# County of Fairfax, Virginia

To protect and enrich the quality of life for the people, neighborhoods and diverse communities of Fairfax County

May 19, 2011

Mr. Stuart Tyler
Parsons Transportation Group
100 M Street, SE
Suite 1200
Washington, DC 20003

Reference: U.S. Route 1 Improvements at Fort Belvoir
Fairfax County

Dear Mr. Tyler:

The Federal Highway Administration, in cooperation with the U.S. Army Garrison Fort Belvoir, Fairfax County and the Virginia Department of Transportation (VDOT), has initiated an Environmental Assessment (EA) for improvements to Route 1 between Telegraph Road and Mount Vernon Memorial Highway. To aid in this process, Fairfax County staff have performed a preliminary review of the anticipated development area and the vicinity to identify potential areas of impact to be considered in future planning efforts.

The project area crosses several important wildlife corridors, naturally sensitive areas and two major Historic Overlay Districts (The Pohick Church Historic District at the west end and Woodlawn Historic district at the east end of the project area). It is also imperative to note that the Route 1 segment between the new Woodlawn Plantation entrance and the Route 1/Mount Vernon Memorial Highway intersection is severely constrained in terms of right-of-way.

The County requests the Eastern Federal Lands Highway Division of the Federal Highway Administration (EFLHD), to take into consideration, the above mentioned limitations and comments attached to this letter, while preparing the Environmental Assessment for the Route 1 Widening project. Thank you for inviting Fairfax County to provide comments on the Route 1 Improvements at Fort Belvoir. If you have any questions or require additional information, please contact me at 703-877-5686 or laura.miller@fairfaxcounty.gov, or Smitha Chellappa at 703-877-5761 or smitha.chellappa@fairfaxcounty.gov.

Sincerely,

Laura Miller, PE, PMP, LEED AP
Fairfax County BRAC Coordinator

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**Route 1 Widening**
**Environmental Assessment Issues/Concerns**
**Fairfax County Comments, May 2011**

***Natural Resource Protection***

- All Resource Protection Areas (RPAs) in the project area, impacts of each alternative to RPAs, efforts that will be taken to minimize impacts to RPAs and, if/where impacts are unavoidable, efforts that will be taken to mitigate/compensate for these impacts need to be identified.

- With respect to RPAs, EQCs, and the Forest and Wildlife Corridor, improvements to the intersection of Richmond Highway and the Fairfax County Parkway would have a particular potential for adverse impacts, most notably if the construction of a grade-separated interchange was to be pursued. I recommend that design options for intersection improvements be particularly sensitive to potential impacts to these environmentally-sensitive areas.

- The project area crosses several important wildlife corridors and natural areas. The location and extent of Fort Belvoir's Forest and Wildlife Corridor, impacts of each alternative to the Forest and Wildlife Corridor, efforts that will be taken to minimize impacts to the Forest and Wildlife Corridor and, if/where impacts are unavoidable, efforts that will be taken to mitigate/compensate for these impacts. Improvements along this road corridor need to be sensitive to impacts to soils, flora and fauna, minimize disruption to the same, and provide for mitigating measures to alleviate impacts. Efforts that will be taken to facilitate the passage of wildlife under roads (e.g., the provision of bridges or large, open-bottom or counter-sunk culverts that encourage animal use) need to be identified.

- Identification of any other ecologically-significant natural resource areas within the project area as identified on Figure 13.1 of Fort Belvoir's Integrated Natural Resources Management Plan, the impacts of each alternative to these resources, efforts that will be taken to minimize impacts to these resources and, if/where impacts are unavoidable, efforts that will be taken to mitigate/compensate for these impacts.

*Wildlife Corridors*

- Particular concern is noted of the likelihood of security fencing along the entire Route 1 frontage with Ft. Belvoir. Significant lengths of fencing already exist along Route 1, Telegraph Road and several other roads related to Ft. Belvoir; and, the Route 1 corridor in Prince William and Stafford Counties is fenced for Quantico.

- Fundamentally fences significantly reduce the movement of terrestrial vertebrate animal species, particularly for turtles and mammals that are the size of a skunk or larger. This can reduce road kill of those animals, but can also result in isolated populations that lose genetic diversity and have reduced reproductive success and long-term viability.

- Road design should provide wildlife passage under roads wherever possible in the form of larger, open-bottom or counter-sunk culverts that encourage animal use. Such passages can facilitate animal movement and allow for census work at concentrated locations to assess animal populations.

*Stormwater Management*

- The existing infrastructure along this road corridor was built prior to current stormwater control standards and the federally regulated Multiple Separate Storm Sewer System (MS4) permit program. All changes to the road system should seek to reduce stormwater impacts over existing condition and comply with MS4 permit requirements for the impacted permit holders. Stormwater improvements for this corridor should not only seek to use innovative methods such as LID as well as more traditional stormwater control techniques, but should take into account the impacts and benefits to flora and fauna within the receiving streams and in the surrounding land areas. The Dogue Creek and Accotink Creek corridors should receive special attention.

- Identification of stormwater management and water quality improvement measures that will be incorporated into the project design. Efforts should be taken to improve flow, volume and water quality controls for the entirety of the road (and not just for the additional impervious cover) in comparison to current conditions. Low impact development practices that would serve to reduce both volumes and peak flow rates of stormwater runoff should be evaluated. Stormwater management measures in the Accotink Creek watershed should be provided such that this project would be supportive of the Accotink Creek flow-based Total Maximum Daily Load.

*Vegetation Restoration*

- Road construction and corridor maintenance should account for the fact that all land disturbance now results in conditions that favor non-native invasive species. Road corridors generally remain disturbed; motor vehicles regularly act as vectors for the transport of plant seed, fungal spore and both the larval and adult forms of insect pests; and altered wind patterns associated with roadways provide ideal conditions for dispersal and pollination of non-native invasive species. As a result restoration after disturbance and road corridor maintenance should include protocols for planting locally native plant species, monitoring road corridors for restoration success and the establishment of non-native invasive species, and treatment of non-native invasive species to prevent establishment and spread both along the road corridor and into adjacent areas.

- Identification of impacts to vegetative communities and tree canopy, efforts that will be taken to minimize clearing of native vegetation, and efforts that will be taken to mitigate/compensate for loss of native vegetation through the planting of native species within the highway right-of-way and/or off-site.

***Environmental Quality Corridor***

- Identification of Environmental Quality Corridors (EQCs) as set forth in the Environment section of the Policy Plan volume of Fairfax County's Comprehensive Plan (see http://www.fairfaxcounty.gov/dpz/comprehensiveplan/policyplan/environment.pdf, Objective 9, Policy a, starting on page 14). While EQCs and RPAs will largely overlap, there may be some areas in the study area that are not identified as RPA that would qualify for designation as EQC. Staff from the Environment and Development Review Branch, Planning Division, DPZ is available if needed to assist project staff and consultants regarding EQC delineations.

- Identification of impacts of each alternative to EQCs, efforts that will be taken to minimize impacts to EQCs, and, if/where impacts are unavoidable, efforts that will be taken to mitigate/compensate for these impacts.

***Cultural Resource Protection***

- The Route 1 Improvements project area is anchored on each end within a Historic Overlay District – The Pohick Church Historic District at the west end of the project and the Woodlawn Historic District on the east end. Historic Overlay Districts within Fairfax County are established to aid in the identification and protection of historic and/or archaeological resources located within or in the vicinity of any Historic Overlay District. Additional review by the Architectural Review Board (ARB) and protection efforts are required for any development within these districts. Any disturbance envisioned with the Route 1 improvements should be carefully evaluated for conformance with Part 2 of Chapter 7 of the Zoning Ordinance which discusses Historic Overlay Districts.

- There are historic sites and/or elements along the corridor that will need to be identified in the EA. The Pohick Church sits on the SW corner of Route 1 and Telegraph Road. Old Colchester Road, a Virginia Byway, intersects Route 1 at Telegraph Road. There's also Woodlawn Plantation and the Friends of Woodlawn Meeting House. There's also a homeless shelter at Pohick Road (Tulley Gate) and Route 1 that has some historic significance.

- Beyond the specific limits of the Historic Overlay Districts, Fairfax County's Comprehensive Plan addresses the potential for the study area to contain artifacts important to the county's and the country's heritage. The EA study area is located within the LP4-Fort Belvoir Community Planning Sector of Planning Area IV. Comprehensive Plan guidance for this Community Planning Sector, which would apply to the EA study area, states that:

  > "Any development or ground disturbance in this sector, both on private and public land, should be preceded by heritage resource studies, and alternatives should be explored for the avoidance, preservation or recovery of significant heritage resources that are found. In those areas where significant heritage resources have been recorded, an effort should be made to preserve them. If preservation is not feasible, then, in accordance with countywide objectives and policies as cited in the Heritage Resources section of the Policy Plan, the threatened resource should be thoroughly recorded and in the case of archaeological resources, the artifacts recovered." (Area IV, Lower Potomac Planning District, LP4-Fort Belvoir Community Planning Sector, Heritage Resources, pp. 122).

- Schedule for the Section 106 process needs to be included in the EA. Both direct and indirect effects from undertaking of historic properties need to be considered. Viewshed analysis/study will be required both to and from historic properties.

***Non-motorized Connections***

- Numerous Fairfax County and Park Authority policies emphasize the importance of establishing an integrated, multi-modal transportation system. In addition to the street network in the area, trail systems and bike routes not only address the region's transportation demand, but also provide a crucial link to Fairfax County's park system. Within the EA study area, noted non-motorized connections include a major paved trail along Route 1 as well as an on-

road bike route. The continuity of this system is supported by the continuation of major paved trails along Telegraph Road, Fairfax County Parkway and Mount Vernon Memorial Highway/Old Mill Road. A minor paved trail also connects with Route 1 at Woodlawn Road. Many of these surfaces provide the physical connections that link points along the National Park Service's thematic Potomac Heritage National Scenic Trail as well as the planned Southern Fairfax County route for the East Coast Greenway.

- Any road improvement plans should fully address the intent and need for non-motorized transportation routes that support Fairfax County's overall transportation plan. Pavement width should be sized to provide on-road bike access. Right-of-way sections should fully accommodate all required trail construction.

- The County's Trail Plan, adopted by the BOS in 2002 includes both a) a major paved trail (10' width) and b) on-road bicycle facilities. Currently, completed segments of US Route 1 provide for a wide curb lane (minimum 14' in width exclusive of the gutter pan). These bicycle facilities should be provided for along the whole project length. Additionally, the plan includes the 2002 alignment for the Potomac Heritage National Scenic Trail (PHNST), classified as part of the Major Regional Trail System.

- This segment of US Route 1 includes several regionally significant trails. These include: The Potomac Heritage National Scenic Trail, the East Coast Greenway Trail, and may ultimately include the AASHTO US Bike Route 1 (this US Bike Route was detoured on to telegraph Road in response to 9/11 base road closures).

- The Fairfax County Parkway Trail currently is routed onto Backlick Road through Accotink Village to US Route 1 as an on-road route. Depending on the scope of improvements, this major trail junction may need to be reconfigured.

- Major bicycle route intersections along this project include: Telegraph Road, Backlick Road (Fairfax County Parkway Trail), and Mount Vernon Memorial Highway/Mulligan Road Extension.

***Mount Vernon Visioning***

- The EA study area lies within the Mount Vernon Supervisory District. In August 2010, Mount Vernon District Supervisor Hyland appointed a 75-member Mount Vernon Visioning Task Force with the purpose of establishing a 25-year vision for the Mount Vernon District. In February 2011 the Task Force published their report which addressed eight focus areas and recommended actions to improve the overall quality of life in the Mount Vernon District. The eight focus areas include:
    - Education
    - Human Services
    - Housing & Community Development
    - Business and Economic Development
    - Public Safety
    - Transportation
    - Environment, Parks & Recreation

- Land Use

- This report represents significant time, effort and input from the Mount Vernon community as well as support from the district supervisor. Improvements and impacts to the Route 1 corridor should be reviewed in light of the Task Force's recommendations which are available on-line through the Mount Vernon District web page. (http://www.fairfaxcounty.gov/mountvernon/documents/final_report_of_the_visioning_task_force.pdf)

- The Park Authority will be glad to assist in the identification of all Fairfax County parkland within the study area as well as to discuss methods to minimize impacts to the County's natural and cultural resources.

***Transportation***

- Figure 3 (Page 32) from the Fairfax County Comprehensive Plan appendix (2007 edition) which includes right-of-way requirements and cross-section for Route 1, needs to be included in the EA. http://www.fairfaxcounty.gov/dpz/comprehensiveplan/policyplan/transportation.pdf

- The Environmental Assessment (EA) is being initiated for the improvements to Route 1 in Fairfax County between Telegraph Road and Mount Vernon Memorial Highway. However, with the Mulligan Road project, which is currently under construction, Mount Vernon Memorial Highway will be realigned to meet Mulligan Road (aka Old Mill Road) at the intersection with Route 1. New configuration of the intersection should be properly indicated on all the maps depicting Route 1 widening and EA limits.

- In the EA task "Characterize existing conditions in the study area and identify transportation problems and needs" new configuration of the Route 1/ Mount Vernon Highway/ Mulligan Road intersection should be a part of the existing condition for EA, and as such considered for all the stages of traffic analysis as part of EA.

- The most northern part of the EA and Route 1 project limit, the segment between the new Woodlawn Plantation entrance (existing signal at Route 1/ Woodlawn Road intersection), which is also a part of Mulligan Road project, and Route 1/ Mount Vernon Memorial Hwy/Mulligan Road intersection is severely constrained in terms of the right of way. National Trust for Historic Preservation is a land owner on both sides of this segment of Route 1. It is highly unlikely that the assumed typical section including Transitway: BRT/LRT as indicated in the FC Comprehensive Plan can be accommodated within this segment. This should be properly identified and evaluated during the "Identify and Evaluate Improvement Alternatives" task.

- Comprehensive Plan indicates the Route 1/Fairfax County Parkway intersection as a location for the future grade separated interchange. The feasibility of the full and partial (flyover) grade separation should be investigated and considered as part of the alternatives evaluation. The impact of this alternative should also be considered vis-à-vis the proposed Comprehensive Plan Amendment, Item ST11-IV-LP1 at East of the Fairfax County Parkway, at the juncture of

Richmond Highway and Backlick Road in Lower Potomac planning district, parcel location 109-1 ((1)) ALL.

- A negotiated typical section of 148' was agreed to in a Memorandum of Agreement (MOA) between the Department of the Army and the Virginia Department of Transportation on 26 Aug 2010 for widening of Route 1 through Fort Belvoir Main Post. This section provides for 6-lane divided traffic, transit corridors for light rail or Bus Rapid Transit, pedestrian and bicycle traffic, and shoulders. In addition, the MOA addresses the ability to expand beyond the 148' section for utility relocations, storm water management facilities, turn lanes, traffic signalization, temporary construction, slopes, replacement of a railroad/transit bridge over Route 1, maintenance of traffic during construction, and other ancillary improvements.

- Proposed typical section for Route 1 widening should include bicycle and pedestrian accommodations as specified by the FCDOT Bicycle Program Coordinator, and FC Pedestrian Safety Manager.

- There is an ongoing out-of-turn comprehensive plan amendment currently under review for the Village of Accotink. There is a desire to construct multifamily with a mix of retail and some office on the parcels on the north side of Route 1 on both sides of Backlick Road. The developability of these parcels is a concern with Route 1 being widened and utilities being placed on the north side of Route 1. Access to these parcels may also become a concern as the Route 1 will be going from undivided to divided.

- From a transit planning perspective, there is a need to maintain the ability to put some form of high-quality transit in the corridor such as Metrorail extension, light rail, BRT, etc. and needs to be mentioned in the EA.

- There have been several car crashes recently on Route 1 down by Telegraph and Fairfax County Parkway. Adding a median will help, but improving safety in the corridor should certainly be considered in the EA.

***Fire and Rescue***

- Emergency response access must be maintained. Fire and Rescue Department (FRD) emergency responders must be able to traverse the Route 1 corridor during construction with limited disruptions to maintain emergency response to all incidents.

- Additional hydrants are needed along the Route 1 corridor to provide adequate water supply. Currently, hydrants are only located at either end of the section of Route 1 identified and around the Accotink community. FRD's preference is to locate hydrants on both sides of Route 1 (similar to how it is done on interstates.)

- Expand the traffic preemption systems (Opticom) to include all intersections in all directions along the Route 1 corridor. An additional traffic preemption system is needed at the intersection of Telegraph Road and Route 1. At the current time, it appears that the traffic preemption systems only function for North/South traffic on Route 1 and does not extend past the Fairfax County Parkway.

- Provide sufficient turn lanes along the Route 1 corridor. Turn lanes allow vehicles making turns to move out of the main flow of traffic. They also provide “bail out” space for vehicles to move out of the way of emergency apparatus responding to incidents.

- Provide shoulders along both sides of the Route 1 corridor. Much of this section of Route 1 does not have shoulder space. Shoulders of sufficient width are needed to allow disabled vehicles and emergency apparatus to pull off the main roadway and not obstruct traffic. FRD prefers rounded curbing to allow the shoulder to be "mountable" by emergency apparatus.
- If center medians are planned, cut-throughs must be provided for emergency responders. Sufficient space around a median allows disabled vehicles to pull off the main roadway and not obstruct traffic. Medians also provide "bail out" space for vehicles to move out of the way of emergency apparatus responding to incidents. If a raised concrete median is planned, the curbs should be rounded for easy access by emergency apparatus.