FINDING OF NO SIGNIFICANT IMPACTS (FONSI)
MD 4 at Suitland Parkway Interchange Construction
on Joint Base Andrews-Naval Air Facility Washington, MD

Prince George's County, Maryland

Pursuant to provisions of the National Environmental Policy Act (NEPA), Title 42 United States Code (USC) Sections 4321 to 4347, implemented by Council on Environmental Quality (CEQ) Regulations, Title 40, Code of Federal Regulations (CFR) §1500-1508, and 32 CFR §989, Environmental Impact Analysis Process, and on behalf of the U.S. Air Force (Air Force), the Maryland State Highway Administration (SHA) assessed the potential environmental consequences associated with the MD 4 and Suitland Parkway Interchange Construction on Joint Base Andrews-Naval Air Facility Washington, MD in Prince George's County.

The purpose of the proposed action is to facilitate transportation improvements at the intersection of MD 4 with Suitland Parkway and Presidential Parkway. This action is needed to improve traffic operations and provide sufficient capacity to address existing and projected travel demands along the MD 4 corridor. The proposed improvements address safety and capacity requirements in order to alleviate existing deficiencies while accommodating projected traffic increases resulting from existing and planned growth in this area.

The Environmental Assessment (EA), incorporated by reference into this finding, analyzes the potential environmental consequences of activities associated with the MD 4 and Suitland Parkway Interchange Construction, and provides environmental protection measures to avoid or reduce adverse environmental impacts.

The EA considers all potential impacts of the Proposed Action and the No Action Alternative. The EA also considers cumulative environmental impacts with other projects at Joint Base Andrews-Naval Air Facility Washington, MD (JBA).

PROPOSED ACTION

The Maryland State Highway Administration (SHA) has proposed improvements that would construct a grade-separated, signalized diamond interchange with a directional ramp at the intersection of MD 4 and Suitland Parkway/Presidential Parkway. The profile of Suitland Parkway and existing Presidential Parkway would be raised, while the profile of MD 4 would be lowered, allowing Suitland Parkway and existing Presidential Parkway to travel over MD 4. Elements of the current design that would occur within the boundary of JBA include the relocation of an existing high pressure fuel line, and relocation of the JBA perimeter fence and security path.

The MD 4/Suitland Parkway/Presidential Parkway interchange construction would maintain access between westbound Suitland Parkway and JBA North Gate. In addition, the existing ramp from eastbound Suitland Parkway to JBA North Gate would be maintained. The access from JBA North Gate to eastbound Suitland Parkway and Old Marlboro Pike would be provided via a newly constructed spur diverging from the outbound ramp (from JBA North Gate to westbound Suitland Parkway). This spur would connect (in a T-intersection) to a newly constructed two-lane road between Old Marlboro Pike and the ramp from southbound MD 4 to Suitland Parkway. This two-lane road would terminate at the ramp from southbound MD 4 to

Suitland Parkway as a right-in and right-out connection. This will allow travel to eastbound Suitland Parkway and further to southbound MD 4.

NuStar Energy, L.P. owns and operates an eight-inch high pressure petroleum products fuel line that services JBA. The existing fuel line runs parallel to and across Suitland Parkway and MD 4. Construction of the MD 4/Suitland Parkway/Presidential Parkway interchange would require several sections of the existing fuel line to be removed and relocated. A 355 linear foot segment of fuel line will be abandoned in place as it travels along the rock walls paralleling the westbound lanes of Suitland Parkway and under the existing Suitland Parkway Bridge over the entrance ramp to the JBA North Gate. New fuel line (2,100 linear feet) will be laid between the tie-in location and a new crossing under the JBA perimeter fence.

Additionally, widening along the southbound MD 4 mainline would require the relocation of approximately 720 linear feet of the JBA perimeter fence and security path up to 25 feet west of their existing location and the extension of an existing culvert by approximately 15 feet. The proposed action would include a temporary construction easement for approximately 7.7 acres (334,824 square feet), a perpetual easement for less than 0.1 acre, and a revertible easement for approximately 0.6 acre to SHA via revertible easement.

NO ACTION ALTERNATIVE

The No Action Alternative describes the action of continuing the present transportation conditions. Under the No Action Alternative the existing at-grade intersection would remain and there would be no need to relocate the fuel line, perimeter fence, or security path. The intersection of MD 4/Suitland Parkway/Presidential Parkway would continue to experience a breakdown of traffic flow with frequent delays at high traffic volumes and congestion would remain an issue at the intersection. This condition would be exacerbated by projected traffic volume increases as a result of area and regional increases in development.

ALTERNATIVES TO THE PROPOSED ACTION

FHWA and SHA completed multiple studies documenting alternatives to the signalized diamond interchange with directional ramp design, the current design. These studies included: a May 19, 2000 FHWA approved FONSI; a June 2014 National Park Service EA; a Final Section 4(f) Evaluation, approved by FHWA November 10, 2014; and an Environmental Reevaluation, approved by FHWA November 12, 2014. These studies concluded that the current design best met the project purpose and need. Additionally, each of the alternatives evaluated would require the relocation of the fuel line, perimeter fence, and security path similar to the current design to accommodate grading and elevation changes associated with the interchange construction. Therefore, the alternatives evaluated in this EA are limited to the No Action Alternative and the proposed action.

SUMMARY OF FINDINGS

The analyses of the affected environment and environmental consequences of implementing the proposed action presented in the EA concludes that by implementing environmental protection measures as well as the avoidance and minimization, JBA would be in compliance with all terms and conditions and reporting requirements for implementation of the reasonable and prudent measures.

The Air Force has concluded that no significant adverse effects would result to the following resources as a result of the proposed action: air installation compatibility use zone/land use, stream, wetlands, occupational safety and health, human and environmental health due to hazardous materials, biological and natural resources, or cultural resources. No significant adverse cumulative impacts would result from activities associated with the Proposed Action when considered with past, present, or reasonably foreseeable future projects at JBA. In addition, the EA concluded that the action alternative would not affect the following resources: 100-Year Floodplain; Groundwater, Geology and Topography, Airspace and Airfield Operation, Environmental Justice, Socioeconomics, Visual Resources, Bird-Aircraft Strike Hazards, Air Quality, Climate or Clear Zones.

Maryland Coastal Zone Management: In accordance with the Federal Coastal Zone Management Act (CZMA) and the Maryland Coastal Zone Management Program, this federal action must be consistent "to the maximum extent practicable" with the Maryland Coastal Zone Management Program. In accordance with Maryland's Federal Consistency Process, SHA submitted a Federal/State Joint Permit Application under U.S. Army Corps of Engineers Section 404, certifying that the proposed action is consistent with Maryland's Coastal Zone Management Process. The Maryland Department of the Environment will provide a consistency determination when it issues the permit.

FINDING OF NO SIGNIFICANT IMPACT

Based on my review of the facts and analyses contained in the attached EA, conducted under the provisions of NEPA, CEQ Regulations, and 32 CFR §989, I find that the Preferred Alternative, the MD 4 and Suitland Parkway Interchange Construction, cumulatively with other projects at JBA will not result in a significant impact. Accordingly, an Environmental Impact Statement is not required. The signing of this Finding of No Significant Impact completes the environmental impact analysis process.

The signing of the FONSI for the proposed MD 4 and Suitland Parkway interchange construction at JBA will complete the Environmental Impact Analysis Process under Air Force regulations.

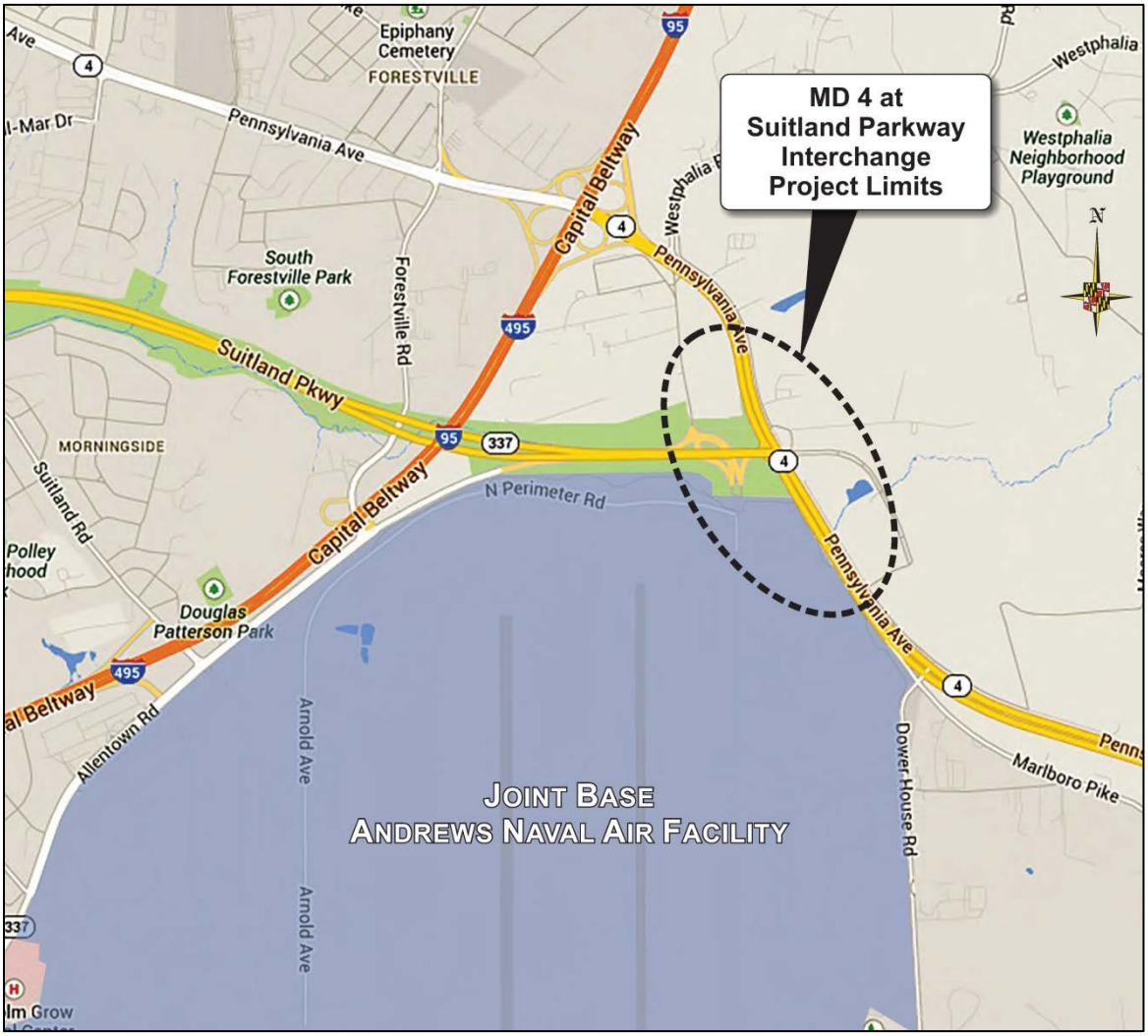
31 MAR 2015

DANIEL L. WATERS, Colonel, USAF
Vice Commander

Date

ENVIRONMENTAL ASSESSMENT (EA)

FOR MD 4 AT SUITLAND PARKWAY INTERCHANGE CONSTRUCTION ON JOINT BASE ANDREWS-NAVAL AIR FACILITY WASHINGTON, MD



PREPARED FOR:

Department of the Air Force

March 2015

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GLOSSARY OF ABBREVIATIONS AND ACRONYMS

ADT	Average Daily Traffic Volume
AEF	Air and Space Expeditionary Forces
BMPs	Best Management Practices
AICUZ	Air Installation Compatible Use Zone
CEQ	Council on Environmental Quality
CES/CEIE	Civil Engineer Squadron, Environmental Element
CFR	Code of Federal Regulations
DNR	Maryland Department of Natural Resources
EA	Environmental Assessment
EIAP	Environmental Impact Analysis Process
EPA	Environmental Protection Agency
EO	Executive Order
FEMA	Federal Emergency Management Agency
FONPA	Finding of No Practicable Alternative
FONSI	Finding of No Significant Impact
FHWA	Federal Highway Administration
JBA	Joint Base Andrews-Naval Air Facility Washington, MD
JPA	Joint Permit Application
LOS	Level-of-Service
MAJCOM	Major Command
MDE	Maryland Department of the Environment
MOA	Memorandum of Agreement
NEPA	National Environmental Policy Act
NPS	National Park Service
NRHP	National Register of Historic Places
ROW	Right-of-way
SE/SC	Sediment erosion and sediment control
SHA	Maryland State Highway Administration
SHPO	State Historic Preservation Officer
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service

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Cover Sheet

ENVIRONMENTAL ASSESSMENT
MD 4 at Suitland Parkway Interchange Construction
on Joint Base Andrews-Naval Air Facility Washington, MD

Responsible Agencies: U.S. Air Force, Maryland State Highway Administration (SHA), and Federal Highway Administration (FHWA)

Affected Location: Intersection of MD 4 and Suitland Parkway, located approximately one mile southeast of the MD 4/Capital Beltway (I-95/I-495) interchange in Prince George's County, Maryland. Elements of the proposed action would include minor modifications to access at Joint Base Andrews-Naval Air Facility Washington, MD (JBA) North Gate, as well as the relocation of an existing high pressure fuel line and the relocation of the JBA perimeter fence and security path in the north east portion of JBA.

Proposed Action: The MD 4/Suitland Parkway Interchange project would upgrade the existing MD 4 and Suitland Parkway/Presidential Parkway intersection to a grade-separated, signalized diamond interchange with a directional ramp. The proposed action includes requisite roadway improvements and utility/service modifications within the boundary of JBA to accommodate the interchange construction.

Report Designation: Environmental Assessment

Written comments and inquiries regarding this document should be directed to: Mr. Bruce Grey, Deputy Director for Office of Planning and Preliminary Engineering, Maryland State Highway Administration, 707 North Calvert Street, Baltimore, MD 21202 or via email to bgrey@sha.state.md.us. Your assistance in providing information is greatly appreciated.

Abstract: SHA and FHWA are proposing roadway improvements at the intersection of MD 4 and Suitland Parkway, located approximately one mile southeast of the MD 4/Capital Beltway (I-95/I-495) interchange in Prince George's County (Figure 1). The MD 4/Suitland Parkway Interchange project would upgrade the existing MD 4 and Suitland Parkway/Presidential Parkway intersection to a grade-separated, signalized diamond interchange with a directional ramp.

The scope of this EA includes an evaluation of alternatives for the proposed activities, where applicable, and analysis of the cumulative impacts on the natural and manmade environments within the boundary of JBA. This EA has been prepared to report the evaluation conducted of the proposed action and alternatives, including the No Action Alternative. Resource areas addressed in the EA include: air installation compatibility use zone/land use, stream, wetlands, occupational safety and health, human and environmental health due to hazardous materials, biological and natural resources, or cultural resources.

The Draft EA was made available to agencies and the public for a 15-day comment period from February 13, 2015 to February 28, 2015.

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1.0 PURPOSE AND NEED FOR ACTION

1.1 INTRODUCTION

The Maryland State Highway Administration (SHA) and Federal Highway Administration (FHWA) are proposing roadway improvements at the intersection of MD 4 and Suitland Parkway, located approximately one mile southeast of the MD 4/Capital Beltway (I-95/I-495) interchange in Prince George's County, Maryland (Figure 1). The project area abuts the northeastern portion of Joint Base Andrews-Naval Air Facility Washington, MD (JBA) and would require construction within the boundary of JBA (Figure 2). The construction activities within the boundary of JBA would include grading necessary to facilitate the construction of a proposed grade-separated interchange at MD 4 and Suitland Parkway, the relocation of the existing high pressure fuel line, and perimeter fence and security path occupying the northeast perimeter of JBA (Figure 3). The proposed interchange construction would require right-of-way (ROW) acquisition within the existing northeast perimeter of JBA. Additionally, construction within the northeast boundary of JBA would require modifications to the vehicle access at the JBA North Gate; however, this work would be completed outside of the boundary of JBA. The proposed work within the boundary of JBA would require authorization from the U.S. Air Force (Air Force). Per the requirements of 32 Code of Federal Regulations (CFR) 989, the Air Force Environmental Impact Analysis Process (EIAP) §14(j)(1), "All [environmental assessments] on non-Air Force proposals that require an Air Force decision, such as use of Air Force property for highways, space ports, and joint-use proposals," require Major Command (MAJCOM) approval. Therefore, this Environmental Assessment (EA) identifies and evaluates potential environmental impacts within the boundary of JBA associated with the proposed MD 4 at Suitland Parkway Interchange Construction to facilitate the requisite Air Force authorization. It has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969 and the President's Council on Environmental Quality (CEQ) regulations to implement NEPA (40 CFR Parts 1500-1508).

Environmental impacts of the MD 4 at Suitland Parkway interchange construction project are fully evaluated in the May 19, 2000, FHWA approved the Finding of No Significant Impact (FONSI) and the November 12, 2014 FHWA approved Environmental Reevaluation for the same project. Additionally, the National Park Service (NPS) evaluated the proposed action and alternatives in an EA published June 20, 2014. The NPS NEPA decision document is anticipated February 2015.

The JBA encompasses 4,346 acres located approximately five miles southeast of Washington, D.C., in southern Prince George's County, Maryland. Suburban, residential, commercial, and industrial development generally surrounds the base, reflecting JBA's proximity to Washington, D.C. and its location in what has been a continually growing metropolitan area since the base was established in the 1940s. With regard to infrastructure, the base is divided into western and eastern sections containing missions and administrative facilities; the two sections are separated by an airfield, with two active runways that are oriented north-south. The western portion of the base is the larger land area, with community facilities (including commercial services), a medical center, a large outdoor recreation/golf course facility, residential housing, and various administrative uses. The majority of the industrial uses are located in the eastern portion of the base. The proposed improvements would be constructed along the northeastern perimeter of the base.

Figure 1: Project Location Map

Figure 2: MD 4 at Suitland Parkway Interchange Construction Project - Overview

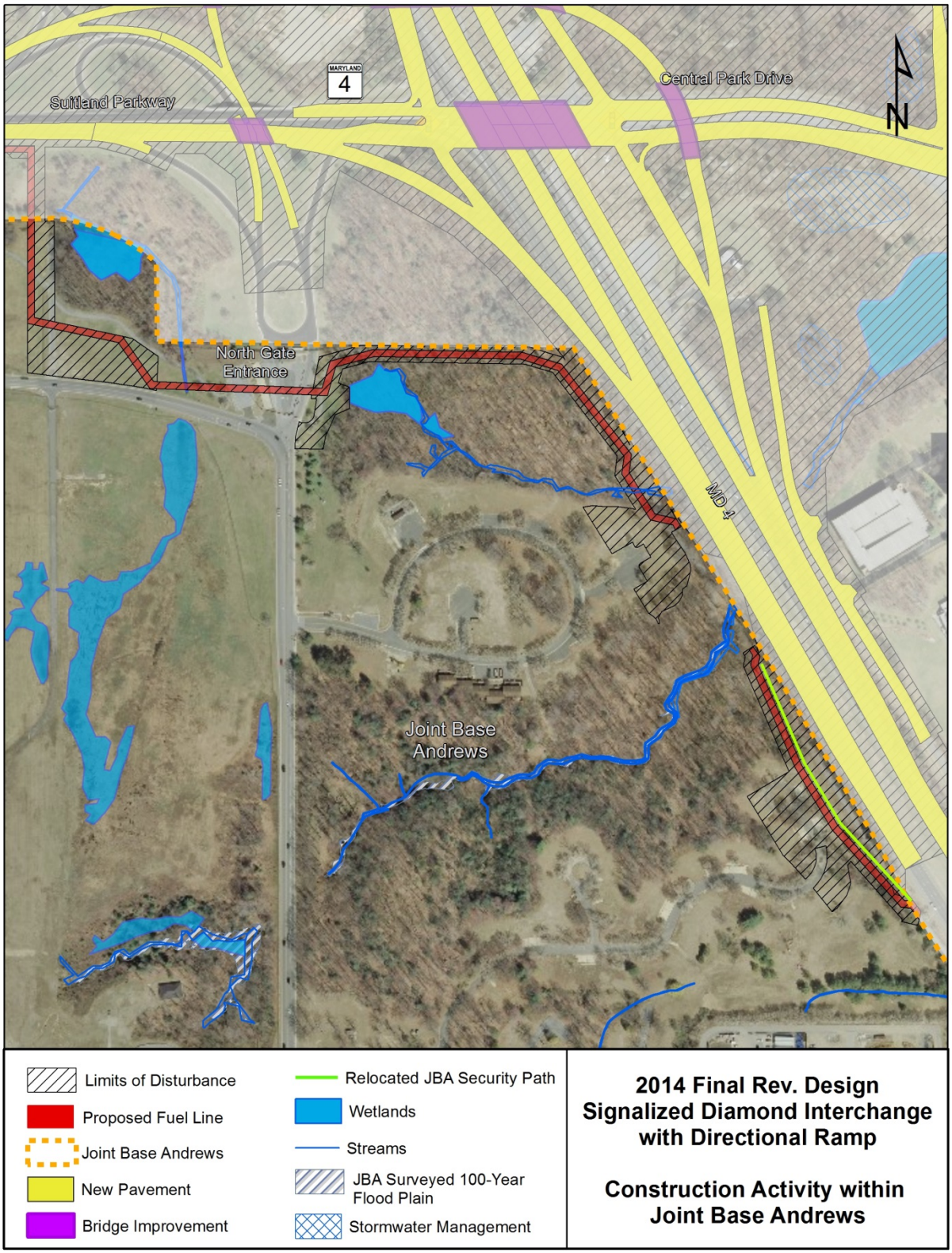

Figure 3: MD 4 at Suitland Interchange Construction Project - Within JBA

In January 2010, a General Plan Update was published for JBA. As identified in the 2010 General Plan Update, the Air Force has developed a comprehensive planning process for actions related to land use, infrastructure development, and project sitings. The proposed action, while not identified within the General Plan Update, would not preclude the implementation of projects identified within the General Plan Update.

The mission of JBA is to provide contingency response capability critical to national security. This includes a secure installation with robust infrastructure that supports organizations on base. The vision of JBA is to provide a secure aerial gateway to the Nation's Capital for the President of the United States, Vice President, Executive Cabinet members, members of Congress, military leaders, foreign heads of state, and other dignitaries (JBA 2010).

The existing fuel line provides jet fuel to JBA necessary to support activities including maintenance of the emergency reaction rotary-wing airlift and other National Capital Region contingency response capabilities critical to national security, and for organizing, training, equipping and deploying combat-ready forces for Air and Space Expeditionary Forces (AEFs). The existing perimeter fence and security path support the security mission of JBA. The proposed relocation of these facilities is necessary to accommodate the MD 4/Suitland Parkway interchange construction project; however, the mission of these facilities and JBA would remain unchanged upon completion of construction.

1.2 PURPOSE OF THE PROPOSED ACTION

The purpose of the proposed action is to improve traffic operations and provide sufficient capacity to address existing and projected travel demands along the MD 4 corridor. Planned residential, mixed-use, and military development along the MD 4 corridor will cause the already congested MD 4 transportation system to further deteriorate, thereby increasing travel time, accident potential, and roadway congestion. The proposed improvements address safety and capacity requirements at the intersection of MD 4 and Suitland Parkway in order to alleviate existing deficiencies while accommodating projected traffic increases resulting from existing and planned growth in this area.

1.3 NEED FOR THE ACTION

This action is needed because the corridor currently experiences excessive traffic congestion, which is projected to increase as future development will bring more traffic to the area. Traffic congestion occurs along the MD 4 corridor as a result of ongoing development and growth in commuter traffic volumes from Anne Arundel County, Calvert County, and Southern Prince George's County to Washington, D.C. Level-of-Service (LOS) on expressways and freeways with uninterrupted flow conditions are ranked from Level A (free traffic flows at high speeds with low volume) to Level F (total breakdown of traffic flow with frequent delays at high traffic volumes). A 2011 traffic analysis indicated that MD 4 at Suitland Parkway had an Annual Average Daily Traffic (ADT) of 60,500 vehicles and operated at (LOS F during the AM and PM peak hours; eight percent of the existing and future volumes are comprised of truck traffic. Based on the 2011 traffic analysis for the MD 4/Suitland Parkway intersection, by 2030 ADT at the MD 4/Suitland Parkway intersection is projected to reach 84,450 vehicles.

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2.0 PROPOSED ACTION AND ALTERNATIVES

2.1 SELECTION STANDARDS

NEPA and CEQ regulations mandate the consideration of reasonable alternatives to the proposed action. "Reasonable alternatives" are those that also could be utilized to meet the purpose of and need for the proposed action. Per the requirements of 32 CFR §989, the Air Force EIAP regulations, selection standards are used to identify alternatives for meeting the purpose and need for the action. During the process of proposal development, a variety of factors and alternatives were considered.

The Air Force EIAP does not outline specific selection standards, but states "The Air Force may expressly eliminate alternatives from detailed analysis, based on reasonable selection standards. In consultation with the EPF, the appropriate Air Force organization may develop written selection standards to firmly establish what is a "reasonable" alternative for a particular project, but they must not so narrowly define these standards that they unnecessarily limit consideration to the proposal initially favored by proponents" (32 CFR §989). Based on consultation with JBA, criteria for the selection of action alternatives were identified. Criteria included the following considerations:

- To the extent practicable, action alternatives must address traffic operations and capacity needs as sited in the project purpose and need statement.
- To the extent practicable, the action alternatives must avoid or minimize impacts to resources, including: wetlands or floodplains, per Executive Order (EO) 11990 (Protection of Wetlands) and 11988 (Floodplain Management); Suitland Parkway, a National Register of Historic Places (NRHP) listed historic district; and JBA.
- Action alternatives must be sited to minimize operational constraints and safety concerns over the long term.
- In addition to the federal, state, and local regulations; any work proposed within the boundary of JBA must be compliant with JBA environmental programs plans and protocols.

On May 19, 2000, the FHWA approved a FONSI/Section 4(f) Evaluation for the MD 4 Project Planning Study. This study evaluated corridor improvements, including three alternatives for improvements at the MD 4 and Suitland Parkway intersection. The FONSI/4(f) documented that SHA's Selected Alternative, a diamond roundabout interchange design, would have no significant impacts on the environment. Following FONSI approval, the project was divided into phases for design and construction. To date, only the MD 4/Suitland Parkway interchange phase of the project has been funded for design and construction. This phase is currently at the Final Review design stage (90% completion) and is listed in the current Transportation Improvement Plan (ID # 3547).

Upgrades to the MD 4/Suitland Parkway intersection would require a Special Use Permit from National Park Service (NPS) for temporary occupancy of NPS lands during construction. Additionally, construction of the proposed improvements, including the relocation of the fuel line, would require a permanent transfer of land from NPS to SHA via a land exchange. The transferred land would accommodate the expanded footprint of the proposed improvements including a portion of the relocated fuel line. Therefore, on behalf of NPS SHA prepared an EA (June 2014) that focused on the impacts on the proposed improvements on NPS lands. The

June 2014 EA evaluated the 2000 FONSI Selected Alternative as well as the signalized diamond interchange with directional ramp design (which is the current design). This document identified the current design as the SHA and NPS preferred alternative. The NPS NEPA decision document is anticipated February 2015.

Further alternatives to the proposed action were evaluated in a Final Section 4(f) Evaluation (FHWA, November 10, 2014) that considered nine alternatives to the current design that would avoid or minimize impacts to Suitland Parkway. These alternatives as well as the 2000 FONSI Selected Alternative are briefly described in Table 1. Each of the Avoidance Alternatives described in Table 1, would minimize impacts to the Suitland Parkway and JBA. These alternatives would not require the relocation of the fuel line or the perimeter fence. However, Avoidance Alternatives 2 and 4 would not provide adequate operational or capacity improvements to accommodate existing or projected traffic volumes. Avoidance Alternative 3 would provide capacity and operational improvements; however, the Final Section 4(f) Evaluation determined that this alternative would have severe social, economic, and environmental impacts. Each of the Minimization Alternatives evaluated would require changes within the JBA boundary similar to the current design. These changes include ROW acquisition and the relocation of the fuel line, perimeter fence and security path to accommodate grading and elevation changes associated with the construction of a grade-separated interchange. This document concluded that the current design, the signalized diamond interchange with directional ramp, includes all possible planning to minimize harm resulting from the use of the Suitland Parkway (FHWA 2014a).

Following completion of the Final Section 4(f) Evaluation, SHA completed an Environmental Reevaluation of the MD 4 at Suitland Parkway interchange construction project, which was approved by FHWA on November 12, 2014.

SHA and FHWA documented in the studies described above an evaluation of alternatives to the proposed action that would avoid or minimize impacts of the overall project. The studies concluded that the alternatives evaluated would either not provide adequate traffic operations and capacity improvements to meet the project purpose and need or have environmental impacts that greatly exceeded those of the proposed action; therefore, the alternatives evaluated in this EA are limited to the No Action Alternative and the proposed action.

Table 1: Alternatives Considered but Dismissed

ALTERNATIVE	DESCRIPTION	REASONS DISMISSED
2000 FONSI Selected Alternative: Diamond Roundabout Interchange (also referred to as Minimization Alternative 7 in the Final Section 4(f))	MD 4 would be lowered and Suitland Parkway would be raised to an overpass, providing a grade separated interchange design. The interchange would consist of two roundabouts constructed on either side of the MD 4 overpass of Suitland Parkway, at the terminus of the MD 4 on- off-ramps. All traffic traversing the intersection would circumnavigate the two roundabouts located at the ramp terminals of the interchange.	Based on an evaluation of updated traffic projections for the corridor, the two-lane roundabout interchange design would, upon opening, operate at a failing level of service during both the AM and PM peak hours.

ALTERNATIVE	DESCRIPTION	REASONS DISMISSED
Avoidance Alternative 2: Upgraded At-Grade MD 4 and Suitland Parkway Intersection East of Existing Intersection	The entire intersection would be expanded in order to accommodate existing and future traffic volumes as well as be realigned to the east. This would minimize impacts west of the existing intersection. The expansion of the intersection would be limited to adding a left-turn lane from MD 4 northbound to Suitland Parkway westbound resulting in three left-turn lanes. Additionally, two channelized right-turn lanes from eastbound Suitland Parkway to southbound MD 4 could be constructed without impacting Suitland Parkway property.	This alternative would provide some increase in capacity at the intersection; however, these minor improvements would not address the substantial increase in traffic volumes. The intersection would also maintain the same number of conflict points. The addition of turn lanes would exacerbate the existing difficulties for pedestrians and bicyclists navigating across MD 4.
Avoidance Alternative 3: Shift Signalized Diamond Interchange with Directional Ramp East	The alignment of MD 4 would be shifted east and an interchange would be constructed with the signalized diamond and directional ramp design. This alignment shift would minimize impacts west of the existing intersection. It would require the realignment of Presidential Parkway, which would intersect with Central Park Drive at an at-grade intersection east of the directional ramp.	This alternative would displace four office buildings and the Prince George's County storm water management pond would need to be reconstructed.
Avoidance Alternative 4: Extend Presidential Parkway to Connect to an Expanded Dower House Road Interchange	Suitland Parkway, after bridging over MD 4, would tie into Central Park Drive and Presidential Parkway. Presidential Parkway would be extended south to connect with MD 4 at a proposed interchange with Dower House Road. There would be no access provided between MD 4 and Suitland Parkway.	The projected increase in traffic from this alternative on Presidential Parkway would substantially exceed the functional classification of this roadway. Increased traffic volumes would increase conflict points and present a condition inconsistent with driver expectations coming off of Suitland Parkway. Traffic volume would result in operational failure at the intersections on either side of the interchange. Impacts to existing and planned developments east of MD 4 would result in severe economic impacts.
Minimization Alternative 1: Single-Point Urban Interchange	Retaining walls would be constructed to allow the placement of MD 4 on- and off- ramps closer to MD 4. Access at the north and southbound on- and off-ramps would be controlled through a single signalized intersection.	This alternative would not provide adequate capacity for the peak hour movement from northbound MD 4 to westbound Suitland Parkway. A large pavement area in the middle of the intersection would present challenges for bicyclists attempting to get through the entire intersection before the signal changes. This design would not be compatible with pedestrian or bike access
Minimization Alternative 2: Diverging Diamond Interchange	The MD 4 on-and off- ramps would converge with the Suitland Parkway/Central Park Drive main route at signalized intersections on either side of the MD 4 overpass. This interchange design would require traffic on the Suitland Parkway/Central Park Drive overpass to drive on the left side of the road. Signals on either side of the overpass would control this movement. This would allow vehicles from the MD 4 off-ramps continuous flow turn lanes in both directions onto Suitland Parkway.	This alternative would require extensive driver education to familiarize users with the operations of this interchange, which would present potential safety concerns. Additional signage, lighting, and pavement would be needed, beyond those typical of a standard diamond interchange. Safety concerns would arise from the complicated pedestrian route for crossing the bridge.

ALTERNATIVE	DESCRIPTION	REASONS DISMISSED
Minimization Alternative 3: Urban Diamond Interchange	Retaining walls would be used between each MD 4 on- and off-ramp and the MD 4 mainline in order to place the interchange ramps closer to MD 4. The ramps would meet at signalized intersections located above, and on either side of, MD 4.	The signals at the interchange ramps termini would not accommodate the existing and future traffic volumes for this movement, resulting in lengthy intersection queues along the ramp from northbound MD 4.
Minimization Alternative 4: Table Roundabout Interchange	The configuration of the intersection would include a large roundabout at the center of the MD 4 and Suitland Parkway interchange that would address all turning movements. A direct ramp from Suitland Parkway eastbound to MD 4 southbound would be provided. The roundabout would be constructed at an elevated grade over MD 4 requiring the construction of two bridges spanning MD 4.	This alternative would result in operational breakdown due to the high volume of traffic entering the roundabout. There would also be pedestrian and bike safety concerns through or around the roundabout from multiple conflict points.
Minimization Alternative 5: Partial Cloverleaf Interchange	Under this alternative, the MD 4 mainline would be shifted 75 feet east of its existing alignment. Loop ramps would be constructed in both the north and south quadrants on the west side of MD 4. It would also require three separate bridges in addition to numerous access ramps.	This alternative would not provide adequate capacity for the volume of traffic circumnavigating the interchange from northbound MD 4 to westbound Suitland Parkway. The weaving areas compromise the operations of this design.
Minimization Alternative 6: Folded Diamond Interchange	Double ramps in both the northeast and southwest quadrants of the interchange would be constructed. The approaches of Suitland Parkway and Presidential Parkway would each be widened to ten lanes in order to allow for adequate navigation of the ramps on either side of MD 4.	This alternative would allow adequate traffic capacity and improve safety for vehicles, bikes, and pedestrians; however the Suitland Parkway Bridge over the entrance ramp to JBA North Gate would undergo full reconstruction. The wide roadway, complex design, and numerous ramps would reduce the area of impact to Suitland Parkway, but would cause greater harm to the character of the Parkway.
Minimization Alternative 8: Eliminate Directional Ramp	A traditional diamond interchange would be constructed without the directional ramp to facilitate travel from northbound MD 4 to Suitland Parkway. This alternative would require all traffic from northbound MD 4 onto westbound Suitland Parkway make a left-turn at the signalized intersection located on the east side of the interchange.	This alternative would not accommodate existing and future traffic volumes, resulting in lengthy intersection queues along the ramp from MD 4.
Alternative 9: Eliminate Channelized Right-Turn Ramp	Under this alternative, the channelized right-turn ramp from Suitland Parkway to southbound MD 4 would be eliminated. All traffic traveling from eastbound Suitland Parkway to southbound MD 4 would need to turn right at the signalized intersection on the west side of MD 4.	This alternative would not accommodate existing and future traffic volumes, resulting in lengthy intersection queues along Suitland Parkway.

2.2 PROJECT AREA HISTORY

Construction of the airfield that was to become JBA began in 1942. The installation became operational in May 1943 as the Camp Springs Army Airfield, airfields were operational in 1943, with 5,500 feet of runways by 1944. The name was changed to Andrews Field in 1945. When the Air Force became a separate service in 1947, the installation was renamed Andrews Air

Force Base. The base serves as a travel and support center for the President of the United States and other distinguished federal and foreign civilian and military dignitaries. Airfields were operational in 1943, with 5,500 feet of runways by 1944. In 2009, Andrews Air Force Base merged with Naval Air Facility Washington to form JBA.

The project area is in the northeast quadrant of JBA. JBA has two complete runway systems located in a north/south orientation. The project is located at the north end of the eastern runway system, Runway 01R/19L, which is 9,755 feet long with 1,000-foot overruns on each end. In addition to the runway, the project area contains the JBA North Gate, which provides access for government employees and base residents during restricted hours, portions of Perimeter Road (the only primary roadway connecting the two sides of the base), a perimeter security path and fencing supports security monitoring throughout the base. The project area includes limited vegetation cover including maintained and forested areas. Based on a review of historical topographic maps and aerial imagery, changes within the immediate project area have been minimal since construction of the air force base in 1942. Residential housing occupied the area immediately east of the JBA North Gate; however, these facilities have been demolished. Roadways and utilities are all that remain of the former housing development.

2.3 PROPOSED ACTION

SHA proposes improvements that would construct a grade-separated, signalized diamond interchange with a directional ramp at the intersection of MD 4 and Suitland Parkway/Presidential Parkway. The profile of Suitland Parkway and existing Presidential Parkway would be raised, while the profile of MD 4 would be lowered, allowing Suitland Parkway and existing Presidential Parkway to travel over MD 4.

Elements of the current design that would occur within the existing boundary of JBA include the relocation of an existing high pressure fuel line, and relocation of the JBA perimeter fence and security path. SHA would require Air Force issuance of a temporary construction easement to facilitate construction within the boundary of JBA.

NuStar Energy, L.P. owns and operates an eight-inch high pressure petroleum products line (fuel line) that services JBA. The existing fuel line runs parallel to and across Suitland Parkway and MD 4, entering JBA south of the project area. Construction of the MD 4/Suitland Parkway interchange would require several sections of the existing fuel line to be removed and relocated. 3,658 linear feet of fuel line on NPS property would be removed, extending from a tie-in location adjacent to the westbound lanes of Suitland Parkway to the existing JBA perimeter fence crossing, which is located adjacent to southbound MD 4. New fuel line (2,060 linear feet) would be laid between the tie-in location and a new crossing under the JBA perimeter fence. The new fuel line would extend south and southeast inside the perimeter of JBA for approximately 703 feet toward the JBA North Gate Entrance where the fuel line would be installed easterly via a 496 feet horizontal directional drilling from tie-in to tie-in underneath the existing JBA North Gate entrance. The fuel line would continue east and southeast along the inside of the JBA perimeter fence for 1,335 feet to its tie-in with the existing fuel line. A second 891-foot long segment of fuel line extending further southeast along MD 4 would be relocated immediately west of its existing location to accommodate the proposed grading associated with the MD 4 construction. The result would include the installation of a total of 3,425 feet of fuel line within the JBA perimeter fence.

Additionally, widening along the southbound MD 4 mainline would require the relocation of approximately 720 linear feet of the JBA perimeter fence and security path up to 25 feet west of their existing location and the extension of an existing culvert by approximately 15 feet.

The proposed construction activities would require a temporary construction easement for approximately 7.7 acres. A perpetual easement for less than 0.1 acre and a revertible easement for approximately 0.6 acre would be required to accommodate roadway widening, access ramps and associated grading.

Construction activities within the JBA perimeter would be staged and maintained as small as possible and free of debris. Construction staging would be coordinated with JBA staff prior to initiating construction.

2.5 NO ACTION ALTERNATIVE

The No Action Alternative describes the action of continuing the present transportation conditions. Under the No Action Alternative the existing at-grade intersection would remain and there would be no need to relocate the fuel line, perimeter fence, or security path. The intersection of MD 4 and Suitland Parkway would continue to operate at a LOS F, and congestion would remain an issue at the intersection. This condition would be exacerbated by projected traffic volume increases as a result of area and regional increases in development.

2.6 ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD

As discussed in Section 2.1, FHWA and SHA completed multiple studies documenting alternatives to the signalized diamond interchange with directional ramp design (which is the current design). These studies concluded that the current design best meets the project purpose and need. Additionally, the majority of the alternatives evaluated would require the relocation of the fuel line, perimeter fence, and security path, similar to the current design, to accommodate grading and elevation changes associated with the interchange construction.

Two concepts for the fuel line relocation were presented to the Air Force in Fall 2013.The first would align the relocated fuel line along the JBA perimeter. The second alternative would align the relocated fuel line along the Tyler Road tree line, at the southern extent of the project area. The Air Force determined that locating the fuel line along the base perimeter would provide adequate security clearance for the fuel line (a minimum of 30 feet). Additionally, siting the fuel line relocation along the perimeter would maintain siting flexible in the Tyler Road area. As a result, the JBA Facilities Board Working Group recommended that perimeter road location for approval December 12, 2013. JBA Facilities Board provided approval of the perimeter road site for the fuel line relocation December 18, 2013.

Therefore, the alternatives evaluated in this EA are limited to the proposed action (which is the current design) and the No Action Alternative.

2.7 REGULATORY COMPLIANCE AND PERMIT REQUIREMENTS

A soil erosion and sediment control (SE/SC) plan will be prepared in accordance with Maryland Department of the Environment (MDE) *2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control*. Typically an SE/SC plan would include permanent mitigation

measures such as the establishment of temporary or permanent vegetative cover, slope protection structures, channel stabilization of open channels and existing streams or ditches, sediment barriers across or a the toe of slopes, and protection of storm sewer line inlets to intercept and retain sediment. Implementation of such measures during construction would minimize sediment runoff. In addition, temporary best management practices (BMPs), such as installation of silt fence and sediment trapping or filtering would be utilized during construction to minimize erosion and sedimentation from ground disturbing activities that expose bare soil. Temporary BMPs would be used only during construction and would be removed once the disturbed area has been permanently stabilized, if applicable.

Stormwater management for the MD 4/Suitland Parkway interchange project would be prepared and implemented in accordance with the 2000 Maryland Stormwater Design Manual, Volumes I & II (MDE 2000), addressing long-term stormwater runoff.

SHA prepared and submitted a Joint Permit Application (JPA) June 9, 2014 for impacts resulting from the MD 4/Suitland Parkway interchange project, including the fuel line relocation. This application will be used to secure a U.S. Army Corps of Engineers (USACE) Section 404 Permit and MDE Section 401 Water Quality Certification for the project.

Recommendations made by the Maryland Department of Natural Resources (DNR) Environmental Review Unit (dated April 29, 2013) regarding fish species protection measures for the Unnamed Tributary to Cabin Branch, Classification Use 1, include a no instream work restriction during the period of March 1 through June 15, inclusive, during any year. In addition, existing riparian vegetation in the area of the stream channel will be preserved as much as possible to maintain aquatic habitat and provide shading to the stream. No areas designated for the access of equipment and for the removal or disposal of material would be located within the stream and associated riparian vegetation. Temporarily disturbed areas should be restored and re-vegetated. The use of concrete or grouting within streams, if determined necessary, would be managed to assure curing processes do not impact the stream or modify stream pH.

Construction activities occurring within the boundary of JBA would be coordinated with JBA 11 CES/CEIE to ensure compliance with all JBA environmental programs, plans and protocols (Table 2).

Table 2: JBA Environmental Plans

RESOURCE AREA	TITLE	DATE
Air Quality	Air Emissions Inventory	2013
Noise, Land Use and Planning	Air Installation Compatible Use Zone (AICUZ) Study	2007
	General Plan Update*	2010
Hazardous Materials	Asbestos Management Plan	2008
	Lead-Based Paint Management Plan	2009
	Hazardous Waste Management Plan	2014
	Facility Response Plan	2011
	Pollution Prevention Plan	2010
	Integrated Emergency Management Plan	2013
	Integrated Solid Waste Management Plan	2013
	Spill Prevention Control and Countermeasure Plan	2011
Natural Resources	Integrated Natural Resources Management Plan	2015
Cultural Resources	Integrated Cultural Resources Management Plan	2009
Stormwater	Stormwater Pollution Prevention Plan	2011

* Update in progress, Installation Development Plan anticipated completion, June 2015.
Source: Personal Communication from Anne Hodges, 11 CES/CEIE

3.0 AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES

This chapter describes the current conditions of the environmental resources, either man-made or natural, and the potential environmental consequences of implementing the Preferred Alternative or the No Action Alternative.

Project impacts have been evaluated in this EA using the Council on Environmental Quality (CEQ) definition of significance (40 CFR 1508.27) per the National Environmental Policy Act (NEPA). According to this definition, significance requires consideration of both the context and intensity of impacts. Context refers to the spatial (e.g., region or location) and temporal (e.g., short or long term) setting of the proposed action. Intensity refers to the severity of impact.

a) Context- This means the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale. Both short- and long-term effects are relevant.
b) Intensity- This refers to the severity of impact. More than one agency may make decisions about partial aspects of a major action.

Based on the scope of the proposed action, issues with minimal or no impacts were identified through a preliminary screening process. The following describes those resource areas not carried forward for a detailed analysis, along with the rationale for their elimination.

Regardless of the alternative selected, the following resources would not be affected by the proposed action and are not discussed in detail in this EA:

- **100-Year Floodplain:** Floodplains are generally areas of low, level ground on one or both sides of a stream channel that are subject to either periodic or infrequent inundation by flood waters. Floodplains are regulated by the Federal Emergency Management Agency (FEMA) with standards outlined in 44 CFR Part 60.3. EO 11988 (Floodplain Management) requires agencies to assess the effects that their actions may have on floodplains and to consider alternatives to avoid adverse effects and incompatible development on floodplains. FEMA has not developed Flood Insurance Rate Maps for JBA. In 2005, JBA completed a floodplain study which indicated that there are seven floodplains located within the boundaries of JBA (JBA 2010). The floodplains are generally limited to small streams and the area immediately adjacent to these streams. The proposed action would not occur within the 100-year floodplain of the unnamed tributary of Cabin Branch (Figure 4.2, 2010 General Plan Update; JBA 2010); therefore, this topic is dismissed from further analysis.

- **Groundwater:** Groundwater recharge occurs primarily through precipitation. Groundwater flow is believed to be down-gradient toward local streams or downward toward deeper underlying aquifers. Stormwater management for the MD 4/Suitland Parkway interchange project would be prepared and implemented in accordance with the 2000 Maryland Stormwater Design Manual, Volumes I & II (MDE 2000), addressing long-term stormwater runoff and groundwater recharge. The proposed action, including the relocation of an existing high pressure fuel line, and relocation of the JBA perimeter fence and security path will not impact groundwater resources; therefore, this topic is

dismissed from further analysis.

- **Geology and Topography:** Much of the surficial geology at JBA is comprised of the late Tertiary Period Pliocene Epoch (about 7 million years old) upland deposits. These deposits consist of irregularly bedded cobbles, gravel, and fine sand intermixed with silt or clay, and vary in thickness from 10 feet to 20 feet. Based on the construction methods proposed to relocate the existing fuel line and JBA perimeter fence and security path, no impact to geology or topography is anticipated. The proposed construction methods will only disturb the surface soil horizons and do not extend into the deeper geologic formation. Therefore, no impacts to geology or subsurface soils are expected from the construction of the proposed action.

  The proposed action, including the relocation of the fuel line, JBA perimeter fence and security path will temporarily alter the existing topography. However, the site of the proposed action is generally flat and has no special qualities; grading will be limited and the impacts to topography would be negligible; therefore, this topic is dismissed from further analysis.

- **Airspace and Airfield Operation:** On most Air Force installations, the airfield is not only the dominant land use, but is usually the very reason for the existence of the installation. The airfield land use typically consists of the entire airfield pavement system (runway, taxiway, and apron), related open space, navigational aids, and all imaginary airfield and airspace clearance surfaces. The size and configuration of an airfield largely depend on topography, climate, meteorological factors, land availability, and weapons system characteristics. JBA has two complete runway systems, each with its own north/south runway, parallel taxiway, and apron. The two parallel taxiways, serve the west and east ramps, respectively, via a network of three connecting ladder taxiways. Facilities housing airfield operations and maintenance activities are located parallel to the west and east aprons.

  The proposed action would occur northeast of the airfield and would not result in changes to the airfield environment or airspace operations; therefore, this topic is dismissed from further analysis.

- **Environmental Justice:** EO 12898 *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* directs federal agencies to focus attention on human health and environmental conditions in minority and/or low-income communities. Potential health and safety impacts that could disproportionately affect children are considered under the guidelines established by EO 13045, *Protection of Children from Environmental Health Risks and* 9 *Safety Risks*. The 2014 Environmental Reevaluation evaluated the project area for the presence of minority and low-income populations. Based on an evaluation of demographic data for the project area it was determined that environmental justice populations are present within the project area. However, the proposed improvements are generally within the same location as existing facilities, no particular residential areas, business area, or community facility is adversely impacted by the proposed improvements. Additionally, there are no concentrations of impacts in any one particular area. Any adverse impacts resulting from the project would not disproportionately impact communities within the project area meeting the environmental justice threshold; therefore, this topic is dismissed from further analysis.

- **Socioeconomics:** Construction activities may provide a temporary benefit to the local economy with the hiring of construction workers and an increase in local revenue generated by the construction workers and activities. Improved traffic operations and capacity would result in transportation benefits, including improved mobility and efficiency of the area transportation network to move traffic volumes, resulting in a minor economic benefit to the project area, no adverse impact to the socioeconomic environment would occur; therefore, this topic is dismissed from further analysis.

- **Visual Resources:** Construction activities within the JBA perimeter would be staged within the vicinity of the former housing development, located east of the JBA North Gate. All staging areas would be maintained as small as possible and free of debris. This area is east of the perimeter road and located downslope towards MD 4; therefore, visual impacts for JBA visitors would be negligible. All construction would be completed in accordance with JBA specifications. The proposed action would have no permanent impact on visual resources; therefore, this topic is dismissed from further analysis.

- **Bird-Aircraft Strike Hazard (BASH):** JBA is an area of high bird-aircraft strike hazard (BASH) potential, as the base is located in the Atlantic flyway near several wildlife refuges. Migratory birds, especially waterfowl, are common at JBA due to the ponds and wetlands and the proximity of JBA to the Chesapeake Bay. Migratory birds are afforded special status under the Migratory Bird Treaty Act of 1918. Additionally, both resident and migratory populations of bald eagles *(Haliaeetus leucocephalus)*, occur in the region. Effective August 8, 2007, under the authority of the Endangered Species Act of 1973, as amended the U.S. Fish and Wildlife Service delisted the bald eagle in the lower 48 States of the United States from the Federal List of Endangered and Threatened Wildlife. However, the bald eagle will still be protected by the Bald and Golden Eagle Protection Act, Lacey Act and the Migratory Bird Treaty Act. Also, resident (non-migrating) Canada geese are of particular concern due to their large size and growing populations.

  BASH is defined as the threat of aircraft collision with birds and other wildlife during aircraft operations. Most birds fly close to ground level; correspondingly, most BASH incidents occur at low altitudes in the immediate vicinity of the airfield. *The Bird/Wildlife Aircraft Strike Hazard Plan* provides guidance to minimize wildlife-aircraft strikes (JBA, 2006). Management practices include flight crew awareness, take-off/landing scheduling, measures to preclude the development of wildlife populations in the airfield, vegetation management such as not planting bird-attracting species, a sound system that includes air cannon and predator calls, and a trained dog and handler to disrupt flocks on the ground are used before lethal means. In order to respond to safety concerns, JBA has also obtained a USFWS Migratory Bird Depredation Permit to reduce the number of geese on site.

  The proposed action is not expected to impact the BASH plan. The proposed action would not include any unusual use of airspace or the placement of elevated structures that might be attractive to birds, nor will it include any significant change to wildlife habitat or forested area. In accordance with specific regulations governing the types of plant material available for use on site; revegetation species would be selected based on their expected height at maturity and their limited attraction of birds. Fruiting species and large groupings of evergreens would not be planted. Revegation would be coordinated

with JBA. Preventative measures to eliminate interference with migratory birds and other wildlife would be implemented in accordance with the Migratory Bird Treaty Act, DNR requirements and relevant guidance during construction. Therefore, this topic is dismissed from further analysis.

- **Air Quality:** The project area is located in the Metropolitan Washington Air Quality Control Region. The U.S. Environmental Protection Agency (EPA) has designated particulate matter less than 10 micrometers (PM_{10}), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), and lead (Pb) as in attainment of the NAAQS. The EPA has designated Washington D.C. as a moderate non-attainment area for the criteria pollutant ozone (O_3) and as a non-attainment area for particulate matter less than 2.5 micrometers ($PM_{2.5}$). This airshed is in maintenance for carbon monoxide (CO). The SHA completed an Air Quality Analysis as part of the environmental studies for the MD 4 corridor study in October 2013. The Air Quality Analysis determined that the proposed improvements to MD 4 at the Suitland Parkway intersection in Prince George's County would meet the Clean Air Act and 40 CFR 93.109 requirements for $PM_{2.5}$ and CO. A more detailed hot-spot analysis is not required because the project was not found to *be a project of air quality concern* as defined under 40 CFR 93.123(b)(1). The project would not cause or contribute to a new violation of the $PM_{2.5}$ or CO State and National ambient air quality standards, or increase the frequency or severity of an existing violation. This project has been determined to generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special mobile source air toxics concerns. As such, this project would not result in changes in traffic volumes, vehicle mix, basic project location, or any other factor that would cause an increase in mobile source air toxics impacts of the project compared to that of the no-build alternative.

  In November 2013, the Interagency Consultation Group, consisting of FHWA, EPA, MDE and the Metropolitan Planning Organization, concurred with this determination. The report was posted on SHA's website for public comment in December 2013. No comments were received. Based on these findings, the action alternatives would have negligible effects on air quality. Therefore, this impact topic has been dismissed from further detailed analysis in this EA.

- **Climate:** The proposed action will be built in accordance with applicable EOs and Air Force directives on sustainability. Based on traffic analysis completed by SHA in 2011, the existing average ADT volume for the MD 4 and Suitland Parkway intersection is 60,500. This volume is projected to increase to an ADT of 84,450 vehicles in 2030, the design year for the project. Construction activities related to the action alternatives would temporarily increase greenhouse gas emissions. However, the action alternatives would reduce current congestion allowing vehicles to travel at more fuel efficient speeds and result in an overall decrease of greenhouse gas emissions. An increase in fuel efficient technology and more stringent standards would decrease greenhouse gas emissions overall. The project would not be a contributing factor to climate change. The proposed action would not have any short-term or long-term adverse impact on climate; therefore, this topic is dismissed from further analysis.

- **Clear Zones:** Accident potential zones, rectangular zones extending outward from the ends of active runways at military bases, delineate those areas recognized as having the greatest risk of aircraft mishaps, most of which occur during takeoff or landing. Clear

zones are the areas closest to the end of the runway, which is considered the most hazardous area. At JBA, clear zones extend 3,000 feet from the end of the runway and 1,500 feet on either side of the runway centerline. Permissible uses, structure heights, and the construction material in these areas are specifically prescribed in order to protect both the safety of the aircrews and the safety of persons and property on the surface. All construction would occur a minimum 250 feet from the centerline of the runway (landmark - depressed curb in the field). Therefore, this topic is dismissed from further analysis.

3.1 AIR INSTALLATION COMPATIBLE USE ZONE (AICUZ)/LAND USE

Affected Environment

Current land use at JBA is the result of a development pattern that began in the 1940s. The airfield separates the base into western and eastern halves. Facility development and supporting infrastructure have evolved over time as missions and requirements have changed. During that time, the base has maintained adequate functional relationships with relatively few land use conflicts, suggesting that land use planning principles have been followed during the installation's historical development. The land use categories at JBA presently include: administrative; aircraft operations and maintenance; airfield; community; industrial; medical; open space; outdoor recreation; residential; and water. The aircraft operations and maintenance land use has developed adjacent to the east and west flight lines, with few unrelated facilities occupying this prime real estate. The base contains a consolidated community center that is accessible to west side workers and residents. Industrial uses are consolidated in a few contiguous areas, the largest being the base supply, civil engineering, and transportation facilities on the east side. Administrative uses are split between the two halves of the base. Residential areas are located primarily along the western perimeter. The location of the proposed action is within designated Airfield and Open Space land use.

The Maryland coastal zone is comprised of the land, water and subaqueous land between the territorial limits of Maryland in the Chesapeake Bay, Atlantic Coastal Bays and the Atlantic Ocean, as well as the towns, cities and counties that contain and help govern the thousands of miles of Maryland shoreline according to the Maryland DNR Chesapeake and Coastal Program website (http://www.dnr.state.md.us/ccp/index.asp). This area encompasses the entirety of Prince George's County, including the project area. Under the Coastal Zone Management Act; federal actions, including federal financial assistance activities, that have reasonably foreseeable coastal effects must be consistent with the enforceable policies of state coastal management programs as outlined in *Maryland's Enforceable Coastal Policies* (April 8, 2011). The Maryland coastal program is a networked program. MDE handles Federal Consistency Reviews. The proposed construction would not be located within the Maryland Department of Natural Resources (DNR) defined Chesapeake Bay Critical Area.

Environmental Consequences

The proposed action would require a temporary construction permit of 7.7 acres for the use of JBA property during construction. Long-term impacts to land use would include a perpetual easement of less than 0.01 acre and a revertible easement of 0.6 acre. The easements are necessary to accommodate grading for the grade-separate interchange and associated roadway widening. A temporary increase in noise levels would result from the proposed interchange construction. No residences or businesses are located within the project area, nor are there any approved development plans or other planned noise sensitive receivers (e.g.,

child care centers, schools, etc.) in the study area. Following construction land use within the project area would remain similar to the existing use. Relocation of the fuel line, perimeter fence, or security path would have no impact on planned development/use within JBA.

As outlined in *A Guide to Maryland's Coastal Zone Management Program Federal Consistency Process*, (http://www.dnr.state.md.us/bay/ czm/fed_consistency_guide.pdf) the state's permit decision constitutes the federal consistency decision for this project. A Federal/State Joint Permit Application was submitted for MDE review June 6, 2014, certifying that the proposed action would be consistent with Maryland's Coastal Zone management Program (**Appendix A**). This document is under review, with approval anticipated Winter 2015. No work on the project would proceed until issuance of a permit authorization from JPA, ensuring that the proposed action is consistent with the Coastal Zone Management Act.

Therefore, the sum of the activities comprising the proposed action would have short- and long-term negligible impacts on AICUZ/Land Use within the project area. Based on the above analysis, impacts on land use would not be significant in either context or intensity as defined by CEQ.

Under the No Action Alternative, the relocation of an existing high pressure fuel line, and relocation of the JBA perimeter fence and security path would not be built; therefore, there would be no changes to land use or zoning.

3.2 STREAMS

Affected Environment

JBA is located within multiple sub-basins in the Mid-Atlantic Region (JBA 2012). Most of JBA is in the Potomac River Sub-Region (Hydrologic Unit Code [HUC] 0207), while the eastern edge of JBA is in the Upper Chesapeake Sub-Region (HUC 0206). The uplands that characterize the topography of JBA create a watershed divide, with the western portion of the base generally draining to the Potomac River (HUC 02070010) and the eastern portion generally draining to the Patuxent River (HUC 02060006), which is located approximately seven miles east of the base. Surface water at the existing project location and the location of the proposed action drains to the southwest to an unnamed tributary in the headwaters of Cabin Branch.

Environmental Consequences

The proposed action, the relocation of an existing high pressure fuel line, and relocation of the JBA perimeter fence and security path would have minor impacts to stream resources. Waters located within the boundary of JBA that would be impacted by the proposed action include an unnamed tributary to Cabin Branch, which is classified as Use I waters (support of estuarine and marine aquatic life and shellfish harvesting). The proposed fuel line relocation and culvert extension would include 47 linear of permanent impacts and 120 linear of temporary impacts to Waters of the United States (WUS). Implementation of erosion and sediment control practices, such as installation of a silt fence, sediment trapping or filtering, and other best management practices (BMPs), would minimize temporary impacts to water quality and wetlands during construction. Per Maryland Department of Natural Resources (DNR) correspondence dated April 29, 2014, no instream work is permitted in Use I streams from March 1 through June 15, inclusive, during any year.

The SHA has coordinated mitigation for stream impacts associated with the MD 4/Suitland Parkway interchange project, including the fuel line relocation, by providing stream stabilization at Marbury Drive in District Heights, Maryland. The proposed stream restoration project is located off-site, approximately 2.5 miles northwest of the project area. The proposed mitigation will include approximately 1,650 linear feet of stream restoration and 12,500 square feet riparian buffer enhancement. In August 2013, SHA confirmed agency support of the proposed mitigation. Therefore, the proposed action would have short- and long-term negligible adverse impacts to streams. Based on the above analysis, impacts on streams would not be significant in either context or intensity as defined by CEQ.

Under the No Action Alternative, the relocation of an existing high pressure fuel line, and relocation of the JBA perimeter fence and security path would not be built; therefore, no impacts to stream resources would occur.

3.3 WETLANDS

Affected Environment

Wetlands are protected as a subset of the "waters of the United States" under Section 404 of the Clean Water Act (CWA), as well as EO 11990 (Protection of Wetlands) which requires federal agencies to take action to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the beneficial values of wetlands. The U.S. Army Corps of Engineers (USACE) defines wetlands as "those areas that are inundated or saturated with ground or surface water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted to life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas (33 CFR 328)."

Numerous wetland surveys have been conducted at JBA within the last 15 years. These included: a delineation report completed in 2004, a formal jurisdictional delineation completed in 2010, a 2013 delineation report, and a 2014 jurisdictional determination. The culmination of these studies identified 150.9 acres of jurisdictional wetlands on JBA (JBA 2014). Based on a review of the 2004 wetlands and waters delineation reports, approved jurisdictional determinations, and recent field verification, a number of wetlands and waters features are located adjacent to the project area.

Environmental Consequences

Based upon a review of GIS data layers provided by JBA and the design plans for the proposed action (Figure 3); no wetlands are located within the limit of disturbance for the proposed action. Therefore, the construction activities associated with the proposed action would have no impact to wetlands within the boundary of JBA. Based on the above analysis, impacts on wetlands would not be significant in either context or intensity as defined by CEQ.

Under the No Action Alternative, the relocation of an existing high pressure fuel line, and relocation of the JBA perimeter fence and security path would not be built; therefore, no impacts to wetlands would occur.

3.4 OCCUPATIONAL SAFETY AND HEALTH

Affected Environment

Construction jobsite safety and the prevention of accidents is an ongoing activity for any Air Force jobsite. All contractors performing construction activities are responsible for complying with Air Force safety and Occupational Safety and Health Administration General Plan Environmental Assessment for JBA *Final EA 3-19 April 2011* (OSHA) regulations, and are required to conduct construction activities in a manner that does not pose any undue risk to workers or personnel. Industrial hygiene programs address exposure to HAZMAT, use of personal protective equipment (PPE), and use and availability of Material Safety Data Sheets. Industrial hygiene is the responsibility of contractors, as applicable. Contractor responsibilities are to review potentially hazardous workplaces; to monitor exposure to workplace chemical (e.g., asbestos, lead, HAZMAT), physical (e.g., noise propagation), and biological (e.g., infectious waste) agents; to recommend and evaluate controls (e.g., ventilation, respirators); to ensure personnel are properly protected or unexposed; and to ensure a medical surveillance program is in place to perform occupational health physicals for those workers subject to any accidental chemical exposures or engaged in hazardous waste work.

Environmental Consequences

The proposed action, including the relocation of an existing high pressure fuel line, and relocation of the JBA perimeter fence would be constructed in accordance with OSHA standards. Although no adverse impacts on the occupational safety and health of personnel at JBA, visitors to JBA, or the public in general would be expected from implementing the proposed action, construction activities always have some inherent risk for worker safety. To prevent such impacts, construction contractors would be required to establish and maintain safety programs. All contractors performing construction activities would be responsible for complying with U.S. Air Force safety rules as well as OSHA regulations. They would be required to conduct construction activities in a manner that would not pose any undue risk to workers or personnel. Contractor responsibilities would include reviewing potentially hazardous workplaces, monitoring exposure to any safety issues, and ensuring that a plan is in place to respond to any foreseeable issues. Following construction regular monitoring and maintenance of the fuel line would occur in accordance with MDE monitoring requirements, which has been developed in consideration of OSHA standards. Therefore, the proposed action would have short- and long-term negligible adverse impacts to occupational safety and health. Based on the above analysis, impacts to occupational safety and health would not be significant in either context or intensity as defined by CEQ.

Under the No Action Alternative, the relocation of an existing high pressure fuel line, and relocation of the JBA perimeter fence and security path would not be built; therefore, no consideration of OSHA would be required.

3.5 HAZARDOUS MATERIALS / WASTE

Affected Environment

The Air Force maintains a comprehensive set of policies and plans to ensure JBA's assigned missions do not adversely affect the surrounding natural environment. Hazardous substances are those corrosive, toxic, flammable, and reactive materials that, when spilled or released into the environment, are dangerous to public health. A HAZMAT pharmacy is established at Building No. 3066 to serve a single point of control and accountability for HAZMAT. This

pharmacy system provides JBA with a standard way to manage HAZMAT procurement and to comply with Environment, Safety, and Occupational Health requirements. Any solid, liquid, or contained gaseous material for disposal or recycle that poses significant potential harm to human health or environmental quality is a hazardous waste (Resource Conservation and Recovery Act of 1976). Up to 55 gallons of a hazardous waste may be stored at or near its point of generation, at an initial accumulation point, before it must be transferred to Building No. 3304, the designated hazardous waste storage area. Hazardous wastes would then be removed and disposed of by licensed private contractors, as JBA does not currently have a hazardous waste transfer, storage, and disposal facility; nor does it treat or directly dispose of any hazardous waste.

Any activity generating waste must have their waste tested to determine if it is hazardous. If the waste is hazardous, the activity must request approval from the Civil Engineer Squadron's Asset Management Flight for an initial accumulation point. Each waste-accumulating activity must appoint a site manager to be responsible for ensuring regulatory requirements are met. In addition, hazardous waste training is required for all personnel whose duties involve actual or potential exposure to hazardous waste. All hazardous waste storage containers must be in good condition and meet applicable United Nations transportation packaging requirements. Each waste stream must also be identified and quantified, with the mixing of hazardous and nonhazardous waste prohibited. After accumulation, wastes are transported to Building No. 3304 for storage prior to disposal.

The JBA is listed as a Superfund Site according to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) by Environmental Protection Agency (EPA). As such, any on site excavation would follow the *Joint Base Andrews Environmental Protection Standards for Contracts, Section 2.7.* This would include soils monitoring with a photo ionization detector during excavation. If contamination or potential contamination is observed, the material would be segregated from non-contaminated soils. The material would be sampled for characterization before off-site disposal at a licensed waste management facility.

Environmental Consequences

The proposed action, including the relocation of an existing high pressure fuel line, and relocation of the JBA perimeter fence and security path would adhere to the above-mentioned guidelines regarding waste classification and disposal, if necessary. The length of fuel line to be installed would not contain asbestos or other known hazardous materials. The fuel line to be installed would comply with all MDE and EPA regulations. Therefore, the proposed action would have no adverse impacts on human and environmental health due to hazardous materials and wastes. Based on the above analysis, impacts on human or environmental health due to hazardous materials and wastes would not be significant in either context or intensity as defined by CEQ.

No potential, adverse environmental or health effects related to the use, disposal, or storage of HAZMAT would be expected from implementing the No Action Alternative, as the relocation of an existing high pressure fuel line, and relocation of the JBA perimeter fence and security path would not occur.

3.6 BIOLOGICAL / NATURAL RESOURCES

Affected Environment

Nearly 80 percent of JBA Main Base is developed or intensely managed. Vegetation occurs largely in association with intensively managed areas (i.e., improved areas): lawns, gardens, golf course fairways, ponds, bare ground, and recreational fields. The airfield environment, including the infield of the airfield and the clear zones, is also intensively managed and is considered as improved area. The remaining patches of original vegetation (i.e., unimproved areas) are a combination of mixed hardwood forest, mixed hardwood/pine forest, oak forest, oak/hickory forest, oak/pine forest, pine forest, red maple swamp, and shallow emergent marsh.

In 2011, the JBA Arbor Plan was updated. The plan analyzed existing tree cover on JBA for the period from 1958 to 2009 using aerial imagery, remote sensing, and geographic information system tools. The 2011 Arbor Plan is designed to be used as a guide to landscape development, reforestation and maintenance of forest resources at JBA. It identifies priority planting areas in the form of corridors, gateways and reforestation plans, and it recommends plant materials and design guidelines to achieve the following goals:

- Help offset the loss of forest stands which has occurred over the past years
- Sustain the ecological values and the function of the forested landscape
- Integrate forest management activities with the management of base natural resources and the military mission of JBA
- Promote non-fragmented ecological communities and biodiversity while discouraging habitat that is in conflict with the mission
- Enhance the aesthetic and ecological value of the base where possible

All tree removal and/or pruning activities are required to be performed in accordance with the Arbor Plan's design and maintenance guidelines.

Wildlife habitat at JBA consists of a mix of upland and wetland areas surrounded by urban and suburban development. A biological survey conducted in 1994 identified 84 species of birds in a variety of ecological communities at JBA, including open water, red maple swamp, mixed hardwood forest, old field successional, mowed field, and mowed grass. Those results, combined with additional data from 2006, identified a total of 13 species of mammals, 10 species of reptiles and amphibians, 13 species of insects, and 5 species of fish at JBA. Since the survey was not a total inventory, it is possible there are additional undocumented animal species on JBA. Documented non-game species include raptors, gulls, killdeer, flocks of migrating starlings and cowbirds, waterfowl, wading birds, and songbirds. Game species that have been documented include white-tailed deer, wild turkey, gray squirrel, eastern cottontail, Canada geese, mallard, lesser scaup, mourning dove, and northern bobwhite quail. Populations of these species are limited by the reduction and fragmentation of suitable habitat outside of JBA and isolation of habitats at JBA. Due to mission and security constraints, no public access is permitted for hunting, fishing, trapping, or other wildlife-related outdoor recreation at JBA. JBA has depredation permits for birds and deer; these species are managed to keep the airfield clear and minimize BASH hazards (JBA 2014).

In accordance with Section 7 of the Endangered Species Act of 1973, the SHA solicited comments from the USFWS and DNR as it relates to known occurrences of rare, threatened, and endangered species within the project area that may be adversely impacted by the project.

A DNR letter dated May 2, 2012 and online USFWS certification dated April 2, 2012 confirmed that no federal or state listed species of concern were identified within the project area. These letters are provided in **Appendix B**.

Environmental Consequences

The proposed action will impact 1.4 acres of forested area within the boundary of JBA. Protection measures and BMPs would be implemented to minimize impacts to vegetation to the extent possible. Vegetative protection measures may include, but would not be limited to: evaluation of large trees and development of a tree save plan by an arborist or licensed tree expert; installation of tree protection fencing; root pruning for trees whose critical root zones (CRZs) lie within proposed construction area; minimizing tree cutting to the extent possible; and staging construction equipment to avoid damage to vegetation. A landscaping plan has been developed for implementation following construction that would provide approximately 0.7 acre reforestation and 0.3 acre afforestation. Planting in accordance with the landscaping plan would exceed the JBA Arbor Plan minimum 60% revegetation by 8%.

Temporary disturbances during construction would result in short-term impacts on terrestrial species and their habitat. The temporary construction-related disturbances would cause species to relocate to similar suitable habitats in the area. Species inhabiting the areas of permanent disturbance would likely reestablish themselves following construction in adjacent areas of sufficient habitat. Additionally, revegetation in accordance with the aforementioned landscape plans would, upon maturity, provide sufficient food and shelter for the reestablishment of some species within the project area. Therefore, the proposed action would have long-term minor adverse impacts to wildlife habitat.

The sum of the activities comprising of the proposed action would have short- and long-term minor adverse impacts to biological and natural resources. Based on the above analysis, impacts to biological and natural resources would not be significant in either context or intensity as defined by CEQ.

Under the No Action Alternative the relocation of an existing high pressure fuel line, and relocation of the JBA perimeter fence and security path would not be built; therefore, no impacts to biological or natural resources would occur.

3.7 CULTURAL RESOURCES

Affected Environment

Under federal law, impacts to cultural resources could be considered adverse if the resources are eligible for listing, or are listed on, the NRHP, or are important to American Indian groups. In a consultation letter dated May 27, 2014 SHA notified Maryland Historical Trust (MHT) of recent design changes for the MD 4/Suitland Parkway interchange project, including the fuel line relocation and the extent of the proposed perimeter fence and security path relocation. SHA concluded that the proposed action would not impact significant archeological sites based on the results of previous archaeological investigations and the extensive disturbance documented throughout the archaeological survey area. Additionally, no historic structures or districts would be impacted within the boundary of JBA by the proposed action. Suitland Parkway, located along the northern boundary of JBA within the project area, is a historic district listed on the National Register of Historic Places. By carbon copy the Maryland Commission on Indian Affairs was also notified of the project. Pursuant to Section 106 (36 CFR 800.5), MHT concurred

on July 22, 2014 that the interchange construction project would have *an adverse effect* on Suitland Parkway. A Memorandum of Agreement (MOA), outlining measures to mitigate for impacts to Suitland Parkway, was executed October 17, 2014 by NPS, FHWA, SHA, and MHT. MHT concurrence and the MOA are provided in **Appendix B**.

Each year the Department of the Interior, Bureau of Indian Affairs publishes a list of Federally Recognized Indian Tribes/Nations. As of the January 29, 2014 Federal Register Notice, there are no Federally Recognized Indian Tribes/Nations in Maryland. Although there are no federally recognized tribes in Maryland, the Powhatan is a State-recognized tribe and is anticipated to be federally recognized in the near future. JBA is not required by the National Historic Preservation Act (NHPA) to consult with this tribe; however, JBA should prepare to do so, if necessary, for future projects. JBA will consider Native American concerns in base planning, complying with the American Indian Religious Freedom Act and the Native American Graves Protection and Repatriation Act.

Environmental Consequences

Based on the SHAs findings and MHT's concurrence, the proposed action would not impact cultural, historical, or archeological resources within the boundary of JBA. Should construction unearth previously undiscovered archeological resources, work will be stopped in the area of any discovery and consultation with the State Historic Preservation Officer (SHPO)/Tribal Historic Preservation Officer and the ACHP will occur as necessary (36 CFR 800.13). In the unlikely event that human remains are discovered during construction, provisions outlined in the Native American Graves Protection and Repatriation Act of 1990 will be followed as appropriate. Therefore, the proposed action would have no impacts on cultural resources. Based on the above analysis, impacts on cultural resources would not be significant in either context or intensity as defined by CEQ.

Under the No Action Alternative, the relocation of an existing high pressure fuel line, and relocation of the JBA perimeter fence and security path would not be built; therefore, there would be no impacts to cultural, historical, or archeological resources.

3.8 CUMULATIVE IMPACTS

Cumulative effects on environmental resources result from the incremental effects of an action when combined with other past, present, and reasonably foreseeable future projects in the region of influence. Cumulative effects can result from individually minor but collectively substantial, actions taken over a period of time. In accordance with NEPA, a discussion of cumulative effects that could result from projects that are proposed or anticipated in the foreseeable future is required.

The scope of the cumulative effects analysis involves both the geographic extent of the effects and the time frame in which the effects could be expected to occur, as well as a description of what resources could potentially be cumulatively affected. JBA has several known construction and demolition projects scheduled over the next several years, as described in Table 3 Initial clearing, grubbing and utility relocation for the interchange project was advertised August 26, 2014. Final design for the remainder of the interchange will be advertised by August 2015 and construction would continue through 2019.

Table 3: Summary of Proposed Projects at JBA and Timeframe for Construction

Project Name/Description	Anticipated Fiscal Year					
	2015	2016	2017	2018	2019	2020+
Construct Helicopter Operations Facility	X					
Consolidated Communications Center				X		
Demolish 1558, 1539, 1560					X	X
Construct Type IV Fuel Hydrant System for the Aerospace Control Alert Facility		X	X	X		
21 Point Enclosed Firing Range			X	X		
Security Forces Group Complex			X	X		
Relocate East Runway						X
Replace Child Development Center #1			X	X	X	
Base Civil Engineer Complex					X	
Replace West Fitness Center				X	X	
Relocate JADOC for New Large Hangar Complex			X			
Relocate MWD K9 Kennels for New Large Hangar Complex			X			
Relocate Hazardous Cargo Pad/EOD Range for New Large Hangar Complex			X			
Construct New Large Hangar Complex				X		
Fire Station Addition for New Large Hangar Complex				X		
Demolish Munitions Storage Area		X	X	X		
Replace USAPAT Facility			X			
Taxiway Whiskey Reconstruction and Extension		X	X	X		
Taxiway Charlie Reconstruction		X	X	X		
Taxiway November Reconstruction		X	X	X		
Replace Airfield Storm Drains	X	X	X	X	X	
Replace East/West Deluge Line		X	X	X		
Repair Paynes Branch			X	X		
Construct EOD Addition		X	X			
Addition to Base Exchange	X	X	X			
Construct Logistics Readiness Squadron Addition		X	X	X		
Construct Chapel Addition		X	X	X		
Construct Facility at Davidsonville		X	X			
Construct Taxi Lane for the Aerospace Control Alert Facility	X	X				
Construct 2nd Taxiway Hangar 20					X	X
Construct Addition to Visiting Quarters (B 1380)						X
Upgrade Main, Pearl Harbor, VA, North Gates			X	X		
Demolish Library B 1642		X	X			
Demolish T-Line B 3602		X	X			
Demolish 1713, 3603, 3605, 3808		X	X			

Project Name/Description	Anticipated Fiscal Year					
	2015	2016	2017	2018	2019	2020+
Demolish 1522, 1524, 1527		X	X			
Facility Demolition (Ongoing)	X	X	X	X	X	

Source: Personal Communication from Anne Hodges, 11 CES/CEIE

Air Installation Compatible Use Zone/Land Use

The proposed action would have long-term negligible impacts to AICUZ and land use within the project area. Planned projects would be developed in accordance with the JBA General Plan and the *Andrews Air Force Base Maryland Air Installation Compatible Use Zone Study* (December 2007). Therefore, past, present and reasonably foreseeable actions occurring within JBA would result in negligible adverse cumulative effects to AICUZ and land use. These effects, in combination with negligible adverse impacts of the proposed action would contribute a negligible adverse cumulative impact to AICUZ and land use within JBA.

Streams

The proposed action would contribute long-term minor adverse impacts to stream resources within JBA. Planned projects would be developed in accordance with the JBA General Plan. Construction activities associated with these projects would include grading, clearing, and excavation. Each of these projects would be require adherence to MDE stormwater management regulations, erosion and sediment control plans and adherence to best management practices (BMPs). Past, present and reasonably foreseeable actions occurring within JBA would result in minor adverse cumulative effects to streams. These effects, in combination with long-term minor adverse impacts of the proposed action would contribute a minor adverse cumulative impact on streams within JBA.

Wetlands

The proposed action would have no direct impacts to wetlands; therefore, the proposed action would have no contribution to cumulative impacts.

Occupational Safety and Health

The proposed action would have long-term negligible adverse impacts to occupational safety and health. Planned projects would be developed in accordance with the JBA General Plan. All construction activity would be conducted in accordance with OSHA standards. Construction contractors would be required to establish and maintain safety programs. All contractors performing construction activities would be responsible for complying with Air Force safety rules as well as OSHA regulations. Past, present and reasonably foreseeable actions occurring within JBA would result in negligible adverse cumulative effects to occupational safety and health. These effects, in combination with negligible adverse impacts of the proposed action would contribute a negligible adverse cumulative impact on occupational safety and health within JBA.

Hazardous Materials and Waste

The proposed action would have no adverse impacts on human and environmental health due to hazardous materials and wastes; therefore, the proposed action would have no contribution to cumulative effects.

Cultural Resources

The proposed action would have no direct impacts to cultural resources; therefore, the proposed action would have no contribution to cumulative impacts.

Biological/Natural Resources

The proposed action would result in long-term minor adverse impacts to biological and natural resources. Planned projects would be developed in accordance with the JBA General Plan. Construction activities associated with these projects would adhere to MDE stormwater management regulations, erosion and sediment control plans and BMPs. Further, adherence of all development activities to the JBA Arbor Plan would ensure reforestation and maintenance of forest resources at JBA. Therefore, past, present and reasonably foreseeable actions occurring within JBA would result in minor adverse cumulative effects to biological and natural resources. These effects, in combination with long-term minor adverse impacts of the proposed action would contribute a minor adverse cumulative impact on biological and natural resources within JBA.

Summary of Cumulative Impacts

When the proposed action is considered in conjunction with past, present, or reasonably foreseeable actions, no significant cumulative impacts would be expected on any resource area.

3.9 Summary of the Environmental Consequences of the Alternatives

A summary of environmental consequences for each alternative is provided in Table 4. Based on the above analysis, impacts resulting from the proposed action would not be significant in either context or intensity as defined by CEQ.

Table 4: Summary of Environmental Consequences

Environmental Factors	Proposed Action	No Action Alternative
AICUZ/Land Use	The proposed action would require temporary construction authorization of 7.7 acres. Permanent land use would be affected by a perpetual easement of less than 0.1 and a revertible easement of 0.6 acre via a revertible easement to SHA. The proposed action would have short- and long-term negligible impacts to AICUZ and land use. The proposed action would contribute a negligible adverse cumulative impact to AICUZ and land use.	The No Action Alternative would have no impacts on AICUZ or land use.
Streams	The proposed action would impact 47 linear feet of streams. The proposed action would have short-and long-term minor adverse impacts on streams. The proposed action would contribute a minor adverse cumulative impact on streams within JBA.	The No Action Alternative would have no impacts on streams.
Wetlands	The proposed action would have no impacts on wetlands.	The No Action Alternative would have no impacts on wetlands.
Occupational Safety and Health	The proposed action would have short- and long-term negligible adverse impacts to occupational safety and health. The proposed action would contribute a negligible adverse cumulative impact on occupational safety and health.	The No Action Alternative would have no impacts on occupational safety and health.
Hazardous Materials and Waste	The proposed action would have no impacts on human and environmental health due to hazardous materials and wastes.	The No Action Alternative would have no impacts on human and environmental health due to hazardous materials and wastes.
Biological/Natural Resources	The proposed action would impact 1.4 acres of forested resources. The proposed action would result in long-term minor adverse impacts to biological and natural resources. The proposed action would contribute a minor adverse cumulative impact on biological and natural resources.	The No Action Alternative would have no impacts on Biological and Natural Resources.
Cultural Resources	The proposed action would have no impacts on Cultural Resources.	The No Action Alternative would have no impacts on Cultural Resources.

4.0 PUBLIC AND AGENCY INVOLVEMENT

Coordination with state and federal agencies was conducted during the planning and NEPA process to identify issues and/or concerns related to natural and cultural issues potentially impacted by the undertaking.

4.1 Agency Coordination

In accordance with Section 7 of the Endangered Species Act of 1973, the SHA solicited comments from the USFWS and DNR as it relates to known occurrences of rare, threatened, and endangered species within the proposed project area that would be adversely impacted by the project. A DNR Wildlife and Heritage letter dated May 2, 2012, an online USFWS certification dated April 2, 2012, and a DNR Environmental Review Unit letter dated April 29, 2013 confirmed that no federal or state listed species of concern were identified within the project area. The response letters are provided in **Appendix B**.

As detailed in Section 3.7, SHA consulted MHT via letter dated, May 27, 2014 for their concurrence that the proposed action would not impact significant archeological sites based on the results of previous archaeological investigations and the extensive disturbance documented throughout the archaeological survey area. Further, SHA determined that no historic structures or districts would be impacted within the boundary of JBA by the proposed action. Suitland Parkway, located along the northern boundary of JBA within the project area, is a historic district listed on the National Register of Historic Places. By carbon copy the Maryland Commission on Indian Affairs was also notified of the project. Pursuant to Section 106 (36 CFR 800.5), MHT concurred on July 22, 2014 that the interchange construction project would have *an adverse effect* on Suitland Parkway. A Memorandum of Agreement (MOA), outlining measures to mitigate for impacts to Suitland Parkway, was executed October 17, 2014 by NPS, FHWA, SHA, and MHT. MHT concurrence and the MOA are provided in **Appendix B**.

In accordance with Presidential Executive Order 12372 and Code of Maryland Regulation 34.02.01.04-06, the Maryland State Clearinghouse coordinated intergovernmental review of the project. By letter dated March 16, 2015, the MD Clearinghouse provided review and recommendation for the proposal (**Appendix B**). Many agencyagency reviewers provided confirmation that the project is generally consistent with plans, programs, and objectives. Substantive comments provided are summarized below and responses are provided.

DNR requested that the project ensure best management practices are used with stormwater management and sediment erosion control. Similarly, Prince George's County requested that the project should include strategies on stormwater management runoff controls and treatment for the additional impervious road surfaces. As detailed in Section 3, stormwater management runoff controls and treatment for the additional impervious road surfaces for the MD 4/Suitland Parkway interchange project would be prepared and implemented in accordance with the *2000 Maryland Stormwater Design Manual, Volumes I & II* (MDE 2000), addressing long-term stormwater runoff and groundwater recharge.

MDE commented that any solid waste generated from the project must be property disposed of at a permitted solid waste acceptance facility, or recycled if possible. Further, MDE instructed that the Waste Diversion and Utilization Program should be contacted for any proposed generation of or handling of hazardous wastes, to ensure these activities are conducted in

compliance with applicable federal and state laws and regulations. Any on site excavation would follow the *Joint Base Andrews Environmental Protection Standards for Contracts*, which includes detailed provisions to address digging or trenching within the boundary of JBA including solid waste disposal or recycling in accordance with federal and state regulations, as detailed in Section 3.5.

4.2 Comment Period

This EA was distributed for public and agency review with a comment period of 15 days. No public comments were received during the public review period.

5.0 LIST OF PREPARERS

AIR FORCE

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FEDERAL HIGHWAY ADMINISTRATION

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6.0 REFERENCES

Joint Base Andrews-Naval Air Facility Washington, MD (JBA)

No Date *Joint Base Andrews Environmental Protection Standards for Contracts.* Provided by JBA Staff, June 10, 2014.

2004 *Final Wetlands Delineation Report*. Prepared by J. M. Waller and Associates. March 2004.

2007 *Air Installation Compatible Use Zone Study*. Andrew Air Force Base (AAFB). Available at: http://www.mncppcapps.org/planning/publications/PDFs/193/AICUZ-Final-Study.pdf. Accessed: November 2014.

2009 *Integrated Cultural Resources Management Plan (ICRMP) Andrews Air Force Base, Maryland.* Available at: http://www.andrews.af.mil/library/environmental/index.asp. Accessed: January 2015.

2010 *General Plan Update*, Joint Base Andrews-Naval Air Facility, Washington, MD. 100% Submission. January 2010.

2012 Integrated Natural Resources Management Plan for Joint Base Andrews-Naval Air Facility Prince George's and Anne Arundel Counties, Maryland. October 2012.

2014 *Joint Base Andreas Wetlands and Waters.* Fact Sheet as of March 31, 2014. Provided electronically by JBA staff December 31, 2014.

Maryland State Highway Administration (SHA)

2014a *Final Section 4(f) Evaluation – MD 4 at Suitland Parkway.* Approved November 10, 2014.

2014b *Environmental Reevaluation – MD 4 at Suitland Parkway.* Approved November 12, 2014.

Maryland Department of the Environment (MDE)

2000 *2000 Maryland Stormwater Design Manual, Volumes I and II.* October 2000, Revised may 2009. Available at: http://www.mde.state.md.us/programs/Water/StormwaterManagementProgram/MarylandStormwaterDesignManual/Pages/programs/waterprograms/sedimentandstormwater/stormwater_design/index.aspx. Accessed March 2014.

Maryland State Highway Administration (SHA)

2014 *MD 4/Suitland Parkway – NuStar Fuel Line Permitting and Advancement with Joint Base Andrews*. Joint Base Andrews Coordination Meeting Minutes. February 27, 2014.

2013 *Conformity Determination: MD 4 (Pennsylvania Avenue) at Suitland Parkway Interchange Improvements.* November 14, 2013. Available online: http://roads.maryland.gov/oppen/md%204%20suitland%20parkway%20pm2.5%20conformity%20final.pdf. Accessed March 2014.

2000 *Finding of No Significant Impact/Section 4(f) Evaluation: Maryland Route 4: From East of the I-95/I-495 Interchange to West of Maryland Route 223.* May 19, 2000.

National Park Service (NPS)

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U.S. Environmental Protection Agency (EPA)

2013 The Greenbook Nonattainment Areas for Criteria Pollutants. Available at: http://www.epa.gov/oar/oaqps/greenbk/index.html. Accessed: August 14, 2013.

APPENDIX A:

Federal/State Joint Permit Application

JOINT FEDERAL/STATE APPLICATION FOR THE ALTERATION OF ANY FLOODPLAIN, WATERWAY, TIDAL OR NONTIDAL WETLAND IN MARYLAND

FOR AGENCY USE ONLY

Application Number		**Date Determined Complete**	
Date Received by State		**Date(s) Returned**	
Date Received by Corps			
Type of State permit needed		**Date of Field Review**	
Type of Corps permit needed		**Agency Performed Field Review**	

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- Please submit 1 original and 6 copies of this form, required maps and plans to the Wetlands and Waterways Program as noted on the last page of this form.
- Any application which is not completed in full or is accompanied by poor quality drawings may be considered incomplete and result in a time delay to the applicant.

Please check one of the following:

RESUBMITTAL: ____ APPLICATION AMENDMENT: X MODIFICATION TO AN EXISTING PERMIT: ____
JURISDICTIONAL DETERMINATION ONLY ____ APPLYING FOR AUTHORIZATION ____
PREVIOUSLY ASSIGNED NUMBER (RESUBMITTALS AND AMENDMENTS) 07-NT-0395/200765337

DATE: JANUARY 26, 2015
APPLICATION DESCRIPTION: MD SHA / FMIS # PG618C21/PG618E21 / MD 4/SUITLAND PARKWAY INTERCHANGE

1. APPLICANT INFORMATION:
APPLICANT NAME:

A. Name: Mr. Todd Nichols B. Daytime Telephone: (410) 545-8628
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AGENT/ENGINEER INFORMATION:

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C. Company: A. Morton Thomas and Assoc. D. Email Address:
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ENVIRONMENTAL CONSULTANT:

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MDE CONSULTANT REVIEWER:

A. Name: Mr. Ed Tinney B. Daytime Telephone: (410) 462-9364
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PRINCIPAL CONTACT:

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C. Company: MD State Highway Administration – EPD D. Email Address: emarkel@sha.state.md.us
E. Address: 707 North Calvert Street Mailstop – C-303
F. City: Baltimore State: Maryland Zip: 21202

2. PROJECT DESCRIPTION

a. GIVE WRITTEN DESCRIPTION OF PROJECT:

This project (PG618C21/PG618E21) proposes a new interchange at the existing MD 4/Suitland Parkway at-grade intersection, in Prince George's County, Maryland. The proposed interchange configuration consists of a Diamond Interchange with a Directional Ramp. MD 4 will be lowered beneath Suitland Parkway for the construction of the interchange. Improvements to Suitland Parkway will be limited to deceleration and acceleration lanes. Portions of Presidential Parkway will be modified and reconstructed to accommodate the change in profile and acceleration and deceleration lanes from the interchange ramps. As part of this interchange design, MD 4 will be widened to a three lane section with room in the median for a future additional lane. The construction of a pedestrian path will also be included in this project. This JPA includes the impacts for the roadway construction referenced above as well as impacts from relocation of the NuStar jet fuel pipeline and the Marbury Drive stream restoration project. To see a detailed breakout of the impacts, see Appendix D.

Has any portion of the project been completed? ____ Yes __X__ No ____ If yes, explain ____

Is this a residential subdivision or commercial development? ____ Yes __X__ No

If yes, total number of acres on property N/A acres

b. ACTIVITY: Check all activities that are proposed in the wetland, waterway, floodplain, and nontidal wetland buffer as appropriate.

A. __X__ filling
B. ____ dredging
C. __X__ excavating
D. ____ flooding or impounding water
E. ____ draining
F. __X__ grading
G. __X__ removing or destroying vegetation
H. __X__ building structures

Area for items(s) checked: **Wetlands**

Nontidal Wetland - *Permanent*	3,902	sq. ft.	
Nontidal Wetland - *Temporary*	56,359	sq. ft.	
Tidal Wetland - *Permanent*	0	sq. ft.	
Tidal Wetlands - *Temporary*	0	sq. ft.	

Wetland Buffers

Buffer - *Permanent* (Nontidal Wetlands Only)	38,430	sq. ft.
Buffer - *Temporary* (Nontidal Wetlands Only)	32,726	sq. ft.
Expanded Buffer (Nontidal Wetland Only)	0	sq. ft.

Stream /Waters

Stream affected - *Permanent*	48,321	sq. ft.	4,222	LF
Stream affected - *Temporary*	5,176	sq. ft.	384	LF
Tidal Waters - *Permanent*	0	sq. ft.		
Tidal Waters - *Temporary*	0	sq. ft.		

100-year Floodplain

Disturbance in Floodplain	61,403	sq. ft.
Net Volume of Material in Floodplain		+/- CY

c. TYPE OF PROJECTS: Project Dimensions

For each activity, give overall length and width (in feet), in columns 1 and 2. For multiple activities, give total area of disturbance in square feet in column 3. For activities in tidal waters, give maximum distance channelward (in feet) in column 4. For dam or small ponds, give average depth (in feet) for the completed project in column 5. Give the volume of fill or dredged material in column 6.

			Length (Ft.) 1	Width (Ft.) 2	Area Sq. Ft. 3	Maximum/Average Channelward Encroachment 4		Pond Depth 5	Volume of fill/dredge material (cubic yards) below MHW or OHW 6
A.	____	Bulkhead							
B.	____	Revetment							
C.	____	Vegetative Stabilization							
D.	____	Gabions							
E.	____	Groins							
F.	____	Jetties							
G.	____	Boat Ramp							
H.	____	Pier							
I.	____	Breakwater							
J.	____	Repair & Maintenance							
K.	X	Road Crossing	varies	varies	251,202				
L.	____	Utility Line							
M.	____	Outfall Construction							
N.	____	Small Pond							
O.	____	Dam							
P.	____	Lot Fill							
Q.	____	Building Structures							
R.	____	Culvert							
S.	____	Bridge							
T.	____	Stream Channelization							
U.	____	Parking Area							
V.	____	Dredging							

1. ____ New 2. ____ Maintenance 3. ____ Hydraulic 4. ____ Mechanical

W. ____ Other (explain) ____

d. PROJECT PURPOSE: Give brief written description of the project purpose:
The purpose of this project is to improve safety and provide sufficient capacity to address existing and projected travel demands along this section of MD 4. The area in the immediate vicinity of the intersection has experienced substantial development growth. In addition, the traffic generated from the growth of the surrounding areas (Anne Arundel and Calvert Counties) needs to be accommodated. In order to address these concerns, and to improve the safety along this section of MD 4, SHA recommends construction of an interchange at MD 4 and Suitland Parkway.

3. PROJECT LOCATION:
a. LOCATION INFORMATION:

A. County: Prince George's B. City: Melwood C. Name of waterway or closest waterway Cabin Branch
D. State stream use class designation: USE I
E. Site Address or Location: MD 4 at Suitland Parkway
F. Directions from nearest intersection of two state roads: From I-95/495 southbound exit on MD 4 south (exit 11) towards Upper Marlboro. Continue south through the study area to the MD 4/Suitland Parkway intersection.
G. Is your project located in the Chesapeake Bay Critical Area (generally within 1,000 feet of tidal waters or tidal wetlands)?: ___ Yes X No
H. County Book Map Coordinates (Alexandria Drafting Co.); Excluding Garrett and Somerset Counties:
Map: 5651 Letter: B, C, D Number: 7, 8 (to the nearest tenth)
I. FEMA Floodplain Map Panel Number (if known): 2452080060C
J. 1. 38.829917 latitude 2. -76.856694 longitude

b. ACTIVITY LOCATION: Check one or more of the following as appropriate for the type of wetland/waterway where you are proposing an activity:

A. ___ Tidal Waters
B. ___ Tidal Wetlands
C. ___ Special Aquatic Site (e.g., mudflat, vegetated shallows)
D. X Nontidal Wetland
E. X 25-foot buffer (nontidal wetlands only)
F. ___ 100-foot buffer (nontidal wetland of special State concern)
G. X In stream channel
1. ___ Tidal 2. X Nontidal
H. X 100-year floodplain (outside stream channel)
I. ___ River, lake, pond
J. ___ Other (Explain)

c. LAND USE:

A. Current Use of Parcel Is: 1. ___ Agriculture: Has SCS designated project site as a prior converted cropland? ___ Yes ___ No 2. X Wooded 3. ___ Marsh/Swamp 4. X Developed
5. ___ Other

B. Present Zoning Is: 1. ___ Residential 2. X Commercial/Industrial 3. ___ Agriculture 4. ___ Marina 5. X Other Highway ROW
C. Project complies with current zoning X Yes ___ No

THE FOLLOWING INFORMATION IS REQUIRED BY THE STATE (blocks 4-7):

4. REDUCTION OF IMPACTS: Explain measures taken or considered to avoid or minimize wetland losses in F. Also check Items A-E if any of these apply to your project.

A. X Reduced the area of disturbance
B. ___ Reduced size/scope of project
C. ___ Relocated structures
D. X Redesigned project
E. ___ Other

F. Explanation Complete avoidance of impacts to WUS, wetlands and wetland buffers is not feasible at this location. However, SHA incorporated the following avoidance/minimization features into the proposed design in order to reduce impacts to nontidal WUS, wetlands and their buffers: (1) a retaining wall is being placed at STA. 82+50 - 84+50 on the southbound side of MD 4 to avoid impacts to WUS WL043, (2) the majority of the interchange footprint was planned north of Suitland Parkway in an area without WUS, wetlands, or their buffers, and (3) the PEPCO lot was reconfigured to avoid all impacts to wetland WL002B. Due to an anticipated reduction in size of PEPCOs storage lot by approximately 2 acres at mainline STA. 56+00, PEPCO requested that SHA fully replace the PEPCO storage lot in-kind by extending their existing lot. SHA responded by reducing the loss of PEPCOs existing lot (and the amount to be replaced) to 1.1 acres, and avoiding and minimizing resource impacts as much as possible in the area of the extended lot. SHA redesigned the proposed interchange and the extended lot concept such that wetland WL002B is completely avoided. The lot extension does require a pipe extension under the lot of about 188 LF. The pipe under the lot will be an extension of a piped stream that currently runs under MD 4 north and southbound lanes. See Appendix I for more avoidance and minimization discussion about the Pepco Lot.

Describe reasons why impacts were not avoided or reduced in Q. Also check Items G-P that apply to your project.

G. ____ Cost
H. ____ Extensive wetlands on site
I. X Engineering/design constraints
J. ____ Other natural features
K. ____ Parcel size
L. ____ Other regulatory requirement
M. X Failure to accomplish project purpose
N. ____ Safety/public welfare issue
O. ____ Inadequate zoning
P. ____ Other ____

Q. Description Complete avoidance of impacts to WUS, wetlands and wetland buffers is not feasible at this location. Site constraints include the following: (1) the two most impacted systems, WUS WL001A,B,C (811 l.F.) and WUS WL012 (1,017 l.F), are located directly adjacent to MD 4, between MD 4 and the Pennsylvania Ave. Access Rd., and (2) grading to lower MD 4 below Suitland Parkway requires minor unavoidable impacts to WUS systems flowing perpendicular to MD 4.

5. LETTER OF EXEMPTION: If you are applying for a letter of exemption for activities in nontidal wetlands and/or their buffers, explain why the project qualifies:

A. ____ No significant plant or wildlife value and wetland impact
   1. ____ Less than 5,000 square feet
   2. ____ In an isolated nontidal wetland less than 1 acre in size
B. ____ Repair existing structure/fill
C. ____ Mitigation Project
D. ____ Utility Line
   1. ____ Overhead
   2. ____ Underground
E. Other (explain) ____

F. X Check here if you are **not** applying for a letter of exemption.

IF YOU ARE APPLYING FOR A LETTER OF EXEMPTION, PROCEED TO BLOCK 11

6. ALTERNATIVE SITE ANALYSIS: Explain why other sites that were considered for this project were rejected in M. Also check any items in D-L if they apply to your project. **(If you are applying for a letter of exemption, do not complete this block):**

A. X 1 site
B. ____ 2 - 4 sites
C. ____ 5 or more sites

Alternative sites were rejected/not considered for the following reason(s):

D. ____ Cost
E. ____ Lack of availability
F. X Failure to meet project purpose
G. ____ Located outside general/market area
H. ____ Greater wetlands impact
I. ____ Water dependency
J. ____ Inadequate zoning
K. ____ Engineering/design constraints
L. ____ Other ____

M. Explanation This project is fixed by function and must occur at the existing MD 4/Suitland Parkway intersection.

7. PUBLIC NEED: Describe the public need or benefits that the project will provide in F. Also check Items in A-E that apply to your project. **(If you are applying for a letter of exemption, do not complete this block):**

A. X Economic
B. X Safety
C. _____ Health/welfare
D. _____ Does not provide public benefits
E. _____ Other _____

F. Description This project would benefit the public by relieving traffic congestion and improving safety by constructing a controlled access interchange at MD 4 and Suitland Parkway. In addition, these proposed improvements would better support the existing and planned growth of this area and surrounding areas, which would positively benefit the surrounding area's economic development. Travel times for commuters should also be improved.

8. OTHER APPROVALS NEEDED/GRANTED:

A. Agency	B. Date Sought	C. Decision 1. Granted	C. Decision 2. Denied	D. Decision Date	E. Other Status
MD 4/Suitland Parkway Interchange					
Maryland Historical Trust	5/27/2014			7/22/2014	
MD DNR Environmental Review	4/2/2012			4/29/2013	
MD DNR Wildlife and Heritage	4/18/2013			5/02/2012	
US Fish and Wildlife	4/2/2012			4/2/2012	
Marbury Mitigation Site					
MD DNR Environmental Review	5/1/2014			8/15/2014	
MD DNR Wildlife and Heritage	4/25/2014			5/5/2014	
US Fish and Wildlife	4/25/2014			5/1/2014	
Maryland Historical Trust	5/27/2014			7/22/2014	

9. MITIGATION PLAN: Please provide the following information:

a. Description of a monetary compensation proposal, if applicable (for **state requirements** only). Attach another sheet if necessary.

NA

b. Give a brief description of the proposed mitigation project.

Stream restoration design plans along Marbury Drive, in Prince George's County, are at semi-final review (previously submitted). Please refer to Appendix E for the Phase II Mitigation Plan.

c. Describe why you selected your proposed mitigation site, including what other areas were considered and why they were rejected.

This site was selected in cooperation with MDE/USACE following a comprehensive mitigation site search, as documented in the Mitigation Site Search Report October 2007 (previously submitted), and is best suited to replace the lost functions and values of resources at the MD 4/Suitland Parkway Interchange.

d. Describe how the mitigation site will be protected in the future.

The selected mitigation site will be protected through a Memorandum of Agreement with the City of District Heights (the landowners) and Prince George's County, who currently maintains the site.

10. HAVE ADJACENT PROPERTY OWNERS BEEN NOTIFIED?: A. X Yes B. _____ No

Provide names and mailing addresses below (Use separate sheet, if necessary):

a.	b.	c.
Please see Appendix F for a list of adjacent property owners and Certification of Notification.		

11. HISTORIC PROPERTIES: Is your project located in the vicinity of historic properties? (For example: structures over 50 years old, archeological sites, shell mounds, Indian or Colonial artifacts). Provide any supplemental information in Section 13.

A. X Yes B. _____ No C. _____ Unknown

12. ADDITIONAL INFORMATION: Use this space for detailed responses to any of the previous items. Attach another sheet if necessary:
See Appendix G for agency coordination

Check box if data is enclosed for any one or more of the following (see checklist for required information):

A.	____ Soil borings	D.	____ Field surveys	G.	____ Site plan
B.	X Wetland data sheets	E.	____ Alternate site analysis	H.	X Avoidance and minimization analysis
C.	____ Photographs	F.	____ Market analysis		

I. X Other (explain) Appendix A: MD 4/Suitland Parkway Interchange Wetland Impact Plates
Appendix B: NuStar Pipeline Relocation Wetland Impact Plates, Construction Plans, and Erosion and Sediment Control Plans
Appendix C: Marbury Stream Restoration Wetland Impact Plates, Construction Plans, and Erosion and Sediment Control Plans
Appendix D: Impact Summary Table
Appendix E: Phase II Mitigation Plan
Appendix F: Adjacent Property Owner List and Certification of Notification
Appendix G: Agency Coordination
Appendix H: Marbury Stream Mitigation Site Wetland Delineation Memo
Appendix I: Pepco Lot Avoidance and Minimization
Appendix J: Pre-Application Meeting Minutes

CERTIFICATION:

I hereby designate and authorize the agent named above to act on my behalf in the processing of this application and to furnish any information that is requested. I certify that the information on this form and on the attached plans and specifications is true and accurate to the best of my knowledge and belief. I understand that any of the agencies involved in authorizing the proposed works may request information in addition to that set forth herein as may be deemed appropriate in considering this proposal. I certify that all Waters of the United States have been identified and delineated on site, and that all jurisdictional wetlands have been delineated in accordance with the Corps of Engineers Wetlands Delineation Manual (Wetlands Research Program Technical Report Y-87-1). I grant permission to the agencies responsible for authorization of this work, or their duly authorized representative, to enter the project site for inspection purposes during working hours. I will abide by the conditions of the permit or license if issued and will not begin work without the appropriate authorization. I also certify that the proposed works are consistent with Maryland's Coastal Zone Management Plan. I understand that none of the information contained in the application form is confidential and that I may request that additional required information be considered confidential under applicable laws. I further understand that failure of the landowner to sign the application will result in the application being deemed incomplete.

LANDOWNER MUST SIGN:  DATE: 10-22-07

Mr. Todd Nichols, Chief
Environmental Programs Division
Office of Environmental Design

APPENDIX B:

Agency Coordination

MARYLAND
DEPARTMENT OF
NATURAL RESOURCES

Martin O'Malley, Governor
Anthony G. Brown, Lt. Governor
John R. Griffin, Secretary
Joseph P. Gill, Deputy Secretary

May 2, 2012

Mr. Bruce M. Grey
Maryland Department of Transportation
State Highway Administration
707 North Calvert Street
Baltimore, MD 21202

RE: Environmental Review for MD 4: from I-95/I-495 to MD 223, Improvements Including Interchange at Westphalia Road, Suitland Parkway and Dower House Road, Prince George's County, Maryland.

Dear Mr. Grey:

The Wildlife and Heritage Service has determined that there are no State of Federal records for rare, threatened or endangered species within the boundaries of the project site as delineated. As a result, we have no specific comments or requirements pertaining to protection measures at this time. This statement should not be interpreted however as meaning that rare, threatened or endangered species are not in fact present. If appropriate habitat is available, certain species could be present without documentation because adequate surveys have not been conducted or results not reported to us.

Thank you for allowing us the opportunity to review this project. If you should have any further questions regarding this information, please contact me at (410) 260-8573.

Sincerely,

Lori A. Byrne

Lori A. Byrne
Environmental Review Coordinator
Wildlife and Heritage Service
MD Dept. of Natural Resources

ER # 2012.0481.pg
Cc: T. Redman, DNR

United States Department of the Interior
U.S. Fish & Wildlife Service
Chesapeake Bay Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401
410/573 4575

Online Certification Letter

Today's date: April 2, 2012

Project: MD 4:from I-95/I-495 to MD 223

Dear Applicant for online certification:

Thank you for choosing to use the U.S. Fish and Wildlife Service Chesapeake Bay Field Office online list request certification resource. This letter confirms that you have reviewed the conditions in which this online service can be used. On our website (www.fws.gov/chesapeakebay) are the USGS topographic map areas where **no** federally proposed or listed endangered or threatened species are known to occur in Maryland, Washington D.C. and Delaware.

You have indicated that your project is located on the following USGS topographic map

Upper Marlboro

Based on this information and in accordance with section 7 of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*), we certify that except for occasional transient individuals, no federally proposed or listed endangered or threatened species are known to exist within the project area. Therefore, no Biological Assessment or further section 7 consultation with the U.S. Fish and Wildlife Service is required. Should project plans change, or if additional information on the distribution of listed or proposed species becomes available, this determination may be reconsidered.

This response relates only to federally protected threatened or endangered species under our jurisdiction. For additional information on threatened or endangered species in Maryland, you should contact the Maryland Wildlife and Heritage Division at (410) 260-8540. For information in Delaware you should contact the Delaware Natural Heritage and Endangered Species Program, at (302) 653-2880. For information in the District of Columbia, you should contact the National Park Service at (202) 535-1739.

The U.S. Fish and Wildlife Service also works with other Federal agencies and states to minimize loss of wetlands, reduce impacts to fish and migratory birds, including bald eagles, and restore habitat for wildlife. Information on these conservation issues and how development projects can avoid affecting these resources can be found on our website (www.fws.gov/chesapeakebay).

We appreciate the opportunity to provide information relative to fish and wildlife issues, and thank you for your interest in these resources. If you have any questions or need further assistance, please contact Chesapeake Bay Field Office Threatened and Endangered Species

program at (410) 573-4531.

Sincerely,

Genevieve LaRouche
Field Supervisor

MARYLAND
DEPARTMENT OF
NATURAL RESOURCES

Martin O'Malley, Governor
Anthony G. Brown, Lt. Governor
John R. Griffin, Secretary
Joseph P. Gill, Deputy Secretary

Coordination Sheet for Maryland Department of Natural Resources, Environmental Review Unit information on fisheries resources, including anadromous fish, related to project locations and study areas

DATE OF REQUEST April 2, 2012: NAME OF REQUESTOR: Chrissy Brandt

PROJECT NAME AND LOCATION: MD 4: from I-95/I-495 to MD 223

The Maryland State Highway Administration is proposing improvements to MD 4 from east of the I-95/I-495 Interchange to west of MD 223 in Prince George's County, including interchange construction at Westphalia Road, Suitland Parkway, and Dower House Road. SHA initially coordinated with your agency during preparation of an Environmental Assessment/Finding of No Significant Impact, approved in 1998 and 2000, respectively. Due to the length of time that has elapsed since the previous coordination, we are reinitiating this request. A map of the project locations has been included for your reference.

NAME OF STREAM(S) (and MDE Use Classification) WITHIN THE STUDY AREA:
Unnamed Tributary to Cabin Branch, Use I

SUB-BASIN (6 digit watershed): 02-13-11

DNR RESPONSE:

__X__Generally, no instream work is permitted in Use I streams during the period of March 1 through June 15, inclusive, during any year.

ADDITIONAL FISHERIES RESOURCES NOTES

Fish species identified by Maryland Biological Stream Survey (MBSS) in nearby locations include American eel, blacknose dace, creek chub, pumpkinseed, redbreast sunfish, swallowtail shiner, tessellated darter, and white sucker.

ADDITIONAL COMMENTS ON BMPS:

Existing riparian vegetation in the area of the stream channel should be preserved as much as possible to maintain aquatic habitat and provide shading to the stream. Areas designated for the access of equipment and for the removal or disposal of material should avoid impacts to the stream and associated riparian vegetation. Any temporarily disturbed areas should be restored and re-vegetated. The use of concrete or grouting required to conduct repairs should be managed to assure curing processes do not impact the stream or modify stream PH.

Any expected potential fish species should be adequately protected by the Use I instream work prohibition time of year restriction referenced above, through sediment and erosion control measures, and other Best Management Practices.

MD DNR, Environmental Review Unit signature

DATE: ---------4-29-2013----------

Martin O'Malley, *Governor*
Anthony G. Brown, *Lt. Governor*

State Highway Administration
Maryland Department of Transportation

James T. Smith, Jr., *Secretary*
Melinda B. Peters, *Administrator*

May 27, 2014

RE: Project No. PG618C21
MD 4 at Suitland Parkway Interchange
Prince George's County, Maryland
USGS *Upper Marlboro* 7.5' Quadrangle

Mr. J. Rodney Little
State Historic Preservation Officer
Maryland Historical Trust
100 Community Place
Crownsville MD 21032-2023

Dear Mr. Little:

This letter serves to provide the Maryland Historical Trust (MHT) with the draft Memorandum of Agreement (MOA) for the proposed SHA Project No. PG618B21, MD 4 over the Suitland Parkway. SHA has funded the project for construction and we are providing MHT with a detailed project description including design refinements as part of the ongoing consultation. It is SHA's determination that the project will have an adverse impact on historic properties including the Suitland Parkway; SHA received MHT's concurrence on July 9, 2010. The MOA that was previously circulated on June 25, 2013 has been revised for a final review prior to signature. The copy provided with this letter as Attachment 1 addresses additional comments made by the National Park Service (NPS) and the Federal Highway Administration (FHWA). SHA is working closely with the NPS, both the National Capital Region and the National Capital Parks East, which manages the Suitland Parkway. Also included in the consultation are Joint Base Andrews, the Prince George's County Historic Preservation Commission, and Prince George's Heritage, Inc. SHA's proposed MOA is provided here for these agencies' comments. SHA's proposed project is to construct a grade-separated, signalized diamond interchange between MD 4 (Pennsylvania Avenue) and the Suitland Parkway, with a directional ramp at the intersection of MD 4 and Suitland Parkway/Presidential Parkway. The Suitland Parkway is listed in the National Register of Historic Places (NRHP) (PG:76A-22/NR-1175) and is located near Joint Base Andrews (JBA) in Prince George's County, Maryland.

Project Description:

SHA proposes to construct a grade-separated interchange at the intersection of MD 4 and Suitland Parkway/Presidential Parkway, involving improvements within the NRHP boundary of the Suitland Parkway, as depicted on the plans included as Attachment 2. The project will

include a directional overpass from MD 4 to the Suitland Parkway; a hiker-biker trail within the boundary of the JBA; relocation of the fuel line within both the Suitland Parkway boundary and JBA; a breakout utility project that will be constructed in advance of the actual interchange project on the east side of MD 4; stream restoration at the Marbury Stream mitigation site; and an exchange with NPS of lands near Fort Foote Park purchased by SHA for this purpose.

MD 4 (Pennsylvania Avenue) in Prince Georges County is a heavily traveled, four-lane north-south corridor. The Suitland Parkway interchange is one of three interchanges along MD 4 being designed to replace at-grade intersections between I-495 and MD 223. The proposed Suitland Parkway interchange configuration (Alternative 3) would construct a grade-separated, signalized diamond interchange with a directional ramp at the intersection of MD 4 and Suitland Parkway/Presidential Parkway. To accommodate the heavy left turn movement from MD 4 northbound to Suitland Parkway westbound, Ramp D would be a two-lane, free flow directional ramp that will include improvements within the NRHP boundary of the Suitland Parkway.

The existing condition of Suitland Parkway is four 12-foot lanes (two in each direction) with a three-foot shoulder on each side and a five-foot median. In the proposed typical section, the two 12-foot westbound lanes of Suitland Parkway would remain unaltered; however, in the eastbound direction the two existing 12-foot lanes would be widened to four 12-foot lanes. The four lanes will include two through lanes, a combined through right-turn lane, and an exclusive right turn lane which will then proceed onto southbound MD 4 via a channelized right-turn ramp.

As part of this interchange design, MD 4 would be widened to a three lane section with room in the median for a future additional lane. The centerline of MD 4 would be shifted approximately 75 feet east to reduce impacts to the Suitland Parkway. A four-way signalized intersection would be constructed with Suitland Parkway west of MD 4 to control traffic from the southbound MD 4 on- and off-ramps. The eastern leg of the interchange (existing Presidential Parkway) would be extended east as outlined in Prince George's County approved developer plans for the area. The extended east-west route would be renamed Central Park Drive. Presidential Parkway would be realigned to connect with Central Park Drive at an intersection east of the intersection with northbound MD 4 on- and off-ramps.

Improvements to the Suitland Parkway would be limited to raising the profile and widening Suitland Parkway to provide deceleration and acceleration lanes as it approaches MD 4. The large traffic volume from eastbound Suitland Parkway to southbound MD 4 requires the provision of additional lanes over the historic concrete arch Suitland Parkway Bridge, which would not be able to accommodate the proposed typical section. In order to provide additional lanes, the concrete arch bridge would be widened from 70 feet to 106 feet. To maintain the aesthetics and design features of the historic bridge, the existing stone-faced piers, abutments, wingwalls, parapets, and spandrels on the south elevation will be carefully removed and reused on the widened portion of the bridge. In the proposed typical section, the westbound direction of Suitland Parkway would be unchanged (two lanes), but in the eastbound direction there would be four 12-foot lanes passing over the bridge: two through lanes, a combined through-right turn lane, and an exclusive right turn lane which will then split off east of the bridge to proceed onto southbound MD 4 via Ramp K. The portion of Presidential Parkway to the east of MD 4 will be

modified and reconstructed to accommodate the change in profile and the acceleration and deceleration lanes from the interchange ramps. A bike path will be constructed on the north side of the interchange.

From the northbound MD 4 off-ramp, a two-lane directional ramp would be constructed to carry traffic from northbound MD 4 to westbound Suitland Parkway, crossing over existing Presidential Parkway then curving west to cross over MD 4, descending to a tie-in with westbound Suitland Parkway immediately west of the existing ramp from Old Marlboro Pike and the JBA North Gate.

To the north of the JBA North Gate, the existing ramp from Old Marlboro Pike to westbound Suitland Parkway would be removed along with the existing loop ramp from westbound Suitland Parkway to the JBA North Gate. Access to the JBA North Gate would be provided via a newly constructed road extending from the Old Marlboro Pike access road south, then under the directional ramp and the historic concrete arch Suitland Parkway Bridge to JBA North Gate. The existing ramp from JBA North Gate to southbound MD 4 via Suitland Parkway would be removed. Access to southbound MD 4 would be provided via an access road providing a connection to Old Marlboro Pike. This road would provide drivers with the option to continue onto southbound MD 4 via a right-hand turn. The access ramp from JBA North Gate to westbound Suitland Parkway would be reconstructed to align with the directional ramp tie-in to westbound Suitland Parkway.

The MD 4 and Suitland Parkway interchange will be designed to provide a symbolic entrance to the nation's capital and to complement the historic character of the Suitland Parkway. Specific design elements include extensive landscaping throughout the interchange, the reconstruction of a historic parkway bridge, and aesthetic treatment of new structures and ramps. The construction of the interchange will require the permanent transfer of approximately seven acres of perpetual easement from NPS to SHA, and an additional 18-acre temporary occupancy area required for construction from the NPS property. No right-of-way will be acquired; however a perpetual easement is needed for all roadways, drainage facilities, and slopes that SHA will be required to maintain.

Areas identified for perpetual easements from NPS include:

- The land that would be occupied by the directional ramp from MD 4 northbound to Suitland Parkway westbound as it traverses Suitland Parkway property, north of the Suitland Parkway mainline;
- Suitland Parkway approaches to the proposed interchange from immediately east of the bridge over the entrance ramp to JBA to the existing SHA ROW; and
- The land that would be occupied by the directional ramp connecting eastbound Suitland Parkway with southbound MD 4.

A Special Use Permit with NPS would provide for the 18-acre temporary occupancy area covering construction staging, grading and drainage, resurfacing and reconstruction of the approach roadways, construction of the bike/multi-use path, re-vegetation, post-construction vegetation monitoring, and invasive species management. There would be no permanent change

in the use of the temporary occupancy areas.

NuStar Energy, L.P. owns and operates an eight-inch high pressure petroleum products pipeline that services Andrews Air Force Base. The existing pipeline runs parallel to and along the north side of Suitland Parkway, then crosses under the Parkway and runs along the west side of MD 4. The Pipeline would be impacted by the proposed undertaking and would need to be relocated. The project limits of the interchange construction encompass approximately 8,800 linear feet of the existing NuStar pipeline, requiring several sections to be relocated. Permit plates showing the pipeline relocation are included as Attachment 3. Please note that due to security concerns, the plans may not be disseminated to the public.

The utility breakout project provides for the construction of a utility corridor east of MD 4 at Suitland Parkway, as depicted on the plans included as Attachment 4. The work is mainly along the service road to the east of MD 4. It starts north of the intersection with Machinists Place/Pennsylvania Avenue Service Road and continues to just south of the Westphalia Rd/ MD 4 intersection. The total length of the corridor is about 3,330 feet. The work consists of constructing a graded and stabilized access road that will facilitate utility relocations by others. The project also involves demolition of a building (formerly owned by Walton Westphalia, Item 99976, plat # 57640) and removal of pavement from the parking lot. The lot would be removed and graded. The work will consist of, but will not be limited to: clearing and grubbing; earthwork (compaction, borrow and excavation); drainage structures; building demolition and disposal; pavement removal; erosion and sediment control; maintenance of traffic; Geogrid installation; temporary traffic control; landscaping; and incidentals necessary to complete the utility work.

The Marbury Stream Restoration project will provide offsite mitigation for the MD 4 at Suitland Parkway project. Mitigation will consist of stream stabilization and buffer plantings. The site is within the developed residential neighborhood of District Heights, between eastbound and westbound Marbury Drive, and measures approximately 60 feet wide by 2500 feet long (Attachment 5). Land use along the stream consists of maintained lawns with some sparsely scattered trees, primarily at the top of the slope, closest to the roadway. As such, the trees provide no stream buffer or shading.

SHA intends to design and implement a more natural setting to replace the existing, maintained stream. The work will involve buffering the stream channel with native plantings to provide shade. All vegetation would be native and appropriate for the Coastal Plain physiographic province of Maryland. Trees selected for the planting design would meet an average maximum height requirement, as suggested by SHA and Prince George's County, to minimize the viewshed impact to the properties surrounding the study site. Recommended plantings include herbaceous species such as soft rush and Joe Pye Weed. SHA plans to coordinate with the surrounding community (or representatives from the County) to incorporate the community's plant preferences into the design. Riffle grade controls will be installed, a failing weir will be removed, and stormwater treatment bars will be installed at each of eight outfalls located along the stretch of stream.

Community enhancement features under consideration include a pedestrian bridge, street trees, additional lighting, benches, trash cans, and an educational or town gateway sign. No property will be acquired. The site is located entirely within Prince George's County right-of-way.

Funding

Federal funds are anticipated for this project.

Prior Coordination

On December 16, 1997, SHA determined that the proposed interchange between MD 4 and the Suitland Parkway would have an adverse effect on historic properties. The Maryland Historical Trust (MHT) concurred with the determination on March 6, 1998. In 1999, the Federal Highway Administration (FHWA), MHT, and the National Park Service (NPS) executed an MOA to resolve adverse effects. The 1999 MOA has been superseded by the draft MOA included as Attachment 1 based on subsequent changes to the design of the proposed interchange since 1999. The project will continue to have an adverse effect on the Suitland Parkway, as indicated in SHA's most recent letter to MHT dated March 31, 2010. MHT concurred with the continued adverse effect determination on July 9, 2010.

Area of Potential Effects

In determining the Area of Potential Effects (APE) for this project, SHA considered possible visual, audible, atmospheric and/or physical impacts to historic properties, both archaeological sites and standing structures that would diminish any National Register of Historic Places (NRHP) qualifying characteristic of the historic property's integrity. The project will require additional right-of-way as well as perpetual and temporary easements. The APE includes the historic standing structures within or immediately facing the highway, interchange, and/or access road. The APE for the stream restoration project will be confined to the limits of disturbance of the mitigation project, since the work will be at or below grade of the road. The archaeology survey area within the APE is defined as the limits of construction where ground disturbance would occur. The discontiguous APE is indicated on the attached USGS quadrangle maps for Upper Marlboro in Attachment 6 (6A and 6B).

Identification Methods and Results

Potentially significant architectural and archaeological resources were both researched as part of the historic investigation instigated by the proposed interchange construction project.

Architecture: SHA Architectural Historian Anne E. Bruder consulted the SHA-GIS Cultural Resources Database, NRHP and MIHP forms, the Integrated Cultural Resources Management Plan, Andrews Air Force Base, Maryland (US Army Corps of Engineers 2009), Washington Parkways Historic Resources Studies (Krakow 1990) and photographs at the SHA library and made field visits on May 12 and 13, 2014 to JBA, Suitland Parkway and District Heights to view the project areas. In addition, Ms. Bruder regularly has attended team meetings with FHWA and the NPS to discuss the project.

The APE for this project includes both the Suitland Parkway, PG:76A-22, which is listed in the NRHP, and JBA (formerly Andrews Air Force Base) which contains historic standing structures that are confined to the west side of the base. SHA's project will impact the east end of the Suitland Parkway and the northern and eastern portions of JBA.

As noted above, SHA previously determined that the proposed alterations to the east end of the Suitland Parkway in order to create a signalized diamond interchange with a directional ramp would have an adverse impact on historic properties, including the Suitland Parkway. Additional project elements such as a hiker-biker trail and the fuel line will be constructed within the boundaries of JBA. However, this work will be an in-kind replacement of an existing trail and pipe. There are no historic standing structures in the APE within JBA. Likewise, SHA proposes to install an access road along the east side of MD 4 in order to relocate utilities associated with the MD 4/Suitland Parkway project. During SHA's May 13, 2014 field visit, the Samuel T. Wood Property, a former farm that has been converted to an industrial complex was identified. The property is largely overgrown, but several outbuildings are visible. SHA took photographs and has determined that the Samuel T. Wood Property lacks integrity of design, workmanship, feeling and association. Additional research did not identify events, persons or architectural designs that meet the requirements of NRHP Criteria A (events), B (persons) or C (architecture) of state, local or national significance. As a result, SHA has determined that the Samuel T. Wood Property is not eligible for inclusion in the NRHP. A short form DOE along with photographs and a location map are included in Attachment 7.

On May 12, 2014, SHA also made a field visit to District Heights to view the proposed Marbury Stream Restoration project location. The Prince George's County Historic Preservation Office has a written evaluation of the District Heights Survey Area, PG:75A-057. The District Heights Survey Area consists of 1,328 primary resources that were constructed between the 1920s and the 1960s. Near the stream, the houses are typical post-World War II suburban residential examples of raised ranch, split level and ranch houses constructed between 1958 and 1965. Given the large number of resources in the survey area and the confined APE, SHA has not evaluated any of the houses facing the Marbury Drive Stream Restoration. None of the houses are on the stream's banks, but all are separated by the eastbound and westbound streets on either side of the stream and plantings on the individual lots. As a result, there is a very limited viewshed of the stream from any house facing the stream.

The stream is an unnamed tributary to the southwest branch of the west branch of the Patuxent River which has been channelized as a result of residential and street construction. It is surrounded by grass on the embankments with trees standing near the streets on either side. SHA will provide new plantings and a pedestrian bridge crossing the stream that will not introduce any new visual elements to the stream area that are out of character with the neighborhood. SHA makes this determination since the work will be at or below the grade of the surrounding roads. There are no historic standing structures in the APE and the proposed stream improvements will have no impact on historic standing structures.

As noted above, SHA's proposed project, MD 4 at Suitland Parkway Interchange will have an adverse impact on the Suitland Parkway, a historic property. SHA's proposed MOA to address the adverse effect includes items that have long been discussed by the consulting parties, including reconstruction of the historic Suitland Parkway Bridge over the JBA entrance ramp, as well as the low guard wall which separates the entrance and exit ramps leading from the JBA gate. The MOA is included for your review and comment (Attachment 1). We hope to complete the review so that we can move forward with executing the agreement. The version provided includes comments made by the NPS and FHWA.

Archaeology: SHA archaeologist Richard Ervin assessed design changes to the MD 4 at Suitland Parkway interchange project, including the current design of the NuStar pipeline relocation, the MD 4/Suitland Parkway breakout utility project, and the Marbury stream mitigation site. The assessment was based on review of previous archaeological studies, topographic and soils maps, aerial photographs, and examination of the SHA-GIS Cultural Resources database. Field visits were made to the project area in 2007 and 2012.

GIS shapefiles for the 8-Inch Pipeline Relocation at about 70% design completion, provided in April 2014, were used to assess potential impacts of the proposed pipeline relocation. The archaeology survey area of the Pipeline Relocation is defined as the additional limits of proposed construction, where ground disturbance would occur. Final Plans at 95% completion were used to assess the potential impacts of the breakout utility project. The survey area of the breakout utility project is also defined as the additional limits of proposed construction, where ground disturbance would occur.

The MD 4/Suitland Parkway archaeology survey area crosses gently sloping terrain cut by several tributaries of Cabin Branch, which flow to the east. At the west end of the survey area, the headwaters of Henson Creek parallel the east end of the Suitland Parkway. Soils are part of the Beltsville-Leonardtown-Chillum association, moderately deep, gently sloping, well-drained to poorly drained soils with a compact substratum.

Fiedel (1998) surveyed the MD 4 project corridor from east of I-95 to west of MD 223. Extensive shovel testing, which was concentrated near the proposed MD 4/Suitland Parkway interchange and at the northern and southern termini of the survey area, recorded no archaeological sites, and indicated considerable disturbance throughout the survey area.

Moeller et al. (1995) conducted Phase I survey of Andrews Air Force Base, now JBA, and Child and Heidenrich (2004) conducted survey of the areas at the northern perimeter of the Base for a safety zone tree control project. The former study recorded several historic period sites (18PR443 to 18PR446, and 18PR448) and one prehistoric site (18PR447) on the Air Force Base property; Child and Heidenrich (2004) recorded no archaeological sites. None of the recorded sites are in the archaeological survey area for the MD 4 at Suitland Parkway interchange or the proposed gas line relocation.

Other parts of the archaeology survey area were examined by Jones et al. (2002; survey of Suitland Parkway); and by Banguilan and Boyd (2007; survey of the Westphalia Center tract). A series of five adjacent late historic period archaeological sites (18PR843 to 18PR847) were recorded in the larger MD 4 Suitland Parkway interchange survey area by Banguilan and Boyd (2007). The sites are a series of middle to late twentieth century house sites described as disturbed (Banguilan and Boyd 2007) by building construction and their recent demolition. The poor integrity of the sites, together with their recent age, suggests little research value.

No archeological sites have been recorded in the survey area of the NuStar Pipeline Relocation, which was examined by Moeller et al. (1995) and Fiedel (1998). The proposed pipeline alignment follows the south side of the Suitland Parkway, crossing into the northern edge of the JBA property, then following the west side of existing MD 4. The additional impacts caused by the NuStar pipeline relocation are minor, and primarily occur within areas disturbed by road and associated utility construction, commercial development, and development of JBA. Disturbance is indicated by mapped soils in the additions to the survey area, which are (from west to east) as Potobac-Issue complex, frequently flooded; Beltsville silt loam; Beltsville-Urban Land complex; Woodstown sandy loam; Udorthents, highway; Grosstown gravelly silt loam; Grosstown-Urban Land complex; Marr-Dodon complex; Marr-Dodon Urban Land complex; and Udorthents.

Parts of the breakout utility project survey area were examined by Fiedel (1998) and Banguilan and Boyd (2007), who recorded one site in the survey area, 18PR845, one of a series of middle to late twentieth century house sites (Banguilan and Boyd 2007). The refinement is located east of MD 4, in terrain characterized by a mix of grassed areas; forested terrain; and areas disturbed by twentieth century residential and commercial properties, residential demolition, and light industrial activity. Soils in the addition to the survey area for the breakout Utility project are mapped as well-drained Marr-Dodon complex; Sassafras-Urban Land complex; Marr-Dodon fine sandy loam, 0- 5% slopes; and Udorthents, highway.

Archaeological site 18PR845, which would be impacted by the breakout utility project, was determined not eligible for the NRHP on April 3, 2007 according to the DOE database. Based on the negative results of previous archaeological investigations in the survey area, and the extensive disturbance documented throughout the archaeological survey area, the proposed design changes from the pipeline relocation and the breakout utility project will not impact significant archaeological sites. No further archaeological work is warranted.

For the proposed Marbury Stream Restoration project, the survey area is defined as the limits of proposed construction, where ground disturbance would occur. No archaeological surveys have been done, and no archaeological sites have been recorded in the survey area, which is a channelized stream flanked by middle twentieth century suburban development. The stream was channelized and straightened as part of twentieth century residential development. Based on prior disturbance and the minor scope of construction, which will be confined to the graded streambanks, the undertaking will not impact significant archaeological sites. No further archaeological work is warranted.

Review Request

Please examine the attached maps, plans, short form DOE with attachments, and Eligibility and Effects Table (Attachment 8), along with the attached MOA. We request any comments that MHT may have by June 25, 2014. We also request your concurrence with our eligibility and impact determinations on project design changes, and our determination that there would continue to be adverse effects on the Suitland Parkway, an historic property by the construction of the MD 4 at Suitland Parkway Interchange. By carbon copy, we invite the National Park Service, both the National Capital Region and the National Capital Parks East, Prince George's County Historic District Commission, Prince George's Heritage, Inc., and the Maryland Commission on Indian Affairs to provide comments and participate in the Section 106 process. Relevant federally recognized tribes will also be invited to consult. Pursuant to the requirement of the implementing regulations found at 36 CFR Part 800, SHA seeks their assistance in identifying historic preservation issues as they relate to this specific project (see 36 CFR §800.2(c)(4) and (6), and §800.3(f) for information regarding the identification and participation of consulting parties, and §800.4, and §800.5 regarding the identification of historic properties and assessment of effects). For additional information regarding the Section 106 regulations, see the Advisory Council on Historic Preservation's website, www.achp.gov, or contact the Maryland State Highway Administration or the Maryland Historical Trust). If no response is received by June 25, 2014, we will assume that these offices decline to participate. Please contact Ms. Anne E. Bruder at 410-545-8559 (or via email at abruder@sha.state.md.us) with questions regarding standing structures for this project. Mr. Richard G. Ervin may be reached at 410-545-2878 (or via email at rervin@sha.state.md.us) with concerns regarding archaeology.

Very truly yours,

April Fehr
For

Digitally signed by April Fehr for
DN: cn=April Fehr for, o=SHA,
ou=EPLD-CRS,
email=afehr@sha.state.md.us, c=US
Date: 2014.05.27 16:09:52 -04'00'

Julie M. Schablitsky
Assistant Division Chief
Environmental Planning Division

Attachment:
1) MD 4 at Suitland Parkway Memorandum of Agreement (DRAFT)
2) Project Plans, MD 4 at Suitland Parkway
3) Project Plans, NuStar Pipeline Relocation
4) Project Plans, Breakout Utility Project
5) Location Map, Marbury Stream Restoration
6) APE Maps 6A and 6B
7) DOE Short Form with photographs and map
8) Eligibility and Effects Table

cc: Ms. Katherine Birmingham, NPS-NCPE
Ms. Anne E. Bruder, SHA-EPLD
Mr. E. Keith Colston, Administrator, Maryland Commission on Indian Affairs
Mr. Richard G. Ervin, SHA-EPLD
Mr. Joel Gorder, NPS-NCR
Mr. Moreshwar Kulkarni, SHA-OOS
Ms. Heather Lowe, SHA-EPLD
Ms. Jeanette Mar, FHWA-DelMar Division
Mr. Robert Mocko, NPS-NCPE
Ms. Alexis Morris, RK&K
Ms. Keilyn Perez, FHWA-DelMar Division
Ms. Tammy Stidham, NPS-NCR

Concurrence with the MD State Highway Administration's Determination(s) of Eligibility and/or Effects

Project Number: PG618C21 **MHT Log No.** 2014027 86
Project Name: MD 4 at Suitland Parkway Interchange
County: Prince George's
Letter Date: May 22, 2014

The Maryland Historical Trust has reviewed the documentation attached to the referenced letter and concurs with the MD State Highway Administration's determinations as follows:

Eligibility (as noted in the Eligibility Table [Attachment 8]):

- [X] Concur
- [ ] Do Not Concur

Effect (as noted in the Effects Table [Attachment 8]):

- [ ] No Properties Affected
- [ ] No Adverse Effect
- [ ] Conditioned upon the following action(s) (see comments below)
- [X] Adverse Effect

Comments:

THANK YOU FOR PROVIDING OUR OFFICE WITH A COPY OF THE DRAFT MEMORANDUM OF AGREEMENT FOR OUR REVIEW. WE HAVE ADDED COMMENTS AND EDITS DIRECTLY TO THE ELECTRONIC VERSION OF THE DOCUMENT, WHICH WE HAVE SENT DIRECTLY TO MS. ANNE BRUDER. WE LOOK FORWARD TO WORKING WITH SHA TO FINALIZE THE AGREEMENT.

By: _____ 7-22-14
MD State Historic Preservation Office/ Date
Maryland Historical Trust

Return by U.S. Mail or Facsimile to:
Dr. Julie M. Schablitsky, Assistant Division Chief, Environmental Planning Division,
MD State Highway Administration, P.O. Box 717, Baltimore, MD 21203-0717
Telephone: 410-545-8870 and Facsimile: 410-209-5046

MEMORANDUM OF AGREEMENT AMONG THE FEDERAL HIGHWAY ADMINISTRATION, THE NATIONAL PARK SERVICE, THE MARYLAND STATE HISTORIC PRESERVATION OFFICER AND THE MARYLAND STATE HIGHWAY ADMINISTRATION PURSUANT TO 36 CFR 800 REGARDING CONSTRUCTION OF THE MD 4/SUITLAND PARKWAY INTERCHANGE IN PRINCE GEORGE'S COUNTY, MARYLAND

WHEREAS, the Federal Highway Administration (FHWA) proposes to assist the Maryland State Highway Administration (MD SHA) with the improvements to the MD 4/Suitland Parkway Interchange in Prince George's County (Undertaking); and

WHEREAS, after detailed study of alternatives, the MD SHA has selected the following Preferred Alternative for construction: MD 4/Suitland Parkway Diamond Interchange with a directional ramp; and

WHEREAS, the FHWA has determined that the Undertaking will have an adverse effect on Suitland Parkway (MIHP No. PG:76A-22), which is listed in the National Register of Historic Places (NRHP) under Criteria A and C; and

WHEREAS, the FHWA has consulted with the Maryland State Historic Preservation Officer (MD SHPO) pursuant to 36 CFR Part 800, the regulations implementing Section 106 of the National Historic Preservation Act (16 USC 470f); and

WHEREAS, the National Park Service (NPS), the federal agency with jurisdiction over the Suitland Parkway which is part of a unit of the National Park System, has participated in the Section 106 process for the Undertaking; and

WHEREAS, FHWA shall serve as the lead Agency Official pursuant to 36 CFR 800.2(a)(2) and shall act in cooperation with NPS in order to fulfill their respective responsibilities under the requirements Section 106 of the National Historic Preservation Act of 1966; and

WHEREAS, FHWA has invited NPS to be a signatory to this Memorandum of Agreement (MOA); and

WHEREAS, in 1999, FHWA assisted MD SHA with the planning for improvements to the MD 4/Suitland Parkway Interchange that resulted in a signed Memorandum of Agreement between FHWA, the MD SHPO, the NPS, MD SHA and the Advisory Council on Historic Preservation (the Council) that has expired and the same parties now propose this MOA; and

WHEREAS, the MD SHA has participated in consultation, has responsibilities for implementing stipulations under this MOA, and has been invited to be a signatory to this MOA; and

WHEREAS, the United States owns in fee the property on the west side of MD 4 which contains the portion of the Suitland Parkway administered by the NPS, and prior to the commencement of the on-site work, the NPS will undertake a land exchange with the MD SHA of lands in the amount of 7.0 Acres required for the Undertaking's construction, operations and maintenance of the bridges, ramps and landscaping; and

WHEREAS, SHA will apply to NPS for permits to access the Suitland Parkway for activities including construction of the interchange and incidentals, and will comply with the Archaeological Resources Protection Act (ARPA) and other permits, if needed; and NPS's processing and issuance of these permits constitutes Federal undertakings by the NPS; and

WHEREAS, the NPS administers the property which contains and will continue to contain the Suitland Parkway, and will issue permit(s) to allow MD SHA access to lands in the amount of 9.5 Acres for nine (9) years including four years of construction and five years for post-construction landscape maintenance, , also all constituting a Federal undertaking by the NPS; and

WHEREAS, the MD SHPO agrees that fulfillment of the terms of this MOA will satisfy the responsibilities of any Maryland state agency under the requirements of the Maryland Historical Trust Act of 1985, as amended, State Finance and Procurement Article §§ 5A-325 and 5A-326 of the Annotated Code of Maryland, for any components of the Undertaking that require licensing, permitting, and/or funding actions from Maryland state agencies; and

WHEREAS, the MD SHA held a public meeting on April 12, 2008, and notified the public through newsletter(s) and posting of National Environmental Policy Act (NEPA) documentation on the SHA Project and NPS PEPC websites during 2014; and

WHEREAS, the FHWA has notified the Council of the adverse effect determination, and the Council has declined to participate in the consultation; and

NOW THEREFORE, the FHWA, NPS, MD SHPO and MD SHA agree that the undertaking shall be implemented in accordance with the following stipulations evidencing that the signatories have taken into account the effect of the undertaking on historic properties.

STIPULATIONS

FHWA and MD SHA will ensure that the following measures will be implemented: .

I. Mitigation Measures for Suitland Parkway (MIHP No. PG:76A-22)

A. All activities of the Undertaking that physically affect Suitland Parkway shall be conducted in compliance with NPS requirements and permits.

B. MD 4/Suitland Parkway Interchange Design Plan Review –

1. MD SHA shall provide a copy of the 90% interchange design plans, including the designs for the historic bridge, new bridges and ramps, pedestrian trail, traffic

barrier, utilities, decorative fencing and decorative finishes, lighting and landscaping for approval by the MD SHPO and NPS. The MD SHPO and the NPS shall provide review comments about the plans within thirty (30) calendar days after receipt.

2. If the MD SHPO or the NPS cannot provide comments within the 30 day period, at 30 days following receipt, each party shall notify the MD SHA about a date certain by which comments will be made.
3. If the MD SHPO or the NPS object to any aspect of the plans, the objecting party will follow the procedure stipulated in Stipulation VII below.

C. Treatment of Historic Suitland Parkway Bridge over Entrance Ramp to Joint Base Andrews North Gate and Ramp Salvage and Reuse of Stone

1. MD SHA shall require its Contractor to salvage and reuse the stone cladding from the historic bridge and the stone guard wall on the ramp. Each stone will be cleaned, stockpiled and reset on the new portion of the bridge and wall in the same manner as the historic bonding pattern. If, during removal, any stone is lost or damaged, the Contractor will be responsible for obtaining stone similar in color, size, shape and integrity to complete the design.
2. Interim Protection of Stone – Following the removal of the stone cladding from the historic bridge and wall, the Contractor will be responsible for storing the cleaned stone in a secure location until it is reset on the historic Suitland Parkway Bridge.

D. New Stone for Suitland Parkway Bridge and Ramp –

1. If it is not possible to salvage and re-use the stone cladding from the historic bridge and/or wall, MD SHA shall require its Contractor to obtain new stone for the cladding that matches the original in color and integrity.
2. Selection of Stone for Suitland Parkway Bridge and Ramp Wall -- FHWA and MD SHA will provide NPS and MD SHPO with the opportunity to make the stone selection by visiting up to three (3) local quarries that have the similar type of stone as the stone used on the historic Suitland Parkway Bridge.
    a. At each quarry, a selection of stone will be examined to determine suitability for inclusion on the historic Suitland Parkway Bridge based on color, durability and integrity.
    b. The name of the selected quarries and chosen stone(s) will be included in the Contract Documents.
    c. Prior to construction, the SHA contractor will create three (3) sample panels using the selected stone to demonstrate the color and texture of the cladding, the bonding pattern and the mortar.
    d. The NPS and the MD SHPO will meet with MD SHA on site at the historic bridge to compare the sample panels with the original stone cladding to make a final determination of which stone and mortar to use. Information about the requirements for the three samples and notification of the parties will be found in the Contract Documents.
    e. In the event that MD SHA is unable to provide comparable stone, MD SHA will make an effort to find an alternative supplier with NPS

approval; and the same selection procedure described above will occur.

3. Mortar Joints – The mortar used by the Contractor to reset the stone cladding on the south side of the historic Suitland Parkway Bridge will match in color and texture the original mortar on the south side of the bridge, will have greater vapor permeability and be softer (measured in compressive strength) than the masonry units, and will be recessed to the same depth from the stone surface as the current mortar on the south side of the bridge.
4. Qualified Mason – All work resetting the stone façade on the historic bridge and guard wall will be completed by a mason who has a minimum of five (5) years of experience with repointing of historic masonry structures.
5. Contract Documents –The requirements of Stipulations I.B.1-3. will be included in MD SHA's Project Construction Contract and Plans.

E. Treatment of New Bridge within Suitland Parkway Boundary over Exit Ramp from Joint Base Andrews North Gate (SHA Bridge No. 1630000, Ramp D over Ramp J)
   1. New Bridge Design – MD SHA will design a concrete slab bridge for the MD 4 Directional Ramp D over Ramp J within the Suitland Parkway's NRHP boundary and the exterior of the parapets as well as the abutments will be clad with a stone and mortar bonding pattern that is similar to, but does not replicate the color or pattern of the historic Suitland Parkway Bridge.
   2. Stone Cladding –MD SHA will provide NPS and MD SHPO with the opportunity to make the stone selection for the new structure within the Suitland Parkway. The process for stone selection that is described in Stipulation I.D. 2-5 above will also be used for the new structure.
   3. Qualified Mason – All work setting the stone façade on the new bridge will be completed by a Mason who has at least five (5) years of experience with the pointing of stone structures.
   4. Contract Documents -- The requirements of Stipulation I.D.2. and I.E. will be included in SHA's Project Construction Contract and Plans.

F. Landscaping within Suitland Parkway Boundary
   1. New Landscape Plan – MD SHA shall, in consultation with the MD SHPO and NPS, develop and implement a landscape plan to provide an appropriate vegetative buffer within the MD 4/Suitland Parkway Interchange, consistent with the proposal entitled "Suitland Parkway Landscape Plan." The proposed trees and vegetation on NPS lands have been selected from a list provided by NPS. The Suitland Parkway Landscape Plan will incorporate grading and planting trees, shrubbery and other plants that are visually and historically compatible with the existing historic landscape of the Suitland Parkway.

2. Vegetation Maintenance – MD SHA shall, in consultation with the MD SHPO and NPS, develop and implement a five year vegetation maintenance plan that will include an invasive plant removal plan for the area within the MD 4/Suitland Parkway project limits. The "Vegetative Removal Plan" will be provided separately from the interchange landscape plans.
3. Implementation – MD SHA shall implement the approved landscape maintenance plans after the completion of construction of the Undertaking, and shall start the work following the completion of the Interchange construction. The MD SHA is responsible for erosion and sediment control measures in compliance with the U.S. Army Corps of Engineers and Maryland Department of the Environment Permit. The landscape installation will commence as soon as seasonal planting is recommended by NPS.
4. Maintenance – MD SHA will maintain the newly planted landscape features for five (5) years following installation. Maintenance will include Controls that will be put in place to ensure the survival of the plants by watering and monitoring them, to ensure that they survive. If they die, they will be replaced in-kind.
5. Landscape Plans – MD SHA shall provide the landscape plan and the vegetation removal plan to the MD SHPO and NPS as part of the 90% plan review.

G. Additional Activities within Suitland Parkway Boundary
1. Pedestrian Trail – MD SHA shall provide a bicycle trail along westbound Suitland Parkway from Presidential Parkway to Old Marlboro Pike in a location approved by NPS.
2. Traffic Barrier – MD SHA shall provide a steel-backed timber traffic barrier within the project limits along the Suitland Parkway NRHP boundary.
3. Highway Signage –MD SHA shall provide design and location information for MD SHPO and NPS approval of any highway signs within the Suitland Parkway NRHP boundary.
4. Lighting – MD SHA shall provide the location and type of lighting within the Suitland Parkway NRHP boundary for MD SHPO and NPS approval.
5. Utilities – MD SHA shall provide design and location information for any utilities within the Suitland Parkway NRHP boundary for MD SHPO and NPS approval.

H. Additional Activities within MD 4/Suitland Parkway Interchange
1. Plans for the decorative fencing and decorative finish within the Interchange will be provided to the MD SHPO and NPS as required by Stipulation I.B.1 for thirty day review.
2. Decorative Fencing – MD SHA shall provide decorative safety fencing along the parapets of the Suitland Parkway Bridge over MD 4 (SHA Bridge No. 1629700) outside the Suitland Parkway NRHP Boundary.
3. Decorative Finish – Outside of the Suitland Parkway NRHP boundary, MD SHA shall provide a surface applied stain to the exterior bridge concrete surfaces on the MD 4 ramps visible from Suitland Parkway.

II. Design Development, Alignment Modifications and Ancillary Activities

A. MD SHA shall coordinate any change, modification, or refinement to the design or scheduling of this Undertaking that may potentially impact the viewshed of the Suitland Parkway with the MD SHPO and the NPS at that time, in accordance with the provisions of Stipulation III below.

B. The project may result in unforeseen effects on other historic properties due to changes made during design development, alignment modifications, or as a result of associated ancillary activities including, but not limited to construction staging areas, stormwater management facilities, wetland mitigation areas, reforestation areas, environmental stewardship activities, or other actions. All design and construction elements that may affect historic properties will be subject to review and concurrence by the MD SHPO and, if the resource is administered by NPS, the NPS. The FHWA and the MD SHA will ensure that avoidance of adverse impacts to historic properties is the preferred strategy and will utilize all feasible, prudent, and practicable measures to avoid adverse impacts.

1. Should activities be added to the Undertaking for which cultural resources studies have not been completed, the MD SHA shall ensure that consultation ensues with the MD SHPO, the FHWA, the NPS, if the lands are administered by NPS, and other relevant consulting parties as appropriate, and that all required cultural resources studies are implemented in accordance with the applicable performance standards in Stipulation V and with the following procedures:

   a. Identification -- The MD SHA professional cultural resources staff shall review any additions or changes to the project and implement identification investigations as necessary to identify any historic properties that may be impacted by the proposed activity or alignment modification. If project changes are made within lands administered by NPS, cultural resources investigations shall be carried out in consultation with NPS. The MD SHA shall provide all completed information to the MD SHPO, the FHWA, NPS, and relevant consulting parties under this MOA for review and comment.

   b. Evaluation -- The MD SHA shall evaluate all cultural resources identified in the areas inventoried under Stipulation II.B.1.a. in accordance with 36 CFR 800.4(c) to determine their eligibility for the National Register of Historic Places. If project changes are made within lands administered by NPS, cultural resources investigations shall be carried out in consultation with NPS. The MD SHA shall provide the results of any such evaluation efforts to the MD SHPO, the FHWA, NPS, and relevant consulting parties for review and comment.

   c. Treatment -- Should any property eligible for inclusion in the National Register of Historic Places be identified under Stipulation II.B.1.a., the MD SHA shall make a reasonable and good-faith effort to avoid adversely impacting the resource(s) by relocating or modifying the proposed action. If adverse impacts effects are unavoidable, the MD SHA, the FHWA, the MD SHPO, NPS, if the lands are administered by NPS, and relevant consulting parties shall consult in accordance with 36 CFR 800.6 to resolve adverse effects on National Register-eligible historic properties.

The FHWA shall solicit the participation of the Council. If adverse effects are unavoidable, the MD SHA, the FHWA, the MD SHPO, NPS and relevant consulting parties shall develop and implement appropriate treatment options in a Memorandum of Agreement. The FHWA and the MD SHA shall implement the mitigation plan once the MD SHPO concurs with the plan. The MD SHA shall ensure that any resulting cultural resources work is accomplished in accordance with the relevant performance standards in Stipulation V.

III. Unanticipated Discovery of Historic Properties. Because the project is within an area of that may have high sensitivity for cultural resources, buried archaeological features may exist within or adjacent to the construction area.

The SHA Senior Archaeologist (410-545-2878) (the SHA Archaeologist) shall act as the archaeological liaison with the SHA Construction Engineer and shall attend the pre-construction meeting. The SHA Archaeologist, assisted by SHA consultant archaeologist URS, shall be available to report to the job site within 24 hours of notification to inspect any archaeological features that might be discovered during construction.

A. Discoveries made within lands administered by the National Park Service:

1. Human Remains - Should any human remains (hereafter, "Remains") be encountered during construction, all construction work in the vicinity of the Remains shall be temporarily stopped to prevent damage to the Remains, or to any additional Remains that might be present in the immediate vicinity. The SHA Construction Engineer shall immediately notify the Park Superintendent (202-690-5127), Park Police (202-610-8703), Park Archeologist (202-692-6038), NPS Regional Archeologist (202-619-7280), Maryland SHPO (Administrator, Review and Compliance, 410-514-7631), and the SHA Archaeologist. In consultation with NPS, the SHA Archaeologist shall immediately coordinate with the SHA archaeological contractor to inspect the Remains within 24 hours of notification. The SHA Archaeologist shall prepare a preliminary evaluation of the Remains and shall propose a plan (hereafter, "Plan") for their protection, recovery, or destruction without recovery. Construction shall be temporarily suspended in the immediate vicinity of the Remains until the archaeological investigation has been completed, as provided for in the Standard Specifications for Construction and Materials under Section TC-5.04 (Cultural Resources) and Section TC-4.04 (Work Suspension). Construction can and should continue in all other parts of the project area. If the SHA Construction Engineer determines that the feature is located in a part of the project that will affect the critical path of construction, investigations will be limited to the minimum time required to complete necessary archaeological investigations. The SHA Archaeologist shall consult with, and shall provide the proposed Plan to, the Park Superintendent, Park Archaeologist, Regional Archaeologist, and Maryland SHPO for their review and approval. The Park Superintendent, in consultation with the Park and Regional Archaeologists, and Maryland SHPO, shall determine the appropriate course of action, following the Department of the Interior's guidelines on human remains.

2. Should any previously unidentified archaeological sites, features, artifacts, or materials (hereafter, "Resources") be encountered during construction, all construction work in the vicinity of the Resources shall be temporarily stopped to prevent damage to the Resource, or to any additional Resources that might be present in the immediate vicinity. The SHA Construction Engineer shall immediately notify the Park Superintendent, Park Archaeologist, Regional Archaeologist, Maryland SHPO, and the SHA Archaeologist for their review and approval. The SHA Archaeologist shall immediately coordinate with the SHA archaeological contractor to inspect the Resource within 24 hours of notification. The SHA Archaeologist shall prepare a preliminary evaluation of the Resource and shall propose a plan (hereafter, "Plan") for its protection, recovery, or destruction without recovery. Construction shall be temporarily suspended in the immediate vicinity of the Resource until the archaeological investigation has been completed, as provided for in the Standard Specifications for Construction and Materials under Section TC-5.04 (Cultural Resources) and Section TC-4.04 (Work Suspension). Construction can and should continue in all other parts of the project area.
3. The SHA Archaeologist shall consult with, and shall provide the proposed Plan to, the Park Superintendent, Park Archaeologist, Regional Archaeologist, and Maryland SHPO. The Regional and Park Archaeologists will determine the appropriate course of action with the SHA Archaeologist; additional specifications are spelled out by the NPS in the "Special Stipulations" section of the approved ARPA permit that will be issued by the Regional Director. Construction shall be temporarily suspended in the immediate vicinity of the resource until the archaeological investigation has been completed, as provided for in the Standard Specifications for Construction and Materials under Section TC-5.04 (Cultural Resources) and Section TC-4.04 (Work Suspension). Construction can and should continue in all other parts of the project area. If the SHA Construction Engineer determines that the feature is located in a part of the project that will affect the critical path of construction, investigations will be limited to the minimum time required to complete necessary archaeological investigations.

B. Discoveries made within lands not administered by the National Park Service.
   1. Human Remains - Should any human remains (hereafter, "Remains") be encountered during construction, all construction work in the vicinity of the Remains shall be temporarily stopped to prevent damage to the Remains, or to any additional Remains that might be present in the immediate vicinity. The SHA Construction Engineer shall immediately notify the SHA Archaeologist.
      a. In consultation with the MD SHPO, the SHA Archaeologist shall immediately coordinate with the SHA archaeological contractor to inspect the Remains within 24 hours of notification. If the Remains cannot be avoided by construction, the SHA Archaeologist shall prepare a preliminary evaluation of the Remains and shall propose a plan (hereafter, "Plan") for their protection, recovery, or destruction without recovery. Construction shall be temporarily suspended in the immediate

vicinity of the Remains until the archaeological investigation has been completed, as provided for in the Standard Specifications for Construction and Materials under Section TC-5.04 (Cultural Resources) and Section TC-4.04 (Work Suspension). Construction can and should continue in all other parts of the project area.

b. If the SHA Construction Engineer determines that the feature is located in a part of the project that will affect the critical path of construction, investigations will be limited to the minimum time required to complete necessary archaeological investigations. The SHA Archaeologist shall consult with, and shall provide the proposed Plan to, Maryland SHPO for their review and approval. Construction may resume in any areas under a temporary work suspension after the SHA archaeologist notifies the SHA Project Engineer.

2. If previously unrecorded archaeological features, artifacts, or other resources are discovered during construction, all construction work in the immediate vicinity of the archaeological resource shall be temporarily halted or modified to prevent further damage to the discovered resource, or to any unidentified resources that might be present in the immediate vicinity. The contractor shall immediately notify the SHA Project Engineer, who shall coordinate with the SHA archaeologist.
    a. If a discovered resource cannot be avoided by construction, the SHA archaeologist shall perform a preliminary inspection of the resource to evaluate its potential eligibility to the National Register of Historic Places, and, in consultation with the Maryland State Historic Preservation Office (MD SHPO), shall develop a Treatment Plan for its protection, recovery, or destruction without recovery. The archaeological investigation may include further clearing to define the archaeological resource, photography and measured drawings, and excavation of all or part of the resource.
    b. Construction shall be temporarily suspended in the immediate vicinity of the resource until the archaeological investigation has been completed, as provided for in the Standard Specifications for Construction and Materials under Section TC-5.04 (Cultural Resources) and Section TC-4.04 (Work Suspension). Construction can and should continue in all other parts of the project area. Construction may resume within the area of the archaeological feature once the Treatment Plan has been approved by the MD SHPO, and all of its provisions have been successfully concluded. Construction may resume in any areas under a temporary work suspension after the SHA archaeologist notifies the SHA Project Engineer.

IV. Archeological Resource Protection Act (ARPA) Permit

A. In accordance with the provisions of ARPA, and prior to the construction/implementation phase of the project, before any and all ground disturbing activities occur within lands administered by the NPS, specifically the National Capital Parks-East/Suitland Parkway (including all related activities such as utility work and relocations, staging or stockpiling

of materials, and establishment of construction trailers and access points), SHA shall apply for and obtain an ARPA Permit so that archeological work may be undertaken under the terms of Stipulation III. or Stipulation IV., if warranted.

B. The SHA Archaeologist will hire an archaeological contractor meeting the Secretary of Interior's Standards, and will apply for an ARPA permit through the NPS NCR Regional Archaeologist in case of any inadvertent discovery due to project construction. The SHA Archaeologist and the archaeological contractor shall be available to conduct any required archaeological investigations on NPS lands, under the direction of the Park Archeologist and the NPS Regional Archeologist.

C. Additional specifications are spelled out by the NPS in the "Special Stipulations" section of the approved ARPA permit that will be issued by the Regional Director, and within the "Plan for Treatment of Unanticipated Historic Properties on Lands owned by the NPS," which shall be included within the Undertaking's Special Provisions.

V. Performance Standards

A. Professional Qualifications – The MD SHA shall ensure that all cultural resources work performed pursuant to this MOA is carried out by or under the direct supervision of a person or persons meeting at a minimum the Professional Qualifications Standards set forth in the Secretary of the Interior's Standards for Architectural History and Archeology (36 CFR Part 61).

B. Standards and Guidelines - The MD SHA shall ensure that all cultural resources work carried out pursuant to this MOA shall be conducted in a manner consistent with the principles and standards contained in the documents (and subsequent revisions thereof) listed below:

- *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (48 FR 44716-44742) (1983 and successors);*
- *Standards and Guidelines for Archeological Investigations in Maryland (Shaffer and Cole 1994);*
- *Standards and Guidelines for Architectural and Historical Investigations in Maryland (Maryland Historical Trust, 2000);*
- *Guidelines and Resources for Compliance-Generated Determinations of Eligibility (DOEs) (Maryland Historical Trust, 2009);*
- *Advisory Council on Historic Preservation – Section 106 Archaeology Guidance (ACHP 2007);*
- *Recommended Approach for Consultation on Recovery of Significant Information from Archaeological Sites (ACHP 2007) (64 FR 27085-27087);*
- *the Annotated Code of Maryland, Title 10 Subtitle 4, §10-401 through §10-404;*
- *Guidelines for Applying the National Register Criteria for Evaluation, National Park Service Bulletin 15;*
- *Secretary of Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes (1996).*
- *Preservation Brief 2: Repointing Mortar Joints in Historic Masonry Buildings (http://www.nps.gov/tps/how-to-preserve/briefs/2-repoint-mortar-joints.htm)*

VI. Curation

A. The MD SHA shall ensure that all materials and records generated by archeological work conducted on non-NPS administered lands pursuant to the MOA, including but not limited to recovered artifacts, field notes and forms, photographs, maps, and reports, for which legal title can be obtained, shall be submitted to the MD SHPO for curation in accordance with 36 CFR Part 79.

B. The MD SHA and NPS shall ensure that all artifacts, specimens, samples, materials, and records generated by archeological work conducted on lands that are at the time administered by NPS pursuant to this MOA, including but not limited to recovered artifacts, field notes and forms, photographs, maps, and reports, are the property of the NPS and will be documented, curated, and conserved, as necessary, according to the standards found in 36 CFR 79, *Curation of Federally-Owned and Administered Archaeological Collections*; the *National Park Service Museum Handbook, Part 1;* and the requirements of the NPS's Regional Archaeology Program for the storage of objects at the NPS National Capital Region Museum Resource Center in Landover, Maryland in accordance with 36 CFR Part 79 and the Archeology Laboratory Manual of the NPS Regional Archeology Program, National Capital Region. The artifacts, specimens, samples, materials, and records will be turned over to the NPS upon completion of any archaeological analysis performed as part of this MOA.

VII. Resolution of Objections by the Signatories

A. Should the MD SHPO, or any of the signatories to this MOA, object in writing within 30 days to any plans or actions proposed pursuant to this MOA, the FHWA shall consult with the objecting party to resolve the objection. Pending resolution of the objection, construction related specifically to the plans or actions to which objection is made shall be temporarily suspended, as provided for in the Standard Specifications for Construction and Materials under Section TC-5.04 (Cultural Resources) and Section TC-4.04 (Work Suspension). Construction can and should continue in all other parts of the project area. If the FHWA determines that such objection cannot be resolved, the FHWA will:

1. Forward all documentation relevant to the dispute, including the FHWA's proposed resolution, to the Council. The Council shall provide the FHWA with its advice on the resolution of the objection within 30 days of receiving adequate documentation. Prior to reaching a final decision on the dispute, the FHWA shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the Council, signatories and concurring parties, and provide them with a copy of this written response. The FHWA will then proceed according to its final decision.

2. If the Council does not provide its advice regarding the dispute within the 30 day time period, the FHWA may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, the FHWA shall prepare a written response that takes into account any timely comments regarding the dispute from the signatories and concurring parties to the MOA, and provide them and the Council with a copy of such written response.
3. The FHWA's responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remains unchanged.

VIII. Resolution of Objections by the Public - At any time during implementation of the measures stipulated in this MOA, should an objection pertaining to this MOA or the effect of the undertaking on historic properties be raised by another consulting party, a concurring party to the MOA, or a member of the public, the FHWA shall notify the parties to this agreement and take the objection into account, consulting with the objector and the NPS, if the objection pertains to the Parkway, and, should the objector so request, with any of the parties to this MOA to resolve the objection.

IX. Amendment - If any of the signatories to this MOA believe that its terms cannot be carried out, or that an amendment to the terms must be made, that signatory shall immediately consult with the other signatories to develop amendments. If an amendment cannot be agreed upon within fifteen (15) days, the dispute resolution process set forth in Stipulation VII will be followed.

X. Termination - Any signatory to this MOA may terminate it by providing thirty days written notice to the other parties, provided that the parties will consult during the period prior to termination to seek agreement on amendments or other actions that would avoid termination. Termination of this MOA will require compliance with 36 CFR 800. However, notwithstanding the aforementioned, this MOA may be terminated by the execution of a subsequent MOA that explicitly terminates or supersedes its terms.

XI. Duration -- This MOA remains valid for a period of 10 years from the date of execution. If the Undertaking has not been constructed within ten (10) years after the execution of the MOA, SHA shall undertake a review of the MOA with all the signatories to determine if the MOA remains valid. If the signatories agree that the MOA requires amendment, a new agreement and consultation shall commence. The signatories may also agree to an extension for carrying out its terms.

Execution of this MOA by the FHWA, NPS, MD SHPO and MD SHA, and implementation of its terms provide evidence that FHWA and NPS have afforded the Council an opportunity to comment on the Undertaking and its effects on historic properties, and that FHWA and NPS have taken into account the potential effects of the Undertaking on historic properties.

FEDERAL HIGHWAY ADMINISTRATION

By: _____ Date: 10/17/14
Gregory Murrill, Division Administrator

MARYLAND STATE HISTORIC PRESERVATION OFFICER

By: _____ Date: 10-16-14
J. Rodney Little, State Historic Preservation Officer

NATIONAL PARK SERVICE

By: _____ Date: 10/16/14
Gopaul Noojibail, Superintendent
National Capital Parks -- East

MARYLAND STATE HIGHWAY ADMINISTRATION

By: _____ Date: 10/10/14
Melinda B. Peters, Administrator

March 16, 2015

Ms. Heather Lowe
NEPA Compliance Section Team Leader
Maryland State Highway Administration
Mailstop C-301
707 N. Calvert Street
Baltimore, MD 21202

STATE CLEARINGHOUSE RECOMMENDATION

State Application Identifier: MD20150213-0098
Applicant: Maryland State Highway Administration
Project Description: Draft Environmental Assessment and Draft Finding of No Significant Impact: MD 4 at Suitland Parkway/Presidential Parkway Interchange Contruction ad it affects Joint Base Andrews-Naval Air Facility Washington (Prior: MD20140627-0558)
Project Location: Prince George's County
Approving Authority: U.S. Department of Transportation DOT/FHWA
Recommendation: Consistent with Qualifying Comment(s)

Dear Ms. Lowe:

In accordance with Presidential Executive Order 12372 and Code of Maryland Regulation 34.02.01.04-.06, the State Clearinghouse has coordinated the intergovernmental review of the referenced project. This letter constitutes the State process review and recommendation. This recommendation is valid for a period of three years from the date of this letter.

Review comments were requested from the Maryland Department(s) of Natural Resources, the Environment, the Maryland Department of Planning, including the Maryland Historical Trust; and Prince George's County.

The Maryland Department of Planning, including the Maryland Historical Trust found this project to be consistent with their plans, programs and objectives.

The Maryland Department of Planning stated that this project will not impact state growth management policies.

The Maryland Historical Trust (MHT) has determined that the project will have "no effect" on historic properties and that the federal and/or State historic preservation requirements have been met. MD 4 / Suitland Parkway Interchange construction within Joint Base Andrews will have no effect on historic properties.

The Maryland Department(s) of Natural Resources, Environment; and Prince George's County found this project to be

generally consistent with their plans, programs and objectives, but included certain qualifying comments summarized below.

The Maryland Department of Natural Resources stated please ensure best management practices are used with stormwater management and sediment erosion control.

Prince George's County stated that the proposed Draft EA (Feb 2015) for MD Route 4 at Suitland Parkway Interchange should include strategies on stormwater management runoff controls and treatment for the additional impervious road surfaces proposed by State Highway Administration/ Federal Highway Administration (SHA/FHWA).

The Maryland Department of Environment comments are as follows:

1. Any solid waste including construction, demolition and land clearing debris, generated from the subject project, must be properly disposed of at a permitted solid waste acceptance facility, or recycled if possible. Contact the Solid Waste Program at (410) 537-3315 for additional information regarding solid waste activities and contact the Waste Diversion and Utilization Program at (410) 537-3314 for additional information regarding recycling activities.

2. The Waste Diversion and Utilization Program should be contacted directly at (410) 537-3314 by those facilities which generate or propose to generate or handle hazardous wastes to ensure these activities are being conducted in compliance with applicable State and federal laws and regulations. The Program should also be contacted prior to construction activities to ensure that the treatment, storage or disposal of hazardous wastes and low-level radioactive wastes at the facility will be conducted in compliance with applicable State and federal laws and regulations.

Any statement of consideration given to the comments(s) should be submitted to the approving authority, with a copy to the State Clearinghouse. The State Application Identifier Number must be placed on any correspondence pertaining to this project. The State Clearinghouse must be kept informed if the approving authority cannot accommodate the recommendation.

Please remember, you must comply with all applicable state and local laws and regulations. If you need assistance or have questions, contact the State Clearinghouse staff person noted above at 410-767-4490 or through e-mail at nasrin.rahman@maryland.gov. **Also please complete the attached form and return it to the State Clearinghouse as soon as the status of the project is known.** ***Any substitutions of this form must include the State Application Identifier Number.*** **This will ensure that our files are complete.**

Thank you for your cooperation with the MIRC process.

Sincerely,

Linda C. Janey Mat

Linda C. Janey, J.D., Assistant Secretary

LCJ:NR
cc: Anne Hodges
Amanda Degen - MDE
Greg Golden - DNR
Kathleen Herbert - PGEO
Dan Rosen - MDPI-R
John Leocha/LaVerne Gray - MDPLR&WC
Bihui Xu - MDPI-T
Peter Conrad - MDPL
Beth Cole - MHT
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PROJECT STATUS FORM

Please complete this form and return it to the State Clearinghouse upon receipt of notification that the project has been approved or not approved by the approving authority.

TO: **Maryland State Clearinghouse**
Maryland Department of Planning
301 West Preston Street
Room 1104
Baltimore, MD 21201-2305

DATE: _____
(Please fill in the date form completed)

FROM: _____
(Name of person completing this form.)

PHONE: ____-____-_____
(Area Code & Phone number)

RE: **State Application Identifier:** **MD20150213-0098**
Project Description: Draft Environmental Assessment and Draft Finding of No Significant Impact: MD 4 at Suitland Parkway/Presidential Parkway Interchange Contruction ad it affects Joint Base Andrews-Naval Air Facility Washington (Prior: MD20140627-0558)

PROJECT APPROVAL

This project/plan was: ☐ **Approved** ☐ **Approved with Modification** ☐ **Disapproved**

Name of Approving Authority: _____ **Date Approved:** _____

FUNDING APPROVAL

The funding (if applicable) has been approved for the period of:

_____, 201____ **to** _____, 201____ **as follows:**

Federal $:	**Local $:**	**State $:**	**Other $:**
_____	_____	_____	_____

OTHER

☐ *Further comment or explanation is attached*