Reply To
Attention Of

DEPARTMENT OF THE ARMY
NORFOLK DISTRICT CORPS OF ENGINEERS
FORT NORFOLK 803 FRONT STREET
NORFOLK, VIRGINIA 23510-1096

November 9, 2012

Eastern Virginia Regulatory Section
NAO-2012-00638

Federal Highway Administration
ATTN: Mr. Ed Sundra
Director of Program Development
400 N. 8th Street, Suite 750
Richmond, VA 23219-4825

Virginia Department of Transportation
ATTN: Ms. Angel Deem, Project Manager
Environmental Division
1401 East Broad Street
Richmond, VA 223219

Dear Mr. Sundra and Ms. Deem:

This letter provides the comments of the Norfolk District Corps of Engineers (Norfolk District) in response to the Environmental Assessment (EA), dated August 23, 2012, for the Route 29 Bypass in Albemarle County and Charlottesville, Virginia. The proposed project is a new 6.24-mile four-lane divided, limited access bypass to the west of existing Route 29, beginning at the Route 250 Bypass and terminating at the existing Route 29, north of the South Fork Rivanna River. Over the course of approximately twenty-five years, you have prepared an Environmental Impact Statement (EIS), an EA, a Supplemental EIS (SEIS), and a Record of Decision (ROD), for this project, and the Norfolk District was a cooperating agency in the preparation of those documents. You have prepared the current EA as a re-evaluation of the project.

We regret that due to workload, the belated notification that the EA was available for review, and the complexity of the matters at hand, we were unable to provide comments by the deadline of October 9, 2012. As you know, this project has had considerable history which requires a lot of time and consideration. During this time, we have had the opportunity to receive and consider the comments from Environmental Protection Agency (EPA), interested organizations, and the public.

The stated purpose of the project is "to find a solution to existing and future congestion on a three-mile section of U.S. Route 29 between U.S. Route 250 Bypass and the South Fork Rivanna River in the City of Charlottesville and Albemarle County north of Charlottesville." A secondary purpose of the study was "to complete a gap in ongoing improvements to U.S. Route 29 through Central Virginia."

The EA states that the preferred alternative will impact 2.8 acres of jurisdictional wetlands, and approximately 7040 linear feet of streams, at 43 locations. These waters are regulated by the

Norfolk District under Section 404 of the Clean Water Act (33 U.S.C. 1344). Therefore, an Individual Department of the Army permit would be required for the project as proposed.

The EA evaluates only "Alternative 10" from the 1993 EIS, with modifications, as the selected alternative. The EA only briefly summarizes alternatives previously considered. It indicates that 4.2 miles of the 6.24-mile road would cross the watershed of the South Fork of the Rivanna River Reservoir, and potential impacts to this Reservoir were the subject of a lawsuit and the subsequent 2003 SEIS. The EA further states, "an alternatives analysis will not be conducted anew because the project has a valid 2003 ROD."

The National Environmental Policy Act (NEPA) provides a broad-based approach to impact balancing. However, NEPA does not contain substantive requirements that compel agencies to choose a particular alternative as is required by Section 404(b)(1) of the Clean Water Act. Compliance with NEPA requirements may not necessarily translate to compliance with the Section 404(b)(1) guidelines during the Section 404 permit process. As you know, Corps regulations require us to consider a full range of public interest factors and conduct an alternatives analysis in order to identify the least environmentally damaging practicable alternative (LEDPA), which is the only alternative we can authorize. In addition to wetland and waters impacts, we must consider factors such as land use (including displacements of homes and businesses), floodplain hazards and values, water supply and conservation, water quality, safety, cost, economics, threatened and endangered species, historic and cultural resources, and environmental justice. The term, "practicable" means "available and capable of being done after taking into consideration cost, existing technology, and logistics in light of the project purpose." The principal prerequisite to establishing practicability is to establish the purpose of the proposed activity and to apply the above-mentioned practicability factors with the intent of avoiding significant impacts to aquatic resources, and is not necessarily confined to maximizing benefits related to the project's purpose.

Because of the age of the previous studies, we may not have all of our earlier files and related letters. Nevertheless, our letters commenting on the DEIS on July 9, 1990, on the SEIS on April 15, 2002, and our most current letter of March 27, 2012, had noted that we could not identify the LEDPA because the level of detail given regarding wetlands was insufficient for us to compare the alternatives. The current EA provides an overview map of the alignments of each of the alternatives considered in the past, and briefly states why they were eliminated from further consideration, but it still does not provide sufficient detail for the Corps to reach a conclusion of LEDPA.

In order for us to identify the LEDPA, we must have sufficient information included in the comparison of the alternatives and agree that there are no other reasonable alternatives that need evaluation. In order for us to concur that the preferred alternative is the LEDPA, you must demonstrate either that 1) all alternatives with less impact are impracticable, 2) they would not adequately meet the project purpose, or 3) that the impacts for the preferred alternative can be further avoided and minimized by means such as bridging, shifts within the corridor, or narrowing of crossings etc. But failing this, other alternatives may be considered "practicable" for the Section 404 alternatives analysis.

We will evaluate whether the project will have significant environmental effects, and if so, then the FHWA and/or the Norfolk District will need to prepare an EIS or an SEIS, prior to our making a permit decision. We encourage you to conduct a thorough alternatives analysis as part of your current study to avoid future delays and repetition of effort, particularly given the extent of time that has passed since your prior studies.

In order for the Norfolk District to make a LEDPA determination, the following issues must be sufficiently addressed:

Traffic Study

1) The traffic study, entitled "Traffic and Transportation Technical Report for Environmental Assessment, Route 29 Bypass," dated August 16, 2012 (Table 6), suggests that in the 2040 design year, there is little difference in Level of Service (LOS) between the build and the no-build alternative, for the preferred alternative: in fact, the only changes in LOS occur at Route 29 at Hilton Heights Road, which goes from an "F" to a "D", and Route 29 at Rio Road (as at-grade intersection), which goes from an "E" to a "D". Otherwise, four scenarios remain an "F" and three remain a "D." Thus, it is not clear that the proposed project will provide much relief to traffic congestion.

2) Although the traffic study indicates that it is based on a design with no interchanges in between its two interchange termini, it is unclear whether it is based on the most current preliminary design, (i.e., with signalized interchanges). In addition, Southern Environmental Law Center (SELC) contends that the study is based on a flawed traffic study model, which inflated the amount of through traffic. The (SELC) states that the model was revised in February; however the previous model was still used in the study. Please clarify, as this difference could have an impact on the travel times in the study. If the current design and model criteria are not the basis for the study, then the study needs to be revisited using the proper updated criteria.

3) The study suggests that most of the traffic currently using this corridor is local traffic, rather than through traffic. Therefore, the project purpose of reducing congestion along three miles of the existing Route 29 may be better served by a more localized improvement or series of improvements. Have any similar traffic studies been conducted for other alternatives that improve the existing corridor?

4) The traffic study indicates that the preferred alternative would result in a 13% increase in traffic north of its northern interchange with the existing corridor. However, the EA does not indicate how this new problem area would be addressed, or how this might affect the current project's effectiveness in meeting its purpose and need.

Alternatives analysis

Since we have insufficient information for determining a LEDPA at this point, it is not appropriate to consider only the preferred alternative for our purposes. It is clear that the alternatives analysis is based on information that is between 10 and 20 years old, and needs to be updated to reflect current conditions and alternatives.

1) It is our understanding that since the 2003 ROD was finalized, considerable efforts have been made by the Charlottesville/Albemarle Transportation Coalition and others in cooperation with local and state officials, to identify alternatives to the preferred alternative along the existing Route 29 corridor, through efforts called "Places 29" as well as a Metropolitan Planning Organization (MPO) Corridor Study. We note that reference is made to these efforts in the EA. However, it is unclear specifically which components of these efforts were considered, incorporated, or eliminated, and why. In addition, the EA indicates that grade-separated interchanges along the existing Route 29 at Hydraulic Road and Greenbriar Drive, which were originally part of the selected alternative, were eliminated, but it does not indicate why. Particular attention should be given to improve-in-place alternatives, particularly those that resulted from the aforementioned efforts. Please specify which road projects will be going forward with or without the bypass (which ones are in the six-year plan), as well as discuss all of the components that were not considered, or considered and ruled out, and why. Each component of the above-mentioned efforts should be described in terms of what role it could play in reducing congestion. Combinations of some or all of the components of these efforts should be evaluated as stand-alone alternatives to the preferred alternative. In light of the fact that these alternatives appear to have less environmental impact than the preferred one, all of these factors need to be thoroughly and carefully evaluated, in comparison with the preferred alternative.

2) Comparable waters/wetlands data for other alternatives will be needed in order to reach a LEDPA determination, unless information is submitted to substantiate that none of the other alternatives is practicable or address the purpose and need. In addition, given that the majority of the impacts for the preferred alternative are within direct tributaries of the S/F Rivanna River Reservoir, the preferred alternative may be more impactive to water quality overall than other alternatives that are not so located. A range of alternatives must be given full consideration. The 2002 SEIS document did not include information concerning the linear feet or area of stream impacts for any of the alternatives except for the preferred alternative. Furthermore, it contained a chart with comparisons of each alternative's wetland impacts, but it did not specifically explain how or when these figures were derived. The comparisons between the other alternatives' impacts appear to have been compiled at least 20 years ago; the jurisdictional determination for the preferred alternative was completed in 1998; and no overview or topo maps depicting the approximate locations and sizes of these impacts within each alternative alignment was provided. The project terminii

appear to have changed since all of this work was completed, and changes have most likely occurred within the other alternatives' corridors such that these figures and conditions may no longer be accurate. An updated study of impacts to waters of the U.S., including wetlands, is clearly needed; and the identification of waters of the U.S must be sufficient for locating and comparing the alternatives. U.S. quads, NWI maps, aerials of the study area, soil mapping, modeling, and spot-checked locations should be utilized to estimate the location of wetlands and waters, for each alternative, as well as thorough descriptions of how they were quantified.

3) Once the Corps identifies the LEDPA, a new jurisdictional determination using the Corps 1987 wetland delineation manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region, will be required to identify all waters of the U.S. within the project corridor.

Comments with Regard to the Preferred Alternative

1) Impacts on the South Fork Rivanna River Reservoir: As you know, the Corps is required to consider impacts on public water supplies. We recognize that extensive work was done to this end in the 2003 SEIS. However, it is our understanding from SELC that since that time, there may have been a change in the management plan for the Rivanna Water and Sewer Authority (RWSA) Reservoir, such that intake pipes will now begin to pump water from the South Fork Rivanna River Reservoir to two other associated reservoirs. However, it is unclear whether RWSA officials have reviewed the project with regard to its effects on their facility, operations, and water quality, making it difficult to assess fully the project's impacts on the water supply. Please have the RWSA review the project, and provide to us their comments and how you will address them.

2) Stormwater management: The EA states that 100% of the runoff within the South Fork Rivanna Reservoir watershed will be captured, but neither the basis for this statement nor the storm year for which this is true (2 year, 5-year 10-year, etc) is specified. VDOT should ensure that its stormwater plans are in compliance with the current stormwater management regulations. It is recommended that VDOT consider incorporating into the stormwater plan up-to-date low impact development (LID) facilities, which may be more effective at removing sediment and other pollutants than older designs. In addition, it is unclear whether or not stormwater treatment facilities are planned in waters of the U.S., including wetlands. As indicated in previous correspondence, all facilities should be located outside of jurisdictional waters unless you can demonstrate that it is impracticable to do so.

3) Total Maximum Daily Loads (TMDLs) and other water quality impacts: The EA makes no mention of how the preferred alternative would affect the already impaired waters with the increased impervious area, the 2.8 acres of wetlands impacts, impacts from 24 crossings, runoff, or pollutants. Anticipated water quality impacts and new TMDL

requirements mentioned in EPA's letter will need to be thoroughly addressed, as they will be considerations in obtaining a Section 401 permit from the Virginia Department of Environmental Quality (VDEQ). The Section 401 permit must be obtained before the Norfolk District can issue its Section 404 permit.

4) Threatened/Endangered species: The Norfolk District has designated FHWA as the lead Federal agency responsible for fulfilling our collective duties under Section 7 of the Endangered Species Act. We note that a June 2011 survey in Ivy Creek found two live James Spinymussels (*Pleurobema collina*), a Federally-listed endangered species. We also note that the project does not cross Ivy Creek but comes within 1000 feet of it. In addition, in June 2012, a survey was done from the S/Fork Rivanna River dam to 800 meters downstream of the proposed Bypass crossing of the S/F. No James Spinymussel specimens were found there. The EA found that the project is not likely to adversely affect the James Spinymussel; however, please note that for a "not likely to adversely affect" one must obtain concurrence of the U.S. Fish and Wildlife Service (USFWS), through the use of their online review process. While we are not the lead, we recommend that you perform the online review process and obtain an up-to-date response letter from the USFWS. Confirmation of this coordination will be required with any application submitted to the Norfolk District. In addition, as past, present, and reasonably foreseeable future impacts may have potential to affect the species, we recommend that this be addressed in the cumulative effect determination.

5) Cultural Resources/Historic Properties: The Norfolk District has designated FHWA as the lead Federal agency responsible for fulfilling our collective duties under Section 106 of the National Historic Preservation Act (NHPA). We note that there has been some additional architectural survey work done in August 2012, documented in a report entitled, "Environmental Assessment, Route 29 Bypass, Management Survey for Architectural Survey." Mention is also made of a data recovery plan for archeology, which was apparently formalized in a 1992 Memorandum of Agreement (MOA). The EA further states that both the Virginia Department of Historic Resources (VDHR) and the Advisory Council on Historic Preservation (ACHP) have concurred that the project will have no adverse effect on historic properties. However, documentation to that effect is not found in the EA. With the submittal of an application to the Norfolk District, all historic and cultural resources work would need to be brought up-to-date, including up-to-date response(s) from these agencies.

Secondary and Cumulative Impact Analysis

The EA refers back to the 2003 SEIS's cumulative impact analysis, and then states that since the 2003 SEIS, some changes in development have occurred along the corridor and to the termini and/or alignment in response. However, these impacts are not specified, quantified, or addressed. We must consider all impacts that are expected to occur later in time or farther removed in distance, but are still reasonably foreseeable, as well as incremental impacts of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. The specific

characterizations of existing, new, and planned roads, land use, percent impervious surface, anticipated growth induced by the project, and known and anticipated water quality and wetland impacts, which were provided in the 2003 SEIS, need to be quantified and updated. These include, but are not necessarily limited to:

- the "Base Case;"
- All of the projects listed as being on the comprehensive long-range plan;
- All existing, proposed, and projected growth and development in the watershed and along the corridor, up through Greene County. We understand that according to data SELC has obtained from Albemarle and Greene Counties, substantial new development--approximately 3000 residential units and 3.3 million sq ft of non-residential--have been approved in Albemarle County, north of the proposed northern bypass terminus, since the 2003 SEIS. Further, Greene County further north has recently approved another 1100 residential units and 500,000 sq ft of commercial development in the Rt 29 corridor;"
- The additional 8.3-mile bypass, called a "Western Bypass Extension" to connect to the northern terminus of this one, if planned or reasonably foreseeable;
- Cumulative long-term risk from contamination should be calculated for the life of the entire reservoir facility, including any components connected through pipes;
- Potential indirect and cumulative impacts on the James Spinymussel and its habitat.

Models and/or land use experts may be helpful in accomplishing these analyses.

Mitigation

As mentioned earlier, avoidance of impacts to the aquatic environment, including wetlands, should be an important consideration in your alternatives analysis. Measures to avoid and minimize impacts to streams and wetlands, such as bridging, alignment shifts, and elimination of medians, should be incorporated wherever practicable, and the environmental document should discuss avoidance and minimization measures considered. Relocation of streams should be avoided. All stormwater facilities should be located outside of jurisdictional areas.

Options for compensating for unavoidable impacts to wetlands and other aquatic resources should be an early consideration. Mitigation plans must be in compliance with the 2008 EPA/Corps Final Compensatory Mitigation Rule. Currently, the Norfolk District typically requires wetland impacts to be mitigated at 2:1 for forested, 1.5:1 for scrub/shrub, and 1:1 for emergent. Typically, we require stream mitigation for unavoidable stream impacts to greater than 300 linear feet of stream at a crossing. However, we also consider the cumulative impacts to streams from a given project, and may require mitigation for shorter lengths of stream if there are many impacts in close proximity, or if there are multiple impacts to the same stream and/or its direct tributaries. We encourage natural channel design to the extent practicable for streams that must be relocated. Currently, the Norfolk District utilizes the Unified Stream Methodology for determining how much stream mitigation is required and the amount of mitigation credit that

will be granted for stream mitigation projects. Mitigation banks that include the impact areas within their geographic service areas should be identified, as well as any currently proposed banks.

In conclusion, the current EA is insufficient for the Norfolk District to make a LEDPA determination. We concur with EPA that it would be prudent to allow for a comprehensive reevaluation of the project, and a new NEPA document to address all the issues raised in this letter, as well as those that have been raised by others and are outside our purview but are subject to NEPA, and to provide an up-to-date alternatives analysis that is appropriate for a future Section 404 permit application. However, if these issues are not addressed in your final NEPA document, then we may need to prepare our own NEPA document, or adopt your document and prepare a supplement to it, once we receive an application.

Thank you for the opportunity to provide comments. If you have questions, please contact Ms. Kathy Perdue at (757) 201-7218 or Kathy.S.Perdue@usace.army.mil.

Sincerely,

for William T. Walker
Chief, Regulatory Branch

Douglas W. Domenech
Secretary of Natural Resources

David A. Johnson
Director

COMMONWEALTH of VIRGINIA
DEPARTMENT OF CONSERVATION AND RECREATION
203 Governor Street
Richmond, Virginia 23219-2010
(804) 786-1712

MEMORANDUM

DATE: November 20, 2012

TO: Angel Deem, VDOT

FROM: Roberta Rhur, Environmental Impact Review Coordinator

SUBJECT: DCR 12-069, VDOT ROUTE 29 BYPASS

Division of Planning and Recreational Resources

The Department of Conservation and Recreation (DCR), Division of Planning and Recreational Resources (PRR), develops the *Virginia Outdoors Plan* and coordinates a broad range of recreational and environmental programs throughout Virginia. These include the Virginia Scenic Rivers program; Trails, Greenways, and Blueways; Virginia State Park Master Planning and State Park Design and Construction.

We have reviewed the Route 29 Bypass EA and offer the following response: on page 28, the EA acknowledges that the proposed route crosses the South Fork of the Rivanna, a designated Scenic River. However, it also states "…the visual impacts at the river crossing have not changed." While it is true that there will no change in the Scenic River designation status of the Rivanna, the proposed route will add another crossing to the designated Scenic River segment and bridge crossings are considered a negative impact to scenic qualities of any river due to the impact to the river view-shed. We recommend mitigating for impacts by using native plant materials to restore any areas that must be disturbed during the projects construction.

There is a potential that the proposed route will impact local trails as well; therefore, we recommend coordinating with the local government planning staff to ensure that impacts are minimized to the most practicable degree possible.

Division of Stormwater Management

Stormwater Management:
Virginia Department of Transportation (VDOT) projects that undertake land-disturbing activities of 10,000 square feet or greater must comply with the most current version of the VDOT erosion and sediment control (ESC) annual specifications approved by DCR. All regulated land-disturbing activities must have a project specific ESC plan developed in accordance with the DCR approved VDOT ESC annual specifications. However, the project specific ESC plan need not be submitted to DCR for approval since VDOT has DCR approved annual specifications. All regulated land-disturbing activities associated with the project, including on and off site access roads, staging areas, borrow areas, stockpiles, and soil

intentionally transported from the project must be covered by the project specific ESC plan. Annual specifications must be prepared in accordance with the Virginia Erosion & Sediment Control Law (VESCL) and Regulations (VESCR) and the most current version of the *Virginia Erosion & Sediment Control Handbook*. [Reference: VESCL §10.1-560, §10.1-564; VESCR §4VAC50-30-30, VESCR §4VAC50-30-40, §4VAC50-30-100]

VDOT projects that undertake land-disturbing activities equal to or greater than one acre must comply with the most current version of the VDOT stormwater management (SWM) annual specifications approved by DCR. All regulated land-disturbing activities must have a project specific SWM plan developed in accordance with the DCR approved VDOT SWM annual specifications. However, the project specific SWM plan need not be submitted to DCR for approval since VDOT has DCR approved annual specifications. Annual specifications must be prepared in accordance with the Virginia Stormwater Management Act (VSMA) and the Virginia Stormwater Management Program (VSMP) Permit Regulations. [Reference: VSMA §10.1-603.5; VSMP Permit Regulations §4VAC50-60-160]

The operator or owner of construction activities involving land disturbing activities equal to or greater than one acre are required to register for coverage under the General Permit for Discharges of Stormwater from Construction Activities and develop a project specific stormwater pollution prevention plan (SWPPP). Construction activities requiring registration also includes the land-disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan of development will ultimately disturb equal to or greater than one acre. The SWPPP must be prepared prior to submission of the registration statement for coverage under the general permit and the SWPPP must address water quality and quantity in accordance with the Virginia Stormwater Management Program (VSMP) Permit Regulations. General information and registration forms for the General Permit are available on DCR's website at
http://www.dcr.virginia.gov/soil_and_water/index.shtml
[Reference: Virginia Stormwater Management Law Act §10.1-603.1 et seq.; VSMP Permit Regulations §4VAC50-60 et seq.]

The remaining DCR divisions have no comments regarding the scope of this project. Thank you for the opportunity to comment.

From:	Mark Douglas
To:	VDOT-Route 29 Bypass EA; Deem, Angel N. (VDOT)
Cc:	Barbara Rudnick; Jessica Martinsen; Jeffrey Lapp
Subject:	Route 29 Bypass Environmental Assessment
Date:	Tuesday, October 09, 2012 4:25:53 PM
Attachments:	Route 29 Bypass EA EPA Comments Oct_9_2012.pdf

Angel,

Please find attached EPA's comments for the above mentioned EA. Thank you for the coordination and opportunity to comment.

Thank you ,

Mark Douglas
Environmental Assessment and Innovation Division
US EPA Region 3
3EA30
1650 Arch St
Philadelphia, PA 19103
215-814-2767

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

October 9, 2012

Ms. Angel Deem
Virginia Department of Transportation
Environmental Division
1221 East Broad Street
Richmond, VA 23219

Subject: Environmental Assessment Route 29 Bypass from Route 250 Bypass to US Route 29 North of South Fork Rivanna River, Albemarle County and City of Charlottesville, Virginia

Dear Ms. Deem,

In accordance with the National Environmental Policy Act of 1969 (NEPA), and Section 309 of the Clean Air Act, the United States Environmental Protection Agency (EPA) has reviewed the Environmental Assessment (EA) dated August 23, 2012 for the above referenced proposed project. The project is being studied by the Virginia Department of Transportation (VDOT) in cooperation with the Federal Highways Administration (FHWA) as co-lead agencies developing environmental analysis of impacts of the proposed study pursuant to NEPA. EPA recently responded to the request for scoping comments from VDOT and FHWA for their undertaking of a reevaluation of the environmental study for the proposed project. EPA's correspondence is dated February 29, 2012. The lead agencies state that the EA was prepared to address changes to the project and new information or circumstances relevant to environmental concerns and bearing on the proposed project and its impacts since completion of previous documents issued for comment pursuant to NEPA. Historically, an Environmental Impact Statement (Draft EIS 1990, Final EIS 1993) and Supplemental EIS (Draft SEIS 2002, Final SEIS 2003) were completed for the project.

The proposed project's purpose is to relieve congestion on the three-mile section of Route 29 between Route 250 Bypass and the crossing of the South Fork Rivanna River. It has been proposed that the need is best addressed by construction of a limited access road which is forecast to carry up to 28,000 vehicles per day by design year 2040. The project is expected to divert up to 28% of the traffic along the three miles of Route 29. The past environmental documents and subsequent Records of Decision (ROD) lead to, and upheld, the selection of Alternative 10 as the preferred alternative. Alternative 10 is a 4-lane bypass on new location west of the existing Rt 29 and passes through a scenic and historical area of rural residential housing, woodlands and farmlands. Alternative 10 impacts approximately 2.8 acres of wetlands, the highest of the alternatives studied. Over 3 miles of its 6.2 mile length is located in the watershed of a public water supply (South Fork Rivanna River Reservoir) and approximately 1/4 mile of roadway is located within 600 to 1300 feet of the reservoir. The Supplemental EIS

focused on the two issues of potential impact to the South Fork Rivanna River Reservoir and effect on archaeological resources. EPA prepared comment letters on both the Draft EIS and the SEIS. It is clear from our formal record, that EPA raised significant concerns about the project.

Concerns remain from the original study, including potential risk to water supply by proximity of the roadway to the reservoir. Issues of concern in regard to new circumstances include need for analysis to support that construction and operation of a highway will not contribute to further degradation of water quality, in light of development of the Chesapeake Bay total maximum daily load (TMDL), the listing of streams in affected watersheds as impaired, the need to examine secondary development that may result from the project and secondary and cumulative impact analysis. Consideration and compliance should be made to new laws and Executive Orders, including the protection and restoration of the Chesapeake Bay. Please consider detailed comments on the review of the EA, provided as an attachment to this letter.

If the lead agencies proceed with a Clean Water Act Section 404 permit application to impact jurisdictional waters, the Army Corps of Engineers (Corps) and EPA will require a thoroughly vetted avoidance and minimization analysis as well as the alternatives analysis identifying all practicable alternatives. As the Corps can only permit the Least Environmentally Damaging Practicable Alternative (LEDPA), it must be demonstrated that the preferred alternative is the LEDPA. The study should analyze aquatic impacts based on current determinations of jurisdictional waters. The alternatives analysis is up to 20 years old and may not be sufficient for the CWA 404 permit application process review.

EPA understands that some controversy has existed with respect to this project over the years and we support VDOT and FHWA's decision to include public involvement in the reevaluation and EA process. As you realize, the EA process can conclude in a Finding of No Significant Impact, but if controversy and environmental or community impacts appear significant pertaining to new information or circumstances, including new regulations, a higher level of study may be required (40 CFR 1508.26). Given the amount of time that has passed, it is prudent to allow for a comprehensive reevaluation of the project. EPA suggests that it might be appropriate for the lead agencies to provide an updated or new SEIS to reflect the environmental conditions since the last NEPA document, provide an up-to-date alternatives analysis reflecting current status of roadways and land use in the area; and have an alternatives analysis that will be appropriate for any future permit application in accordance with the CWA.

EPA appreciates the opportunity to provide input on the issues of this study. If there are any questions or concerns, please feel free to contact Ms. Barbara Rudnick, NEPA Team Leader, at 215-814-3322 or Mr. Mark Douglas, principle reviewer, at 215-814-2767.

Sincerely,

Jeffrey D. Lapp, Associate Director
Office of Environmental Programs

Enclosure

Attachment

Alternatives

The EA provides a summary of the previously considered alternatives, as stated in the document, for informational purposes only and an alternatives analysis will not be conducted anew as part of the EA, the project has a valid Record of Decision (ROD) from September 2003. Throughout this document, there are references to the amount of development within the study area as well as north of the study area in Greene County. The alternatives analysis does not account for current status of roadways nor consider new alternatives since the SEIS in 2003. These alternatives and alignments were based on traffic patterns and flow from the 1990's as pointed out in the EA. EPA suggests additional considerations are afforded the alternatives analysis as the new development, and amount of time, since the ROD was issued that needs and alignment shifts may be warranted.

Chesapeake Bay TMDL and 303d Listed Sub-watersheds and associated TMDLs

The EA mentions that the bypass corridor passes through the South Fork Creek Rivanna River, Ivy Creek, Moores Creek, Meadow Creek watersheds all of which have been listed for aquatic life use since the ROD of 2003. A TMDL has been issued for Moores and Meadow Creeks for sediment, which was not mentioned in the EA, nor how the proposed project will comply with the TMDL implementation plan. The entire project is within the Rivanna River watershed which has a TMDL for sediment. The TMDL identifies sedimentation caused by higher runoff flows as the primary stressor on the impaired sections of the river. The EA does not mention, nor address the impacts of the project on the TMDL. The EA states that during construction, the applicable regulations for stormwater will be followed, but makes no mention of how the proposed project will potentially affect the already impaired watersheds with the increased surface disturbance, filling of 2.8 acres of wetlands, increased impermeable surfaces, impacts from the 24 stream crossings, runoff, and potential pollutants from the roadway once the roadway is in use. EPA suggests the applicant discuss what efforts will be employed to avoid further impairment of the waterways and if need be, consider an alternate route to avoid the impacts.

The EA acknowledges the development of the Chesapeake Bay TMDL. However, similar to the other TMDLs and impaired water bodies mentioned above, the EA does not discuss or demonstrate how the proposed project will meet the TMDL allocations, offset any new or increased discharges or loads, or limit additional impairment of the waterbodies as a result of the impacts associated with the construction of the roadway and additional SW runoff after construction. The EA claims that the TMDL cannot scale down to assess water quality on a project level for this analysis. The Chesapeake Bay Watershed model can be scaled down to the county level and to the drainage area of a river with flow of at least 100 cubic feet per second (cfs). Although it is not designed to assess compliance or site-specific developments, the Chesapeake Bay Program Watershed Model could support a general analysis of the potential increase in nitrogen, phosphorus and sediment delivered to the Chesapeake Bay resulting from an additional six miles of impermeable surface at these county and river segment scales.

Federal agencies are also required to address issues raised in EO13508 "Protecting and Restoring the Chesapeake Bay Watershed" which includes restoring wetlands, streams, and riparian forest buffers, in addition to reducing nitrogen, phosphorous, sediment and toxic contaminants to meet water quality goals.

Stormwater

EPA requests a further analysis of the post-construction storm water (SW) management plan. It is unclear what is meant by the statement on page 48 that the storm water management will capture all runoff from the project area. Does the SW management plan cover all SW events? Does it mean that all runoff is contained, infiltrated, evaportranspirated and/or reused, or does it mean that the storm water drains to a designated point? Considerable SW management methodologies have changed and new practices have been developed since the 2003 ROD's SW management plans were put forth. These newer practices include low impact development (LID) best management practices (BMPs) incorporated into Green Infrastructure development.

Secondary and Cumulative Impact Analysis

As stated in EPA's scoping letter, an assessment of indirect (including secondary growth) and cumulative effects, in accordance with Council on Environmental Quality (CEQ) guidance, has evolved (and been incorporated into some state transportation department's NEPA process), it would be appropriate to perform a new secondary and cumulative impact study. The EA repeatedly points out the amount of development which has occurred along Route 29 in the study area since issuance of the most recent ROD in 2003. It is reasonable to assume that once the areas around the study area are built out, the development pressure will move further north in Greene County. It is also possible that if the bypass is constructed, the development of Greene County will, in fact speed up, as the potential commuting advantage between the area and Charlottesville could attract additional developers and residents that would have not had interest in the area prior to the bypass. In fact the EA mentions that the area north of the northern terminus has substantial new development; but does not discuss or offer analysis of potential secondary and cumulative impacts north of the northern bypass terminus. Models or expert land-use panels can be used to predict growth patterns. As pointed out in the EA, the development north of the study area may be driving the need for the bypass. Additionally, updates of land use should be included in this study. Discussion of integrating smart growth/sustainability into the project should be considered.

EPA has suggested in previous EIS reviews that cumulative long term pollutant loading and long-term risk from intentional or non-intentional contamination by hazardous material should be calculated for the life of the reservoir.

Incorporation of planning, land use and traffic data

The 2040 traffic flow forecasts are calculated from the constrained long range transportation plan (CLRP) which considers all of the foreseeable improvements to roadways in the study area. These other projects include widening of existing Route 29 northward from the

South Fork Rivanna River to Timberwood Boulevard; improvements to parallel secondary roads (Berkmar Drive, Hillsdale Drive) to expand options for local circulation; a grade-separated interchange at Route 29 and Rio Road; and improvements to the Route 29/Route 250 bypass interchange. These projects are proposed separate to the proposed project. It is possible that the projects along Route 29 may not go forward if the bypass is in-fact built due to the additional costs. Without the additional projects considered in the CLRP, the overall traffic flow improvements may not be to the extent forecasted in the EA. EPA suggests the applicant provide an analysis of the proposed project alone and not include the additional roadway improvements for an accurate build no-build comparison. Additionally, based on the information provided in Table 4, there does not appear to be a significant change in level of service on Route 29 between the build and no-build traffic forecasts of the representative interchanges. While the overall forecasted travel time is down, the level of service remains the same for all interchanges except for the Hilton Heights Road interchange goes from VDOT's level of service (LOS) of 'E' to 'D'.

Federal agencies are required to address issues raised in EO 13514, "Federal Leadership in Environmental, Energy and Economic Performance" and transportation reauthorization law which includes advancing regional and local integrated planning, and recognizing existing community transportation infrastructure. Local planning organization information and analysis should be incorporated where appropriate.

Final Compensatory Mitigation Rule

The EA did not directly address the change in regulatory practices since the issuance of the SEIS, including the revision to the regulations for compensatory mitigation for authorized impacts to waters of the U.S. under Section 404 of the Clean Water Act. The regulations, known as the Final Compensatory Mitigation Rule, are intended to standardize mitigation nationally as well as improve the effectiveness of mitigation to replace aquatic functions through permitted impacts to jurisdictional waters. The regulations were issued jointly by the Corps of Engineers and EPA in 2008 can be found at 40 CFR Part 230. EPA suggests a thorough discussion of the proposed impacts of 2.8 acres of wetlands and 24 stream crossings and how the mitigation efforts will follow the Final Compensatory Mitigation Rule.

Conclusion

EPA would suggest that given the time that has passed since the original study that an alternative that is sensitive to the environmental and social concerns be considered in addition to the preferred bypass. EPA has stated in previous letters that new evaluation of an upgrade to existing Route 29, with intersection grade separation, should be considered; it should also be determined if changes in the preferred bypass alignment could reduce impacts. As stated in our letter of 1990, the agency supports improvements utilizing existing alignments, whenever possible, in order to minimize environmental impacts; this is particularly true if a new alignment yields limited traffic relief in the corridor. Alternatives analysis is the heart of NEPA, as described by CEQ (40 CFR 1502.14)

Albemarle County Public Schools

Office of the School Board
401 McIntire Road
Charlottesville, Virginia 22902-4596
Phone: (434) 296-5893 Fax: (434) 296-5869
www.k12albemarle.org

October 8, 2012

Ms. Angel Deem
Environmental Division
Virginia Department of Transportation
1221 E. Broad Street
Richmond, VA 23219

Subject: Route 29 Charlottesville Bypass Environmental Assessment Comments

Re: 10/05/12 Letter from Chief Operating Officer, Albemarle County Public Schools

Dear Ms. Deem:

Albemarle County Public Schools appreciates the opportunity to comment on the Virginia Department of Transportation's (VDOT) Environmental Assessment (EA) for the Route 29 Bypass in Albemarle County. The Superintendent and Chairman of the School Board are highly concerned about the impact of the US 29 Bypass on several of our schools. The planned highway will require taking some School Board land from our largest campus and will pass very close to Greer Elementary School and an athletic field complex at Jack Jouett Middle School it will encroach upon a heavily used recreation and athletic field at Greer and it will also pass closely to Agnor-Hurt Elementary School.

VDOT has received the referenced letter describing the technical details of our concerns regarding the EA from our Chief Operating Officer (attached). We believe that the *Preliminary Noise Analysis Draft Report* issued in August 2012 needs to include more robust analysis of the Mary Greer Elementary School property, which may be the most vulnerable portion of the School Division campus to be encroached upon by the highway. We also believe the analysis should be revised to add value to the expected benefits of noise abatement at the schools.

Highways such as the US 29 Bypass are known sources of significant noise and air pollution, especially from the expected truck traffic. We believe that the children of Albemarle County must be protected from hazards and that the ambient noise level should be appropriate for learning and recreation. Common methods for remediation of highway noise include construction of sound barriers and earth berms. The School Board believes that construction of the US 29 Bypass must include sufficient remediation to insulate the Greer and Agnor-Hurt Elementary, and Jack Jouett Middle School buildings and fields from traffic noise.

Many members of our community have expressed concerns with air pollution affecting the health of some of our most vulnerable children attending our schools. In addition to the noise reduction benefits of the barriers, EPA's School Siting Guidelines suggest that noise barriers near the roadside may reduce downwind air pollution concentrations.

Taking some School Board land for completion of the highway will leave our residual property with significantly less value. The Superintendent and I respectfully request that VDOT consider the technical comments to the EA provided by our Chief Operating Officer, and that the final design of the highway include sufficient remediation of noise and air pollution. We also request consideration of either a relocation or renovation of the recreational field at Greer Elementary. Our children deserve the safest and quietest environment possible while attending County schools, and we trust that you will support our request.

Our point of contact for this matter is Chief Operating Officer Mr. Josh Davis, who can be reached at (434) 296-5877, or email jdavis@k12albemarle.org.

Sincerely,

Steve Koleszar
Chairman, Albemarle County School Board

Pamela Moran, Ed.D.
Superintendent, Albemarle County Public Schools

Albemarle County Public Schools
401 McIntire Road, Room 345
Charlottesville, Virginia 22902
Phone: (434) 972-4055 Fax: (434) 296-5869
www.k12albemarle.org

October 5, 2012

Ms. Angel Deem
Environmental Division
Virginia Department of Transportation
1221 E. Broad Street
Richmond, VA 23219

Subject: Route 29 Charlottesville Bypass Environmental Assessment Comments

Dear Ms. Deem:

Albemarle County Public Schools appreciates the opportunity to comment on the Virginia Department of Transportation's (VDOT) Environmental Assessment for the Route 29 Bypass in Albemarle County.[1] We believe that the *Preliminary Noise Analysis Draft Report* issued in August 2012 needs to include more robust analysis of the Mary Greer Elementary School property, which may be the most vulnerable portion of the School Division campus to be encroached upon by the highway. We also believe the analysis should be revised to add value to the expected benefits of noise abatement at the schools.

Please consider and respond to the following comments:

Comments related to the Preliminary Noise Analysis Draft Report (August 2012)
We request the following actions be taken to revise the *Preliminary Noise Analysis Draft Report* issued in August 2012:

1) Per the Virginia Department of Transportation's *Highway Traffic Noise Impact Analysis Guidance Manual*, "within Activity Category C, there are several activities that require different analysis methods to quantifying the number of receptor units for these land uses." The fields at Jack Jouett Middle School and Mary Greer Elementary are considered Activity Category C areas because they are a Section 4(f) site and recreation & active sport areas at schools.

   The Optimized Barrier Analysis for Common Noise Environment (CNE) H found that the proposed barrier near the athletic fields at Jack Jouett Middle School is feasible but not reasonable because the Maximum Square Footage of Abatement per Benefited Receptor

[1] State Project No.: 0029-002-844, P101; UPC 102419

(MaxSF/Benefit) value is 1,988. The MaxSF/Benefit must not exceed 1,600 in order to be considered reasonable.[2]

2) Analyze the placement of a noise barrier near Mary Greer Elementary in addition to the one at Jack Jouett Middle School (CNE H). The current modeled location of the noise barrier is shown in Figure 6. A previous assessment for this project stated that noise abatement would not be necessary at Greer Elementary due to the vertical alignment of the highway. The current assessment gives no reason for the lack of robust analysis near Greer Elementary and is silent regarding any protection from the vertical alignment. The analysis should examine the possible assertion that the vertical alignment of the highway, based on the current and final design, is sufficient.

   Per the *Preliminary Noise Analysis Draft Report*, additional modeling sites for CNE H were added in a grid pattern per VDOT procedures to determine the depth of impact and to aid in calculating reasonableness for the consideration of noise abatement. The grid pattern was only followed for the athletic field at Jouett Middle School. Because there is another athletic & recreation field at Mary Greer Elementary, Albemarle County Public Schools request that the analysis be revised to follow the grid pattern recommendation outlined in Steps 1-7 in Appendix E of VDOT's *Highway Traffic Noise Impact Analysis Guidance Manual*.

   Please also note that the recently completed addition at Greer Elementary School includes outdoor learning spaces that will be exposed to noise from the highway. Your revised analysis should include a receptor site at the entrance to the outdoor learning space.

3) Per guidance in Appendix E of VDOT's *Highway Traffic Noise Impact Analysis Guidance Manual*, add value to the sites at Mary Greer Elementary and Jack Jouett Middle School (CNE H) based on the outdoor learning spaces at Greer, field usage and existing quiet conditions at the fields.[3]

   The field usage information has been summarized as follows:
   - At each school, the entire student population utilizes the fields every school day, for PE classes and recess.
   - At Greer Elementary, 442 students use the fields 180 days per year for PE and recess.
   - At Jouett Middle School, 574 students use the fields 180 days per year for PE and recess.

   Community Athletic Organizations, such as the Soccer Organization of Charlottesville-Albemarle (SOCA) and Babe Ruth Softball, use the fields nearly every day of the year (excluding holidays), with between 20 and 195 participants. SOCA alone uses the fields about 298 of the 365 days of the year for their soccer programs. Additional field usage details are attached to this letter.

[2] Preliminary Noise Analysis Draft Report; Section VI, Page 16.
[3] Procedures recommended in VDOT's *Highway Traffic Noise Impact Analysis Guidance Manual*, Appendix E.

4) Add a monitoring site to the field at Mary Greer Elementary (CNE H) due to the inconsistent modeled noise level prediction for Build (2040) Noise Level at site MH1. The modeled noise level at Mary Greer Elementary School is 51 dB(A), while each monitored and modeled Build (2040) Noise Level at Jack Jouett Middle School ranges from 55 – 63 dB(A). The proximity of the Mary Greer Elementary School field to the proposed bypass warrants a measured receptor site.[4]

5) For the Optimized Barrier Analysis at CNE C, a post-and-panel sound barrier system was evaluated to mitigate predicted impacts and was found to not achieve feasible reductions. Albemarle County Public Schools request that an alternate noise abatement strategy be considered for CNE C. Please note comments above regarding adding value to the sites based on field usage and existing quiet conditions for Activity Category C. At Agnor-Hurt Elementary, 578 students use the fields 180 days per year for PE and recess.

6) ***Comments related to the Environmental Assessment***

Correction needed in Section 3.7, Hazardous Materials Sites (page 52) --

Current Environmental Assessment: "Four registered facilities are located near the project alignment. The Albemarle County School Complex on Hydraulic Road and Lambs Lane has three of the facilities that are registered with the EPA for handling or producing hazardous wastes. The Albemarle County Schools-Building Services at 2751 Hydraulic Road is registered with the EPA as a conditionally-exempt small quantity generator of hazardous waste, which means that it produces less than 100 pounds of hazardous waste per year."

Change: "Four registered facilities are located near the project alignment. The Albemarle County School Complex on Hydraulic Road and Lambs Lane has three of the facilities that are registered with the EPA for handling or producing hazardous wastes. The Albemarle County Schools-Building Services at 2751 Hydraulic Road is registered with the EPA as a conditionally-exempt small quantity generator of hazardous waste, which means that it produces less than 100 kilograms of hazardous waste per month."[5]

Our point of contact for this matter is Ms. Lindsay Check-Snoddy, who can be reached at (434) 975-9340, or email lcsnoddy@k12albemarle.org.

Sincerely,

Josh Davis
Chief Operating Officer

Attachment

[4] Table 9 – Route 29 Bypass Project, Optimized Barrier Analysis – CNE H.
[5] http://www.epa.gov/osw/hazard/generation/cesqg.htm

Summary of Field Usage

Agnor Hurt Elementary: September 5, 2012 Enrollment: 578

Soccer Field; Baseball Field, Playground Equipment, Asphalt Play Area

Field: Multi-Use

Organization	Dates	Days	Time	*Participants Per Day
SOCA	9/1 - 11/4	M - F	5:00pm - Dark	40
		Sa - S	8:00am - 6:00pm	160
SOCA	3/1 - 6/2	M-T-W-F	5:00pm - Dark	40
		Sa - S	8:00am - 6:00pm	160
ACPS Recess	8/22 - 6/8	M - F	10:00am - 1:00pm	578
ACPS PE Classes	8/22 - 6/8	M - F	8:30am - 2:00pm	289

Field: Baseball

Organization	Dates	Days	Time	*Participants Per Day
Albemarle Babe Ruth Softball	9/1 - 10/31	M - F	5:00pm - Dark	40
		Sa - S	8:00am - 6:00pm	160
Albemarle Babe Ruth Softball	3/1 - 7/1	M - F	5:00pm - Dark	40
		Sa - S	8:00am - 6:00pm	160

Greer Elementary: September 5, 2012 Enrollment: 442

Multi-Purpose Field, Playground Equipment Asphalt Play Area, Walking Trails

Field: Multi-Purpose

Organization	Dates	Days	Time	*Participants Per Day
SOCA	3/1 - 6/4	M-T-W-F	6:00pm - Dark	20
SOCA	3/1 - 6/4	M-T-W-F	6:00pm - Dark	20
YMCA Lacrosse	9/1 - 5/31	T - TH	6:00pm - Dark	20
Boys Middle School Lacrosse	3/1 - 5/31	M -TH	4:00pm - 6:00pm	20
ACPS Recess	8/22 - 6/8	M - F	10:00am - 1:00pm	442
ACPS PE Classes	8/22 - 6/8	M - F	8:30am - 2:00pm	221

Jouett Middle: September 5, 2012 Enrollment: 574

2 Multi-Purpose Fields, Baseball Field, Asphalt Play Area, Tennis Cts, Walking/Jogging Trails

Field: Multi-Use

Organization	Dates	Days	Time	*Participants Per Day
Boys Middle School Lacrosse	9/1 - 10/31	Sunday	11:00am - 6:00pm	70
SOCA	9/1 - 11/5	M - F	6:15pm - Dark	35
Boys Middle School Lacrosse	3/1 - 5/2	Sunday	11:00am - 6:00pm	70
SOCA	3/1 - 5/31	M - F	6:15pm - Dark	35
Boys/Girls Lacrosse	9/1 - 10/31	M - F	4:00pm - 6:30pm	45
JV - Varsity Lacrosse	2/1 - 6/30	M - F	4:00pm - 6:30pm	45
JV - Varsity Softball	2/1 - 6/30	M - F	4:00pm - 6:30pm	45
Pop Warner/TJYFL	9/1 - 12/31	M - F	6:00pm - 8:00pm	60
ACPS PE and Science Classes	8/22 - 6/8	M - F	8:00am - 4:00pm	287
ACPS Extended Lunch (15 min.)	8/22 - 6/8	M - F	12:00pm - 2:00pm	574

Field: Softball Field

Organization	Dates	Days	Time	*Participants Per Day
JAGS Softball	3/1 - 7/31	M - F	6:00pm - 8:00pm	15
		Sa - S	8:00am - Dark	15

Field: Trails

Organization	Dates	Days	Time	*Participants Per Day
Cross Country Track	8/1 - 10/31	M - F	4:00pm - 6:30pm	100
Indoor Track	11/1 - 2/28	M - F	4:00pm - 6:30pm	60
Outdoor Track	2/1 - 6/30	M - F	4:00pm - 6:30pm	50

Note: The School Board endorses the concept that outdoor facilities will serve as a community and district park, and are therefore available for frequent use by the community.

* Does not include Spectators	**Total Participants**	**3,916**

COUNTY OF ALBEMARLE
Office of Board of Supervisors
401 McIntire Road
Charlottesville, Virginia 22902-4596
(434) 296-5843 FAX (434) 296-5800

October 9, 2012

Ms. Angel Deem
Environmental Division
Virginia Department of Transportation
1221 E. Broad Street
Richmond, VA 23219

RE: Route 29 Charlottesville Bypass Environmental Assessment

Sent via E-mail

Dear Ms. Deem:

I have been part of the discussion on the western bypass through many iterations. As a student, then as a teacher and parent of children at the St. Anne's Lower School, as a member of the CHART committee for eight years, during which we worked on two long range plans and several short interval updates, as a member of the public during the 29H250 study and the 29 corridor studies, and now as a representative of the White Hall district.

While the road is not proposed to traverse the district I represent, many White Hall citizens in both the western and northern parts of the county will be affected by the construction and the roadway itself. People are already concerned about how the huge traffic numbers eastbound on 250 and 64 from Crozet and the Valley will be affected by construction of the southern terminus. There is no information about lane closures or cut offs all together of the Old Ivy Road connector which provides a duplicate and very effective feeder street to eastbound 250 bypass today. Current traffic backs up through the village of Ivy in the mornings.

Earlysville and Free Union commuters will not see any benefit to using the bypass, as they would suffer the worst section of the southbound roadway before they even get to the northern terminus. The lack of the third lane to be added to the current 29, and the remediation of the vertical curves which cause terrible sight distance and many rear end accidents is a huge failure of the current Skanska design. The RFP called for the third lane from the river to Hollymead. It is incomprehensible to me that the contract would be awarded to the one company who did NOT fulfill its requirements, ie the third lane on 29 north of the river, while other companies who did fulfill the RFP were not considered.

In general terms, it is also inconceivable how a proper assessment can be done without using the design proposed for the evaluation. How can the plans for the old bypass and its termini give any confidence that the new design will work without adverse consequences.

The steep grades at the cross over at Leonard Sandridge Drive and crossing Mt. Falcon, will provide difficulty in icy conditions due to the extreme steepness, slow traffic and create a place destined to have many accidents.

The noise of the engines and gears struggling with the grade will inhibit learning of the children at the STAB Lower school, where I taught science and technology in the 80's as well as shower them with particulates from exhaust. The same circumstance will be created at all the other schools who lie on the periphery of the roadway.

The major failure of the last bypass plan was the lack of protection for the reservoir during construction and during use. The steepness of the slopes and the statistical guarantee that within 50 years a hazmat carrying truck will wreck on that stretch of roadway, to such an extent that the intake pipe of our local water supply would be shut down.

My years on the CHART committee were spent working on the parallel road network to speed through drivers by freeing up the currently built roadway and permitting the local uses for which over 90% of the traffic comes to 29 every day. None of those needs have changed, and none are funded, despite being on our list for years and having total support from both jurisdictions.

We must pay attention to the lessons of modern medicine, which show that children, who live in stressful environments due to noise and pollution, are to be helped rather than allowed to fail. My childhood doctor, in his high 80s, spoke at our June meeting this was coming.

Thank you for listening.

As a long time member of the Rivanna Conservation Society, I will heartily endorse the letter sent by that body to you. The letter follows.
I will also endorse the concerns of the STAB trustees about the consequences of the roadway to their property. Their letter also follows.
The Piedmnt Environmental Council provided these concerns, which I also endorse.
Route29BypassEA@VDOT.Virginia.gov.

- **The alternatives are not reviewed:** the assessment doesn't compare completion of the bypass with completion of alternatives that were laid out in the recommendations for the Places29 plan.

- **It analyzes an outdated design:** the assessment analyzes an outdated bypass design, not the recent one submitted by the contractor. The newer design shows *significant changes* to the north and south ends of the bypass.

- **The land use & traffic impacts are missing:** the assessment does not provide any analysis of the impact of this project on traffic flow and land use north of the bypass.

- **Health impacts are overlooked:** the assessment does not include a review of recent studies on the health impacts of highways near schools, senior centers and neighborhoods.

- **It downplays the impacts on water quality:** the assessment is all but silent on the impacts that over two million square feet of new, impervious surfaces will have on the Chesapeake Bay.

Where Things Stand

Once public comments are collected and reviewed, the Federal Highway Administration will decide whether to accept the concerns Thank you for putting your determined diligence on this proposal and to represent the concerns of our locality about the roadway.

or require that VDOT complete a Supplemental Environmental Impact Study (SEIS). **We believe that the FHWA should insist on a full SEIS, which would include a thorough review of alternatives.**

Route29BypassEA@VDOT.Virginia.gov.

Route29BypassEA@VDOT.Virginia.gov.

Comments of the Rivanna Conservation Society Regarding the Route 29 Charlottesville Bypass Environmental Assessment
October 3, 2012

The Rivanna Conservation Society is a nonprofit, membership organization based in Charlottesville, Virginia and we write to share our views about the proposed Route 29 Bypass project. RCS is concerned that there has been no meaningful comparison of alternatives since the Federal Highway Administration (FHWA) and the Virginia Department of Transportation (VDOT) prepared the final Environmental Impact Statement (EIS) Bypass Project back in 1993. Although a supplemental EIS was completed in 2003 as the result of a federal court decision, the focus of that document was limited primarily to the impacts of the bypass on the South Fork Rivanna Reservoir, as more than half the project would be built through the reservoir's watershed.

Significant changes have been made to the Route 29 corridor since that time and the surrounding environment has been modified in the past two decades. Four sub-watersheds and a significant portion of the larger Rivanna River watershed in which the proposed bypass would be built have either been listed as impaired or have had a Clean Water Act 303(d) total maximum daily load (TMDL) assessment developed, or both, due to benthic impairment. In addition, the Chesapeake Bay-wide TMDL has been and is being developed for the Chesapeake Bay States.

In addition, the Charlottesville-Albemarle community has, over the past decade, worked with local, regional, and state officials to develop an effective approach for reducing congestion on Route 29 by improving the existing alignment through a combination of grade-separated interchanges, extensions of local roads along Route 29, and improvements to existing intersections. This type of alternative would be far less damaging than building a new, six-mile highway through this area of sensitive water resources. In particular, it would have little to no new impact on the reservoir watershed, and it would impact fewer impaired waters.

Our organization is concerned that the draft Environmental Assessment does not include any new analysis of alternatives, and its analysis of the effects of the Bypass on impaired water resources is viewed as inadequate. RCS is also concerned that its efforts to secure the "Scenic River Designation" for the Rivanna will be undermined by this project. Specifically we raise these issues to your attention.

Chesapeake Bay

Pages 48-49 of the draft EA discuss the Bay, but this section is primarily background information about the TMDL and its development. The single paragraph about the bypass simply asserts that the Chesapeake Bay Watershed Model is not calibrated to a scale that allows the project's impact on the Bay to be quantified. Then it suggests that the bypass would generate no new impacts on the Bay because the highway would shift traffic from existing Route 29, rather than generating new traffic volumes. This assertion ignores the additional sediment loadings to the Bay watershed from construction of the bypass and increased stormwater runoff from the significant amount of new impervious surface it would generate. This cursory treatment of this issue in the draft Environmental Assessment is inadequate, particularly in light of the fact that this is one of the first National Environmental Policy Act (NEPAP documents for a highway project in Virginia that has been prepared since the Bay TMDL was established, and it could therefore set a precedent for future NEPA analyses of this important issue.

Impaired Waters

Another important new piece of information is that the route for the proposed bypass traverses the watersheds of five waterways recently listed for benthic impairments. The draft EA fails to mention or provides only scant analysis of the impact the bypass would have on those waterways.

South Fork Rivanna River

Just below the northern terminus, the bypass would cross directly over a 3.38 mile segment of the South Fork Rivanna River that was initially listed as impaired for benthics in 2010. DEQ has determined three potential sources of the impairment: (1) an upstream impoundment; (2) municipal sources (urbanized high density area); and (3) non-point sources. The draft EA acknowledges that this impairment is new information, but it does not evaluate the potential impacts of the bypass on the impairment.

Ivy Creek

Ivy Creek drains the watershed where a large portion of the bypass alignment is located, and its benthic impairment, initially listed in 2008 and lengthened in 2010, extends 11.41 miles from its headwaters to its confluence with the South Fork Rivanna River Reservoir. The draft EA acknowledges that Ivy Creek's impairment is new information, but it does not evaluate impacts from the bypass in light of these new circumstances.

Moores Creek and Meadow Creek

The southern terminus of the Bypass would straddle the Meadow Creek and Moores Creek watersheds, which were listed as impaired for benthics in 2006 and 2008, respectively. The Virginia Department of Environmental Quality (VADEQ) recently completed a joint TMDL development report and Implementation Plan for these two waters and two others (Lodge Creek and Schenks Branch). The TMDL report identified sediment as the most probable stressor in all four waterways, and it also cited hydrologic modifications as a non-pollutant stressor in Meadow Creek, primarily related to the large amount of impervious surface in the watershed. The draft EA does not even mention these impairments, the TMDL development report, or the implementation plan.

Rivanna River

The entire bypass project would be located within the Rivanna River watershed. Two consecutive segments of the Rivanna, beginning roughly three miles downstream from the point where the bypass would cross the South Fork Rivanna River, were listed as impaired for benthics in 1996 and 2006. In 2008, VADEQ established a "sediment TMDL" for the Rivanna. It identifies sedimentation caused by higher runoff flows as the primary stressor on the Rivanna River watershed. The TMDL also affirms that improving the Rivanna River's impaired segments depends on reducing sediment through stormwater control and alleviating the impacts of urbanization. The draft EA fails to mention the effects of the bypass on the impairment or the TMDL.

In light of this and other important new information, the Rivanna Conservation society encourages the FHWA and the VDOT, as part of the NEPA process, to conduct a meaningful comparison of the effectiveness and impacts of the proposed bypass to an alternative that focuses on improving the existing alignment.

Rivanna Conservation Society
PO Box 1501
Charlottesville, VA 22902

Dear Ms. Deem:

We write today on behalf of the Board of Trustees of St. Anne's-Belfield School in response to the Environmental Assessment for the proposed Western Bypass. The Belfield Campus of St. Anne's-Belfield School is located adjacent to the southern terminus of the proposed Western Bypass and, therefore, any new road construction will have significant short- and long-term impacts on our students and our campus.

Noting the above, St. Anne's-Belfield School is of the opinion that noise, environmental and operational analysis contained in the current Environment Assessment (EA) is not applicable to, or representative of, the current design that was submitted as part of the winning design-build proposal. The geometric configuration of the southern terminus of the Western Bypass differs radically from what was originally proposed in 2003 and is being used as a basis in the current assessment.

The changes in the geometry and associated traffic flows at the southern terminus are inconsistent with all of the previously completed technical analyses for this portion of the Western Bypass that were included in the Environmental Assessment (EA) approved for public availability by the Federal Highway Administration (FHWA) on August 23, 2012. This inconsistency results in a document that does not comprehensively nor accurately address the proposed road project.

The EA approved by FHWA incorporates the following technical reports:

- The "Traffic and Transportation Technical Report" dated August 16, 2012;
- The "Final - Air Quality Technical Report" dated August 2012; and
- The "Preliminary Noise Analysis Draft Report" dated August 2012.

The traffic volumes used in all three (3) of the technical reports assume the southern terminus geometry proposed for the Western Bypass in 2003 that included free-flow flyovers to accommodate traffic entering/exiting from the US Route 250 Bypass to the proposed Route 29 Bypass. None of the aforementioned technical reports reflect the signalized diamond configuration of the southern terminus currently proposed by the design-build team in Proposal Submittal – Volume 1 dated April 17, 2012; the geometry that was reviewed by FHWA in advance of the Concurrence of Award issued June 15, 2012.

The following major differences are noted between the 2003 and 2012 geometry of the southern terminus:

- The 2003 design proposed a northbound flyover ramp that directly connected eastbound US Route 250 Bypass to the Western Bypass thus avoiding the diamond interchange at Leonard Sandridge Road; the SKANSKA design eliminates this flyover forcing all traffic to pass through traffic signals at the diamond interchange.
- The 2003 design proposed a southbound flyover ramp that directly connected the Western Bypass to westbound US Route 250 Bypass thus avoiding the diamond interchange at Leonard Sandridge Road; the SKANSKA design eliminates this flyover forcing all into the diamond interchange.
- In the 2003 design, traffic from Old Ivy Road remained separate from mainline eastbound US Route 250 Bypass traffic and had to use the diamond interchange at Leonard Sandridge Road to access the Western Bypass as well as eastbound US Route 250 Bypass; the SKANSKA design creates a weaving segment on mainline eastbound US Route 250 Bypass between Old Ivy Road and Leonard Sandridge Road.

The following figures document the difference in the AM and PM peak hour volumes at the interchange of US Route 250 Bypass and Leonard Sandridge Road/proposed Western Bypass. The volumes in Figure 1 were taken from Appendix C of the "Traffic and Transportation Technical Report" dated August 16, 2012 for the 2040 Build Conditions. The impacts of the two flyovers diverting volumes from the diamond interchange are evidenced by the low volumes exiting eastbound US Route 250 Bypass via Ramp ST-D and entering westbound US Route 250 Bypass via Ramp ST-A.

The volumes in Figure 2 were taken from Attachment A of the design-build team in Proposal Submittal – Volume 1 dated April 17, 2012. The impact of removing the northbound flyover ramp is seen in the increase of left turn movements from Ramp ST-D onto Leonard Sandridge Parkway (in the PM peak hour there were 5 lefts with the flyover versus 1,227 without the flyover).

FIGURE 1:

2040 Volumes from "TRAFFIC AND TRANSPORTATION TECHNICAL REPORT" dated August 16, 2012 (2040 Build Synchro HCS Output Sheets)

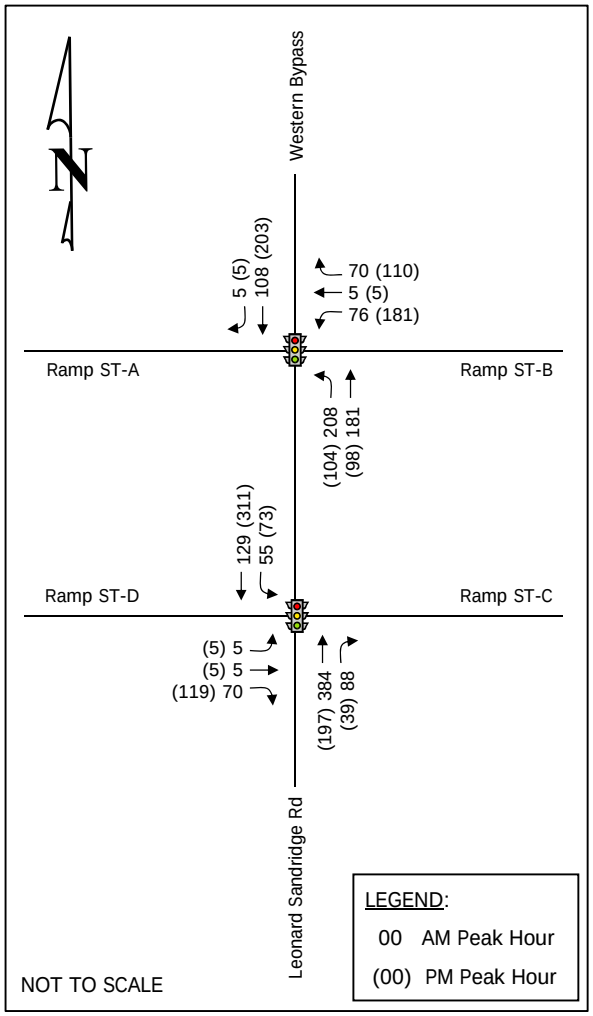
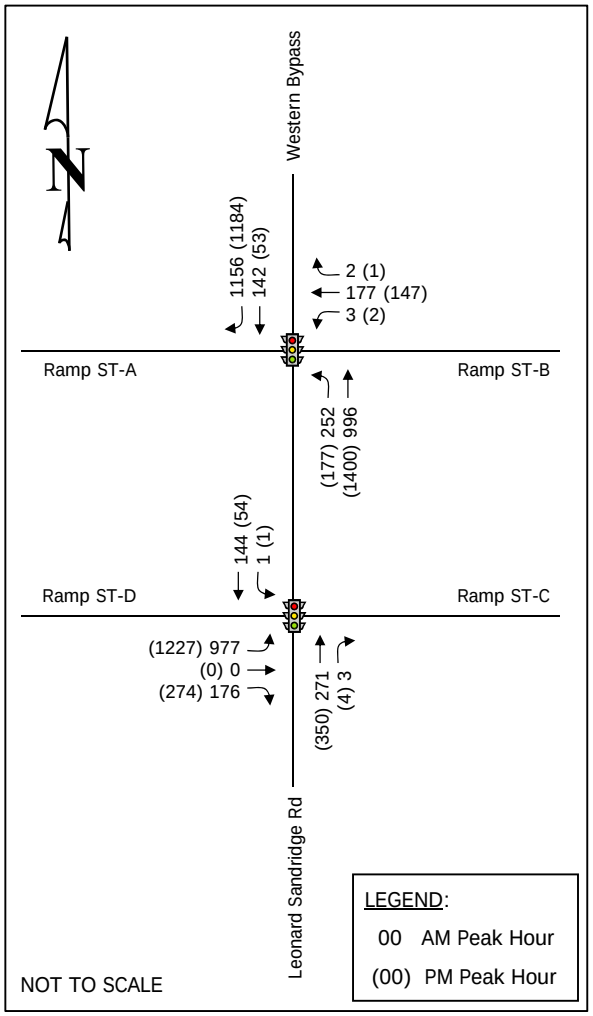


FIGURE 2:

2036 Volumes from Skanska Branch Highways Joint Venture Proposal Submittal – Volume 1 dated April 17, 2012 (Attachment A)



From Figure 2, the 977 AM peak hour and 1,227 PM peak hour left turns from Ramp ST-D will be required to exit eastbound US Route 250 Bypass, navigate through traffic attempting to enter eastbound US Route 250 Bypass from Old Ivy Road, come to a stop at the traffic signal at Leonard Sandridge Road, turn onto Leonard Sandridge Road and finally negotiate an 11.4% grade to pass through a second traffic signal before entering the Western Bypass. This scenario was not analyzed in the EA.

With respect to the previously noted weaving section on US Route 250 Bypass between Old Ivy Road and Leonard Sandridge Road, the SKANSKA design-build proposal (Volume 1 dated April 17, 2012) includes an operation analysis. The SKANSKA plans show a weaving segment approximately 1,200 feet long with approximately 2,937 vehicles during the AM peak hour and 4,290 vehicles during the PM peak (2036) passing through the segment. Table 1 indicates the weaving segment will operate at LOS B

during the AM peak hour and LOS C during the PM peak hour.

A 2010 analysis of comparable weaving segments on US Route 29 Bypass between Interstate 64 and Fontaine Avenue indicated the northbound weaving segment operated at LOS F under 2010 existing AM peak hour conditions and that the southbound weaving segment operated at LOS E under 2010 existing PM peak hour conditions (replicating observed field conditions). The northbound weaving segment is approximately 1,675 feet long and had a volume of 3,383 vehicles during the AM peak hour. The southbound weaving segment is approximately 1,400 feet long and in 2010 had a volume of 2,785 vehicles during the PM peak hour. Based on this information, it appears unlikely that the proposed weave will operate as well as anticipated.

In summary, we feel that the current EA does not fully or accurately address the potential design changes being considered at the southern terminus of the proposed Route 29 Bypass. We respectfully request that you take the above information into consideration and re-visit the anticipated impacts associated with the proposed design changes.

Sincerely,

David S. Lourie, Head of School
St. Anne's-Belfield School

Richard L. Booth, Chair of the Board
St. Anne's-Belfield School

Cc: Mr. James Utterback, VDOT Culpeper District Administrator
Mr. Hal Jones, VDOT Project Manager
Albemarle County Board of Supervisors

Thank you again for your consideration.

Ann H Mallek

From:	Rodney Thomas
To:	VDOT-Route 29 Bypass EA
Subject:	Inviromental Study
Date:	Friday, October 05, 2012 11:03:18 AM

I am of the opinion that the EIS being done is sufficient and will cover any and all new and or existing enviromental concerns. I feel that VDOT and Shansky have sufficient knowledge to complete the study that will allow FHWA, VDOT and the contractor to move forward with an immediate OK on all facets of the ie, design, enviroment and noise impact.
It is tme for this road to be built!!
Thank You,

Rodney S. Thomas
Albemarle County Supervisor, Rio District
Charlottesville Press, Inc.
434-293-9191

From: Murray, Lonnie M *HS
To: VDOT-Route 29 Bypass EA
Subject: Route 29 Charlottesville Bypass Environmental Assessment
Date: Friday, September 28, 2012 3:59:14 PM

I'm writing to address two important design elements of the Western Bypass:

1) **Impact on the Meadowcreek Trail** - My understanding is that the wooded area between the university of Virginia and the 150 Bypass that the Meadowcreek Trail passes through will be impacted. As a community our trail and the greenspace that it travels through is very important to our community. While I know of no endangered species, that area is relatively biodiverse for an urban area including at least three different species of orchid, evergreen wild ginger (Hexastylis sp.) and several fern allies. There are also several historic structures including a former ice skating pond, and Charlottesville's former poor house. In urban area, preexisting forest can be hard to come by and it's very important to preserve this highly used corridor for people and wildlife.

2) **Use Biofilters not Retention Basins -** I and others are very concerned that the plan will be to use retention basins, concrete, and culverts to treat storm water. **Biofilters utilizing native plants** have been demonstrated to be far more effective at removing toxins, sediment, nitrogen and other compounds that could flow into the Chesapeake Bay. Plus, they add value by providing urban habitat for birds, insects and other important wildlife and are more appealing to look at.. Given that we are in the midst of trying to implement the Chesapeake Bay TMDL, and given the importance of having this into our community to be attractive to our many tourists, I strongly recommend that VDOT uses the latest industry standard techniques of biofilters, native plants, and rain gardens to treat stormwater.

   In addition, given that restoration and protection of our streams is so important to our community, I would encourage that **any impacts to existing streams and wetlands from the Road should be mitigated locally** by funding stream daylighting and other wetland restoration projects. We do not want to see wetland mitigation credits used for this project that come from outside our immediate area.

Thanks,

Lonnie M. Murray

Albemarle County
Director, Thomas Jefferson Soil and Water Conservation District