

MEMORANDUM

TO: City Council

FROM: Alfred D. Lott, ICMA-CM, CPM
City Manager

SUBJECT: ***Status Report***

DATE: October 25, 2018

Status Report

1. Governor's Bridge Reconstruction Alternatives

On Wednesday, October 17th the Prince George's County Department of Public Works & Transportation held a public information meeting in Bowie regarding several alternative improvement concepts for the rehabilitation of Governor's Bridge (see attached handout material from the meeting). The bridge was closed in 2015 due to deterioration issues and flooding of the Patuxent River. Approximately 50 people from Prince George's and Anne Arundel counties attended the meeting, which was held at the Comfort Inn. County Council Vice-Chair Todd Turner also attended and addressed the residents. A full copy of the 262-page Alternative Analysis Report can be found on the project website: <https://www.princegeorgescountymd.gov/3010/Governors-Bridge-Road-Bridge>. City Council's longstanding policy is that the bridge should be repaired or reconstructed and opened to traffic as soon as possible. The City has expressed its support for this improvement project annually in its recommendations on the County capital improvement program. This year's letter included the following endorsement of the project:

The City is pleased to see \$7.1 million in funding programmed for a replacement structure over the Patuxent River. A new bridge with a wider span, now approximately 90% designed, will provide improved safety, especially for emergency vehicles. Access to the Governor Bridge Road community has been challenging since the existing bridge was closed. Replacement of the existing bridge will guarantee a second point of access to the homes and businesses on Governor Bridge Road in case of emergency.

The County Public Works Department is accepting comments and recommendations concerning the proposed alternatives until December 3, 2018.

2. County Council Results CB-13-2018 (Zoning Rewrite)

On Tuesday, October 23rd, the Prince George's County Council held a public hearing on CB-13-2018, the rewrite of the County Zoning Ordinance. A total of 11 speakers, including the City's Planning Director, addressed the Council. Most spoke in favor of approval, however, some residents felt the County should delay action until more thorough explanations are provided for the multitude of amendments made by the Council. At the conclusion of the hearing, Vice-Chair Todd Turner offered Amendment #4 to address the need for a number of technical revisions. Council Member Derrick Leon Davis seconded, and the amendments were included in the bill. Council Member Davis moved for APPROVAL of CB-13, as amended. Vice Chair Turner seconded and the bill passed by a vote of 8-1 (Lehman against). The new regulations do not become effective until 2020. Companion bills revising the Subdivision Regulations and updating the Landscape Manual were also approved.

ADL/lfr
Attachments

Prince George's County & Anne Arundel County Joint Public Meeting Governors Bridge Road, Bridge Rehabilitation Project

Wednesday, October 17, 2018

Comfort Inn & Conference Center
4500 Crain Highway
Bowie, MD 20716

AGENDA

I. Welcome and Introductions

Council Member Jerry Walker, District 7, Anne Arundel County
Council Member Todd M. Turner, District 4, Prince George's County

II. Presentation: Governors Bridge Road, Bridge Rehabilitation Project

Prince George's County

- Unmesh Patel, P.E., Project Manager, Highway and Bridge Design Division
- Questions and Answers

III. Closing Remarks

Council Member Jerry Walker, District 7, Anne Arundel County
Council Member Todd M. Turner, District 4, Prince George's County

IV. One-on-One Discussions

Contact Information:

Prince George's County DPW&T		
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Anne Arundel County DPW		
<u>Dan Anderson</u> Project Engineer Anne Arundel County DPW Pwande85@aacounty.org		

Project Weblink to obtain Presentation Material:

<https://www.princegeorgescountymd.gov/3010/Governors-Bridge-Road-Bridge>

Rehabilitation of Governors Bridge Road Bridge Alternates

Alternate 1 - No-Build alternative

Estimated Construction Cost (\$200,000)

Advantages:

- Low cost.
- Existing historic structure would not be impacted.
- No impacts to the surrounding parks, historic or environmental site features.
- No impacts to the Patuxent River.
- Existing structure could be used by pedestrians, bikers, fisherman, and other non-vehicle based users with minimum repair of the structure.
- No additional right-of-way required.
- No utility impacts.

Disadvantages:

- Bridge will remain structurally deficient, will not be opened to vehicular traffic.
- Roadway remains closed and detour route stays in effect.
- The Prince George's County approach would still be subject to frequent closings due to flooding.

Alternate 2 - Rehabilitation of the existing structure

Estimated Construction Cost (\$2,200,000)

Advantages:

- Structure retains its historic integrity.
- Least expensive "build" alternate.
- No additional right-of-way is required.
- No impacts to the Patuxent River.
- No impacts to the surrounding parks, historic or environmental site features.
- No utility impacts.

Disadvantages:

- Does not improve the horizontal or vertical alignment of the roadway.
- The Prince George's County approach would still be subject to frequent closings due to flooding.
- Structure would be posted for load restrictions and limited to lightweight vehicles.
- Continual maintenance of bridge structure due to continuing deterioration.

Alternate 3 - (Existing Alignment – 1 Lane Bridge)

Estimated Construction Cost (\$6,000,000)

Advantages:

- No load restrictions on the bridge for lightweight or heavyweight vehicles.
- Portions of existing bridge would be retained for historical context.
- Improved horizontal & vertical sight distance on the Prince George's County approach.
- Reduced frequency of flooding during minimal storm event.
- Least expensive new bridge alternative.
- Minimal impacts to the Patuxent River compared to Alternates 4, 5 and 6.
- Less right-of-way impacts compared to Alternates 4,5 and 6 due to improved horizontal & vertical sight distance on west approach road and two-lane bridge structure.

Disadvantages:

- Impacts to parks, historic, and environmental site features due to Prince George's County approach roadway horizontal and vertical sight distance improvements.
- Right-of-way is required to improve the roadway alignment.
- Aerial utility pole impacts adding time and cost.
- Prince George's County approach roadway would flood during higher storm events.

Alternate 4 - (Existing Alignment – 2 Lane Bridge)

Estimated Construction Cost (\$6,850,000)

Advantages:

- Installation of 22-foot wide two-lane bridge would replace one-lane bridge and would allow two lanes of traffic.
- No load restrictions on the bridge for lightweight or heavyweight vehicles.
- Improved horizontal & vertical sight distance on Prince George's County approach.
- Reduced frequency of flooding during minimal storm event.

Disadvantages:

- Modification of the bridge to accommodate two traffic lanes would modify the historic context of the existing historic structure.
- Increased impacts to the Patuxent River compared to Alternate 3 due to roadway horizontal and vertical sight distance improvements and two-lane bridge structure.
- Increased right-of-way impacts compared to Alternate 3 due to improved horizontal & vertical sight distance on west approach road and two-lane bridge structure.
- Aerial utility pole impacts adding time and cost.
- Prince George's County approach roadway would flood during higher storm events.

Alternate 5 -(Shifted Alignment – 1 Lane Bridge)

Estimated Construction Cost (\$6,900,000)

Advantages:

- No load restrictions on the bridge for lightweight or heavyweight vehicles.
- Existing historic bridge would remain in place for historical context.
- Improved horizontal & vertical sight distance on Prince George's County's and Anne Arundel County's approach roadways.
- Reduced frequency of flooding during minimal storm event.

Disadvantages:

- Increased impacts to parks, historic and environmental site features compared to Alternatives 3 & 4 due to improved horizontal & vertical sight distance on Prince George's County and Anne Arundel County approach roadways on the shifted alignment.
- Additional impacts to the Patuxent River due to construction of new bridge abutments for the shifted alignment.
- Prince George's County approach roadway would flood during higher storm events.
- Increased right-of-way impacts compared to Alternate 3 & 4 due to shifted alignments and roadway geometric improvements.
- Aerial utility pole impacts adding time and cost.
- Higher cost than Alternate 3.
- Permitting would be more difficult than Alternates 3 & 4.

Alternate 6 -(Shifted Alignment – 2 Lane Bridge)

Estimated Construction Cost (\$7,700,000)

Advantages:

- New 22-foot clear roadway width two-lane bridge to the south of existing bridge on shifted road alignment to avoid impact on exiting historic bridge.
- No load restrictions on the bridge for lightweight or heavyweight vehicles.
- Existing historic bridge would remain in place for historical context.
- Improved horizontal & vertical sight distance on Prince George's County's and Anne Arundel County's approach roadways.
- Reduced frequency of flooding during minimal storm event.

Disadvantages:

- Increased impacts to parks, historic and environmental site features compared to Alternates 3, 4 & 5 due to improved horizontal & vertical sight distance on Prince George's and Anne Arundel County approach roadways on shifted alignment.
- Additional impacts to the Patuxent River due to construction of new bridge abutments for the shifted alignment.
- Prince George's County approach roadway would flood during higher storm events.
- Increased right-of-way impacts compared to Alternatives 3, 4 & 5 due to shifted alignments and roadway geometric improvements.
- Aerial utility pole impacts adding time and cost.
- Highest cost of all alternates.
- Permitting would be more difficult than Alternates 3 ,4 & 5.

ALTERNATIVES SUMMARY

ALTERNATIVE	DESCRIPTION	COST	NUMBER OF LANES	BRIDGE WIDTH	RETAINS BRIDGE HISTORIC INTEGRITY	FLOODING REDUCED	ROADWAY GEOMETRY IMPROVEMENTS
1	NO-BUILD	\$ 0.2 M	0	12.25'	YES	NO	NO
2	BRIDGE REHABILITATION	\$2.0 M	1	12.25'	YES	NO	NO
3	NEW BRIDGE - EXISTING ALIGNMENT	\$6.0 M	1	15'	YES	SLIGHTLY	WEST APPR ONLY
4	NEW BRIDGE - EXISTING ALIGNMENT	\$6.8 M	2	22'	YES	SLIGHTLY	WEST APPR ONLY
5	NEW BRIDGE - SHIFTED ALIGNMENT	\$6.9 M	1	15'	NO	SLIGHTLY	YES
6	NEW BRIDGE - SHIFTED ALIGNMENT	\$7.7 M	2	22'	NO	SLIGHTLY	YES



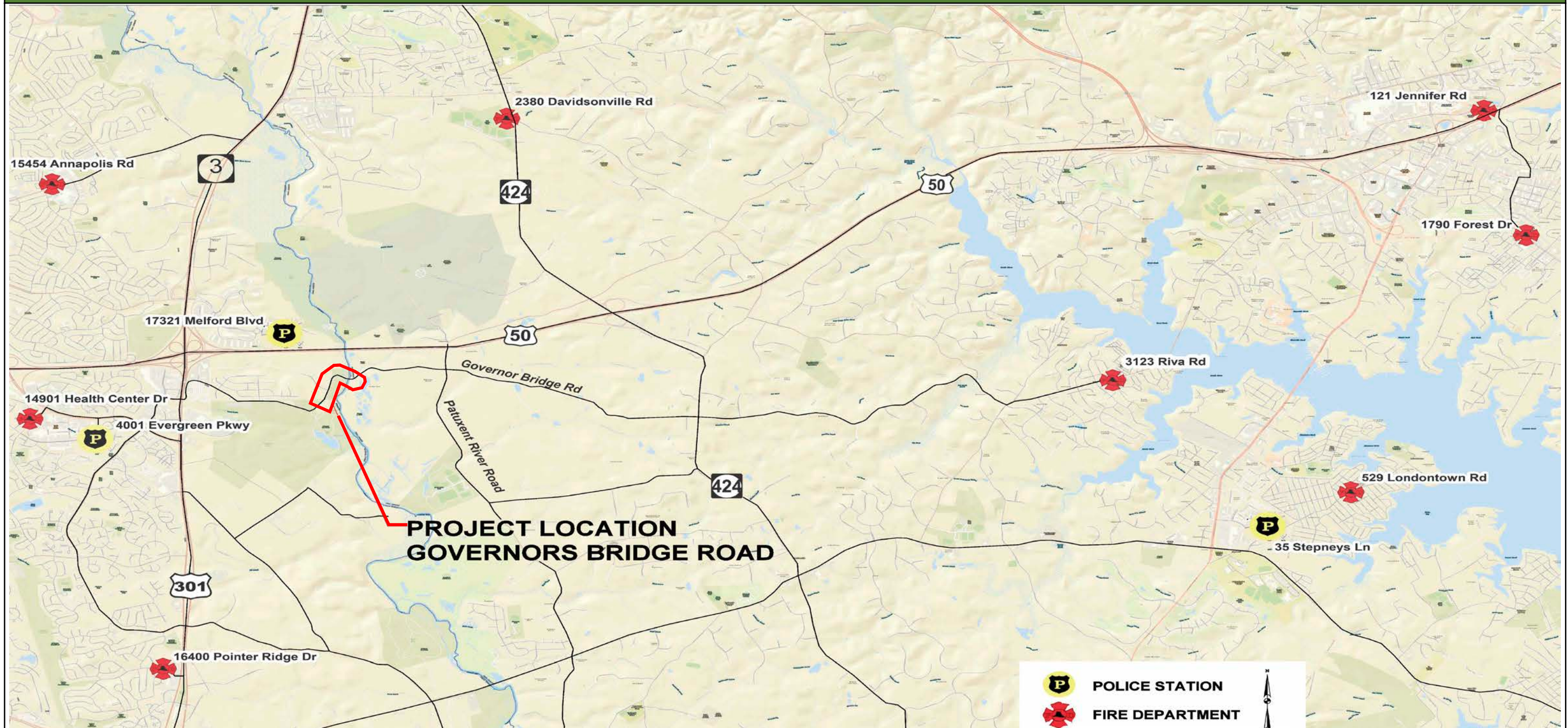
REHABILITATION OF GOVERNORS BRIDGE ROAD BRIDGE OVER PATUXENT RIVER ALTERNATE 1 – NO BUILD



County Executive
Rushern L. Baker, III

Department of Public Works and Transportation

Acting Director
Gwendolyn T. Clerkley



Alternate 1 would close the Pratt Truss bridge permanently to vehicular traffic and there will be no rehabilitation to the existing bridge. Minor repairs will be made to the approach roadway and the existing bridge structure would allow pedestrian and bicycle traffic.



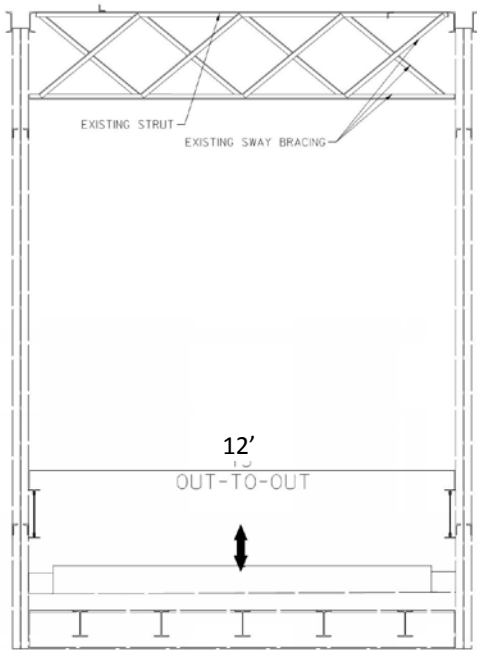
REHABILITATION OF GOVERNORS BRIDGE ROAD BRIDGE OVER PATUXENT RIVER ALTERNATE 2 – BRIDGE REHABILITATION



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Alternate 2 would rehabilitate the existing Pratt Truss bridge structure with little to no impact to its historic integrity. Besides cleaning and painting the existing bridge, several structural members (such as steel stringers, bottom chords & steel open grid deck) would need to be replaced. Even with the repairs, the rehabilitated bridge would remain posted for certain live loading combinations due to its inherent structural makeup. The Prince George's County side approach road would continue to flood during minimal storm events necessitating regular road closures that are encountered today.

This bridge has been rehabilitated similarly in the past, most recently in 2014. Even with the repairs, the structure has undergone more deterioration and section loss in some of the primary structural steel members and was subsequently closed to vehicular traffic in March 2015.



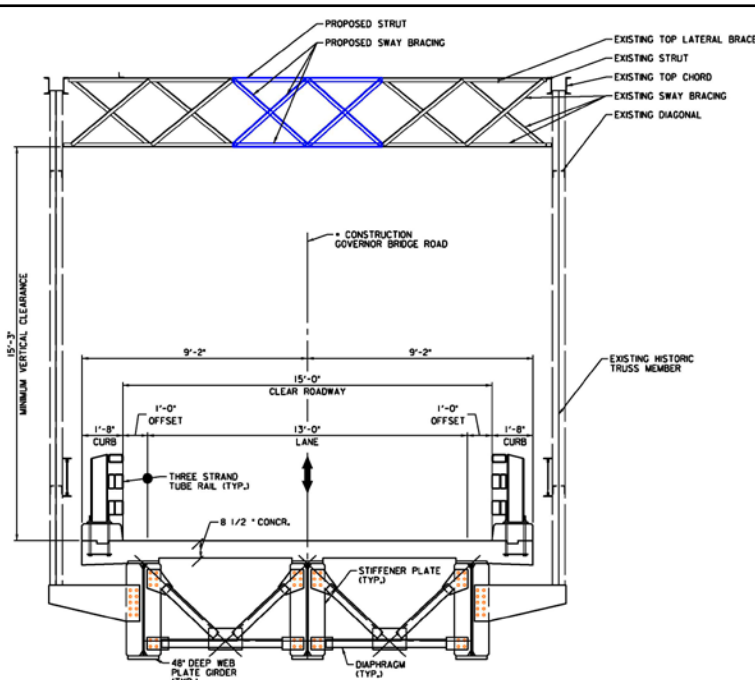
REHABILITATION OF GOVERNORS BRIDGE ROAD BRIDGE OVER PATUXENT RIVER ALTERNATE 3 – EXISTING ALIGNMENT – 1 LANE BRIDGE OPTION



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Alternate 3 would replace the existing Pratt Truss bridge with a 15-foot wide, single lane steel bridge structure and concrete deck. The trusses from the original bridge would be removed, retained and reinstalled only to maintain the historic appearance without providing any structural support to the bridge. The existing top lateral bracing, struts and sway bracings (see bridge typical section) would be cut and new members will be added to account for the adjustment in bridge width.

The proposed roadway improvements along Governors Bridge Road would include reconstruction, realignment and widening of the road. The Prince George's County approach would be modified to improve horizontal and vertical sight distance while minimizing the environmental impacts. This approach road would be raised to pass the 2-year storm which would reduce the frequency of flooding on the Prince George's County side. It would not be possible to raise the road and bridge any further without increasing flood impacts to the US 50 bridge crossing.



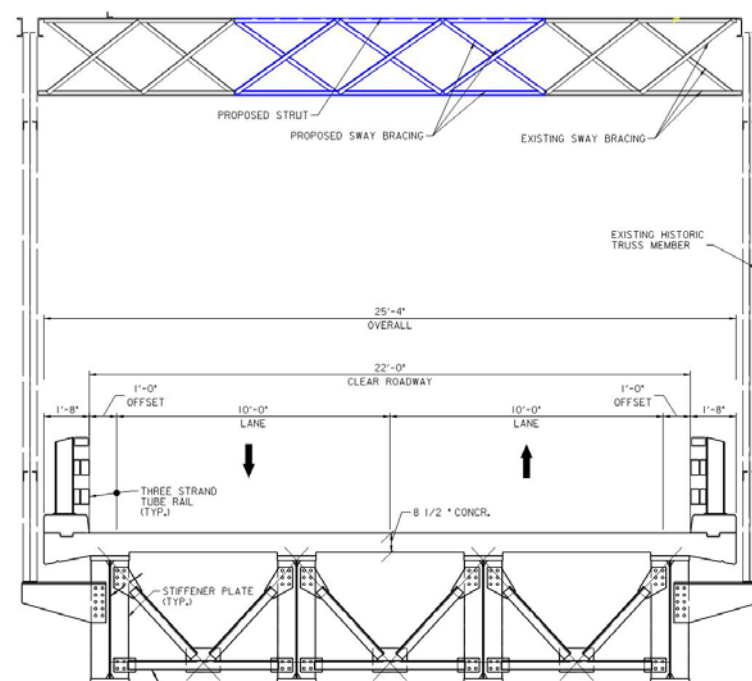
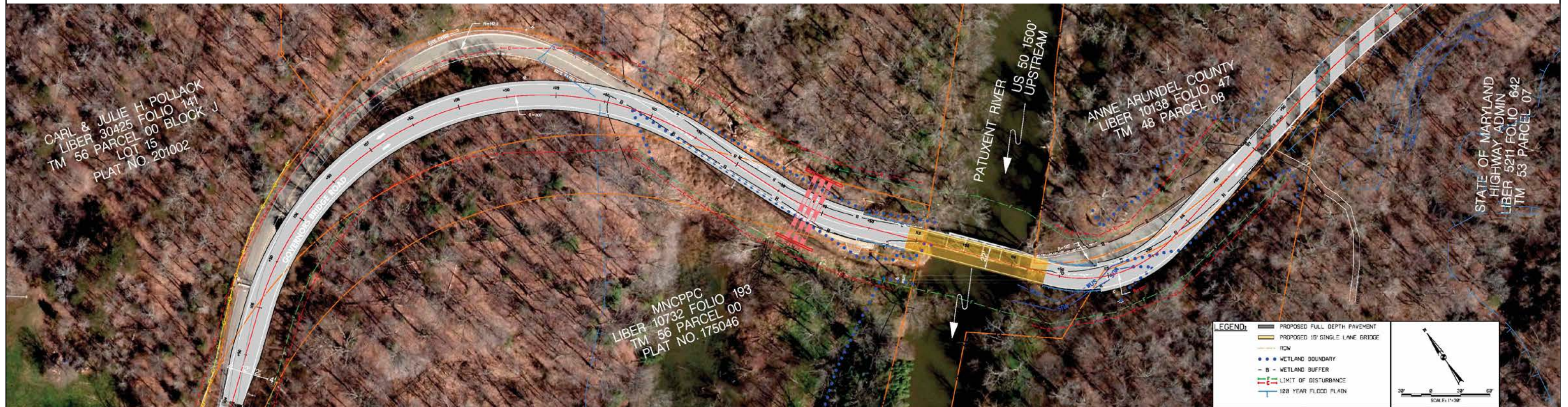
REHABILITATION OF GOVERNORS BRIDGE ROAD BRIDGE OVER PATUXENT RIVER ALTERNATE 4 – EXISTING ALIGNMENT – 2 LANE BRIDGE OPTION



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Alternate 4 would provide for a two-lane bridge on the existing bridge location with retained elements of the original structure. Alternative 4 is identical to Alternative 3 other than the number and width of the lanes on the bridge.

Alternate 4 would replace the existing Pratt Truss bridge with a 22-foot wide, two lane steel bridge structure and concrete deck. The trusses from the original bridge would be removed, retained and reinstalled without providing any structural support to the bridge. The existing top lateral bracing, struts and sway bracings (see bridge typical section) would be cut and new members would be added to account for the adjustment in bridge width.

The proposed roadway improvements along Governor Bridge Road would include reconstruction, realignment and widening of the road. The Prince George's County approach would be modified to improve horizontal and vertical sight distance while minimizing the environmental impacts. This approach road would be raised to pass the 2-year storm which would reduce the frequency of flooding on the Prince George's County side. It would not be possible to raise the road and bridge any further without increasing flood impacts to the US 50 bridge crossing.



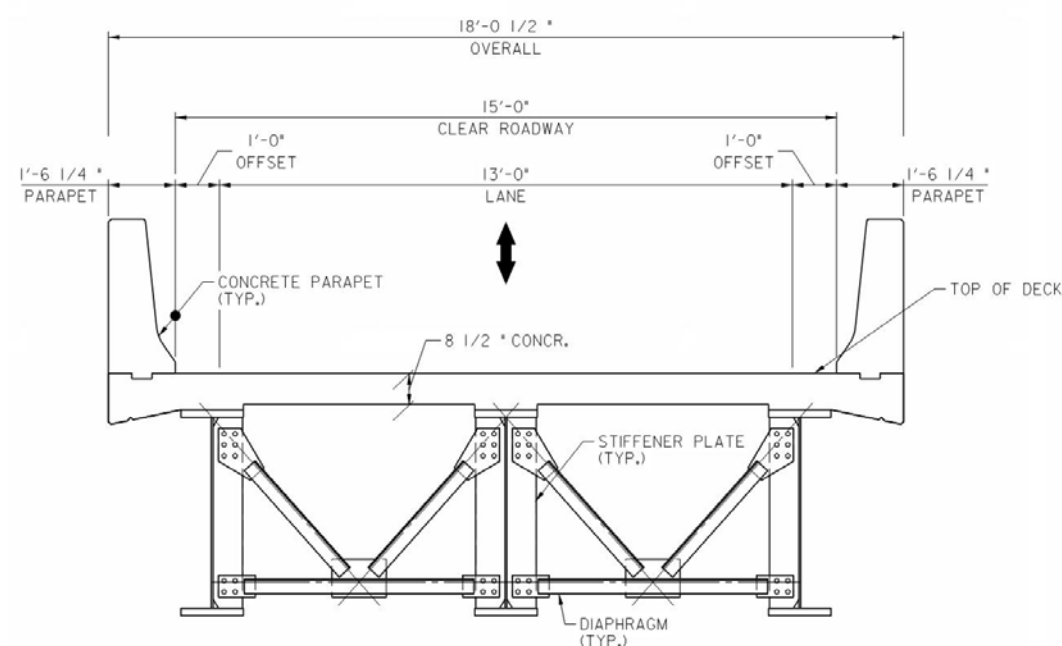
REHABILITATION OF GOVERNORS BRIDGE ROAD BRIDGE OVER PATUXENT RIVER ALTERNATE 5 – SHIFTED ALIGNMENT – 1 LANE BRIDGE OPTION



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Alternate 5 would provide a new 15-foot wide, one-lane bridge downstream of the existing location while maintaining the existing Pratt Truss bridge in the same location to retain its historic integrity. No repairs would be performed on the existing Pratt Truss bridge.

The new bridge would be a steel structure with concrete deck. Additional impacts to the Patuxent River would occur due to the construction of the new bridge abutments. This alternate involves increased impacts to parks, historic and environmental site features compared to Alternatives 3 & 4 due to improved horizontal & vertical sight distance on Prince George's and Anne Arundel County approach roadways on the shifted alignment.

Proposed roadway improvements along Governor Bridge Road would include reconstruction of the roadway to improve horizontal and vertical sight distance on east and west approach road while minimizing the environmental impacts. The west approach road will be raised to pass the 2-year storm which eliminates frequent flooding on the Prince George's County side. It was not possible to raise the road and bridge any further without increasing flood impacts to the US 50 bridge crossing.



REHABILITATION OF GOVERNORS BRIDGE ROAD BRIDGE OVER PATUXENT RIVER ALTERNATE 6 – SHIFTED ALIGNMENT – 2 LANE BRIDGE OPTION



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Department of Public Works and Transportation

Acting Director
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Alternate 6 provides a new 22-foot wide, two-lane bridge downstream of the existing location while maintaining the existing Pratt Truss bridge in the same location to retain its historic integrity. No repairs will be performed on the existing Pratt Truss bridge.

The new bridge would be a steel structure with concrete deck. Additional stream impacts would occur due to the construction of the new bridge abutments. This alternate involves increased impacts to parks, historic and environmental site features compared to Alternatives 3 & 4 due to improved horizontal & vertical sight distance on Prince George's and Anne Arundel County approach roadways on the shifted alignment.

Proposed roadway improvements along Governor Bridge Road would include reconstruction of the roadway to improve horizontal and vertical sight distance on east and west approach road while minimizing the environmental impacts. The west approach road will be raised to pass the 2-year storm which eliminates frequent flooding on the Prince George's County side. It was not possible to raise the road and bridge any further without creating flood impacts to the US 50 bridge crossing.

