Workshop Public Meeting

Taylor County Public Library Assembly Room

200 Beech Street, Grafton, West Virginia 26354



WV Department of Transportation Division of Highways

State Project S246-9-0.03 Federal Project BR-0009(143)E

Bridge Street Bridge Replacement Grafton, Taylor County, West Virginia August 5, 2010

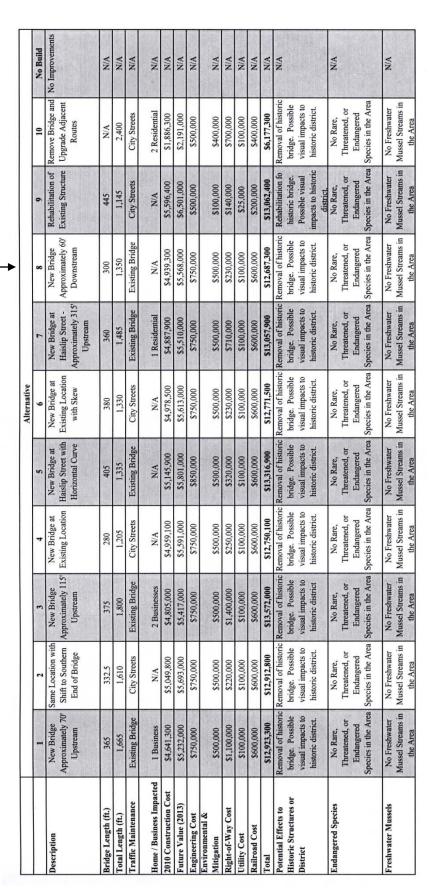
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S246-9-0.03
Bridge Street Bridge
Grafton
Taylor County

Preferred



Purpose of Workshop

The purpose of this informational workshop public meeting is to afford participants an opportunity to ask questions and state their views and opinions on the bridge replacement project.

Workshop Format

This meeting will be held in a workshop format from 4:00 to 7:00 pm. The WVDOH procedure for public meetings is informal to maximize the attendees' ability to ask questions and to give input on the project. **THERE WILL BE NO FORMAL PRESENTATION.**

Project Description

The West Virginia Department of Transportation, Division of Highways (WVDOH) is in the process of considering alternatives for the future replacement of the Bridge Street Bridge, which crosses Three Fork Creek, CSX railroad, and Front Street in Grafton, Taylor County. The existing bridge is located near the western end of Taylor County Route (CR) 9, approximately 0.02 miles east (south by direction) of the intersection of US Route 119.

The Bridge Street Bridge was constructed in 1951 as a five span, steel truss and continuous span wide flange structure. It replaced a combined Thru and Pony Truss structure at the same location and is situated perpendicular to the creek. Current traffic data (2009) indicates the average daily traffic (ADT) as 4,000 vehicles per day and it is projected to be 6,100 in 2029. The bridge has a posted weight limit of 16 tons and has a current sufficiency rating of 31.1 out of 100.

A detour (page 15) that permits closure of the bridge to build the new bridge utilizes CR 44, CR 44/8, CR 119/42, and US 119. Approximately 500 feet of CR 44 that currently facilitates one-way traffic needs to be converted to two-way traffic. The length of the detour is approximately 1.3 miles. The detour route crosses two bridges (48-119-7.93 and 48-119/32-0.16) and one at-grade railroad crossing. District Four Traffic

Engineer, Fouad Shoukry, reviewed the detour route and indicated the existing road network should adequately handle the traffic diversion resulting from the temporary closure of Bridge Street Bridge. The St. Mary's Street Bridge in Grafton, which was built in 2005, used the same detour for maintenance of traffic during construction of the replacement bridge. This structure is located on US Route 119 and has an ADT of approximately 7,000.

Factors being considered are cost, stream hydraulics, traffic service and impacts on the human and natural environments. Design and environmental studies have been initiated so that environmental compliance documentation can be developed for the proposed action as required by the National Environmental Policy Act (NEPA) of 1969. This Act is our national guideline for the protection of the environment and it requires that potential environmental consequences be indentified and various alternatives evaluated to avoid and to reduce impacts before certain actions are taken. This project is located within the Grafton Historic District and the bridge is eligible for the National Register of Historic Places. See SHPO 2/4/10 letter on page 27 and map showing the District Boundaries on page 28.

Bridge Street Bridge Alternatives

Alternative 1

Alternative 1 replaces the bridge approximately 70 feet (centerline to centerline) upstream of the existing location. Alternative one was dismissed because it requires acquisition of the Department of Health and Human Resources (DHHR) building. This facility is relatively new and has a high right-of-way cost with community impacts. The southern end of the bridge has a steep grade; greater than 12.5%. See graphic on page 16.

Alternative 2

Alternative 2 entails replacing the bridge at its current location, shifting the southern end of the bridge west while using the detour, as mentioned above, to maintain traffic during construction. The total length of mainline construction is approximately 1,610 feet, including a 332-½ foot bridge. The new bridge will have three spans with stub abutments founded on piling. The structure will have a 155-foot end span over the railroad with a vertical curve, a 132 ½-foot center span over Three Fork Creek, and a 45-foot end span.

The bridge and roadway layout, combined with the higher railroad clearance, will require the grade of CR 9 and the new bridge to be increased from the existing grade of

8.82% to 10.00%. The 10.00% grade extends onto the bridge for 230 feet before transiting to a vertical curve.

The intersection of CR 9 with CR 44 and CR 44/8 will be a four-legged intersection, with the intersecting roads meeting at nearly right angles. This intersection will be a three-way stop with motorists crossing the bridge having the right-of-way as the bridge's grade presents concern during the winter season.

The new location requires the acquisition of the vacant lot south of the bridge. See graphic on page 17.

Alternative 3

Alternative 3 is similar to Alternative 1; however, it shifts the southern abutment to the east. This alternative has a high right-of-way cost in that it requires the removal of the DHHR building and Laundromat facilities resulting in community impacts. See graphic on page 18.

Alternative 4

Alternative 4 entails replacing the bridge at its current location. The detour route, as mentioned above, will be utilized to maintain traffic during construction. The total length of mainline construction is approximately 1,205 feet, including a 280-foot bridge. The new bridge will have 2 spans with stub abutments founded on piling. The structure will have a 140-foot span over the railroad with a vertical curve and a 140-foot span over Three Fork Creek.

The new bridge will have a similar grade to the existing structure (i.e. 8.82% to 9.00%). Front Street has an approach to the bridge with a 10.22% grade, placed on fill material. Front Street's and CR 9's bridge approaches require some additional right-of-way south of the bridge. Utility relocations are required to relocate a gas line, gas regulation station, overhead utilities, and casing of a water line. See graphic on page 19.

Alternative 5

Alternative 5 entails replacing the bridge east of the existing bridge at Haislip Street while using the existing bridge to maintain traffic during construction. The detour route will also be used intermittently in order to build the new connecting roads. The total length of mainline construction is approximately 1,355 feet, including a 405-foot bridge. The new bridge will have 3 spans with stub abutments founded on piling, with 135-foot spans. A horizontal curve is located on the southern end of the bridge and connects to Front Street.

A T-intersection is utilized at the intersection of Barrett Street (CR 44) with CR 9 and CR 9 with Front Street located approximately 100 feet northwest of the intersection of CR 44/CR 9. The new configuration, combined with the higher railroad clearance, will

require the grade of CR 9 and the new bridge to be increased from 8.82% to 10.94%. The CR 9 roadway connector requires the acquisition of a vacant lot south of the bridge. See graphic on page 20.

Alternative 6

Alternative 6 is similar to Alternative 2; however, it replaces the bridge on a skew alignment with the northern abutment to the east and the southern abutment to the west of the existing location. The detour route will be used to maintain traffic during construction. The total length of mainline construction is approximately 1,330 feet, including a 380-foot bridge. The new bridge will have 3 spans with stub abutments founded on piling. The structure will have a 140-foot end span over the railroad with a vertical curve, a 140-foot center span over Three Fork Creek, and a 100-foot end span.

The grade of the new bridge is steeper than the existing bridge as it increases from 8.82% to 15.21%. This grade could present safety issues during the winter; as such, the four-legged intersection of CR 9 with CR 44 and CR 44/8 will be a three-way stop with motorists crossing the bridge having the right-of-way. See graphic on page 21.

Alternative 7

Alternative 7 consists of replacing the bridge east of the existing bridge at Haislip Street while using the existing bridge to maintain traffic during construction. The total length of construction is about 600 feet, which includes a 360-foot bridge. The new bridge will have 3 spans with stub abutments founded on piling. The structure would have a 140-foot end span over the railroad with a vertical curve, a 140-foot center span over Three Fork Creek, and an 80-foot end span.

The new alignment will require the grade of CR 9 and the new bridge to be increased from 8.82% to 16.53%. This grade could be a safety issue during the winter season, the "T-intersection" at CR 9 with CR 44/8 will require stop controls to permit right-of-way to vehicles crossing the bridge. The new location requires the acquisition of one residential home. See graphic on page 22.

Alternative 8 (Preferred)

Alternative 8 replaces the bridge adjacent to the existing bridge. The proposed structure is located approximately 60 feet downstream of the existing bridge. The total length of construction is about 900 feet, which includes a 300-foot bridge. The new bridge will have 2 spans with stub abutments founded on piling with 150-foot spans over the railroad and Three Fork Creek.

The new bridge has a similar grade to the existing structure (i.e. 8.82% to 9.00%). Front Street will have an approach to the bridge with a 13.41% grade placed on fill material. The alignment requires acquisition of a vacant lot within the Grafton Historic District just north of the bridge. Front Street and CR 9 bridge approaches require some

right-of-way south of the bridge as well. Utility relocation will be required to relocate a gas line, gas regulation station, and casing of a water line.

The existing bridge will primarily be utilized to maintain traffic during construction; however, the detour route may be needed intermittently after the new bridge is constructed to facilitate the construction of Front Street and the southern approach of the bridge. See graphic on page 23.

Alternative 9

Alternative 9 consists of renovating the existing bridge which requires a detour to maintain traffic during construction. To rehabilitate the bridge, approximately 75% of the truss members and deck will need to be replaced. Many of the truss members are deemed to be "fracture critical" which could result in a catastrophic failure of the entire structure if they were to fail. The abutments, piers, and bents will also have to be substantially rehabilitated or replaced. It is not possible to rehabilitate the bridge to accommodate today's legal load limits.

Upon completion of the rehabilitation, the bridge will be classified as functionally obsolete under Federal Highway Administration criteria due to its 13-foot 10-inch vertical clearance and the 12-foot vertical clearance over Front Street. Additionally, the rehabilitated bridge will be classified as structurally deficient since it would not accommodate legal loads.

With due consideration given to the rehabilitation cost and the fact that the bridge will be classified as both functionally obsolete and structurally deficient, the rehabilitation of this structure is not recommended. See graphic on page 24.

Alternative 10

Alternative 10 consists of removing the bridge and upgrading adjacent routes. The detour length is approximately 1.3 miles with an average drive time of three and a half minutes. Improvements will be required at the intersection of Beech Street with Walnut Street, upgrade the at-grade railroad crossing, and reconstruction of CR 44/8 (Front Street). CR 44/8 will be entirely reconstructed with improved turning radius. These improvements require acquisition of two residential houses. This alternative requires motorists to navigate through two traffic signals, an at-grade railroad crossing, a four-way intersection, and across two bridges. See graphic on page 25.

No Build Alternative

Due to the deteriorating condition of the existing structure, the No-Build Alternative will eventually result in the permanent closure of the bridge resulting in a 1.3 mile detour via US 119, CR 119/42, and CR 44/8. The detour will be burdensome on downtown traffic (including commercial, park, and residential traffic; school buses; and

emergency vehicles). Motorists will be required to navigate through two traffic signals, an at-grade railroad crossing, a four-way intersection, across two bridges, and sight distance and grade issues along Front Street.

Bridge removal has community impacts and results in additional travel times. The No Build alternative will be a hindrance for those who access the DHHR facility and emergency access to South Grafton. See graphic on page 26.

Recommendation

The investigation and study recommends that Alternative 8 (page 23), a two-span, 300-foot long bridge adjacent to the existing bridge to be the preferred alternative. The proposed structure is located approximately 60 feet downstream of the existing bridge. Maintenance of traffic will be handled using the existing structure during construction. In addition, an overhead utility line, a gas line and gas regulation station, the casing of a water line, and right-of-way relocations are required. For estimating purposes, it was assumed that a steel superstructure will be used.

The project's environmental process is underway. Should further studies determine that Alternative 8 is problematic or unfeasible, Alternative 4 is recommended as a second choice. Alternative 4 (page 19) is very similar to Alternative 8; however, it replaces the structure at the existing location with traffic utilizing the detour route through Grafton.

Comments

Those wishing to file written comments may fill out a comment sheet (page 11) and turn in at the registration table or send them on or before September 7, 2010 to:

Mr. Gregory L. Bailey, P.E., Director, Engineering Division West Virginia Division of Highways 1900 Kanawha Boulevard East Building 5, Room A-317 Charleston, West Virginia 25305-0430 DATE:

Mr. Gregory L. Bailey, P.E. Director, Engineering Division West Virginia Division of Highways 1900 Kanawha Boulevard East Building 5, Room A-317 Charleston, West Virginia 25305-0430

DATE: August 5, 2010

ORGANIZATION (IF ANY):

SUBJECT: INFORMATIONAL WORKSHOP PUBLIC MEETING

PROJECT: Bridge Street Bridge Replacement

State Project S246-9-0.03

Taylor County

COMMENTS DU	IF BY	September 7, 2010		
Please consider	the follow	ving comments:		
(Please print the	following	information)		
NAME:				
ADDRESS:				

BRIDGE REPLACEMENT STUDY

BRIDGE STREET BRIDGE

STATE PROJECT S246 - 9 - 0.02

FEDERAL PROJECT BR-0009(143)E

TAYLOR COUNTY

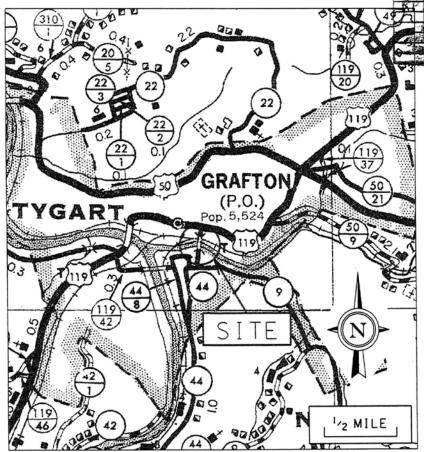
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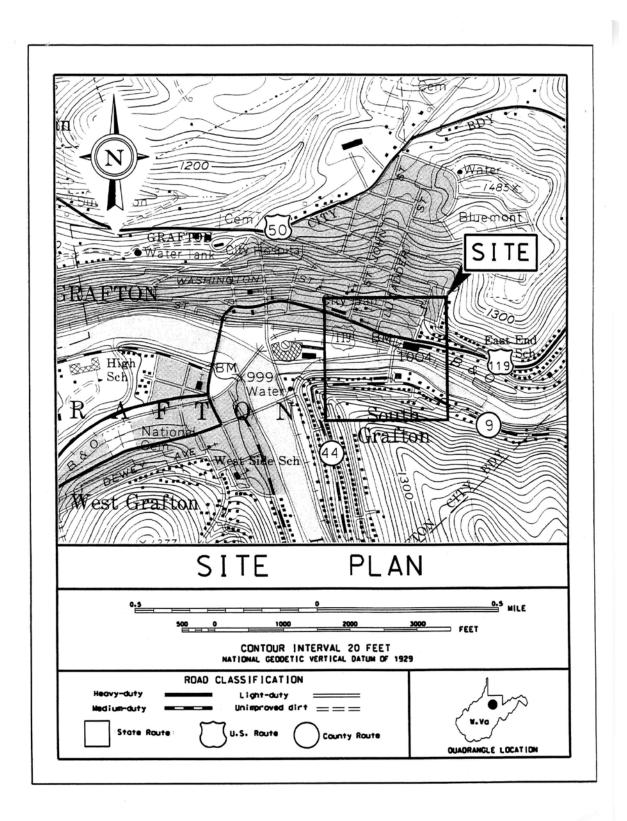
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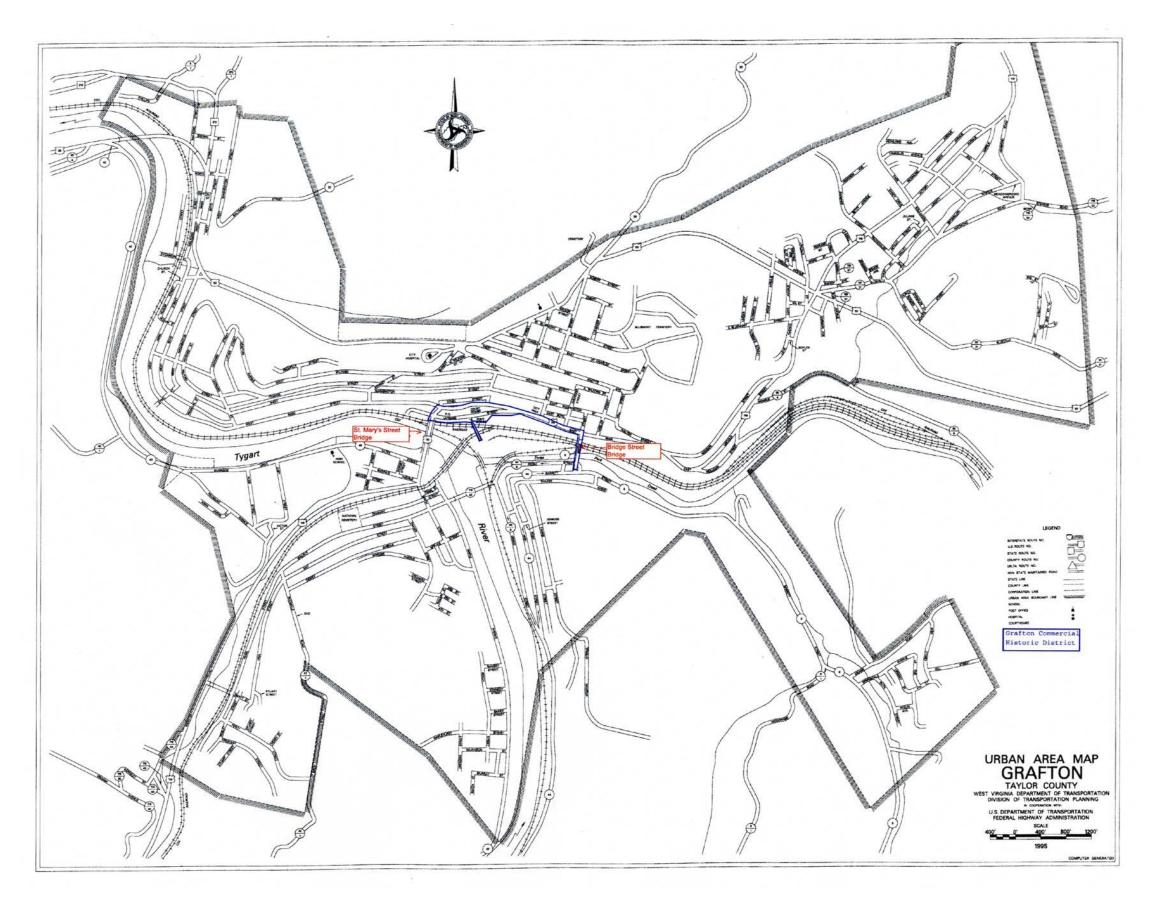
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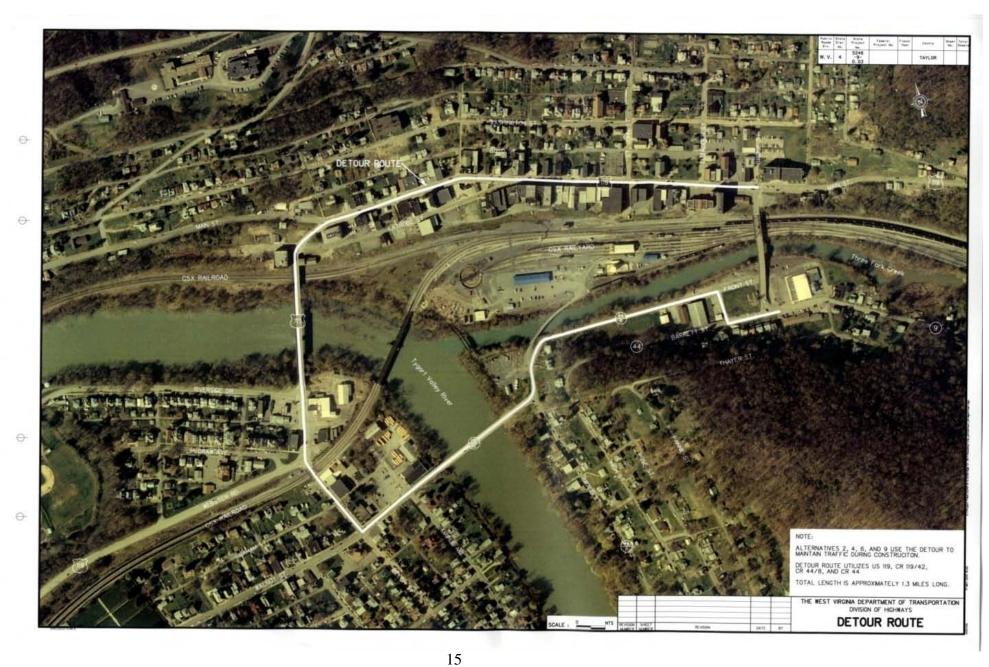


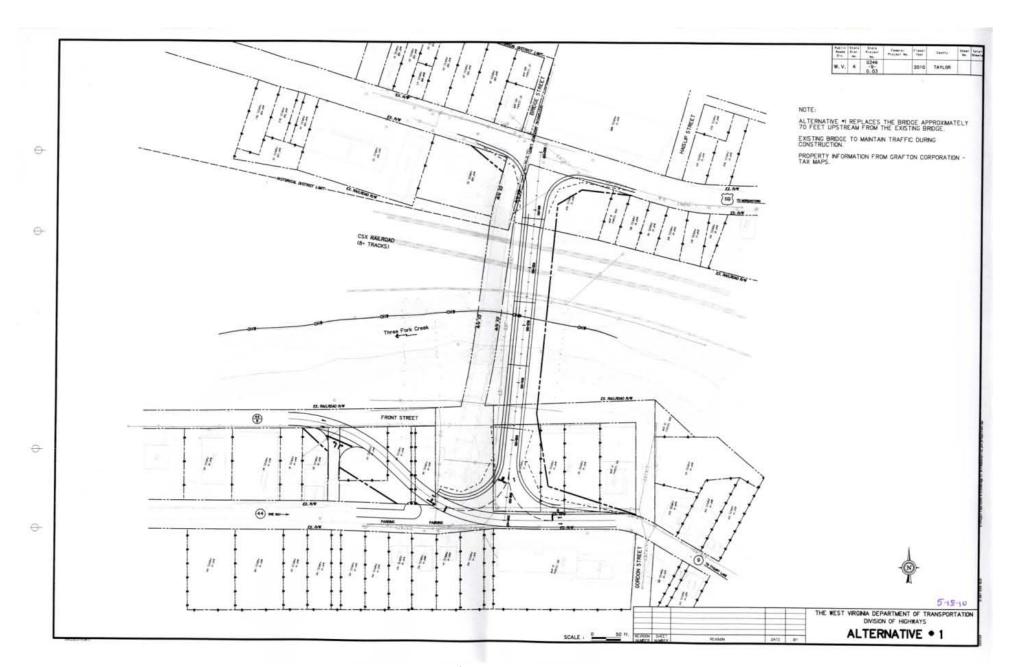
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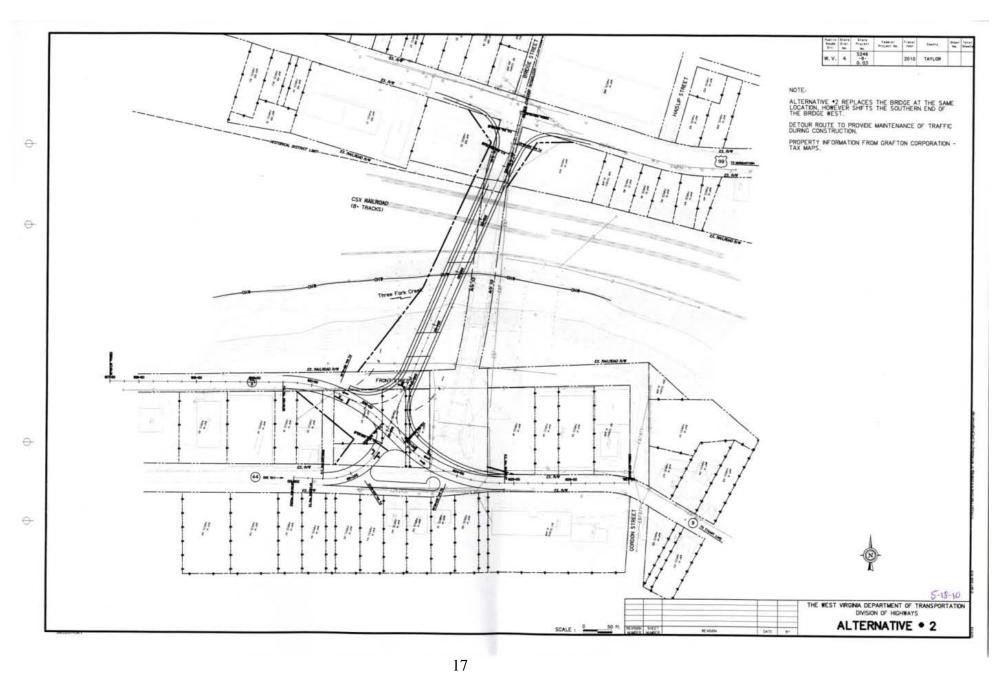
WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PLANNING AND RESEARCH DIVISION

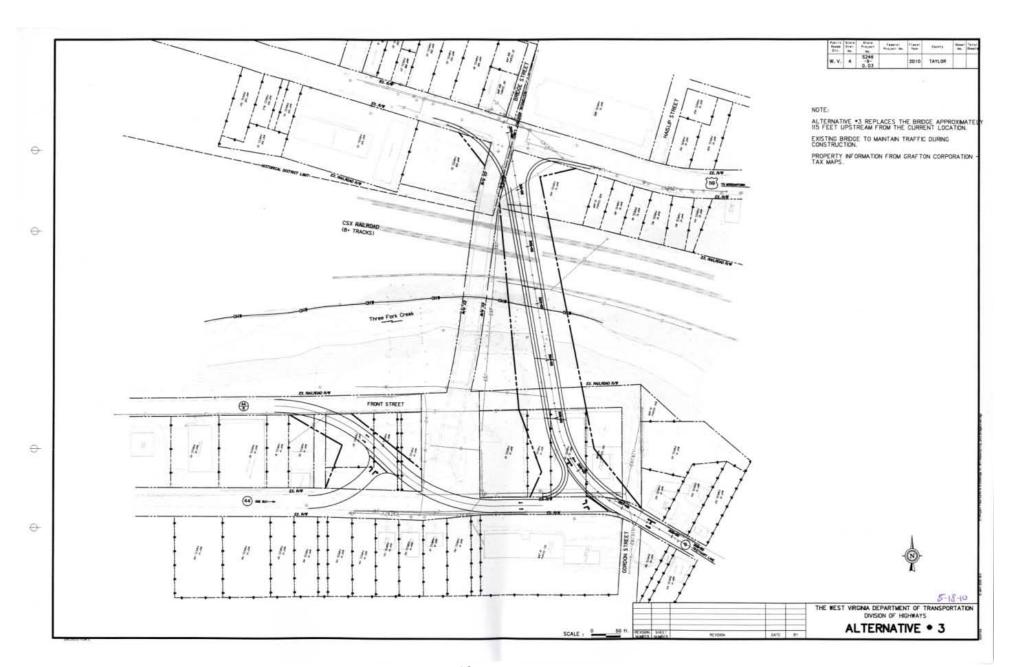


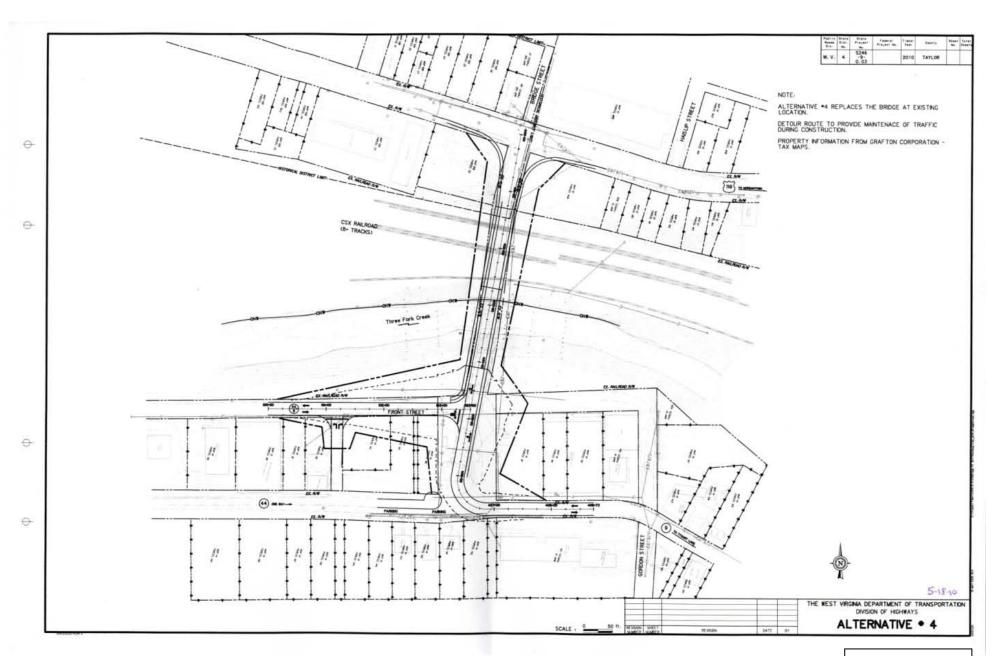


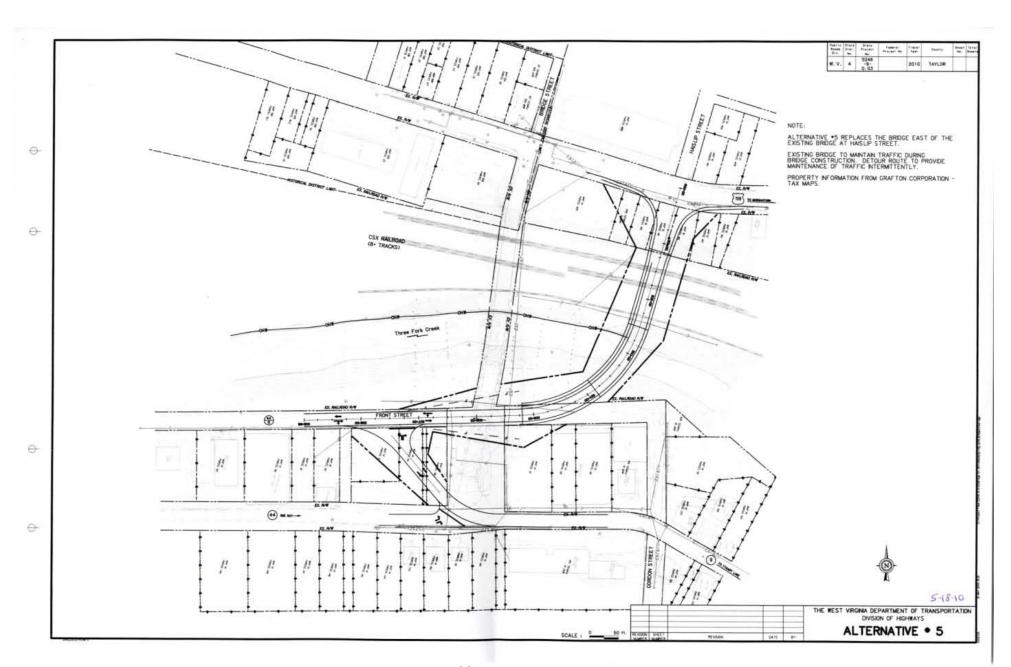


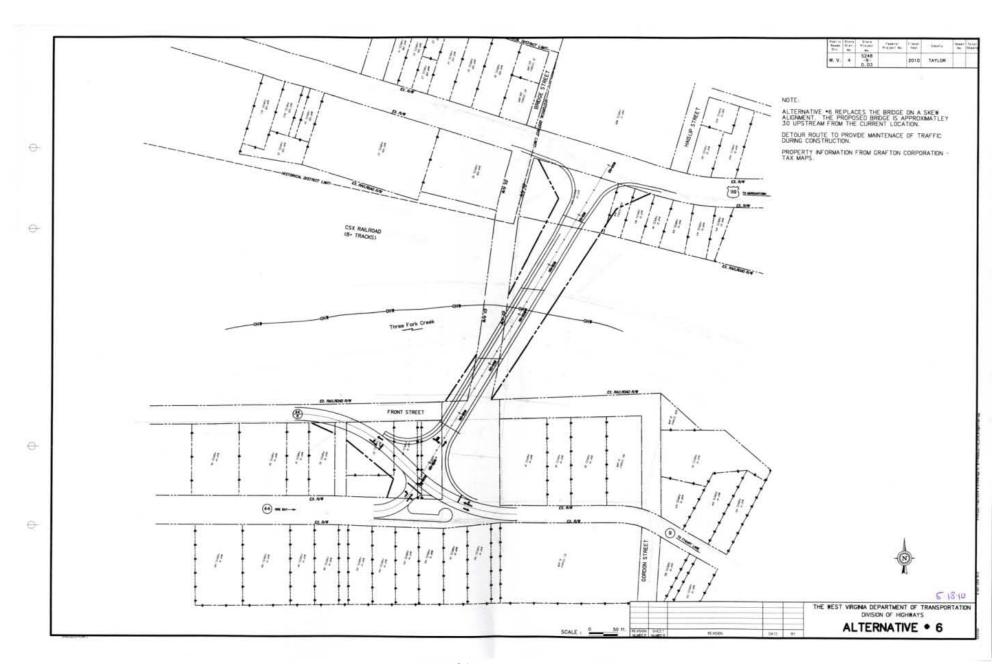


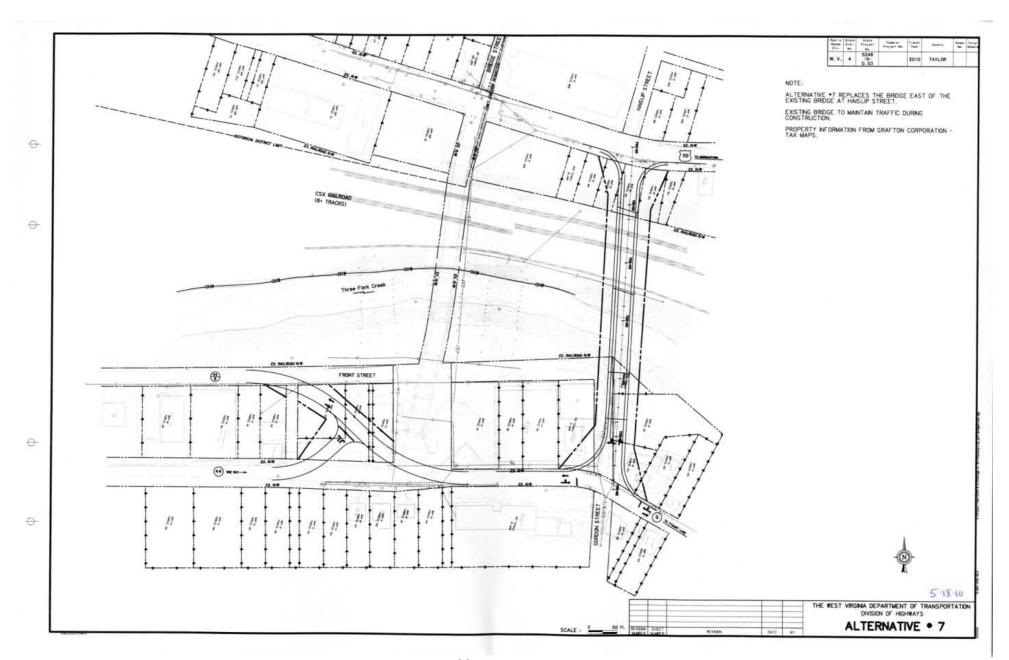


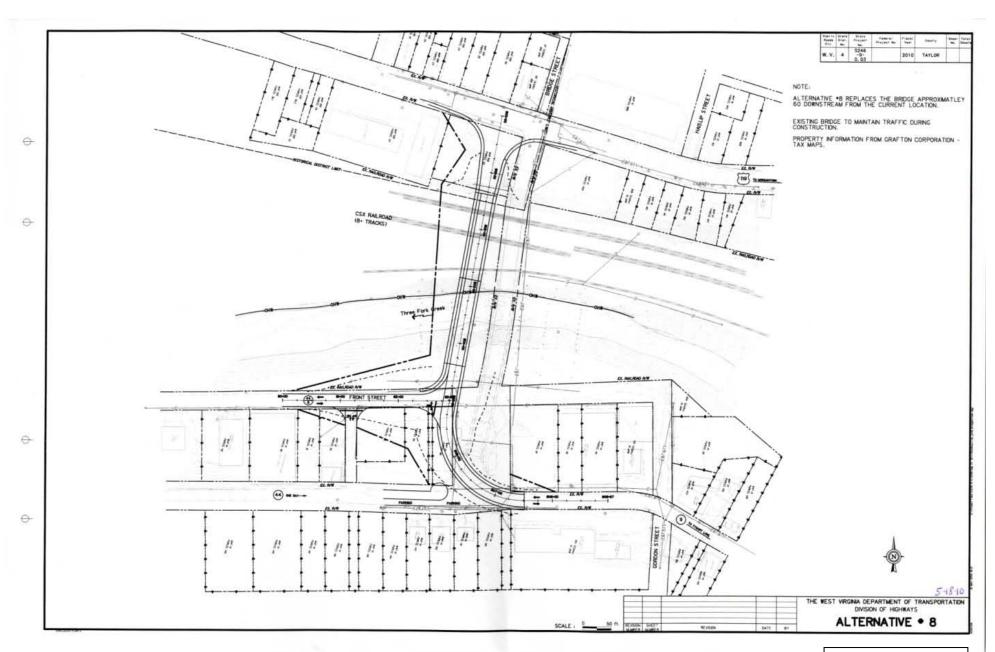


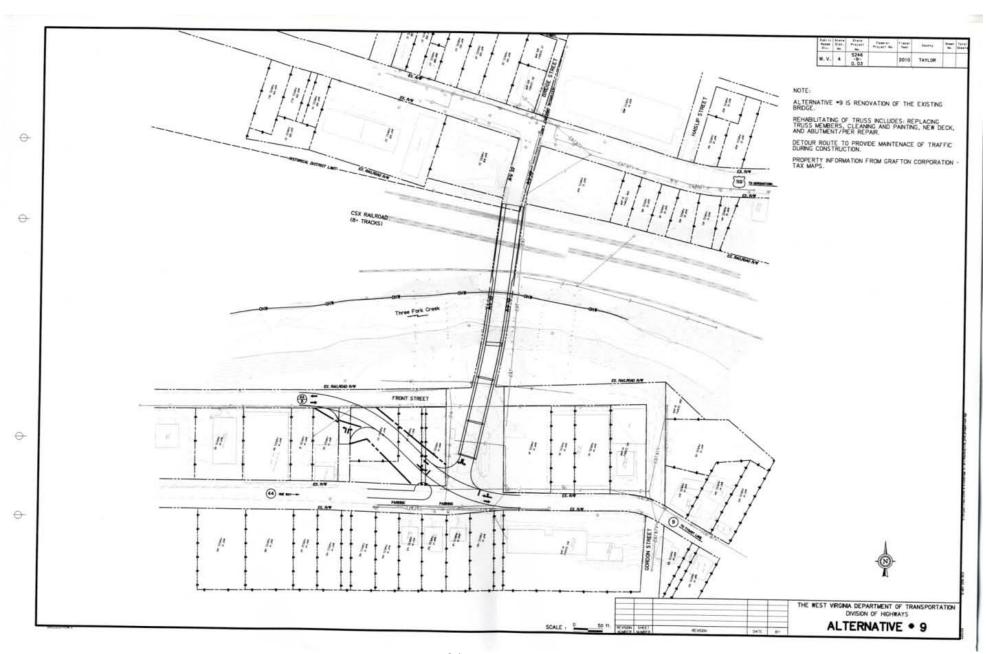




















The Culture Center 1900 Kanawha Blvd., E. Charleston, WV 25305-0300

Randall Reid-Smith, Commissioner

Phone 304.558.0220 • www.wvculture.org Fax 304.558.2779 • TDD 304.558.3562

February 4, 2010

Mr. Gregory L. Bailey, PE Director WV DOH Building Five, Room 110 Capitol Complex Charleston, WV 25305

RE: Bridge Street Bridge Replacement

5346-9-0.03

FR#: 10-374-TA

Dear Mr Bailey:

It is our understanding that the proposed project will involve demolition and replacement of the existing Bridge Street Bridge in Grafton.

The Bridge Street Bridge is currently listed as a contributing structure to the Grafton Historic District. It is our understanding that you are questioning this designation. After reviewing the National Register nomination and researching the bridge, we agree with your findings and feel the bridge should not have been listed as a contributing structure to the Grafton Historic District.

However, it is our opinion that the bridge is considered eligible for listing in the National Register of Historic Places as an individual structure. It now meets the fifty year requirement, retains integrity, and according to the draft of the West Virginia Statewide Bridge Survey, is the only existing steel through truss bridge in Taylor County; therefore, it is our opinion that it is eligible under Criterion C.

We appreciate the opportunity to be of service. If you have questions regarding our comments or the Section 106 process, please contact Aubrey Von Lindern, Historian in the Historic Preservation Office at (304) 558-0240.

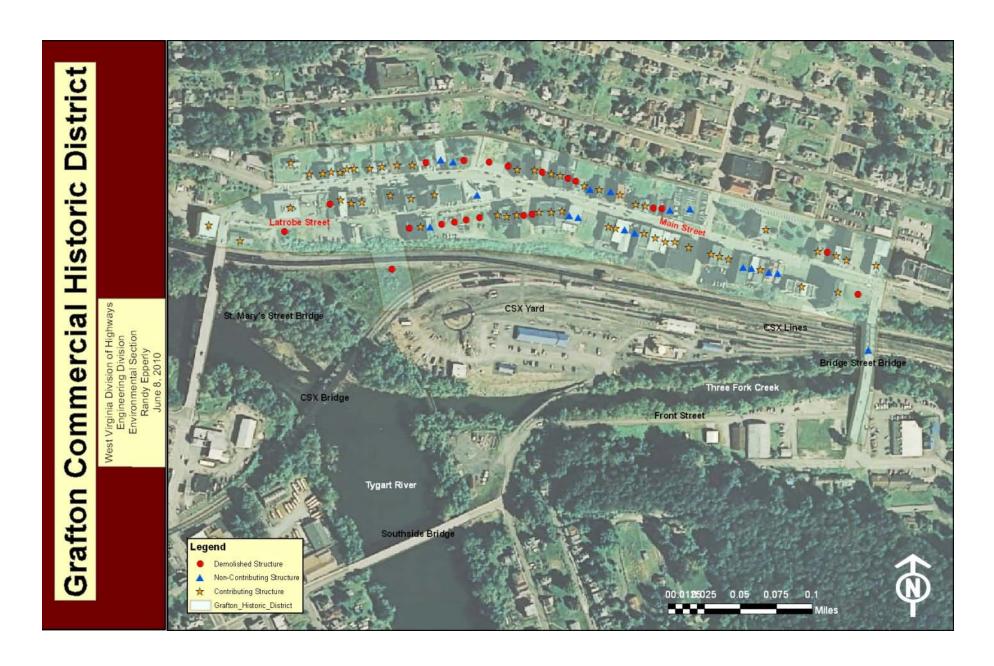
0))100 11 (291) 330 021

Susan M. Pierce

Deputy State Historic Preservation Officer

SMP/ACV

Sincerely.





OCT 1 4 2009

ENGINEERING DIVISION
WY DOH

DIVISION OF NATURAL RESOURCES

Wildlife Resources Section Operations Center P.O. Box 67 Elkins, West Virginia 26241-3235 Telephone (304) 637-0245 Fax (304) 637-0250

October 9, 2009

Frank Jezioro Director

Joe Manchin III Governor

> Mr. Gregory L. Bailey Division of Highways 1900 Kanawha Boulevard, East Building Five, Room 110 Charleston, WV 25305-0430

Dear Mr. Bailey:

We have reviewed our files for information on rare, threatened and endangered (RTE) species and natural trout streams for the areas of the proposed highway projects:

CF	State Project S202-1-1.57 Federal Project BR0001(225)E Grade Road Overpass Bridge Replacement Berkeley County	Our records indicate no known occurrences of RTE species or natural trout streams at this site.
1BM	State Project S217-23/9-8.40 Federal Project Br-0239(003)D Anmoore Run Bridge Replacement Harrison County	Our records indicate no known occurrences of RTE species or natural trout streams at this site.
1 pm	State Project S310-20/8-0.04 Meadow Creek Bridge Replacement Fayette County	Our records indicate no known occurrences of RTE species or natural trout streams at this site.
BM	State Project 21-30-1.75 Skin Creek Arch #2 Bridge Repair Lewis County	Our records indicate no known occurrences of RTE species or natural trout streams at this site; however, mussel surveys are required.
TBM	State Project 13-39-0.80 Coats Run Culvert Replacement Greenbrier County	Our records indicate no known occurrences of RTE species at this site. Coats Run is a natural trout stream.
184	State Project S355-1/12-0.08 Hurricane Branch Road Box Wyoming County	Our records indicate no known occurrences of RTE species or natural trout streams at this site.

TBM	State Project S246-9-0.02 00 Federal Project BR-0009(143)D Bridge Street Bridge Replacement Taylor County	Our records indicate no known occurrences of RTE species or natural trout streams at this site.
10	State Project S345-20-22.45 Sandstone Mountain Road Landslide #3864 Summers County	Our records indicate no known occurrences of RTE species or natural trout streams at this site.
R	State Project CR 17 MP 13.75 Indian Creek Culvert Replacement Ritchie County	Our records indicate no known occurrences of RTE species or natural trout streams at this site.
$\langle \rho_{\iota_V}$	State Project U348-2/18-0.00 Bens Run Industrial Park Access Road Tyler County	Our records indicate no known occurrences of RTE species or natural trout streams at this site.

The Wildlife Resources Section knows of no surveys that have been conducted in these areas for rare species or rare species habitat. Consequently, this response is based on information currently available and should not be considered a comprehensive survey of the areas under review.

Thank you for your inquiry, and should you have any questions please feel free to contact me at the above number, extension 2048.

Sincerely,

Barbara Sargent

Environmental Resources Specialist

Wildlife Diversity Program