



COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION

87 Deacon Road

Fredericksburg, VA 22405

GREGORY A. WHIRLEY
COMMISSIONER

February 25, 2013

Mr. Leon Hughes
Planning & Zoning
Spotsylvania County
9019 Old Battlefield Blvd, Suite 320
Spotsylvania, VA 22553

Re: Dominion Raceway – TIA/Rezoning Submittal
Access Management Exception Request
Route 606, Spotsylvania County

Dear Mr. Hughes,

As requested, VDOT has reviewed the above-mentioned TIA & Rezoning submittal, submitted to this office on January 24, 2013. Comments are as follows:

TIA/Rezoning Application:

1. The report is not clear about what improvements are proposed for the phased development implementation.
 - a. The report does not accurately characterize the comparison of operations for the no build and build conditions, particularly relative to queuing results.
 - b. Page 15 states an additional turn lane for NB off-ramp, yet on page 10, it states an additional turn lane for SB off-ramp. Please revise and adjust Figure 7 on Page 39.
 - c. All improvements needed to operate at an acceptable LOS for the proposed development need to be borne by the developer & prior to operation.
2. Synchro does not necessarily provide accurate results for congested conditions. SimTraffic should be used to provide queuing results in the vicinity of the interchange.

February 25, 2013

3. The performance of the intersection of the SB Ramps and Rte 606 will be significantly degraded in all four scenarios (AM, PM, Fri, Sat) as a result of this development. Please indicate appropriate mitigation measures for this location.
4. The option of realigning the NB off-ramp with the Dominion entrance would cement the operational condition with ramp traffic from both I-95 NB and SB being in direct competition for green time to enter the Raceway, and opposing through traffic on 606 WB that is destined for 95 NB. Compromising interchange traffic flow with event traffic is not acceptable, and this alternative should be removed. Eliminating the left into the Raceway and utilizing the suggested roundabout east of the proposed entrance minimizes conflicts as well as potential impact to the interstate ramps.
5. The left turn lane into the proposed Raceway entrance does not appear to be adequate as shown. Please run a capacity analysis to determine requirement in ultimate build-out condition.
6. The Synchro analysis codes the SPUI with three approaches (EBTs&R, WBTs, and 2SBRs). Where are the SBLs? Where are the 2SBRs going?
7. Preliminary Turn Lane Exhibit – Should the Access Management Exception be granted, the exact location of the entrance will need to be discussed further based on roadway improvements required.
 - a. This exhibit shows additional ROW will be needed from the property to the east of the site for the eastbound RT lane taper and drainage improvements. Is this feasible considering the VOF Conservation Easement?
 - b. The proposed entrance road exceeds the width of the existing 50' Frontage Road ROW. This ROW will need to be abandoned per State and local regulations. The entrance road will require an access easement from Parcel 63-A-62. This should be provided, or a Letter of Intent provided, prior to approval of the GDP.
 - c. The existing and proposed 80' access easements shall provide access to the Speedway Entrance road for parcels 63-A-5E, 63-A-62, or 63-A-63, as well as all commercial parcels within the development.
8. TIA & AM-2 reference that the entrance to Dominion Raceway will be the only commercial access constructed on the north side of Mudd Tavern Road. There are two (2) entrances for the existing former gas station immediately west of the Dominion entrance. It is recommended these entrances be removed and internal access be provided for this parcel from the Raceway access road.

9. Page 3 – Friday PM Peak trip generation is based on drag strip event + commercial. Saturday PM Peak trip generation is based on oval track event + commercial, and appears to generate more traffic than the drag strip event + commercial. Will restrictions on types of events be proffered to restrict events to those proposed in the study?
10. Page 9 – Under the 2017 partial build-out w/out improvements to the bridge, Option 1 states 3500 max attendance event, and Option 2 states 2300 max attendance. The TIA needs to provide a maximum trip generation, rather than different scenarios
11. Page 10 – Option 2 Partial Build Out indicates a 6,000 SF quality restaurant , yet on page 2 of the study, it indicates the commercial parcels are assumed as 6,000 SF high-turnover restaurants. These have different ITE codes (931 vs. 932). Please clarify.
12. Page 11 – Under Mudd Tavern/Mallard Rd intersection, the 2017 buildout PM Peak goes from a LOS A to a LOS D. While a LOS D is generally acceptable to VDOT, this does not comply with the “Do No Harm”. What mitigation is proposed to offset this impact?
13. Page 12 – The discussion for Mudd Tavern Rd/Raceway Entrance does not account for development of parcels 63-A-5E, 63-A-62, or 63-A-63. What impact will development of these parcels (By-Right?) have on the proposed intersection, and the interchange?
14. Page 13/14 – Mudd Tavern Rd/Raceway Entrance 2023 Build Conditions - Concepts 1 & 2 indicate a LOS F at the NB & SB interchange approaches for full build-out. How is this impact being mitigated? This project should not be dependent on VDOT projects.
15. Page 31 – Mudd Tavern Road is actually posted as 35 MPH speed limit. Please correct.
16. Page 33/Figure 6 – Existing Lane Use & Traffic Control exhibit shows a dedicated RT lane for the NB off-ramp. This conflicts with the proposed addition of a RT lane. Please clarify.
17. Page 74. Pass-by and Diverted Link Site Trip Distribution and Assignment: The methodology utilized is not acceptable. The proposed commercial uses will clearly draw traffic from the through volumes on I-95, not just diverted ramp traffic. The methodology used will understate the project impacts on these critical ramp intersections. This trip assignment needs to be revised and reanalyzed.

- a. Commercial pass-by trips on I-95 diverting to Route 606 should not be considered pass-by trips on Route 606 east of I-95; they are NEW trips on Route 606 east since the vehicles would not otherwise be on Route 606 (i.e. exit the interstate) if the site remained undeveloped. Please adjust pass-by trip discounts accordingly.
- b. Please revise Table 4 – Site Trip Generation Analysis on p.65 to reflect volumes at the site driveway intersection with Route 606 (i.e. diverted link trips should appear as new trips at this intersection).

18. Page 80: 2017 Total Future Peak Hour Levels of Service:

- a. Results for the EB through movement queuing in the signalized condition for the NB ramp intersection show very long queues, including some results that are indeterminate using Synchro. The analysis should be done using SimTraffic. The 1,200 foot queuing condition for the full build-out AM peak hour will block the SB off-ramp, Dan Bell Lane and several commercial driveways on the west side of I-95.
- b. Queuing and/or delays for the SB off-ramp are long in the Saturday condition for Phase 1 and all conditions for the full build out condition. This needs to be addressed.

19. Page 82: Last paragraph references Table 6. Should be table 5. Similarly, page 88 should reference Table 6 not Table 7.

20. Page 93: Table 6 2023 analysis results:

- a. The Single Point Urban Interchange appears to provide acceptable results pending clarification of the lane use assignments discussed above. Additionally, the Mudd Tavern/Relocated Mallard/Site Entrance intersection shows some long delays entering Mudd Tavern Road from the minor streets.
- b. The modified option “C” interchange configuration for the eastbound left to turn into the Dominion entrance is forecast to have a 521 foot queue in the Saturday peak hour, which needs to be addressed. This alternative also calls for a six-lane bridge, however the interchange bridge replacement project is preliminarily planned as a 4 lane bridge, per the attached current Concept C exhibit. Please re-run the analysis based on this 4-lane section, or proffer two (2) additional lanes for the bridge.
- c. The VDOT Long Range Plan calls for I-95 to be 8 Lanes wide. All proposed concepts need to accommodate this configuration. Therefore, the

options should not indicate the on and off-ramps are reconstructed closer to the main line.

21. Page 99: Improvements recommended supporting the partial build-out scenarios do not include the “northbound left turn lane improvement” indicated to be needed on Page 78, last paragraph. The Synchro file for the 2017 Phase I analysis shows a 200 foot right turn lane while the existing condition shows 50 feet. There is also a 700 foot AM peak hour queue eastbound at the NB ramps that is not discussed relative to impacts.
22. Page 104: Indicates the northbound off-ramp turn lane is not necessary for the initial phase that includes the raceway and one out parcel. As noted above, this is in conflict with the statement on Page 78. The phasing of the recommended improvements is not clear.
23. The Report indicates that “special events” that would generate trips in excess of the raceway events would be addressed with a Special Event Management Plan discussed later. There is no substantive discussion of special event traffic in the report. Special Event Traffic Management needs to be addressed in more detail. Though use of the roundabout would significantly reduce special event concerns.
 - a. The Special Event Traffic Management would also need to comply with VDOT Special Event Permit guidelines. This would require a Single Use Permit for each event.
 - b. The Report also indicates utilizing the VDOT property for an overflow “jug-handle U-turn”. This should not be assumed.
24. Will the proposed site necessitate a Comp Plan Amendment? What will be the effects of the proposed site on the Regional Travel Demand Model?

Additional Items to Consider:

1. Page 57: Site trip generation. The trip generation is generally acceptable with following notations:
 - a. Trip forecasts for gas stations with C-Store should be based on an average of the trip generation determined using number of fueling positions and the square feet of store. However in this case, since it is a highway oriented facility, utilizing just the number of pumps is acceptable.
 - b. The “teams” trip generation implies that all members of each team will arrive in one vehicle. Is this the expectation?

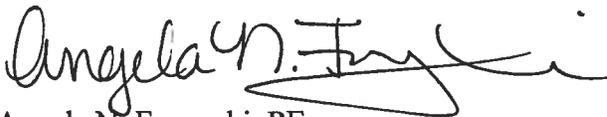
February 25, 2013

Access Management Exception (AM-2) Request:

1. While we are not able to grant an exception based on our review of the traffic impact study, and the comments in this letter, we are willing to continue discussion and will make full consideration of your request as we move forward.
2. The following general comments are provided for future submittals of this AM-2.
 - a. The AM-2 Request document should be modified based on all modifications to the TIA noted above.
 - b. The Access Management Exception Request does not need to include Mallard Road, as this intersection is on the opposite side of the roadway.
 - c. The two (2) abandoned entrances on the north side of Mudd Tavern Rd and the existing entrance for the Shell gas station should not be included for reference, unless these have approved Access Management Exception Request approvals.
 - d. The “Exception to the requirement that an entrance shall not be located within the functional area of intersection or roundabout” needs to be checked as well as “Attached: A traffic engineering study...” since the proposed entrance is within the functional area of the interchange.
 - e. Please revise the Posted Speed Limit to 35 MPH on page 2.
 - f. All future submittals of the AM-2 should be addressed to Mrs. Angela N. Foroughi, PE – Transportation & Land Use Director.

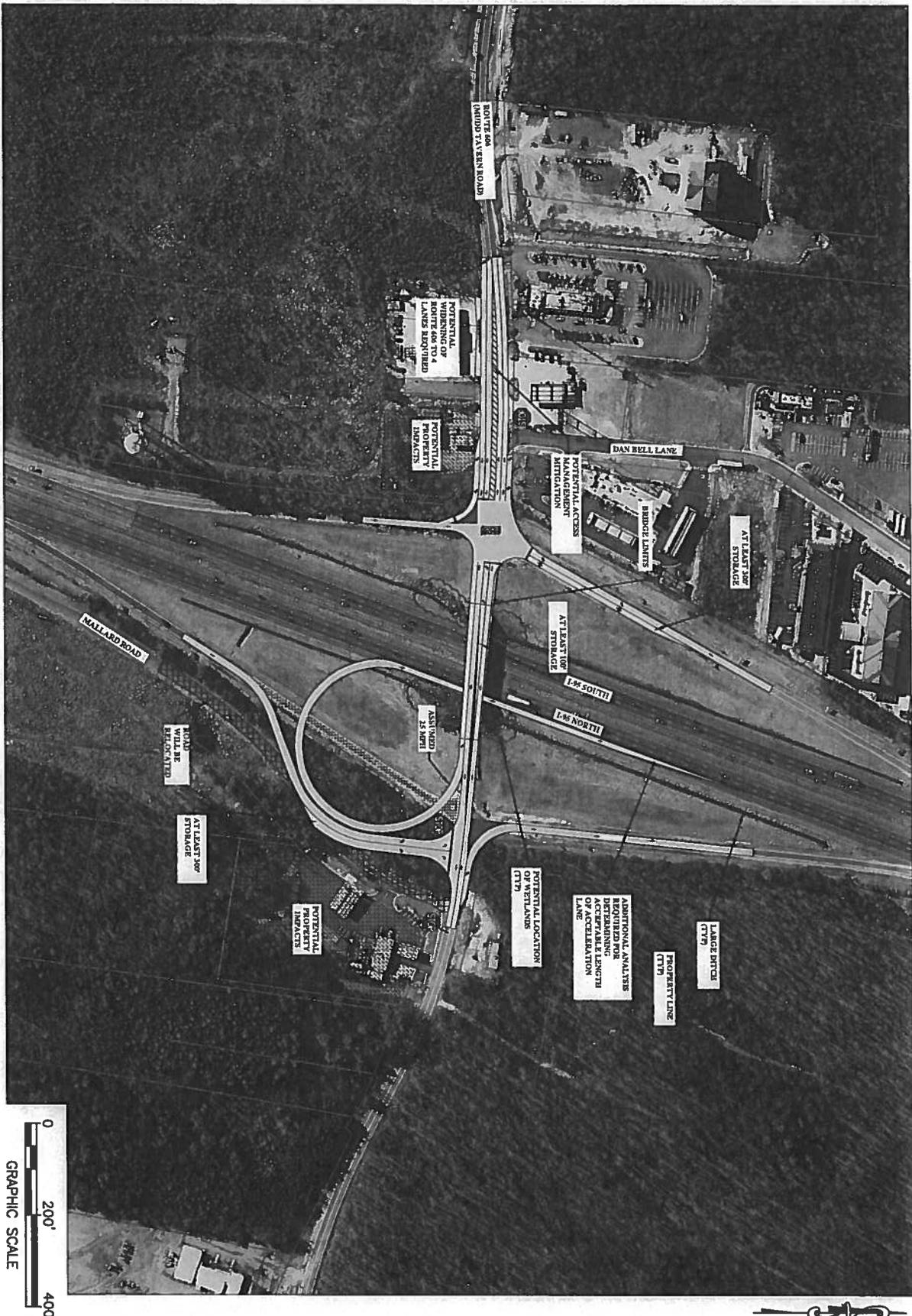
If you have any questions or would like to discuss please contact me.

Sincerely,



Angela N. Foroughi, PE
Transportation & Land Use Director
Fredericksburg District

cc: John Riley – Bowman Consulting Group
Charlie Payne – Hirschler Fleischer
File



**FREDERICKSBURG
 BRIDGE IMPROVEMENTS**
 PREPARED FOR
VDOT
 SPOTSYLVANIA COUNTY VA

UPC 100829
Route 606 over I-95
CONCEPT C

KHA PROJECT
 117037001
 DATE
 JAN. 6, 2012
 SCALE AS SHOWN
 DESIGNED BY CPA
 DRAWN BY CPA
 CHECKED BY WFM

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No.	REVISIONS	DATE	BY
1	UPDATED BASED ON TRAFFIC ANALYSIS	7/31/2012	KHA

Fig. 4