County of Fairfax, Virginia

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

November 15, 2010

Commander
U.S. Army Garrison, Fort Belvoir
9430 Jackson Loop, Suite 200
ATTN: Director of Public Works
Fort Belvoir, VA 22060-5116

Subject: Final Environmental Assessment and Draft Finding of No Significant Impact for The National Museum of the United States Army at Fort Belvoir, Virginia

Dear Mr. Sanders:

Thank you for inviting Fairfax County to provide comments on the Final Environmental Assessment and Draft Finding of No Significant Impact for the National Museum of the United States Army at Fort Belvoir, Virginia.

In response to a draft Environmental Assessment on the Army Museum provided in November 2008, the County expressed its strong support to the Army's decision to have the home of the National Museum of the United Sates Army located at Fort Belvoir. However, the County did not support a proposed Finding of No Significant Impact and recommended that an Environmental Impact Statement be prepared, which we continue to maintain is necessary to provide the comprehensive level of detail needed to move forward.

Our detailed comments on the above referenced documents are attached. Thank you for your attention and consideration of our comments. If you need additional assistance please contact me at (703) 877-5688.

Sincerely,

Mark G. Canale
Fairfax County BRAC Coordinator

MGC/slc
Attachments: As Stated

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cc: Members, Fairfax County Board of Supervisors
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James Patteson, Director, Department of Public Works and Environmental Services
John W. Dargle Jr., Director, Fairfax County Park Authority
Katharine D. Ichter, Director, Fairfax County Department of Transportation

The National museum of the United States Army
Comments from Fairfax County, Virginia
November 11, 2010

Land Use and Compatibility

- The site borders the Newington Community Planning Sector in the Springfield Planning District of Fairfax County. The Fairfax County Comprehensive Plan, as amended through July 27, 2010, states the area to the west of the Gunston site is planned for low density residential use at 1-2 dwelling units per acre and private open space. The Comprehensive Plan specifies that development should be sensitive to the historic and environmental constraints in the area. This area is zoned PDH-2 and is developed as a single family neighborhood, with much of the land immediately adjacent to Fort Belvoir owned by the Park Authority and the Mount Air Homeowners Association and preserved as public or private open space. This open space provides a buffer which should help reduce the impacts of the NMUSA development on the residential neighborhood. However, as noted in comments on the draft EA in 2008, the Mount Air Historic District is located adjacent to the proposed museum site. This historic resource is not mentioned in the EA.

Environmental Quality Corridors

- The Environmental Assessment does not recognize Fairfax County's Environmental Quality Corridor policy. The policy should be recognized in subchapter 3.5 of the EA, along with wetlands and Resource Protection Areas, and EQC boundaries should be identified. The response to comment #42 of the 2008 draft EA (Appendix G) states that impacts to EQCs would be avoided to the extent practicable and cites subchapter 3.5, but this is not discussed anywhere in the EA. Of particular concern is the EQC associated with Kernan Run, which includes the stream, the associated 100-year floodplain and wetlands, and steeply sloping areas (15% or greater slope gradients) adjacent to these features. Much, if not all, of the area to the west of the proposed museum and parking areas would be located within this EQC, and, as noted below, we have concerns regarding the impacts that the entrance road would cause to this EQC. The EA fails to recognize this critical impact and therefore does not adequately assess the environmental impacts of the proposal.

Stream and Resource Protection Area impacts

- Page 73 of the EA indicates that there would be impacts to approximately 0.114 acre of wetlands, 209 linear feet of streams, and 2.113 acres of Resource Protection Areas. Additional impacts may occur for the construction of utilities. The EA notes that roadway crossings of RPAs may be allowed if no better alternatives can

be found and if they are aligned to minimize impacts to the RPA. The EA acknowledges that the proposed roadway runs parallel and along the edge of an RPA and that this inconsistent with these provisions of the ordinance. We feel that the EA does not sufficiently address alternative access concepts and their associated environmental impacts and feel that such analyses should be presented prior to acceptance of the FONSI

- Previous project documentation indicated that on-site and possibly off-site stream restoration efforts would be pursued, applying natural stream design techniques. Only brief mention is made on page 65 of the EA of possible restoration efforts. To what extent are stream restoration efforts still being anticipated?

- The EA notes that compensatory mitigation measures for unavoidable wetlands impacts would need to be provided through the U.S. Army Corps of Engineers and Virginia Department of Environmental Quality permitting processes. No details are provided regarding mitigation strategies, although previous documentation referenced the purchase of credits at a wetlands bank. While we recognize that these impacts will be minor, we question why the purchase of credits in a wetlands bank (which would probably not even be located in Fairfax County) would be the preferred mitigation approach. Consideration should be given to pursuing restoration efforts nearby. The Stormwater Planning Division of the Department of Public Works and Environmental Services (703-324-5500) may have suggestions for nearby restoration projects.

Stormwater management

- The EA does not present details regarding the proposed stormwater management system--we recommend that conceptual information regarding the proposed stormwater management system be provided at this time in order to provide for a more complete understanding of the level of stormwater control that will be pursued and the types and locations of treatment facilities that will be provided in order to achieve this level of control. Previous documentation indicated that there would be an attempt to attain LEED® Stormwater Design credits as well as the use of pervious pavement and a vegetated roof. Is this still anticipated? The county would like to review the Stormwater Pollution Prevention Plan (SWPPP) for the NMUSA at this time; absent such information, we do not feel that we have sufficient documentation to enable us to comment fully on the FONSI, the potential impacts of the proposed project on nearby streams and the Accotink watershed, and the efficacy of any proposed stormwater controls.

- Page 63 of the EA references a Total Maximum Daily Load (TMDL) that is being developed to address a benthic impairment along Accotink Creek between Calamo Branch and Accotink Bay. As of the date of this review, the U.S. Environmental Protection Agency is pursuing an aggressive stormwater flow reduction approach to

this TMDL; a 49.7% reduction in flow in existing stormwater discharges from the 1-year 24-hour event has been identified as being necessary to address the impairment. In addition, new development and redevelopment would need to achieve no net increase in flow. At present, the current goal for completion of this TMDL is the end of December 2010, with implementation anticipated to take place no later than May 2011. Page 27 of the EA states that the Army anticipates starting construction on the NMUSA campus early in 2012. The EA contains no discussion of possible impacts of the proposed project to this TMDL, although significant increases in post-construction runoff for storms of 2-year and 10-year intensity are calculated in Appendix F (the TMDL requires reductions in the 1-year, 24-hour flow event). Possible mitigation strategies are briefly noted on p.65 (include "stream restoration" and "stream improvements"), but almost no details are provided. It is therefore not possible to evaluate whether these strategies will protect and enhance streams as well as achieve the flow reductions that will be required by the benthic TMDL.

- The EA also lacks any mention of the forthcoming Chesapeake Bay TMDL. The EA should at least acknowledge the existence of this important environmental legislation, and the expected regulatory requirements of both the Accotink Creek benthic TMDL and the Bay-wide TMDL should be discussed more fully in the Stormwater Pollution Prevention Plan for this development.

- While Fairfax County has raised concerns with this flow-based approach to the Accotink Creek benthic TMDL, EPA's proposed approach underscores the need for Fort Belvoir to pursue development designs that minimize impervious cover and optimize stormwater controls, particularly as they would reduce stormwater runoff volumes. The EA notes that "approximately 22 acres would be covered with asphalt, concrete, structures, etc." and indicates that stormwater management/best management practice controls will be provided consistent with the county's Chesapeake Bay Preservation Ordinance requirements. The EA also notes that a Virginia Stormwater Management Program permit would be required. It is not stated explicitly that the project will meet the minimum requirements of the Fairfax County Public Facilities Manual, but Fort Belvoir has referenced this intent for other projects—can we assume that this will be the intent here as well? As the site is entirely pervious (consisting of wooded areas and golf course holes), this development would result in considerable increases in flow volumes from the site; clearly, it will add to, rather than reduce, flow volumes in Accotink Creek. In light of EPA's proposed approach to the TMDL, we urge Fort Belvoir to pursue stormwater management efforts that would be more substantial than the minimum requirements of the Chesapeake Bay Preservation Ordinance and the county's Public Facilities Manual. All efforts should be taken to minimize impervious cover and to optimize stormwater runoff volume controls--stormwater runoff volumes from the site should be minimized. Toward this end, stormwater runoff should be infiltrated, evapotranspired and/or reused on the site to the maximum extent

possible. Strategies that could be considered include those that have previously been recommended by county staff: vegetated roofs; other low impact development techniques that serve to infiltrate stormwater runoff; and the harvesting and reuse of rainwater. Previous documentation indicated that "the Museum site stormwater management will be based on models that replicate the natural hydrologic cycle." Page 38 of the EA indicates that such technologies will be evaluated but makes no commitments to their application. Page 65 identifies low impact development techniques as a "possible mitigation strategy" but again offers no commitments. In light of the proposed flow TMDL for Accotink Creek, we feel that such commitments would be appropriate.

- Consideration should be given to the educational opportunities that an exemplary and innovative stormwater management system would provide. Fort Belvoir has been an effective steward of its natural resources, and the environmental stewardship aspect of the Army's mission could be highlighted through such efforts. Page 27 of the EA notes that outdoor education will be part of the museum's program. An exemplary and innovative stormwater management system could become part of this program.

- Page 12 of the EA states: "If the Army opts for a structured parking arrangement, the footprint of the parking lot(s) would be reduced by approximately 2 to 3 acres." No conceptual plan is provided that shows how a structured parking alternative would be designed, but this reduction in proposed impervious cover would be substantial, and it is possible that there could be considerably less clearing needed as well. In light of the flow-based TMDL that has been proposed for Accotink Creek, a structured parking alternative should be pursued. In addition to reducing the overall impervious footprint, the parking structure could be designed with additional stormwater controls (e.g. vegetated roof, terraces w/tree box filters, cistern for rainwater capture) to further reduce flows.

- The proposed intensity of development on the upland area of the site, along with the significant elevation differences on the site, evoke concerns about the potential for the discharge of relatively large volumes and flows of stormwater runoff and the potential for erosion at outfalls and within downstream areas. Reductions of stormwater runoff volumes, through infiltration/low impact development practices and/or harvesting and re-use strategies, would reduce this concern. Unless all rainfall would be retained on the site, however, there would be a need to design stormwater outfalls carefully--outfalls should be non-erosive and stream stabilization work in receiving streams should be performed as necessary to ensure a stable receiving stream condition.

- We encourage Fort Belvoir to coordinate the development of a stormwater management control system on the site with the Fairfax County Department of Public Works and Environmental Services. The Stormwater Planning Division of

DPWES should also be consulted in regard to the culvert removal, stream restoration and stream improvement work that is referenced on page 65 of the EA.

- Finally, as was previously noted in the county's spring 2010 comments on related documentation, a Watershed Management Plan is currently under development for Accotink Creek; the proposed project falls within Watershed Management Area 8. This area was modeled and assessed as the current golf course and open space land use. The results show that this area is one of the remaining areas in the Accotink Creek watershed that falls below the "Very High" mark for Total Nitrogen, Total Phosphorous and Total Suspended Solids. It also scored very high for Subwatershed Ranking. Every effort should be made to preserve the low level of nutrients and suspended solids in this subwatershed. For information on the Accotink Creek Watershed Management Plan, visit the Accotink Creek watershed website at http://www.fairfaxcounty.gov/dpwes/watersheds/accotinkcreek.htm. For additional information, contact Danielle Wynne at danielle.wynne@fairfaxcounty.gov or 703-324-5616.

Tree Preservation/Clearing and Grading

- On page 14, it is noted that "a 1.9 to 2-acre area of trees would be selectively cleared between the access road and the museum complex at the top of the hill to provide an iconic view of the NMUSA from the access road." It is not clear where this area of selective clearing would be located; we are concerned that trees may be removed from steeply sloping areas within the EQC associated with Kernan Run--the EQC would include all steeply sloping areas (15% or greater slope gradients) adjacent to Kernan Run and associated floodplain and wetland areas—much, if not all, of the wooded areas to the west of the proposed museum and parking areas would be included. We feel that clearing within the EQC should be avoided to the extent possible; if an "iconic view" from the access road is desired, perhaps a more direct access route oriented away from the stream valley should be pursued.

- Clarification is also needed as to whether any selective clearing would occur within areas that may affect sensitive species—page 58 of the EA notes, for example, that the Virginia Department of Conservation and Recreation has indicated that a state rare dragonfly has been historically documented at the project site. Would the selective clearing potentially impact habitat for this species or any of the areas identified as potential habitat for the small whorled pogonia? If so, we'd recommend against the selective clearing.

- Table 3.3-3 on page 52 of the EA identifies impacts of the proposed action on the cover types that are present on the site. Do these figures include the 1.9 to 2-acre area that would be selectively cleared?

- Page 61 states that trees will be planted at a 2:1 ratio to replace those that will be removed. Other documents have limited this replacement to those trees with a diameter at breast height of four inches or more; we have consistently recommended replacement of lost canopy and not just the larger trees. We encourage Fort Belvoir to consider canopy replacement and not just replacement of larger trees.

Noise

- The EA states that there are no residential or other noise-sensitive receptors within 1,000 feet of the proposed site. However, this does not necessarily mean that there will not be any adverse noise impacts. The EA notes that there will occasionally be noise impacts associated with military bands, re-enactment activities, parades, discharges of dummy ordnance and amplification of voices and music to reach a large crowd. Page 80 of the EA indicates that gunpowder for cannons may be stored on the site, but no indications are given regarding how frequently cannons may be fired. Ideally, noise from these activities would not be audible at any noise-sensitive location. We recognize that this may not be possible (particularly in regard to noise associated with the firing of dummy ordnance), and we previously recommended that noise levels not exceed thresholds for stationary noise sources that have been established in Fairfax County's Noise Ordinance. On page 88 of the EA, it is stated that Fort Belvoir intends to comply with this Ordinance, which prohibits the operation of any stationary noise source that will generate noise in excess of 55 dBA when measured anywhere on a residentially-zoned property. We commend Fort Belvoir for this commitment and encourage Fort Belvoir to provide further guidance regarding how this commitment will be enforced. All noise-generating activities associated with museum operation (including special events) should be viewed as stationary noise sources and should comply with the 55 dBA limit. Efforts should be made to establish clear lines of communication with neighborhoods to the west of the site, including the provision of contacts for the filing of noise complaints and an effective response process.

- The EA states that construction activities would occur primarily during normal weekday business hours, with no violations of the county's Noise Ordinance anticipated. We commend Fort Belvoir's sensitivity to construction noise impacts and support limitations on hours of construction.

Air Quality

- As was the case for the 2008 EA, this EA notes that construction-related emissions of ozone precursors, fine particles and sulfur dioxide will be well below applicability thresholds associated with Environmental Protection Agency and Virginia Department of Environmental Quality requirements. Operational emissions will also be well below these thresholds. The EA therefore concludes

that no mitigation measures will be needed. However, as we noted in our comments on the 2008 EA, air quality mitigation measures were identified for the Base Realignment and Closure projects at Fort Belvoir, including limitations on construction on Code Orange, Red and Purple ozone days, anti-idling restrictions, use of ultra low sulfur diesel fuel and other restrictions. In light of the proximity of the museum project to the BRAC projects, we continue to feel that it would be appropriate to apply the construction-related limitations applicable to the BRAC projects to the museum project as well. There should also be a consideration of longer-term measures that could be taken on Code Orange, Red and Purple ozone days to reduce emissions of ozone precursors (e.g., deferral of maintenance activities involving the use of gas-powered equipment or surface coatings that may emit volatile organic compounds).

- Regarding fine particulates (PM2.5): PM2.5 formation is a year-round phenomenon and it is expected that there will be a number of additional heavy-duty construction vehicles and equipment generating particulate matter in the area. This activity will have a cumulative impact on the project which will add to the background concentrations in the project area during the construction period. Therefore, feasible contingency measures should be identified to address this problem.

<u>Heritage Resources</u>

Note: The Heritage Resources comment provided in May 2010 for the U.S. Army Museum –NCPC project plans review is shown as Attachment II.

- Section 3.6 and Appendix B of the EA address heritage resources. Page 76, Section 3.6 states that Mount Air was evaluated and determined eligible for listing in the National Register of Historic Places; however, the evaluation determined that the site lacks historic viewshed. This statement also appears in a January 21, 2010 letter from Colonel Blixt to the Virginia Department of Historic Resources (VDHR) as found in Appendix B, and is based on language in the draft National Register nomination which discusses the compromised setting of the original 522 acres of Mount Air. The January 21 letter states that, “Based on its evaluation, Fort Belvoir has determined that the historic viewshed of Mount Air has been significantly compromised to the north and west by a recent housing development and to the south and east by the encroachment of wooded areas. As such, Fort Belvoir has determined that historic views do not contribute to the significance of Mount Air.” There is no documentation in the EA indicating VDHR’s concurrence with the Army’s finding regarding the historic viewshed.

- While it is clear that the setting of the original 522 acres of Mount Air has been compromised, the viewshed of the remaining 15.57 acres of Mount Air has been protected and contributes to the significance and character of Mount Air.

- Appendix B includes concurrence from VDHR that Mount Air is eligible for listing in the National Register of Historic Places under Criterion D. The draft nomination of eligibility for listing in the National Register of Historic Places was submitted as meeting three criterions; the request from Fort Belvoir did not seek VDHR concurrence on the other two criterions.

- Area of Potential Effect (APE) -ages 75-76, the EA states that the "visual Area of Potential Effect (APE) is defined as the viewshed to and from the proposed site. The auditory APE is defined as area where noise generated by the proposed action would be audible. The visual and auditory APE's extend ¼ mile from the limits of disturbance." The EA does not address visual or auditory impacts from the Army Museum's proposed site and building design on Mount Air. The following two items are specific concerns:
    - The entrance road to the Army Museum is proposed to be located along the western boundary adjacent to Mount Air. This raises concern of potential negative visual and audible impact on Mount Air.
    - The proposed museum design includes a tower 100 feet in height. It is not clear as to what impact this may have on Mount Air and raises concern of potential negative visual impact on the property.

- Given these concerns, the County strongly encourages the Army to evaluate the potential visual and auditory impacts on Mount Air. If this evaluation has been completed, findings from the analysis should be provided for comment and the EA impact summary should be revised if it is required.

<u>Access to the museum</u>

- The Army is proposing to provide access to the site through an at-grade intersection with the Fairfax County Parkway. The access road would cross an abandoned railroad alignment and follow an abandoned road alignment (Swank Road) that cuts through a steeply sloping area adjacent to Kernan Run, the perennial stream that flows along the western property boundary. The road would follow this alignment for several hundred feet and would then diverge away from the Swank Road alignment and climb a relatively steeply sloping area to the plateau area on which the museum and associated facilities would be located. As detailed below, there would be significant adverse environmental impacts associated with this alignment. There may be at least two alternative approaches to access to the site that could have lesser adverse impacts. While we do not feel that there is enough information about either of these alternatives to identify either as preferred, and while we therefore are not presenting these alternatives as preferred approaches, we do feel that there is a need for a rigorous evaluation of both alternatives as they relate to the impacts that would occur through the sole approach that is evaluated in the EA.

Alternatives

- One alternative access approach would be to provide access from Kingman Road. We recognize that there has been considerable discussion in the past regarding the idea of accessing the museum from Kingman Road and that Fort Belvoir has chosen not to pursue such a concept; however, we do not feel that the EA sufficiently justifies this decision. The FONSI and the EA both state that "Fort Belvoir determined that the impacts of this alternative on the Forest Wildlife (sic) Corridor and other resources would have been too great." However, neither the FONSI nor the EA provide any elaboration on how this conclusion was reached. We recognize that any access from Kingman Road would require a new crossing of the Forest and Wildlife Corridor, along with either a second EQC crossing or perhaps the loss of additional areas from the golf course, thereby necessitating additional redesign efforts. The Kingman Road access idea was recognized in the 2008 draft Environmental Assessment, where it was suggested that a study would need to be performed to evaluate the impacts of this access concept to the Forest and Wildlife Corridor. In light of the considerable concerns that would be generated by direct access from the Fairfax County Parkway, we feel that the Kingman Road access concept should not be eliminated from consideration and that it should be evaluated as an alternative within the NEPA documentation. Has the study suggested in the 2008 Environmental Assessment been performed? If not, what is the basis for the conclusion that the Kingman Road access is not feasible when such an access was presented for consideration two years ago? It is our view that, if this study has not been performed, it should be, and the results should be incorporated within the NEPA analysis in order to allow for a comparison of the environmental impacts between the proposed access concept and a Kingman Road access. It should be noted that a portion of the corridor has already been cleared in the area where a Kingman Road access would probably originate (across from the Defense Logistics Agency entrance at Kingman Road), and the topography in the area is such that a bridge crossing of the stream in this area could be designed such that it would create only a narrow disturbance footprint with a wide, tall opening that would readily accommodate faunal movement, hydrologic functions and genetic exchange. While the impacts associated with a Kingman Road access may ultimately be determined to eliminate this option from consideration, we feel that this conclusion cannot be reached from the documentation that has been provided. Either better documentation should be provided or the Kingman Road option should, at this point, be retained for analysis as a possible alternative.

- A second access alternative would be the approach that was identified in the 2008 EA—a more direct access to the museum/parking area from the Fairfax County Parkway. While this approach would still impact the Kernan Run EQC, it would reduce much of the EQC impacts compared with the proposed access approach. A more direct access road would also reduce the fragmentation of the EQC that would result from the use of the old road alignment. Two amphibian crossings are

proposed for the proposed road alignment; there would not be the fragmentation requiring these crossings if a more direct route to the plateau area was to be pursued. A more direct access road would also reduce potential concerns about conflicts between the access road and Mount Air, as the access road would be considerably farther away from the historic site. Previous documentation suggested that this alternative access concept may not be feasible due to steepness of slopes in the area. Is this the reason a more direct access is not being pursued? If so, why would a service drive in this area be feasible while an access road would not be? Either better documentation should be provided as to why this alternative is no longer feasible, or it should be retained for analysis as a possible alternative.

- Consideration could also be given to a third possible alternative: the provision of a grade-separated access. While such an approach would be considerably more expensive than an at-grade Parkway intersection, it would be beneficial from both an environmental perspective and a Parkway operations perspective, and it could avoid an at-grade crossing of the abandoned rail alignment.

- If an alternative access strategy is pursued, the old Swank Road alignment could be restored, through planting of native species and/or natural succession, based on the recommendation of a professional arborist. Another option would be to retain the use of this alignment as a pedestrian and bicycling route.

<u>Environmental impacts of the proposed access approach</u>

- The proposed access road would have significant adverse impacts to an Environmental Quality Corridor (boundaries defined by the extent of 15% + slopes) and would also encroach into a Resource Protection Area. The impacts would not be confined to a small portion of this EQC; rather, the road would be oriented near and parallel to the stream for a distance of several hundred feet. The old road bed along which this access road would be constructed is narrow and has closed forest canopy over it. Redeveloping this road for an entrance road would have direct impacts on the stream and adjacent wetlands, would cause significant deforestation on steep slopes and in the RPA over a considerable length, would significantly compromise the ecological functions of this EQC, and would place significant impervious surfaces adjacent to Kernan Branch with little or no opportunity of capturing, treating and detaining that run-off before it would enter the stream. Such runoff would likely also cause significant impacts to the wetlands adjacent to the old road bed.

- While it is recognized that the area in question has already been disturbed by the abandoned road alignment, the use of this alignment for the entrance road would perpetuate and exacerbate the conflict with the EQC policy and add impervious cover within the RPA. Further, it is not clear the extent to which additional clearing and grading would be needed for construction of this road—we would anticipate

that the limits of clearing and grading would need to extent well beyond the areas that have already been cleared.

- In March 2010, the Virginia Department of Historic Resources (VDHR) determined that Mount Air is eligible for listing on the National Register of Historic Places. The entrance road to the Army Museum is proposed to be located along the western property boundary adjacent to Mount Air. This raises a concern about potential negative visual and audible impacts to Mount Air.

Fairfax County Comprehensive Plan

- As noted in the County's comments for the draft EA, Fairfax County conducted a special Area Plans Review (APR) process in 2008-2009 to consider proposals to amend the Comprehensive Plan to address BRAC movements in the National Capital Region. BRAC APR proposal 08-IV-9S was cited as possibly increasing traffic impacts to the Gunston site should the proposal be adopted. Refer to the Attachment I for a map that shows the location of 08-IV-9S and the NMUSA site. Since the time of review of the draft EA, proposal 08-IV-9S was adopted by the Fairfax County Board of Supervisors. This amended the Comprehensive Plan to add an option that recommends office and/or industrial use at an intensity up to .20 FAR on 56 acres, or a development potential of approximately 480,000 square feet (sf). An approximately 165,000 sf Fed-Ex facility has been built. A rezoning application was approved to allow for the development of 300,000 sf of office or industrial/flex use, and it is anticipated that 3 to 5 buildings will be constructed. The Army should consider this development potential in its analysis, particularly the traffic impacts to the Fairfax County Parkway and Telegraph Road.

Real Property Master Plan

- Section 3.1, Land Use, Plans, and Coastal Zone Management page 34: "The Army, through the master planning process (AR-120), continues to revise the RPMP to address future land uses at the garrison, beyond those immediate changes needed to accommodate the BRAC 2005 actions." This same statement was in the draft EA, and as noted by staff at that time, it would seem appropriate for the RPMP to be finalized with proper review and adoption before decisions are based on its contents.

Transportation

- A draft Memorandum of Agreement regarding the proposed access from the Museum onto the Fairfax County Parkway and the preservation of the Army owned land to build a grade separated interchange at the Parkway and John J. Kingman Road is still under review. The County strongly supports preservation of the land

for the future interchange as a condition to change the Parkway's limited access at the Museum entrance.

- Page 120 references conformance to I&IM 241.2 for MOT plans. The latest I&IM 241.4 for Traffic Management Plan (TMP) should be used instead.

- The EA states that there are no safety concerns (p. 115). A crash analysis needs to be supplemented to support this claim.

- A TMP should be drafted for the NMUSA site.

- Access from public roadways for bicycles and pedestrians is mentioned, but not in much detail. On-site bicycle/pedestrian facility concepts, connecting to existing and planned facilities off-site should be provided. Also, existing and planned bicycle/pedestrian connections and facilities should be illustrated graphically.

- It is stated that most museum trips will be made in the off-peak. What is this statement based upon?

- It is stated that transportation impacts are minor enough to warrant a FONSI. However, significant deficiencies at the following intersections are also indicated:
    - Route 1 @ Fairfax County Parkway
    - Fairfax County Parkway @ Kingman Road
    - Fairfax County Parkway SB Ramps @ Telegraph Road

- Grade separation at Kingman Road is not funded, with the cost anticipated to be high. Interim mitigation is needed at the above intersections.

- It was difficult to review comprehensively, as Appendix E was really just a summary. Many elements were omitted. A more traditionally formatted report should be provided, including all elements of the analysis in full detail.

- Page 3 of Appendix E – is it reasonable to state that the I-95/395 HOT Lanes will be built by 2013?

- Page 5 of Appendix E – it is hard to believe that the traffic LOS could deteriorate so badly from 2008 to 2013, and that it is all due to "background traffic" not additional traffic due to BRAC actions. If the deterioration of the network is due to cumulative effects of BRAC and other development on Fort Belvoir, Fort Belvoir should mitigate the traffic impacts.

- The traffic impact analysis, based on May 2008 data and a 2013 buildout, should be revised based on 2010 data and a 2015/17 phased opening.

- The basis for the 1.5% annual growth rate should be provided.

- Bullet #3 at the bottom of page 1 ("No roadway improvements…were included in the 2013 No Action Alternative") contradicts the information provided at the bottom of page 4 ("No Action Network Improvements").

- The trip generation approach seems simplistic. Additional detail is needed (tables, calculations, trip rates, trip generation studies, etc.).

- Information is needed on the other museums in the region that were examined to develop traffic projections at the NMUSA.

- Trip generation numbers provided in text on page 1 don't match fully with those provided graphically on page 11.

- The trip distribution/assignment provided on page 11 is not fully consistent with the % distributions and trips generated (page 1).

- A traffic signal warrant analysis is required at the NMUSA site access before signalization should be assumed.

- 1,000 feet NW of signalized Kingman Road, neither a signalized (2,640') nor unsignalized (1,320') access meets VDOT access management standards for principal arterials.

- While a longer term concept is provided for grade separation at Kingman Road, there would be spacing issues in the interim that needs to be investigated.

- Detailed traffic count data sheets should be provided in addition to the graphic on page 9.

- Traffic volumes figures at the end of Appendix E should be identified by number or letter.

- Traffic volumes on page 12 should equal the sum of those on pages 10 and 11, but do not in all cases.

- An additional figure should be provided showing BRAC action volumes assumed.

- Operational analyses (i.e., Synchro files and reports) should be provided for review.

- Intersection deficiencies are identified, but no interim improvements proposed. The Kingman grade separation is not funded.

- Parking reduction should be considered, as mentioned above.

- With 575-625 parking spaces, with 40 more for buses, a TMP should be drafted for the NMUSA site.

- Parking reduction, with TDM strategies, should be implemented.

- The County favors structured parking in order to reduce environmental impacts and the amount of impervious surface, and to allow better flexibility for site design and layout.

- The structured parking alternative should be depicted in a separate figure, in the same manner as Figure 2-1 on Page 19. While the EA asserts there will be less of an impact with structured parking, there will be impacts that should be addressed. The lack of analysis for the structured parking alternative leads one to believe that surface parking is what will ultimately be constructed.

- Fairfax County staff supports NCPC's suggestion for the Army to consider relocating parking so it is behind the museum and parade grounds or on either side of the museum. As stated by NCPC, visitors to the museum should have the opportunity to experience the building and entrance before experiencing the parking lot.

- In the review of the draft EA, NCPC encouraged the Army to reevaluate the need for approximately 550 parking spaces since this number is based on accommodating visitors for higher attendance events rather than average daily visitors. The final EA still notes 500-550 spaces in phase I, and 800-850 spaces total. Did the Army consider reducing the number of parking spaces per NCPC's suggestion?

Transit

- The Fairfax County 2020 TDP and the newly planned transit routes in the area should to be mentioned in the EA.

- The potential for high quality transit use on the rail spur from the CSX line (p. 116) needs to be explained.

- There are planned shuttle routes coming to Fort Belvoir that should serve the NMUSA site and needs to be mentioned.

- An effort should be made to connect the newly proposed shuttle services (Lorton VRE and Franconia-Springfield Metro) with the NMUSA site.

- The newly completed Fairfax County TDP should be referenced as planned transit routes service this portion of the Fairfax County Parkway.

- The rail spur that connects to the CSX tracks at Newington runs along the frontage of this site and should be mentioned for potential transit connectivity.

Additional comments

- Page 37 notes an intent for the NMUSA and associated facilities to quality for a LEED silver designation. We encourage Fort Belvoir to seek this certification through the U.S. Green Building Council. Page 37 also notes an intent to design building systems to achieve a 30 percent energy use reduction in comparison to a baseline building. A number of specific technologies would be evaluated in furtherance of these goals. We commend Fort Belvoir for its commitment to green building design and construction.

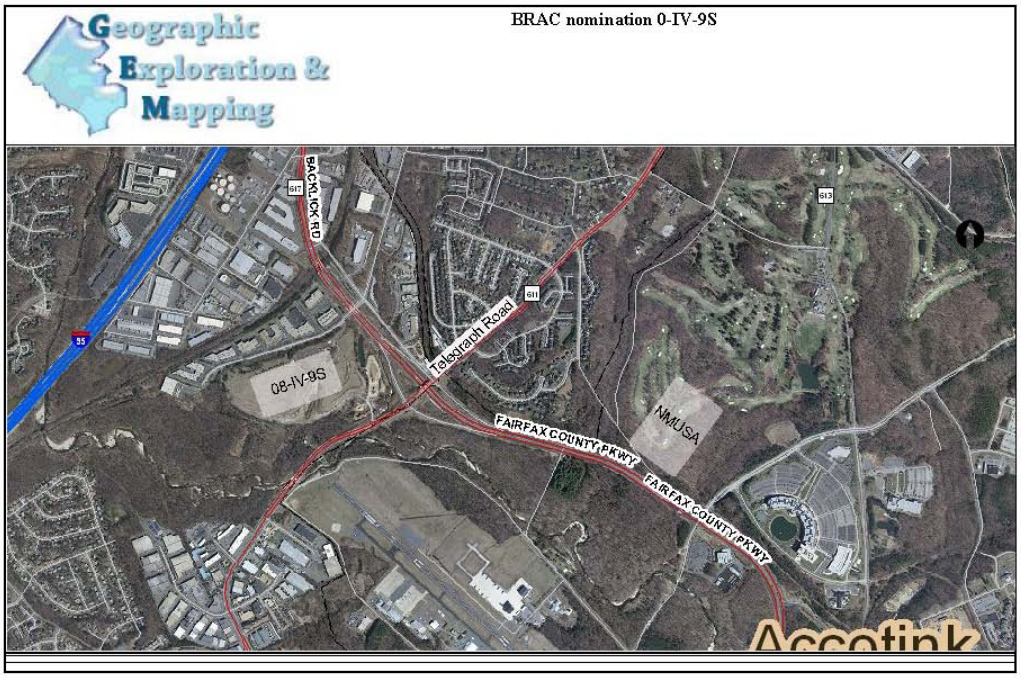
- Page 66 states that Fairfax County's Resource Protection Area designation includes 100-year floodplains. Only major floodplains (floodplains associated with streams with drainage areas equal to or exceeding 360 acres) are included. In addition, per the state's regulations, tidal wetlands, tidal shores and associated 100-foot buffer areas are included in the RPA designation, although it is recognized that tidal features are not on or near the site. In the description of activities allowed in RPAs, "very low-density" development is identified as being compatible. This is not accurate, as nothing in the Chesapeake Bay Preservation Ordinance speaks to density of development in an RPA—redevelopment and water-dependent development are allowed, as are other uses through exemptions or exception procedures.

- Subchapter 3.7 of the EA states that the Environmental and Natural Resources Division of Fort Belvoir would be notified in the event of any fuel spills. Any releases of petroleum products or hazardous materials should be reported to the Fairfax County Fire and Rescue Department.

- Page 11, Section 2.1 states the Army is still in the process of planning the NMUSA, and it is likely that the impacts of the final design would be less than the projected impacts of the conceptual layout. In the review of the draft EA approximately two years ago, Fairfax County noted it is not possible to conclude that the impacts of the final design would be less than the impacts of the conceptual layout. We have the same concern to date, as the final design is still unknown.

Attachment I

ATTACHMENT I



Attachment II

Heritage Resources comment - May 14, 2010

Consideration of potential impacts to Mount Air. Mount Air abuts the site proposed for the Army Museum at the west.

Background: In March 2010, the Virginia Department of Historic Resources (VDHR) determined Mount Air eligible for listing on the National Register of Historic Places. This determination was based on the National Register (NR) nomination completed by Fort Belvoir in January 2010.

The NR completed nomination was cited in a January 21, 2010 letter from Colonel Blixt to VDHR which was included in the review materials for the US Army Museum project plans. The letter states that "Based on its evaluation, Fort Belvoir has determined that the historic viewshed of Mount Air has been significantly compromised to the north and west by a recent housing development and to the south and east by the encroachment of wooded areas. As such, Fort Belvoir has determined that historic views do not contribute to the significance of Mount Air."

Mount Air was established as a local historic overlay district by the Board of Supervisors in 1984. Design standards and guidelines for the district include the following:

> Standard 5--Retain and enhance landscape screening around Mount Air to preserve its rural character.
> Guidelines:
> 5.1 Little, if any, new development or roads should be visible from the grounds of Mount Air.
> 5.2 Maintain a "green ring" around the Mount Air site.

The housing development cited above was reviewed and approved by the county's Architectural Review Board (ARB) to ensure protection of the character of Mount Air.

Comment: In its January 21, 2010 letter cited above, the Army states it has determined that historic views do not contribute to the significance of Mount Air. No information was located in the project review materials regarding the VDHR concurrence with the Army's finding. The determination is not final without concurrence from the VDHR.

Because the housing development cited above received approval by the county's ARB, it can be argued that the historic viewshed has been protected and contributes to the character of Mount Air. The visual impact of the proposed site and building design on Mount Air should be taken into consideration so as to protect the viewshed.

The entrance road to the Army Museum is proposed to be located along the western boundary property boundary adjacent to Mount Air. This raises concern of potential

negative visual and audible impact on Mount Air and locating the road to a more central location is recommended.

The proposed museum design includes a 100’ high tower. It is not clear as to what impact this may have on Mount Air and raises concern of potential negative visual impact on the property.