Old Bridge Rd and Occoquan Rd Intersection Improvement

Public Hearing Comments

NO.	DATE	NAME	COMMENT	RESPONSE
1	2/3/22	William Benton	In your opinion, does the design of the project meet the needs for this intersection? - Yes There seems to be details yet to be determined. What specific concerns (such as design/safety/environmental) do you have regarding the proposed project? - 1) Is there a pipeline along Occoquan Dr to be relocated? 2) Coordination with VDOT is important and should be addressed. 3) Traffic considerations during construction will impact access - is there any mitigation possible? e.g. temporary access roads, etc. Do you support this project? - Yes Please keep us informed as to any changes & schedules.	Thank you for your valuable feedback and support of this project, it is much appreciated. The County will continue to post project information as they become available and approved by the reviewing agencies. Project documents will continue to be populated here on the County's current transportation webpage: https://www.pwcva.gov/department/transportation/current-road-projects The project is currently going through the Utility Field Inspection (UFI) stage to identify impacts to the utilities, mitigation strategies, and potential relocation design to address your concern of this pipeline as well as other utilities at this intersection. Coordination certainly taking place with VDOT as well as all the affect utility owners. The temporary traffic plans have made it through one round of design and will continue to be updated and finetuned to address VDOT comments and concerns as well as improve access during construction. Yes, mitigation strategies will be analyzed as implemented to the extend feasible to address your concern. The County will continue to keep the public informed of this project as it moves towards final design. Please check back frequently on the County's current transportation project webpage provided above for new information or contact the project PM for additional information.
2	2/3/22	Deborah Phillips	In your opinion, does the design of the project meet the needs for this intersection? - Yes What specific concerns (such as design/safety/environmental) do you have regarding the proposed project? - If you make a right turn on red on Occoquan Rd you will have traffic cutting through that goes through Occoquan. They stopped that years ago to stop that now everyone goes Tanyard Hill now which has lots of traffic. Do you support this project? - Yes	Thank you for your valuable feedback and support of this project, it is much appreciated. The realignment of this intersection is a spot improvement project which should not impact or worsen the traffic volumes on Tanyard Hill Rd. The reduction in vehicular crashes and congestion will benefit the surrounding roadways and it will promote lesser cut through traffic. If you require additional information or follow up to your question, please do not hesitate to reach out to the project PM. Thank you again for you feedback!
3	2/4/22	Neil Nelson	Please explain why a Class 1 Trail (shared use, wide blacktop path) is not included in the design. The PWC Comp Plan does show at Class 1 Trail along Old Bridge Rd, from Rt 123 to the PW Parkway. I attended the public hearing virtually last night, but the audio quality was not good, so I missed much of it. I know there was a question and some discussion about sidewalks and setback. I think Dat Ngo mentioned the limited amount of funds for the project through the Federal SMART SCALE program, and constraints on right-of-way, easements, & acquisition. Could you recap the rationale for including sidewalk instead of shared-use path in the design?	Although a Class 1 Trail is shown in the PWC Comprehensive Plan, it is not within the scope and SMARTSCALE funding application for this intersection safety improvement project. Implementing a full trail (7.5' buffer, 10' trail) to be maintained by VDOT at this time would indeed result in additional utility and ROW impacts, reconfiguration of the adjacent service road, and would result in an inconsistent break in the type of the facilities currently present on Old Bridge Road (concrete sidewalk, standard buffer). In other words, the proposed trail would abruptly start and end only at this intersection, resulting in drastic changes to the type of pedestrian/bicycle facilities in such a short run. Should the funding for the Class 1 Trail be available in the future, the entire Old Bridge Road corridor from Rte. 123 to PWC Parkway will be updated to include this trail for a more consistent application under a separate stand-alone pedestrian improvement project.

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4	2/8/22	Shaun Fielding	1. I support this project. 2. The median opening at station 111+75 is ill advised and does not fit with the intent of this project. It should be closed. It is too close to the signal and the little directional island and no left turn sign placed at the business driveway are insufficient to prevent people exiting that business from using that median opening for a quick left turn. This is a safety hazard and should be corrected. 3. I encourage PWC to work with the town of Occoquan to provide a complete pedestrian pathway from Old Bridge to the Town of Occoquan. There are a lot of pedestrians walking along that corridor that walk on the very minimal shoulder or even in the lane. This project will likely increase vehicular traffic down that stretch and will increase the potential for pedestrian/vehicle conflicts. This should be a priority for the county. Thank you for your hard work	Thank you for your feedback. Yes, the median opening is currently under design revision and will be closed off to increase the storage capacity of the left turn lane and to eliminate sight distance issues and illegal left turns as mentioned. The County's design consultant is currently investigating a delivery truck Auto- turn Movement to ensure that trucks can make a U-turn at the intersection to access those businesses before proposing to close off this left turn. The final plans will show a revised design. Yes, we agree that promoting safe and ADA compliant routes for pedestrians is always a key factor in the continued development of our pedestrian and bicycle network. Pedestrian safety is a priority for the County and we will continue to review the County Comprehensive Plan and implement these pedestrian facilities as funding becomes available for stand-alone projects or if opportunities arise to incorporate these pedestrian improvements into roadway projects, we will certain make that a precedence.

9625 Park Street
Manassas VA 20110
February 17, 2022

Via Email: sdjouharian@pwcgov.org

Ms. Sherry Djouharian, Project Manager
Prince William County Department of Transportation
5 County Complex Court, Suite 290
Prince William, VA 22192

Re: Old Bridge Rd/Occoquan Rd Intersection Project Design Public Hearing Comments

Dear Ms. Djouharian:

Active Prince William submits the following comments for the Design Public Hearing for the above-referenced project. Our all-volunteer organization seeks improved active mobility and public transportation throughout greater Prince William, to create more livable, equitable, and sustainable communities.

Our concerns with the proposed design for this intersection-reconstruction project can be summarized as follows: 1) lengthened crosswalks, 2) inadequate replacement sidewalks, 3) lack of bicycling accommodations, and 4) excessive design speeds.

Although framed as a "safety improvement", this project does little to make walking, bicycling, or transit access safer. At the same time, this project would promote speeding and add unnecessary vehicle capacity.

According to the traffic crash reports compiled by the Virginia Department of Motor Vehicles, Prince William County experienced a total of 804 traffic crashes involving pedestrians or bicyclists during the past decade (2012-2021), resulting in 232 severe injuries and 53 deaths among people walking or bicycling. Undoubtedly, the excessive design speeds on Prince William County's multilane arterial roadways are largely responsible for this carnage affecting people walking and bicycling, while also causing many additional deaths and severe injuries to the drivers and occupants of motor vehicles.

According to VDOT's 2019 traffic count data, Old Bridge Road (VA 641) had an AADT of 53,000 west of Occoquan Road and an AADT of 45,000 east of Occoquan Road, whereas Occoquan Road (VA 906) had an AADT of 13,000 south of Old Bridge Road and an AADT of 2800 north of Occoquan Road. However, those traffic volumes will likely decrease once the southbound bottleneck on I-95 south of Mile-Marker 160 is fixed.

Lengthened Crosswalks

The proposed design would lengthen all three marked crosswalks at this intersection. With the added right-turn lane on eastbound Old Bridge Road, the Old Bridge Road crosswalk would

become eight lanes wide. The crosswalk across the southern leg of Occoquan Road would remain six lanes wide, and the crosswalk across the northern leg of Occoquan Road would now cross four lanes of traffic, including the separated right-turn pocket from southbound Old Bridge Road.

To help mitigate the adverse impacts of those longer crosswalks, the design should create protected median pedestrian refuges in each crosswalk. In addition, whenever pedestrian crossing signals are activated, leading pedestrian intervals should be triggered to give the crossing pedestrians a head start over both right-turning and left-turning vehicles.

Moreover, serious consideration should be given to not adding right-turn lanes on eastbound Old Bridge Road and/or southbound Occoquan Road and to eliminating one or two of the existing turn lanes on northbound Occoquan Road.

On eastbound Old Bridge Road, the existing curb lane approaching Occoquan Road should be redesignated for right turns only, rather than adding a new right-turn-only lane. The VDOT traffic data show that the Old Bridge Road leg east of Occoquan Road carries 8,000 fewer vehicles/day than the Old Bridge Road leg west of Occoquan Road, indicating that two eastbound straight-through lanes are sufficient at that location.

On southbound Occoquan Road, which carries only 2800 vehicles/day, a short right-turn pocket with a pork chop island pedestrian refuge could be created as an alternative to the proposed new right-turn-only lane.

On northbound Occoquan Road, one of the two existing left-turn-only lanes could be eliminated and/or the right-turn lane replaced with a short right-turn pocket with a pork chop island pedestrian refuge.

The overall objective should be to shorten, not lengthen, the three existing crosswalks.

Thank you for your valuable feedback, it is much appreciated. The traffic numbers you presented above are not projected design year traffic volumes and do not take into account turning movement counts. The additions of the two new right turn lanes were warranted by turning vehicle counts. This is a standard traffic engineering design requirement that must be met to the extent feasible when roadway improvement projects are implemented anywhere in the state. Eliminating lanes at this intersection or any other intersection in the County requires immense justification, studies, and public support.

Crosswalk crossing times are designed based on the lengths of the crosswalks, therefore, sufficient time will be provided for all pedestrians and bicyclists to cross the roadway. As you can tell from the existing conditions of this intersection, it is a busy intersection with a number of facilities and existing businesses with right-of-way adjacent to the roadways, therefore, median refuge areas were not implemented on Old Bridge Road due to the constraints and the County's efforts to reduce ROW take as much as possible.

Inadequate Replacement Sidewalks

The proposed replacement sidewalks, along both sides of both roads, are only five feet wide and separated from the roadway by only a four-foot-wide grass buffer. While this does represent a modest improvement over the existing deficient sidewalks, the replacement sidewalks should be both wider and separated farther from the roadway.

Walking just four feet way from busy multilane roadways is noisy and unpleasant, and five-foot-wide sidewalks do not comfortably accommodate two-way pedestrian traffic or walking two abreast.

Furthermore, in winter, snow and ice plowed onto such narrowly buffered sidewalks from the adjacent roadway can render such sidewalks impassable for many days and weeks. In the summer heat, the absence of street trees growing within a viable planting strip makes walking without shade miserable.

In addition, the proposed sidewalks are devoid of much-needed pedestrian amenities such as benches, pedestrian-scale streetlights, and bus shelters.

The realignment of Old Bridge Road will abandon much of the existing roadway along the south side of this road. That abandoned roadway provides ample right of way to build a wider and better-separated replacement sidewalk at that location.

For future projects, the County should revise its road-design standards to provide better pedestrian accommodations.

Yes, we agree that providing further setbacks and wider sidewalks are always an added benefit to the pedestrian facilities throughout the County. However, several factors must come into consideration with this suggestion:

- Adjacent property impacts (utilities, parking lots, entrances, etc.) and ROW acquisition costs.
- We meet the standard VDOT sidewalk width and buffer setback requirements. VDOT will maintain these facilities once complete. They are also a stakeholder and will question designs that result in excessive maintenance responsibilities such as additional mowing.
- Signal arms have a maximum length that they can accommodate. Pushing sidewalk further back compromises these mast arms and can result in additional costs.

Pedestrian safety is a priority for the County and we will continue to review the County Comprehensive Plan and implement these pedestrian facilities as funding becomes available for stand-alone projects or if opportunities arise to incorporate these pedestrian improvements into roadway projects, we will certain make that a precedence.

As for the bus shelters, the County and its consultant did not identify any bus stop locations within the vicinity of this project, therefore, bus pads/shelters or benches were not considered as part of these improvements.

Lack of Bicycling Accommodations

Old Bridge Road and Occoquan Road both lack bicycling accommodations, so they are not Complete Streets. Without even a sidepath (a wide sidewalk intended for both bicycling and walking), these roadways should be restriped or rebuilt with at least conventional (striped) on-road bicycle lanes.

Besides improving bicycling conditions, conventional on-road bicycle lanes enhance the pedestrian environment by increasing the separation between the sidewalk and vehicle traffic and by shortening pedestrian crossings of the vehicle lanes at intersections.

Old Bridge Road has overly wide 12-foot travel lanes, the width used on Interstate highways with 70+ MPH design speeds. Thus, **bike lanes could easily be retrofitted on Old Bridge Road at any time, simply by restriping its six 12-foot-wide travel lanes as six 11-foot-wide travel lanes** and reallocating the freed-up space for bike lanes. When added to the existing two-foot-wide concrete gutter pans, the freed-up space would produce five-foot-wide bicycle lanes, meeting the AASHTO minimum width. Some additional space for bike lanes (or wider medians) could be created by narrowing all left- and right-turn lanes to 11 feet as well.

Since Occoquan Road has only 11-foot lanes, narrowing those lanes to create bike lanes—while still somewhat feasible—might not be approved by VDOT. **However, it is readily feasible to modify the current project to redesign the rebuilt north leg of Occoquan Road to incorporate five-foot bike lanes in both directions.**

The south leg of Occoquan Road has at least four travel lanes between Old Bridge Road and US-1 yet had an AADT of only 13,000 in 2019. **This roadway is thus a prime candidate for a four-lane to three-lane road diet**, producing a roadway with only one travel lane per direction, a two-way left-turn lane in the center, and two one-way bicycle lanes.

Such roadway reconfigurations, if managed by VDOT during scheduled roadway resurfacing, are highly cost effective and are accomplished at no cost of the County. **Prince William County should coordinate with VDOT to retrofit bike lanes on the entirety of Old Bridge Road and of Occoquan Road whenever those roadways are next scheduled for periodic resurfacing. If either roadway is reconfigured before the current project is completed, the current project should ensure that those bike lanes are incorporated into the final roadway striping plan for the rebuilt segment.**

The County agrees and supports your take on making streets and roads more bicycle friendly. This is always a key factor in the continued development of our pedestrian and bicycle network. Bicycle accessibility is a priority for the County and we will continue to review the County Comprehensive Plan and implement these facilities as funding becomes available for stand-alone projects or if opportunities arise to incorporate these improvements into roadway projects, we will certain make that a precedence. For now, widening the roadway to implement

on-road bicycle lanes for this short segment of roadway is outside the scope and funding for this intersection safety improvement project and will not be approved and accepted by VDOT.

Excessive Roadway Design Speeds

At the public hearing, project staff reported that the proposed design would preserve the present 35 MPH posted speed limit on Old Bridge Road and aims for a 40 MPH design speed. Those speeds are too high for an arterial roadway through a commercial corridor with nearby residential neighborhoods and a large park-and-ride facility.

Project staff also noted the traditional highway engineering practice of posting speed limits based on the observed speeds of the motorists that use the roadway (i.e., the 85th percentile speed). Such an antiquated and dangerous practice is the opposite of a safe systems approach; namely, engineers should select roadway design speeds and standards that allow pedestrians and bicyclists to survive most collisions with motor vehicles.

Narrowing the lanes on Old Bridge Road to 11 feet (or less) would be one simple step to reduce the excessive design speed on this roadway. In addition, the curb-return radii at all corners of this intersection should be reduced to conform to the 30 MPH design speed that is appropriate for this roadway.

Please keep in mind that Old Bridge Road is posted for 35 MPH along this entire stretch of roadway leading up to the Rte 123 intersection. The design speed is generally set to be 5 MPH above the posted speed limit per VDOT and AASHTO design guidelines. Setting the design speed at 40 MPH does not necessarily promote speeding. This was set to provide a smooth continuous curve that is a direct correlation of the physical features of this intersection and provides adequate sight distance to reduce congestion and rear end collisions.

Reducing the lanes down to 11' will not be an option as this roadway accommodates bus traffic. In addition, a reduction in lane width for this short segment of roadway/intersection only to widen back out to 12' lanes prior to and after the intersection is not good standard roadway design engineering practice and will not be accepted by VDOT.

Thank you for considering our comments as you finalize the design of this project;

Sincerely,

Allen Muchnick and Mark Scheufler, co-chairs
Active Prince William

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