskin Run Rural Historic District, William Grubb Farm, and the Norfolk Southern Railroad, and the highest cost of construction due to relocating 17,000 feet of the Norfolk Southern Railroad. Every Build Alternate, including those previously eliminated, will impact historic properties

and/or districts, therefore all alternates were once again reviewed and Alternate 4, originally eliminated due to its impact on the Kabletown Rural Historic District, was chosen as the Preferred Alternate. A public workshop was held on November 18, 2003 to present Alternate 4 as the Preferred Alternate.

As a result of decreased available funding, the US 340 project was placed on hold. During this time, the project area experienced residential growth and development. Due to the growth and development within the area of Alternate 4, and a desire to potentially further minimize impacts to historic resources, two modifications of Alternate 4 (Alternates 4A and 4B) were developed. These modifications include a slight westerly shift of Alternate 4, identified as Alternate 4A, to further minimize impacts to the Byrdland Historic Property and residential properties, as well as an easterly shift of Alternative 4, identified as Alternative 4B, to further minimize impacts to the Village of Rippon Historic District and residential properties. A public information workshop was held on September 24, 2012, to present these modifications to Alternative 4 to the public, update the public on the project status, and gather input and feedback from the public. Verbal and written comments received at the workshop expressed opposition to Alternates 4, 4A, and 4B due to their impacts to the Ryan's Glen subdivision and the proposed Oak Hill subdivision and a desire by the public for all previous alternates to be re-evaluated using current data and conditions.

Additional build alternates (Alternates 4C, 10A, 10B, and 11) were created in response to public input received at the September 24, 2012 workshop. These alternates, along with Alternates 4, **4A (Preferred)**, and 4B, were presented at a public hearing on June 3, 2013. WVDOH and FHWA have agreed that these alternates should be discussed in a *Supplemental Draft Environmental Impact Statement (SDEIS)*.

The project is located within the Hagerstown/Eastern Panhandle Metropolitan Planning Organization.

B. SYSTEM LINKAGE

US 340 is a north-south transportation facility that connects the panhandle of West Virginia to Maryland and Virginia. Traveling north on US 340 from the project area leads to Frederick, Maryland and I-70, a major east-west regional freeway facility. Continuing east, I-70 connects to Baltimore, Maryland. To the south of the project area, US 340 connects to VA Route 7, US 17, US 50, US 522, and I-66 in Virginia. Traveling west of the project area leads to I-81, one of the

principal north-south freeway facilities in the eastern United States. East of the project area is I-95, a national north-south freeway facility, which traverses the Washington DC/Northern Virginia metropolitan area. Traffic from the Baltimore area destined for I-81 in Virginia uses I-70, US 340, and VA Route 7 to avoid congestion in and around the Washington DC area. Exhibit II-3 illustrates the relationship of US 340 to the regional transportation network.

Within Jefferson County, US 340 is the major north-south facility. North of the project area and east of Charles Town, US 340 connects to WV 51, an east-west facility. From US 340, WV 51 extends to the west through Charles Town and into Berkeley County where it connects to I-81. US 340 also connects to WV 9 east of Charles Town. WV 9 is another north-south facility in Jefferson County. North of its intersection with US 340, WV 9 extends to Martinsburg and I-81 in Berkeley County. To the south of US 340, WV 9 extends across the Shenandoah River, into Virginia, and ties to VA Route 7 near Leesburg. US 340 northeast of Charles Town leads to Harpers Ferry and continues into Virginia and Maryland. Exhibit II-4 illustrates the relationship of US 340 to the transportation network in and around Jefferson County.

The approximate 4.5 miles of two-lane US 340 create a gap between the existing four-lane sections of US 340 north and south of the project area. This missing link disrupts the continuity of the roadway in this area, causing drivers to adapt and make adjustments transitioning from a four-lane road to a two-lane road. This discontinuity affects system linkage along US 340 between Virginia and West Virginia.

C. CAPACITY AND TRANSPORTATION DEMAND

Capacity is defined as the maximum number of vehicles capable of traveling along a section of roadway during the peak travel period in the absence of restrictive conditions such as highway geometry, traffic volumes, and other environmental factors. When traffic volumes approach or exceed the capacity of the roadway, travel conditions deteriorate and congestion results. The *Highway Capacity Manual 2010* (HCM) defines the capacity of a two-lane highway as 1,700 passenger cars per hour (pc/h) with a limit of 3,200 pc/h in the two directions.

The methodologies prescribed in Chapter 15/Two-Lane Highways of the HCM were applied to analyze travel conditions along US 340 within the project limits. US 340 was assigned as a Class I two-lane highway since motorists should expect to travel at high speeds. This two-lane section of highway connects to a four-lane divided highway at both ends of the project giving travelers the sense that high travel speeds can be maintained. In the case of Class I two-lane

highways, HCM uses two measures of effectiveness to determine the automobile level of service (LOS):

1. *Average Travel Speed (ATS)* is defined as the segment length of highway divided by the average travel time it takes vehicles to travel that length,
2. *Percent of Time Spent Following (PTSF)* slower vehicles and represents the freedom to maneuver, the comfort and convenience of travel, and the percentage of vehicles traveling in platoons.

LOS is defined in terms of both ATS and PTSF for Class I two-lane highways. The LOS is a qualitative measure that describes operational conditions of a traffic stream along a roadway or at an intersection of two roadways. For two-lane highways, levels of service are assigned a letter designation from A to E, with LOS A representing optimal travel conditions and LOS E representing the worst travel conditions with average travel speeds well below expectations and restrictive opportunities for passing. Table II-1 below defines LOS on two-lane highways.

Table II-1: LOS for Two-lane Highways

LOS	Class I Highways	
	ATS (mi/h)	PTSF (%)
A	>55	≤35
B	>55-50	>35-50
C	>45-50	>50-65
D	>40-45	>65-80
E	≤40	>80

Source: Highway Capacity Manual 2010, Chapter 15/Two-lane Highways

Exhibit II-5 describes the characteristics of the traffic stream for each Level of Service. WVDOH has established the minimum desirable level of service for US 340 during peak periods to be LOS D.

The WVDOH Traffic Demand/Analysis Unit of the Planning Division provided traffic volumes for years 2011/2012 and 2033. The project begins 1000 FT south of the Virginia/West Virginia state line in Clark County, VA where the existing 4-lane highway transitions down to a 2-lane highway. Because of this, no coordination with VDOT was necessary to obtain traffic data for the project. The existing average daily traffic (ADT) volumes were based on traffic count data collected along US 340. Historic traffic data in the corridor suggests an annual background traffic growth rate of 1.60%. Future year (2033) traffic volumes were derived by applying the

annual background traffic growth factor to the 2011/2012 traffic volumes. ADT along this stretch of US 340 is in the range of 11,700 to 15,200 vehicles per day in 2011/2012. The projected ADT for design year 2033 ranges from 16,600 to 21,600 vehicles per day. The Hagerstown/Eastern Panhandle Metropolitan Planning Organization (HEPMPO) has also been consulted to provide traffic volumes for this project. According to the Executive Director of the HEPMPO, the HEPMPO generally relies on state DOTs to provide project level traffic volumes based on their traffic counting programs. However, HEPMPO does maintain a regional travel demand model using a baseline year of 2010. A comparison of the traffic volumes received from WVDOH and HEPMPO can be summarized as follows:

- At the VA/WV border, WVDOH provides a 2011/2012 ADT of 11,700. The HEPMPO traffic model shows a 2010 ADT of 13,100. Another resource, the *2013 Virginia Department of Transportation Daily Traffic Volume Estimates Including Vehicle Classification Estimates, Jurisdiction Report 21* reports an ADT of 11,000 south of the VA/WV state border.
- At CR 340/2 (Wheatland Road), the ADT provided by both WVDOH (for 2011-12) and HEPMPO (for 2010) are within 100 vpd.
- The growth rates differ between the two agencies. WVDOH information suggests a growth rate of 1.60% whereas HEPMPO data shows a growth rate of 0.8%.
- At the VA/WV state border, WVDOH provides a 2033 ADT of 16,600 which compares to an ADT of 16,000 from the HEPMPO regional travel demand model.
- At CR 340/2 (Wheatland Road), the 2033 ADT provided by WVDOH is approximately 19,150 compared to an ADT of 16,600 from the HEPMPO regional travel demand model.

Based on the summary above, the WVDOH traffic data provided was used for the analysis. For the base year (2011/2012), it is consistent with information available from VDOT and for the horizon year of 2033, it provides a conservative, worst case approach with slightly higher traffic volumes. Regardless of the source of the traffic volumes, the results of the level of service analysis presented below would be similar. This statement is backed by the fact that the LOS for the two-lane highway is unacceptable using WVDOH traffic data for 2011/2012 and the HEPMPO model uses equal or higher initial traffic volumes. If the existing two-lane highway

exhibits unacceptable operational performance (level of service) in 2011/2012, then it stands to reason that the level of service will remain unacceptable until such time that improvements are made. However, improved traffic operations, or Level of Service, that results from the US 340 Improvement project, is just one component of the project’s need. Additional components are also addressed in this section. The WVDOH ADT volumes for 2011/2012 and 2033 are shown in Exhibit II-6.

A traffic analysis was completed to evaluate the existing traffic conditions in the year 2011/2012 as well as no-build conditions in the design year 2033. The traffic evaluation consisted of two-lane highway analysis as described in the *Highway Capacity Manual 2010, Fifth Edition*. Highway Capacity Software (HCS) was used to analyze capacity of two-lane highway segments along US 340.

Existing operating conditions along US 340 are LOS E in the base year and design year (see Table II-2).

Table II-2: Level of Service (Two-lane Highway)

US 340 Segment	Dir.	2011/2012			2033 No-Build		
		ATS (mph)	PTSF (%)	LOS	ATS (mph)	PTSF (%)	LOS
Shepherds Mill Rd to CR 38 (Smith Rd)	NB	38.7	80.5	E	35.3	88.2	E
	SB	39.1	73.5	E	35.5	81.6	E
CR 38 (Smith Rd) to CR 340/1 (Lewisville Rd)	NB	30.7	80.2	E	27.1	88.4	E
	SB	31.0	74.2	E	27.2	82.4	E
CR 340/1 (Lewisville Rd) to Scooter La	NB	39.3	80.0	E	35.8	88.2	E
	SB	39.6	74.3	E	36.0	82.6	E
Scooter La to CR 21 (Meyerstown Rd)	NB	21.1	80.4	E	17.4	89.2	E
	SB	21.5	74.6	E	17.6	83.3	E
CR 21 (Meyerstown Rd) to CR 19 (Withers Larue Rd)	NB	20.1	86.4	E	14.7	92.7	E
	SB	22.2	74.7	E	15.0	88.4	E
CR 19 (Withers Larue Rd) to CR 340/2 (Wheatland Rd)	NB	29.4	82.9	E	25.2	90.1	E
	SB	29.7	76.1	E	25.2	85.4	E
CR 340/2 (Wheatland Rd) to CR 340/3 (Roper N. Fork Rd)	NB	36.8	82.6	E	32.6	90.2	E
	SB	37.0	76.1	E	32.8	85.5	E

Without improvements to US 340, motorists will continue to contend with undesirable travel conditions (LOS E) during peak travel periods throughout the entire project area. Levels of service for existing (2011/2012) and design year (2033) no-build conditions along US 340 are shown on Exhibit II-6.

The next step of the analysis was to determine the LOS for a 4-lane divided highway; the proposed typical section for this project. Chapter 14 in the HCM defines the capacity of a multilane highway by looking at free-flow speed (FFS) and density expressed as passenger cars per mile per lane (pc/mi/ln). For multilane highways, levels of service are assigned a letter designation from A to F, with LOS A representing free-flow conditions and LOS F representing heavily congested conditions with a complete breakdown of uninterrupted flow. Table II-3 defines the level of service for multilane highways.

Table II-3: LOS for Multilane Highways

LOS	FFS (mph)	Density (pc/mi/ln)
A	All	>0-11
B	All	>11-18
C	All	>18-26
D	All	>26-35
E	60	>35-40
	55	>35-41
	50	>35-43
	45	>35-45
F	Demand Exceeds Capacity	
	60	>40
	55	>41
	50	>43
	45	>45

Source: Highway Capacity Manual 2010, Chapter 14/Multilane Highways

The multilane highway analysis is described in Chapter 14 of the HCM. Highway Capacity Software (HCS) was used to determine the LOS of multilane highway segments along US 340. The results of the analysis are presented in Table II-4.

Table II-4 clearly shows that the proposed 4-lane highway will accommodate travel demand in the corridor into the design year and beyond.

Table II-4: Level of Service (Multilane Highways)

US 340 Segment	Dir.	2033 Build		
		FFS (mph)	Density (pc/m/ln)	LOS
Shepherds Mill Rd to CR 38 (Smith Rd)	NB	53.3	10.2	A
	SB	53.3	8.3	A
CR 38 (Smith Rd) to CR 340/1 (Lewisville Rd)	NB	54.0	10.4	A
	SB	54.0	8.5	A
CR 340/1 (Lewisville Rd) to Scooter La	NB	54.5	10.5	A
	SB	54.3	8.6	A
Scooter La to CR 21 (Meyerstown Rd)	NB	54.5	10.8	A
	SB	54.5	8.8	A
CR 21 (Meyerstown Rd) to CR 19 (Withers Larue Rd)	NB	54.5	13.3	B
	SB	54.5	10.8	A
CR 19 (Withers Larue Rd) to CR 340/2 (Wheatland Rd)	NB	54.0	11.8	B
	SB	54.0	9.7	A
CR 340/2 (Wheatland Rd) to CR 340/3 (Roper N. Fork Rd)	NB	52.8	11.7	B
	SB	52.8	9.5	A

D. SOCIAL DEMANDS AND ECONOMIC DEVELOPMENT

Current land use and zoning in the project area includes agriculture, residential, and sparse commercial and industrial districts. There are also a number of historic districts in and near the project area. Outside of the immediate project area, land use bordering US 340 includes incorporated towns, such as Charles Town, industrial-commercial districts, and residential growth districts. Exhibit II-7 shows the existing and future land use for the project area.

The *Envision Jefferson 2035 Comprehensive Plan* cites the lack of road improvements as a major restraint on the economic growth of the County. Jefferson County is bypassed by the interstate highway system. Because of its geographic location, the county has the potential to become a point of distribution for several metropolitan areas located within a 300-mile radius. Better access via interstate highways and other four-lane roadway facilities could make Jefferson County even more attractive to prospective businesses and industries. Improving this section of US 340 would serve to support the *Envision Jefferson 2035 Comprehensive Plan*.

With the increase in population in the last three decades, Jefferson County's roads have had to bear the combined burden of increased traffic volume and heavier commercial vehicles. As a result, the deficiencies of the highway and road systems have become more critical.

The *Envision Jefferson 2035* plan recognizes that land use decisions of adjacent counties including Frederick County, MD, and Loudoun County, VA, will affect development in the vicinity of US 340. As Frederick, Leesburg, and the Dulles area become major employment centers in their own right, the US 340 project area is a viable residential option within a reasonable commute of these locations. Demand for housing in the vicinity of US 340, increased travel, and tourism throughout the area have resulted in substantial sources of income. History, culture, and the rural nature of the area attract residents from the nearby metropolitan areas. Major attractions in the area include the Charles Town Races, Harpers Ferry National Historical Park, Jefferson County Mountain Heritage Arts and Crafts Festival, the National Fisheries Center, Summit Point Raceway, and other recreational activities such as hiking and whitewater rafting. All of these activities can be accessed via US 340 and connecting roadways. As a result of improving US 340 and providing better access to these facilities, tourism could become even more important to the local economy. Exhibit II-8 illustrates the major attractions near the project area.

The quality of life and cost of living available in Jefferson County and the surrounding area are part of its positive attributes. The area enjoys significantly lower housing costs and an overall lower cost of living than other nearby areas. The area's natural environment and smaller population also make it an attractive place to live. Additionally, provisions in the West Virginia Tax Code have made the area an attractive retirement location for military veterans. The improvement of the roadway through this area will affect all of these characteristics.

E. MODAL INTER-RELATIONSHIPS

The Norfolk Southern Corporation and the CSX Transportation System provide rail access through the county. The Norfolk Southern is oriented north-south through Jefferson County and is located along the western edge of the project area. To the north, the railroad connects to Hagerstown, Maryland. To the south, this railroad extends to Front Royal, Virginia where it connects to the Virginia Inland Port. The CSX Transportation System has railroad facilities that extend from Harpers Ferry west through the county. The more southern route extends from

Harpers Ferry southwest to Winchester, Virginia. The more northern route extends from Harpers Ferry to Martinsburg.

The Virginia Inland Port is located in Warren County, Virginia along VA 340/US 522. This facility provides truck to rail transfer for the Norfolk Southern and the CSX Transportation System. The port is accessible to trucks traveling via US 340, VA Route 7, and I-81 south.

Air transportation in Jefferson County is provided by the Eastern West Virginia Regional Airport located in Martinsburg along WV 9, approximately 15 miles west of Charles Town. The airport's primary business is charter flights. The most frequently flown charter flight is to Charleston, West Virginia. The nearest large scale airport is Dulles International. It is located in northern Virginia approximately 50 miles to the east of the project area. Air cargo service, domestic commercial service, and international air travel is available at this airport.

Commuter bus and rail services are part of the transportation network of Jefferson County. Public bus service is provided by the Eastern Panhandle Transit Authority (PanTran). PanTran serves the Martinsburg area and various areas throughout Berkeley and Jefferson Counties, utilizing US 340 north of the project area. Regular stops include Charles Town, Harpers Ferry, and Shepherdstown. In addition to regular stops, PanTran makes stops off the regular route if it has been requested in advance by a rider. Commuter rail service is provided from Martinsburg to Washington DC with stops at Duffields and Harpers Ferry by the Maryland Area Rail Commute (MARC). This program is supported by the Maryland Department of Transportation.

F. ROADWAY CHARACTERISTICS

The existing US 340 entering Jefferson County, WV from Clark County, VA is a two-lane rural highway for approximately 4.5 miles. It transitions to a 4-lane highway south of Charles Town, WV. There are several issues with the existing two-lane section of US 340 when compared to standards set forth in the American Association of State Highway and Transportation Officials (AASHTO) *A Policy on Geometric Design of Highways and Streets (2011)*. These issues can generally be grouped into the following categories:

Highway Geometry – this group characterizes the alignment and cross-sectional elements of the roadway.

- *Posted Speed* – The existing two-lane US 340 has a posted speed of 55 MPH except through Rippon, WV where the posted speed limit is 40 MPH. The reduced speed limit through Rippon represents 20% of the project length.
- *Travelway* – The lane widths along US 340 within the project limits range from 10.5 FT to 11.5 FT. With an Average Daily Traffic (ADT) volume well above the 2000 vehicles per day (vpd) threshold in AASHTO, a 12 FT lane width is required for all design speeds, including the 40 MPH posted speed through Rippon. This suggests that the lane width throughout the project limits is 100% substandard.
- *Shoulders* - The average usable shoulder width is approximately 5.5 feet within the project limits. The shoulder generally consists of 2.5 feet of pavement and 3 feet of gravel or turf. This falls below the required usable shoulder width of 8 FT according to AASHTO. This analysis suggests that the usable shoulder width along the entire project length is substandard.
- *Horizontal Alignment* – There are nine horizontal curves within the project limits. Two of the curves are in Rippon, WV where the posted speed limit is 40 MPH. If the cross-slopes met the requirements set forth for superelevation rates according to AASHTO, six out of nine horizontal curves would satisfy the criteria. The radii of existing curves range from 1,000 FT to 4,700 FT in the sections posted at 55 MPH. The minimum radius for curves using a design speed of 60 MPH (posted 55 MPH) with an 8% maximum superelevation rate is 1,200 FT. Three curves or 50% of the horizontal curves in the 55 MPH sections fall below the minimum radius as specified by AASHTO. The curves in the 40 MPH section through Rippon range from 750 FT to 3,000 FT which meet the AASHTO criteria for minimum radii.
- *Passing Zones* – Passing zones are directly related to design speed and decision sight distance and should be provided where practical for two-lane highways. Along existing US 340 within the project limits, there are five northbound (NB) and four southbound (SB) passing zones. The NB passing zones range in length from 460 FT to 1,020 FT representing 18% of the length of the project (82% no passing zone). The SB passing zones range from 575 FT to 940 FT which represents just 12% of the project length (88% no passing zone). AASHTO recommends a minimum passing sight distance of 1,000 FT for a design speed of 60 MPH. Only one of the nine, or 11%, of the passing

zones could meet this criteria. The lack of passing zones leads to driver frustration, congestion, and poor traffic operations.

Access – this category describes the number, type, and control at the access points along the highway. There are 14 roads and 55 driveways that intersect US 340 within the project limits. The intersecting roads are stop-sign controlled but no supplemental pavement markings (stop bars) were observed. There are no traffic signals along the two-lane section of US 340. The intersection angle with the mainline or skew is another intersection design element. It is desirable to have intersections at a skew angle between 75° and 90°. Most of the intersecting roadways meet this criteria with the exception of Long St. which intersects US 340 at a 42° skew. Several of the drives are several hundred feet wide along the US 340 road frontage. With more formalized entrances and exits to adjacent commercial uses, a more orderly, safer traffic flow can be expected. Some specific examples of poor access include:

- The Rainbow Road Club, located on the west side of US 340, has two entrance/exit locations for the club's parking lot. The drive is approximately 300 FT wide along the US 340 frontage and located on the inside of a substandard (less than a 1,200 FT radius) horizontal curve. The entrance has limited sight distance to the south and poor visibility to the north due to a crest vertical curve in the roadway.
- John's Family Restaurant is located on the west side of US 340 between CR 38 and US 340/1. The access extends along US 340 for approximately 400 feet. There is limited sight distance to the north resulting from a crest vertical curve on US 340.
- At the intersection of US 340 and CR 19 (Withers Larue Road), there is limited sight distance to the north because of building locations and a stone retaining wall along US 340.
- The Rainbow Diner is located on the west side of Us 340 north of CR 340/2. There is nearly 600 FT of frontage to pull off and park. There are also two other commercial drives and one residential drive within this area.

Roadside Design – in this category, elements beyond the travelway are described such as steep side slopes and unprotected fixed objects. AASHTO's *Roadside Design Guide (4th Edition 2011)* is the design guide resource that sets the criteria and design considerations. Examples in this category are discussed below as traversed from south to north:

- There is a 4-foot diameter concrete culvert with a protective headwall that directs an unnamed tributary of Long Marsh Run under US 340 just south of CR 38. The side slopes from the shoulder of US 340 down to the tributary are steep and without the protection of guardrail.
- An unprotected inlet with a drop-off of approximately 3 feet is located in the northeast corner of the intersection and is a potential concern to vehicles on CR 38 turning right (northbound) onto US 340 and for errant vehicles on US 340.
- At the intersection of US 340 and CR 19 (Withers Larue Road), the close proximity of the stone wall and buildings to the US 340 travel lanes provides a constricted travel corridor for all motorists. The stone wall to wall clearance is approximately 44 feet, separated from the travel lanes by a 5-foot paved shoulder, concrete curb and gutter, and narrow sidewalk on either side. Much of the curb face in Rippon has deteriorated.
- Unprotected pipe culvert headwalls are a common occurrence north of Rippon along the roadway. In particular, an unprotected headwall is located approximately 1,600 feet south of Bullskin Creek on the northbound side of the road. The headwall is located just above ground level and approximately 6.5 feet away from the edge of the travel lane. Another location occurs along US 340 at the Bullskin Creek crossing. These headwalls are close to the roadway and represent an unprotected hazard for motorists.

G. SAFETY

Roadway characteristics, as defined in the previous section, combined with uncontrollable factors, such as inclement weather conditions and animals crossing the road, can make for undesirable travel along existing US 340 within the project area. Accident data was provided by WVDOH. Due to the minor extent of the project located in Virginia, VDOT accident data has not been incorporated into the analysis. None of the public or stakeholder involvement over the course of the project has indicated a crash concern with the VA segment of the project that would suggest it should be explored further. A review of the WVDOH accident data from January 2013 through December 2013 for this section of US 340 revealed that a total of 29 accidents occurred from south of the state line between Virginia and West Virginia to the existing four-lane section of the Charles Town Bypass. This compares to 21 total accidents in 2008 and 29 accidents back in 2003. Twelve of the 29 accidents during 2013 involved injuries.

None of the accidents involved fatalities. The type of accidents was dominated by rear end collisions, which accounted for 59% of the total. The next largest category was side swipes, which were 21% of the total. The chart presented in Exhibit II-9 displays the mix of accident types in the corridor.

Surface conditions affect the ability of a driver to keep a vehicle under control. If there are inadequate shoulders and narrow travel lanes, such as along the existing two-lane section of US 340, and no exclusive turn lanes, a driver has little room to recover from mishaps related to poor sight distance, slowing and turning vehicles, and poor road conditions due to inclement weather. Eliminating substandard roadway design features will reduce the number of accidents and provide better traffic flow.

1. Accident Rates

By taking the number of accidents per segment of roadway and converting the actual number to an accident rate, the roadway can be compared to other regional and statewide averages. The most common accident rate is defined as the number of accidents on a section of highway per 100 million vehicle miles (ACC/HMVM) of travel. The formula used to determine the accident rate is as follows:

$$\text{ACC/HMVM} = ((N(100,000,000))/(T)(L)(A))$$

Where: N = number of accidents in the time period

T = time period in days

L = one-way length of roadway in miles

A = average daily traffic in the time period

The injury accident and fatal accident rates can also be determined by using the accident rate above and substituting the total number of injury accidents or the total number of fatal accidents for the total number of accidents (N).

In order to identify areas of concern, the project area was separated into eight segments, labeled A through H. These segments were determined by intersection locations along US 340. By separating the roadway into segments and calculating separate rates for each segment, the degree of hazard for each section can be determined. Exhibit II-10 shows the segments used in this analysis as well as the locations and types of each accident within each segment. Table II-5 shows the accident rate, injury rate and fatality rate for each segment, the total project area, the

local area, and the state. The highest accident rate and highest injury accident rate occurred in Segment A with accidents clustered near the Rainbow Road Club. This segment resulted in crash rates higher than the average for all state-maintained highways throughout the state. Contributing factors to the excessive crash rates could include lack of formal ingress/egress, substandard horizontal curvature on US 340, and poor sight distance. Segment A had the highest accident rate and injury rate by far compared to other segments. Exhibit II-10 illustrates the location of reported crashes, illustrating the dispersed nature of events in other segments.

Table II-5: Accident Rates

Highway Section (Segment)	No. of Crashes¹ (Each)	Segment Length (Miles)	Accident Rate¹ (HMVM)	Injury Rate¹ (HMVM)	Fatality Rate¹ (HMVM)
A	13	0.30	1009	621	0.0
B	5	0.60	194	39	0.0
C	1	0.30	78	0	0.0
D	0	0.40	0	0	0.0
E	0	0.40	0	0	0.0
F	3	0.60	105	35	0.0
G	3	0.70	85	28	0.0
H	4	0.70	113	28	0.0
Total All Segments	29	4.00	157	65	0.0
Statewide – US & WV ² Routes (non-municipal)	N/A	N/A	199	42	1.6

Sources: 1) 2013 crash data provided by WVDOH
 2) 2013 Statewide Crash Rates provided by WVDOH

2. Severity Index

Severity index is representative of the relative danger of any given road, segment of road, or spot location. As the index for a location rises, the likelihood of a severe accident involving injury or death increases. This severity index (SI) is calculated using the following formula:

$$SI = (NI + NF)/(Nt)$$

Where: NI = number of injury accidents

NF = number of fatal accidents

Nt = number of total accidents

The severity index was calculated for each segment of the roadway that is identified in Exhibit II-10. The severity index calculated for the State of West Virginia represents the data for all traffic accidents in the state. Table II-6 shows the calculated severity index for each segment, the severity index for the total project area, and the state severity index (calculated using all crash data). Again, Segment A has the highest severity index, nearly double the statewide average. Segments F and G has a severity index equal to the statewide average. While segments F and G had three accidents each during the reporting period, Segment A had a total of 13 accidents in the same reporting period.

Table II-6: Severity Index

Highway Section (Segment)	Severity Index ¹
A	0.62
B	0.20
C	0.00
D	N/A
E	N/A
F	0.33
G	0.33
H	0.25
Total All Segments	0.41
Statewide Average ²	0.33

Sources: 1) 2013 crash data provided by WVDOH
2) WVDOH 2003 Crash Data

3. Safety Summary

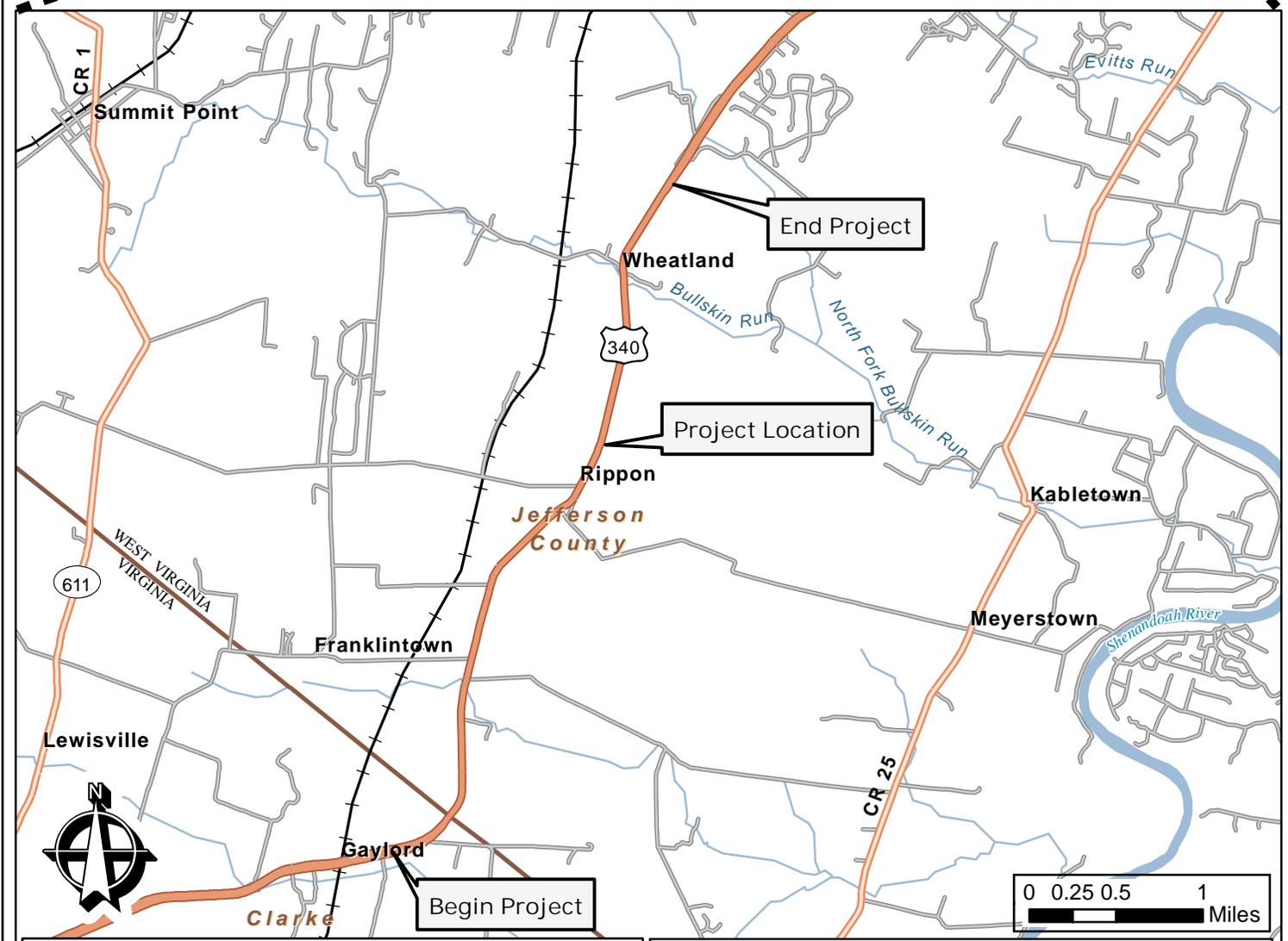
Segment A clearly exhibits the need for improvements. The number of accidents is more than double that in any other segment that was reviewed, the Accident Rate is nearly five times more than the statewide average, the Injury Rate is over ten times the statewide average, and the Severity Index is nearly double the statewide average. This can be compared to Segment B (the segment with the next highest number of accidents) that has an Accident Rate and Injury Rate nearly equal to the statewide average. However, it has a Severity Index nearly half of the statewide average and one third of the Severity Index for Segment A meaning that Segment B is a much less dangerous stretch of road than is Segment A. Based on the Severity Index, Segments F and G are more dangerous than is Segment B although Segment B had the higher number of accidents. The remaining segments fall below the statewide averages in all categories and present no safety concerns.

H. CONCURRENCE WITH PURPOSE AND NEED

The *Purpose and Need Report* for this project is on file with the WVDOH. In accordance with the procedures for the combined NEPA/Section 404 process, resource agencies were provided the opportunity to review the Purpose and Need Report in October 1996. A complete listing of the agencies receiving the Purpose and Need Report is contained in Section VIII of this document. The West Virginia Division of Environmental Protection concurred with the purpose and need on October 22, 1996. On November 7, 1996, the US Army Corps of Engineers concurred with the purpose and need for improvements to US 340 in the project area. Concurrence was received on November 21, 1996, from the West Virginia Division of Culture and History. The United States Environmental Protection Agency concurred with the purpose and need on January 23, 1997. Other agencies chose not to respond. Concurrence is assumed for these agencies.

The original Purpose and Need for the project is reaffirmed with the information presented in this SDEIS.

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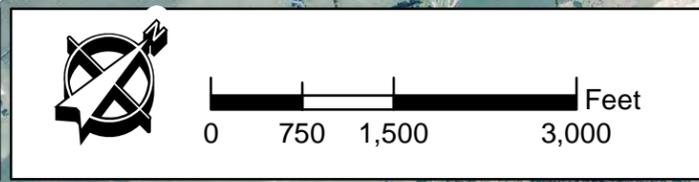


**US 340
IMPROVEMENT
STUDY**

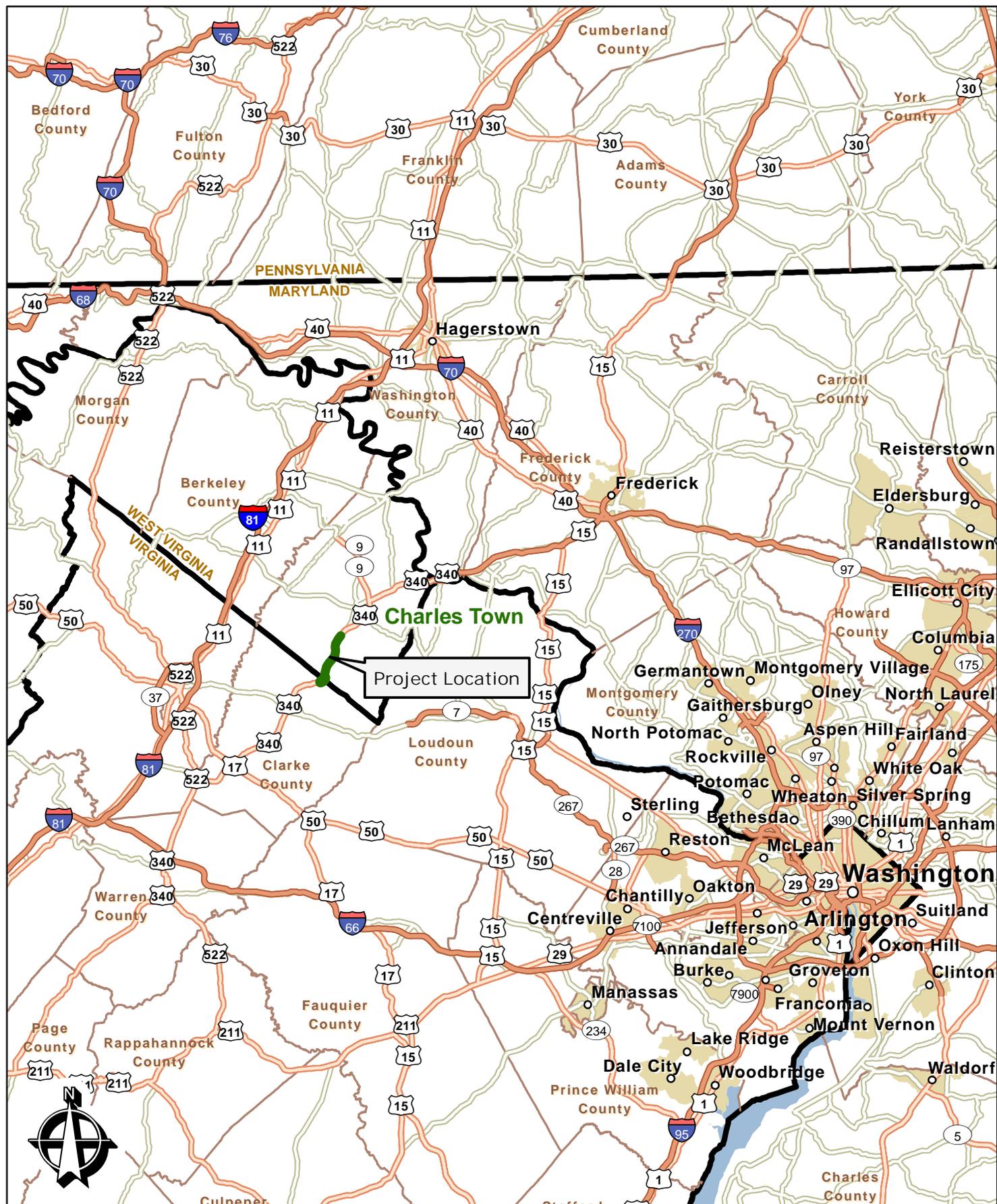
Project Vicinity



**US 340
IMPROVEMENT
STUDY**

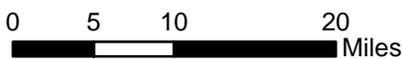


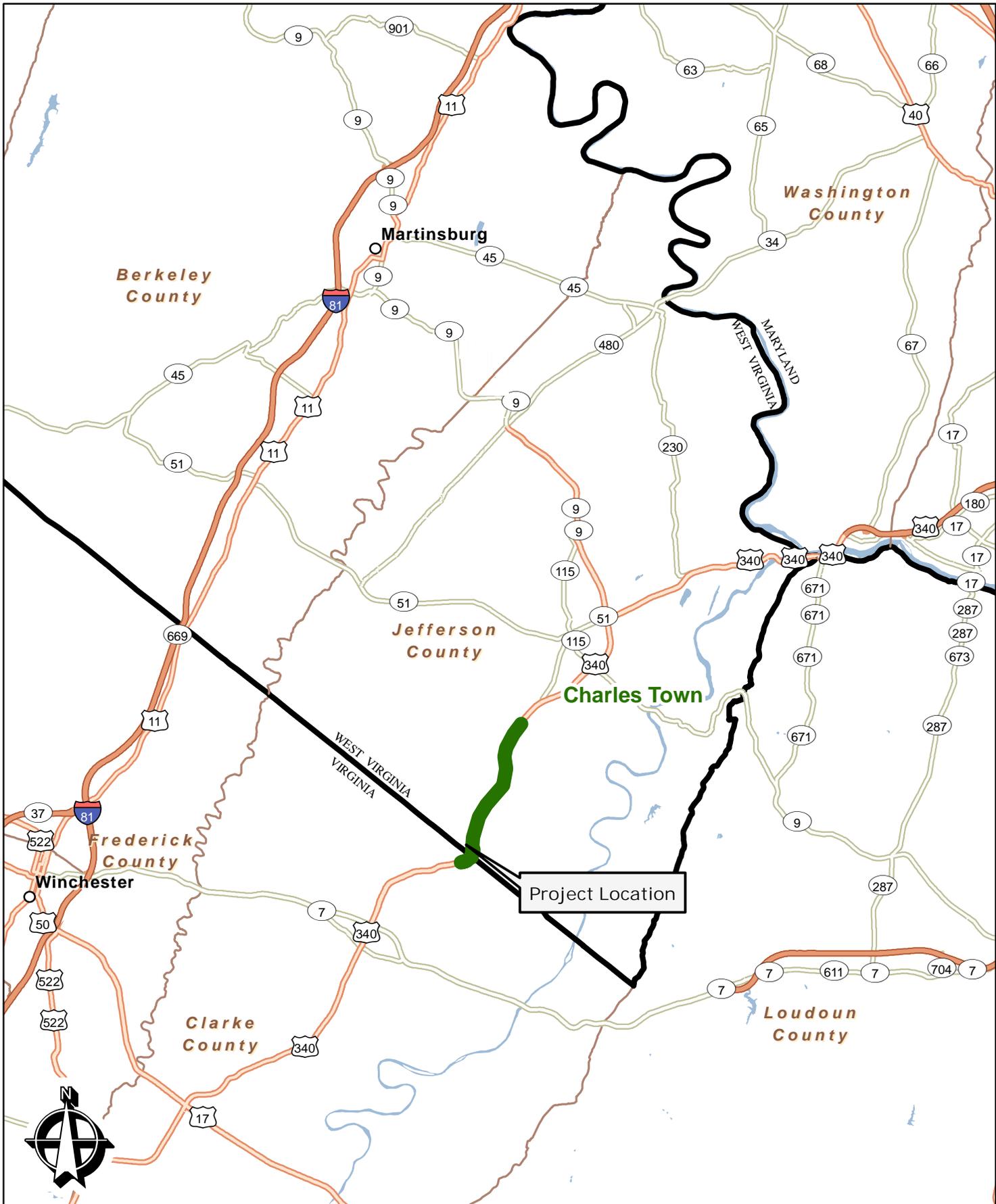
Project Study Area



**US 340
IMPROVEMENT
STUDY**

**Regional Transportation
Network**



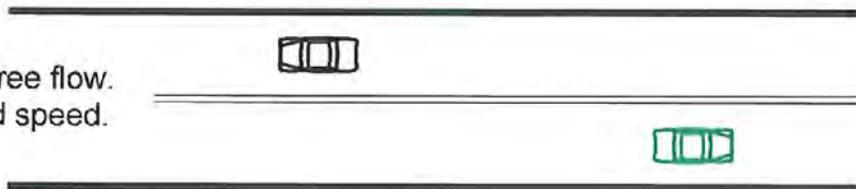


**US 340
IMPROVEMENT
STUDY**

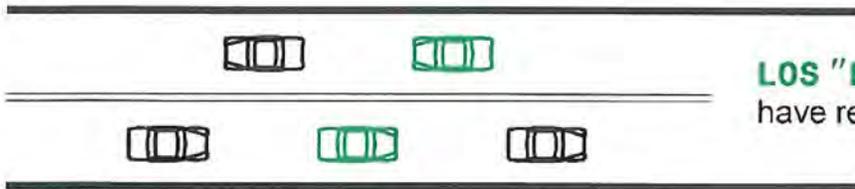
Local Transportation
Network



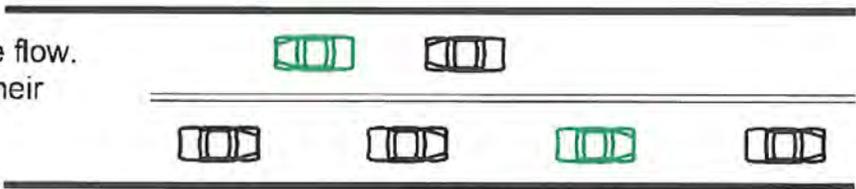
LOS "A" describes a condition of free flow. Drivers are able to drive at a desired speed.



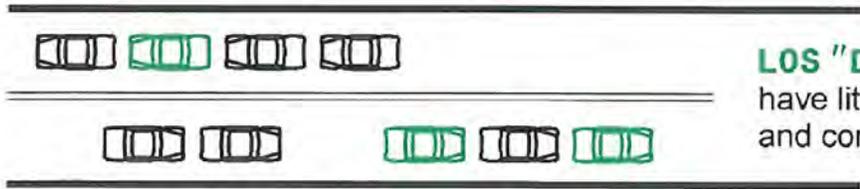
LOS "B" is in the zone of stable flow. Drivers have reasonable freedom to select their speed.



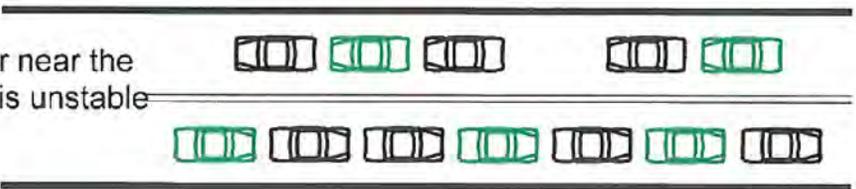
LOS "C" is still in the zone of stable flow. Most of the drivers are restricted in their freedom to select their own speed.



LOS "D" approaches unstable flow. Drivers have little freedom to maneuver and comfort and convenience are low.

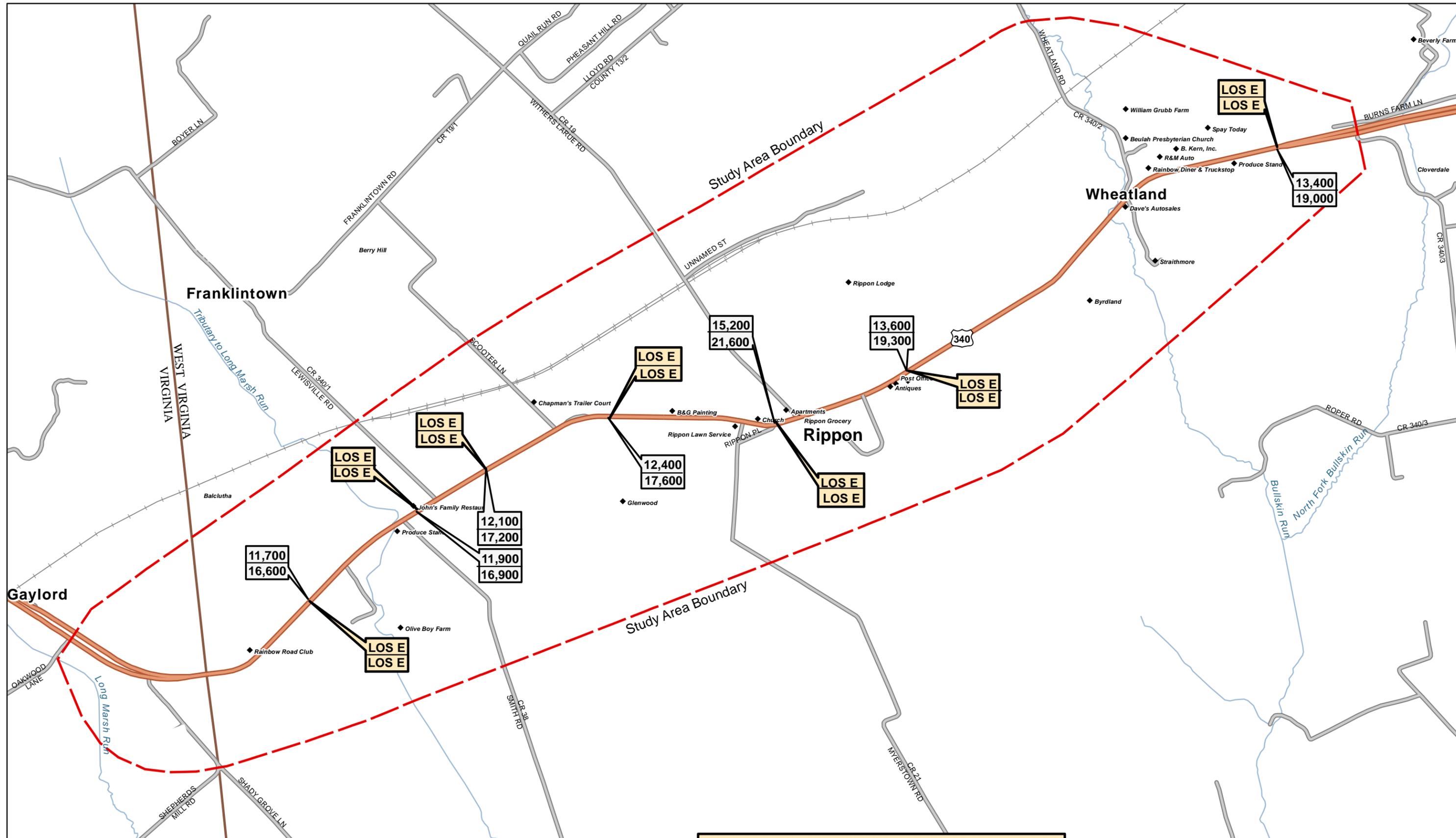


LOS "E" represents operations at or near the capacity of the highway. Traffic flow is unstable and driver frustration is high.

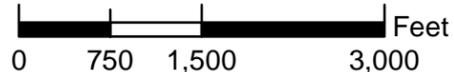


**US 340
IMPROVEMENT
STUDY**

Level of Service



**US 340
IMPROVEMENT
STUDY**

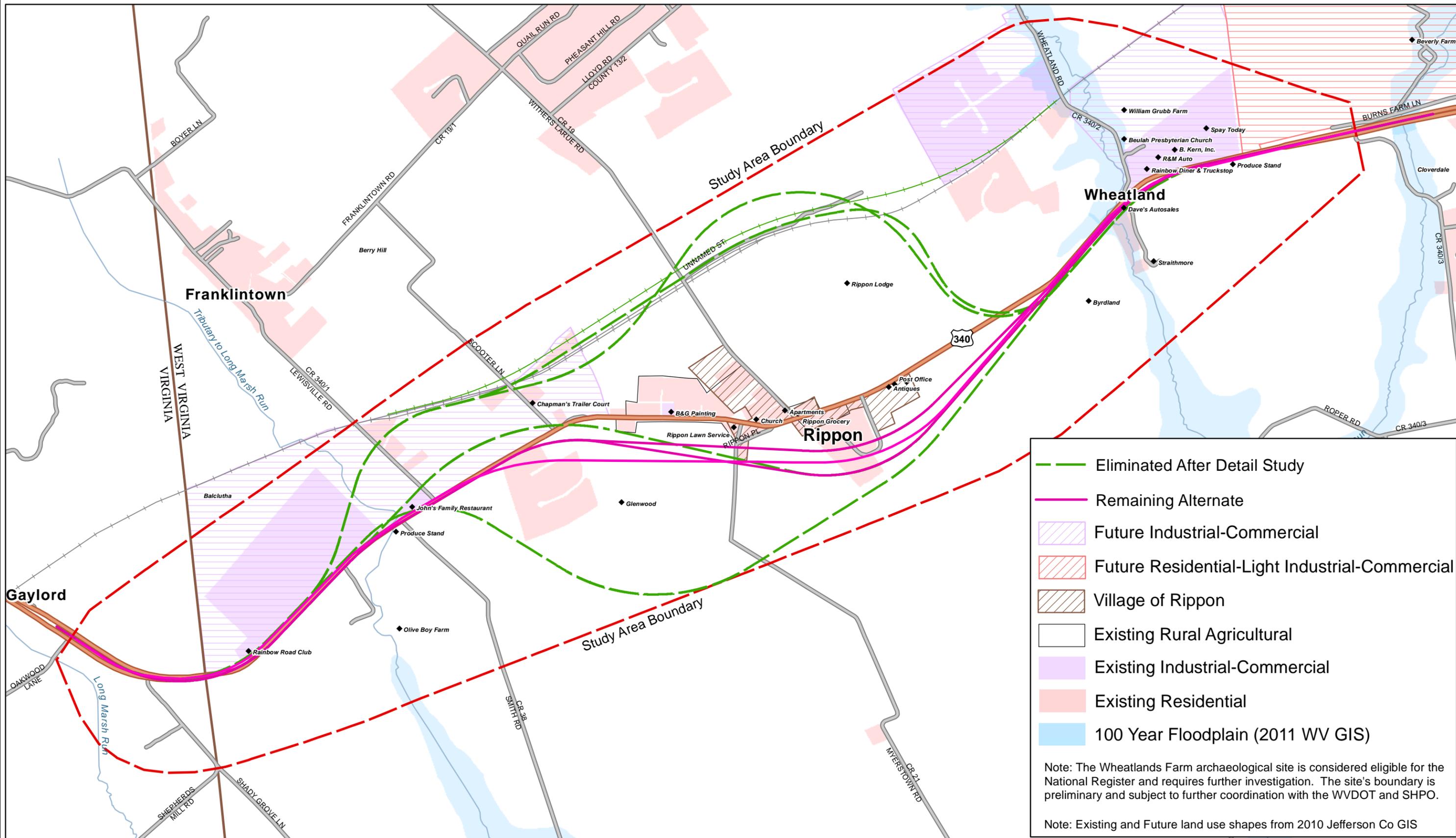


**2011 & 2012 TWO LANE HIGHWAY LEVEL OF SERVICE (LOS)
2033 TWO LANE HIGHWAY LEVEL OF SERVICE (LOS)**

**2011 & 2012 AVERAGE DAILY TRAFFIC
2033 AVERAGE DAILY TRAFFIC**

Note: Average Daily Traffic is Identified in Vehicles Per Day

**Average Daily Traffic
and
Level of Service**

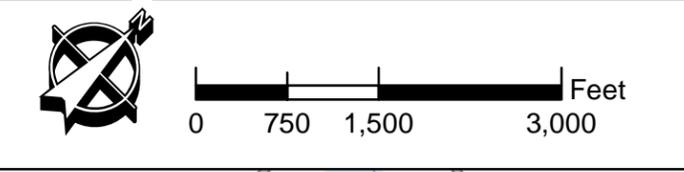


-  Eliminated After Detail Study
-  Remaining Alternate
-  Future Industrial-Commercial
-  Future Residential-Light Industrial-Commercial
-  Village of Rippon
-  Existing Rural Agricultural
-  Existing Industrial-Commercial
-  Existing Residential
-  100 Year Floodplain (2011 WV GIS)

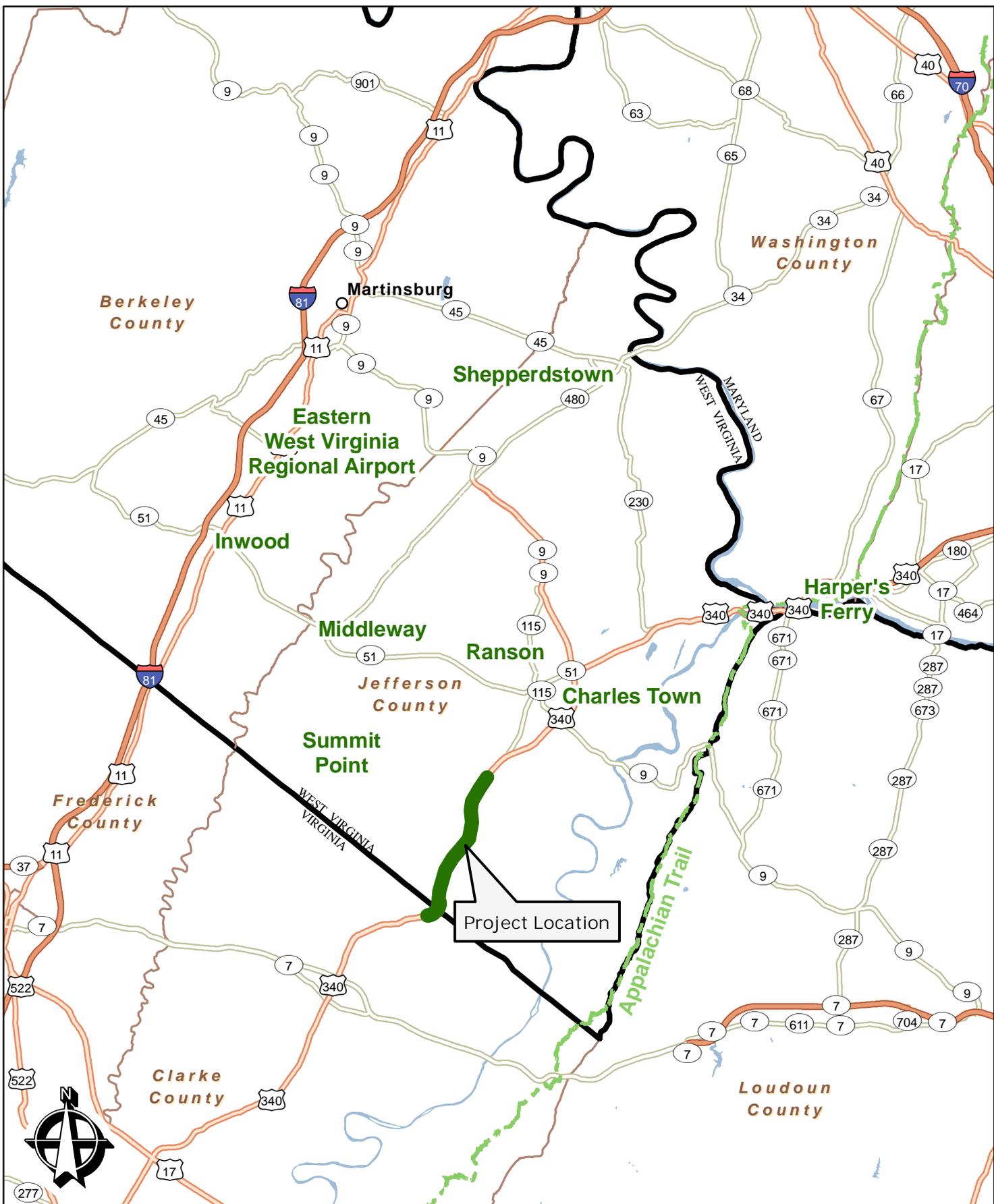
Note: The Wheatlands Farm archaeological site is considered eligible for the National Register and requires further investigation. The site's boundary is preliminary and subject to further coordination with the WVDOT and SHPO.

Note: Existing and Future land use shapes from 2010 Jefferson Co GIS

**US 340
IMPROVEMENT
STUDY**

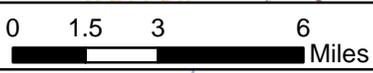


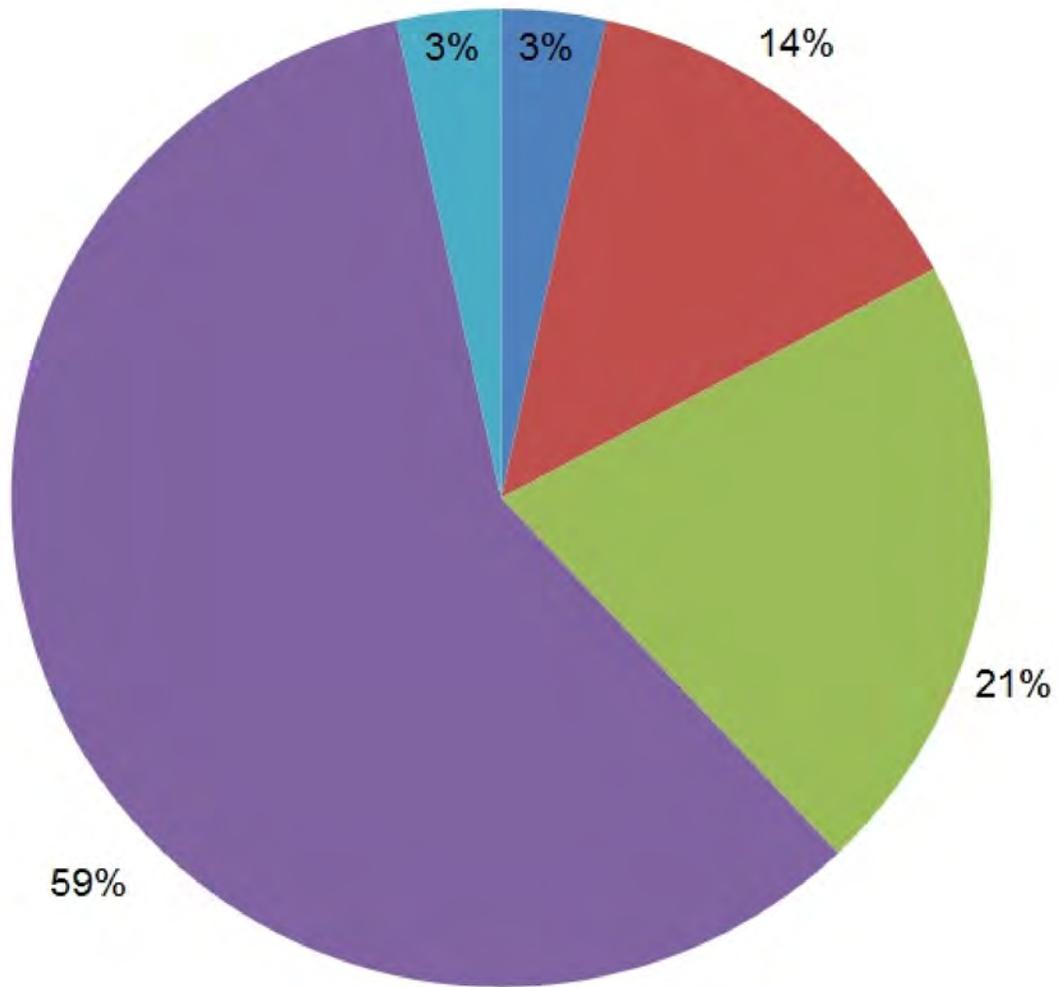
**Existing and Future
Land Use**



**US 340
IMPROVEMENT
STUDY**

Local Points of Interest

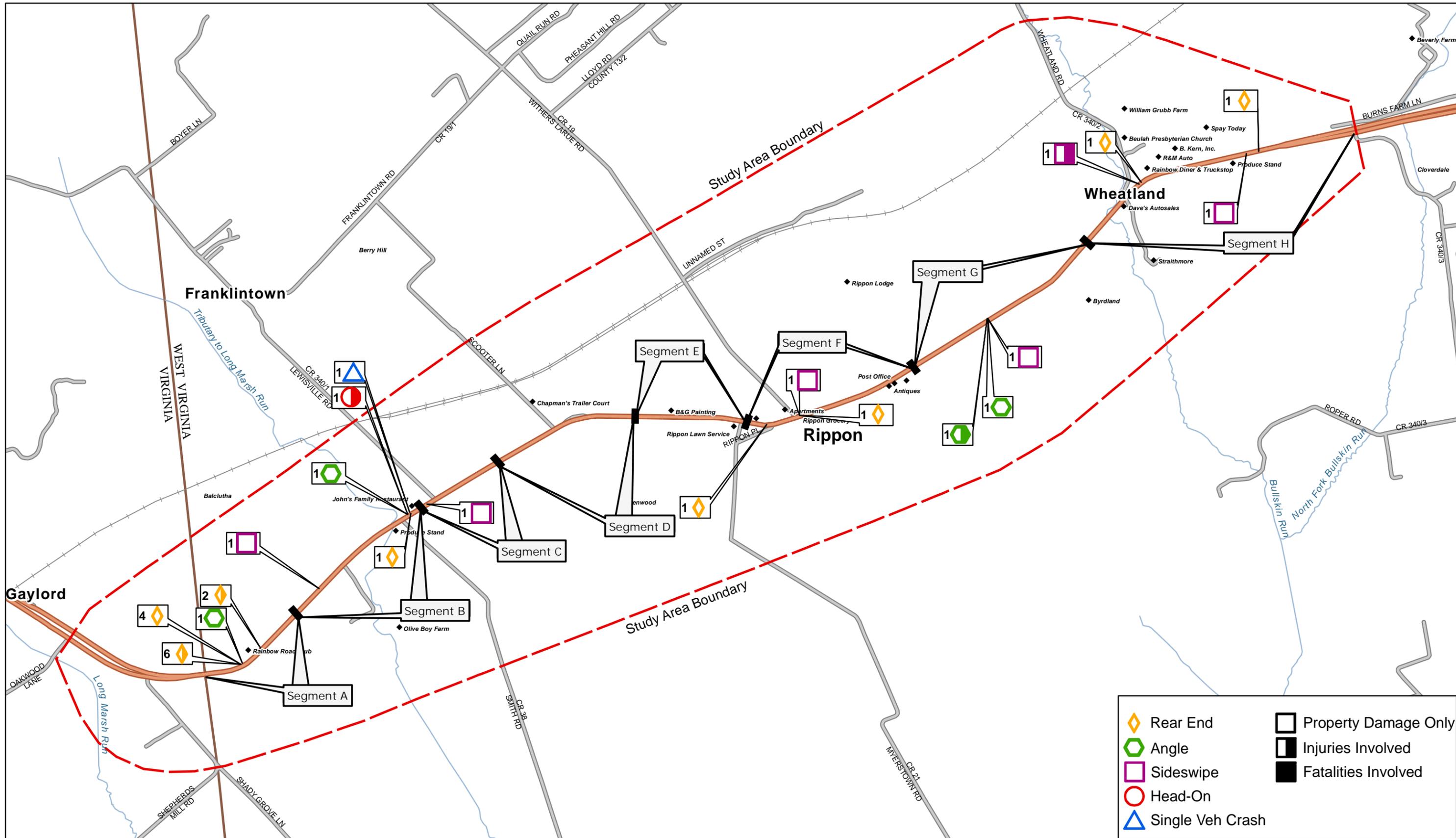




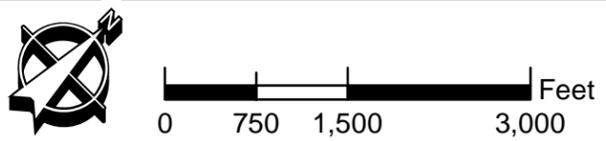
■ Single Veh Crash ■ Angle ■ Sideswipe ■ Rear End ■ Head On

***US 340
IMPROVEMENT
STUDY***

Accident Types



**US 340
IMPROVEMENT
STUDY**



- | | |
|------------------|----------------------|
| Rear End | Property Damage Only |
| Angle | Injuries Involved |
| Sideswipe | Fatalities Involved |
| Head-On | |
| Single Veh Crash | |

**Accident Location
and
Types by Segments**

SECTION III
Alternatives

III. ALTERNATIVES

At the outset of this project, four broad-ranged alternatives were established for consideration. These included the Mass Transit Alternative, the Transportation Systems Management (TSM) Alternative, the No-Build Alternative, and the Build Alternative. The Build Alternative includes the construction of a partially controlled access four-lane divided highway with a depressed median.

The Mass Transit Alternative and the TSM Alternative were eliminated from further consideration because they do not serve the needs of the project or have been determined not to be prudent alternatives. The TSM Alternative does not address the capacity or roadway continuity needs. The Mass Transit Alternative does not have sufficient ridership to eliminate the need for roadway capacity improvements.

The No-Build Alternative and the Build Alternative were retained for detailed analysis. A Draft Environmental Impact Statement (DEIS) was approved on November 9, 2001. Eight build alternates (Alternates 1-8) were presented in the DEIS and six (Alternates 1, 3-6, and 8) were evaluated in detail. Alternates 6 and 8 were presented at a Public Hearing in January 2002 as the recommended alternates for implementation.

In response to public input received from the 2002 hearing, an additional concept, Alternate 9, was developed to avoid the Kabletown Historic District and the Ripon Lodge historic property. An Informational Public Workshop in July 2002 was conducted to present Alternate 9 along with Alternates 6 and 8.

Following the 2002 Workshop, further evaluations related to the federally-protected historic resources west of US 340 were completed. The Bullskin Run Rural Historic District and Shenandoah Valley Railroad (Norfolk Southern Railroad) were found to be eligible for the National Register of Historic Places. Alternate 6 was eliminated due to the total number of business and residential relocations (10) and the impacts on historic resources including Rippon Lodge, Wheatland Farm, Kabletown Rural Historic District, and the Bullskin Run Rural Historic District. The elimination of Alternate 8 was due to total number of business and residential relocations (8), the impacts on historic resources, including Kabletown Rural Historic District, Bullskin Run Rural Historic District, William Grubb Farm, and the Norfolk Southern Railroad, and the high costs of both construction and long-term maintenance

associated with two grade separation structures over the railroad. Alternate 9 was eliminated from further consideration due to having a high number of business and residential relocations (14 total), impacts on historic resources, including Kabletown Rural Historic District, Bullskin Run Rural Historic District, William Grubb Farm, and the Norfolk Southern Railroad, and the highest cost of construction due to relocating 17,000 feet of the Norfolk Southern Railroad. Every Build Alternate, including those previously eliminated, will impact historic properties and/or districts, therefore all alternatives were once again reviewed and Alternate 4, originally eliminated due to its impact on the Kabletown Rural Historic District, was chosen as the Preferred Alternate.

As a result of decreased available funding, the US 340 project was placed on hold. During this time, the project study area experienced residential growth and development. Due to the growth and development within the area of Alternate 4, and a desire to potentially further minimize impacts to historic resources, two modifications of Alternate 4 (Alternates 4A and 4B) were developed. These modifications include a slight westerly shift of Alternate 4, identified as Alternate 4A, to further minimize impacts to the Byrdland Historic Property and residential properties, as well as an easterly shift of Alternate 4, identified as Alternate 4B, to further minimize impacts to the Village of Rippon Historic District and residential properties. A Public Information Workshop was held on September 24, 2012, to present these modifications to Alternative 4 to the public, update the public on the project status, and gather input and feedback from the public. Verbal and written comments received at the workshop expressed opposition to Alternates 4, 4A, and 4B due to their impacts to the Ryan's Glen subdivision and the proposed Oak Hill subdivision and a desire by the public for all previous alternates to be re-evaluated using current data and conditions.

Additional build alternates (Alternates 4C, 10A, 10B, and 11) were created in response to public input received at the 2012 workshop. These alternates, along with Alternates 4, 4A, and 4B, were presented at a Public Hearing in June 2013. These alternates are displayed in Exhibit III-2. WVDOH and FHWA have agreed that these alternates should be discussed in a Supplemental Draft Environmental Impact Statement (SDEIS). FHWA placed a Notice of Intent in the Federal Register on January 14, 2014 to prepare a Supplemental Draft Environmental Impact Statement.

The No-Build Alternative would involve maintenance of the existing facility but no capacity improvements to the roadway are made. This alternative does not address the many roadway

deficiencies that currently exist along the facility, nor does it address operations based on future travel demand, therefore, it does not meet the needs of this project. However, it is retained for comparative purposes.

A. BUILD ALTERNATIVE

1. Build Alternative Design Criteria

Projected traffic volumes for this roadway corridor indicate that a four-lane facility is needed in order to address future travel demand and improve safety through the project area. The proposed typical section for this project is shown in Exhibit III-1. It will tie to the existing four-lane sections that exist to the south in Clark County, VA and north of Wheatland, WV. A divided highway with a 40-foot depressed median is proposed throughout the length of the facility. The facility is designed in accordance with the AASHTO's *A Policy on Geometric Design of Highways and Streets*. The design speed is 60 miles per hour. All proposed profile grades are well below the maximum allowable grade of 4 percent. All horizontal curvature is above the minimum radius of curvature of 1,528 feet. The Design Criteria are listed in Table III-1.

2. Build Alternates 4, 4A, 4B, 4C, 10A, 10B, and 11

The seven build alternates considered for evaluation in this SDEIS are shown on Exhibit III-2 and described in detail in the following sections.

Alternate 4 - Beginning south of the Virginia-West Virginia state line, where the existing 4-lane US 340 begins to transition to two lanes, Alternate 4 generally follows the existing alignment to a point north of CR 340/1. Here it departs the existing alignment and veers easterly crossing CR 21 approximately 650 feet east of the existing US 340 and bypasses the Village of Rippon to the east. The new alignment then turns northerly and rejoins the existing US 340 alignment south of Bullskin Run Creek. Alternate 4 then follows existing US 340, with some minor curvature improvements near the intersection of CR 340/2, to the 4-lane divided highway north of Wheatland. The total length of Alternate 4 is 4.6 miles. Exhibit III-3 shows the location of Alternate 4.

Alternate 4A (Preferred) - Beginning south of the state line between West Virginia and Virginia where the existing 4-lane US 340 begins to transition to two lanes, Alternate 4A generally follows the existing roadway for a length of 1.4 miles. The alignment then turns east away from the existing roadway and crosses CR 21 (Meyerstown Road) on the east side of the

community of Rippon, but just to the west of Alternate 4. Alternate 4A turns north and merges with the existing alignment near Wheatland. The proposed improvement continues northward along the existing roadway and ends at the multilane divided segment of US 340 south of Charles Town. The approximate length of Alternate 4A is 4.5 miles. Exhibit III-4 shows the location of Alternate 4A.

Table III-1: Design Criteria

Description	Mainline	Major Access Roads
Class of Highway	Rural Arterial	Rural
Type of Terrain	Rolling	Rolling
Design Speed	60 mph	40 mph
Required Stopping Sight Distance	570 feet	325 feet
Design Stopping Sight Distance	725 feet	
ADT Present (2011/2012)	12,900	
ADT Future (2033)	19,000	
DHV (2015)	1,420	
D%	55/45	
%T (DHV)	10%	
K	10%	
Maximum Grade	4.0%	8.0%
Minimum Radius	1,200 feet	444 feet
Maximum Superelevation	0.08	0.08
Roadway Width:	4 lanes @ 12 feet ea.	
Median Width:	40 feet (Depressed)	
Shoulder Width:	Outside - 12 feet (10 feet Paved) Inside - 6 feet (3 feet Paved)	
Access spacing	2,000 feet Minimum	

Source: AASHTO, *A Policy on Geometric Design of Highways and Streets*, 2011.

Alternate 4B - Alternate 4B begins south of the state line between West Virginia and Virginia where the existing 4-lane US 340 begins to transition to two lanes, and generally follows the existing roadway for a length of 1.4 miles. The alignment then turns east away from the existing roadway and crosses CR 21 (Meyerstown Road) on the east side of the community of Rippon, and just east of Alternate 4. Alternative 4B turns north and merges with the existing alignment near Wheatland. The proposed improvement continues northward along the existing roadway and ends at the multilane divided segment of US 340 south of Charles Town. The approximate length of Alternate 4B is 4.6 miles. Exhibit III-5 shows the location of Alternate 4B.

Alternate 4C - Beginning south of the state line between West Virginia and Virginia where the existing 4-lane US 340 begins to transition to two lanes, Alternate 4C generally follows the existing roadway for a length of 0.9 miles. The alignment then departs the existing US 340 alignment and continues northerly crossing CR 340/1 in the vicinity of Grove Way before making a long, sweeping curve to the right and crossing existing US 340 at Ryan's Glen Drive. It continues on new alignment on the east side of existing US 340 crossing Meyerstown Road approximately 400 feet east of existing US 340. It remains on new location on the east side of Rippon Village and makes a long, sweeping curve to the left through the Oak Hill subdivision before rejoining the existing US 340 alignment on the tangent in front of Wheatland Farm. It then follows the existing alignment, with some minor improvement to the curvature in front of the Rainbow Diner and Truck stop, and ends at the multi-lane divided segment of US 340 south of Charles Town. The approximate length of Alternate 4C is 4.6 miles. Exhibit III-6 shows the location of Alternate 4C.

Alternate 10A - Alternate 10A begins south of the state line between West Virginia and Virginia where the existing 4-lane US 340 begins to transition to two lanes, and generally follows the existing roadway for a length of 0.7 miles. The alignment then departs the existing US 340 alignment and continues northerly crossing CR 340/1 approximately 500 feet east of the railroad. It then runs along the east side of the railroad before turning to the left and crossing the railroad (proposed grade separation) approximately 500 feet south of CR 19 (Withers Larue Road). It continues northward after crossing Withers Larue Road (proposed grade separation) and makes a long, sweeping curve to the right again crossing the railroad (proposed grade separation) north of Rippon Lodge Rural Historic District and south of Allen Lane. It crosses existing US 340 in the vicinity of Allen Lane turning north and then following

the existing alignment until it ends at the multi-lane divided segment of US 340 south of Charles Town. The approximate length of Alternate 10A is 5.3 miles. Exhibit III-7 shows the location of Alternate 10A.

Alternate 10B - Similar to Alternate 10A, Alternate 10B begins south of the state line between West Virginia and Virginia where the existing 4-lane US 340 begins to transition to two lanes, and generally follows the existing roadway for a length of 0.7 miles. The alignment then departs the existing US 340 alignment and continues northerly crossing CR 340/1 approximately 500 feet east of the railroad. It then curves to the left near Scooter Lane and runs on the railroad right-of-way (the railroad would be relocated to the west). The alignment continues on railroad right-of-way until it curves to the right north of Rippon Lodge Rural Historic District and south of Allen Lane. It crosses existing US 340 in the vicinity of Allen Lane turning north and then following the existing alignment until it ends at the multi-lane divided segment of US 340 south of Charles Town. The approximate length of Alternate 10B is 5.2 miles. Exhibit III-8 shows the location of Alternate 10B.

Alternate 11 - Beginning south of the state line between West Virginia and Virginia where the existing 4-lane US 340 begins to transition to two lanes, Alternate 11 generally follows the existing roadway for a length of 0.9 miles. The alignment then curves to the right departing the existing US 340 alignment and runs between Olive Boy Farm and Ryan's Glen subdivision. It then curves to the left around Glenwood, Wayside Farm and Oak Hill subdivision. It continues northerly until it rejoins the existing US 340 alignment on the tangent in front of Wheatland Farm. It then follows the existing alignment, with some minor improvement to the curvature in front of the Rainbow Diner and Truck Stop, until it ends at the multi-lane divided segment of US 340 south of Charles Town. The approximate length of Alternate 11 is 5.1 miles. Exhibit III-9 shows the location of Alternate 11.

B. BUILD ALTERNATE COMPARISON

The evaluation process included developing a comparative summary of the impacts based on the detailed environmental studies prepared for each of the seven alternates considered in the SDEIS phase of the project. Table III-3 identifies the categories that are considered to be important when comparing alternates and quantifies the impact in each category for each alternate. Details of these impacts are presented in Section IV. By ranking each of the seven alternates under each category on a scale from 1 - 7, with 1 being the least impact and 7 being

the greatest impact, a total can be calculated, effectively ranking each alternate based on the extent of impacts with no weighting of the categories. While this is purely a quantitative method of analysis, judgement and subjectivity will be employed to select a Preferred Alternate.

Table III-2 identifies the categories used for ranking the alternates and shows the quantities and rank in each of the individual categories. Total points were obtained by simply adding the rank in each of the alternates is provided at the bottom of the table.

Table III-2: Rank of Alternates

Description	Alternate						
	4	4A*	4B	4C	10A	10B	11
Residential Relocations (#)	10	3	5	14	12	8	8
Rank	5	1	2	7	6	3	3
Business Relocations (#)	4	4	4	3	3	4	5
Rank	3	3	3	1	2	3	7
Right of Way (Acres)	112	116	120	140	153	156	137
Rank	1	2	3	5	6	7	4
Hist. Arch Resources (Acres)	153	153	159	156	107	130	171
Rank	3	3	6	5	1	2	7
Wetlands (Acres)	1	1.1	1.3	1.2	2	2	2
Rank	1	2	4	3	5	5	5
Floodplains (Acres)	5.1	6.1	6.3	6.3	6	6	6
Rank	1	5	6	6	2	2	2
Streams (LF)	1348	1315	1409	1773	1160	1179	1147
Rank	5	4	6	7	2	3	1
Farmlands (Acres/Rank)	123	134	138	149	144	178	150
Rank	1	2	3	5	4	7	6
Cost - Right of Way (\$**)	10.6	13.82	15.25	16.375	14.9	20.31 ¹	13.56
Rank	1	3	5	6	4	7	2
Cost - Construction (\$**)	36.5	36.1	35.6	37.6	62.07	42.38 ¹	39.64
Rank	3	2	1	4	7	6	5
Total Points	24	27	39	49	38	45	42
Overall Ranking	1	2	4	7	3	6	5

* Preferred Alternate

** Multiply table value by 1,000,000 to get estimated cost.

¹ Cost does not reflect relocation of 12,500± linear feet of railroad

C. ANALYSIS OF BUILD ALTERNATES

The Comparative Summary Table (Table III-3) and Rank of Alternates Table (Table III-2) were utilized to perform an analysis of the build alternates. Each of the alternates is discussed below along with a determination on whether or not the alternate should be eliminated or retained for further consideration. It is important to note that each of the seven alternates under consideration satisfies the project purpose and need by:

1. Connecting to the existing 4-lane highway at either end,
2. Addressing existing roadway deficiencies by meeting project design criteria specified by AASHTO,
3. Improving traffic operations with additional travel lanes and exclusive turn lanes,
4. Improving safety through improved sight distance, additional lanes for passing, and adding turn lanes to remove turning/stopped vehicles from through travel lanes.

Alternate 4 received an overall rank of 1 when compared to the other seven alternates. It has the third most number of relocations (business and residential) but requires the least amount of new right-of-way. It is tied for third, with one other alternate, for the impacts to the number of acres within historic resources, requiring acquisition within three historic districts and four individual historic property boundaries. Alternate 4 has the least impact on wetlands compared to the other build alternates. It had the least impact to floodplains and farmlands. Alternate 4 was also the least costly of the seven build alternates. Of the 49 written comments received following the June 3, 2013 Public Workshop/Hearing, eight comments favored Alternate 4 while four opposed all build alternates. Alternate 4 will be retained for further consideration based on the low overall cost, low number of relocations, low impacts on historic resources, and low impacts to wetlands.

Alternate 4A (Preferred) has an overall rank of 2 when compared to the other alternates under consideration. It has the least number of relocations (residential and business) and the second least number of acres required for right-of way. Alternate 4A is tied with Alternate 4 with impacts to 153 acres of historic resource boundaries which is third least amongst the seven alternates. It ranks second for impacts to wetlands and farmlands, fourth for linear impacts to streams, and second in total construction cost (\$49,920,000). Of the 49 written comments received following the June 3, 2013 Public Workshop/Hearing, three comments favored Alternate 4A while four opposed all build alternates. Alternate 4A will be retained for

further consideration based on low number of relocations, low acreage of right of way needed, low impacts to historic resources, and low overall costs.

Alternate 4B has an overall rank of 4 compared to the seven alternates under consideration. It has the second least number of relocations (residential and business) and the third least number of acres required for right-of way. Alternate 4B is second most in impacted acreage within historic resource boundaries (159 acres). It ranks fourth in impacts to wetlands but second most in linear impacts to streams. It has the third lowest total impacts to farmlands and third lowest total construction cost (\$50,850,000). Of the 49 written comments received following the June 3, 2013 Public Workshop/Hearing, 1 comment favored Alternate 4B while 4 opposed all build alternates. Alternate 4B will be retained for further consideration based on the low overall cost, low number of relocations, and lower acreage of right of way required.

Alternate 4C received an overall rank of 7 compared to the other alternates under consideration. It has the highest number of business/residential relocations and requires the third highest total acreage for right of way (140 acres). It has the third highest impact to acreage within historic resource boundaries (159 acres). It ranks third least in impacts to wetlands, tied with Alternate 4B for most impacts to floodplains, and highest in linear impacts to streams. It has the third highest total impacts to farmlands and third highest total construction cost (\$53,975,000). Of the 49 written comments received following the June 3, 2013 Public Workshop/Hearing, three comments favored Alternate 4C, two comments were opposed, and four opposed all build alternates. Due to the high extent of impacts, Alternate 4C has been eliminated from further consideration.

Alternate 10A received an overall rank of 3 compared to the other alternates under consideration. However, it will have the second highest number of business/residential relocations and require the second highest total acreage for right of way (153 acres). Additionally, it has the highest total cost (\$76,970,000 for right of way and construction) out of the seven alternates. Because of the construction of two grade separation structures over the historic Shenandoah Valley Railroad (currently the Norfolk Southern Railroad) and one grade separation over Withers Larue Road, Alternate 10A will likely have the highest long term maintenance costs as well. Of the 49 written comments received following the June 3, 2013 Public Workshop/Hearing, 13 comments opposed Alternates 10A and 10B while four opposed all build alternates. For reasons stated above, Alternate 10A has been eliminated from further consideration.

Alternate 10B received an overall rank of 6 compared to the other seven alternates being considered. It was highest in amount of right of way needed (156 acres) and correspondingly, highest in right of way cost (\$20,310,000). It was also highest in total acreage of farmlands (115 acres of prime and unique and 53 acres of statewide and locally important). The total cost of Alternate 10B is second highest at \$62,690,000, trailing only Alternate 10A. Additionally, the cost included in Tables III- 2 and III-3 does not include the cost of relocating 12,500 FT of railroad which would likely vault Alternate 10B to the most costly of the seven alternates. Of the 49 written comments received following the June 3, 2013 Public Workshop/Hearing, 13 comments opposed Alternates 10A and 10B while four opposed all build alternates. For these reasons, Alternate 10B has been eliminated from further consideration.

Alternate 11 was introduced to minimize impacts to individual historic resources and avoid the Ryan's Glen subdivision. Its overall rank is 5 compared to the other alternates under consideration. It ranked highest in the number of business relocations and tied with one other alternate for third most residential relocations. It had the highest impacts to number of acres within historic resources boundaries (171 acres). Alternate 11 is tied with two other alternates for the most impact to wetlands (2.0 acres) but had the least impact on streams (1,147 LF). It also ranked poorly when considering farmlands impacts. The total cost of Alternate 11 (\$53,200,000) has it as the fourth most expensive alternate. Of the 49 written comments received following the June 3, 2013 Public Workshop/Hearing, 3 comments opposed Alternate 11, seven favored Alternate 11, and four opposed all build alternates. Alternate 11 has been eliminated from further consideration for reasons stated above.

In summary and based on the analysis presented above, build alternates to be retained for further evaluation include Alternates 4, 4A, and 4B. Build Alternates 4C, 10A, 10B, and 11 have been eliminated from further consideration for the reasons stated above.

D. PREFERRED ALTERNATE

The WVDOH has identified **Alternate 4A** as the "**Preferred Alternate**" for improvements to US 340 in Jefferson County, WV from just south of the State line in Clark County, VA to the Charles Town Bypass, a distance of approximately 4.5 miles.

Alternate 4A begins south of the State line in Clark County, VA and follows the existing US 340 alignment for approximately 1.4 miles. In Clark County, VA, construction will occur within the existing right of way. Once into West Virginia, widening will transition to the west side of the

existing highway to minimize impacts to Olive Boy Farm. In this initial section, the alignment will take the Rainbow Café. Approaching CR 38, the alignment transitions across to the east side of the existing highway. As it approaches Ryans Glen Dr., the alignment swings easterly on new location. Two Ryans Glen residences will be displaced due to this alignment. The alignment remains to the east of existing US 340 on new location crossing Meyerstown Road. At Meyerstown Road there is a small segment of the Village of Rippon Historic District that Alternate 4A crosses, displacing a contributing element (Johnson House). The alignment then makes a long sweeping arc to the left around Rippon and cuts off a section of Rippon Commons Ct. (also known as Oak Hill Subdivision). It then begins a long transition back towards the existing alignment through the Byrdland historic property. It rejoins the existing US 340 alignment just south of Byrdland Way. Widening occurs to the east of the existing highway crossing Straithmore historic property and taking Dave's Auto Sales. Some "flattening" of the existing horizontal curvature near CR 340/2 is required to meet current design standards. Also, some realignment of CR 340/2 (Wheatland Road) and Straithmore Farm Lane is required to provide safe access to the new facility. The alignment then proceeds northerly to tie to the existing 4-lane highway. Near this northern limit, there is a farm stand that will be displaced.

Alternate 4A has the least number of residential relocations (3) when compared to the remaining alternates under consideration (Alternates 4 and 4B). It has the same number of business relocations (4) as Alternates 4 and 4B. It requires 116 acres of right of way compared to 112 and 120 acres for Alternates 4 and 4B, respectively. Alternates 4 and 4A impact 153 acres while Alternate 4B impacts 159 acres of historic properties. Wetland impacts range from 1.0 -1.32 acres for the remaining alternates with Alternate 4A at 1.1 acres. Linear feet of stream impacts are lowest for Alternate 4A as are impacts to "active" prime and unique, and statewide and locally important farmlands. Total estimated costs for the remaining alternates ranges from \$47,100,000 for Alternate 4 to \$50,850,000 for Alternate 4B with Alternate 4A estimated to cost \$49,920,000. Using these factors for comparison, WVDOH recommends Alternate 4A as the Preferred Alternate.

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Table III-3: Comparative Summary

Category	Units	No-Build	Build Alternates Remaining			Build Alternates Eliminated from Further Consideration			
			4	4A (Preferred)	4B	4C	10A	10B	11
Roadway Length	Miles	0.0	4.6	4.5	4.6	4.6	5.3	5.2	5.1
Residential Relocations	Total / Minority	0 / 0	10 / 0	3 / 0	5 / 0	14 / 1	12 / -	8 / -	8 / -
Business Relocations	Total / Minority	0 / 0	4 / 0	4 / 0	4 / 0	3 / 0	3 / 0	4 / 0	5 / 0
Non-Profit Relocations	Total	0	0	0	0	0	0	0	0
Right-of-Way	Parcels / Acres	0 / 0	49 / 112	49 / 116	44 / 120	42 / 140	30 / 153	30 / 156	30 / 137
Environmental Justice Impacts	Yes or No	No	No	No	No	No	No	No	No
Potential Hazardous Material Sites	Each	0	3	3	3	3	3	3	3
Historic Architectural Resources	Resources / Acres	0 / 0	8 / 153	8 / 153	8 / 159	8 / 156	8 / 107	8 / 130	7 / 171
Archaeological Resources (Predictive Model)	Sites	0	0	0	0	0	0	0	0
Public Recreational Resources	Sites	0	0	0	0	0	0	0	0
Wetlands	Acres	0.0	1.0	1.1	1.3	1.2	2.0	2.0	2.0
T&E – Indiana Bat / Northern Long Eared Bat / <u>Madison Cave Isopod</u> Known Occurrence in Jefferson Co. Suitable Habitat in Project Area Biological Assessment	Yes or No Yes or No Effect (E) or No Effect (NE)	No / No / <u>Yes</u> ¹ No / No / <u>No</u> NE / NE / <u>E</u> ⁴	No / No / <u>Yes</u> ¹ Yes / Yes / <u>Yes</u> NE / NE / <u>E</u> ⁴	No / No / <u>Yes</u>¹ Yes / Yes / <u>Yes</u> NE / NE / <u>E</u>⁴	No / No / <u>Yes</u> ¹ Yes / Yes / <u>Yes</u> NE / NE / <u>E</u> ⁴	No / No / <u>Yes</u> ¹ Yes / Yes / <u>Yes</u> NE / NE / <u>E</u> ⁴	- - -	- - -	- - -
Floodplains	Acres	0.0	5.1	6.1	6.3	6.3	6.0	6.0	6.0
Streams – UNT to Long Marsh Run	Linear Feet	0	465	465	465	751	154	173	245
Streams – Bullskin Run ²	Linear Feet	0	883	850	944	1022	1,006	1,006	902
Farmlands – Prime & Unique	Acres (Active/Total)	0 / 0	19 / 74	18 / 80	23 / 84	27 / 87	17 / 90	16 / 115	36 / 94
Farmlands – Statewide & Locally Important	Acres (Active/Total)	0 / 0	15 / 49	13 / 54	14 / 54	14 / 62	12 / 54	8 / 63	18 / 56
Noise Impacts	# of Properties	4	2	2	1	1	-	-	-
Air Quality Carbon Monoxide Concentrations (Design Year)	PPM (1-hour / 8-hour)	0.9 / 0.7	0.7 / 0.6	0.7 / 0.6	0.7 / 0.6	0.7 / 0.6	2.3 / 1.4	2.3 / 1.4	2.3 / 1.4
Mobile Source Air Toxics (MSAT) ³	Low or High Potential	Low Potential	Low Potential	Low Potential	Low Potential	Low Potential	Low Potential	Low Potential	Low Potential
Right-of-Way & Utility Cost	Dollars	\$0	\$ 10,600,000	\$ 13,820,000	\$ 15,250,000	\$ 16,375,000	\$ 14,900,000	\$ 20,310,000 ⁵	\$ 13,560,000
Construction Cost	Dollars	\$0	\$ 36,500,000	\$ 36,100,000	\$ 35,600,000	\$ 37,600,000	\$ 62,070,000	\$ 42,380,000 ⁵	\$ 39,640,000
Total Cost	Dollars	\$0	\$ 47,100,000	\$ 49,920,000	\$ 50,850,000	\$ 53,975,000	\$ 76,970,000	\$ 62,690,000 ⁵	\$ 53,200,000

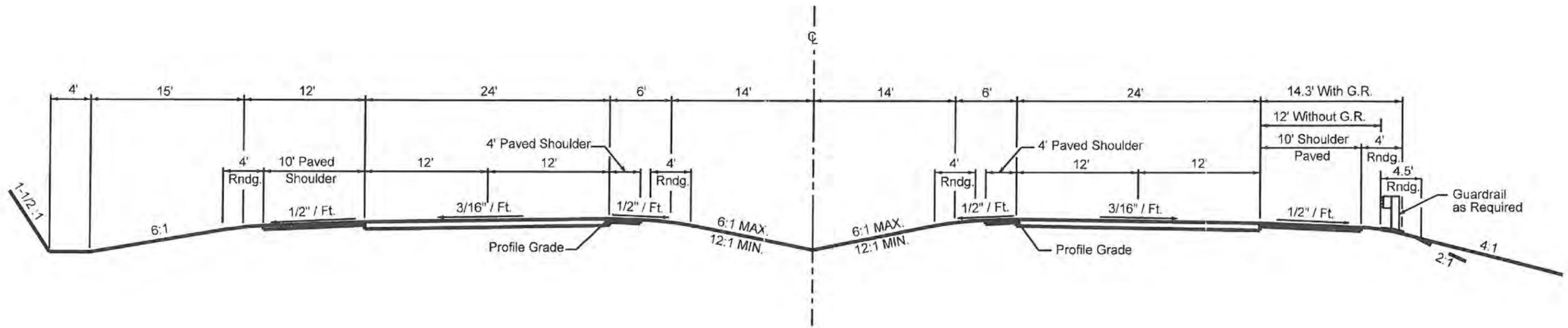
¹ The known occurrences are outside of the project study area.

² The entire length of Bullskin Run is included in the *West Virginia Department of Environmental Protection Draft Section 303(d) List of impaired waters for 2014*.

³ The project falls under MSAT Tier 2 for qualitative analysis. Vehicle Miles Traveled and fleet mix under each build alternate are similar therefore no appreciable difference in expected in overall MSAT emissions among the alternates. EPA initiatives on vehicle emissions standards and fuel regulations are projected to reduce annual MSAT emissions despite growth in VMT. Thus the alternates under consideration are given a “Low Potential” to effect MSAT.

⁴ The USFWS has made a “may affect but not likely to adversely affect” determination for the Madison Cave isopod.

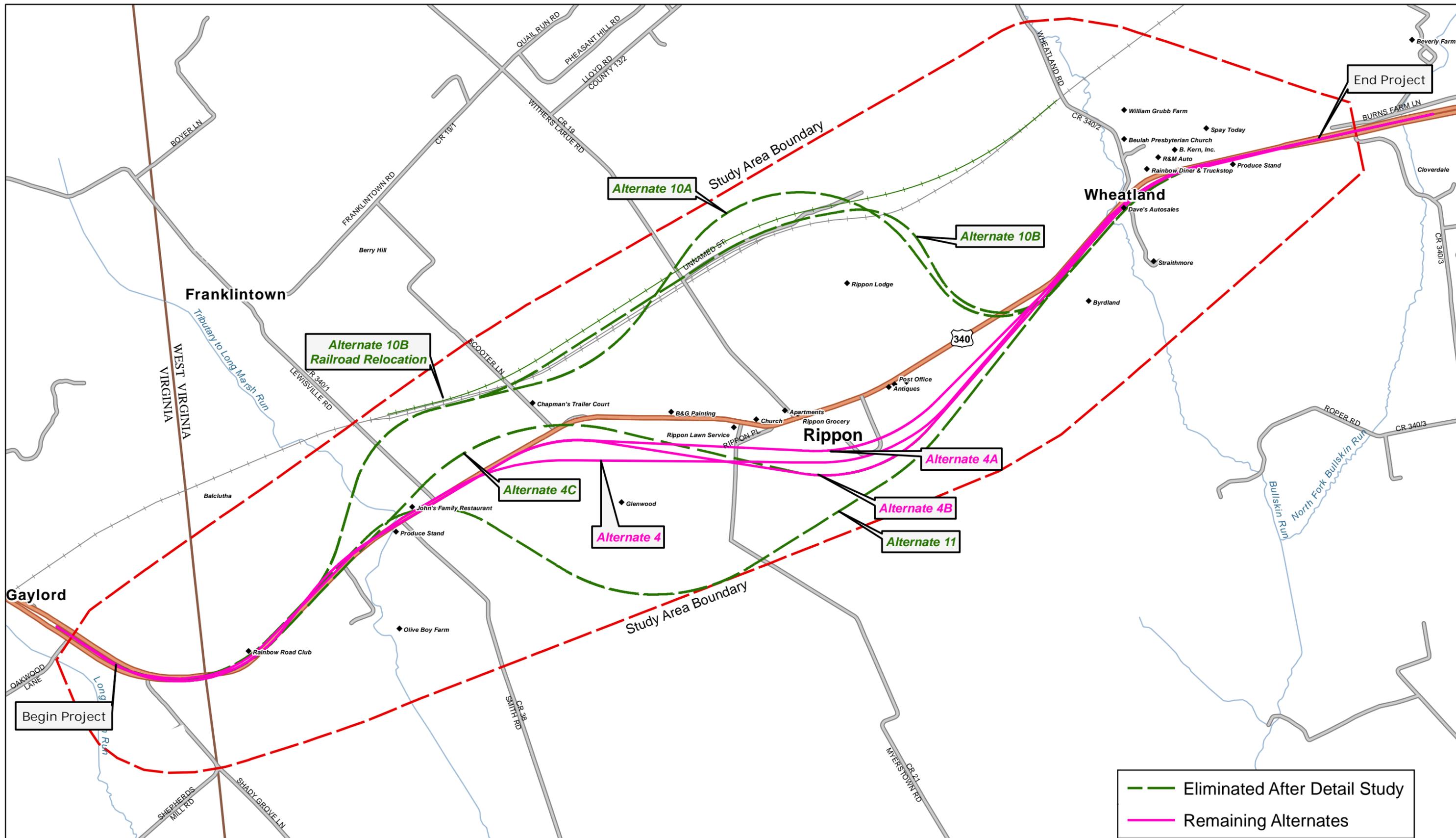
⁵ Cost does not reflect relocation 12,500± linear feet of railroad.



**US 340
IMPROVEMENT
STUDY**

Proposed
Typical Section

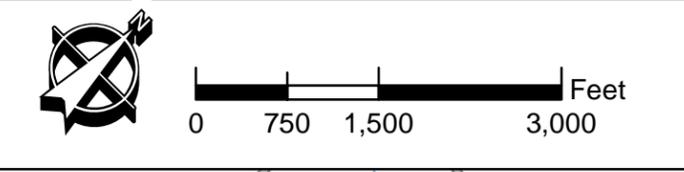
Exhibit III-1

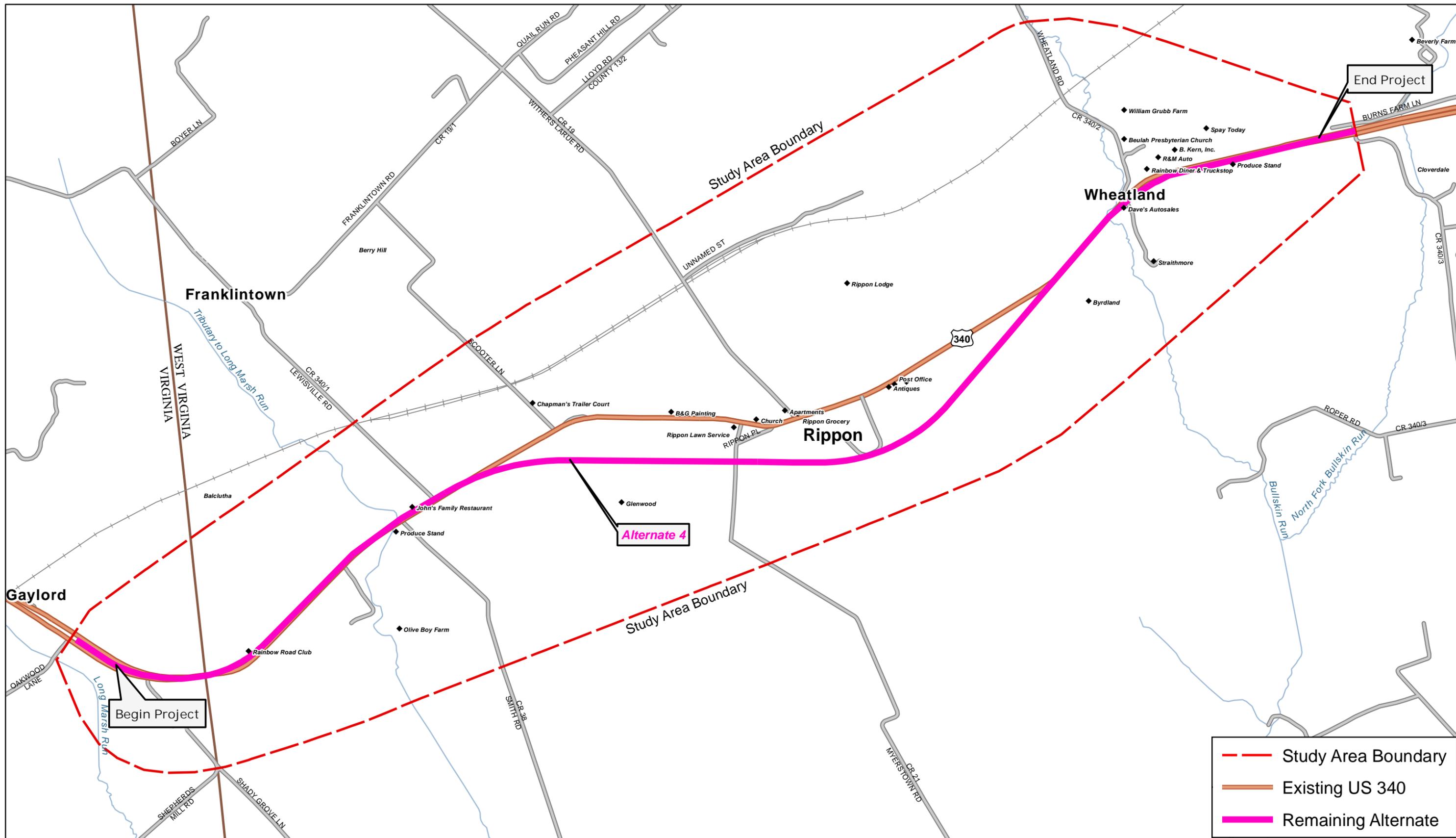


--- Eliminated After Detail Study
--- Remaining Alternates

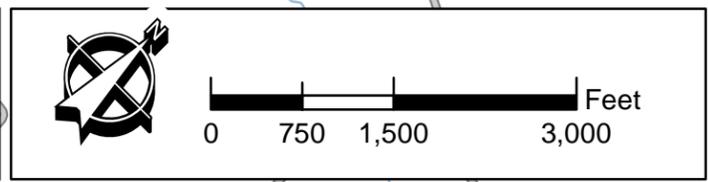
Build Alternate Locations

**US 340
IMPROVEMENT
STUDY**

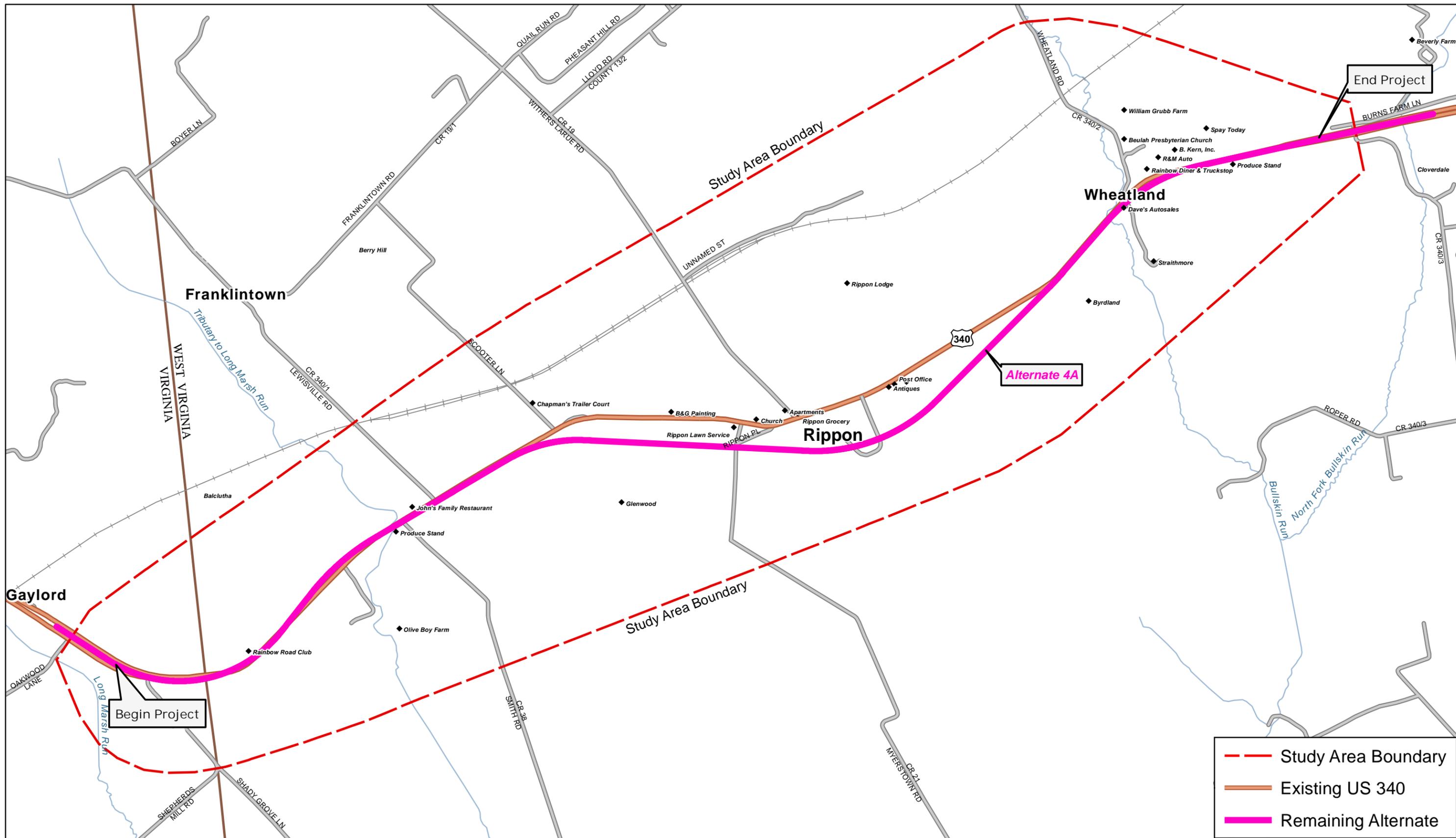




**US 340
IMPROVEMENT
STUDY**



**Build Alternate
Number 4 Location**



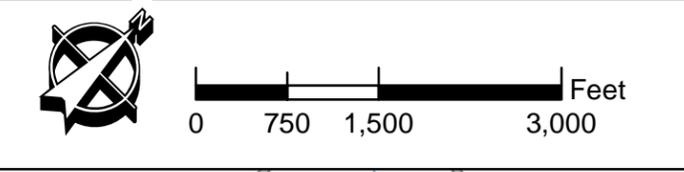
Begin Project

End Project

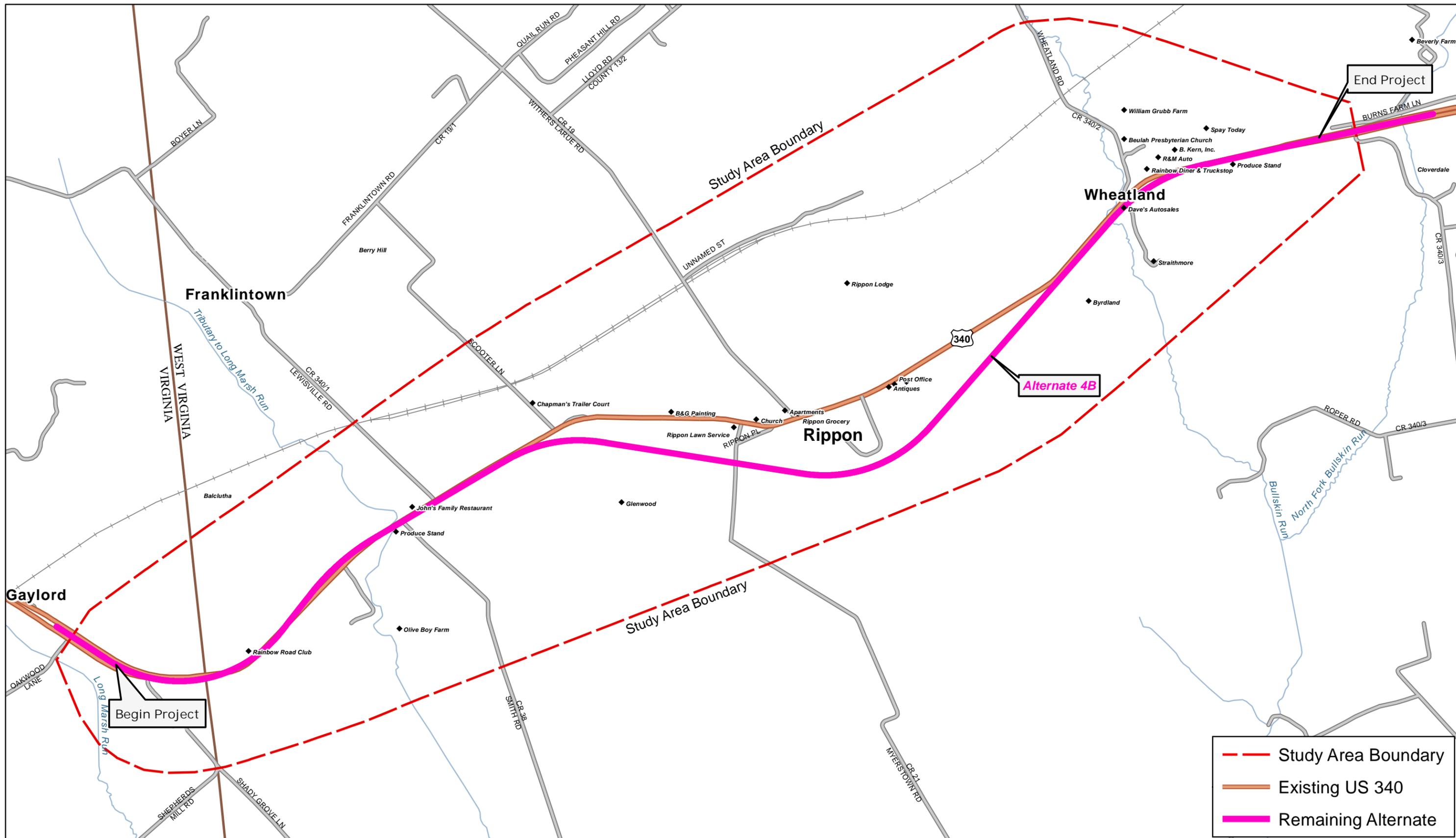
Alternate 4A

- - - Study Area Boundary
- Existing US 340
- Remaining Alternate

**US 340
IMPROVEMENT
STUDY**



**Build Alternate
Number 4A Location**



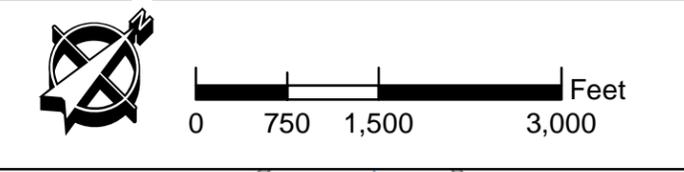
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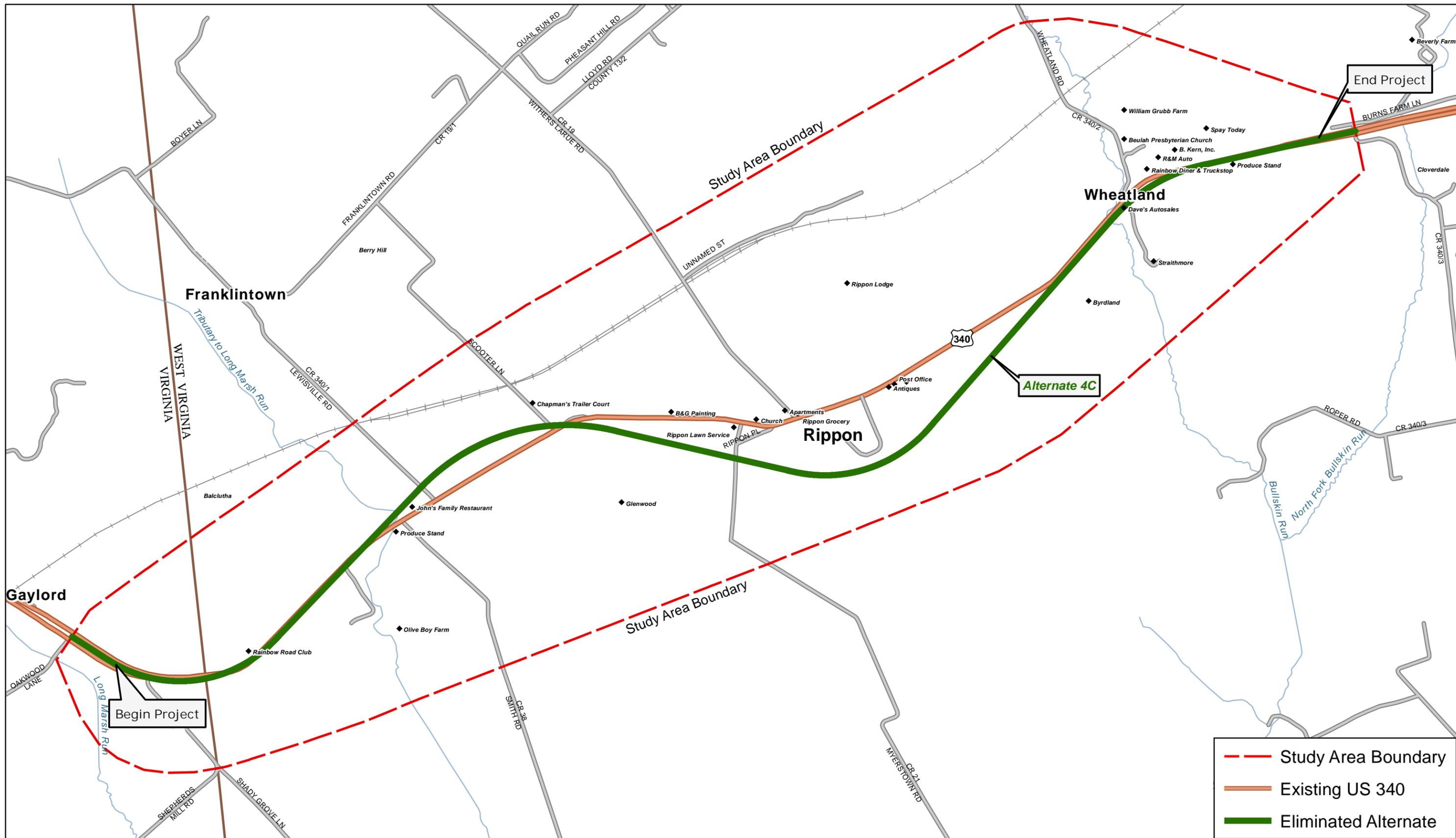
Alternate 4B

- - - Study Area Boundary
- Existing US 340
- Remaining Alternate

**US 340
IMPROVEMENT
STUDY**



**Build Alternate
Number 4B Location**



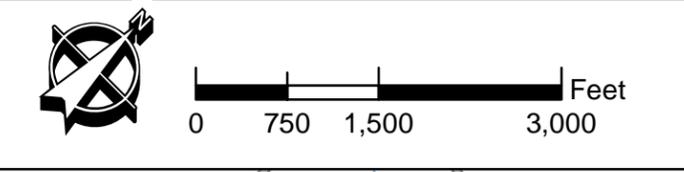
Begin Project

End Project

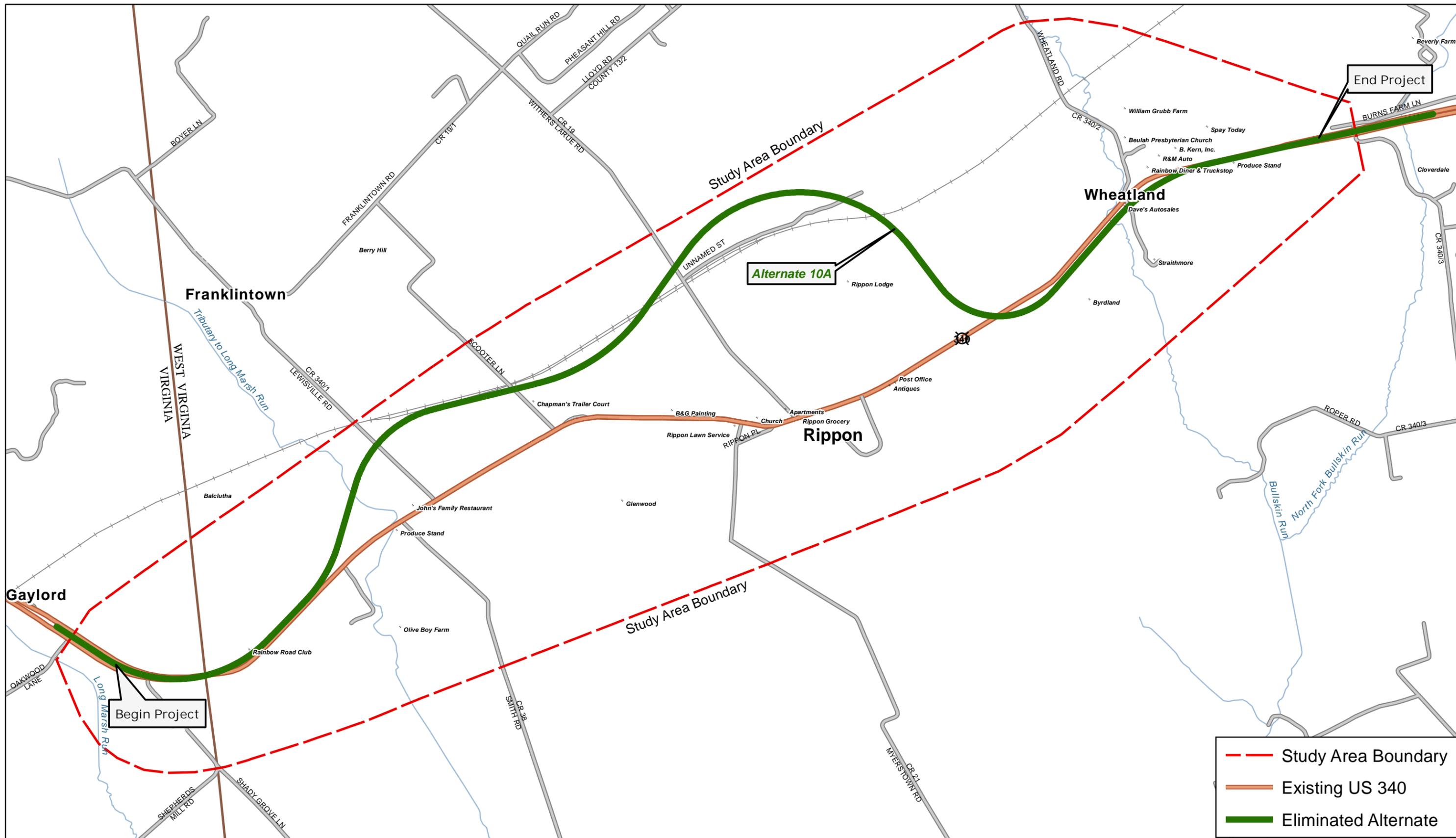
Alternate 4C

- - - Study Area Boundary
- Existing US 340
- Eliminated Alternate

**US 340
IMPROVEMENT
STUDY**



**Build Alternate
Number 4C Location**



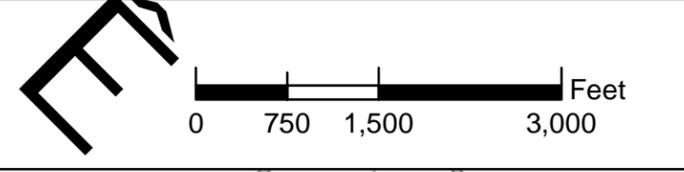
End Project

Alternate 10A

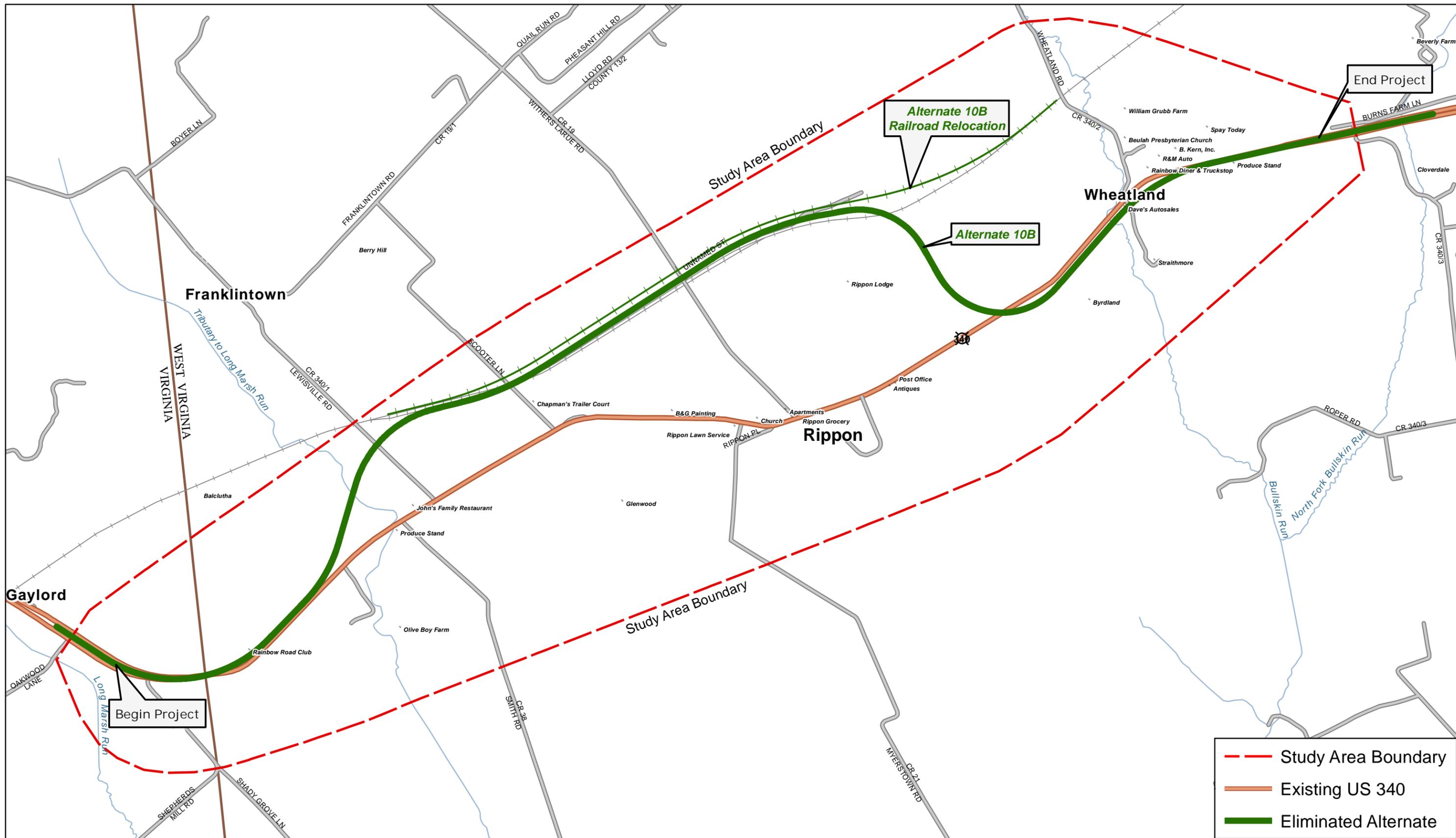
Begin Project

- - - Study Area Boundary
- Existing US 340
- Eliminated Alternate

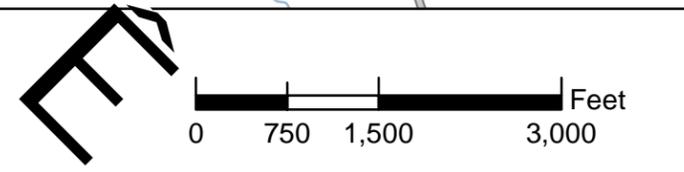
**US 340
IMPROVEMENT
STUDY**



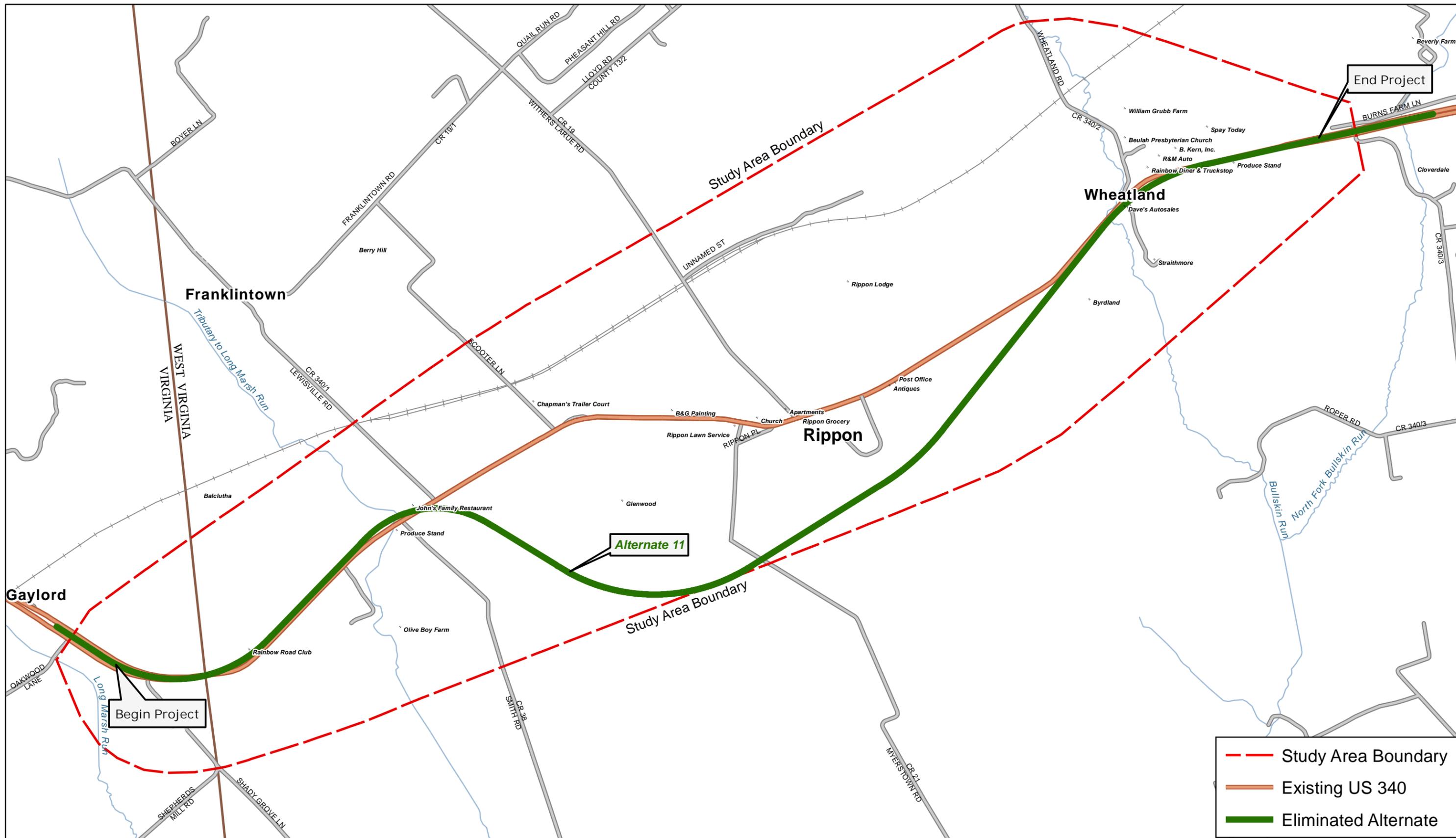
**Build Alternate
Number 10A Location**



**US 340
IMPROVEMENT
STUDY**



**Build Alternate
Number 10B Location**

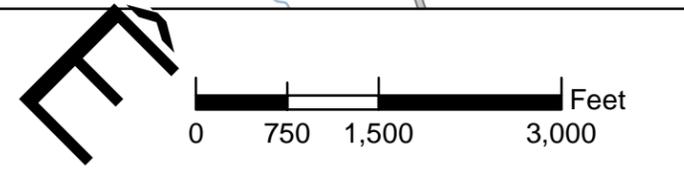


Begin Project

Alternate 11

End Project

**US 340
IMPROVEMENT
STUDY**



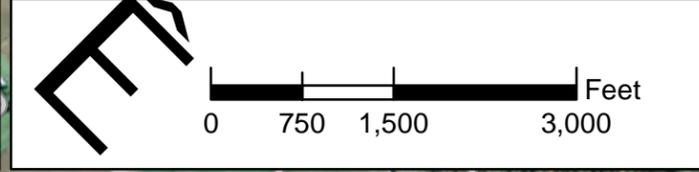
Build Alternate
Number 11 Location



Legend

- Proposed Easment
- Proposed Right of Way
- Edge of Pavement

**US 340
IMPROVEMENT
STUDY**



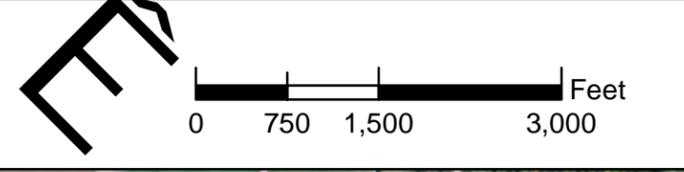
**Build Alternate
Number 4 Design**



Legend

- Proposed Easement
- Proposed Right of Way
- Edge of Pavement

**US 340
IMPROVEMENT
STUDY**



**Build Alternate
Number 4A Design**



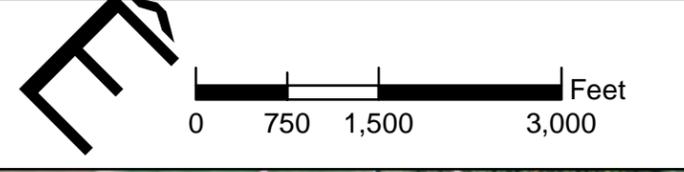
Begin Project

End Project

Legend

- Proposed Easement
- Proposed Right of Way
- Edge of Pavement

**US 340
IMPROVEMENT
STUDY**



Build Alternate
Number 4B Design

SECTION IV

Affected Environment & Environmental Consequences

IV. AFFECTED ENVIRONMENT & ENVIRONMENTAL CONSEQUENCES

This section provides a description of the existing social, economic, and natural environments of the project area. The social, economic, and natural environment impacts associated with each of the remaining build alternates 4, **4A (Preferred)**, and 4B are described in the following sections, along with measures proposed to mitigate those impacts.

A. SOCIAL ENVIRONMENT

1. POPULATION AND GROWTH CHARACTERISTICS

a) Population Characteristics

For purposes of discussing socioeconomic conditions, the study area is comprised of the following Census Block Groups, based on the 2010 Census: Census Block Groups 972800-1 (east of US 340) and 972800-3 (west of US 340), which make up most of the project area, and 972800-4 in Jefferson County, West Virginia. Small areas of Census Block Groups 010100-2 and 010100-4 in Clarke County, Virginia are also in the project area. Table IV-1 provides information on the population and its racial and ethnic composition for the Census Block Groups in the project area, along with corresponding information for Jefferson County and West Virginia as a whole for comparison purposes.

All of the Census Block Groups in the project area have a lower proportion of minority residents than Jefferson County as a whole. Individual block group minority concentrations range from 6.1 percent to 10.3 percent, compared to a countywide average of 12.4 percent. All of the Block Groups in the project area also have a lower proportion of Hispanic residents than Jefferson County as a whole. Based on Census data and field observation, there are no concentrated areas of minority residents in the project area. Environmental justice concerns are discussed further in Section IV.A.6.

Table IV-1: POPULATION CHARACTERISTICS

JURISDICTION	TOTAL POPULATION	TOTAL POPULATION BY RACE							TOTAL POPULATION BY HISPANIC OR LATINO ETHNICITY			TOTAL MINORITY POPULATION *
		White	Black or African American	American Indian or Alaskan Native	Asian	Native Hawaiian or Pacific Islander	Other#	Hispanic or Latino (any race)	Not Hispanic or Latino			
West Virginia	1,852,994	1,739,988 (93.9%)	63,124 (3.4%)	3,606 (0.2%)	12,406 (0.7%)	428 (<0.1%)	33,261 (1.8%)	22,268 (1.2%)	1,830,726 (98.8%)	126,003 (6.8%)		
Jefferson County	53,498	46,876 (87.6%)	3,524 (6.6%)	132 (0.2%)	618 (1.2%)	33 (0.1%)	2,315 (4.3%)	2,489 (4.6%)	51,009 (95.4%)	7,918 (14.8%)		
Census Block Group 972800-1	1,565	1,465 (93.6%)	44 (2.8%)	1 (<0.1%)	18 (1.2%)	0 (0.0%)	37 (2.3%)	29 (1.9%)	1,536 (98.1%)	113 (7.2%)		
Census Block Group 972800-3	1,477	1,330 (90.1%)	108 (7.3%)	3 (0.2%)	1 (<0.1%)	1 (0.1%)	35 (2.4%)	25 (1.7%)	1,452 (98.3%)	158 (10.7%)		
Census Block Group 972800-4	1,685	1,511 (89.7%)	74 (4.4%)	11 (0.7%)	7 (0.4%)	2 (0.1%)	80 (4.7%)	72 (4.3%)	1,613 (95.7%)	196 (11.6%)		
Census Block Group 010100-2	1,151	1,079 (93.7%)	41 (3.6%)	0 (0.0%)	5 (0.4%)	0 (0.0%)	26 (2.2%)	35 (3.0%)	1,116 (97.0%)	79 (6.9%)		
Census Block Group 010100-4	1,677	1,575 (93.9%)	55 (3.3%)	2 (0.1%)	10 (0.6%)	0 (0.0%)	35 (2.1%)	37 (2.2%)	1,640 (97.8%)	114 (6.8%)		

#includes individuals reporting "some other race" or "two or more races."

*Total minority population includes all individuals reporting a race other than white plus all individuals reporting both white race and Hispanic or Latino ethnicity (data not shown). This is calculated by subtracting the total non-Hispanic white population (data not shown) from the total population. All other races with Hispanic or Latino ethnicity are included in the race figures used to determine total minority population.

Source: US Census Bureau (2010) Summary File 1 Total Population (100-Percent Data), Table P8. – RACE and Table P9. – HISPANIC OR LATINO, AND NOT HISPANIC OR LATINO BY RACE

b) Age of Population

Table IV-2 shows information about the relative age of the project area's population. The median age of all of the Census Block Groups in the project area is relatively high, reflecting West Virginia's high median age overall. Median age of the U.S. population is 36.8 years, while West Virginia's median age is 41.3 years. Most of the Block Groups in the project area have a slightly higher percentage of residents aged 65 years or older than in Jefferson County as a whole, but all have a lower percentage than for West Virginia as a whole. Based on Census data and field observation, there are no defined communities or areas composed primarily of older residents in the project area. Most of the Block Groups in the project area also have a slightly higher percentage of residents aged 19 years or younger than for the county or state as a whole.

Table IV-2: Population by Age Group and Median Age (2010)

Area	Total Population	Percent ≤ 19 Years	Percent ≥ 65 Years	Median Age
West Virginia	1,852,994	23.7	16.0	41.3
Jefferson County	53,498	27.0	11.8	41.1
Census Block Group 972800-1	1,565	25.6	13.2	43.8
Census Block Group 972800-3	1,477	29.0	11.9	40.8
Census Block Group 972800-4	1,685	30.3	8.9	40.5
Census Block Group 010100-2	1,151	27.5	14.6	44.4
Census Block Group 010100-4	1,677	27.5	14.6	44.4

c) Growth Trends

As shown in Table IV-3, the population of Jefferson County has grown steadily in recent decades, growing notably faster than West Virginia's population as a whole. Several new residential subdivisions have developed in and near the project area in recent decades. Jefferson County's location at the fringes of the Washington DC metropolitan area, within

commuting distances from employment centers in the Washington area, has contributed to its population growth. This factor will continue to influence growth in Jefferson County and the surrounding area, with the West Virginia Bureau of Business and Economic Research predicting continued, but more moderate growth in Jefferson County through 2030. The state’s overall population, however, is anticipated to begin to decline after 2020.

Table IV-3: Population Projections

Area	Year	Population	Period	Percent Change
West Virginia	1990	1,793,477	--	--
	2000	1,808,344	1990-2000	+8.3
	2010	1,852,994	2000-2010	+2.5
	2020*	1,857,795	2010-2020	+0.3
	2030*	1,833,536	2020-2030	-1.3
Jefferson County	1990	35,926	--	--
	2000	42,571	1990-2000	+18.5
	2010	53,498	2000-2010	+25.7
	2020*	59,552	2010-2020	+11.3
	2030*	65,144	2020-2030	+9.4

* Projected population

Source: US Census Bureau (2010) Summary File 1 Total Population (100-Percent Data); West Virginia University Bureau of Business and Economic Research (2014), Population Trends in West Virginia Through 2030

2. ECONOMIC ENVIRONMENT

Data herein is taken from the 2012 Economic Census and 2014 American Community Survey, collected by the US Census Bureau.

As shown in Table IV-4, a much higher proportion of Jefferson County working-age residents are in the labor force than in West Virginia as a whole. Jefferson County’s labor force participation is also slightly higher than the national rate. Jefferson County’s unemployment rates are also relatively low compared with West Virginia and the nation as a whole. Recent unemployment rates are slightly higher than they were a decade ago, but the nationwide economic recession in the intervening years has strongly influenced these trends.

Unemployment rates in Jefferson County continue to decline from the higher rates experienced between 2009 and 2011.

Table IV-4: Employment Status and Unemployment Rates

Area	Population 16 Years and Older in Labor Force	Unemployment - 2004 Annual Average	Unemployment - 2014 Annual Average	Unemployment - March 2015
United States	63.5%	5.5%	6.2%	5.5%
West Virginia	54.2%	5.3%	6.5%	7.7%
Jefferson Co.	67.4%	3.4%	4.5%	4.8%

Source: US Census Bureau 2010-2014 American Community Survey Table B23001. – EMPLOYMENT STATUS FOR THE POPULATION 16 YEARS AND OVER; U.S. Bureau of Labor Statistics, 2015.

a) Income and Housing Characteristics

As shown in Table IV-5, the median household incomes in the project area Block Groups are generally higher than for Jefferson County as a whole and are much higher than the state’s median household income. The highest median household income in the project area is in Block Group 972800-1 (\$93,750), which corresponds to the area east of US 340. Median household income in Block Group 972800-3 (\$53,250) is lower than the county as a whole, but is still 28 percent higher than the state’s overall median household income.

The U.S. Department of Health and Human Services (HHS) establishes annual poverty guidelines, defining household income thresholds for determining a household’s poverty status. These income thresholds are reported by household size. According to the 2014 American Community Survey, there is an average of 2.63 persons per household in Jefferson County. The HHS 2014 household income threshold for poverty status was \$15,730 for a two-person household and \$19,790 for a three-person household. At the block group level, the American Community Survey reports the number of households with incomes at a range of levels—it reports the number of households with incomes under \$10,000, the number with incomes between \$10,000 and \$14,999, the number with incomes between \$15,000 and \$19,999, etc. For this analysis, all households with incomes in these three lowest categories (i.e., households with incomes under \$20,000) were counted as falling below the poverty threshold. Table IV-5 shows the percent of households in each block group with incomes falling below this level.

The pattern of households with incomes below the poverty level is similar to the pattern of median household incomes in the project area. Block Group 972800-3 has the highest concentration of households with incomes below the poverty level (21.0 percent below poverty level) in the project area, but this is lower than the statewide percentage of 24.4 of households below the poverty level. Based on the current Census data and on field reviews, low-income residents are generally not concentrated in specific locations in the project area.

Table IV-5: Income and Housing Characteristics

Area	Median Household Income	Percent of Families with Income Below Poverty Level	Renter-occupied Housing Units	Vacant Housing Units	Median Value of Owner-occupied units	Median Year Housing Structures Built
West Virginia	\$ 41,576	24.4%	30.9%	13.4%	\$ 100,200	1973
Jefferson County	\$ 66,205	13.2%	21.0%	9.6%	\$ 204,900	1986
Census Block Group 972800-1	\$ 93,750	10.2%	12.6%	10.1%	\$ 244,100	1989
Census Block Group 972800-3	\$ 53,250	21.0%	17.6%	6.9%	\$ 193,900	1992
Census Block Group 972800-4	\$ 83,011	0.0%	10.8%	4.8%	\$ 306,000	1992
Census Block Group 010100-2	\$ 93,173	20.0%	12.1%	9.9%	\$ 370,800	1992
Census Block Group 010100-4	\$ 68,914	6.1%	20.1%	10.1%	\$ 369,000	1978

Source: US Census Bureau 2010-2014 American Community Survey Table B19001. – HOUSEHOLD INCOME IN THE PAST 12 MONTHS; Table B25077 – MEDIAN VALUE OF OWNER-OCCUPIED HOUSING UNITS; Table B25035 – MEDIAN YEAR STRUCTURE BUILT; US Census Bureau (2010) Summary File 1 Total Population (100-Percent Data), Table H1 & H3 – OCCUPIED STATUS

Most of the housing in the project area is owner-occupied, with smaller proportions of renter-occupied housing units than Jefferson County or West Virginia as a whole. The proportion of vacant housing units is generally similar to or lower than the county as a whole, and lower than the state as a whole. The median values of owner-occupied housing units in the project area are all much higher than for West Virginia as a whole. Most of the project area has higher median house values than Jefferson County as a whole, which has a median house value of \$204,900. The exception is Census Block Group 972800-3, which has a slightly lower median house value (\$193,900). This is consistent with the somewhat lower median household income and higher proportion of households below the poverty level in this block group. Housing units in the project area are typically newer than for Jefferson County as a whole (median year built 1986) and much newer than for West Virginia as a whole (median year built 1973).

b) Project Effects on the Local Economy

According to *Envision Jefferson County*, lack of road improvements has been a restraint on the economic growth of Jefferson County. Better access via interstate highways and other four-lane roadway facilities would make Jefferson County more attractive to prospective businesses and industries. These improvements could help support planned industrial and commercial growth, particularly in the large area located at the south end of the project area, west of the existing US 340, which is zoned for these types of land uses. Because of its geographic location, Jefferson County has the potential to become a point of distribution for several metropolitan areas located within a 300-mile radius. US 340 improvements would be consistent with the *Envision Jefferson 2035 Comprehensive Plan*.

Improved access through Jefferson County is likely to help promote local tourist attractions such as Charles Town Races, Harpers Ferry National Historical Park, the Jefferson County Mountain Heritage Arts and Crafts Festival, the National Fisheries Center, and Summit Point Raceway. As a result of improving US 340 and providing better access to these attractions, tourism may become more important to the local economy.

Small businesses located within the community of Rippon may be affected by the reduction in through-traffic due to the relocation of US 340 to outside of the community. The majority of these businesses are likely to primarily serve the local residents with only a small percentage of their business generated by through-traffic. The slight effect of the relocation of US 340 is

balanced by the improved traffic conditions within Rippon. Decreased traffic makes the businesses in the community of Rippon more easily accessible.

Any effect on the businesses in the community of Rippon that may occur may be more than compensated for by the economic benefits of increased tourism and expected residential growth and its attendant taxes. The economic benefits provided by the proposed improvements are not expected to substantially differ between build alternates.

3. LAND USE PLANNING

For a county government to implement land use regulations, the West Virginia Code requires that the county enact and maintain a comprehensive plan. The *Envision Jefferson 2035 Comprehensive Plan* is Jefferson County's comprehensive plan. It states that the county is in transition—while, for most of its history, Jefferson County has been an agricultural community, it is becoming increasingly developed. The 50 miles separating Jefferson County from the Washington DC metropolitan area allowed the rural traditions and agricultural landscape to remain intact until the late 1980s. Since that time, the willingness of workers to commute further, the expansion of the boundaries of the DC metro areas, the addition of more commuter trains and the attractiveness of Jefferson County as a place to live have resulted in substantial population growth. The population is anticipated to continue its steady growth over the next two decades. In light of this continued growth, Jefferson County seeks to shape future growth in a manner that preserves the most important features of Jefferson County: the rural landscape, the natural beauty of the rivers, the rolling terrain and the strong sense of community.

Jefferson County's zoning ordinance identifies five zones in the county. Along the east side of US 340, the project area is classified in the Rural zoning category. Along the west side of US 340, the project area includes Industrial-Commercial and Rural zoning designations, with the area around Rippon designated in the Village zoning category. Reflecting this zoning pattern, current land use in the project area encompasses agriculture, residential, and sparse commercial and industrial development.

The comprehensive plan's future land use guide designates planned future land uses throughout the county. The area east of US 340 in the project area is designated for Rural/Agriculture uses and Large Lot Residential uses. The future land use guide designates much of the area along and to the west of US 340 and east of the Norfolk Southern Railroad as a

Preferred Growth Area (PGA), including a mix of Industrial or Commercial uses, Mixed Use Residential/Commercial uses, and Low Density Residential uses. This area is called the US 340 South PGA and the plan acknowledges that the improvements to US 340 have the potential to create some growth pressures along this corridor. PGAs are areas that are outside current urban growth boundaries where water and sewer are either currently available or could be made available within the next two decades. Public water and sewer are not currently available in the US 340 South PGA, but the plan indicates that localized water and sewer services could be developed to support growth in this area. The plan indicates that a small area plan for this area may need to be developed, depending on the alignment of this project's Preferred Alternative.

a) Impacts to Land Use

All four of the build alternates considered are on new alignment for a portion of their length. All four follow a roughly similar alignment and, from a land use planning perspective, are likely to affect the area similarly. As indicated in the *Envision Jefferson 2035 Comprehensive Plan*, the project has the potential to encourage additional growth along the US 340 corridor. Because the alignments of the four build alternates are similar, each is likely to stimulate a similar pattern of growth along the corridor. The No-Build Alternative will not result in any land use changes.

The comprehensive plan's future land use guide designates much of the area along and to the west of US 340 in the project area as a PGA, using a representative alignment for the US 340 improvements as the eastern boundary for the PGA. The intention is to establish this area as an area that could support growth in a mix of industrial, commercial and residential land uses over the next two decades, even though public water and sewer are not currently available. The plan indicates that localized water and sewer services could be developed to support growth in this area. The plan also indicates that a small area plan for this area may need to be developed, depending on the alignment of this project's Preferred Alternative. Any of the four build alternates under consideration would support the plan's vision for this area.

4. RELOCATION IMPACTS

The potential residential and business relocations vary by alternate. Table IV-6 displays by alternate the number of relocations by type and the total right of way required. The number of

relocations is based on alternate alignments and conceptual design over planimetric basemaps provided.

Table IV-6: Relocations by Alternate

Alternate	Relationship to Rippon Village District	Right of way (Acres)	Number of Relocations			
			Site-Built Residences	Mobile Homes	Business	Minority Owned
4	bypasses to the East	112	10	0	4	0
4A (Preferred)	bypasses to the East	116	3	0	4	0
4B	bypasses to the East	120	5	0	4	0

As shown in Table IV-6, Alternate 4A (Preferred) requires the fewest number of relocations. Alternate 4 has a total of 14 relocations, which includes 10 residences and four businesses. Alternate 4A has a total of seven relocations, including three residences and four businesses. Alternate 4B has a total of nine relocations, including five residences and four businesses.

It is the policy of the WVDOH to ensure that comparable replacement housing is available prior to construction of state- and federal-assisted projects. The acquisition and relocation program is undertaken in accordance with the *Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970*, as amended. Replacement assistance and compensation are offered regardless of race, sex, color, or national origin. Right of way agents are available to address specific questions and details of the state’s relocation assistance program at public meetings for the project.

A review of data from the Multiple Listing Service during June 2015 showed that there are over 150 residential properties on the market in the two zip codes in the project vicinity (25414 and 25446). The average list prices in these two zip codes are over \$300,000, somewhat higher than Jefferson County’s median house value of \$223,700, but there are numerous properties available with list prices at or below the county’s median house value. There appeared to be an adequate number of properties on the market with a variety of features in all price ranges. Although there is not a large number of rental properties available in the area, there are typically five to ten available rental properties in the area, with monthly rents ranging from just under \$1,000 to just over \$2,000.

There is adequate land available for the relocation of the impacted businesses. There are areas at the south and north ends of the project that are zoned for commercial land uses. For several of the potentially impacted businesses, it may be possible for the business to relocate to a different location on the remaining property. For all cases, there should be adequate locations available nearby to re-establish the business.

If necessary, the WVDOT will implement a Last Resort Housing Program. This program ensures that decent, safe, and sanitary housing is made available to all relocatees.

5. COMMUNITY FACILITIES AND SERVICES

a) Neighborhoods and Community Cohesion

The project area is generally rural in nature with several large farms scattered throughout. The two communities in the project area are Rippon and Wheatland. Rippon is generally centered around the intersections of US 340 and CR 19 and 21. Wheatland is located in the vicinity of the intersection of US 340 with CR 340/2.

None of the build alternates under consideration will have a notable effect on community cohesion. By relocating the existing US 340 out of the Village of Rippon Historic District to a new alignment outside of the district, community cohesion could be positively affected. Through-traffic will no longer have to pass through the center of the Village of Rippon; all of the alternates relocate US 340 outside of the central village district.

The small portion of each alternate in Clarke County, Virginia will not have any effect on community cohesion. The improvements proposed for the section of the project within Clarke County will not require new right of way. All widening will be constructed within the existing right of way for each build alternate.

Within the Wheatland area, the majority of the development is west of the existing US 340. In this area, all of the build alternates are located near the existing US 340; for this reason, none will greatly affect community cohesion in this area. The No-Build Alternative will have no effect on community cohesion.

b) Utilities

The communities and rural development within the project area are not serviced by public water supplies or sanitary sewer. It can generally be assumed that each residence has a water

supply from a well or cistern and an on-site sewage disposal system. FirstEnergy provides electrical power in the project area, Frontier Communications provides landline telephone service, and Comcast provides cable service.

Several single-family residences or businesses in close proximity, such as mobile home parks and some areas within Rippon, rely on a single water supply and/or sewage disposal system. The Rainbow Road Club has a non-community water supply that serves both the food establishment and a single-family residence. John's Family Restaurant also has a non-community water supply that serves the food service establishment and several single-family homes. Rippon Mobile Home Park has a well that serves the entire park. The location of the sewage disposal service for the park is unknown. Dave's Auto Sales and Service has a well and sewage disposal system which serves the auto service and an apartment located above. The Rainbow Diner Truck Stop/Rainbow Mobile Home Park has a non-community water supply that serves the food service establishment, the mobile home park, and two single-family residences.

Impacts to existing utilities in the project area are considered low to moderate. Over a third of the project length will be on new alignment where no impacts to existing utilities is expected. Where the project follows the existing US 340 alignment closely, impacts on existing overhead utility lines and poles can be anticipated to adequately accommodate the proposed typical sections and appropriate clear zone. Actual impacts to existing utilities will be determined during development of construction plans for the preferred alternate.

c) Education

There are no educational facilities located within the project area. In West Virginia, the project area lies within two elementary school districts. West of the Norfolk Southern Railroad, students attend the South Jefferson Elementary School. East of the railroad, Page Jackson Elementary covers grades K-3 and Wright Denny Elementary covers grades 4-6. The project area is within the Charles Town Middle School district, which serves grades 7-9. Jefferson County High School and Washington High School both serve Jefferson County. Washington High School is immediately north of the project area along US 340 in close proximity to the middle school.

American Public University System, headquartered in Charles Town, consists of two online universities: American Public University and American Military University. The school was

founded in 1991 has no physical facilities within the project area. Other nearby institutions are found in Martinsburg and Shepherdstown to the northwest and north, respectively.

d) Emergency Services

Law enforcement in Jefferson County is provided by the municipal police forces of Charles Town, Harpers Ferry/Bolivar, Ranson, Shepherdstown, and the countywide services of the State Police and the County Sheriff's Department. Municipal police may respond to emergencies outside of the jurisdiction based on urgency and the availability of other law enforcement personnel. Charles Town is the municipal police force closest to the project area. The Citizen's Fire Company, located in Charles Town, and the Independent Fire Company, located in Ranson, provide fire service for the project area. The Independent Fire Company also provides emergency medical service. The Jefferson Medical Center in Ranson is the closest hospital to the project area.

The proposed project will not directly affect any emergency facilities. By upgrading this segment of US 340, accessibility to the area for emergency reasons will be improved over the existing condition, improving emergency response times. The effect on emergency services will not vary among the build alternates under consideration.

e) Other Community Facilities

Other community facilities within the project area include two churches and a post office, which is located off of US 340, north of the community of Rippon. There are no libraries, parks, or recreation areas within the project area. The existing rail line, churches, and the post office in the project area will not be affected by any of the remaining alternates evaluated.

6. ENVIRONMENTAL JUSTICE

Executive Order 12898 protects minority and low income populations from experiencing disproportionately high, adverse impacts from federal actions. If disproportionately high and adverse impacts are anticipated to occur, the action cannot be completed unless it can be proven that there is a substantial need for the project, that avoidance or mitigation of the impacts is not practical, that it would have increased adverse social, economic, environmental, or human health impacts that are more severe, or that it would result in increased costs of extraordinary magnitude.

A three part screening methodology was used to determine whether environmental justice populations might be impacted by the project:

- Census data for block groups within the project area were assembled to highlight any potential concern areas with high minority or low income population concentrations. This information was presented in Section IV.A.1 and IV.A.2 with key findings repeated below.
- A windshield survey of the project area was conducted to look for visual indicators of the potential presence of low income or minority populations. Although this is a less precise measure than conducting community surveys to apply specific thresholds set by the US Department of Health and Human Services, it was determined to represent an appropriate effort in concert with the other two components of the screening.
- For the Preferred Alternate 4A, analysts assessed each potential residential relocation to determine whether it is owned by a minority or low income household. For businesses, this also included a look at the type services rendered to determine if the business serves a niche within the community; that is, would its relocation or loss have an undue indirect effect on area residents?

The study area is comprised of a predominantly white, non-Hispanic population, at higher proportions than for the county as a whole. Based on Census data and field observation, there do not appear to be any concentrated areas of minority residents in the project area. Therefore, no disproportionately high or adverse impacts to minority populations are expected to result from the No Build or any of the build alternatives.

Census data show that the median household incomes for project area block groups are generally higher than the statewide or countywide averages. Two block groups have somewhat higher concentrations of households with incomes below the poverty level. Based on Census data and field observation, there do not appear to be any concentrated areas of low income residents within the project area. Therefore, no disproportionately high or adverse impacts to low income populations are expected to result from the No Build or any of the build alternatives.

From a relocation perspective, three homes and four businesses will be affected by the Preferred Alternate (Alternate 4A).

- Of these, none are minority owned.
- Two homes are located in the Ryan's Glen neighborhood, assessed at over \$300,000 each. The third is on Meyerstown Road; it is unclear that this home is currently inhabited.
- Affected businesses include two restaurants, a car dealership and service shop, and a seasonal produce stand. Although two of the three restaurants in the project area will be affected, there are numerous restaurants in nearby Berryville, Summit Point, and Ranson. Likewise, the car sales/service shop is the only service provider of its kind within the 5 mile project area; however, numerous similar businesses exist in Ranson, approximately 5 miles to the north. Another seasonal produce stand exists at the opposite end of the project area.

The extent of relocations is not expected to result in disproportionately high or adverse impacts to any environmental justice populations. All right-of-way acquisitions and displacements will follow the *Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970*, as amended, and applicable WVDOH regulations. Replacement assistance and compensation are offered regardless of race, sex, color, or national origin.

7. TRANSPORTATION FACILITIES

Beyond highway travel, rail access through Jefferson County is provided by Norfolk Southern Railroad and the CSX Transportation System. Commuter bus services are also part of the transportation network of Jefferson County. The Eastern Panhandle Transit Authority provides public bus service in the Martinsburg area and in various areas throughout Berkeley and Jefferson counties, using US 340 north of the project area.

Any of the build alternates will have a positive effect on accessibility by improving north-south access through Jefferson County. Each provides improved access to jobs, goods, facilities, and services in Charles Town and the surrounding area. Each also improves access to east-west roadways such as I-66 and I-70 that connect to the major metropolitan areas of Washington DC and Baltimore, Maryland.

B. HISTORIC AND ARCHAEOLOGICAL RESOURCES

Various historic and prehistoric investigations of the project area were completed during the late 1990s and early 2000s, resulting in the documentation of 72 resources over 50 years in age. This effort identified four National Register of Historic Places (NRHP) listed or eligible historic districts plus three listed and nine eligible individual properties. A 2015 architectural survey update for the project area was conducted to 1) update the results of earlier surveys to include any previously unrecorded resources now of 50 years of age or older; 2) provide recommendations on the NRHP eligibility of the newly recorded resources; and 3) update information on previously recorded resources including recommendations on NRHP eligibility status and any potential changes to NRHP boundaries of individual resources or historic districts.

The assessment of cultural and historic resources is part of compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966 and its implementing regulations, 36 CFR Part 800, as amended. The investigations were conducted according to the Secretary of the Interior's *Standards and Guidelines for Historic Preservation Projects* (Federal Register, Vol. 48, No. 190, September 1983, P. 44716-44742, et seq.), and the scope and products of the investigation meet the guidelines issued by the West Virginia Division of Culture and History, State Historic Preservation Office (WVSHPO) (WVSHPO 2001, 2005).

This section contains a general summary of the findings of the process; each listed/eligible resource is discussed in greater detail in Section IV.B.3 (archaeological sites) and IV.B.4 (aboveground resources). To date, consultation regarding the eligibility of resources has occurred with SHPO; effects determinations are being coordinated with the SHPO concurrent with the publication of this SDEIS. A Memorandum of Agreement will be developed, detailing any agreed upon mitigation measures for adverse effects on historic properties associated with the Preferred Alternative.

1. OVERVIEW OF EFFECTS CRITERIA

In accordance with the NHPA of 1966, the requirements of 36 CFR 800, and Executive Order 11593, historic and archaeological resources were identified and the impacts evaluated for the three remaining build alternates considered for the project. These resources may also be protected under Section 4(f) of the US Department of Transportation Act, as discussed in Chapter V.

Based on consultation with WVSHPO, a preliminary determination of effect from the previously considered build alternates in the DEIS was also made for each individual property and district listed or eligible for listing on the NRHP (See Appendix B in DEIS for correspondence). One of three possible preliminary determinations were provided for each of the previously considered build alternates, including Alternate 4, in conjunction with each historic resource: no effect, no adverse effect, or adverse effect. As additional build alternates were added following this phase in the Section 106 consultation process, additional consultation with the SHPO regarding effects on historic resources is ongoing concurrent with the publication of this SDEIS.

An alternate is considered to have an effect on a historic resource whenever any condition of the alternate causes or may cause any change, beneficial or adverse, in the quality of the characteristics that qualify the property to meet the criteria of the NRHP. An adverse effect will occur when an alternate diminishes the integrity of the resource's location, design, setting, materials, workmanship, feeling, or association of the property or district that contributes to its significance in accordance with the NRHP criteria. Adverse effects on NRHP sites may occur under any one or more of the following conditions:

- Physical destruction, damage, or alteration of all or part of the property.
- Isolation of the property from or alteration of the character of the property's setting when the character contributes to the property's qualification for the National Register.
- Introduction of visual, audible, or atmospheric elements that are out of character with the property or alter its setting.
- Neglect of a property resulting in its deterioration or destruction.
- Transfer, lease, or sale of a property without adequate conditions or restrictions regarding preservation of the property's significant historic features.

The effects of an alternate that will otherwise be found to be adverse may be considered as being not adverse under the following conditions:

- When the historic property is of value only for its potential contribution to archaeological, historic, or architectural research, and when such value can be

substantially preserved through the conduct of appropriate research, and such research is conducted in accordance with applicable professional standards and guidelines.

- When the undertaking is limited to the rehabilitation of buildings and structures and is conducted in a manner that preserves the historic and architectural value of the affected historic property through conformance with the Secretary of the Interior's *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings*.
- When the undertaking is limited to the transfer, lease, or sale of a historic property, and adequate restrictions or conditions are included to ensure preservation of the property's significant features.

2. CONSULTATION PROCESS

The project has been coordinated through the WV SHPO in order to satisfy requirements of the Section 106 consultation process. Previous correspondence with the WV SHPO from the DEIS can be found in Appendix B on the compact disk included in the back, inside cover of this document. In this correspondence, the WV SHPO generally concurred with the eligibility and effects findings presented in the early reports for the original build alternates considered up to 2001. Since the 2001 DEIS was approved, additional coordination, meetings, studies, and correspondence has occurred as listed below:

- **January 15, 2002** Public Hearing,
- **July 23, 2002** Public Workshop,
- **December 2001** *Criteria of Effects Report Alternates 6 and 8* – Coastal Carolina Research,
- **May 2002** *Visual Effects Balloon Test Alternative 8*, Coastal Carolina Research,
- **September 2002** *Cultural Resource Studies Alternatives 8 and 9*, Coastal Carolina Research,
- **December 2002** *Cultural Resource Study of Proposed Bullsken Run Rural Historic District Alternatives 8 and 9*, Coastal Carolina Research,

- **December 2003** *Cultural Resource Studies Alternatives 8 and 9*, Coastal Carolina Research
- **May 2004**..... *Criteria of Effects Report Alternative 4*, Coastal Carolina Research,
- **September 24, 2012**.... Public Workshop
- **June 3, 2013**..... Public Hearing
- **May 29, 2014**..... Letter Report: *No Effect for Archaeological Resources*, Coastal Carolina Research,
- **June 25, 2014**..... WV SHPO reply letter regarding review of the letter report on potential effects,(see Appendix B),
- **July 8, 2014** WV SHPO reply letter regarding the sinkhole investigations and potential effects on Kabletown RHD and Olive Boy Farm (see Appendix B),
- **July 21, 2014** US Department of Transportation, Federal Highway Division response letter to June 2014 letter from SHPO (see Appendix B),
- **April 2015**..... *Archaeological Assessment of Site Potential Alternatives 4, 4A, 4B, and 4C*, Coastal Carolina Research,
- **June 2015**..... *Architectural Survey Update and Historic Property Boundary Review*, Coastal Carolina Research,
- **June 24, 2015**..... WV SHPO reply letter concurring with findings of the archaeological assessment for site potential alternatives 4, 4A, 4B, and 4C (see Appendix B),
- **August 10, 2015** WV SHPO reply letter concurring with eligibility findings for architectural resources and requesting additional information (see Appendix B),
- **October 8, 2015**..... Virginia Outdoors Foundation (VOF) response of no significant conflict with the proposed project (see Appendix B),

- **October 9, 2015**..... WV SHPO reply letter concurring with findings of the *Architectural Survey Update and Historic Property Boundary Review*, Coastal Carolina Research (see Appendix B),
- **November 18, 2015**..... WV SHPO reply letter of concurrence with assessment of cemetery resource as not eligible (see Appendix B).
- **November 24, 2015**..... VA DHR letter reply finding the project will have a “No Adverse Effect” on Long Marsh Run Historic District (See Appendix B).

Additional consultation will occur following approval of this SDEIS for the US 340 Improvements project. Effect determinations are being coordinated with the SHPO concurrent with the publication of this SDEIS. A Memorandum of Agreement will be developed, detailing any agreed upon mitigation measures for adverse effects on historic properties associated with the Preferred Alternative.

3. ARCHAEOLOGICAL SITES

There are no known archaeological sites in the project area listed on the NRHP. To determine the potential to encounter previously undiscovered sites, analysts ran a predictive model and conducted field surveys for a representative sample of the Area of Potential Effect (APE), which covered a 350-foot wide corridor for Alternates, 4, **4A (Preferred)**, 4B, and 4C. This predictive model was approved by the WVSHPO on February 17, 1999.

The WVSHPO reviewed and concurred with the *Phase I Cultural Resource Investigation Architectural Survey and Archaeological Assessment, Proposed Improvements to US 340 Jefferson County, West Virginia* (May 1997) and the *Predictive Model Addendum* (June 1997). The archaeological assessment of the predictive model was created to guide future archaeological research. Based on distance to water, soil characteristics, and level of slope, it is estimated that approximately 65 percent of the project area has a high probability of containing archaeological sites while 20 percent has a medium probability and 15 percent a low probability of containing archaeological sites. Paleoindian sites are likely to be rare in this project area. Early and Middle Archaic sites are likely to consist of lithic scatters. Hunting and resource procurement camps are likely to be present from all time periods. Archaeological sites from the period of early settlement in the eighteenth century through the post-bellum period can be anticipated in the project area. There may be archaeological components associated with standing structures

and along old roadbeds. Additionally, several Civil War skirmishes occurred in the project area and there may be remaining archaeological evidence of these conflicts.

In consultation with the WVSHPO, the WVD0H determined that an archaeological survey of from five to seven percent of each of the high-probability, medium-probability, and low-probability areas within the selected alignments was needed to test the predictive model. The predictive model was tested and the findings reported in the *Archaeological Sample Survey Report* (August 1999). Areas were selected randomly for survey to obtain adequate coverage of the corridors and to take advantage of the natural landforms. Approximately 40 acres were examined during the sample survey. The total acreage represents five percent of each of the three probability areas within each corridor.

The findings from the sample survey recorded eight sites. Of these eight, three were discovered within the Ripon Lodge Farm National Register property boundary, one discovered on property associated with Olive Boy Farm, two were discovered on the property associated with the Wheatlands Farm, and two isolated finds were discovered in a low-probability area near the northern end of the project area. The survey and findings included in the report where concurred with by the WVSHPO in letters dated November 23, 1999 and December 7, 1999. The findings of this survey recommend further investigations for four archaeological sites should they be impacted by the Preferred Alternative. These four sites have the potential to provide early historic settlement information for the project area. Three of the four sites are located within the Ripon Lodge National Register property and appear to be contributing elements while the remaining site is located on the Wheatlands Farm.

In 2003, Alternate 4 was identified as the Preferred Alternate. Subsequently, after a period of dormancy with respect to potential project funding, and as part of renewed efforts under a Supplemental Draft Environmental Impact Statement, seven new build alternates (4A, 4B, 4C, 9, 10A, 10B, and 11) were added to the study.

In 2014, additional investigation was undertaken for two sinkholes: one within the boundary of the NRHP-eligible Olive Boy Farm and one within the qualifying landscape of the NRHP-eligible Kabletown Rural Historic District. Field testing did not reveal any archaeological sites or isolated finds at either location. This effort is documented in a *Letter Report: No Effect on Archaeological Resources* dated May 29, 2014 to Mr. Ben Hark, Environmental Section Head WVD0H. The WVSHPO concurred with the assessment on July 8, 2014.

An *Archaeological Assessment of Site Potential* (April 2015) has been prepared for the current variations of Alternate 4 (Alternates 4, 4A, 4B, and 4C). The WVSHPO concurred with these findings in their letter dated June 24, 2015.

a) Project Effects on Archaeological Sites

Four potentially NRHP-eligible archaeological sites have been identified based on investigations to date: three sites associated with the Ripon Lodge NRHP-listed property and a fourth site within the Wheatlands Farm.

Alternates 4, **4A (Preferred)**, and 4B will not impact the Ripon Lodge property or the contributing sites. The final determination of effect for these alternates to these sites is “no adverse effect.”

Wheatlands Farm contains one site that may be considered eligible for listing on the NRHP as a historic archaeological site; alternates 4, **4A (Preferred)**, and 4B will not impact this farm. The final determination of effect for these alternatives is “no effect.”

As none of the remaining build alternates impact the Wheatlands archaeological site or any of the sites identified on Ripon Lodge, no additional work is proposed at these sites.

Programmatic language will be included in the project’s Memorandum of Agreement for Cultural/Historic Resources that describes how any additional archaeological resources discovered during construction should be addressed.

4. HISTORIC ARCHITECTURAL RESOURCES

The WVSHPO reviewed and concurred with the *Phase I Cultural Resource Investigation Architectural Survey and Archaeological Assessment, Proposed Improvements to US 340 Jefferson County, West Virginia* (June 1997). This survey identified the historic resources within the APE for aboveground resources, which covers the entire project area. Based on this survey an “Architectural Evaluation” was prepared to evaluate the historic properties and districts and determine which properties are eligible for listing on the NRHP. The SHPO concurred with the eligible property and boundary recommendations made in the Architectural Evaluation on January 7, 2000.

Additional Phase I cultural resource investigations and architectural evaluations were prepared in response to comments provided at the January 2002 public hearing. The SHPO

attended a field review on April 11, 2003; SHPO concurred with the eligible property and boundary recommendations presented in the December 2003 *Cultural Resource Study of the Proposed Bullskin Run Rural Historic District*.

a) 2015 Survey Update

Additional effort was undertaken in 2014-2015 to provide an updated survey of historic architectural resources in the APE. Of the 72 previously recorded resources documented during the 2015 survey, eight have lost the primary resource and are listed as no longer extant; ten have lost secondary resources such as barns, smaller outbuildings or tenant houses; eight have had notable alterations such as the addition of porches, modern siding, or garages or the loss of components such as porches; and two are in abandoned and in deteriorating condition. None of these changes affect the original eligibility determinations or boundaries of previously recorded individually eligible or listed resources or eligible or listed districts. One previously surveyed resource (St. John's Episcopal Church) is newly recommended as eligible under Criterion C for its architecture.

During the supplemental survey, ten new resources were recorded, which include a former store, a diner, a cemetery, a farm complex, a post office, and five dwellings. These resources have dates ranging from ca. 1850 to ca. 1965. Eight of the newly recorded resources are recommended as not individually eligible for the NRHP and not contributing to a historic district. Two of the newly recorded resources, the Adams House (JF-1224) and the McPherson-Adams House (JF-1225), are recommended as contributing resources to the Kabletown Rural Historic District. The ca. 1850 McPherson-Adams House, the oldest section of which is a one-story side-gabled stone dwelling, is recommended as contributing and also as potentially individually eligible for the NRHP.

b) NRHP Listed & Eligible Resources in the APE

Table IV-7 summarizes the resources within the APE that have been identified as NRHP listed or eligible for NRHP listing. Resources inset beneath a historic district are contributing to that district as well as being individually listed/eligible. It should be noted that large historic districts cover approximately 90% of the project area.

Table IV-7: Listed & Eligible Historic Resources

Resource	Eligibility	Description
Long Marsh Run Rural HD	Listed	16 sq mi rural landscape with 366 contributing resources
Kabletown Rural HD	Eligible (A, C)	18 sq mi rural landscape with 25 contributing resources
Village of Rippon HD	Eligible (A, C)	Commercial crossroads community with 34 contributing resources
St. John's Episcopal Church**	Eligible (C)	1890 Gothic Revival church
William Grubb Farm*	Listed (A, C)	1763 "stone-ender" house & farm
Olive Boy Farm	Eligible (C)	1858 Italianate farmhouse
Glenwood	Eligible (C)	1845 Federal farmhouse
Wayside Farm	Eligible (C)	1800s Federal farmhouse
Ripon Lodge	Listed (A, C) Eligible (D)	1833 Federal house & archaeological sites
Byrdland*	Eligible (A, C)	1850s I-house & farm
Wheatland Farm*	Eligible (D)	Archaeological site on 1800s plantation complex
Straithmore*	Eligible (A, C)	1830s Greek Revival house & farm
Norfolk Southern Railroad*	Eligible (A)	1878 railroad line
McPherson-Adams House	Eligible (A, C)	1850s farmhouse
Bullskin Run Rural HD	Eligible (A, B, C)	20 sq mi rural landscape with 19 contributing resources
Berry Hill	Eligible (C)	1800 Federal house
Beverley Farm	Listed (C)	1800 Federal house

* Resource also is a contributing element within the Bullskin Run Rural Historic District

** Resource is also a contributing element within the Village of Rippon Historic District

The historic architectural resources noted above are shown in Exhibit IV-1 through Exhibit IV-4. Exhibit IV-1 shows the extent of the Kabletown Rural Historic District, which covers a large area that extends far to the east of the project area boundary. Exhibit IV-2 shows the extent of the Bullskin Run Rural Historic District, which covers a large area extending far west of the project area boundary. Exhibit IV-3 zooms in to the project area, showing the relationship between the remaining build alternatives and adjacent portions of both larger

historic districts. Exhibit IV-4 identifies the smaller NRHP listed or eligible resources within the project area, showing the relationship between these sites and the remaining build alternatives.

Two of the newly recorded resources identified in the 2015 survey update, the Adams House (JF-1224) and the McPherson-Adams House (JF-1225), are identified as contributing resources to the Kabletown Rural Historic District.

- The Adams House is a ca. 1953 two-story, side-gabled dwelling that was built by the owner of the earlier McPherson-Adams House and is located on the same parcel.
- The ca. 1850 McPherson-Adams House, the oldest section of which is a one-story side-gabled stone dwelling, is recommended as contributing and also as potentially individually eligible for the NRHP. It is recommended under Criterion C as an example of mid-nineteenth-century rural architecture in southern Jefferson County. The property is also potentially eligible under Criterion A for significance in the area of agriculture in that it represents a nineteenth-century farm that shifted to dairying at the beginning of the twentieth century.

Both the Adams House and the McPherson-Adams House are located outside the current project area. However, they lie on a parcel that extends into the project area and will likely form an appropriate NRHP boundary once eligibility is determined.

St. John's Episcopal Church within the Village of Rippon Historic District, also newly identified as an eligible resource, lies within the Kabletown Rural Historic District as well. Constructed in 1890 by architect J. G. Holmes, the church exhibits the Gothic-Revival style. Other features include wooden fishscale shingles, an elaborately carved round-arched vergeboard with pendant, brick buttresses, gothic-arched windows, and matching louvered wooden shutters with brick arches above. The church is a contributing element to both of the encompassing districts.

The addition of these three resources to the Kabletown Rural Historic District will not require any form of boundary adjustment.

c) Determinations of Project Effects

Table IV-8 lists the preliminary determinations of effect from Alternate 4 on each historic resource, subject to concurrence from WV SHPO. Due to the similarities of design alignments for Alternates 4, **4A (Preferred)**, and 4B, it is appropriate to conclude that the determination of effect is similar for each of these alternates. Further coordination with the WVSHPO is needed before effects determination can be finalized. Each resource is discussed in more detail following the summary table. View shed and noise analyses referenced herein are presented in Sections IV.C.5 and IV.C.6.

Table IV-8: Preliminary Determinations of Effect

Resource	Alt 4 Effect Determination
Long Marsh Run Rural HD	No Adverse Effect
Kabletown Rural HD	Adverse Effect
Village of Rippon HD	Adverse Effect
St. John's Episcopal Church**	No Effect
William Grubb Farm*	No Effect
Olive Boy Farm	Adverse Effect
Glenwood	Adverse Effect
Wayside Farm	Adverse Effect
Ripon Lodge	No Adverse Effect
Byrdland*	Adverse Effect
Wheatland Farm*	No Effect
Straithmore*	Adverse Effect
Norfolk Southern Railroad*	No Adverse Effect
McPherson-Adams House	No Adverse Effect
Bullskin Run Rural HD	Adverse Effect
Berry Hill	No Effect
Beverley Farm	No Adverse Effect

* Resource also is a contributing element within the Bullskin Run Rural Historic District

** Resource is also a contributing element within the Village of Rippon Historic District

Existing US 340 extends through the **Long Marsh Run Rural Historic District** at the south end of the project in Clarke County, Virginia. The improvements proposed for the four remaining build alternates at this location will all be constructed within the existing right of way. No property will be acquired from the rural historic district. The alternates are anticipated to have minimal visual impacts to the rural district since existing US 340 already extends through the district and the location of the roadway will not change in this area. Therefore, each of the remaining build alternates will have “no adverse effect” on Long Marsh Run Rural Historic District.

Alternates 4, **4A (Preferred)**, and 4B will impact the western edge of the **Kabletown Rural Historic District** by land acquisition for the proposed right of way. The three remaining build alternates will impact 103.5 to 106.7 acres within the district boundary based on preliminary design. Moderate visual impacts and increased noise levels at some receptors within the district may occur. Two to three contributing structures within the district fall within the acquisition areas: the Johnson House within the Village of Rippon (taken by Alternates 4A and 4B), the US 340 bridge over Bullskin Run (taken by all three remaining build alternates), and the 1870 tenant farmhouse at Byrdland (taken by Alternates 4 and 4B). Therefore, each of the remaining build alternates will have an “adverse effect” on Kabletown Rural Historic District.

The **Village of Rippon Historic District** is located along existing US 340 and encompasses the junctures with CR 21 and CR 19. Alternates 4, **4A (Preferred)** and 4B impact the southeast edge of the district along CR 21 (Meyerstown Rd). Based on the current design, land acquisition is required to accommodate the proposed right-of-way. This land acquisition includes the Johnson House located at 31 Meyerstown Road. Although not individually eligible itself, the 1940s vernacular residence is recommended as a contributing element to the Village of Rippon Historic District. Further, these alternates visually impact the district by moving the primary highway outside the central portion of this crossroads hamlet. Therefore, each of the alternates will have an “adverse effect” on the Village of Rippon Historic District.

St. John’s Episcopal Church is located along the east side of existing US 340 at the intersection of US 340 and Long St. just south of CR 19. The building is a contributing element of the Village of Rippon Historic District. Alternates 4, **4A (Preferred)** and 4B are located east of the existing US 340 alignment. The property will not be directly impacted by land acquisition. There will be a buffer of trees, shrubs, and out buildings between the church and the proposed US 340

facility, therefore visual impacts are anticipated to be low. A determination of “no effect” is expected.

The **William Grubb Farm** is located on the north end of the project along Wheatland Road, west of the existing US 340. All the proposed build alternates are located east of the historic property. It is not directly impacted by land acquisition under any of the remaining alternates and no visual impacts are anticipated. Therefore, each of the remaining build alternatives will have “no effect” on the William Grubb Farm.

The **Olive Boy Farm** property is located along CR 38 east of US 340. It is directly impacted by land acquisition for the proposed right of way by Alternates 4, **4A (Preferred)** and 4B with acquisition ranging from 6.28 to 10.7 acres based on preliminary design. No contributing structures are impacted. These three alternates also have a low visual impact on the Olive Boy Farm. Therefore, each of the remaining build alternates will have an “adverse effect” on the Olive Boy Farm. Opportunities to minimize the extent of project effects within the Olive Boy Farm will be discussed as the Section 106 consultation process continues. It may be possible to widen the existing alignment to the west, reducing impacts within Olive Boy, without resulting in substantially greater impacts to the surrounding environment.

The **Glenwood** property is located south of the community of Rippon on the east side of US 340. A proposed access road may take property from the southwest corner of the farm. In addition, Alternates 4, **4A (Preferred)**, and 4B result in a moderate visual impact of the property with Alternate 4 in the closest proximity. Also, since the proposed US 340 facility will be closer to the house, it will likely result in increased noise. As currently designed, the project will have an “adverse effect” on Glenwood.

The **Wayside Farm** property is located southeast of the community of Rippon on the east side of US 340. Alternates 4, **4A (Preferred)**, and 4B will have a moderate visual impact on the property. None of the remaining build alternates require right of way acquisition within the historic boundary. Therefore, each of the remaining build alternates have an “adverse effect” on the Wayside Farm.

The **Ripon Lodge** is located along existing US 340 just north of the Village of Rippon and is one of the most prominent properties within the area. Alternates **4A (Preferred)**, and 4B are all on new location to the east of the existing US 340 and will not require right of way acquisition

within the historic boundary. The remaining build alternates result in low visual impacts and reduced noise levels compared to the future no build scenario. Therefore, each of the remaining build alternates have a “no adverse effect” on the Ripon Lodge.

Byrdland is located at the north end of the project along the east side of US 340. It is directly impacted by Alternates 4, **4A (Preferred)**, and 4B as a result of land acquisition for the proposed right of way, with acquisition ranging from 25.7 to 28.5 acres based on conceptual designs. Alternates 4 and 4B result in the loss of one contributing structure: the 1870 tenant house located on the north corner of the property. This frame I-house is currently vacant and its condition is deteriorating. No contributing structures are impacted. In addition, these alternates lead to moderate visual impacts on the property. Therefore, each of the remaining build alternates have an “adverse effect” on Byrdland.

The archaeological site at **Wheatland Farm**, discussed further in Section IV.B.3, is not impacted and results in a “no effect” determination.

The **Straithmore** property is located on the north end of the project along the east side of existing US 340. The mainline alignment for all of the proposed build alternates lie west of the historic property. However, the property is impacted by land acquisition for driveway realignment associated with Alternates 4, **4A (Preferred)**, and 4B. No contributing structures would be impacted. In addition, all of these alternates have a low visual impact to the property. Therefore, each of the remaining build alternates have an “adverse effect” on Straithmore.

The **Norfolk Southern Railroad** right of way, historically known as the Shenandoah Railroad, runs parallel to and west of existing US 340. Alternates 4, **4A (Preferred)**, and 4B are not located in the vicinity of the railroad. No visual impacts are anticipated with Alternates 4, **4A (Preferred)**, and 4B. Therefore, each of the remaining build alternates have a “no adverse effect” on the railroad.

The **McPherson-Adams House** is located east of existing US 340 at the terminus of an unpaved lane extending off Meyerstown Road (CR 21). The dwelling is surrounded by grass, a few trees, and a number of small outbuildings. Although the dwelling is outside of the project limits, the proposed NRHP Boundary does extend into the project study area. No right of way acquisition is expected within the proposed NRHP Boundary and no visual impacts are anticipated therefore, the project will have a “no adverse effect” on the resource.

The **Bullskin Run Historic District** lies predominately west of the Norfolk Southern Railroad throughout most of the project area. North of CR 340/2, the boundary abuts the existing right of way of US 340. Based on preliminary design, the remaining three build alternates will impact approximately 24.2 – 28.2 acres towards the northern end of the project adjacent to the existing US 340 alignment. This includes reconstruction of the small historic bridge that current carries US 340 across Bullskin Run. Alternates 4, **4A (Preferred)**, and 4B are anticipated to have no visual impacts to the District. Therefore, each of the remaining build alternates have an “adverse effect” on the Bullskin Run Rural Historic District.

Berry Hill is located west of the railroad near the south end of the project area. No right of way is required from this property with any of the build alternates. All the remaining build alternates will have no visual impact to the property. Therefore, each of the remaining build alternates have “no effect” on Berry Hill.

The **Beverly Farm** is located at the northern end of the project area, west of existing US 340. Based on preliminary design, all the alternates will require right of way from this property ranging from 0.5 to 0.9 acres, adjacent to the existing US 340 right of way. Low visual impacts to the property are anticipated as a result of implementing any one of the remaining four build alternates. Therefore, each of the remaining build alternates have a “no adverse effect” on the Beverly Farm. Opportunities to minimize the extent of project effects within the Beverly Farm will be discussed as the Section 106 consultation process continues. It may be possible to widen the existing alignment to the east, reducing impacts within the property, although this would result in greater impacts within the Straithmore property.

d) Mitigation Measures for Preferred Alternative.

The WVDOH will coordinate the effects determinations from Alternates 4, **4A (Preferred)**, or 4B with the WVSHPO and inform the Advisory Council on Historic Preservation in accordance with Section 106 of the NHPA. Mitigation measures for the Preferred Alternative will be identified in a Memorandum of Agreement (MOA). Mitigation measures include the enhancement of positive effects as well as the minimization or elimination of negative effects. In an attempt to minimize or eliminate impacts associated with the Preferred Alternative, mitigation measures that will be incorporated during subsequent design phases and construction plan preparation may include:

- Final roadway design and engineering attempts to blend the new road into the existing topography and natural landscape.
- In the areas where the alternate is aligned with an existing road, the horizontal and vertical alignments of the existing road are followed, consistent with design criteria.
- Selective clearing of trees along the right of way is used to minimize the loss of vegetation.
- An aesthetically pleasing highway is provided, with gently rounded grassed shoulders beyond the edge of paving to enhance the view of the road and the view from the road.
- Native vegetation will be planted to screen the highway from the surrounding project area.

The MOA will be signed by the SHPO, the FHWA, the WVDOH, other invited signatories as appropriate, as well as the Advisory Council on Historic Preservation, following the selection of a Preferred Alternative.

C. NATURAL ENVIRONMENT

1. GEOLOGY & TERRESTRIAL HABITATS

Jefferson County, West Virginia is located in two geologic provinces, the Blue Ridge Province and the Great Limestone Valley of the Ridge and Valley Province. The project area lies within the Ridge and Valley Province, specifically in the Shenandoah Valley. The project area is underlain by extensive limestone outcrops, giving way to rolling hills with exposed rock outcrops. The foothills of the Blue Ridge Mountains are visible in the distance. Elevations in the immediate project area vary between 450 feet above mean sea level and 580 feet above mean sea level.

The project area is generally agricultural in nature with little land remaining in native vegetation. Native vegetation generally remains only along fence lines and the stream corridors within the project area.

a) Soils

The Soil Survey of Jefferson County, West Virginia identifies two general soil associations in the project area.

- The Duffield-Frankstown association, which covers the majority of the project area, consists of deep, medium-textured, dominantly nearly level to strongly sloping soils formed in material weathered from limestone and limey shale on uplands.
- The Hagerstown-Frederick-Huntington local alluvium association occurs mainly to the west of the project area with a small portion extending into the northwestern edge of the project area. This association consists of deep, medium-textured and moderately fine-textured, dominantly nearly level to moderately steep soils formed in material weathered from limestone on uplands and along drainageways.

The Soil Survey of Clarke County, Virginia also identifies two general soil associations within the project area.

- The Pomplimento-Timberville soil association occurs on uplands and consists of deep, well-drained soils that have a clayey or loamy subsoil and formed in materials weathered from interbedded limestone, shale, and siltstone or colluvium.
- The Pomplimento-Webbtown-Timberville association consists of deep or moderately deep, well-drained soils that have a clayey or loamy subsoil and formed in materials weathered from interbedded limestone, shale, and siltstone or colluvium and occurs in uplands.

Specific soil types which occur in the project area are Hagerstown silt loam, Hagerstown silty clay loam, Hagerstown and Frederick cherty silt loams, Hagerstown and Frederick very rocky silt loams, Hagerstown and Frederick cherty silty clay loams, Hagerstown and Frederick very rocky silty clay loams, Huntington silt loam, Duffield silt loam, Alluvial land-marl substratum, Frankstown shaly silt loam, and Linside silt loam within West Virginia. The specific soil types which occur within the project area of West Virginia include Timberville silt loam, Pomplimento-Webbtown Complex-rocky, Pomplimento-Webbtown Complex, Pomplimento silt loam-rocky, and Pomplimento-Rock Outcrop Complex.

Table IV-9 summarizes the impacts to each soil type for each of the remaining build alternatives.

Table IV-9: Soil Types by Alternate (Jefferson County, West Virginia)

Soil Type (Map symbol)	Area Within Proposed Right of Way		
	Alt. 4 (Acres)	Alt. 4A (Preferred) (Acres)	Alt. 4B (Acres)
Fairplay (marl) silt loam (Fa)	3.0	3.6	3.8
Funkstown silt loam (Fk)	7.2	5.7	5.2
Hagerstown silt loam, 3 to 8 percent slopes (HbB)	23.7	29.4	30.0
Hagerstown silty clay loam, 8 to 15 percent slopes (HcC)	6.6	5.6	6.2
Hagerstown silt loam, 3 to 8 percent slopes, very rocky (HeB)	0.1	0.3	0.3
Hagerstown silt loam, 8 to 15 percent slopes, very rocky (HeC)	9.2	7.5	7.6
Hagerstown-Opequon-Rock outcrop complex, 15 to 35 percent slopes (HgE)	0.0	0.0	0.0
Hagerstown-Rock outcrop complex, 3 to 8 percent slopes (HrB)	1.0	1.3	1.3
Hagerstown-Rock outcrop complex, 8 to 15 percent slopes (HrC)	8.0	3.6	3.6
Lindside silt loam (Ln)	3.5	3.6	3.9
Poplimento silt loam, 3 to 8 percent slopes (PmB)	0.9	0.0	0.5
Poplimento silt loam, 8 to 15 percent slopes (PmC)	39.6	41.6	44.4
Poplimento-Rock outcrop complex, 8 to 15 percent slopes (PrC)	28.5	37.5	36.4
Toms silt loam (Tm)	0.2	0.0	0.0
Urban land-Udorthents (Uu)	4.1	3.4	3.2

(1) Land Cover

The project area is primarily rural and consists of one built subdivision, a mobile home park, a post office, a church, businesses along US 340, and scattered home sites. Open fields are the predominant land type. There are tree lines along property boundaries and some wooded areas along Bullskin Run and around Wheatland.

(2) Farmlands

Per the 2012 Census of Agriculture, collected by the US Department of Agriculture, Jefferson County contains 501 farms with an average size of 134 acres. In total, approximately 39,000 acres are devoted to harvested crops, including primarily hay (14,000 acres), corn (11,000 acres), and soybeans (7,500 acres). Countywide, 239 farms raise cattle, representing over 15,000 animals. The average market value of agricultural products sold per farm is approximately \$71,000 per year.

Section 1504(c)(1) of the Farmland Protection Policy Act (FPPA) defines farmland as either prime farmland, unique farmland, farmland other than prime or unique that is of statewide importance, or farmland other than prime or unique that is of local importance. These definitions refer to areas where the soils are conducive to agricultural production, not just areas currently or historically used as farmland.

- Prime Farmland soils are those soils best suited for producing food, feed, fiber, forage, and oilseed. According to the Act, prime farmland does not include land already in or committed to urban development or water storage.
- Unique farmland is land, other than prime farmland, that has combined conditions to produce sustained high quality and high yields of specialty crops, such as citrus, nuts, fruits, and vegetables when properly managed.
- Soils of statewide importance are those soils with seasonal wetness, erosion, or drought that limit their suitability for some crops but can still produce a moderate to high yield of adaptable crops with modern farming methods.
- Other Lands are soils that are not suited for crop production without extensive management inputs. Other Lands include water storage and urban and built-up areas

as well as areas that have been zoned by a local planning authority to be something other than agricultural or silvicultural.

In accordance with the FPPA and State Executive Order Number 96, an assessment was conducted for the potential impacts of land acquisition and construction activities on prime, unique, and local or statewide important farmland soils, as defined by the Natural Resource Conservation Service (NRCS).

The NRCS assigns ratings to potential farmland impacts in order to determine the level of significance of 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 added together for a possible total rating of 260 points. Sites receiving a total score of 160 points or more are given increasingly higher levels of consideration for protection.

All of the project build alternates involve the use of prime farmland and state and locally important farmland soils. These impacts are summarized in Table IV-10 and Exhibit IV-5 graphically. In accordance with the FHWA's *Guidelines for Implementing the Final Rule of the Farmland Protection Policy Act for Highway Projects*, a Farmland Conversion Impact Rating (FCIR) assessment for corridor type projects was prepared and submitted to the NRCS. A copy of the FCIR form can be found in Appendix A. Since the alternates are similar, the scores in each of the corridors is similar, ranging from 116 to 120. Each of the project build alternates result in a total score of less than 160 points. Therefore, in accordance with the FPPA, no further consultation is required.

Table IV-10: Farmland Impacts

	Prime and Unique Farmland (Acres)*	Statewide or Locally Important Farmland (Acres)*	Total Impact (Acres)*
Alternate 4	56.6	41.3	97.9
Alternate 4A (Preferred)	58.5	45.0	103.5
Alternate 4B	61.5	50.0	111.5

* Excludes areas within the existing right of way.

Registered agricultural districts add an extra level of protection for farmlands. The Clarke County Agricultural District is located near the beginning of the project in Clarke County, Virginia. If the acquisition of land from this district is in excess of one acre from any one parcel or in excess of ten acres from the entire district, a notice of intent must be filed at least 30 days prior with local authorities (Code of Virginia 15.1-1512). One 17.82-acre parcel within this district is adjacent to the project.

2. WATER RESOURCES

a) Streams

The North Fork of Bullskin Run, Bullskin Run, Long Marsh Run, and two unnamed tributaries of Long Marsh Run drain the project area. These streams flow generally southeast into the Shenandoah River.

The West Virginia Division of Environmental Protection, Office of Water Resources was contacted for information on water quality within the project area. All streams in the project area are designated as Category B Waters. Category B Waters are for the propagation and maintenance of fish and other aquatic life. There are also subcategorizations within Category B. Bullskin Run and Long Marsh Run are considered to be in Category B2, Trout Waters. The two tributaries of Long Marsh Run have intermittent flow and do not meet the definition of Trout Waters. These streams fall under Category B3, small, non-fishable streams.

There are no wild or scenic rivers within the project area.

According to the 2014 update of West Virginia's 303(d) list of impaired waterways, the entire length of Bullskin Run is impaired with fecal coliform and nitrite. The proposed alignment crosses Bullskin Run towards the northern end of the project near Wheatland. Virginia's 2014 update identifies Long Marsh Run in Clark County, VA as impaired based on e. coli. Long Marsh Run lies south of where the US 340 widening would begin. An unnamed tributary (UNT) to Long Marsh Run in Jefferson County, WV is not listed as an impaired waterway by either state. The UNT to Long Marsh Run is located towards the southern end of the project.

Three stream reaches cross the proposed alignment. Table IV-11 summarizes the stream impacts for each of the remaining alternates, which are shown graphically in Exhibit IV-6.

- The southernmost tributary of Long Marsh Run is located in Clarke County, Virginia; no impacts to this tributary are anticipated from any of the build alternates since it crosses the existing 4-lane divided highway section.
- Build Alternates 4, **4A (Preferred)**, and 4B cross the second unnamed tributary of Long Marsh Run just south of CR 38 (Smiths Rd) near the existing alignment.
- Alternates 4, **4A (Preferred)**, and 4B are on a similar alignment and cross Bullskin Run near the existing US 340 alignment just south of Wheatland Road.

All stream-runs are contained within box or pipe culverts located to minimize channel modifications. As necessary, channel lining is utilized to minimize erosion at the culvert ends. Possible roadway construction impacts to streams include increased sedimentation and the removal of the streamside canopy. Impacts to stream crossings will be minimized to the maximum extent possible through strict adherence to best management practices. None of the remaining alternates impact protected drinking water supplies.

Table IV-11: Stream Impacts

	UNT to Long Marsh Run (ft)	Bullskin Run (ft)	Total (ft)
Alternate 4	465	883	1,348
Alternate 4A (Preferred)	465	850	1,315
Alternate 4B	465	944	1,409

b) Ponds

Three excavated ponds have been identified within the project vicinity. Pond #1 is located on the north side of CR 21. Pond #2 is located on the east side of CR 21 which turns in a northerly direction east of Pond #1. Pond #3 is located on the south side of Access Road, east of the railroad tracks. The locations of these ponds in relation to the various build alternates are depicted in Exhibit IV-6. Alternates 4, **4A (Preferred)**, and 4B pass between the ponds and US 340 and therefore will not impact any of the three ponds identified.

c) Springs

Springs of West Virginia is a manuscript that identifies the locations of springs throughout the state and gives the characteristics of each spring. A literature search of this book identified four springs within the project area boundary. Lippett Springs on Olive Boy Farm is located along the second unnamed tributary of Long Marsh Run. This spring discharges 140 gallons of water per minute at a constant temperature of 54.0 degrees Fahrenheit. The Henry Baker Farm Spring, Baker Farm Spring, and the Joseph Bell Farm Spring are located along Bullskin Run. The Henry Baker Farm spring lies west of US 340 and the Joseph Bell Farm spring lies adjacent to the east side of US 340. The Henry Baker Farm spring discharges 160 gallons per minute at a temperature of 54 degrees Fahrenheit. The Joseph Bell Farm spring discharges 520 gallons per minute at a temperature of 53 degrees Fahrenheit.

The locations of these springs relative to the build alternates are depicted in Exhibit IV-7. All build alternates (4, **4A (Preferred)**, and 4B) will impact the Joseph Bell Farm Spring. These alternates include construction east of existing US 340 where this spring is located. The remaining build alternates will not impact any of the other springs within the project area.

d) Ground Water

Two major types of aquifers exist in West Virginia: unconsolidated alluvial deposits and sedimentary bedrock. Ordovician and Cambrian age sedimentary bedrock aquifers consisting of sandstone, shale, and limestone underlie the majority of Jefferson County.

In its *Groundwater Programs and Activities – Biennial Report to the West Virginia 2014 Legislature*, the West Virginia Department of Environmental Protection, Division of Water and Waste Management states:

“Although there seems to be adequate supplies of groundwater for public and private use, industry must usually rely on other sources of water. Groundwater quantity is highly variable throughout the state. Yields range considerably, even from location to location within the same water-bearing formation. Water-bearing formations in areas of fractured limestone in the southeastern and eastern part of the state and wells drilled in alluvium along the Ohio River tend to have the greatest yields. Water-bearing formations produce from a few gallons per minute (gpm) to more than 2,300 gpm in

some sand and gravel aquifers along the Ohio River. Average yields throughout the state are around 260 gpm.

Groundwater quality is affected by human activities and can be degraded as a result of industrial waste disposal, coal mining, oil and gas drilling, agricultural activities, domestic or municipal waste disposal, transportation, and rural development. Waters sampled at the 53 locations show that background levels of parameters tested occur at concentrations far below action levels set by groundwater quality standards, with a few exceptions.

Two major concerns are the high concentrations of radon in certain watersheds and the presence of pharmaceuticals and endocrine disrupting chemicals in groundwater. Radon is a naturally occurring element found in many soils and rock types.

The discovery of the presence of pharmaceuticals and endocrine disrupting chemicals in groundwater has raised concerns regarding their effects on human health and the continued viability of antibiotic medications. Endocrine disrupting chemicals are found in a wide variety of products; their presence appears to be ubiquitous in the environment. Bioassays of fish in the Potomac River found intersex characteristics in the fish sampled. One such mutation is the presence of eggs in the testes of male fish. Another concern is the presence of certain antibiotics in ground and surface waters. As many of these compounds are known endocrine disruptors, their presence even at low concentrations warrant additional scrutiny.

The practice of land applying biosolids from waste treatment facilities and livestock operations on agricultural areas must be reevaluated in light of recent research, as these biosolids have been shown to be laden with a wide variety of pharmaceuticals, endocrine disrupting chemicals, and especially, antibiotics. At this time, more study needs to be done in this area to determine the appropriate course of action needed to address this concern.”

None of the remaining alternates contribute to these concerns and will have no impact on groundwater quality or supply.

e) Floodplains

A floodplain evaluation was conducted in accordance with Executive Order 11988, Floodplain Management, and 23 CFR Chapter 1, Subpart A. This evaluation is based on the results of the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Mapping for the project area. The community panel used to determine the 100-year floodplain boundaries is 540065 0065B in West Virginia. Exhibit IV-8 depicts the 100-year floodplain limits in relation to the build alternates.

Generally, encroachment on floodplains by structures and fill can reduce flood-carrying capacity, increase flood height and velocities, and increase flood hazards beyond encroachment itself. As part of the National Flood Insurance Program, FEMA has determined floodway boundaries as a tool for floodplain management. Based on FEMA's definition, the 100-year floodplain is divided into a floodway and a floodway fringe. The floodway is the channel of a stream plus any adjacent floodplain areas that need to be kept free of encroachment so that the 100-year flood can be carried without substantial increases in flood heights. Minimum federal standards limit such increases to one foot, provided that hazardous velocities are not produced. The area between the floodway and the 100-year floodplain is termed the floodway fringe. The floodway fringe encompasses the portion of the floodplain that could be completely obstructed without increasing the water surface elevations above FEMA's published floodway elevation.

Location studies and conceptual design have taken into consideration all factors to minimize impacts to floodplains. All remaining build alternates cross the floodplain that is associated with Bullskin Run. Due to the orientation of the proposed alignments relative to the floodplain, all crossings are perpendicular or at near perpendicular angles. Alternates 4, **4A (Preferred)**, and 4B cross the floodplain near the location of the existing US 340 alignment. Table IV-12 contains the floodplain impacts for these build alternates. Alternate 4 has the least effect on floodplains with 5.1 acres of impact. Alternate 4B has the greatest impact on floodplains with 6.3 acres. The location and conceptual design of the build alternates at floodplains were carefully addressed to successfully mitigate increases in flooding risk and substantial environmental impacts. Potential impacts to the floodplains throughout the project area as a result of erosion will be mitigated through strict adherence to best management practices.

Table IV-12: Floodplain Impacts

Alternate	Floodplain Impacts
4	5.1 acres
4A (Preferred)	6.1 acres
4B	6.3 acres

Construction of any of the build alternates increases the amount of impervious surface area within the project area, thereby increasing stormwater runoff. The increased amount of paved surface draining into the area is very small in relation to overall drainage areas. Detailed hydraulic surveys and studies will be performed during the design phase of the project. The effect of the new roadway on stormwater discharge will be evaluated to ensure no substantial increase in downstream flooding occurs when residences are present along the stream. It is expected that backwater elevations and velocity increases at floodplain encroachments are nonexistent or minimal. Limits within which activity could take place are restricted to that necessary for the conduct of work. Under the conditions described herein, any impacts to the natural and beneficial floodplain values associated with the project are negligible.

The adopted comprehensive plan of Jefferson County, West Virginia defines floodplains as a natural resource which needs to be protected from development, deforestation, and draining or filling of wetland areas. No incompatible floodplain development is anticipated in conjunction with the no-build or build alternates.

f) Required Permits

Construction of this project along any of the build alternates require a Section 404 Dredge and Fill Permit from the US Army Corps of Engineers, a Section 401 Water Quality Certification from the West Virginia Department of Environmental Protection, Division of Water and Waste Management, and a National Pollutant Discharge Elimination System (NPDES) General Water Pollution Control Permit also from the Department of Environmental Protection. The West Virginia Erosion and Sediment Control Best Management Practice Manual has been prepared to address erosion and sediment control for earth disturbing construction activities.

3. WETLANDS

Wetlands are protected resources under Section 404 of the Federal Water Pollution Control Act, more commonly known as the Clean Water Act. Wetlands provide valuable habitat for fish and wildlife, may support rare and endangered species, have high primary productivity, improve water quality, and regulate storm flow.

National Wetlands Inventory (NWI) mapping was initially used to identify wetlands within the project area. The NWI mapping indicated two artificially impounded freshwater ponds and wetlands associated with Bullskin Run and the unnamed tributary of Long Marsh Run. A field review of the project area was conducted to verify wetland determinations and to identify dominant vegetation at the potentially impacted wetland systems. Wetland determinations were made using the three parameter approach (soils, vegetation, and hydrology) detailed in the 1987 US Army Corps of Engineers *Manual for Identification and Delineation of Jurisdictional Wetlands*. Exhibit IV-9, Exhibit IV-10, and Exhibit IV-11 display the locations of these wetlands relative to the build alternates. An updated wetland assessment, including jurisdictional determinations and permitting, will be completed during the subsequent design phases of the project.

a) Project Impacts

Table IV-13 summarizes the impacts to each wetland by each build alternate.

Table IV-13: Wetland Impacts

Alternate	Wetland System #2 (Acres)	Wetland System #3 (Acres)	Total Area (Acres)
4	0.16	0.85	1.01
4A (Preferred)	0.12	1.02	1.14
4B	0.12	1.13	1.25

Wetland System #1 (associated with Long Marsh Run) will not be impacted by any of the build alternates.

Wetland System #2 is along an unnamed tributary to Long Marsh Run and is east of existing US 340. Alternates 4, **4A (Preferred)**, and 4B have a similar alignment where they cross this

second unnamed tributary to Long Marsh Run at existing US 340. To the east of US 340, the Long Marsh Run is approximately 7 feet wide. Arrowhead (*Sagittaria* sp.) was observed just east of the existing roadway. Approximately 30 feet east of US 340, the wetland area widens to approximately 30 feet. The dominant vegetation is panic grass (*Panicum* sp.). The classification for this wetland area is Palustrine, emergent, persistent, temporarily flooded (PEM1A). Overland flow and a natural spring (Lippett Springs on Olive Boy Farm) supply hydrology to this system. Indicators of hydrology include inundation and saturated soil conditions. This wetland system is part of the continuous connected stream system of a tributary to Long Marsh Run.

Wetland System #3 is along Bullsken Run. On the east side of existing US 340, the Joseph Bell Farm spring begins flowing southeast into the main channel of Bullsken Run. The area between these two channels is also part of the wetland. Watercress (*Nasturtium officinale*) dominates the two channels. Sycamore (*Platanus occidentalis*) is the dominant tree between the two channels. Sphagnum moss (*Sphagnum* sp.) was also observed in this area. On the east side of existing US 340, watercress (*Nasturtium officinale*) also dominates. Rushes (*Juncus* sp.) are also on the east side. This wetland system is part of the continuous connected stream system of Bullsken Run. Alternates 4, **4A (Preferred)**, and 4B are on a similar alignment and cross Bullsken Run at the location of existing US 340.

Classifications for the Bullsken Run System include Palustrine, forested/scrub-shrub, broad-leaved deciduous, temporarily flooded (PFO/SS1A); Palustrine, emergent, persistent, temporarily flooded (PEM1A); and Palustrine, scrub-shrub, broad-leaved deciduous/emergent, persistent, seasonally flooded (PSS1/EM1C). Hydrology is supplied to this wetland system by overland flow and by several natural springs along the length of Bullsken Run. Indicators of hydrology include saturated soil conditions and water-stained leaves.

Because the wetland systems within the project area are linear and generally perpendicular to the project, avoidance of all wetland areas is not practical. Minimization of wetland impacts was incorporated into the engineering studies for this project. Wetland areas were mapped and given consideration during the development of alternate alignments. The linear wetlands found in the project area were crossed at perpendicular or near perpendicular angles to minimize impacts. The acreage of wetlands provided are those within the proposed right of way. During final design of the Preferred Alternate, further efforts to minimize impacts to wetlands will be reviewed. Any wetland resources impacted by the Preferred Alternate will be

assessed in accordance with the US Army Corps of Engineers' Eastern Mountain and Piedmont Supplement to the 1987 delineation manual.

Conceptual mitigation for unavoidable wetland impacts typically involves enhancement and/or replacement. One option for enhancement of the existing streams in the area is replanting the banks adjacent to the streams with indigenous species. In many areas, little vegetation remains along the streams due to the surrounding agriculture. Replacement of wetland losses is accomplished adjacent to streams with minimal excavation, followed by planting with indigenous wetland species. Any compensatory mitigation will comply with the 2008 *Final Rule on Compensatory Mitigation* established by the EPA and US Army Corps of Engineers.

4. WILDLIFE

Deer (*Odocoileus virginianus*) and a variety of small mammals such as raccoons (*Procyon lotor*), gray squirrels (*Sciurus carolinensis*), opossums (*Didelphis virginiana*), skunks (*Mephitis mephitis*), mice (*Peromyscus* spp.), shrews (*Sorex* spp.) and moles (*Scalopus aquaticus*) are likely to exist within the project area. A variety of birds are also likely to be seen in the area including warblers (*Dendroica* spp.), sparrows (*Ammodramus* spp., *Ammodramus* spp., *Spizella* spp.) woodpeckers (*Dryocopus pileatus*, *Melanerpes* spp., *Picoides* spp.), vireos (*Vireo* spp.), ovenbirds (*Seiurus* spp.), thrushes (*Hylocichla mustelina*, *Catharus* spp.), blackbirds (*Agelaius phoeniceus*, *Euphagus carolinus*), grackles (*Quiscalus* spp.), and starlings (*Sturnus vulgaris*). Reptiles which may occur in the project area include rattlesnakes (*Sistrurus miliarius*, *Crotalus* spp.), garter snakes (*Thamnophis* spp.), rat snakes (*Elaphe* spp.), water snakes (*Nerodia* spp.), copperheads (*Agkistrodon contortrix*), box turtles (*Terrepenne carolina*), and painted turtles (*Chrysemys picta*). Common amphibians such as toads (*Bufo* spp.) and frogs (*Hyla* spp., *Acris* spp., *Pseudocris* spp., *Rana* spp.) can also be expected.

a) Threatened and Endangered Species

Under federal law, any action which is likely to result in a negative impact to federally protected plants or animals is subject to review by the US Fish and Wildlife Service (USFWS), under one or more provisions of the Endangered Species Act (ESA) of 1973. Section 7 of the ESA states that "each federal agency shall ... ensure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of [critical] habitat of such species..." (50 CFR 420.07 a (2)). This requirement means that federal

agencies are required to consider two main issues during Section 7 consultation with respect to a threatened and endangered species: (1) whether the proposed action is likely to jeopardize the continued existence of the species, and (2) whether the proposed action would destroy or adversely modify designated “critical habitat” for that species. If the federal agency finds, based on a Biological Assessment, that an action is not likely to adversely affect a species and the USFWS concurs with that finding, then it is presumed that the action will not jeopardize the species and the Section 7 consultation is concluded.

A letter was sent by WVDOH to USFWS in December 2015 to request updated information on threatened and endangered species for Jefferson County, WV. The USFWS reply letter, dated December 22, 2015 confirmed that there are three species listed for Jefferson County, WV. These species are identified below along with a biological assessment for each species.

The **Indiana bat** (*Myotis sodalis*) was officially listed as an endangered species on March 11, 1967 (Federal Register 32[48]:4001 under the Endangered Species Preservation Act of October 15, 1966 (80 Stat. 928; U.S.C. 668dd(c)). The only “critical habitat” that has been designated within West Virginia for the Indiana bat is an area called Hellhole Cave, which is located approximately 90 miles from the western extent of existing US 340. The proposed project will have no effect on this designated critical habitat for the Indiana bat.

Given the composition of land cover in the project area and reported summer habitat requirements of the species, it is unlikely that the Indiana bat would be found in an area mostly devoid of trees and water such as the project area. Indiana bat typically roost in forested stands as opposed to fence lines and individual trees. Assessing the project area for potential roost and forage habitat within forested stands (excluding fence lines and individual trees) shows that with any of the alternates under consideration, potential roost habitat ranges from 11-14% of the total area of each build alternative. As such, if the species were known to inhabit the Shenandoah Valley, the impact of this project on suitable forage habitat would be negligible.

The **Northern long-eared bat** (*Myotis septentrionalis*) was officially listed as a federally threatened species on April 2, 2015 (Federal Register Vol. 80 No. 63) under the ESA. No critical habitat has been designated for the Northern long-eared bat. Therefore, the proposed project will have no effect on critical habitat for the Northern long-eared bat.

Given the composition of land cover in the project area, and reported summer habitat requirements of the species, it is unlikely that the Northern long-eared bat would be found in an area mostly devoid of trees and water such as the project area. The Northern long-eared bat typically roost in forested stands, but may utilize fence lines and individual trees under certain circumstances. Assessing the project area for potential roost and forage habitat within all forested area (including fence lines and individual trees) shows that with any of the alternates under consideration, potential roost habitat ranges from 16-20% of the total area of each build alternative. As such, if the species were known to inhabit the Shenandoah Valley, the impact of this project on suitable forage habitat would be negligible.

The **Madison Cave Isopod** (*Antrolana lira*) is a subterranean groundwater obligate crustacean (stylobite) endemic to the karst aquifers of the Shenandoah Valley in Virginia and West Virginia. It was officially listed as threatened on October 4, 1982 (Federal Register Vol. 47 No. 192). No critical habitat has been designated for the species. The closest positive sampled sites to the project are 1) George Washington Cave, 3.3 miles to the northeast and 2) a pair of wells on the Irvin King farm, approximately 3 miles east of the project site. However, very few sites in immediate proximity to the project area were sampled, with the exception of two wells approximately ½ mile west of Sinkhole #2, neither of which yielded specimens of the Madison Cave isopod.

In December of 2014, a Phase II survey of two sinkholes was undertaken. No connection to suitable Madison cave isopod habitat was identified during this effort.

In a letter from USFWS dated June 1 2015 (see Appendix B), the USFWS concluded that the project may effect but is not likely to adversely affect the Madison Cave isopod. No further consultation or biological assessment is required.

Because the project 1) will affect less than 17 acres of potential bat foraging or roosting habitat, 2) is not within bat hibernacula or summer use buffers, and 3) will not affect any caves or mines that could be used as a hibernacula, the project is not likely to adversely affect Indiana bat or Northern long-eared bat. The project may affect but is not likely to adversely affect Madison cave isopod. Therefore, no biological assessment or further Section 7 consultation is required. The USFWS concurrence letters are included in Appendix B.

5. VISUAL CHARACTERISTICS

a) Existing Visual Environment

Lying in the Shenandoah Valley, the project area is underlain by extensive limestone outcrops, giving way to rolling hills with exposed rock outcrops. The foothills of the Blue Ridge Mountains are visible in the distance. Elevations in the immediate project area vary between 450 feet above mean sea level and 580 feet above mean sea level. Although most of the area has been cleared for agriculture, some natural vegetation still exists. Deciduous trees and some evergreen trees are present throughout the project area, primarily along fence lines. Seasonal vegetation exists on farmed lands in the form of row crops. Fruit orchards also occur within the project vicinity.

Throughout the project area, the landscape has been altered by development. Lands bordering US 340 have been cleared for row crops, orchards, livestock grazing, and light residential and commercial development. The Norfolk Southern Railroad parallels US 340 to the west. Above ground utility lines are located throughout the area. There are seven billboards along the existing roadway in the project area.

The project area is rural with sporadic development concentrated around the communities of Rippon and Wheatland. Development consists mainly of residential properties and farm complexes. Some commercial properties exist along the project area, consisting of a few restaurants and small businesses.

Approaching the project area from the south, US 340 is a four-lane divided facility. Prior to crossing into West Virginia, the four-lane roadway transitions to a two-lane facility. Continuing north on US 340, travelers pass the Rainbow Road Club, a seasonal produce stand, John's Family Restaurant, Chapman's Trailer Park, and B & G Painting. Along US 340 in the community of Rippon are private residences, a church, old storage buildings, the Rippon Grocery, an antique store, the Rippon Post Office, St. John's Episcopal Church, and the entrance to the historic Ripon Lodge. Development immediately north of Rippon is sparse and consists of single-family homes and farms. As US 340 continues north, it passes through the community of Wheatland where Dave's Auto Service, the Rainbow Diner Truck Stop, Thomas B. Kern, Inc., and a seasonal produce stand are located adjacent to the road. Leaving the project area, the two-lane US 340 transitions back to a four-lane facility and continues north through Jefferson County.

b) Visual Impacts

The introduction of any large facility in an area alters the local perception of the visual environment. A location may be deemed visually sensitive for its visual quality, uniqueness, cultural importance, and viewer characteristics. According to FHWA Guidelines, high visual quality is obtained when area landscape components have impressive characteristics that convey visual excellence. Striking landscapes are not limited to the natural environment and can be associated with urban areas as well. Visual quality is subjective in that it is also determined by a viewer's perception of an area.

A field review was conducted in order to investigate the area for its overall visual quality. The review did not yield any significant findings of special or unique natural areas, officially designated recreation areas, or officially designated scenic overlooks within the immediate project area. The open fields and rolling terrain are characteristic for much of Jefferson County. US 340 throughout the county has been identified in the Jefferson County Comprehensive Plan by the Jefferson County Parks and Recreation Commission as a scenic route due to its historical significance and scenic quality for various points along the roadway. However, no publicly accessible historic sites are located within the project area. Four historic districts and several private historic properties do exist within the project area. These properties were investigated further for their visual sensitivity.

A rating scale was used to qualify the relative degree of project impact based on the importance of the visual resource, existing landscape, sensitivity of the viewer, and the visual contrast imposed by an improved facility to the existing visual surroundings. The ratings are characterized as follows:

- No Impact - The view of the proposed action has minor implications to the existing landscape or there is no impact at all.
- Low Impact - The view of the project is limited, the visual resource is limited in importance, there are dominating visual intrusions in the viewshed from other sources, or there is a weak visual contrast between the facility and the landscape. If any of the proposed actions are closer to the resource than the existing facility, but do not necessarily create a visual impact, per se, due to visual intrusions, it has been rated as having a low impact.

- Moderate Impact - The view of the proposed action is a moderate intrusion into the visual environment with greater contrast than the low impact but not as great as a high impact.
- High Impact - The proposed action is in close proximity and highly visible to viewers, has a strong contrast with the landscape, is in an area of importance with limited visual intrusions, or involves substantial viewer sensitivity.

Based on these definitions, each visually sensitive historic site was evaluated for visual impacts associated with each of the build alternates. Table IV-14 summarizes the degree of impact from Alternate 4 to each visually sensitive resource. Due to the similarity of design alignments and relative proximity to the historic resources, visual impacts for all of the remaining build alternates would be similar.

Table IV-14: Visual Impact Rating

Resource	Impact Rating
Long Marsh Run Rural HD	Low
Kabletown Rural HD	Moderate
Village of Rippon HD	Moderate
St. John's Episcopal Church**	Low
William Grubb Farm*	No
Olive Boy Farm	Low
Glenwood	Moderate
Wayside Farm	Moderate
Ripon Lodge	Low
Byrdland*	Moderate
Straithmore*	Low
Norfolk Southern Railroad*	No
McPherson-Adams House	No
Bullskin Run Rural HD	No
Berry Hill	No
Beverley Farm	No

** Resource also is a contributing element within the Bullskin Run Rural Historic District*

*** Resource is also a contributing element within the Village of Rippon Historic District*

Existing US 340 extends through the **Long Marsh Run Rural Historic District** in Clarke County, Virginia, which is noted for its remarkably unaltered and picturesque rural land. The proposed improvements for the build alternates will remain within the existing right of way. There will be no grade or elevation changes made to US 340 in this area. The visual change for this area will include the modification of the existing two-lane roadway to a new four-lane divided roadway, and this change will occur at the at the same location as existing US 340 within existing right of way. All alternates are evaluated as having a low visual impact to this historic resource.

The **Kabletown Rural Historic District** is characterized by rich well-drained limestone soils over rolling terrain with several springs and two fairly large streams. The combination of hills and open land interspersed with forestland as well as the dramatic eastern backdrop of the Blue Ridge Mountains provides many varied and spectacular vistas of a true rural countryside. These natural landscape elements are further complimented by cultural features such as farms, crossroads, roadbeds, tree lines, hedgerows, field patterns, and fences. Existing US 340 currently provides a two-lane road extending north to south through the western edge of this district. A majority of the large farms and country estates contributing to the pristine agricultural landscape are located east of existing US 340. Alternates 4, **4A (Preferred)**, and 4B are located east of US 340. These alternates introduce a visual intrusion into the agricultural landscape by dividing this landscape from some of the other contributing elements, such as Wayside Farm and the Village of Rippon, by a new four-lane roadway. Alternates 4, **4A (Preferred)**, and 4B are considered to have a moderate visual impact on the district.

Currently, US 340 is a two-lane road through the **Village of Rippon Historic District**, a rural hamlet dating to the late 19th and early 20th centuries. Improvements would route traffic east of the village. Alternates 4, **4A (Preferred)**, and 4B have a moderate impact to the visual environment looking east of the village because of the close proximity of the alignments to the village and the contrast of the new facility with the existing landscape.

St. John's Episcopal Church is located along the east side of existing US 340 just north of the US Post Office near Rippon, WV. The building is a contributing element of the Village of Rippon Historic District. Alternates 4, **4A (Preferred)**, and 4B are located east of the existing US 340 alignment. The property will not be directly impacted by land acquisition. There will be a buffer of trees, shrubs, and out buildings between the church and the proposed US 340 facility, therefore visual impacts are anticipated to be low.

The **William Grubb Farmhouse** dates back to 1763 with additions throughout the house's existence. The house is a rare vernacular building type that combines a stone end with log construction. A barn with a silo, a corncrib, a well house, a chicken coop, and a studio are included on the property. From the front of the main house, the existing US 340 is not visible because of the natural topography and vegetation. Alternates 4, **4A (Preferred)**, and 4B are located about 1,450 feet east of the Grubb Farm. Each remaining build alternate has been evaluated as having no impact due to the fact that they are east of existing US 340 and any view of the facility is obstructed.

The **Olive Boy Farm** is located along CR 38 (Smith Road), east of existing US 340. This Italianate style house is believed to have been constructed in the 1840's. In addition to the main house, there are several outbuildings including a kitchen/slave quarters, springhouse, barn, and tenant house. A family cemetery dating to the 1850's is also located on this farm. The main residence is at an elevation of 500 feet above mean sea level. To the west, the topography varies slightly and gently slopes down towards a tributary to Long Marsh Branch and gradually rises back up to existing US 340. To the east, the topography generally slopes down from 500 feet above mean sea level to 475 feet above mean sea level. Looking east from the back of the house, the viewshed includes a tributary to Long Marsh Run and pastures. Alternates 4, **4A (Preferred)**, and 4B will traverse the western most edge of the property and lie approximately 1,300 feet west of the historic house. A clear view of Alternates 4, 4A, and 4B are obstructed due to the existing landscape. Visually, these alternates have been evaluated as having a low impact to the property based on their close relationship to the existing facility. This evaluation is based on the visibility of the facility and the contrast between the existing landscape and the new facility.

Glenwood is located south of the community of Rippon on the east side of US 340. The property consists of a main residence and several outbuildings, dating back to 1844. The Glenwood property is at an elevation of approximately 500 feet above mean sea level. Looking west from the front yard of Glenwood, the terrain varies in elevation by about 10 feet. A clear view of existing US 340 is obstructed by trees and shrubs. Looking east, the terrain levels out and mountains are present in the background. Alternate 4 lies approximately 950 feet west of Glenwood. Alternates **4A (Preferred)** and 4B lie approximately 1,200 feet west of the house. Alternates 4, 4A, and 4B have been evaluated as having a moderate impact to the property.

This evaluation is based on the close proximity of each alternate to the property and the contrast of the new facility with the existing landscape.

The **Wayside Farm** main residence was originally built in 1816 with later additions in 1829 and 1880. Other buildings located on the farm are a meathouse, stone milk house, early to mid-nineteenth century log slave quarters/kitchen, a late-nineteenth century timber-framed bank barn on a stone foundation, a late-nineteenth century corncrib, a frame workshop dating to about 1900, and a modern chicken coop. The main residence is at an elevation of approximately 500 feet above mean sea level and faces southwest. Alternates 4, **4A (Preferred)**, and 4B lie to the west of the house, approximately 400-500 feet away at an elevation of 510 feet above mean sea level and impose upon the existing landscape as seen from the house. Based on the close proximity to the property and the degree of contrast of this facility with the landscape, these alternates have been evaluated as having a moderate impact on the visual environment.

The **Ripon Lodge** is one of the most prominent properties within the area. The lodge (now a private residence) dates back to 1833; the property also has many nineteenth and early-twentieth century outbuildings. The Ripon Lodge is situated at an elevation of about 540 feet above mean sea level. The surrounding landscape consists of gentle hills, with variations in elevation of about 5 feet, and planted trees and shrubs. Surrounding land is used for grazing livestock and other agricultural purposes. The lodge faces east, towards existing US 340, and is approximately 1,700 feet west of the existing roadway. Alternates 4, **4A (Preferred)**, and 4B are located east of existing US 340 by 1,600 feet to 2,100 feet. All of these alternates disturb the existing landscape and are somewhat visible from the Ripon Lodge because of open fields associated with this portion of the project area. As a result, these alternates have been evaluated as having a low impact to the perceived visual environment.

Byrdland was constructed between 1830 and 1850. The property consists of a large I-house of log construction with stucco cladding and many outbuildings that date the late 1800's and early 1900's. The property is located on a hill surrounded by mature trees. The main residence is situated at an elevation of about 525 feet above mean sea level and faces west towards the existing US 340. It is approximately 750 feet east of the existing roadway. However, US 340 is barely visible due to varying elevations and existing vegetation. All of the proposed alignments lie west of the main house. Alternates 4, **4A (Preferred)**, and 4B transect the western edge of the historic boundary of the property. The natural characteristics of the land surrounding the

main house preclude a clear view of the existing alignment; however, the introduction of a four-lane facility within the historic boundaries will have some visual implications. For this reason, these build alternates have been evaluated as having a moderate visual impact to the Byrdland property.

Straithmore is a Federal-style house and is believed to have been constructed in 1827. Also located on the property are the ruins of a stone mill and other stone and wood remnants from various outbuildings. The house faces west and is situated on top of a hill that grades down to Bullskin Run. US 340 currently lies about 1,150 feet west of the main house. The topography between the house and the roadway varies in elevation. This undulating terrain makes it difficult, if not impossible, to see the existing roadway. Alternates 4, **4A (Preferred)**, and 4B are in the same approximate location along existing US 340 in this area of the project. Since the alternates will introduce a modern four-lane roadway along the historic boundary, Alternates 4, 4A, and 4B have been evaluated as having a low impact to the visual environment of this property.

The **Norfolk Southern Railroad**, completed in 1882, is located west of existing US 340, extending the length of the project area. The railroad elevation ranges from 525 feet at the south end to 520 feet at the northern end of the project area. Alternates 4, **4A (Preferred)**, and 4B are located at a minimum of 400 feet east of the railroad, will not require any right of way, and are considered to have no visual impacts to the railroad right of way.

The **McPherson-Adams House** is located east of existing US 340 at the terminus of an unpaved lane extending off Meyerstown Road (CR 21). The dwelling is surrounded by grass, a few trees, and a number of small outbuildings. Although the dwelling is outside of the project limits, the proposed NRHP boundary does extend into the project study area. No right of way acquisition is expected within the proposed NRHP boundary and no visual impacts are anticipated.

The **Bullskin Run Rural Historic District** includes an outstanding collection of historic buildings that illustrate the growth and development of the area from the mid-1730s up to the mid-twentieth century. The majority of resources are farm and estate dwellings and their associated outbuildings. Also included are mills, cemeteries, churches, a school, a tavern, and other historic resources that further develop and illustrate Jefferson County's history. The district encompasses approximately 21 square miles, predominantly west of the existing Norfolk Southern Railroad. A portion of the eastern end of the district surrounds the

community of Wheatland and extends across existing US 340. Alternates 4, **4A (Preferred)**, and 4B are anticipated to have no visual impact to the district since existing US 340 already extends through the district.

Berry Hill is a fine example of a circa 1800 stone Federal-style dwelling. This property is located west of the Norfolk Southern Railroad in the vicinity of Franklinton. The house sits at an elevation of 570 feet and is approximately one mile from existing US 340. Alternates 4, **4A (Preferred)**, and 4B will have no visual impact to the property because they are located near the existing US 340 alignment.

The **Beverly Farm** is one of the finest Federal-style brick dwellings within the Bullskin Run Rural Historic District. The house sits at an approximate elevation of 500 feet. A large fill slope was located next to this property when existing US 340 was constructed. Existing US 340 is the eastern boundary for the Beverly Farm and is at an elevation of 520 feet. Alternates 4, **4A (Preferred)**, and 4B will connect with existing US 340 just south of the property and extend to the four-lane section of US 340 at CR 340/3. These alternates are considered to have a low impact on the property.

c) Mitigation

In compliance with the FHWA's Guidelines with respect to the visual environment, mitigation measures will be addressed for the visual effects of the Preferred Alternative on the project area.

The remaining build alternates are not anticipated to have any high rating visual effects to the project area. However, there are moderate visual impacts anticipated to the Kabletown Rural Historic District, Village of Rippon, Glenwood, Wayside, and Byrdland. Low visual impacts are anticipated for Long Marsh Run, Balclutha, Olive Boy Farm, Ripon Lodge, Straithmore, and Beverly.

Mitigation includes the enhancement of positive effects as well as the minimization or elimination of negative effects. In an attempt to minimize or eliminate impacts associated with the Preferred Alternative, the following mitigation measures will be incorporated, as appropriate, during final design:

- Final roadway design and engineering attempts to blend the new road into the existing topography and natural landscape.
- In the areas where the alternate is aligned with an existing road, the horizontal and vertical alignments of the existing road are followed, consistent with design criteria.
- Selective clearing of trees along the right of way is used to minimize the loss of vegetation.
- An aesthetically pleasing highway is provided, with gently rounded grassed shoulders beyond the edge of paving to enhance the view of the road and the view from the road.
- Native vegetation will be planted to screen the highway from the surrounding project area.

6. NOISE

The noise impacts for the proposed improvements have been assessed in accordance with FHWA regulations published in 23 CFR, Part 772, and the WVDOT *Traffic Noise Policy*, July 13, 2011.

There are two types of traffic noise impacts: Noise Abatement Criteria and substantial increase.

The Noise Abatement Criteria (NAC) established by Part 772 and listed in Table IV-15, represents the noise level at which noise abatement must be considered. The NAC apply to areas having regular human use and where lowered noise levels are desired. They do not apply to the entire tract of land on which the activity is based, but only to that portion where the activity takes place. The NAC are given in terms of the A-weighted, hourly equivalent sound level in decibels or dB(A).

The noise impact assessment is made using the criteria listed in Table IV-15. If, for a given activity, the design year noise levels “approach or exceed the NAC”, then the activity is impacted and a variety of abatement measures must be considered. The WVDOT has defined “approach” as one decibel less than the NAC.

The Federal guidelines provide a second criterion for assessing impact. For some locations, a project may impose a large increase in noise levels over base year levels, although the levels

may not reach the NAC. The WVDOH *Traffic Noise Policy* defines the “substantial increase” as 15 dB(A) or greater between the base year and design year.

When traffic noise impacts are identified, noise abatement measures shall be considered for feasibility and reasonableness and may include traffic management measures, alteration of horizontal and vertical alignments, establishment of buffer zones, noise insulation for Activity Category D land uses, and the construction of noise barriers. The final decision to construct noise abatement measures will be made upon completion of the project design and the public involvement process.

Table IV-15: Noise Abatement Criteria

Activity Category	Leq (h) ¹ dB(A) ²	Description of Activity
A	57 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B ³	67 (Exterior)	Residential
C ³	67 (Exterior)	Active sports areas, amphitheaters, auditoriums, campgrounds, cemeteries, daycare centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails and trail crossings.
D	52 (Interior)	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios
E ³	72 (Exterior)	Hotels, motels, offices, restaurants/bars and other developed lands, properties or activities not included in A-D or F.
F	----	Agricultural, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing
G	----	Undeveloped lands that are not permitted

Source: FHWA 23 CFR 772

¹ The equivalent steady-state sound level which in a stated period of time contains the same acoustic energy as the time-varying sound level during the same period of time, with Leq(h) being the hourly value of Leq.

² The Leq(h) activity criteria values are for impact determination only, and are not design standards for noise abatement measures.

³ Includes undeveloped lands permitted for this activity category.

a) Characteristics of Noise

Noise is defined as unwanted or irritating sound. It is emitted from numerous sources, including airplanes, factories, railroads, animals, construction activity, trucks and automobiles. On-road vehicle noise is primarily comprised of noises from engine exhaust, drive train, and the tire/roadway interaction. Of these sources, tire/roadway noise is typically the most offensive at highway travel speeds.

The magnitude of noise is usually described by its sound pressure. Because the range of sound pressure varies greatly, a logarithmic scale is used to relate sound pressures to some common reference pressure, yielding the sound pressure level. Sound pressures levels are expressed in units of decibels (dB) and are often modified by frequency-weighted scales (e.g., A- or C-weighted scales). Table IV-16 presents some common noise sources and their corresponding dB(A) measures.

Table IV-16: Common Indoor and Outdoor Noise Levels

Common Outdoor Noise Levels	Noise Level dB(A)	Common Indoor Noise Levels
	110	← Rock Band
Jet Flyover at 1000 feet →	100	← Inside Subway Train (NY)
Gas Lawn Mower at 3 feet →		
Diesel truck at 50 feet →	90	← Food Blender at 3 feet
Noisy Urban Daytime →	80	← Garbage Disposal at 3 feet
Gas Lawn Mower at 100 feet →	70	← Vacuum Cleaner at 10 feet
Commercial area →		← Normal Speech at 3 feet
	60	
Quiet Urban Daytime →	50	← Large Business Office
		← Dishwasher in the Next Room
Quiet Urban Nighttime →	40	← Large Conference Room
Quiet Suburban Nighttime →		← Library
	30	
Quiet Rural Nighttime →		← Bedroom at Night
	20	
		← Broadcast and Recording Studio
	10	
	0	← Threshold of Hearing

Adapted from the *Guide on Evaluation and Attenuation of Traffic Noise*, American Association of State Highway and Transportation Officials (AASHTO). 1974 (revised 1993).

The A-weighted scale is used almost exclusively when measuring vehicle noise because it places a stronger emphasis on the frequency range to which the human ear is most sensitive

(approximately 1,000-6,000 hertz). Sound levels filtered with the weighted A-weighted scale are often expressed as dB(A). Throughout this discussion, noise levels are expressed in dB(A).

Since most environmental noise fluctuates from moment to moment, it is common practice to condense all of this information into a single number called the equivalent sound level (Leq). The Leq is the value of a steady sound level that represents the same sound energy as the actual time-varying sound levels evaluated over the same period. For highway traffic noise assessment, Leq is typically evaluated over a one hour period, and is denoted as Leq(h). Throughout this report, all noise levels are expressed in a one hour equivalency.

b) Measurement of Existing Noise Levels

The two most commonly used methods of obtaining noise levels for existing conditions are by computer modeling and field measurements. Computer modeling is feasible only when the predominant noise source is vehicular traffic. In situations where traffic is not the primary noise source, field measurement (noise monitoring) is the accepted method for determining the existing ambient noise level.

Noise monitoring was performed in October 2014 along the project alternatives with a Larson-Davis Model 824 Type I Sound Level Meter. Sixteen measurements were taken over a span of three days. Noise measurement levels ranged from 49.2 dB(A) to 64.5 dB(A).

The data collected was used in the validation of the noise model. The model is considered validated if the measured noise levels and the predicted noise levels for the existing condition are within +/- 3 dB(A).

The noise measurements validated use of the FHWA Traffic Noise Model, Version 2.5 (TNM) as appropriate for use in determining the traffic generated noise levels. The model accounts for such factors as ground absorption, roadway geometry, receptor distance, existing buildings, topography, vehicle volumes and speeds, and volumes of medium trucks (vehicles with 2 axles/6 tires) and heavy trucks (3 axles or more). All of the measurements were validated except for one: FM 21 was taken at a distance from any traffic noise source and where the dominant noise was non-traffic sources such as insects, sporadic vehicle traffic, air planes and other natural phenomena.

c) Predicted Existing Noise Levels

Traffic noise emissions are composed of several variables, including the number, types, and travel speeds of the vehicles, as well as the geometry of the roadways on which the vehicles travel. Additionally, variables such as weather and intervening topography affect the transmission of traffic noise from the vehicles to noise sensitive receptors.

In accordance with industry standards and accepted best practices, detailed computer models were created using the FHWA TNM 2.5. The computer models were validated to within acceptable tolerances of field-monitored traffic noise data, and were used to predict traffic noise levels for receptor locations in the vicinity of the proposed project. Sporadic traffic noises such as horns, squealing brakes, screeching tires, etc. are considered aberrant and are not included within the predictive model algorithm. Traffic noise is not constant; it varies in time depending upon the number, speed, type, and frequency of vehicles that pass by a given receptor. Furthermore, since traffic noise emissions are different for various types of vehicles, the TNM algorithm distinguishes between the source emissions from the following vehicle types: automobiles, medium trucks, heavy trucks, buses, and motorcycles, as shown in Table IV-17. The computer traffic noise prediction model uses the number and type of vehicles on the planned roadway, vehicle speeds, the physical characteristics of the road (curves, hills, depressions, elevations, etc.), receptor location and height, and, if applicable, barrier type, barrier ground elevation, and barrier segment top elevations.

Table IV-17: Traffic Noise Model (TNM) Vehicle Classification Types

TNM Vehicle Type	Predicted Design-Year Noise Level Increase ² Leq(h)
Autos	All vehicles with two axles and four tires, including passenger cars and light trucks, weighing 9,900 pounds or less
Medium Trucks	All vehicles having two axles and six tires, weighing between 9,900 and 26,400 pounds
Heavy Trucks	All vehicles having three or more axles, weighing more than 26,400 pounds
Buses	All vehicles designed to carry more than nine passengers
Motorcycles	All vehicles with two or three tires and an open-air driver / passenger compartment

Sources: FHWA *Measurement of Highway-Related Noise*, § 5.1.3 Vehicle Types.
 FHWA *Traffic Monitoring Guide*, § 4.1 Classification Schemes

Noise levels in this study have been determined for base year (2011/2012) existing conditions and the design year (2033) build and no-build conditions. Table IV-18 presents a summary of the existing ambient noise measurements along with corresponding predicted values from the computer model, based on the traffic data collected during the noise monitoring. At the ten locations where the predominant noise source is from vehicular traffic, the predicted values, obtained from the computer model, were all within 3 dBA's of the measured values.

Table IV-18: Ambient Noise Levels

Noise Monitor Site No.	Site Description	Distance to US 340 (feet)	Measured Ambient (dBA)	Predicted Value (dBA)
FM01	Residence off US 340 / Oakland Ln	70	64.5	63.5
FM02	Residence off Shepherd's Mill Rd	860	52.4	53.2
FM03	Residence off US 340 behind Rainbow Road Club	125	64.3	62.1
FM04	Residence off US 340 / Lewisville Rd	135	61.8	62.5
FM05	Residence off US 340 north of Scooter Ln	280	55.7	55.4
FM08	Residence off Jenkins Hill Rd	760	49.2	51.1
FM09	Residence off Wheatland Rd	535	51.4	52.4
FM10	Residence off US 340 at north end of project	160	64	61.7
FM11	Residence off US 340 south of Allen Ln	260	53.8	56.8
FM12	Residence off Birdland Way	200	55.6	57.0
FM13	Residence off Earl Ellinfritz Dr	120	63.8	63.9
FM14	Residence off Meyerstown Rd	1140	51.3	51.3
FM15	Abandoned residence off Meyerstown Rd	565	53.4	54.6
FM16	Residence on east side of US 340 south of USPO	155	60.0	59.7
FM21	Residence at 227 Ryan's Glen Dr	975	51.5	45.8
FM22	Residential cul-de-sac (Rippon Commons)	525	53.0	51.8

d) Traffic Noise Impact Analysis

The initial task in determining noise impacts is to identify activity areas along the project corridors that are sensitive to noise. Impact assessments have been performed for 83 receptors within the project corridors which represent 84 residential properties, one commercial property, and one church. These areas are shown in Exhibit IV-12. Any properties that were not represented either have no outdoor noise-sensitive human activity or were determined to be Activity Category F, which are areas that are not sensitive to noise and therefore do not have NAC impact criteria.

Traffic noise abatement is warranted and must be considered when traffic noise impacts are created by either of the following two conditions:

- The predicted traffic noise levels for the design year approach (reach one decibel less than) or exceed the NAC contained in 23 CFR 772 and in Table IV-15.
- The predicted traffic noise levels for the design year substantially exceed base year (2011/2012) noise levels, defined as a 15 dB(A) increase.

The noise prediction results are detailed for each noise sensitive area in Table IV-19. Included for each site are the applicable NAC category and the worst hourly equivalent sound level for the base year (2011/2012) and the build condition for the design year (2033) for each of the four build alternatives studied.

The results of the traffic noise analysis indicate that the proposed US 340 improvement will both increase and decrease noise levels at noise sensitive receptors in the immediate vicinity of the proposed facility. The proposed improvements will result in design year outdoor build noise levels which range from 50 to 68 dB(A), ranging from a -14 dB(A) decrease to a 13 dB(A) increase over existing noise levels. The indoor noise level at the one church studied will decrease from 50 dB(A) in the base year condition to 41 dB(A) in the build condition. For reference purposes, an increase of three decibels is considered barely perceivable, and an increase of ten decibels doubles the loudness.

A comparison of the design year (2033) build noise levels with the applicable NAC reveals that two receptors along Alternates 4 and **4A (Preferred)** and one receptor along Alternate 4B will receive traffic noise levels which approach or exceed the NAC. A comparison of the design year build noise level increases with the applicable criteria reveals that no receptors will experience design year build noise levels that will be substantially higher than base year levels.

Table IV-19: Leq Traffic Noise Levels

Receptor	Properties Represented	NAC Land Use Category	Approaching NAC Criteria	Noise Levels*								
				dB (A)								
				Existing (2012)	No-Build		Alt 4		Alt 4A (Preferred)		Alt 4B	
Level	Diff	Level	Diff		Level	Diff	Level	Diff				
R003	1	B	66	53	55	2	55	2	55	2	55	2
R005	1	B	66	65	67	2	68	3	68	3	68	3
R015	1	B	66	53	55	2	55	2	55	2	55	2
R016	1	B	66	61	63	2	63	2	63	2	63	2
R017	1	B	66	63	65	2	65	2	65	2	65	2
R020	1	B	66	56	58	2	59	3	59	3	59	3
R021	1	B	66	54	56	2	57	3	57	3	57	3
R026	1	B	66	53	54	1	51	-2	54	1	54	1
R027	1	B	66	54	56	2	51	-3	55	1	55	1
R028	1	B	66	58	60	2	54	-4	57	-1	57	-1
R029	1	B	66	64	66	2	56	-8	60	-4	60	-4
R030	1	B	66	70	72	2	**	0	62	-8	62	-8
R031	1	B	66	57	59	2	52	-5	55	-2	55	-2
R033	1	B	66	67	68	1	56	-11	59	-8	58	-9
R034	1	B	66	68	69	1	58	-10	63	-5	61	-7
R035	1	B	66	68	69	1	57	-11	62	-6	61	-7
R036	1	B	66	71	73	2	58	-13	60	-11	60	-11
R037	1	B	66	65	67	2	55	-10	58	-7	57	-8
R038	1	B	66	60	61	1	53	-7	56	-4	55	-5
R039	1	B	66	57	59	2	52	-5	55	-2	54	-3
R041	1	B	66	58	59	1	52	-6	54	-4	53	-5
R042	1	B	66	60	61	1	53	-7	55	-5	54	-6
R044	1	B	66	70	72	2	57	-13	59	-11	58	-12
R045	1	B	66	56	58	2	51	-5	53	-3	52	-4
R046	1	B	66	59	60	1	52	-7	54	-5	53	-6
R047	1	B	66	58	60	2	51	-7	54	-4	52	-6
R048	1	B	66	70	72	2	57	-13	59	-11	58	-12
R049	1	B	66	68	70	2	57	-11	57	-11	56	-12
R050	1	B	66	72	73	1	59	-13	60	-12	59	-13
R051	1	B	66	72	73	1	60	-12	62	-10	60	-12
R052	1	B	66	63	65	2	59	-4	65	2	60	-3
R054	1	B	66	50	51	1	60	10	56	6	61	11
R055	1	B	66	70	71	1	61	-9	64	-6	61	-9
R060	1	B	66	60	62	2	55	-5	57	-3	55	-5

Receptor	Properties Represented	NAC Land Use Category	Approaching NAC Criteria	Noise Levels*								
				dB (A)								
				Existing (2012)	No-Build		Alt 4		Alt 4A (Preferred)		Alt 4B	
Level	Diff	Level	Diff		Level	Diff	Level	Diff				
R061	1	B	66	64	65	1	55	-9	58	-6	56	-8
R062	1	B	66	74	75	1	64	-10	65	-9	64	-10
R063	1	B	66	74	75	1	64	-10	65	-9	64	-10
R064	1	B	66	70	72	2	60	-10	63	-7	61	-9
R065	1	B	66	72	74	2	60	-12	64	-8	63	-9
R066	1	B	66	70	71	1	58	-12	62	-8	61	-9
R067	1	B	66	64	66	2	54	-10	58	-6	56	-8
R069	1	B	66	71	73	2	58	-13	62	-9	62	-9
R070	1	B	66	65	67	2	56	-9	60	-5	57	-8
R071	1	B	66	74	75	1	60	-14	64	-10	64	-10
R074	1	B	66	60	61	1	57	-3	60	0	56	-4
R076	1	B	66	72	74	2	59	-13	60	-12	59	-13
R078	1	B	66	60	62	2	54	-6	56	-4	55	-5
R079	1	B	66	60	61	1	56	-4	57	-3	56	-4
R080	1	B	66	58	59	1	55	-3	56	-2	55	-3
R084	1	B	66	54	56	2	57	3	59	5	59	5
R085	1	B	66	59	61	2	63	4	62	3	64	5
R086	1	B	66	63	66	3	68	5	66	3	**	0
R089	1	B	66	60	62	2	**	0	64	4	**	0
R095	4	B	66	61	62	1	62	1	61	0	61	0
R102	1	B	66	64	66	2	65	1	64	0	64	0
R103	1	B	66	63	65	2	64	1	64	1	65	2
R109	1	B	66	58	60	2	64	6	62	4	63	5
R116	1	B	66	63	64	1	62	-1	62	-1	62	-1
R117	1	B	66	53	55	2	55	2	55	2	55	2
R118	1	B	66	60	61	1	**	0	62	2	61	1
R119	1	B	66	61	62	1	**	0	**	0	**	0
R120	1	B	66	60	62	2	**	0	**	0	**	0
R121	1	B	66	55	57	2	**	0	62	7	62	7
R122	1	B	66	52	53	1	65	13	58	6	58	6
R123	1	B	66	72	74	2	58	-14	60	-12	60	-12
R124	1	D	51	50	51	1	40	-10	41	-9	40	-10
R125	1	B	66	69	71	2	60	-9	61	-8	60	-9
R127	1	B	66	68	69	1	58	-10	60	-8	59	-9
R128	1	B	66	50	51	1	63	13	59	9	**	0

Receptor	Properties Represented	NAC Land Use Category	Approaching NAC Criteria	Noise Levels*								
				dB (A)								
				Existing (2012)	No-Build		Alt 4		Alt 4A (Preferred)		Alt 4B	
Level	Diff	Level	Diff		Level	Diff	Level	Diff				
R129	1	B	66	73	74	1	60	-13	64	-9	63	-10
R130	1	B	66	70	71	1	57	-13	59	-11	57	-13
R131	1	C	71	53	55	2	55	2	56	3	57	4
R132	1	B	66	51	53	2	**	0	56	5	56	5
R133	1	B	66	51	52	1	59	8	55	4	55	4
R134	1	B	66	51	53	2	58	7	55	4	55	4
R135	1	B	66	52	53	1	57	5	55	3	54	2
R136	1	B	66	48	49	1	53	5	50	2	50	2
R137	1	B	66	49	51	2	55	6	53	4	52	3
R138	1	B	66	49	50	1	55	6	52	3	53	4
R139	1	B	66	50	52	2	59	9	53	3	54	4
R140	1	B	66	50	51	1	**	0	54	4	55	5
R141	1	B	66	57	59	2	60	3	59	2	59	2
R142	1	B	66	59	60	1	58	-1	61	2	56	-3

*Noise levels determined for a design year of 2033

** Potential acquisition of the receptor under the build alternate

Based on the previously outlined NAC, noise impacts were determined for the remaining build alternates. Except for two receptors under various alternates, all receptors fall under Land Use Activity Category B (67 dBA). The two non-Category B receptors are one Category D church (R124) and one Category C commercial (R131) property.

Levels that exceed the noise criteria (approaching NAC and/or substantial increase criteria) are denoted for individual receptors. None of the receptors exceed the “substantial increase” criteria. Two of the receptors, R005 and R086 designated as NAC Land Use Category B, approach or exceed the NAC. Each of these receptors represent a single property.

Since the alternate alignments are relatively similar to one another, the noise levels from each of the build alternates can be expected to be similar. Impacts to the same receptors were observed for the four build alternates with receptor R086 being acquired under Alternates 4B and 4C.

e) Potential Noise Abatement Measures

Section 23 CFR Part 772 identifies certain noise abatement measures that may be considered in the project design to reduce traffic noise impacts. These abatement measures include: traffic management, alteration of alignments, buffer zones, building insulation, and the construction of noise barriers.

- Highway alignment selection involves the horizontal or vertical orientation of the proposed improvements in such a way as to minimize impacts and costs. The selection of alternate alignments for noise abatement purposes must consider the balance between noise impacts and other engineering and environmental parameters. For noise abatement, horizontal alignment selection is primarily a matter of locating the roadway at a sufficient distance from noise sensitive areas. The alternates in this study were developed to minimize costs and environmental impacts. Hence, further alteration of the proposed horizontal alignments is not reasonable or feasible from a planning and design standpoint.
- Traffic management measures that limit vehicle type, speed, volume, and time of operations are often effective noise abatement measures. For this project, traffic management measures are not considered appropriate for noise abatement due to their effect on the capacity and level of service on the proposed roadway. Additionally, US 340 is a primary rural highway and elimination of truck traffic will not be in keeping with the function of the facility.
- Although vegetation does not generally make an efficient sound barrier, the use of landscaping can have psychological effects on decreasing perceived sound levels. The design of landscaping for such a purpose is dependent upon location and site-specific criteria and requires details beyond the scope of this analysis. Therefore, vegetation was not considered for noise mitigation purposes in this report.
- WVDOH policy does not allow for the purchasing of properties for the purpose of noise abatement. Therefore, property acquisition was not considered for noise abatement purposes in this report.

The only remaining feasible abatement measure is the construction of noise barriers. To be considered for construction, a noise barrier must be both feasible and reasonable according to WVDOH policy.

The feasibility of a noise barrier is based on its effectiveness in reducing traffic noise levels as well as any adverse impacts to property access, drainage, topography, utilities, safety, and maintenance requirements. A barrier which reduces noise levels by a minimum of five dB(A) at a minimum of one impacted receptor is considered feasible.

The construction of a noise barrier is not reasonable if the cost is greater than \$30,000 per benefited receptor. If the cost of the abatement exceeds this cost per receptor, then the mitigation measure is not considered reasonable. The estimated cost of construction (material and labor) is \$25 per square foot. In the analysis, each residential unit is considered a single residential property. To remain in compliance with Federal regulations, the allowance analysis must also consider receptors which are not impacted but which will also benefit from the construction of a noise barrier. The area of noise barrier per benefited receptor calculation considers all benefitted receptors without regard to whether they are predicted to be impacted or not.

The barrier must also provide a 7 dB(A) reduction in noise to at least ten percent of the benefited receptors.

Noise Barriers were investigated at two locations along the four build alternates. For each barrier investigated, multiple heights, lengths and locations were studied. During the design phase of this project it likely will be possible to refine the end points, variations in height, and the locations of the barriers relative to the proposed roadways in order to maximize their efficiency and enhance their aesthetics. During the design phase of the project there may also be modifications to the horizontal and vertical alignments which could change the effectiveness of the barriers. The investigations completed for this phase of the analysis were intended to identify the likelihood of a barrier being both feasible and reasonable and not to identify its final configuration.

Barrier 1

A noise barrier was investigated to mitigate the predicted traffic noise level impact to one impacted residential receptor (R005 – residence behind Rainbow Road Club) along all four

alternates. Barrier 1 is 700 feet long and is located along the west side of US 340. At a height of 14 feet, it will provide a 7 dB(A) reduction in noise at the receptor. The total wall cost is \$245,000 for one benefited receptor. This exceeds \$30,000 per benefited receptor per the WVDON Highway Traffic Noise Policy (Effective July 13, 2011). This barrier is preliminarily considered feasible but not reasonable and is not recommended for further consideration.

Barrier 2

A noise barrier was investigated to mitigate the predicted traffic noise level impact to one impacted residential receptor (R086 – residence opposite Jenkins Hill Rd on US 340) along Alternatives 4 and **4A (Preferred)**. Barrier 2 is 1300 feet long and is located on the east side of US 340 between Birdland Way and Strathmore Farm Lane. At a 16-foot height, the sound barrier wall will provide a 7 dB(A) reduction in noise at the impacted receptor. The barrier will also benefit two receptors located along Strathmore Farm Lane (R089 and R109). The total wall cost is \$455,000, or \$151,700 per benefited receptor. This exceeds the allowable cost of \$30,000 per benefited receptor per the WVDON Highway Traffic Noise Policy (Effective July 13, 2011). This barrier is preliminarily considered feasible but not reasonable and is not recommended for further consideration.

f) Construction Noise

The major construction elements of this project are expected to be earth removal, hauling, grading, and paving. General construction noise impacts, such as temporary speech interference for passersby and those individuals living or working near the project, can be expected particularly from paving operations and grading equipment. Extremely loud construction noise activities such as the usage of impact hammers will provide sporadic, temporary, and potentially substantial noise impacts in localized areas.

Whenever possible, measures should be taken to reduce the duration and intensity of construction noise impacts, such as work-hour limitations, enforcing equipment muffler and maintenance requirements, locating haul-road locations sensitive to neighboring land use, and the restriction of tailgate banging. In addition, the neighboring property owners and users should be provided with a means to register complaints about construction noise that includes timely response and follow-up procedures.

To reduce the potential for noise impacts at the majority of residential receptors, work should not be allowed during typical sleeping hours and should be limited during weekends. Impact-type activities especially should be conducted in residential areas while people are at work and children are at school. Any construction activities that are necessary during evening and overnight hours should be closely coordinated so that appropriate mitigation strategies can be put into place before the construction activities are started.

There is one church among the residential and commercial receptors along this project. Evening and weekend work should be scheduled to be sensitive to not interrupting activities and services being conducted at the church property.

7. AIR QUALITY

An *Air Quality Analysis* Report was completed in compliance with the Clean Air Act (CAA) and its amendments, related Federal regulations, and FHWA Guidance.

Jefferson County is included in the Hagerstown / Eastern Panhandle Metropolitan Planning Organization and this project is included in the 2014-2017 *Transportation Improvement Program* and the 2040 *Long Range Transportation Plan Update*.

The primary pollutants from motor vehicles are unburned hydrocarbons, nitrogen oxides (NO_x), carbon monoxide (CO) and particulates. Hydrocarbons (HC) and NO_x can combine in a complex series of reactions catalyzed by sunlight to produce photochemical oxidants such as ozone and NO₂. Because these reactions take place over a period of several hours, maximum concentrations of photochemical oxidants are often found far downwind of the precursor sources. These pollutants are regional problems.

Clarke and Jefferson Counties are in attainment with the United States Environmental Protection Agency's (EPA) National Ambient Air Quality Standards (NAAQS). Since a CO hot spot analysis was performed for the 1997 air quality evaluation, the hot-spot analysis was updated.

a) Carbon Monoxide

For each of the four build alternates being evaluated in the SDEIS, the roadway segment having the potential for generating the highest CO concentration was identified. This critical segment happens to be identical for all alternates and is located between Meyerstown Road and CR 19

(Withers Larue Road). Since the alignment, traffic, and right of way are identical for all build alternates along this segment, only one analysis at one receptor site was required. The selected receptor site is located on the proposed right of way line. Air quality projections were calculated for the existing condition (2012), the year of project completion (2020), interim year after project completion (2025), and the design year (2033).

For comparison purposes, air quality projections were calculated for the no build alternate using the existing alignment and traffic volumes projected for the same years as examined in the analysis of the build alternates. The critical segment having the highest volume and lowest estimated speed is located in Rippon, north of the intersection of US 340 and Meyerstown Road. The receptor used in the analysis is located at the edge of the existing right of way line.

Speeds for the build and no build scenarios were estimated using the Highway Capacity Software (HCS2010) package and the *Highway Capacity Manual*.

Carbon Monoxide 1-hour and 8-hour concentrations of 0.7 ppm and 0.6 ppm, respectively, were used for background concentrations in the analysis. These values were obtained from the USEPA's AirData website and were observed in 2014 at the nearest air monitoring station for CO in Howard County, Maryland.

In comparing the projected CO concentration levels in with the NAAQS, no violations of the 1-hour standard (35 ppm) or 8-hour standard (9 ppm) are expected for the no build or any of the build alternates. The highest 1-hour and 8-hour CO concentrations for any of the years analyzed are not expected to exceed 1.4 and 1.0 ppm (including background contributions), respectively, at the investigated site.

Table IV-20: Maximum Predicted Carbon Monoxide Concentrations

1-Hour Concentrations (including 0.7 ppm background concentration)		
Year	Concentration (ppm)	
	No Build	All Alternates - Build
2012 - Existing	1.4	N/A
2020 - Year of Project Completion	1.2	0.9
2025 - Interim Year	1.0	0.7
2033 - Design Year	0.9	0.7
8-Hour Concentrations (including 0.6 ppm background concentration)		
Year	Concentration (ppm)	
	No Build	All Alternates - Build
2012 - Existing	1.0	N/A
2020 - Year of Project Completion	0.9	0.7
2025 - Interim Year	0.8	0.6
2033 - Design Year	0.7	0.6

National Ambient Air Quality Standards: 35 ppm (1-hour) & 9 ppm (8-hour)

b) Mobile Source Air Toxics (MSAT)

Air toxics analysis is a continuing area of research. In particular, the tools and techniques for assessing project-specific health outcomes as a result of lifetime MSAT exposure remain limited. These limitations impede the ability to evaluate how potential health risks posed by MSAT exposure should be factored into project-level decision making. As such, the FHWA has developed a tiered approach for analyzing MSATs in NEPA documents, depending on specific project circumstances. The FHWA has identified three levels of analysis:

- No analysis for projects with no potential for meaningful MSAT effects;
- Qualitative analysis for projects with low potential for MSAT effects; and
- Quantitative analysis to differentiate between alternatives for projects with higher potential MSAT effects.

The US 340 improvement project is included in the middle category.

For each alternate in the SDEIS, the amount of MSAT emitted would be proportional to the vehicle miles traveled, assuming other variables such as fleet mix are the same between alternates.

Because the traffic volumes for the No Build Alternate are the same as any of the Build Alternates, higher levels of MSAT are not expected from any of the build alternates compared to the no build.

In addition, because the estimated vehicle miles traveled under each of the build alternates is the same, it is expected that there would be no appreciable difference in overall MSAT emissions amount the remaining build alternates. Also, regardless of the chosen alternate, design year emissions will likely be lower than present levels as a result of the EPA's national control programs that are projected to reduce annual MSAT emissions by over 80 percent from 2010 to 2050. Local conditions may differ from these national projections; however, the magnitude of the EPA-projected reductions is so great that MSAT emissions in the project area are likely to be lower in the future in virtually all locations.

Under each alternate, there may be localized areas where vehicle miles traveled would increase and others where it would decrease. Therefore, it is possible that localized changes in MSAT emissions may occur. The localized increases in MSAT emissions would likely be more pronounced along new alignment sections; localized decreases would be likely to occur where through-traffic is diverted to the new alignment, such as Rippon. However, even if these increases do occur, they too will be substantially reduced in the future due to implementation of the EPA's vehicle and fuel regulations.

c) Climate Change

Transportation sources contribute to greenhouse gases through the burning of petroleum-based fuel. According to FHWA, transportation sources are responsible for approximately one quarter of greenhouse gas emissions in the US. Under the CAA, the EPA has the authority to establish motor vehicle emissions standards for CO and other greenhouse gases, although such standards have not yet been established as part of the NAAQS. FHWA is actively involved in efforts to initiate, collect, and disseminate climate change-related research and to provide technical assistance; however, FHWA does not believe it is informative to consider greenhouse gas emissions in this SDEIS.

FHWA will continue to pursue these efforts as productive steps to address this important issue. FHWA will review and update its approach to climate change at both the project and policy level as more information emerges and as policies and legal requirements evolve. Discussions regarding greenhouse gas emissions are ongoing.

8. HAZARDOUS MATERIALS

An initial assessment of potential contamination sites was conducted for the project. This review consisted of a field visit to determine business names, types, and site characteristics of parcels that were within the project vicinity and review of computer database files from the West Virginia Division of Environmental Protection. In general, the sites discussed are contained within the proposed right of way or within 500 feet of the proposed right of way for the build alternates under consideration. The West Virginia Department of Environmental Protection's database files provided information on known hazardous waste generators, underground storage tanks, and reported contamination incidents. The Jefferson County Planning Commission and the County Engineer were consulted for any available information on potential contamination sites. They did not have information relevant to the project area. Research into past land uses was conducted. Past land uses may present a concern since contaminants can remain in the environment for many years. Historic aerial photography from 1979 was available from the Jefferson County Planning Commission for the project area but did not indicate any additional potential contamination sites. Long-time residents of the area were also questioned regarding past land uses. A few gas stations formerly existed in the community of Rippon; however, these are too far from the locations of the proposed alternates to be of concern.

After review of the available information on each site, a determination was made of the risk of encountering unknown contamination at that site. These assessments were based on the likelihood that contamination exists at the site and on the degree of concern this presents relative to the build alternates under consideration.

The risk system identifies four degrees of risk: No, Low, Medium, and High. This categorization is for general purposes. Sites where known spills or leaks have occurred may not necessarily present a high degree of concern if the environmental agencies are aware of the situation, enforcement actions are being taken, and remedial activities are either completed or underway. The degrees of risk are defined as follows:

- No Risk means that the observed condition of the site, the state records, and the current or previous business activity does not support a contamination risk.

- Low Risk means that the business handles hazardous materials or petroleum products but has a clean appearance and no known violations. An example of such a business might be a gas station with new underground storage tanks, monitoring wells, leak prevention system, no automotive maintenance, and a clean record in the environmental agency’s files.

- Medium Risk indicates there is a higher concern or may include sites of known contamination. Medium risk sites may require some follow-up prior to right of way acquisition.

- High Risk suggests that additional studies are recommended and that soil and groundwater sampling and laboratory analysis may be required.

Table IV-21: Likelihood to Encounter HazMats at Select Sites

Site	Risk
Rainbow Road Club	Low
Residence near Chapman Trailer Court	No
Ripon Lodge	No
Byrdland	Low
Dave’s Auto Sales	Medium

The **Rainbow Road Club** is located just north of the state line between Virginia and West Virginia on the west side of the existing US 340. Upon field review, there was a lot of farm equipment to the rear of the building with a large garage on the property. It appears that light repair work is done at this location. Two rusted tanks were also observed to the rear of the property, of the size typically used for home heating oil. Alternates 4, **4A (Preferred)**, and 4B are located adjacent to the property along the existing US 340. This property is given an assessment of low risk for all of the build alternates based on the minimal quantities of hazardous materials likely to be utilized on-site.

One **residence** of concern is located on the west side of the existing US 340, east of Chapmans Trailer Court and west of the community of Rippon. An underground storage tank was identified on this property. During field review, an antique gas pump was visible. The house was built around 1920. The owner was questioned about the gas pump. It was there when he

bought the property in the 1970's and he was unaware if there was an underground storage tank on the property. There was no record of this site in the West Virginia Division of Environmental Management's underground storage tank database. The site poses no risk to Alternates 4, **4A (Preferred)**, and 4B due to their distance from the site.

Ripon Lodge is located north of the community of Rippon, west of the existing US 340. An underground storage tank could be located next to the Ripon Lodge. Upon field review, the only possible indication of this tank was a hill that appeared to have been created by fill. There was no evidence to confirm that a tank once existed or exists on this property. The West Virginia Department of Environmental Protection database did not have any information on this site. The site poses no risk to the Alternates 4, **4A (Preferred)**, or 4B.

Byrdland is located on the east side of the existing US 340, south of Bullskin Run. Another antique gas pump was observed at this residence during field review. No information is available on if the underground storage tank associated with this pump has been removed. This site could not be found in the West Virginia Division of Environmental Management's database. Alternates 4, **4A (Preferred)**, and 4B are located approximately 400 feet from the gas pump. Despite the lack of information on a potential underground storage tank at this site, it is given an assessment of low risk for the build alternates due to the distance from the proposed right of way.

Dave's Auto Sales is located on the east side of the existing US 340, just north of Bullskin Run in the Wheatland area. There is currently a 275 gallon used oil tank on-site that is picked up and recycled by a company operating out of Baltimore. The building was formerly Baney's Mill Garage. It was a gas station at one time. According to the current business owner, the tanks were removed approximately eight years ago and there are no known contamination problems on-site related to these tanks. The US EPA Hazardous Waste Identification Number is WVD988786414. Records indicate that the facility generates less than 220 lbs. per month of hazardous materials. The facility lies directly within the proposed right of way for the Alternates 4, **4A (Preferred)**, and 4B. This site is given an assessment of medium risk for the Alternates 4, 4A, and 4B based on the available information.

D. OTHER POTENTIAL IMPACTS

1. ENERGY

The short-term energy requirement for construction of the Alternates 4, **4A (Preferred)**, or 4B is greater than the energy requirements for the No Build Alternative. However, the post-construction operational energy requirement of the facility is less with a build alternative than with the No Build Alternative. The savings in operational energy requirements offset construction energy requirements and thus, in the long-term, result in net savings in energy usage. The proposed facility reduces traffic congestion, thereby reducing overall vehicular energy consumption.

2. CONSTRUCTION IMPACTS

All of the build alternates considered for the project have similar construction impacts. All of the construction impacts listed below are temporary in nature. Construction activities for the proposed project may impact air quality, noise, water quality, and traffic flow. There are also visual impacts for those residents and travelers within the immediate vicinity of the project.

- The air quality impact will be temporary and primarily consists of emissions from diesel-powered construction equipment, dust from embankment and the haul road area, and burning of debris.
- Short-term noise and vibration impacts may be created through heavy equipment movement and other construction activities such as pile driving.
- Water quality impacts from erosion and sedimentation will be controlled through best management practices.
- Maintenance of traffic and sequence of construction will be scheduled to minimize traffic delays throughout the project. Signs will be utilized where appropriate to provide notice of road closures and other pertinent information to the traveling public. The local news media will be notified in advance of road closings and other construction related activities that could excessively inconvenience the community so that motorists, residents, and businesses could plan their day and travel routes in advance. Access to all businesses and residences will be maintained to the extent practical through controlled construction scheduling. Traffic delays will be minimized

to the extent possible where many construction operations are in progress at the same time.

- For residents living along the proposed facility, some of the materials stored for project construction may be displeasing visually; however, this condition is only temporary.

Construction of the roadway and structures may require excavation of unsuitable material, placement of embankments, and use of materials such as asphalt concrete and portland cement concrete. Disposal may be on-site in a retention area or off-site. The removal of structures and debris will be accomplished in accordance with local and state regulations. The contractor is responsible for the methods of controlling pollution on haul roads, in borrow pits, other material pits, and areas used for disposal of waste materials from the project. Temporary erosion control features will comply with best management practices and will be designed in accordance with the WVDOT *Erosion and Sediment Control Manual*.

3. CUMULATIVE AND SECONDARY IMPACTS

In accordance with the NEPA, potential secondary and cumulative impacts related to the proposed project have been identified. Guidelines prepared by the Council on Environmental Quality (CEQ) for implementing NEPA broadly defined secondary impacts as those that are “caused by an action and are later in time or farther removed in distance but are still reasonably foreseeable” (40 CFR 1508.8). Cumulative impacts are those that “result from the incremental impacts of an action when added to other past and reasonably foreseeable future actions” (40 CFR 1508.7). They are similar to secondary impacts in the geographic context. However, cumulative impacts consider past, present, and future trends.

a) Secondary Impacts

Also commonly known as induced development, secondary impacts are the downstream ramifications of the initial action. A wide variety of effects can occur. Generally, the analysis works through three questions to identify potential secondary effects: 1) where does the project have the potential to improve accessibility? 2) Where is the increased accessibility likely to cause changes in development patterns? 3) What impacts are likely to occur based on the change in development patterns?

The proposed project is intended to meet the transportation needs of the area including capacity, safety, and road deficiencies. It is driven more by system linkage and safety

considerations than improving access. As such, it has a lower potential to induce secondary growth than a transportation improvement designed to increase access, such as building a new facility.

The local comprehensive plan, *Envision Jefferson 2035*, clearly defines how county planners envision future growth patterns. One of its highest priorities is promoting economic growth within farming communities, recognizing that the county has the highest composition of arable land by area within the state. Current societal trends embrace niche farming, community markets, and localized food sources, adding value to assist farmers in maintaining active farms. More abstract recommendations in the comprehensive plan prioritize preservation of historic and cultural resources, the natural environment, and recreational facilities. County leaders' commitment to protecting the rural heritage of the county—enforced through zoning restrictions, subdivision regulations, development guidelines, etc.—further limit the likely magnitude of induced development that will occur once the US 340 corridor is widened.

As shown on Exhibit II-7 in Section II, the project area consists of primarily rural land use with most zoned as rural agricultural. Public water and wastewater infrastructure does not exist within the vicinity, greatly limiting the potential for the area to see development at higher densities or intensities than the current patterns. This limitation will in turn limit the amount of growth likely to occur in the area, as growth is limited to the same types of rural land uses currently characterizing the area. As envisioned by the county's comprehensive plan, future development is primarily intended to occur within the Preferred Growth Area, where industrial-commercial, residential growth-light industrial-commercial, and Rippon Village District land use designations have been defined between existing US 340 and the Norfolk and Southern Railroad. Within the Preferred Growth Area, denser development is targeted to occur over the 20 year planning horizon; however, the plan acknowledges that water, sewer, and other shared infrastructure investments are needed to spur the restoration and revitalization of villages, including Rippon. There is no identified timeline or funding to secure such infrastructure, making the timing of these development changes uncertain.

As a whole, Jefferson County is slowly beginning to transition to a residential community for metropolitan DC commuters.

With or without the proposed project, this trend is anticipated to continue. Although the improved facility will follow a new alignment in places, it is not anticipated to induce notable

additional growth beyond levels already anticipated for the area. However, it is possible that the project may indirectly accelerate the rate of this background residential growth as travel times improve.

Potential secondary impacts on water resources, wetlands, floodplains, stormwater runoff, and natural communities are mitigated by the requirement for all future development to comply with existing regulations and ordinances.

- Through compliance with the Federal Clean Water Act, the West Virginia State Code of Regulations Title 46, and the Groundwater Protection Act, adverse impacts to water resources will be minimized. The incorporation of best management practices is often used to minimize water resource impacts.
- The Federal Clean Water Act regulates impacts to wetlands. A Section 404 permit is required for any project that impacts wetlands. The permitting process requires that wetland impacts have been avoided or minimized. The Chesapeake Bay Watershed Protection program limits discharges into and from county waterways. Wetland mitigation may be required to compensate for unavoidable wetland losses.
- Jefferson County has a floodplain ordinance in effect that requires compliance with FEMA regulations. FEMA requires that residential structures be elevated to the base-flood elevation, non-residential structures to be floodproofed to the base flood elevation, and no construction is permitted within any floodway that will increase the 100-year flood elevation. Jefferson County's ordinance also prohibits construction within floodplains on new lots. According to the Jefferson County Subdivision Ordinance, a stormwater management plan must be developed that is capable of controlling the two-year storm, passing the ten-year storm through the principal control structure, and providing an emergency spillway or routing for the 100-year storm.

b) Cumulative Impacts

Cumulative impacts of past, present, and future projects on the social or natural environment are viewed as a whole. Changes due to individual projects may seem insignificant, but the cumulative analysis considers how these small changes add up. This assessment examined anticipated countywide trends over the past two decades and next two decades.

The project area has not drastically changed within the past twenty years. Countywide, SR-9 was constructed as a four lane facility between the Virginia line and Berkeley County while residential and commercial growth occurred concentrated in Charles Town and Shepherdstown. The US 340 project area is predominantly agricultural. One modern subdivision has been constructed to date; Ryan's Glen includes about a dozen large, single family homes on two acre lots. The majority of the existing development occurred prior to 1980, although the region is slowly beginning to transition to a residential community for metropolitan DC commuters. The comprehensive plan identifies the potential to extend public infrastructure (water, natural gas, and telecommunications) further into the county, although no timelines or funding sources are identified. The MPO's long range transportation plan does not include any additional highway capacity improvement projects within the vicinity of the project corridor.

Any future development projects within the project area would have localized impacts within the surrounding environment: water resources, wetlands, floodplains, and natural communities. The prevalence of historic sites and districts indicates that development projects would be likely to impact these resources as well – if not directly within the footprint of the districts, certainly within the viewshed.

Potential cumulative impacts within the project area are minimal. Aside from the construction of the Ryan's Glen neighborhood within the last decade, little to no growth has occurred in the vicinity. While there is one other planned subdivision in the project area, future growth is anticipated to be modest. Future development is somewhat constrained by the lack of public water and sewer infrastructure and by the region's commitment to its rural heritage. The *Envision Jefferson 2035* comprehensive plan notes, "one of the highest priorities of the [plan] and public was the desire to preserve rural landscapes, heritage, and lifestyle that attracted many residents to Jefferson County... to balance the demands of growth with the protection of agricultural lands." The plan states that, between 1974 and 2007, approximately 14,000 acres of land within the county were removed from agricultural production.

Including those potential impacts discussed as secondary impacts, the cumulative impacts to these resources are expected to be minimal.

4. SHORT TERM USE VERSUS LONG TERM PRODUCTIVITY

The build alternates under consideration would have similar impacts on local short-term uses of resources and enhancement of long-term productivity. There may be limited adverse short-term effects on the human environment during project construction. There may be minor siltation of local surface waters during construction. This is minimized by strict adherence to best management practices. Increased noise levels due to construction would also be short-term.

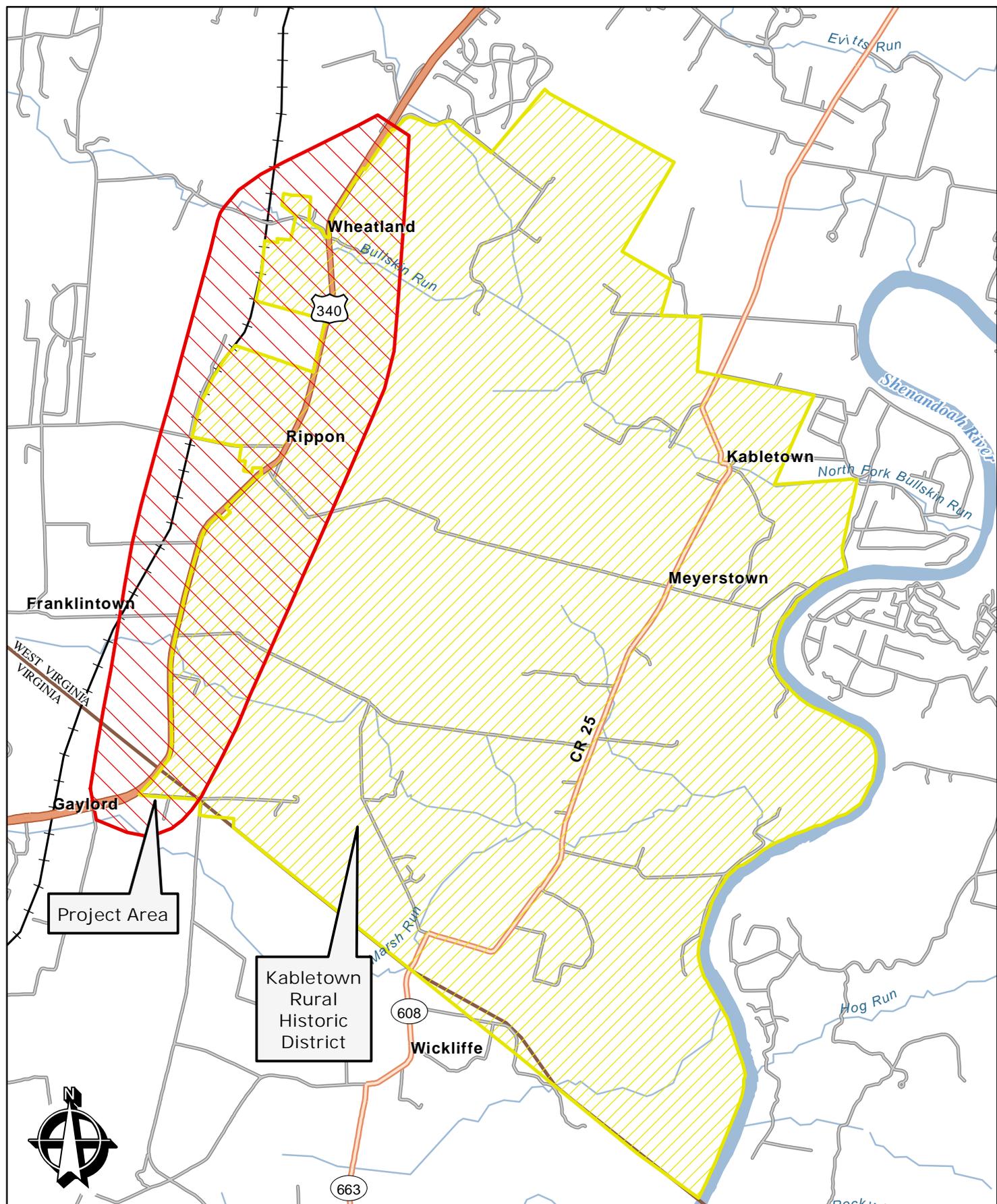
The proposed project is classified as a long-term productive facility. This project, with its improved design characteristics, provides for safe and efficient vehicle operation for future as well as present travel time. The benefits such as reduced operating costs, reduced travel time, increased safety, and general enhancement of the area offered by the long-term productivity of this project should more than offset the short-term inconvenience and any adverse effects on the human environment.

5. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Implementation of the proposed project involves a commitment of a range of natural, physical, human, and fiscal resources. Land used in the construction of the proposed facility is considered an irreversible commitment during the time period that the land is used for a highway facility. However, if a greater need arises for use of the land or if the highway facility is no longer needed, the land can be converted to another use. At present, there is no reason to believe such a conversion will be necessary or desirable.

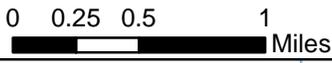
Considerable amounts of fossil fuels, labor, and highway construction materials such as cement, aggregate, and bituminous material are expended. Additionally, large amounts of labor and natural resources are used in the fabrication and preparation of construction materials. These materials are generally not retrievable. They are not in short supply and their use does not have an adverse effect upon continued availability of these resources. Any construction would also require a substantial one-time expenditure of state/federal funds that are not retrievable.

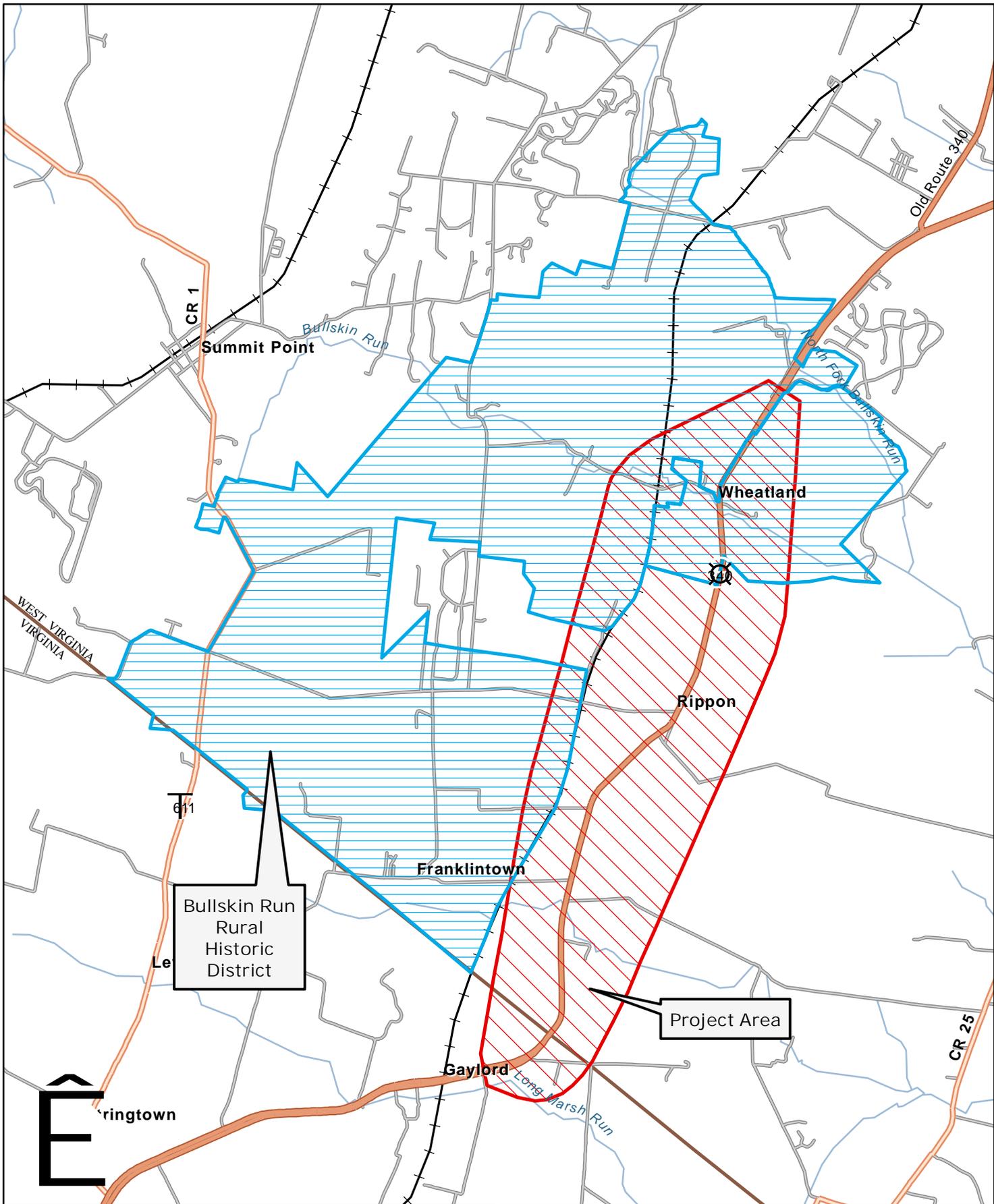
The commitment of these resources is based on the concept that residents in the immediate area, region, and state benefit by the improved quality of the transportation system. These benefits consist of improved quality, accessibility and safety, savings in time, and greater availability of quality services that are anticipated to outweigh the commitment of these resources.



**US 340
IMPROVEMENT
STUDY**

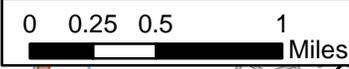
**Kabletown Rural
Historic District
Boundaries**

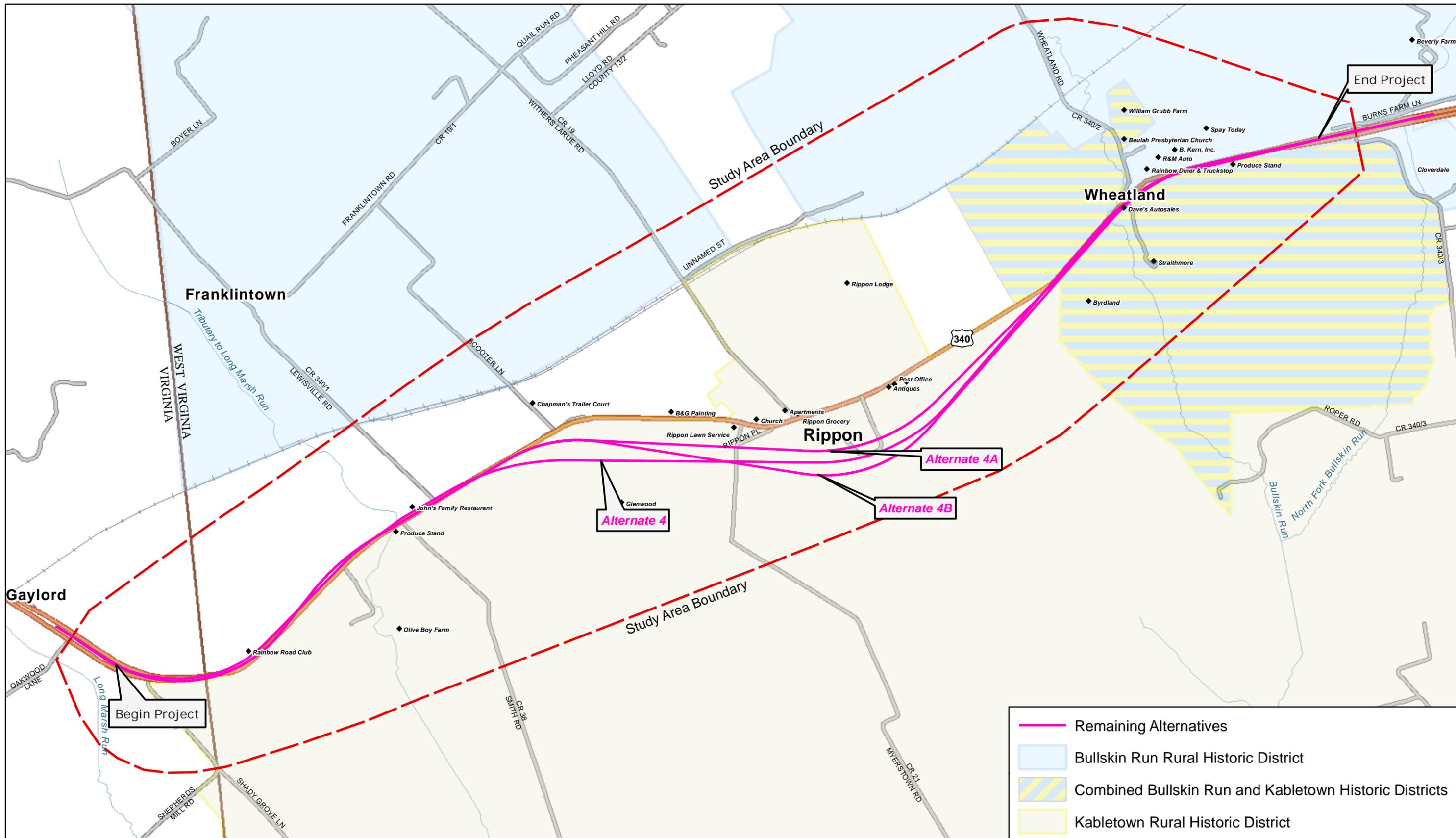


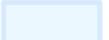
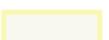


**US 340
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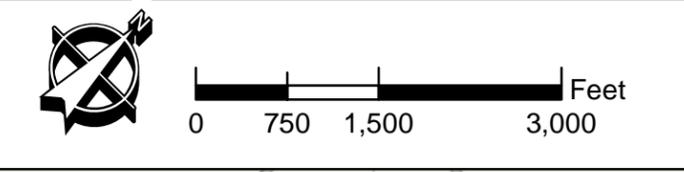
**Bullskin Run Rural
Historic District**



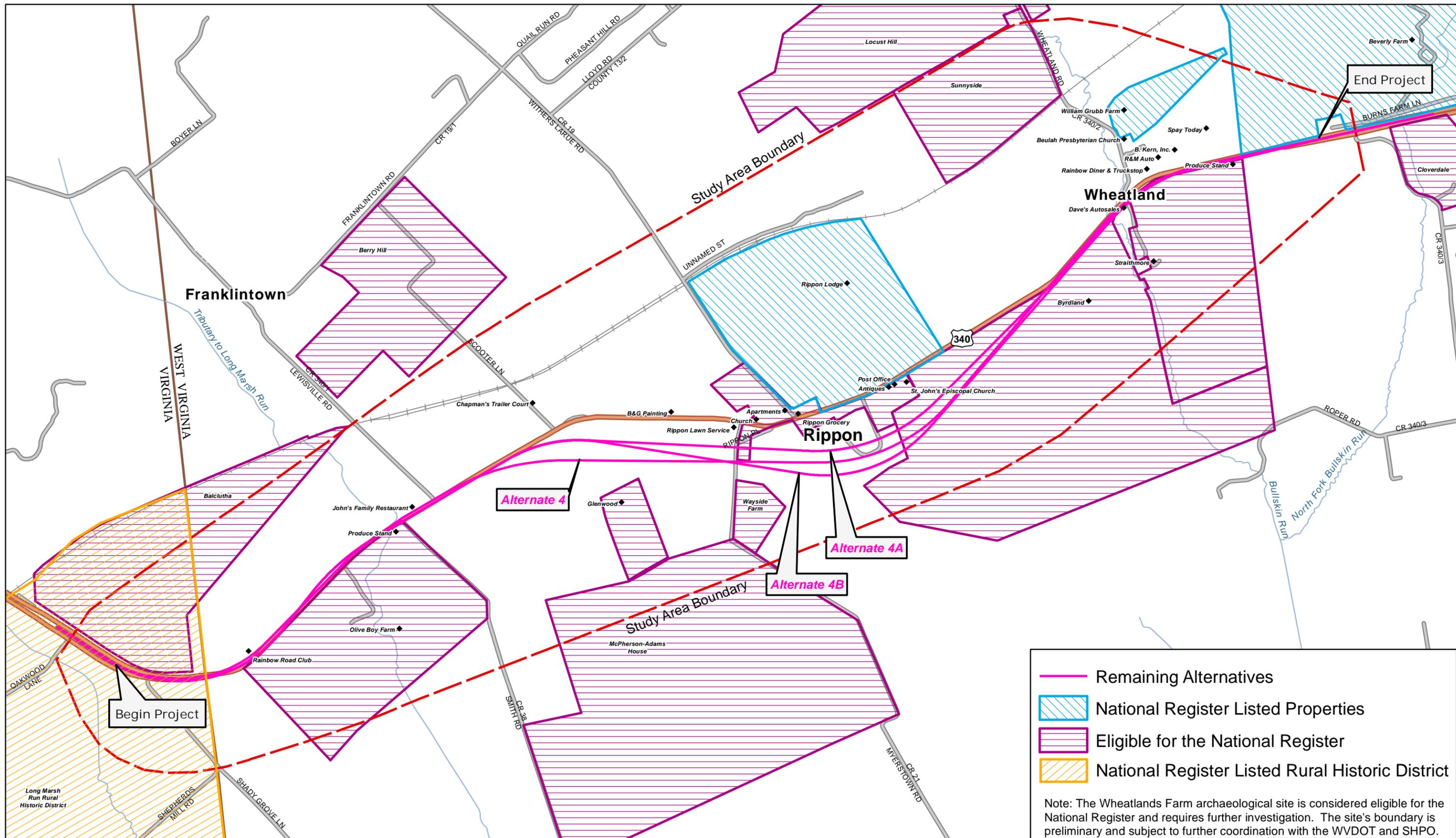


-  Remaining Alternatives
-  Bullskin Run Rural Historic District
-  Combined Bullskin Run and Kabletown Historic Districts
-  Kabletown Rural Historic District

**US 340
IMPROVEMENT
STUDY**



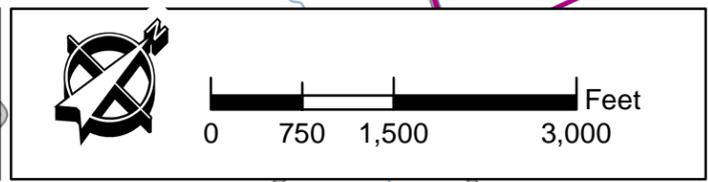
**Bullskin Run &
Kabletown Rural
Historic District**



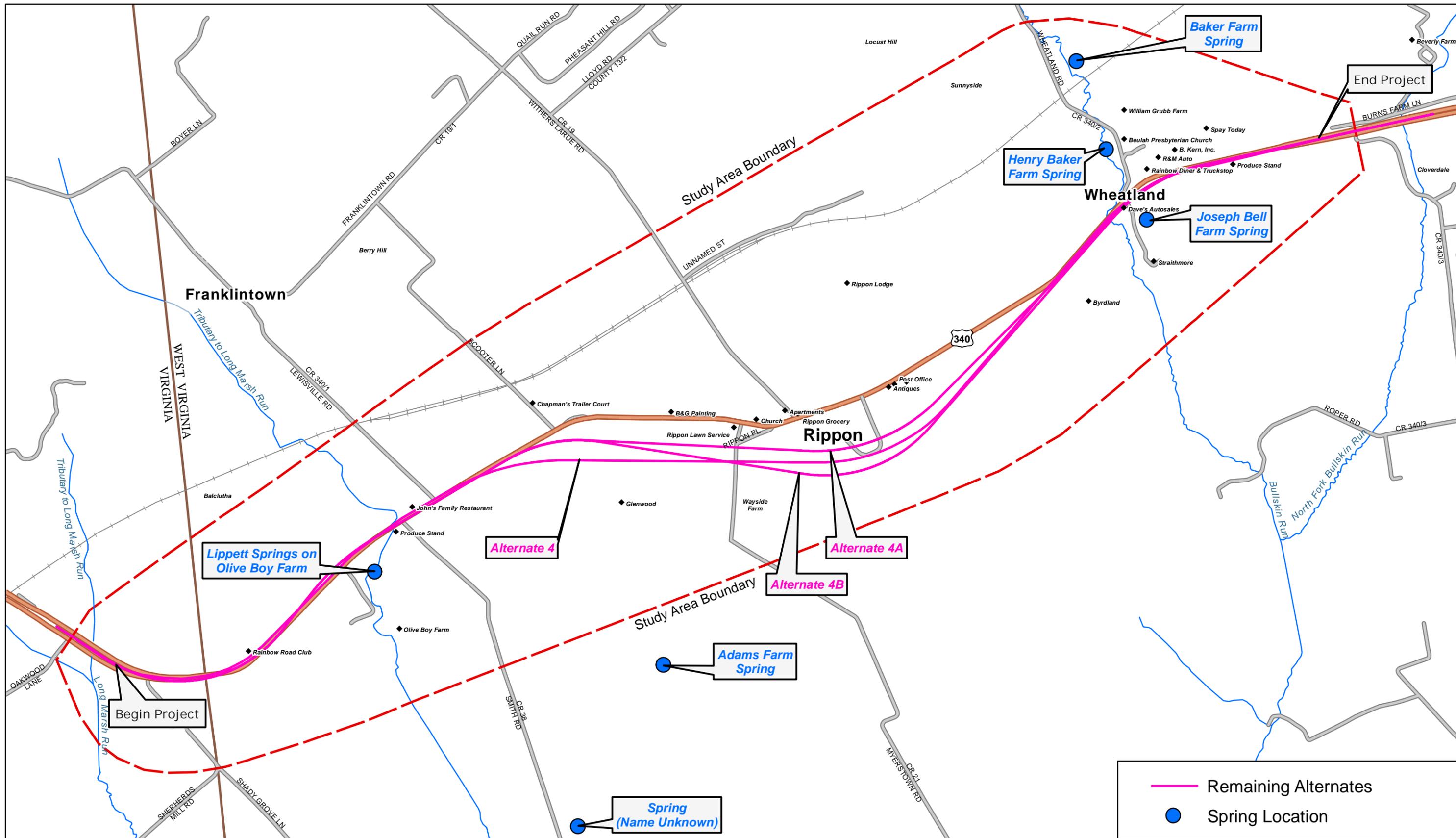
-  Remaining Alternatives
-  National Register Listed Properties
-  Eligible for the National Register
-  National Register Listed Rural Historic District

Note: The Wheatlands Farm archaeological site is considered eligible for the National Register and requires further investigation. The site's boundary is preliminary and subject to further coordination with the WVDOT and SHPO.

US 340 IMPROVEMENT STUDY



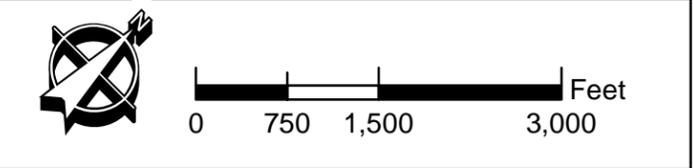
Cultural Resources

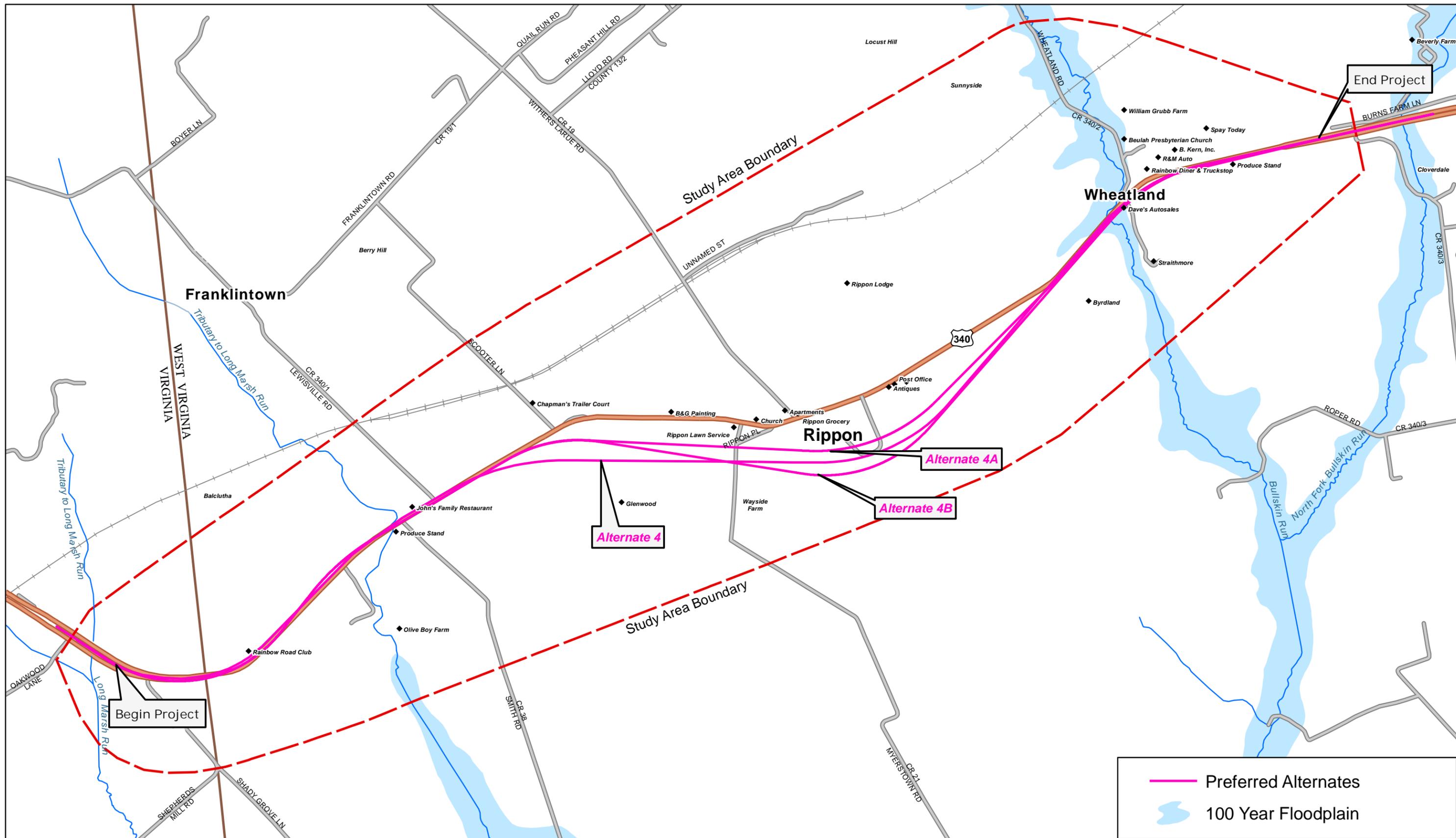


	Remaining Alternates
	Spring Location

Location of Springs

**US 340
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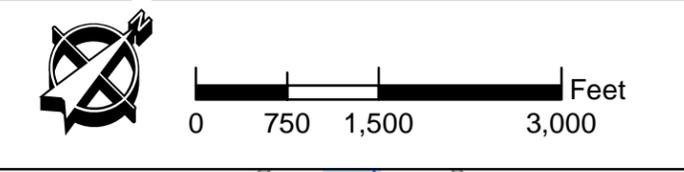


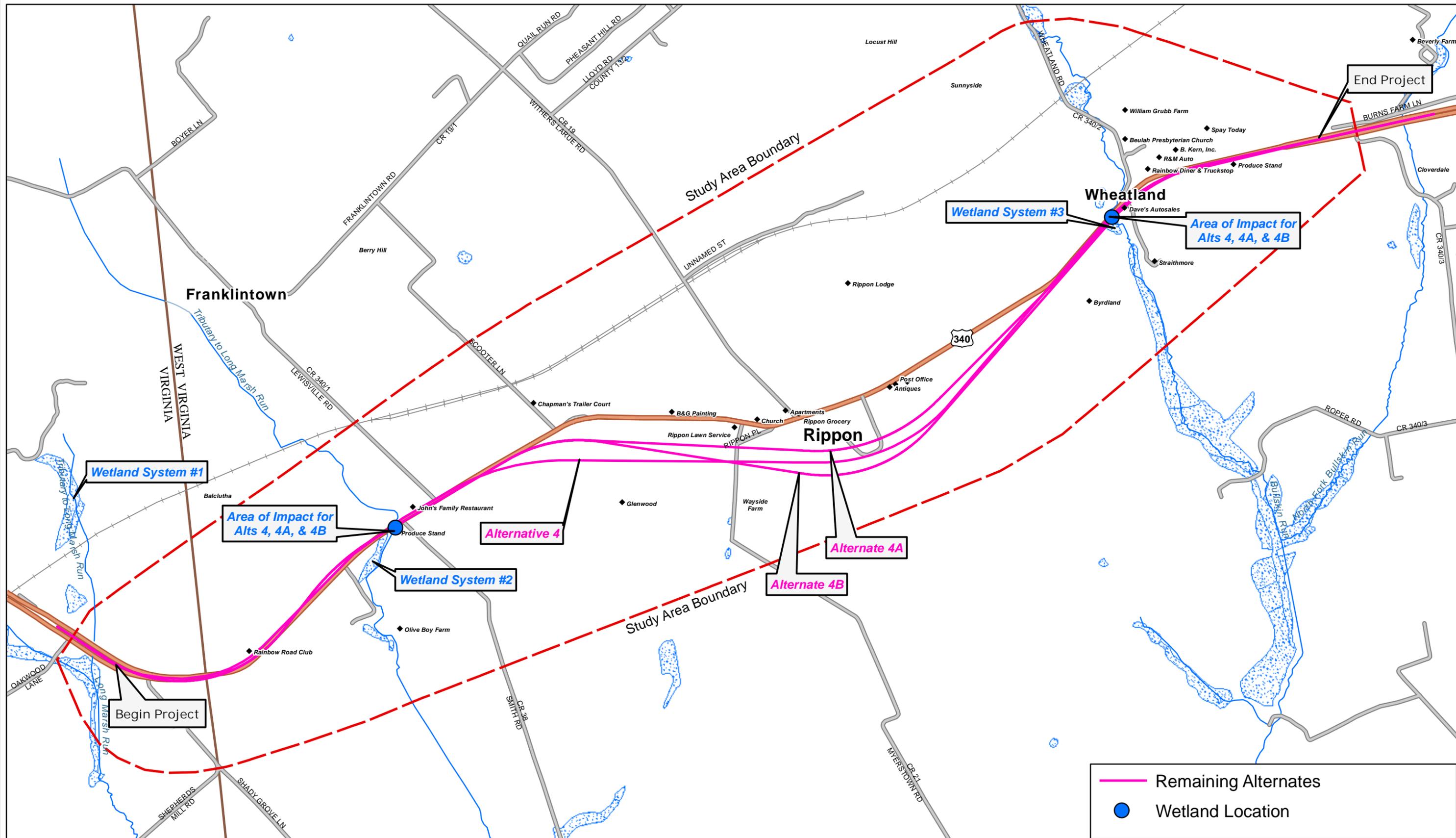


 Preferred Alternates
 100 Year Floodplain

100 Year Floodplain Limits

**US 340
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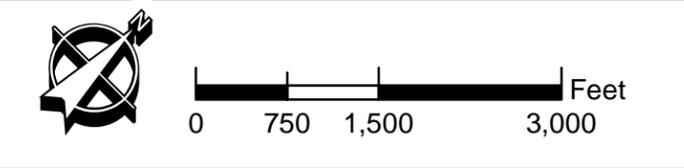


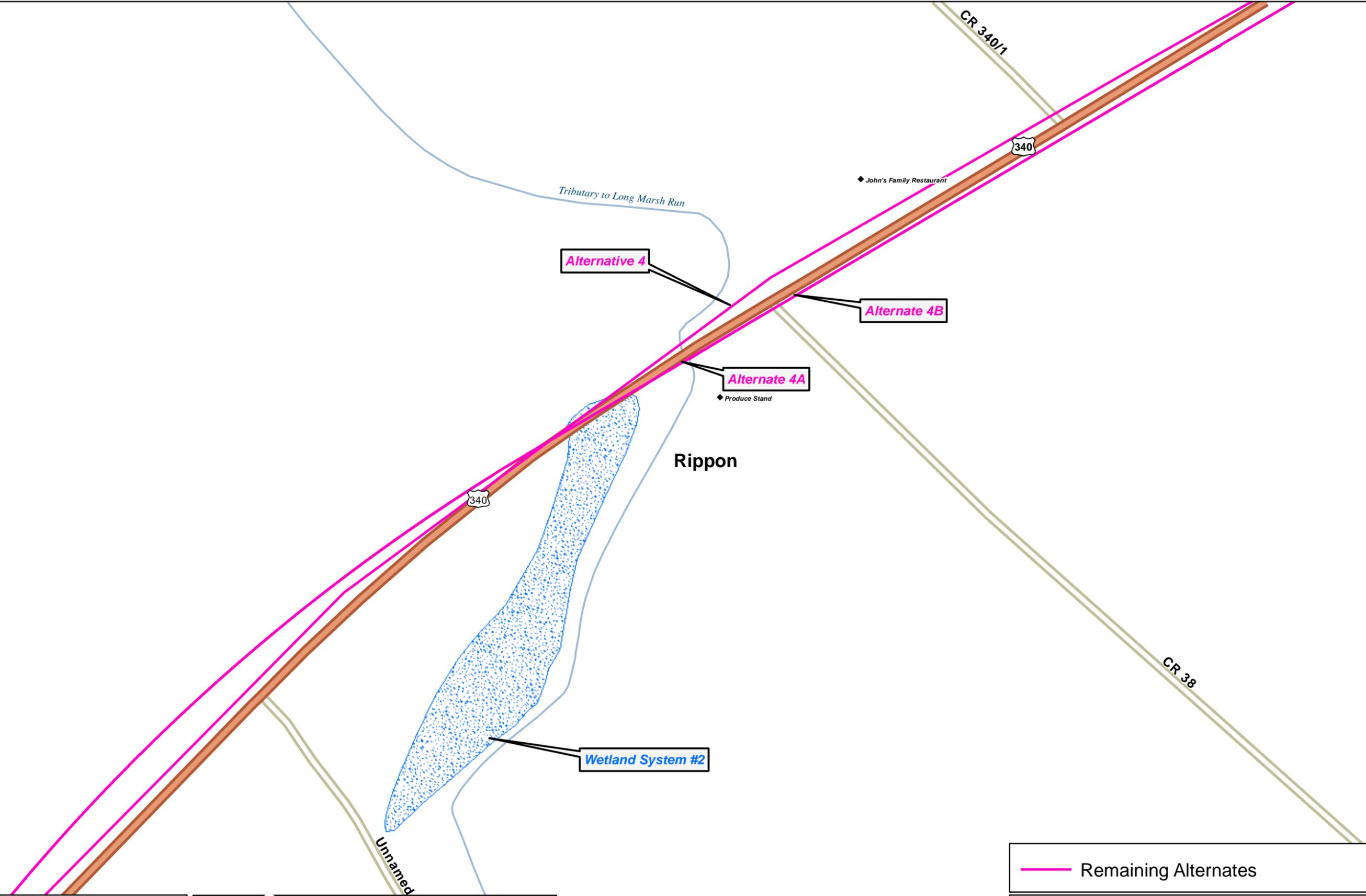


- Remaining Alternates
- Wetland Location

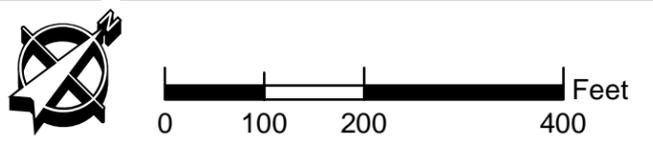
Location of Wetlands

**US 340
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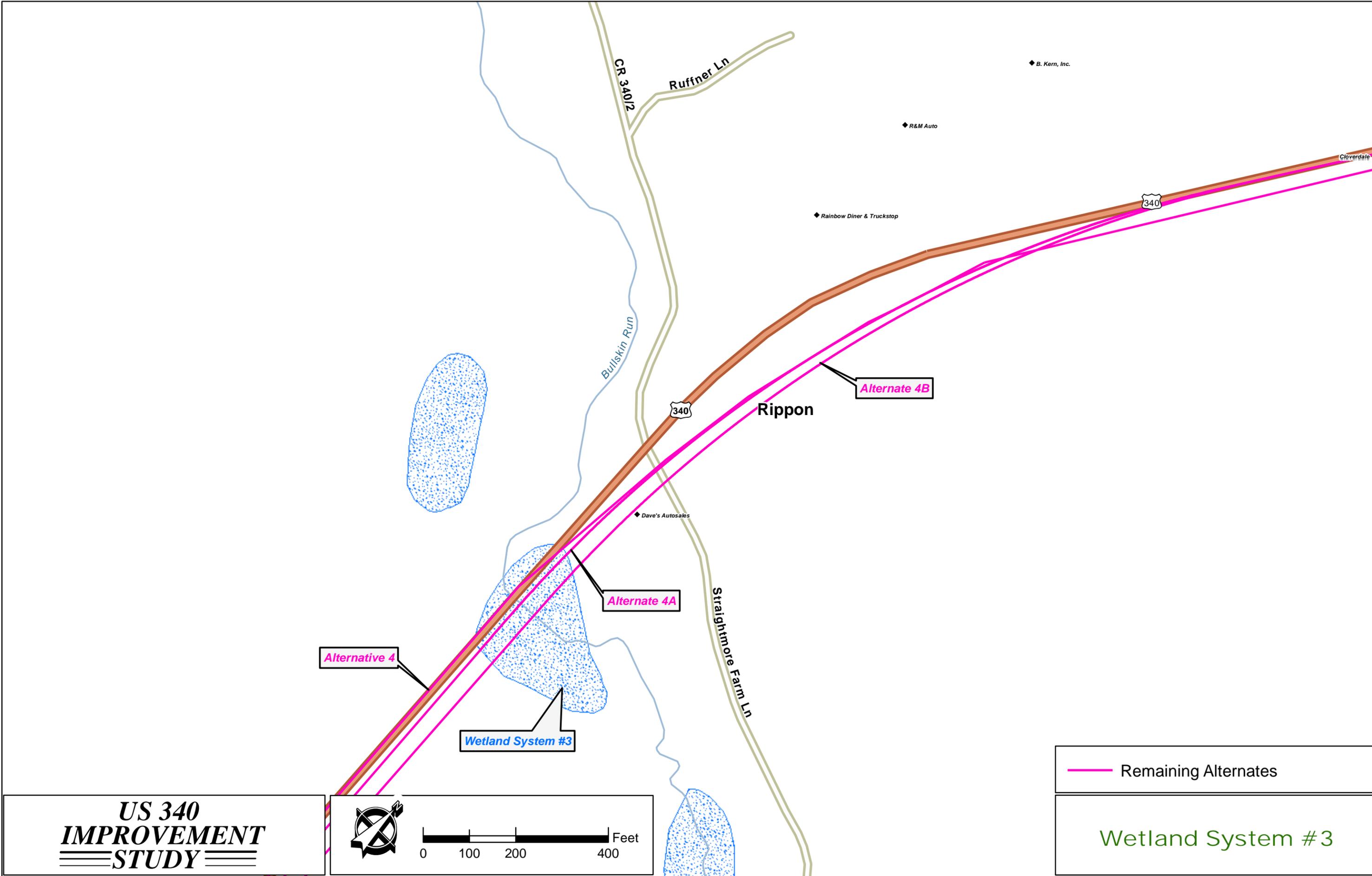


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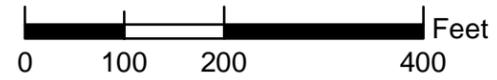


— Remaining Alternates

Wetland System #2

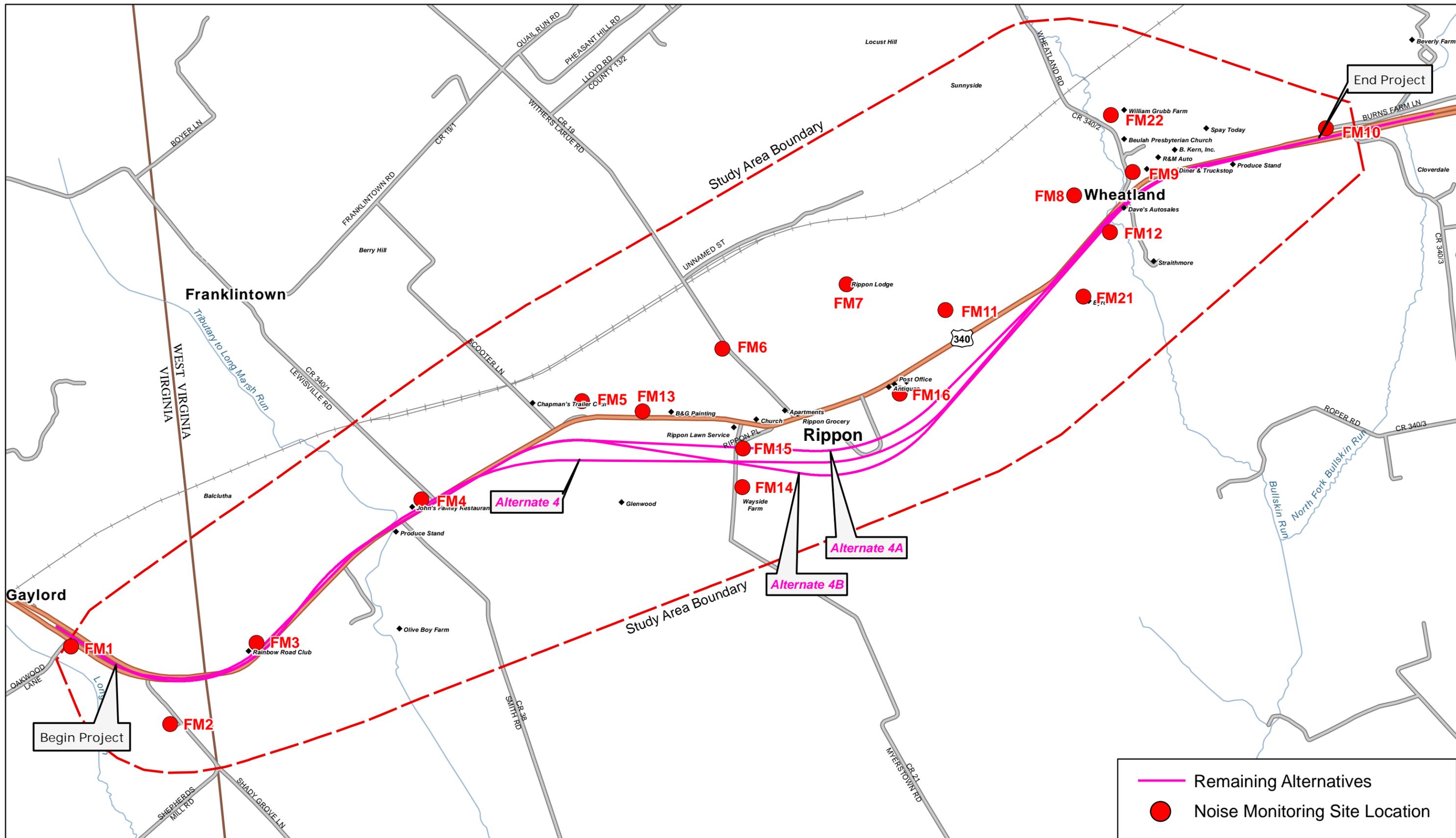


**US 340
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STUDY**



— Remaining Alternates

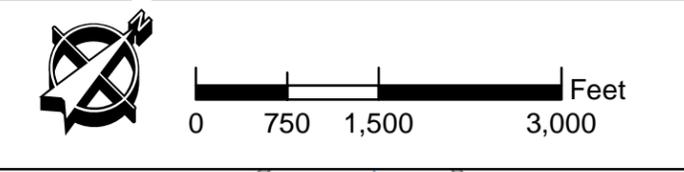
Wetland System #3



	Remaining Alternatives
	Noise Monitoring Site Location

Noise Monitoring Locations

**US 340
IMPROVEMENT
STUDY**



SECTION V

Section 4(f) Evaluation

V. SECTION 4(f) EVALUATION

In accordance with Section 4(f) of the 1966 Department of Transportation Act, an evaluation of the project area was conducted for properties determined to be qualified for Section 4(f) evaluation. This law requires that no publicly owned land from a public park or public recreation area, or land from a significant historic site or public wildlife refuge, be used for federal-aid highways unless there is no feasible and prudent alternative. Section 4(f) uses can include direct takes, temporary occupancy, or constructive use due to proximity effects. Specific alternatives and actions to minimize harm must be considered. This chapter demonstrates that (1) no feasible and prudent alternative exists to avoid the use of all Section 4(f) resources and (2) all possible planning to minimize harm to Section 4(f) resources is being incorporated.

A. INTRODUCTION

Within the project area, there are no public parks, recreational areas, or wildlife refuges. However, there are a large number of historic properties, including large districts with overlapping boundaries. The amount of area covered by the historic resources make complete avoidance impossible. Over the long history of the development of this project, and as a result of ongoing consultation and public involvement, a total of 15 build alternates have been studied.

The Draft Section 4(f) Evaluation was included in the Draft Environmental Impact Statement (DEIS) circulated in November 2001. The Draft Section 4(f) Evaluation reviewed the Section 4(f) impacts from Alternates 6 and 8 which were identified in the DEIS as the two remaining “alternates still under consideration.” Alternates 6 and 8 were retained as alternates still under consideration for the project since these alternates, when compared to the remaining alternates studied in detail, minimized impacts to the Kabletown Rural Historic District and historic resources located east of the railroad.

Following the circulation of the DEIS, a Public Hearing was held on January 15, 2002. Comments received at the hearing referred to several potentially historic properties located west of the railroad. Additional historic studies were performed in 2002 and 2003 for the areas west of the railroad. These studies identified a rural historic district and several historic properties eligible for listing in the National Register.

A survey of these properties was performed and two cultural resource technical reports were submitted to SHPO in September 2002 and December 2002. SHPO attended a field review on April 11, 2003 to evaluate the historic boundaries. Based on SHPO comments, an additional technical report was submitted to SHPO in December 2003.

Alternates 6 and 8 avoided impacts to the majority of historic properties east of US 340 and minimized impacts to the Kabletown Rural Historic District. However, by incorporating the historic resources identified in the 2002 and 2003 technical reports into the project study, Alternates 6 and 8 no longer avoid and minimize impacts to all the historic resources in the project area, east and west of the railroad. Therefore, Alternates 1, 3, 4, 5, 6, 8, and 9 were evaluated in 2003, and Alternate 4 was identified as the Preferred Alternative. Section II discusses the evaluation and selection criteria for the Preferred Alternative.

As a result of funding availability, the project was placed on hold. During this time, the project study area experienced residential growth and development. Due to the growth and development within the area of the Preferred Alternate 4, and a desire to potentially further minimize impacts to historic resources, two modifications of Alternate 4 (Alternates **4A (Preferred)** and 4B) were developed. These modifications include a slight westerly shift of Alternate 4, identified as Alternate 4A, to further minimize impacts to the Byrdland Historic Property and residential properties, as well as an easterly shift of Alternate 4, identified as Alternate 4B, to further minimize impacts to the Village of Rippon Historic District and residential properties.

A public information workshop was held on September 24, 2012, to present these modifications to Alternate 4 to the public, update the public on the project status, and gather input and feedback from the public. Verbal and written comments received at the workshop expressed opposition to Alternates 4, 4A, and 4B due to their impacts to the Ryan's Glen subdivision and the proposed Oak Hill subdivision as well as a desire by the public for all previous alternatives to be re-evaluated using current data and conditions.

Additional build alternates (Alternates 4C, 10A, 10B, and 11) were created in response to public input received at the 2012 workshop. These alternates, along with Alternates 4, **4A (Preferred)**, and 4B, were presented at a public hearing on June 3, 2013. WVDOH and FHWA have agreed that these alternates should be discussed in this SDEIS.

As noted in Section III, Alternates 4C, 10A, 10B, and 11 have been eliminated from further consideration and evaluation due to their increased costs, greater extent of environmental impacts, and lack of public support. This Section 4(f) Evaluation revises the Draft Section 4(f) Evaluation by including an evaluation of the remaining build alternates on the Section 4(f) resources. The following sections identify Section 4(f) resources within the project area, summarize the alternative development process with an analysis of the avoidance alternative and least overall harm, then examine each resource with a 4(f) use.

B. SECTION 4(F) EVALUATION SUMMARY

1. SECTION 4(F) PROPERTIES

Within the project area, there are no public parks, recreation areas, or wildlife refuges. There are, however, seventeen historic resources within the project area, discussed further in Section IV.A.7. The historic architectural resources include three properties and one district listed on the NRHP, three eligible historic districts, and nine eligible aboveground historic properties. One archaeological site, considered eligible for listing on the NRHP, was also identified in the project area.

The Ripon Lodge, the William Grubb Farm, and the Beverly Farm are listed on the NRHP. Long Marsh Run Rural Historic District (Long Marsh Run) is also listed; Long Marsh Run is located at the south end of the study area in Clarke County, Virginia with one contributing element within Jefferson County, West Virginia.

The three historic districts eligible for the NRHP include the Kabletown Rural Historic District (Kabletown), the Bullskin Run Rural Historic District (Bullskin Run), and the Village of Rippon Historic District (Village of Rippon). Kabletown historic boundaries, shown in Exhibit V-2, encompass approximately 18 square miles surrounding and including over half of the project area east of the Norfolk Southern Railroad. Bullskin Run historic boundaries, shown in Exhibit V-3, encompass approximately 20 square miles and include a majority of the project area west of the Norfolk Southern Railroad. Kabletown and Bullskin Run also include a common area surrounding the community of Wheatland at the north end of the project area. The Village of Rippon historic boundaries include the community of Rippon. The Village of Rippon is also a contributing element to the Kabletown Historic District.

The historic resources eligible for or listed on the NRHP in the project area, excluding Long Marsh Run Rural Historic District (located primarily in Virginia), are contributing elements to and are located within the historic boundaries of either Kabletown, Bullskin Run, or both rural districts. The historic resources, shown on Exhibit V-4, Exhibit V-5, and Exhibit V-6, are individually listed or eligible for listing on the NRHP based on each of their unique historic contributions to West Virginia. The individual properties in the project area eligible for listing on the NRHP are identified below. Where the eligible resource also contributes to a larger district, the encompassing rural historic district(s) is also noted, as applicable.

- St. John's Episcopal Church (Village of Rippon and Kabletown Historic Districts)
- Olive Boy Farm (Kabletown Rural Historic District)
- Glenwood (Kabletown Rural Historic District)
- Wayside Farm (Kabletown Rural Historic District)
- Byrdland (Kabletown and Bullskin Run Rural Historic Districts)
- Straithmore (Kabletown and Bullskin Run Rural Historic Districts)
- Norfolk Southern Railroad (Kabletown and Bullskin Run Rural Historic Districts)
- McPherson-Adams House (Kabletown Rural Historic District)
- Berry Hill (Bullskin Run Rural Historic District)

The archaeological site within the project area that is considered eligible is the Wheatland Farm and is located within both Kabletown and Bullskin Run. The decision to preserve resources in place or recover them will be reviewed by the WVSHPO following additional archaeological testing should the site be disturbed by the Preferred Alternative. For now, this site is being considered a Section 4(f) property.

2. BUILD ALTERNATES AND IMPACTS TO 4(f) PROPERTIES

As of the 2001 DEIS, eight build alternates were evaluated. Based on conceptual alignments, Alternates 6 and 8 were identified as having the fewest uses of Section 4(f) resources. It should be noted that cultural resource investigations west of the rail line were not undertaken prior to

the publication of the DEIS. Based on the conceptual level of detail for each build alternate, no constructive uses or temporary occupancies are anticipated for any resource. It is assumed that the conceptual footprint incorporates an adequate buffer of right of way to accommodate construction activities; the character and function of the resources (i.e., private homes) preclude a substantial loss of value due to proximity impacts under typical circumstances.

- Alternate 1 bisects the Ripon Lodge and Wheatland Farm archaeological site. It traverses the Kabletown Rural Historic District and portions of the Bullskin Run Rural Historic District that overlap with Kabletown. It also runs along the boundaries of Olive Boy Farm, Straithmore, and Beverly Farm.
- Alternate 2, which generally follows the existing US 340 alignment, bisects the Village of Rippon Historic District and traverses the Kabletown Rural Historic District plus portions of the Bullskin Run Rural Historic District that overlap with Kabletown. It also runs along the boundaries of Olive Boy Farm, Ripon Lodge, Byrdland, Straithmore, and Beverly Farm. It should be noted that this alternative requires the acquisition of the majority of properties adjacent to the highway through the community of Rippon. This alternative was not fully developed because of the inability to maintain traffic during construction.
- Alternate 3 bisects the Ripon Lodge; it traverses the Kabletown Rural Historic District and portions of the Bullskin Run Rural Historic District that overlap with Kabletown. It also runs along the boundaries of Olive Boy Farm, Byrdland, Straithmore, and Beverly Farm.
- Alternate 4 bisects Byrdland; it traverses the Kabletown Rural Historic District and portions of the Bullskin Run Rural Historic District that overlap with Kabletown. It also runs along the boundaries of Olive Boy Farm, the Village of Rippon Historic District, Straithmore, and Beverly Farm.
- Alternate 5 bisects Olive Boy Farm, Wayside Farm, and Byrdland. It traverses the Kabletown Rural Historic District and portions of the Bullskin Run Rural Historic District that overlap with Kabletown. It also runs along the boundaries of Glenwood, Straithmore, and Beverly Farm.

- Alternate 6 bisects the northern edge of the Ripon Lodge property and crosses the Wheatland Farm archaeological site; it traverses the Kabletown Rural Historic District and portions of the Bullskin Run Rural Historic District that overlap with Kabletown. It also runs along the boundaries of Olive Boy Farm, Straithmore, and Beverly Farm.
- Alternate 7 bisects the Ripon Lodge property; it also traverses the Kabletown Rural Historic District and portions of the Bullskin Run Rural Historic District that overlap with Kabletown. It runs along the boundaries of Olive Boy Farm, the Village of Rippon Historic District, Byrdland, Straithmore, and Beverly Farm. Because of the resulting skew of the US 340/CR 19 intersection, this alternative was not fully developed.
- Alternate 8 was initially developed as an avoidance alternative; although subsequent historic surveys identified additional resources nullifying this aim. Alternate 8 crosses the historic Norfolk Southern Railroad in two locations; bisects Sunnyside, William Grubb Farm, and the southern corner of Beverly Farm; and traverses the Bullskin Run Rural Historic District plus a small portion of the Kabletown Rural Historic District that overlaps with Bullskin Run Rural Historic District.

During 2002-2003, additional historic surveys were conducted in the western portion of the project area and Alternate 9 was added. Alternate 9 follows the historic Norfolk Southern Railroad, requiring the tracks to be shifted north on new alignment. This alternate bisects the Norfolk Southern Railroad, Sunnyside, William Grubb Farm, and the southern corner of Beverly Farm. It traverses the Bullskin Run Rural Historic District and a small area of the Kabletown Rural Historic District that overlaps with Bullskin Run Rural Historic District. It also runs along the boundaries of Olive Boy Farm, Ripon Lodge, and Sunnyside.

As a result of the expanded historic analysis, Alternate 4 was identified as the preferred alternative, dismissing all other build alternates previously considered. During the intervening years, build alternates 4A, 4B, 4C, 10A, 10B, and 11 were added in response to public comments. Based on the conceptual alignments, Alternate 4A was identified as having the lowest use of Section 4(f) resources.

- **Alternate 4A (Preferred)** bisects Byrdland, requiring 26.6 acres of right of way within the historic boundary. It also passes through the southeastern corner of the Village of Rippon Historic District, requiring 1.4 acres of right of way acquisition including one

- contributing structure. It traverses the Kabletown Rural Historic District and a portion of the Bullskin Run Rural Historic District that overlaps with Kabletown, for a total of 108.6 acres of right of way acquisition within the two districts. Alternate 4A also runs along the boundaries of Olive Boy Farm, Straithmore, and Beverly Farm, resulting in 16.8 acres of right of way acquisition within the three historic boundaries; this could likely be minimized during final design.
- Alternate 4B bisects Byrdland, requiring 28.5 acres of right of way within the historic boundary. It traverses the Kabletown Rural Historic District and a portion of the Bullskin Run Rural Historic District that overlaps with Kabletown, for a total of 111.5 acres of right of way acquisition within the two districts. It also runs along the boundaries of Olive Boy Farm, the Village of Rippon Historic District, Straithmore, and Beverly Farm, requiring acquisition of 18.6 acres of right of way and one contributing structure. These impacts could likely be minimized during final design.
 - Alternate 4C bisects Byrdland, requiring 33.2 acres of right of way within the historic boundary. It traverses the Kabletown Rural Historic District and a portion of the Bullskin Run Rural Historic District that overlaps with Kabletown, for a total of 106.4 acres of right of way acquisition within the two districts. It also runs along the boundaries of Olive Boy Farm, the Village of Rippon Historic District, Straithmore, and Beverly Farm, requiring acquisition of 16.9 acres of right of way and one contributing structure. These impacts could likely be minimized during final design.
 - Alternate 10A crosses the historic Norfolk Southern Railroad in two locations and curves into the northern boundary of Byrdland. It traverses portions of Bullskin Run Rural Historic District and Kabletown Rural Historic District. It runs along the boundaries of Olive Boy Farm, Straithmore, and Beverly Farm. In total, Alternate 10A results in approximately 107 acres of right of way acquisition within historic properties.
 - Alternate 10B follows the historic Norfolk Southern Railroad, requiring the tracks to be shifted north on new alignment. This alternate bisects the Norfolk Southern Railroad and curves into the northern boundary of Byrdland. It traverses portions of Bullskin Run Rural Historic District and Kabletown Rural Historic District. It runs along the boundaries of Olive Boy Farm, Ripon Lodge, Sunnyside, Straithmore, and Beverly Farm.

In total, Alternate 10B results in approximately 130 acres of right of way acquisition within historic properties.

- Alternate 11 bisects Byrdland; it traverses portions of Kabletown Rural Historic District and portions of Bullskin Run Rural Historic District that overlap with Kabletown. It runs along the boundaries of Olive Boy Farm, Straithmore, and Beverly Farm. In total, Alternate 11 results in approximately 171 acres of right of way acquisition within historic properties.

Alternates 4C, 10A, 10B, and 11 were dismissed from further consideration due to increased impacts to historic resources, higher right of way requirements, impacts to farmlands and higher costs.

3. AVOIDANCE ALTERNATIVES

As large rural historic districts span the entire length and width of the project area and cover over 90% of its surface area, an avoidance alternative that satisfies the project purpose is not feasible. A series of 15 new location alternatives and alignment shifts were considered as discussed in Chapter III; it is impossible to trace a highway alignment through the project area that does not pass within the boundaries of one or more historic districts. To avoid the entirety of both rural historic districts, a location alternative would have to be located over 3 miles east or west of the existing alignment; such an alternative would not satisfy the project's purpose of addressing traffic operations and improving safety along the existing US 340 corridor.

Design changes to modify the footprint of the typical section likewise do not enable designs to avoid encroachment within one or more historic districts. Alternative actions, such as running transit along the existing alignment or incorporating transportation management systems, would not necessarily result in a Section 4(f) use; however, these strategies do not satisfy the project's purpose and need as discussed in Chapter II. Although the No Build Alternative avoids Section 4(f) properties and districts, it is not considered a prudent alternative since it would not meet the purpose and need for the project.

4. MINIMIZATION OF OVERALL HARM (MACRO-LEVEL ANALYSIS)

Alternates 1, 2, 3, 6, 7, 9, and 10B would lead to a 4(f) use of the Ripon Lodge, which is the most prominent and arguably the most significant resource in the vicinity and has been previously listed on the NHRP. Alternates 8 and 9 would result in right of way acquisition through the

William Grubb Farm property, also previously listed on the NHRP. Alternate 5 avoids both these resources but would result in a 4(f) use of two additional resources (Glenwood and Wayside farms) which are not directly affected by any of the other build alternates. Alternate 10A also avoids the most significant resources; however, it requires multiple grade-separated crossings of the historic Norfolk Southern Railroad, thereby increasing project costs and dramatically affecting the historic agrarian setting of the valley. Alternate 11 results in the highest acreage of direct right of way takes within historic boundaries, a Section 4(f) use within these resources. While Alternate 4C results in similar effects on historic resources as Alternate 4B, Alternate 4C results in greater impacts on other resources (i.e., residential relocations, acres of right of way, streams, and farmlands). Accordingly, Alternate 4, 4A, and 4B were advanced for detailed study.

The following subsections discuss the seven criteria for a Least Harm analysis, followed by a micro-level discussion of Section 4(f) considerations for Alternates 4, **4A (Preferred)**, and 4B on individual properties. Exhibit V-6 shows the location of the Section 4(f) properties in relation to each of these build alternates.

a) Ability to Mitigate Adverse Impacts

Each of the remaining build alternates provide a similar level of flexibility to mitigate further impacts. Based on current information, minor shifts in the alignment may allow designers to avoid or minimize the required footprint within Olive Boy Farm, Straithmore, and/or Beverly Farm. Measures to mitigate harm to the larger rural historic districts, the Village of Rippon Historic District, and Byrdland could include minor alignment shifts, a narrower typical section, landscaping, or other site-specific measures. These mitigations options will be explored as part of the ongoing Section 106 consultation process and an updated analysis will be presented in the FEIS.

b) Relative Severity of Remaining Harm

Each of the remaining build alternates results in a similar severity of harm to Section 4(f) properties. Table V-1 and Table V-2 show a comparison summary of the Section 4(f) impacts related to the remaining alternates. Table V-1 provides the Kabletown and Bullskin Run impacts of the alternates for: 1) the area of property unique to each of the two rural historic districts, 2) the area of property that is common to both rural historic districts, and 3) the total amount of Section 4(f) property without including the common areas twice.

Of the three remaining build alternates, Alternate 4A (Preferred) results in the fewest acres of 4(f) use within the Kabletown Rural Historic District (81.1 acres) and within the combined footprints of individual resources (44.8 acres). The difference in acreage of use between the three remaining build alternates is only 3%. Each results in the loss of one contributing element. Each follows existing highway right of way boundaries along the edge of the property for three of the resources, minimizing the extent of physical changes to the setting following construction.

Table V-1: Comparative Summary of Section 4(f) Impacts on Districts

District	Right of Way Acquisition for Build Alternates (Acres)		
	Alt 4	Alt 4A (Preferred)	Alt 4B
Kabletown Rural Historic District*	82.4	81.1	83.3
Bullskin Run Historic District*	3.1	4.8	4.8
Combined Bullskin Run and Kabletown Historic Districts Area	21.1	22.7	23.4
Long Marsh Run Rural Historic District	0.0	0.0	0.0
Total Section 4(f) Impacts on Districts	106.6	108.6	111.5

Note: The impacts to the Kabletown Rural Historic District could be minimized further during final design.

* Excludes combined area that is common to both districts

Alternate 4 will impact 103.5 total acres of Kabletown and 24.2 total acres of Bullskin Run. This alternate will impact five other historic resources in the project area as shown in Table V-2.

These five include the Village of Rippon Historic District, Olive Boy Farm, Ripon Lodge, Byrdland, Straithmore, and Beverly Farm.

Alternate **4A (Preferred)** will impact 103.8 total acres of Kabletown and 27.5 total acres of Bullskin Run. This alternate will impact five other individual historic resources in the project area including the Village of Rippon Historic District, Olive Boy Farm, Byrdland, Straithmore, and Beverly Farm.

Alternate 4B will impact 106.7 total acres of Kabletown and 28.2 total acres of Bullskin Run. This alternate will impact five other individual historic resources in the project area. These include the Village of Rippon Historic District, Olive Boy Farm, Byrdland, Straithmore, and Beverly Farm.

Table V-2: Comparative Summary of Individual Historic Property and District Impacts

Property	Historic Property (Total Acres)	Right-of-Way Acquisition for Build Alternates (Acres)		
		Alt. 4	Alt. 4A (Preferred)	Alt. 4B
¹⁾ Village of Rippon Historic District	45	0.7	1.4	1.1
^{1) 3)} St. John's Episcopal Church	--	0.0	0.0	0.0
^{1) 2)} William Grubb	25	0.0	0.0	0.0
^{1) 4)} Olive Boy	182	10.7	6.3	6.5
¹⁾ Glenwood	24	0.0	0.0	0.0
¹⁾ Wayside Farm	16	0.0	0.0	0.0
¹⁾ Ripon Lodge	195	0.0	0.0	0.0
^{1) 2)} Byrdland	412	25.7	26.6	28.5
^{1) 2)} Wheatland Farm	17	0.0	0.0	0.0
^{1) 2)} Straithmore	160	8.8	10.0	10.5
^{1) 2)} Norfolk Southern Railroad	--	0.0	0.0	0.0
¹⁾ McPherson-Adams House	--	0.0	0.0	0.0
²⁾ Berry Hill	144	0.0	0.0	0.0
^{2) 4)} Beverly Farm	438	0.9	0.5	0.5
TOTALS		46.8	44.8	47.1

¹⁾ This property is part of the Kabletown Rural Historic District

²⁾ This property is part of the Bullskin Run Rural Historic District

³⁾ This property is part of the Village of Rippon Historic District

⁴⁾ The impacts from Alternates 4, 4A, and 4B could be minimized or potentially avoided during final design.

c) Relative Significance of Each Property

The most significant features in the vicinity are the three previously listed properties: William Grubb Farm, Ripon Lodge, and Beverly Farm. Of these, William Grubb Farm and the Ripon

Lodge are avoided; the remaining alignments require approximately 0.5-0.9 acres of right of way along the edge of the Beverly Farm historic boundary based on conceptual designs.

Impacts to the remaining properties will be similar for each of the three alternates advanced for detailed study.

d) Views of Officials with Jurisdiction

Coordination efforts with the WV SHPO are ongoing regarding project effects on historic resources. Coordination and meetings with SHPO and other agencies included discussions concerning the determination of Section 4(f) properties, avoidance alternatives, and measures to minimize harm. An overview of historic resources within the project area and project impacts to these features has been presented at the 2002 public hearing and during 2012 and 2013 public workshops. As discussed in Chapter IV, the SHPO has concurred with the eligibility determinations but coordination on the effects determinations is ongoing at the time of the publication of this SDEIS. Coordination regarding the 4(f) uses of these properties will occur concurrently with the effects discussions. Further consultation will occur to identify measures to avoid and/or mitigate any remaining effects to historic resources as the project development process continues. This information will be incorporated into the FEIS.

e) Degree each Alternate Meets Purpose and Need

As discussed in Chapter II, the purpose and need for the proposed improvements to US 340 is to address traffic operations and improve safety deficiencies along the existing facility. The remaining build alternates satisfy the project purpose to a similar degree.

f) Adverse Impacts to Non 4(f) Resources

As presented in Table I-1, the remaining detailed study alternates result in similar levels of impacts to other resources within the human and natural environment. **Alternate 4A (Preferred)** has the fewest residential relocations, least stream impacts, and fewest acres of farmland disturbed.

g) Cost Differences

Also presented in Table I-1, the remaining detailed study alternates result in similar costs, ranging from an estimated \$47 to \$51 million.

C. THE KABLETOWN RURAL HISTORIC DISTRICT

1. Description

The Kabletown Rural Historic District is eligible for listing on the NRHP. The district boundaries, as shown on Exhibit V-2, encompass approximately 18 square miles. The district boundaries are generally defined by the West Virginia state line to the south, the Kabletown magisterial district to the north, the Shenandoah River to the east, and existing US 340 to the west until the Village of Rippon where the boundaries roughly follow the railroad tracks.

Exhibit V-4 shows the location of the Kabletown Rural Historic District in relation to the alternates. All of the build alternates extend through the western side of the Kabletown Rural Historic District. Alternates 4, **4A (Preferred)**, and 4B are located in the western edge the historic district on the east side of US 340.

The Kabletown Rural Historic District has multiple owners. The district encompasses several very large private farms and parts of four communities: Kabletown, Meyerstown, Rippon, and Wheatland. The farms are located to the east of US 340 extending to the Shenandoah River. The communities of Rippon and Wheatland are within the project area and include various commercial businesses, churches, and private residences. These communities are located along existing US 340 and CR 25 (east of the project area).

The Kabletown Rural Historic District is unique to West Virginia because it represents an antebellum Virginia landscape. The district includes the agricultural landscape and architectural resources of an area distinctively rural. It contains numerous large antebellum and postbellum estates, several small nineteenth and early twentieth century farms, and rural communities. The main type of architectural resource in the district is the farm, estate dwelling, and its related outbuildings. In addition, several mills, mill sites, schools, and churches also contribute to the diversity of this district.

The primary roads accessing the Kabletown Rural Historic District include US 340, and the Jefferson County roads CR 340/1, 340/2, 19, 21, 38, and 25. This existing roadway network provides the major vehicular, pedestrian, and bicycle access to the district.

2. Potential Impacts

Alternates 4, **4A (Preferred)**, and 4B will directly impact the Kabletown Rural Historic District by requiring land acquisition, resulting in a 4(f) use of the resource. The entire length of Alternates 4, 4A, and 4B extend through the district primarily east of existing US 340, requiring 101.6 to 106.7 acres of permanent right-of-way from the district. One contributing resource may be lost in the Village of Rippon Historic District, which is also part of the Kabletown Rural Historic District. Based on conceptual designs, no constructive uses or temporary occupancies have been identified. Other environmental impacts are discussed in Chapter IV.

a) Measures to Minimize Harm

Minimizing harm to the historic district may be accomplished by using additional design measures. Design measures to be considered could include minor alignment shifts during the design of the proposed road. Alternates 4, **4A (Preferred)**, and 4B could potentially be shifted slightly west from the State line to CR 38 to reduce the impacts to the rural historic district. Additional minimization measures for the rural historic district could include providing landscaped screening to reduce visual impacts. These measures will be explored further as the Section 106 consultation process continues, with an updated discussion included in the FEIS.

D. THE BULLSKIN RUN RURAL HISTORIC DISTRICT

1. Description

The Bullskin Run Rural Historic District is eligible for listing on the National Register of Historic Places. The district boundaries, as shown on Exhibit V-3, encompass approximately 20 square miles and include the head of the Bullskin Run at its westernmost boundary, and the confluence of the North and South Forks at the easternmost boundary. The southern boundary of the proposed district is the West Virginia state line.

Exhibit V-5 shows the location of the Bullskin Run Rural Historic District in relation to the alternates. All of the build alternates extend through the western side of the Bullskin Run Rural Historic District. Alternates 4, **4A (Preferred)**, and 4B are located east of existing US 340 and also impact the area of the district that is common to Kabletown.

The Bullskin Run Rural Historic District has multiple owners. The district encompasses several very large private farms and parts of two communities, Franklinton and Wheatland. The farms are located predominantly west of US 340 extending to CR 1. The community of

Wheatland is within the project area and includes various commercial businesses, churches, a non-profit business, and private residences.

The Bullskin Run Rural Historic District includes an outstanding collection of historic buildings that illustrate the growth and development of the area from the mid-1730s up to the mid-twentieth century. The majority of resources are farm and estate dwellings and their associated outbuildings. Also included are mills, cemeteries, churches, a school, a tavern, and other historic resources that further develop and illustrate Jefferson County's history. The Bullskin Run Rural Historic District is further enhanced by the pristine nature of the landscape with few modern intrusions.

The primary roads accessing the Bullskin Run Rural Historic District include US 340, and the CR 340/1, 340/2, 19, 13/2, and 19/1. This existing roadway network provides the major vehicular, pedestrian, and bicycle access to the district.

2. Potential Impacts

All four of the Alternates 4, **4A (Preferred)**, and 4B will directly impact the Bullskin Run Rural Historic District with land acquisition, resulting in a 4(f) use of the resource. Alternates 4, 4A, and 4B impact approximately 24-31 acres in the vicinity of the Wheatland community, generally along the existing US 340 alignment. No contributing structures would be affected. Based on conceptual designs, no constructive uses or temporary occupancies have been identified. Other environmental impacts are discussed in Chapter IV.

a) Measures to Minimize Harm

As each of the remaining build alternatives follow the existing highway corridor through the narrowest possible portion of the rural historic district, physical impacts within the district will be minimal. Design measures to further minimize harm could include changes to reduce the footprint or cross-section or landscaping. These will be explored further as the Section 106 consultation process continues, with an updated discussion included in the FEIS.

E. THE VILLAGE OF RIPPON HISTORIC DISTRICT

1. Description

A large portion of the Village of Rippon is eligible for listing on the National Register as a historic district under Criteria A and C. It is also a contributing element within the larger

Kabletown Rural Historic District. The Village of Rippon consists of approximately 45 acres. Thirty-two properties are located in the community of Rippon and identified as contributing to the eligible historic district. These include several stores, a school, two churches, a grain elevator, a warehouse, a parish hall, and 22 dwellings. A majority of these buildings are dated to the late-nineteenth and early-twentieth century. The district is located along the existing US 340 and encompasses the junctures with CR 21 and CR 19.

Within the district, one contributing resource could potentially be impacted: the Heskett House #1 property. It is the southeast most boundary of the district. The property is privately owned. The dwelling was originally part of Wayside Farm located just to the east. It is one of a few log dwellings in the community of Rippon. The right section of the Heskett House #1 is log and appears to be two bays wide. It is covered in German-lap siding and has a gable roof and an interior-end flue. A frame 2-story side wing with composition siding and an exterior-end flue has been added as well as a 1-story, cross-gable-roofed frame wing. The outbuildings include two early to mid-twentieth century shed-roofed sheds.

The Village of Rippon Historic District is accessed from US 340 and CR 19. The existing roadway network provides vehicular, pedestrian, and bicycle access to the historic district. Access to the Heskett House #1 property is by private drive. The main driveway to the house is accessed from CR 21.

2. Potential Impacts

Required land acquisition for Alternates 4, **4A (Preferred)**, and 4B will directly impact the southeast edge of the Village of Rippon Historic District, resulting in a 4(f) use of the resource. Based on conceptual plans, approximately 0.7 to 1.4 acres will be acquired from the historic district, including one structure listed as a contributing resource (Johnson House). Land acquisition also includes two sheds dated to the early to mid-twentieth century. The new right-of-way for Alternate 4 will be within 8 feet of the Heskett House #1. Exhibit V-6 and Exhibit V-7 show the relationship of the alternates to the historic district.

Alternate 4 results in the least impacts (0.7 acres) within this district, clipping the southernmost extension of the district along Meyerstown Road at the Johnson House property. Alternates **4A (Preferred)**, and 4B impact the same location but have a greater footprint as a longer portion of Meyerstown Road is improved in these scenarios. Alternate 4A also includes additional acquisition area along Rippon Commons Court to connect back to existing US 340.

Alternate 4A requires 1.4 acres of acquisition within the district; Alternate 4B requires 1.1 acres. Based on conceptual designs, no constructive uses or temporary occupancies have been identified.

a) Measures to Minimize Harm

Minimizing harm to the Section 4(f) property may be accomplished by additional design measures. Among the measures to be considered will include alignment adjustments for Alternates 4, **4A (Preferred)**, and 4B and providing landscaped screening to reduce visual impacts. There is the potential for the location of Alternates 4, 4A, and 4B to be shifted to minimize impacts and perhaps to the point of avoiding the historic district. However, alignment shifts would likely result in greater impacts to the historic Byrdland property, two newly constructed subdivisions, and/or the historic Wayside Farm.

These and other potential mitigation measures will be explored further as the Section 106 consultation process continues, with an updated discussion in the FEIS. While **Alternate 4A (Preferred)** does not result in the least harm to the Village of Rippon Historic District considered as an individual resource, it does result in fewer impacts to Section 4(f) properties overall.

F. THE OLIVE BOY FARM SECTION 4(F) PROPERTY

1. Description

The Olive Boy Farm is eligible for listing on the National Register of Historic Properties under criterion C and is located on the east side of US 340. The historic property boundaries encompass approximately 182 acres and represent the previous ownership boundaries of the Olive Boy Farm. It is also a contributing component within the Kabletown Rural Historic District.

Alternates 4, **4A (Preferred)**, and 4B border the western boundary of the property along US 340. These alternates are located approximately 1,500 feet from the main house. Exhibit V-6 and Exhibit V-8 show the location of the Olive Boy property in relation to the build alternates.

The Olive Boy property is privately owned. The property was constructed by Dr. Blackburn sometime in the 1840's. The main house is a fine example of the Italianate style as expressed

by local craftsmen. The setting is pristine and includes several outbuildings. These outbuildings include a stone spring house, the Blackburn cemetery, a one story kitchen/slave quarters, a small frame barn, a 1990 tenant house, and a 1970 turn-out shed.

Access to the Olive Boy property is by private drive. The driveway to the tenant house is from existing US 340. The driveway to the main house on Olive Boy Farm is accessed from CR 38.

2. Potential Impacts

Land acquisition for right-of-way impacts the Olive Boy property with Alternates 4, **4A (Preferred)**, and 4B as shown on Exhibit V-8, resulting in a 4(f) use of the resource. Alternates 4, 4A, and 4B follow similar alignments in this location along the western boundary of Olive Boy adjacent to the existing highway; Each of these alternates will require from 6.5 to 10.7 acres from the Olive Boy property, located in a strip along the existing US 340 right of way. No standing structures will be directly impacted with any of the build alternates. Based on conceptual designs, no constructive uses or temporary occupancies have been identified. Other environmental impacts are discussed in Chapter IV.

a) Measures to Minimize Harm

As each of the remaining build alternatives follow the existing highway corridor along the property's boundary, physical changes within the district will be minimal. Minimizing harm to the Section 4(f) property may be accomplished by additional design measures, such as alignment shifts during the design of the proposed roadway. Alternates 4, 4A (Preferred), and 4B could be shifted away from the property, widening to the west of the existing alignment to minimize or avoid the Olive Boy Farm. These measures will be explored further as the Section 106 consultation process continues, with an updated discussion included in the FEIS.

G. THE BYRDLAND SECTION 4(F) PROPERTY

1. Description

The Byrdland property is eligible for listing on the National Register of Historic Places. The property consists of approximately 412 acres. This historic property was constructed between 1830 and 1850. The property consists of a large I-house of log construction with stucco cladding. Many outbuildings are located within the property that date from the late 1800's to the early 1900's. The outbuildings include three tenant houses; a frame bank barn; several frame shed-roofed chicken coops; a frame corncrib; three concrete silos; four gable-roofed

sheds clad in either vertical siding for German-lap siding; a pigsty; several tractor sheds; a two-story frame granary with exterior stairs; a frame garage with sliding doors; and several modern machine sheds. The main house has undergone very little alteration. This property is eligible for listing on the National Register for its architectural and historic importance. It is also a contributing component within the Bullsken Run and Kabletown Rural Historic Districts. Together with its many late nineteenth-century outbuildings it is one of the most intact farm complexes in the area.

The Byrdland property is located on a hill surrounded by mature trees. The main residence faces west towards the existing US 340. It is approximately 750 feet east of the existing roadway; however, US 340 is barely visible due to varying elevations and existing vegetation. The Byrdland property is privately owned.

Access to the Byrdland property is by private drive. The main driveway to the house is from the existing US 340.

2. Potential Impacts

The Byrdland property is directly impacted under Alternates 4, **4A (Preferred)**, and 4B by land acquisition, resulting in a 4(f) use of the resource. Approximately 25.7 to 28.5 acres of permanent right is required for Alternates 4, 4A, and 4B. All of the impacts are to unimproved or agricultural land located in fields along existing US 340. There are two farmhouses that will be directly impacted by Alternates 4, 4A, and 4B. Alternates 4, 4A, and 4B extend approximately 700 feet west of the main house. Exhibit V-6 and Exhibit V-9 show the location of the Byrdland property in relation to the alternates. No constructive uses or temporary occupancies have been identified based on conceptual designs.

Other environmental effects are discussed in Chapter IV.

a) Measures to Minimize Harm

While it would be possible to avoid or minimize impacts to the Byrdland property by shifting the alignments further west, this would lead to a more significant use within the Village of Rippon Historic District, including the loss of multiple contributing structures. Acquisition within the footprint of the Ripon Lodge historic property would also likely be required to accommodate the wider cross-section of the improved highway. A tighter radius S-curve along

the proposed alignment could also reduce the footprint within Byrdland; however, this would compromise the project purpose depending on the severity of the curve.

Providing landscaped screening for the alternates to reduce visual impacts could also be considered. These measures will be explored further as the Section 106 consultation process continues, with an updated discussion in the FEIS.

H. THE STRAITHMORE SECTION 4(F) PROPERTY

1. Description

The Straithmore property is eligible for listing on the NHRP under criteria A and C. The property consists of approximately 160 acres. The Straithmore property is located on the north end of the project along the existing US 340. It is a Federal-style house that was constructed in 1827. Also located on the property are the ruins of a stone mill and other stone and wood remnants from various buildings. The house faces west and is situated on top of a hill that grades down to Bullskin Run. The resource is a contributing element to the Kabletown and Bullskin Run Rural Historic Districts.

US 340 currently lies about 1,150 feet west of the main house. The topography between the house and the roadway varies in elevation, making it difficult, if not impossible, to see the existing roadway.

The Straithmore property is privately owned. Straithmore possesses great integrity of design and workmanship and is a fine example of a brick Federal-style dwelling with an attached brick service wing. It is composed of a five-bay, two-story brick section with a recessed one and a half-story, two-bay service wing. An old road trace is evident in the front yard, and the house faces west on a hill above Bullskin Run. The mill ruins further enhance the property's significance. Other outbuildings include two frame barns (circa 1900), a brick two-story smokehouse with gable roof (circa 1827), and a modern, three-bay, one and a half-story log building under construction using logs from a house on the neighboring property.

Access to the Straithmore property is by private drive. The main driveway to the house is accessed from CR 340/2, east of US 340.

2. Potential Impacts

The Straithmore property is impacted by land acquisition under all the remaining build alternates, resulting in a 4(f) use. Along this historic property, the location of Alternates 4, **4A (Preferred)**, and 4B are the same, traveling along the western property boundary adjacent to the existing US 340 alignment. Alternates 4, 4A, and 4B will require from 8.8 to 10.5 acres of right-of-way, located in a strip along the existing right of way. An additional strip of acquisition will be necessary to reconstruct the driveway, increasing the acreage totals. Exhibit V-6 and Exhibit V-10 show the relationship of the alternates to the property. Based on conceptual designs, no constructive uses or temporary occupancies have been identified.

No standing historic structures fall within the proposed acquisition areas; a seasonal produce stand is located at the northern corner of the property within the acquisition area but is not considered a contributing element within the resource. Other environmental effects are discussed in Chapter IV.

a) Measures to Minimize Harm

Minimizing harm to the Section 4(f) property may be accomplished by additional design measures, such as widening west of the existing US 340 alignment or reducing the cross-section to reduce the extent of impacts. However, a westerly shift could require increased acquisition within the Beverly Farm. The design of the preferred alternate will be coordinated with the West Virginia SHPO as the Section 106 consultation process continues and documented in the FEIS.

I. THE BEVERLY FARM SECTION 4(F) PROPERTY

1. Description

Beverley is located along US 340, south of Charles Town, encompassing 438 acres. It is a contributing element within the Bullskin Run Rural Historic District. The house faces south and is situated adjacent to existing US 340 at the northern end of the study area. The main residence is at an elevation of 500 feet above mean sea level. Existing US 340 is approximately 520 feet above mean sea level and is east of the main house. The embankment between the house and the roadway obstructs the view of the existing roadway.

The Beverly Farm is privately owned. The property includes a two-story, five-bay, gable-roofed, Federal-style brick dwelling laid in Flemish-bond brick. Some of the architectural

details include a brick water table, and brick jack arches. Two stone outbuildings on the property are believed to date to the original eighteenth-century construction period of the Stephenson house. Beverley is one of the finest Federal-style brick dwellings within the Bullskin Run Rural Historic District. The property is accessed from a private driveway off of existing US 340.

2. Potential Impacts

Alternates 4, **4A (Preferred)**, and 4B will directly impact the Beverly Farm with land acquisition, resulting in a 4(f) use of the resource. Alternates 4, 4A, and 4B follow the same location and will impact 0.5 to 0.9 acres from the easternmost tip of the property, adjacent to existing US 340 right of way. Exhibit V-6 and Exhibit V-11 show the location of the Beverly Farm in relation to the alternates. As each of the remaining build alternatives follow the existing highway corridor along the property's boundary, physical changes within the district will be minimal. No standing structures lie within the acquisition area. No constructive uses or temporary occupancies have been identified based on conceptual plans.

a) Measures to Minimize Harm

Minimizing harm to the historic property may be accomplished by using additional design measures. Among the design measures to be considered could include alignment shifts during the design of the Preferred Alternative. Alternates 4, **4A (Preferred)**, and 4B could potentially be shifted further east to minimize and possibly avoid the impacts to the Beverly Farm although this may increase impacts to Straithmore, Kabletown, and Bullskin Run. Additional minimization measures could include providing landscaped screening to reduce visual impacts. These measures will be explored further as the Section 106 consultation process continues, with an updated discussion in the FEIS.

J. SUMMARY

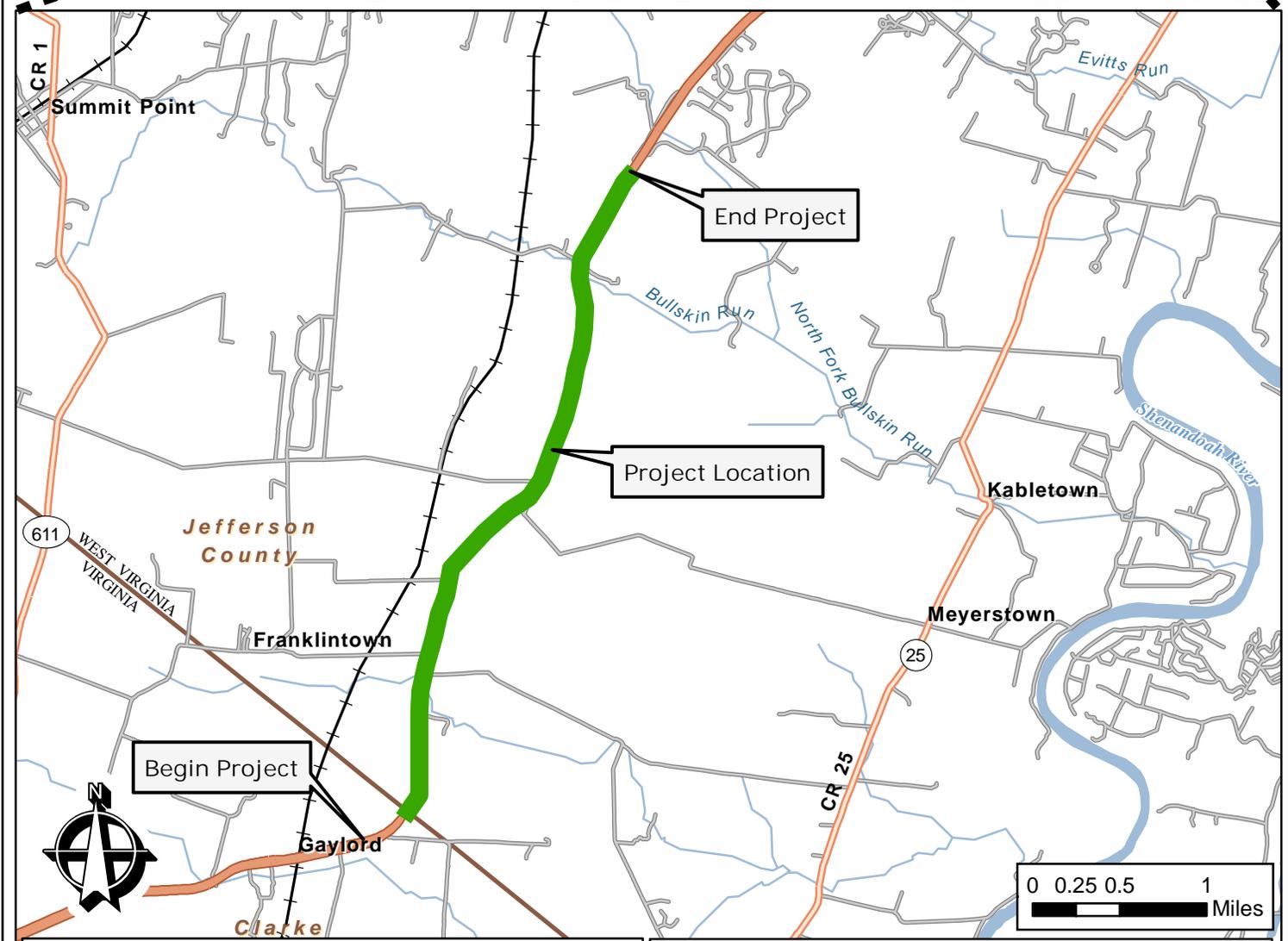
While the project area contains no public parks, recreation areas, or wildlife refuges, the large number and size of historic resources make avoidance of Section 4(f) properties impossible.

Fifteen build alternates were evaluated alongside the No-Build Alternate. Alternates 1, 2, 3, 6, 7, 9, and 10B would lead to a 4(f) use of the NRHP-listed Ripon Lodge. Alternates 8 and 9 would bisect the NRHP-listed William Grubb Farm. Alternate 5 avoids both these resources but would

result in a 4(f) use of two additional resources which are not directly affected by any of the other build alternates. Alternate 10A also avoids the most significant resources; however, it requires multiple grade-separated crossings of the historic Norfolk Southern Railroad. Alternate 11 results in the highest acreage of direct right of way takes within historic boundaries. While Alternate 4C results in similar effects on historic resources as Alternate 4B, Alternate 4C results in greater impacts on other resources. Accordingly, Alternate 4, 4A (Preferred), and 4B were advanced for detailed study.

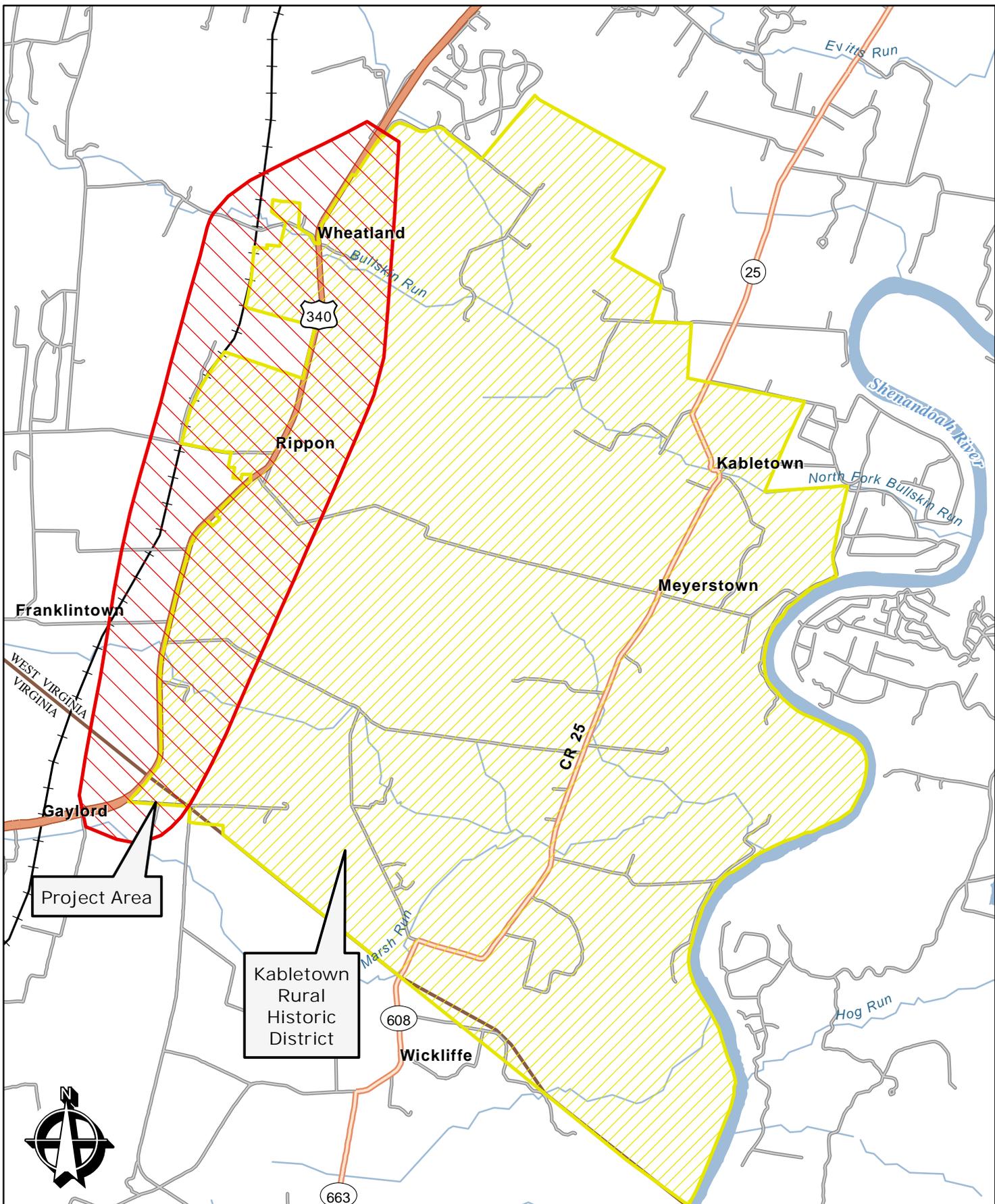
Based on current information, Alternate 4A (Preferred) results in the fewest acres of Section 4(f) use within the Kabletown Rural Historic District and within the combined footprints of individual resources. The difference in acreage of use between the three remaining build alternates is only 3%. Each results in the loss of one contributing element. Each follows the existing highway right of way boundaries along the edge of the property for three of the resources, minimizing the extent of physical changes to the setting following construction. Additional information from the Section 106 consultation process and comments received from the public will be used to update this analysis. The revised analysis will be presented in the FEIS.

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**US 340
IMPROVEMENT
STUDY**

Project Vicinity



Project Area

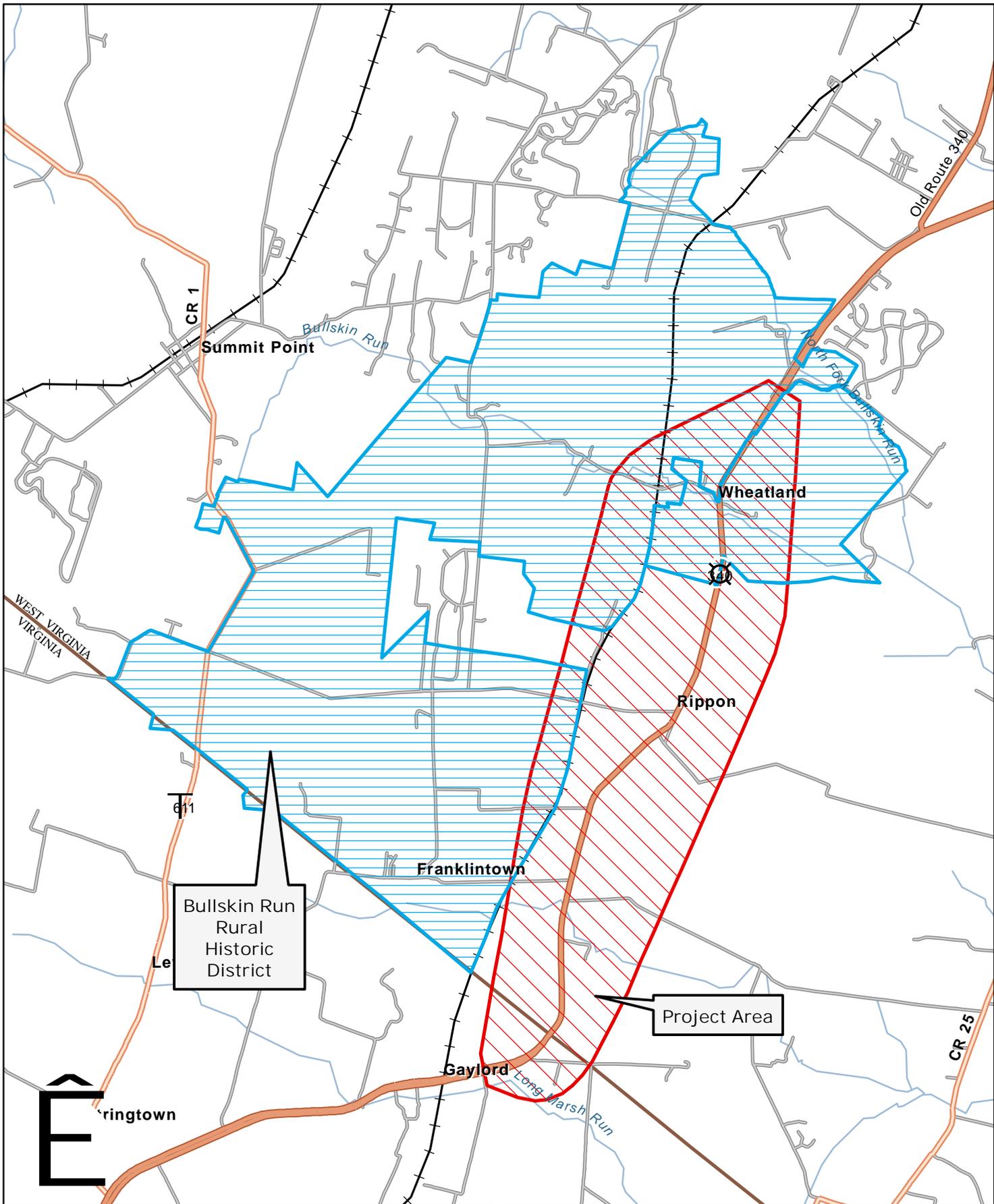
Kabletown Rural Historic District



**US 340
IMPROVEMENT
STUDY**

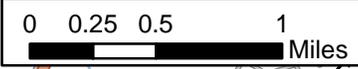
**Kabletown Rural
Historic District
Boundaries**

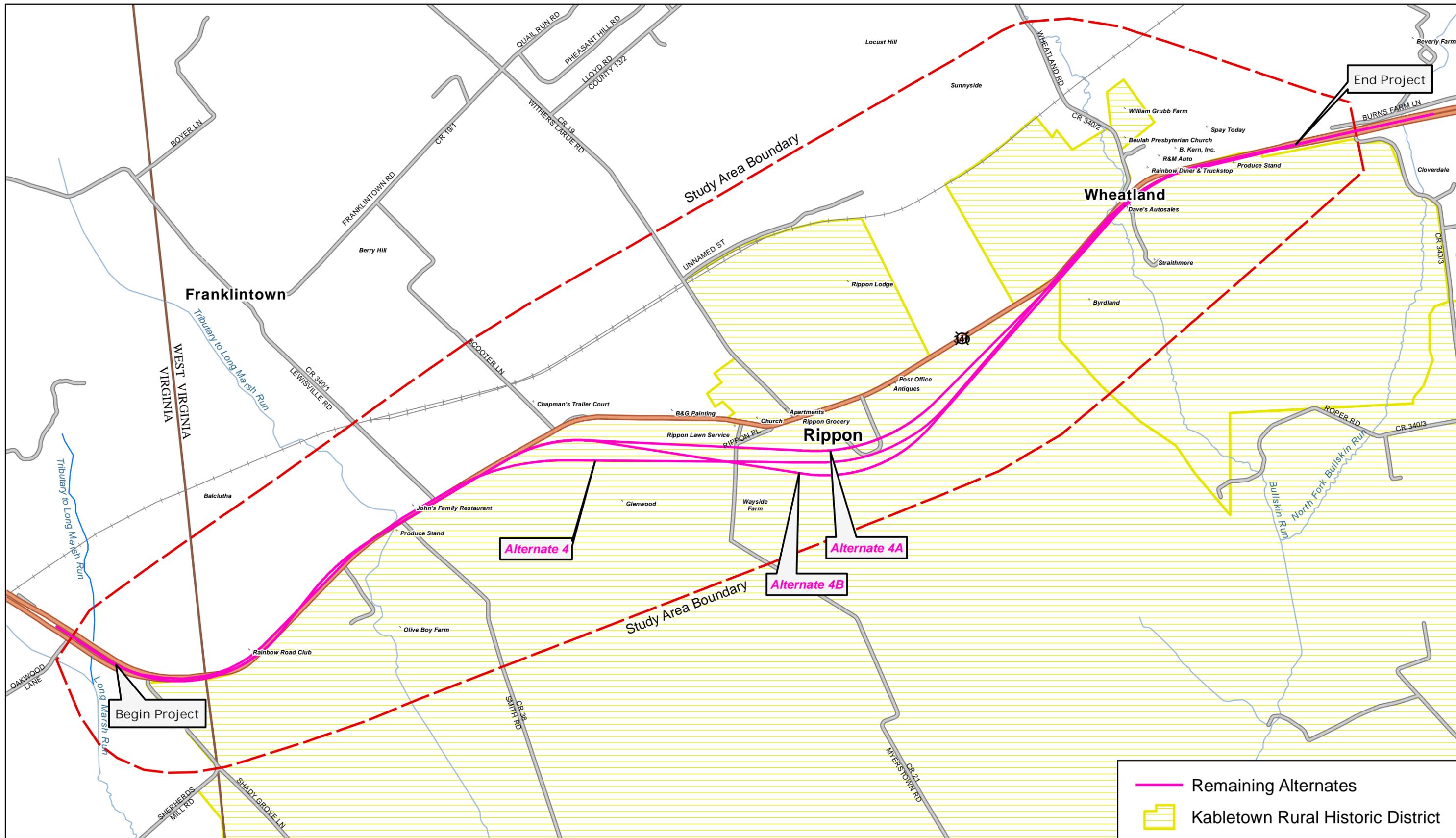




**US 340
IMPROVEMENT
STUDY**

**Bullskin Run Rural
Historic District**





Begin Project

End Project

Alternate 4

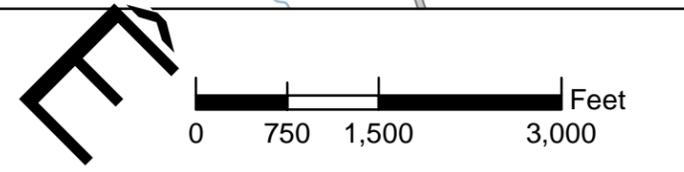
Alternate 4B

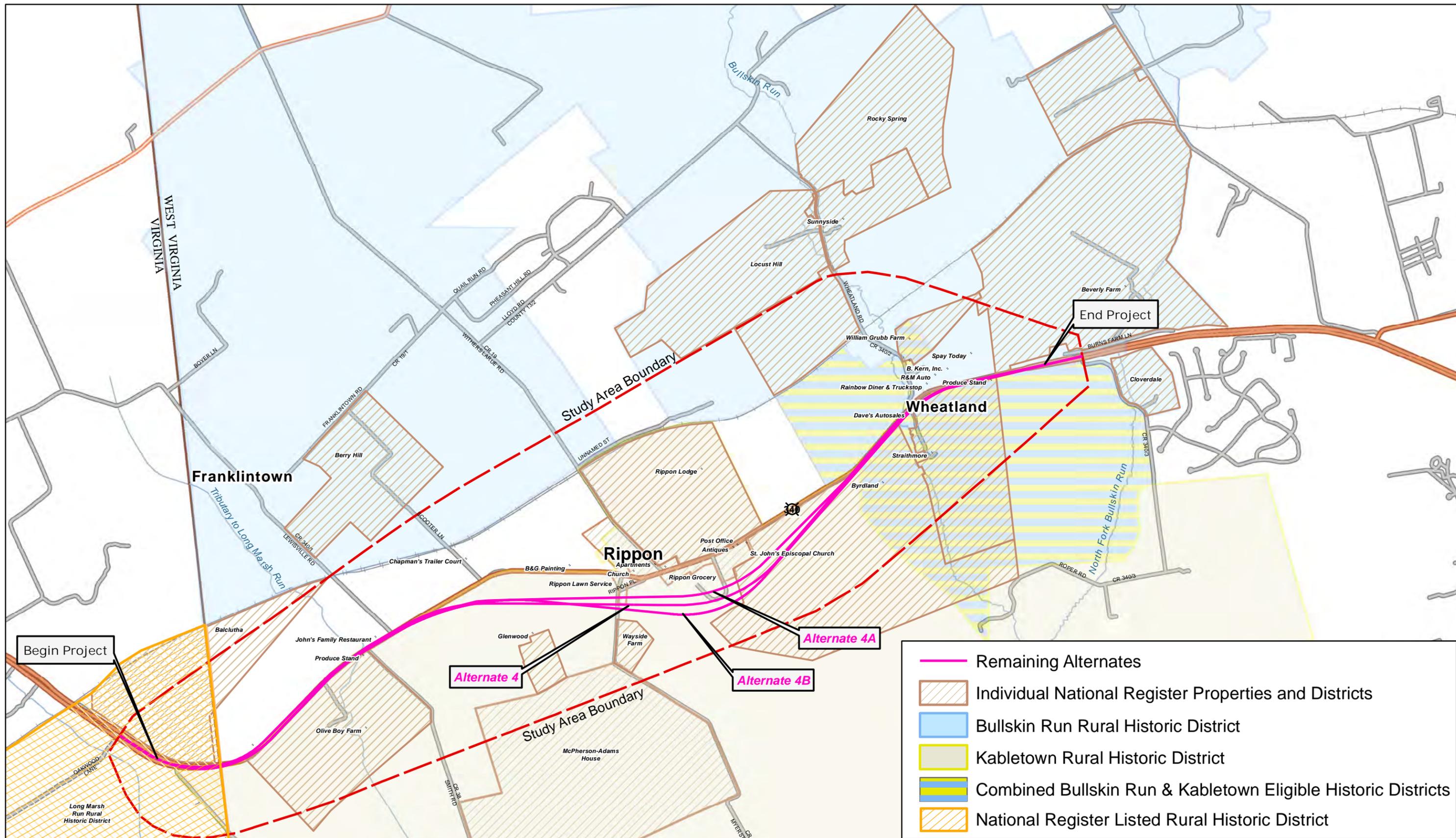
Alternate 4A

- Remaining Alternates
- Kabletown Rural Historic District

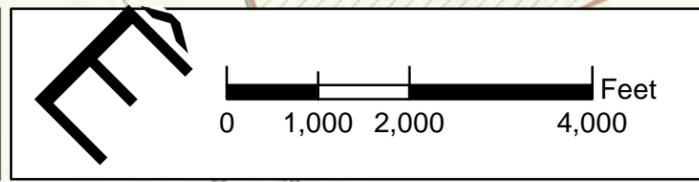
Impacted Section 4(f)
Kabletown Rural
Historic District

**US 340
IMPROVEMENT
STUDY**



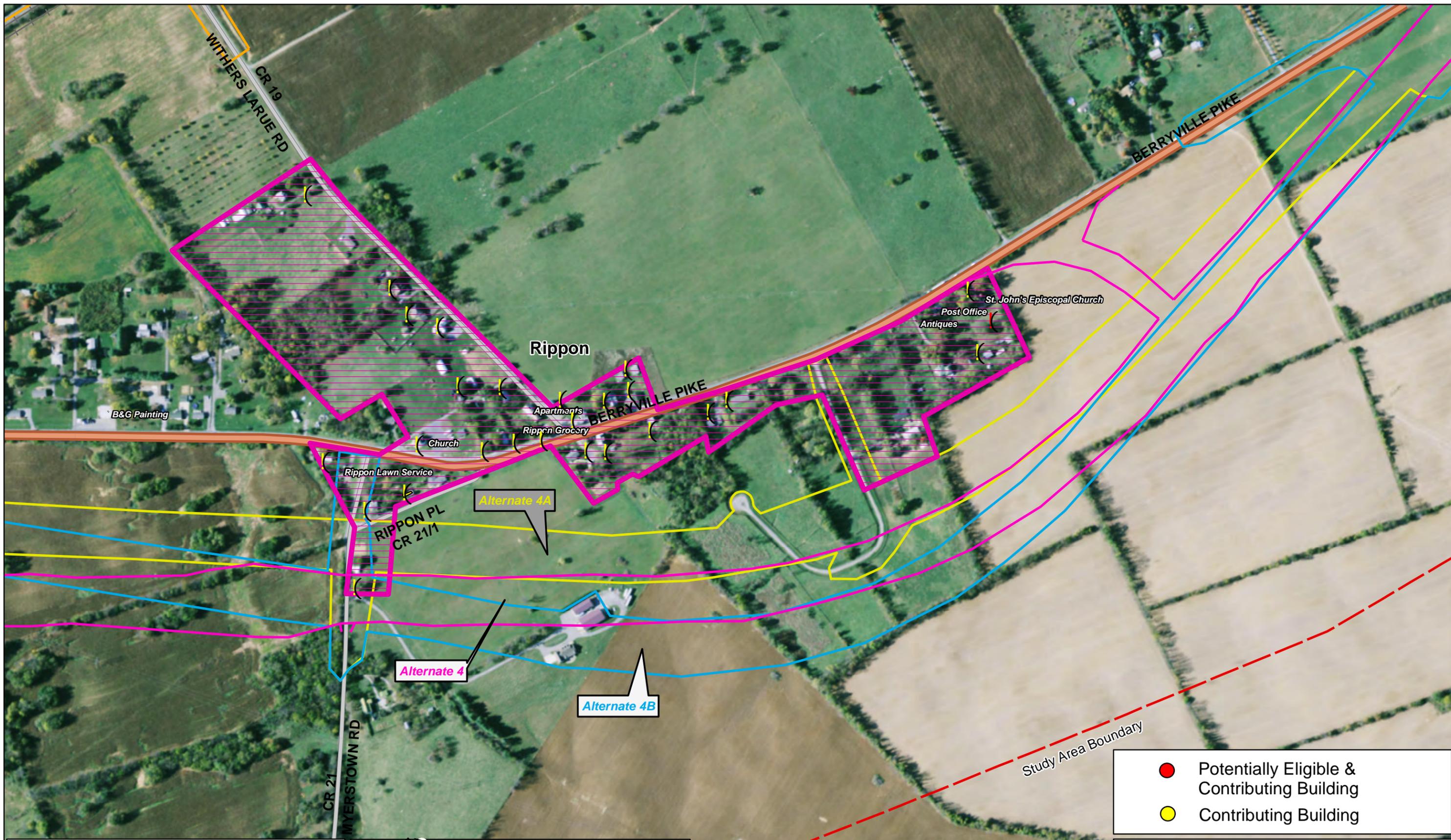


**US 340
IMPROVEMENT
STUDY**



Historic Resources

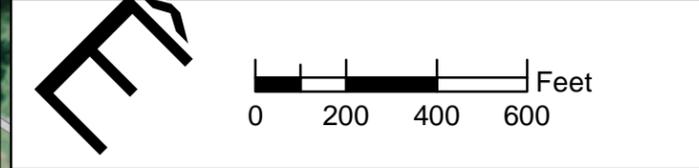
- Remaining Alternates
- Individual National Register Properties and Districts
- Bullskin Run Rural Historic District
- Kabletown Rural Historic District
- Combined Bullskin Run & Kabletown Eligible Historic Districts
- National Register Listed Rural Historic District

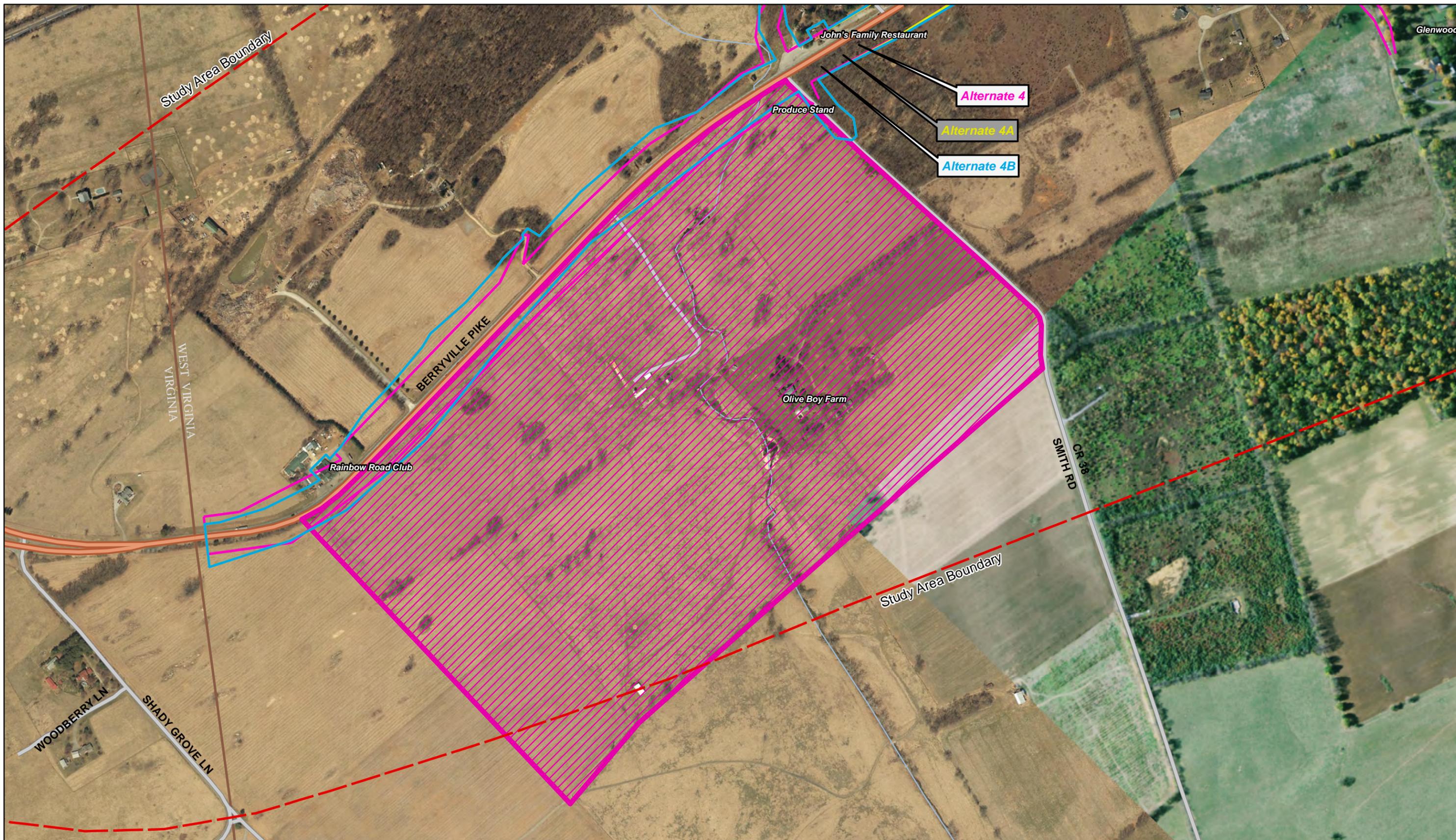


- Potentially Eligible & Contributing Building
- Contributing Building

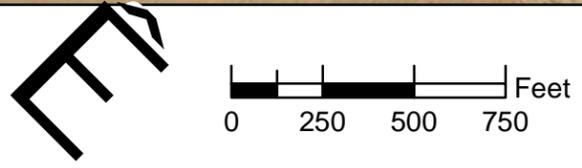
Impacted Village of
Rippon Historic District

**US 340
IMPROVEMENT
STUDY**

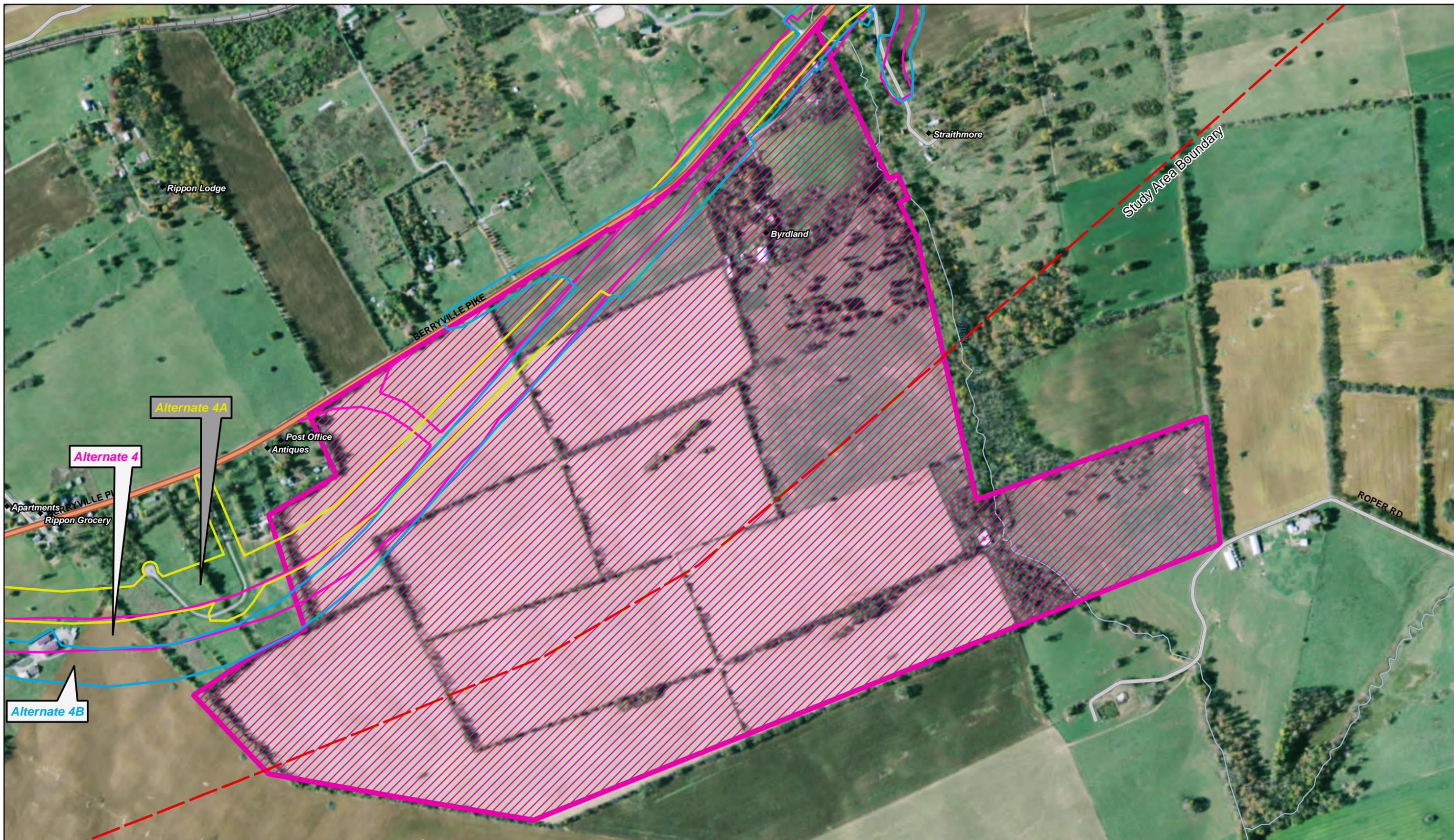




**US 340
IMPROVEMENT
STUDY**



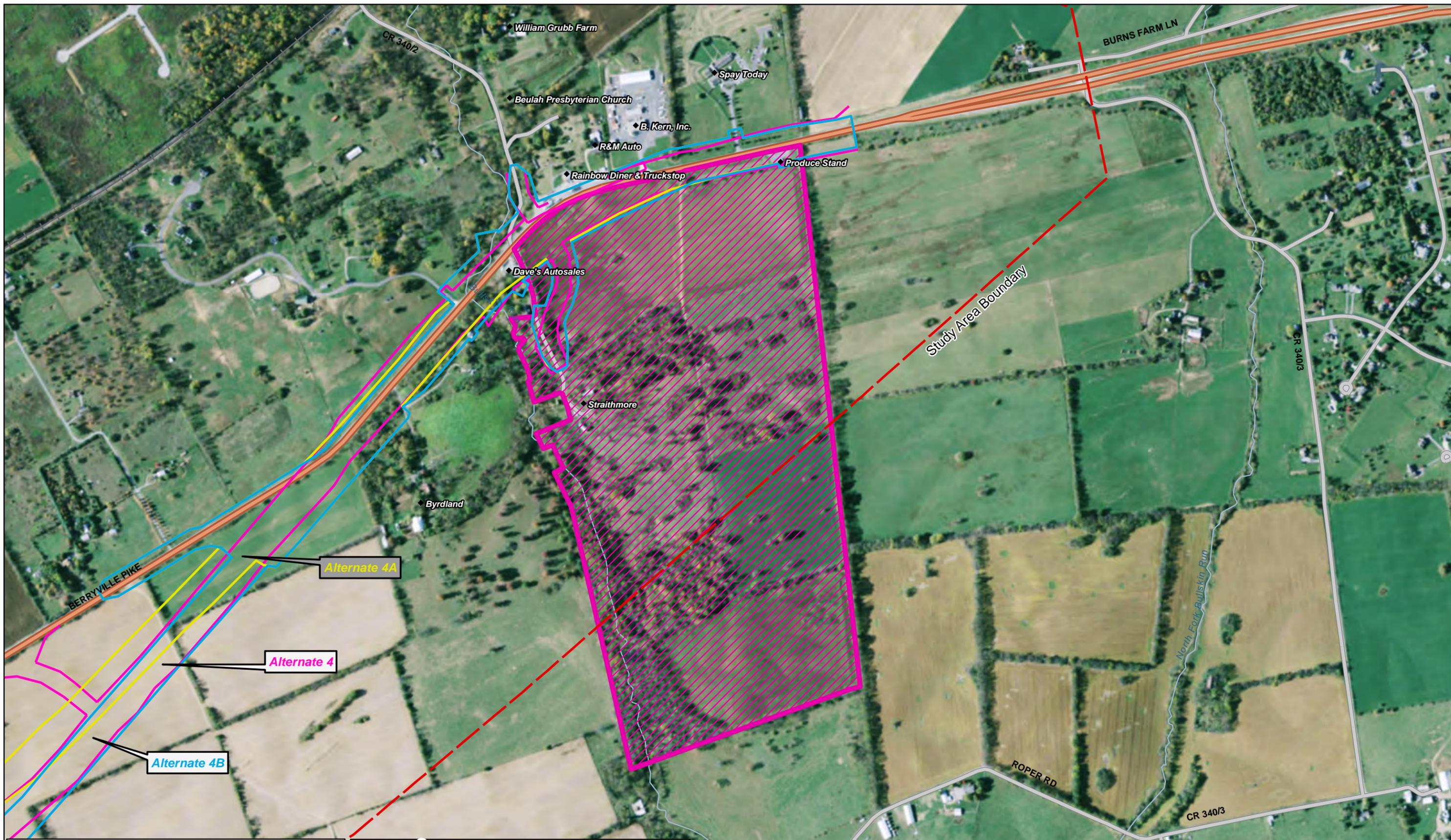
Impacted
Olive Boy Farm
Property



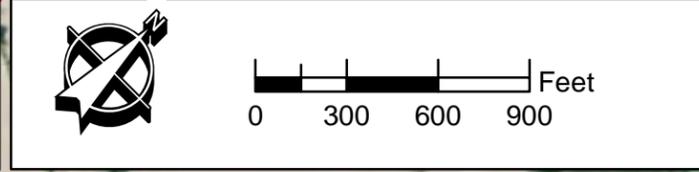
**US 340
IMPROVEMENT
STUDY**



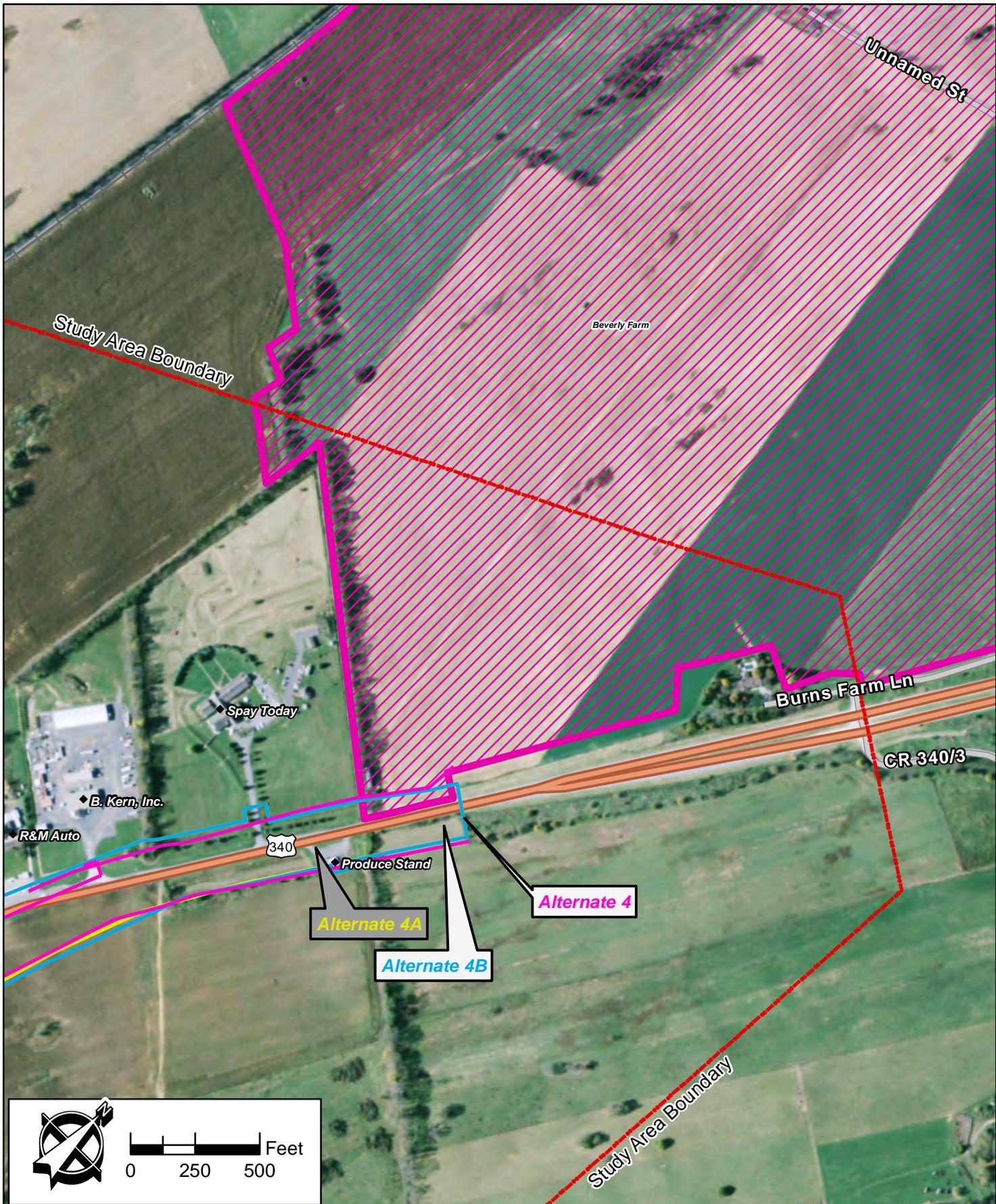
Byrdland
Impacts



**US 340
IMPROVEMENT
STUDY**



**Straithmore
Impacts**



**US 340
IMPROVEMENT
STUDY**

**Beverly Farm
Impacts**

SECTION VI

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VI. LIST OF PREPARERS

This document was prepared by the West Virginia Department of Transportation and the Federal Highway Administration with assistance from H. W. Lochner, Inc. in cooperation with Coastal Carolina Research, Inc., Maral S. Kalbian, LLC, and Orndorf and Associates.

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15 years of experience
Senior Planner

Jeff Schlotter, A.I.C.P.

M.A. in Applied Cultural Anthropology
B.S. in Urban Planning
29 years of experience
Senior Planner

Brian D. Dehler, P.E.

B.S. degree in Civil Engineering
32 years of experience
Sr. Project Manager

Douglas Wheatley, P.E.

B.S. Degree in Civil Engineering
11 years of experience
Transportation Engineer

H.W. Lochner, Inc. (continued)

Dave Shannon, P.E.

B.S. Civil Engineering
23 years of experience
Project Manager

Kevin Connor

M.S. Zoology
B.S. Biology
20 years of experience
Sr. Environmental Manager

Coastal Carolina Research, Inc.

Susan E. Bamann, Ph.D., RPA

M.A., Anthropology
Ph.D., Anthropology
27 years of experience
Project Manager

Jeroen vanden Hurk, Ph.D.

M.A., Architectural History
Ph.D., Architectural History
20 years of experience
Historian & Principal Investigator

J. Eric Deetz, M.A., RPA

M.A., Archaeology and Heritage Management
30 years of experience
Archaeological Principal Investigator
Senior Archaeologist

Maral S. Kalbian, LLC

Maral S. Kalbian

M.A.H., Master of Architectural History
20 years of experience
Architectural Historian

Orndorff and Associates

Wil Orndorff

M.S. Geological Sciences
B.A. Natural Sciences
17 years of experience
Consulting Geologist

SECTION VII

List of Agencies, Organizations,
and Persons to Whom Copies
of this Statement are Sent

VII. LIST OF AGENCIES, ORGANIZATIONS, AND PERSONS TO WHOM COPIES OF THIS STATEMENT ARE SENT

FEDERAL AGENCIES

Jessica Martinsen

Team Leader
Office of Environmental Programs (E3A30)
US Environmental Protection Agency,
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

Jeffrey Lapp

Associate Director
Office of Environmental Programs (E3A30)
U.S. Environmental Protection Agency,
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

Ginger Mullins

Chief, Regulatory Branch
U.S. Army Corps of Engineers, Huntington
District
502 Eighth Street
Huntington, WV 25701-2070

Mary Ann Tierney

Regional Director
Federal Emergency Management Agency
Region III
615 Chestnut Street
Philadelphia, PA 19106

Bill O'Donnell

Assistant State Conservationist-Programs
U.S. Department of Agriculture
1550 Earl L. Core Road, Suite 200
Morgantown, WV 26505

John Schmidt

Supervisor
U.S. Fish and Wildlife Service
West Virginia Field Office
694 Beverly Pike
Elkins, WV 26241

Willie R. Taylor

Director, Office of Environmental Policy
and Compliance
U.S. Department of Interior
1849 C. Street, NW (MS 2462)
Washington, D.C. 20240

**FEDERALLY RECOGNIZED INDIAN
TRIBES**

Seneca-Cayuga Tribe of Oklahoma

Paul Barton
Tribal Historic Preservation Officer
23701 S. 655 Road
Grove, OK 74344

Seneca Nation of Indians

Melissa Bach
Tribal Historic Preservation Officer
90 Ohi:yo' Way
Salamanca, NY 14770

Eastern Shawnee Tribe of Oklahoma

Robin Dushane
Tribal Historic Preservation Officer
10080 S. Bluejacket Road
Wyandotte, OK 74370

Eastern Band of Cherokee Indians

Russell Townsend
Tribal Historic Preservation Officer
PO Box 455
Cherokee, NC 28719

The Delaware Nation

Tamara Francis-Fourkiller
Cultural Preservation Director
PO Box 825
Anadarko, OK 73005-0825

STATE AGENCIES – West Virginia

Danny Bennett

WV Division of Natural Resources
Post Office Box 67
Elkins, WV 26241

Susan Pierce

Director
Deputy State Historic Preservation Officer
West Virginia Division of Culture and
History
The Culture Center
Capitol Complex
1900 Kanawha Blvd., East
Charleston, WV 25305-0300

Scott G. Mandirola

Division Director
WV Department of Environmental
Protection
Division of Water and Waste Management
601 57th Street SE
Charleston, WV 25304

Robert A. Fala

Director
Division of Natural Resources
Building 74
324 Fourth Ave.
South Charleston, WV 25303

Patty Hickman

Interim Director
Land Restoration
West Virginia Department of
Environmental Protection
601 57th Street
Charleston, WV 25304

William Durham

Division Director
Air Quality
West Virginia Department of
Environmental Protection
601 57th Street
Charleston, WV 25304

Wilma Reip

Water Resources Section
WV Department of Environmental
Protection
601 57th Street
Charleston, WV 25304

Scott Eplin

District Engineer/Manager
WV Division of Highways
P.O. Box 880
801 Madison Ave.
Huntington, WV 25712

STATE AGENCIES – Virginia

Randy Kiser, PE

District Administrator
VDOT, Staunton District Complex
811 Commerce Road
Staunton, VA 24401

Sandra 'Rene' Hypes

Department of Conservation and
Recreation
Central Office – Main Street Centre
Richmond, VA 23219

Sharon Baxter

Department of Environmental Quality
Office of Environmental Enhancement
629 East Main Street
P.O. Box 10009
Richmond, VA 23240-0009

Greg Evans

Department of Forestry
Voluntary Mitigation Program Manager
900 Natural Resources Drive, Suite 800
Charlottesville, VA 22903

Ernie Aschenbach

Department of Game and Inland Fisheries
4010 West Broad Street
P.O. Box 11104
Richmond, VA 23230-1104

Barry Matthews, P.G.

Department of Health
Office of Drinking Water Programs
109 Governor St, 6th Floor
Richmond, VA 23219

Marc E. Holma

Department of Historic Resources
2801 Kensington Avenue
Richmond, VA 23221

Randy Owen

Marine Resources Commission
2600 Washington Ave., 3rd floor
Newport News, VA 23607-0756

Mike Hallock-Solomon

Virginia Outdoors Foundation
Shenandoah Valley Region – Staunton
103 East Beverley Street, Suite B
Staunton, VA 24401-4324

Elizabeth Jordan, Ph.D.

Department of Transportation
Environmental Division
1401 East Broad Street
Richmond, VA 23219

LOCAL AGENCIES – West Virginia

Region 9 - Eastern Panhandle
Regional Planning & Development Council
400 West Stephen Street, Ste 301
Martinsburg, WV 25401

Jane M. Tabb

President
Jefferson County Commission
124 E. Washington Street
Charles Town, WV 25414

LOCAL AGENCIES –Virginia

Lisa Cooke

Park Director
Clarke County Offices
101 Chalmers Court, Suite B
Berryville, VA 22611

David Ash

County Administrator
Clarke County Offices
101 Chalmers Court, Suite B
Berryville, VA 22611

Charles Devine, MD

Health Director
Lord Fairfax Health District
Frederick / Winchester Environmental Health
107 North Kent Street, Suite 201
Winchester, VA 22601

SECTION VIII

Comments and Coordination

VIII. COMMENTS AND COORDINATION

A. INFORMATION WORKSHOP – SEPTEMBER 24, 2012

An Informational Public Workshop was held on September 24, 2012 at the Page-Jackson Elementary School in Charles Town, WV. The purpose of the workshop was to provide an update on the progress of the US 340 Improvement Study since the last public workshop was held in 2003. At that time, Alternate 4 was selected as the Preferred Alternate. Since that time, additional build alternates 4A and 4B were developed to minimize impacts to historic resources and residential properties affected by Alternate 4. These new build alternates were the focus of the workshop. The attendance sheet shows that 92 individuals registered for the workshop.

A comment form was included in the project handout and available for pickup at the registration station. Attendees were encouraged to provide their written comments using the forms. Following the workshop, 24 written comments were received by the study team along with copies of letters (3) sent to elected officials.

Over half of the comments received stated opposition to Alternates 4, 4A, and 4B due to the impact on Ryan's Glen subdivision. Three of the comments expressed preference for Alternate 4. Three others requested bicycle facilities. The remainder of the comments favored a particular alternate, requested a limited access facility with frontage roads, identified a new alternate, or wanted the project to avoid their property.

B. PUBLIC WORKSHOP/HEARING – JUNE 3, 2013

A Public Workshop and Public Hearing was held on June 3, 2013 at the Page-Jackson Elementary School in Charles Town, WV. The purpose of the workshop was to provide an update on progress of the US 340 Improvements Study and to receive formal comments on the project. The focus of the workshop was on the previously presented Alternates 4, 4A, and 4B plus newly developed Alternates 4C, 10A, 10B, and 11 which were developed following public comments received at the September 24, 2012 Public Workshop. Again, the primary driver in development of additional project alternates was minimizing impacts to historic resources and residential properties. There were 122 individuals who registered for the workshop and 20 who signed up to speak at the Public Hearing.

There was a wide variety of responses included in the comments received following the Public Workshop/Hearing. There were 49 written comments received. Eight favored Alternate 4, three favored Alternates 4A or 4C, one for Alternate 4B, two favored eliminating Alternate 11, thirteen wanted Alternates 10A and 10B to be eliminated, two wanted Alternates 4, 4A, 4B, and 4C to be eliminated, seven were in favor of Alternate 11, four opposed all build alternates, three wanted the project to move forward quicker, two wanted to be added to the mailing list, and two were in general favor of the project.

September 2012 Workshop Comments



US 340 FOUR-LANE IMPROVEMENT:
VA LINE TO CHARLES TOWN BYPASS

Informational Public Workshop
Monday, September 24, 2012

COMMENT SHEET – Please return on or before Wednesday, October 24, 2012

Contact Information [Please Print]

Name: LYN WIDMYER

Mailing Address (including Zip Code): 1434 Cattail Run
Charles Town WV 25414

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

- (1) A public hearing needs to be scheduled
- (2) alternative routes to 4A, B, C, need to be studied
- (3) landscaping needs to be shown
- (4) a behopath needs to be included
- (5) what is relationship to newer more stringent stormwater regs adopted since 2003?
- (6) how can this situation be avoided in the future -- ~~no~~ notification to prospective home buyers must be provided when r-o-w alignments are under review
- (7) Homes built since 2003 should ~~not~~ be ~~taken~~ avoided - These folks bought without any idea of r-o-w impact.

Project Information and Comment Sheets can be found online at our web page:

<http://go.wv.gov/dotcomment>

Click on "Comment on Engineering Projects", then "Open", and then click on "US 340 Project"



US 340 FOUR-LANE IMPROVEMENT:
VA LINE TO CHARLES TOWN BYPASS

Informational Public Workshop
Monday, September 24, 2012

COMMENT SHEET – Please return on or before Wednesday, October 24, 2012

Contact Information [Please Print]

Name: Steve Stoliphe 304 283 0614

Mailing Address (including Zip Code): PO box 37
Rippon WV 25441

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

I Like the proposed Routes that
you have picked.

When you print your maps
please remove the Bullskin Historic
District, There is no such thing!!!

The land owners voted not to
have a Bullskin Historic District
therefore it does not exist.

Project Information and Comment Sheets can be found online at our web page:

<http://go.wv.gov/dotcomment>

Click on "Comment on Engineering Projects", then "Open", and then click on "US 340 Project"



US 340 FOUR-LANE IMPROVEMENT:
VA LINE TO CHARLES TOWN BYPASS

Informational Public Workshop
Monday, September 24, 2012

COMMENT SHEET – Please return on or before Wednesday, October 24, 2012

Contact Information [Please Print]

Name: Michael Brust
Mailing Address (including Zip Code): 201 Ryan's Glen Drive, Charles Town, WV 25414

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

As a member/resident of the Ryan's Glen subdivision,
my family is directly impacted and displaced by any
of the Alternate selections whether it is 4, 4A, or 4B.
I would like to ask that the entire process be stopped
and opened up to public discussion in an open forum. There
appears to be little concern for any of the 14 homes
in our new subdivision which was approved by the
County after they knew of the plans for 340. Would
you please consider reassessing these proposals to
include re-evaluating Alternate 5. Thank you.

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US 340 FOUR-LANE IMPROVEMENT:
VA LINE TO CHARLES TOWN BYPASS

Informational Public Workshop
Monday, September 24, 2012

COMMENT SHEET – Please return on or before Wednesday, October 24, 2012

Contact Information [Please Print]

Name: Greg Bonar

Mailing Address (including Zip Code): 1108 N. Mildred St. Ranson W. VA

Greg.bonar@ftr.com 25438

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

It looks like that most of the telephone
lines will have to be moved from one side
of the road or the other and also the
switch in Rippon is right on the ~~edge~~
edge of all 3 plans 4r 4A, 4b. Once you
decide which one you are going to use
please get back in contact with me at
my e-mail address. Then I can give you
a price. Thanks Greg

Project Information and Comment Sheets can be found online at our web page:
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US 340 FOUR-LANE IMPROVEMENT:
VA LINE TO CHARLES TOWN BYPASS

Informational Public Workshop
Monday, September 24, 2012

COMMENT SHEET – Please return on or before Wednesday, October 24, 2012

Contact Information [Please Print]

Name: Bradley Grubb

Mailing Address (including Zip Code): 118 Catty Ct, Charles Town WV
25414

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

I appreciate the workshop. However the data presented was not current. The maps display 2002 data and is factual inaccurate. Your cost data is materially misrepresented.

Alternates 4 4A, + 4B are no longer the most economical. A revision is needed. Please consider moving 4 to the west to avoid the 3 new homes. This will prevent \$1.5 million in unnecessary relocation costs. Please reconsider + make slight adjustment. You can easily develop 4C that avoids Ryans Glen all together.

I formally request a public hearing to discuss this in a transparent manner.

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Informational Public Workshop
Monday, September 24, 2012

COMMENT SHEET – Please return on or before Wednesday, October 24, 2012

Contact Information [Please Print]

Name: Kristin Grubb

Mailing Address (including Zip Code): 118 Cutty Ct. Charles Town

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

I want you to revisit other options besides 4, 4a, and 4b. It is impossible to make an informed decision when you only update these options and not the other alternatives they were originally compared to. I think it is a sad misgovernance to know that a subdivision is going to be affected no matter what and continue to allow new homes to be built in the path of all options. The lack of information is intolerable. I moved to West Virginia into my new home in Ryan's Glen, in June of 2012. For us to not be notified better of these plans is injustice. We could not know about the 340 project coming from out-of-state when no information was available online. Policies need to change.

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VA LINE TO CHARLES TOWN BYPASS

Informational Public Workshop
Monday, September 24, 2012

COMMENT SHEET – Please return on or before Wednesday, October 24, 2012

Contact Information [Please Print]

Name: Bill Chesley

Mailing Address (including Zip Code): 151 Packer Dr. Charles Town WV
25414

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

HAS ANYONE ASKED ABOUT A CEE ROAD
Bike PATH. OR BIKE PATH
WASHINGTON TO N.C.

Multiple horizontal lines for additional comments or questions.

Project Information and Comment Sheets can be found online at our web page:
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US 340 FOUR-LANE IMPROVEMENT:
VA LINE TO CHARLES TOWN BYPASS

Informational Public Workshop
Monday, September 24, 2012

COMMENT SHEET – Please return on or before Wednesday, October 24, 2012

Contact Information [Please Print]

Name: Carolyn Sue Zirkle (John's Family Restaurant)
Mailing Address (including Zip Code): Box 219
Rippon, W. Va. 25441

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

Thank you!!!
I thank you!!!
I will get away from Gun
Range!

Project Information and Comment Sheets can be found online at our web page:
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Click on "Comment on Engineering Projects", then "Open", and then click on "US 340 Project"



US 340 FOUR-LANE IMPROVEMENT:
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Informational Public Workshop
Monday, September 24, 2012

COMMENT SHEET – Please return on or before Wednesday, October 24, 2012

Contact Information [Please Print]

Name: _____

Mailing Address (including Zip Code): _____

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

Please consider providing limited access points without the future potential for more accesses. Please provide for frontage roads where possible

Please provide either parallel bike route on a separate ROW or along the edge of the road dedicated to bike/pedestrian access.

Project Information and Comment Sheets can be found online at our web page:
<http://go.wv.gov/dotcomment>
Click on "Comment on Engineering Projects", then "Open", and then click on "US 340 Project"



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VA LINE TO CHARLES TOWN BYPASS

Informational Public Workshop
Monday, September 24, 2012

COMMENT SHEET – Please return on or before Wednesday, October 24, 2012

Contact Information [Please Print]

Name: Bill Chesley

Mailing Address (including Zip Code): 151 Packer Dr.
Charles Town, WV 25414

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

Alternate 4 OK, Better Than 80R9.
WV Biking Path looking At 340 Road.
Washington to Nico Bike Path At 340 Road
BE SURE BIKE PATH ALONG ROAD IS BIG
ENOUGH

Project Information and Comment Sheets can be found online at our web page:
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Informational Public Workshop
Monday, September 24, 2012

COMMENT SHEET – Please return on or before Wednesday, October 24, 2012

Contact Information [Please Print]

Name: Becky Kingsberry

Mailing Address (including Zip Code): 194 Ryans Glen Dr
Charles Town WV 25414

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

We need to have other alternatives for
this studied / reviewed. The current
alternatives impact a new community of
home owners of which 3 have just recently
we purchased their homes & moved in.
Our community members purchased homes
in the Ryans Glen Community in good faith.
Apparently someone forgot to mention these
plans to us when we were looking to
buy. Wouldn't the county and the builder
have known about this already??
Again, we propose for the other alternatives
to be looked at again.

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Informational Public Workshop
Monday, September 24, 2012

COMMENT SHEET – Please return on or before Wednesday, October 24, 2012

Contact Information [Please Print]

Name: LINDA J. HAUGHTON

Mailing Address (including Zip Code): 201 Ryans Glen Drive
Charles Town, WV. 25414

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

My family would like you to reaccess your
options to include the railroad tracks -
the trailer park or moving the road in
back of alternate # 5. That is all farm
land and in our opinion wouldn't have
a great impact on the Ryans Glen Subdivision.
This was done along Rt. 9 thru the apple
orchard going towards Martinsburg.
We can't go into bankruptcy over a highway!
This is what will happen to us if you put
the highway on Alt. # 4A/4B

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Informational Public Workshop
Monday, September 24, 2012

COMMENT SHEET – Please return on or before Wednesday, October 24, 2012

Contact Information [Please Print]

Name: Peanne Morton

Mailing Address (including Zip Code): PO Box 58 - 2446
Berryville Pike, Rippon, WV 25441

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

4 B should be the chosen Rt,
as it interferes with fewer residences.

Multiple horizontal lines for additional comments or questions.

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Informational Public Workshop
Monday, September 24, 2012

COMMENT SHEET – Please return on or before Wednesday, October 24, 2012

Contact Information [Please Print]

Name:

Carolyn Zurble (John's Restaurant)

Mailing Address (including Zip Code):

Box 219
Rippon, WV. 25441

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

Thank you !!
Thank you !!

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US 340 FOUR-LANE IMPROVEMENT:
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COMMENT SHEET – Please return on or before Wednesday, October 24, 2012

Contact Information [Please Print]

Name: Kelly Timbrook

Mailing Address (including Zip Code): 110 Ryans Glen Dr, Charles Town, WV 25414

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

Please don't destroy my home! I placed my life savings into it. I am a WV native, and I was so happy to be able to find a place like Ryans Glen. I had NO IDEA that my dream home would turn into this waking nightmare. "Dan Ryan" had to know about this, & still they built. Did they say anything or tell me? Of course not! I would never have gambled with my life's work/savings and purchased a house, only to have it razed w/i five years. No one in their right mind would. To have something like this sprung on me had caused severe emotional distress and sleeplessness. I also ask, "How could WV DOT or Jefferson County or others do this to our community - because Ryans Glen is just that." I also wonder how someone like Lou Athey can sleep at night - probably just fine, because →

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he has his money. And in reviewing the "Comparative Summary" it appears as though our entire subdivision wasn't even taken ~~to~~ into consideration. Why not? There's got to be a better route than 4, 4a & 4b. There must be a better route than through our homes and my neighbors' lives. Please stop this miscarriage of justice.

I also STRONGLY object to the notion that "we should have known" about this. I do not own a crystal ball. ~~As~~ Again, no one during my entire home-buying process said word one about this. We are not stupid - we would never have settled in a community that had the like expectancy of a common house fly!

I am sure there are hundreds of people facing this horrible situation. Please do the right and honorable thing - re-route this road!

2007 - moved up

2008

Kelly Timbrook
110 Lyons Glen Dr.
Chas Town —
WV 25414

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US 340 FOUR-LANE IMPROVEMENT:
VA LINE TO CHARLES TOWN BYPASS

Informational Public Workshop
Monday, September 24, 2012

COMMENT SHEET – Please return on or before Wednesday, October 24, 2012

Contact Information [Please Print]

Name: Keely Timbrook

Mailing Address (including Zip Code): 110 Rogers Glen Dr, Char Town 25414

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

After speaking w/ the majority of officials present,
several things concerned me: No date could/
would be provided; lack of communicative and
information that persuaded this "into gathering;
why did we have to find out about this via
informal channels?

And, why can't the previous routes be re-evaluated?
For example, Alt 5 -> push it further EAST, away
from our subdivision, as well as from Wayside
Farm.

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Click on "Comment on Engineering Projects", then "Open", and then click on "US 340 Project"

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3



US 340 FOUR-LANE IMPROVEMENT:
VA LINE TO CHARLES TOWN BYPASS

Informational Public Workshop
Monday, September 24, 2012

COMMENT SHEET – Please return on or before Wednesday, October 24, 2012

Contact Information [Please Print]

Name: THOMAS HAUGHTON

Mailing Address (including Zip Code): 201 RYANS GLEN DR.
CHARLESTOWN, WV 25414

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

THIS PROJECT IMPACTS MY HOME, MY FAMILY
MY LIFE. THERE NEEDS TO BE MOAR
STUDY INTO THE ALIGNMENT OF THE
ROAD.

THE STATE'S LAW FOR COMPENSATION COMES
NO WHERE NEAR WHAT I PAID FOR THE PROPERTY
AND WILL PUT ME ON THE STREET AND
BANKRUPT.

I WAS NEVER INFORMED ABOUT THE ROAD
BY ANY ONE.

THERE ARE OTHER ALTERNATIVES AND THE
PROJECT SHOULD BE PUT ON HOLD

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VA LINE TO CHARLES TOWN BYPASS

Informational Public Workshop
Monday, September 24, 2012

COMMENT SHEET – Please return on or before Wednesday, October 24, 2012

Contact Information [Please Print]

Name: Cheryl McCormell
Mailing Address (including Zip Code): 341 Ryans Glen Dr.
Charles Town, WV 25414

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

The project was not disclosed to the inhabitants of Ryans Glen HOA. The Planning Commission knowingly approved the Ryans Development after the state had developed the US 340 Four-lane Improvement. This information was not disclosed to potential buyers from Dan Ryan Homes. Due to this information, all progress should be halted and options reviewed, with suitable agreement received before going forward with any construction. The WVDOT maps show areas where s's can be made to reduce the impact on Ryans Glen.

Project Information and Comment Sheets can be found online at our web page:

<http://go.wv.gov/dotcomment>

Click on "Comment on Engineering Projects", then "Open", and then click on "US 340 Project"



US 340 FOUR-LANE IMPROVEMENT:
VA LINE TO CHARLES TOWN BYPASS

Informational Public Workshop
Monday, September 24, 2012

COMMENT SHEET – Please return on or before Wednesday, October 24, 2012

Contact Information [Please Print]

Name: Julie Elliott

Mailing Address (including Zip Code): 250 Ryans Glen Drive
Charles Town, WV 25414

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

First let me say I am not against growth or progress but I
was floored with the news of the 340 bypass coming
thru our community! we have been here almost 3 years
and never once was this disclosed to us. We would
NOT have bought here had we known this was a
possibility. The planning commission should never have
let Dan Ryan build this community. I consider
this to be unethical & deceitful at the very least.

I would almost rather my home be demolished than have to
live with the decreased quality of life that will come
with the bypass. we will never be able to sell our home now.
There are good hardworking people that live here and
some of us should have to pay the price for
someone elses greed!!! Someone needs to be held
accountable!!!

Project Information and Comment Sheets can be found online at our web page:

<http://go.wv.gov/dotcomment>

Click on "Comment on Engineering Projects", then "Open", and then click on "US 340 Project"



Wayside Farm

P.O. Box 40
Rippon, WV 25441

Mr. George Bailey, PE
Director, Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Blvd. East
Charleston, WV 25305-0430

October 2, 2012

Gentlemen;

My comments deal with State Project: U-219-340-0.00(02).

I am the owner of Wayside Farm, an historic property located on Myerstown-Rippon Road. Three alternate routes for the "improvement" to US 340 are proposed.

I much prefer no improvement but of the threes alternatives **4A** has the least impact on my property; and that would be my choice.

All the alternatives are likely to affect the grade of Myerstown Road and its connection with US 340. I am concerned with potential grade changes at the point where my lane intersects with Myerstown Road and their effect on storm water drainage. I await further refinement of your plan.

Yours Truly,

James Keel, DVM



US 340 RIPPON TO VIRGINIA STATE LINE

WV Senators Unger & Snyder must have your comments to make them a matter of record on the Senate Floor.

The bottom line on this project is lack of information, education, interaction and most importantly DISCLOSURE, communication between Planning, Zoning, Commissioners and the DOH as well as the legislative elected body.

The homeowners in Ryans Glen HOA were not in the loop.

Communication must be up front.

DOH could initiate eminent domain without your comment(s)

Mail To: Mr. Gregory Bailey, PE - Director, Engineering Division - WV Dept. of Highways
State Capitol Complex, Bldg. 5 - 1900 Kanawha Boulevard East
Charleston, WV 25305-0430

COMMENT SHEET – Please return on or before Wednesday, October 24, 2012

Contact Information [Please Print]

Name: Bill Chesley

Mailing Address (including Zip Code): 151 Packett Dr. Charles town, WV. 25414

B Chesley @ Frontier Net. Net

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

- Big maps on table up to date! (old)
- WV Bike path across WV looking at this route along road
- Washington to N.C. Bike route looking at this route along road.
- Sounds like bridge will open in Nov.
- Alternate 4, what does it take in houses.
- Names of businesses that have to be re-moved.
- Alt. 8+9 too costly.

Project Information and Comment Sheets can be found online at our web page:

<http://go.wv.gov/dotcomment>

Click on "Comment on Engineering Projects", then "Open", and then click on "US 340 Project"

**Lucy M. Athey
1788 Fairway Drive
Fernandina Beach, FL 32034**

October 3, 2012

Mr. Gregory Bailey, PE
Director, Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, WV 25305-0430

Dear Mr. Bailey,

I was unable to attend the Public Workshop on 9/24/12 concerning the US 340 Improvement Project. Since then I have received detailed information on your probable plans.

First, I would like to state that I can appreciate that often the condemnation process is necessary for the public good. Concurrent with this process is the need for the government to treat affected property owners in a fair and equitable manner.

Herein lies the problem. Recently I purchased the nine-lot subdivision known as "Oak Hill" with the stated purpose of selling these lots for residential development. This project has received final plat approval with the necessary agencies and I was ready to consummate a sale when I received notice of your probable intent. This of course put everything on hold since all three alternatives (4,4A, &4B) greatly impact my development.

Regardless of the route chosen my development has gone from a tranquil setting adjacent to the village of Rippon to being intersected by a four-lane highway.

Again, I fully appreciate your need to upgrade the road but in the process you have already greatly injured me because I can no longer market my property. If this were my residence I could enjoy it until such time as you start your condemnation process, which may well be many years coming. This is not the case for me. "Oak Hill" is my business and as such I am paralyzed until such time as you make a decision. I can think of no other business that would be similarly impacted.

US 340
10/3/12

Page 2

Therefore, it is my hope that you would compensate me at this time for my property to accommodate the highway and to maintain a fair and equitable treatment of me as a devastated property owner.

Submitted Respectfully,

Lucy M. Athey



October 5, 2012

Mr. Allen Wilson
317 Ryans Glen Drive
Charles Town, WV 25414

Re: Defeating the Proposed US Highway 340 Relocation

Dear Mr. Wilson:

I felt it necessary, out of respect for the situation you find yourselves in, to send a letter directly to you. Having been born into a family of homebuilders, building homes is all I have ever done. The most satisfying part of my job is watching neighborhoods and communities grow and thrive where there was nothing before. Providing a home for good folks to enjoy for many years is the whole purpose of why I wanted to build homes. Therefore, I was disturbed, concerned, and quite frankly, shocked to learn that a proposed relocation of US Highway 340 could result in the loss of your home.

Although it may be obvious, Dan Ryan Builders and I were not aware of this proposed plan. When the article came out last week, that was the first time we had heard about it. Ultimately, we learned that this plan was recommended at a 2003 meeting and then studied internally at the West Virginia Division of Highways with no further public discussions or forums until this year. In April 2005, we signed a contract to purchase the home sites at Ryan's Glen, and two years later in April 2007, we were able to purchase the first home sites from the owner and developer and begin building. At no time were we made aware of this plan or any public hearing discussing this plan, either by the state or county governments, or by the developer who sold these home sites to us and lived in the community himself.

Though I wanted to share that history, the main purpose of my letter is to make sure that you are aware that this decision is not yet final. It is imperative that you submit written objections to this plan on or before Wednesday, October 24, 2012. Visit the following website: <http://go.wv.gov/dotcomment> and click on "Comment on Engineering Projects", then "Open." Then, click on "US 340 Project." You may then submit your comments online, or print the comment form, complete it, and send it to this address:

Mr. Gregory Bailey, PE
Director, Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

CORPORATE OFFICE

This comment period will be the most direct way to have your voice heard on this issue, but it is not the only way. Below are some resources that you may find helpful in preventing any highway plan that affects you and the homes in your community.

1. Herb Snyder, West Virginia State Senator, Jefferson County, (304) 725-6174
2. Tiffany Lawrence, West Virginia State Delegate, Jefferson County, (304) 340-3152
3. Shelley Moore Capito, U.S. Representative for West Virginia's 2nd Congressional District, (304) 264-8810 or (202) 225-2711
4. Jay Rockefeller, U.S. Senator from West Virginia, (304) 262-9285 or (202) 224-6472
5. Joe Manchin, U.S. Senator from West Virginia, (304) 264-4626 or (202) 224-3954

I truly hope that you, your families and your neighbors can change the course of this proposed plan.

Sincerely,



Dan Ryan
President
Dan Ryan Builders, Inc.

cc: Herb Snyder, West Virginia State Senator, Jefferson County
Tiffany Lawrence, West Virginia State Delegate, Jefferson County
Shelley Moore Capito, U.S. Representative for West Virginia's 2nd Congressional District
Jay Rockefeller, U.S. Senator from West Virginia
Joe Manchin, U.S. Senator from West Virginia



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

Earl Ray Tomblin
Governor

Paul A. Mattox, Jr., P. E.
Secretary of Transportation/
Commissioner of Highways

November 8, 2012

The Honorable Joe Manchin III
United States Senate
300 Virginia Street East, Suite 2630
Charleston, West Virginia 25301-2523

Dear Senator Manchin:

Thank you for your letter, dated October 10, 2012, on behalf of your constituents Mr. Michael Brust, Ms. Kelly Timbrook, and Ms. Debbie Wilson concerning impacts to their property from proposed US 340 in Jefferson County.

The Division of Highways (DOH) has been studying this improvement since the mid 1990's which consists of upgrading US 340 in Jefferson County from two to four lanes. The project begins at the Virginia State Line and extends to the Charles Town Bypass for a distance of approximately five miles. Preferred Alternative Four was selected in 2003 due to lower construction costs, less impact to historic and residential properties, and from favorable comments received from the public at that time. Because several years have passed and the occurrence of recent residential development, the DOH determined it was appropriate to reengage the public concerning this project.

Minimization Alternatives 4A and 4B were developed in 2011 to reduce residential impacts to Ryans Glen. An additional minimization alternative has been suggested since a public meeting held on September 24, 2012, which has the potential to further reduce residential impacts. We expect to present this new information to the public in early 2013. Please know that all comments received at public meetings are made part of the official project record. Those who submit comments will be notified individually in advance of subsequent public involvement concerning US 340.

The Federal Highway Administration must approve the Final Environmental Impact Statement (FEIS) before construction plans can be developed. FEIS approval would not occur until mid to late 2013 at the earliest. Currently, no funds are programmed for construction of this project.

Again, thank you for writing and sharing your constituents' concerns. I appreciate your continued support and interest in highway matters. Should you need additional information, please do not hesitate to contact my office.

Sincerely,

ORIGINAL SIGNED BY
PAUL A. MATTOX, JR.

Paul A. Mattox, Jr., P. E.
Secretary of Transportation/
Commissioner of Highways

PAM:Bc

bcc: AC, CC, CH, HD, DD(AC, MF), DDE, DDM(AS), DDR(CL)

JOE MANCHIN III
WEST VIRGINIA

United States Senate

WASHINGTON, DC 20510-4804

SUITE 703
HART BUILDING
WASHINGTON, DC 20510
(202) 224-3954

ENERGY AND NATURAL
RESOURCES COMMITTEE
ARMED SERVICES COMMITTEE
SPECIAL COMMITTEE ON AGING

October 10, 2012

Mr. Paul A. Mattox, Jr., P.E.
Cabinet Secretary
West Virginia Department of Transportation
1900 Kanawha Boulevard E, Room 5
Charleston, West Virginia 25305-0001

Dear Secretary Mattox,

Enclosed, please find communications regarding the extension plan of U.S. Route 340 and its potential effects on the Ryan's Glen subdivision from my constituents Mr. Michael Brust, Ms. Kelly Timbrook, and Ms. Debbie Wilson.

I would appreciate your looking into this matter and providing one of my staff, Lee Garton, with a reply.

Sincerely,



Joe Manchin III
United States Senator

JM/lg

OCT 15 2012

Mr. Michael Brust
201 Ryans Glen Drive
Charles Town WV 25414-4959

Good Morning Senator Manchin,

I am a resident of the Ryan's Glen subdivision in Rippon, West Virginia and in the last week I have been informed of plans to create a divided highway for route 340 from the Virginia state line to the Charles Town area. Unfortunately, the plans that we have received from the West Virginia Department of Transportation (only after a Freedom of Information Act filing I might add) show that this new road will travel directly through our subdivision of Ryan's Glen. While my home is certainly impacted by any route that comes through our neighborhood, I am terribly distressed that there is a possibility of any of my neighbors losing their homes. As a matter of fact, of the three alternative suggestions for this new road, (Alternative 4, 4A, and 4B) the three newest homes in our development, one just having been occupied in the last four (4) months, will be completely removed!

I am sure that there is a need for a new highway for US 340 and that in the long run, it will be good for Jefferson County, but to run this road through a development that is only 4 years old, is a terrible tragedy. We held an emergency community meeting last evening in the home of our HOA Board President and every one of us is hopeful that your office can lend us support in fighting this plan. We have discovered that this plan has been in the works since late 1997-1998 and even as recent as 2003. Our development was approved by the Jefferson County planning commission in 2005-2006. This was approved even over objections from Rippon residents who are willing to testify under oath that they said they should not allow a new community when a new road is going to be put through! This honestly sounds as if the decision was made to allow the development without regard to anyone that would be purchasing a home in this development and how it would affect them or their families. While I would never want to think that people would be so callous, it sure is beginning to look that way.

At the meeting last evening, a gentleman who is running for Delegate, John Maxey, also informed us that in the event that this is pushed through, even if the State of West Virginia offers us "fair" market value for our homes, it will be less than what many of us purchased our homes for several years ago due to the downturn in the economy. While many of us were not surprised at that fact, we were mortified to find out that the State of West Virginia is one of a few in the nation that would force the HOMEOWNERS to remain responsible for any mortgage amount left after the State has made their offer! Now Senator Manchin, I can tell you with certainty that we all love our homes and that we are good tax paying citizens with no plans to ever neglect our debts, but if this were to happen, I for one, and there are others in the community, would be forced into bankruptcy and financial ruin as a result of this! How can we live in the United States of America, the State of West Virginia, Jefferson County, the small town of Rippon and be forced to accept terrible personal hardship such as this? I find it so hard to comprehend that this is happening!

Senator Manchin, I am begging you to help us with this matter that is before us! There is a public meeting at Page Jackson Elementary School outside of Charles Town this evening from 4pm

until 7pm. Senator Manchin, I know that you must be a terribly busy man with tremendous responsibilities, but if you could attend, it would be a tremendous blessing to us to have your support in person. If you cannot make it, and again, I know that you are very busy, perhaps you could send a representative from your office to attend and speak with us. Again, I do not ask this lightly. You have tremendous responsibilities and burdens as our Senator, but we truly are in desperate need of your assistance.

I am very thankful for your time and attention to this matter of incredible importance to us. Please help us.

Very Respectfully,

Michael Brust
Ryan's Glen, Rippon, Resident

Ms. Kelly Timbrook
110 Ryans Glen Drive
Charles Town WV 25414-4982

Dear Senator Manchin,

My name is Kelly Timbrook, and I live in Jefferson County – Ryan’s Glen, to be specific. By now, I believe your office has received word on what is happening regarding our community. My neighbors and I found out last Friday (September 21) that an informational public workshop was to be held, to discuss the US 340 Four-Lane Improvement [State Project: U-219-340-0.00(02)] on Monday, September 24, 2012. In addition, we learned, for the FIRST time, that the proposed route(s) were to cut through the heart of our community.

I recall finding my home, while I was searching for a place to live. I wanted a couple of acres and a nice house – a small subdivision in which I could get to know people, but with enough room between all of us to enjoy one of the things I treasure about West Virginia: its natural beauty. Ryan’s Glen seemed like a dream come true. I chose this place, even though it meant a 100-mile commute, daily.

I can’t speak for my neighbors, but I placed my life savings into my down payment. I believed it to be a sound investment. My closing date was Christmas Eve 2008. What a wonderful present, I thought.

Now I find out that, during this entire process, all the while, my home and my community were in the crosshairs of a demolition crew. Some of the homes slated for destruction have been occupied for a year or less!

I’m not trying to place blame, although I find it impossible to understand how Lou Athey (the land owner) and Dan Ryan Builders (the builder) could have failed to mention any of this to any/all of us. I’ve been told that the Jefferson County Planning Committee knew of the road plans in 2003 and STILL approved the construction of our subdivision, known as Ryan’s Glen Drive, Charles Town, West Virginia.

Should the route as proposed (known as 4, 4A and 4B) be allowed to be built, it will destroy our community. At least three NEW homes will be torn down, and the entire community will be adversely impacted: several lots will be smaller, to make room for the right-of-way and lanes; the noise from traffic will be increased (I don’t even want to hear some engineer tell me how noise barriers will help); property values will plummet (and who knows if we’d EVER be able to sell, because who would ever buy a house next to a four-lane highway? I know I wouldn’t); those of us who would be forced to leave would face financial ruin (in this economy, who knows if we’d ever recover); our quality of life would be destroyed – I could continue, but I hope you see my point.

Most of the homeowners in Ryan’s Glen attended the workshop. I believe most of us were shocked at the total lack of specifics available, especially by the engineers. No one would give us a time line; one of them couldn’t even describe egress from my driveway!

We were encouraged by a couple of individuals to place in writing our comments about the proposed routes. In closing, I'd like to re-state a partial summary of mine:

- Please do not destroy our community by allowing 4, 4A or 4B to be built.
- If US 340 must be widened, please re-consider Alternate 5, but move it further east. (This would save cutting a swathe through Wayside Farm, and perhaps be less of a negative impact on Olive Boy Farm.)
- None of us would have ever purchased a home in Ryan's Glen, had we known about any of this. My exact comment was, "We would never have purchased a home in a subdivision that had the life expectancy of a common house fly."
- I was told that Alternate 8 was eliminated because two bridges would have to be built. Could this route also be re-considered? Two bridges may go a long way to bridging this conflict between the WVDOT and the good citizens of Rippon. Remember, it's not just our subdivision – this impacts an entire community of people all along 340 – people who are our neighbors and friends.
- I would like to see Dan Ryan Builders and Lou Athey pay for the hardship, headache and heartache they've caused. I am not an attorney, but surely there is some relief for us via legal avenues.
- And finally, I would like our elected officials to stand with us during this trying time. I have lost sleep and work hours to this, and we're just getting started.

Please feel free to contact me at the following number (703-488-4292) if you have any questions.

I want to thank you for your time and patience, and for ANY consideration you and your esteemed office are able to bring to our effort.

Respectively yours,

Kelly Timbrook
110 Ryan's Glen Drive
Charles Town, WV 25414

Ms. Debbie Wilson
317 Ryans Glen Drive
Charles Town, WV 25414-4960

Comments: Ryans Glen Development

Homes were built after being approved. Homes were approved after rt. 340 alignment was public and six years later planning commission is now trying to destroy homes. Development knowingly put houses in the path of the highway realignment.

Ripon Lodge Farm
2547 Berryville Pike, PO Box 130
Rippon, WV 25441
304-725-6670

RECEIVED
OCT 22 2012
ENGINEERING DIVISION
WV DOH

October 15, 2012

Mr. Gregory Bailey, PE
Director, Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

Re: US 340 IMPROVEMENTS
Federal Project NH-0340(030)E
US 340-4 Lane Project
State Project U219-340-0.00(0.02)
Jefferson County
Virginia State line to Charles Town Bypass

Dear Mr. Bailey:

After many Public Workshops (since 1998), the choice of Alternate Route #4 East of the existing Rt. 340 was the most appropriate. As stated in the Draft Environmental Impact Statement 2001, 89% of the residents felt this was the least intrusive and most financially practical path for the proposed completion of the divided highway connecting us with the completed Virginia section of Rt. #340.

Our community has been discussing the upgrading of our section of Rt. 340 since Virginia completed their part nearly 40 years ago. The anticipated path has been a serious concern for everyone in our area for decades, and the latest decision to use Alternate #4 has been well known and accepted for a long time. After so many years of worry we finally were sure of the route and have been able to plan for the future.

The entire issue has been very stressful for my family and all of my neighbors. It has affected many relationships between good friends, but over the last several years things have settled down, and most of us have assumed that the issue had been settled, and we are ready to move on with the project when financing is available.

Local, long time residents watched the development of Ryan's Glenn with concern and amazement. We assumed the developers knew what they were doing and that new residents would be aware of the Rt. 340 plans. What we saw going on did not make sense but it was none of our business, really. The developers always do what they want to do and they usually confront concerned citizens with lawyers to affirm their rights. So, most of us have learned to stay out of the other people's business. This is unfortunate because some new residents appear to be surprised, hurt and frightened by recent discussions to finally complete the project.

The Morgan family is respectful of the issues facing the new residents of Ryan's Glenn. They are in a tough spot, but so are we. Ripon Lodge Farm is on the National Historic Register. We have four generations involved in caring for our land and the preservation of our historic buildings. Any road building West of the existing highway would be devastating to us. We are a productive farm with sustainable products and management but, we could not stay in business, or justify the cost of maintaining our property, if our farm would be split by a new road. A western route would be the end of Ripon Lodge Farm and would pretty much destroy the Historic Village of Rippon.

So, we feel that the course must remain East of the present highway. Alternate #5 may solve some of the issues with Ryan's Glenn. If Alternate #4 is still the best choice, then the affected owners should be well compensated by the State and they should look to the courts for justice from the developers.

Respectfully,

A handwritten signature in black ink that reads "Rusty Morgan". The signature is written in a cursive, flowing style.

Rusty Morgan and Family

CC: Susan Pierce, WV Historian



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

Earl Ray Tomblin
Governor

Paul A. Mattox, Jr., P. E.
Secretary of Transportation/
Commissioner of Highways

November 5, 2012

Ms. Katherine R. Mason
Chairperson
Eastern Panhandle Transportation Authority
Post Office Box 869
Charles Town, West Virginia 25414

Dear Ms. Mason:

Thank you for your letter, dated October 16, 2012, concerning your support for upgrading US 340 in Jefferson County from two to four lanes. The project begins at the Virginia State Line and terminates at the Charles Town Bypass for a distance of approximately five miles.

Your letter will be made part of the project record. The improvement of US 340 is a priority project for the West Virginia Division of Highways and we will continue to identify potential construction funding sources. Potential alignment shifts are currently being investigated that were suggested as a result of our recent public meeting. These options have the potential to minimize residential impacts. An additional public meeting is anticipated after the first of the year. The Eastern Panhandle Transportation Authority is on our project mailing list to receive updated information as it becomes available.

Again, thank you for writing and sharing your concerns. Should you need additional information, please contact Mr. Ben Hark of our Engineering Division, at (304) 558-9670 or by email at Ben.L.Hark@WV.gov.

Sincerely,

ORIGINAL SIGNED BY
PAUL A. MATTOX, JR.

Paul A. Mattox, Jr., P. E.
Secretary of Transportation/
Commissioner of Highways

PAM:Bc

cc: Governor Earl Ray Tomblin

bcc: AC, CC, CH, HD, DD(AC, MF), DDE, DDM(AS), DDR(CL), DE/M-5

Eastern Panhandle Transportation Authority
PO Box 869
Charles Town, WV 25414

October 16, 2012

Paul A Mattox, Secretary of Transportation
1900 Kanawha Bl
Charleston, WV 2

STATE OF WEST VIRGINIA
GOVERNOR'S OFFICE

DATE 10/22/12

Dear Secretary M

The Eastern Panh
consideration be
Charles Town Byp

From: **Office of Constituent Services**
Missy Parsons

est that urgent
terminus of the

We know that the
4-lane access to a
Town Races, Harp
Berkeley Counties
transportation for
tourism industry i

Acknowledge & Refer
To: Sec Paul Mattox

is road will provide
Casino at Charles
in Jefferson and
provide adequate
o benefit the

Thank you for you

- PLEASE SEE ME ABOUT THIS
- Per your request
- For appropriate action
- For appropriate disposition
- Please return with recommendations/comments
- Please draft response for this office
- Please respond directly
- Please respond directly and copy this office
- This constituent has received a response from the Governor's Office
- For your information
- Other

Sincerely,


Katherine R Maso
Eastern Panhandk

Comments: Please copy this office
on your response.
Thanks!

- CC: Governor T.....
Lee Thorne, District 5 DOH
Senators: Barnes, Helmick, Snyder, Unger
Delegates: Cowles, Duke, Householder, Kump, Lawrence, Overington
County Administrators: Hammond, Keyser, McClintock
Robert Gordon, HEPMPO

OCT 24 2012

Eastern Panhandle Transportation Authority
PO Box 869
Charles Town, WV 25414

October 16, 2012

Paul A Mattox, Secretary of Transportation
1900 Kanawha Blvd East, Bldg Five, Rm 110
Charleston, WV 25305-0430

Dear Secretary Mattox:

The Eastern Panhandle Transportation Authority would like to formally request that urgent consideration be given to the completion of Rt 340 South from the southern terminus of the Charles Town Bypass 4.0 miles to the Clarke County, VA line.

We know that there are many priorities in the state but the completion of this road will provide 4-lane access to all of the Jefferson County industrial parks, The Hollywood Casino at Charles Town Races, Harpers Ferry National Park, and all other Federal installations in Jefferson and Berkeley Counties. It is our thought that this is the most economical way to provide adequate transportation for the Jefferson County businesses and population. It will also benefit the tourism industry in the Eastern Panhandle.

Thank you for your prompt attention to this request.

Sincerely,



Katherine R Mason, Chairperson
Eastern Panhandle Transportation Authority

CC: Governor Tomlin
Lee Thorne, District 5 DOH
Senators: Barnes, Helmick, Snyder, Unger
Delegates: Cowles, Duke, Householder, Kump, Lawrence, Overington
County Administrators: Hammond, Keyser, McClintock
Robert Gordon, HEPMPO

OCT 24 2012

Joseph V. Cepelka

PO Box 14
131 Myerstown Road
Rippon, WV 25441

October 19, 2012

Mr. Gregory Bailey, PE
Director, Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, WV 25305-0430

RECEIVED
OCT 23 2012
ENGINEERING DIVISION
WV DOH

RE: US 340 Four-Lane Improvement: VA line to Charles Town Bypass

Dear Sir:

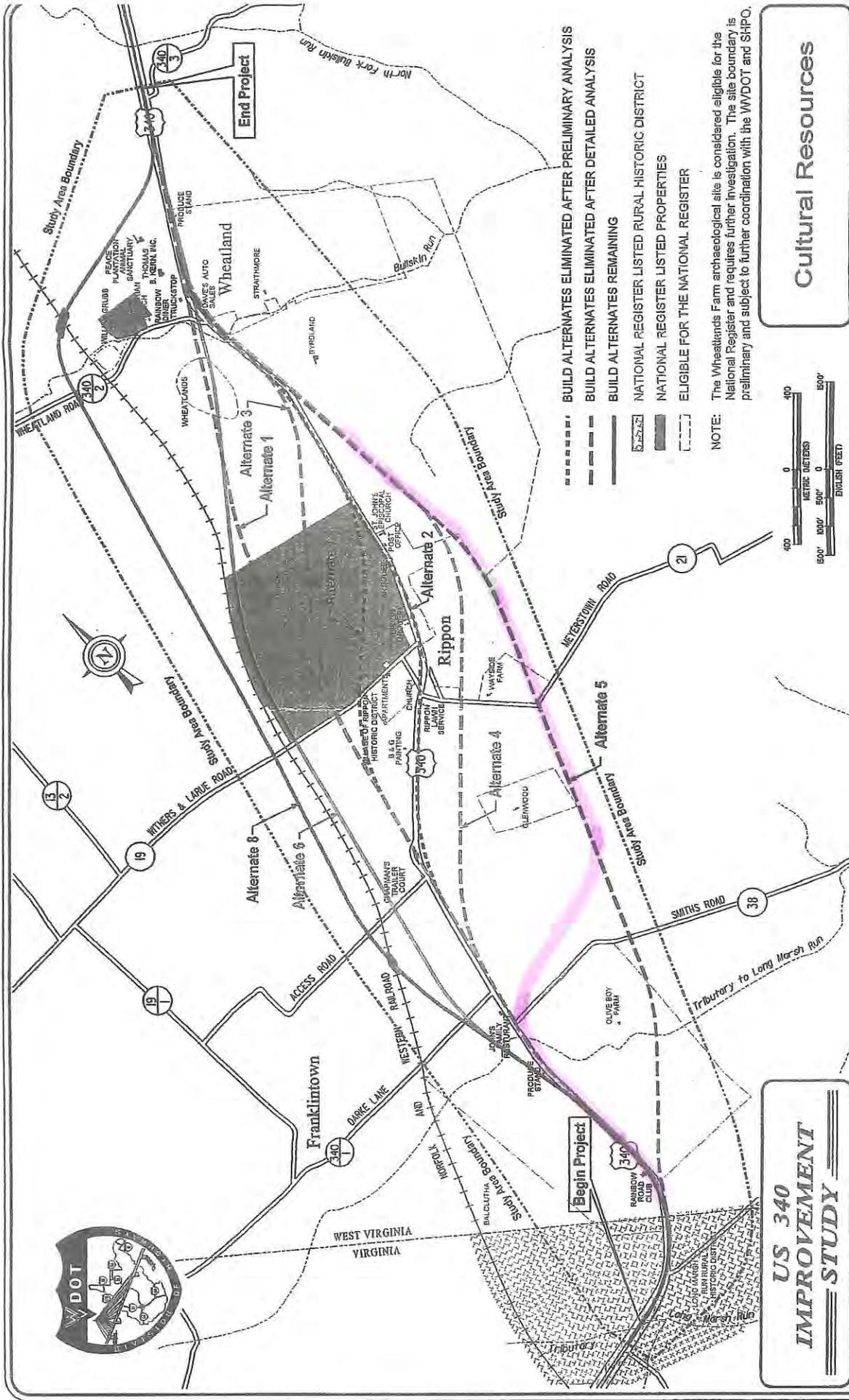
I would like to submit an idea for the path of the 340 lane improvement. I believe that option 5 needs to be looked at more closely because loss of residences would be avoided. Route 340 could be moved so that it moves east of Wayside Farm and Glenwood. Just past Glenwood it could then turn to the west and skirt south of Ryans Glen. It could then turn back to the south staying north of Smith Road. It could then also overlay the existing route 340. This option avoids cutting Olive Boy Farm in half. I am enclosing a hand drawing of this possibility. In order to save residences, some of which have been in the families for over a hundred years, I feel this would benefit both sides. If you have any questions or would like further explanation, please feel free to contact me. I can be reached on my cell phone at 304-270-8252 or e-mail at jcepelka@frontiernet.net. Thank you for the opportunity to offer my suggestion.

Sincerely,

Joseph V. Cepelka
Resident and Land Owner



Attachment Enclosed



**US 340
IMPROVEMENT
STUDY**

Cultural Resources

October 20, 2012

RECEIVED
OCT 24 2012
ENGINEERING DIVISION
WVDOH

Mr. Gregory Bailey, PE
Director, Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

Re: US 340 Four-Lane Improvements Study: Virginia Line to Charles Town Bypass

Dear Mr. Bailey:

Pursuant to the public workshop held on September 24, 2012 please accept this letter as my formal comments on the proposed alternatives for the new four-lane road project. My residence is located at 1505 Berryville Pike in Rippon, West Virginia. In each of the three alternatives (4, 4A and 4B) my property is depicted as property number 121. Currently, I have three access points onto Route 340 to my property which runs from Scooter Lane to Earl Ellifritz Road. Immediately south of my property is Scooter Lane (Rippon Mobile Home Park) which also accesses Route 340. There are ten total residences which access Scooter Lane and enter on to Route 340. I own six of the properties which access this lane.

Based on the information provided by WVDOH on the three alternatives which affect my property and the adjacent, please find below my comments and recommendations on each of the three alternatives:

Alternative 4: This alternative proposes utilizing the existing Route 340 roadway to access the re-aligned Route 340 with additional right-of-way being taken along the frontage of my property. The improvements in this alternative start nearest to the northernmost entrance to my property and extend to the southernmost corner along the frontage of my property. It does not appear that the roadway in this section is being widened therefore I do not see any reason for additional right-of-way needed for this option.

Recommendation: Utilize the existing Route 340 right-of-way with no modifications to areas outside of the right-of-way.

Alternative 4A: This alternative proposes and access road to the re-aligned Route 340 which includes a "Y" type intersection with one leg of the intersection northeast of my property and the other leg southwest of my property with the intersection of the "Y" directly in front of the main entry into my property. The southern leg of the "Y" intersection does not appear to follow the existing Route 340 roadway which results in an additional right-of-way taking on the frontage of my property.

Recommendation: Since I own a majority of the residences on Scooter Lane and this would not be a heavily used access road, I would recommend that this access road follow the existing Route 340 roadway with no additional right-of-way taken for the

improvements. I have coordinated with the other residents regarding this option and have attached their signatures indicating their agreement that this recommendation is an acceptable alternative to the significant improvements in this area that are being proposed by WVDOH.

Alternative 4B: In the vicinity of my property it appears that this alternative is identical to Alternative 4A.

Recommendation: Since I own a majority of the residences on Scooter Lane and this would not be a heavily used access road, I would recommend that this access road follow the existing Route 340 roadway with no additional right-of-way taken for the improvements. I have coordinated with the other residents regarding this option and have attached their signatures indicating their agreement that this recommendation is an acceptable alternative to the significant improvements in this area that are being proposed by WVDOH.

Additional Thoughts: In an ideal world, I would like to see the community of Rippon remain intact. No community deserves to be bisected by a four lane highway. Since the unfortunate build out of Ryan's Glenn, it may be in the best interest of all to revisit Alternative 5 which bypasses the community to the east. Old Rt. 340 can be used for local traffic, connecting the new bypass at the Virginia Line and the vicinity of Wheatland Road.

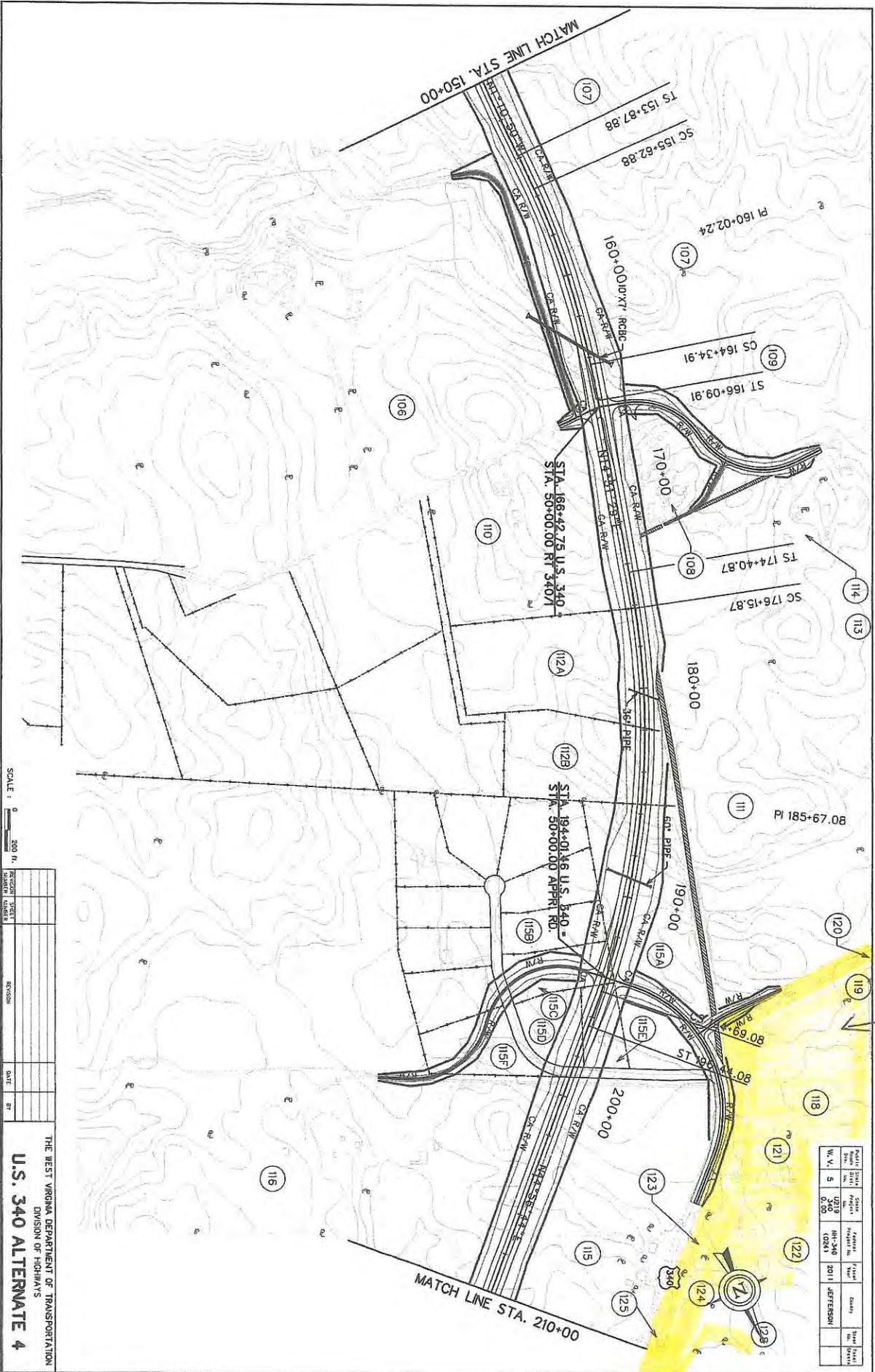
I appreciate your consideration of my comments above and my recommendations. Should you have any questions or comments, please do not hesitate to contact me.

Regards,



Paul Michael Chapman
1505 Berryville Pike
Rippon, WV 25441
(304) 279-6297

Attachments



Property owned =
 No changes to west side are needed

SCALE: 0 200 ft

REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
U.S. 340 ALTERNATE 4

Project No.	5	Scale	1" = 200'	Project No.	2011	County	Jefferson
W. V. No.	5	Sheet No.	0.00	Project No.	2011	County	Jefferson

June 2013 Workshop Comments

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

IN THE MATTER OF:

U.S. Route 340 Project

Charles Town

Jefferson County, West Virginia

PUBLIC HEARING

The following is a transcript of proceedings held reference the above-styled matter at the Page-Jackson Elementary School located at Charles Town, Jefferson County, West Virginia, on June 3, 2013, taken by Sherry M. Lawson, Certified Court Reporter, in and for the State of West Virginia.

SHERRY M. LAWSON

Certified Court Reporter

4904 Boxwood Drive

Charleston, WV 25306

304-419-6154

APPEARANCES:

BRENT WALKER, Moderator

Director of Communications

West Virginia Department of Transportation

GREGORY BAILEY, Hearing Officer/Panel Member

Director, Engineering Division

West Virginia Division of Highways

EMILIANO LOPEZ, Panel Member

Assistant Division Administrator

Federal Highway Administration

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Reporter's Certificate.....33

1 MODERATOR: Good evening everyone. I'm Brent Walker. I'm Director of
2 Communications for the West Virginia Department of Transportation. I'd like to
3 welcome everyone to this evening's U.S. 340 public hearing. It's being held jointly with
4 the West Virginia Division of Highways and the Federal Highway Administration, and on
5 behalf of these two agencies we'd like to welcome each and every one of you.

6 It's real important that we hear from you; whether it be this evening publicly or
7 in comments. Both are equally important. We do have a list of speakers that we are
8 pleased to welcome and anxious to hear from. They're of equal weight. The
9 comments; if you choose not to speak but want to provide your comments in written
10 form that is fine as well and equally important.

11 This evening's proceedings are being recorded by a stenographer and the
12 transcript will become part of the official project record. For those of you who prefer to
13 submit written comments, forms for this purpose are available outside. Comments can
14 be submitted here tonight, in writing, by email, or on our website. Any written comments
15 or supporting materials submitted during the comment period will also become part of
16 the project record.

17 With me tonight is Emiliano Lopez. He's the Assistant Division Administrator
18 for the Federal Highway Administration's West Virginia Division, and Mr. Greg Bailey;
19 he's with the Division of Highways State Highway Engineering Program and Planning
20 Division.

21 At this time -- I know that we have a couple of elected officials -- if I could have
22 them come over here close to the mike, we'll hear from them first. And while they're
23 making their way there I would like to introduce to you Mr. Emiliano Lopez.

1 MR. LOPEZ: Thank you, Brent, and more importantly, thank you all for
2 coming this evening. For many of you I know it's probably been a long day already so
3 we really appreciate you taking time out of your busy day to be here and provide input
4 on this much needed project.

5 As Brent mentioned, I'm Emiliano Lopez with the Federal Highway
6 Administration's West Virginia Division office in Charleston. The Federal Highway
7 Administration, in conjunction with the West Virginia Division of Highways, is proposing
8 to improve the existing two-lane section of U.S. 340, a half-mile from the West
9 Virginia/Virginia state line to approximately two miles north of the community of Rippon
10 in Jefferson County, West Virginia.

11 The proposed project is needed to address deficiencies that have occurred
12 over time in operation and roadways features, as well as the need to accommodate
13 future traffic growth so that smooth, safe traffic flow can be maintained today, as well as
14 into the future.

15 The West Virginia Division of Highways and the Federal Highway
16 Administration are working diligently to ensure that the project needs are met while at
17 the same time minimizing and balancing the impacts to both the community and to the
18 environment. We're pleased to be part of this effort and look forward to further success
19 in advancing this project.

20 Again, our heartfelt thank-you for being here this evening and at this time I will
21 turn the hearing over to the West Virginia Division of Highways Deputy State Highway
22 Leader of Program and Planning; Greg Bailey. Greg?

23 MR. BAILEY: Thank you, Emiliano. I have a couple of things I want to
24 say. I have a prepared statement that I need to read into the record here, but a couple

1 of things is that first of all, I want to echo what has been said already and that is that the
2 Division of Highways, particularly on behalf of Secretary Mattox, we're very grateful that
3 you all have taken the time tonight to attend this meeting and provide us your
4 comments. I know sometimes in dealing with government it seems like nobody is
5 listening to you. I've been there, too, even though I work for government, but the only
6 thing I can say to you is I do promise you that we do listen to your comments and we do
7 read through them and we go through them. So we really are very appreciative of the
8 fact that you all have taken a lot of time tonight and today and have committed your time
9 and efforts to come here and provide us input. We're just very appreciative of that and
10 just wanted to make sure to say that and thank you for that.

11 The second thing is it was brought to my attention, and this is purely
12 coincidental -- I know that sometimes people don't believe in coincidence, but this is
13 coincidental. There seems to have been a little bit of confusion last week. The Division
14 of Highways, actually our Planning Division who isn't actually conducting this meeting
15 tonight, a separate division of the Division of Highways, but they were up here in this
16 whole Panhandle area passing out some surveys at different intersections. Some of
17 those intersections were locally, right here, some were over in Berkeley County, and
18 some were over in Morgan County.

19 The purpose of those surveys was it was a planning survey that was asking
20 people to provide answers to questions, but they were also trying to get answers on
21 what people's travel habits are. One of the things you can do like with the section of
22 highway we're talking about tonight, is we can go out there and we can measure the
23 vehicles passing by a particular point on a highway at any time and tell how many
24 vehicles are passing by. But what we can't do as we measure those vehicles is tell

1 where all those vehicles are coming from; where did they start, where did they originate,
2 and where are they going type thing.

3 So in our Planning Department we do these studies sometimes and
4 sometimes we do them in a real hands-on way. We actually go out on the highways
5 and pass out survey information and in that we might ask all kinds of questions.

6 What I can assure you, to the best of my ability, is those surveys that were
7 being passed out, those are long-term type survey things that are going on, that have
8 nothing to do with this meeting that we're conducting on this particular highway project.
9 So we want to apologize. The timing wasn't very good on our part since it happened at
10 about the same time as this public meeting, but it just happened; the way the schedule
11 worked out. It's two different groups in the Highway Department. So if we caused any
12 confusion in that manner, we apologize for that, but there is no connection between all
13 those surveys that were done and this project today.

14 So we'll try to do a better job in the future communicating when we have those
15 types of things going on, but I just wanted to make sure everybody is clear there is no
16 connection between those surveys and what we're talking about tonight. These are two
17 totally separate issues.

18 Okay, with that I'm going to move ahead here and read this statement. "The
19 purpose of this public hearing is to provide an update on the progress of the U.S. 340
20 Improvement Study and to receive formal comments; those can be oral or written, on
21 the project. At the September 2012 Informational Public Workshop Alternatives 4, 4A
22 and 4B were presented. Based on recommendations from you, the public, at the
23 September 2012 public meeting, Alternatives 4C, 10A, 10B, and 11 were developed
24 and they are the focus of this workshop/hearing tonight.

1 There are project maps on display at the meeting and you've seen them out
2 here in the hallway. There are also maps in the handout that you've been given. You're
3 encouraged to examine them and discuss the project with members of the study team.
4 A comment sheet is enclosed in those handouts for you to provide the project team with
5 your opinions and thoughts on this project. Please feel free to provide your comments
6 either orally here this evening in this public hearing, or written, or you can go to our
7 West Virginia DOH website at www.transportation.wv.gov under public
8 comments/engineering projects/U.S. 340 Project, or you can do both. You can testify
9 tonight at the hearing and you can still give separate written comments. Any of those
10 means would be fine. All of those comments that are given will become a part of the
11 official project record.

12 Comments will be accepted on the project until July 3, 2013. Following the
13 close of the comment period, the project team will address comments in the
14 Supplemental Draft Environmental Impact Statement to the previous Draft
15 Environmental Impact Statement. A public hearing, just like the one we're attending
16 tonight, will then be held on the Supplemental Draft Environmental Impact Statement. A
17 Final Environmental Impact Statement will address the public and agency comments.
18 Following the receipt of public and agency comments on the Final Environmental Impact
19 Statement a Record of Decision, sometimes known as a ROD, will be published to
20 complete the National Environmental Policy Act, known as the NEPA, process. The
21 final design for the Preferred Alternative will depend on the availability of funding for this
22 project.

23 Our purpose tonight is to listen to your comments and place them in the official
24 record. All of the information you provide is important, but questions that you ask from

1 the floor will not be answered directly during the testimony. However, any question you
2 ask during your testimony will become a part of the official record, also. You may also
3 take the time to talk individually to our staff either as you have already prior to this public
4 hearing or after the public hearing outside the cafeteria. But please remember only
5 written comments and public testimony will become a part of the official record. No oral
6 comments in discussions out here will become part of the official record.

7 With that being said, I'll now turn the hearing over to Brent Walker who has a
8 few instructions for giving testimony before calling the first speaker. Thank you.

9 MODERATOR: Thank you, Greg. We've got Commissioner Widmyer and
10 Delegate Espinosa in just a second. Let me just say that everyone who is speaking this
11 evening, please remember that we are recording this hearing. When offering testimony
12 please speak directly into the microphone and provide your full name, address, and any
13 organization you may represent before giving your testimony.

14 We will call people to testify -- I'm sorry?

15 UNIDENTIFIED FEMALE: This is our other Commissioner here tonight;
16 Patsy Noland.

17 MODERATOR: We'll be happy to hear from her. We didn't have her name
18 down. Are we okay?

19 COMMISSIONER NOLAND: We're good.

20 MODERATOR: We would love to hear from you. I did not have you on the
21 list.

22 COMMISSIONER NOLAND: That's okay, you go right ahead.

23 MODERATOR: Okay. We will call people to testify in the order in which
24 they have signed up out front. Please come to the microphone when your name is

1 called. To provide an equal opportunity for everyone to speak we've allotted each
2 person five minutes and we will use the traffic signal to keep things on schedule. After
3 coming to the microphone a green light indicates that you may start. A yellow light
4 indicates that you have one minute left. And the red light indicates that your time is
5 over. So just please respectfully ask that you yield the microphone when you see the
6 red light.

7 We will now hear from the first public official. Let's hear from Delegate
8 Espinosa.

9 DELEGATE ESPINOSA: Thank you very much. I'm Paul Espinosa. I
10 represent the 66th Delegate District in the West Virginia House of Delegates. This
11 project does run through the 66th District.

12 I'll be brief, because I really most want to hear the comments that will be
13 presented here this evening. I do want to take a moment to thank the West Virginia
14 Department of Highways and the Federal Highway Administration for hosting tonight's
15 workshop and hearing because obviously there are a lot of heartfelt thoughts on this
16 matter and it's very important that folks have an opportunity to weigh-in on this important
17 project.

18 I have received communications from my constituents and others in the
19 impacted area; certainly a lot of comments about which Alternate might be preferable,
20 but I think the issue that most resonates with me is the concern that until a final decision
21 is made on this project many folks feel that they're very much in limbo; not knowing
22 exactly how this project is going to impact them.

23 So my request would be that all those parties involved in this decision-making
24 process move forward with all due haste, consistent with an open and transparent

1 process, to move towards a Record of Decision so that all the impacted parties will
2 know where they stand in this project and can act accordingly.

3 So again, I thank you for the opportunity to speak this evening and thank you
4 for hosting this forum.

5 MODERATOR: Thank you. Commissioner Widmyer? Commissioner,
6 please --

7 COMMISSIONER NOLAND: No, that's okay. I may speak later. Thank
8 you.

9 COMMISSIONER WIDMYER: My name is Lyn Widmyer. I'm a County
10 Commissioner, and it's a pleasure being back here because both my kids went here so
11 it's always nice to come back. I have very pleasant memories of this school.

12 I just wanted to say a few words. First of all, I know what a difficult decision
13 this is and how this is affecting people's lives, because 35 acres of our family farm was
14 taken for Route 9 between Charles Town and the Virginia line, and I can't tell you the
15 pain and the difficult situation that was dealing with right-of-way and watching the farm
16 be crossed by this road. So I understand what a difficult time anyone is having that's
17 affected by any of these options.

18 I just wanted to make the comment that one of the things we've discovered by
19 the Route 9 experience is what is very important is the crossroads and that the State
20 does a very good job on planning the straightaway, but it's the local roads and how they
21 intersect that really affect the neighborhoods. And all of these roads are at-grade with
22 no improvements of any kind.

23 I think we need to think about that as we look at these options because the
24 County Commission, the Development Authority and other bodies in this county are

1 looking at this section of Route 340 as an economic corridor, and these crossroads that
2 are now planned for, you know, just what you see is what you get -- I mean, it's very
3 important to think about what's going to happen to them in the future.

4 And I'm here, too, to listen tonight, but the only thing is I hope with the Record
5 of Decision not being planned until 2016 -- we're in the exact same situation that led to
6 Ryans Glen, which is there is nothing written anywhere or any official document saying
7 that this is a corridor that's under study for new road improvements. I just hope you'll
8 put up a sign or something so we don't have more Ryans Glen before 2016. Thank you.

9 MODERATOR: Thank you. Commissioner Noland, you reserve the right
10 certainly, to speak.

11 COMMISSIONER NOLAND: Thank you.

12 MODERATOR: All right. The first person, and again they are in the order in
13 which they signed up out front, but we'll begin with Franklin Adams.

14 MR. ADAMS: They said I've got five minutes so my old English teacher
15 would be proud of me. My name is Franklin W. Adams. My address is P. O. Box 99,
16 Rippon, West Virginia, 25441.

17 Every day we read where productive farmland, acreage, is disappearing at an
18 alarming rate with a large amount being divided by interchanges, acceleration and
19 deceleration lanes, and housing developments. Once this acreage has been eliminated
20 from the landscape it is gone forever.

21 The proposed Alternative 11 will split a 30-acre field and a 15-acre woodland
22 down through the middle, leaving access only on the other side of the highway. In
23 addition, my cattle will only have access to water that will be on the opposite side from
24 their pasture. That will be another headache.

1 As a side note for you nature lovers: Seth Pond is home to both migrating and
2 nesting Canadian geese. Oftentimes cars will stop to observe mamma and papa
3 shepherding their offspring off the road.

4 For the aforesaid reasons I am opposed to Alternative 11. In conclusion,
5 nearly everyone is concerned that their home is impeding the path of progress. Well,
6 Ladies and Gentlemen, I'm here to tell you my land is my home. Thank you.

7 MODERATOR: Thank you, sir. Next to speak is Lou Athey.

8 MR. ATHEY: My name is Lou Athey. I'm here representing the owner of
9 the Oak Hill Subdivision, which is County Green LLC. My address is Amelia Island,
10 Florida.

11 I have some appreciation for the difficulty in choosing a road for the new 340.
12 But in the meantime my property owner is faced with enormous carrying costs including
13 real estate taxes, maintenance and maybe most important opportunity costs. When you
14 stretch out a decision for six or seven years it becomes quite difficult.

15 I read about the Madison Cave isopod that's an endangered species and I'm
16 going to try to make sure that we don't fall in that same category which is, again, the
17 way we feel, but it's obviously very difficult to choose a road, but it appears that it's
18 pretty easy to eliminate a road. So I would ask that the roads with 4's attached; that's 4,
19 4A, 4B and 4C, be eliminated from your consideration if, for no other reason, just
20 because of the disproportionate number of parcel acquisitions that would be required if
21 those roads were chosen.

22 Thank you very much.

23 MODERATOR: Thank you, sir. The next person to speak is Carolyn Zirkle.

1 MS. ZIRKLE: Yes, my name is Carolyn Zirkle and I own John's Family
2 Restaurant and I'm very opposed to 10A and 10B.

3 I have the misfortune of living next to a gun range that has altered our lives.
4 I'm unable to sell my home or my restaurant due to the fact that there is going to be a
5 road somewhere, sometime. So I really would like this to be kind of in a hurry. So I can
6 -- I can't go in my yard. We have a pool we can't enjoy because there's a gun range
7 right in our backyard. And I would think that anybody that had a house where you can
8 hear a gun range would be very glad that a road was going to take it.

9 I welcome you with everything of 10A and 10B, and I'll be very, very happy;
10 thrilled. Thank you very much.

11 MODERATOR: Thank you. Next to speak this evening; John Maxey.

12 MR. MAXEY: Thank you. My name is John Maxey; 335 Old Shenandoah
13 Trail, Harpers Ferry, West Virginia.

14 I'd like to start by saying that the lack of a Record of Decision on the part of
15 DOH is absolutely no excuse for the Jefferson County Planning Commission's complete
16 failure to plan. The approval of Mr. Athey's subdivision at Oak Hill, as well as the
17 subdivision as it was currently platted at Ryans Glen is inexcusable. Mr. Glen Hetzel
18 showed up at the public hearing in 2005 and clearly told the Planning Commission that
19 the highway routes had been planned to go through that parcel. He was ignored and
20 the project was approved as presented anyway. It's completely inexcusable.

21 I'd like to continue by thanking the Division of Highways for coming today to
22 hear people, but to also point out that many of the same people in this room tonight
23 were here to be heard ten years ago when the DOH came up in 2003. And yet, we're

1 still here, no decision has been made, we're still waiting on a Record of Decision, and
2 apparently the funding doesn't exist to purchase or negotiate with the rights-of-way.

3 What we're doing by having this thing hang over everyone's head is turning
4 neighbors against each other unnecessarily, and actually depriving them of the full use
5 of their property. We have landowners and farmers that are unable to put in fence lines,
6 sheds, barns. They can't plan; they can't really use their property.

7 We have homeowners that are unable to move, unable to refinance their
8 homes. Everything is completely up in the air and yet there is no compensation
9 available because without a Record of Decision there is no negotiation for the rights-of-
10 way. So we're depriving people of their property without any provision for
11 compensation. It's completely unfair.

12 I would urge the Division of Highways to either move rapidly towards a Record
13 of Decision or if there's no funding available, abandon the project. Thank you.

14 MODERATOR: Thank you for your comments. And next, Mr. Glen Hetzel.

15 MR. HETZEL: I'm Glen Hetzel; 895 Smith Road; owner of a farm there.

16 Since my name has been bandied about for a number of years I wanted to have the
17 opportunity to let you know that I do exist; I'm still in the area. The first time my name
18 came up had to do with Athey's Folly and is now being resurfaced on that same
19 account.

20 My main concern is the time it's taken to move this far, if there's been any
21 movement at all. It's been more than ten years. I'm not sure I'll live to see the road be
22 finished, if it ever is. And many of you in this room may not be around when the road is
23 finished. My main concern then is to urge the Highway Department to find the funding,

1 move forward, and forget 2018 and move for 2015 when you start construction. Thank
2 you.

3 MODERATOR: Thank you, sir. Next to speak is Nance Briscoe.

4 MS. BRISCOE: My name is Nance Briscoe. I live at 22 Cloverdale Place.
5 I'm a citizen here in Jefferson County and I'm what you call a transplant. I moved out
6 here from Los Almas, New Mexico where I never heard about homeowner associations,
7 subdivisions, or governing documents. But I did hear about something everyone has
8 forgotten. It's called disclosure.

9 When my husband and I came out here we met and liked a person by the
10 name of Charlie Marcus. Some of you may know who that is. He since has died. And
11 his son, Terry Marcus. Unfortunately he, too, has died. They had the Cloverdale
12 Heights Subdivision of 137 lots up for sale. The developer that put our house together
13 was Foster Eonous out of Baltimore, Maryland.

14 When we looked at the lot in 1987 before the house was built Charlie Marcus
15 said to my husband and I, "Think before you choose that lot." At that time old 340,
16 which is similar to what Augustine Avenue looks like, went right through the back of the
17 property we were looking at. Two lanes; it didn't have a yellow line at that time; a lot of
18 rabbits, some deer. We really liked what we saw.

19 Charlie Marcus and Foster Eonous, our builder, said, "Go to town. Talk to the
20 Planning people and Engineering. Find out what the road is going to be. We have
21 heard 340 from Charles Town somewhere near the bowling alley will be connected as a
22 four-lane highway with a median strip." Okay. In my book that's disclosure. That's not
23 a signed, sealed, delivered document to me or anyone else. That's a commonsense
24 discussion using something we all appreciate; disclosure.

1 We went to town. We spoke with a gentleman by the name of Paul Raco.
2 Paul had a map probably as big as this piece of paper is, and pencil marks all the way
3 from town to Clarke County, Virginia state line. He said, "We don't have anything in
4 writing. It's all discussion, but sooner or later that road is going to come through."

5 Okay.

6 We talked to a Mr. Shepp, who worked at that time -- I don't know if he still is
7 here or not -- for Appalachia Survey. He came out and he walked my husband and I on
8 the property and he showed us where that road was going to be removed, a guardrail
9 would be put up, a berm would be built, and a four-lane highway would go through. We
10 were told it would go probably as far as the Burns Farm or the Mickey Farm, which it
11 did. Those farms intersect at Roper North Fork.

12 In my opinion, Department of Highways 26 years ago already had done
13 studies, had done paperwork, had done maps, had spoken with people. By the time
14 2006 got here we went through more than one engineering director, if you will, or
15 planning person. We went through more than one set of county commissioners. We
16 went through more than one delegate for this section. In my opinion, disclosure is not
17 only material goods; it is what is going to happen on the outside of your property.

18 My husband and I chose to purchase the lot, and we're thankful we did. But
19 all of you need to know something's missing in this scenario: Disclosure. So with that I
20 thank you for being here, I thank you for the time, and I hope everyone will understand
21 disclosure does not have to be in ink. It's commonsense. Thank you.

22 MODERATOR: Thank you for your comments. The next citizen to speak is
23 Will Allen.

24 MR. ALLEN: I'm speaking for my son first.

1 MODERATOR: Also, Anna; you'll be on-deck.

2 MR. ALLEN: Good evening. When discussing a topic that involves the
3 removal of people from their homes it is difficult to do so without any bias. Bias is
4 inherent with any topic that hits so close to home. However, one thing that is always
5 free of bias is numbers. Facts are always facts. And in this case the facts are almost
6 entirely in favor of Alternate 4.

7 Alternate 4 is the obvious route because it simply makes the most sense. It's
8 the most direct route, a route which saves money on the construction. Not to mention
9 the fact that it avoids the cost of either a) building bridges, or b) railroad relocation, as
10 indicated by Alternates 10A and 10B respectively. The extra costs just to appease
11 homeowners who should have been informed of their inevitable move when it was
12 decided in '03 would be huge.

13 In addition to costs we must also look at the most important factor of all;
14 safety. In the U.S. close to 50 percent of all deadly single vehicle accidents occur on or
15 directly after and resulting from curves in the road. Anyone with eyes can see the
16 problems this spells for Alternates 10A and 10B. The almost entirely straight Alternate
17 4 -- what? I didn't write this. The ones on Allen Lane appear especially dangerous.

18 So, as stated, the choice is clear. We can either choose cheap, straight and
19 safe, or costly, indirect and potentially deadly. After eliminating bias it's easy to see
20 Alternate 4 is the best choice for the people of this county. Thank you, and good night.

21 MODERATOR: Thank you. Anna?

22 MS. ALLEN: Hi, I'm Anna Allen. I'm 14 years old and I've lived on 2703
23 Berryville Pike, West Virginia, 25441 for all of my life; the same block of land containing

1 Allen Lane and the same block of land completely severed in-half by Alternates 10A and
2 10B.

3 Since I was little, before I even entered kindergarten in 2004, I had been told
4 that an endangered species of birds resembling mockingbirds, are the reason our land
5 was protected from the U.S. 340 Improvement route. Alternate Route 4 was the chosen
6 path in 2003, the last time this issue arose.

7 Unfortunately the construction was delayed long enough for a misinformed
8 opportunist to enter our county and build a housing development directly in the way of
9 the newly planned 340 route. Many families now live in this development known as
10 Ryans Glen. Due to this new group of innocent people, and other arising issues, a plan
11 for U.S. 340 has once again come up.

12 I do realize that everyone's home is their comfort zone; the place they return to
13 each day to relax and feel safe. My home is just that to me. But it is not only my and
14 my family's home. Our land harbors many species, including the endangered little
15 brown bat, seasonal butterflies, foxes, white-tailed deer, rabbits, squirrels, Baltimore
16 Orioles, gold finches, red-tailed hawk, red-winged blackbirds, cardinals, bluebirds, barn
17 swallows, skunks, and many more creatures.

18 We also have planted a wide variety of native trees such as White Pines,
19 Scotch Pines, Norway Spruce, Blue Spruce, Blue Pines, Douglas Firs; the list goes on.
20 I'm not going to read all of these, but many more. These various tree species help
21 support a wide and healthy variety of underbrush that provides food and shelter for
22 many animals, including a thriving population of Eastern Box Turtles.

23 Along with the box turtles there are many species of snakes, a strong
24 population of insects and arachnids live on our land as well. Fireflies and honeybees

1 are two types of insects that can be seen regularly around our house and both have
2 thinning populations across the northeastern U.S.

3 I've listed many species that have made homes of our land, but the one that
4 stuck on my mind is the Butcher Bird, also known as the Loggerhead Shrike. Although
5 I've been hearing the story all my life I've never taken the time to notice one until just the
6 other day. It was a defining moment for me as my dad and I watched the interesting
7 bird bob its tail back and forth, keeping its balance on the branch of a peach tree at the
8 edge of our farm. It swooped down and took a drink, as many other birds on our land
9 do, but it really made me think.

10 I realize that my home means a lot more to me than it does to you, but I never
11 want to lose it and I hope that you were able to catch a glimpse of it through my eyes.

12 I realize that the residents of Ryans Glen are not at all responsible for the fact
13 that their land was predestined to be the new U.S. 340 Route, but that isn't the fault of
14 the people around them, either. It isn't very fair to them, but it is less fair to push the
15 road back over on the other people.

16 Thinking practically, without personal opinion, Alternate Route 4 is the best
17 choice.

18 MODERATOR: Thank you, and then we'll call Lewis Allen.

19 MR. ALLEN: Good evening, my name is Lewis Allen. I live on Allen
20 Lane, directly in the path of Alternates 10A and 10B.

21 My father was born at Rippon Lodge in 1916. He lived there until the death of
22 his mother in 1971. My grandmother unfortunately had hired an incompetent lawyer,
23 whom I'll refer to as Bean Pickles, to help her write her will. Due to his incompetency
24 we had to sell the house and most of our farm in order to pay the inheritance tax. I was

1 eleven years old. I couldn't understand it. We owed no back taxes, had no mortgage.
2 Grandma died, so we owed the government more money than we'd ever seen. Why?
3 Does anyone really own anything in this country anymore? We just rent from the
4 government.

5 I've lived here all my life, raised my kids here, paid my taxes on time, never
6 been to jail. I've attended most meetings concerning this project in the past and came
7 away thinking the matter was pretty much decided on; Alternate 4.

8 Mr. Streaker, the former owner of what is now Ryans Glen, sold out and
9 moved to Florida. Then someone decided it would be okay to build a bunch of big
10 houses there. Whoever made that brilliant decision has to have a bad taste in their
11 mouth after kissing all that Lou Athey and Dan Ryan backside.

12 Now they want to take my land across the railroad and crush other long-life
13 residents on this side. I guess money talks, but it's not right.

14 So come on people on the west side. Let's get together and fight this injustice
15 or we're going to get railroaded, literally and figuratively. Let's get the lawsuits rolling
16 and fatten up the lawyers; a bunch of ticks on the dog of society.

17 Now for the practical side of my argument: Do these curves make any sense
18 to you on Alternate 10A and 10B? According to the National Highway Transit and
19 Safety Administration approximately 50 percent of fatal single vehicle accidents occur
20 on or directly after curves there. It just doesn't make any sense.

21 MODERATOR: Thank you, sir. Next is Libby Pierce. Libby Pierce.

22 MS. PIERCE: Hi, my name is Libby Pierce. I'm a resident of Allen Lane
23 and I have been all of my life; the farm has been in our family for 100 years.

1 It appalls me that the Planning Commission would even think that they're
2 going to redo this road. Because of our Planning Commission's inadequacy now the
3 Department of Highways has to revisit this, do all these new plans, and all this money
4 because of our people.

5 I imagine that when this man -- we did not have it in writing, it was not a matter
6 of record that we were going to use Route 4, but that man who owned that farm before
7 Ryans Glen was there installed very expensive horse fencing and sheds. We were
8 assured enough that Route 4 was going through that he sold that property and I imagine
9 at a very low cost because probably whoever bought the property was well aware that's
10 where the highway was going: "But as long as the homeowners don't know, we don't
11 really care."

12 I'm sorry, that's it for me. Thank you.

13 MODERATOR: Thank you. Next up; Wayne Hall.

14 MR. HALL: I'm Wayne Hall. I live at 236 Allen Lane. My wife's name is
15 Linda Allen Hall, so you know where I am leaning.

16 10A and 10B, I can't understand it. As Lewis just said, whoever heard of
17 putting a dead man's curve -- who decides -- "Let's go down the road. Where are we
18 going? Let's take a nice right here. Let's go up through this family farm here and
19 actually subdivide it." And at the time the taxes, the inheritance tax, was extraordinarily
20 high; not like it is now. And, of course, the family had to sell the farm. That is to say it
21 happens and it still happens, but I am sorry for anybody losing their home.

22 I just found out tonight, which I tried to find out, what is the width of a dual-lane
23 highway are they talking about? The guy gave me approximately 250 feet. I said,
24 "Well, you know this thing that the State sent us shows Allen Lane. It shows this

1 highway going on the other side of Allen Lane," and I keep looking at it and I said, "That
2 isn't Allen Lane. Allen Lane comes right down the property line." And, of course, the
3 way they're doing that highway is going right up the property line. So tonight I find out
4 my house is gone if they choose this.

5 Well, the lady that spoke said, "Disclosure". I mean, disclosure; that is the
6 most commonsense thing I ever heard of. You're coming down a dual-lane highway, go
7 to a single-lane highway, and you go to a dual-lane highway, and you buy a house on
8 the side of the road commonsense tells me, "Hey, that's an awful doggone risky
9 situation."

10 Maybe they're thinking 50/50. Maybe the highway is just going to be a two-
11 lane there. But it comes to find out, no, they might want to take this thing to Martinsburg
12 and bring it down, or maybe circle around down around Summit Point and bring it in. I
13 don't know, it hasn't been decided yet.

14 That's the big thing. Who in the heck knows? We were here ten years ago;
15 we're back again, and the Highway Department comes in and they're all nice and polite,
16 and so glad to see you. "We're going to take your home." You know, that is just plain
17 doggone ridiculous.

18 Why can't we just get something done? I mean, make a decision. It's easy,
19 and do it. I mean, it's frustrating and, of course, I hate anybody losing their home, but I
20 know there's a lot of taxpayers hate to see a lot -- maybe my land is worth 30 million
21 dollars more. It seemed like 10A and 10B is going to be something like 26 million or 22
22 million more. It will make a nice highway. A lot of expensive curve there, but maybe
23 that's what they want.

1 And I want to thank everybody and I'm like quite a few others; I'm not too fond
2 of the Planning Commission and what in the heck they did. I heard one of them was
3 said to say, "How can we tell the man what he can do with his land?" That's true. And
4 then you've got these speculators come in and grab up the land, and these speculators
5 -- there's one speculator in this county that I have never heard one person say one good
6 thing about, not one person, and then he comes up and sells it to a man that's going to
7 build a subdivision.

8 Well, you know, that's fine, business is business, but, you know, that
9 disclosure; is that ethical? Thank you.

10 MODERATOR: Thank you, sir, for your comments. Next to speak is David
11 and I apologize -- is it David Tabb?

12 MR. TABB: Thank you. Good afternoon. My name is David Tabb; 107
13 Tabb Lane, Harpers Ferry, West Virginia.

14 I don't know what to do with five minutes. You should get with the County
15 people because, if you notice, almost everybody doesn't go to the yellow light. We only
16 get three minutes at the County Commission.

17 We have a big problem here. The Highway Department; you can't trust. The
18 County Commission; you can't trust. How do I know that? Because for the last six
19 years I've taken them to court. I've been deemed guilty of practicing law without a
20 license.

21 You, the people sitting here in front of me, this is our home. My family has
22 been here for almost 200 years. Everybody that drove here today touched the road that
23 my grandfather built. We didn't have the Highway Department. We had the Jefferson
24 County Roads.

1 Then after the hard work and money that we, the people of Jefferson County;
2 whether you've only been here one day or you've been here 200 years -- we did this.
3 We built the infrastructure. We made this our home.

4 It starts here. The county is in bad shape. The state is in bad shape. The
5 country is in bad shape. We need to get our affairs together at home. Until that
6 happens, the country is going down the tubes. We can do better. We have to do better.
7 Our children and their children depend on it.

8 I have a contract from the Route 340 project; the eastern side. Over \$300,000
9 that these people up here spent -- over \$300,000 and I spent over 60 hours appointed
10 to a committee and they threw it in the trashcan. That's unacceptable.

11 Yet the County can spend a quarter of a million dollars on 3/10ths of a mile
12 with no permits, on height road, no bonding, using our County employees or the
13 Highway Department, and double-dipping.

14 340 in Virginia was finished almost 40 years ago and the other structure or the
15 bypass was finished somewhere around 18 years ago. The only reason this is getting
16 looked at is because 340 East on Harpers Ferry is being ignored. That's where the
17 traffic is. They've already said that they can monitor how much traffic. I can get to
18 Berryville almost any time of the day with hardly any delay. You try to go to Frederick or
19 try to come back home at any time, any day or night, and you're in trouble.

20 I have given written structures of how to fix the roads and they're ignored. I've
21 been in constant contact with the Highway Department. I have a contract that says
22 \$300,000 to be donated to the Highway Department at an undisclosed number,
23 undisclosed account, from the Federal Government. If I and other people hadn't been
24 involved we would already have another stoplight at Shipley School. They stole Kuhn's

1 Road. That road is what my grandfather built. I offered to pay double for that road than
2 what was given for it. It was stolen from us.

3 I've been made fun of, I've been laughed at, and I can handle it. But we
4 cannot trust the Highway Department or our elected officials. It's time we, the people,
5 take over this county and this state and this government. We don't have much time left.
6 I really appreciate your time.

7 And one other thing: I think the County Commission -- we need a new light
8 (indicating). That's a lot bigger, and for \$2000 I think we can afford that one. You all
9 have a good day.

10 MODERATOR: Thank you, sir, for your comments. Next to speak is Jay
11 Cepelka.

12 MR. CEPELKA: My name is Jay Cepelka. I live at 131 Meyerstown Road,
13 Rippon, West Virginia.

14 In 1992, before I built my house, what was considered I guess 4, Route 4 at
15 that time, had been taken off the table. I started the project in April of 2003, finished it in
16 November of that year, and we had a meeting here shortly thereafter in which Route 4
17 was back on the table as the prime route of travel for the new road.

18 I know it doesn't satisfy anybody where the road goes and it never will. My
19 biggest concern is the uncertainty of what our lives are as to what we can do with our
20 property and where we may have to move to or what we may have to do with it.

21 So with that said, I would certainly like to see the project be moved on as
22 quickly as possible, and I thank you for your time.

23 MODERATOR: Thank you, sir. The last person that is signed up to speak
24 is Daniel Lutz.

1 MR. LUTZ: Good evening and thank you for your time, and thank you
2 for your attention. My name is Daniel Lutz. I live at 175 Wheatland Road, Charles
3 Town, West Virginia.

4 I'm appalled at some of the issues that I've raised about all of the Alternatives,
5 including the ones that have been taken off the table, that haven't received any study or
6 the staff doesn't have any knowledge with which to address.

7 I've listened to some of the people who have spoken this evening about
8 eminent domain and various terms, and I recall a term in common law called usufruct,
9 that's u-s-u-f-r-u-c-t. The first time I ever found it referenced in American history was
10 following the claims for compensation following Sherman's march to the sea. Now until
11 this evening I really had not thought about the parallels between this highway and
12 Sherman's march to the sea until I listened to the Allen family speak, and it suddenly
13 became a whole lot clearer.

14 Usufruct, briefly, says that the sovereign, the government if you will, the king,
15 or whoever, or the dictator, owns all property and that you only have it at the will and
16 pleasure of the sovereign. The sovereign may take it from you, extract anything from
17 you for its use, and you have no power. This is what eminent domain was enacted
18 upon in 1862 and it even went so far in Connecticut as to allow a Wal-Mart to be
19 constructed on land that people had to give up their homes for.

20 Now, several things bother me about this. When choosing a road, as several
21 people have said, safety should be the number one concern. Commissioner Widmyer is
22 absolutely right. I know she's surprised to hear me say that. At-grade intersections are
23 extremely dangerous with the kind of traffic we have, and as I listen to the Allens speak,
24 I joked with the staff saying that they should name these curves out there that they're

1 proposing for the Alternates across the Allen place as Lawyers' Curves because these
2 boys are going to make a lot of money. And I told Jay that he should buy another
3 rollback and station it out there because he'll be able to retire a second time.

4 Unless staff plans to bank these curves like the Talladega Speedway or
5 perhaps Dover or Bristol -- Lord, I wouldn't want to drive those tracks under any
6 circumstances, but the point is there's no roads in America that are built to Autobahn
7 standards. Has anybody ever driven the Autobahns? 120 miles an hour, safely.
8 Nobody would do it. No German with any sense unless they had a lot of beer in them
9 would do that on these roads.

10 I would like to respectfully suggest that Alternative 8 be taken back off the
11 elimination list and reconsidered so that the road can cross the Northfolk Southern
12 Railroad and the south fork of the Bullskin Run on the west side with a safe interchange
13 for Wheatland Road, a safe interchange for Withers Larue Road, a safe interchange for
14 Lewisville Road.

15 And then please negotiate with Virginia and find out how we can get a safe
16 interconnection at the state line. I've heard, "Oh, we can't do anything because Virginia
17 won't talk to us." Sooner or later somebody has got to talk. There has to be a way.

18 Also, the other Alternatives that go down the existing highway -- right below
19 Dave Slusher's car lot is a spring that rises underneath the existing road that no one
20 knew about according to the staff. This spring supplies a large amount of water for the
21 south fork of the Bullskin Run between 340 and the river. It's already polluted horribly
22 with the heavy metal rock salt runoff from the truck stop and from the highway itself.
23 Now let's go disturb that harsh topography and probably eliminate that spring altogether.

24 I thank you kindly for your time.

1 MODERATOR: Thank you, sir. I'm going to turn it back over to Greg
2 Bailey, but I do want to reiterate how important it is that we hear from you, either
3 verbally here or in written comments outside. Any questions that may have been
4 sparked by this evening's hearing; we're certainly available out here afterward. It's real
5 important to us, it may surprise some of you, but it is important to us and we're happy
6 that you all came and we were happy to listen.

7 With that I'll turn it over to Greg Bailey.

8 MR. BAILEY: The first thing I need to ask is is there anyone else at this
9 time that wishes to comment publicly? Okay.

10 MR. MORGAN: My name is Rusty Morgan. I live at Rippon Lodge Farm.
11 It's the farm that is being bypassed by -- I guess it's 10A and 10B, and we're grateful for
12 that. We're grateful that the road is not presently designed to go through our property.
13 It's very precious to us.

14 I really -- what I want to do is keep my comments really short. I want to
15 support my neighbors. I think the two routes to the west of us, across the railroad
16 tracks, are completely impractical. They would harm my farm. They wouldn't take
17 farmland from me, but as far as noise and the view, it would be a miserable thing. But
18 I'm not going to stand here and argue about those things, but I do think what it does to
19 the Allens next-door to me, and that was once part of Rippon Lodge Farm, to destroy
20 what they have left is just wrong.

21 To go to more expensive routes and to create a road that has those curves in
22 it I think, again, like Lyn Widmyer said, the intersections of the local roads become very
23 dangerous when they're associated with railroad tracks. So I just think that those two
24 routes really ought to be eliminated. Thank you very much.

1 MR. BAILEY: Thank you.

2 MR. BRUST: My name is Michael Brust and I live at 201 Ryans Glen
3 Drive; the subject of some discussion this evening. I'm not up here to do anything other
4 than let the folks that have lived here all their lives -- me, I've lived in West Virginia since
5 2001 -- I moved from Ranson. We needed a bigger home for my family. I was
6 absolutely assured from the beginning of the process from the date that I closed until
7 last September that nothing was ever going to be done to disturb the property which I
8 purchased.

9 I'll be the first one to admit that I overpaid for my home and I have felt the
10 effects of the economy and the problems just as much as anyone else. I want to assure
11 everyone that's been here living here all their lives it was never our intention to come in
12 and cause a problem. We never even knew this was going to happen. My preference
13 would be that no one would lose their home. Unfortunately, I think we all know that at
14 some point, maybe even 50 years down the road at the pace that I've heard about this
15 evening, someone will lose their home.

16 I have another subject I'd like to discuss. Regardless of who loses their home,
17 if the State of West Virginia, in their infinite wisdom that will not pay off any unpaid
18 balance of a home that they take that they deem at their own personal fair market value
19 -- that's the big concern for a lot of us that live in Ryans Glen. I know for me personally,
20 and my family who lives with me, if you buy-out my home for the purchase price I'll be
21 glad to go. I'm not looking to make a penny. I'll even take a little bit of a loss, but I can't
22 afford to do anything else.

23 So I have to try something and this is the whole reason that we objected to
24 Alternatives 4, 4A, 4B and 4C now. Really, you know, at this point I'm exhausted and

1 you guys have dealt with this for far longer than I have. Our community is a little bit at
2 odds with what's going on so it's not just us within our own community, but we just don't
3 want to seem like the bad guys. I hope everyone here understands that. Obviously the
4 best solution is one where nobody loses anything.

5 There's a lot more that I could say, but there's just not enough time. I wish us
6 all the very best. Thank you.

7 MR. BAILEY: Sir, could you restate your name? I don't think we got that.
8 I'm sorry.

9 MR. BRUST: Unfortunately, I've been one of the ones that's been in the
10 paper. It's Michael Brust, B-r-u-s-t, 201 Ryans Glen Drive. Thank you.

11 MR. BAILEY: Thank you.

12 MR. LOGAN: Good evening. My name is Jeff Logan. I, too, am a
13 resident of the Ryans Glen community; 344 Ryans Glen Drive.

14 I just really want to focus on two main points here. One is disclosure and two
15 is addressing some of the Alternatives. For the Department of Highways, in regards to
16 the disclosure issue I really would like for you guys to disclose how you go about the
17 comment process. How do you read these, what's the methodology used to process
18 the comments? Is there some sort of exact science behind it or do you just collect it
19 and it goes to the wayside? I think that needs to be disclosed; the methodology you use
20 to track those comments and citizen opinions.

21 Second, I'd like to have the Department of Highways -- officially ask them to
22 disclose the detailed maps of these plans. They're out there. These other drawings are
23 really pretty, but they don't show anything. I know you guys have detailed maps of

1 which homes would actually be affected and would just like you guys in the next week
2 or two to officially release those to the public beyond the County Commission.

3 And regarding the Alternatives; I feel for the Allen family. I think that's an
4 unfair solution and the community of Ryans Glen doesn't advocate moving the route to
5 save us while impacting others. That's not what we stand for.

6 But to the point of doing something that's sensible; straight, narrow,
7 inexpensive, I agree with that. There are Alternatives 1, 3 and 5 that have been
8 removed previously for decisions that were decided upon before the landscape changed
9 with Ryans Glen and other houses. I ask the Department of Highways to open up those
10 Alternatives again since they are direct routes and probably inexpensive routes.

11 Thank you.

12 MR. BAILEY: Thank you. Is there anyone else who wishes to speak? If
13 not, let the record show that no further public comments are to be offered. We want to
14 thank you for attending the hearing tonight. The hearing portion of this meeting is now
15 adjourned and you all are free if you wish to go back outside here and speak with our
16 staff and give any written comments.

17 Again, on behalf of Secretary Mattox, we really appreciate your time and
18 efforts. Thank you.

19 (Public hearing concluded.)

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REPORTER'S CERTIFICATE

STATE OF WEST VIRGINIA,
COUNTY OF JEFFERSON, to wit:

I, Sherry M. Lawson, Certified Court Reporter and Notary Public in and for the State of West Virginia, duly commissioned and qualified, do hereby certify that the foregoing proceedings were taken and transcribed by me at the time and place and for the purpose specified in the caption hereof.

I do further certify that the said proceedings were correctly taken by me via voice writing and that the same was accurately reduced in full to computer transcription to the best of my skill and ability.

I do further certify that I am neither attorney or counsel for, nor related to or employed by any parties to the action in which these proceedings were taken; and furthermore, that I am not a relative or employee of any attorney or counsel employed by the parties hereto, or financially interested in the action.

Given under my hand this the 25th day of June, 2013.
My commission expires November 9, 2021.

Certified Court Reporter/Notary Public



US 340 IMPROVEMENT STUDY

Public Workshop and Hearing Monday, June 3, 2013

COMMENT SHEET – Please return on or before Wednesday, July 3, 2013

Contact Information [Please Print]

Name: Bill Allen

Mailing Address (including Zip Code): P.O. Box 143
Rippon, W. Va. 25441

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

I FEEL The by pass should have
stayed on the original route we
already approved. I think the planning
commission should have never issued
building permits for Ryans when seeing as
they already knew that was the original
plan for the by pass

Project Information and Comment Sheets can be found online at our web page:

<http://go.wv.gov/dotcomment>

Click on "Comment on Engineering Projects", then "Open", and then click on "US 340 Project"



US 340 IMPROVEMENT STUDY

Public Workshop and Hearing Monday, June 3, 2013

COMMENT SHEET – Please return on or before Wednesday, July 3, 2013

Contact Information [Please Print]

Name: Laura J. Allen
Mailing Address (including Zip Code): P.O. Box 115
Rippon, WV 25441

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

I don't believe Alternative 10A nor 10B should be considered. The cost for either of these is much more ~~that~~ expensive than any of the other routes. I think the original route (Alternative 4) should be the one used. The curve would be way too much on Alternative 10A or Alternative 10B. Also, to have to move Norfolk-Southern Railroad tracks would be way too much expensive.

Project Information and Comment Sheets can be found online at our web page:

<http://go.wv.gov/dotcomment>

Click on "Comment on Engineering Projects", then "Open", and then click on "US 340 Project"



US 340 IMPROVEMENT STUDY

Public Workshop and Hearing Monday, June 3, 2013

COMMENT SHEET – Please return on or before Wednesday, July 3, 2013

Contact Information [Please Print]

Name: Lewis Allen

Mailing Address (including Zip Code): P.O. Box 115, Rippon, WV. 25441

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

How can you even ~~consider~~ consider Alts. 10A & B?
Dangerous curves and additional cost seem
to obviously eliminate these two.

Project Information and Comment Sheets can be found online at our web page:

<http://go.wv.gov/dotcomment>

Click on "Comment on Engineering Projects", then "Open", and then click on "US 340 Project"



US 340 IMPROVEMENT STUDY

Public Workshop and Hearing Monday, June 3, 2013

COMMENT SHEET – Please return on or before Wednesday, July 3, 2013

Contact Information [Please Print]

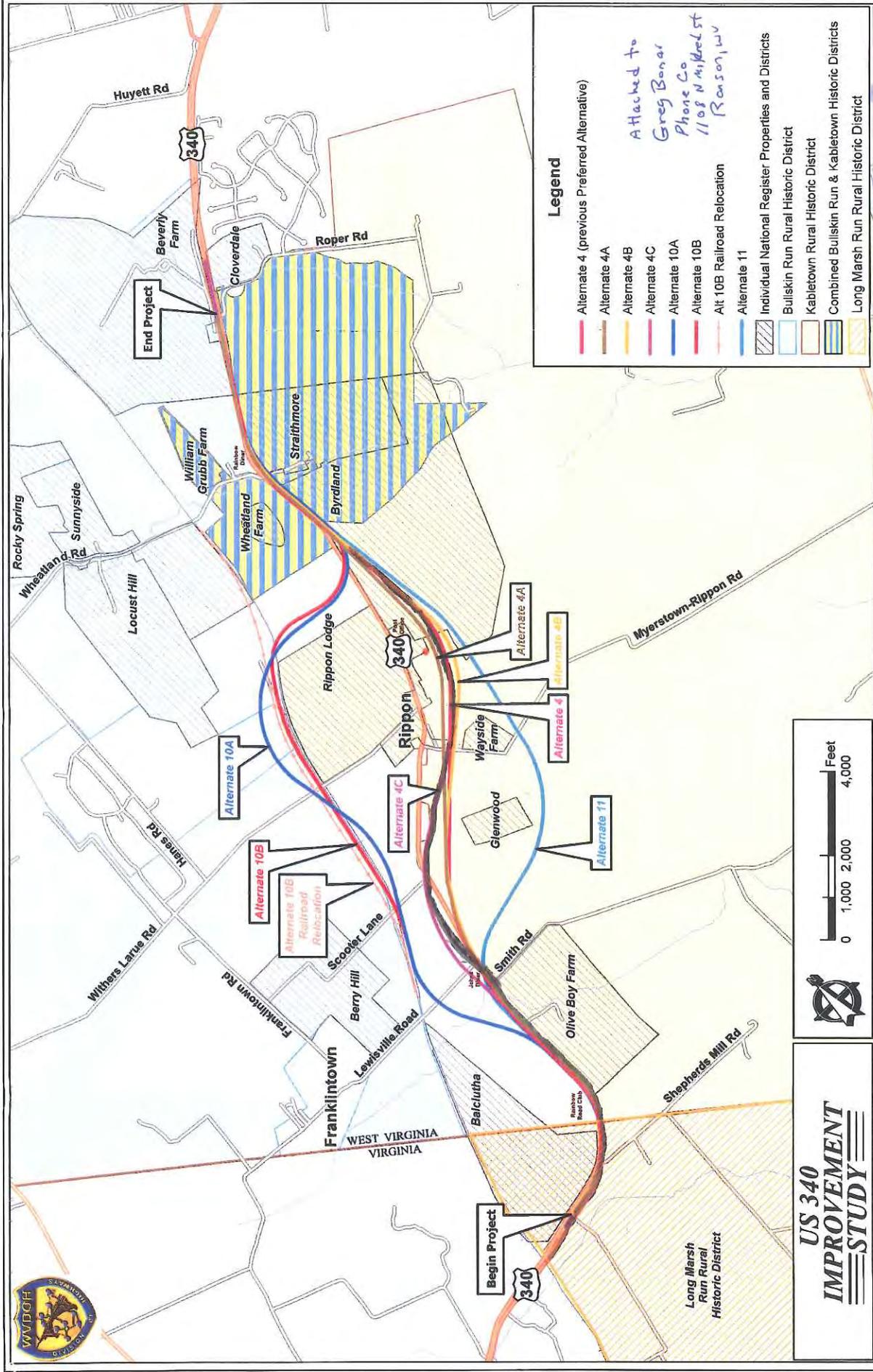
Name: Greg Bonar phone company

Mailing Address (including Zip Code): 1108 N. Mildred St. Ranson, W.V.
304-725-4199 25438

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

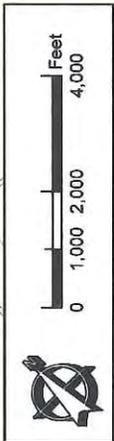
Your comments or questions for the project team:

This move on 4C would save the
Resturant and also save money and help
the community keep a landmark. We all love
John's Diner for every meal. This also moves
you away from our switch 4A is very close
to red dot. I would recomend
that you would follow alt. 4A after Lewisville
Rd.



- Legend**
- Alternate 4 (previous Preferred Alternative)
 - Alternate 4A
 - Alternate 4B
 - Alternate 4C
 - Alternate 10A
 - Alternate 10B
 - Alt 10B Railroad Relocation
 - Alternate 11
 - Individual National Register Properties and Districts
 - Bullskin Run Rural Historic District
 - Kabletown Rural Historic District
 - Combined Bullskin Run & Kabletown Historic Districts
 - Long Marsh Run Rural Historic District

Attached to
 Greg Bonar
 Phone Co
 1108 N. Market St
 Ranson, WV



**US 340
 IMPROVEMENT
 STUDY**

June 3, 2013

Exhibit 3 - Alternates 4, 4A, 4B, 4C, 10A, 10B, 11





US 340 IMPROVEMENT STUDY

Public Workshop and Hearing Monday, June 3, 2013

COMMENT SHEET – Please return on or before Wednesday, July 3, 2013

Contact Information [Please Print]

Name: Michael J Clark
Mailing Address (including Zip Code): Po Box 111, Rippon WV 25441

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

Alternate choice should be where there is least land disturbance, least wetlands disturbance, least environmental effect, to minimize construction hazards Also the cost to the taxpayer in these slow economic times must be considered
Having noted these evaluations, it seems that WVDOH actually proposed the correct Alternate in 2002 why waste time and money when the right decision was made to extend the existing 4 lane Bypass ^{ground} Rippon in Jefferson County. I think Alternate Route 4 should be used.

Project Information and Comment Sheets can be found online at our web page:

<http://go.wv.gov/dotcomment>

Click on "Comment on Engineering Projects", then "Open", and then click on "US 340 Project"



US 340 IMPROVEMENT STUDY

Public Workshop and Hearing Monday, June 3, 2013

COMMENT SHEET – Please return on or before Wednesday, July 3, 2013

Contact Information [Please Print]:

Name: ^{Daughter} Dianna Dick Por Edith Ellifritz

Mailing Address (including Zip Code): P.O. Box 147 Rippon WV 25441

101 Earl Ellifritz Dr.

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

After looking over all the new proposed routes
we think alternate 4B looks the best and
makes the most sense

Why make the highway make such big loops
and cross RR's causing more expense

Just please make this happen and not
take another 20 years.

This is a very unsafe ~~area~~ stretch of
highway, with too much ~~too~~ traffic for just
two lanes.



US 340 IMPROVEMENT STUDY

Public Workshop and Hearing Monday, June 3, 2013

COMMENT SHEET – Please return on or before Wednesday, July 3, 2013

Contact Information [Please Print]

Name: Helen Lafferty
Mailing Address (including Zip Code): 350 Quail Run Rd
Summit Point WV 25446

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

We have property that is directly affected by
alternate plan TOA & 10b and we were not notified
directly of the public hearing & workshop. Please put
us on the mailing list for direct mailing.

Project Information and Comment Sheets can be found online at our web page:

<http://go.wv.gov/dotcomment>

Click on "Comment on Engineering Projects", then "Open", and then click on "US 340 Project"



US 340 IMPROVEMENT STUDY

Public Workshop and Hearing Monday, June 3, 2013

COMMENT SHEET – Please return on or before Wednesday, July 3, 2013

Contact Information [Please Print]

Name: Deanne Norton

Mailing Address (including Zip Code): 2446 Berryville Pike
P.O. Box 58, Ripppm. WV 25441

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

A copy of all engineering plans should be
available to the public at our local county offices

Information
re: The access roads connecting the existing & the
new highway should be made available.

Is spending \$10 million a mile (in today's \$)
a wise expenditure?

Project Information and Comment Sheets can be found online at our web page:

<http://go.wv.gov/dotcomment>

Click on "Comment on Engineering Projects", then "Open", and then click on "US 340 Project"



US 340 IMPROVEMENT STUDY

Public Workshop and Hearing Monday, June 3, 2013

COMMENT SHEET – Please return on or before Wednesday, July 3, 2013

Contact Information [Please Print]

Name: Kina + Stanley White

Mailing Address (including Zip Code): 95 Rippon Commonct
Charles Town, WV 25714

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

I ~~own~~ bought property that will be effected
by this road change and I have not receive
any information from the state since my neighbor
called six months ago. Can someone make sure
we are added to the list of property owners



US 340 IMPROVEMENT STUDY

Public Workshop and Hearing Monday, June 3, 2013

COMMENT SHEET – Please return on or before Wednesday, July 3, 2013

Contact Information [Please Print]

Name: Carolyn Zuke

Mailing Address (including Zip Code): Box 219 Rippon, WV 25441

John's Family Restaurant

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

340 is a very dangerous road, we need
a four lane before more lives are lost.

My life style has been changed because of
the gun range in my back yard. I
want to move so you can have the
restaurant at my house I am not OK with
Alt 10A & 10B - thrilled with all others,

Thank you
Sue

Project Information and Comment Sheets can be found online at our web page:

<http://go.wv.gov/dotcomment>

Click on "Comment on Engineering Projects", then "Open", and then click on "US 340 Project"



Wayside Farm

P.O. Box 40
Rippon, WV 25441

RECEIVED

JUN 10 2013

ENGINEERING DIVISION
June 5, 2013
WV DOT

Mr. Gregory Bailey, PE
Director, Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, WV 25305-0430

Dear Mr. Bailey;

My comments deal with State Project U-219-340-0.00(02).

I am the owner of Wayside Farm, an historic property located on the Myerstown-Rippon Road. I commented previously (October, 2, 2012) on the alternate routes for the "improvement" of US340 as presented at your Informational Public Workshop on September 24, 2012.

At the workshop on June 3, 2013, 4 new or modified alternates were presented. Three of these, Alternates 10A, 10B, and 11 have many similarities to alternatives that were eliminated following the July 2002 workshop. They suffer from many of the same deficiencies as the earlier alternatives. 10A or 10B would entail excessive costs of up to twenty-nine million dollars more than other alternatives. This would be a tragic waste of taxpayer dollars and probably would not withstand informed public scrutiny. The entire Ryan's Glen development could be moved and rebuilt for less than that.

Alternate 11 would cause the wastage of agricultural acreage in excess of the land needed for right-of-way. Specifically, crossing the Adam's farm adjacent to the Myerstown Road would sever the farm from an important source of water for their beef cattle. They would lose access to the spring-fed pond situated at the bend in Myerstown Road and several acres of crop and pasture. That pasture is subject to periodic flooding and would require added costs for flood control. It would seriously intrude into the Kabletown Rural Historic District and despoil the view from the Rippon area over the as yet unspoiled farmland.

My preference remains with the Alternate 4A which if combined with the southern portion of Alternate 4C would avoid Ryan's Glen.

Yours Truly,

James Keel, DVM



US 340 IMPROVEMENT STUDY

Public Workshop and Hearing Monday, June 3, 2013

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JUN 13 2013
ENGINEERING DIVISION
WV DOH

COMMENT SHEET – Please return on or before Wednesday, July 3, 2013

Contact Information [Please Print]

Name: Michael Nemeec

Mailing Address (including Zip Code): 5203 Kabletown Road
Charles Town, WV 25414

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

The ideal solution would be to add another two lanes parallel to the existing two lane road, as Virginia has done on many of its roads.

The closest to the ideal are alternates 4, 4A, 4B, 4C. The 4's are the lowest in estimated costs except for Alternate 11. The problem with Alternate 11 is that it impacts the valuable resource in Jefferson County, its farmland.

Project Information and Comment Sheets can be found online at our web page:

<http://go.wv.gov/dotcomment>

Click on "Comment on Engineering Projects", then "Open", and then click on "US 340 Project"



US 340 IMPROVEMENT STUDY

Public Workshop and Hearing Monday, June 3, 2013

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JUN 13 2013
ENGINEERING DIVISION
WVDOH

COMMENT SHEET – Please return on or before Wednesday, July 3, 2013

Contact Information [Please Print]

Name: Richard & Linda Shirley

Mailing Address (including Zip Code): 4529 middle way pike
Kearneysville WV 25430

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

To who it may concern
Its nice to have people move into our
area, But its a shame for those people
that brought the homes which most of
them knew that 340 dual highway was
coming through there property, so they think
it should be rerouted to the peoples
area and homes that have lived here all
there lives and there family before them it
a shame for them to even think about as far as I am
concerned they dont give a D" about anybody but there self!
I dont want to think about how hard it would be to give your home, but
they knew about it. So as far as I am concerned, the way they routed it the
first time it should stand that way. I am a life time resident which my father
was and his father was. I do feel sorry for them but please let it go
through the way it was supposed to go through
Sincerely
Richard Shirley & Linda M. Shirley

Project Information and Comment Sheets can be found online at our web page:

<http://go.wv.gov/dotcomment>

Click on "Comment on Engineering Projects", then "Open", and then click on "US 340 Project"

Certified mail # 2012 2210 0002 0740 9463

Joseph V. Cepelka

PO Box 14
131 Myerstown Road
Rippon, WV 25441

June 28, 2013

West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, WV 25305-0430

RE: US 340 Four-Lane Improvement Study: Virginia line to Charles Town Bypass

To Whom It May Concern:

I am writing this letter to request that the Alternate 11 Centerline Route for the US 340 Four Lane Improvement be considered as the final route. To me and my family, this would be the best route to consider because it will not displace and place burden on as many residential families as any of the Alternate 4 routes would. I am aware that this route would take some rural farmland but so does every other option that has been given. Also, every one of the alternate 4 routes looks to run directly over sinkhole #1 which is marked on the map dated February 11, 2013.

If any of the Alternate 4 routes were to be chosen, I would hope that they could be aligned so as not to take my families home and buildings. Our property is all that is left of our families' original farm dating back over 200 years. We built our dream home on this property for that reason and were also advised that we would never have to worry about 340 being directed through it.

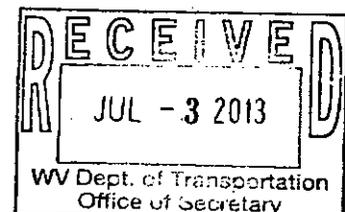
Which ever route is chosen, I wish the decision would be made soon so that residents like my self aren't burdened and stressed with what the outcome of their property will be. Every one of us landowners are in limbo and unable to do anything with our properties until this decision is made.

If you have any questions or would like further explanation, please feel free to contact me. I can be reached on my cell phone at 304-270-8252 or e-mail at jcepelka@frontiernet.net. Thank you for the opportunity to offer my suggestion.

Sincerely,



Joseph V. Cepelka
Resident and Land Owner



July 5, 2013

RECEIVED
JUL 17 2013
ENGINEERING DIVISION
WV DOH

Dear Mr. Bailey and Colleagues

I am writing in regards to WV state project U319-340-0.00 02 and Federal Project U319-340-0.00 02, the expansion of route 340.

My husband and I purchased our home in Ryan's Glen less than two years ago and our lives were almost immediately thrown into limbo with the announcement of the 340 expansion and its potential to run directly through our property or neighborhood.

We are a young couple, newly married. We were looking forward to having children but are no longer financially secure enough given the current situation to do so. Our family is on hold.

I am also a veterinarian and had been looking forward to opening my own practice and boarding kennel to serve our community and provide jobs for our neighbors. I cannot pursue this dream until I have a reliable financial investment in my home and property. My career is on hold.

Furthermore, I am not even able to sell my home and move to start my family and my business as my home is worthless until a decision is made. My family and my career are indefinitely on hold.

I realize that a road is going to be built and that in many ways that will enhance our area in the future. However, I ask that you please be mindful of the lives you are affecting at the present time. Given the significant negative impact of alternative 4 (4, 4A, 4B, 4C) to both homeowners and business as outlined in the impact studies, I urge you

to eliminate these options as we move forward. These routes unnecessarily destroy homes, properties and lives that could otherwise be avoided. Our community at Ryan's Glen stands firmly behind alternative 11 or a variant of this route in order to minimize damage to Rippon's residences and businesses.

Thank you for your time and consideration.

Sincerely,


Adrienne Doering Curtis and Mark Curtis



US 340 IMPROVEMENT STUDY

Public Workshop and Hearing Monday, June 3, 2013

COMMENT SHEET – Please return on or before Wednesday, July 3, 2013

Contact Information [Please Print]

Name: Richard & Margaret Kiands

Mailing Address (including Zip Code): P.O. Box 32
Rippon WVA 25441

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

Alternatell go in Behind the new house
across Road We Been here 35 yrs so why
should we have to move if not right to us

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JUL 08 2013

ENGINEERING DIVISION
WVDOH



US 340 IMPROVEMENT STUDY

Public Workshop and Hearing Monday, June 3, 2013

COMMENT SHEET – Please return on or before Wednesday, July 3, 2013

Contact Information [Please Print]

Name: Charles W. Albright

Mailing Address (including Zip Code): P.O. Box 42

Rippon WVA 25441

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

Alternate 11 go in behind the new
house across the road we been here 34 yrs
so why should we have to move it not right for us

Project Information and Comment Sheets can be found online at our web page:

<http://go.wv.gov/dotcomment>

Click on "Comment on Engineering Projects", then "Open", and then click on "US 340 Project"



US 340 IMPROVEMENT STUDY

Public Workshop and Hearing Monday, June 3, 2013

COMMENT SHEET – Please return on or before Wednesday, July 3, 2013

Contact Information [Please Print]

Name: Lucy M. ATHEY

Mailing Address (including Zip Code): 1788 Fairway Drive
Fernandina Beach, FL 32034

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

My name is Lucy M. Athey and I own the 9 lots in the Oak Hill Subdivision at Rippon, WV. I have reviewed the various options and feel that option 11 is the best choice for the least impact. My ability to continue to carry the property is very limited. It has always been my intention to sell these lots once the real estate market stabilized. This has happened but I am unable to move because of the cloud of the road. Please eliminate option 4, 4A, 4B, + 4C on the basis that the projected impact of these routes is too severe to continue to consider. I feel my damages are occurring regardless of the final route on a daily basis until such time as 4, 4A, 4B, 4C are eliminated.

Thank you for your consideration.
Lucy M. Athey

June 24, 2013

Mr. Gregory Bailey, PE
Director, Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

RECEIVED
JUL 01 2013
ENGINEERING DIVISION
WV DOH

Dear Mr. Bailey,

Subject: State ProjectU-219-340-0.00(02)

I was impressed by the fact that after hearing the testimony on the above State Project on June 3, 2013 that you or one of the other top officials approached me with a question about the separation of my cattle from their water supply, which is a wet weather pond. I have seen as much as 2-3 acres adjacent to the pond flooded from torrential downpours.

On another note, the loss of productive agriculture land over a ten year period would result in the loss of income of a considerable amount. This land cannot be replaced, if it could be, the cost would be astronomical. Houses can be moved or replaced, people can relocate but the loss of income producing land is gone forever.

On the personal side, I am 85 years of age, a Korean War vet, and I have resided on the farm for 82 years. My son and I farm 300 acres, which is the major source of income for our two families.

Alternate 11 would cause loss of agriculture land in excess of land needed for the project. I urge you to consider alternate 4A and the southern segment of alternate 4C as the solution to the completion of the project.

Yours Truly,

Franklin W. Adams

Franklin W. Adams
PO Box 99
380 Myerstown Rd
Rippon WV 25441-0099

RECEIVED
JUL 01 2013
WVDOH
STATE HIGHWAY ENGINEER



Jefferson County, West Virginia

Departments of Planning and Zoning

116 East Washington Street, 2nd Floor

Charles Town, WV 25414

RECEIVED

JUL 05 2013

ENGINEERING DIVISION

WV DOH

www.jeffersoncountywv.org/government/departments/planning-and-zoning-department.html

Email: planningdepartment@jeffersoncountywv.org

Phone: (304) 728-3228

Email: zoning@jeffersoncountywv.org

Fax: (304) 728-8126

July 2, 2013

Mr. Gregory Bailey, PE
Director, Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, WV 25305-0430

Mr. Bailey,

Enclosed is a letter addressed to the Jefferson County Planning Department in support of State Project: U319-340-0.00 02/Federal Project: NH-0340(030) US 340 Improvement Study. We are forwarding the letter to you per the request of the Jefferson County Development Authority.

Thank you for the opportunity to submit comments on the proposed US 340 South widening project.

Sincerely,

Alexandra Beaulieu, Planning Clerk
Jefferson County Departments of Planning and Zoning



Jefferson County
Development Authority

Board of Directors
2012-21013

Mark Dyck
President

Howard Mills
Vice President

Eric J. Lewis
Secretary/Treasurer

Mike Chapman
Joe Cosentini
Helen Dettmer
Annette Gavin
Conrad C. Hammann
Joshua Householder
Debra Lee Hovatter
Eric J. Lewis
P. David Mills
Walter Pellish
James A. Tolbert
Karan Townsend

John Reisenweber
Executive Director

PO BOX 237
CHARLES TOWN
WV 25414

304.728.3255
304.725.3133 fax

www.JCDA.net

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APR 05 2013

JEFFERSON COUNTY
PLANNING, ZONING AND ENGINEERING

April 2, 2013

Ms. Jennifer Brockman
Jefferson County Planning and Zoning Department
PO Box 250
Charles Town, WV 25414

Dear Ms. Brockman,

On behalf of the Jefferson County Development Authority (JCDA), I am writing to express our strong support for the planned expansion of Rt. 340 South from two lanes to four lanes from Charles Town to the Virginia line. We believe that this road project is a priority for Jefferson County and respectfully request that the expansion be included as an integral part of the Envision Jefferson 2035 Comprehensive Plan update. This road project is not only extremely important for the economy here in Jefferson County but also for the safety and quality of life for our citizens and those visiting the county.

As you know, the Rt. 340 expansion has been included in the WV Department of Highways (WVDOH) 6-year transportation plan which illustrates that it is a priority for the State of West Virginia and their limited road construction funding. In addition, this project has been unfortunately stalled due to housing subdivisions that were approved in the preferred road expansion alignment which has resulted in additional costs and delays as WVDOH now must engineer an alternative alignment. Because of this situation, it is imperative that this project be given the highest priority as you update the Jefferson County Comprehensive plan to ensure that it gets back on track without any further delays.

Finally, the JCDA also requests that the Envision Jefferson 2035 update also include provisions for utility easements along the preferred route as well as any additional amenities such as a bike path similar to the recently completed path along the new Route 9. It will be much easier and less costly to provide the necessary infrastructure along the road if utility easements are considered as part your planning process and factored into the easement acquisition phase of the project.

In closing, I want to thank you and your staff for all of your hard work on the Envision Jefferson 2035 Comprehensive Plan update. If I can be of any further assistance, please do not hesitate to contact me.

Sincerely,

John Reisenweber
Executive Director

2013



Jefferson County, West Virginia

Departments of Planning and Zoning

116 East Washington Street, 2nd Floor

Charles Town, WV 25414

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JUL 05 2013

ENGINEERING DIVISION
WV DOH

www.jeffersoncountywv.org/government/departments/planning-and-zoning-department.htm

Email: planningdepartment@jeffersoncountywv.org

zoning@jeffersoncountywv.org

Phone: (304) 728-3228

Fax: (304) 728-8126

July 2, 2013

Mr. Gregory Bailey, PE
Director, Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, WV 25305-0430

Mr. Bailey,

Enclosed is a paper copy of the letter submitted through your online comments page on behalf of the Jefferson County Planning Commission on July 2, 2013.

Thank you for the opportunity to submit comments on the proposed State Project: U319-340-0.00 02/Federal Project: NH-0340(030) US 340 Improvement Study.

Sincerely,

Alexandra Beaulieu, Planning Clerk
Jefferson County Departments of Planning and Zoning



Comment

[Transportation](#) > [Highways](#) > [Engineering](#) > [Comment on Projects](#) > [US 340 Project](#) > Thank You for Your Comments

Thank You for Your Comments

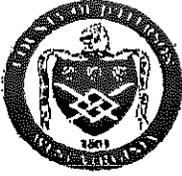
Thank you for your comments. They are important to us and will be made part of the project record.

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JEFFERSON COUNTY, West Virginia

Departments of Planning and Zoning

116 East Washington Street, 2nd Floor

Charles Town, WV 25414

Email: planningdepartment@jeffersoncountywv.org

Phone: (304) 728-3228

Email: zoning@jeffersoncountywv.org

Fax: (304) 728-8126

June 13, 2013

Mr. Gregory Bailey, PE
Director, Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

RE: State Project: U319-340-0.00 02/Federal Project: NH-0340(030)
US 340 Improvement Study

Dear Mr. Bailey:

At the June 11, 2013 Planning Commission meeting, the Jefferson County Planning Commission discussed the new alternative alignments for the proposed widening of US 340 South to the Virginia line and would like the following comments entered into the record for the Public Hearing held June 3, 2013.

The Jefferson County Commission has stated that widening this section of US 340 to four lanes is a high priority for business development within the County. The Planning Commission requests that the decisions related to the final Preferred Alignment and Record of Decision be made expeditiously to allow future development decisions and current property owners within the Preferred Alignment to have some certainty as to the future. Further, it is critical that the design of this four-lane section of road occur in a manner that ensures that it is a free-flowing limited access highway with limited potential for future traffic signals. To this end, the Planning Commission would like the following thoughts considered as the design is undertaken:

- Please note that if a four-lane road is located in this area, it is likely that the adjoining land uses will change to a more intense use (such as commercial or industrial uses) and the DOH should take more intense land uses into consideration when designing the road;
- In order to provide for a free-flowing corridor that allows traffic to move quickly, the design needs to take into consideration access management principles and be designed in a way to minimize the need for future traffic signals;
- Where possible, provide for a parallel frontage road to serve the existing driveways that front on the road currently, to minimize the number of direct accesses to a four-lane road;

1062 4

- Design and construct a separated bike path along this route to continue the path currently along Route 9 for the use of Jefferson County citizens and the many tourists that visit the County via bicycle (recommend a minimum of 12 feet from the edge of pavement and a paved bike path is a minimum of 10 feet);
- Provide landscaping along the corridor in a way that complements the history and culture of this area of the County; and
- Design the road in a manner that is sensitive to the significant historic features that are found in this area of the County.

On behalf of the nine members of the Jefferson County Planning Commission, these comments are being submitted as part of the Public Comment being solicited by the West Virginia Division of Highways.

Sincerely,



Paul G. Taylor, President
Jefferson County Planning Commission

CC: Jefferson County Commission

4
282

Ripon Lodge Farm
2547 Berryville Pike, PO Box 130
Rippon, WV 25441



June 24, 2013

Mr. Gregory Bailey, PE
Director, Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

Re: US 340 IMPROVEMENTS
Federal Project NH-0340(030)E
US 340-4 Lane Project
State Project U219-340-0.00(0.02)
Jefferson County
Virginia State line to Charles Town Bypass

Dear Mr. Bailey:

My wife and I live at Ripon Lodge Farm on the West side of the existing Route #340. All 200 acres of our farm is on the National Register of Historic Places. Our son owns forty acres attached to us on the south side, across Withers-Larue Road. We have a large investment in preserving the historic buildings on the farm, and the fourth generation is now pitching in to help maintain the property. We have been granted a Conditional Use Permit from Jefferson County to build a farm brewery and a pub to serve the public with our beer and other products produced on the farm. We have been growing special barley crops and hops for about six years, and have a malting facility completed, which is capable of making 500# batches every day or so. We are well on our way to making the farm completely self-sustaining by controlling what we grow and how we market the produce.

The purpose of all this work is to preserve Ripon Lodge Farm as an example of rural life and farming in the history of our County. We believe what we are doing is good for our family, but it will also be an asset for the community.

We are obviously concerned about the effect of the proposed new highway around Rippon. The threat of harm to our home and enterprise has been going on for nearly forty years, now. My son says his whole life! For the last several years our local community has adjusted to what seemed to be a consensus following the last round of public hearings. Route # 4 made the most sense to build. The State would need to do some more environmental studies and we would have to wait for funding.

10825

Now we are considering additional routes because new residents are complaining about decisions that were made before they moved here. The truth is, the homes in Ryan's Glen should never have been built, and, now, the new owners are in a tough spot. No one wants them to be hurt, but the County needs the road to be built.

Once committed, sticking to "the plan" is usually a good policy. The suggestion of new routes to the west of the existing highway is totally impractical. The cost would be immense, and the path of the road would completely destroy my neighbor's family homes on land that once was part of Ripon Lodge Farm. They have lived here their whole lives. They deserve to be left alone.

This route would also destroy any atmosphere of rural living on our farm and would make our plans inoperable, due to the disruption and noise that would surround most of our property. The western routes would also go right through the center of my son's forty acres. The proposed bridges, raised over the landscape, would finish the devastation. We are crying out for good planning, and sensitivity to the beauty of our area.

We are also concerned about protecting historic properties on the eastern routes. Certainly, Alternative 11, the furthest east, would not be a good route. It destroys too much valuable farmland and affects historic homes unnecessarily. Let's keep the road as far away as possible from the Wayside farm. But, let's not chop up the Adams Brother's productive fields, either.

In conclusion, any of the number four alternatives would be acceptable, but number 4A looks like the best route to us. It was quite clear at the public meeting last week that there was very little support (if any) for the western routes.

Thank You for listening to all of us.

Respectfully yours,



Mr. and Mrs. A.M.S. Morgan III

(Rusty & Cricket Morgan)

5
2062



US 340 IMPROVEMENT STUDY

Public Workshop and Hearing Monday, June 3, 2013

RECEIVED

JUL 05 2013

ENGINEERING DIVISION
WV DOH

COMMENT SHEET – Please return on or before Wednesday, July 3, 2013

Contact Information [Please Print]

Name: Richard & Valli Farmer

Mailing Address (including Zip Code): PO Box 72 40 Scooter Lane
Rippon WV 25441

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

I like Alternate II
I have lived here for 38 years
and I don't want to lose my home.

Project Information and Comment Sheets can be found online at our web page:

<http://go.wv.gov/dotcomment>

Click on "Comment on Engineering Projects", then "Open", and then click on "US 340 Project"

6



US 340 IMPROVEMENT STUDY 03/2013

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ENGINEERING DIVISION
WVDOH

Public Workshop and Hearing Monday, June 3, 2013

COMMENT SHEET – Please return on or before Wednesday, July 3, 2013

Contact Information [Please Print]

Name: Ruth Parker

Mailing Address (including Zip Code): 60 Strathmore Farm Lane
Charles Town, WV 25414

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

Attached is my main comment, but option 4A is the one I prefer - the "A" options I feel are the most practical & 4A is the farthest from my house! I just purchased it & am in the process of fixing it up. It is a pre-civil war house and is part of the historical history of the county. I hate to see any part of history destroyed. Anything that could be done to preserve the house would be greatly appreciated! The house faces Strathmore Farm Lane, so the back of the house "faces" 340. I understand the reasoning for the expansion & the decisions that must be made. Please consider preserving a bit of history. Please keep us informed of the progress! Thank you!

Ruth Parker

Project Information and Comment Sheets can be found online at our web page:

<http://go.wv.gov/dotcomment>

Click on "Comment on Engineering Project" then "Open" and then click on "US 340 Project"

1 of 3

7

Re: Comment on 340 hwy repair.

To whom it may concern,

My name is Ruth Parker and I own and reside at 60 Straithmore Farm Lane, Charles Town, WV 25414. I want to say that the current 4 series proposals seem to be the best options. Option 10 looks to be way too expensive and complicated, let alone adding more time and money to an already lengthy endeavor. Besides, I cannot imagine dealing with the railroad – for two crossings!

I just purchased the property and knew that the road was going to be close depending on which option was chosen. Of course I would prefer not to have the house taken. The house is an old Federal style brick home built around 1830 (according to county records). It is a recognized structure in the Bullskin Run Historic district and depending on which source, it is referred to as the Straithmore Tenant house or the Straithmore Overseers house. A member of the local historical commission (John Allen, the architectural historian) came to the house and said that it has many of the original features, some not usually found in as good shape as in this place. It has an unusual false chimney and the interior has the original doors, banister and railing. The property is apparently eligible for National Historic Registry – something I hope to pursue in the near future.

My other concern in the wetlands behind the house. I was told that this can be dealt with, but I still have concerns. It is part of the Bullskin Run watershed. With the past history of pollutants in this creek, I would think that preservation of undisturbed portions of this watershed would be crucial to decreasing contamination and restoration of the watershed.

I went to the meeting June 3 at Page Jackson school. Very informative! I liked being able to talk to the planners and engineers. I felt that the information was good, although I really needed to see more detailed maps – which I did get to see when asked. Turns out the house is so close on several of the proposals, that at this moment it is still in the air as to whether the house gets taken or not. I was told that it may be possible to put up a berm, wall, or other form of separation from the highway - I am fine with that. If a slight adjustment can be made so that the house can remain, it would be greatly appreciated! I still will hate to see the stream area taken – old deed records say there is an community well there and I would like to find it if possible.

Thank you for your consideration and thanks again for the informative meeting.

Sincerely,

Ruth Parker



2 of 3

from option 4A

60 Straithmore Farm Lane



Ruth Parker
60 Straithmore Farm Lane

3 of 3



US 340 IMPROVEMENT STUDY

Public Workshop and Hearing Monday, June 3, 2013

COMMENT SHEET – Please return on or before Wednesday, July 3, 2013

Contact Information [Please Print]

Name: Theresa E. Shirley

Mailing Address (including Zip Code): 4637 Middleway Pike
Kearneysville W.Va. 25430

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Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team: To Whom it may Concern

In my opinion, the WVDOH and The Jefferson Co. Planning Commission is responsible for undue hardship and heartache to residents new and old, by not committing in writing to the Alternates Rts. of 4a,b,c; many years ago as believed by residents who fought this battle before. The Planning Commission allowed housing developments to be built knowing full well they were in the path of the chosen 4 lane highway route; also the developers were aware of this. Its a disgrace that people were misled like this. If there is no money for the project, then scrap it! If the DOH would pay the homeowners in these developments enough to payoff the mortgage on their homes it still would not come close to the costs of choosing Alternate Rt 10a,b because of crossing of railways several times. Also Alternate 4 is straiter and follows the old Rt 340 closely. Alternate Rt 11 would destroy a farm which we have to few of now days. This whole area of the eastern panhandle is an historic site because of the Civil War. Streams, wetland and farms are important to all of us. Wildlife has no place to call their own as it is. It's a shame to waste taxpayer dollars for study after study on projects that has no funding anyway. I believe we would be better served to somehow build a direct 4 lane route bypassing Harpers Ferry into Md. onto Rt 340. This is a major backup for all commuters to Fredrick-Rockville-Baltimore. Please stick to Alternate Routes 4abc. Stop wasting money on projects that are not funded. Fed Up with waste and lies.

Project Information and Comment Sheets can be found online at our web page:

<http://go.wv.gov/dotcomment>

Click on "Comment on Engineering Projects", then "Open", and then click on "US 340 Project"

I did attend the last meeting as a concerned taxpayer and voter even though I live on a different highway. It could be my home next

8



US 340 IMPROVEMENT STUDY

Public Workshop and Hearing Monday, June 3, 2013

COMMENT SHEET – Please return on or before Wednesday, July 3, 2013

Contact Information [Please Print]

Name: Staci Clark

Mailing Address (including Zip Code): 238 Ira Way
Kearneysville, WV 25430

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Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

As a tax payer, Alternates 10A & 10B
make no sense whatsoever. This is not
the part of 340 w/ the traffic congestion.
I say abandon the whole project.
There is no \$ to fund it anyway.

Project Information and Comment Sheets can be found online at our web page:

<http://go.wv.gov/dotcomment>

Click on "Comment on Engineering Projects", then "Open", and then click on "US 340 Project"



US 340 IMPROVEMENT STUDY

Public Workshop and Hearing Monday, June 3, 2013

COMMENT SHEET – Please return on or before Wednesday, July 3, 2013

Contact Information [Please Print]

Name: Louis B. ATHEY

Mailing Address (including Zip Code): 1788 FAIRWAY DRIVE
FERNANDINA BEACH, FL 32034

REC'D JUN 11 2013
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Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

I attended the Public Forum on "new 340" on Monday evening June 3, 2013. My belief is that OPTION 11 is the far superior option. The stated purpose of the meeting was to receive public comment on the project. Unfortunately, a good bit of the evening was devoted to attacking me, and others personally. I request that any future public meeting be monitored by the state and that such attacks be prohibited. It was especially frustrating since I had no inclination or opportunity for rebuttal. I don't think this was the proper forum for this type of dialogue. I fully understand the long process of getting to a final selection route, but I do encourage you to try to eliminate 4, 4A, 4B, and 4C at this time. Now that you are fully aware of the impact of any of these 4 routes, the projected properties to be acquired is disproportionately higher than other routes. I also believe the projected take under

4, 4A, 4B, and 4C is likely underestimated. Submitted with respect for the job to be done, L.B. Athey

Project Information and Comment Sheets can be found online at our web page:

<http://go.wv.gov/dotcomment>

Click on "Comment on Engineering Projects", then "Open", and then click on "US 340 Project"



US 340 IMPROVEMENT STUDY

Public Workshop and Hearing Monday, June 3, 2013

COMMENT SHEET – Please return on or before Wednesday, July 3, 2013

Contact Information [Please Print]

Name: Frank Roach

Mailing Address (including Zip Code): 142 Windy Hill Lane
Kearneysville, WV 25430

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WVDOH

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

As a taxpayer, I am outraged @ the new proposals for Rt 340 improvements. In particular, Alternate routes 10A & 10B are ridiculous. Not only are they both more expensive but look very dangerous as well.

I feel for the residents of the Ryan's Glen subdivision. This is something that never should have made it thru the planning commission of Jefferson County and now the Ryan's Glen residents are mostly likely going to pay for their incompetence.

Project Information and Comment Sheets can be found online at our web page:

<http://go.wv.gov/dotcomment>

Click on "Comment on Engineering Projects", then "Open", and then click on "US 340 Project"



US 340 IMPROVEMENT STUDY

Public Workshop and Hearing Monday, June 3, 2013

COMMENT SHEET – Please return on or before Wednesday, July 3, 2013

Contact Information [Please Print]

Name: Elizabeth Allen Pierce

Mailing Address (including Zip Code): P.O. Box 153
Rippon, WV 25441

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WVDOH

Your opinions about this project are important to us. Please use the space below to include your comments or questions. If you need additional space, please take another sheet or you may include your own letter.

Your comments or questions for the project team:

I find it appalling that our planning commission approved a development right in the path of the proposed road and now that DOT is even considering changing the roadway. ~~because~~ I would think every tax payer in the county would be outraged @ the added expenses we fought the proposed routes from the earlier meeting and were given enough assurance from DOT that ~~it~~ ^{Alter 10A} it was the preferred route. Enough assurance in fact, that the previous owner of the property that is now the development causing the concern, ^(Ryans place) sold the property after installing expensive horse fencing & sheds because he was so sure the road was going thru there. I would imagine whoever bought the property from the farm owner got a very good deal. The property that will be divided by Alter 10A & 10B have been in my family for 100 years

Jane Allen Rutherford
3578 Bakerton Rd
Harpers Ferry, WV 25425

June 18, 2013

Mr. Gregory Bailey, PE
Director, Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430



Re: US 340 Improvement Study Meeting Held on June 3, 2013

Dear Mr. Bailey

I own 223 acres in the Kabletown District, adjacent to Ripon Lodge. My Grandmother, Florence Long Allen, owned Ripon Lodge in Rippon, WV until her death in 1968. At that time Mr. Bud Morgan purchased much of the acreage and home at Ripon Lodge. This was due to my Uncle, William Allen, not being able to pay the large amount of inheritance tax due and then forced to sell. Each of his children was able to retain +/- 10 acres of land which they built their homes on. My Father, Robert Allen, also inherited land that was also a part of Ripon Lodge, adjacent to Rusty Morgan's home, which has no buildings on it. These acres are known as 53.07 acres-North-Ripon Lodge, Allen; 120.15 acres Ripon Lodge-Allen; and 50 acres-South-Ripon Lodge-Allen. Copies of the tax receipts are enclosed. It is my understanding that Rusty Morgan, son of Mr. Bud Morgan, was able to have Ripon Lodge added to the National Register of Historic Places. It is also my understanding that my cousins who built their home on Allen Lane are not eligible to have their land added under Ripon Lodge to the National Register of Historic Places due to having within the past several years improved the land with their homes. They would not have built their homes there had they thought US 340 Improvement was going through their land. My land does not have a home or improvements on it so I would think it could be included under Ripon Lodge as historic. If that is the case then Alternate 10A and 10B should be eliminated. Indications from previous meetings were that Alternate 4 was the Preferred Alternative.

If some of the main determining factors as to which alternate should be chosen include safety and cost to the people of WV, Alternate 10A and 10B should be eliminated. The several sharp turns would endanger drivers and their passengers not to mention the additional cost involved over Alternate 4. I don't want to see anyone lose their home but the folks as Ryan's Glen should have been told that it was a good chance that improvements to Rt. 340 could be going through their development. Disclosure should have been made prior to them purchasing the land and they could make an informed decision. Michael Brust, of Ryan's Glen, attended the June 3 meeting and this information was not shared with him. He advised he didn't think the Allen Lane homes (Alternate 10A and 10B) should be chosen. He shared that he is extremely upside down in the loan for his home. I didn't ask him but it appear that he built his home at peak in Jefferson County and then the economy took a huge hit. It would be beneficial

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1045

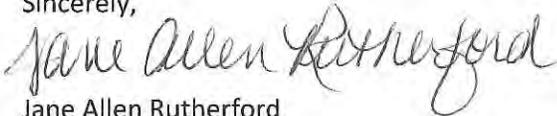
6/18/13

to him and probably most of the homeowners in Ryan's Glen to buy them at out at what they owe on them if they are upside down. Lou Athey and Dan Ryan should be held accountable along with the Planning Commission for what they've done to the innocent people of Ryan's Glen. If Athey, Ryan and the Planning Commission are not held accountable and don't right the wrong they've committed financially to Ryan's Glen folks then looking at the money that would be saved by not choosing Alternate 10A and 10B should be reviewed carefully. Millions of dollars could be saved with the choice of another alternate.

I hope that a decision can be made quickly. People deserve to be able to get on with their lives.

Thank you for providing me the opportunity to share my opinion with you and the DOH.

Sincerely,



Jane Allen Rutherford

Enclosures

Jane Allen Rutherford
Allen's Wonderland
3578 Bakerton Road
Harpers Ferry, WV 25425

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2065

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JUN 21 2013

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DESCRIPTION	WV DUN	COUNTY	TAX YEAR	TICKET NO.
53.07 AC. NORTH-RIPFON LODGE, ALLEN		JEFFERSON	2012	19046
		DISTRICT		ACCDUNT NO.
		06-KABLETOWN DIST		00016022
		RATE	CLASS	ASSESSMENT
				ASSESSMENT LESS EXEMPTION
				TAX DUE (1/2 YEAR)

MAP/PARCEL: 12 0017 0004 0000

RUTHERFORD JANE A ET AL
3578 BAKERTON RD
HARPERS FERRY, WV 25425

ROBERT E SHIRLEY 304-728-3220
SHERIFF & TREASURER

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FULL YEAR PAYMENT REAL PROPERTY

PLEASE EXAMINE VOID RECEIPT CAREFULLY AND

13
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TAX RECEIPT

DESCRIPTION	COUNTY	TAX YEAR	TICKET NO.
50 AC SOUTH-RIPPON LODGE--ALLEN	JEFFERSON	2012	19047
	DISTRICT		ACCOUNT NO.
	06-KABLETOWN DIST		00016023
	RATE	ASSESSMENT	ASSESSMENT LESS EXEMPTION
			TAX DUE (% YEAR)

MAP/PARCEL: 12 0017 0005 0000

RUTHERFORD JANE A ET AL
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DESCRIPTION		COUNTY		TAX YEAR	TICKET NO.
120.15 AC RIPPON LODGE--ALLEN		JEFFERSON		2012	19045
		DISTRICT			ACCOUNT NO.
		06-KABLETOWN DIST			00015019
RATE	CLASS	ASSESSMENT	ASSESSMENT LESS EXEMPTION	TAX DUE (1/2 YEAR)	

MAP/PARCEL: 12 0017 0001 0000

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12
 19045

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SECTION X

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Appendix A

**FARMLAND CONVERSION IMPACT RATING
FOR CORRIDOR TYPE PROJECTS**

PART I (To be completed by Federal Agency)	3. Date of Land Evaluation Request	4. Sheet 1 of _____
---	------------------------------------	---------------------

1. Name of Project	5. Federal Agency Involved
--------------------	----------------------------

2. Type of Project	6. County and State
--------------------	---------------------

PART II (To be completed by NRCS)	1. Date Request Received by NRCS	2. Person Completing Form
--	----------------------------------	---------------------------

3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES <input type="checkbox"/> NO <input type="checkbox"/>	4. Acres Irrigated Average Farm Size
--	--

5. Major Crop(s)	6. Farmable Land in Government Jurisdiction Acres: _____ %	7. Amount of Farmland As Defined in FPPA Acres: _____ %
------------------	---	--

8. Name Of Land Evaluation System Used	9. Name of Local Site Assessment System	10. Date Land Evaluation Returned by NRCS
--	---	---

PART III (To be completed by Federal Agency)	Alternative Corridor For Segment			
	Corridor A	Corridor B	Corridor C	Corridor D

A. Total Acres To Be Converted Directly				
---	--	--	--	--

B. Total Acres To Be Converted Indirectly, Or To Receive Services				
---	--	--	--	--

C. Total Acres In Corridor				
----------------------------	--	--	--	--

PART IV (To be completed by NRCS) Land Evaluation Information				
--	--	--	--	--

A. Total Acres Prime And Unique Farmland				
--	--	--	--	--

B. Total Acres Statewide And Local Important Farmland				
---	--	--	--	--

C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted				
---	--	--	--	--

D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value				
--	--	--	--	--

PART V (To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)				
--	--	--	--	--

PART VI (To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))	Maximum Points			
--	----------------	--	--	--

1. Area in Nonurban Use	15			
-------------------------	----	--	--	--

2. Perimeter in Nonurban Use	10			
------------------------------	----	--	--	--

3. Percent Of Corridor Being Farmed	20			
-------------------------------------	----	--	--	--

4. Protection Provided By State And Local Government	20			
--	----	--	--	--

5. Size of Present Farm Unit Compared To Average	10			
--	----	--	--	--

6. Creation Of Nonfarmable Farmland	25			
-------------------------------------	----	--	--	--

7. Availability Of Farm Support Services	5			
--	---	--	--	--

8. On-Farm Investments	20			
------------------------	----	--	--	--

9. Effects Of Conversion On Farm Support Services	25			
---	----	--	--	--

10. Compatibility With Existing Agricultural Use	10			
--	----	--	--	--

TOTAL CORRIDOR ASSESSMENT POINTS	160			
----------------------------------	-----	--	--	--

PART VII (To be completed by Federal Agency)				
---	--	--	--	--

Relative Value Of Farmland (From Part V)	100			
--	-----	--	--	--

Total Corridor Assessment (From Part VI above or a local site assessment)	160			
---	-----	--	--	--

TOTAL POINTS (Total of above 2 lines)	260			
--	------------	--	--	--

1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:	4. Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input type="checkbox"/>
-----------------------	---	-----------------------	--

5. Reason For Selection:

Signature of Person Completing this Part:	DATE
---	------

NOTE: Complete a form for each segment with more than one Alternate Corridor

CORRIDOR - TYPE SITE ASSESSMENT CRITERIA

The following criteria are to be used for projects that have a linear or corridor - type site configuration connecting two distant points, and crossing several different tracts of land. These include utility lines, highways, railroads, stream improvements, and flood control systems. Federal agencies are to assess the suitability of each corridor - type site or design alternative for protection as farmland along with the land evaluation information.

(1) How much land is in nonurban use within a radius of 1.0 mile from where the project is intended?

More than 90 percent - 15 points
90 to 20 percent - 14 to 1 point(s)
Less than 20 percent - 0 points

(2) How much of the perimeter of the site borders on land in nonurban use?

More than 90 percent - 10 points
90 to 20 percent - 9 to 1 point(s)
Less than 20 percent - 0 points

(3) How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last 10 years?

More than 90 percent - 20 points
90 to 20 percent - 19 to 1 point(s)
Less than 20 percent - 0 points

(4) Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?

Site is protected - 20 points
Site is not protected - 0 points

(5) Is the farm unit(s) containing the site (before the project) as large as the average - size farming unit in the County ?

(Average farm sizes in each county are available from the NRCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage or Farm Units in Operation with \$1,000 or more in sales.)
As large or larger - 10 points
Below average - deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more below average - 9 to 0 points

(6) If the site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?

Acreage equal to more than 25 percent of acres directly converted by the project - 25 points
Acreage equal to between 25 and 5 percent of the acres directly converted by the project - 1 to 24 point(s)
Acreage equal to less than 5 percent of the acres directly converted by the project - 0 points

(7) Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?

All required services are available - 5 points
Some required services are available - 4 to 1 point(s)
No required services are available - 0 points

(8) Does the site have substantial and well-maintained on-farm investments such as barns, other storage building, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?

High amount of on-farm investment - 20 points
Moderate amount of on-farm investment - 19 to 1 point(s)
No on-farm investment - 0 points

(9) Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?

Substantial reduction in demand for support services if the site is converted - 25 points
Some reduction in demand for support services if the site is converted - 1 to 24 point(s)
No significant reduction in demand for support services if the site is converted - 0 points

(10) Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of surrounding farmland to nonagricultural use?

Proposed project is incompatible to existing agricultural use of surrounding farmland - 10 points
Proposed project is tolerable to existing agricultural use of surrounding farmland - 9 to 1 point(s)
Proposed project is fully compatible with existing agricultural use of surrounding farmland - 0 points

Appendix B



June 25, 2014

RECEIVED
JUN 27 2014
ENGINEERING
VISION

The Culture Center
1900 Kanawha Blvd., E.
Charleston, WV 25305-0300

Randall Reid-Smith, Commissioner

Phone 304.558.0220 • www.wvculture.org
Fax 304.558.2779 • TDD 304.558.3562

EEO/AA Employer

Mr. Ben Hark
Environmental Section Head
WVDOH
1900 Kanawha Blvd., East
Building 5, Room A-848
Charleston, WV 25305

RE: US 340
State Project: U219-340-0.00; Federal Project: NH-340 (024)
FR#: 96-814-JF-22

Dear Mr. Hark:

We have reviewed the information submitted for the above referenced project to determine potential effects to cultural resources. Unfortunately, we are concerned that WV DOH continues to conduct project reviews on behalf of the Federal Highway Administration without complying with Section 106 regulations. We request that a qualified staff archaeologist review the report prior to its submission to our office.

The report was prepared by staff at Coastal Carolina Research as sub-consultants to HW Lochnar. Your letter indicates that the consultant is "an extension of our WV DOH Environmental Staff." As stated in previous correspondence, the Section 106 regulations state under 36 CFR Part 800.2(a)(1) that "Section 112(a)(1)(A) of the act requires each Federal agency responsible for the protection of historic resources, including archaeological resources, to ensure that all actions taken by employees or contractors of the agency shall meet professional standards under regulations developed by the Secretary." The Section 106 regulations further state under 36 CFR Part 800.2(a)(3), "If a document or study is prepared by a non-Federal party, the agency official is responsible for ensuring that its content meets applicable standards and guidelines." It is not evident that a qualified DOH archaeologist reviewed the content of this report to ensure that work conducted by outside consultants meets federal and state standards and guidelines. We will be happy to provide our comments once that has occurred.

We appreciate the opportunity to be of service. *If you have questions regarding our comments or the Section 106 process, please contact Lora A Lamarre-DeMott, Senior Archaeologist, at (304) 558-0240.*

Sincerely,

Susan M. Pierce
Deputy State Historic Preservation Officer

SMP/LLD



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

Earl Ray Tomblin
Governor

Paul A. Mattox, Jr., P. E.
Secretary of Transportation/
Commissioner of Highways

May 30, 2014

Ms. Susan Pierce, Deputy State
Historic Preservation Officer
Division of Culture and History
1900 Kanawha Boulevard, East
Charleston, West Virginia 25305

Dear Ms. Pierce:

State Project U219-340-0.00
Federal Project NH-340 (024)
US 340 Improvement Study
Archaeology Resources
Sinkhole Investigations Related to the Madison Cave Isopod
Jefferson County

This submission for the Jefferson County US 340 project addresses Archeological Resources for two sinkholes. Our May 28, 2014 Historic Resources submission to your office, is for the same two sink holes. Attached are two of your letters from 1999 that addresses Archeology.

The West Virginia Division of Highways (WVDOH) is in the process of updating the environmental studies for the US 340 four lane project in Jefferson County.

Part of the initial studies involves updating endangered species concerns with respect to the Madison Cave Isopod that occurs in underground aquifers. The first step in this process is to investigate known sink holes to determine if there could be connectivity to a water source.

There are two sink holes on preferred alternative 4 located on historic properties that require access & debris removal.

The attached archeological letter report addresses this work and the effect to Archeological Resources.

The WVDOH has contacted the effected property owners and have been given right of entry to perform the required work.

Costal Carolina Research, who performed this work, is a sub consultant to HW Lochnar, our prime NEPA consultant. These firms are an extension of our WV DOH Environmental Staff.

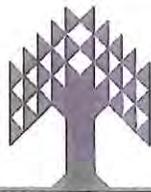
If you have any questions please you may contact me at (304) 558-9670.

Very truly yours,

A handwritten signature in blue ink that reads "Ben L. Hark".

Ben L. Hark
Environmental Section Head
Engineering Division

BH:k
Enclosure
bcc: DDE(SM)



WEST VIRGINIA DIVISION OF
CULTURE AND HISTORY

February 17, 1999

Mr. James Sothen
Division of Highways
Building 5, Room 109
Capitol Complex
Charleston, WV 25305

RE: Route 340 - Archaeological Assessment and
Archaeological Predictive Model
FR: 96-814-JF

Dear Mr. Sothen,

We have reviewed the following documents: "Phase I Cultural Resource Investigation Architectural Survey and Archaeological Assessment, Proposed Improvements to US 340 Jefferson County, West Virginia" and the "Predictive Model Addendum". In accordance with Section 106 of the National Historic Preservation Act, we submit our comments on the above referenced project.

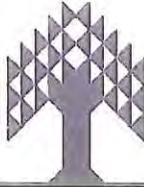
Overall, we find both documents acceptable and the Archaeological Predictive Model to be thorough and comprehensive. We look forward to reviewing the results of the predictive model testing.

We appreciate the opportunity to be of service. If you have any questions, please contact Patrick Trader, Senior Archaeologist.

Sincerely,


Susan M. Pierce
Deputy State Historic Preservation Officer

SMP:PDT



WEST VIRGINIA DIVISION OF
CULTURE AND HISTORY

December 7, 1999

Mr. James Sothen
Division of Highways
Building 5, Room 110
Capitol Complex
Charleston, WV 25305

RECEIVED

DEC 14 1999

ENGINEERING DIVISION
WV DOH

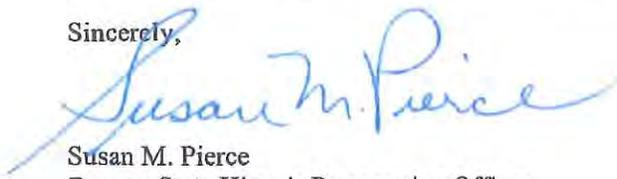
RE: US 340, VA Line to Charles Town
State project U219-340-0300(02)
FR#: 96-814-JF

Dear Mr. Sothen:

As requested, we have reviewed the consultant's conclusions as found in the archaeological sample survey report for the above mentioned project. We concur with the recommendation that medium and high probability areas be survey of the Preferred Alternative. We add the recommendation that those portions of the low probability areas not previously disturbed or located on steep slopes be visually surveyed and shovel tested if necessary. As the discussion of the predictive model asserts, there has been very little organized examination of this portion of Jefferson County, and the US 340 project presents an excellent opportunity to remedy this oversight.

We appreciate the opportunity to be of service. If you have questions regarding our comments or the Section 106 process, please call Joanna Wilson, Senior Archaeologist, at (304) 558-0220 extension 146.

Sincerely,


Susan M. Pierce
Deputy State Historic Preservation Officer

SMP:jlw



Coastal Carolina Research
P.O. BOX 1198, Tarboro, North Carolina 27886
(252) 641-1444 | (252) 641-1235 fax
www.ccrtarboro.com

May 29, 2014

Ben Hark
Environmental Section Head
West Virginia Division of Highways
1900 Kanawha Boulevard, East
State Capitol Complex, Building 5
Charleston, WV 25305

RE: US 340 Improvement Study, Categorical Exclusion for Sinkhole Investigations Related to the Madison Cave Isopod Study, Jefferson County, West Virginia (Federal Project No.: NH-0340(030); WVDOH Project No.: U219-340-0.00 02), Archaeological Survey of Sinkholes #1 and #2.

Dear Mr. Hark:

Introduction

Coastal Carolina Research (CCR), under contract with H. W. Lochner, Inc., is conducting studies for a Categorical Exclusion for the Madison Cave Isopod Study in compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966 and its implementing regulations, 36 CFR Part 800, as amended. The Madison Cave Isopod Study is evaluating the potential impact to the Madison Cave Isopod habitat from alterations of sinkholes related to the roadway improvement project for the existing two-lane section of US 340 in Jefferson County, West Virginia. As part of the studies of the sinkholes, the West Virginia Division of Highways (WVDOH) intends to remove debris, including farm-related debris, from two sinkhole openings (Sinkhole #1 and #2) to expose any open throat or cave entrance that may be present. Sinkhole #1 is within the established boundaries of the two NRHP-eligible properties, Olive Boy Farm (JF-0062-006) and the Kabletown Rural Historic District, and Sinkhole #2 is located within the qualifying landscape of the established boundary of the NRHP-eligible Kabletown Rural Historic District (Attachment A). This letter details the results of an archaeological identification survey conducted around the sinkhole openings. Archaeological monitoring of debris removal will also be conducted as part of the overall investigations at a later date.

Sinkhole Descriptions and Records Search Results

Sinkhole #1. This sinkhole, located approximately 50 feet west of US 340 in an open pasture, is less than 15 feet in diameter and is situated within a shallow swale (Orndorff 2011). It contains farm debris including old fencing materials and may have considerable depth. The sinkhole is located along the western boundary of Olive Boy Farm as well as the Kabletown Rural Historic District, of which Olive Boy Farm is a contributing element.

Sinkhole #2. Sinkhole #2 is approximately 15 feet in diameter is situated in an approximately 100-foot-diameter limestone rock break. The east-facing rock break is grown up with trees but is otherwise within an agricultural field (Orndorff 2011). The sinkhole has been used as a dump for field stone and farm debris including fencing and roofing. It is located within the qualifying landscape of the established boundary of the NRHP-eligible Kabletown Rural Historic District, approximately 600 feet southeast of US 340 (see Attachment A).

Previously Identified Archaeological Sites. No previously recorded archaeological sites are located directly at or immediately adjacent to either of the sinkhole locations; however, one previously recorded archaeological site (46JF139) is located within one mile of Sinkhole #1 (Attachment B), and three previously recorded archaeological sites (46JF301 through 303) are located within one mile of Sinkhole #2 (Attachment C).

CCR is a Wholly Owned Subsidiary of CCRG

 COMMONWEALTH CULTURAL
RESOURCES GROUP, INC.
www.ccrainc.com

Historic Background

Sinkhole #1. Sinkhole #1 is located on land that is part of Olive Boy Farm. The 16 acres upon which Olive Boy Farm sits today was once part of a much larger, 8,007-acre tract granted in 1730 by Lord Fairfax to Mann Page, son-in-law of his agent Robert "King" Carter (O'Dell 1995). By 1815, the present-day Olive Boy Farm property was part of a 246-acre farm, Spring Grove, that was owned and operated by Elizabeth Blackburn with assistance from her four children and various slaves. Elizabeth Blackburn's son inherited the farm by 1840 and was also a slaveholder. He sold the entire farm, with the existing family cemetery and former house (both well south of the current sinkhole), to Thomas Isbell in 1853. Isbell constructed the current Italianate Olive Boy Farm house in 1858 (Kalbian et al. 2000). Sinkhole #1 has been in the agricultural setting associated with Spring Grove, later renamed Olive Boy Farm, since that time.

Sinkhole #2. Sinkhole #2 is situated on land that was once part of the greater Glenwood tract and is currently part of the Kabletown Rural Historic District. The early history of the Glenwood tract begins in 1748 when one of the heirs to the Mann Page tract in northeastern Frederick County sold his inheritance to Ralph Wormeley (Kalbian et al. 2000). The land exchanged hands numerous times throughout the eighteenth and nineteenth centuries, and in 1844 the property was divided into two separate tracts by the then owner, Daniel Heflebower. One tract became known as Wayside, and stayed in the hands of the Heflebower family, while the other tract, which became known as Glenwood, was sold. Farming operations continued on the Glenwood tract throughout the nineteenth century, and in 1845, a high-style, eclectic dwelling was constructed on the farm, with Georgian, Federal, and Greek Revival-style elements. The house still stands roughly 1,100 feet southeast of the sinkhole; however, the land that the sinkhole is on has been separated from the Glenwood tract. The Glenwood property was sold and divided several more times throughout the nineteenth and twentieth centuries (Kalbian et al. 2000). Today, Sinkhole #2 remains in an agricultural setting, with the NRHP-eligible Glenwood property boundary well to the south (see Attachment A).

Archaeological Identification Survey Methods

The archaeological identification survey utilized information gathered by CCR as part of previous background reviews (Brady and Lautzenheiser 1999; Kalbian et al. 2000; Lautzenheiser et al. 1997) and current consultation with the West Virginia Division of Culture and History's State Historic Preservation Office (SHPO) to obtain information on any additional previously recorded sites. For the survey fieldwork, the study areas for the sinkholes were given full consideration through visual inspection. In areas without standing water or obvious heavy saturation, if not obviously disturbed by previous substantial earth moving activities or excessively sloped, shovel tests were placed at the 15-m intervals. Digital photography was used to document the project area.

The study area for Sinkhole #1 was the approximate 50-ft (15-m) perimeter around the sinkhole. For Sinkhole #2, the study area is defined as the approximate 50-ft (15-m) perimeter around the sinkhole as well as a proposed temporary access corridor to bring equipment to the sinkhole. The access corridor would be approximately 600 feet long and no greater than 50 feet in width.

Shovel tests were 50 x 50 cm in diameter and were excavated at least 10 cm into the subsoil or sterile soil. Fill from the tests was screened through 6.35-mm mesh screen. An archaeological site would be defined by the recovery of identifiable features (hearth, refuse pit, articulated brick, etc.) or three or more artifacts in reasonable association on a landform or connected landforms. Any other isolated artifact finds would be considered an isolated find. No sites or isolated finds were identified.

Ben Hark
May 29, 2014
Page 3

Archaeological Identification Survey Results

The archaeological identification survey was conducted on May 21, 2014, by CCR project archaeologist Lindsay Flood, M.A., RPA, and CCR archaeologist Amanda Stamper. Field maps and GPS locational devices for the survey were prepared by CCR GIS Coordinator D. Allen Poyner based on locational data and engineering plans provided by H. W. Lochner, Inc.

No archaeological sites or isolated finds were recorded at either of the two sinkhole locations.

Sinkhole #1. Four shovel tests were excavated around Sinkhole #1. The shovel tests were spaced approximately 15 m apart from each other, with Shovel Test 1 to the northeast of the sinkhole, Shovel Test 2 to the southeast, Shovel Test 3 to the southwest, and Shovel Test 4 to the northwest (Attachment D). The current conditions at the sinkhole location consist of a cow pasture with tall grass. Logs and other wood debris have been placed in and around the sinkhole (Attachments E and F). The soil profiles of the four shovel tests were similar and appeared to represent a brown (7.5YR 4/4) silty clay loam plow zone between 23 and 27 cm thick, above a strong brown (7.5YR 4/6 to 7.5YR 5/8) silty clay subsoil (Attachment G). The subsoil was excavated for a full 10 cm. No artifacts were found in any of the four shovel tests, and no sites were recorded at the location for Sinkhole #1.

Sinkhole #2. Sixteen shovel tests were excavated at the project area for Sinkhole #2, with six shovel tests placed at approximately 15-m intervals around the copse of trees associated with the sinkhole. The other 10 shovel tests were placed at approximately 15-m intervals along the proposed access corridor that runs from the sinkhole, northwest to US 340 (Attachment H). Apart from the copse of trees where the sinkhole is located, the ground cover at the project area for Sinkhole #2 consists of an agricultural field, which at the time of the current survey contained tall grass and had recently been planted with corn (Attachments I through L). The typical shovel test profile represented a dark yellowish brown (10YR 4/6) to a yellowish brown (10YR 5/6) silty clay loam plow zone that averaged 28 cm in thickness on top of a strong brown (7.5YR 5/8) silty clay subsoil (Attachment M). Four of the shovel tests also had an intermediate soil zone (Zone 2) between the plow zone and the subsoil. This zone was between 7 cm and 28 cm thick, and ranged from a dark yellowish brown (10YR 4/4 to 10YR 4/6) clay loam to a yellowish brown (10YR 5/6) silty clay loam (see Attachment M). Zone 2 in these four shovel tests appeared to be a deeper, buried plow zone, and was observed in areas of the field that were low, where colluvial deposition may have taken place. The subsoil below was excavated for a full 10 cm. No artifacts were found in any of the 16 shovel tests, and no sites were recorded at the location for Sinkhole #2.

Recommendations

No previously recorded archaeological sites are located at or adjacent to the Sinkhole #1 or #2 locations. Background review indicates that one of the previously recorded archaeological sites (46JF139) is located in the one-mile search radius of Sinkhole #1, and three previously recorded archaeological sites (46JF301 through 303) are located within one mile of Sinkhole #2 (see Attachments B and C). Background review also indicates limited potential for historic habitation sites at the sinkhole locations.

Visual inspection and intensive survey of the area of potential modifications associated with the sinkhole investigations yielded no evidence of archaeological sites; therefore, no archaeological sites on or eligible for the NRHP will be affected by the proposed investigations. It has also already been previously recommended that the NRHP-eligible properties or districts in the vicinity of the sinkholes will not be adversely affected by the potential

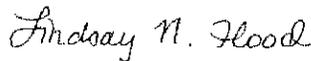
Ben Hark
May 29, 2014
Page 4

modifications associated with the sinkhole investigations (Bamann and Van den Hurk 2014). No further archaeological work is recommended.

Yours truly,



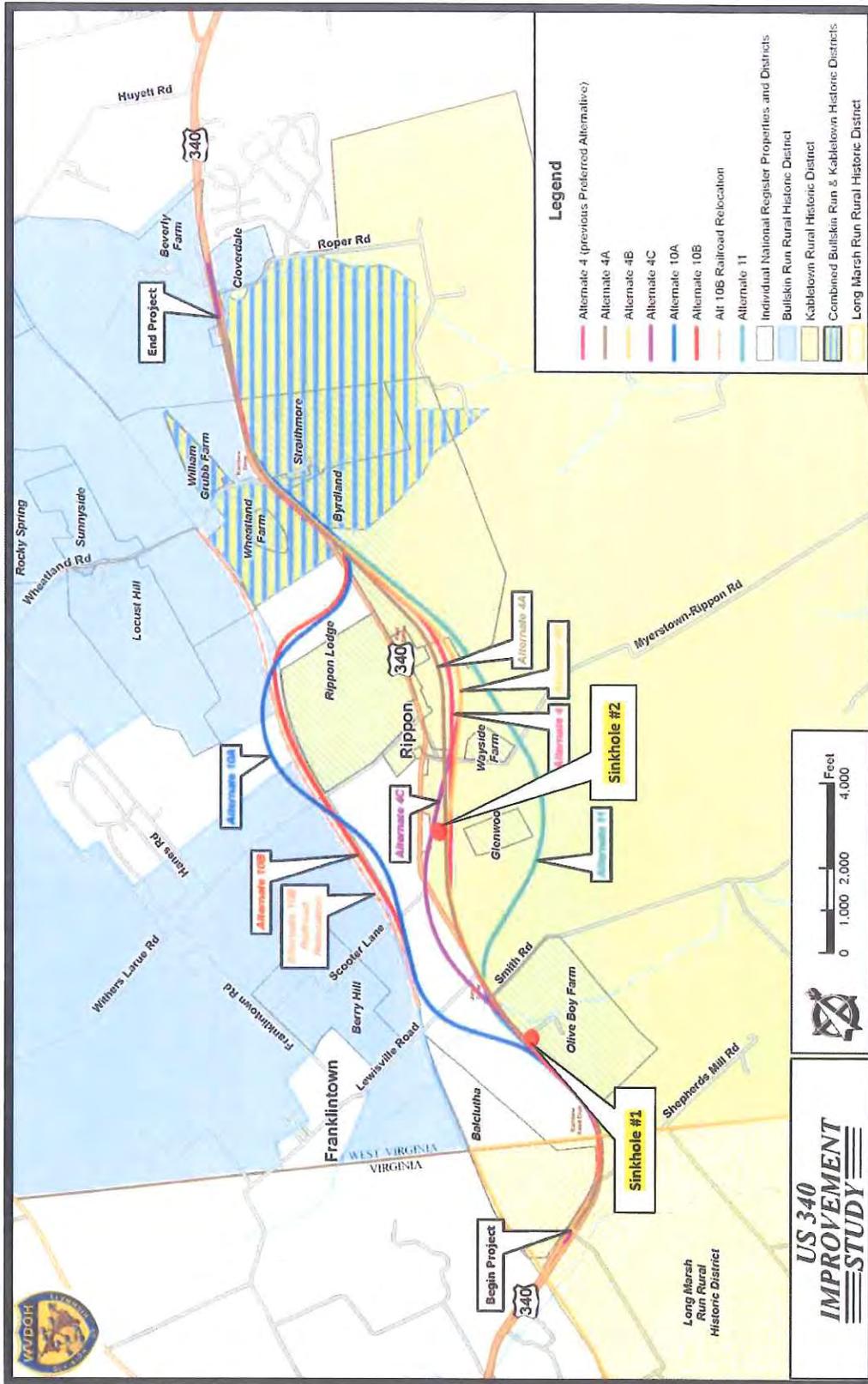
Susan E. Bamann, Ph.D., RPA
Regional Director/Project Manager



Lindsay N. Flood, M.A., RPA
Project Archaeologist

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2011 *Evaluation of Potential Impact to Madison Cave Isopod Habitat from Alteration of Sinkholes by WVDOH Project U219-340, Alternatives 4, 4A, and 4B*. Ms. on file, West Virginia Division of Highways, Charleston.



Attachment A: US 340 Improvement Study, WVDOH Map of Current Alternates with General Locations of Sinkholes Added.

Attachment B: Table Listing Previously recorded Archaeological Sites Within a 1-mile Radius of Sinkhole #L.

Site Number	Site Name	Site Type	Elevation above MSL (ft)	Topographic Setting	Proximity to Project Area	Source of Information
46JF139 (JF-0062-0006)	Blackburn/Isbell-Wortley	Historic, Domestic and Cemetery: 19th-20th century	500	Ridge Toe	0.256 mi	WV Archaeological Site Form (WV SHPO Map Viewer)

Attachment C: Table Listing Previously recorded Archaeological Sites Within a 1-mile Radius of Sinkhole #2.

Site Number	Site Name	Site Type	Elevation above MSL (ft)	Topographic Setting	Proximity to Project Area	Source of Information
46JF301	Ripon Lodge Farm	Historic, Domestic: 19th-20th century	545	Upland Flat	0.762 mi	Brady and Lautzenheiser 1999; WV Archaeological Site Form (WV SHPO Map Viewer)
46JF302	Ripon Lodge Farm	Historic, Domestic: 19th-20th century	540	Upland Flat	0.870 mi	Brady and Lautzenheiser 1999; WV Archaeological Site Form (WV SHPO Map Viewer)
46JF303	Ripon Lodge Farm	Historic, Industrial: 19th-20th century	530	Upland Flat	0.442 mi	Brady and Lautzenheiser 1999; WV Archaeological Site Form (WV SHPO Map Viewer)



Attachment D: Map Showing the Locations of Sinkhole 1 and Excavated Shovel Tests.



Attachment E: View of Sinkhole #1 from Shovel Test 3, Looking Northeast.



Attachment F: View of Sinkhole #1 from Shovel Test 1, Looking West.

Attachment G: Shovel Test Profiles at Sinkhole #1.

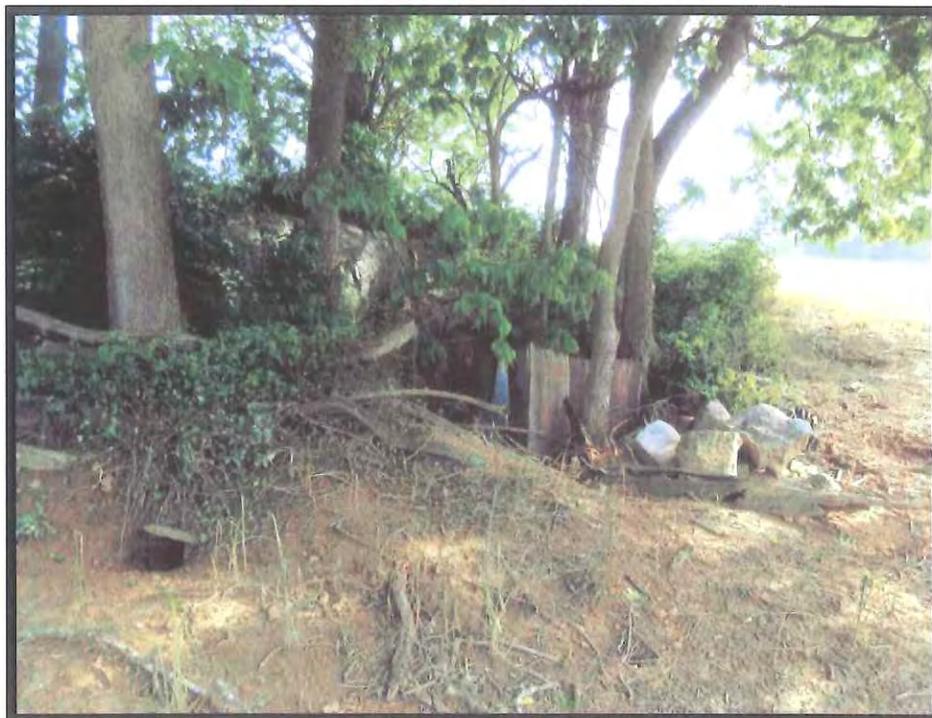
Shovel Test (ST) #	Zone 1 (Depth and Soil Color/Texture)		Zone 2 (Depth and Soil Color/Texture)	
	Depth	Soil Color/Texture	Depth	Soil Color/Texture
ST 1	0-23	7.5YR 4/4 (brown) silty clay loam	23-33	7.5YR 5/8 (strong brown) silty clay
ST 2	0-25	7.5YR 4/4 (brown) silty clay loam	25-36	7.5YR 4/6 (strong brown) silty clay
ST 3	0-27	7.5YR 4/4 (brown) silty clay loam	27-37	7.5YR 5/8 (strong brown) silty clay
ST 4	0-25	7.5YR 4/4 (brown) silty clay loam	25-35	7.5YR 5/8 (strong brown) silty clay



Attachment H: Map Showing the Locations of Sinkhole 2, Proposed Access Corridor, and Excavated Shovel Tests.



Attachment I: View of Sinkhole #2, Looking West-Northwest.



Attachment J: View of Sinkhole #2 from Shovel Test 4, Looking Northeast.



Attachment K: View of Copse of Trees and Sinkhole #2, and Shovel Test 4 Being Excavated, Looking Northeast.



Attachment L: View of Proposed Access Corridor and Copse of Trees in Field that Contains Sinkhole #2, Looking South-Southeast.

Attachment M: Shovel Test Profiles at Sinkhole #2.

Shovel Test (ST) #	Zone 1 (Depth and Soil Color/Texture)		Zone 2 (Depth and Soil Color/Texture)		Zone 3 (Depth and Soil Color/Texture)	
	Depth	Soil Color/Texture	Depth	Soil Color/Texture	Depth	Soil Color/Texture
ST 1	0-26	10YR 4/6 (dark yellowish brown) silty clay loam	26-37	7.5YR 5/8 (strong brown) silty clay		
ST 2	0-23	10YR 4/6 (dark yellowish brown) silty clay loam	23-33	7.5YR 5/8 (strong brown) silty clay		
ST 3	0-25	10YR 4/6 (dark yellowish brown) silty clay loam	25-44	10YR 5/6 (yellowish brown) silty clay loam	44-54	7.5YR 5/8 (strong brown) silty clay
ST 4	0-39	10YR 4/6 (dark yellowish brown) silty clay loam	39-49	7.5YR 5/8 (strong brown) silty clay		
ST 5	0-28	10YR 4/6 (dark yellowish brown) silty clay loam	28-40	7.5YR 5/8 (strong brown) silty clay		
ST 6	0-39	10YR 4/6 (dark yellowish brown) silty clay loam	39-49	7.5YR 5/8 (strong brown) silty clay		
ST 7	0-28	10YR 4/6 (dark yellowish brown) silty clay loam	28-40	7.5YR 5/8 (strong brown) silty clay		
ST 8	0-19	10YR 4/6 (dark yellowish brown) silty clay loam	19-47	10YR 4/6 (dark yellowish brown) clay loam	47-57	7.5YR 5/8 (strong brown) silty clay
ST 9	0-28	10YR 4/6 (dark yellowish brown) silty clay loam	28-39	7.5YR 5/8 (strong brown) silty clay		
ST 10	0-37	10YR 4/6 (dark yellowish brown) silty clay loam	37-47	7.5YR 5/8 (strong brown) silty clay		
ST 11	0-22	10YR 4/6 (dark yellowish brown) silty clay loam	22-50	10YR 4/4 (dark yellowish brown) clay loam	50-60	7.5YR 5/8 (strong brown) silty clay
ST 12	0-28	10YR 4/6 (dark yellowish brown) silty clay loam	28-35	10YR 4/4 (dark yellowish brown) clay loam	35-45	7.5YR 5/8 (strong brown) silty clay
ST 13	0-26	10YR 4/6 (dark yellowish brown) silty clay loam	26-37	7.5YR 5/8 (strong brown) silty clay		
ST 14	0-30	10YR 4/6 (dark yellowish brown) silty clay loam	30-40	7.5YR 5/8 (strong brown) silty clay		

Attachment M: continued

ST 15	0-23	10YR 5/6 (yellowish brown) silty clay loam	23-33	7.5YR 5/8 (strong brown) silty clay mottled with 10YR 6/6 (brownish yellow) silty clay		
ST 16	0-18	7.5YR 5/8 (strong brown) silty clay				



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Randall Reid-Smith, Commissioner

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EEO/AA Employer

July 8, 2014

Mr. Ben Hark
Environmental Section Head
WVDOH
1900 Kanawha Blvd., East
Building 5, Room A-848
Charleston, West Virginia 25305



RE: US 340 Improvement Study Sinkhole Investigation related to the Madison Cave Isopod
State Project: U219-340-0.00; Federal Project: NH-340 (024)
FR#: 96-814-JF-23

Dear Mr. Hark:

We have reviewed the above mentioned project to determine its effects to cultural resources. As required by Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments.

According to submitted information, the West Virginia Department of Highways proposes to remove debris, including farm related debris, from two sinkhole openings to expose any throat or cave entrances that may be present. The project is related to the Madison Cave Isopod (a threatened species) study.

Architectural Resources:

Olive Boy Farm and the Kabletown Rural Historic District are considered eligible for listing in the National Register of Historic Places. However, these properties will not be adversely impacted by the proposed project. No further consultation is necessary; however, we do ask that you contact our office if your project should change

We appreciate the opportunity to be of service. *If you have questions regarding our comments or the Section 106 process, please contact Ernest E. Blevins, Structural Historian, at (304) 558-0240.*

Sincerely,

Susan M. Pierce
Deputy State Historic Preservation Officer

SMP/EEB



U.S. Department
of Transportation

**Federal Highway
Administration**

West Virginia Division

July 21, 2014

Geary Plaza, Suite 200
700 Washington Street, East
Charleston, West Virginia 25301
Phone (304) 347-5928
Fax (304) 347-5103

IN REPLY REFER TO:
Federal Project NH-340(024)
State Project U219-340-0.00
US 340 Improvement Project
Jefferson County

Ms. Susan Pierce
Deputy State Historic Preservation Officer
West Virginia Division of Culture and History
1900 Kanawha Boulevard, East
Charleston, West Virginia 25305

Dear Ms. Pierce:

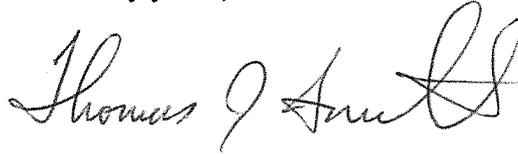
With this letter, the Federal Highway Administration (FHWA) is responding to your June 25, 2014 letter to the West Virginia Department of Transportation, Division of Highways (WVDOH) on the subject project. In this letter you expressed concern regarding compliance with National Historic Preservation Act (NHPA), Section 106 regulations.

On May 30, 2014, the WVDOH submitted an archeological survey report for two sinkholes located within the study area of the subject project for your review and concurrence. We have verified that professional archeologists who meet the U.S. Department of Interior (USDO) Secretary's Standards conducted the survey and prepared the report. We have also verified that the WVDOH reviewed the report to ensure the content met applicable standards and guidelines, prior to submittal to you.

Based on the information above, our office believes the survey work, report preparation and review process complies with the NHPA Section 106 regulations; specifically, 36 CFR Part 800.2(a)(1) and 36 CFR 800.2(a)(3). Should you find substantive issues related to the quality of the report, FHWA recognizes its responsibilities for quality control and will take additional measures to ensure that such issues are attended by WVDOH.

If you have any questions concerning this matter, please contact Jason Workman at (304) 347-5271 or via email at jason.workman@dot.gov.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Thomas J. Smith".

Thomas J. Smith, P.E.
Division Administrator

cc: File, Reading, JEW, TJS, AR
ARogers:072114 (j:\ARogers\2014\2014 07 21 US340 Improvement Project Response-WVSHPO
Sec106 Compliance Concerns)



United States Department of the Interior

FISH AND WILDLIFE SERVICE

West Virginia Field Office
694 Beverly Pike
Elkins, West Virginia 26241



June 1, 2015

Mr. Ben Hark
West Virginia Department of Transportation
Division of Highways
1900 Kanawha Boulevard East
Charleston, West Virginia 25305

Re: West Virginia Division of Highways, US 340 Phase II Madison Cave Isopod Survey
Report, Jefferson County, West Virginia

Dear Mr. Hark:

This responds to your request of April 27, 2015, for information regarding the potential occurrence of federally listed endangered or threatened, candidate or proposed species or their designated critical habitats in the vicinity of the referenced project. These comments are provided pursuant to the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*).

The proposed US 340 highway project involves several right-of-way alternatives that are currently being studied in more detail. The project area is underlain by the Cambrian-aged Conococheague Formation, which is known to host populations of the federally listed threatened Madison cave isopod (*Antrolana lira*), a freshwater crustacean that is only known to occur in the Shenandoah Valley in West Virginia and Virginia. The Madison Cave isopod's habitat consists of ground water and aquifers in karst (limestone) areas near surface-to-ground-water interfaces such as vertical fissures, sinkholes, or caves. Two of the right-of-way alternatives are in close proximity to sinkholes.

A Phase I survey of these sinkholes was completed on October 9, 2011, to determine whether there was potential connectivity to Madison Cave isopod habitat. This Phase I survey involved three sinkholes. Of these, two contained farm debris and merited future surveying once the debris could be excavated. The third sinkhole contained no indication of karst features at the site; it was determined to likely be an old farm pond. Additionally, the feature is shown as a pond on U.S. Geological Survey topographic maps.

A Phase II survey of the sinkholes was proposed in your March 18, 2014, correspondence. The Service concurred with the survey plan on March 24, 2014. This survey was carried out by Wil

Mr. Ben Hark
June 1, 2015

2

Orndorff, an expert on the Madison Cave isopod and karst habitats on December 15, 2015. Both sinkholes were excavated during this time following methodologies outlined in your March 18, 2014 correspondence. No connection to suitable Madison Cave isopod habitat was found during the Phase II efforts. Both sinkholes were backfilled with gravel and then capped with soil excavated from the sinkhole.

As a result of the above information, the Service has concluded that the project may affect, but is not likely to adversely affect, the Madison Cave isopod. The Service appreciates WVDOH's efforts to avoid and minimize impacts to federally listed species and their habitats. No biological assessment or further section 7 consultation under the ESA is required with the Service. Should project plans change or amendments be proposed that we have not considered in your proposed action, or if additional information on listed and proposed species becomes available, or if new species become listed or critical habitat is designated, this determination may be reconsidered.

If you have any questions regarding this letter, please contact Liz Stout of my staff at (304) 636-6586 Ext. 15, Elizabeth_Stout@fws.gov, or at the letterhead address.

Sincerely,



John E. Schmidt
Field Supervisor



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JUN 29 2015
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DIVISION

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Randall Reid-Smith, Commissioner

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EEO/AA Employer

June 24, 2015

Mr. Ben Hark
Environmental Section Head
WVDOH
1900 Kanawha Blvd., East
Building 5, Room A-848
Charleston, WV 25305

RE: US 340
State Project: U219-340-0.00; Federal Project: NH-340 (024)
FR#: 96-814-JF-28

Dear Mr. Hark:

We have reviewed the document titled Archaeological Assessment of Site Potential Alternatives 4, 4A, 4B, and 4C US-340 Improvement Study that was submitted for the above referenced project to determine potential effects to cultural resources. As required by Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments

According to the document, WV Division of Highways has added seven new alternatives, 4a, 4b, 4c, 9, 10a, 10b, and 11, for evaluation in the development of plans to improve a section of U.S. 340 in Jefferson County, WV. It is our understanding that Alternative 4 is still preferred. The report presents the results of an assessment that was conducted to determine the known archaeological resources in and the archaeological potential for Alternatives 4, 4a, 4b, and 4c. After consideration of a number of variables, the archaeologists at Coastal Carolina Research concluded that there is a moderate to high potential for Native American sites and a high potential for historic period sites within the Area of Potential Effect of each of the alternatives. They also concluded there is a low potential for archaeological resources that would affect the decision making during the planning process. We concur with these conclusions and look forward to reviewing the results of the Phase I survey once a final preferred alternative has been selected.

We appreciate the opportunity to be of service. *If you have questions regarding our comments or the Section 106 process, please contact Lora A Lamarre-DeMott, Senior Archaeologist, at (304) 558-0240.*

Sincerely,

Susan M. Pierce
Deputy State Historic Preservation Officer

SMP/LLD



August 10, 2015

The Culture Center
1900 Kanawha Blvd., E.
Charleston, WV 25305-0300

Randall Reid-Smith, Commissioner

Phone 304.558.0220 • www.wvculture.org
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EEO/AA Employer

Mr. Ben L. Hark
Environmental Section Head, Engineering Division
West Virginia Division of Highways
1334 Smith Street
Charleston, West Virginia 25301

RE: US 340 Improvement Study
Architectural Survey Update / Jefferson County
State Project No. U219-340-0.00 / Federal Project No. NH-340 (024)
FR# 96-814-JF-29

Dear Mr. Hark:

We have reviewed the above mentioned project to determine its effects to cultural resources. As required by Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments.

According to the submitted information, the West Virginia Division of Highways (DOH) has proposed improvements to the existing two-lane section of US 340 (approximately five miles) in Jefferson County from 0.5 mile southwest of the West Virginia state line (with Virginia) to approximately two miles north of the community of Rippon, WV. A four-lane divided highway is planned, and numerous alternatives have been evaluated, including six in detail in a 2001 Draft Environmental Impact Statement (DEIS). In 2003, Alternative 4 was identified as the Preferred Alternative. However, following a period of project dormancy, seven new Alternatives (4a, 4b, 4c, 9, 10a, 10b, and 11) were added to the study. However, the report does not include the new Alternatives nor the revised Area of Potential Effect (APE). Please provide our office with illustrations that depict the revisions.

At the request of H.W. Lochner, Inc., Coastal Carolina Research (CCR) has prepared an updated survey of architectural resources and a review of historic property boundaries for the overall project's Study Area encompassing the various alternatives and the current variations of Alternative 4 (4, 4a, 4b, and 4c). *Architectural Survey Update and Historic Property Boundary Review, US 340 Improvement Study, Jefferson County, West Virginia*, (the report) presents the results of an architectural survey update for the Study Area associated with the ongoing US 340 Improvement Study. The current survey was conducted to 1) update earlier survey information to include any previously unrecorded resources that now meet the 50 years of age requirement; 2) provide recommendations on the National Register of Historic Places (NRHP) eligibility of newly recorded resources; and, 3) update previously recorded resources including updated NRHP eligibility recommendations and/or any potential NRHP boundary changes of either individual resources or historic districts. We understand that information for a determination of effects for the Preferred Alternative and its variations (Alternatives 4, 4a, 4b, and 4c) is being prepared separately.

Architectural Resources:

We have reviewed the submitted report. Table 4-1 (enclosed) summarizes the previous NRHP eligibility status as well as the results and recommendations (from the current survey) for each of the 72 previously recorded resources. The 2015 comments within the table speak to the resource's individual eligibility status as well as its status within one of three previously-identified, NRHP-eligible Historic Districts (i.e., Kabletown Rural Historic District, Bullskin Run Rural Historic District, and Rippon Historic District). The table also indicates the location of the resource in relation to the project's Study Area.

Although our office has previously commented about the eligibility of these resources, due to the passage of time, we believe that updated comments are warranted. We concur with CCR's recommendations as enumerated in the "NRHP Eligibility Recommendation" column in Table 4-1. Specifically regarding the individual NRHP eligibility recommendations, we concur that the following architectural resources are individually eligible for the NRHP:

Olive Boy Farm (JF-0062-0006); Glenwood (JF-0062-0011); Wayside Farm (JF-0062-0012); Byrdland (JF-0062-0016); Wheatland (JF-0062-0017); Straithmore (JF-0062-0019); Berry Hill (JF-0062-0029); St. John's Episcopal Church (JF-0062-0049; Criterion C); Snyder-Barney Mill Ruins (JF-0169; Criterion D); and the Shenandoah Valley section of the Norfolk Southern Railway (JF-1228; Criterion A).

In CCR's discussion about the Bullskin Run Historic District and the Rippon Historic District (p. 2-6), we note that the authors state that the districts were "determined eligible" for the NRHP. Although our office concurs with CCR's assessment of eligibility and these historic districts are considered eligible for NRHP inclusion, neither district has been formally determined eligible for the NRHP by the Keeper. In order to avoid misperception, we recommend that CCR reconsider the language used in the discussion.

Table 4-2 (enclosed) summarizes the resource-specific information and NRHP recommendations for the ten (10) newly surveyed resources. Of these resources, one is a cemetery and our comments for which are found below. Regarding the nine remaining resources, CCR recommends the McPherson-Adams Farm (JF-1225) as potentially eligible for individual listing in the NRHP under Criteria A and C as well as a contributing resource to the Kabletown Rural Historic District. While we do not necessarily disagree with the eligibility recommendation, what is the recommended period of significance and NRHP boundary for this farm?

Finally, we concur that the remaining eight architectural resources (JF-1218 – JF-1222; JF-1224; JF-1226 - JF1227) in Table 4-2 are not individually eligible for the NRHP. However, without additional justification, we are unable to concur with the recommendation that the Adams House (JF-1224) is a contributing resource to the Kabletown Rural Historic District.

Cemetery Resources:

We note that CCR recorded the Old Baptist Cemetery (Resource Number 006) on a West Virginia Cemetery Form; however documentation listed in form item 20 was not included in the submission. We request that your office submit the necessary documentation to our office. Upon receipt of the requested information, we will provide further comment.

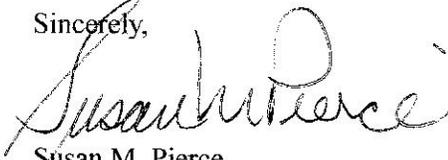
Mr. B. Hark
August 10, 2015
FR #96-814-JF-29
Page 3

Public Comment:

If you have not already done so, we encourage your office to inform the property owners, the Jefferson County Historic Landmarks Commission, the Jefferson County Historical Society, and the Preservation Alliance of West Virginia about the latest project developments.

We appreciate the opportunity to be of service. *If you have questions regarding our comments or the Section 106 process, please contact Jeffrey S. Smith, Structural Historian, at (304) 558-0240.*

Sincerely,

A handwritten signature in cursive script that reads "Susan M. Pierce". The signature is written in dark ink and is positioned above the typed name.

Susan M. Pierce
Deputy State Historic Preservation Officer

SMP/JSS

Table 4-1: Previously Recorded Architectural Resources Documented During the Current Project.

WV HPI #	Resource Name or Description	Date	Previous NRHP Status		Comments	2015 Update & Recommendations			Location
			Individual Status*	Eligible as Contributing to HDs		Individual Eligibility Status	Eligible as Contributing to HDs	Location	
JF-0005	William Grubb Farm	ca. 1763	NRHP (1991)	Bullskin Run and Kabletown Rural HDs		NRHP (1991)	Bullskin Run and Kabletown Rural HDs	In Study Area	
JF-0062-0001	Balcutha	ca. 1840	NRHP (1996) as part of historic district	Long Marsh Rural HD	The dwelling is located in Virginia and two barns in Jefferson County, WV. The Long Marsh Rural Historic District in Clarke County, VA, has been in NRHP since 1996.	The smaller of the two barns recorded in 1996 no longer survives. The loss of the barn has no effect on the overall boundary of the property, nor its eligibility.	Long Marsh Rural HD	In Study Area	
JF-0062-0002	Edward Allen House	1927	Not eligible (1999)	n/a	A wrap-around porch was added to the front of the dwelling since it was first recorded in 1996.	Not eligible	n/a	In Study Area	
JF-0062-0003	Shady Grove Farm Tenant House	ca. 1910	Part of Olive Boy Farm (1999)	Olive Boy Farm and Kabletown Rural HD	The siding and windows were altered on the dwelling since it was first recorded in 1999.	Not eligible, but the building remains a contributing element of Olive Boy Farm and the Kabletown Rural HD.	Olive Boy Farm and Kabletown Rural HD	In Study Area	
JF-0062-0004	Arthur Allen House #1	ca. 1870	Not eligible (1999)	Kabletown Rural HD		Not eligible	Kabletown Rural HD	In Study Area	
JF-0062-0005	Arthur Allen House #2	ca. 1900	Not eligible (1999)	Kabletown Rural HD		Not eligible	Kabletown Rural HD	In Study Area	
JF-0062-0006	Olive Boy Farm	1858	Recommended eligible (1999)	Kabletown Rural HD		Eligible	Kabletown Rural HD	In Study Area	
JF-0062-0007	John's Family Restaurant	1944	Not eligible (1999)	n/a	The restaurant has been expanded since it was first surveyed in 1996.	Not eligible	n/a	In Study Area	
JF-0062-0008	Hackberry	ca. 1881	Not eligible (1999)	n/a	Surveyed as Breezewood (JF-0370) in 2005. The porches were altered and a wing was added to the rear elevation.	Not eligible	n/a	In Study Area	
JF-0062-0009	Dunn-Jenkins House	ca. 1915	Not eligible (1999)	n/a		Not eligible	n/a	In Study Area	

WV HPI #	Resource Name or Description	Date	Previous NRHP Status		Comments	2015 Update & Recommendations		Location
			Individual Status*	Eligible as Contributing to		Individual Eligibility Status	Eligible as Contributing to	
JF-0062-0034	Payton House	ca. 1910	Not eligible (1996)	Rippon HD		Not eligible	Rippon HD	In Study Area
JF-0062-0036	Heskett House # 1	Mid to late 19 th century	Not eligible (1996)	Rippon HD	The two small outbuildings no longer survive, but there is no change to the house.	Not eligible	Rippon HD	In Study Area
JF-0062-0037	Johnson House	ca. 1940	Not eligible (1996)	Rippon HD		Not eligible	Rippon HD	In Study Area
JF-0062-0038	Nicodemus House	ca. 1880-1900; 1910	Not eligible (1996)	Rippon HD	The porch and shed wing no longer survive	Not eligible	Rippon HD	In Study Area
JF-0062-0039	Donald Chapman House	ca. 1905	Not eligible (1996)	n/a		Not eligible	n/a	In Study Area
JF-0062-0040	Anders House	Mid-19 th century	Not eligible (1996)	Rippon HD	No longer extant. Replaced by a modern house, loss does not affect the district boundary.	n/a	n/a	In Study Area
JF-0062-0041	Wilt & Moffett Grocery	1916	Not eligible (1996)	Rippon HD		Not eligible	Rippon HD	In Study Area
JF-0062-0042	Wilt-Adams House	1916	Not eligible (1996); Recommended not eligible (2005)	Rippon HD		Not eligible	Rippon HD	In Study Area
JF-0062-0043	Robinson House #1	ca. 1880-1900	Not eligible (1996); Recommended not eligible (2005)	Rippon HD		Not eligible	Rippon HD	In Study Area
JF-0062-0044	Carter House #1	ca. 1880-1900	Not eligible (1996)	Rippon HD		Not eligible	Rippon HD	In Study Area
JF-0062-0045	Carter House #2	ca. 1880-1900	Not eligible (1996)	Rippon HD	The house is abandoned and in a ruinous state.	Not eligible	Rippon HD	In Study Area

WV HPI #	Resource Name or Description	Date	Previous NRHP Status		Comments	2015 Update & Recommendations		Location
			Individual Status*	Eligible as Contributing to		Individual Eligibility Status	Eligible as Contributing to	
JF-0062-0046	Robinson House #2	ca. 1880-1900	Not eligible (1996)	Rippon HD	No longer extant. Replaced by a modern house, loss does not affect the district boundary.	n/a	n/a	In Study Area
JF-0062-0047	Jenkins House	ca. 1890-1910	Not eligible (1996)	Rippon HD	No longer extant, loss does not affect the district boundary.	n/a	n/a	In Study Area
JF-0062-0048	Jenkins Antique Store	1932	Not eligible (1996)	Rippon HD	No longer extant, loss does not affect the district boundary.	n/a	n/a	In Study Area
JF-0062-0049	St. John's Episcopal Church	1890	No (clear) recommendation (1996)	Rippon HD		Potentially eligible under Criterion C	Rippon HD	In Study Area
JF-0062-0050	Rippon Store & House (1996)/Rippon Grocery (2005)	1932	Not eligible (1996); Recommended not eligible (2005)	Rippon HD	House received its own entry in 2004/5 (JF-0351).	Not eligible	Rippon HD	In Study Area
JF-0062-0051	Breedden House	1927	Not eligible (1996); Recommended not eligible (2005)	Rippon HD		Not eligible	Rippon HD	In Study Area
JF-0062-0052	Heskett House and Store	ca. 1860	Not eligible (1996); Recommended not eligible (2005)	Rippon HD		Not eligible	Rippon HD	In Study Area
JF-0062-0053	Heskett House #2	ca. 1890-1910	Not eligible (1996); Recommended potentially eligible under C (2005)	Rippon HD		Not eligible	Rippon HD	In Study Area

WV HPI #	Resource Name or Description	Date	Previous NRHP Status		Comments	2015 Update & Recommendations		Location
			Individual Status*	Eligible as Contributing to		Individual Eligibility Status	Eligible as Contributing to	
JF-0062-0063	Rippon School	ca. 1900	Not eligible (1996); Recommended potentially eligible under A (2005)	Rippon HD		Not eligible	Rippon HD	In Study Area
JF-0062-0064	Saylor House	ca. 1900-1920	Not eligible (1996); Recommended not eligible (2005)	Rippon HD		Not eligible	Rippon HD	In Study Area
JF-0062-0065	Cooper House	ca. 1920	Not eligible (1996); Recommended not eligible (2005)	Rippon HD		Not eligible	Rippon HD	In Study Area
JF-0062-0066	LaRue House	1950	Not eligible (1996); Recommended not eligible (2005)	Rippon HD		Not eligible	Rippon HD	In Study Area
JF-0062-0068	Bridge over Bullskin Run	ca. 1910-1930	Not eligible (1996)	Bullskin Run and Kabletown Rural HDs	Modern guardrails were affixed to the original railings.	Not eligible	Bullskin Run and Kabletown Rural HDs	In Study Area
JF-0062-0069	Dave's Auto	1940	Not eligible (1996)	Bullskin Run and Kabletown Rural HDs	The stepped parapet wall on the front gable end was removed and a second-floor apartment was added over the rear of the building.	Not eligible.	Not contributing to the Bullskin Run & Kabletown Rural HDs, loss does not affect the district boundary.	In Study Area
JF-0164	Meadow Spring Farm (Nicodemus Farm)	ca. 1840	Recommended potentially eligible under C and perhaps A (2005)	Bullskin Run and Kabletown Rural HDs		Not eligible	Bullskin Run and Kabletown Rural HDs	Outside Study Area, but property extends into Study Area.

WV HPI #	Resource Name or Description	Date	Previous NRHP Status		Comments	2015 Update & Recommendations		Location
			Individual Status*	Eligible as Contributing to HD		Individual Status	Eligible as Contributing to HD	
JF-0215	Shady Grove Farm/Hermitage	ca. 1880	Recommended potentially eligible under C (2005)	Kabletown Rural HD		Not eligible	Kabletown Rural HD	Outside Study Area, but property extends into Project Study Area.
JF-0326	Beverly	ca. 1800	In NRHP since 1987	Bullskin Run HD		NRHP	Bullskin Run HD	Outside Study Area, but property extends into Project Study Area.
JF-0340	Ripon Lodge Manager's House	ca. 1920	No (clear) recommen- dation (2005)	Ripon Lodge NR	Contributing building to the Ripon Lodge NR boundary increase. Originally included as part of Ripon Lodge (JF- 0062-0015).	Not eligible	Ripon Lodge NR	In Study Area
JF-0351	House	ca. 1900	Recommended not eligible (2005)	Rippon HD	Originally included as part of the Rippon Store & House (JF-0062-0050)	Not eligible	Rippon HD	In Study Area
JF-0356	Bullskin Run Bridges	ca. 1900 & ca. 1920	Oldest recommended potentially eligible under Criterion A (2005)	Bullskin Run and Kabletown Rural HDs	Originally included as part of the William Grubb Farm (JF-0005). Not individually eligible but contributing to Bullskin Run & Kabletown Rural HDs.	Not eligible	Bullskin Run and Kabletown Rural HDs	In Study Area
JF-1228	Shenandoah Valley Section of the Norfolk Southern Railway	ca. 1878	Eligible (WV SHPO 2003)	Bullskin Run and Kabletown Rural HDs	No change. Contributing to Bullskin Run & Kabletown Rural HDs.	Eligible under Criterion A	Bullskin Run and Kabletown Rural HDs	In Study Area

*dates 1996, 1999, and 2000 refer to HPI form entry dates for US 340 Improvement Study projects; 2005 date refers to Taylor and Taylor Associates, Inc., (2005).

Table 4-2: Newly Recorded Architectural Resources Documented During the Current Project.

WV HPI #	Resource Name or Description	Date	NRHP Eligibility Recommendation	Comments
JF-1218	Berryville Pike (US 340), Charles Town, WV	ca. 1955	Recommended not eligible	In Study Area
JF-1219	1580 Berryville Pike (US 340), Charles Town, WV	ca. 1965	Recommended not eligible	In Study Area
JF-1220	1621 Berryville Pike (US 340), Charles Town, WV	ca. 1965	Recommended not eligible	In Study Area
JF-1221	58 Earl Lillifritz Drive, Charles Town, WV	ca. 1965	Recommended not eligible	In Study Area
JF-1222	20 Hunters Hollow Lane, Charles Town, WV	ca. 1965	Recommended not eligible	In Study Area
JF-1223	Old Baptist Church Cemetery, northwest side of Berryville Pike (US 340), at intersection with Meyerstown Road	ca. 1888	Recommended not eligible	In Study Area
JF-1224	Adams House, 384 Meyerstown Road, Charicestown, WV	1953	Recommended not individually eligible but contributing to the Kabletown Rural HD*	Parcel extends into Study Area
JF-1225	McPherson-Adams House, 380 Meyerstown Road, Charicestown, WV	ca. 1850	Recommended potentially individually eligible for the NRHP under A & C; Contributing to the Kabletown Rural HD*	Parcel extends into Study Area
JF-1226	United States Post Office, 2468 Berryville Pike (US 340), Rippon, WV	ca. 1965	Recommended not individually eligible and not contributing to the Rippon HD	In Study Area
JF-1227	Rainbow Diner & Truck Stop, Berryville Pike (US 340), WV	ca. 1940	Recommended not eligible	In Study Area

*does not affect the current historic district boundary



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

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Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4000
1-800-592-5482

August 27, 2015

Mr. R. J. Scites, P.E.
Director, Engineering Division
West Virginia Division of Highways
1334 Smith Street
Charleston, West Virginia 25301

RE: Proposed Draft Supplemental Environmental Impact Statement for US 340 from the Virginia State Line to the Charles Town Bypass, Federal Project NH-0340(030), West Virginia Project U219-340-0.00(02), Clarke County, Virginia and Jefferson County, West Virginia

Dear Mr. Scites:

This letter is in response to the scoping request for the above-referenced project. As you may know, the Department of Environmental Quality, through its Office of Environmental Impact Review (DEQ-OEIR), is responsible for coordinating Virginia's review of federal environmental documents prepared pursuant to the National Environmental Policy Act (NEPA) and responding to appropriate federal officials on behalf of the Commonwealth.

ENVIRONMENTAL REVIEW UNDER THE NATIONAL ENVIRONMENTAL POLICY ACT: PROJECT SCOPING AND AGENCY INVOLVEMENT

NEPA (PL 91-190, 1969) and its implementing regulations (Title 40, *Code of Federal Regulations*, Parts 1500-1508) requires a draft and final Environmental Impact Statement (EIS) and, when necessary, a Supplemental EIS for federal activities or undertakings that are federally licensed or federally funded which will or may give rise to significant impacts upon the human environment. An EIS carries more stringent public participation requirements than an Environmental Assessment (EA) and provides more time and detail for comments and public decision-making. 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 providing notice of your scoping request to the following state agencies, locality and Planning District Commission, including but not limited to:

Department of Environmental Quality:

- DEQ Regional Office
- Air Division
- Office of Wetlands and Stream Protection
- Division of Land Protection and Revitalization
- Office of Stormwater Management

Department of Conservation and Recreation
Department of Health
Department of Agriculture and Consumer Services
Department of Game and Inland Fisheries
Virginia Marine Resources Commission
Department of Historic Resources
Department of Mines, Minerals, and Energy
Department of Forestry
Department of Transportation
Clarke County
Northern Shenandoah Valley Regional Commission

DOCUMENT SUBMISSIONS

In order to ensure an effective coordinated review of the NEPA document, notification of the NEPA document should be sent directly to OEIR. We request one electronic copy and two hard copies (CD, preferred, or paper) for our files and for small localities. Electronic copies may be sent to eir@deq.virginia.gov (10 MB maximum) or made available for download at a website, file transfer protocol (ftp) site or the VITAShare file transfer system (<https://vitashare.vita.virginia.gov>).

We strongly encourage you to issue shape files with the NEPA document. In addition, project details should be adequately described for the benefit of the reviewers.

DATA BASE ASSISTANCE

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/>

- 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 NEPAassist Database

Facilitates the environmental review process and project planning:

- <http://nepaassisttool.epa.gov/nepaassist/entry.aspx>

If you have questions about the environmental review process and/or the federal consistency review process, please feel free to contact me (telephone (804) 698-4204 or e-mail bettina.sullivan@deq.virginia.gov).

I hope this information is helpful to you.

Sincerely,



B.S.
Bettina Sullivan, Program Manager
Environmental Impact Review and
Long-Range Priorities



RECEIVED
SEP 16 2015
LIVESTOCK DIVISION

COMMONWEALTH of VIRGINIA

Department of Historic Resources

2801 Kensington Avenue, Richmond, Virginia 23221

Molly Joseph Ward
Secretary of Natural Resources

Julie V. Langan
Director

Tel: (804) 367-2323
Fax: (804) 367-2391
www.dhr.virginia.gov

14 September 2015

Mr. R. J. Scites
Director, Engineering Division
West Virginia Division of Highways
1334 Smith Street
Charleston, West Virginia 25301

RE: US 340 from Virginia State Line to Charles Town Bypass
Jefferson County, West Virginia
State Project No. U219-340-0.00(02)
VDHR File No. 2015-1028

Dear Mr. Scites:

The Department of Historic Resources (DHR) has received for our review and comment the above referenced project. It is our understanding that the West Virginia Division of Highways proposes to construct a four-lane portion of the Charles Town Bypass beginning in Jefferson County, West Virginia, at the 0.5 mile marker southwest of the state line between Clarke County, Virginia, and West Virginia, and running north for a distance of five miles to the completed section of the Charles Town Bypass.

As the undertaking begins one half mile from the Virginia State line and does not cross our border, we do not believe that any historic properties located within the jurisdiction of DHR will be affected. However, when available please provide us an electronic version on disc of the Supplemental Environmental Impact Statement for our consideration.

If you have any questions about our comments, please contact me at (804) 482-6090.

Sincerely,

Marc Holma, Architectural Historian
Division of Review and Compliance

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10 Courthouse Ave.
Petersburg, VA 23803
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Fax: (804) 862-6196

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Fax: (540) 387-5446

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Fax: (540) 868-7033

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

David Dowling
Deputy Director of
Soil and Water and Dam Safety

COMMONWEALTH of VIRGINIA
DEPARTMENT OF CONSERVATION AND RECREATION

October 7, 2015

R.J. Scites
WV Division of Highways
1334 Smith Street
Charlestown, WV 25301

Re: U219-340-0.00(02), US 340 Improvements

Dear Mr. Scites:

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.

According to the information currently in our files, the Gaylord Calcareous Marsh Conservation Site is within two miles of the project site. Conservation sites are tools for representing key areas of the landscape that warrant further review for possible conservation action because of the natural heritage resources and habitat they support. Conservation sites are polygons built around one or more rare plant, animal, or natural community designed to include the element and, where possible, its associated habitat, and buffer or other adjacent land thought necessary for the element's conservation. Conservation sites are given a biodiversity significance ranking based on the rarity, quality, and number of element occurrences they contain; on a scale of 1-5, 1 being most significant. Gaylord Calcareous Marsh Conservation Site has been given a biodiversity significance ranking of B4, which represents a site of moderate significance. The natural heritage resources of concern at this site are:

<i>Railus limicola</i>	Virginia rail	G5/S2B, S3N/NL/NL
<i>Porzana carolina</i>	Sora	G5/S1B, S2N/NL/NL
<i>Eutrochium maculatum</i> var. <i>maculatum</i>	Spotted Joe-pye-weed	G5T5/S1/NL/NL
<i>Carex utriculata</i>	Beaked Sedge	G5/S1/NL/NL
<i>Juncus torreyi</i>	Torrey's Rush	G5/S1/NL/NL
<i>Ribes americanum</i>	Wild Black Currant	G5/S1/NL/NL
<i>Potamogeton zosteriformis</i>	Flatstem Pondweed	G5/S1/NL/NL

Carex utriculata - *Sparganium americanum* Herbacious Vegetation G4G5/S1/NL/NL
Ridge and Valley Calcareous Spring Marsh (Beaked Sedge - American Bur-Reed Type)

This project is situated on karst-forming carbonate rock and can be characterized by sinkholes, caves, disappearing streams, and large springs. If such features are encountered during the project, please coordinate with Wil Orndorff (540-230-5960, Wil.Orndorff@dcr.virginia.gov) to document and minimize adverse impacts.

600 East Main Street, 24th Floor | Richmond, Virginia 23219 | 804-786-6124

State Parks • Soil and Water Conservation • Outdoor Recreation Planning
Natural Heritage • Dam Safety and Floodplain Management • Land Conservation

Discharge of runoff to sinkholes or sinking streams, filling of sinkholes, and alteration of cave entrances can lead to surface collapse, flooding, erosion and sedimentation, groundwater contamination, and degradation of subterranean habitat for natural heritage resources. If the project involves filling or “improvement” of sinkholes or cave openings, DCR would like detailed location information and copies of the design specifications. In cases where sinkhole improvement is for stormwater discharge, copies of VDOT Form EQ-120 will suffice. New “Karst Assessment Guidelines” developed by the Virginia Cave Board for land development can be found at http://www.dcr.virginia.gov/natural_heritage/documents/karst_assessment_guidelines.pdf. DCR requests a copy of the environmental analysis conducted in 2014 for the Madison Cave Isopod.

There is also potential for the Northern Long-eared bat (*Myotis septentrionalis*, G1G3/S3/LT/NL) to occur within the project area. The Northern Long-eared bat is a small insect-eating bat characterized by its long-rounded ears that when folded forward extend beyond the tip of the nose. Hibernation occurs in caves, mines and tunnels from late fall through early spring and bats occupy summer roosts comprised of older trees including single and multiple tree-fall gaps, standing snags and woody debris. Threats include white nose syndrome and loss of hibernacula, maternity roosts and foraging habitat (NatureServe, 2014). Due to the decline in population numbers, the Northern Long-eared bat has been federally listed as “threatened” by the United States Fish and Wildlife Service (USFWS).

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 Northern Long-eared bat, if tree removal is proposed for the project DCR recommends coordination with the USFWS to ensure compliance with protected species legislation. DCR recommends coordination with the WVDNR Natural Heritage Program for natural heritage resources within the project area in West Virginia.

There are no State Natural Area Preserves under DCR’s jurisdiction in the project vicinity.

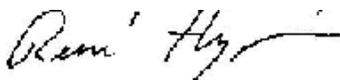
Under a Memorandum of Agreement established between the Virginia Department of Agriculture and Consumer Services (VDACS) and the DCR, DCR represents VDACS in comments regarding potential impacts on state-listed threatened and endangered plant and insect species. The current activity will not affect any documented state-listed plants or insects.

New and updated information is continually added to Biotics. Please re-submit project information and 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.

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 Ernie Aschenbach at 804-367-2733 or Ernie.Aschenbach@dgif.virginia.gov.

Should you have any questions or concerns, feel free to contact me at 804-371-2708. Thank you for the opportunity to comment on this project.

Sincerely,



S. Rene' Hypes
Project Review Coordinator

CC: Troy Anderson, USFWS
Ernie Aschenbach, VDGIF
Wil Orndorff, DCR-Karst
WVDNR-Natural Heritage Program

Literature Cited

NatureServe, 2014. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1.
NatureServe. Arlington, Virginia. Available <http://explorer.natureserve.org> (Accessed: December 22, 2014).



October 8, 2015

Mr. RJ Scites, P.E.
Director, Engineering Division
West Virginia Division of Highways
1334 Smith Street
Charleston, WV 25301

**RE: WVDOH State Project #:U219-340-0.00(02) and Federal Project: NH-0340(030)
VOF Open-Space Easement CLA-01583, PropID: 3698
Instrument: #04-4453**

Dear Mr. Scites:

This letter is in response to a letter sent to Mr. Mike Hallock-Solomon of the Virginia Outdoors Foundation from Mr. Ben L. Hark of the West Virginia Department of Transportation received on September 8, 2015 regarding comment on WVDOH State Project #:U219-340-0.00(02) and Federal Project: NH-0340(030). The Virginia Outdoors Foundation (VOF) thanks you for the opportunity to comment on this project regarding a proposed highway improvement project to U.S. Route 340 in Jefferson County WV, including improvements on a portion of U.S. Route 340 in Clarke County, VA.

The VOF open space easement property in the vicinity of the Preferred Alternative is known as CLA-01583, owned by Oakland Orchard, LP, c/o Mr. Peter J. Cook. From review of the material provided and terms of the open-space deed of easement, VOF finds no significant conflict with the proposed project as long as all permanent improvements occur within the existing right-of-way of U.S. Route 340. Should the final design for the Preferred Alternative change, show a need to extend beyond the existing right of way, or need a temporary construction easement please contact VOF at your earliest convenience for further review.

As always, the impact of highway improvement projects to VOF open-space easements should be kept to a minimum to ensure that conservation values are not impaired.

Thank you for the notice and please feel free to contact me with any further questions, comments, or concerns.

Sincerely,

Abbe Kennedy
Stewardship Assistant
Mobile: 540-424-6251
Email: akennedy@vofonline.org

virginiaoutdoorsfoundation.org

From: Cromwell, James R. (VDOT) <James.Cromwell@VDOT.Virginia.gov>
Sent: Tuesday, October 27, 2015 12:18 PM
To: Hark, Ben L
Cc: Mullins, Sondra L; Dehler, Brian
Subject: RE: US 340 SDEIS

I have an answer for you. We do not wish to be a signatory to the document but we would like the opportunity to review and comment on the DEIS, as well as get copies of any correspondence with and from the Virginia Resource agencies you contacted as part of the study.

Thank you for your patience.

James R. Cromwell
Environmental Program Manager
Virginia Department of Transportation
1401 E. Broad Street
Richmond, VA 23219
Phone (804) 225-3608
Cell (804) 840-9340
Fax (804) 786-7401

James.Cromwell@VDOT.Virginia.gov



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ENGINEERING
DIVISION

The Culture Center
1900 Kanawha Blvd., E.
Charleston, WV 25305-0300

Randall Reid-Smith, Commissioner

Phone 304.558.0220 • www.wvculture.org
Fax 304.558.2779 • TDD 304.558.3562

EEO/AA Employer

November 18, 2015

Mr. Ben L. Hark
Environmental Section Head, Engineering Division
West Virginia Division of Highways
1334 Smith Street
Charleston, West Virginia 25301

RE: US 340 Improvement Study
Architectural Survey Update / Jefferson County
State Project No. U219-340-0.00 / Federal Project No. NH-340 (024)
FR# 96-814-JF-31

Dear Mr. Hark:

We have reviewed the above mentioned project to determine its effects to cultural resources. As required by Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments.

Cemetery Resources:

Thank you for submitting the revised West Virginia Cemetery Form for the Old Baptist Cemetery (Resource Number 006). We are also in receipt of the CD containing a PDF of the revised form as well as shapefiles for the resource. We have assigned the cemetery trinomial number 46-JF-582 and note that the form now contains UTM coordinates.

Coastal Carolina Research, Inc. (CCR) surveyed and documented the c. 1888 Old Baptist Cemetery for the above-referenced project. CCR recommended the resource as not eligible for the National Register of Historic Places. Following a review of the cemetery form, we concur with their assessment. No further consultation is necessary regarding cemetery resources; however, we ask that you contact our office if your project should change.

We appreciate the opportunity to be of service. If you have questions regarding our comments or the Section 106 process, please contact Jeffrey S. Smith, Structural Historian, or Lora Lamarre-DeMott, Senior Archaeologist, at (304) 558-0240.

Sincerely,

Susan M. Pierce
Deputy State Historic Preservation Officer

SMP/JSS/LLD



COMMONWEALTH of VIRGINIA

Department of Historic Resources

2801 Kensington Avenue, Richmond, Virginia 23221

Molly Joseph Ward
Secretary of Natural Resources

Julie V. Langan
Director

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24 November 2015

Mr. R. J. Scites
Director, Engineering Division
West Virginia Division of Highways
1334 Smith Street
Charleston, West Virginia 25301

RE: US 340 from Virginia State Line to Charles Town Bypass
Jefferson County, West Virginia
State Project No. U219-340-0.00(02)
VDHR File No. 2015-1028

Dear Mr. Scites:

After discussing the above referenced project with Mr. Ben Hark, West Virginia Division of Highways, it has come to our attention that the Department of Historic Resources' (DHR) understanding of the undertaking was in error. Prior to Mr. Hark's phone call it was our belief that the Route 340 improvement project will not cross into Virginia but that all construction would be limited to the West Virginia side of the border. Our comments included in DHR's letter of 14 September 2015 reflected that belief. In fact, the undertaking will extend a few thousand feet over existing right of way into the Commonwealth.

The project Area of Potential Effects (APE) on the Virginia side of the state line includes the Long Marsh Run Rural Historic District (DHR Inventory No. 021-0967), a property listed in the National Register of Historic Places. We believe that the proposed widening of US 340 will have No Adverse Effect on the Long Marsh Run Rural Historic District.

If you have any questions about our comments, please contact me at (804) 482-6090.

Sincerely,

A handwritten signature in black ink, appearing to read "Marc Holma".

Marc Holma, Architectural Historian
Division of Review and Compliance

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10 Courthouse Ave.
Petersburg, VA 23803
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Fax: (804) 862-6196

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Western Region Office
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Fax: (540) 387-5446

Northern Region Office
5357 Main Street
PO Box 519
Stephens City, VA 22655
Tel: (540) 868-7029
Fax: (540) 868-7033

C: Mr. Ben Hark, WVDOH



United States Department of the Interior



FISH AND WILDLIFE SERVICE

West Virginia Field Office
694 Beverly Pike
Elkins, West Virginia 26241

December 22, 2015

Mr. Ben Hark
West Virginia Department of Transportation
Division of Highways
1900 Kanawha Boulevard East
Charleston, West Virginia 26305

Re: West Virginia Department of Transportation, US 340 Improvement Project, Jefferson County, West Virginia (FWS File #: 2015-TA-0451)

Dear Mr. Hark:

This responds to your December 2, 2015, request for information regarding the proposed US 340 widening project in Jefferson County, West Virginia. Former correspondence and completed surveys have occurred on this project, but these did not address every species potentially present within the proposed project area. The following comments are provided pursuant to the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*).

Based on your correspondence, the Service has determined that three federally listed species may occur within the range of the proposed project that may be affected by the construction and operation of the proposed project, the endangered Indiana bat (*Myotis sodalis*), the threatened northern long-eared bat (*M. septentrionalis*)(NLEB), and the threatened Madison Cave isopod (*Antrolana lira*)(MCI).

Federally Listed Bats

The Indiana bat and NLEB may use the project area for foraging and roosting between April 1 and November 15. Indiana bat summer foraging habitats are generally defined as riparian, bottomland, or upland forest, and old fields or pastures with scattered trees. Roosting/maternity habitat consists primarily of live or dead hardwood tree species which have exfoliating bark that provides space for bats to roost between the bark and the bole of the tree. Tree cavities, crevices, splits, or hollow portions of tree boles and limbs also provide roost sites. Similar to the Indiana bat, NLEB bat foraging habitat includes forested hillsides and ridges, and small ponds or streams. NLEB are typically associated with large tracts of mature, upland forests with more canopy cover than is preferred by Indiana bats. Northern long-eared bats seem to be flexible in selecting roosts, choosing roost trees based on suitability to retain bark or provide cavities or crevices, and this species is known to use a wider variety of roost types than the Indiana bat.

Males and non-reproductive females may also roost in cooler places, like caves and mines. This bat has also been found rarely roosting in structures, like barns and sheds. In West Virginia, the U.S. Fish and Wildlife Service (Service) considers all forest habitats containing trees greater than or equal to 3 inches in diameter at breast height (DBH) to be potentially suitable as summer roosting and foraging habitat for the Indiana and northern long-eared bat.

Indiana bats and NLEB use caves or mine portals for winter hibernation between November 15 and March 31. These species also use the hibernacula and areas around them for fall-swarmering and spring-staging activity (August 15 to November 14 and April 1 to May 14, respectively). Some males have been known to stay close to the hibernacula during the summer and may use the hibernacula as summer roosts. There may be other landscape features being used by NLEB during the winter that have yet to be documented.

The Service has determined the number of acres of potential summer foraging and roosting habitat on the West Virginia landscape available to each Indiana bat, versus the total acreage of forest. On that basis, we have determined that small projects, more than 10 miles from a known priority 1 or 2 Indiana bat hibernaculum, more than 5 miles from a known priority 3 or 4 Indiana bat hibernaculum, or more than 2.5 miles from any known maternity roost, or more than 5 miles from summer detection sites where no roosts were identified, that affect less than 17 acres of forested habitat, and will not affect any potential hibernacula, will have a very small chance of resulting in direct or indirect take of the Indiana bat, and therefore these effects are considered discountable.

This 17-acre threshold was developed based on information specific to the Indiana bat in West Virginia. While there are many similarities between the Indiana bat and NLEB, the distribution and abundance of the NLEB in West Virginia is much different than the Indiana bat and there are a number of factors that make the NLEB different from the Indiana bat in regard to whether they are likely to be adversely affected by these types of activities. The WVFO is currently reviewing existing data and available literature on the NLEB to determine how our recommendations should be modified to address the NLEB. We anticipate that additional information may become available as the Service accepts public comments and works to finalize the 4(d) rule for the species. **We expect that this 17-acre threshold may change** in the near future and our intent is to make modifications to our recommendations concurrent with the anticipated completion of the final 4(d) rule **on or before the end of the 2015 calendar year**. In the interim, our office will be using the threshold developed for the Indiana bat to make determinations regarding the NLEB.

Because the distance that NLEB typically travel between foraging and roosting sites and hibernacula are different from the Indiana bat, we are using species-specific buffers around known NLEB captures, maternity, and hibernacula sites. Therefore, small projects completed before the end of the 2015 calendar year that are more than 5 miles from a NLEB hibernaculum or 1.5 miles from a known NLEB maternity roost or 3 miles from a NLEB detection site with no roost identified, that affect less than 17 acres of suitable forested habitat, and will not affect any potential hibernacula, will also be considered to have discountable effects on the NLEB.

Mr. Ben Hark
December 22, 2015

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Because your project 1) will affect less than 17 acres of potential Indiana bat or NLEB foraging or roosting habitat; 2) is not within any of the Indiana bat or NLEB hibernacula or summer use buffers described above; and 3) will not affect any potential caves or mines that could be used as hibernacula for these species, we have made a determination that the project is not likely to adversely affect the Indiana bat or NLEB.

Madison Cave Isopod

The Service received results of Phase I surveys for MCI on October 9, 2011, and Phase II survey results were carried out by Wil Orndorff, an expert on MCI and karst habitats, on December 15, 2014. As a result of these efforts, the Service concurred that the project may affect, but is not likely to adversely affect MCI in a letter to you on June 1, 2015. This concurrence has not changed.

Therefore no biological assessment or further section 7 consultation under the ESA is required with the Service. Should project plans change or amendments be proposed that we have not considered in your proposed action, or if additional information on listed and proposed species becomes available, or if new species become listed or critical habitat is designated, this determination may be reconsidered.

We appreciate your continued commitment to avoiding and minimizing impacts to federally listed threatened and endangered species. If you have any questions regarding this letter, please contact Liz Stout of my staff at (304) 636-6586, Ext. 15, or elizabeth_stout@fws.gov, or at the letterhead address.

Sincerely,



John E. Schmidt
Field Supervisor