

Supplemental Environmental Assessment Easement Acquisition/Obstruction Removal

Draft

Maryland Airport Indian Head, Maryland

Prepared for:



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THIS ENVIRONMENTAL ASSESSMENT BECOMES A FEDERAL DOCUMENT WHEN
EVALUATED, SIGNED, AND DATED BY THE RESPONSIBLE FAA OFFICIAL.

RESPONSIBLE FAA OFFICIAL

DATE

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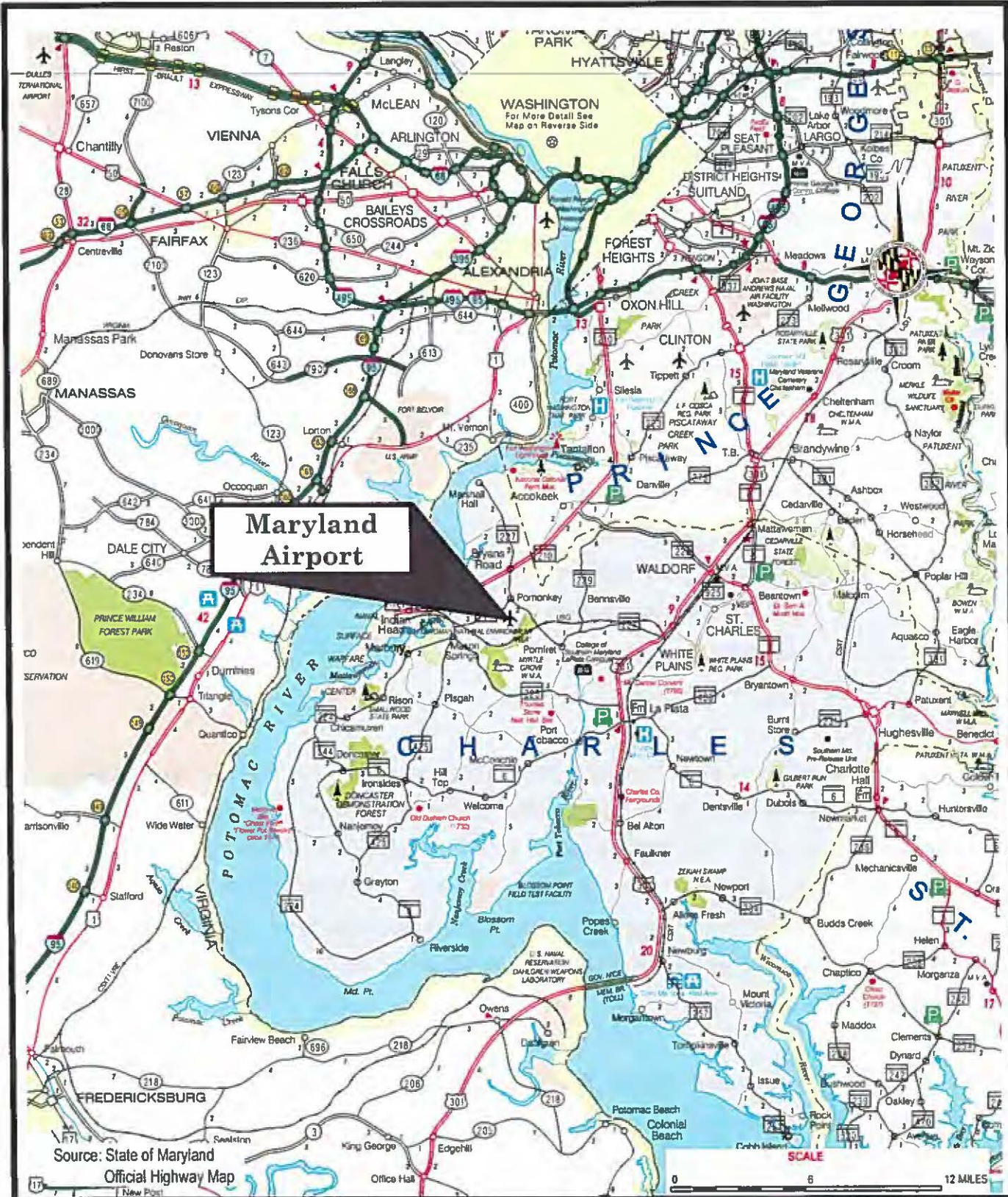
CHAPTER 1 - INTRODUCTION

The Maryland Airport, located in Indian Head, Maryland, is conducting a Supplemental Environmental Assessment (EA) to address the impacts of acquiring additional easements for the removal of obstructions for Runway 20. This Study is a supplemental document to the 2003 Maryland Airport Environmental Assessment for Capital Development. The analysis for the proposed easement acquisition and obstruction removal was not included in the original 2003 EA. The 2003 EA is being supplemented with this separate document which discusses the changed circumstances from the original EA. New data is presented for the following elements of the EA:

- Proposed Action (Chapter 2)
- Purpose and Need (Chapter 3)
- Alternatives Analysis (Chapter 4)
- Affected Environment (Chapter 5)
- Environmental Consequences (Chapter 6)
- Cumulative impacts (Chapter 7)
- Mitigation (Chapter 8)

The easement acquisition and obstruction removal was not included in the 2003 EA Proposed Action or Alternatives to the Proposed Action as the obstructions were not identified nor anticipated at that time. The Proposed Action for this Supplemental EA includes the easement acquisition and obstruction removal. The Affected Environment and Environmental Consequences sections of this supplemental EA have been developed based on the new Proposed Action and revised environmental data and therefore, all NEPA Impact categories were evaluated in this supplement.

The airport serves general aviation needs in Charles County, Maryland. The airport is approximately 20 miles south of Washington, D.C. and 4 miles east of Indian Head, Maryland. The airport also offers access for travelers, provides relief for the General Aviation traffic at the Ronald Reagan Washington National Airport, and makes the region accessible to incoming visitors. A location and vicinity map are shown in **Exhibits 1.1** and **1.2**, respectively.



**Maryland
Airport**

Exhibit 1.1
Maryland Airport
Airport Location Map

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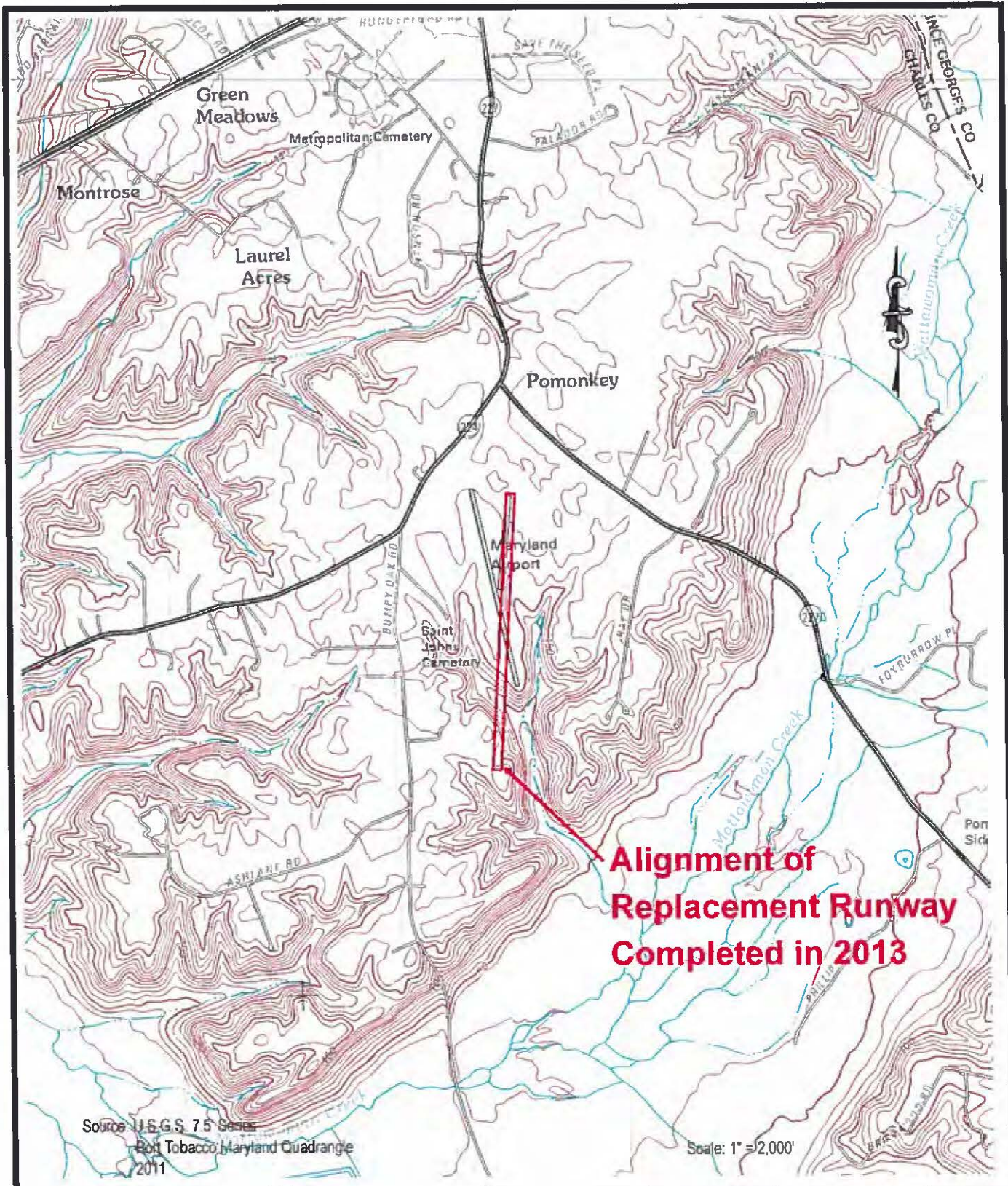


Exhibit 1.2
Maryland Airport

Airport Vicinity Map

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The Airport is owned and operated by Bauserman Service, Inc. and has one runway (Runway 2-20) which was constructed in 2013 and measures 3,740' long and 75' wide. The removal of additional trees which are obstructions to the approach to Runway 20 will allow the Airport to complete the final obstruction removal phase for the runway construction.

This Environmental Assessment, developed pursuant to the National Environmental Policy Act (NEPA), describes the project (the Proposed Action), the project purpose & need, alternatives to the Proposed Action, the environmental consequences, and mitigation if applicable. An environmental determination is required prior to easement acquisitions and obstruction removal.

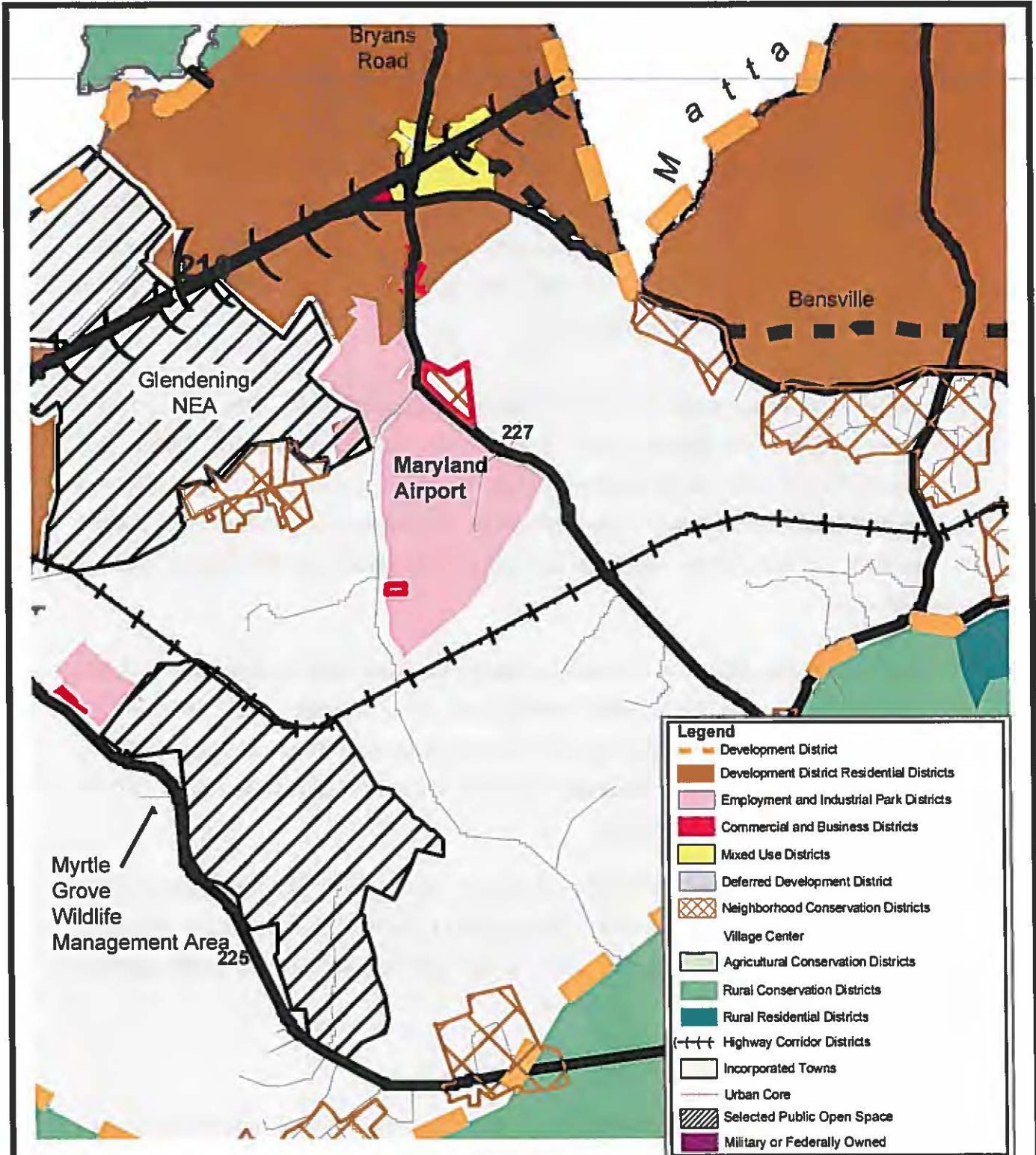
1.1 Project Setting

Maryland Airport is located in Charles County, Maryland approximately 20 miles south of Washington, D.C. The airport entrance is off Livingston Road (Rt. 224). The airport is 7 miles northwest of La Plata, Maryland and 4 miles east of Indian Head, Maryland and the Potomac River. The Mattawoman Creek is just south of the airport. A drainage way runs through airport property that supports the creek. The airport is bordered by rural residential development to the east and north.

The 2006 Charles County Comprehensive Plan details the current land uses around the Maryland Airport as shown in **Exhibit 1.3**. The Comprehensive Plan identifies land uses by districts. The following is the description of each district encompassing or located adjacent to the Maryland Airport. As stated in the Comprehensive Plan:

Employment and Industrial Park District: To provide locations for additional, up-graded and diverse job opportunities for residents of the County, the land use plan reserves several areas for development into employment and industrial clusters or parks. The Maryland Airport is located in this district as well as the adjacent property to the north which is reserved for industrial development.

Neighborhood Conservation District: Neighborhood Conservation Districts are established to recognize residential subdivisions that have already been developed in the County. In these



| Legend | |
|--------|--|
| | Development District |
| | Development District Residential Districts |
| | Employment and Industrial Park Districts |
| | Commercial and Business Districts |
| | Mixed Use Districts |
| | Deferred Development District |
| | Neighborhood Conservation Districts |
| | Village Center |
| | Agricultural Conservation Districts |
| | Rural Conservation Districts |
| | Rural Residential Districts |
| | Highway Corridor Districts |
| | Incorporated Towns |
| | Urban Core |
| | Selected Public Open Space |
| | Military or Federally Owned |

Source 2006 Charles County
Comprehensive Plan

Exhibit 1.3
Maryland Airport
Land Use Plan

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districts, established densities may be inconsistent with those permitted in the future. Future development in Neighborhood Conservation Districts will be permitted to continue in the density and pattern for which respective subdivisions were designed at the time they were first planned. The proposed easement and obstruction removal areas are located within this District. Deferred Development District: "The purposes of this district are to maintain low-density residential development (one dwelling unit per 10 acres), and preserve the rural environment, natural features and established character of the area."

The airport is currently zoned IG – Light Industrial (Appendix A). This zone provides appropriate locations for industrial uses of a moderate scale and intensity. Zoning Text Amendment #46-17 adds General Aviation Airport as a permitted use in the IG zone subject to the specified conditions including the requirement for the airport to be public use and meeting the standards set forth by the Maryland Aviation Administration and the Federal Aviation Administration.

The area surrounding Maryland Airport is primarily rural and undeveloped. The St. John's Chapel is located adjacent to Maryland airport property along Livingston Road however. The Chapel is not included in the Supplemental EA study area and will not be impacted by the proposed easement acquisition or obstruction removal. The viewshed from the church will also not be impacted by the Proposed Action.

Two schools are located approximately a half mile north of the Maryland Airport along Livingston Road; Matthew Henson Middle School and J C Parks Elementary School. Neither of these schools is located within the EA study area nor will they be impacted by the proposed easement acquisitions and obstruction removal.

1.2 Socioeconomic Characteristics

The 2006 Charles County Comprehensive Plan details the growth and development of the county and the facilities and infrastructures needed to accommodate that growth in a controlled manner. Based upon several different factors influencing the growth in the county, Charles County is projecting an average annual employment growth rate of 0.75 percent between 2010-2030.

CHAPTER 2 - PURPOSE AND NEED

The purpose of the Proposed Action is to allow the airport to construct the final phase of the runway development project by acquiring easements and removing obstructions to the future approach area for Runway 20. This will ensure compliance with Federal Aviation Administration (FAA) Part 77 and Maryland Aviation Administration (MAA), State Code of Maryland Regulations 11.03.05, airspace regulations. The acquisition of 23.4 acres of off-airport property, via easements, will allow the airport to clear 6.5 acres of obstructions in the approach for Runway 20 on property not currently owned by the airport. An additional 2.2 acres of obstructions located on airport property also need to be removed which results in a total of 8.7 acres of on and off-airport obstruction removal. The removal of these obstructions will enhance the safe operation of aircraft at the Maryland Airport.

In 2007, an aerial survey conducted as part of the runway project identified additional obstructions on the north side of Pomfret Road to the new Runway 20 approach. These obstructions consist of trees of varying heights located in the FAA's Federal Aviation Regulation Part 77 approach surface. This regulation requires obstructions to be removed to ensure the safe operation of aircraft at the Airport. Since these obstructions were not included in the original EA, it was determined that the new runway would be constructed at a shorter length until the obstructions could be removed. This runway length allows the Airport to temporarily meet the future operational needs.

The EA identifies and quantifies the environmental consequences of obstruction removal via tree clearing operations at the airport as well as addresses the acquisition of aviation easements off of airport property. This analysis includes site surveys and review of existing data regarding the impact categories identified in NEPA and addressed in this EA. These aviation easements are necessary for the airport to clear obstructions on property adjacent to but not owned by the Airport.

CHAPTER 3 - PROPOSED ACTION

The Proposed Action represents the solution for addressing the issues identified in the Purpose and Need Section discussed earlier. The Proposed Action is depicted in Exhibits 3.1 through 3.3 and includes:

- Airport acquisition of approximately 23.4 acres of aviation easements on sixteen (16) land parcels.
- Clearing of approximately 8.7 acres of existing obstructions to the Part 77 approach and transitional surfaces including 2.2 acres on airport property and 6.5 acres on property adjacent to the Airport (5.6 acres on the northern parcels and 0.9 acres on the southern parcel). This 6.5 acre area falls within the proposed easement acquisition land. Obstructions will be removed from these 6.5 acres once the easements have been purchased by the Airport from the landowners. The clearing will include a combination of tree topping and clear cutting by mechanical means such as chain saws and tree fellers, depending upon the location of the tree and its proximity to the Airport. Grubbing is not included in the Proposed Action. A staging area will be located within the proposed limits of tree clearing along Promfret Road as shown in Exhibit 3.2. These areas will be maintained as cleared areas or allowed to regenerate with natural vegetation. Any vegetation that becomes a future obstruction will be removed as required using mechanical means.
- Removing individual trees in the remaining 16.9 acre easement acquisition area if any trees grow to become obstructions in the future to the Part 77 approach surface for Runway 20.

Aviation easements do not include the acquisition of the land in fee simple but allow the airspace over the subject property to be purchased and subsequently controlled by the airport. This gives the airport the ability to clear obstructions in the future if they impact or are likely to impact the safe operation of aircraft at the Airport. Obstructions to the full 4,300' runway encompass approximately 8.7 acres currently however; trees in the 23.4 acre proposed easement acquisition area may need to be removed if they become obstructions in the future. The proposed

... easement acquisition areas are included on the approved 2011 Airport Layout Plan (ALP) and the Proposed Action identified in this EA is consistent with the development plans for the Maryland Airport.

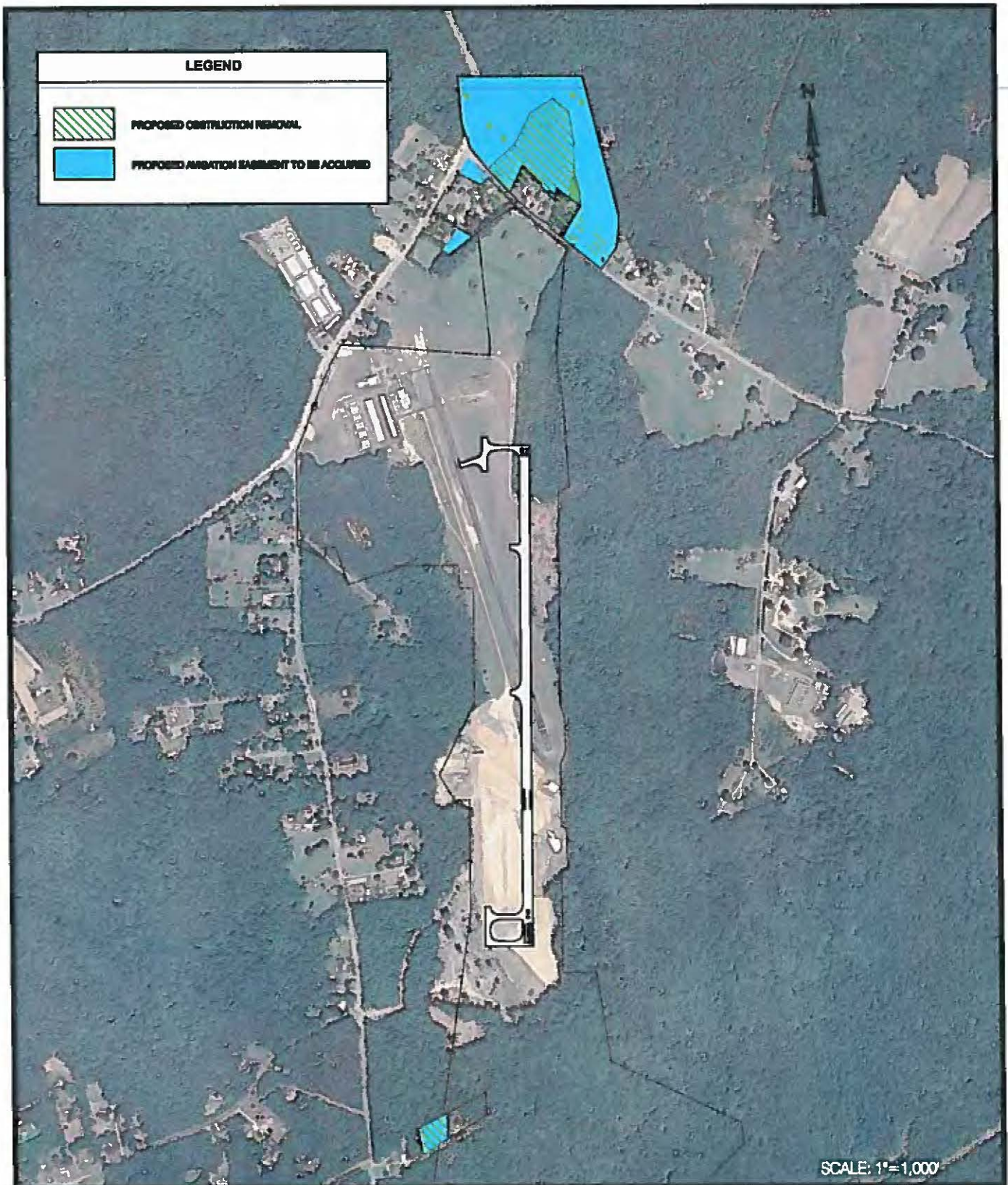




Exhibit 3.1
Maryland Airport
Proposed Obstruction Removal & Aviation Easements
Supplemental Environmental Assessment

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LEGEND

 PROPOSED OBSTRUCTION REMOVAL

 PROPOSED AVIGATION EASEMENT TO BE ACQUIRED

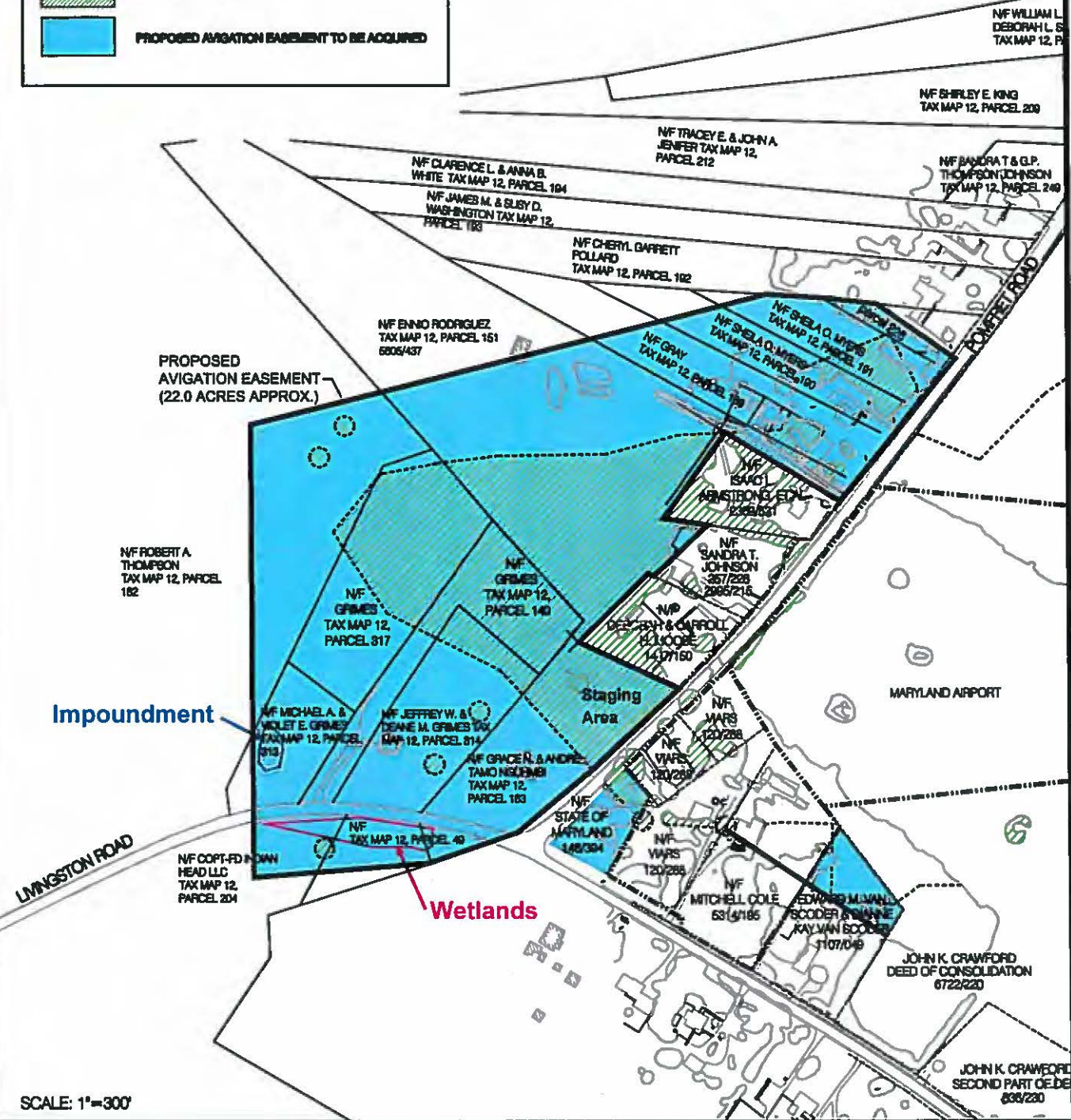

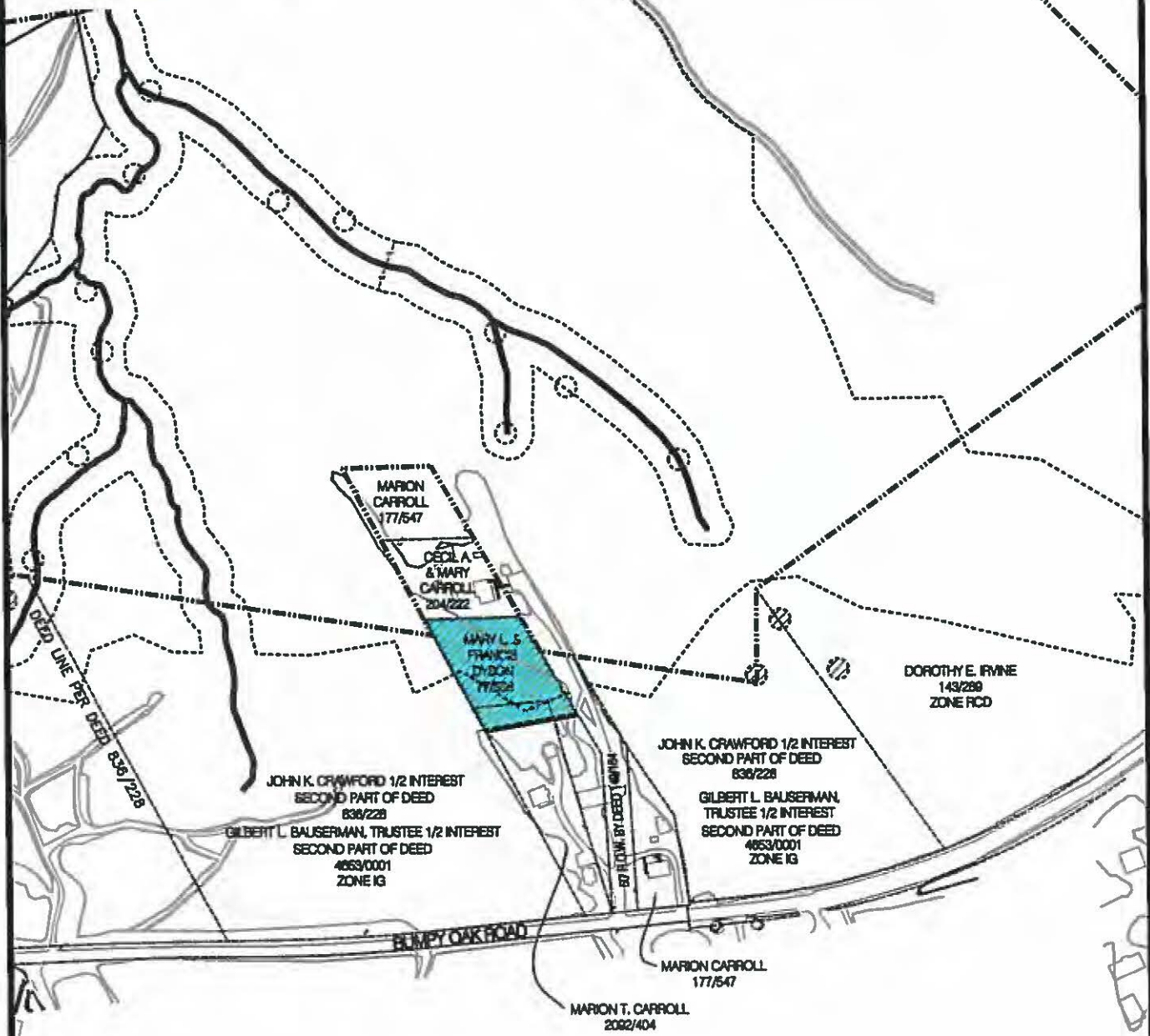


Exhibit 3.2
Maryland Airport - (North)
Proposed Obstruction Removal & Avigation Easements
Supplemental Environmental Assessment

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LEGEND

 PROPOSED AVIGATION EASEMENT TO BE ACQUIRED AND OBSTRUCTION REMOVAL



SCALE: 1"=300'

Exhibit 3.3
Maryland Airport - (South)
Proposed Obstruction Removal & Avigation Easements
Supplemental Environmental Assessment

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CHAPTER 4 - ALTERNATIVES ANALYSIS

Alternatives to the Proposed Action represent options for addressing the EA purpose & need. As stated in FAA Order 5050-4B, "This section compares the No Action, the Proposed Action, and reasonable alternatives (if any), and each reasonable alternative's expected environmental effects." The Alternatives to the Proposed Action are discussed below.

4.1 No Action Alternative

Per FAA Part 77, the No Action alternative includes not acquiring the avigation easements nor clearing any of the areas identified as obstructions. This would create no environmental impact; however, it would also not allow the Airport to construct the full 4,300' runway as designed. The runway would remain at 3,740' which would not allow the Airport to effectively accommodate the types of aircraft for which the runway was designed. This alternative could also restrict the type of approaches that the FAA can develop to Runway 20 which pilots use during reduced visibility conditions. Therefore, the No Action Alternative is not a reasonable alternative.

4.2 Fee-Simple Acquisition of Obstruction Areas Alternative

The acquisition of the obstruction areas in fee simple would give the Maryland Airport complete ownership and control of the activities on the properties and allow the Airport to remove the obstructions impacting Runway 20. However, the acquisition of these sixteen parcels in fee simple would also result in the acquisition of three single-family homes. These residents would need to be relocated which could be averted by acquiring avigation easements instead. Potential Socioeconomic impacts are discussed further in Chapters 5 and 6. This alternative is not analyzed in further detail as part of this EA. If the Maryland Airport sponsor decides to acquire these properties in fee-simple in the future, additional environmental analysis via a supplemental EA would be required prior to fee simple acquisitions. The additional analysis would include an Environmental Due Diligence Audit on the properties to determine if there are any adverse attributes such as previous hazardous materials impacts, fuel spills, etc.

4.3 Alternatives Analysis

The two alternatives to the Proposed Action presented above were reviewed relative to the project Purpose and Need. The No Action Alternative was rejected because it does not result in the removal of the obstructions as required by FAA FAR Part 77 airspace regulations. The Fee-Simple Alternative was rejected due to the need to relocate the existing residents if the property was acquired in fee-simple. The relocation of these residents is not necessary in order to remove the identified obstructions. The Proposed Action is the preferred development alternative as it meets the purpose and need while minimizing adverse impacts.

CHAPTER 5 - AFFECTED ENVIRONMENT

This section of the Environmental Assessment describes the existing conditions of the geographic area potentially affected by the Proposed Action or No Action Alternative. The following subsections describe the environmental resources that the Proposed Action and No Action Alternative are likely to affect (FAA Order 1050.1E, paragraph 405e). New data has been incorporated into this Chapter to supplement the 2003 EA Affected Environment.

The Maryland Airport is located upstream of the estuarine portions of the Mattawoman Creek. This watershed provides habitat for a number of freshwater fish species and supports an economically important high quality largemouth bass sports fishery. Submerged aquatic vegetation in the estuarine portions of Mattawoman Creek functions as an important factor in maintaining high water quality and habitat quality for aquatic life.

5.1 Fish, Wildlife, Plants

The EA study area consists of a mix of mature deciduous/coniferous forest and regularly maintained residential lots. The vegetation on these lots ranges from singular instances of mature trees to shrubs and grasses maintained for aesthetic value to the resident. The trees in this area have experienced a long term, un-interrupted growth and have reached an estimated 50-65 feet in height.

Impacts to fish, wildlife, and plants are possible with the implementation of the Proposed Action. These impacts to biotic communities include the removal of trees which may reduce interior dwelling habitats for avian species. Potential impacts and mitigation measures are discussed further in Section 6.7 of the EA.

5.2 Construction Impacts

Specific effects during construction which may create adverse environmental impacts include noise from construction equipment; noise and dust from delivery of materials and excavation equipment, creation of borrow pits and disposal of spoil, air pollution from construction equipment exhaust, and water pollution from erosion. In addition, occasional problems arise

from increased vehicular traffic around the actual construction site.

5.3 Resources Affected

Implementation of the Proposed Action would affect the following resources:

- *Air Quality* – temporary impact from construction
- *Compatible Land Use* – potential impact from obstruction removal
- *Construction Impacts* – temporary noise, air quality, and water quality impact
- *Fish, Wildlife, and Plants* – reduction of habitat for tree removal
- *Hazardous Materials, Pollution Prevention, and Solid Waste* – potential temporary from construction activities
- *Light Emissions and Visual Impacts* – increased viewshed of airport
- *Natural Resources and Energy Supply and Sustainable Design* – reduction of natural resources due to vegetation/tree removal
- *Noise* – temporary construction impact
- *Secondary (Induced) Impacts* – potential impact from easement acquisitions on private property
- *Socioeconomic Impacts, Environmental Justice, and Children's Environmental Health and Safety Risks* – potential impact from easement acquisitions on private property
- *Water Quality* – potential impacts from construction activities
- *Wetlands* – potential impacts from construction activities

5.4 Resources Not Affected

Implementation of the Proposed Action would not affect the following resources:

- *Coastal Resources*
- *Department of Transportation Act: Section 4(f)*
- *Farmlands*
- *Floodplains*
- *Historical, Architectural, Archeological, and Cultural Resources*
- *Wild and Scenic Rivers*

Implementation of the No Action Alternative would not affect the following resources:

- *Air Quality*
- *Coastal Resources*
- *Compatible Land Use*
- *Construction Impacts*
- *Department of Transportation Act: Section 4(f)*
- *Farmlands*
- *Fish, Wildlife, and Plants*
- *Floodplains*

-
- *Hazardous Materials, Pollution Prevention, and Solid Waste*
 - *Historical, Architectural, Archeological, and Cultural Resources*
 - *Light Emissions and Visual Impacts*
 - *Natural Resources and Energy Supply and Sustainable Design*
 - *Noise*
 - *Secondary (Induced) Impacts*
 - *Socioeconomic Impacts, Environmental Justice, and Children's Environmental Health and Safety Risks*
 - *Water Quality*
 - *Wetlands*
 - *Wild and Scenic Rivers*

CHAPTER 6 - ENVIRONMENTAL CONSEQUENCES

An examination of environmental impact was completed and documented for the categories listed in FAA Order 5050.4B, "Airport Environment Handbook." New data has been incorporated into this Chapter to supplement the 2003 EA Environmental Consequences.

6.1 Air Quality

The United States Congress has established the framework for air quality regulations through the passage of the Clean Air Act. The Clean Air Act requires the administrator of the Environmental Protection Agency (EPA) to establish national ambient air quality standards for air contaminants. EPA accepted the FAA's Emissions & Dispersion Modeling System (EDMS) as a formal EPA "Preferred Guideline" model for use at civil airports and military bases for air quality assessment.

Charles County is located in an 8-hour Ozone nonattainment and maintenance area as well as a Particulate Matter (PM-2.5) maintenance area according to the U.S. Environmental Protection Agency (EPA) Green Book. The proposed project is not an exempt action or presumed to conform (FAA Environmental Desk Reference for Airport Actions, October 2007, Chapter 1 Air Quality, 3.a.2.a) and therefore requires a direct emissions inventory for the implementation of the Proposed Action.

The source of emissions from the proposed project includes construction equipment associated with the proposed removal of obstructions and vehicles that will be used to haul away the cut vegetation. Any associated emissions of nitrogen oxides and volatile organic compounds (precursors to ozone) will be well below the *de minimis* levels for nonattainment and maintenance areas as identified in 40 CFR 91.153 and shown in Table 6-1. The Emissions Inventory reflects the direct emissions associated with the proposed obstruction removal and was determined using the Emissions and Dispersion Modeling System (EDMS) Version 5.1.4.1. No additional aircraft operations will result from the obstruction removal or easement acquisition. In addition, the proposed project will not affect surface transportation. Air quality impacts will be minimal and temporary, and there will be no long-term impacts.

**Table 6-1
Proposed Action Air Emissions Inventory**

| | Emissions (tons/year) | | | | | |
|--|-----------------------|-----------------|-------|-------|------------------|-------------------|
| | NO _x | SO _x | VOC | CO | PM ₁₀ | PM _{2.5} |
| Direct Emissions | 0.001 | 0 | 0.001 | 0.007 | 0 | 0 |
| Maintenance Area General Conformity Threshold | 100 | 100 | 50 | 100 | 100 | 100 |
| Nonattainment Area General Conformity Threshold | 100 | 100 | 50 | 100 | 100 | 100 |

Source: Emissions and Dispersion Modeling System Version 5.1.4.1.

The airport's activity level is below the threshold for requiring a National Ambient Air Quality Standards (NAAQS) analysis. The FAA threshold is more than 180,000 forecasted operations (arrivals and departures) for general aviation airports like 2W5 (FAA Air Quality Procedures for Civilian Airports and Air Force Bases). As per FAA Airport Master Record Data (Form 5010-1) the Airport currently has approximately 17,000 annually, well below the current threshold.

Implementation of the Proposed Action, No Action Alternative or Fee-Simple Alternative will not adversely impact air quality in the region.

6.2 Coastal Zone Management / Coastal Resources

The Charles County Zoning Ordinance defines the Overlay Zone: Critical Area Zone. The purpose of this zone is to provide special regulatory protection for the land and water resources located within the Chesapeake Bay Critical Area in Charles County. This zone includes all lands and waters within 1,000 feet of the heads of tides designated under Title 9 of the Natural Resources Article. The Maryland Airport is not included in this zone and therefore, no further analysis is needed for the Critical Area Zone of Charles County. The Proposed Action will be implemented in accordance with Executive order 13508 *Chesapeake Bay Protection and Restoration*.

The Maryland Coastal Program, administered by the Maryland Department of Natural Resources, is a networked program comprised of several State agencies that collectively implement the Program. The Federal Consistency Review requirements are implemented through

the Wetlands & Waterways Program within the Water Management Administration of the Maryland Department of the Environment. Maryland Airport, which received funding and other support from the FAA, is located within the Maryland Coastal Zone and will likely have foreseeable coastal effects. The Maryland Airport project is therefore subject to Federal Coastal Consistency Review. The FAA, or its agent acting on its behalf, is required to receive concurrence from the State of Maryland to ensure that the Maryland Airport project is consistent to the maximum extent practicable with Maryland's enforceable policies. The Draft Supplemental EA was submitted to MDE for the Coastal Zone Consistency Determination. MDE did not respond

The Coastal Barriers Resources Act of 1982 (CBRA) prohibits, with some exceptions, Federal financial assistance for development within the Coastal Barrier Resources System which consists of undeveloped coastal barriers along the Atlantic and Gulf coasts. The Maryland Airport is not within the Coastal Barrier Resources System. No further analysis is needed for the Coastal Barriers Resources Act.

Implementation of the Proposed Action, No Action Alternative or Fee-Simple Alternative will not adversely impact coastal resources.

6.3 Compatible Land Use

This section includes documentation to support the required sponsor's assurance under Section 511(a) (5) of the 1982 Airport Act that appropriate action, including the adoption of zoning laws, has been or will be taken, to the extent reasonable, to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including landing and takeoff of aircraft. Land use impacts exceeding thresholds of significance, which have impacts (for example, disruption of communities, relocation, induced socioeconomic impacts, wetlands, floodplains, coastal zones, critical habitat, or endangered or threatened species) will be analyzed and described accordingly under the appropriate impact category with any necessary cross-references to the Compatible Land Use section to avoid duplication.

The 2006 Charles County Comprehensive Plan shows the airport to be in the Light Industrial (IG) Zone. A General Aviation airport is a permitted use in the Light Industrial Zone and as such is compatible with surrounding development that is a permitted use. The area north of the airport is zoned as a Neighborhood Conservation District.

The County currently has no airport overlay zoning to reduce or preclude incompatible land uses. However, the County has expressed an interest in implementing such zoning. The Airport Master Plan includes a sample zoning ordinance for use by the County. The airport owners do not have regulatory control over property that is not owned by the Airport. Therefore, aviation easements are needed as discussed in this EA, which would allow the Airport to maintain and ensure obstruction free approaches. The airport owners are working closely with the County to enact zoning laws to restrict the use of land adjacent to and in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations.

6.4 Construction Impacts

Specific effects during construction which may create adverse environmental impacts include noise from construction equipment, noise and dust from delivery of materials and excavation equipment, creation of borrow pits and disposal of spoil, air pollution from construction equipment exhaust, and water pollution from erosion. In addition, occasional problems arise from increased vehicular traffic around the actual construction site. Construction impacts are typically of short duration, associated with actual construction activities, and can be mitigated during the construction period with careful planning and proper controls.

Ordinances and regulations address the impacts of construction activities, including construction noise, dust, and noise from heavy equipment traffic; disposal of construction debris; and air and water pollution. During construction of the Proposed Action, there are a number of potential environmental impacts that could occur, but these would be controlled through careful attention to construction methods and implementation of BMPs.

6.4.1 Potential Air Quality Construction Impacts

Air quality impacts could occur during construction of the Proposed Action due to dust and fumes from construction equipment, earthwork activities, and vehicles accessing the construction site. BMPs that limit dust generation could include vegetative cover, mulch, spray-on adhesive, calcium chloride application, water sprinkling, stone, tillage, wind barriers, and construction of a temporary graveled entrance/exit to the construction site. In an effort to limit the amount of dust that could be generated, construction activities could be staged. The contractor should also comply with county and/or other local air pollution regulations.

The No Action Alternative would have no construction development and; therefore, would not result in any impact to the current air quality.

During construction of the Proposed Action, BMP's would be implemented to limit air quality impacts. Additionally, the contractor would be required to comply with county and/or other local air pollution regulations.

6.4.2 Potential Construction Noise Impacts

Noise impact may occur in the vicinity of the construction site for the Proposed Action. **Table 6-2** illustrates the typical sound levels associated with various pieces of construction equipment that could be used during construction.

**Table 6-2
 Construction Equipment Noise**

| Equipment Type | Typical Sound Level dBA at 50 feet |
|-------------------------|---|
| Backhoe | 85 |
| Bulldozer | 87 |
| Concrete Mixer (truck) | 85 |
| Dump Truck | 88 |
| Generator | 76 |
| Jackhammer | 88 |
| Paver | 89 |
| Pile Driver | 101 |
| Pneumatic Tools | 85 |
| Portable Air Compressor | 81 |
| Pump | 76 |
| Rock Drill | 98 |

Table 6-2
Construction Equipment Noise

| Equipment Type | Typical Sound Level dBA at 50 feet |
|-----------------------|---|
| Scraper | 88 |

Source: *Handbook of Noise Assessments, page 215*
(Edited by Daryl N. May, Ph.D., 1978)

The No Action Alternative would have no construction development and; therefore, would not result in any noise impacts.

During construction of the Proposed Action, BMP's would be implemented to reduce noise impacts. Additionally, the contractor will be required to comply with county and/or other local noise regulations.

6.4.3 Potential Water Quality Impacts due to Construction

Water quality could potentially be impacted by surface water runoff, accidental release of fuel or hydraulic fluids, sedimentation from soil erosion, and changes in stream channel grades. Several BMPs, which will be utilized during construction, include; construction of temporary diversions to dispose of runoff to control erosion and sedimentation: construction of diversion dikes to prevent sediment-laden runoff from exiting the construction site; construction of temporary sediment traps, which could detain sediment-laden runoff and trap the sediment to prevent impacts to surrounding water bodies; and construction of sediment basins, straw bale dikes, and rock dams to retain sediment on the construction site and prevent sedimentation to water bodies. The contractor would be required to comply with current federal and state laws and regulations regarding water quality and stormwater management.

Oil and grease spills during construction are another possible source of water pollution. The chance for oil and grease spills is small. However, since such incidents would be handled by a Spill Prevention, Control, and Countermeasures Plan (SPCC), as specified in a National Pollution Discharge Elimination System (NPDES) permit that is required during construction, any undetected accidental leakage would be absorbed and/or filtered by slopes and ditches before reaching major streams. Appropriate BMPs would be used during construction for erosion control and water quality protection, as well as other mitigative measures required for NPDES

permit approval. Staging areas, haul routes, and laydown areas will be located within the limits of disturbance for the Proposed Action. Construction equipment is stored in the staging area while not working and the laydown area is where trees will be placed prior to being shredded or hauled off site. Additional mitigation measures are discussed in Chapter 8 of this EA.

Implementation of the Proposed Action, No Action Alternative or Fee-Simple Alternative will not result in adverse construction impacts.

6.5 Department of Transportation Act: Section 4(f)

Section 4(f) of the Department of Transportation Act states that a project requiring the use of any publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance or land from a historic site of national, state, or local significance shall not be approved unless there is no feasible alternative to the use of such land.

The areas encompassing easement acquisitions are currently comprised of single-family houses and undeveloped land. There are no public parks, recreation areas, wildlife or waterfowl refuges in the areas identified for easement acquisition or obstruction removal. The Proposed Action will not impact any land that falls under the requirements of Section 4(f). Exhibit 6.1 depicts "Protected Lands" identified by Charles County for the areas encompassing the proposed project. No Section 4(f) features are identified within the proposed project limits as shown on Exhibit 6.1. Additionally, no property of historic significance will be impacted by this project.

Implementation of the Proposed Action, No Action Alternative or Fee-Simple Alternative will not result in any Section 4(f) impacts.

6.6 Farmlands

The Farmland Protection Policy Act (FPPA), Public Law 97-98, authorized the Department of Agriculture to develop criteria pertaining to the conversion of farmlands to non-agricultural use. Farmland protected by the FPPA is either prime farmland that is not already committed to urban development or water storage, unique farmland, or farmland that is of state or local importance as determined by the appropriate state or local government agency with the concurrence of the

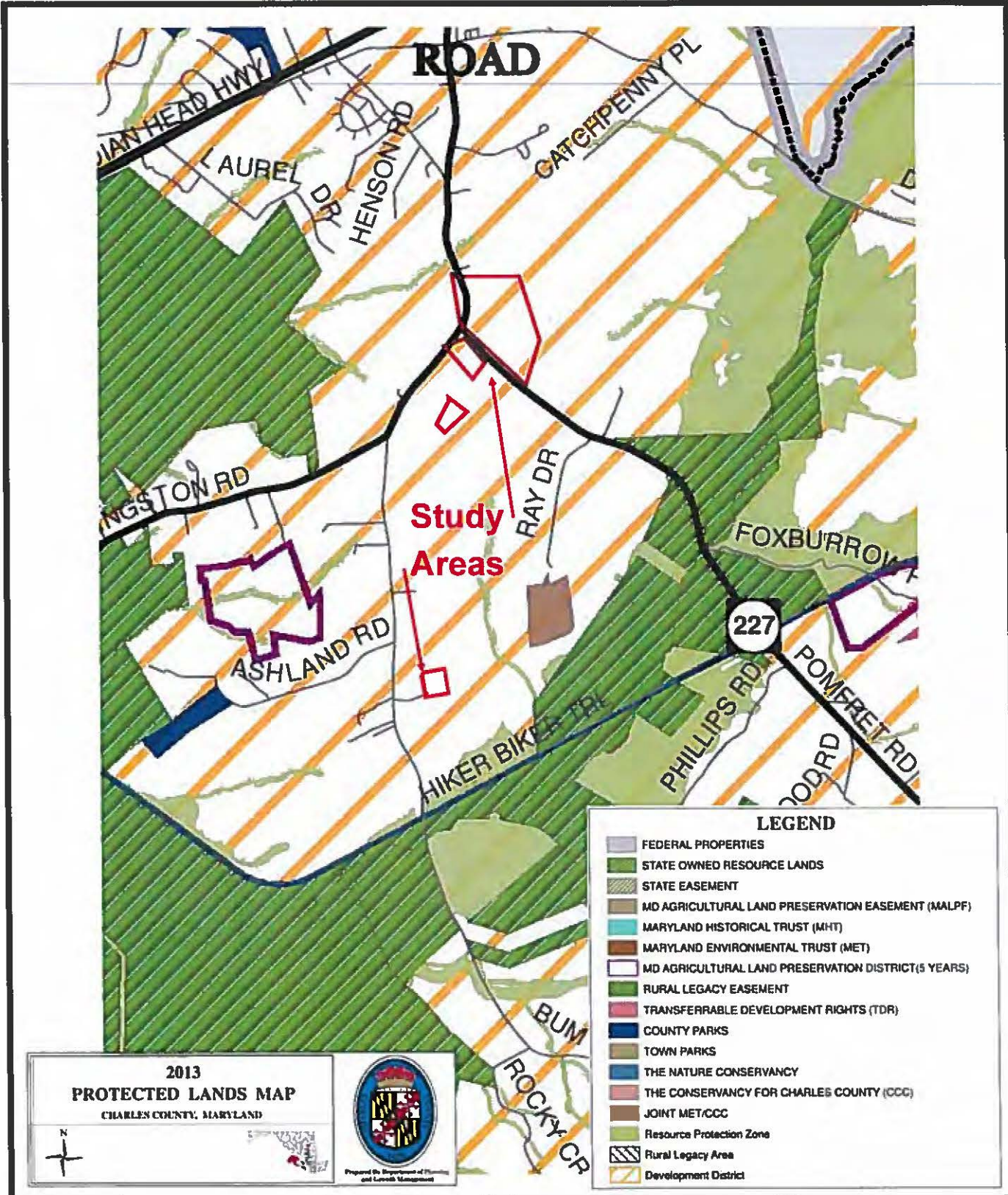


Exhibit 6.1
Maryland Airport

Charles County Protected Lands

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Secretary of Agriculture.

A U.S. Department of Agriculture (USDA) NRCS custom soil resource report (**Appendix G**; NRCS Web Soil Survey: <http://websoilsurvey.nrcs.usda.gov>) identifies Beltsville silt loam (2 to 5 percent slopes) in the project area. These soils are considered prime farmland soils only if drained. Prime farmland, as defined by the USDA, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land or water areas. Part 622.04 of the National Soil Survey Handbook, published by NRCS, states that some soil map units include both drained and undrained areas, but only the drained areas meet the prime farmland criteria. The identified soils on the project site are not protected by the Farmland Protection Policy Act. In addition, the proposed easement acquisition and obstruction removal will not impact the surrounding soil and will not change the current use of these properties. No farmland will be impacted by the Proposed Action.

Implementation of the Proposed Action, No Action Alternative or Fee-Simple Alternative will not result in farmland impacts.

6.7 Fish, Wildlife, and Plants

Mill Creek Environmental Consultants, Ltd. completed a survey and analysis of the study area to determine the impact of airport development, in the form of clearing and tree removal, on the existing biotic communities. The delineation was conducted by Matthew Neely, Senior Environmental Scientist, PWD (VA), Mill Creek Environmental Consultants, Ltd. A map of the survey area and differing community types is included in **Appendix C** along with the Biotic Communities Report. The survey revealed two types of terrestrial habitat and one small aquatic habitat within the survey area boundaries.

Community A consists of approximately 27+ acres of mature mixed deciduous/coniferous forest. Trees in this community have experienced a long term of un-interrupted growth and have reached an estimated 50-65', in height. Dominant species prevalent throughout the community

include Virginia pine, White Oak, Black Oak, American Beech, and hickories, with lesser prevalent species being Sassafras, Flowering Dogwood, Red Maple, Sweetgum, American Holly, and Willow Oak.

In addition to multiple species of birds who nest and feed in the area, animals frequenting the area are White-tailed deer, Raccoon, Gray Squirrel, Striped Skunk, Eastern Cottontail, Red Fox, Gray Fox and the Virginia Opossum. Common reptiles and amphibians associated with this type community are: the Common Garter Snake, Rat Snake, Common Kingsnake, Copperhead, Eastern Box Turtle, and various species of frogs and skinks.

In addition to the terrestrial habitat discussed above, aquatic habitat does exist within the survey area boundaries. Approximately 281+ linear feet of intermittent stream segment was found in the northwest corner of the survey area. This stream bed averages about 4 feet in width with banks approximately 18-24" in height. Sheet-flow from the nearby roadway makes its way into this intermittent stream moving northwest (NW) out of the survey area. The substrate ranges from mud to coarse gravel in areas with locations of undercut banks and small point bars of deposition. While this habitat does not support fish species, it does provide suitable habitat for amphibious species such as frogs.

The stream was determined to be intermittent in the field by the scientist conducting the wetland delineation. In addition to his own determination, the wetland delineation was confirmed and a JD was issued by the U.S. Army Corps of Engineers. A regulatory scientist from the Maryland Department of the Environment also reviewed the field scientist's delineation. In addition to the physical site inspection, background research/mapping was reviewed regarding all streams within the survey area. The stream segment identified in the field did not even merit inclusion in the national hydrography dataset or USGS topo.

Mill Creek Environmental Consultants, Ltd. completed a survey to evaluate the presence of any Federal or State listed Threatened or Endangered Species and or habitat that may be potentially impacted by airport development in the future, particularly in the form of obstruction removal of trees. The results of this survey are included in **Appendix D**.

Federally listed species are protected by the Endangered Species Act of 1973, as amended. The U.S. Department of the Interior's Fish and Wildlife Service (USFWS) administers the Act, listing and protecting federally endangered and threatened species. Currently there are 9 plant species federally listed as endangered or threatened which occur or formerly occurred in Maryland. In addition to these 9 plant species, 27 animals are currently federally listed as endangered or threatened in the state of Maryland.

The Wildlife and Heritage Service Natural Heritage Program tracks the status of over 1,100 native plants and animals that are among the rarest in Maryland and most in need of conservation efforts as elements of our State's natural diversity. Of these species, the Maryland Department of Natural Resources officially recognizes 607 species and subspecies as endangered, threatened, in need of conservation, or endangered extirpated. Only 37, or 3% of the total tracked species, are listed by the U.S. Fish and Wildlife Service as nationally endangered or threatened.

A physical inspection of the survey area did not reveal any federal or state listed threatened or endangered species. In addition to the physical inspection of the survey area, input for Endangered and Threatened species information was solicited from the US Fish and Wildlife Service (USFWS), and the Maryland Department of Natural Resources (MDNR). The USFWS confirmed that there are no federally listed species associated with the project area (Appendix D). Additionally, the Maryland Department of Natural Resources also confirmed that they have no concerns regarding state listed species within the boundaries of the Supplemental EA survey areas. Regarding benthic organisms, the most likely organism potentially present would be the freshwater crayfish (*cambarus* spp.). Impacts to the Mattawan watershed as a result of the Proposed Action will be temporary and mitigated with erosion and sediment controls.

The Proposed Action will be designed and constructed to comply with Executive Order 13112 *Invasive Species*.

Implementation of the Proposed Action, No Action Alternative or Fee-Simple Alternative will not adversely impact fish, wildlife, or plants.

6.8 Floodplains

Federal Insurance Rate Maps (FIRM) are used as the primary reference to determine the base of floodplains. Additional references include Floodway maps and Flood Insurance Studies generally performed by FEMA. The Proposed Action is not located within either the 100-year or 500-year flood area as determined by the Flood Insurance Rate Maps as shown in **Appendix F**.

The Floodplain Management Ordinance of Charles County addresses utility installation within the limits of floodplains. This ordinance in no way discourages or prohibits such construction but specifies that the systems “must be designed to minimize or eliminate the infiltration of flood waters into the systems or discharges from the systems into flood waters and shall be located and constructed so as to minimize or eliminate flood damage.”

Implementation of the Proposed Action, No Action Alternative or Fee-Simple Alternative will not result in floodplain impacts.

6.9 Hazardous Materials, Pollution Prevention, and Solid Waste

The Resource Conservation and Recovery Act of 1976 (RCRA) established a cradle to grave hazardous waste management system. The EPA has authorized Maryland to administer a state hazardous waste program which generally parallels the federal program.

No hazardous waste impacts are anticipated as a result of implementing the Proposed Action. No structures which could contain hazardous materials will be removed as part of the Proposed Action. In addition no hazardous materials were identified in the survey area (**Appendix H**). If hazardous materials or hazardous waste are encountered during implementation of the Proposed Action, they will be removed from site and disposed of in accordance with federal, state, and local hazardous material disposal regulations.

The proposed obstruction removal will generate vegetative solid waste, which will be properly managed and disposed in accordance with Charles County and Maryland solid waste disposal requirements. The contractor will be required to remove and properly dispose of any and all

wood chips that may result from the Proposed Action. Vegetative debris will be managed in accordance with Executive Order 12088 *Federal Compliance with Pollution Control Standards*. The amount of solid waste generated by the obstruction removal will be reduced as vegetative debris will be recycled as opposed to being discarded in a landfill. This debris will be shredded and reused as mulch.

Implementation of the Proposed Action, No Action Alternative or Fee-Simple Alternative will not adversely hazardous material or solid waste impacts.

6.10 Historic, Architectural, Archeological and Cultural Resources

Two laws apply to the disposition of historic, architectural, archeological and cultural resources. The first law is the National Historic Preservation Act of 1966, and the second is the Archeological and Historic Preservation Act of 1974. As part of the research for this project, a Phase I Cultural Resources Survey was prepared. The full report is included in **Appendix B**. The Summary and Recommendations from this report are as follows.

A Cultural Resources Site Assessment was performed by Browning & Associates, Ltd. for the Area of Potential Effect (APE) for the proposed aviation easements and obstruction removal. No architectural properties were found to exist within the APE.

A total of 101 previously recorded archaeological sites were found to be located within approximately two miles of the Maryland Airport project boundaries. Among these sites are numerous Native American lithic scatters and smaller number of historic components representing occupations from the late seventeenth, eighteenth, nineteenth, and twentieth centuries. No previously recorded sites were found to be located within the APE for archaeology.

A Section 106 project review form for the Proposed Action was submitted to the Maryland Historical Trust for review and comment. MHT determined that the project will have “no effect” on historic properties and that the federal and/or State historic preservation requirements have been met.

Implementation of the Proposed Action, No Action Alternative or Fee-Simple Alternative will not impact any historic, architectural, archeological or cultural resources.

6.11 Light Emissions and Visual Impacts

The FAA requires the airport sponsor to consider the extent to which any lighting associated with an airport action will create an annoyance among people in surrounding areas. There are existing sources of light emissions from the airport property due to the need for visual guidance for airplanes at night and during periods of low visibility.

The acquisition of aviation easements will not cause additional light emission impacts to the surrounding community. No additional airport lighting is included as part of the Proposed Action. The tree clearing around residences on the North side of Pomfret Road may result in some additional airport light emissions to reach these properties. The majority of obstruction removal will occur in areas that are not situated between the properties and the airport.

Visual impacts are identified by examining the visual viewshed of the Proposed Action study area. The visual viewshed, which takes into account the entire landscape, is comprised of two main aspects: views to and views from the Proposed Action. The existing viewshed of the Proposed Action study area is primarily an undeveloped environment with viewsheds typical of commercial and industrial development and large expanses of wooded area.

Construction of the Proposed Action is not anticipated to result in visual impacts which cannot be mitigated. Temporary impacts would be the sighting of construction equipment during obstruction removal while permanent impacts include the conversion of wooded land to fields. From the standpoint of visual appeal from the Proposed Action, occupants would see wooded areas and Maryland Airport facilities.

Potential mitigation of adverse visual impacts would be focused in the areas adjacent to the proposed obstruction removal. Measures that could be used to screen the Proposed Action include planting a mix of regionally native, noninvasive trees and shrubs in a diversity of sizes so

that they wouldn't become future obstructions to the Maryland Airport airspace.

Implementation of the Proposed Action, No Action Alternative or Fee-Simple Alternative will not result in adverse light emissions or visual impacts on the surrounding community.

6.12 Natural Resources, Energy Supply, and Sustainable Design

There will be no grubbing, grading or sidecasting of soil associated with the Proposed Action. Changes in hydrology will be minimal and the obstruction removal area will be allowed to regenerate naturally. Impacts associated with stormwater loss, habitat fragmentation and shade and vegetative buffer will be temporary until the obstruction removal area naturally regenerates.

Executive Order 13123, *Greening the Government through Efficient Energy Management*, encourages each federal agency to expand the use of renewable energy within its facilities and in its activities. This Order also requires each federal agency to reduce petroleum use, total energy use and associated air emissions, and water consumption in its facilities.

The assessment of natural resources and energy supply generally entails altered requirements for stationary facilities. The Proposed Action would result in the use of small amounts of fossil fuels. The proposed obstruction removal will require fuel consumption by harvesting and tree removal equipment but otherwise will have no long-term impacts.

The Proposed Action does not include any major changes in stationary facilities nor does it include the use of scarce or unusual materials. Increased aircraft fuel use is not anticipated with the implementation of the Proposed Action.

Vegetative debris generated as a result of the proposed obstruction removal will be recycled in an effort to reduce the amount of solid waste generated and promote a sustainable design. The larger marketable tree trunks will be sold to a mill. Other vegetative debris will be ground up and hauled away by the contractor to be used as mulch. This will reduce the solid waste impact as waste material will not be disposed of in a landfill.

Implementation of the Proposed Action, No Action Alternative or Fee-Simple Alternative will not impact natural resources.

6.13 Noise

The effects of aircraft noise on communities surrounding an airport are one of the most important environmental impacts to consider. If aircraft noise is sufficiently loud or frequent it can be highly objectionable, as it has the potential to interfere with the daily activities of neighboring residents and businesses. Because aircraft noise is one of the most noticeable environmental effects that an airport produces, the FAA's Environmental Assessment Process (Order 5050.4B) requires that a noise analysis be performed for proposals which individually or cumulatively involve airport location, runway location, major runway extension, or runway strengthening.

The 2003 Maryland Airport EA determined that no residences would be adversely impacted by noise related to the runway realignment and extension and that the 65 decibel DNL contour does not extend off of airport property. The 65 decibel DNL noise contour represents the threshold for adverse impact.

There will be noise impacts associated with construction activities if the Proposed Action is implemented. These impacts will be temporary and will not cause an adverse long-term impact on the surrounding community as discussed further in Section 6.4.2 of this document.

Implementation of the Proposed Action, No Action Alternative or Fee-Simple Alternative will not result in noise impacts.

6.14 Secondary (Induced) Impacts

Induced socioeconomic impacts of airport development normally involve shifts in population, increased public service, or changes in the local business and economic climate. The Maryland Aviation Administration completed the Maryland Airport Economic Impact Study in 2013. This document assessed the direct, indirect, and induced socioeconomic impacts of the 35 public use airports in Maryland. The study determined that Maryland Airport contributes more than \$9

million annually in direct and indirect business revenue to the local economy.

The positive economic impacts of the airport are viewed as beneficial, and the Proposed Action is expected to extend these positive impacts to the local community and region by allowing the Airport to provide non-precision approach capabilities to Runway 2.

6.15 Socioeconomic Impacts, Environmental Justice, and Children's Environmental Health and Safety Risks

6.15.1 Socioeconomic Impacts

Aviation development can impact the social environment as well as the physical environment by affecting public uses and/or community facilities. These impacts are typically associated with the relocation of families and/or disruption of the communities near an airport. Special social impacts (identified in FAA Order 5050.4B) that are associated with airport development include:

- The relocation of residences and/or businesses,
- The alteration of surface transportation,
- The disruption of established communities,
- The disruption of orderly planned development, and
- An appreciable change in employment.

The Proposed Action of easement acquisition and obstruction removal will not cause any of the social impacts listed above. The easement will be acquired as per federal acquisition regulations including an appraisal and review appraisal of the easement. These appraisals will determine the fair market value of the easement and will consider how these easements will impact the future use of the property by the land owner.

Any vehicular traffic increases that occur resulting from the Proposed Action will be due to obstruction removal activities and temporary in nature. The existing roads will be sufficient to accommodate this additional traffic without adversely impacting local residents and businesses.

6.15.2 Environmental Justice

DOT Order 5610.2(a), Executive Order 12898, *Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (May 2, 2012) states that: "to the greatest extent practicable and permitted by law, each federal agency should make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations." Environmental justice, in lay terms, precludes the targeting of low income, minority, economically disadvantaged, or underrepresented communities to further a Proposed Action.

Implementation of the Proposed Action does not concentrate environmental impacts on any low income or economically disadvantaged communities. Approximately 15.3 percent of the United States population lives below the poverty level according to Census data while 5.6% of the population of Charles County, Maryland lives below the poverty level (U.S. Census Bureau, 2007-2011 American Community Survey). Minority populations in Charles County account for approximately 50 percent of the total County population compared to a US average of 28 percent.

The Proposed Action would have no permanent impact on minority populations and low-income populations, as construction of the Proposed Action will not require relocation of residences. In addition, the analysis of environmental justice centers around demonstrating if there are any adverse impacts based on the impact categories evaluated in this EA. The results of the EA indicate that there are no permanent adverse impacts related to environmental justice and therefore there is no permanent adverse effect to minority or low-income populations. Temporary impacts to minority populations include the impacts associated with the obstruction removal such as air quality and noise/vibration impacts.

6.15.3 Children's Environmental Health and Safety Risks

Executive Order 13045, *Protection of Children from Environmental Health Risks and Safety Risks* (April 23, 1997), directs federal agencies to identify and assess environmental health risks

and safety risks that may disproportionately affect children. Environmental health risks and safety risks include risks to health or to safety that are attributable to products or substances that a child is likely to come in contact with or ingest, such as air, food, drinking water, recreational waters, soil, or products they might use or be exposed to. The Proposed Action is not anticipated to cause adverse impacts to Children's Health and Safety. Air quality impacts will be temporary during construction. Construction equipment will be stored in a location inaccessible by the public when not in use and hazardous impacts associated with this equipment are not anticipated.

Implementation of the Proposed Action and No Action Alternative will not result in Socioeconomic Impacts. Implementation of the Fee-Simple acquisition alternative would result in the relocation of three residences but will not result in extensive relocation.

6.16 Water Quality

No adverse impacts to water quality are anticipated with implementation of the Proposed Action. Temporary impacts may occur during the Proposed Action construction phase. However, best management practices such as the use of silt fences and dedicated haul routes and staging areas will limit water quality impacts during the removal of obstructions. An erosion and sediment control plan will be developed and coordinated with the Charles (County) Soil Conservation District prior to the start of any construction activities associated with the Proposed Action.

The Federal Water Pollution Control Act (Clean Water Act) provides the authority to establish water quality standards, control discharges into surface and subsurface waters, develop waste treatment management plans and practices, and issue permits for discharges (Section 402) and for dredged or fill material (Section 404).

Under Section 402 of the Clean Water Act (CWA) all point source discharges of pollutants to waters of the United States (including lakes, rivers, wetlands, etc.) must be authorized under a National Pollutant Discharge Elimination System (NPDES) permit. The point source discharges include stormwater discharges associated with industrial activity (daily operation of an airport) and construction activity disturbing five or more acres of land. Based on these criteria, a construction permit will be required for the Proposed Action. This permit is issued by the Water

Management Administration (WMA) of the Maryland Department of the Environment (MDE). No additional impervious areas will be constructed as part of the Proposed Action.

The Charles County Zoning Ordinance defines the Overlay Zone: Resource Protection Zone. The purpose of this zone is to protect stream valley habitat and stream water quality. This zone applies to many county streams including the Mattawoman Creek and its tributaries. This zone encompasses an area based on the outermost combined limits of the existing 100-year floodplain, if present; non-tidal wetlands contiguous with or within 25 feet of the stream channel; and a buffer. There is no proposed clearing in any areas within the Overlay Zone. Best management practices to ensure water quality will be included in the obstruction removal design project.

Stormwater management for the proposed clearing is addressed in the approved erosion control plan for timber harvesting as per the Charles County Soil Conservation District. No new impervious surfaces are included in the Proposed Action. All work will be conducted in accordance with the erosion control plan and monitored by Charles County.

Implementation of the Proposed Action, No Action Alternative or Fee-Simple Alternative will not impact water quality.

6.17 Wetlands

One function of the United States Army Corps of Engineers (USACE) is the management of the Rivers and Harbors Act of 1899, as well as the Clean Water Act of 1972, as amended. The USACE does this through the review of any projects that will impact navigable waters or other waters of the United States through dredging, filling, diverting etc. those waters or otherwise altering them from their natural state.

The wetlands delineation and survey of all assigned survey areas revealed the presence of approximately .34+ acres of PEM wetlands, in addition to 270' + of intermittent streams. Impact to these areas will require a permit from the U.S. Army Corps of Engineers and possible compensatory mitigation. No obstruction removal is currently identified within the wetland or

stream areas and therefore, no impacts to wetlands are anticipated.

Under Section 404 of the Clean Water Act, USACE has authority to regulate fill into waters of the United States and adjacent wetlands. One wetland area was identified during the field survey as shown in **Exhibit 6.2** and **Exhibit 6.3**. This area was confirmed during the USACE on-site Jurisdictional Determination assessment and is subject to USACE 404 permit requirements. However, this wetland is located within the area of proposed easement acquisition but outside of the obstruction clearing area having no impacts to wetlands therefore no USACE permit is required.

In an email dated September 9, 2013 (Appendix E), MDE stated: "After conducting a site visit on August 29th at Maryland Airport, the Department determined that the depressional area is a regulated wetland and is considered connected by the State. If any impacts are proposed for this area or its adjacent 25-foot buffer then a Joint Federal/State Permit for Alteration to a Nontidal Wetland Waterway or 100-year floodplain needs to be submitted to the State." No obstructions are identified within the 25-foot buffer. If obstructions need to be removed within this buffer in the future, the impacts to the wetlands will be evaluated via tiering or a supplemental study as per NEPA requirements and a Joint Federal/State Permit for Alteration to a Nontidal Wetland Waterway will be submitted to USACE and MDE for review and approval. The removal of trees within this wetlands buffer is not anticipated to adversely impact wetlands.

Implementation of the Proposed Action, No Action Alternative or Fee-Simple Alternative will not impact wetlands.

6.18 Wild and Scenic Rivers

The "Wild and Scenic River Act" describes those river areas eligible to be included in a system afforded protection under the Act as free flowing and "...outstandingly remarkable scenic, recreational, geologic, fish and wild life, historic, cultural, and other similar values." There are currently no National Wild or Scenic rivers in Maryland according to the U.S. Fish and Wildlife Service (www.rivers.gov/maryland). However, the State of Maryland has designated nine scenic and wild rivers. One of these rivers (Wicomico River) is partially located in Charles County.

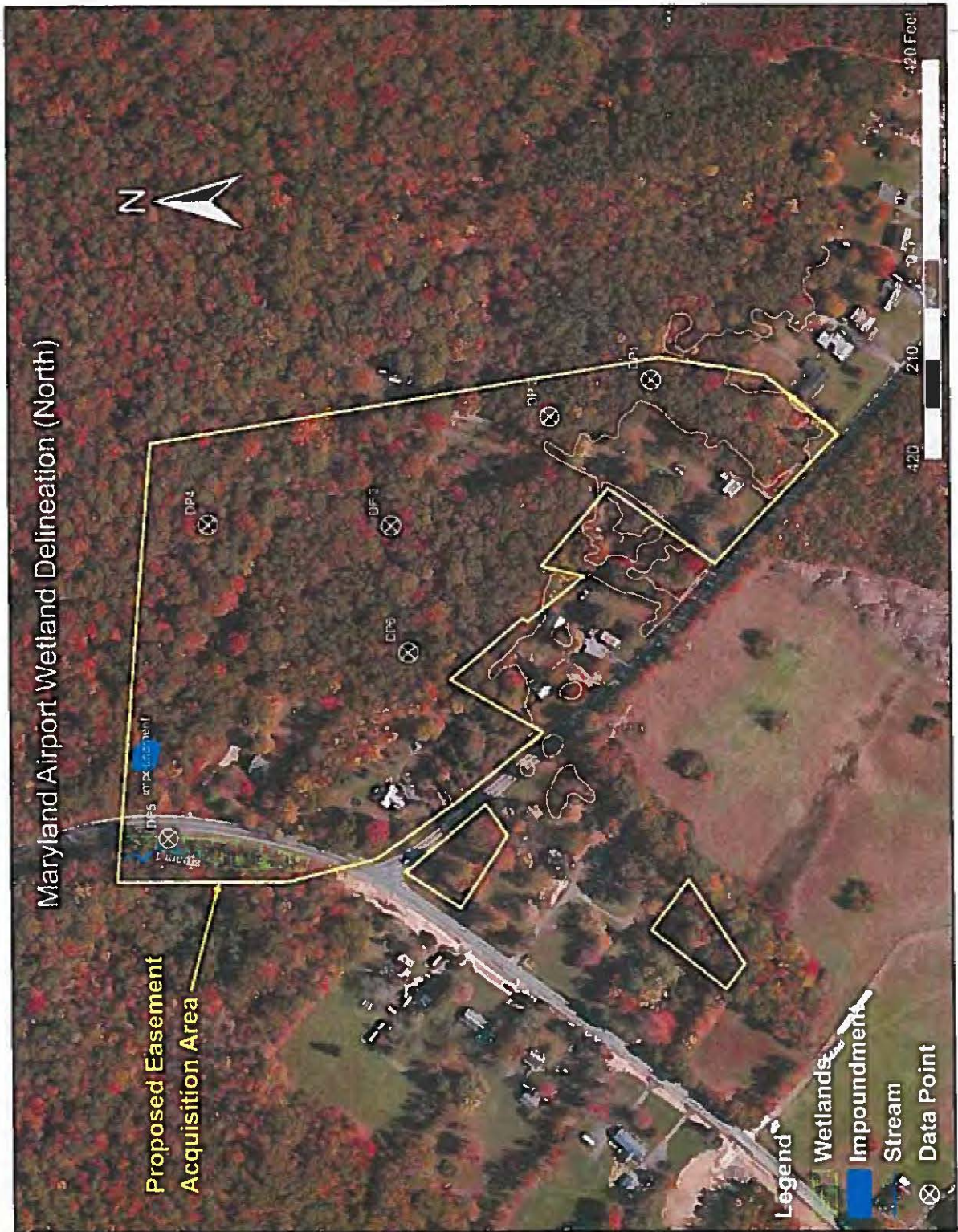


Exhibit 6.2
Maryland Airport

Wetlands Delineation (North)

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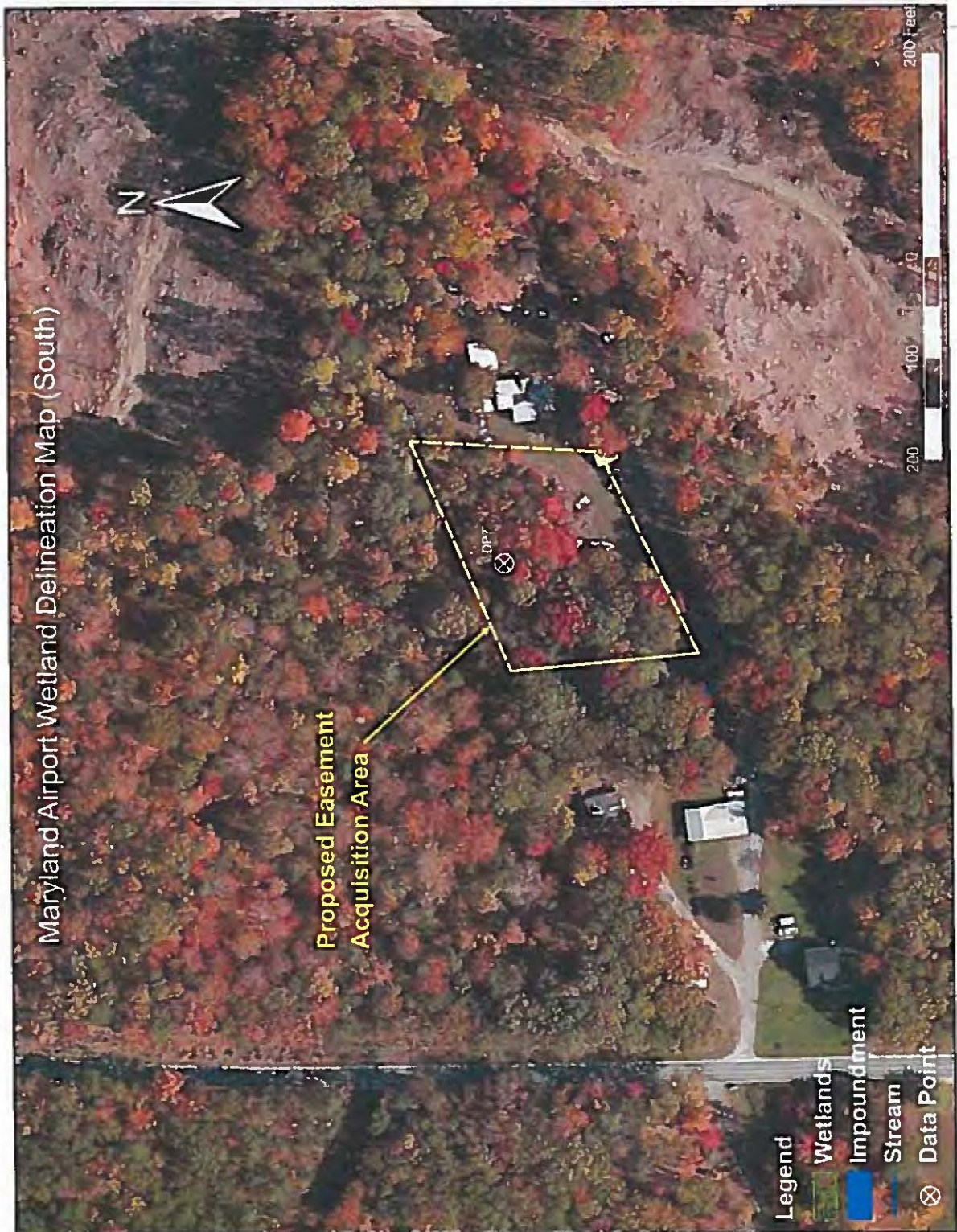


Exhibit 6.3
Maryland Airport

Wetlands Delineation (South)

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Implementation of the Proposed Action, No Action Alternative or Fee-Simple Alternative will not impact any wild or scenic rivers.

CHAPTER 7 - CUMULATIVE IMPACTS

Cumulative impacts address actions by others in combination with the Proposed Action. Cumulative impacts include the impact on the environment resulting from the incremental impact of the Proposed Action when added to other past, present, and reasonable foreseeable future actions, regardless of what agency or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over time.

Recent development at the Maryland Airport has been related to the construction of the new runway. Phase III of the runway construction was completed in 2013. Phase IV of the runway construction will be completed once the obstructions and aviation easements included in this Supplemental EA are removed. Projects completed in the last three years and proposed for the next five years for the Maryland Airport are discussed below.

Past History - The Maryland Airport construction projects conducted over the past three years include:

- Clearing approximately 129 acres of trees for the construction of the new runway
- Construction Phases II & III of the new 3,740' x 75' runway and associated taxiway including grading existing terrain for the new runway alignment
- Land acquisition of the area within the new Runway Protection Zones

These completed projects were included in the 2003 Maryland Airport Environmental Assessment.

Future Plans – The airport development plans for the next five years in addition to the Proposed Action of this EA include:

- Phase IV construction of the runway which will result in a total runway length of 4,300' x 75'

- Construction of a 35' wide parallel taxiway
- Construction of a 33,000 square yard apron adjacent to the terminal building

These projects were included in the 2003 Maryland Airport Environmental Assessment. The majority of the earthwork associated with these three projects has been completed as part of the recent runway construction. These projects will be completed once the obstructions have been removed. A review of these projects indicates that no adverse environmental impacts will result from the completion of these three projects based on field analysis of these project areas. Areas that included earthwork or grading as part of the completed phase of construction were seeded to reduce the likelihood of fugitive dust generation and resulting air quality impacts. This seeding also protects these areas from erosion. Adverse impacts which would elevate the Proposed Action and past/future action above the thresholds for significant impacts are not anticipated. Mitigation for the removal of tree associated with past project and the Proposed Action is included in the existing Maryland Airport Forest Conservation Plan.

Potential induced and cumulative impacts which are not associated with the Proposed Action identified in this EA include indirect impacts to the Mattawoman watershed as a result of future airport development and commercial/residential development around the Maryland Airport.

CHAPTER 8 – MITIGATION

The Proposed Action will not result in any impacts that would require mitigation. However, Best Management Practices (BMPs) are control measures which are used to limit impacts to water quality during construction. BMPs for the construction of the Proposed Action are discussed in the following chapters.

Mitigation measures are used to reduce impacts associated with the implementation of the Proposed Action. Air pollutants most noticeable during construction are dust particles generated from earth moving activities, aggregate handling, and travel on non-paved haul routes. This dust will be controlled by methods including: use of water to keep exposed areas damp. This water will be provided by the construction contractor and brought to the project site via tanker trucks. Other air pollutants include exhaust fumes from construction equipment. Effects from exhaust fumes are generally considered to be negligible due to the large area in which the vehicles are operating. All construction equipment will be maintained and kept in proper operating conditions at all times. Burning of vegetative debris is not included as part of the Proposed Action. The contractor(s) will be required to adhere to all applicable state and local air quality regulations.

Water pollution can occur during project construction primarily from erosion of exposed land surfaces. The use of temporary erosion and sedimentation controls will be required throughout the duration of the construction of each element of the Proposed Action. The 2009 Sediment and Erosion Control Plan that was developed for the runway realignment project includes the obstruction removal areas associated with the Proposed Action of this EA. This plan will be revised if necessary during the design phase of the project. This plan is required by Charles County prior to beginning construction for any land disturbance activities greater than 10,000 sf. Precautions will also be taken during the maintenance and fueling of equipment so that no hazardous materials are dumped onto the ground and allowed to penetrate into the groundwater system. These precautions include collecting and disposing of all used oils in accordance with Federal, State and local laws and utilizing the staging area and drip pads during equipment refueling. Construction debris will be disposed of at a lawful site to reduce the risk of contamination to any wetlands and streams in the vicinity of the work.

Increases in noise levels created by construction equipment can be a source of irritation to nearby residents. Restrictions governing the time of day in which construction activities can take place may be necessary to minimize disruptions to nearby residences.

The construction of the proposed projects may cause a slight increase in vehicular traffic in the airport area. Staging areas and haul routes will be restored to approximately original conditions by regrading and reseeding, where needed.

Per the Maryland Department of Natural Resources: "The main purpose of the Maryland Forest Conservation Act (Natural Resources Article Section 5-1601 through 5-1613) enacted in 1991 was to minimize the loss of Maryland's forest resources during land development by making the identification and protection of forests and other sensitive areas an integral part of the site planning process. Identification of priority areas prior to development makes their retention possible. Of primary interest are areas adjacent to streams or wetlands, those on steep or erodible soils or those within or adjacent to large contiguous blocks of forest or wildlife corridors. Any person making application for a subdivision, grading permit or sediment control plan on a tract of 40,000 square feet or more must submit a Forest Stand Delineation (FSD) and a Forest Conservation Plan (FCP)." The 2009 Forest Conservation Plan that was developed for the runway realignment at Maryland Airport will not need to be revised as it already depicts the limits of clearing associated with this Supplemental EA.

Maryland Natural Resources Code Ann. § 5-1602 states that: "The cutting or clearing of trees to comply with the requirements of 14 C.F.R. § 77.25 relating to objects affecting navigable airspace, provided that the Federal Aviation Administration has determined that the trees are a hazard to aviation."

CHAPTER 9 - PUBLIC INVOLVEMENT

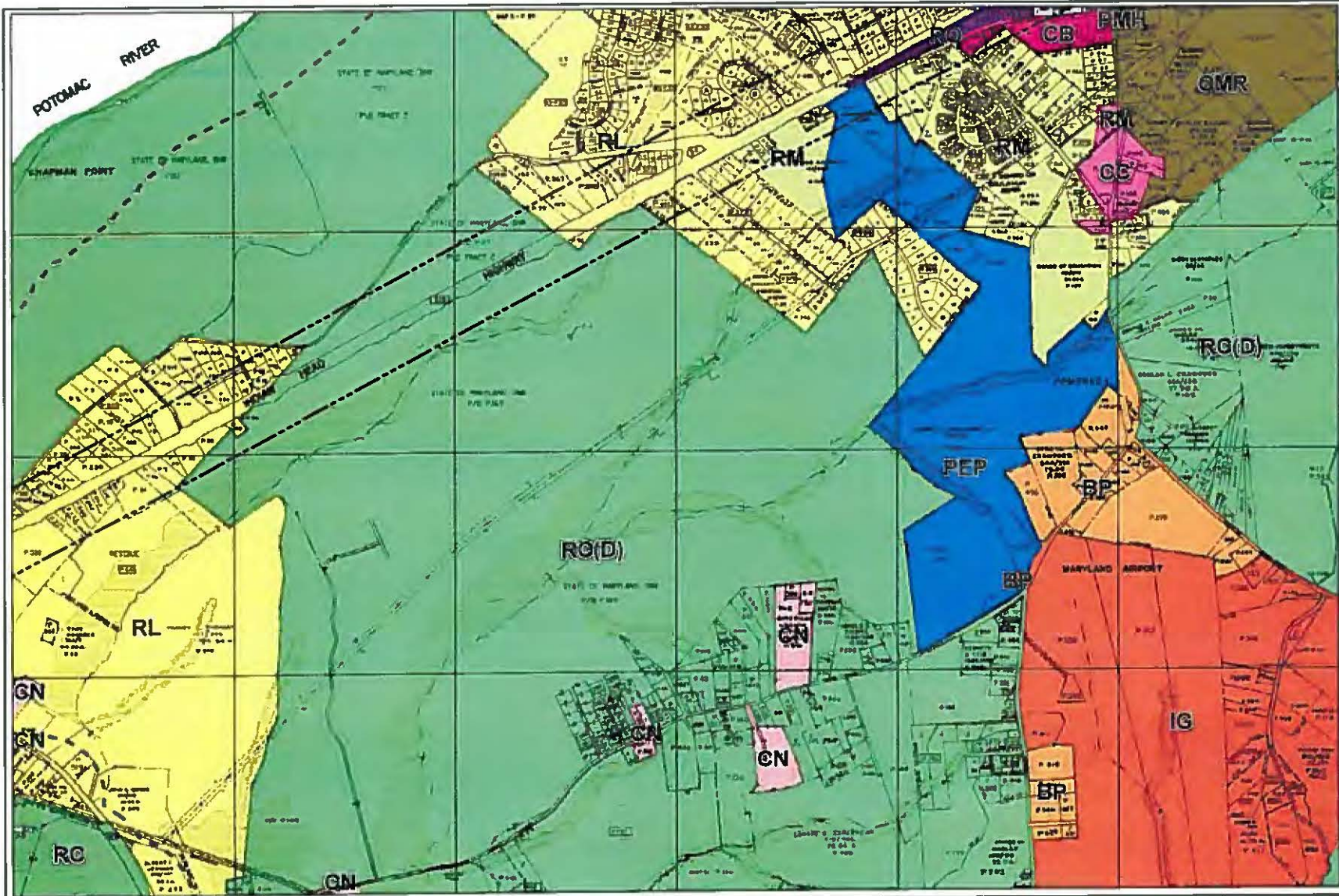
This draft Supplemental Environmental Assessment is to be made available for a 30-day public review period and any comments received during this time will be addressed accordingly (Appendix I).

CHAPTER 10 – AGENCIES, ORGANIZATIONS, AND PERSONS CONSULTED

For the development of this Supplemental Environmental Assessment, the following groups were consulted and provided with copies of the Draft EA:

- Maryland Airport
- Federal Aviation Administration – Washington Airports District Office
- Maryland Aviation Administration
- Maryland Historical Trust
- Maryland Department of the Environment
- Maryland Department of Natural Resources
- United States Army Corps of Engineers
- United States Fish & Wildlife Service

Appendix A
Charles County Zoning Map



| BASE ZONES | |
|----------------------|---|
| AC | AGRICULTURAL CONSERVATION |
| RC/RC(D) | RURAL CONSERVATION |
| RR | RURAL RESIDENTIAL |
| RV | VILLAGE RESIDENTIAL |
| RL | LOW DENSITY SUBURBAN RESIDENTIAL |
| RM | MEDIUM DENSITY SUBURBAN RESIDENTIAL |
| RH | HIGH DENSITY SUBURBAN RESIDENTIAL |
| RESIDENTIAL / OFFICE | |
| CD | CORE DEVELOPMENT / RESIDENTIAL |
| CMR | CORE MIXED RESIDENTIAL |
| CRR | CORE RETAIL RESIDENTIAL |
| CN | NEIGHBORHOOD COMMERCIAL |
| CC | COMMUNITY COMMERCIAL |
| CB | CENTRAL BUSINESS |
| VC | VILLAGE COMMERCIAL |
| BP | BUSINESS PARK |
| LI | LIGHT INDUSTRIAL |
| HI | HEAVY INDUSTRIAL |
| AUC | ACTON URBAN CENTER |
| WC | WALDORF CENTRAL |
| RC(D) | * RURAL CONSERVATION DEVELOPMENT DISTRICT |
| OVERLAY ZONES | |
| HC | HIGHWAY CORRIDOR |
| RP | RESOURCE PROTECTION |
| CA | CRITICAL AREA BOUNDARY |
| FLOATING ZONES | |
| PRD | PLANNED RESIDENTIAL DEVELOPMENT |
| PMH | PLANNED MOBILE HOME PARK |
| PEIP | PLANNED EMPLOYMENT/INDUSTRIAL PARK |
| PMIX | PLANNED MIX USE |
| PUD | PLANNED UNIT DEVELOPMENT |
| WPC | WATERFRONT PLANNED COMMUNITY |
| TOC | TRANSIT ORIENTED DEVELOPMENT |

PROPERTY LINE
 SUBDIVISION LINE
 TOWN BOUNDARY
 PRIVATE ROAD
 STREAM LINE
 CONTROLLING OWNERSHIP

TAX MAPS: 2008 MD DEPT OF PLANNING
 ZONING: CHARLES COUNTY ZONING REGULATIONS CHAPTER 287



ZONING MAP

CHARLES COUNTY, MARYLAND
 DEPARTMENT OF PLANNING AND GROWTH MANAGEMENT



0 300 600 1200 Feet
 DATE: 9/8/2005
 REVISION: BILL 2005-01
MAP NO. 12

Appendix B
Cultural Resources Report

**MARYLAND AIRPORT (2W5)
FAR 77 OBSTRUCTION CLEARANCE
INDIAN HEAD, CHARLES COUNTY, MD
SUPPLEMENTAL
ENVIRONMENTAL ASSESSMENT**

Surveyed for:

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ABSTRACT

Browning & Associates, LTD, performed an environmental assessment for two areas to be affected by proposed improvements to the Maryland Airport, Indian Head, Charles County, Maryland, call sign 2W5, herein abbreviated as IHAP. The survey was conducted in accordance with Section 106 of the National Historic Preservation Act of 1966 as amended to determine whether the proposed improvements had the potential to disturb cultural resources. The project area has two components, one located north of the airport and north of SR 224 and the other located south of the airport east of Bumpy Oak Road, just east of Indian Head, Maryland. Prior survey had located four sites within the property and numerous sites are located in the vicinity. Topography on the south end indicated a high likelihood of prehistoric occupation.

The previous survey for architectural resources was revisited but the conclusions reached then are still felt to be valid. None of the other resources appear to be potentially eligible for the National Register of Historic Places.

The northern location will consist of FAR77 Obstruction Clearance by an Avigation Easement wherein trees above a certain height are either cut off at ground level or topped. Little to no ground disturbance would be occasioned by this effort. Further work is not recommended.

The southern location will consist of FAR77 Obstruction Clearance by an Avigation Easement wherein trees above a certain height are either cut off at ground level or topped. Little to no ground disturbance would be occasioned by this effort. Further work is not recommended.

Adjacent to but outside of the southern project location, four prehistoric archaeological sites (18CH831, 18CH832, 18CH833 and 18CH834) were recorded. A fifth archaeological site (18CH835) is half of a half-mile oval automobile racetrack that operated from 1951-1954±. This recreational resource was recorded as it was over the nominal 50 year limit for NRHP consideration. It was not felt to be eligible.

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INTRODUCTION

Browning & Associates, LTD, performed a **Supplemental Environmental Assessment** for two areas to be affected by proposed improvements to the Maryland Airport, Indian Head, Charles County, Maryland. The survey was conducted in accordance with Section 106 of the National Historic Preservation Act of 1966 as amended to determine whether the proposed improvements had the potential to disturb cultural resources. The project area has two components, one located north of the airport and north of SR 227 and the other located south of the airport and east of Bumpy Oak Road, just east of Indian Head, Maryland. Prior survey (Bamann 1999) had located four sites within the property and numerous sites are located in the vicinity. Topography on the south end indicated a high likelihood for prehistoric occupation.

Figure 1 shows the general project location. Figure 2 shows the project locale on the 500k USGS Quad Sheet. Figure 3 shows the project area on the 100k USGS Quad Sheet. Figure 4 shows the project area on the Port Tobacco 24k USGS Quad Sheet. Figure 5 shows the airport and the project areas on a 1 foot contour map. Figure 6 shows the north project area in detail on the 1' contour map. Figure 7 shows the south project area in detail on the 1' contour map. Figure 8 a LIDAR image of the airport property that brings out topographical detail using color gradients. Figure 9 shows the Maryland Archaeological Research Unit with the project area depicted.

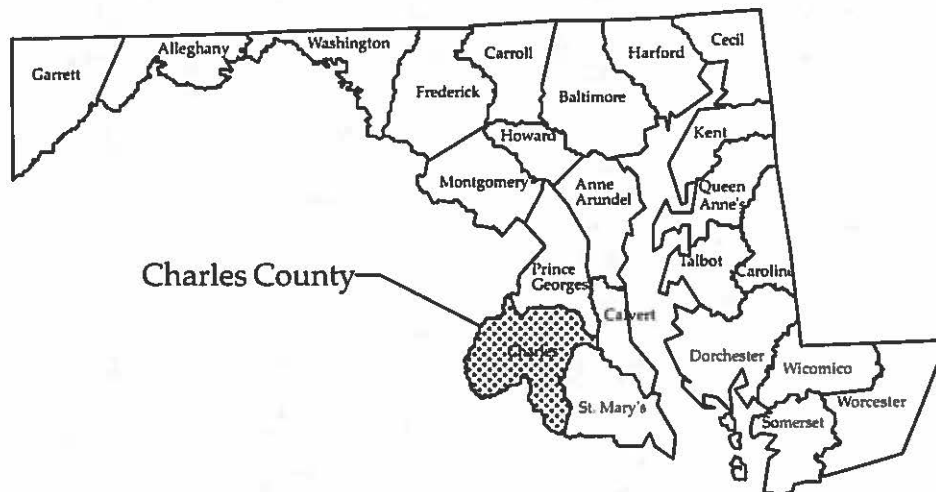


Figure 1. Project Location

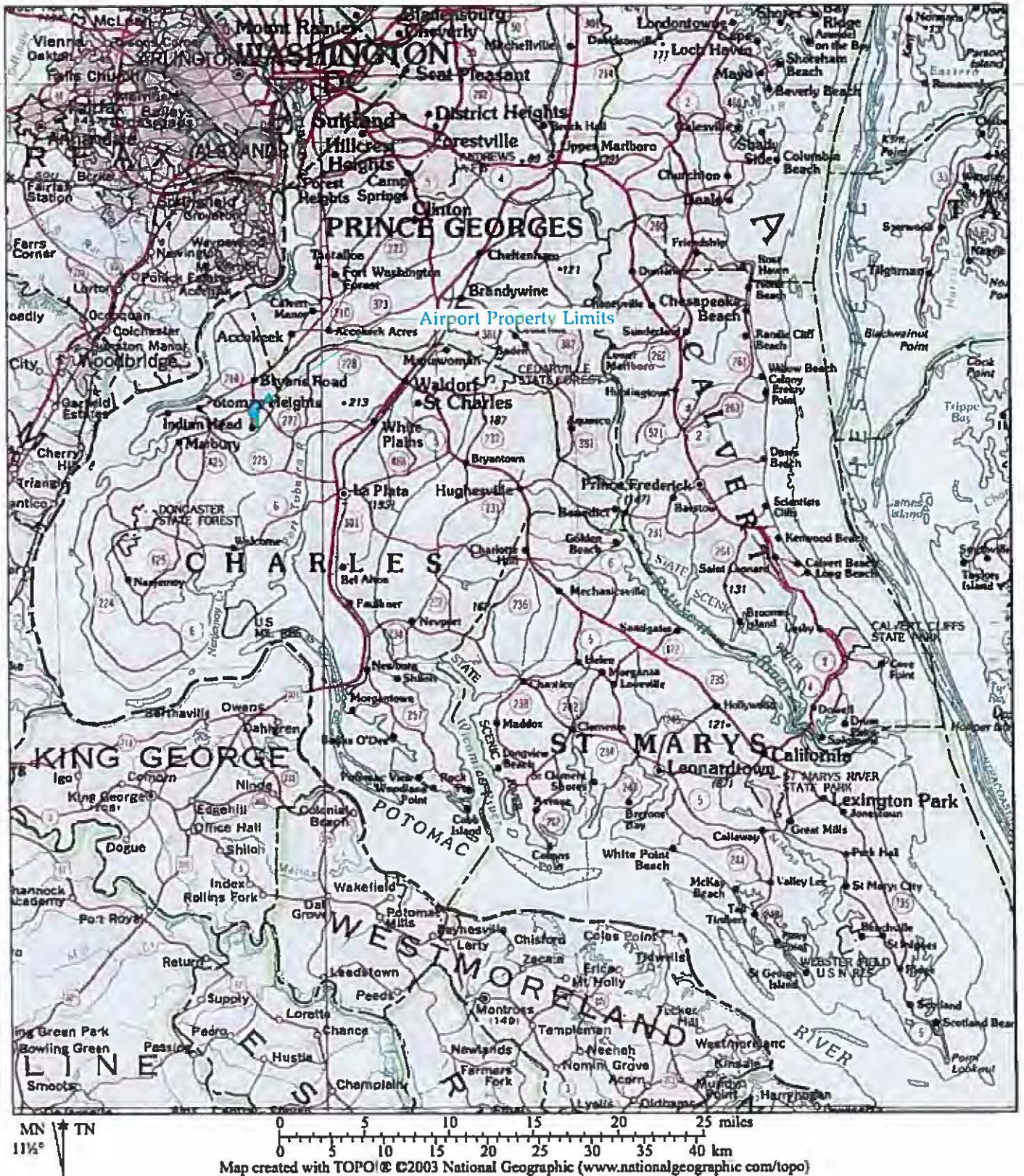


Figure 2. USGS 500K Quad Sheet & Project Locale



Figure 3. 100k USGS Quad & Project Location

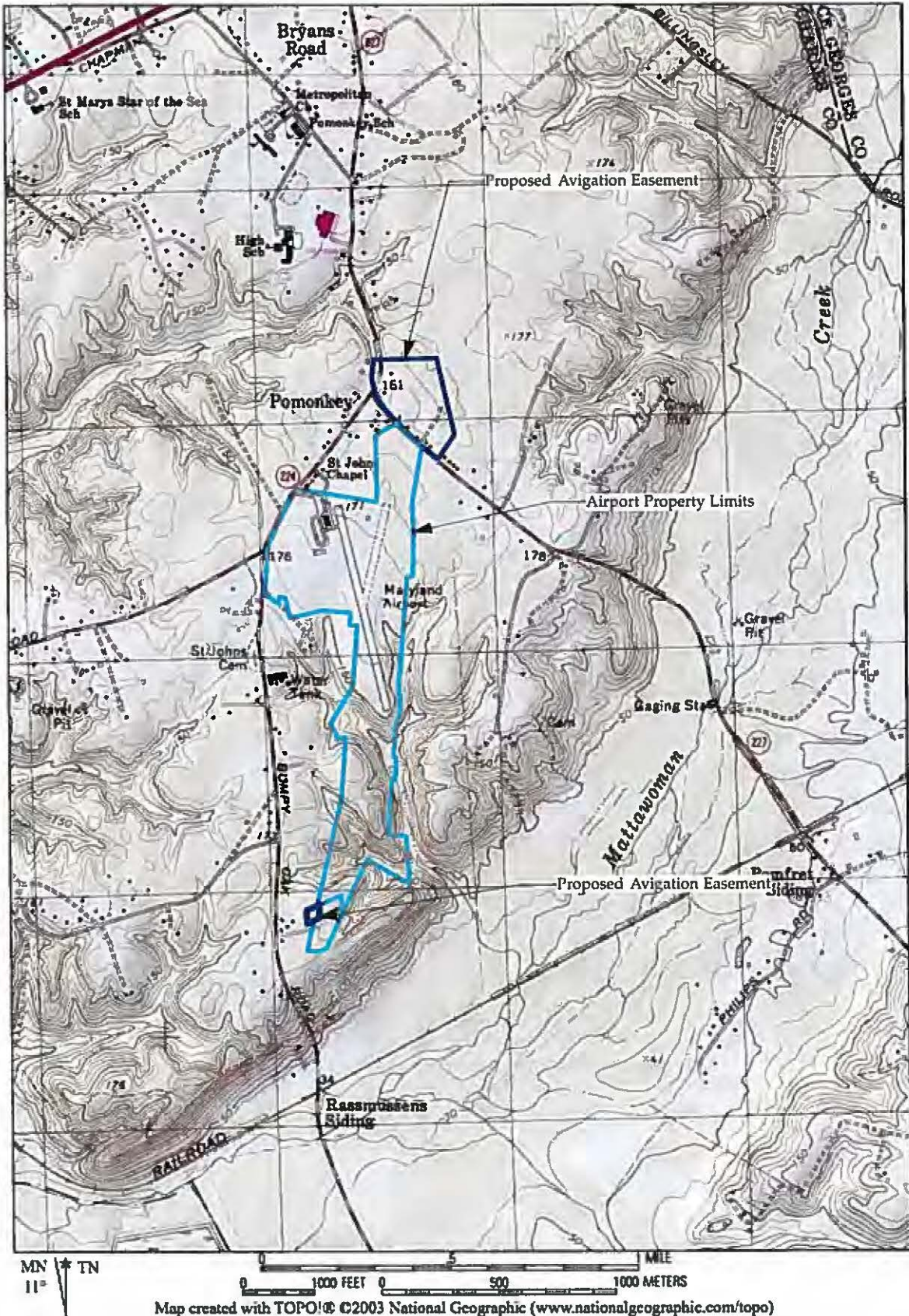


Figure 4. Port Tobacco, MD 24K USGS Quad With Project Areas.

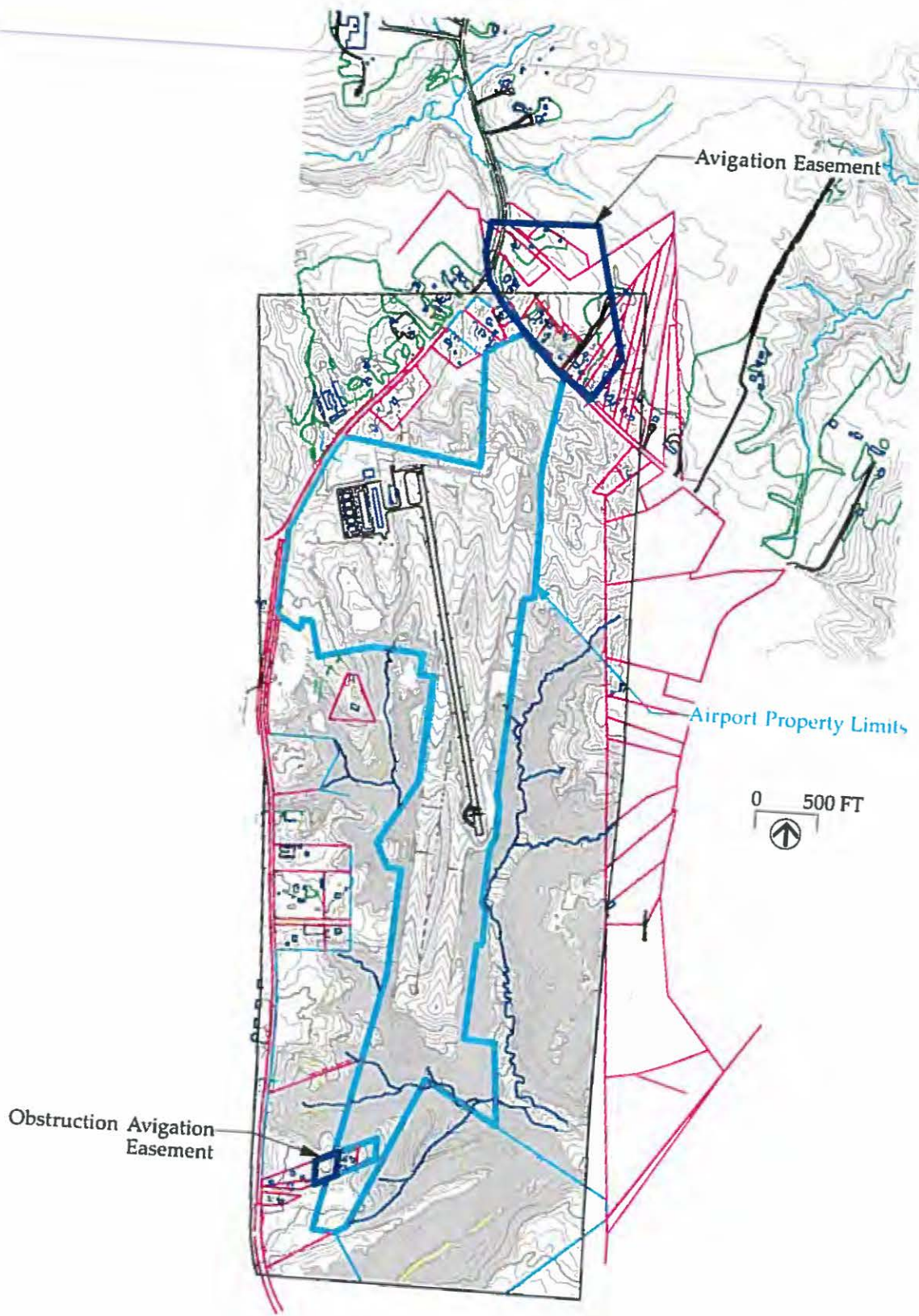


Figure 5. Project Area 1' Contour Map.



Figure 6. North Project Area Detail, 1' Contour Map.

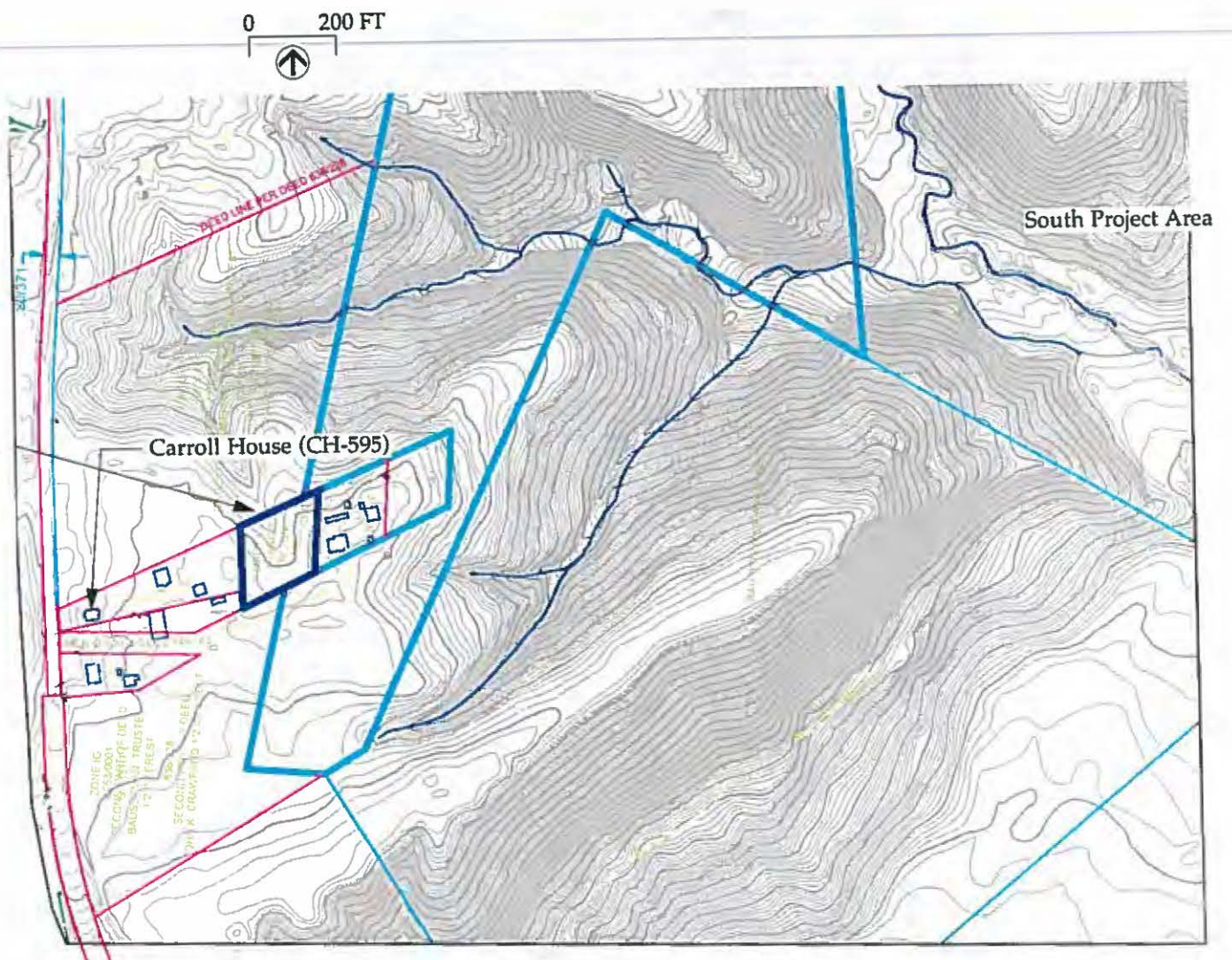


Figure 7 South Project Area, Detail 1' Contour Map.

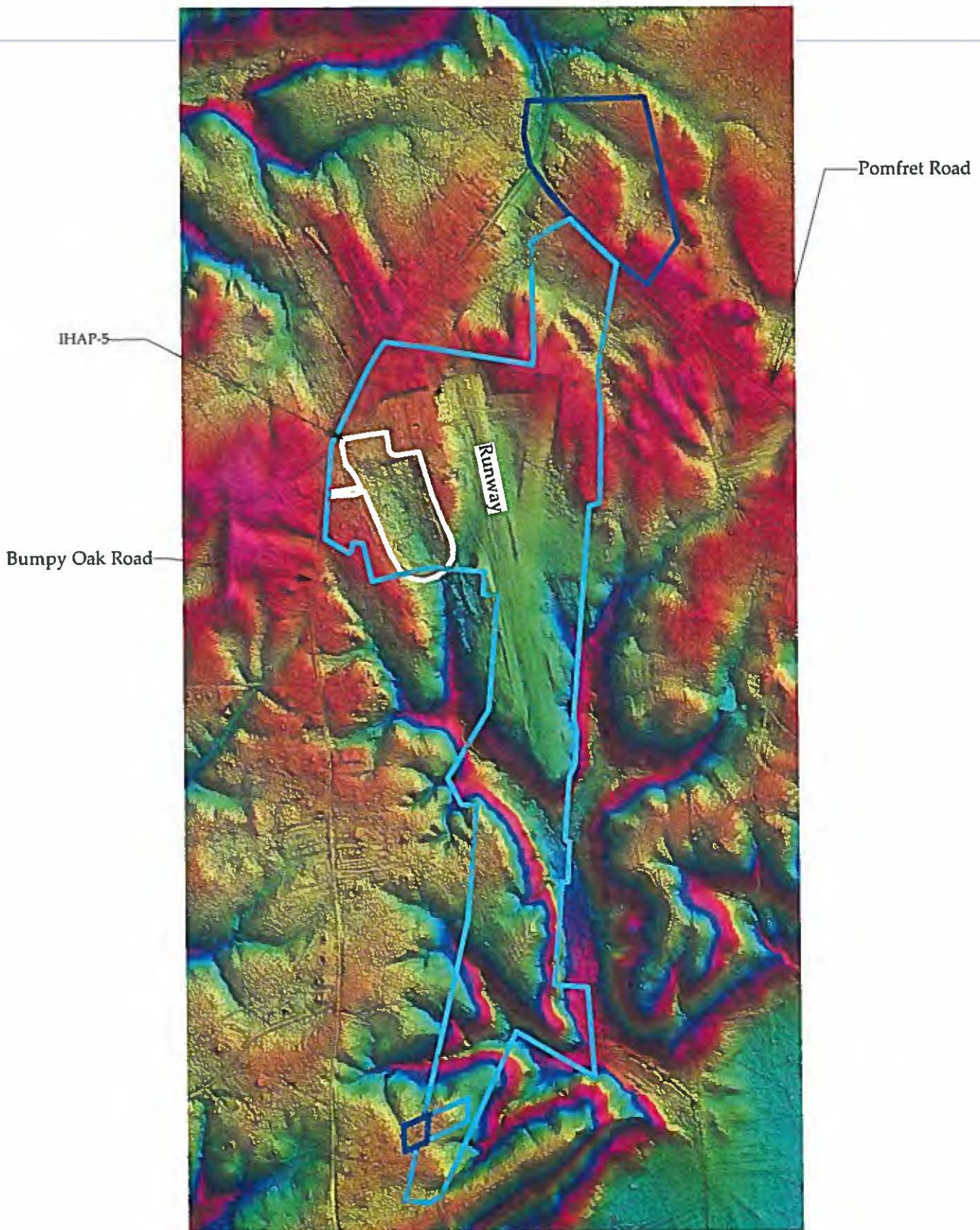


Figure 8. LIDAR Image Of Airport Property Area.

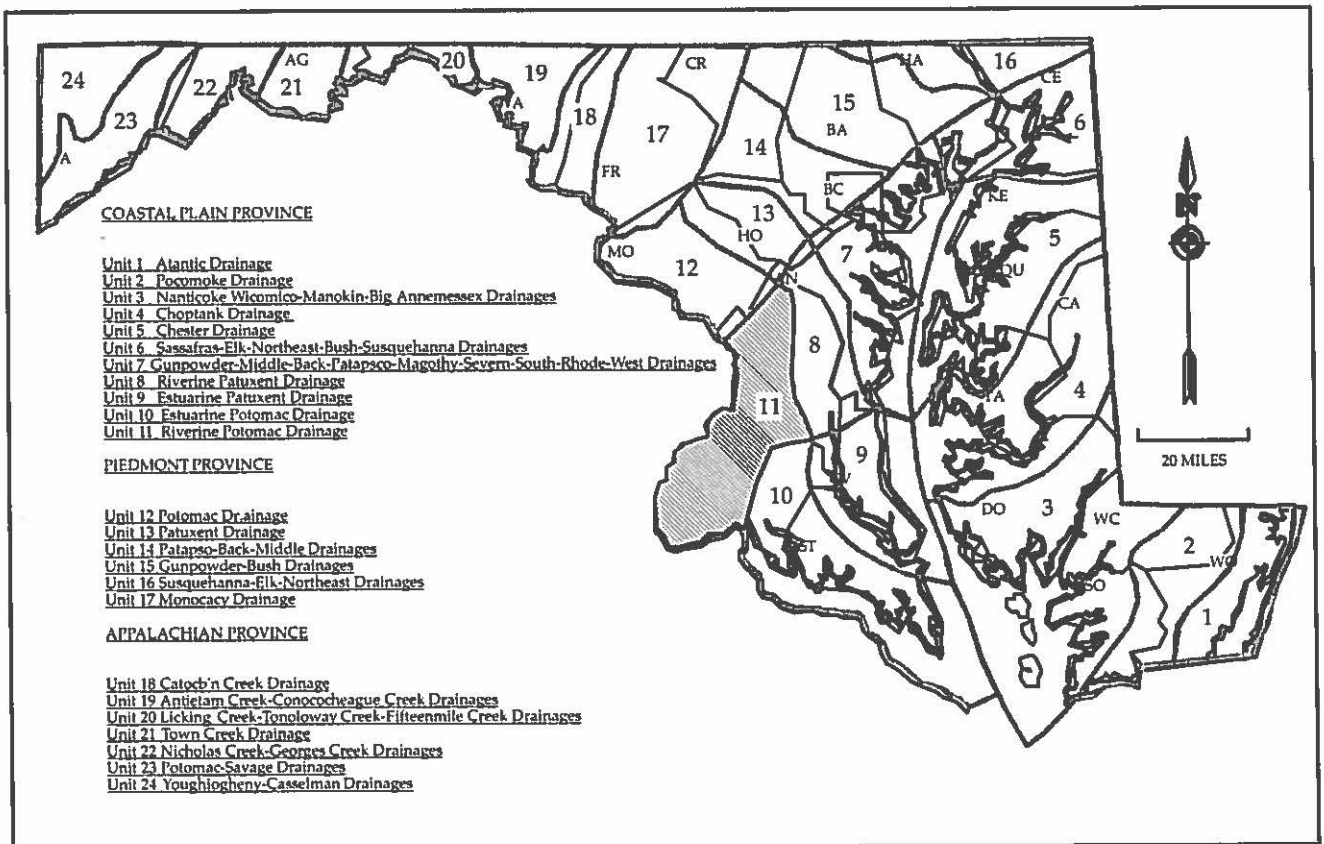


Figure 9. Maryland Archaeological Research Unit Map.

This evaluation is a follow-on to the 1999 Phase I Cultural Resources Survey of the airport property performed by Coastal Carolina Research, Inc., (CCR) (Bamann 1999). CCR surveyed 350 acres± for their project. The background information for that project and for these additions is identical except where we have updated information since the 1999 survey. That report should be consulted as needed for the general background. The project mission for this project was to evaluate the need for survey of the two areas.

This evaluation was conducted in accordance with Section 106 of the National Historic Preservation Act of 1966 as amended and in accordance with the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation as well as the Maryland Standards and Guidelines for Archaeological Investigations in Maryland (Shaffer and Cole 1994).

The survey was conducted on May 14 and 21, 2013. Lyle E. Browning, RPA was the project Principal Investigator, performed the fieldwork and authored the report.

The project areas were designated as the north and south areas. Both will be subject to an aviation easement. That legal instrument is signed among the various parties, up to and including the Federal Aviation Administration (FAA), state level aviation authorities, county authorities and the land owner of record. In it, FAR77 Obstruction Clearance criteria are cited in that from an angle taken from the center of the runway(s) and extended at a perpendicular outward and from the end of the runway(s) and extended at a perpendicular outward. Any obstruction that breaks the plane of that angle can then be removed. Typically this involves either the removal of a tree down to the surface of the ground or the topping of the tree some feet below the angle plane to allow for an extended time to pass before topping was again necessary. As the area is in domestic strip development along state roads, clear-cutting is not an option, nor is disturbance of yard surfaces. In these cases, the least intrusive methods will be employed. See Figure 6 for the limits of the north area aviation easement and the nature of the structures. Therefore, the likelihood of damage to any resources (except visual intrusion upon the domestic structures which had been previously been determined ineligible) is quite low. In view of that visual examination of the area was performed. The landform where the houses are located abuts against SR 224 and SR225 and to the east slopes down into a drainage swale. Whereas the higher elevations might have prehistoric potential, the disturbance will be negligible and was evaluated in that light.

The south area is a small rectangular parcel that has been developed into residential housing. As the area is in domestic strip development, clear-cutting is not an option, nor is disturbance of yard surfaces. In these cases, the least intrusive methods will be employed. See Figure 7 for the limits of the aviation easement and the nature of the structures. Therefore, the likelihood of damage to any resources (except visual intrusion upon the domestic structures which had been previously been determined ineligible) is quite low. In view of that visual examination of the area was performed. The landform where the houses are located abuts against Bumpy Oak Road and to the east slopes down into a drainage swale. Whereas the higher elevations might have prehistoric potential, the disturbance will be negligible and was evaluated in that light.

PHYSICAL SETTING

Topography

Charles County is within the Atlantic Coastal Plain Geographic Province. In the project vicinity, the terrain is generally low and highly dissected with watercourses feeding either the Potomac River or tributary streams of it, notably Mattawoman Creek that bounds the project on the south and east. The geological component is generally marine deposited with attendant soil build-up via vegetation growth. Bamann (1999) and Rose & Comer (2009) have extensive information on the generalized to specific geomorphological background. The project area is in the Riverine Potomac Drainage Unit, as defined by the Council for Maryland Archaeology.

The maximum elevation at the Maryland Airport south extension area is 173 feet while the north rises to 183 feet. The southern portion of the project area is a high and narrow ridge with margins sloping steeply down to Mattawoman Creek on the south and is high dendritically dissected on the north by a tributary stream of Mattawoman Creek.

Soils

The Maryland Airport lands have been described in Bamann (1999). Figure 10 shows the project soils. The soils in the north project area are listed below:

Charles County, Maryland (MD017)

| Map Unit Symbol | Map Unit Name |
|-----------------|--|
| BaB | Beltsville silt loam, 2 to 5 percent slopes |
| BaC | Beltsville silt loam, 5 to 10 percent slopes |
| BcA | Beltsville-Aquasco complex, 0 to 2 percent slopes |
| GwD | Grosstown-Woodstown-Beltsville complex, 5 to 15 percent slopes |

The soils in the south project area are listed below:

Charles County, Maryland (MD017)

| Map Unit Symbol | Map Unit Name |
|-----------------|---|
| BaB | Beltsville silt loam, 2 to 5 percent slopes |
| CmE | Croom-Marr complex, 15 to 25 percent slopes |
| CmG | Croom-Marr complex, 25 to 60 percent slopes |

Vegetation

The northern project area is within suburban strip developed yards with introduced plantings in a background of deciduous forest with some conifers. Vegetation cover over the area is at least 95%.

The southern project area is in deciduous forest that has remained after domestic housing units have been constructed within it.

HISTORIC CONTEXT

Bamann (1999) indicated that a total of 101 sites are located within approximately two miles of the Maryland Airport. These included prehistoric sites, a Civil War camp and a spoon factory. The area has such a high density in the prehistoric due to topography and the availability of riverine and estuarine resources, potable water and other natural resources. Rose & Comer's subsequent work just south of the project area (2009) augments this pattern. Mattawoman Creek is an excellent example of a prehistoric site attractant for the resource base. Bamann notes high concentrations of prehistoric lithic scatters on ridgetops as do other surveyors. Bamann notes that 53 of 69 (77%) sites were on ridge tops.

Both Bamann's and Rose & Comer's work has exhaustive detail on the background research for the project area and the area in general. Given the circumstances found at the airport, a background repetition would serve little purpose. The 1999 and 2009 surveys are considered the surveys of record for the project vicinity and should be consulted if needed.

It is a truism that an open agricultural field with 100% surface visibility is the ideal surface survey condition. The only issue with it is whether there are deeply buried sites that have been obscured by later deposits. That was not the case with the southern part of the project. In fact, erosion prior to timbering had been severe enough that topsoil was virtually missing from the entire area surveyed. This appeared to have been due to erosion but also may have been a result of former agricultural practices that sought to farm flat terrain, however limited in extent. The ridgetop and the adjacent tongues of land were accessible from former farmlands and may therefore have been eroded from intensive farming. Maryland was tobacco country and can be expected to have had the same run of problems that other tobacco states were subjected to as a result of tobacco mono-cropping (Trimble 1974).

Bamann's summary is that the high probability areas are on high ridge top topography, but also concludes that of the sites inventoried, only one had subsurface integrity sufficient to warrant additional investigation. That sample is still sufficient for the project area and is standard for modeling of topography for site location.

The previously recorded cemetery (18CH670 Trueman Cemetery) with the dual headstone for the sole marked grave occupies a small tongue of land and is upraised from the surrounding soil by about a foot, indicative of farming activities. In addition, to the south, a sharp drop-off may indicate a former borrow pit. Archival investigation showed that the land upon which the cemetery is located was originally part of Clark's Inheritance. This was one of the first land patents in the area in the 18th century.

Bamann mentions two log structures that may have been associated with the graveyard but also with the formation of St. John's Episcopal Parish which has a fenced graveyard on the west side of Bumpy Oak Road.

For the purposes of this evaluation, the cemetery is outside the area of direct and indirect impacts.

Located adjacent to the south project is a previously recorded house for the Carroll family. The property is rectangular, fronting onto Bumpy Oak Road, and contains several structures built by the family. The oldest of the structures has been recorded as CH-595 and was judged not eligible. This house is associated with the ribbon development along Bumpy Oak Road that contains a number of African-American owners. The succession of smaller and modest houses to larger more upscale houses reflects the general improvement and stability of the African-American population in general in the 20th century after the removal of race-based restrictions either by law or custom.

METHODS

The intent of this supplementalevaluation is to determine whether the avigation easement off the north end of the airport and the avigation easement off the south end of the airport will require Phase I Survey to identify archaeological sites or standing structures that are eligible for the NRHP and to make appropriate recommendations.

Background Research

Background research for this project was conducted at the Maryland Historical Trust, the Library of Congress and the Library of Virginia. Bamann's work was of particular use as it dealt specifically with the airport property. Rose & Comer's work bridged the gap between 1999 and 2009 for additional background material. This project was located just south of Mattawoman Creek and is thus germane to the project. In addition, the terrain analysis capabilities of LIDAR were of particular use in identifying features that were invisible in standard aerial photographs and upon topographic maps (Figure 8). Michael Davias of Cintos Research kindly provided the LIDAR imagery for the project.

Archaeological Field Methods

Visual examination of the two project areas was performed. The project areas were examined using LIDAR, aerial photography, USGS Quads and the project 1' contour maps.

Prehistoric cultural materials were encountered adjacent to the southern area. These were mapped using GPS for each artifact with notations on lithic material, artifact identification and function. UTM coordinates were then transferred to the computer and then used to compose pieceplot locations for each that were then placed on the project 1' contour maps. Quantum GIS was used for loci construction and for presentation of locations of particular interest groups of artifacts. Their spatial relationships to the terrain were of particular interest.

The analysis of archaeological sites on a map has formed the basis of predictive modeling for site locations. The location of artifacts within a site is normally a function of Phase III mitigation. However, with the advent of easy to use electronic means, a dataset of attributes from visible artifacts is obtainable at low cost. In this case, the artifacts were on the surface of the ground and were in sufficient numbers to provide meaningful information.

Diagnostic artifacts and tools were photographed *in situ* and collected. Representative photographs of debitage were taken. Debitage samples were not taken.

Laboratory Methods

Individual artifacts were bagged in the field with photographs and waypoints taken for each recovered artifact. The intent is that all processed artifacts will be submitted to the Maryland Historical Trust for long-term curation. Disposition of the artifacts is at present undecided.

Architectural Methods

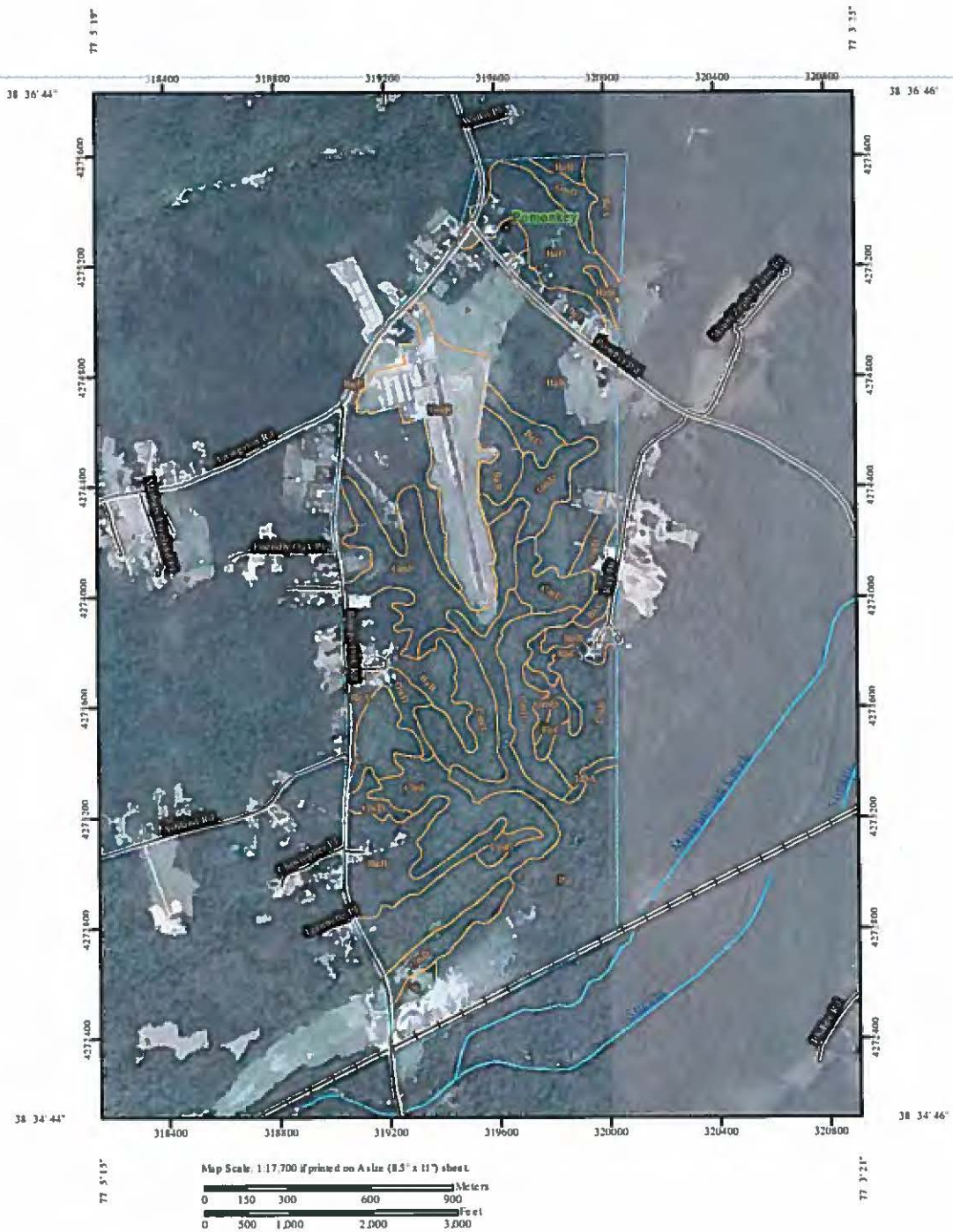
MHT files on standing structures were examined and found to be comprehensive. Visual examination showed no additional structures that met the 50 year threshold for NRHP eligibility. The Bamann survey was therefore considered the survey of record for the project. CH-595 Carroll House at 4450 Bumpy Oak Road was recommended not eligible. The surveyed structure is the sole structure older than 50 years within that parcel. Further work was not recommended and agreed to by MHT.

ARCHITECTURAL SURVEY

The Bamann Survey is considered to be the survey of record and should be consulted for contextual information. The nature of this evaluation is to determine whether additional survey is warranted, thus we are building on the background already provided which includes the project areas.

All effects of the project will be upon structures previously determined not eligible for the NRHP. Further work on standing structures is not recommended.

Soil Map – Charles County, Maryland



USDA Natural Resources Conservation Service

Web Soil Survey National Cooperative Soil Survey

5/30/2013 Page 1 of 3

Figure 10. Project Area Soils Map.



Figure 11. 1994 Aerial View Of Racetrack Area.



Figure 12. 2005 Aerial View Of Racetrack Area.



Figure 13. 2007 Aerial View Of Racetrack Area.

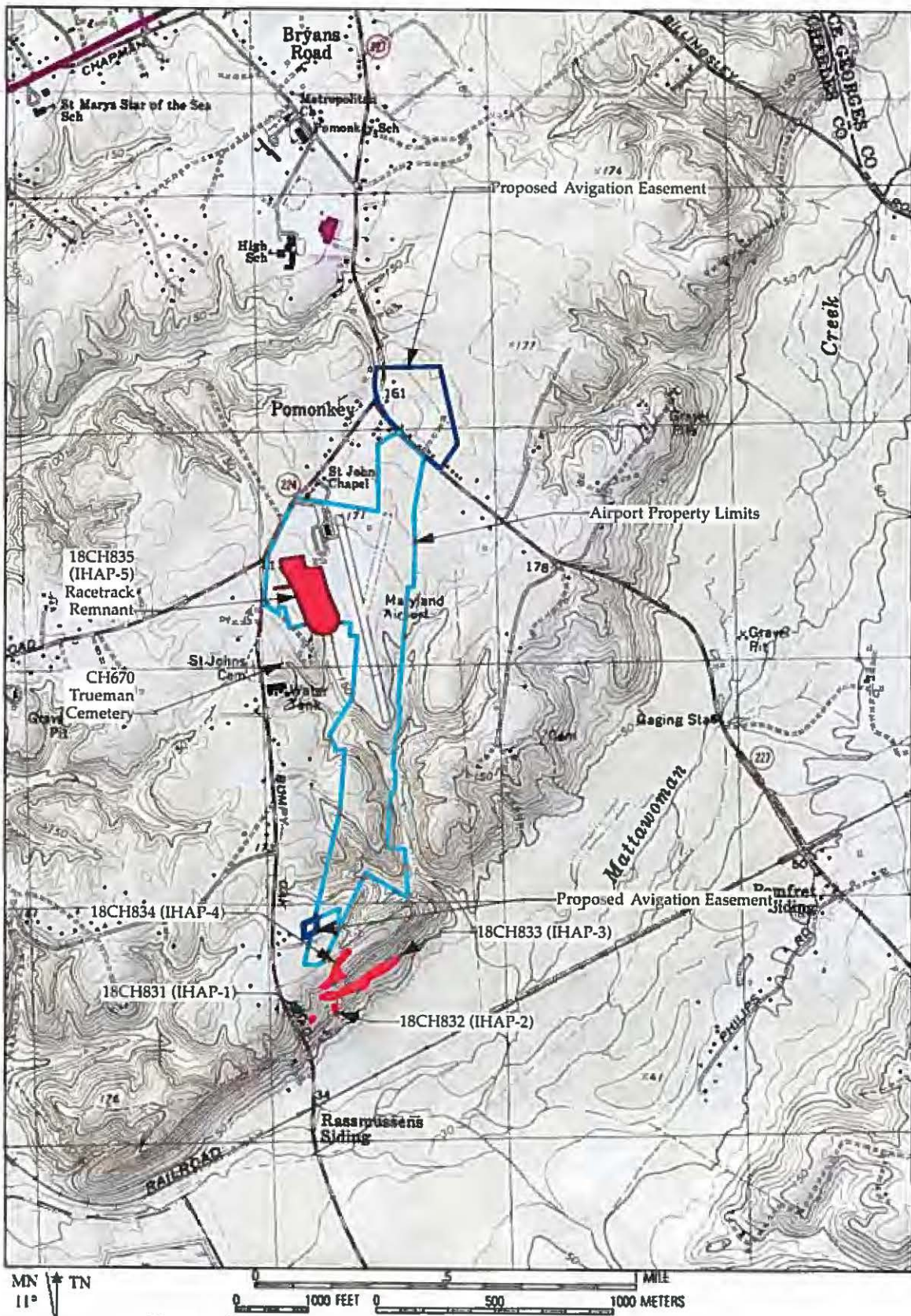


Figure 14. 2013 Aerial View Of Airport Area.

Avigation Easement Area, South



Figure 15. 2013 Aerial View Of South Project Area.



Map created with TOPO!® ©2003 National Geographic (www.nationalgeographic.com/topo)

Figure 16. Port Tobacco, MD 24K USGS Quad With Cultural Resources

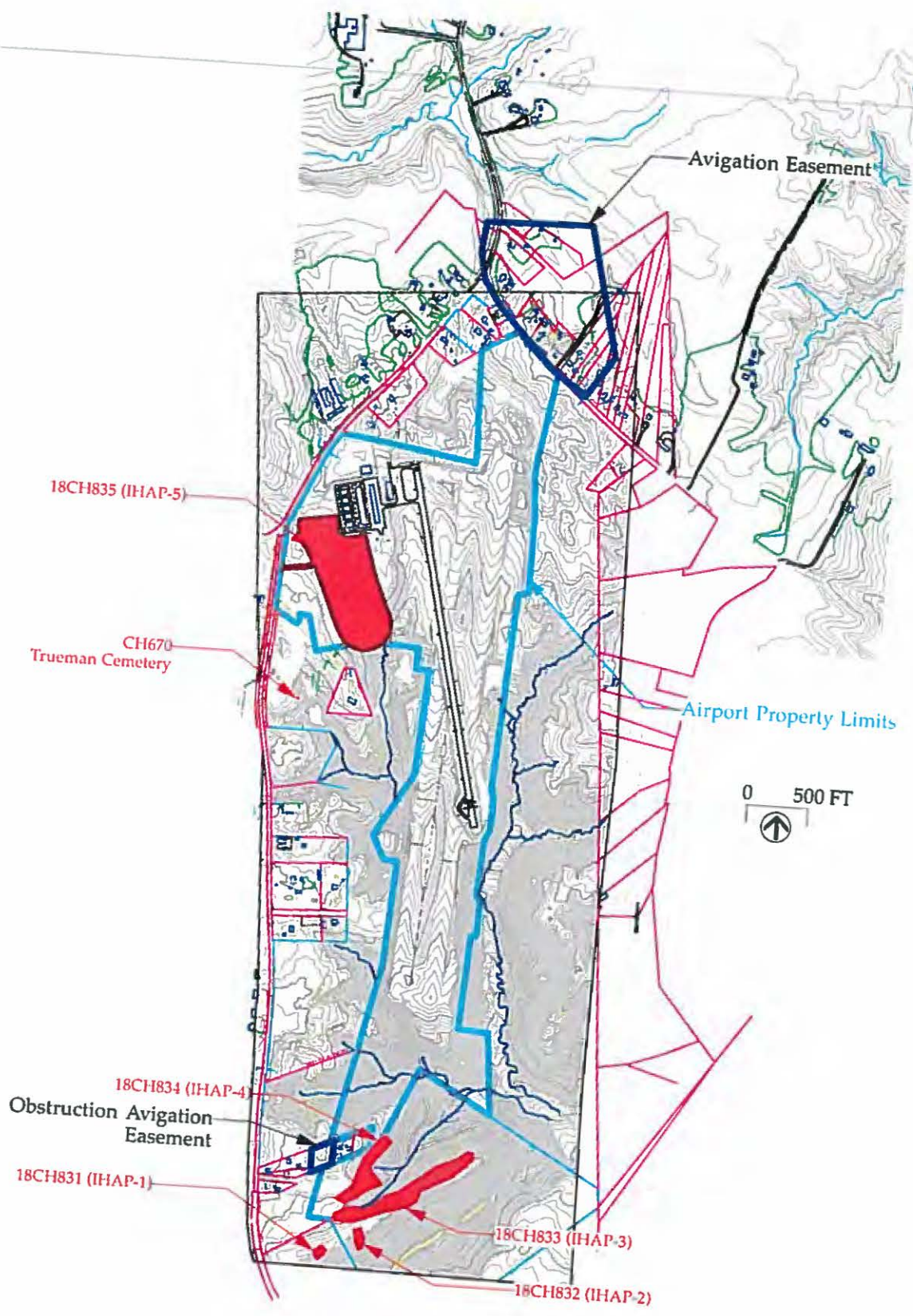


Figure 17. Project Area 1' Contour Map With Cultural Resources.

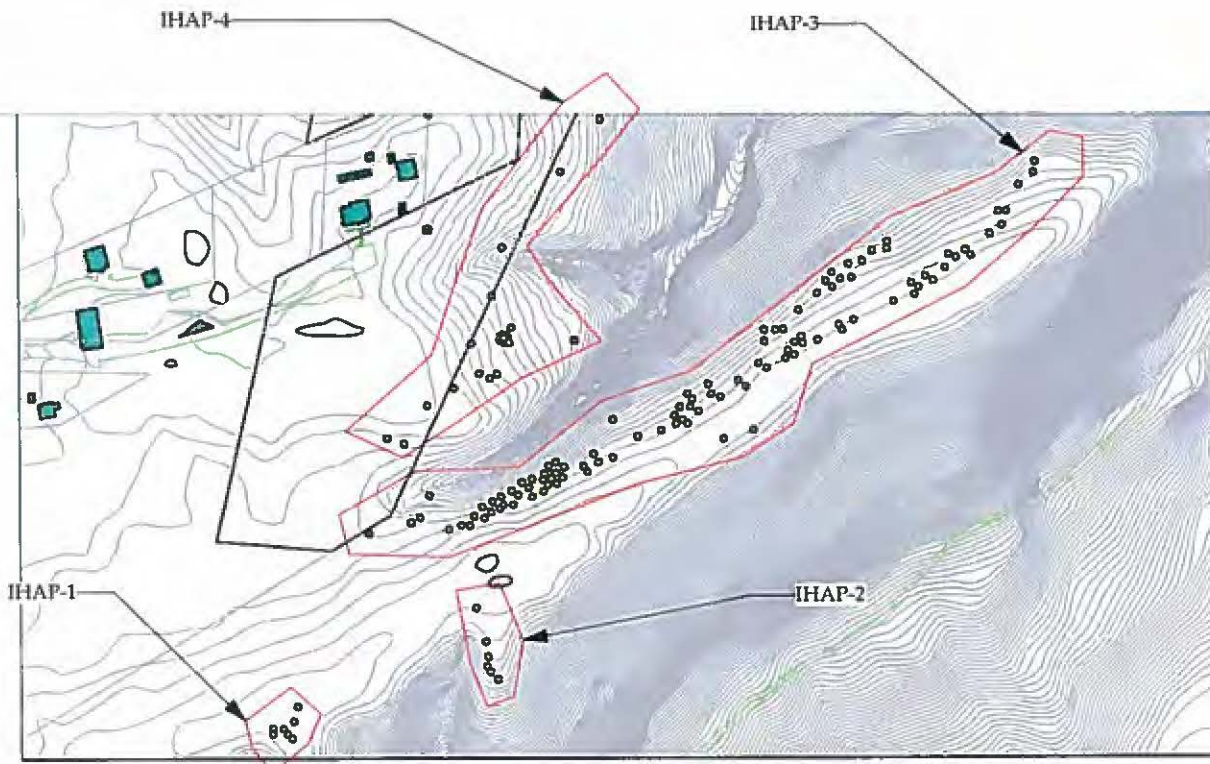


Figure 18. All Artifacts On Project Topo Map.

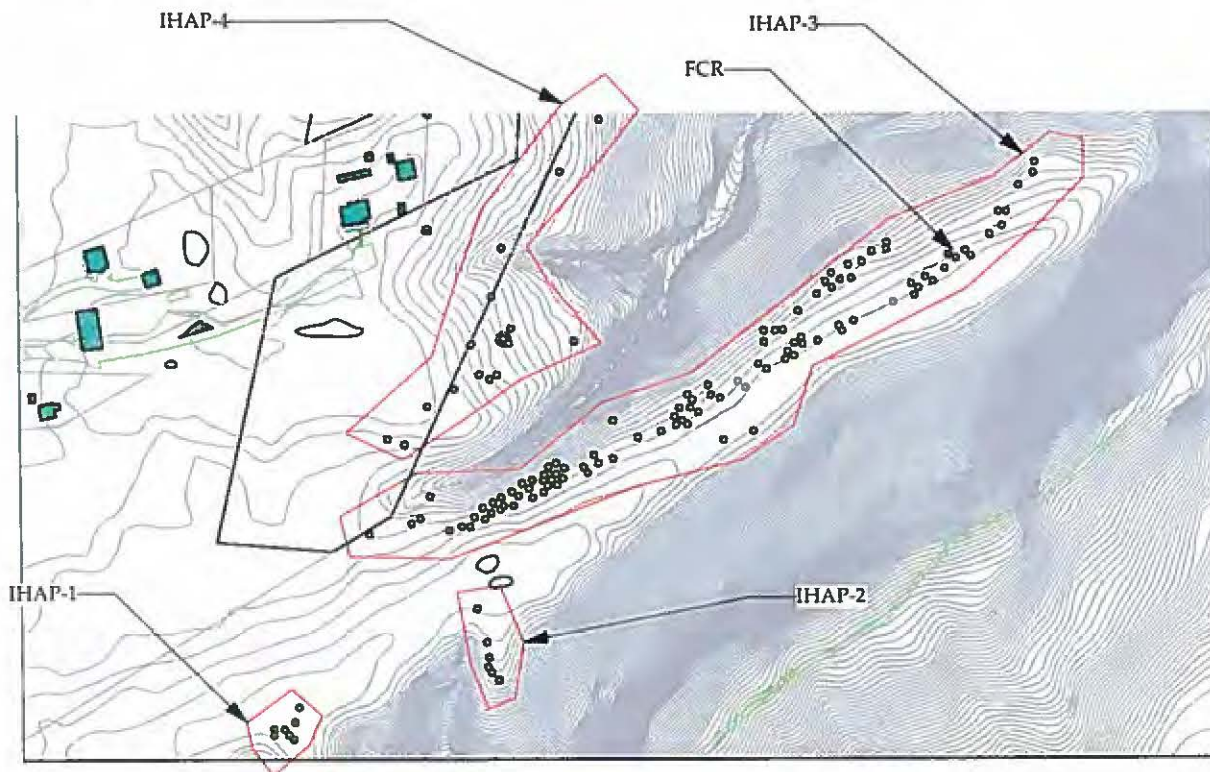


Figure 19. FCR On Project Topo Map.

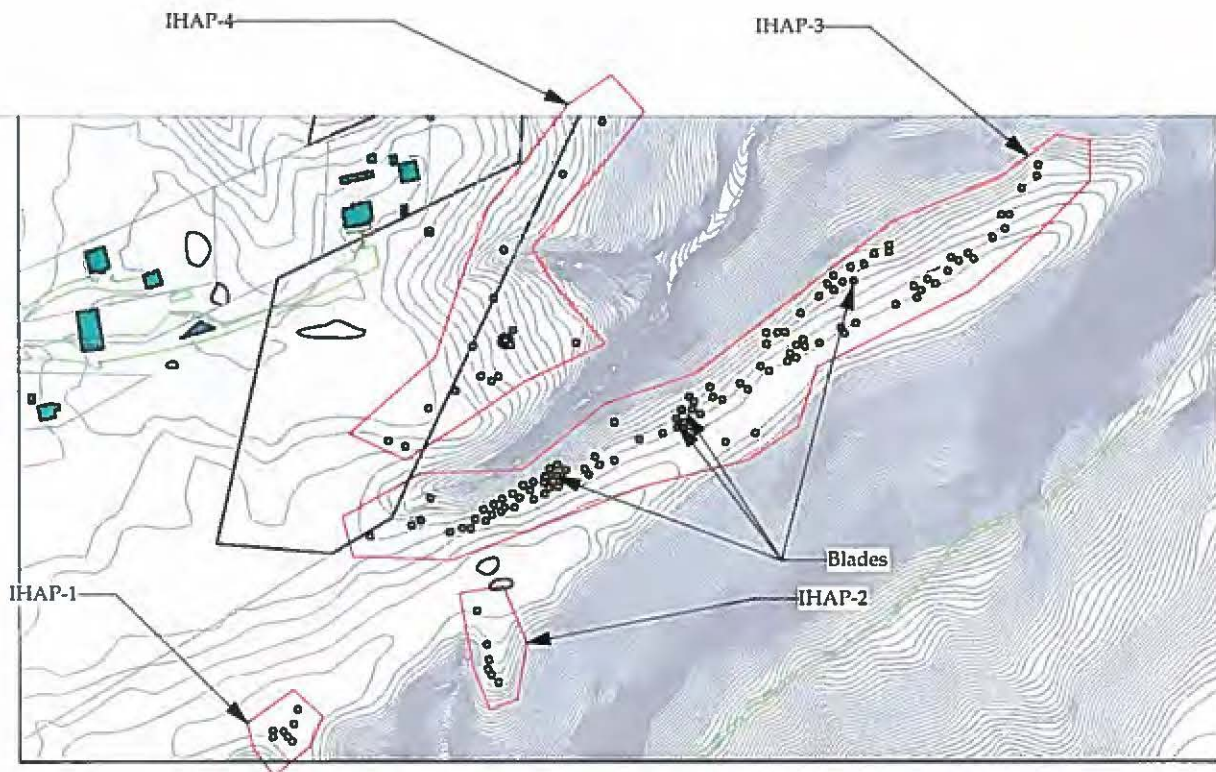


Figure 20. Blades On Project Topo Map.

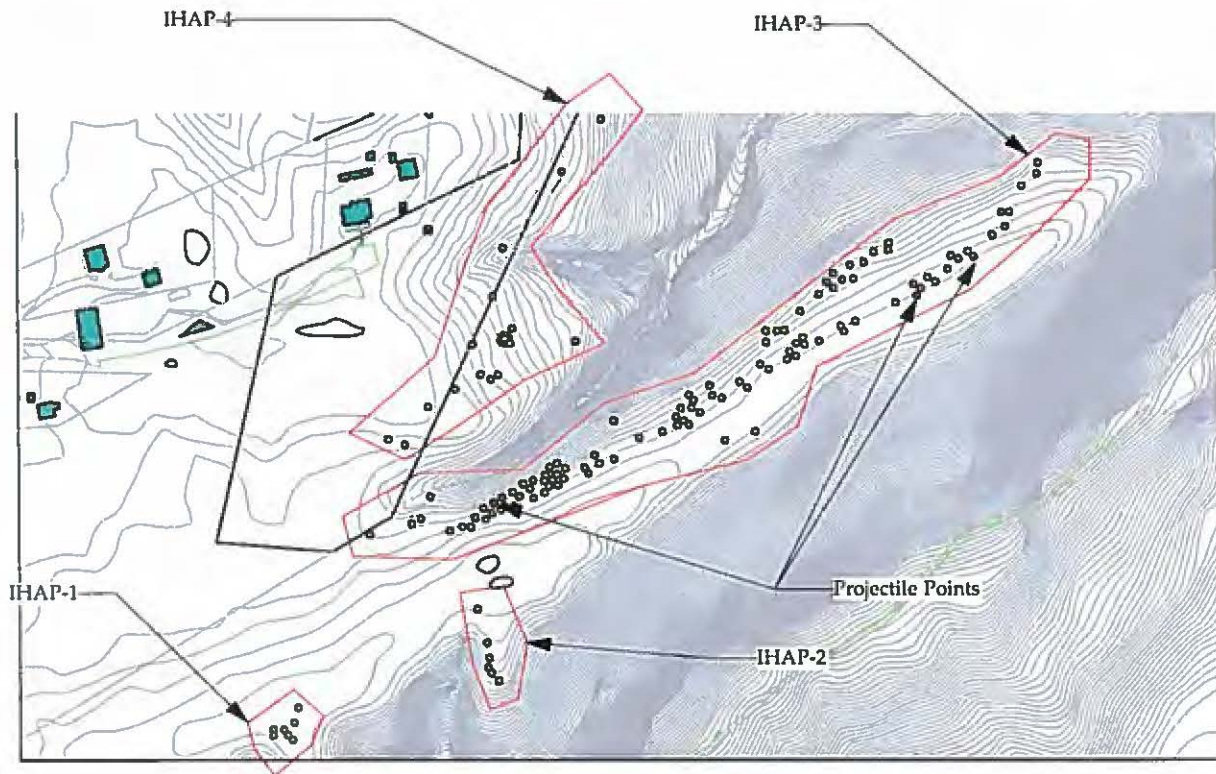


Figure 21. Projectile Points On Project Topo Map.

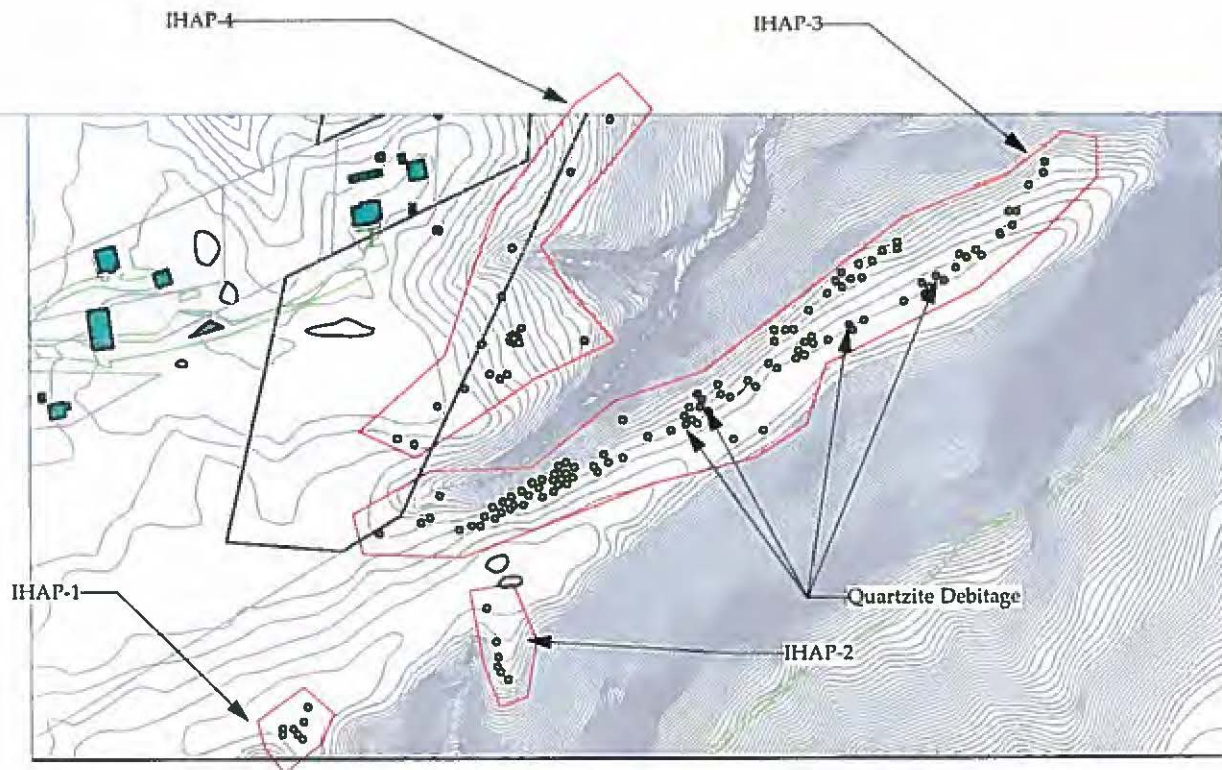


Figure 22. Quartzite Debitage On Project Topo Map

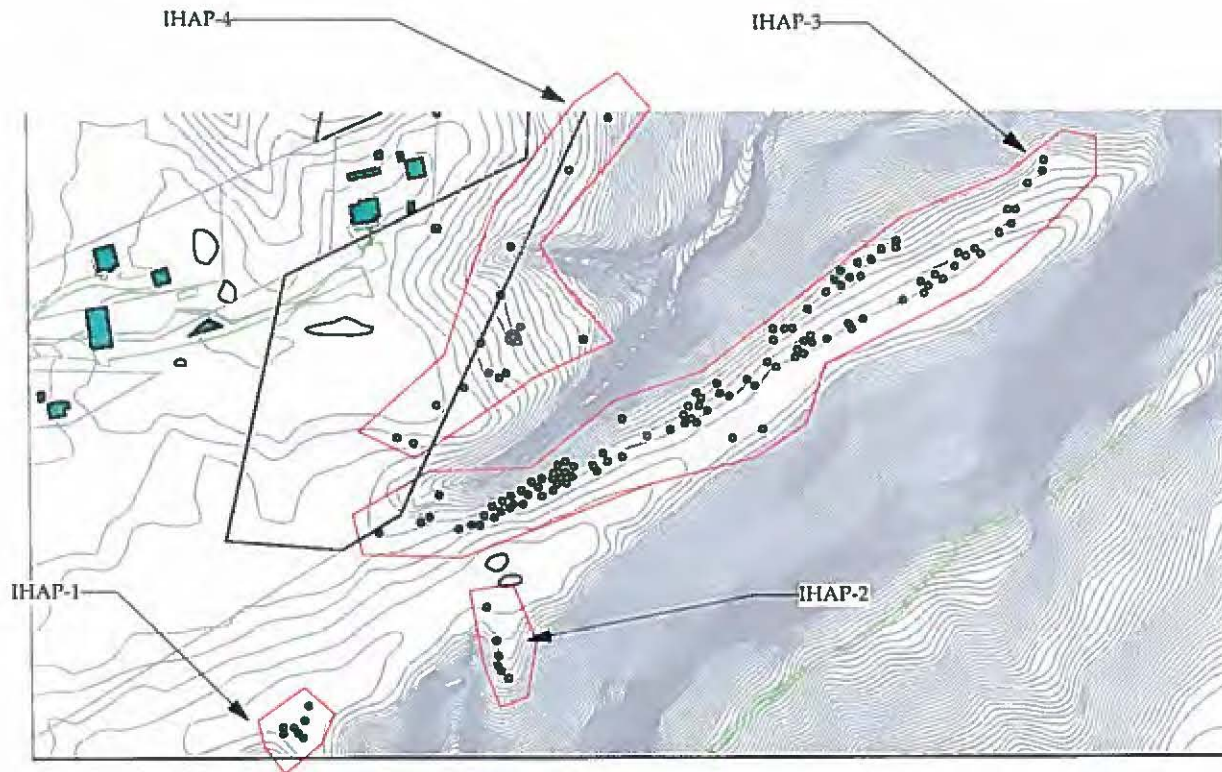


Figure 23. Quartz Debitage On Project Topo Map

SURVEY RESULTS

Main Airport Non-Project Area

Site 18CH835 (IHAP-5) was recorded in the main airport area. This site will not be affected by the project and was recorded as it had achieved the 50 year threshold since the 1999 survey. The site is the former half-mile oval racetrack constructed by the Bauserman family in 1951 and which appears to have ceased operation in 1954. The track has been built over on the north half by hangar construction. The southern half is more or less intact. It consists of a 10' wide and 2' high earthen berm with a flat area inside it. To the west, historic photos show what appears to be the bleacher area with an access road leading to it.

The racetrack was for modified stock cars and then for motorcycles. After the racetrack ceased operations, trees grew within the oval and have largely obscured the feature. LIDAR showed it very effectively (Figure 8). Aerial photographs from 1994, 2005 and 2007 (Figures 11 to 13) show the forest progression. Figure 14 shows the terrain in 2013.

The site is represented by an earthen berm and a flat semi-oval area inside the berm. It is overgrown with trees and brush at present. While representative of an early form of mechanized recreation and spectator sport, the physical remnants are paltry compared with the activities that took place on the racetrack. The automobile races were the attraction for the spectators plus the sense of camaraderie that these events engender among the spectators. Bleachers were built for the spectators on the Bumpy Oak Road side of the track on the outside of it and there were staging, refill and repair areas for the cars on the interior as normal. What is left is a small remnant of the activities, but represents a typical earthen track of the period wherein the cars and the spectators were in very close proximity. The racetrack ran modified stock cars from about 1952-54 and then it was used for a year or so as a motorcycle track using the infield as the track. After about 1955 the track was no longer used.

Due to half of the track being obliterated, the nature of the activities that took place that left little trace of their presence apart from shed automobile and motorcycle parts and the bleacher remnants, the site is not recommended eligible for the NRHP. The value of this type of site lies in the slice of Americana that it represents and the time period in which it operated. Stock cars in that period tended to be composed of a mix of older and newer cars with modifications from various manufacturers. The result would be a mélange of disparate parts. Further work is not recommended.

Site 18CH670 was revisited and found to be substantially in the same condition as described by Bamann in 1999. Background research indicated that James Trueman was "a distinguished officer" in the Revolutionary War (Newman 1971:38) and that the land wherein he and his granddaughter are buried was part of the 500 acre Clarke's Inheritance tract owned by George Dent north of Mattawoman Creek. Without platting of the original patents, exact boundaries can't be determined.

In addition, four sites: 18CH831, 18CH832, 18CH833, and 18CH834, were recorded outside of the south project area.

The area off the southern end of the runways in a recently acquired parcel was also investigated due to proximity and as the conditions were conducive to site location. The area has already been affected by the clearance of trees down to the ground and the subsequent mowing of the remaining vegetation. The opportunity presented itself to record the artifacts on the ground that were visible and to estimate from a limited sample of clear area whether the cleared swaths were characteristic of the remainder. Based upon what was visible in the skidder tracks and from the visible ground in the randomly spaced bare patches, none of the edges of which was over 100 feet from one another and none of which was less than 50 feet in diameter with over 50% surface visibility, the cleared areas and the visible patches were characteristic of the area. In short, lemonade was possible to be made from this lemon. Figure 15 shows the aerial view of the south project area after partial clearcutting in 2013. Figure 16 shows the sites on the Port Tobacco 24k USGS Quad. Figure 17 shows the sites on the project contour map. The decision was made to survey the area as it had been acquired by the airport and conditions were as optimal as they were likely to ever be for efficient site discovery. In addition, the opportunity to directly compare two

disparate survey methods availed itself. The norm in wooded terrain is a gridded shovel test regimen. Bamann used 50' intervals per survey norms. The inspection of freshly prepared agricultural fields after rain is typically considered an ideal methodology. We have for the past 20 years used prepared (plowed, disked or roto-tilled) strips in former agricultural fields at 50' intervals as a far more effective alternative to shovel testing and one which is equally effective as visual inspection of freshly prepared fields at the same interval. We viewed the skidder trails as opportunistic prepared strips and sought to compare the results in terrain that would normally only have been shovel tested. Part of the area had been shovel tested by Bamann and found to be devoid of cultural materials when tested at a 50' interval.

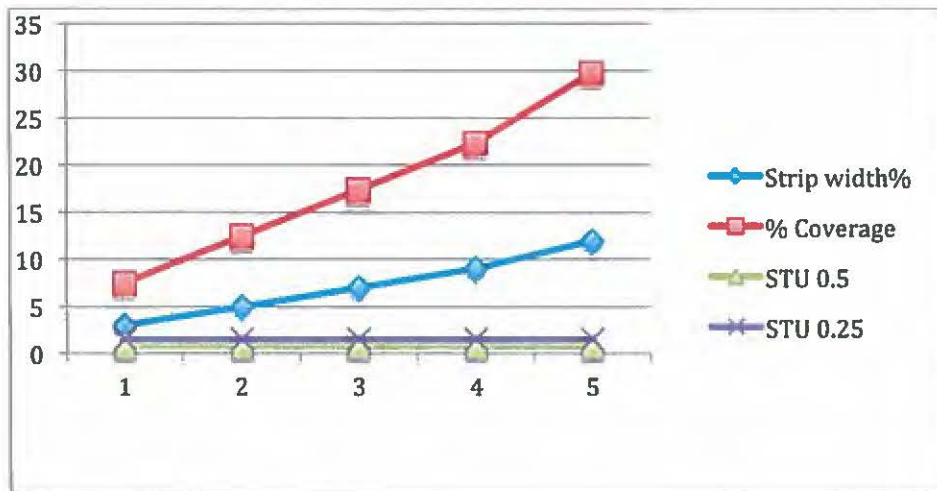
Clearcutting was performed when the land was wet and the subsoils were also wet. Mechanical Tree Cutters (MTC of which there are several variants but for this discussion are lumped together) cut off the trees at their bases and appear to have limbed them there. Skidders then moved the logs to the marshaling yard for further processing and loading onto trucks for transport. The MTC's appear to have done little damage to the ground, probably due to their being rubber tracked vehicles. The skidders are another matter. They have four large tires, articulate in the middle to steer and can literally swim through swampy terrain. They have a blade on the front that can create a road, or a bulldozer can be used to create one. Due to the generally limited time that they operate in an area, they seldom require multiple parallel tracks, although from personal observation, entire Dismal Swamp timber tracts have been thoroughly homogenized to a depth of 3 feet in VA by their use.

CCR had surveyed using the standard 50' shovel test grid over their survey area. A small portion overlapped onto the southern area of this project. STU testing showed no positive tests in the area where we located a site. This is not meant to denigrate CCR or any other firm, but rather shows that gridded interval shovel testing is ineffective at finding relatively low density archaeological sites due to standard probability statistics. The likelihood of finding sites through gridded STU excavation decreases as a function of artifact density per unit area. The only guarantee is that artifact densities would have to be 1 per unit excavated. There are sites with densities of that magnitude, but they tend to be lithic reduction stations along massive cobble deposits and are not typical for terrain used for other purposes.

Below is a table constructed for the use of prepared strips (plowed, disked, roto-tilled, interval scraped or open-field walking at intervals), all of which are set at a 5' width and compared with the standard 15" shovel test excavated to subsoil. The issue of volumetric versus areal survey is addressed by subdividing the STU's into 0.25" deep arbitrary depth spits. The coverage percentages and differences are striking. Whereas STU coverage is 1.5%, any of the continuous strips offers at least 8 times the coverage and with punctuated strips whereby a cleared strip of 5 feet width and 10 feet length separated by 50 feet between clearance areas and at 50 foot intervals between strips is twice as effective. The graph shows that with increasing strip width, the coverage also increases dramatically. In the opposite direction, a 1 bottom plow with a 2' strip is 4 times more effective than shovel testing.

| | Basis | Plow/Disk | Strip, Punctuated | Shovel Test 0.5" | Shovel Test 0.25" | Visual Exam |
|--------------------------|----------|-----------|-------------------|------------------|-------------------|-------------|
| FT/ACRE | 43560.00 | | | | | |
| SQRT 43560= | 208.71 | | | | | |
| INTERVAL | | 50 | 50 | 50 | 50 | 50 |
| TESTS/ACRE | | 5.17 | 26.77 | 25.00 | 25.00 | 5.17 |
| STRIP WIDTH FT | | 5.00 | 5 | 1.3 | 1.3 | 5.00 |
| CLEARED UNIT LENGTH | | | 10 | | | |
| SQ FOOTAGE EXPOSED/ACRE | | 5399.55 | 1338.62 | 325.00 | 650.00 | 5399.55 |
| % COVERAGE | | 12.40% | 3.07% | 0.75% | 1.49% | 12.40% |
| TOPSOIL DEPTH INS | 5 | | | | | |
| 0.5" VISUAL INCREMENTS | 10 | | | | | |
| 0.25" VISUAL INCREMENTS | 20 | | | | | |
| COVERAGE DIFFERENCE 1/2" | 16.61 | | | | | |
| COVERAGE DIFFERENCE 1/4" | 8.31 | | | | | |

Below is a graph illustrating the effect on coverage of increased strip widths as compared with the standard 15" STU diameter.



In this case, the skidder swaths and the bare areas resulting from erosion and other means were used as ready-made swaths for visual examination. Each artifact was piece-plotted using a GPS and transferred to the CAD drawings provided by Talbert & Bright and also introduced into Quantum GIS, a Geographical Information System package to be used for illustrating the different artifact types. The impetus was that the spring growth season was beginning and the area would soon have far less visibility as plants emerged. The procedure was to visually examine the skidder swaths which were up to 12 feet wide and to opportunistically examine bare patches where they occurred. The complete clearcutting and subsequent hydro-axing of the terrain allowed quick visual identification of small benches and other areas on side slopes that would have been difficult to see in full timber. Each artifact was given a separate Waypoint number in the GPS system. Debitage was given a "Q" suffix if quartz (all were milky quartz), a "QZ" suffix if quartzite, "FCR" for fire-cracked rock, "BL" for blade and "PP" for projectile point. All

projectile points were photographed as well in situ. Blades were also photographed and a representative sample of debitage was also sampled. All of the debitage noted on the site ranged in size downward from 2cms square. No raw materials, cores or other resource materials were noted. One small area of FCR was noted but whether this was part of the prehistoric occupation was undecided.

Site Descriptions

SITE: 18CH831 (HAP-1)

SITE TYPE: Native American lithic scatter, undated

SOIL TOPOGRAPHY: Sideslope bench

SITE SIZE: 133 x 114 ft

ARTIFACTS OBSERVED: Milky Quartz debitage (n=7)

COMMENTS: This low-density lithic scatter site occupies a low terrace/bench oriented perpendicularly to Mattawoman Creek. All artifacts observed were white quartz. No diagnostic artifacts were observed. The site represents an overlook/hunting site beside a swale that allows access up to the adjacent higher elevations from the water and aquatic resources of Mattawoman Creek.

This was a strictly visual examination of bare patches on the landform along skidder trails that went into the ground over a foot and churned up the area and thus removed vertical and horizontal integrity. Adjacent to the skidder trails, very limited clear areas showed minimal topsoil over a clayey, pebbly subsoil. The soil has eroded to less than 2" thick and has been disturbed by logging activities. The site consists of a low density scatter of quartz debitage (n=7) indicative of tool maintenance. No raw materials were observed.

RECOMMENDATIONS: Further work on the site is not recommended due to the surface damage and erosion plus the very low likelihood of obtaining enough information to justify the effort.

SITE: 18CH832 (HAP-2)

SITE TYPE: Native American lithic scatter, undated

SOIL TOPOGRAPHY: Sideslope bench

SITE SIZE: 90 x 180 ft

ARTIFACTS OBSERVED: Milky Quartz debitage (n=5)

COMMENTS: This low-density lithic scatter site occupies a low terrace/bench oriented perpendicularly to Mattawoman Creek. All artifacts observed were white quartz. No diagnostic artifacts were observed. The site represents an overlook/hunting site beside a swale that allows access up to the adjacent higher elevations from the water and aquatic resources of Mattawoman Creek.

This was a strictly visual examination of bare patches on the landform along skidder trails that went into the ground over a foot and churned up the area and thus removed vertical and horizontal integrity. Adjacent to the skidder trails, very limited clear areas showed minimal topsoil over a clayey, pebbly subsoil. The soil has eroded to less than 2" thick and has been disturbed by logging activities. The site consists of a low density scatter of quartz debitage (n=5) indicative of tool maintenance. No raw materials were observed.

RECOMMENDATIONS: Further work on the site is not recommended due to the surface damage and erosion plus the very low likelihood of obtaining enough information to justify the effort.

SITE: 18CH833 (HAP-3)

SITE TYPE: Native American lithic scatter

SOIL TOPOGRAPHY: Ridge Top

SITE SIZE: 150 x 1260 ft

COLLECTED ARTIFACTS: 3 milky quartz (2 with red blotches) Halifax variant side notched projectile points. 2 milky quartz blades.

OBSERVED ARTIFACTS: 90 quartz debitage, 2 milky quartz blades, 5 quartzite debitage, 4 FCR

COMMENTS: The site occupies a long narrow erosion tongue oriented parallel with a very steep slope down to Mattawoman Creek to the south. To the north, the site is limited by a deep ravine used by

transiting deer and other game from the lowland water-sources/resources to the uplands. It is along this margin that the site is most represented.

This was a strictly visual examination of skidder trails along the top of the landform that went into the ground over a foot and churned up the area and thus removed vertical and horizontal integrity. Adjacent to the skidder trails, very limited clear areas showed minimal topsoil over a clayey, pebbly subsoil. Topsoil thickness was 2"± and was disturbed by erosion and by recent logging. The structural integrity of the site where the artifacts were identified was totally destroyed by skidder activity. To the south edge of the ridge top, small intermittent areas of clear ground were observed with low to no artifacts present and with minimal topsoil due to erosion.

This was a strictly visual examination of skidder trails along the top of the landform that went into the ground over a foot and churned up the area and thus removed vertical and horizontal integrity. Adjacent to the skidder trails, very limited clear areas showed minimal topsoil over a clayey, pebbly subsoil. Topsoil thickness was 2"± and was disturbed by erosion and by recent logging. The structural integrity of the site where the artifacts were identified was totally destroyed by skidder activity. To the south edge of the ridge top, small intermittent areas of clear ground were observed with low to no artifacts present and with minimal topsoil due to erosion.

The site occupies a high ridge top with a commanding view over Mattawoman Creek to the south. However, the artifact distribution (n=103) is argued to mean that the site was used as an ambush/kill/processing site for whitetail deer transiting up from the water and resources of Mattawoman Creek to the interior uplands for browse. The daily routine of deer is established from direct observation by modern hunters and is suggested from artifact scatters (Browning 2004) on similar terrain in Stafford County, VA. Numerous surveys prior to that project had shown four identical landforms with equal access to water, all oriented at a perpendicular to the stream. Of the four, one would have substantially more artifacts than the adjacent landform while the other two would have generally no evidence. Given several thousand years of activity, this anomalous behavior was finally plausibly explained by animal behavior. In each case, the ravine with the shallowest gradient up from the stream valley was adjacent to the highest density site. The highest density site was also more directly adjacent to the center of the ravine. In all cases, the ravine led to either a ridge or a high terrace. Where a ridge occurred, the usual situation was that on the far side of the ridge, another shallow ravine led to another watershed. Occam's Razor applied to that scenario was that we were not looking at human behavior, but rather were looking at animal behavior that the human apex predators identified to gain access to calories on the hoof. In short, the old saw "that it is best to hunt where the animals are" is applicable. This has direct implications for survival and reproductive success in hunter/forager societies.

Fire cracked rock was noted in one location along the top portion of the ridge more towards the tip than the mouth of the ravine. The artifact distribution is heaviest on the northern face of the landform and still heavier towards the mouth of the ravine at the west. The overlook situation is shown on the attached contour maps by relation of the contour elevation to the loci of debitage. The high ridge parallels the ravine for a longer distance than does the north slope of the ravine where artifacts were present, but in lower densities. Figures 17 to 22 show the various artifacts plotted in categories on the contour map.

The site was occupied apparently only during the time period that Halifax projectile points were made as no others were found. However, small quantities of quartzite debitage were identified, indicative of other time periods or people using the terrain for similar purposes.

The presence of skidder trails along the north top and slightly side slope on the north side of the ridge has resulted in the total destruction of vertical and horizontal integrity in the trails. The skidders operated during wet soil conditions and sank into the soil up to a foot and well into subsoil. The soils are water retentive clays with pebbles. Topsoil was minimal, in the range of up to 3" from observation. Erosion is apparent in bare patches where the skidders had not ventured wherein about half of the areas had subsoil at the surface. No evidence of subsurface activity was noted. The absence of potable water would argue for an intermittently occupied camp and/or kill site.

This was a visual reconnaissance only with no subsurface investigation. Opportunistic examination of the artifacts on the surface of the skidder trails with 100% surface visibility was made along with all bare

patches. Individual artifacts were GPS'd to geo-locate them and *ad hoc* photos of non-diagnostic and all diagnostic artifacts were taken *in situ*. The GPS loci were transformed using standard software and placed on the site contour maps and from there transferred to the less accurate USGS quadrangle sheet for recordation.

Artifact density is a difficult measure to perform in the field, especially at the reconnaissance level. Typically reserved for Phase III excavations and then usually sampled and extrapolated, it is also an under-utilized measure of a site. Reading a paper site form without having seen the site in question gives no real appreciation for the density of artifacts and the usual low-medium-high subjective offerings leave those wishing more exactitude wanting.

This site was GPS'd on the skidder trails and on bare patches. The limits of the site were determined by topography on the north where the site sloped steeply and by the numerous bare patches on the south leading to the precipitous slope down to Mattawoman Creek. On the east the artifacts simply ran out, as they did on the west in the fold of the ravine head. The advantage of the piece-plot using GPS approach is that some form of metrics can be obtained. By placing their locations on the site contour maps, follow-on measurements could be obtained. Distances between artifacts of 20-30 feet were typical where the artifacts were more dense and there were some gaps up to 50 feet. The measured artifact patterns were necessarily linear due to the shape of the skidder trails, but no noticeable differences were observed in the bare patches. The artifact density was estimated at 1/8 square meters. Densities of 1/1 are extraordinarily high as indicated above. However, metrical data on what constitutes a low density site, much less agreement on quantification, is difficult to find in the literature. Personal use over the last 30 years has led to the following classification: High artifact density is greater than 1 artifact per square meter. Medium artifact density is from less than 1 per square meter down to 1 per 5 square meters. Low density is anything below 1 artifact per 6 square meters. The difficulty with those measures is that artifact density maps, due to scale, often subjectively appear to be quite densely populated when artifacts are pieceplotted. When contours are used to denote density or color gradients, the mental imagery is better interpreted.

The surface measure of artifact density presumes an even distribution throughout the presumptive "A" horizon wherein the artifacts of the Archaic are typically found, especially in eroded soil conditions such as were found on this site.

RECOMMENDATIONS: Further work is not recommended as the time period of occupation has been identified, the nature of the lithics has been established and the soils have been so disturbed that meaningful recovery of anything but additional and repetitively similar artifacts is virtually precluded. Further work is not recommended.

SITE: 18CH834 (HAP-4)

SITE TYPE: Native American lithic scatter

SOIL TOPOGRAPHY: Ridge Tip

SELECTED ARTIFACTS: 16 milky quartz debitage

COMMENTS: The site occupies a erosion tongue oriented nearly parallel with a ravine sloping down to a tributary of Mattawoman Creek. To the south, the site is limited by a deep ravine used by transiting deer and other game from the lowland water-sources/resources to the uplands. It is along this margin that the site is most represented.

This was a strictly visual examination of skidder trails along the top of the landform that went into the ground over a foot and churned up the area and thus removed vertical and horizontal integrity. Adjacent to the skidder trails, very limited clear areas showed minimal topsoil over a clayey, pebbly subsoil.

The site occupies a tongue of land north of a ravine feeding into a tributary of Mattawoman Creek to the east. The site has been recently logged and more recently hydro-axed to lower the vegetation level to ground height. Skidder trails were placed on the uplands and were used as survey swaths as they had 100% surface visibility. Where possible due to ground cover from hydro-axe debris, visual examination of areas on the spine and south of the ridge were visually examined. The artifact densities were far less in those areas. However, the artifact distribution (n=16) is argued to mean that the site was used as a secondary to IHAP-3 ambush/kill/processing site for whitetail deer transiting up from the water and

resources of Mattawoman Creek to the interior uplands for browse. The daily routine of deer is established from direct observation by modern hunters and is suggested from artifact scatters (Browning 2004) on similar terrain in Stafford County, VA.

The presence of skidder trails along the top and slightly side slope on the southeast side of the ridge has resulted in the total destruction of vertical and horizontal integrity in the trails. The skidders operated during wet soil conditions and sank into the soil up to a foot and well into subsoil. The soils are water retentive clays with pebbles. Topsoil was minimal, in the range of up to 3" from observation. Erosion is apparent in bare patches where the skidders had not ventured wherein about half of the areas had subsoil at the surface. No evidence of subsurface activity was noted. The absence of potable water would argue for an intermittently occupied camp.

RECOMMENDATIONS: Further work is not recommended as the time period of occupation has been identified, the nature of the lithics has been established and the soils have been so disturbed that meaningful recovery of anything but additional and repetitively similar artifacts is virtually precluded. Further work is not recommended.

North Project Area

The north area is recommended for no further work due to limited project impacts. As part of an avigation easement, trees above a fixed height are either cut off at the base or topped. That would depend upon individual landowner preferences. As the majority of the area is in yards subsurface damage would be minimal in any event. The remainder is either in former house lots that have been disturbed or in forest margins on the terrain dip into a swale that is of no archaeological interest. Therefore, further work is not recommended.

South Project Area

No sites were previously identified within the south project area, nor were they to be expected due to distance from terrain breaks, transportation corridors and ribbon development along Bumpy Oak Road for which a standing structure had been previously recorded: Carroll House CH-595. This is a small vernacular structure fronting onto Bumpy Oak Road. The parcel has since been subdivided into a family subdivision and has several structures all post-dating the CH-595 house. The terrain is also marginal at best for prehistoric occupation.

SUMMARY AND RECOMMENDATIONS

Architectural Survey

Visual examination of the project areas showed a set of occupied and former rural domestic structure ribbon development along the roadways. All of these structures had been previously surveyed by Bamann (1999) and found not eligible by MHT. We concur with that recommendation.

Further work on standing structures is not recommended.

Archaeological Survey

Visual examination of the north project showed a set of occupied and former rural domestic structure ribbon development along the roadways. The yards are developed and some houses have outbuildings. The landform occupied by the houses backs onto a ravine that slopes down from the east. The houses occupy the terrain that might have contained cultural materials. However, given that the avigation easement will not cut below the surface, further work is not recommended due to the low level of impact and the high likelihood that previous occupation has been seriously disturbed by land clearance and landscaping activities.

Visual examination of the south project showed that the Bamann survey had shovel tested around the perimeter and found no sites. The property is a narrow rectangle oriented with the thin end towards Bumpy Oak Road.

Four archaeological sites were found outside the south project area. All were prehistoric lithic scatters consisting of primarily milky quartz debitage. One site had diagnostic artifacts consistent with Middle Archaic Halifax occupation.

Two sites (18CH831 and 18CH832) were on small benches on a side slope overlooking Mattawoman Creek and had no diagnostics. The soils had been severely eroded, in effect deflating the site from its presumptive original position on top of existing topsoil down to where both were lying upon subsoil. The research potential is minimal for these sites and further work is not recommended.

Site IHAP-3 (18CH833) occupied a long narrow tongue of land and contained quartz majority debitage with a very small number of quartzite debitage. FCR was also noted in one location. In addition, this site had several small blades and three Halifax period variant projectile points. All were of quartz, although two had red blotches. They were damaged versions, with one specimen looking more stemmed than side notched due to the extent of damage. The topography was quite steep and the artifacts were concentrated on the north side of the ridge top adjacent to a swale that allowed a shallower gradient from the feeder stream to Mattawoman Creek to upland ridges.

The site had been damaged by logging, but at the same time, due to the low artifact density represented, the site probably would not have been found had it been shovel tested prior to logging, or if it had, the general paucity of artifacts would have resulted in a no further work recommendation.

Due to conditions as found, the decision was made to spot-locate the artifacts using GPS and then to plot them onto the project contour maps. The spread of artifacts is distinctive and nearly evenly spaced down the length of the ridge. The placement bias to the north edge is interpreted as using the overlook provided by the swale for game animals transiting from the water source below up to the uplands for browse and mast.

Although the site has been damaged, it was able to provide information that was not obtainable by shovel testing and which allowed for interpretation that also would not have been possible by shovel testing. The topsoil on the site is virtually non-existent and is indicative of erosion such that the surface materials have deflated to the subsoil. Consequently, the research potential for the site is felt to be minimal and no further work is recommended.

Site IHAP-4 (18CH834) is a smaller semi-mirror of the CH833 site to the south. It occupies the leading edge of the erosion tongues off an upland flat that overlooks the dendritic drainage of a tributary of Mattawoman Creek. It has higher numbers of artifacts at the head of the ravine separating the two sites and up which prey animals transited from water to upland browse and mast. Due to the spreading configuration, the site is less dense than CH833. No diagnostics were observed from the site, but the milky quartz was visually identical with that from the other three sites in the vicinity.

Due to conditions as found, the decision was made to spot-locate the artifacts using GPS and then to plot them onto the project contour maps. The spread of artifacts is distinctive and nearly evenly spaced down the length of the ridge. The placement bias to the north edge is interpreted as using the overlook provided by the swale for game animals transiting from the water source below up to the uplands for browse and mast.

Although the site has been damaged, it was able to provide information that was not obtainable by shovel testing and which allowed for interpretation that also would not have been possible by shovel testing. The topsoil on the site is virtually non-existent and is indicative of erosion such that the surface materials have deflated to the subsoil. Consequently, the research potential for the site is felt to be minimal and no further work is recommended.

Site IHAP-5 (18CH835) is outside the project area and will not be affected by it. It is half of a half-mile race track built in 1951 and abandoned around 1954. This racetrack first ran modified stock cars and then motorcycles. It consists of an earthen berm around the perimeter, a flat area in the middle and the remnants of former bleachers. In addition, pit-stop areas should have been present in the infield.

What remains of the site is an overgrown wooded half-oval embankment. The archaeological remnants would consist of disparate pieces of automobile and motorcycle parts that would give little life to the slice of Americana that existed at the racetrack when it was in operation. Further work is not recommended as the site will not be affected by this project and due to the limited information potential that additional study would provide.

The intent of this supplemental Environmental Evaluation was to determine whether further study of the aviation easement on the north end of the airport and the obstruction clearance area on the southern end of the airport warranted additional study to locate cultural resources that might be eligible for the National Register of Historic Places. The CH670 Trueman Cemetery was revisited and found to be in the same condition as when it was recorded in 1999. The remnant of the racetrack was mentioned in 1999 but was not then 50 years old. This was recorded as CH835 during this evaluation.

In the north project area, rural ribbon development exists where negotiations to eliminate trees above a prescribed height will take place with the choice of removal or topping. The houses with their well developed yards will be unaffected by tree cutting and the landform slopes steeply in back of the yards, thus further work is not felt to be warranted.

In the south project area, the aviation easement area had a structure less than 50 years old built upon it and was considered to be ineligible for the NRHP and for which further investigation is not recommended.

This evaluation of the four sites outside the project appears to have exhausted their information potential and the project is recommended to proceed.

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APPENDIX B1

ARTIFACTS RECOVERED FROM SURVEY

18CH833 (IHAP-3)
3 milky/veined quartz Halifax variant projectile points; 2 milky quartz blades, non -diagnostic.

ARTIFACTS OBSERVED DURING SURVEY BY SITE

18CH831 (IHAP-1)
7 Milky Quartz Debitage

18CH832 (IHAP-2)
5 Milky Quartz Debitage

18CH833 (IHAP-3)
90 quartz debitage, 2 quartz blades, 5 quartzite debitage, 4 FCR

18CH834 (IHAP-4)
16 milky quartz debitage

18CH835 (IHAP-5)
NONE

Appendix B2- Project Photographs



IHAP - Clearance, View to NNE



IHAP-1 Ground conditions



IHAP, Debitage, IHAP-2



IHAP-3 Skidder Trail



IHAP-3 Proj. Pt.



IHAP-3 Blade



IHAP-3 Debitage



IHAP-3 Blade



IHAP-3 Blade



IHAP-3 Proj. Pt.



IHAP-3 Proj. Pt.



IHAP-3 Blade



IHAP-3 Skidder Trail



IHAP - 3 on ridge, View to SSE



IHAP - view to N from IHAP3 to IHAP4



IHAP-5 Racetrack Berm

Appendix B3- Site Forms

MARYLAND INVENTORY OF HISTORIC PROPERTIES
ARCHEOLOGICAL SITE SURVEY: BASIC DATA FORM

Date Filed: 06/14/2013

Check if update:



Maryland Department of Planning
Maryland Historical Trust
Division of Historical and Cultural Programs
100 Community Place
Crownsville, Maryland 21032

Site Number: 18CH831

County: Charles

A. DESIGNATION

1. Site Name: IHAP-1
2. Alternate Site Name/Numbers: _____
3. Site Type (describe site chronology and function; see instructions):
Prehistoric Lithic Scatter
4. Prehistoric Historic _____ Unknown _____
5. Terrestrial Submerged/Underwater _____ Both _____

B. LOCATION

6. USGS 7.5' Quadrangle(s): Port Tobacco (For underwater sites)
NOAA Chart No.: _____
- (Photocopy section of quad or chart on page 4 and mark site location)

7. Maryland Archeological Research Unit Number: 11
8. Physiographic Province (check one):
 Allegany Plateau Lancaster/Frederick Lowland
 Ridge and Valley Eastern Piedmont
 Great Valley Western Shore Coastal Plain
 Blue Ridge Eastern Shore Coastal Plain
9. Major Watershed/Underwater Zone (see instructions for map and list): Lower Potomac River

C. ENVIRONMENTAL DATA

10. Nearest Water Source: Mattawoman Creek Stream Order: 1
11. Closest Surface Water Type (check all applicable):
 Ocean Freshwater Stream/River
 Estuarine Bay/Tidal River Freshwater Swamp
 Tidal or Marsh Lake or Pond
 Spring
12. Distance from closest surface water: 515 meters (or _____ feet)

C. ENVIRONMENTAL DATA [CONTINUED]

13. Current water speed: _____ knots

14. Water Depth: _____ meters

15. Water visibility: _____

16. SCS Soils Typology and/or Sediment Type: Croom-Marr complex, 15 to 25 slopes

17. Topographic Settings (check all applicable):

- | | |
|---|---|
| <input type="checkbox"/> Floodplain | <input type="checkbox"/> Hilltop/Bluff |
| <input type="checkbox"/> Interior Flat | <input type="checkbox"/> Upland Flat |
| <input type="checkbox"/> Terrace | <input type="checkbox"/> Ridgetop |
| <input checked="" type="checkbox"/> Low Terrace | <input type="checkbox"/> Rockshelter/Cave |
| <input type="checkbox"/> High Terrace | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Hillslope | <input type="checkbox"/> Other: _____ |

18. Slope: 0-5%

19. Elevation: _____ meters (or 170 feet) above sea level

20. Land use at site when last field checked (check all applicable):

- | | |
|--|---|
| <input type="checkbox"/> Plowed/Tilled | <input type="checkbox"/> Extractive |
| <input type="checkbox"/> No-Till | <input type="checkbox"/> Military |
| <input type="checkbox"/> Wooded/Forested | <input type="checkbox"/> Recreational |
| <input checked="" type="checkbox"/> Logging/Logged | <input type="checkbox"/> Residential |
| <input type="checkbox"/> Underbrush/Overgrown | <input type="checkbox"/> Ruin |
| <input type="checkbox"/> Pasture | <input type="checkbox"/> Standing Structure |
| <input type="checkbox"/> Cemetery | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Commercial | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Educational | <input type="checkbox"/> Other: _____ |

21. Condition of site:

- Disturbed
 Undisturbed
 Unknown

22. Cause of disturbance/destruction (check all applicable):

- | | |
|--|---|
| <input type="checkbox"/> Plowed | <input type="checkbox"/> Vandalized/Looted |
| <input checked="" type="checkbox"/> Eroded/Eroding | <input type="checkbox"/> Dredged |
| <input type="checkbox"/> Graded/Contoured | <input type="checkbox"/> Heavy Marine Traffic |
| <input type="checkbox"/> Collected | <input checked="" type="checkbox"/> Other: <u>Logged</u> |

23. Extent of disturbance:

- Minor (0-10%)
 Moderate (10-60%)
 Major (60-99%)
 Total (100%)
 % unknown

C. ENVIRONMENTAL DATA [CONTINUED]

24. Describe site setting with respect to local natural and cultural landmarks (topography, hydrology, fences, structures, roads). Use continuation sheet if needed.

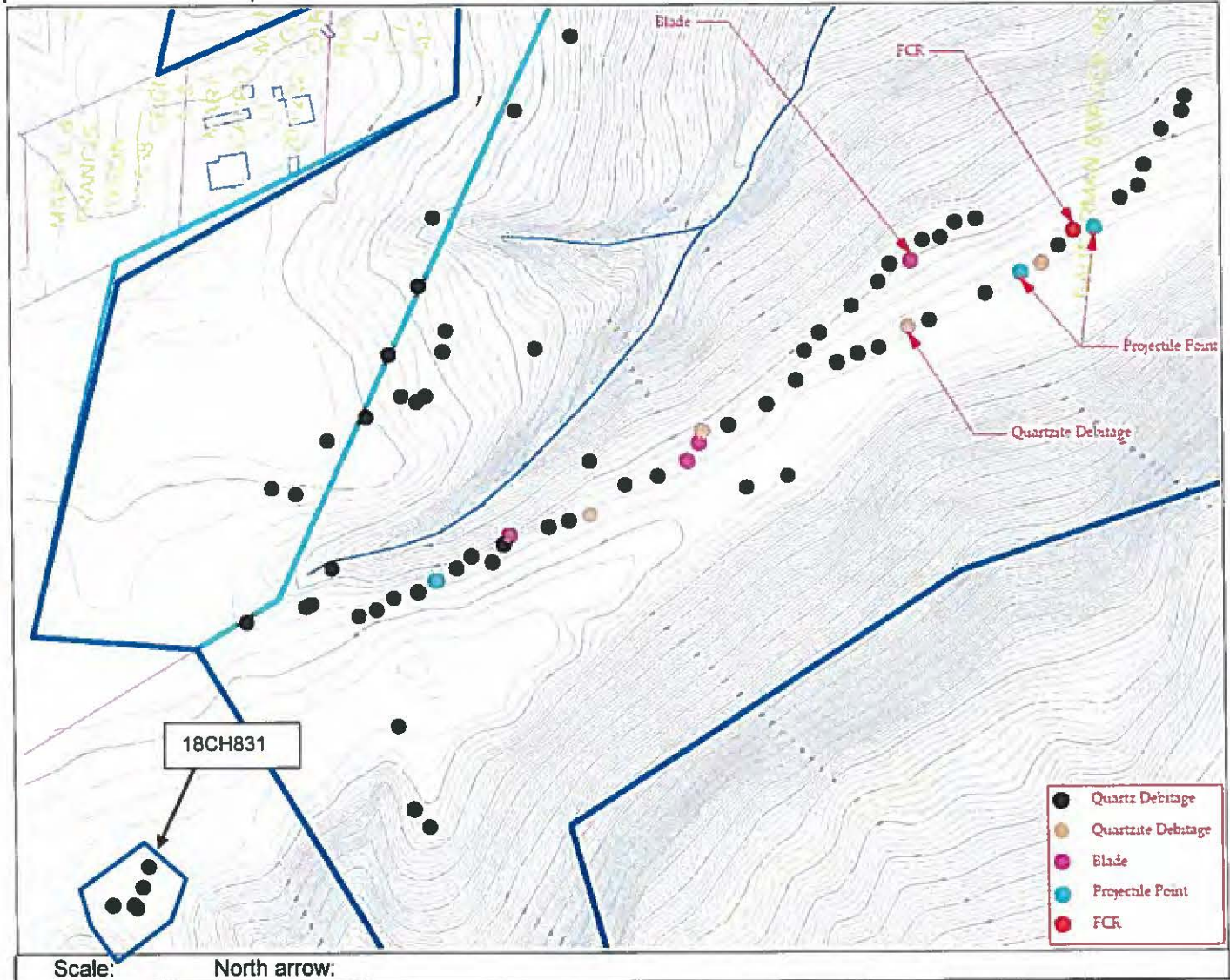
The site occupies a small terrace/bench oriented perpendicularly to Mattawoman Creek to the south. To the north, the site is limited by a high ridge.

25. Characterize site stratigraphy. Include a representative profile on separate sheet, if applicable. Address plowzone (presence/absence), subplowzone features and levels, if any, and how stratigraphy affects site integrity. Use continuation sheet if needed.

This was a strictly visual examination of bare patches on the landform along skidder trails that went into the ground over a foot and churned up the area and thus removed vertical and horizontal integrity. Adjacent to the skidder trails, very limited clear areas showed minimal topsoil over a clayey, pebbly subsoil.

26. Site size: 40 meters by 30 meters (or feet by feet)

27. Draw a sketch map of the site and immediate environs, here or on separate sheet:



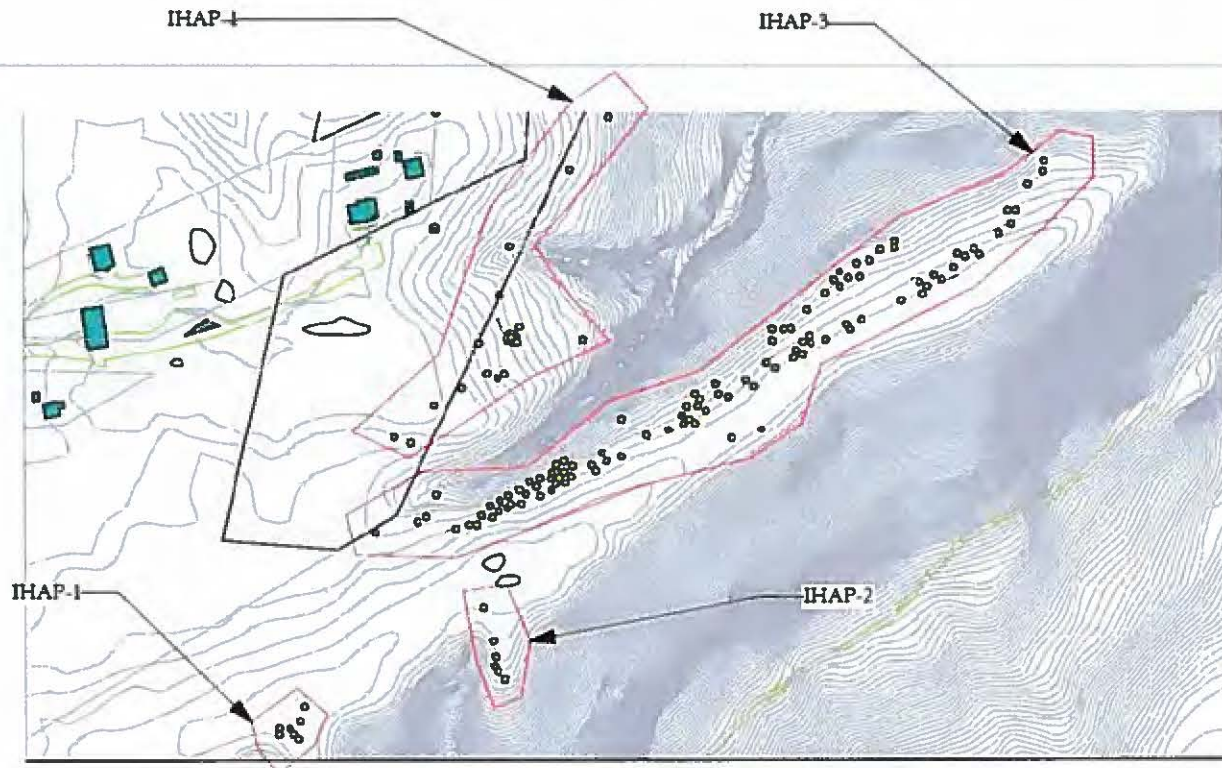


Figure xx. All Artifacts On Project Topo Map.

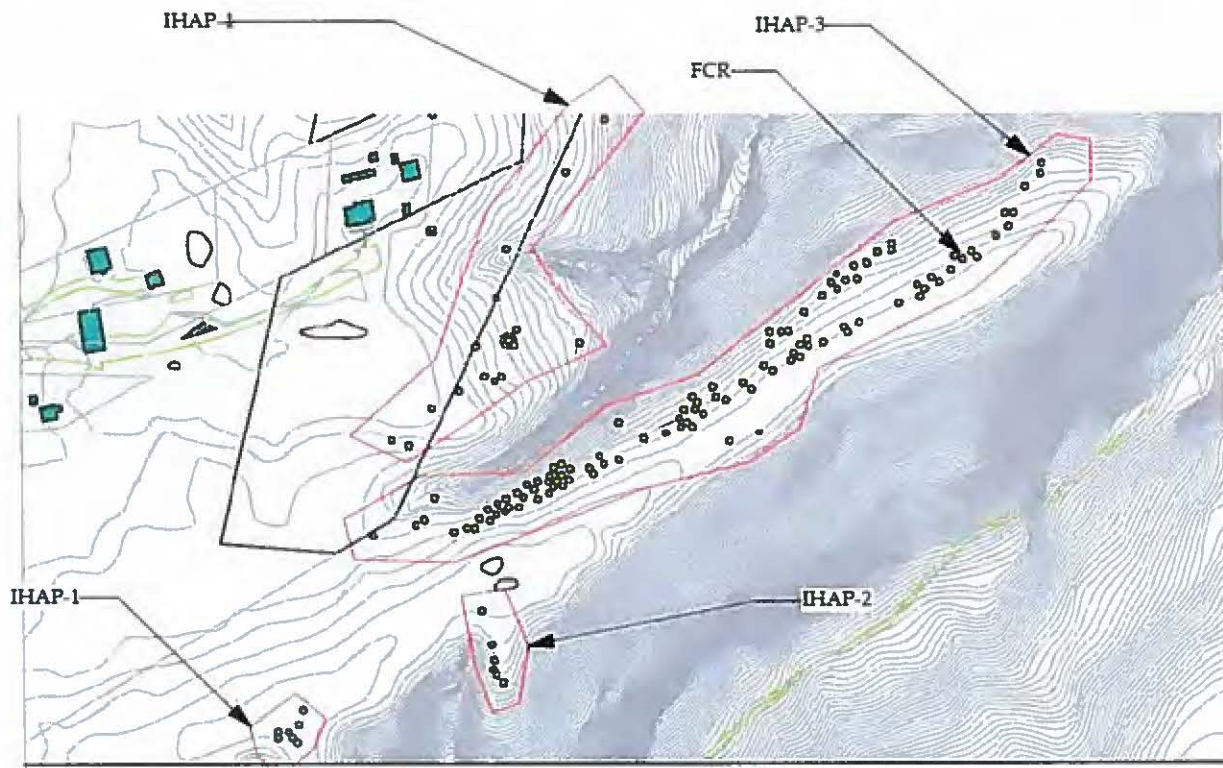


Figure xx. FCR On Project Topo Map.

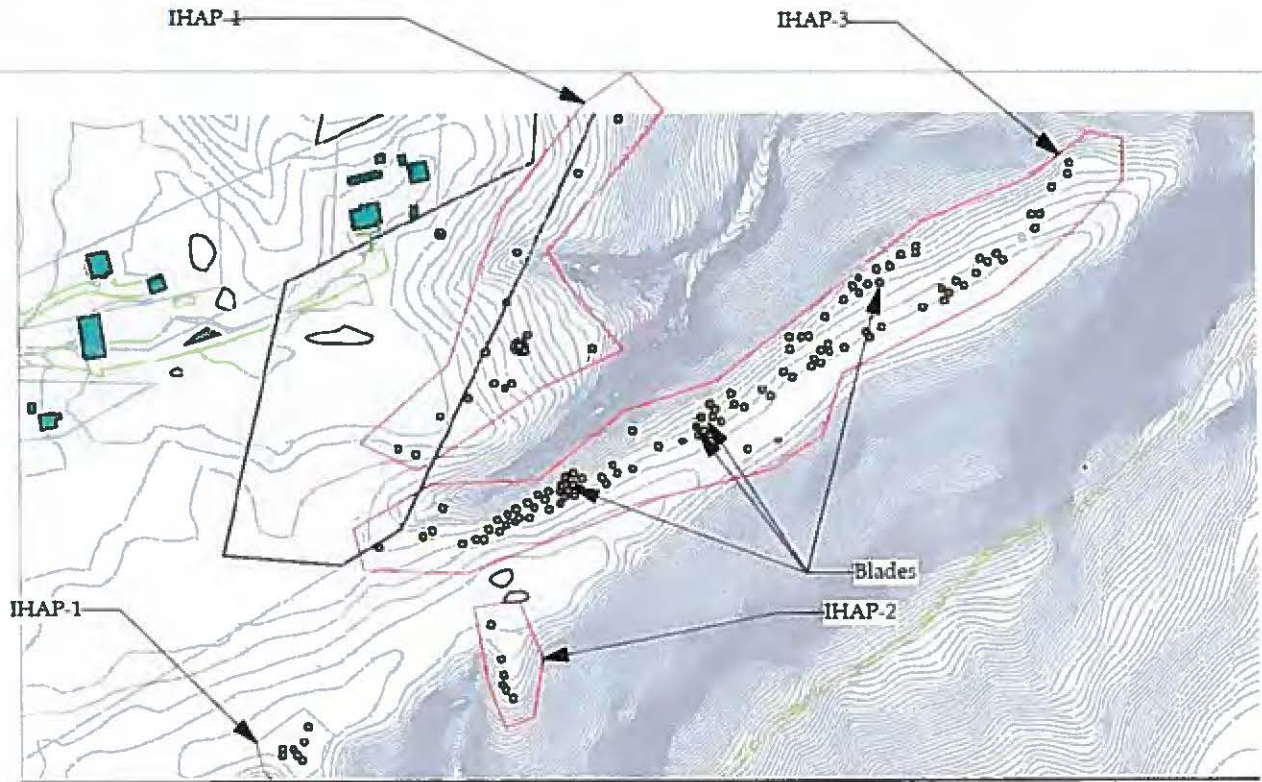


Figure xx. Blades On Project Topo Map.

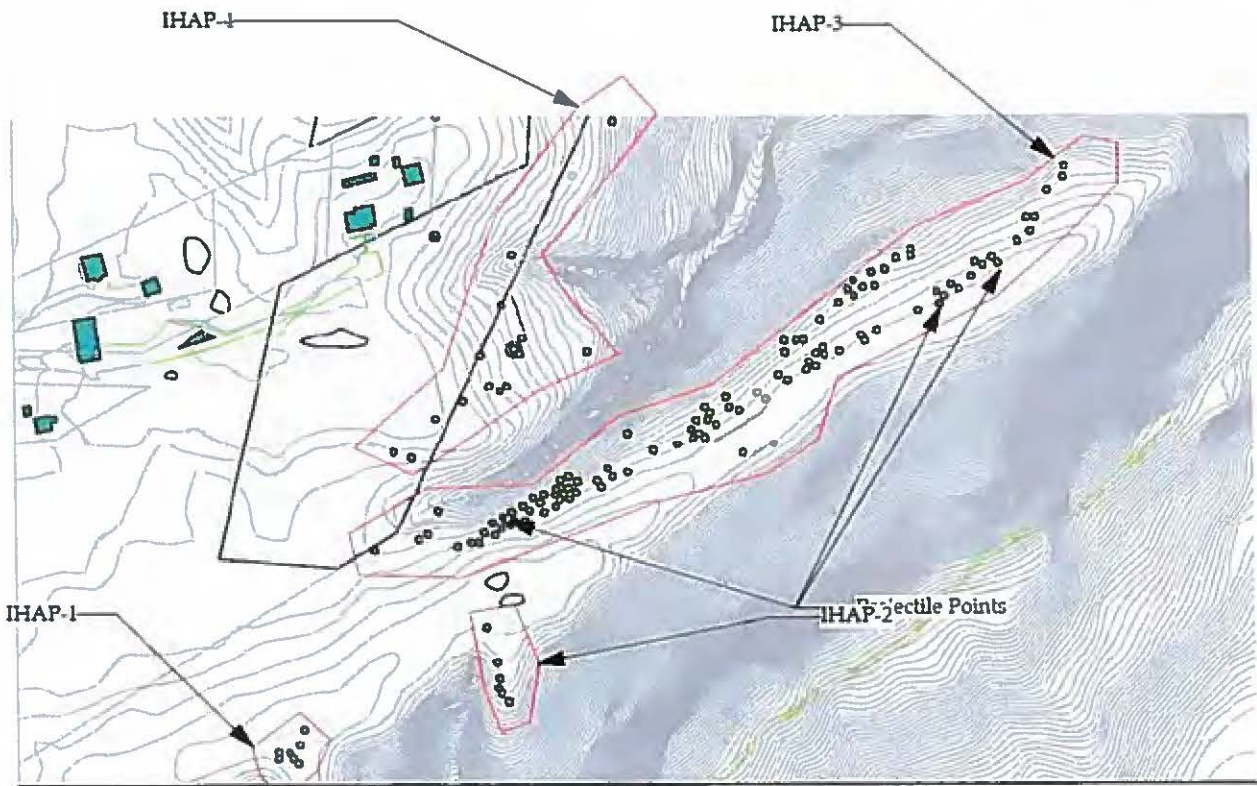


Figure xx. Projectile Points On Project Topo Map.

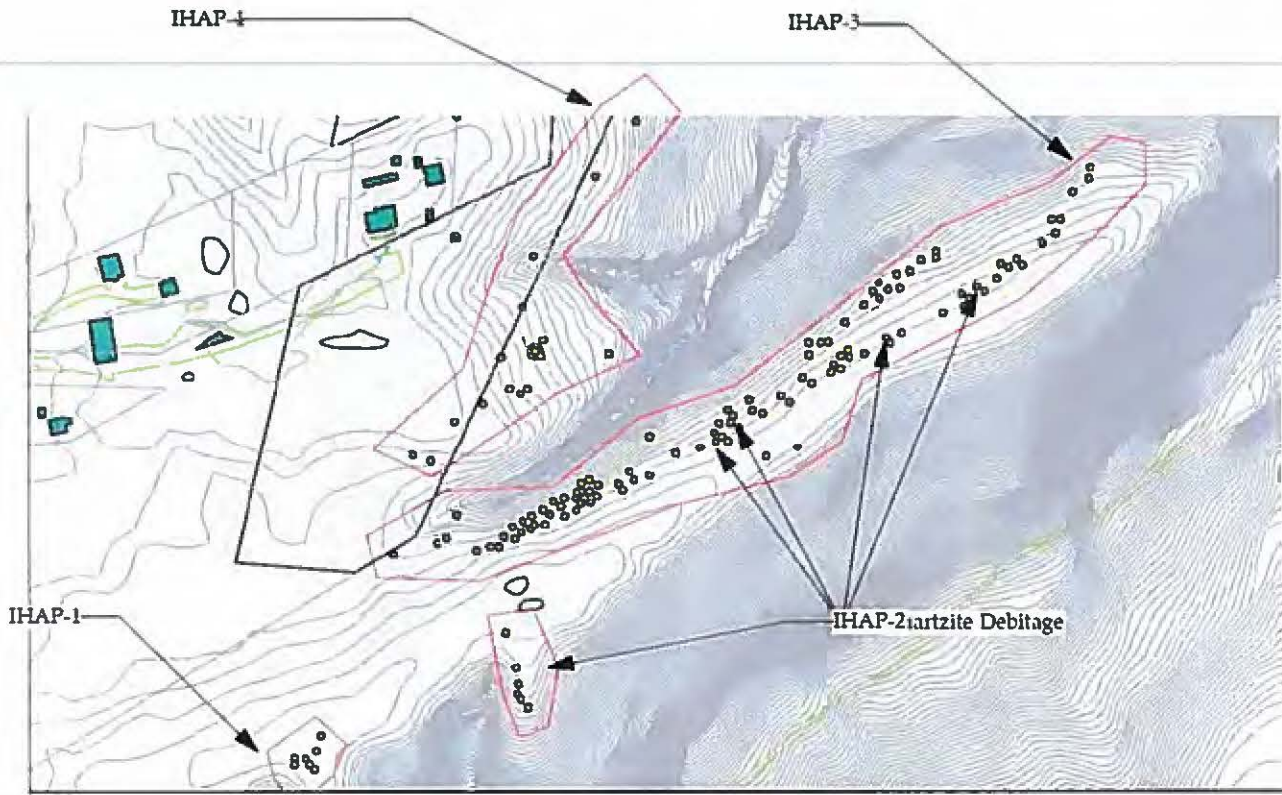


Figure xx. Quartzite Debitage On Project Topo Map.

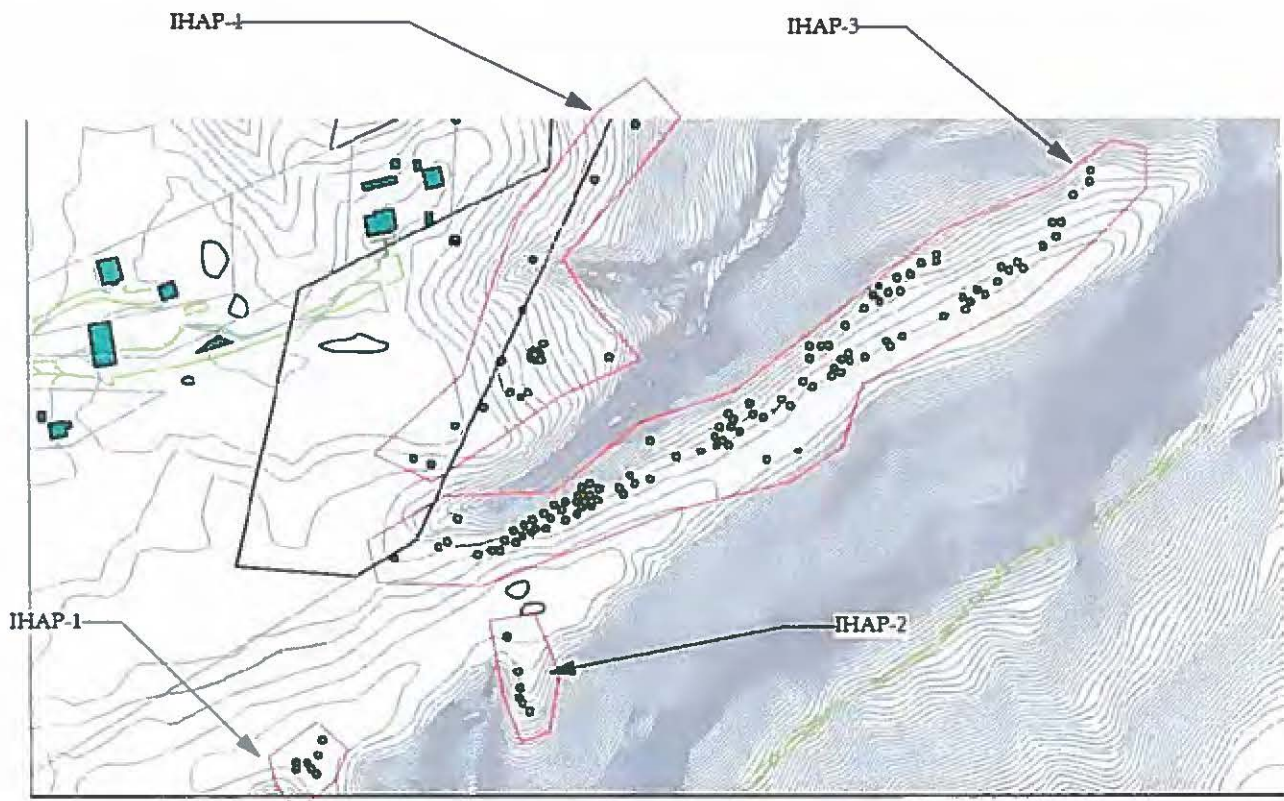
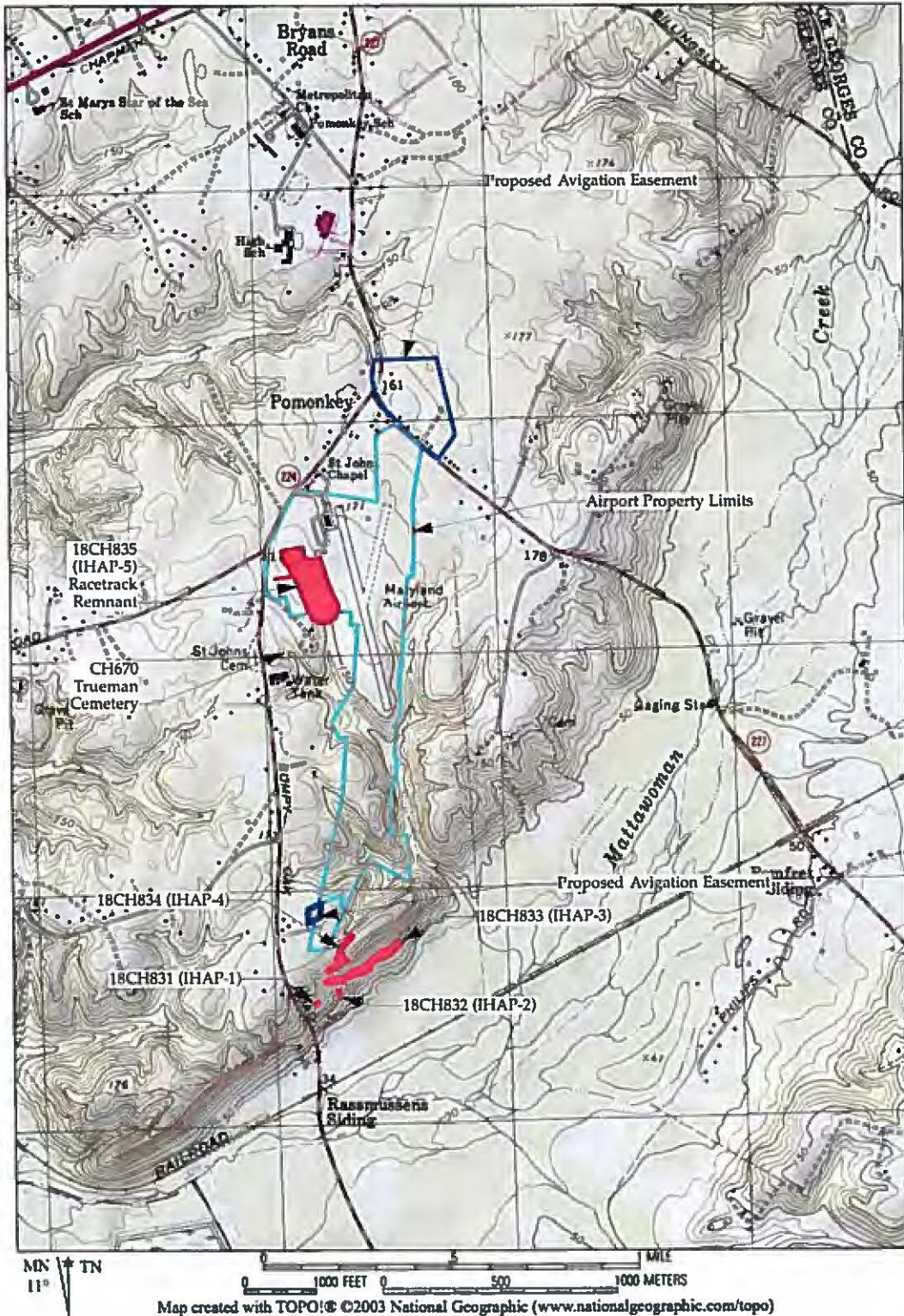


Figure xx. Quartz Debitage On Project Topo Map.

Photocopy section of quadrangle map(s) and mark site location with heavy dot or circle and arrow pointing to it.



Port Tobacco, MD USGS 24k Quad Showing Maryland Airport At Indian Head.

D. CONTEXT

28. Cultural Affiliation (check all applicable):

PREHISTORIC

- Unknown
- Paleoindian
- Archaic
- Early Archaic
- Middle Archaic
- Late Archaic
- Terminal Archaic
- Woodland
- Adena
- Early Woodland
- Middle Woodland
- Late Woodland

CONTACT

HISTORIC:

- Unknown
- 17th century
- 1630-1675
- 1676-1720
- 18th century
- 1721-1780
- 1781-1820
- 19th century
- 1821-1860
- 1861-1900
- 20th century
- 1901-1930
- post-1930

UNKNOWN

E. INVESTIGATIVE DATA

29. Type of investigation:

- Phase I
- Phase II/Site Testing
- Phase III/Excavation
- Archival Investigation

- Monitoring
- Field Visit
- Collection/Artifact Inventory
- Other: _____

30. Purpose of investigation:

- Compliance
- Research
- Regional Survey

- Site Inventory
- MHT Grant Project
- Other: _____

31. Method of sampling (check all applicable):

- Non-systematic surface search
- Systematic surface collection
- Non-systematic shovel test pits
- Systematic shovel test pits
- Excavation units
- Mechanical excavation
- Remote sensing
- Other: _____

32. Extent/nature of excavation: _____

F. SUPPORT DATA

33. Accompanying Data Form(s):

- Prehistoric
- Historic
- Shipwreck

34. Ownership: Private
 Unknown

Federal State Local/County

35. Owner(s): Gil Bauserman
Address: 3900 Livingston Road, Indian Head, MD 20640
Phone: (301) 283-6202

36. Tenant and/or Local Contact: _____
Address: _____
Phone: _____

37. Other Known Investigations: _____

38. Primary report reference or citation: _____

39. Other Records (e.g. slides, photos, original field maps/notes, sonar, magnetic record)?
 Slides Field record Other: _____
 Photos Sonar
 Field maps Magnetic record

40. If yes, location of records: MD SHPO

41. Collections at Maryland Archeological Conservation (MAC) Lab or to be deposited at MAC Lab?
 Yes
 No
 Unknown

42. If NO or UNKNOWN, give owner: Indian Head Airport
location: At airport
and brief description of collection: _____
All debitage GPS'd, representative photos taken. No diagnostic artifacts observed.

43. Informant: _____
Address: _____
Phone: _____

44. Site visited by Lyle E. Browning (Browning & Associates, Ltd.)
Address: 2240 Chartstone Drive, Midlothian, VA 23113
Phone: 804-357-2959 Date: 05/21/2013

45. Form filled out by: Lyle E. Browning (Browning & Associates, Ltd.)
Address: 2240 Chartstone Drive, Midlothian, VA 23113
Phone: 804-357-2959 Date: 06/06/2013

46. Site Summary/Additional Comments (append additional pages if needed):

This low density lithic scatter site occupies a low terrace/bench overlooking Mattawoman Creek. All artifacts observed were white quartz. No diagnostic artifacts were observed. The site represents an overlook/hunting site beside a swale that allows access up to the adjacent higher elevations from the water and aquatic resources of Mattawoman Creek.

The soil has eroded to less than 2" thick and has been disturbed by logging activities. The site consists of a low density scatter of quartz debitage (n=7) indicative of tool maintenance. No raw materials were observed.

Further work on the site is not recommended due to the surface damage and erosion plus the very low likelihood of obtaining enough information to justify the effort.

MARYLAND ARCHEOLOGICAL SITE SURVEY: PREHISTORIC DATA FORM

Site Number 18CH831

1. Site type (check all applicable):

- village
- hamlet
- base camp
- short-term resource procurement
- lithic quarry/extraction
- rockshelter/cave
- cairn

- earthen mound
- shell midden
- fish weir
- submerged prehistoric
- lithic scatter
- unknown
- other:

2. Categories of aboriginal material or remains at site (check all applicable):

- flaked stone
- ground stone
- stone bowls
- fire-cracked rock
- other lithics
- ceramics (vessels)
- other fired clay

- human skeletal remains
- faunal implements/ornaments
- faunal material
- oyster shell
- floral material
- unknown
- other:

3. Lithic materials (check all applicable):

- jasper
- chert
- rhyolite
- quartz
- quartzite
- chalcedony
- ironstone
- argillite

- steatite
- sandstone
- silicified sandstone
- ferruginous quartzite
- European flint
- basalt
- unknown
- other:

4. Diagnostics (choose from manual and give number recovered or observed):

5. Features present:

- yes
- no
- unknown

6. Types of features identified (check all applicable):

- midden
- postmolds
- house patterns
- palisade
- hearths
- chipping clusters

- refuse/storage pits
- burials
- ossuaries
- unknown
- other:

7. Flotation samples collected:

yes
 no
 unknown

analyzed:

yes, by _____
 no
 unknown

8. Samples for radiocarbon dating collected:

yes
 no
 unknown

Dates and Lab Reference Nos. _____

9. Soil samples collected:

yes
 no
 unknown

analyzed:

yes, by _____
 no
 unknown

10. Other analyses (specify): _____

11. Additional comments:

Survey was visual only with photos and GPS waypoints of all artifacts observed on the severely disturbed surface.

12. Form filled out by: Lyle E. Browning (Browning & Associates, Ltd.)
Address/Company Name: 2240 Chartstone Drive, Midlothian, VA 23113
Date: 06/06/2013

MARYLAND INVENTORY OF HISTORIC PROPERTIES
ARCHEOLOGICAL SITE SURVEY: BASIC DATA FORM

Date Filed: 06/14/2013

Check if update:



Maryland Department of Planning
Maryland Historical Trust
Division of Historical and Cultural Programs
100 Community Place
Crownsville, Maryland 21032

Site Number: 18CH832

County: Charles

A. DESIGNATION

1. Site Name: IHAP-2
2. Alternate Site Name/Numbers: _____
3. Site Type (describe site chronology and function; see instructions):
Prehistoric Lithic Scatter
4. Prehistoric Historic _____ Unknown _____
5. Terrestrial Submerged/Underwater _____ Both _____

B. LOCATION

6. USGS 7.5' Quadrangle(s): Port Tobacco (For underwater sites)
NOAA Chart No.: _____
- (Photocopy section of quad or chart on page 4 and mark site location)

7. Maryland Archeological Research Unit Number: 11
8. Physiographic Province (check one):
 Allegany Plateau Lancaster/Frederick Lowland
 Ridge and Valley Eastern Piedmont
 Great Valley Western Shore Coastal Plain
 Blue Ridge Eastern Shore Coastal Plain
9. Major Watershed/Underwater Zone (see instructions for map and list): Lower Potomac River

C. ENVIRONMENTAL DATA

10. Nearest Water Source: Mattawoman Creek Stream Order: _____
11. Closest Surface Water Type (check all applicable):
 Ocean Freshwater Stream/River
 Estuarine Bay/Tidal River Freshwater Swamp
 Tidal or Marsh Lake or Pond
 Spring
12. Distance from closest surface water: 515 meters (or _____ feet)

C. ENVIRONMENTAL DATA [CONTINUED]

13. Current water speed: _____ knots 14. Water Depth: _____ meters

15. Water visibility: Mattawoman Creek in distance

16. SCS Soils Typology and/or Sediment Type: Croom-Marr complex, 15 to 25 slopes

17. Topographic Settings (check all applicable):

- | | |
|---|---|
| <input type="checkbox"/> Floodplain | <input type="checkbox"/> Hilltop/Bluff |
| <input type="checkbox"/> Interior Flat | <input type="checkbox"/> Upland Flat |
| <input type="checkbox"/> Terrace | <input type="checkbox"/> Ridgetop |
| <input checked="" type="checkbox"/> Low Terrace | <input type="checkbox"/> Rockshelter/Cave |
| <input type="checkbox"/> High Terrace | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Hillslope | <input type="checkbox"/> Other: _____ |

18. Slope: 0-5%

19. Elevation: _____ meters (or 165 feet) above sea level

20. Land use at site when last field checked (check all applicable):

- | | |
|--|---|
| <input type="checkbox"/> Plowed/Tilled | <input type="checkbox"/> Extractive |
| <input type="checkbox"/> No-Till | <input type="checkbox"/> Military |
| <input type="checkbox"/> Wooded/Forested | <input type="checkbox"/> Recreational |
| <input checked="" type="checkbox"/> Logging/Logged | <input type="checkbox"/> Residential |
| <input type="checkbox"/> Underbrush/Overgrown | <input type="checkbox"/> Ruin |
| <input type="checkbox"/> Pasture | <input type="checkbox"/> Standing Structure |
| <input type="checkbox"/> Cemetery | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Commercial | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Educational | <input type="checkbox"/> Other: _____ |

21. Condition of site:

- Disturbed
 Undisturbed
 Unknown

22. Cause of disturbance/destruction (check all applicable):

- | | |
|--|--|
| <input type="checkbox"/> Plowed | <input type="checkbox"/> Vandalized/Looted |
| <input checked="" type="checkbox"/> Eroded/Eroding | <input type="checkbox"/> Dredged |
| <input type="checkbox"/> Graded/Contoured | <input type="checkbox"/> Heavy Marine Traffic |
| <input type="checkbox"/> Collected | <input checked="" type="checkbox"/> Other: <u> Logged </u> |

23. Extent of disturbance:

- Minor (0-10%)
 Moderate (10-60%)
 Major (60-99%)
 Total (100%)
 % unknown

C. ENVIRONMENTAL DATA [CONTINUED]

24. Describe site setting with respect to local natural and cultural landmarks (topography, hydrology, fences, structures, roads). Use continuation sheet if needed.

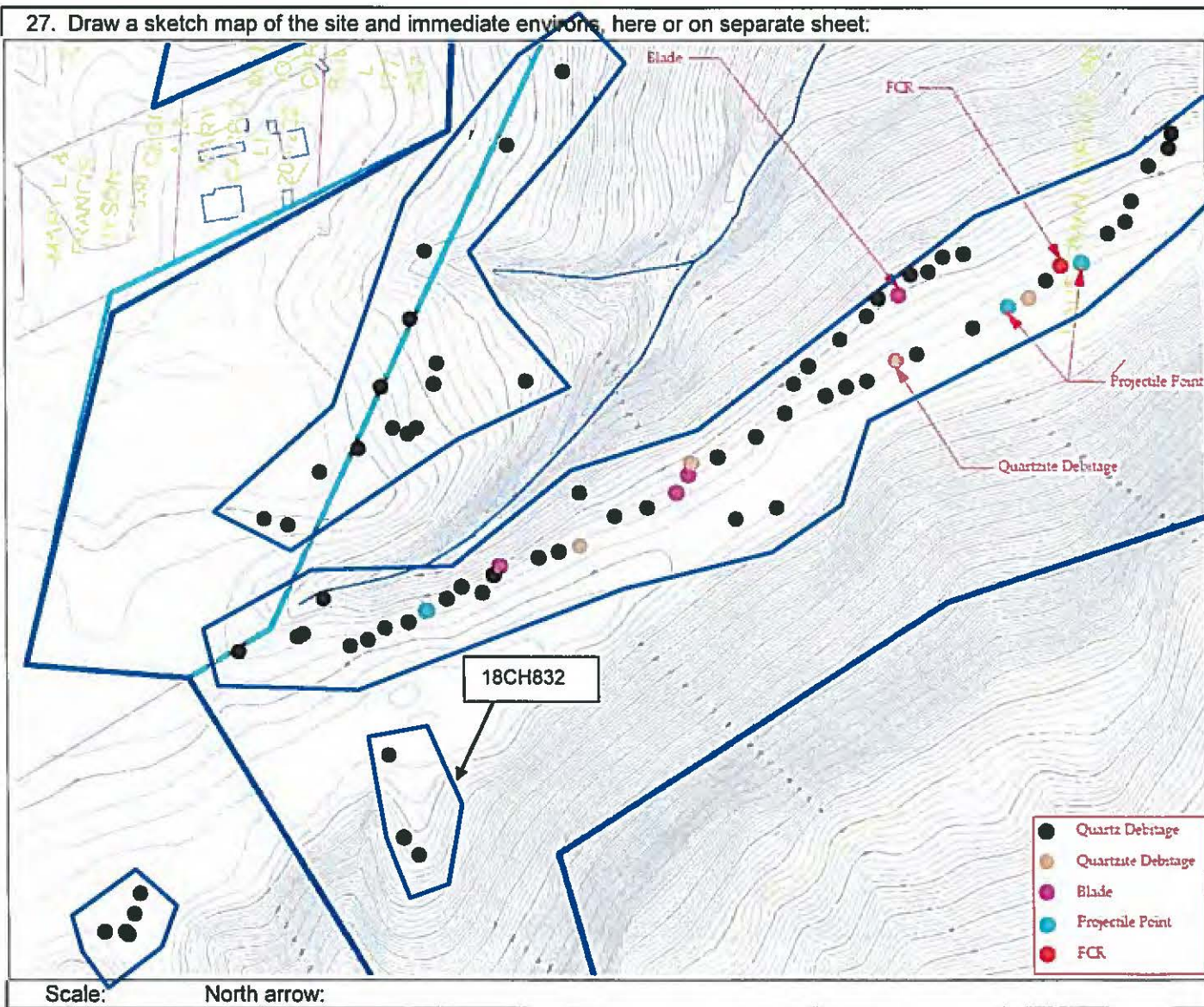
The site occupies a small terrace/bench oriented perpendicularly to Mattawoman Creek to the south. To the north, the site is limited by a high ridge.

25. Characterize site stratigraphy. Include a representative profile on separate sheet, if applicable. Address plowzone (presence/absence), subplowzone features and levels, if any, and how stratigraphy affects site integrity. Use continuation sheet if needed.

This was a strictly visual examination of bare patches on the landform along skidder trails that went into the ground over a foot and churned up the area and thus removed vertical and horizontal integrity. Adjacent to the skidder trails, very limited clear areas showed minimal topsoil over a clayey, pebbly subsoil.

26. Site size: 57 meters by 30 meters (or _____ feet by _____ feet)

27. Draw a sketch map of the site and immediate environs, here or on separate sheet:



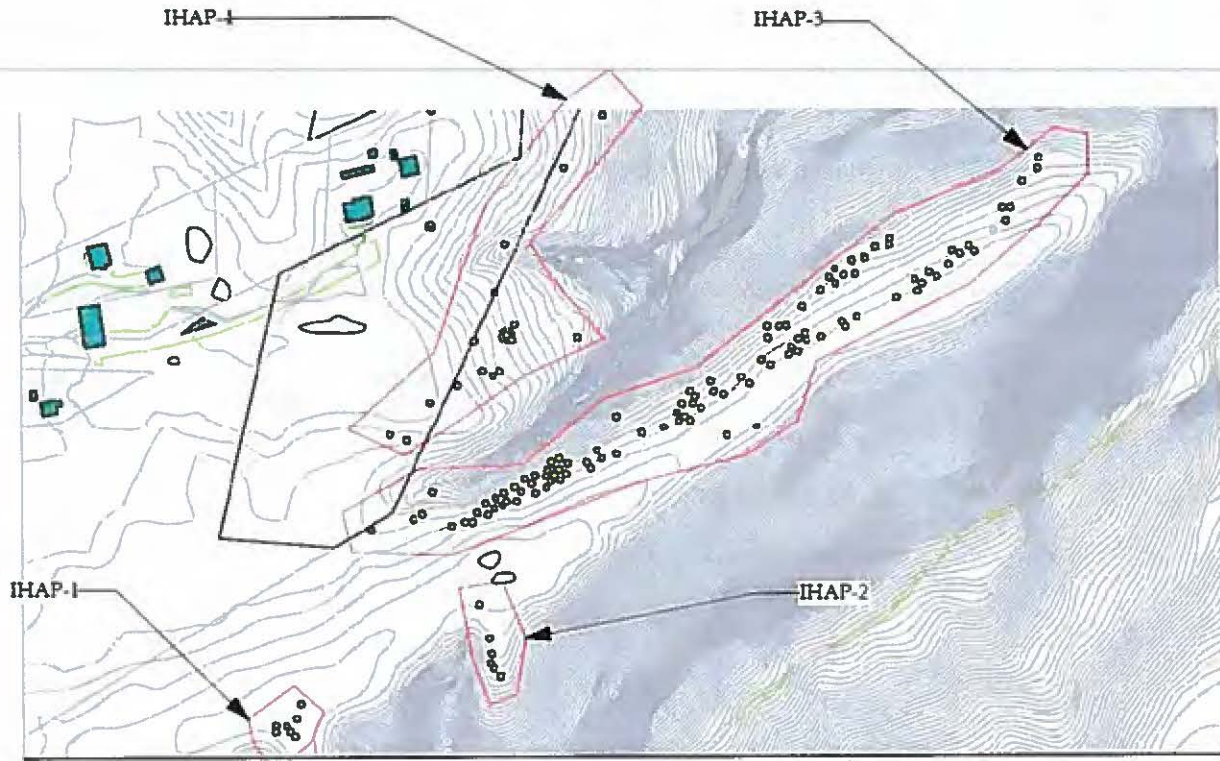


Figure xx. All Artifacts On Project Topo Map.

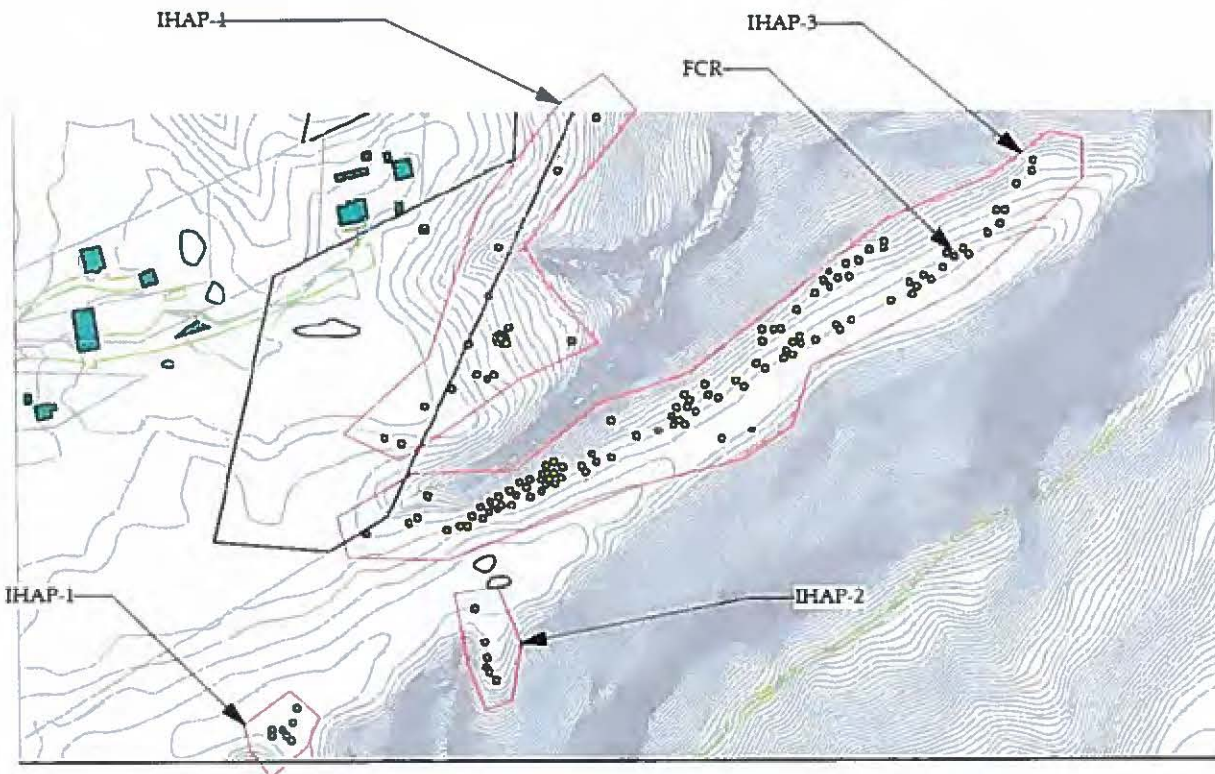


Figure xx. FCR On Project Topo Map.

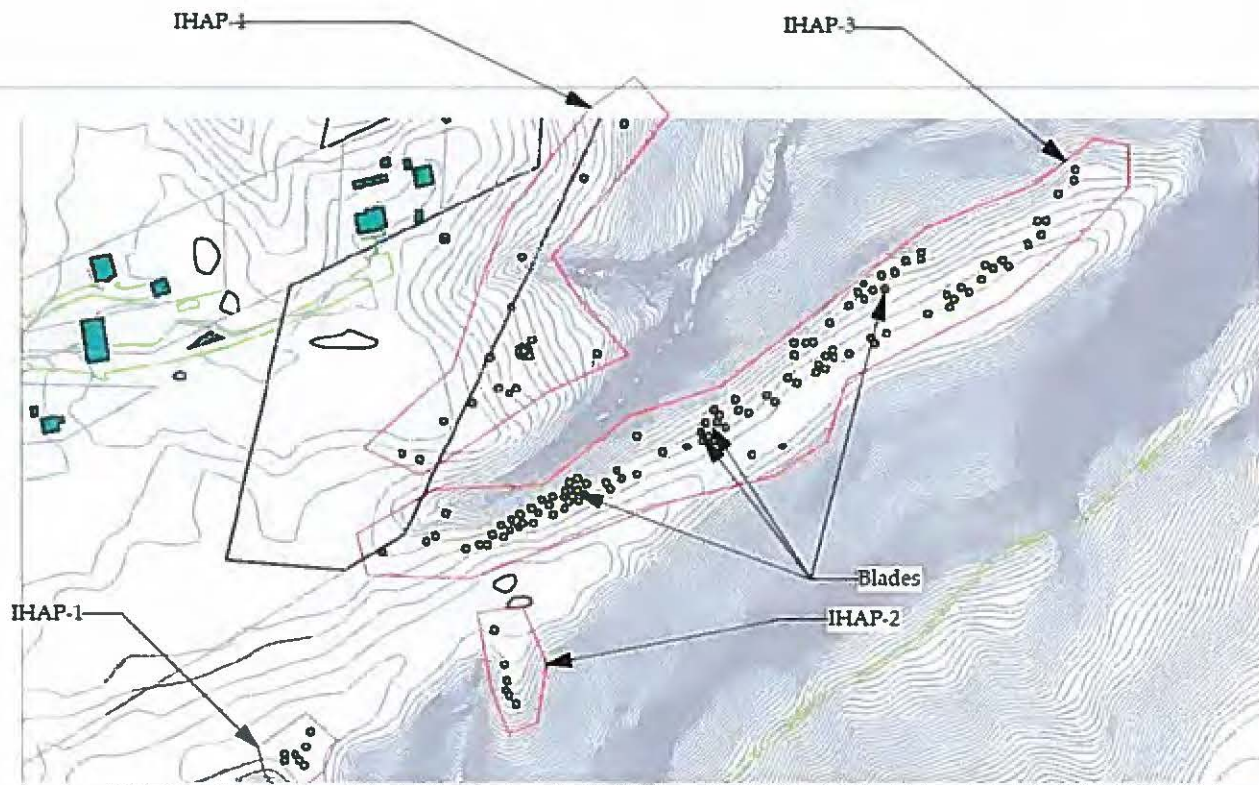


Figure xx. Blades On Project Topo Map.

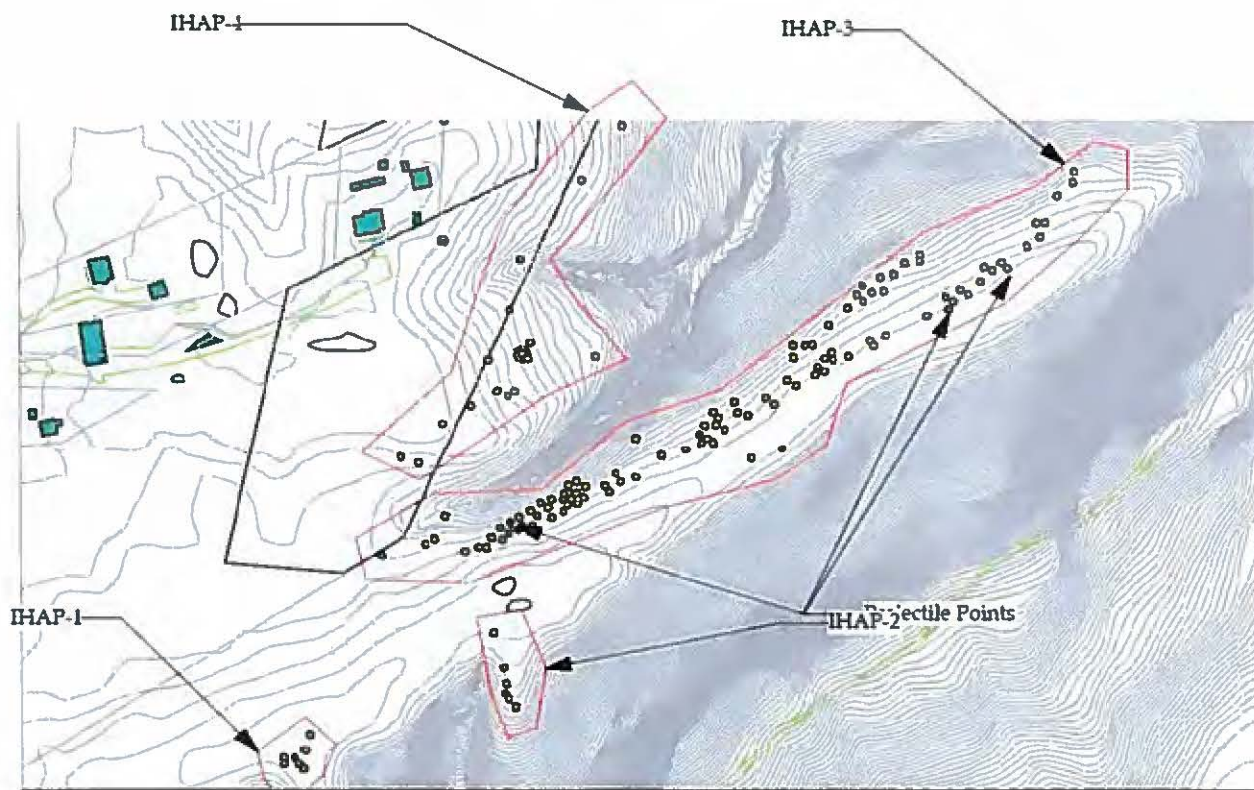


Figure xx. Projectile Points On Project Topo Map.

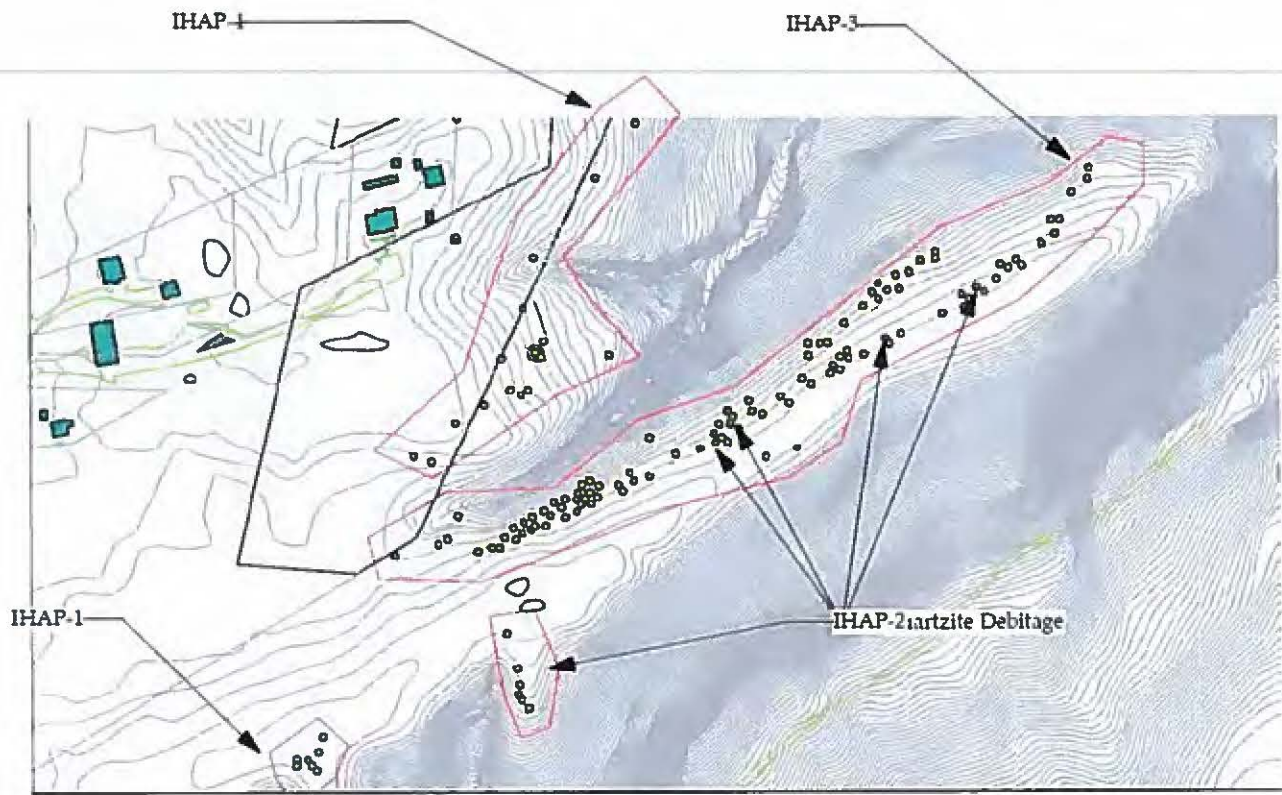


Figure xx. Quartzite Debitage On Project Topo Map.

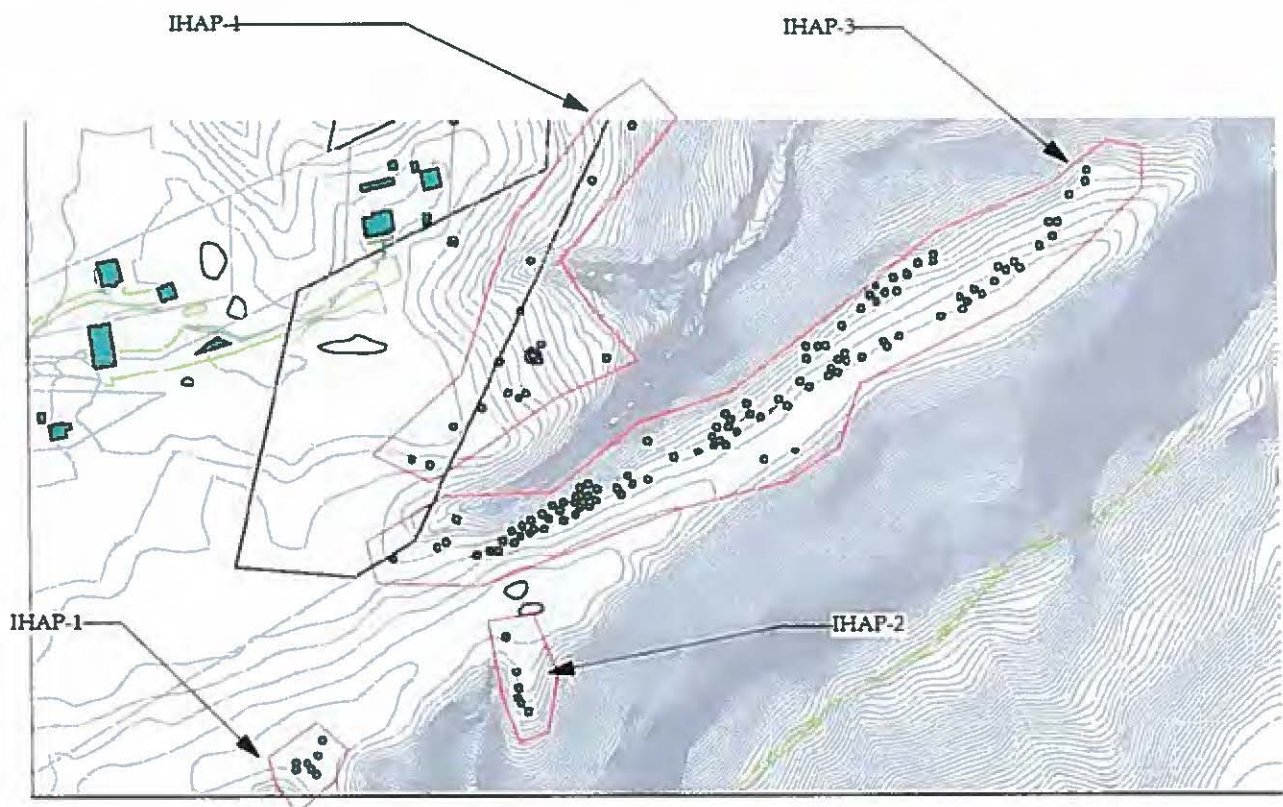
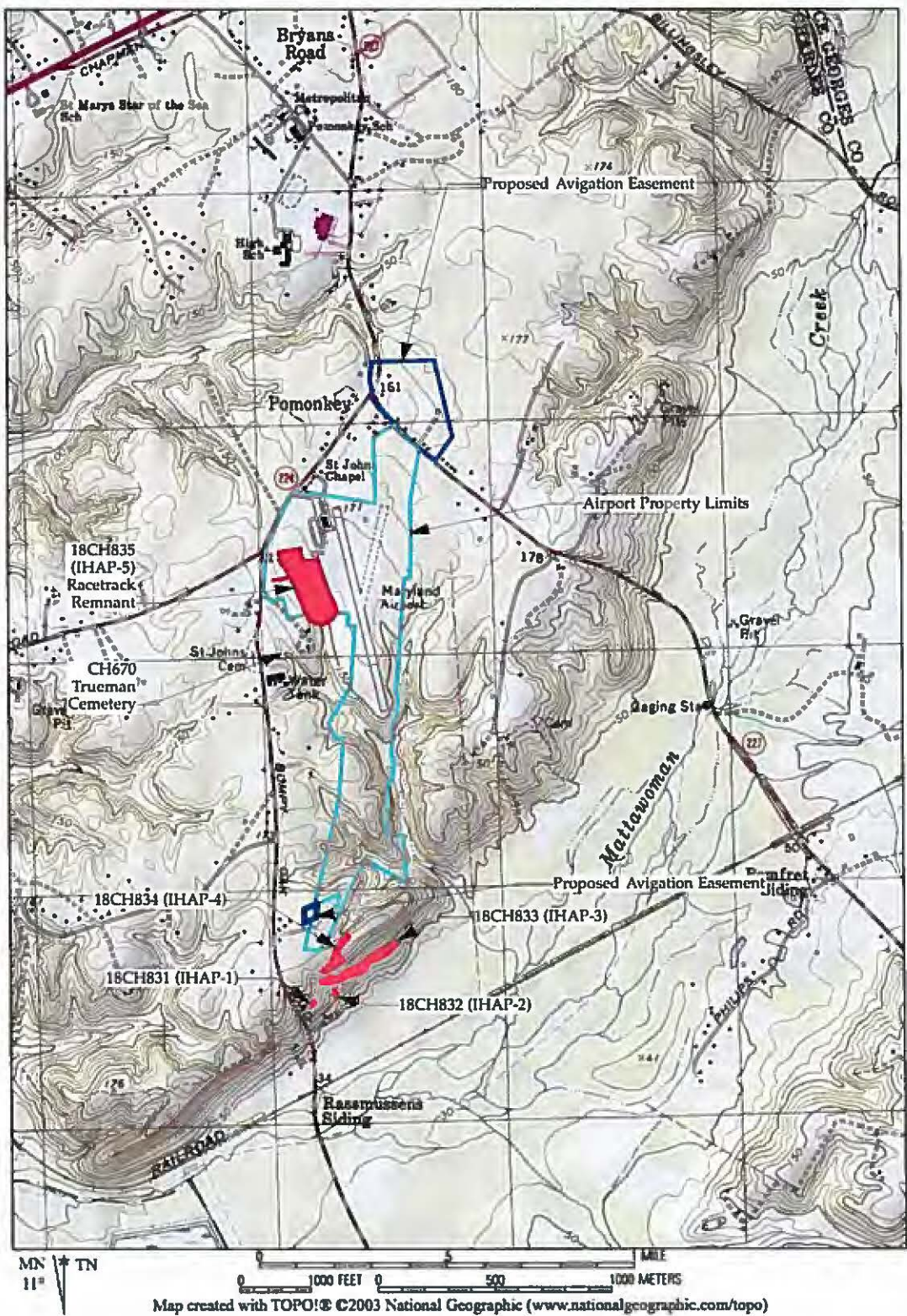


Figure xx. Quartz Debitage On Project Topo Map.

Photocopy section of quadrangle map(s) and mark site location with heavy dot or circle and arrow pointing to it.



Port Tobacco, MD USGS 24k Quad Showing Maryland Airport At Indian Head.

D. CONTEXT

28. Cultural Affiliation (check all applicable):

PREHISTORIC

- Unknown
- Paleoindian
- Archaic
- Early Archaic
- Middle Archaic
- Late Archaic
- Terminal Archaic
- Woodland
- Adena
- Early Woodland
- Middle Woodland
- Late Woodland

CONTACT

HISTORIC:

- Unknown
- 17th century
- 1630-1675
- 1676-1720
- 18th century
- 1721-1780
- 1781-1820
- 19th century
- 1821-1860
- 1861-1900
- 20th century
- 1901-1930
- post-1930

UNKNOWN

E. INVESTIGATIVE DATA

29. Type of investigation:

- Phase I
- Phase II/Site Testing
- Phase III/Excavation
- Archival Investigation

- Monitoring
- Field Visit
- Collection/Artifact Inventory
- Other: _____

30. Purpose of investigation:

- Compliance
- Research
- Regional Survey

- Site Inventory
- MHT Grant Project
- Other: _____

31. Method of sampling (check all applicable):

- Non-systematic surface search
- Systematic surface collection
- Non-systematic shovel test pits
- Systematic shovel test pits
- Excavation units
- Mechanical excavation
- Remote sensing
- Other: _____

32. Extent/nature of excavation: _____

F. SUPPORT DATA

33. Accompanying Data Form(s):

- Prehistoric
- Historic
- Shipwreck

34. Ownership:

- Private
- Unknown

Federal State

Local/County

35. Owner(s): Gil Bauserman
Address: 3900 Livingston Road, Indian Head, MD 20640
Phone: (301) 283-6202

36. Tenant and/or Local Contact: _____
Address: _____
Phone: _____

37. Other Known Investigations: _____

38. Primary report reference or citation: _____

39. Other Records (e.g. slides, photos, original field maps/notes, sonar, magnetic record)?
 Slides Field record Other: _____
 Photos Sonar
 Field maps Magnetic record

40. If yes, location of records: _____

41. Collections at Maryland Archeological Conservation (MAC) Lab or to be deposited at MAC Lab?
 Yes
 No
 Unknown

42. If NO or UNKNOWN, give owner: Indian Head Airport
location: At airport
and brief description of collection: _____
All debitage GPS'd, representative photos taken. No diagnostic artifacts observed.

43. Informant: _____
Address: _____
Phone: _____

44. Site visited by Lyle E. Browning (Browning & Associates, Ltd.)
Address: 2240 Chartstone Drive, Midlothian, VA 23113
Phone: 804-357-2959 Date: 05/21/2013

45. Form filled out by: Lyle E. Browning (Browning & Associates, Ltd.)
Address: 2240 Chartstone Drive, Midlothian, VA 23113
Phone: 804-357-2959 Date: 06/06/2013

46. Site Summary/Additional Comments (append additional pages if needed):

This low density lithic scatter site occupies a low terrace/bench overlooking Mattawoman Creek. All artifacts observed were white quartz. No diagnostic artifacts were observed. The site represents an overlook/hunting site beside a swale that allows access up to the adjacent higher elevations from the water and aquatic resources of Mattawoman Creek.

The soil has eroded to less than 2" thick and has been disturbed by logging activities. The site consists of a low density scatter of quartz debitage (n=5) indicative of tool maintenance. No raw materials were observed.

Further work on the site is not recommended due to the surface damage and erosion plus the very low likelihood of obtaining enough information to justify the effort.

MARYLAND ARCHEOLOGICAL SITE SURVEY: PREHISTORIC DATA FORM

Site Number 18CH832

1. Site type (check all applicable):

- village
- hamlet
- base camp
- short-term resource procurement
- lithic quarry/extraction
- rockshelter/cave
- cairn

- earthen mound
- shell midden
- fish weir
- submerged prehistoric
- lithic scatter
- unknown
- other:

2. Categories of aboriginal material or remains at site (check all applicable):

- flaked stone
- ground stone
- stone bowls
- fire-cracked rock
- other lithics
- ceramics (vessels)
- other fired clay

- human skeletal remains
- faunal implements/ornaments
- faunal material
- oyster shell
- floral material
- unknown
- other:

3. Lithic materials (check all applicable):

- jasper
- chert
- rhyolite
- quartz
- quartzite
- chalcedony
- ironstone
- argillite

- steatite
- sandstone
- silicified sandstone
- ferruginous quartzite
- European flint
- basalt
- unknown
- other:

4. Diagnostics (choose from manual and give number recovered or observed):

| | |
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| | |
| | |

5. Features present:

- yes
- no
- unknown

6. Types of features identified (check all applicable):

- midden
- postmolds
- house patterns
- palisade
- hearths
- chipping clusters

- refuse/storage pits
- burials
- ossuaries
- unknown
- other:

7. Flotation samples collected:

yes
 no
 unknown

analyzed:

yes, by _____
 no
 unknown

8. Samples for radiocarbon dating collected:

yes
 no
 unknown

Dates and Lab Reference Nos. _____

9. Soil samples collected:

yes
 no
 unknown

analyzed:

yes, by _____
 no
 unknown

10. Other analyses (specify): _____

11. Additional comments:

Survey was visual only with photos and GPS waypoints of all artifacts observed on the severely disturbed surface.

12. Form filled out by: Lyle E. Browning (Browning & Associates, Ltd.)
Address/Company Name: 2240 Chartstone Drive, Midlothian, VA 23113
Date: 06/06/2013

MARYLAND INVENTORY OF HISTORIC PROPERTIES
ARCHEOLOGICAL SITE SURVEY: BASIC DATA FORM

Date Filed: 06/17/2013

Check if update:



Maryland Department of Planning
Maryland Historical Trust
Division of Historical and Cultural Programs
100 Community Place
Crownsville, Maryland 21032

Site Number: 18CH833

County: Charles

A. DESIGNATION

1. Site Name: IHAP-3
2. Alternate Site Name/Numbers: _____
3. Site Type (describe site chronology and function; see instructions):
Prehistoric Lithic Scatter
4. Prehistoric Historic _____ Unknown _____
5. Terrestrial Submerged/Underwater _____ Both _____

B. LOCATION

6. USGS 7.5' Quadrangle(s): Port Tobacco (For underwater sites)
NOAA Chart No.: _____
(Photocopy section of quad or chart on page 4 and mark site location)

7. Maryland Archeological Research Unit Number: 11
8. Physiographic Province (check one):
 Allegany Plateau Lancaster/Frederick Lowland
 Ridge and Valley Eastern Piedmont
 Great Valley Western Shore Coastal Plain
 Blue Ridge Eastern Shore Coastal Plain
9. Major Watershed/Underwater Zone (see instructions for map and list): Lower Potomac River

C. ENVIRONMENTAL DATA

10. Nearest Water Source: Mattawoman Creek tributary Stream Order: _____
11. Closest Surface Water Type (check all applicable):
 Ocean Freshwater Stream/River
 Estuarine Bay/Tidal River Freshwater Swamp
 Tidal or Marsh Lake or Pond
 Spring
12. Distance from closest surface water: 250 meters (or _____ feet)

C. ENVIRONMENTAL DATA [CONTINUED]

13. Current water speed: _____ knots

14. Water Depth: _____ meters

15. Water visibility: _____

16. SCS Soils Typology and/or Sediment Type: Beltsville silt loam, 2 to 5 percent slopes

17. Topographic Settings (check all applicable):

- | | |
|--|--|
| <input type="checkbox"/> Floodplain | <input type="checkbox"/> Hilltop/Bluff |
| <input type="checkbox"/> Interior Flat | <input type="checkbox"/> Upland Flat |
| <input type="checkbox"/> Terrace | <input checked="" type="checkbox"/> Ridgetop |
| <input type="checkbox"/> Low Terrace | <input type="checkbox"/> Rockshelter/Cave |
| <input type="checkbox"/> High Terrace | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Hillslope | <input type="checkbox"/> Other: _____ |

18. Slope: 0-5%

19. Elevation: _____ meters (or 165-170 feet) above sea level

20. Land use at site when last field checked (check all applicable):

- | | |
|--|---|
| <input type="checkbox"/> Plowed/Tilled | <input type="checkbox"/> Extractive |
| <input type="checkbox"/> No-Till | <input type="checkbox"/> Military |
| <input type="checkbox"/> Wooded/Forested | <input type="checkbox"/> Recreational |
| <input checked="" type="checkbox"/> Logging/Logged | <input type="checkbox"/> Residential |
| <input type="checkbox"/> Underbrush/Overgrown | <input type="checkbox"/> Ruin |
| <input type="checkbox"/> Pasture | <input type="checkbox"/> Standing Structure |
| <input type="checkbox"/> Cemetery | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Commercial | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Educational | <input type="checkbox"/> Other: _____ |

21. Condition of site:

- Disturbed
 Undisturbed
 Unknown

22. Cause of disturbance/destruction (check all applicable):

- | | |
|--|--|
| <input type="checkbox"/> Plowed | <input type="checkbox"/> Vandalized/Looted |
| <input checked="" type="checkbox"/> Eroded/Eroding | <input type="checkbox"/> Dredged |
| <input type="checkbox"/> Graded/Contoured | <input type="checkbox"/> Heavy Marine Traffic |
| <input type="checkbox"/> Collected | <input checked="" type="checkbox"/> Other: _____ |
| | <u>Logged</u> |

23. Extent of disturbance:

- Minor (0-10%)
 Moderate (10-60%)
 Major (60-99%)
 Total (100%)
 % unknown

C. ENVIRONMENTAL DATA [CONTINUED]

24. Describe site setting with respect to local natural and cultural landmarks (topography, hydrology, fences, structures, roads). Use continuation sheet if needed.

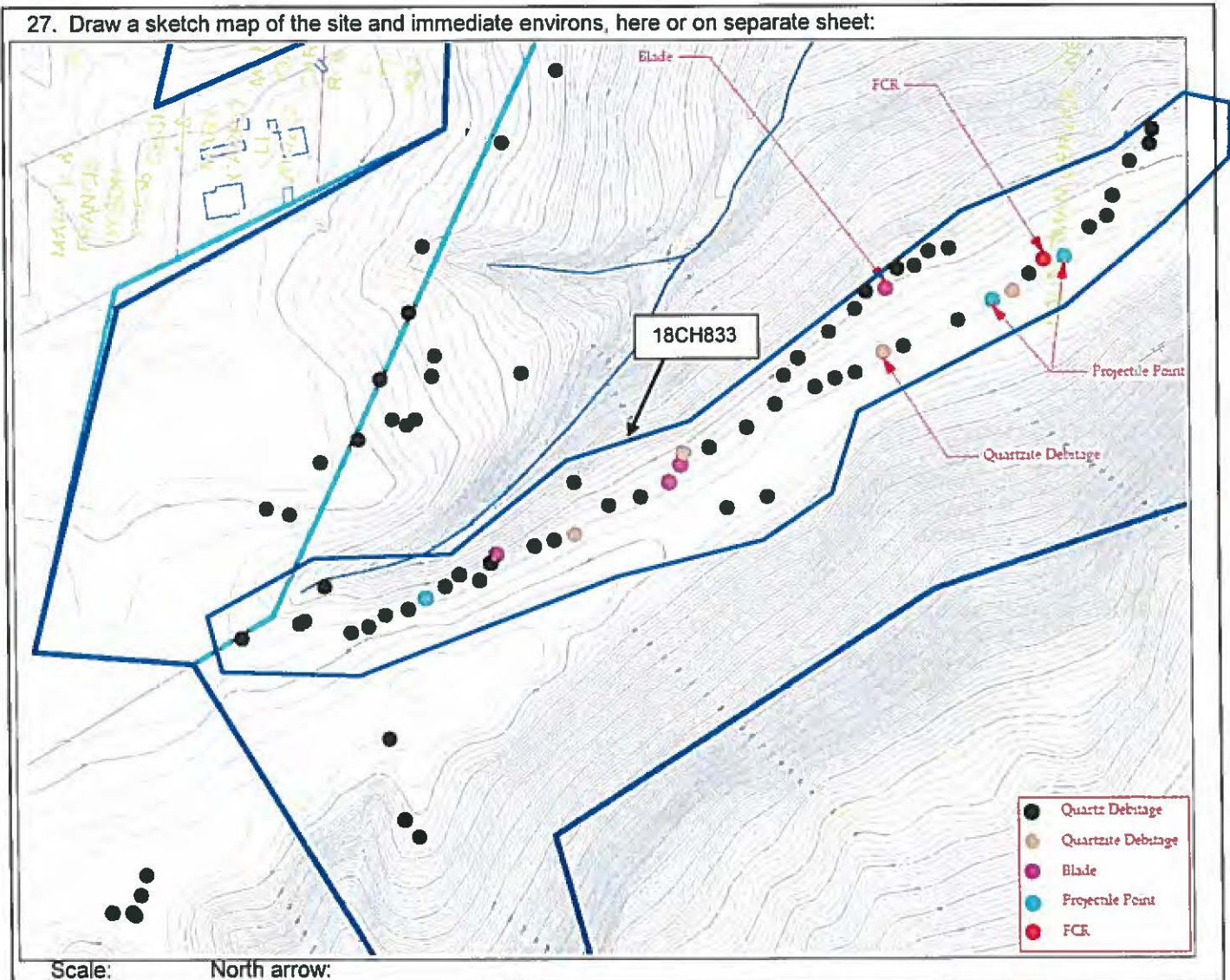
The site occupies a long narrow erosion tongue oriented parallel with a very steep slope down to Mattawoman Creek to the south. To the north, the site is limited by a deep ravine used by transiting deer and other game from the lowland water-sources/resources to the uplands. It is along this margin that the site is most represented.

25. Characterize site stratigraphy. Include a representative profile on separate sheet, if applicable. Address plowzone (presence/absence), subplowzone features and levels, if any, and how stratigraphy affects site integrity. Use continuation sheet if needed.

This was a strictly visual examination of skidder trails along the top of the landform that went into the ground over a foot and churned up the area and thus removed vertical and horizontal integrity. Adjacent to the skidder trails, very limited clear areas showed minimal topsoil over a clayey, pebbly subsoil. Topsoil thickness was 2"± and was disturbed by erosion and by recent logging. The structural integrity of the site where the artifacts were identified was totally destroyed by skidder activity. To the south edge of the ridge top, small intermittent areas of clear ground were observed with low to no artifacts present and with minimal topsoil due to erosion.

26. Site size: 410 meters by 50 meters (or _____ feet by _____ feet)

27. Draw a sketch map of the site and immediate environs, here or on separate sheet:



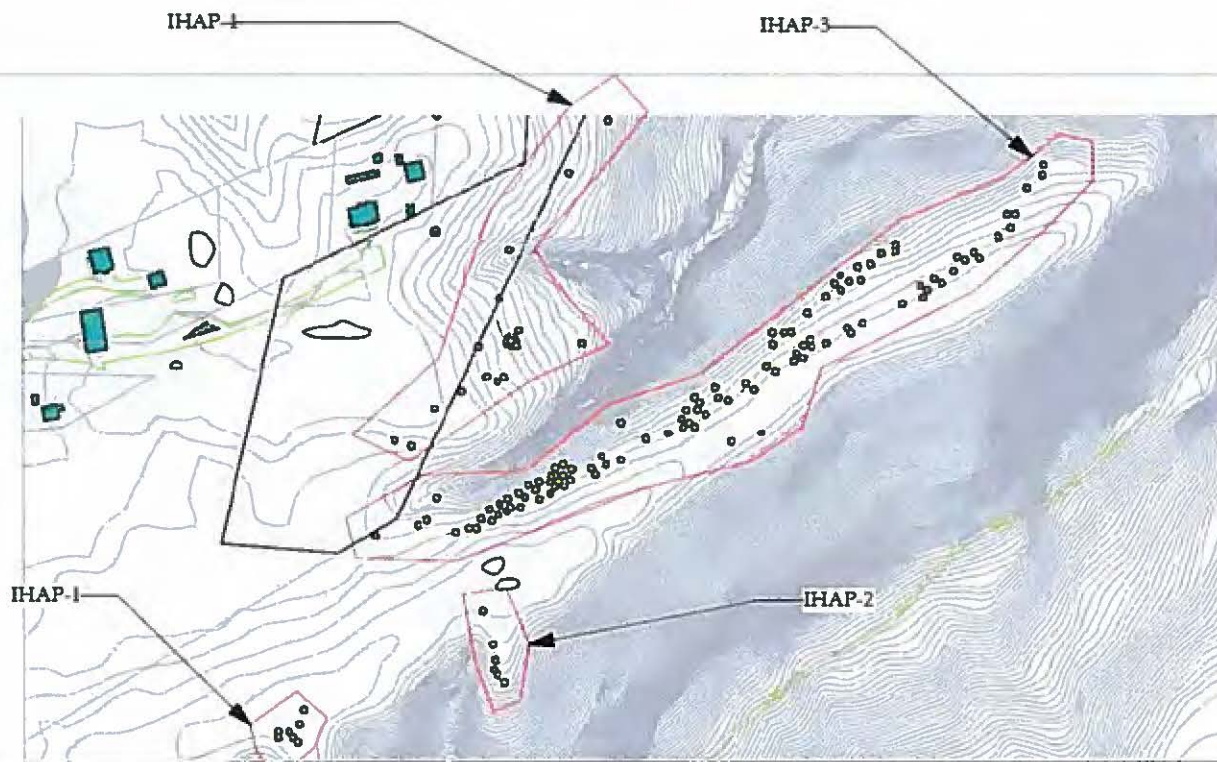


Figure xx. All Artifacts On Project Topo Map.

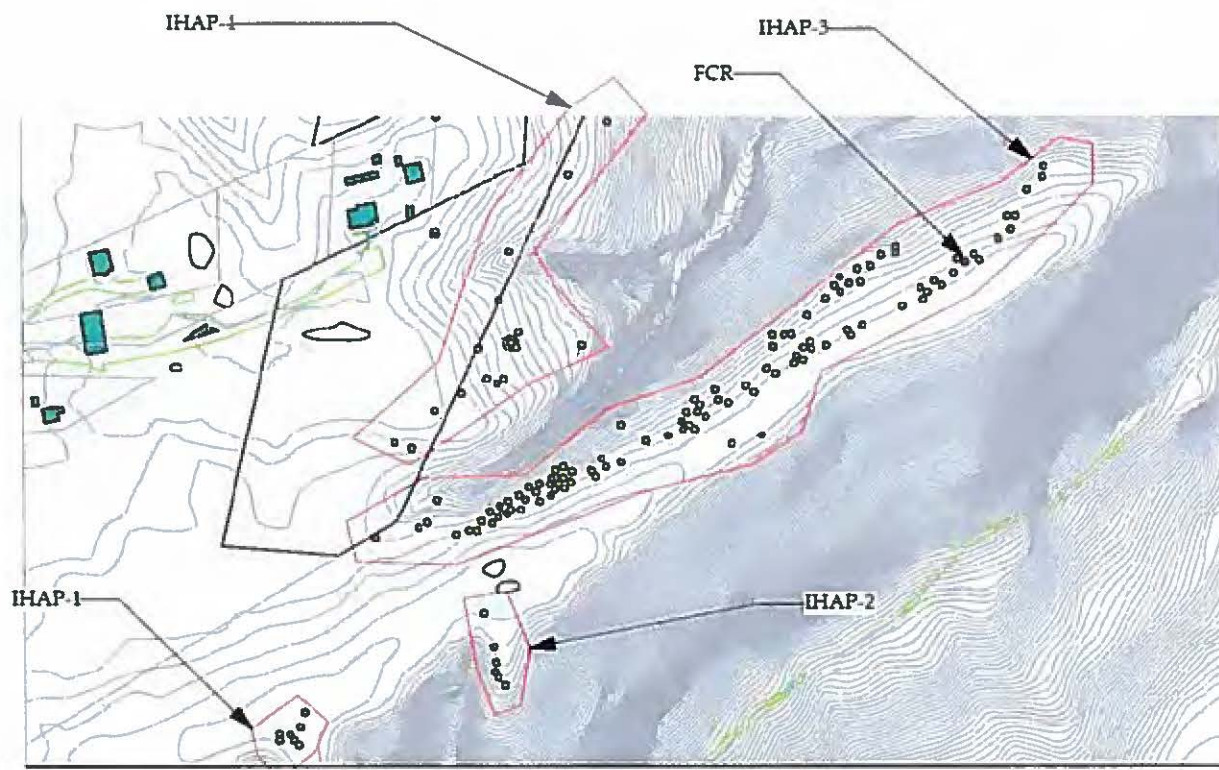


Figure xx. FCR On Project Topo Map.

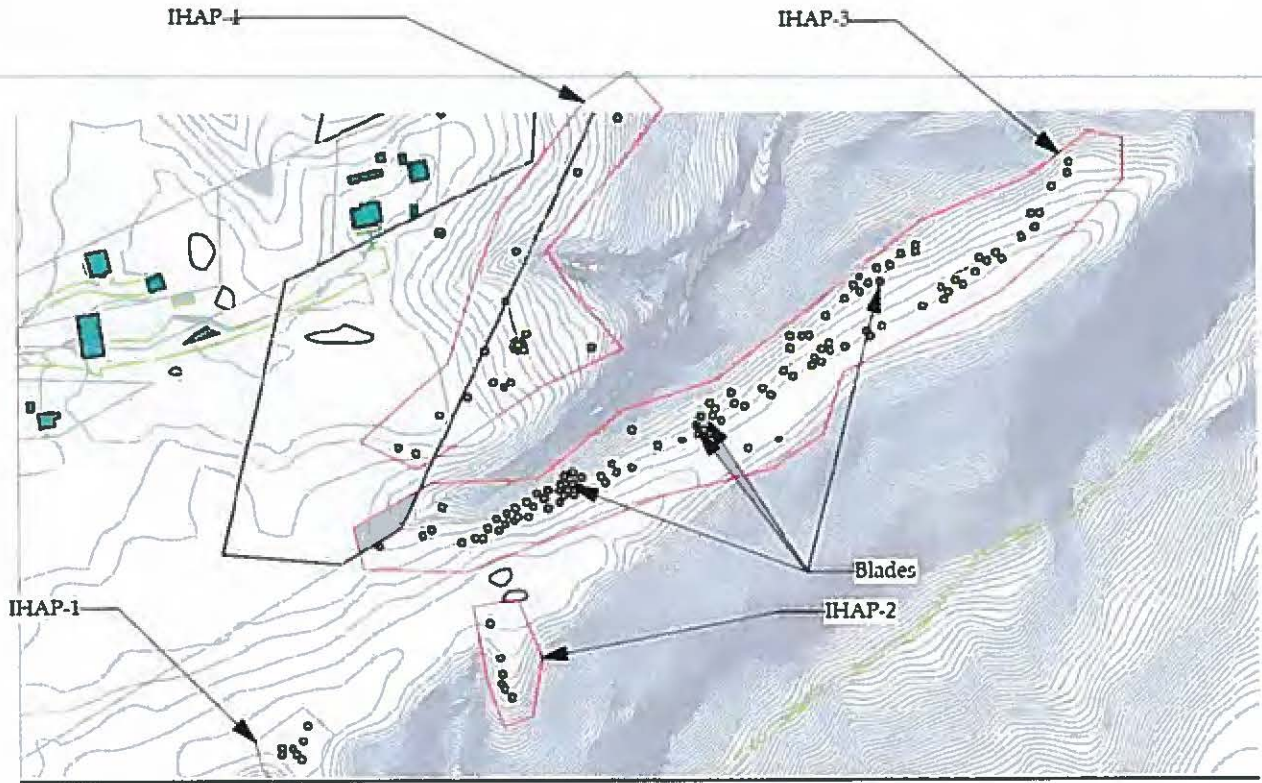


Figure xx. Blades On Project Topo Map.

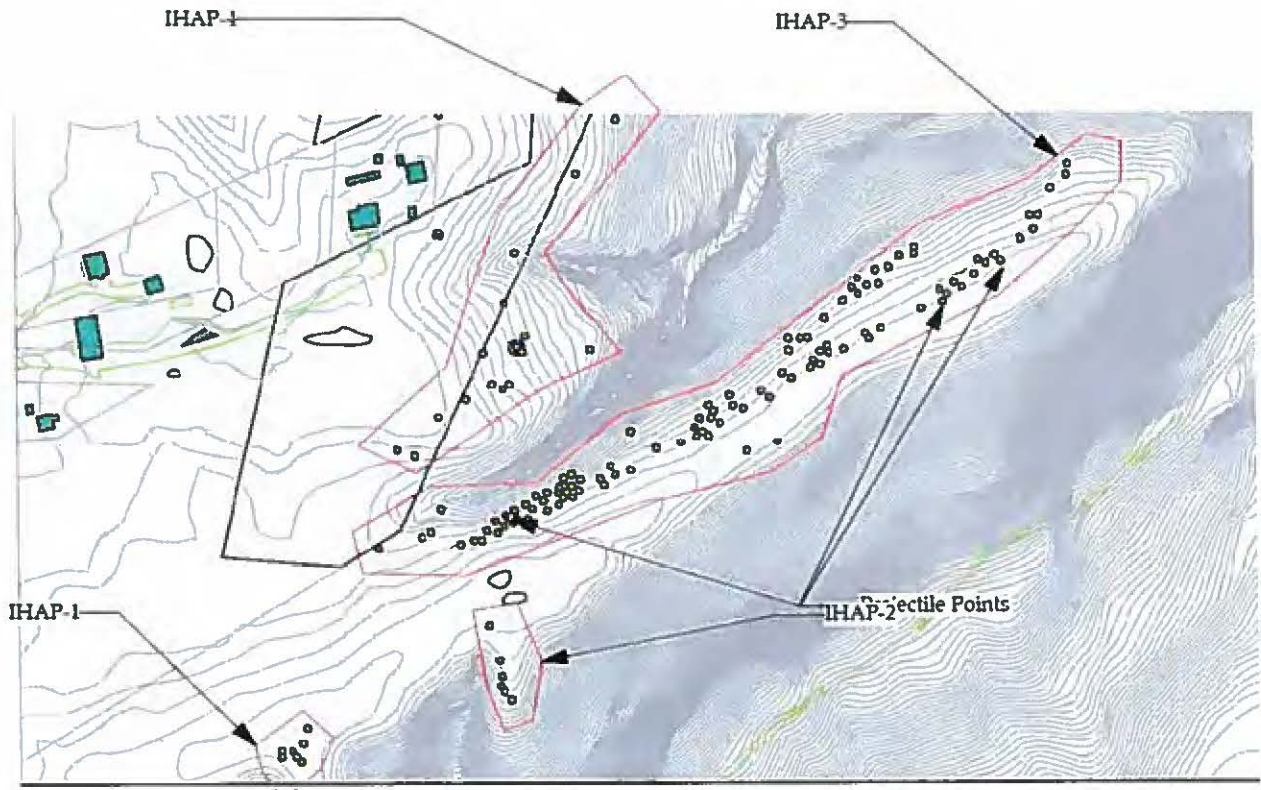


Figure xx. Projectile Points On Project Topo Map.

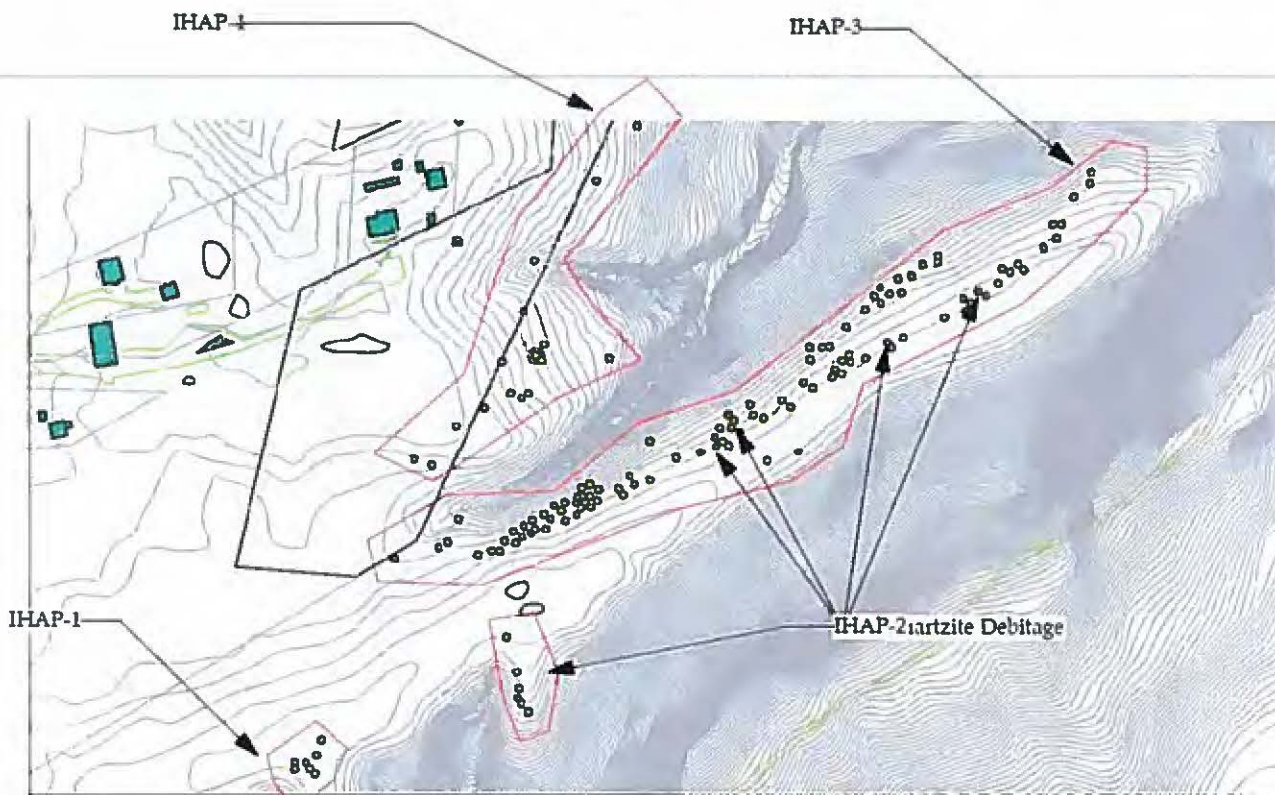


Figure xx. Quartzite Debitage On Project Topo Map.

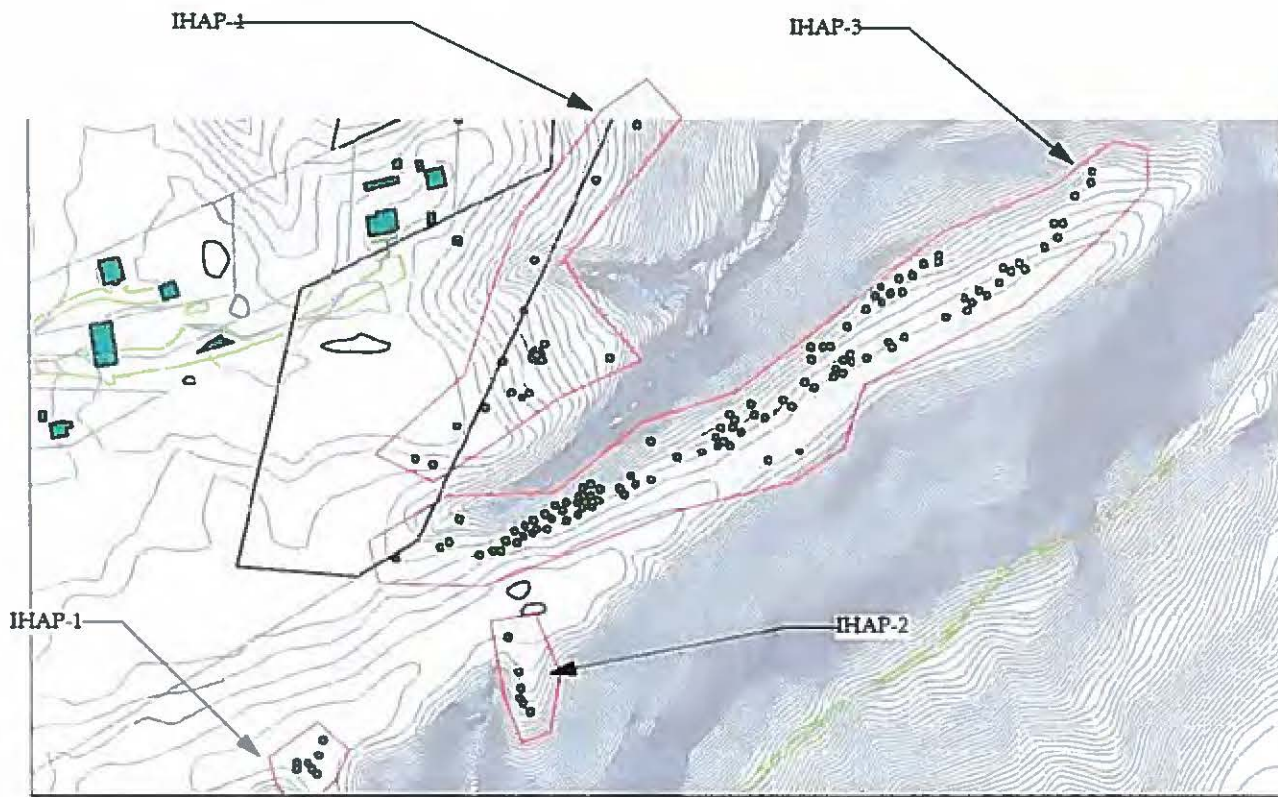
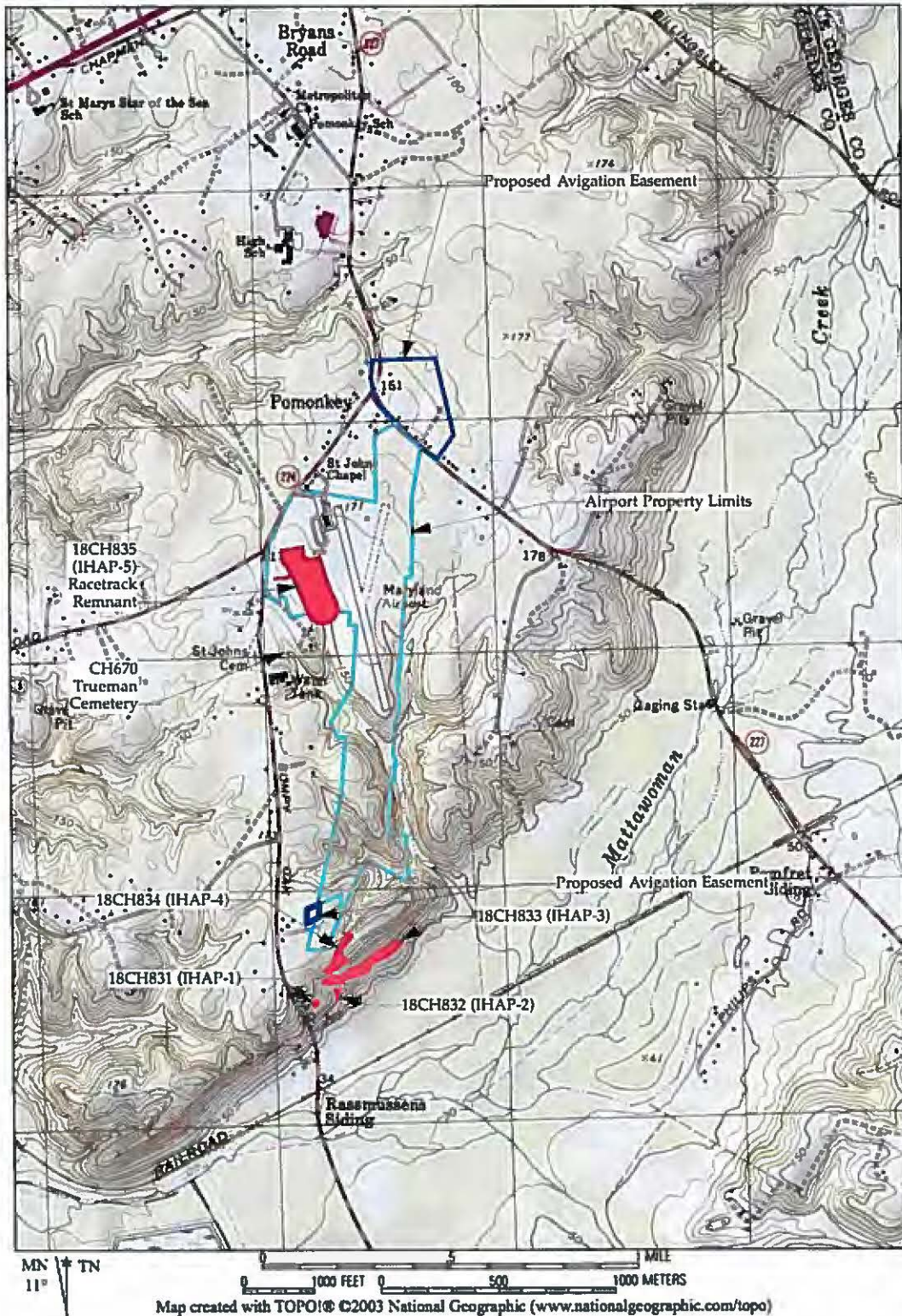


Figure xx. Quartz Debitage On Project Topo Map.

Photocopy section of quadrangle map(s) and mark site location with heavy dot or circle and arrow pointing to it.



Port Tobacco, MD USGS 24k Quad Showing Maryland Airport At Indian Head.

D. CONTEXT

28. Cultural Affiliation (check all applicable):

PREHISTORIC

- Unknown
- Paleoindian
- Archaic
- Early Archaic
- Middle Archaic
- Late Archaic
- Terminal Archaic
- Woodland
- Adena
- Early Woodland
- Middle Woodland
- Late Woodland

CONTACT

HISTORIC:

- Unknown
- 17th century
- 1630-1675
- 1676-1720
- 18th century
- 1721-1780
- 1781-1820
- 19th century
- 1821-1860
- 1861-1900
- 20th century
- 1901-1930
- post-1930

UNKNOWN

E. INVESTIGATIVE DATA

29. Type of investigation:

- Phase I
- Phase II/Site Testing
- Phase III/Excavation
- Archival Investigation

- Monitoring
- Field Visit
- Collection/Artifact Inventory
- Other:
Cultural Resources Short Form Evaluation

30. Purpose of investigation:

- Compliance
- Research
- Regional Survey

- Site Inventory
- MHT Grant Project
- Other:

31. Method of sampling (check all applicable):

- Non-systematic surface search
- Systematic surface collection
- Non-systematic shovel test pits
- Systematic shovel test pits
- Excavation units
- Mechanical excavation
- Remote sensing
- Other: _____

32. Extent/nature of excavation: _____

F. SUPPORT DATA

33. Accompanying Data Form(s):

- Prehistoric
- Historic
- Shipwreck

34. Ownership: Private
 Unknown

Federal State Local/County

35. Owner(s): Gil Bauserman
Address: 3900 Livingston Road, Indian Head, MD 20640
Phone: (301) 283-6202

36. Tenant and/or Local Contact: _____
Address: _____
Phone: _____

37. Other Known Investigations: _____

38. Primary report reference or citation: _____

39. Other Records (e.g. slides, photos, original field maps/notes, sonar, magnetic record)?
 Slides Field record Other: _____
 Photos Sonar
 Field maps Magnetic record

40. If yes, location of records: MAC Lab

41. Collections at Maryland Archeological Conservation (MAC) Lab or to be deposited at MAC Lab?
 Yes
 No
 Unknown

42. If NO or UNKNOWN, give owner: _____
location: _____
and brief description of collection: _____
See accompanying inventory. 95% white quartz, 5% quartzite. FCR present in one location. Halifax Period projectile points observed & collected after GPS'd.

43. Informant: _____
Address: _____
Phone: _____

44. Site visited by Lyle E. Browning (Browning & Associates, Ltd.)
Address: 2240 Chartstone Drive, Midlothian, VA 23113
Phone: 804-357-2959 Date: 05/21/2013

45. Form filled out by: Lyle E. Browning (Browning & Associates, Ltd.)
Address: 2240 Chartstone Drive, Midlothian, VA 23113
Phone: 804-357-2959 Date: 06/06/2013

46. Site Summary/Additional Comments (append additional pages if needed):

The site occupies a high ridgetop with a commanding view over Mattawoman Creek to the south. However, the artifact distribution (n=103) is argued to mean that the site was used as an ambush/kill/processing site for whitetail deer transiting up from the water and resources of Mattawoman Creek to the interior uplands for browse. The daily routine of deer is established from direct observation by modern hunters and is suggested from artifact scatters (Browning 2013) on exactly similar terrain in Stafford County, VA. Fire cracked rock was noted along the top portion of the ridge more towards the tip than the mouth of the ravine. The artifact distribution is heaviest on the northern face of the landform and still heavier towards the mouth of the ravine at the west. The overlook situation is shown on the attached contour maps by relation of the contour elevation to the loci of debitage. The high ridge parallels the ravine for a longer distance than does the north slope of the ravine where artifacts were present, but in lower densities.

The site was occupied apparently only during the time period that Halifax projectile points were made as no others were found. However, small quantities of quartzite debitage were identified, indicative of other time periods or people using the terrain for similar purposes.

The presence of skidder trails along the north top and slightly side slope on the north side of the ridge has resulted in the total destruction of vertical and horizontal integrity in the trails. The skidders operated during wet soil conditions and sank into the soil up to a foot and well into subsoil. The soils are water retentive clays with pebbles. Topsoil was minimal, in the range of up to 3" from observation. Erosion is apparent in bare patches where the skidders had not ventured wherein about half of the areas had subsoil at the surface. No evidence of subsurface activity was noted. The absence of potable water would argue for an intermittently occupied camp.

Further work is not recommended as the time period of occupation has been identified, the nature of the lithics has been established and the soils have been so disturbed that meaningful recovery of anything but additional and repetitively similar artifacts is virtually precluded. Further work is not recommended.

MARYLAND ARCHEOLOGICAL SITE SURVEY: PREHISTORIC DATA FORM

Site Number 18CH833

1. Site type (check all applicable):

- village
- hamlet
- base camp
- short-term resource procurement
- lithic quarry/extraction
- rockshelter/cave
- cairn

- earthen mound
- shell midden
- fish weir
- submerged prehistoric
- lithic scatter
- unknown
- other:

2. Categories of aboriginal material or remains at site (check all applicable):

- flaked stone
- ground stone
- stone bowls
- fire-cracked rock
- other lithics
- ceramics (vessels)
- other fired clay

- human skeletal remains
- faunal implements/ornaments
- faunal material
- oyster shell
- floral material
- unknown
- other:

3. Lithic materials (check all applicable):

- jasper
- chert
- rhyolite
- quartz
- quartzite
- chalcedony
- ironstone
- argillite

- steatite
- sandstone
- silicified sandstone
- ferruginous quartzite
- European flint
- basalt
- unknown
- other:

4. Diagnostics (choose from manual and give number recovered or observed):

Halifax variant Projectile Points (3)
Blades, quartz, (2)

5. Features present:

- yes
- no
- unknown

6. Types of features identified (check all applicable):





- midden
- postmolds
- house patterns
- palisade
- hearths
- chipping clusters

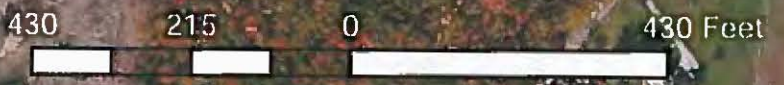
- refuse/storage pits
- burials
- ossuaries
- unknown
- other:

Maryland Airport Biotic Communities Map (North)



Legend




-  Survey Area Boundaries
-  Community A
-  Community B
-  Aquatic Community

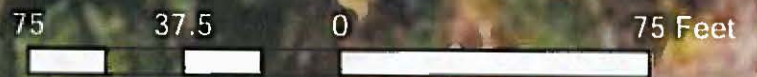


Maryland Airport Biotic Communities Map (South)



Legend

-  Survey Area Boundaries
-  Community A
-  Community B



Appendix D
Endangered and Threatened Species of Concern Survey Report



MillCreek
Environmental Consultants, LTD

**Endangered, Threatened, and Special Concern
(ETS) Species Survey
Supplemental Environmental Assessment (EA)
Maryland Airport, Indian Head, Maryland
Completed for:**

Talbert & Bright, Inc.

09 December 2013

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| Overview of the Survey Area | 3-4 |
| Survey Findings..... | 4 |
| Analysis of Findings..... | 4 |
| References..... | 5 |
| Appendices | |
| 1. Project Survey Area Vicinity Map | |
| 2. USFWS Species list and Search Report | |
| 3. USFWS Certification Letter | |
| 4. MDNR Project Review Letter | |

Introduction

Mill Creek Environmental Consultants, Ltd. recently completed an analysis of given survey area parcels adjacent and in the vicinity of Maryland Airport, Indian Head, Maryland. The purpose of this survey was to evaluate the presence of any Federal or State listed Species and or habitat that may be potentially impacted by airport development in the future, particularly in the form of obstruction removal of trees. The survey area was comprised of three parcels approximately 24± acres in size and can be seen in Appendix D1. This survey was conducted as part of an FAA mandated Environmental Assessment.

Endangered, Threatened, and Special Concerns (ETS) Species Information

Federally listed species are protected by the Endangered Species Act of 1973, as amended. The U.S. Department of the Interior's Fish and Wildlife Service (FWS) administers the Act, listing and protecting federally endangered and threatened species. Currently there are 9 plant species federally listed as endangered or threatened which occur or formerly occurred in Maryland. In addition to these 9 plant species, 27 animals are currently federally listed as endangered or threatened in the state of Maryland.

In addition to the federal program:

The Wildlife and Heritage Service Natural Heritage Program tracks the status of over 1,100 native plants and animals that are among the rarest in Maryland and most in need of conservation efforts as elements of our State's natural diversity. Of these species, the Maryland Department of Natural Resources officially recognizes 607 species and subspecies as endangered, threatened, in need of conservation, or endangered extirpated. Only 37, or 3% of the total tracked species, are listed by the U.S. Fish and Wildlife Service as nationally endangered or threatened.

The primary State law that allows and governs the listing of endangered species is the Nongame and Endangered Species Conservation Act (Annotated Code of Maryland 10-2A-01). This Act is supported by regulations (Code of Maryland Regulations 08.03.08) which contain the official State Threatened and Endangered Species list (http://www.dnr.state.md.us/wildlife/Plants_Wildlife/espaa.asp).

There are currently 345 plant and 110 animal species listed as state threatened or endangered in the state of Maryland. A comprehensive list of Rare, Threatened and Endangered Plants in Maryland can be found here (http://www.dnr.state.md.us/wildlife/Plants_Wildlife/rte/rteplants.asp). A comprehensive list of Rare, Threatened and Endangered Animals of Maryland can be found here (http://www.dnr.state.md.us/wildlife/Plants_Wildlife/rte/rteanimals.asp).

Overview of the Survey Area

The overwhelming majority of all three survey areas consist of mature mixed hardwood/pine forests. Where not forested, the survey areas consist of manicured

residential lawns and homes located on parcels throughout. This area is typical of rural areas throughout this region.

The elevation change throughout the survey areas is relatively minor, between 150-170 feet above sea level. The topography of the site is naturally level for the exception of those areas that slope to and away from the intermittent streams and tributaries in the vicinity. Waters originating within the survey areas are carried into small unnamed tributaries eventually leading into Mattawoman Creek, then the Potomac River and eventually the Chesapeake Bay.

Vegetation throughout all three survey areas can be classified as mature forested mixed hardwood/pine. Areas that are not mature forested areas are typically manicured lawns of residential homes. Tree stratum are composed of species such as Pignut hickory (*Carya glabra*), White Oak (*Quercus alba*), Black Oak (*Quercus velutina*), Virginia Pine (*Pinus virginiana*), Red Maple (*Acer rubrum*), and American Holly (*Ilex Opaca*).

Summary of Findings

A physical inspection of the survey area did not reveal any federal or state listed threatened or endangered species

Findings Reviewed

In addition to the physical inspection of the survey area, input for Endangered and Threatened species information was solicited from the US Fish and Wildlife Service (USFWS), and the Maryland Department of Natural Resources (MDNR). The USFWS confirmed that there are no federally listed species associated with the project area. This confirmation and documentation can be seen in Appendices 2 and 3. Additionally, the Maryland Department of Natural Resources also confirmed that they have no concerns regarding state listed species within the boundaries of the survey areas. Their coordination letter can be seen in Appendix D4.

REFERENCES

Cooperrider, A.Y., R.J. Boyd, and H.R. Stuart, eds. 1986. Inventory and Monitoring of Wildlife Habitat. U.S. Department of the Interior, Bureau of Land Management, Service Center, Denver, CO XVIII, 858 pp.

Braun, Clait E., Editor, 2005. Techniques for Wildlife Investigations and Management. The Wildlife Society, Bethesda, MD, 974 pp.

Fernald, M.L., 1950. Gray's Manual of Botany. Eighth Edition. American Book Company, New York, NY, 1632 pp.

Lowe, David W., John R. Matthews and Charles J. Mosley, Eds. 1991. The Official World Wildlife Fund Guide to Endangered Species of North America. vols. I-III., Beacham Publishing, Inc., Washington, D.C., 1647 pp.

http://www.dnr.state.md.us/wildlife/Plants_Wildlife/espaa.asp

http://www.dnr.state.md.us/wildlife/Plants_Wildlife/rte/rteplants.asp

http://www.dnr.state.md.us/wildlife/Plants_Wildlife/rte/rteanimals.asp

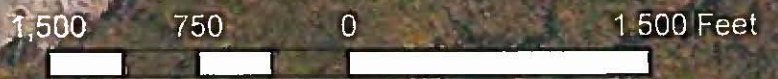
Appendix D1.
Survey Area Map Maryland Airport

Maryland Airport Endangered Species Survey Area Map



Legend

 Survey Area Boundaries



Appendix D2
US Fish and Wildlife Service Species List



U.S. Fish and Wildlife Service

Natural Resources of Concern

This resource list is to be used for planning purposes only — it is not an official species list.

Endangered Species Act species list information for your project is available online and listed below for the following FWS Field Offices:

CHESAPEAKE BAY ECOLOGICAL SERVICES FIELD OFFICE
177 ADMIRAL COCHRANE DRIVE
ANNAPOLIS, MD 21401
(410) 573-4500

Project Name:

Maryland Airport ETS



U.S. Fish and Wildlife Service

Natural Resources of Concern

Project Location Map:



Project Counties:

Charles, MD

Geographic coordinates (Open Geospatial Consortium Well-Known Text, NAD83):

MULTIPOLYGON (((-77.0694508 38.6055753, -77.0721545 38.6077392, -77.0724978 38.608041, -77.0729055 38.6085273, -77.0729484 38.6100355, -77.0696868 38.6099693, -77.0687111 38.606858, -77.0689578 38.6061286, -77.0694508 38.6055753)))

Project Type:

Federal Grant / Loan Related



U.S. Fish and Wildlife Service

Natural Resources of Concern

Endangered Species Act Species List ([USFWS Endangered Species Program](#)).

There are no listed species found within the vicinity of your project.

FWS National Wildlife Refuges ([USFWS National Wildlife Refuges Program](#)).

There are no refuges found within the vicinity of your project.

FWS Migratory Birds ([USFWS Migratory Bird Program](#)).

Most species of birds, including eagles and other raptors, are protected under the Migratory Bird Treaty Act (16 U.S.C. 703). Bald eagles and golden eagles receive additional protection under the [Bald and Golden Eagle Protection Act](#) (16 U.S.C. 668). The Service's [Birds of Conservation Concern \(2008\)](#) report identifies species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become listed under the Endangered Species Act as amended (16 U.S.C 1531 et seq.).

NWI Wetlands ([USFWS National Wetlands Inventory](#)).

The U.S. Fish and Wildlife Service is the principal Federal agency that provides information on the extent and status of wetlands in the U.S., via the National Wetlands Inventory Program (NWI). In addition to impacts to wetlands within your immediate project area, wetlands outside of your project area may need to be considered in any evaluation of project impacts, due to the hydrologic nature of wetlands (for example, project activities may affect local hydrology within, and outside of, your immediate project area). It may be helpful to refer to the USFWS National Wetland Inventory website. The designated FWS office can also assist you. Impacts to wetlands and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes. Project Proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate [U.S. Army Corps of Engineers District](#).



U.S. Fish and Wildlife Service

Natural Resources of Concern

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Endangered Species Act species list information for your project is available online and listed below for the following FWS Field Offices:

CHESAPEAKE BAY ECOLOGICAL SERVICES FIELD OFFICE
177 ADMIRAL COCHRANE DRIVE
ANNAPOLIS, MD 21401
(410) 573-4500

Project Name:

Maryland Airport ETS 2



U.S. Fish and Wildlife Service

Natural Resources of Concern

Project Location Map:



Project Counties:

Charles, MD

Geographic coordinates (Open Geospatial Consortium Well-Known Text, NAD83):

MULTIPOLYGON (((-77.0746417 38.6061818, -77.0737421 38.6072118, -77.0727658 38.6082254, -77.0715733 38.6071036, -77.0736868 38.6055614, -77.0746417 38.6061818)))

Project Type:

Federal Grant / Loan Related



Natural Resources of Concern

Endangered Species Act Species List ([USFWS Endangered Species Program](#))

There are no listed species found within the vicinity of your project.

FWS National Wildlife Refuges ([USFWS National Wildlife Refuges Program](#))

There are no refuges found within the vicinity of your project.

FWS Migratory Birds ([USFWS Migratory Bird Program](#))

Most species of birds, including eagles and other raptors, are protected under the Migratory Bird Treaty Act (16 U.S.C. 703). Bald eagles and golden eagles receive additional protection under the [Bald and Golden Eagle Protection Act](#) (16 U.S.C. 668). The Service's [Birds of Conservation Concern \(2008\)](#) report identifies species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become listed under the Endangered Species Act as amended (16 U.S.C 1531 et seq.).

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U.S. Fish and Wildlife Service

Natural Resources of Concern

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Endangered Species Act species list information for your project is available online and listed below for the following FWS Field Offices:

CHESAPEAKE BAY ECOLOGICAL SERVICES FIELD OFFICE
177 ADMIRAL COCHRANE DRIVE
ANNAPOLIS, MD 21401
(410) 573-4500

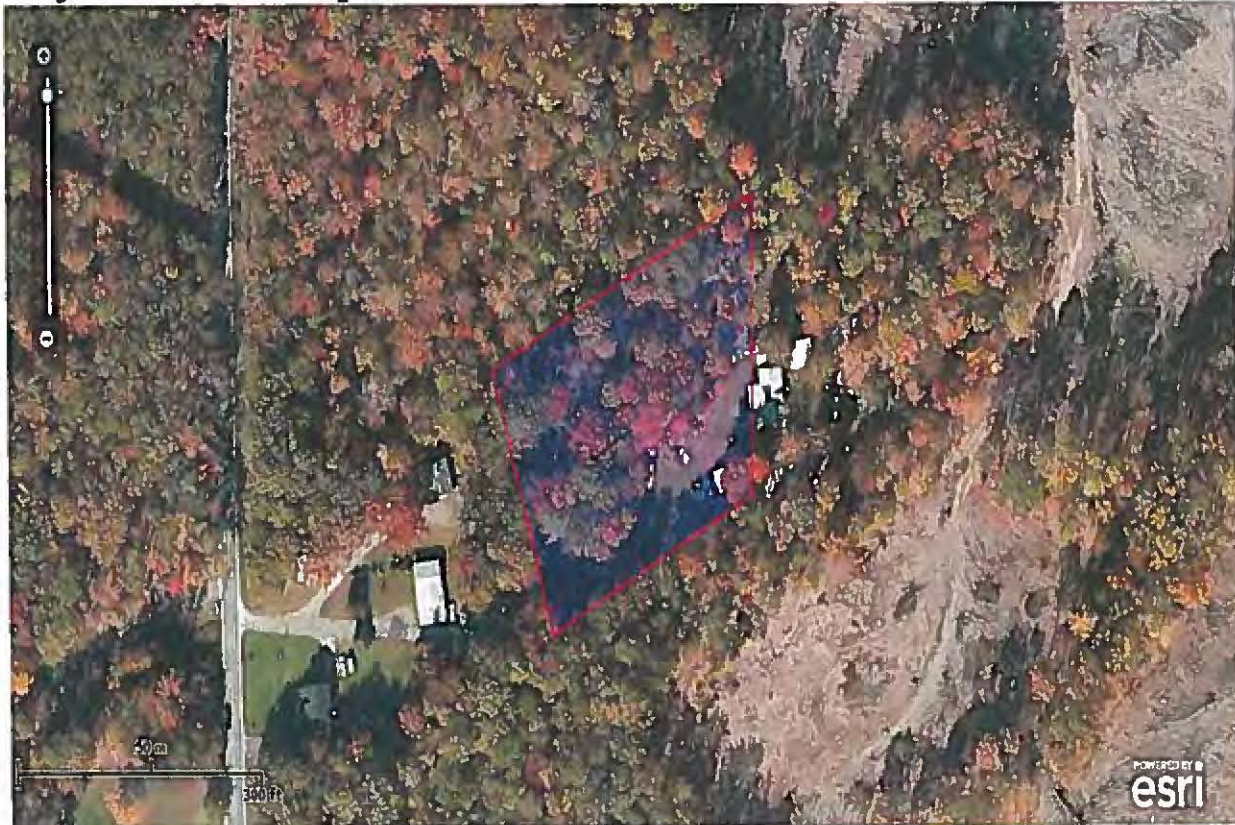
Project Name:

Maryland Airport ETS 3



Natural Resources of Concern

Project Location Map:



Project Counties:

Charles, MD

Geographic coordinates (Open Geospatial Consortium Well-Known Text, NAD83):

MULTIPOLYGON (((-77.0762992 38.5877068, -77.0765511 38.5884028, -77.0754302 38.5888599, -77.0754356 38.5880716, -77.0762992 38.5877068)))

Project Type:

Federal Grant / Loan Related



Natural Resources of Concern

Endangered Species Act Species List ([USFWS Endangered Species Program](#))

There are no listed species found within the vicinity of your project.

FWS National Wildlife Refuges ([USFWS National Wildlife Refuges Program](#))

There are no refuges found within the vicinity of your project.

FWS Migratory Birds ([USFWS Migratory Bird Program](#))

Most species of birds, including eagles and other raptors, are protected under the Migratory Bird Treaty Act (16 U.S.C. 703). Bald eagles and golden eagles receive additional protection under the [Bald and Golden Eagle Protection Act](#) (16 U.S.C. 668). The Service's [Birds of Conservation Concern \(2008\)](#) report identifies species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become listed under the Endangered Species Act as amended (16 U.S.C 1531 et seq.).

NWI Wetlands ([USFWS National Wetlands Inventory](#))

The U.S. Fish and Wildlife Service is the principal Federal agency that provides information on the extent and status of wetlands in the U.S., via the National Wetlands Inventory Program (NWI). In addition to impacts to wetlands within your immediate project area, wetlands outside of your project area may need to be considered in any evaluation of project impacts, due to the hydrologic nature of wetlands (for example, project activities may affect local hydrology within, and outside of, your immediate project area). It may be helpful to refer to the USFWS National Wetland Inventory website. The designated FWS office can also assist you. Impacts to wetlands and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes. Project Proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate [U.S. Army Corps of Engineers District](#).

Appendix D3
USFWS Online Project Review Certification



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:

Project:

Dear Applicant for online certification:

Thank you for using the U.S. Fish and Wildlife Service (Service) Chesapeake Bay Field Office online project review process. By printing this letter in conjunction with your project review package, you are certifying that you have completed the online project review process for the referenced project in accordance with all instructions provided, using the best available information to reach your conclusions. This letter, and the enclosed project review package, completes the review of your project in accordance with the Endangered Species Act of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884), as amended (ESA). This letter also provides information for your project review under the National Environmental Policy Act of 1969 (P.L. 91-190, 42 U.S.C. 4321-4347, 83 Stat. 852), as amended. A copy of this letter and the project review package must be submitted to this office for this certification to be valid. This letter and the project review package will be maintained in our records.

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) 573-4527.

Sincerely,

Genevieve LaRouche
Field Supervisor



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:

Project:

Dear Applicant for online certification:

Thank you for using the U.S. Fish and Wildlife Service (Service) Chesapeake Bay Field Office online project review process. By printing this letter in conjunction with your project review package, you are certifying that you have completed the online project review process for the referenced project in accordance with all instructions provided, using the best available information to reach your conclusions. This letter, and the enclosed project review package, completes the review of your project in accordance with the Endangered Species Act of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884), as amended (ESA). This letter also provides information for your project review under the National Environmental Policy Act of 1969 (P.L. 91-190, 42 U.S.C. 4321-4347, 83 Stat. 852), as amended. A copy of this letter and the project review package must be submitted to this office for this certification to be valid. This letter and the project review package will be maintained in our records.

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)

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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) 573-4527.

Sincerely,

Genevieve LaRouche
Field Supervisor



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: 10/28/2013

Project: Maryland Airport ETS Project Review Survey Area 3

Dear Applicant for online certification:

Thank you for using the U.S. Fish and Wildlife Service (Service) Chesapeake Bay Field Office online project review process. By printing this letter in conjunction with your project review package, you are certifying that you have completed the online project review process for the referenced project in accordance with all instructions provided, using the best available information to reach your conclusions. This letter, and the enclosed project review package, completes the review of your project in accordance with the Endangered Species Act of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884), as amended (ESA). This letter also provides information for your project review under the National Environmental Policy Act of 1969 (P.L. 91-190, 42 U.S.C. 4321-4347, 83 Stat. 852), as amended. A copy of this letter and the project review package must be submitted to this office for this certification to be valid. This letter and the project review package will be maintained in our records.

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) 573-4527.

Sincerely,

Genevieve LaRouche
Field Supervisor

Appendix D4

MDNR Project Review Letter



Martin O'Malley, Governor
Anthony G. Brown, Lt. Governor
Joseph P. Gill, Secretary
Frank W. Dawson III, Deputy Secretary

December 5, 2013

Mr. Matthew A. Neely
Mill Creek Environmental Consultants, Ltd.
11400 Longtown Drive
Midlothian, VA 23112

**RE: Environmental Review for Obstruction Removal Project in Vicinity of Maryland Airport,
Indian Head, Charles County, Maryland.**

Dear Mr. Neely:

The Wildlife and Heritage Service has completed our review of the obstruction removal project in the vicinity of Maryland Airport. At this time we have no concerns or comments regarding rare, threatened and endangered species or their habitats for this proposal. If plans change or the need arises for any additional work in the area, please let us know.

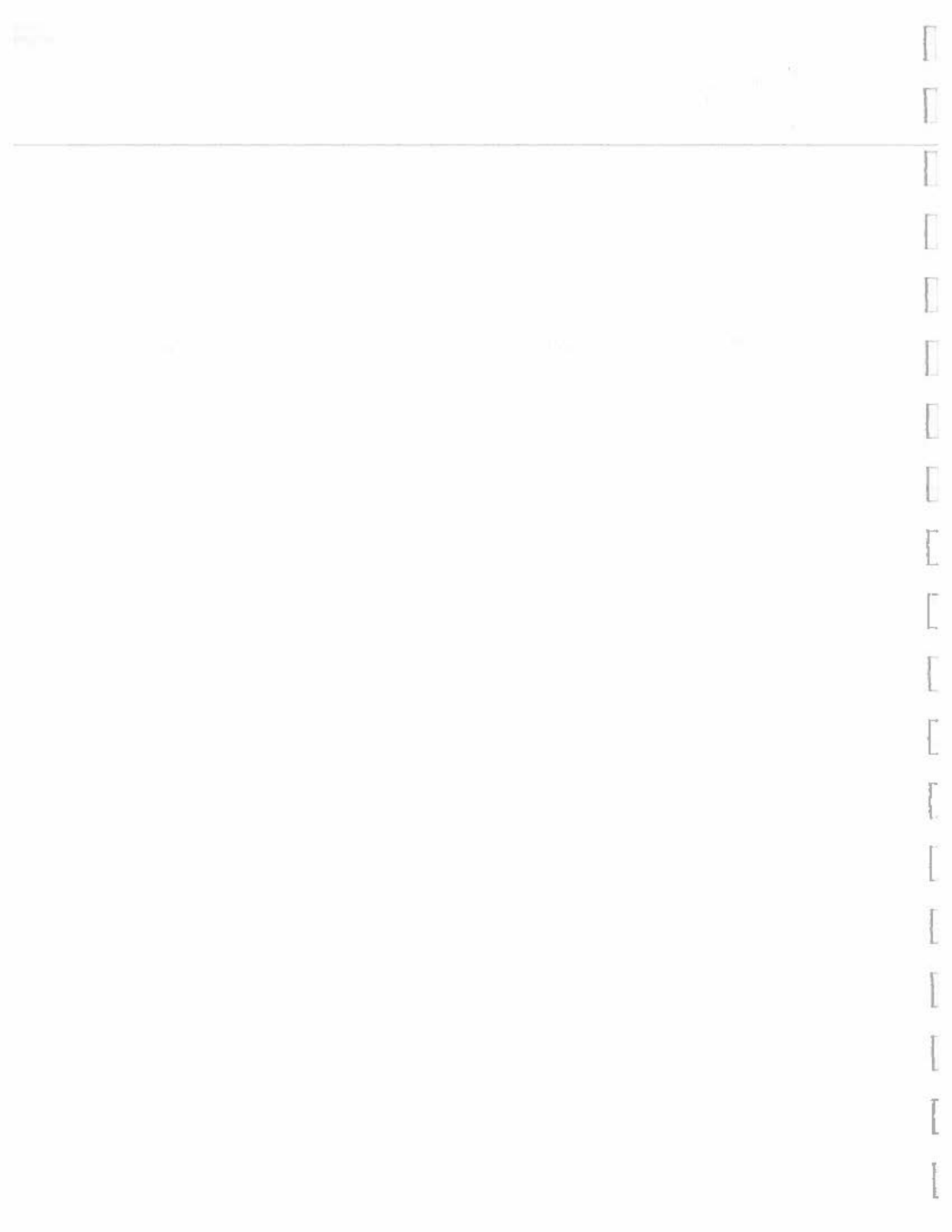
Thank you for allowing us the opportunity to review this project. If you should have any further questions regarding this information, please contact me at (410) 260-8573.

Sincerely,

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

ER# 2013.1622.ch
Cc: T. Larney, DNR
K. McCarthy, DNR

Appendix E
Wetlands Survey, Delineation, and USACE & MDE Coordination





MillCreek

Environmental Consultants, LTD

**Technical Report:
Wetland Delineation for Maryland Airport
Indian Head, Maryland**

Prepared for:

**Talbert & Bright, Inc.
10105 Krause Road, Suite 100
Chesterfield, Virginia 23832**

1 October 2013

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7. Flotation samples collected:

yes
 no
 unknown

analyzed:

yes, by _____
 no
 unknown

8. Samples for radiocarbon dating collected:

yes
 no
 unknown

Dates and Lab Reference Nos. _____

9. Soil samples collected:

yes
 no
 unknown

analyzed:

yes, by _____
 no
 unknown

10. Other analyses (specify): _____

11. Additional comments:

This was a visual reconnaissance only with no subsurface investigation. Opportunistic examination of the artifacts on the surface of the skidder trails with 100% surface visibility was made along with all bare patches. Individual artifacts were GPS'd to geo-locate them and ad hoc photos of non-diagnostic and all diagnostic artifacts were taken in situ. The GPS loci were transformed using standard software and placed on the site contour maps and from there transferred to the less accurate USGS quadrangle sheet.

12. Form filled out by: Lyle E. Browning (Browning & Associates, Ltd.)
Address/Company Name: 2240 Chartstone Drive, Midlothian, VA 23113
Date: 06/06/2013

Artifacts



PREHISTORIC DATA FORM

Ground conditions near IHAP-1 and IHAP-3



MARYLAND INVENTORY OF HISTORIC PROPERTIES
ARCHEOLOGICAL SITE SURVEY: BASIC DATA FORM

Date Filed: 06/17/2013

Check if update:



Maryland Department of Planning
Maryland Historical Trust
Division of Historical and Cultural Programs
100 Community Place
Crownsville, Maryland 21032

Site Number: 18CH834

County: Charles

A. DESIGNATION

1. Site Name: IHAP-4
2. Alternate Site Name/Numbers: _____
3. Site Type (describe site chronology and function; see instructions):
Prehistoric Lithic Scatter
4. Prehistoric Historic _____ Unknown _____
5. Terrestrial Submerged/Underwater _____ Both _____

B. LOCATION

6. USGS 7.5' Quadrangle(s): Port Tobacco (For underwater sites)
NOAA Chart No.: _____
- (Photocopy section of quad or chart on page 4 and mark site location)

7. Maryland Archeological Research Unit Number: 11
8. Physiographic Province (check one):
 Allegany Plateau Lancaster/Frederick Lowland
 Ridge and Valley Eastern Piedmont
 Great Valley Western Shore Coastal Plain
 Blue Ridge Eastern Shore Coastal Plain
9. Major Watershed/Underwater Zone (see instructions for map and list): Lower Potomac River

C. ENVIRONMENTAL DATA

10. Nearest Water Source: Mattawoman Creek Tributary Stream Order: _____
11. Closest Surface Water Type (check all applicable):
 Ocean Freshwater Stream/River
 Estuarine Bay/Tidal River Freshwater Swamp
 Tidal or Marsh Lake or Pond
 Spring
12. Distance from closest surface water: 250 meters (or _____ feet)

C. ENVIRONMENTAL DATA [CONTINUED]

13. Current water speed: _____ knots 14. Water Depth: _____ meters

15. Water visibility: _____

16. SCS Soils Typology and/or Sediment Type: _____

17. Topographic Settings (check all applicable):

- | | |
|--|--|
| <input type="checkbox"/> Floodplain | <input type="checkbox"/> Hilltop/Bluff |
| <input type="checkbox"/> Interior Flat | <input type="checkbox"/> Upland Flat |
| <input type="checkbox"/> Terrace | <input checked="" type="checkbox"/> Ridgetop |
| <input type="checkbox"/> Low Terrace | <input type="checkbox"/> Rockshelter/Cave |
| <input type="checkbox"/> High Terrace | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Hillslope | <input type="checkbox"/> Other: _____ |

18. Slope: 0-5%

19. Elevation: _____ meters (or 165 feet) above sea level

20. Land use at site when last field checked (check all applicable):

- | | |
|--|---|
| <input type="checkbox"/> Plowed/Tilled | <input type="checkbox"/> Extractive |
| <input type="checkbox"/> No-Till | <input type="checkbox"/> Military |
| <input type="checkbox"/> Wooded/Forested | <input type="checkbox"/> Recreational |
| <input checked="" type="checkbox"/> Logging/Logged | <input type="checkbox"/> Residential |
| <input type="checkbox"/> Underbrush/Overgrown | <input type="checkbox"/> Ruin |
| <input type="checkbox"/> Pasture | <input type="checkbox"/> Standing Structure |
| <input type="checkbox"/> Cemetery | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Commercial | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Educational | <input type="checkbox"/> Other: _____ |

21. Condition of site:

- Disturbed
 Undisturbed
 Unknown

22. Cause of disturbance/destruction (check all applicable):

- | | |
|--|--|
| <input type="checkbox"/> Plowed | <input type="checkbox"/> Vandalized/Looted |
| <input checked="" type="checkbox"/> Eroded/Eroding | <input type="checkbox"/> Dredged |
| <input type="checkbox"/> Graded/Contoured | <input type="checkbox"/> Heavy Marine Traffic |
| <input type="checkbox"/> Collected | <input checked="" type="checkbox"/> Other: _____ |
| | <u>Logged</u> |

23. Extent of disturbance:

- Minor (0-10%)
 Moderate (10-60%)
 Major (60-99%)
 Total (100%)
 % unknown

C. ENVIRONMENTAL DATA [CONTINUED]

24. Describe site setting with respect to local natural and cultural landmarks (topography, hydrology, fences, structures, roads). Use continuation sheet if needed.

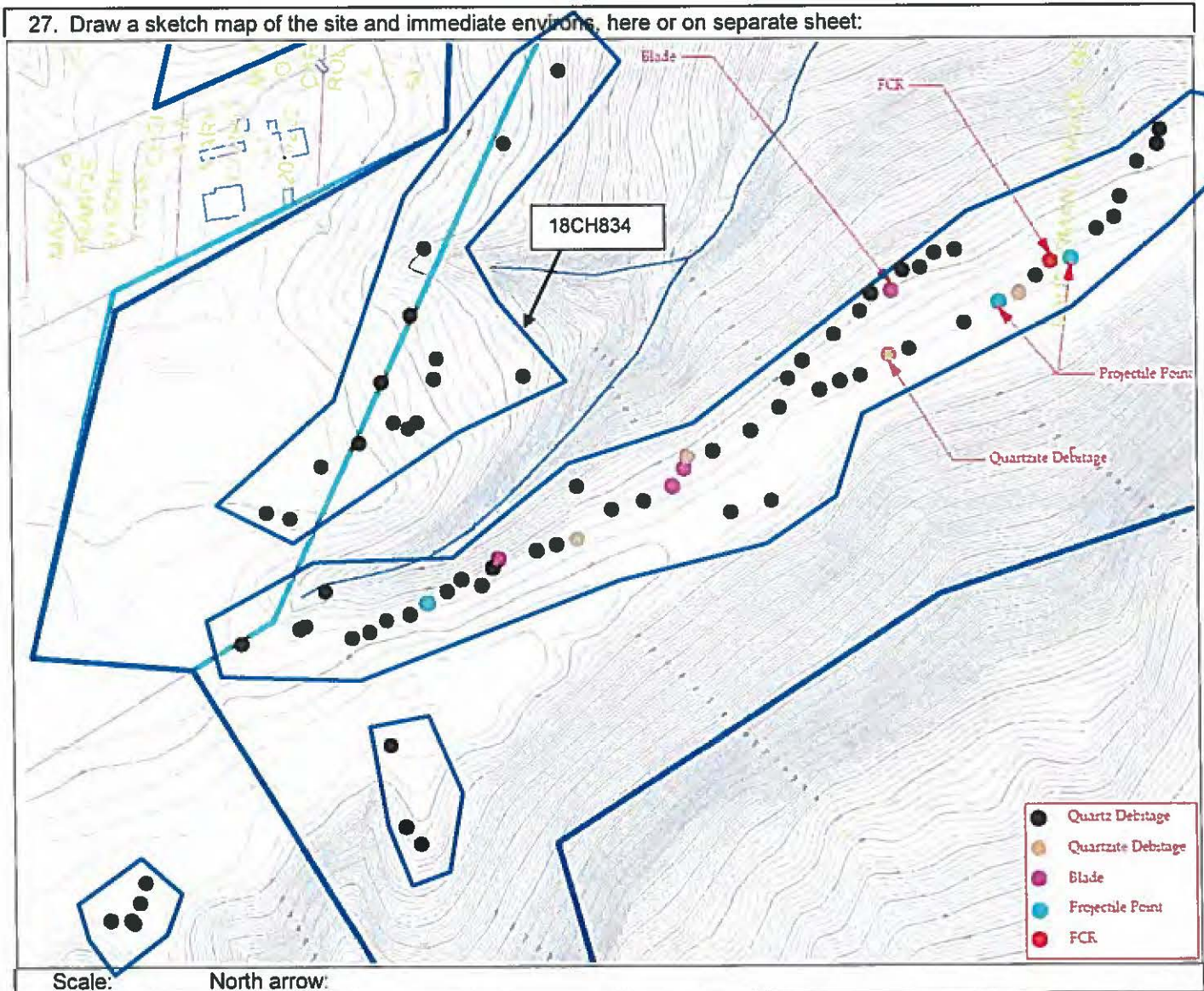
The site occupies an erosion tongue oriented nearly parallel with a ravine sloping down to a tributary of Mattawoman Creek. To the south, the site is limited by a deep ravine used by transiting deer and other game from the lowland water-sources/resources to the uplands. It is along this margin that the site is most represented.

25. Characterize site stratigraphy. Include a representative profile on separate sheet, if applicable. Address plowzone (presence/absence), subplowzone features and levels, if any, and how stratigraphy affects site integrity. Use continuation sheet if needed.

This was a strictly visual examination of skidder trails along the top of the landform that went into the ground over a foot and churned up the area and thus removed vertical and horizontal integrity. Adjacent to the skidder trails, very limited clear areas showed minimal topsoil over a clayey, pebbly subsoil.

26. Site size: 212 meters by 73 meters (or _____ feet by _____ feet)

27. Draw a sketch map of the site and immediate environs, here or on separate sheet:



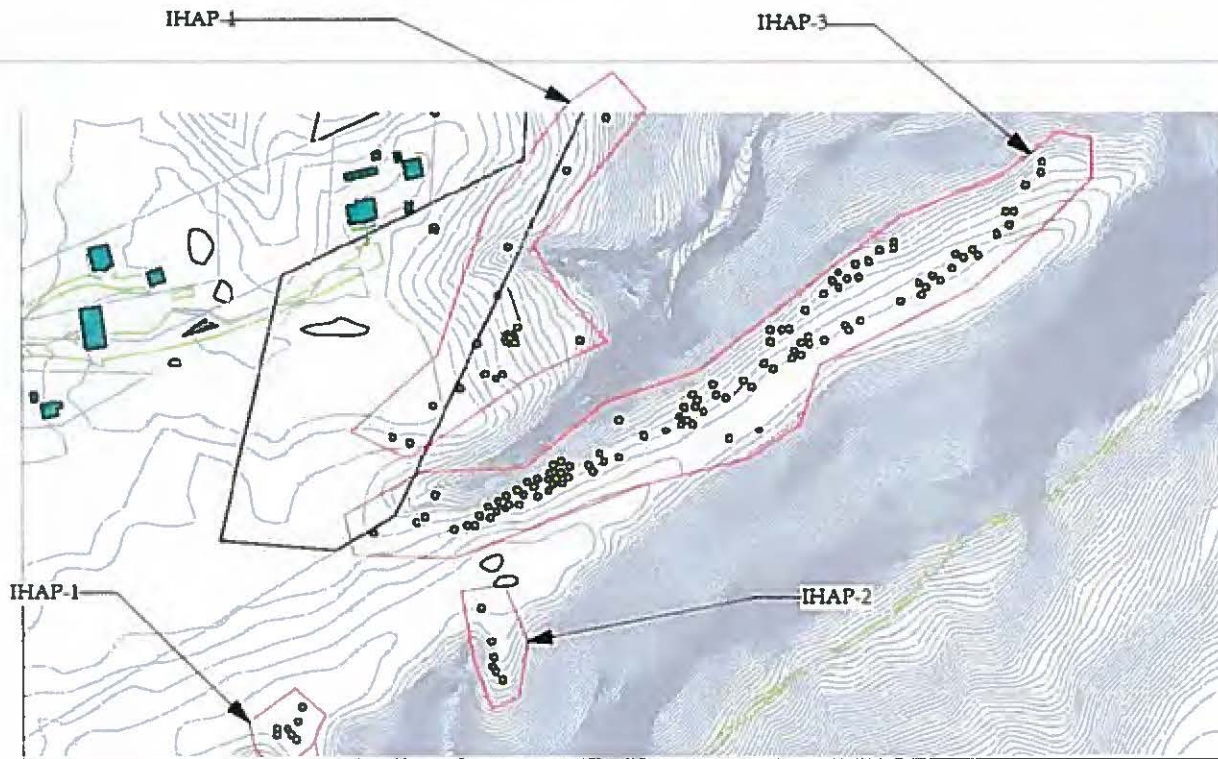


Figure xx. All Artifacts On Project Topo Map.

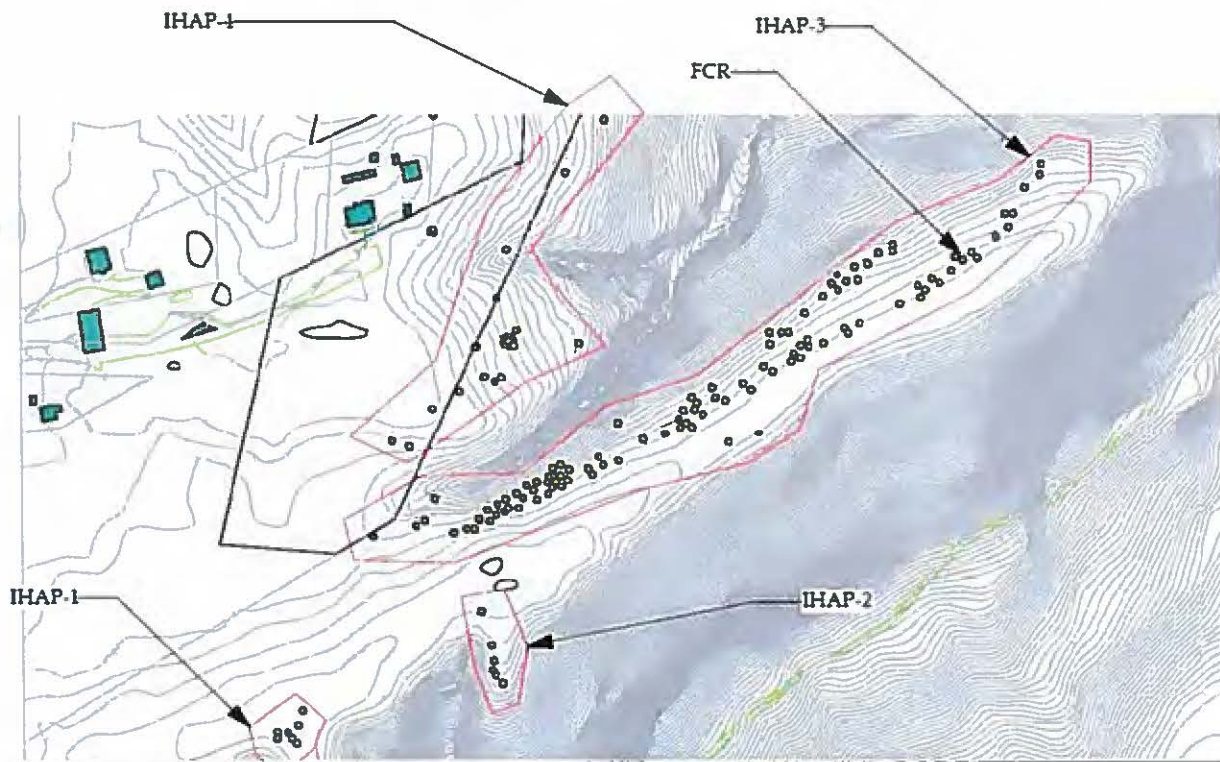


Figure xx. FCR On Project Topo Map.

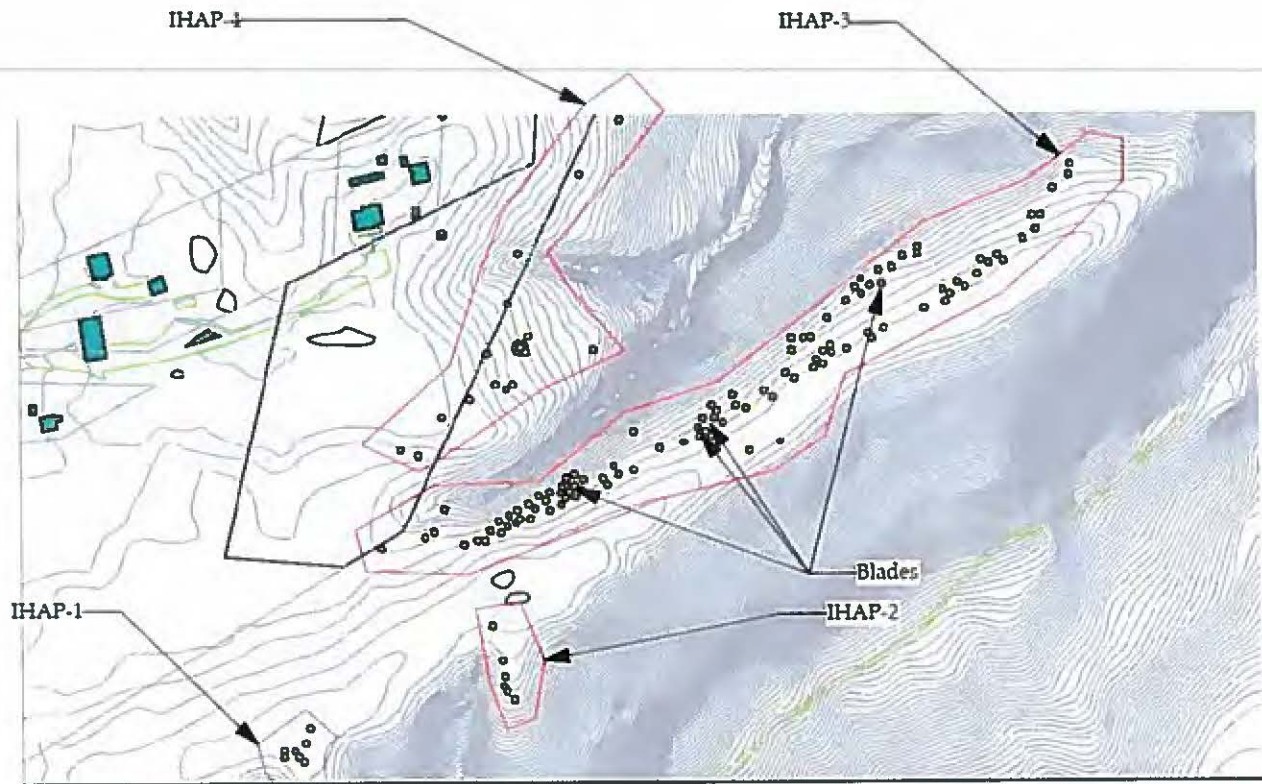


Figure xx. Blades On Project Topo Map.

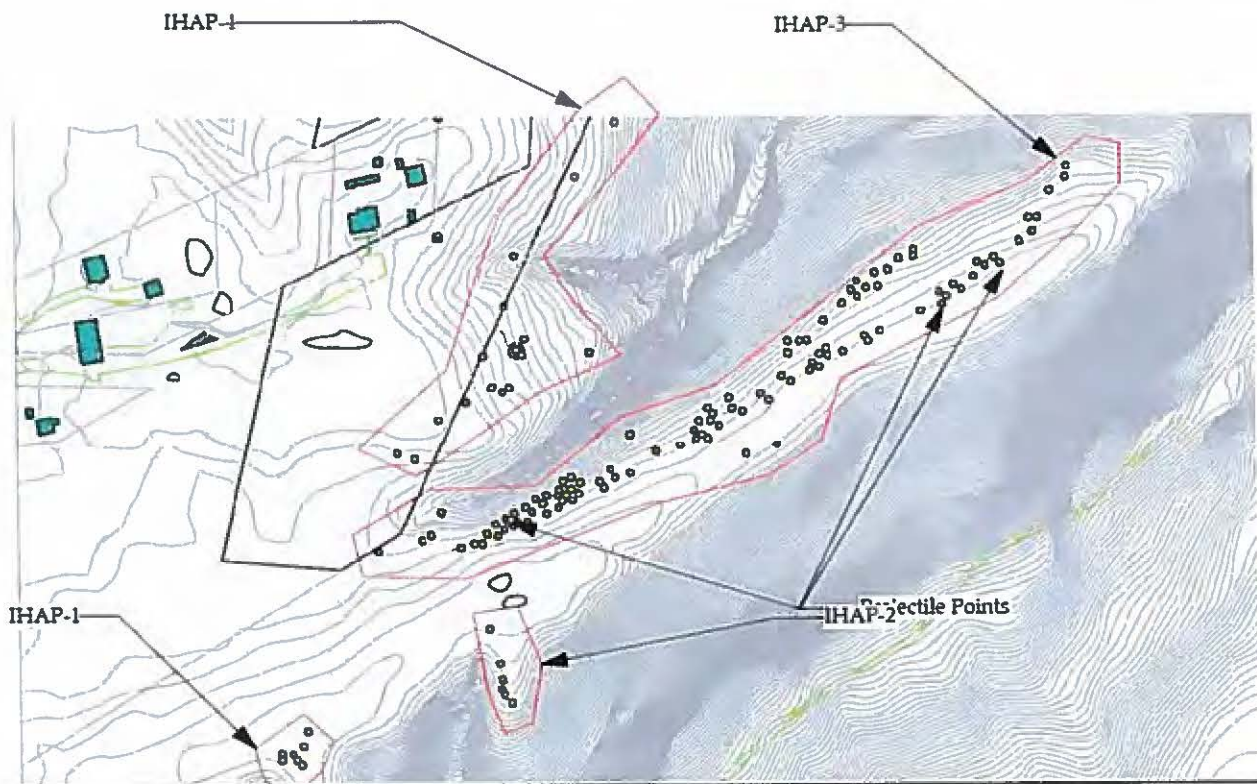


Figure xx. Projectile Points On Project Topo Map.

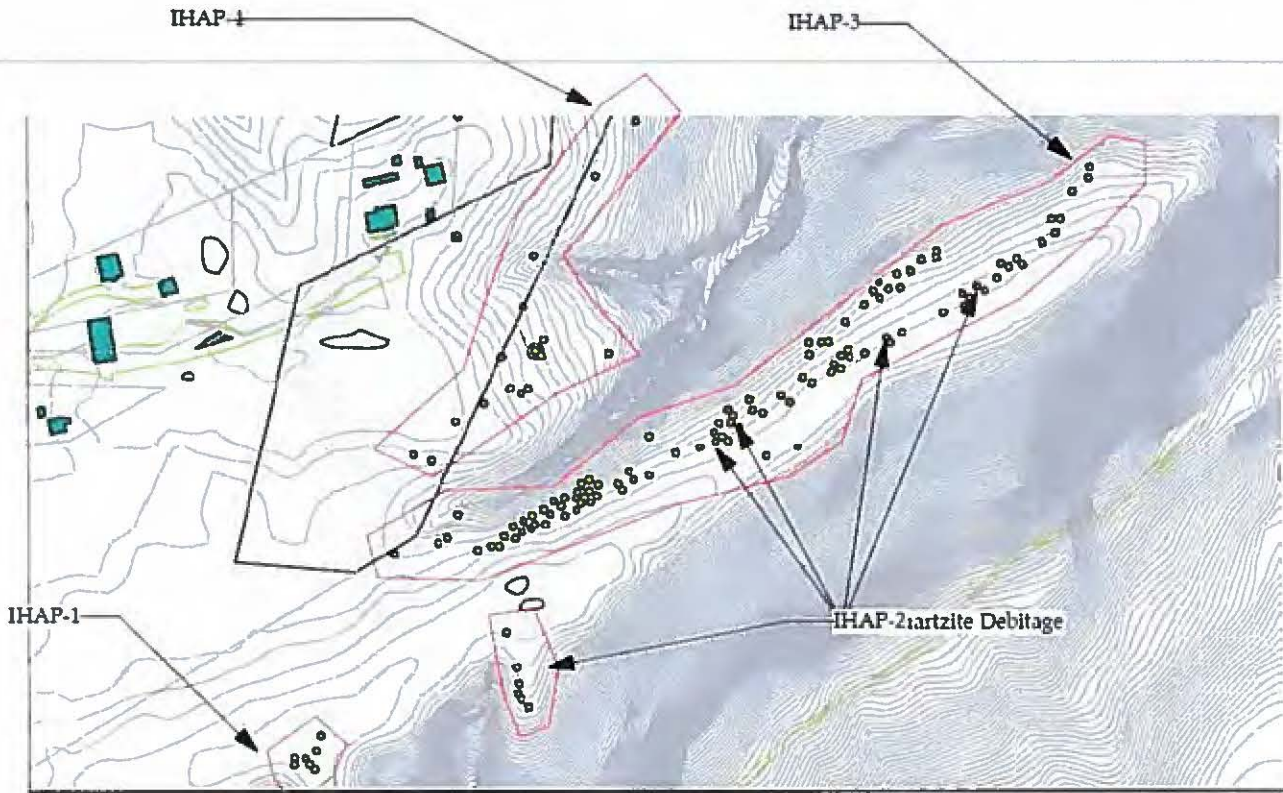


Figure xx. Quantzite Debitage On Project Topo Map.

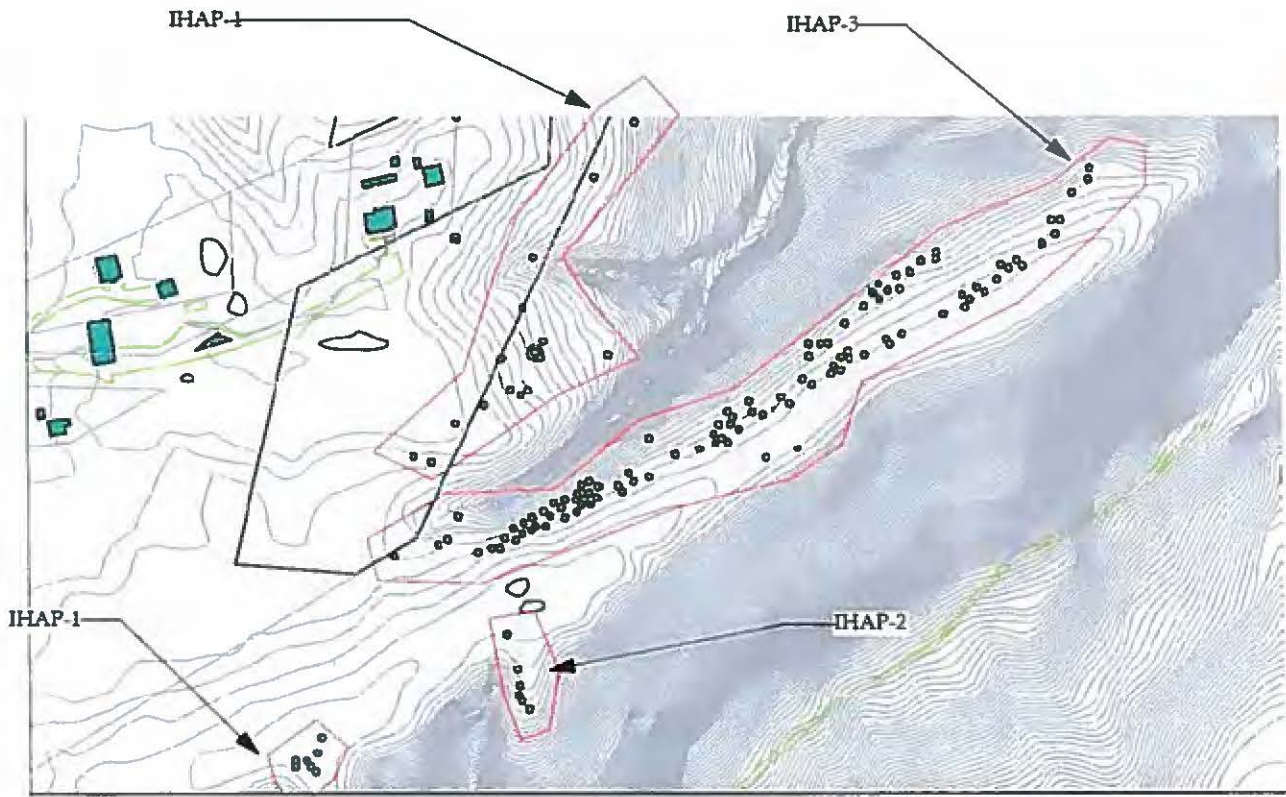
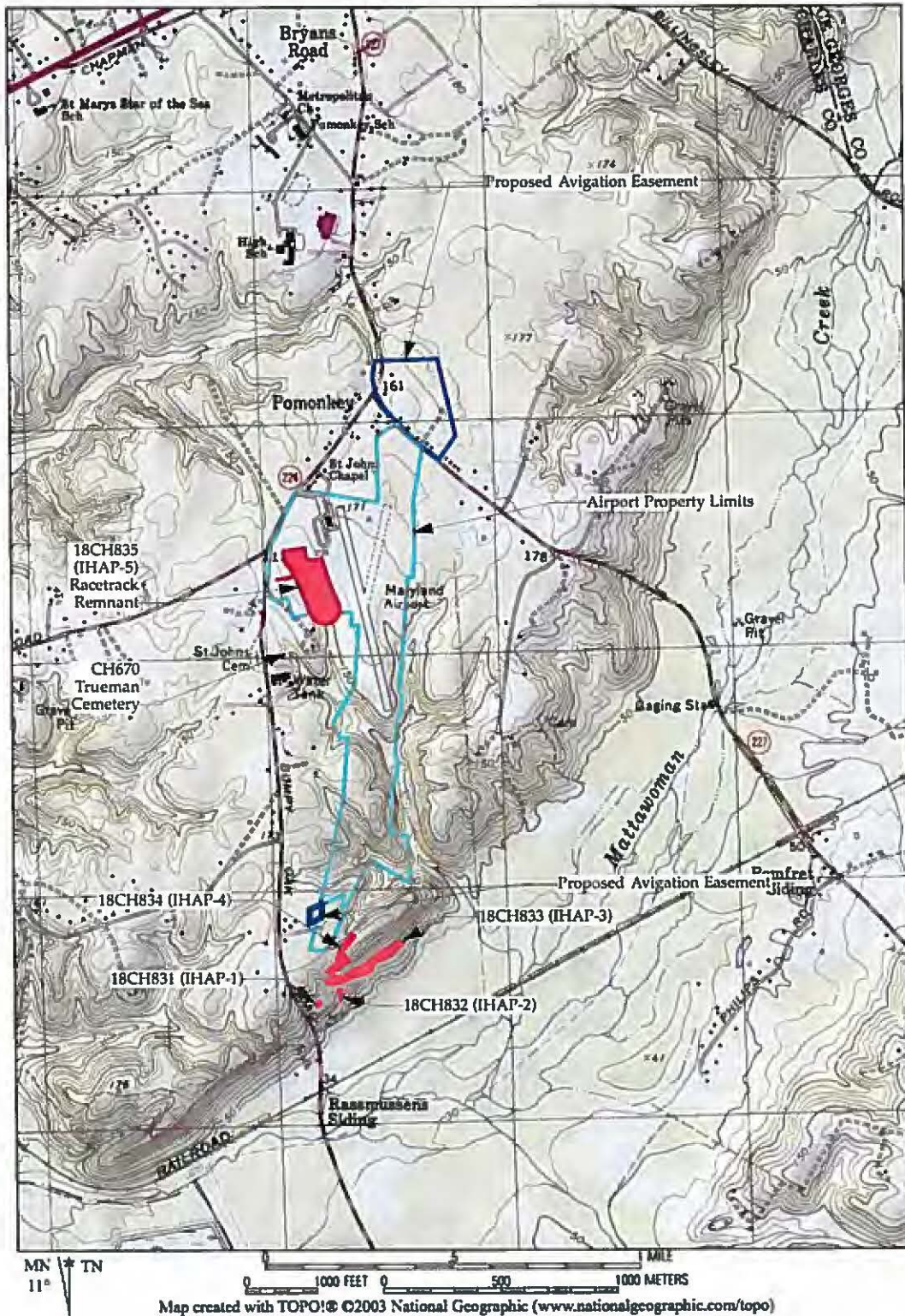


Figure xx. Quartz Debitage On Project Topo Map.

Photocopy section of quadrangle map(s) and mark site location with heavy dot or circle and arrow pointing to it.



Port Tobacco, MD USGS 24k Quad Showing Maryland Airport At Indian Head.

D. CONTEXT

28. Cultural Affiliation (check all applicable):

PREHISTORIC

- Unknown
- Paleoindian
- Archaic
- Early Archaic
- Middle Archaic
- Late Archaic
- Terminal Archaic
- Woodland
- Adena
- Early Woodland
- Middle Woodland
- Late Woodland
- CONTACT

HISTORIC:

- Unknown
- 17th century
- 1630-1675
- 1676-1720
- 18th century
- 1721-1780
- 1781-1820
- 19th century
- 1821-1860
- 1861-1900
- 20th century
- 1901-1930
- post-1930

UNKNOWN

E. INVESTIGATIVE DATA

29. Type of investigation:

- Phase I
- Phase II/Site Testing
- Phase III/Excavation
- Archival Investigation

- Monitoring
- Field Visit
- Collection/Artifact Inventory
- Other:
- Cultural Resources Evaluation

30. Purpose of investigation:

- Compliance
- Research
- Regional Survey

- Site Inventory
- MHT Grant Project
- Other:
- _____

31. Method of sampling (check all applicable):

- Non-systematic surface search
- Systematic surface collection
- Non-systematic shovel test pits
- Systematic shovel test pits
- Excavation units
- Mechanical excavation
- Remote sensing
- Other: _____

32. Extent/nature of excavation: _____

F. SUPPORT DATA

33. Accompanying Data Form(s):

- Prehistoric
- Historic
- Shipwreck

34. Ownership: Private
 Unknown

Federal State Local/County

35. Owner(s): Gil Bauserman
Address: 3900 Livingston Road, Indian Head, MD 20640
Phone: (301) 283-6202

36. Tenant and/or Local Contact: _____
Address: _____
Phone: _____

37. Other Known Investigations: _____

38. Primary report reference or citation: _____

39. Other Records (e.g. slides, photos, original field maps/notes, sonar, magnetic record)?
 Slides Field record Other: _____
 Photos Sonar
 Field maps Magnetic record

40. If yes, location of records: MAC Lab

41. Collections at Maryland Archeological Conservation (MAC) Lab or to be deposited at MAC Lab?
 Yes
 No
 Unknown

42. If NO or UNKNOWN, give owner: Indian Head Airport
location: At airport
and brief description of collection: _____
ALL Debitage GPS'd, representative photos taken. No Datable artifacts observed.

43. Informant: _____
Address: _____
Phone: _____

44. Site visited by Lyle E. Browning (Browning & Associates, Ltd.)
Address: 2240 Chartstone Drive, Midlothian, VA 23113
Phone: 804-357-2959 Date: 05/21/2013

45. Form filled out by: Lyle E. Browning (Browning & Associates, Ltd.)
Address: 2240 Chartstone Drive, Midlothian, VA 23113
Phone: 804-357-2959 Date: 06/06/2013

46. Site Summary/Additional Comments (append additional pages if needed):

The site occupies a tongue of land north of a ravine feeding into a tributary of Mattawoman Creek to the east. The site has been recently logged and more recently hydro-axed to lower the vegetation level to ground height. Skidder trails were placed on the uplands and were used as survey swaths as they had 100% surface visibility. Where possible due to ground cover from hydro-axe debris, visual examination of areas on the spine and south of the ridge were visually examined. The artifact densities were far less in those areas. However, the artifact distribution (n=16) is argued to mean that the site was used as a secondary to IHAP-3 ambush/kill/processing site for whitetail deer transiting up from the water and resources of Mattawoman Creek to the interior uplands for browse. The daily routine of deer is established from direct observation by modern hunters and is suggested from artifact scatters (Browning 2013) on exactly similar terrain in Stafford County, VA.

The presence of skidder trails along the top and slightly side slope on the southeast side of the ridge has resulted in the total destruction of vertical and horizontal integrity in the trails. The skidders operated during wet soil conditions and sank into the soil up to a foot and well into subsoil. The soils are water retentive clays with pebbles. Topsoil was minimal, in the range of up to 3" from observation. Erosion is apparent in bare patches where the skidders had not ventured wherein about half of the areas had subsoil at the surface. No evidence of subsurface activity was noted. The absence of potable water would argue for an intermittently occupied camp.

Further work is not recommended as the time period of occupation has been identified, the nature of the lithics has been established and the soils have been so disturbed that meaningful recovery of anything but additional and repetitively similar artifacts is virtually precluded. Further work is not recommended.

MARYLAND ARCHEOLOGICAL SITE SURVEY: PREHISTORIC DATA FORM

Site Number 18CH834

1. Site type (check all applicable):

- village
- hamlet
- base camp
- short-term resource procurement
- lithic quarry/extraction
- rockshelter/cave
- cairn

- earthen mound
- shell midden
- fish weir
- submerged prehistoric
- lithic scatter
- unknown
- other:

2. Categories of aboriginal material or remains at site (check all applicable):

- flaked stone
- ground stone
- stone bowls
- fire-cracked rock
- other lithics
- ceramics (vessels)
- other fired clay

- human skeletal remains
- faunal implements/ornaments
- faunal material
- oyster shell
- floral material
- unknown
- other:

3. Lithic materials (check all applicable):

- jasper
- chert
- rhyolite
- quartz
- quartzite
- chalcedony
- ironstone
- argillite

- steatite
- sandstone
- silicified sandstone
- ferruginous quartzite
- European flint
- basalt
- unknown
- other:

4. Diagnostics (choose from manual and give number recovered or observed):

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| |

5. Features present:

- yes
- no
- unknown

6. Types of features identified (check all applicable):

- midden
- postmolds
- house patterns
- palisade
- hearths
- chipping clusters

- refuse/storage pits
- burials
- ossuaries
- unknown
- other:

7. Flotation samples collected:

yes
 no
 unknown

analyzed:

yes, by _____
 no
 unknown

8. Samples for radiocarbon dating collected:

yes
 no
 unknown

Dates and Lab Reference Nos. _____

9. Soil samples collected:

yes
 no
 unknown

analyzed:

yes, by _____
 no
 unknown

10. Other analyses (specify): _____

11. Additional comments:

This was a visual reconnaissance only with no subsurface investigation. Opportunistic examination of the artifacts on the surface of the skidder trails with 100% surface visibility was made in addition to bare patches that were all examined. Individual artifacts were GPS'd to geo-locate them and ad hoc photos of non-diagnostic were taken in situ. The GPS loci were transformed using standard software and placed on the site contour maps and from there transferred to the less accurate USGS quadrangle sheet.

12. Form filled out by: Lyle E. Browning (Browning & Associates, Ltd.)

Address/Company Name: 2240 Chartstone Drive, Midlothian, VA 23113

Date: 06/06/2013

Projectile point



Projectile point



Blade



Blade





Skidder Trail, taken east along IHAP-4



MARYLAND INVENTORY OF HISTORIC PROPERTIES
ARCHEOLOGICAL SITE SURVEY: BASIC DATA FORM

Date Filed: 06/14/2013

Check if update:



Maryland Department of Planning
Maryland Historical Trust
Division of Historical and Cultural Programs
100 Community Place
Crownsville, Maryland 21032

Site Number: 18CH835

County: Charles

A. DESIGNATION

1. Site Name: IHAP-5
2. Alternate Site Name/Numbers: _____
3. Site Type (describe site chronology and function; see instructions):
Mid 20th century dirt stock car racetrack
4. Prehistoric _____ Historic X Unknown _____
5. Terrestrial X Submerged/Underwater _____ Both _____

B. LOCATION

6. USGS 7.5' Quadrangle(s): Port Tobacco (For underwater sites)
NOAA Chart No.: _____
- (Photocopy section of quad or chart on page 4 and mark site location)

7. Maryland Archeological Research Unit Number: 11
8. Physiographic Province (check one):
 Allegany Plateau Lancaster/Frederick Lowland
 Ridge and Valley Eastern Piedmont
 Great Valley Western Shore Coastal Plain
 Blue Ridge Eastern Shore Coastal Plain
9. Major Watershed/Underwater Zone (see instructions for map and list): Lower Potomac River

C. ENVIRONMENTAL DATA

10. Nearest Water Source: Mattawoman Creek tributary Stream Order: _____
11. Closest Surface Water Type (check all applicable):
 Ocean Freshwater Stream/River
 Estuarine Bay/Tidal River Freshwater Swamp
 Tidal or Marsh Lake or Pond
 Spring
12. Distance from closest surface water: 1000 meters (or feet)

C. ENVIRONMENTAL DATA [CONTINUED]

13. Current water speed: _____ knots

14. Water Depth: _____ meters

15. Water visibility: _____

16. SCS Soils Typology and/or Sediment Type: _____

17. Topographic Settings (check all applicable):

Floodplain

Interior Flat

Terrace

Low Terrace

High Terrace

Hillslope

Hilltop/Bluff

Upland Flat

Ridgetop

Rockshelter/Cave

Unknown

Other: _____

18. Slope: 0-5%

19. Elevation: _____ meters (or 170 feet) above sea level

20. Land use at site when last field checked (check all applicable):

Plowed/Tilled

No-Till

Wooded/Forested

Logging/Logged

Underbrush/Overgrown

Pasture

Cemetery

Commercial

Educational

Extractive

Military

Recreational

Residential

Ruin

Standing Structure

Transportation

Unknown

Other: _____

21. Condition of site:

Disturbed

Undisturbed

Unknown

22. Cause of disturbance/destruction (check all applicable):

Plowed

Eroded/Eroding

Graded/Contoured

Collected

Vandalized/Looted

Dredged

Heavy Marine Traffic

Other: _____

23. Extent of disturbance:

Minor (0-10%)

Moderate (10-60%)

Major (60-99%)

Total (100%)

% unknown

C. ENVIRONMENTAL DATA [CONTINUED]

24. Describe site setting with respect to local natural and cultural landmarks (topography, hydrology, fences, structures, roads). Use continuation sheet if needed.

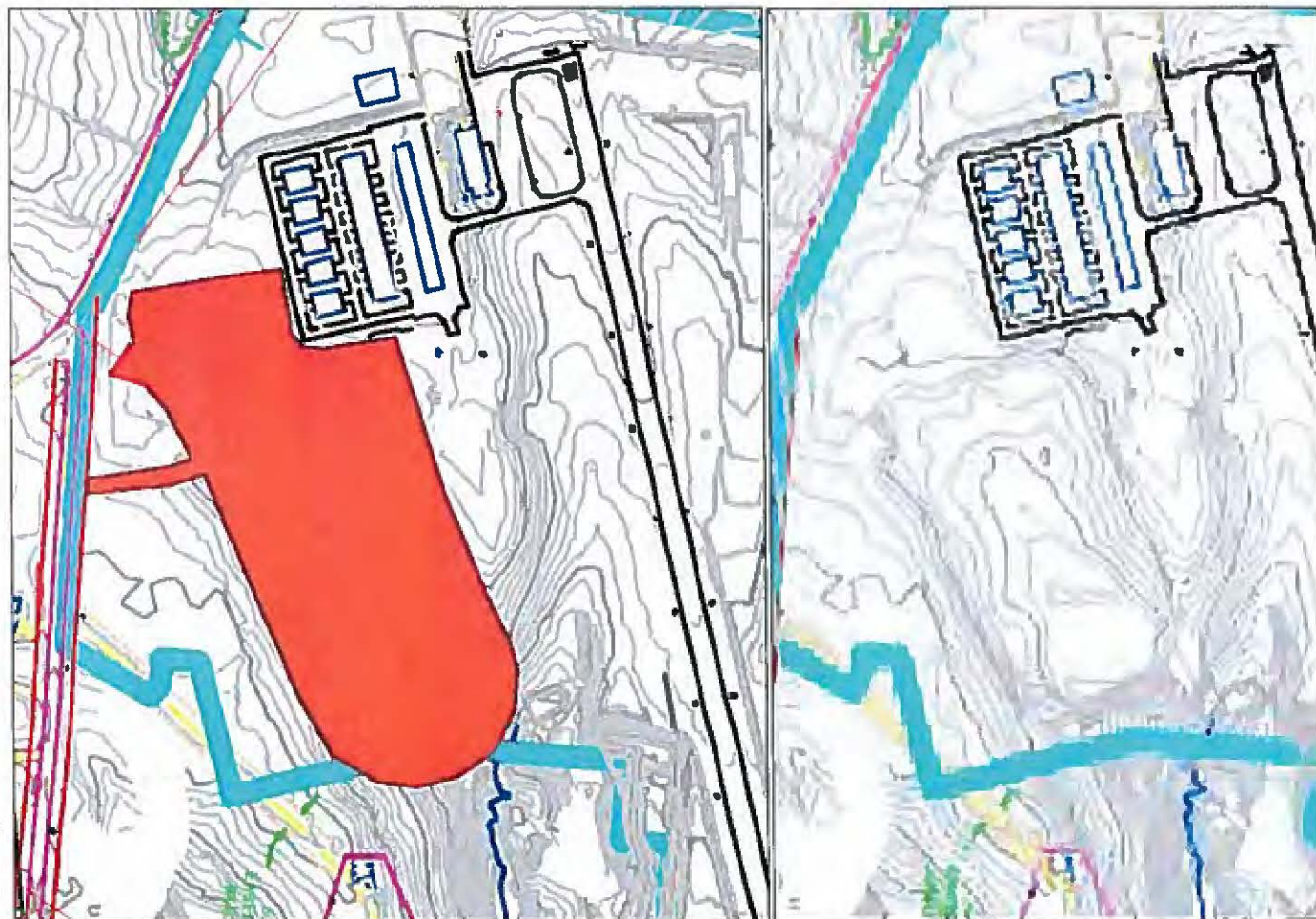
The site is an oval former half mile racing oval built in 1952 and used until about 1954. The northern half has been graded over for airport hangar construction.

25. Characterize site stratigraphy. Include a representative profile on separate sheet, if applicable. Address plowzone (presence/absence), subplowzone features and levels, if any, and how stratigraphy affects site integrity. Use continuation sheet if needed.

This was a strictly visual examination of an anomaly that appeared on the LIDAR figure of the airport and upon investigation was shown to be an exterior berm with an interior flat area. Former bleachers had been removed decades ago.

26. Site size: 350 meters by 220 meters (or _____ feet by _____ feet)

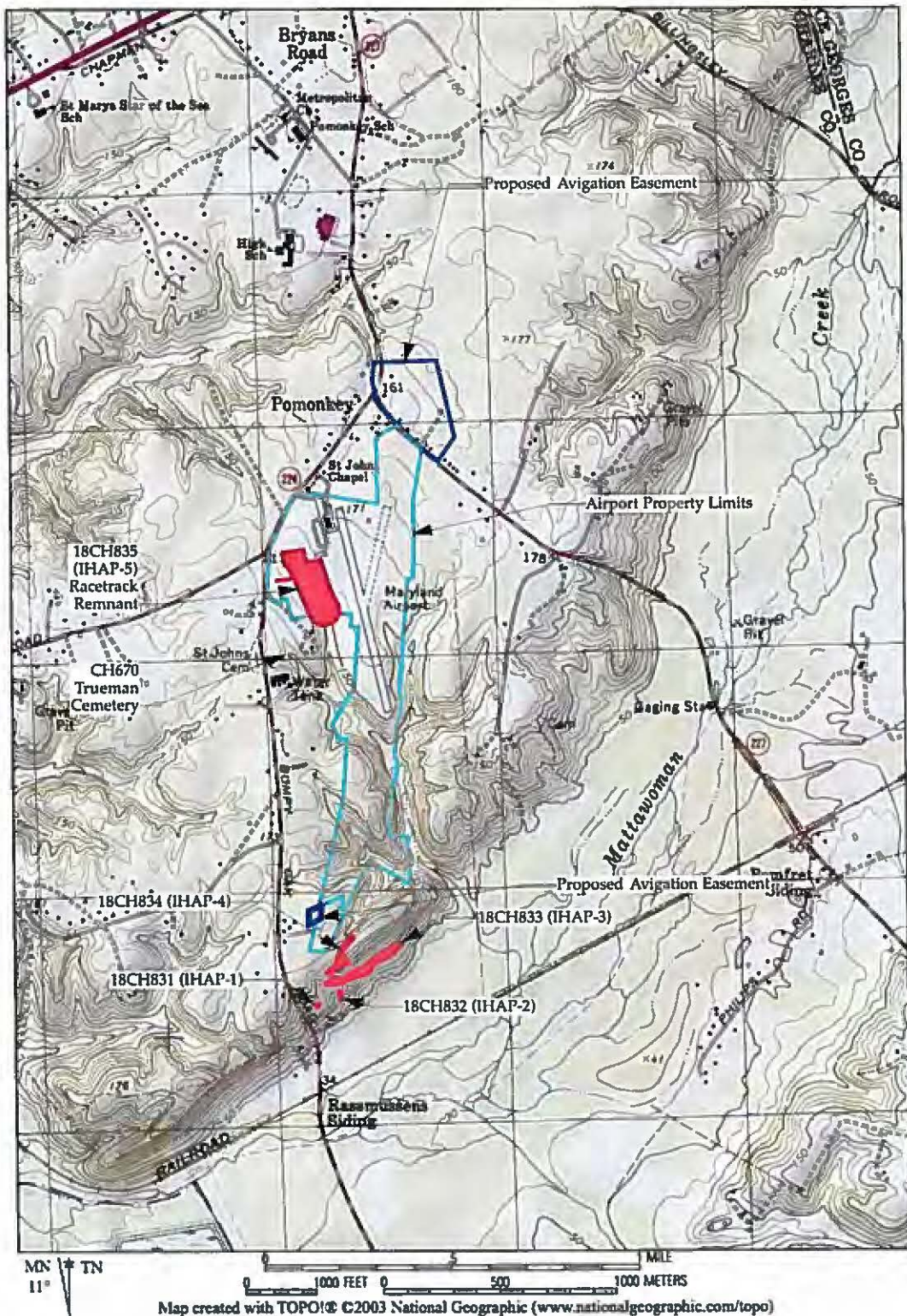
27. Draw a sketch map of the site and immediate environs, here or on separate sheet:



Scale:

North arrow:

Photocopy section of quadrangle map(s) and mark site location with heavy dot or circle and arrow pointing to it.



Port Tobacco, MD USGS 24k Quad Showing Maryland Airport At Indian Head.

D. CONTEXT

28. Cultural Affiliation (check all applicable):

PREHISTORIC

- Unknown
- Paleoindian
- Archaic
- Early Archaic
- Middle Archaic
- Late Archaic
- Terminal Archaic
- Woodland
- Adena
- Early Woodland
- Middle Woodland
- Late Woodland

CONTACT

HISTORIC:

- Unknown
- 17th century
- 1630-1675
- 1676-1720
- 18th century
- 1721-1780
- 1781-1820
- 19th century
- 1821-1860
- 1861-1900
- 20th century
- 1901-1930
- post-1930

UNKNOWN

E. INVESTIGATIVE DATA

29. Type of investigation:

- Phase I
- Phase II/Site Testing
- Phase III/Excavation
- Archival Investigation

- Monitoring
- Field Visit
- Collection/Artifact Inventory
- Other: Cultural Resources Evaluation

30. Purpose of investigation:

- Compliance
- Research
- Regional Survey

- Site Inventory
- MHT Grant Project
- Other:

31. Method of sampling (check all applicable):

- Non-systematic surface search
- Systematic surface collection
- Non-systematic shovel test pits
- Systematic shovel test pits
- Excavation units
- Mechanical excavation
- Remote sensing
- Other: Visual

32. Extent/nature of excavation: _____

F. SUPPORT DATA

33. Accompanying Data Form(s):

- Prehistoric
- Historic
- Shipwreck

34. Ownership: Private
 Unknown

Federal State Local/County

35. Owner(s): Gil Bauserman
Address: 3900 Livingston Road, Indian Head, MD 20640
Phone: (301) 283-6202

36. Tenant and/or Local Contact: _____
Address: _____
Phone: _____

37. Other Known Investigations: _____

38. Primary report reference or citation: _____

39. Other Records (e.g. slides, photos, original field maps/notes, sonar, magnetic record)?
 Slides Field record Other: LIDAR
 Photos Sonar
 Field maps Magnetic record

40. If yes, location of records: MAC Lab

41. Collections at Maryland Archeological Conservation (MAC) Lab or to be deposited at MAC Lab?
 Yes
 No
 Unknown

42. If NO or UNKNOWN, give owner: _____
location: _____
and brief description of collection: _____

43. Informant: _____
Address: _____
Phone: _____

44. Site visited by Lyle E. Browning (Browning & Associates, Ltd.)
Address: 2240 Chartstone Drive, Midlothian, VA 23113
Phone: 804-357-2959 Date: 05/21/2013

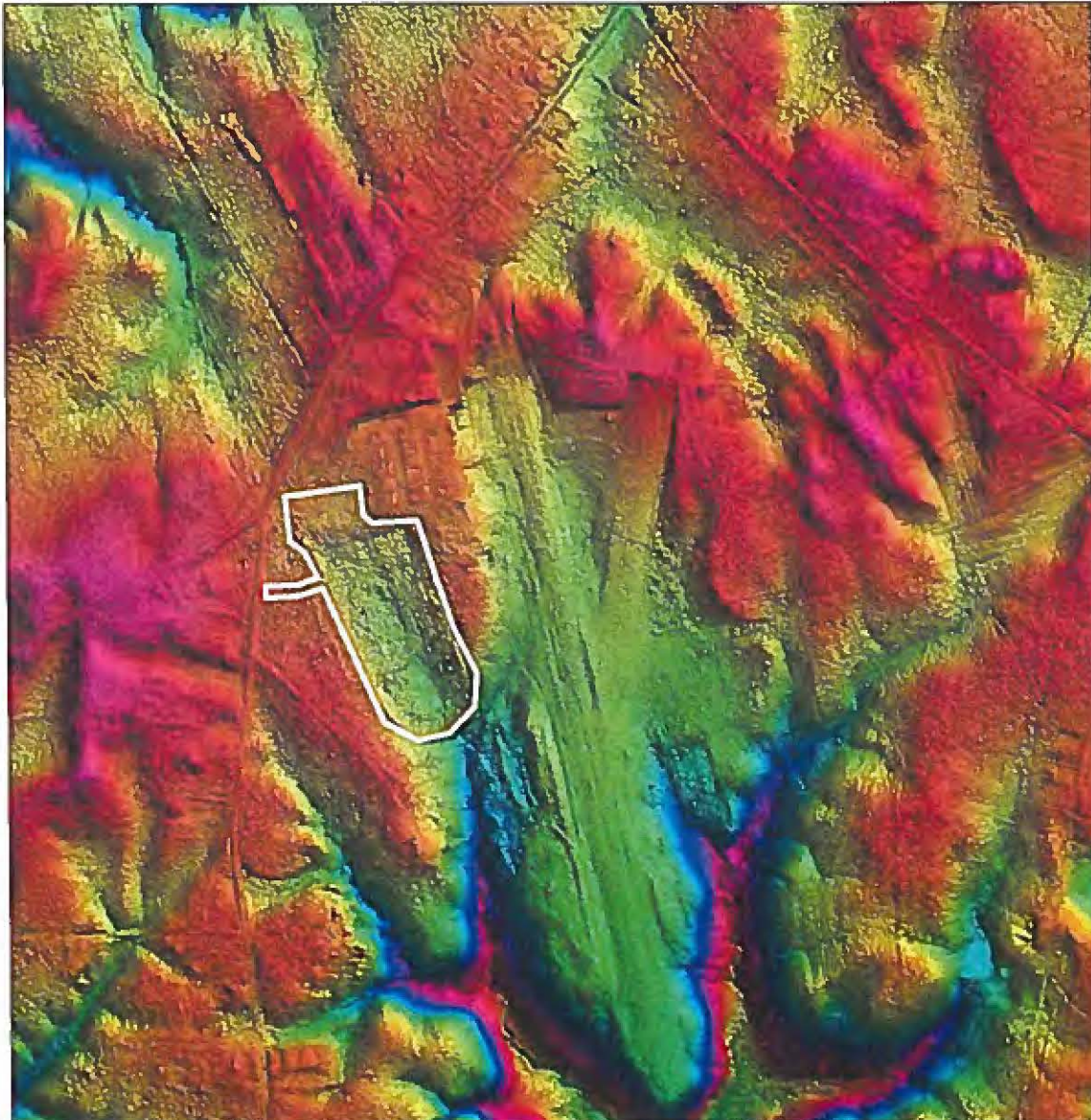
45. Form filled out by: Lyle E. Browning (Browning & Associates, Ltd.)
Address: 2240 Chartstone Drive, Midlothian, VA 23113
Phone: 804-357-2959 Date: 06/06/2013

46. Site Summary/Additional Comments (append additional pages if needed):

This remnant of a half mile dirt automobile racetrack was built in 1952 and functioned for a short period of time. There were wooden bleachers associated west of the track. As it exceeds 50 years in age, and it was representative of rural recreational activities starting in the first half of the 20th century, it was felt that the feature should be recorded. About half of it has been obliterated by construction of hangars at the north end. A probable road trace lead out of the track to the west.

The site is represented by an earthen berm and a flat semi-oval area inside the berm. It is overgrown with trees and brush at present. While representative of an early form of mechanized recreation and spectator sport, the physical remnants are paltry compared with the activities that took place on the racetrack. The automobile races were the attraction for the spectators plus the sense of camaraderie that these events engender among the spectators. Bleachers were built for the spectators on the Bumpy Oak Road side of the track on the outside of it and there were staging, refill and repair areas for the cars on the interior as normal. What is left is a small remnant of the activities, but represents a typical earthen track of the period wherein the cars and the spectators were in very close proximity. The racetrack ran modified stock cars from about 1952-54 and then it was used for a year or so as a motorcycle track using the infield as the track. After about 1955 the track was no longer used. The site is not felt to be eligible for the NRHP.

LIDAR image



MARYLAND ARCHEOLOGICAL SITE SURVEY: HISTORIC DATA FORM

Site Number 18CH835

1. Site class (check all applicable, check at least one from each group):

- a. domestic
 industrial
 transportation
 military
 sepulchre
 unknown

- b. urban
 rural
 unknown

c. standing structure:

- yes
 no
 unknown

d. above-grade/visible ruin:

- yes
 no
 unknown

2. Site Type (check all applicable):

- artifact concentration
 possible structure
 post-in-ground structure
 frame structure
 masonry structure
 farmstead
 plantation
 townsite
 mill (specify: _____)
 raceway
 quarry
 furnace/forge

_____ other industrial (specify):

- road/railroad
 wharf/landing
 bridge
 ford
 battlefield
 military fortification
 military encampment
 cemetery
 unknown
 other:
car racetrack

3. Ethnic Association:

- Native American
 African American
 Angloamerican
 other Euroamerican (specify):

- Hispanic
 Asian American
 unknown
 other:

4. Categories of material remains present (check all applicable):

- ceramics
 bottle/table glass
 other kitchen artifacts
 architecture
 furniture
 arms
 clothing
 personal items

- tobacco pipes
 activity items
 human skeletal remains
 faunal remains
 floral remains
 organic remains
 unknown
 other:

5. Diagnostics (choose from manual and give number recorded or observed):

6. Features present:

- yes
- no
- unknown

7. Types of features present:

- | | |
|---|--|
| <input type="checkbox"/> construction feature | <input type="checkbox"/> road/drive/walkway |
| <input type="checkbox"/> foundation | <input type="checkbox"/> depression/mound |
| <input type="checkbox"/> cellar hole/storage cellar | <input type="checkbox"/> burial |
| <input type="checkbox"/> hearth/chimney base | <input type="checkbox"/> railroad bed |
| <input type="checkbox"/> posthole/postmold | <input checked="" type="checkbox"/> earthworks |
| <input type="checkbox"/> paling ditch/fence | <input type="checkbox"/> raceway |
| <input type="checkbox"/> privy | <input type="checkbox"/> wheel pit |
| <input type="checkbox"/> well/cistern | <input type="checkbox"/> unknown |
| <input type="checkbox"/> trash pit/dump | <input checked="" type="checkbox"/> other: |
| <input type="checkbox"/> sheet midden | <input type="checkbox"/> interior oval |
| <input type="checkbox"/> planting feature | |

8. Flotation samples collected:

- yes
- no
- unknown

- analyzed:
- yes, by _____
 - no
 - unknown

9. Soil samples collected:

- yes
- no
- unknown

- analyzed:
- yes, by _____
 - no
 - unknown

10. Other analyses (specify): _____

11. Additional comments:

12. Form filled out by: Lyle E. Browning (Browning & Associates, Ltd.)
Address/Company Name: 2240 Chartstone Drive, Midlothian, VA 23113
Date: 06/06/2013



Maryland Department of Planning

Sustainable _____ Attainable

November 25, 2014

Mr. Jeff Wellman
Talbert & Bright
10105 Krause Road, Suite 100
Chesterfield, VA 23832

STATE CLEARINGHOUSE RECOMMENDATION

State Application Identifier: MD20141015-0831

Applicant: Talbert & Bright

**Project Description: Supplemental Environmental Assessment for Easement Acquisition/Obstruction Removal,
Maryland Airport, Indian Head**

Project Location: Charles County -Town of Indian Head

Approving Authority: U.S. Department of Transportation DOT/FAA

Recommendation: Consistent with Qualifying Comment(s) and Contingent Upon Certain Action(s)

Dear Mr. Wellman:

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, with attachments, constitutes the State process review and recommendation based upon comments received to date. 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, Transportation, the Environment, Charles County, Town of Indian Head and the Maryland Department of Planning, including the Maryland Historical Trust. As of this date, Town of Indian Head has not submitted comments. This recommendation is contingent upon the applicant considering and addressing any problems or conditions that may be identified by their review. Any comments received will be forwarded.

The Maryland Department(s) of Transportation, Charles County and the Maryland Department of Planning, including the Maryland Historical Trust found this project to be consistent with their plans, programs and objectives.

The Department of Transportation stated that "as far as can be determined at this time, the subject has no unacceptable impacts on plans or programs."

The Maryland Historical Trust 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.

The Maryland Department(s) of Environment and Natural Resources found this project to be generally consistent with their plans, programs and objectives, but included certain qualifying comments summarized below.

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,

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

Richard Eberhart Hall, AICP, Secretary
Amanda Stekem Conn, Esq., Deputy Secretary

Appendix C
Biotic Communities Survey Report



MillCreek

Environmental Consultants, LTD

**Technical Report:
Biotic Communities for Maryland Airport
Indian Head, Maryland**

Prepared for:

**Talbert & Bright, Inc.
10105 Krause Road, Suite 100
Chesterfield, Virginia 23832**

11 December 2013

Introduction

Mill Creek Environmental Consultants, Ltd. recently completed a survey and analysis of approximately 40± acres adjacent to and in the vicinity of Maryland Airport, Indian Head, Maryland. The purpose of this survey was to determine the impact of airport development, in the form of clearing and tree removal, on the existing biotic communities within the survey area boundaries. A map of the survey area and differing community types is at Appendix C1. The survey revealed two types of terrestrial habitat and one small aquatic habitat within the survey area boundaries. A discussion of these habitats follows.

Discussion

The following discussion characterizes the terrestrial and aquatic biotic communities located within the boundaries of the survey area. It is however, important to acknowledge that while this mapping shows boundaries, these boundaries are not straight line in the actual ecosystem. Instances of species outside of their drawn boundaries do occur and can be observed throughout the entirety of the survey areas. The mapping is used to best depict the habitats in general.

Community A:

Community A consists of approximately 27± acres of mature mixed deciduous/coniferous forest. Trees in this community have experienced a long term of un-interrupted growth and have reached an estimated 50-65', in height. Dominant species prevalent throughout the community include Virginia pine (*Pinus virginiana*), White Oak (*Quercus alba*), Black Oak (*Quercus velutina*), American Beech (*Fagus grandifolia*), and hickories (*Carya spp.*), with lesser prevalent species being Sassafras (*Sassafras albidium*), Flowering Dogwood (*Cornus florida*), Red Maple (*Acer rubrum*), Sweetgum (*Liquidambar styraciflua*), American Holly (*Ilex opaca*), and Willow Oak (*Quercus phellos*).

In addition to multiple species of birds who nest and feed in the area, animals frequenting the area are White-tailed deer (*Odocoileus virginianus* L.), Raccoon (*Procyon lotor* L.), Gray Squirrel (*Sciurus carolinensis* L.), Striped Skunk (*Memphitis memphitis* L.), Eastern Cottontail (*Sylvilagus floridanus* L.), Red Fox (*Vulpes vulpes* L.), Gray Fox (*Urocyon cinereoargenteus* L.) and the Virginia Opossum (*Didelphis virginiana* L.).

Common reptiles and amphibians associated with this type community are: the Common Garter Snake (*Thamnophis sirtalis* L.), Rat Snake (*Elaphe obsoleta* L.), Common Kingsnake (*Lampropeltis getusus* L.), Copperhead (*Agkistrodon contortrix* L.), Eastern Box Turtle (*Terrapena carolina* L.), and various species of frogs and skinks.

Community B:

Community B consists of approximately 13± acres of regularly maintained residential lots. The vegetation on these lots ranges from singular instances of mature trees as those in community A to shrubs and grasses maintained for aesthetic value to the resident. This community also contains impervious surfaces such as driveways and roads. Many of the species mentioned in community A will visit the fringes of this community in their

foraging efforts. Small residential gardens and house waste serve as a source of food for some of the species in the area.

Aquatic Habitat

In addition to the terrestrial habitat discussed above, aquatic habitat does exist within the survey area boundaries. Approximately 281± linear feet of intermittent stream segment was found in the northwest corner of the survey area (Appendix C1). This stream bed averages about 4 feet in width with banks approximately 18-24" in height. Sheet-flow from the nearby roadway makes its way into this intermittent stream moving northwest (NW) out of the survey area. The substrate ranges from mud to coarse gravel in areas with locations of undercut banks and small point bars of deposition. While this habitat does not support fish species, it does provide suitable habitat for amphibious species such as frogs.

Conclusion

In conclusion, development of the off airport property in the form of tree clearing for the purpose of obstruction removal, will impact the biotic communities in the vicinity of the airport. It is not likely however, to impact any threatened or endangered species or their habitat.

REFERENCES

Alden, Peter, Brian Cassie, et al. 1999. National Audubon Society Field Guide to the Mid-Atlantic States. Alfred A. Knopf, Inc., New York, NY, 447 pp.

Fernald, M.L., 1950. Gray's Manual of Botany, 8th Edition. American Book Company, New York, 1632 pp.

Sutton, Ann and Myron Sutton. 1993. The Audubon Society Nature Guides: Eastern Forests, Alfred A. Knopf, Inc. New York, NY, 638 pp.

Reid, George K.. 1964. Ecology of Inland Waters and Estuaries, Reinhold Publishing Co., New York, NY, 375 pp.

Ward, Andy D. and William J. Elliot. 1995. Environmental Hydrology, CRC Press, Inc., Boca Raton, FL, 462 pp.





Appendix C1

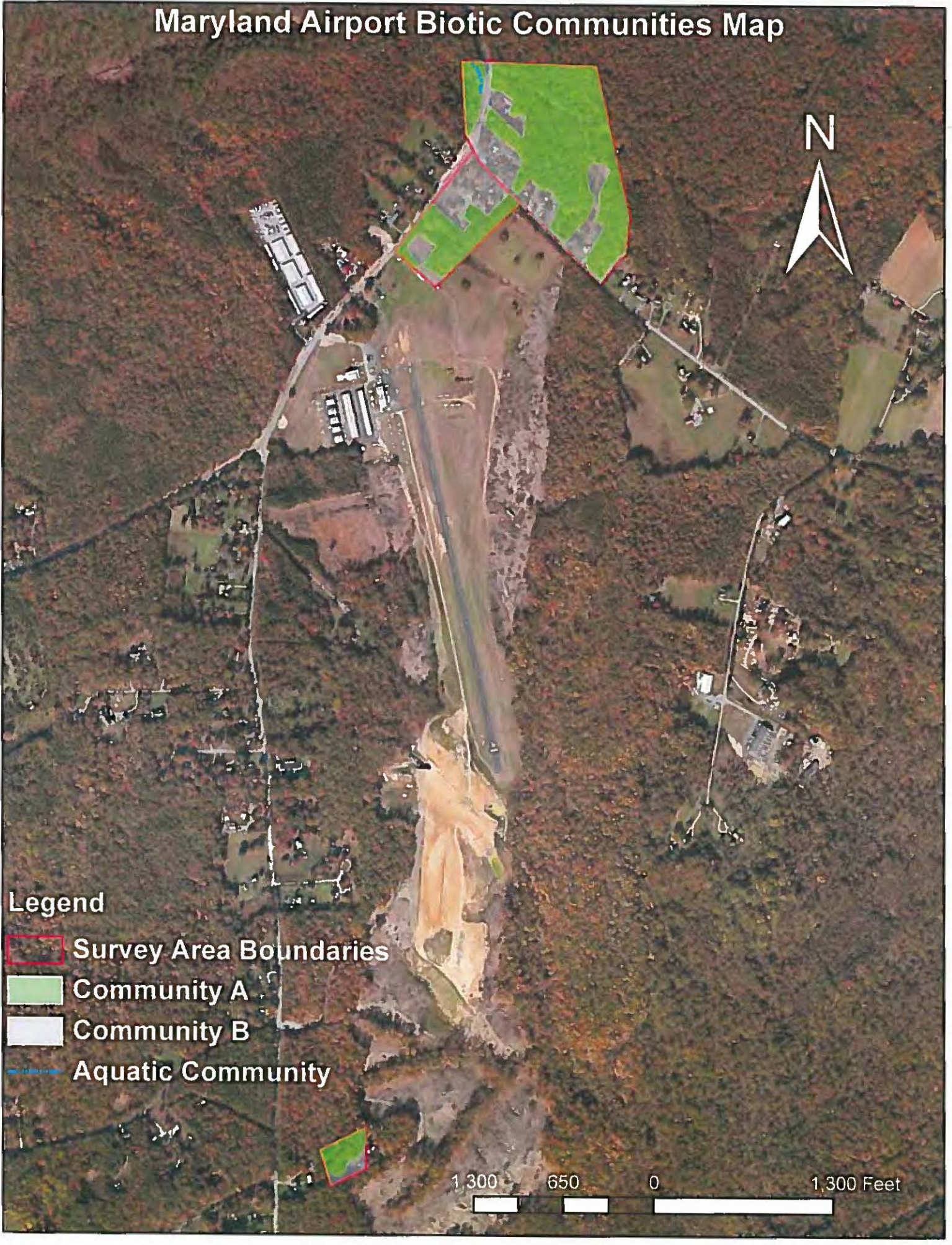
Map of Survey Area Boundary and Biotic Community Types

Maryland Airport Biotic Communities Map



Legend

-  Survey Area Boundaries
-  Community A
-  Community B
-  Aquatic Community



Introduction

Mill Creek Environmental Consultants, Ltd. recently completed a wetlands survey and delineation of these type ecosystems in the vicinity of Maryland Airport in Indian Head, Maryland. The survey area boundaries consisted of four distinct areas located to the north (N), northwest (NW), and southwest (SW) of the airport boundary. The limits of these survey areas and their associated wetlands are depicted in Appendix E1 of this document. The purpose of the wetlands survey and delineation was to provide current information and data on the location and type of these wetlands within the four survey areas in preparation for obstruction removal associated with the required safety surfaces tied to the airport's new runway. This knowledge is to be used for the planning and design of the project in order to facilitate the minimization of impacts to waters of the United States.

Methods

The wetlands delineation was performed according to technical guidance and procedures for identifying and delineating wetlands that may be subject to regulatory jurisdiction under Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbor Act. This guidance and procedures is found in the Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Regional as well as in the actual Corps of Engineers Wetlands Delineation Manual (TR Y-87-1).

The USDA Natural Resource Conservation Service (NRCS) Soil Survey Charles County, Maryland (2010), USF&WS National Wetlands Inventory (NWI) mapping, and Google Earth Aerials along with other available information was reviewed prior to and during the field survey.

Area Characteristics

Site Location and Drainage

This delineation was completed on four distinct survey areas (approx. 24± acres total) to the north (N), northwest (NW), and southwest (SW) of the airport property. Three of these survey areas can be found in vicinity of Pomfret Road (Rt. 227) and its intersection with MD-224. The remaining survey area, comprised of approximately .90± acres, is a single parcel 1.2 miles south of the 227/MD-224 intersection along Bumpy Oak Road. The elevation change throughout the survey areas is relatively minor, between 150-170 feet about sea level. The topography of the site is naturally level for the exception of those areas that slope to and away from the intermittent streams and tributaries in the vicinity. Waters originating within the survey areas are carried into small unnamed tributaries eventually leading into Mattawoman Creek, then the Potomac River and eventually the Chesapeake Bay.

General Description of the Site.

The overwhelming majority of all four survey areas consist of mature mixed hardwood/pine forests. Where not forested, the survey areas consist of manicured residential lawns and homes located on parcels throughout. This area is typical of rural areas throughout this region.

Hydrology

As a whole the hydrology of the area is dominated by Mattawoman Creek. Waters moving down the topographic gradient via over land sheet-flow, as well as ground water movement, make their way to small intermittent unnamed streams that lead into Mattawoman Creek and eventually the Potomac River that drains to the Bay. The 12th order HUC for the survey areas is 020700110102.

Soils.

The soil survey (USDA, NRCS Web Soil Survey 2010) shows that the survey areas are dominated by Beltsville silt loams. Within the survey area only one type of Beltsville loam is mapped as hydric. Additionally, a Grosstown-Woodstown Beltsville complex is also mapped and is classified as hydric by the NRCS. Beltsville loams and their associated complexes like the ones found in the survey area are hydric in this region where found in depressions.

Vegetation.

Vegetation throughout all four survey areas can be classified as mature forested mixed hardwood/pine. Areas that are not mature forested areas are typically manicured lawns for residential homes. Tree stratum are composed of species such as Pignut hickory (*Carya glabra*), White Oak (*Quercus alba*), Black Oak (*Quercus velutina*), Virginia Pine (*Pinus virginiana*), Red Maple (*Acer rubrum*), and American Holly (*Ilex Opaca*).

Wetland Discussion

This wetland delineation revealed the presence of approximately .34± acres of palustrine emergent (PEM) wetlands adjacent to MD-224 near its intersection with Pomfret Road. These wetlands are characterized by emergent grassy vegetation such as Soft Rush (*Juncus effusus*), and Broadleafed Cattail (*Typha latifolia*). Water flowing away from the impervious surface of MD-224 enters this area and slowly makes its way to a small intermittent stream immediately to its west.

In addition to the emergent wetland discussed above, approximately 270± linear feet of intermittent stream was discovered in their immediate vicinity. This stream flows north (N) parallel to MD-224 and then turns back west (W) into Mattawoman Creek and eventually the Potomac River.

Summary

The wetlands delineation and survey of all assigned survey areas revealed the presence of approximately .34± acres of PEM wetlands, in addition to 270' ± of intermittent streams. Impact to these areas will require a permit from the U.S. Army Corps of Engineers and possible compensatory mitigation.

An approved Jurisdictional Determination (JD) has been made confirming the extent of these wetland boundaries. In addition to the US Army Corps of Engineers determination

of jurisdictional wetlands within the survey area, the Maryland Department of Environment has also determined that the mapped impoundment within the survey area boundary should be treated as an isolated wetland and that any activity within this area will require a permit from the state.

REFERENCES

- Fernald, M.L., 1950. Gray's Manual of Botany, 8th Edition. American Book Company, New York, 1632 pp.
- US Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, US Army Engineer Waterways Experiment Station, Vicksburg, Mississippi, 100 pp. W/Appendices.
- U.S. Army Corps of Engineers. 2008. Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region, Technical Report ERDC/EL TR-08-30, U.S. Army Engineer and Research Development Center, Environmental Laboratory, Vicksburg, Mississippi, 162 pp.
- US Department of Agriculture. Soil Conservation Service. 1991. Hydric Soils of the United States, 3d Edition, Miscellaneous Publication Number 1491, Washington, D.C. 564 pp.
- US Department of Agriculture, Natural Resources Conservation Service (NRCS), , WEB, Ortho. 2010.
- US Fish and Wildlife Service, Biological Services Program, 1979. Classification of Wetlands and Deepwater Habitats of the United States. FWS/OBS-79/31, US Department of the Interior, Washington, D.C., 103 pp.

Appendix E1.

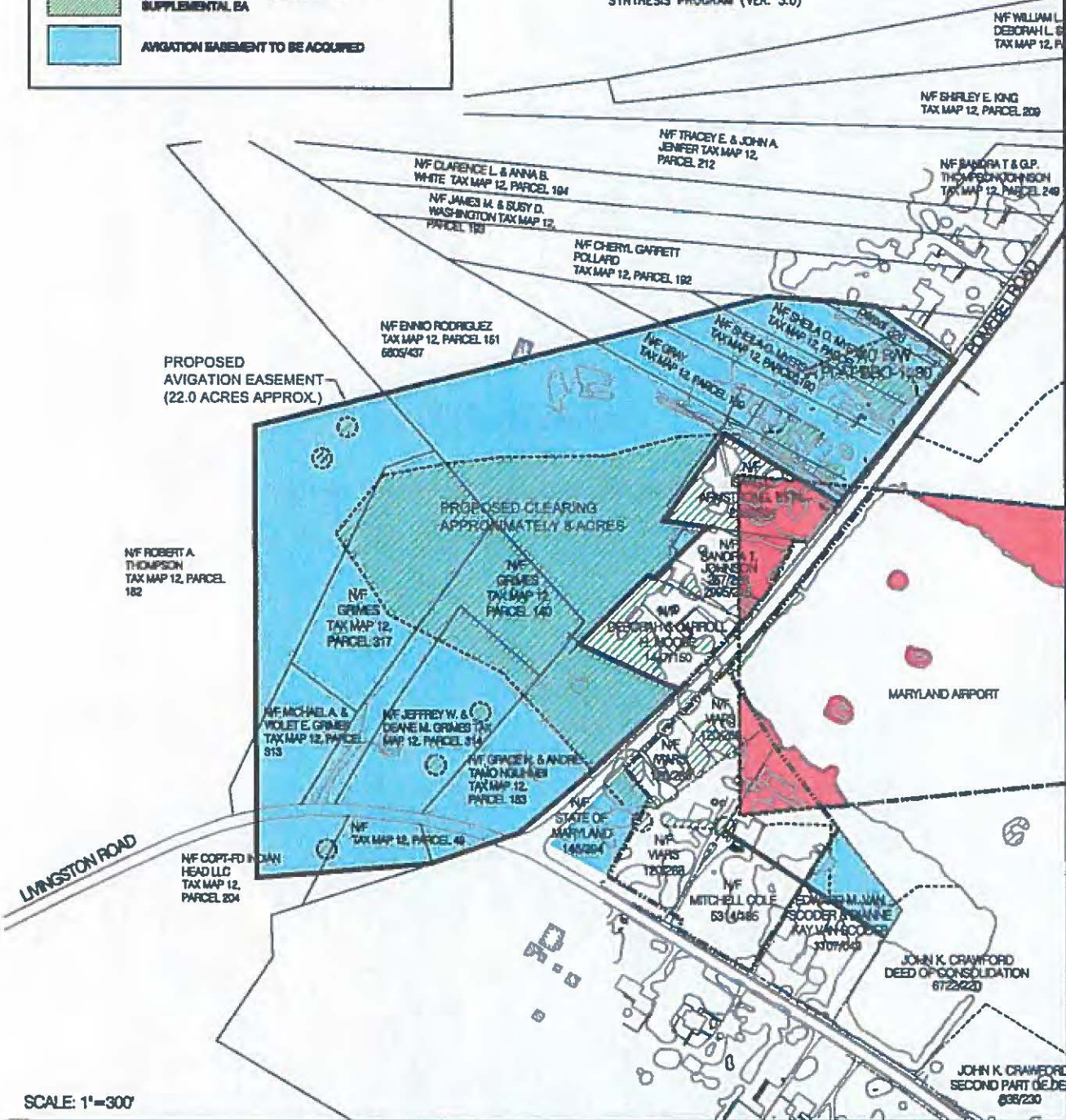
Exhibit Showing Wetlands Survey Areas

LEGEND

- TREE CLEARING ADDRESSED IN EA
- TREE CLEARING TO BE ADDRESSED IN SUPPLEMENTAL EA
- AVIGATION EASEMENT TO BE ACQUIRED



MAGNETIC VARIATION 10° 24.9' WEST
 NOAA GEOMAGNETIC FIELD
 SYNTHESIS PROGRAM (VER. 3.0)



SCALE: 1"=300'

Exhibit 1
Maryland Airport - (North)

TBI Project No. 5802-1202

TALBERT & BRIGHT
 ENGINEERING & PLANNING CONSULTANTS

Proposed Obstruction Removal & Avigation Easements
Requiring Written Re-evaluation of Environmental Assessment

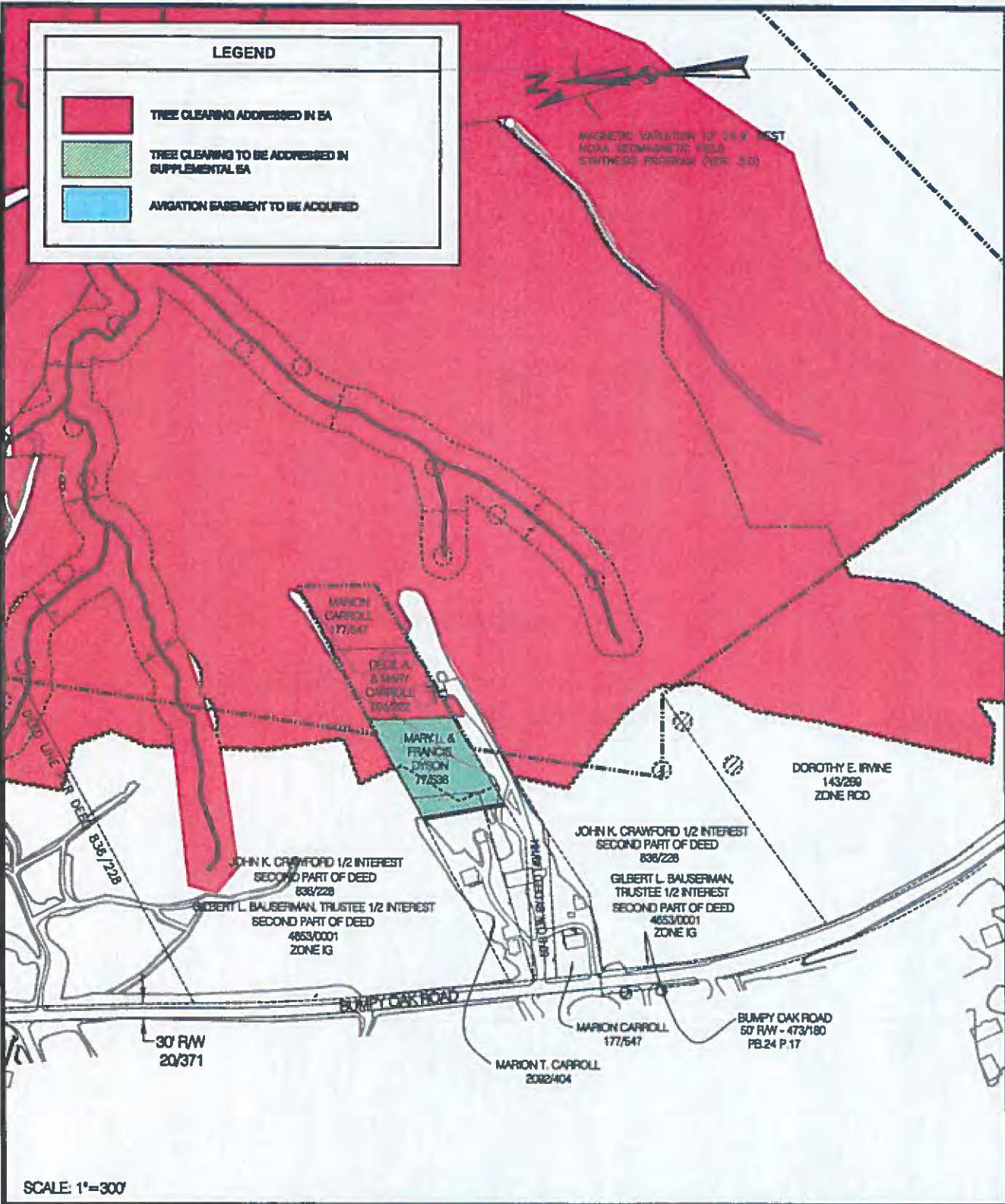
10105 KRAUSE ROAD, SUITE 100
 CHESTERFIELD, VIRGINIA 23812
 PHONE: 804-768-6878 FAX: 804-768-6871

LEGEND

| | |
|--|--|
| | TREE CLEARING ADDRESSED IN EA |
| | TREE CLEARING TO BE ADDRESSED IN SUPPLEMENTAL EA |
| | AVIGATION EASEMENT TO BE ACQUIRED |



MAGNETIC VARIATION 13° 24' WEST
 NOAA GEOMAGNETIC FIELD
 SYNTHESIS PROGRAM (VER. 3.0)



SCALE: 1"=300'

Exhibit 2
 Maryland Airport - (South)

TBI Project No. 5802-1202

TALBERT & BRIGHT
 ENGINEERING & PLANNING CONSULTANTS

Proposed Obstruction Removal & Avigation Easements
 Requiring Written Re-evaluation of Environmental Assessment

10105 KRAUSE ROAD, SUITE 100
 CHESTERFIELD, VIRGINIA 23832
 PHONE: 804-768-6878 FAX: 804-768-6871

Appendix E2.

**Aerial Photographs Showing Delineated
Wetlands Boundaries in Survey Area**

Maryland Airport Wetland Delineation Map (South)

Easement Acquisition Area

Legend

Wetlands

Impoundment

Stream

Data Point



200

100

0

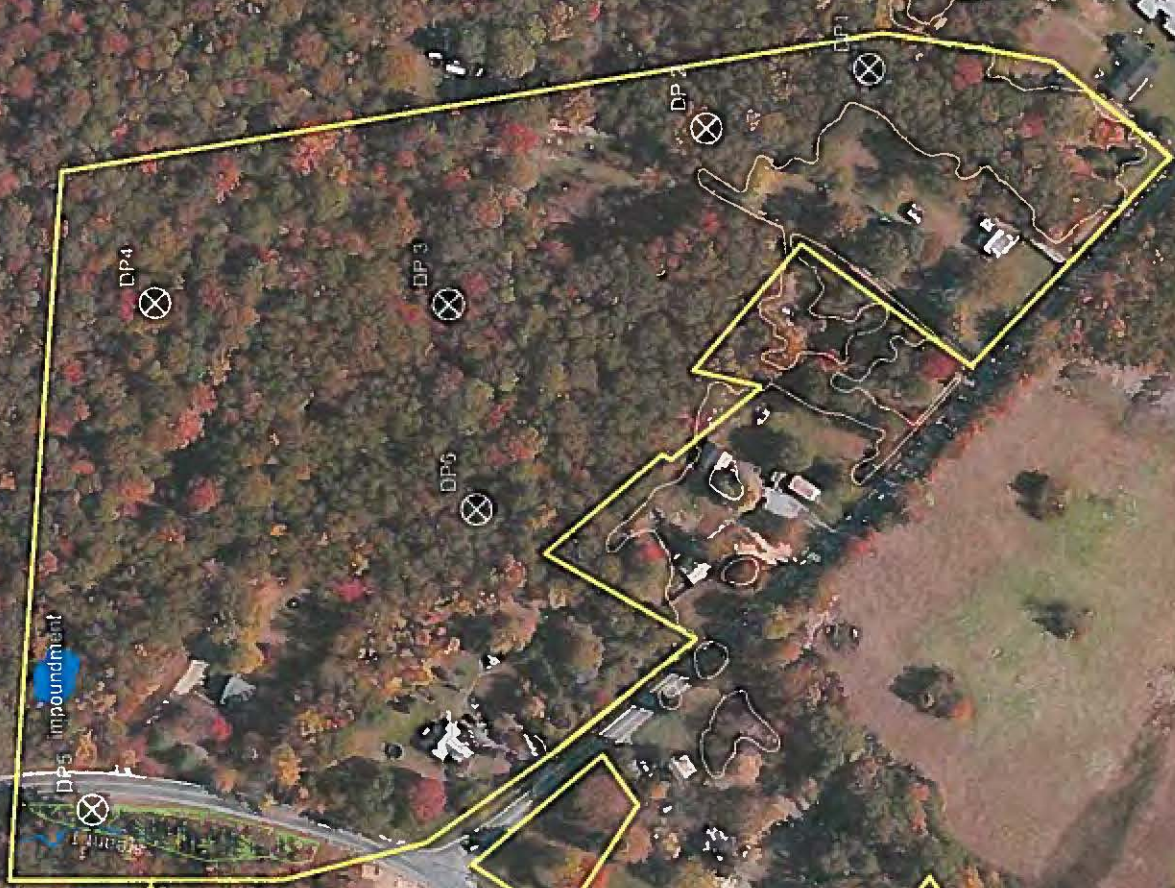
200 Feet



Maryland Airport Wetland Delineation (North)



Easement Acquisition Area



Legend

Wetlands

Impoundment

Stream

Data Point

420 Feet

210

420

Appendix E3.

**Corps of Engineers (COE) Delineation Confirmation and
Jurisdictional Determination (JD) W/Attachments**



DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, CORPS OF ENGINEERS
P.O. BOX 1715
BALTIMORE, MD 21203-1715

JUL 18 2013

Operations Division

Mr. Matt Neely
Mill Creek Environmental Consultants, LTD
11400 Longtown Drive
Midlothian, Virginia 23112

Dear Mr. Neely:

This is in response to an email dated May 1, 2013, requesting a jurisdictional determination (JD) and verification of the delineation of waters of the United States, including jurisdictional wetlands, on the Maryland Airport property in areas identified as Areas 1, 2, 3 and 4 in Pomonkey, Charles County, Maryland. Your project has been assigned the file name, NAB-2013-01142 (MARYLAND AIRPORT)

We have reviewed and concur with the Maryland Airport Delineation, dated April 17, 2013, for the approximately 30 acre site. In addition, a field inspection was conducted on June 7, 2013. This inspection indicated that the delineation of waters of the United States, including jurisdictional wetlands within the "Area of Review" on the enclosed drawing dated April 17, 2013, is accurate. The area indicated as "Area 1" has waters of the United States, including jurisdictional wetlands, and are regulated by this office pursuant to Section 10 of the Rivers and Harbors Act of 1899 and/or Section 404 of the Clean Water Act. There are no areas indicated as waters of the United States, including jurisdictional wetlands, regulated by this office pursuant to Section 404 of the Clean Water Act in Areas 2, 3 and 4. In addition, the area indicated as impoundment on the plan is not regulated by this office because it has no observed connection to Waters of the United States. You should be aware, however, that the impoundment may be considered an isolated nontidal wetland by the State of Maryland. The State of Maryland regulates isolated wetlands and any work proposed in these areas requires a permit from the Maryland Department of the Environment (MDE). Enclosed is a document that outlines the basis of our determination of jurisdiction over these areas.

This letter contains an approved jurisdictional determination for your subject site. This approved jurisdictional determination is valid for five years from the date of this letter unless new information warrants revision of the determination before the expiration date, or a District Engineer has identified, after public notice and comment, that specific geographic areas with rapidly changing environmental conditions merit re-verification on a more frequent basis. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and request for Appeal (RFA) form. If you request to appeal this determination you must submit a completed RFA form to the North Atlantic Division Office at the following address:

Mr. Michael G. Vissichelli
Administrative Appeals Review Officer
North Atlantic Division, Corps of Engineers
Fort Hamilton Military Community
General Lee Avenue Building 301
Brooklyn, NY 11252-6700

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit a RFA form, it must be received at the above address by **SEP 18 2013**. It is not necessary to submit an RFA form to the Division office if you do not object to the determination in this letter.

Please be advised that various development activities, within waters of the United States, including jurisdictional wetlands may be regulated by the Corps. Wetlands and other waters under the jurisdiction of the MDE may also be located on the parcel. You may contact the MDE at (410) 537-3768 for information regarding jurisdiction and permitting requirements.

You are reminded that any grading or filling of waters of the United States, including jurisdictional wetlands, is subject to Department of the Army authorization. State and local authorizations may also be required to conduct activities in these locations. In addition, the Interstate Land Sales Full Disclosure Act may require that prospective buyers be made aware, by the seller, of the Federal authority over any waters of the United States, including wetlands, being purchased.

A copy of this letter is being furnished to the Maryland Department of the Environment for informational purposes. In future correspondence and permit applications regarding this parcel, please include the file number located in the first paragraph of this letter. If you have any questions concerning this matter, please call Mrs. Erica Schmidt of this office at (410) 962-6029.

Sincerely,



Kathy B. Anderson
Chief, Maryland Section Southern

Enclosures

To identify how we can better serve you, we need your help. Please take the time to fill out our new customer service survey at:
<http://www.nab.usace.army.mil/Missions/Regulatory.aspx>

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): JUL 18 2013

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: CENAB-OP-RMS 2013-01142 (MARYLAND AIRPORT)

PROJECT LOCATION AND BACKGROUND INFORMATION: The area of review was determined by approximately 1,500 feet from the proposed ends of the new runway and consisted of four areas identified by Maryland Airport as to where removal of trees is required to meet the FAA regulations. No wetland areas were identified in areas 2, 3, and 4. Within Review Area 1 a small impoundment, emergent wetland, and stream were delineated. Area 1 is located on the northern side of the airport area. It is bordered by Livingston Road and Bumpy Oak Road and is within the approximately 1,500 foot radius from the end of the proposed runway. Area 1 is the only area which has waters of the United States present and is the bases for our determination.

State: MD County/parish/borough: Charles City: Pomonkey

Center coordinates of site (lat/long in degree decimal format): Lat. N 38.6081434°, Long. W76.0711040°

Name of nearest waterbody: Mattawoman Creek

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Mattawoman Creek flows into the Potomac River which is a TNW and an intrastate commerce waterway.

Name of watershed or Hydrologic Unit Code (HUC):

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date:

Field Determination. Date(s): 7 June 2013

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain:

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There are "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply):¹ Area 1

- TNWs, including territorial seas
- Wetlands adjacent to TNWs
- Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs
- Non-RPWs that flow directly or indirectly into TNWs
- Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
- Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
- Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
- Impoundments of jurisdictional waters
- Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: 270 linear feet: 4 width (ft) and/or acres.

Wetlands: 0.40 acres.

c. Limits (boundaries) of jurisdiction based on:

Elevation of established OHWM (if known): ~ 2 feet.

2. Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

- Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: A wetland impoundment was delineated on a parcel of land off of Livingston Road. The area was approximately .07 acres of standing water, leaf debris, fallen trees, and little vegetation. The leaf litter was blackened and there was standing water. The soils were hydric and the area was delineated as a wetland. The area had no outlet except a possible over flow area but there was no indication that the pond overflowed into any other regulated waters of the United States. The area is an isolated wetland area that would be regulated by the State of Maryland.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW
Identify TNW:

Summarize rationale supporting determination
2. Wetland adjacent to TNW
Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size:
Drainage area:
Average annual rainfall: inches
Average annual snowfall: inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

- Tributary flows directly into TNW.
 Tributary flows through tributaries before entering TNW.

Project waters are river miles from TNW.

¹ Supporting documentation is presented in Section III.F.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

Aquatic/wildlife diversity. Explain findings:

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis:

Approximately (0.07) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

| <u>Directly abuts? (Y/N)</u> | <u>Size (in acres)</u> | <u>Directly abuts? (Y/N)</u> | <u>Size (in acres)</u> |
|------------------------------|------------------------|------------------------------|------------------------|
| Yes | 0.07 | | |

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area:
 TNWs: linear feet width (ft), Or, acres.
 Wetlands adjacent to TNWs: acres.
2. RPWs that flow directly or indirectly into TNWs.

- Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
- Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: The stream channel has seasonal flows and intercepts groundwater during the spring months when the water table is high. The consultant stated that on previous site visits the stream was flowing. The channel had a defined bed and bank and an OHWM. The stream also intercepts overland flow from the road. It is determined that the stream flows at least three months a year.

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: 270 linear feet 4 width (ft).
 - Other non-wetland waters: acres.
- Identify type(s) of waters: .

3. **Non-RPWs⁸ that flow directly or indirectly into TNWs.**

- Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

- Tributary waters: linear feet width (ft).
 - Other non-wetland waters: acres.
- Identify type(s) of waters: .

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**

- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
- Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:

- Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: The wetland is located directly abutting the stream and flows directly into the tributary without separation by berm.

Provide acreage estimates for jurisdictional wetlands in the review area: 0.07 acres.

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**

- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**

- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. **Impoundments of jurisdictional waters.⁹**

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- Demonstrate that impoundment was created from "waters of the U.S.," or
- Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
- Demonstrate that water is isolated with a nexus to commerce (see E below).

⁸See Footnote # 3.

⁹To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):¹⁰

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain:
- Other factors. Explain:

Identify water body and summarize rationale supporting determination:

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: linear feet width (ft).
- Other non-wetland waters: acres.
- Identify type(s) of waters:
- Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
- Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:
- Other: (explain, if not covered above):

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource:
- Wetlands: acres.

- Other: (explain, if not covered above):

A wetland impoundment was delineated on a parcel of land off of Livingston Road. The area was approximately .07 acres of standing water, leaf debris, fallen trees, and little vegetation. The leaf litter was blackened and there was standing water. The soils were hydric and the area was delineated as a wetland. The area had no outlet except a possible over flow area but there was no indication that the pond overflowed into any other regulated waters of the United States. The area is an isolated wetland area that would be regulated by the State of Maryland.

Areas indicated as Area 2, 3 and 4 do not have waters of the United States present.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource:
- Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Maps submitted by Mill Creek Environmental Services on behalf of the applicant.
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
- Office concurs with data sheets/delineation report.

¹⁰ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

- Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps:
- Corps navigable waters' study:
- U.S. Geological Survey Hydrologic Atlas:
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name:
- USDA Natural Resources Conservation Service Soil Survey. Citation: Online Soil Map accessed on 1 May 2013
- National wetlands inventory map(s). Cite name:
- State/Local wetland inventory map(s):
- FEMA/FIRM maps:
 - 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date):
or Other (Name & Date):
- Previous determination(s). File no. and date of response letter:
- Applicable/supporting case law:
- Applicable/supporting scientific literature:
- Other information (please specify):

B. ADDITIONAL COMMENTS TO SUPPORT JD: Areas indicated as Area 2, 3 and 4 do not have waters of the United States present. The areas were reviewed because they are located within the 1,500 feet from the end of the runway with potential to have waters of the United States. During the site visit it was raining heavily due to Tropical Storm Andrea. The areas did not have any indication of wetlands or waters present on site during the site visit and previously during the delineation conducted by the consultant. Since the three areas did not have any waters or wetlands present no JD form was completed.

| | | |
|--|-------------------------|-------------------|
| Applicant: MARYLAND AIRPORT | File Number: 2013-01142 | Date: JUL 18 2013 |
| Attached is: | | See Section below |
| INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission) | | A |
| PROFFERED PERMIT (Standard Permit or Letter of permission) | | B |
| PERMIT DENIAL | | C |
| APPROVED JURISDICTIONAL DETERMINATION | | D |
| PRELIMINARY JURISDICTIONAL DETERMINATION | | E |

INITIAL PROFFERED PERMIT: You may accept or object to the permit.

ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the Baltimore District Engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations (JD) associated with the permit.

OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the Baltimore District Engineer. Your objections must be received by the Baltimore District Engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the Baltimore District Engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the Baltimore District Engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

PROFFERED PERMIT: You may accept or appeal the permit

ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the Baltimore District Engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the North Atlantic Division Engineer, ATTN: CENAD-PD-PSD-O, Fort Hamilton Military Community, Building 301, General Lee Avenue, Brooklyn, NY 11252-6700. This form must be received by the North Atlantic Division Engineer within 60 days of the date of this notice with a copy furnished to the Baltimore District Engineer.

PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the North Atlantic Division Engineer, ATTN: CENAD-PD-PSD-O, Fort Hamilton Military Community, Building 301, General Lee Avenue, Brooklyn, NY 11252-6700. This form must be received by the North Atlantic Division Engineer within 60 days of the date of this notice with a copy furnished to the Baltimore District Engineer.

APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new formation.

ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.

APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the North Atlantic Division Engineer, ATTN: CENAD-PD-PSD-O, Fort Hamilton Military Community, Building 301, General Lee Avenue, Brooklyn, NY 11252-6700. This form must be received by the North Atlantic Division Engineer within 60 days of the date of this notice with a copy furnished to the Baltimore District Engineer.

PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an appeal proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

If you have questions regarding this decision and/or the appeal process you may contact:

Sandy Zelen
Regulatory Branch, Baltimore District
Baltimore, MD 21203-1715
Telephone: (410) 962-6028 or 3670

If you only have questions regarding the appeal process you may also contact:

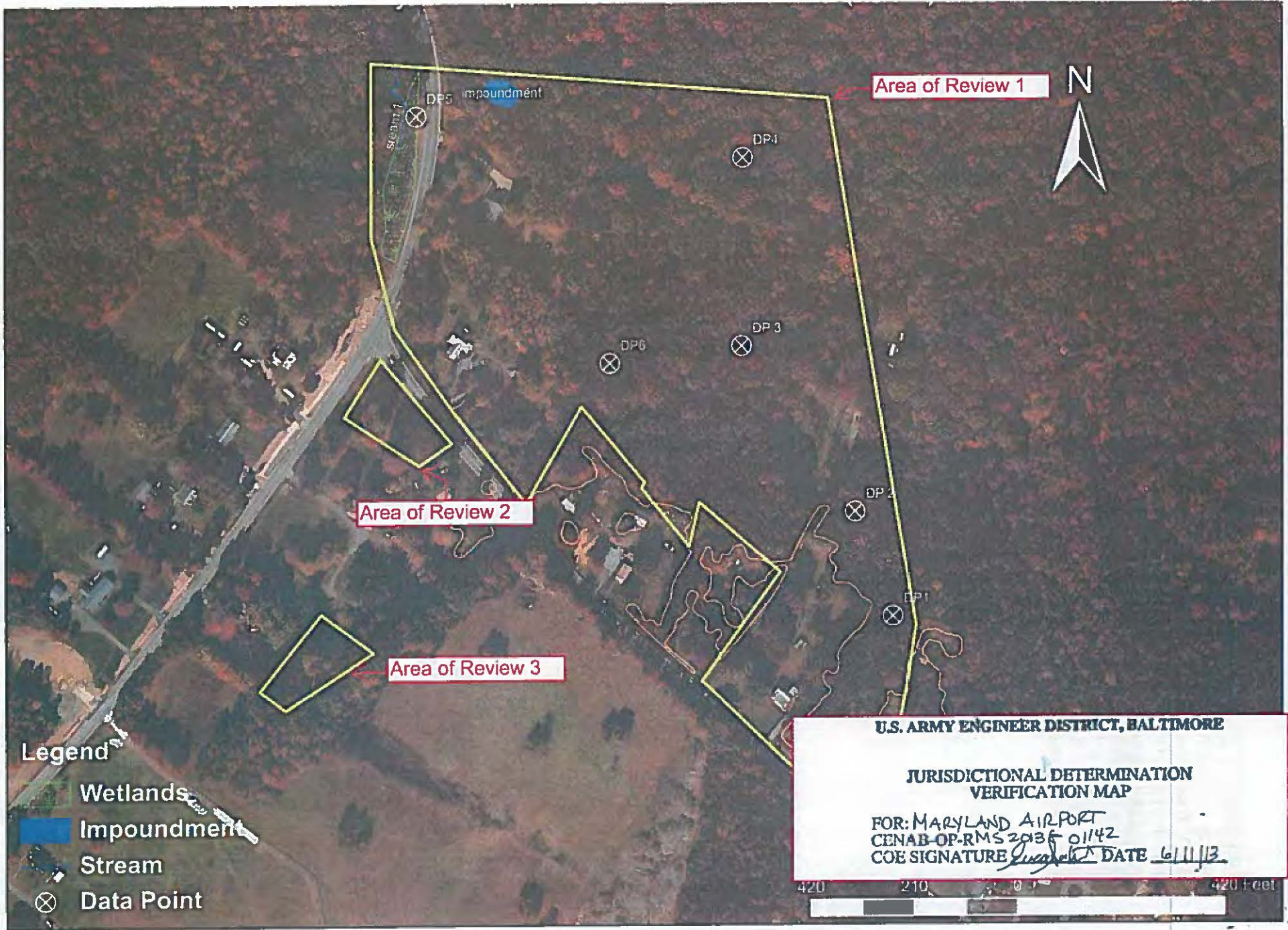
Mr. Michael G. Vissichelli
Administrative Appeals Review Officer
North Atlantic Division, Corps of Engineers Fort Hamilton
General Lee Avenue, Military Community Bldg. 301
Brooklyn, NY 11252-6700
Telephone: (718) 765-7163
Email: Michael.G.Vissichelli2@usace.army.mil

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day period of any site investigation, and will have the opportunity to participate in all site investigations.

Signature of appellant or agent.

Date: _____

Telephone number: _____



Area of Review 1

Area of Review 2

Area of Review 3

Legend

-  Wetlands
-  Impoundment
-  Stream
-  Data Point



U.S. ARMY ENGINEER DISTRICT, BALTIMORE

**JURISDICTIONAL DETERMINATION
VERIFICATION MAP**

FOR: MARYLAND AIRPORT
 CENAB-OP-RMS 2013-01142
 COE SIGNATURE *[Signature]* DATE 6/11/13

420 210 0 210 420 Feet

Maryland Airport Vicinity Map (Topo)

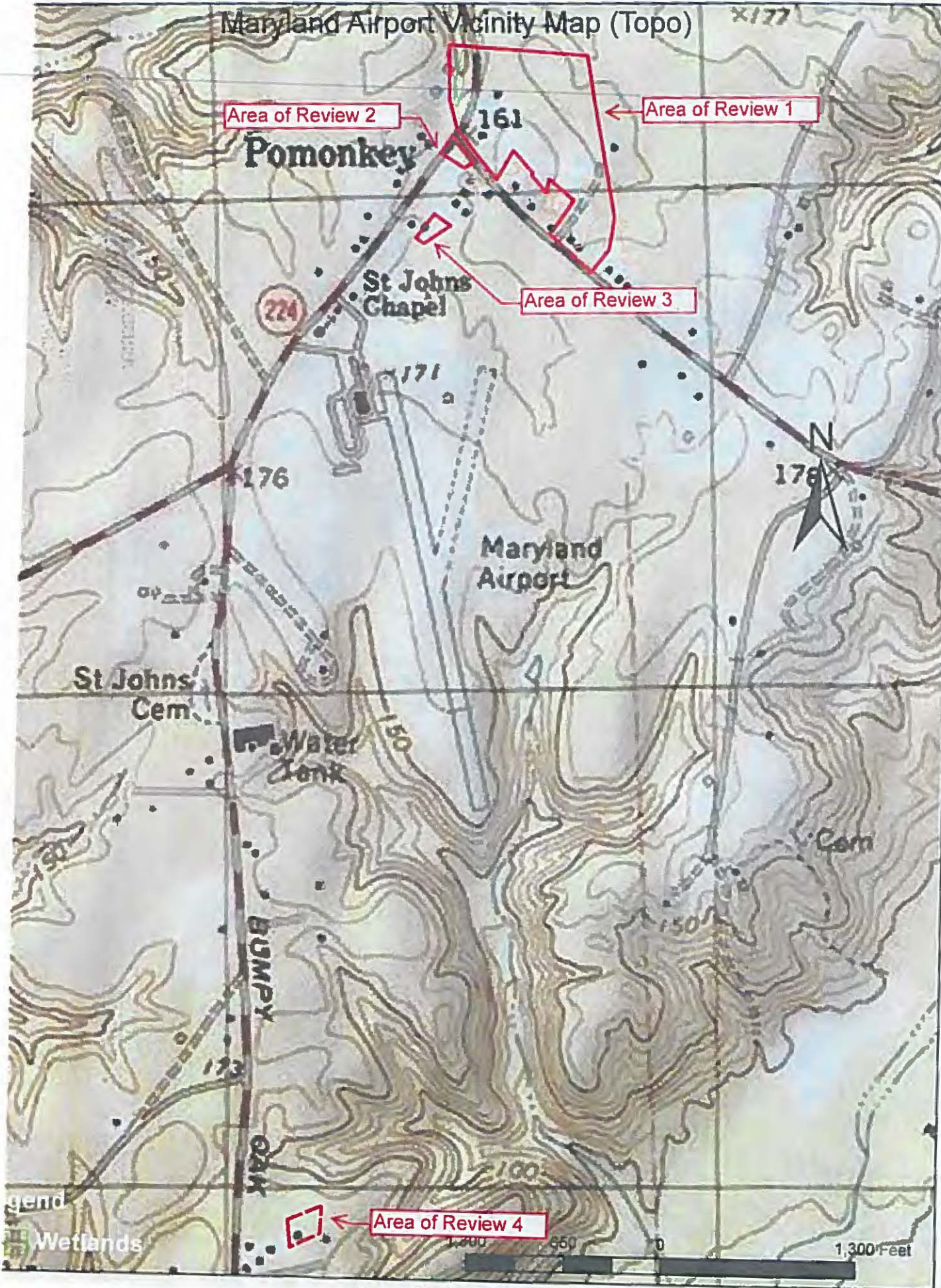
x177

Area of Review 2

Area of Review 1

Area of Review 3

Area of Review 4



Legend

Wetlands

1,300 Feet



Area of Review 4

Legend

-  Wetlands
-  Impoundment
-  Stream
-  Data Point

U.S. ARMY ENGINEER DISTRICT, BALTIMORE

**JURISDICTIONAL DETERMINATION
VERIFICATION MAP**

FOR: MARYLAND AIRPORT
CENAB-OP-RMS 203-01142
COE SIGNATURE *Greg Schult* DATE *6/11/13*



XFINITY Connect

millcreekenvironment@comcast.net

± Font Size -

Re: Maryland Airport

From : Lisa Dosmann -MDE- <lisa.dosmann@maryland.gov>

Mon, Sep 09, 2013 03:52 PM

Subject : Re: Maryland Airport**To :** millcreekenvironment@comcast.net

Good Afternoon,

So sorry, thanks for the reminder.

After conducting a site visit on August 29th at Maryland Airport, the Department determined that the depressional area is a regulated wetland and is considered connected by the State. If any impacts are proposed for this area or its adjacent 25-foot buffer then a Joint Federal/State Permit for Alteration to a Nontidal Wetland Waterway or 100-year floodplain needs to be submitted to the State. Please let me know if you have any questions or concerns.

V/R
Lisa

On Mon, Sep 9, 2013 at 3:44 PM, <millcreekenvironment@comcast.net> wrote:

Lisa

I was wondering if you could send me an email or a letter confirming the manner in which MDE will handle the impoundment we saw on the property near Maryland Airport. I know we had discussed this in the field, I just need to be able to close it out with my client.

I hope all is well with you.

Thanks
Matt

Matt Neely
Senior Environmental Scientist, PWD
Mill Creek Environmental Consultants, Ltd.
11400 Longtown Drive
Midlothian, VA 23112
804-739-2147 Office
757-329-0573 Cell

Lisa Dosmann
Natural Resources Planner
Wetland and Waterways Program Maryland Department of the Environment
1800 Washington Blvd., Ste. 430
Baltimore, Maryland 21230
lisa.dosmann@maryland.gov
Phone: (410) 537-3559
Fax: (410) 537-3751

The following information is provided for your reference:

1. The first section of the document contains the main findings of the study.

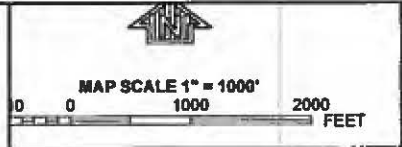
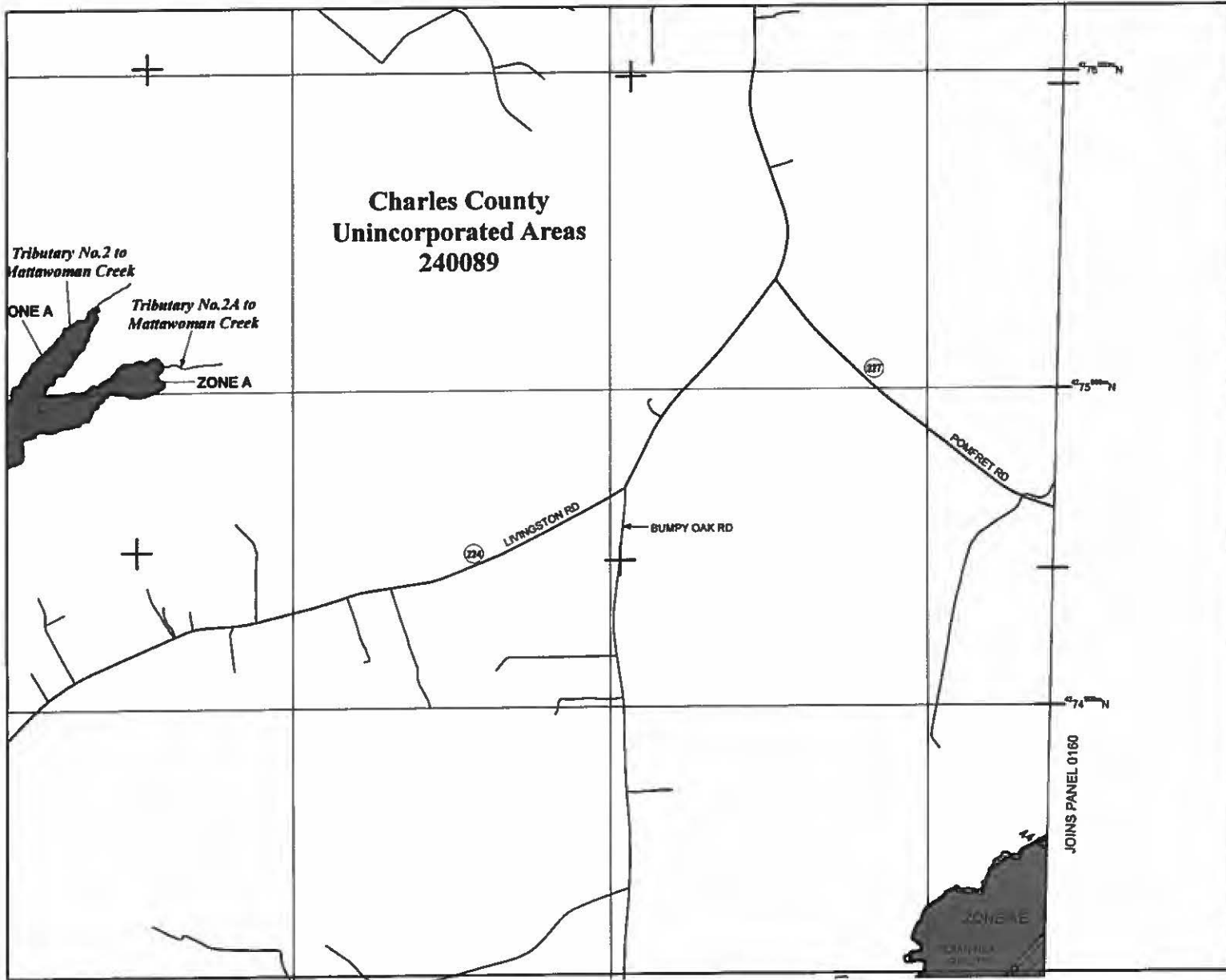
2. The second section discusses the implications of these findings for future research.

3. The third section provides a detailed analysis of the data collected during the study.

4. The fourth section concludes the report and offers recommendations for further action.

Appendix F
FEMA Flood Plains Map





PANEL 0160C

FIRM
FLOOD INSURANCE RATE MAP

**CHARLES COUNTY,
MARYLAND
AND INCORPORATED AREAS**

PANEL 155 OF 575
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTRACT
AGENCY: CHARLES COUNTY NUMBER: 240089 PANEL: 0160C SHEETS: 155 OF 575

Be sure to read the Map Symbols sheet before using this map. The Community Number shown on this map should be used in insurance applications for the actual community.

**MAP NUMBER
24017C0160C**

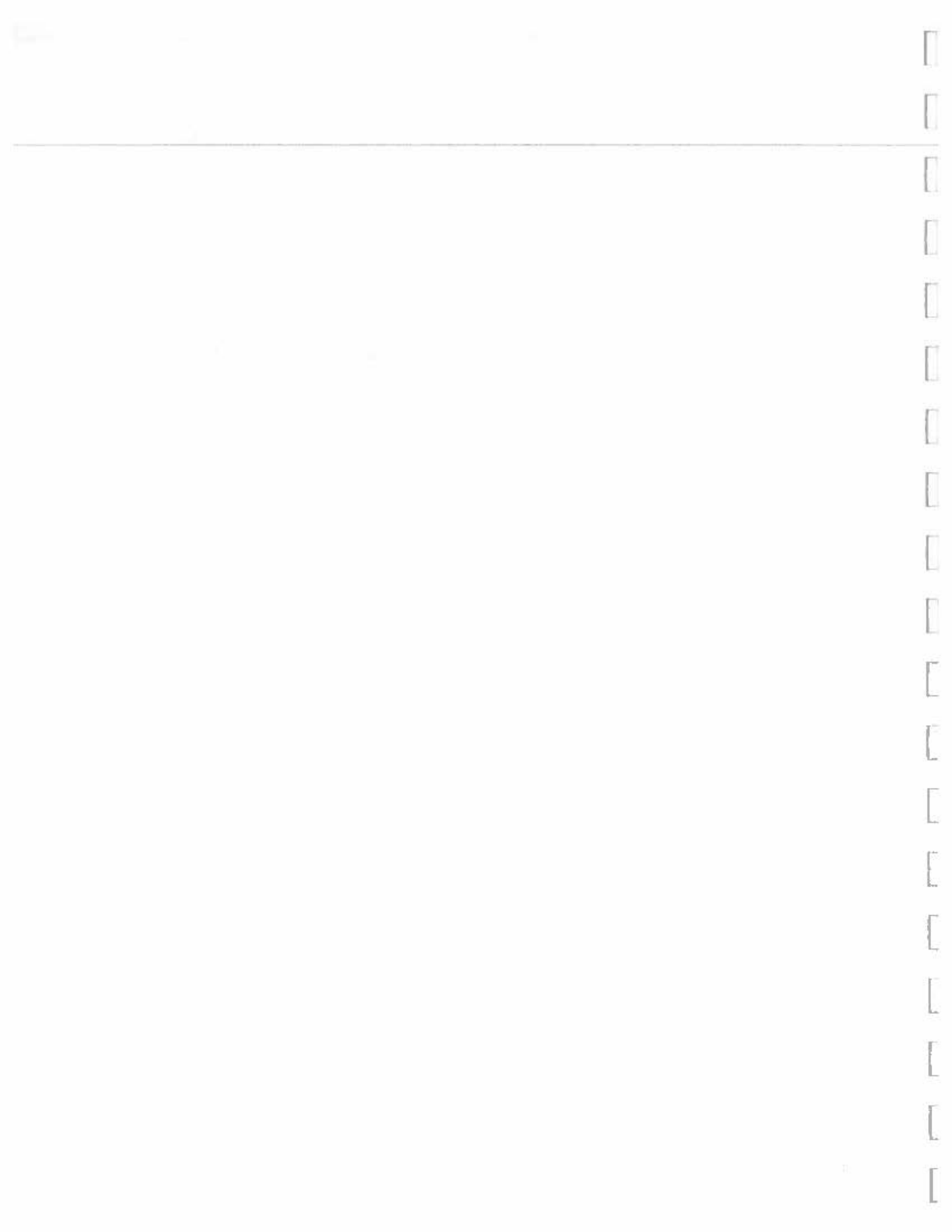
**EFFECTIVE DATE
SEPTEMBER 4, 2013**

Federal Emergency Management Agency

This is an official copy of a portion of the flood insurance rate map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps, contact the FEMA Flood Map Service at www.maf.fema.gov



Appendix G
NRCS Soil Survey Report



USDA United States
Department of
Agriculture

 **NRCS**
Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for Charles County, Maryland



September 30, 2013

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://soils.usda.gov/sqi/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<http://offices.sc.egov.usda.gov/locator/app?agency=nracs>) or your NRCS State Soil Scientist (http://soils.usda.gov/contact/state_offices/).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Soil Data Mart Web site or the NRCS Web Soil Survey. The Soil Data Mart is the data storage site for the official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the

Custom Soil Resource Report

individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

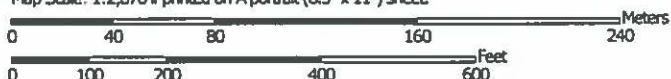
Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



Map Scale: 1:2,870 if printed on A portrait (8.5" x 11") sheet.




Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Charles County, Maryland
 Survey Area Data: Version 6, Mar 9, 2009

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 14, 2011—Nov 12, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

| Charles County, Maryland (MD017) | | | |
|------------------------------------|--|--------------|----------------|
| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
| BaB | Beltsville silt loam, 2 to 5 percent slopes | 6.3 | 26.7% |
| BaC | Beltsville silt loam, 5 to 10 percent slopes | 13.9 | 58.9% |
| BcA | Beltsville-Aquasco complex, 0 to 2 percent slopes | 2.7 | 11.3% |
| GwD | Grosstown-Woodstown-Beltsville complex, 5 to 15 percent slopes | 0.7 | 3.1% |
| Totals for Area of Interest | | 23.6 | 100.0% |

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

Custom Soil Resource Report

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Charles County, Maryland

BaB—Beltsville silt loam, 2 to 5 percent slopes

Map Unit Setting

Elevation: 10 to 400 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 52 to 57 degrees F
Frost-free period: 180 to 210 days

Map Unit Composition

Beltsville and similar soils: 70 percent
Minor components: 30 percent

Description of Beltsville

Setting

Landform: Broad interstream divides
Down-slope shape: Linear, convex
Across-slope shape: Convex, linear
Parent material: Silty eolian deposits over loamy fluviomarine deposits

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: 20 to 40 inches to fragipan
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 3.8 inches)

Interpretive groups

Farmland classification: All areas are prime farmland
Land capability (nonirrigated): 2e
Hydrologic Soil Group: C

Typical profile

0 to 3 inches: Silt loam
3 to 8 inches: Silt loam
8 to 20 inches: Silt loam
20 to 41 inches: Loam
41 to 65 inches: Sandy clay loam
65 to 71 inches: Very gravelly sandy clay loam
71 to 76 inches: Gravelly coarse sandy loam

Minor Components

Aquasco

Percent of map unit: 10 percent
Landform: Broad interstream divides
Landform position (three-dimensional): Interfluvium

Reybold

Percent of map unit: 10 percent

Custom Soil Resource Report

Landform: Broad interstream divides
Landform position (three-dimensional): Interfluve

Lenni, undrained

Percent of map unit: 5 percent
Landform: Depressions

Grosstown

Percent of map unit: 5 percent
Landform: Broad interstream divides
Landform position (three-dimensional): Interfluve

BaC—Beltsville silt loam, 5 to 10 percent slopes

Map Unit Setting

Elevation: 10 to 400 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 52 to 57 degrees F
Frost-free period: 180 to 210 days

Map Unit Composition

Beltsville and similar soils: 70 percent
Minor components: 30 percent

Description of Beltsville

Setting

Landform: Interfluves
Landform position (three-dimensional): Interfluve, side slope
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear
Parent material: Silty eolian deposits over loamy fluviomarine deposits

Properties and qualities

Slope: 5 to 10 percent
Depth to restrictive feature: 20 to 40 inches to fragipan
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 3.8 inches)

Interpretive groups

Farmland classification: Farmland of statewide importance
Land capability (nonirrigated): 3e
Hydrologic Soil Group: C

Typical profile

0 to 3 inches: Silt loam
3 to 8 inches: Silt loam

Custom Soil Resource Report

8 to 20 inches: Silt loam
20 to 41 inches: Loam
41 to 65 inches: Sandy clay loam
65 to 71 inches: Very gravelly sandy clay loam
71 to 76 inches: Gravelly coarse sandy loam

Minor Components

Grosstown

Percent of map unit: 15 percent
Landform: Broad interstream divides

Reybold

Percent of map unit: 5 percent
Landform: Broad interstream divides
Landform position (three-dimensional): Interfluve

Hoghole

Percent of map unit: 5 percent
Landform: Hillslopes
Landform position (three-dimensional): Side slope

Aquasco

Percent of map unit: 5 percent
Landform: Broad interstream divides, swales
Landform position (three-dimensional): Interfluve

BcA—Beltsville-Aquasco complex, 0 to 2 percent slopes

Map Unit Setting

Elevation: 10 to 360 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 52 to 57 degrees F
Frost-free period: 180 to 210 days

Map Unit Composition

Beltsville and similar soils: 50 percent
Aquasco and similar soils: 40 percent
Minor components: 10 percent

Description of Beltsville

Setting

Landform: Broad interstream divides
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear
Parent material: Silty eolian deposits over loamy fluviomarine deposits

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 20 to 40 inches to fragipan

Custom Soil Resource Report

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)

Depth to water table: About 20 to 40 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 4.2 inches)

Interpretive groups

Farmland classification: Farmland of statewide importance

Land capability (nonirrigated): 2w

Hydrologic Soil Group: C

Typical profile

0 to 3 inches: Silt loam

3 to 8 inches: Silt loam

8 to 20 inches: Silt loam

20 to 41 inches: Loam

41 to 65 inches: Sandy clay loam

65 to 71 inches: Very gravelly sandy clay loam

71 to 76 inches: Gravelly coarse sandy loam

Description of Aquasco

Setting

Landform: Broad interstream divides

Landform position (three-dimensional): Interfluvial

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Silty eolian deposits over loamy fluvio-marine deposits

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: 8 to 40 inches to fragipan

Drainage class: Somewhat poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.01 to 0.20 in/hr)

Depth to water table: About 10 to 16 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 4.0 inches)

Interpretive groups

Farmland classification: Farmland of statewide importance

Land capability (nonirrigated): 3w

Hydrologic Soil Group: C

Typical profile

0 to 4 inches: Silt loam

4 to 10 inches: Silt loam

10 to 20 inches: Silty clay loam

20 to 44 inches: Loam

44 to 72 inches: Clay loam

Minor Components

Lenni, undrained

Percent of map unit: 5 percent

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Landform: Depressions on broad interstream divides

Reybold

Percent of map unit: 5 percent

Landform: Fluviomarine terraces, broad interstream divides

Landform position (three-dimensional): Interfluve, tread

GwD—Grosstown-Woodstown-Beltsville complex, 5 to 15 percent slopes

Map Unit Setting

Elevation: 0 to 400 feet

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 52 to 57 degrees F

Frost-free period: 180 to 210 days

Map Unit Composition

Woodstown and similar soils: 30 percent

Grosstown and similar soils: 30 percent

Beltsville and similar soils: 20 percent

Minor components: 20 percent

Description of Grosstown

Setting

Landform: Fluviomarine terraces, hillslopes, drainhead complexes, stream terraces

Landform position (three-dimensional): Riser

Down-slope shape: Linear

Across-slope shape: Linear, convex

Parent material: Loamy and gravelly fluviomarine deposits

Properties and qualities

Slope: 5 to 15 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Moderate (about 6.7 inches)

Interpretive groups

Farmland classification: Not prime farmland

Land capability (nonirrigated): 4e

Hydrologic Soil Group: B

Typical profile

0 to 4 inches: Gravelly silt loam

4 to 20 inches: Silt loam

20 to 26 inches: Gravelly loam

26 to 71 inches: Extremely gravelly silt loam

Custom Soil Resource Report

71 to 80 inches: Extremely gravelly coarse sand

Description of Woodstown

Setting

Landform: Drainhead complexes, stream terraces, depressions, drainageways, hillslopes

Landform position (three-dimensional): Side slope, riser

Down-slope shape: Concave, linear

Across-slope shape: Concave, linear

Parent material: Loamy fluviomarine deposits

Properties and qualities

Slope: 5 to 15 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 2.00 in/hr)

Depth to water table: About 20 to 40 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Moderate (about 8.9 inches)

Interpretive groups

Farmland classification: Not prime farmland

Land capability (nonirrigated): 4e

Hydrologic Soil Group: C

Typical profile

0 to 8 inches: Sandy loam

8 to 28 inches: Loam

28 to 42 inches: Fine sandy loam

42 to 60 inches: Sandy loam

60 to 72 inches: Loamy sand

Description of Beltsville

Setting

Landform: Drainhead complexes, hillslopes

Landform position (three-dimensional): Side slope

Down-slope shape: Concave, linear, convex

Across-slope shape: Concave, convex, linear

Parent material: Silty eolian deposits over loamy fluviomarine deposits

Properties and qualities

Slope: 5 to 15 percent

Depth to restrictive feature: 20 to 40 inches to fragipan

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)

Depth to water table: About 20 to 40 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 3.8 inches)

Interpretive groups

Farmland classification: Not prime farmland

Land capability (nonirrigated): 4e

Custom Soil Resource Report

Hydrologic Soil Group: C

Typical profile

0 to 3 inches: Silt loam

3 to 8 inches: Silt loam

8 to 20 inches: Silt loam

20 to 41 inches: Loam

41 to 65 inches: Sandy clay loam

65 to 71 inches: Very gravelly sandy clay loam

71 to 76 inches: Gravelly coarse sandy loam

Minor Components

Reybold

Percent of map unit: 10 percent

Landform: Hillslopes, drainhead complexes

Landform position (three-dimensional): Interfluve

Lenni, undrained

Percent of map unit: 5 percent

Landform: Depressions

Issue

Percent of map unit: 5 percent

Landform: Drainageways, drainhead complexes

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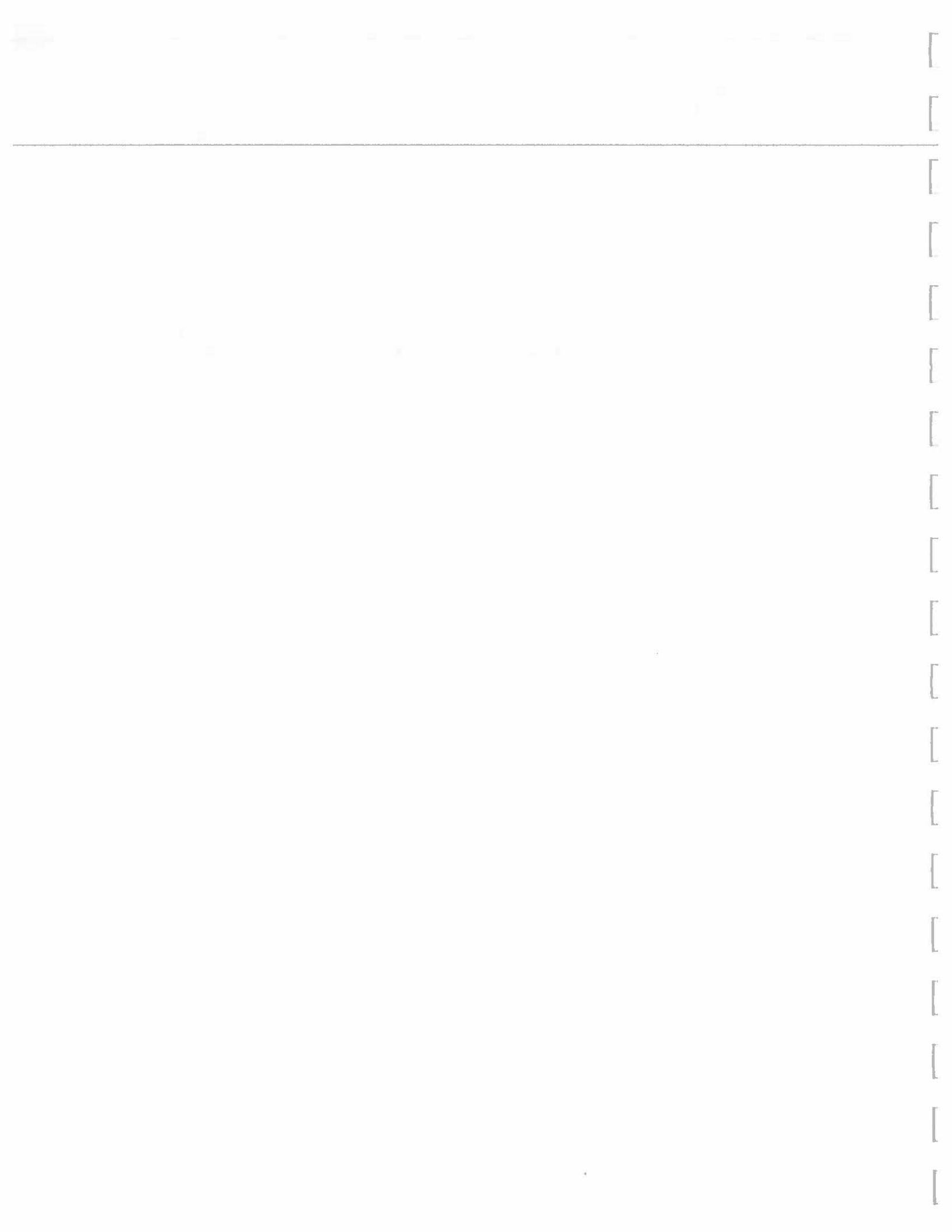
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Appendix H
Survey and Analysis of Hazardous Materials/Sites Report





MillCreek

Environmental Consultants, LTD

**Survey and Analysis for Hazardous Materials/Sites
Supplemental Environmental Assessment (EA)
for Maryland Airport, Indian Head, Maryland**

Completed for:

**Talbert & Bright, Inc.
10105 Krause Road, Suite 100
Chesterfield, VA 23832**

5 November 2013

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Enclosures:

- 1. Project Survey Area Map: Maryland Airport, Indian Head, Maryland**
- 2. ASTM Phase I Report, Environmental Data Resources, Inc., Maryland Airport, Indian Head Maryland**

Introduction

Mill Creek Environmental Consultants, Ltd. recently completed a survey and analysis of 24± acres of land in the vicinity of Maryland Airport, in Indian Head, Maryland. The survey was part of an Environmental Assessment (EA) associated with airport development and the possible removal of obstructions within the FAA mandated part 77 safety areas associated with airspace operations. A main objective of the survey was to determine if the project area might contain uncontrolled hazardous substances or might possibly be contaminated by any hazardous materials/substances/wastes.

Discussion

In order to assess the possibility of an area being contaminated by hazardous materials or substances, an investigator must have knowledge of the definition of the following terms:

- a. **Hazardous Material** – any substance or material that has been determined to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce (49 CFR part 172, table 172.101). This includes hazardous substances and hazardous wastes.
- b. **Hazardous Substances** – any element, compound, mixture, solution, or substances defined as a hazardous substance under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and listed in 40 CFR part 302. If released into the environment, hazardous substances may pose substantial harm to human health or the environment.
- c. **Hazardous Waste** – under the Resource Conservation and Recovery Act (RCRA) a waste is considered hazardous, if it is listed in, or meets the characteristics described in 40 CFR part 261, including ignitability, corrosivity, reactivity, or toxicity.

Any reconnaissance of a project area for the presence of any of the defined and listed hazardous materials, substances, or waste must consider the geographical setting of the site, its natural environment, and historic use.

Maryland Airport, located in Indian Head Maryland is a privately owned public use airport within Charles County. The airport and the survey areas of this study (see Appendix H1) sit approximately 2.5 miles northeast (NE) of the headwaters of Mattawoman Creek and approximately 2.3± miles east (E) of the Potmac River, in the vicinity of the intersection of Pomfret road and MD Rt. 224. The overwhelming majority of the area surveyed is 23± acres in the vicinity of the intersection of Pomfret Rd and Md Rt. 224, with approximately 1± acres of survey area located within a residential lot approximately 1.4± miles south (S) of the intersection along Bumpy Oak Rd.

The physiography of the environment in this area is typical rural residential with numerous residences sitting on lots of acreages .5 acres and larger, the majority of which possess mature stands of deciduous hardwoods and pines such as Virginia Pine (*Pinus virginiana L.*), Hickories (*Carya spp.*), American Beech (*Fagus grandifolia*

L.) and Tuliptrees (*Liriodendron tulipifera*). Non-forested areas typically consist of maintained residential lots that are consistently mowed.

During the physical investigation of the survey area large amounts of trash and residential debris was found on multiple lots within the boundaries. One home and lot, currently being used by the local fire department for training, possesses a significant amount of trash and home waste behind the structure. However, although messy, the debris and waste found at this location does not appear to be the type that could be a point source of pollution for its surrounding area. Other lots contain multiple vehicles that do not appear to be in a state of current operation and piles of debris usually situated next to outbuildings or sheds. None of these elements were out of the norm and are consistent with this type of rural residential physiography.

There is only one stream system that enters the survey area boundary in the vicinity of the Pomfret/224 intersection, immediately adjacent to MD 224 (see Appendix H1). This stream carries overland sheet flow, groundwater, and precipitation falling on the impervious road surfaces to the north (N) and then west (W) into Mattawoman Creek, which leads to the Potomac River. A physical investigation of this stream revealed no waste, debris or any contaminants within the stream. There was no evidence or signs of pollution within the streambed or on the surface of the waters that indicated dumping of toxic or hazardous materials in the vicinity.

As a component of the Hazardous Materials Site Survey for the EA, Mill Creek Environmental Consultants, Ltd. also obtained an Environmental Phase I Report from Environmental Data Resources, Inc.. This report included a search of all Federal, State, and local databases for instances of pollution or environmental contamination in accordance with the radius associated with ASTM standards for the survey area. The records search disclosed no US EPA RCRA (Resources Conservation and Recovery Act) Generators within the search radius. State and tribal entities also listed no current Leaking Underground Storage Tanks within the search radius.

The complete Phase I Report at Enclosure 2. shows all listed incidents of environmental contamination and degradation associated with their established radii. These include not only events but systems such as underground storage tanks which have malfunctioned and contaminated the environment.

Conclusion

Ground examination of the survey areas in the vicinity of Maryland Airport in Indian Head Maryland disclosed that the location was free and clear of hazardous materials and/or toxic substances. The overall natural environment of the area is relatively clean with residential waste being the only major concern. There does not appear to be any cases of dumping or storing toxic or hazardous materials within the survey area boundaries.

There was one FUDS record returned approximately .5-1 miles away from the southern survey area (see Appendix H2, Report 2, Executive Summary). A FUDS site is a listing that "... includes locations of Formerly Used Defense Sites Properties where the US Army Corps Of Engineers is actively working or will take necessary cleanup actions." The location of this site can be seen in the mapping associated with EDR's second report.

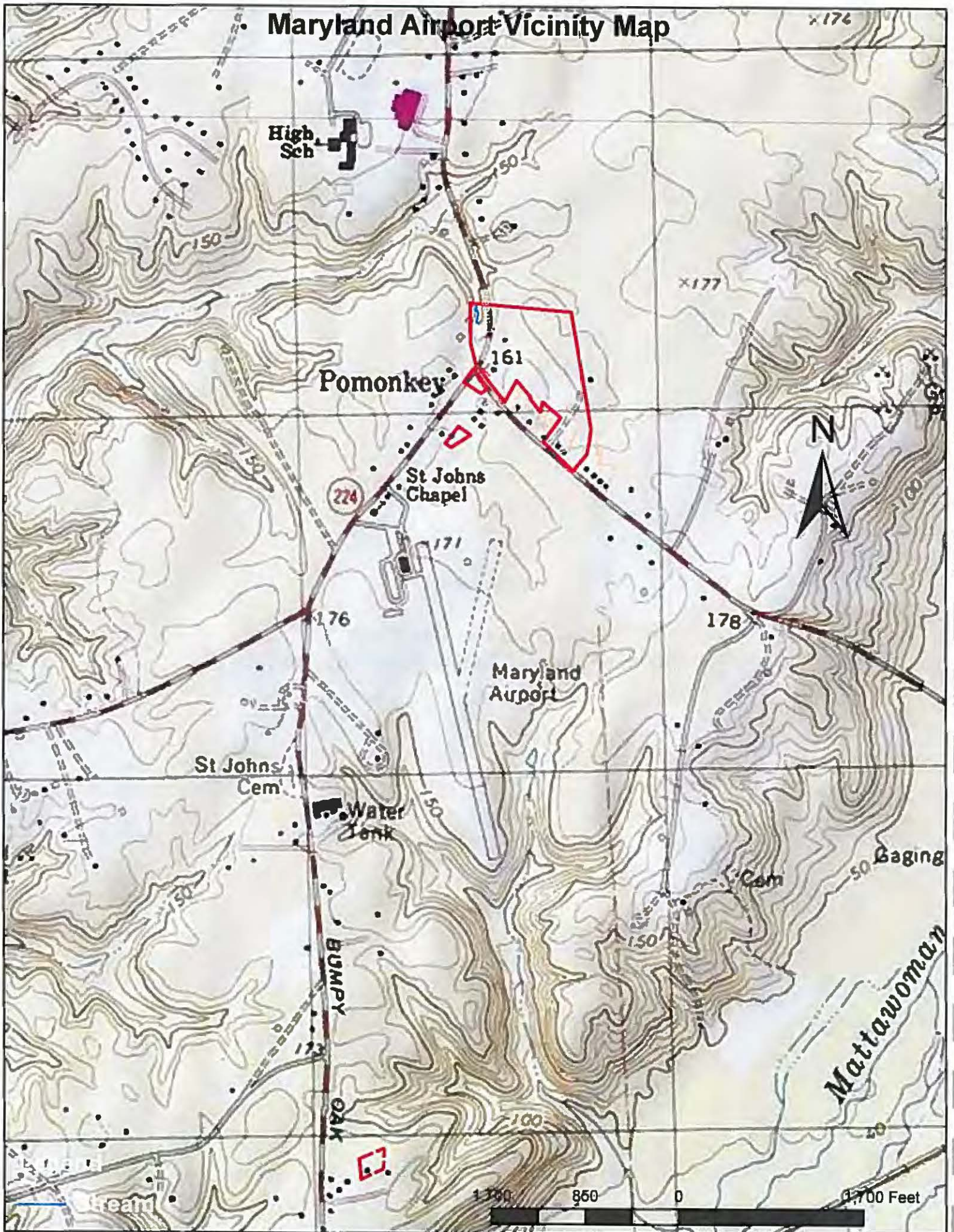
REFERENCES

- Bregman, J.I., Craig Kelley, and James R. Melchor. 1996. Environmental Compliance Handbook, CRC Lewis Publishers, Boca Raton, FL, 417 pp.
- Jain, R.K., L.V. Urban, G.S. Stacey, and H.E. Balbach. 1993. Environmental Assessment. McGraw-Hill, Inc., New York, NY, 526 pp.
- US Department of Transportation. 2004. Federal Aviation Administration Order 1050.1E Subj: Environmental Impacts: Policies and Procedures, Washington, DC, 185 pp.

Enclosure 1.

**Project Survey Area Maps
Maryland Airport, Indian Head Maryland**

Maryland Airport Vicinity Map



Heam

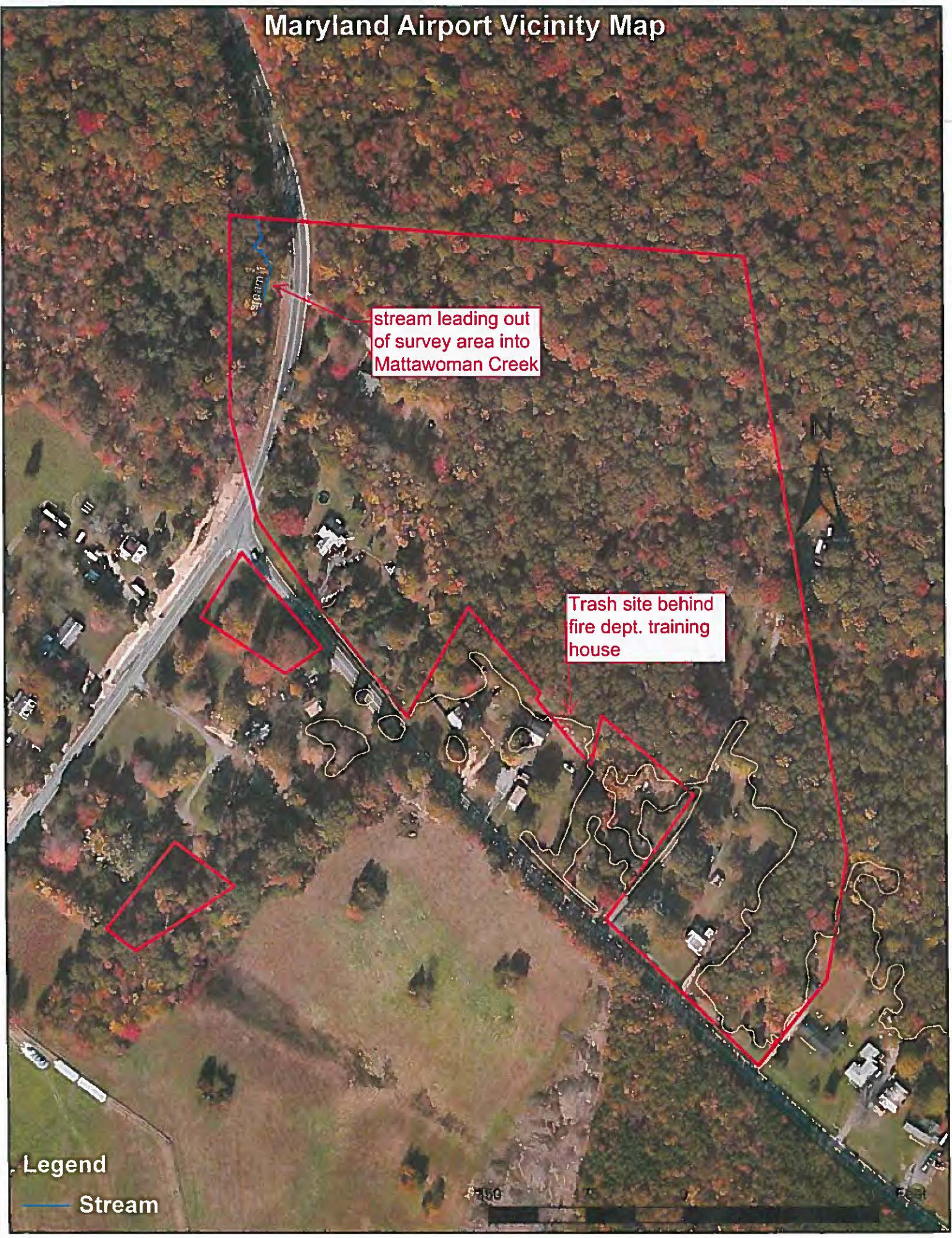


Maryland Airport Vicinity Map

stream leading out of survey area into Mattawoman Creek

Trash site behind fire dept. training house

Legend
— Stream



Maryland Airport Southern Survey Area



yard debris, waste

DP7
⊗

boats



Enclosure 2.

**ASTM Phase I Report, Environmental Data Resources, Inc.
Maryland Airport, Indian Head, Maryland
Reports I and II**

Maryland Airport, Indian Head Maryland I
3900 Livingston Road
Indian Head, MD 20640

Inquiry Number: 3777586.1s
November 05, 2013

The EDR Radius Map™ Report



440 Wheelers Farms Road
Milford, CT 06461
Toll Free: 800 352 0050
www.edrnet.com

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GEOCHECK ADDENDUM

GeoCheck - Not Requested

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

3900 LIVINGSTON ROAD
INDIAN HEAD, MD 20640

COORDINATES

Latitude (North): 38.6081000 - 38° 36' 29.16"
Longitude (West): 77.0712000 - 77° 4' 16.32"
Universal Transverse Mercator: Zone 18
UTM X (Meters): 319652.7
UTM Y (Meters): 4275116.0
Elevation: 169 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 38077-E1 PORT TOBACCO, MD
Most Recent Revision: 1982

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 2011, 2012
Source: USDA

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 7 of the attached EDR Radius Map report:

| <u>Site</u> | <u>Database(s)</u> | <u>EPA ID</u> |
|---|--------------------|---------------|
| MARYLAND AIRPORT - RUNWAY 2-20 & 3900 LIVINGSTON ROAD INDIAN HEAD, MD | FINDS | N/A |

EXECUTIVE SUMMARY

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL..... National Priority List
Proposed NPL..... Proposed National Priority List Sites
NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

CERCLIS..... Comprehensive Environmental Response, Compensation, and Liability Information System
FEDERAL FACILITY..... Federal Facility Site Information listing

Federal CERCLIS NFRAP site List

CERC-NFRAP..... CERCLIS No Further Remedial Action Planned

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG..... RCRA - Large Quantity Generators
RCRA-SQG..... RCRA - Small Quantity Generators
RCRA-CESQG..... RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

US ENG CONTROLS..... Engineering Controls Sites List
US INST CONTROL..... Sites with Institutional Controls
LUCIS..... Land Use Control Information System

Federal ERNS list

ERNS..... Emergency Response Notification System

State- and tribal - equivalent CERCLIS

SHWS..... Notice of Potential Hazardous Waste Sites

EXECUTIVE SUMMARY

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Permitted Solid Waste Disposal Facilities

State and tribal leaking storage tank lists

OCPCASES..... Oil Control Program Cases
HIST LUST..... Recovery Sites
INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

UST..... Registered Underground Storage Tank List
AST..... Permitted Aboveground Storage Tanks
INDIAN UST..... Underground Storage Tanks on Indian Land
FEMA UST..... Underground Storage Tank Listing

State and tribal institutional control / engineering control registries

ENG CONTROLS..... Engineering Controls Site listing
INST CONTROL..... Voluntary Cleanup Program Applicants/Participants

State and tribal voluntary cleanup sites

INDIAN VCP..... Voluntary Cleanup Priority Listing
VCP..... Voluntary Cleanup Program Applicants/Participants

State and tribal Brownfields sites

BROWNFIELDS..... Eligible Brownfields Properties

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

ODI..... Open Dump Inventory
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations
SWRCY..... Recycling Directory
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL..... Clandestine Drug Labs
US HIST CDL..... National Clandestine Laboratory Register

Local Lists of Registered Storage Tanks

HIST UST..... Historical UST Registered Database

Local Land Records

LIENS 2..... CERCLA Lien Information

EXECUTIVE SUMMARY

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System
SPILLS 90..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR..... RCRA - Non Generators
DOT OPS..... Incident and Accident Data
DOD..... Department of Defense Sites
FUDS..... Formerly Used Defense Sites
CONSENT..... Superfund (CERCLA) Consent Decrees
ROD..... Records Of Decision
UMTRA..... Uranium Mill Tailings Sites
US MINES..... Mines Master Index File
TRIS..... Toxic Chemical Release Inventory System
TSCA..... Toxic Substances Control Act
FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing
SSTS..... Section 7 Tracking Systems
ICIS..... Integrated Compliance Information System
PADS..... PCB Activity Database System
MLTS..... Material Licensing Tracking System
RADINFO..... Radiation Information Database
RAATS..... RCRA Administrative Action Tracking System
RMP..... Risk Management Plans
UIC..... Underground Injection Wells Database
DRYCLEANERS..... Registered Drycleaning Facilities
NPDES..... Wastewater Permit Listing
AIRS..... Permit and Facility Information Listing
LEAD..... Lead Inspection Database
INDIAN RESERV..... Indian Reservations
SCRD DRYCLEANERS..... State Coalition for Remediation of Drycleaners Listing
2020 COR ACTION..... 2020 Corrective Action Program List
US AIRS..... Aerometric Information Retrieval System Facility Subsystem
PRP..... Potentially Responsible Parties
LEAD SMELTERS..... Lead Smelter Sites
Financial Assurance..... Financial Assurance Information Listing
LRP..... Land Restoration Program
EPA WATCH LIST..... EPA WATCH LIST
US FIN ASSUR..... Financial Assurance Information
PCB TRANSFORMER..... PCB Transformer Registration Database
COAL ASH..... Coal Ash Disposal Site Listing
COAL ASH DOE..... Steam-Electric Plant Operation Data
COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP..... EDR Proprietary Manufactured Gas Plants
EDR US Hist Auto Stat..... EDR Exclusive Historic Gas Stations

EXECUTIVE SUMMARY

EDR US Hist Cleaners..... EDR Exclusive Historic Dry Cleaners

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were not identified.

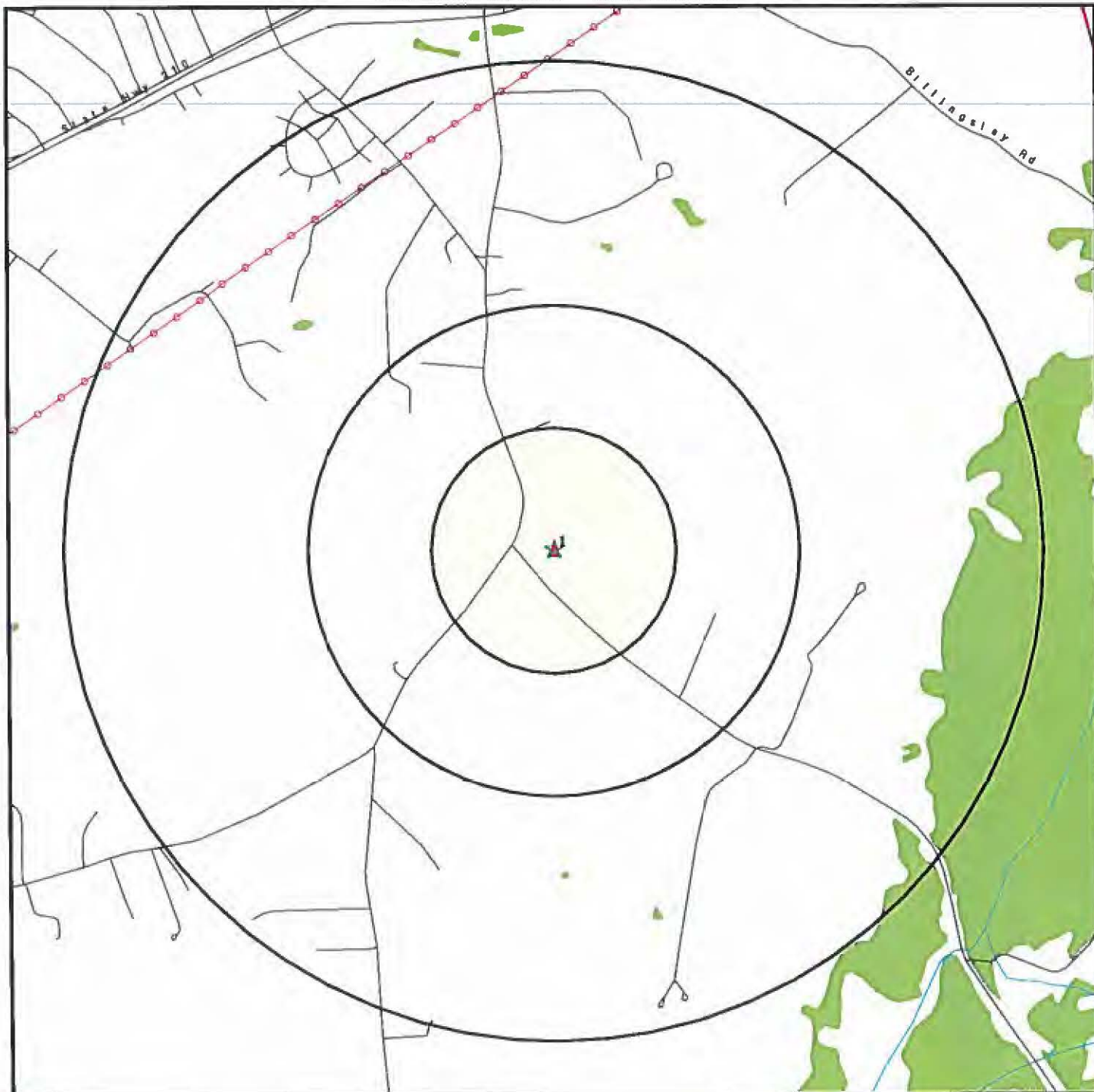
Unmappable (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 43 records.

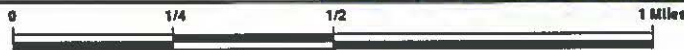
| <u>Site Name</u> | <u>Database(s)</u> |
|------------------------------------|--------------------------|
| CHARLES COUNTY SANITARY LANDFILL | LRP |
| MATTAWOMAN CREEK | LRP |
| SOUTHERN MARYLAND OIL, INC.-BRYANS | ENG CONTROLS |
| ROBBY'S SUNOCO /BRYANS ROAD SUNOCO | OCPCASES, HIST UST |
| BURCH OIL CO. OF CHARLES CO. | HIST UST |
| WALTONS MARKET | HIST UST |
| BRYANS ROAD VOL. FIRE CO. & RES. S | HIST UST |
| BRYANS ROAD CAR WASH | HIST UST |
| MARYLAND INT'L RACEWAY | HIST UST |
| SHERIFF OUTPOST - INDIAN HEAD | HIST UST |
| GENERAL SMALLWOOD MIDDLE SCHOOL | HIST UST |
| INDIAN HEAD ELEMENTARY | HIST UST |
| ST. MARY, STAR OF THE SEA CHURCH | HIST UST |
| LACKEY HIGH SCHOOL | HIST UST |
| LEE'S MARKET | HIST UST |
| GOOSE BAY AGGREGATES, INC. | HIST UST |
| BEL ALTON | HIST UST |
| PEPSI COLA | HIST UST |
| MARYLAND BANK & TRUST | HIST UST |
| WILLS GROUP, INC., THE | HIST UST |
| PARKWAY BUILDING | HIST UST |
| UNITED METHODIST CHURCH, LAPLATA | HIST UST |
| LA PLATA SHOPPING CENTER | HIST UST |
| COLONIAL LIQUORS, INC. | HIST UST |
| GARDINER EQUIPMENT/LA PLATA, INC | HIST UST |
| LA PLATA TV & APPLIANCE, INC. | HIST UST |
| MOBIL | HIST UST |
| ROD RITTER'S EAGLE CHEVROLET | HIST UST |
| OLD PORT MARINA | HIST UST |
| WOOD, DICK | HIST UST |
| BLUE HAVEN | HIST UST |
| PARKWAY MOTEL | HIST UST |
| LA PLATA GLASS | HIST UST |
| MR. TIRE INC. | HIST UST |
| FIN & CLAW LIGHTHOUSE, INC. | HIST UST |
| CHARLES COUNTY SHERIFF DEPT. | HIST UST |
| CHARLES COUNTY DETENTION CENTER | HIST UST |
| ALBAN TRACTOR CO., INC. | HIST UST |
| LA PLATA WIRE CENTER 34126 | HIST UST |
| SOUTHERN MARYLAND TRADE CENTER | HIST UST |
| MATTAWOMAN TREATMENT PLANT | HIST UST |
| LAPLATA CLEANERS | RCRA-SQG, FINDS |
| MACS RUBBISH SERVICE INC | RCRA NonGen / NLR, FINDS |

OVERVIEW MAP - 377586.1s



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites

- Indian Reservations BIA
- County Boundary
- Power transmission lines
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

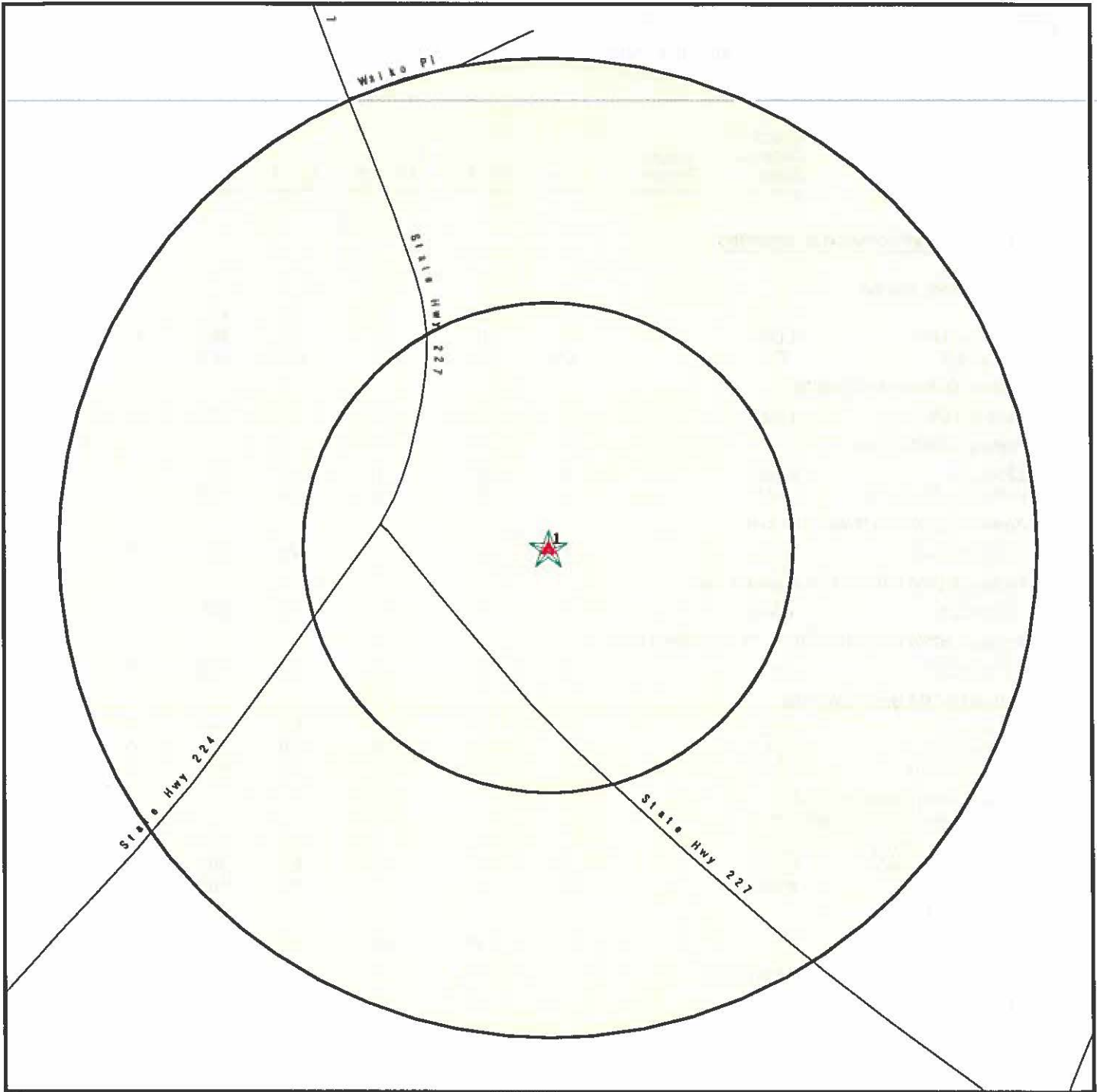


This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Maryland Airport, Indian Head Maryland I
ADDRESS: 3900 Livingston Road
 Indian Head MD 20640
LAT/LONG: 38.6081 / 77.0712

CLIENT: Mill Creek Environmental Consultants
CONTACT: Matthew Neely
INQUIRY #: 377586.1s
DATE: November 05, 2013 6:36 pm

DETAIL MAP - 3777586.1s



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Manufactured Gas Plants
- ⚡ Sensitive Receptors
- ☒ National Priority List Sites
- ☒ Dept. Defense Sites



- ☒ Indian Reservations BIA
- ⚡ Oil & Gas pipelines from USGS



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Maryland Airport, Indian Head Maryland I
 ADDRESS: 3900 Livingston Road
 Indian Head MD 20640
 LAT/LONG: 38.6081 / 77.0712

CLIENT: Mill Creek Environmental Consultants
 CONTACT: Matthew Neely
 INQUIRY #: 3777586.1s
 DATE: November 05, 2013 6:36 pm

MAP FINDINGS SUMMARY

| <u>Database</u> | <u>Search Distance (Miles)</u> | <u>Target Property</u> | <u>< 1/8</u> | <u>1/8 - 1/4</u> | <u>1/4 - 1/2</u> | <u>1/2 - 1</u> | <u>> 1</u> | <u>Total Plotted</u> |
|--|--|----------------------------|-----------------|------------------|------------------|----------------|---------------|--------------------------|
| <u>STANDARD ENVIRONMENTAL RECORDS</u> | | | | | | | | |
| <i>Federal NPL site list</i> | | | | | | | | |
| NPL | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| Proposed NPL | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| NPL LIENS | TP | | NR | NR | NR | NR | NR | 0 |
| <i>Federal Delisted NPL site list</i> | | | | | | | | |
| Delisted NPL | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| <i>Federal CERCLIS list</i> | | | | | | | | |
| CERCLIS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| FEDERAL FACILITY | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| <i>Federal CERCLIS NFRAP site List</i> | | | | | | | | |
| CERC-NFRAP | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| <i>Federal RCRA CORRACTS facilities list</i> | | | | | | | | |
| CORRACTS | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| <i>Federal RCRA non-CORRACTS TSD facilities list</i> | | | | | | | | |
| RCRA-TSDF | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| <i>Federal RCRA generators list</i> | | | | | | | | |
| RCRA-LQG | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| RCRA-SQG | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| RCRA-CESQG | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| <i>Federal institutional controls / engineering controls registries</i> | | | | | | | | |
| US ENG CONTROLS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| US INST CONTROL | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| LUCIS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| <i>Federal ERNS list</i> | | | | | | | | |
| ERNS | TP | | NR | NR | NR | NR | NR | 0 |
| <i>State- and tribal - equivalent CERCLIS</i> | | | | | | | | |
| SHWS | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| <i>State and tribal landfill and/or solid waste disposal site lists</i> | | | | | | | | |
| SWF/LF | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| <i>State and tribal leaking storage tank lists</i> | | | | | | | | |
| OCPCASES | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| HIST LUST | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| INDIAN LUST | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| <i>State and tribal registered storage tank lists</i> | | | | | | | | |
| UST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |

MAP FINDINGS SUMMARY

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---|-------------------------|-----------------|-------|-----------|-----------|---------|-----|---------------|
| AST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| INDIAN UST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| FEMA UST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| <i>State and tribal institutional control / engineering control registries</i> | | | | | | | | |
| ENG CONTROLS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| INST CONTROL | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| <i>State and tribal voluntary cleanup sites</i> | | | | | | | | |
| INDIAN VCP | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| VCP | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| <i>State and tribal Brownfields sites</i> | | | | | | | | |
| BROWNFIELDS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| <u>ADDITIONAL ENVIRONMENTAL RECORDS</u> | | | | | | | | |
| <i>Local Brownfield lists</i> | | | | | | | | |
| US BROWNFIELDS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| <i>Local Lists of Landfill / Solid Waste Disposal Sites</i> | | | | | | | | |
| ODI | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| DEBRIS REGION 9 | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| SWRCY | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| INDIAN ODI | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| <i>Local Lists of Hazardous waste / Contaminated Sites</i> | | | | | | | | |
| US CDL | TP | | NR | NR | NR | NR | NR | 0 |
| US HIST CDL | TP | | NR | NR | NR | NR | NR | 0 |
| <i>Local Lists of Registered Storage Tanks</i> | | | | | | | | |
| HIST UST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| <i>Local Land Records</i> | | | | | | | | |
| LIENS 2 | TP | | NR | NR | NR | NR | NR | 0 |
| <i>Records of Emergency Release Reports</i> | | | | | | | | |
| HMIRS | TP | | NR | NR | NR | NR | NR | 0 |
| SPILLS 90 | TP | | NR | NR | NR | NR | NR | 0 |
| <i>Other Ascertainable Records</i> | | | | | | | | |
| RCRA NonGen / NLR | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| DOT OPS | TP | | NR | NR | NR | NR | NR | 0 |
| DOD | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| FUDS | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| CONSENT | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| ROD | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |

MAP FINDINGS SUMMARY

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---------------------|-------------------------|-----------------|-------|-----------|-----------|---------|-----|---------------|
| UMTRA | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| US MINES | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| TRIS | TP | | NR | NR | NR | NR | NR | 0 |
| TSCA | TP | | NR | NR | NR | NR | NR | 0 |
| FTTS | TP | | NR | NR | NR | NR | NR | 0 |
| HIST FTTS | TP | | NR | NR | NR | NR | NR | 0 |
| SSTS | TP | | NR | NR | NR | NR | NR | 0 |
| ICIS | TP | | NR | NR | NR | NR | NR | 0 |
| PADS | TP | | NR | NR | NR | NR | NR | 0 |
| MLTS | TP | | NR | NR | NR | NR | NR | 0 |
| RADINFO | TP | | NR | NR | NR | NR | NR | 0 |
| FINDS | TP | 1 | NR | NR | NR | NR | NR | 1 |
| RAATS | TP | | NR | NR | NR | NR | NR | 0 |
| RMP | TP | | NR | NR | NR | NR | NR | 0 |
| UIC | TP | | NR | NR | NR | NR | NR | 0 |
| DRYCLEANERS | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| NPDES | TP | | NR | NR | NR | NR | NR | 0 |
| AIRS | TP | | NR | NR | NR | NR | NR | 0 |
| LEAD | TP | | NR | NR | NR | NR | NR | 0 |
| INDIAN RESERV | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| SCRD DRYCLEANERS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| 2020 COR ACTION | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| US AIRS | TP | | NR | NR | NR | NR | NR | 0 |
| PRP | TP | | NR | NR | NR | NR | NR | 0 |
| LEAD SMELTERS | TP | | NR | NR | NR | NR | NR | 0 |
| Financial Assurance | TP | | NR | NR | NR | NR | NR | 0 |
| LRP | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| EPA WATCH LIST | TP | | NR | NR | NR | NR | NR | 0 |
| US FIN ASSUR | TP | | NR | NR | NR | NR | NR | 0 |
| PCB TRANSFORMER | TP | | NR | NR | NR | NR | NR | 0 |
| COAL ASH | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| COAL ASH DOE | TP | | NR | NR | NR | NR | NR | 0 |
| COAL ASH EPA | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

| | | | | | | | | |
|-----------------------|-------|--|---|---|----|----|----|---|
| EDR MGP | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| EDR US Hist Auto Stat | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| EDR US Hist Cleaners | 0.250 | | 0 | 0 | NR | NR | NR | 0 |

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

1
Target
Property

MARYLAND AIRPORT - RUNWAY 2-20 & PARALLEL TAXIWAY
3900 LIVINGSTON ROAD
INDIAN HEAD, MD

FINDS **1015811306**
N/A

FINDS:

Actual:
169 ft.

Registry ID: 110045494835

Environmental Interest/Information System

US National Pollutant Discharge Elimination System (NPDES) module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

Count: 43 records.

ORPHAN SUMMARY

| City | EDR ID | Site Name | Site Address | Zip | Database(s) |
|---------------|------------|------------------------------------|--------------------------------|-------|--------------------------|
| BRYANS ROAD | S104637666 | BURCH OIL CO. OF CHARLES CO. | ROUTE 210 | 20616 | HIST UST |
| BRYANS ROAD | S104637557 | ROBBY'S SUNOCO /BRYANS ROAD SUNOCO | ROUTE 210 | 20616 | OCPCASES, HIST UST |
| BRYANS ROAD | S104637733 | WALTONS MARKET | ROUTE 227 | 20616 | HIST UST |
| BRYANS ROAD | S104637729 | BRYANS ROAD VOL. FIRE CO. & RES. S | RTE 227 & CHAPMANS LANDING ROA | 20616 | HIST UST |
| BRYANS ROAD | S104631296 | BRYANS ROAD CAR WASH | ROUTE 227 | 20616 | HIST UST |
| CHAPTICO | S104639678 | MARYLAND INT'L RACEWAY | ROUTE 234 | 20646 | HIST UST |
| CHARLES | S109326216 | SOUTHERN MARYLAND OIL, INC.-BRYANS | ROUTE 210, 7115 INDIAN HEAD HI | 20646 | ENG CONTROLS |
| INDIAN HEAD | S104637723 | SHERIFF OUTPOST - INDIAN HEAD | ROUTE 210 & INDIAN HEAD HWY | 20640 | HIST UST |
| INDIAN HEAD | S104637706 | GENERAL SMALLWOOD MIDDLE SCHOOL | ROUTE 210 | 20640 | HIST UST |
| INDIAN HEAD | S104637699 | INDIAN HEAD ELEMENTARY | ROUTE 210 | 20640 | HIST UST |
| INDIAN HEAD | S104637562 | ST. MARY, STAR OF THE SEA CHURCH | ROUTE 210 & GREEN MEADOWS DRIV | 20640 | HIST UST |
| INDIAN HEAD | 1001708161 | LACKEY HIGH SCHOOL | ROUTE 224 | 20640 | HIST UST |
| INDIAN HEAD | S104637587 | LEE'S MARKET | ROUTE 225 | 20640 | HIST UST |
| INDIAN HEAD | S104631270 | GOOSE BAY AGGREGATES, INC. | BOX 452R, ROUTE 224 | 20640 | HIST UST |
| LA PLATA | S104637715 | BEL ALTON | ROUTE 301 S. | 20646 | HIST UST |
| LA PLATA | S104637681 | PEPSI COLA | ROUTE 301 SOUTH | 20646 | HIST UST |
| LA PLATA | S104637581 | MARYLAND BANK & TRUST | ROUTE 301 | 20646 | HIST UST |
| LA PLATA | S104637537 | WILLS GROUP, INC., THE | 611 ROUTE 301 N. | 20646 | HIST UST |
| LA PLATA | S104637528 | PARKWAY BUILDING | ROUTE 301 S. | 20646 | HIST UST |
| LA PLATA | S104637504 | UNITED METHODIST CHURCH, LAPLATA | ROUTE 301 AND ROUTE 6 | 20646 | HIST UST |
| LA PLATA | S104637489 | LA PLATA SHOPPING CENTER | ROUTE 301 & ROUTE 6 | 20646 | HIST UST |
| LA PLATA | S104637451 | COLONIAL LIQUORS, INC. | 504 ROUTE 301 N. | 20646 | HIST UST |
| LA PLATA | S104631267 | GARDINER EQUIPMENTLA PLATA, INC | 108 S. 301 HIGHWAY | 20646 | HIST UST |
| LA PLATA | S104631254 | LA PLATA TV & APPLIANCE, INC. | ROUTE 301 S. | 20646 | HIST UST |
| LA PLATA | 1000277766 | LAPLATA CLEANERS | RTE 301 | 20640 | RCRA-SQG, FINDS |
| LA PLATA | S104633320 | MOBIL | ROUTE 6 & ROUTE 301 | 20646 | HIST UST |
| LA PLATA | S104631276 | ROD RITTER'S EAGLE CHEVROLET | ROUTE 6 & 301 | 20646 | HIST UST |
| LA PLATA | S104631196 | OLD PORT MARINA | ROUTE 6 | 20646 | HIST UST |
| LA PLATA | S104637618 | WOOD, DICK | ANDREA LANE, MARIELLEN PARK RO | 20646 | HIST UST |
| LA PLATA | S104637605 | BLUE HAVEN | BOX 4087, HWY. 301 N | 20646 | HIST UST |
| LA PLATA | S104637465 | PARKWAY MOTEL | BOX 4008, ROUTE 301 | 20646 | HIST UST |
| LA PLATA | S104637443 | LA PLATA GLASS | 301 HIGHWAY | 20646 | HIST UST |
| LA PLATA | S104637734 | MR. TIRE INC. | 4007 C, HWY 301 N. | 20646 | HIST UST |
| LA PLATA | S104637670 | FIN & CLAW LIGHTHOUSE, INC. | 729 N. ROUTE 301 | 20646 | HIST UST |
| LA PLATA | S104637657 | CHARLES COUNTY SHERIFF DEPT. | U.S. ROUTE 301, S. | 20646 | HIST UST |
| LA PLATA | S104637652 | CHARLES COUNTY DETENTION CENTER | U.S. ROUTE 301, S. | 20646 | HIST UST |
| LA PLATA | S104631238 | ALBAN TRACTOR CO., INC. | U.S. ROUTE 301 (S. OF MD 6) | 20646 | HIST UST |
| LA PLATA | S104631229 | LA PLATA WIRE CENTER 34126 | 727 N. ROUTE 301 | 20646 | HIST UST |
| LA PLATA | S104637488 | SOUTHERN MARYLAND TRADE CENTER | 551 S. RTE 301 | 20646 | HIST UST |
| LA PLATA | 1000375733 | MACS RUBBISH SERVICE INC | MD RTE 225 | 20646 | RCRA NonGen / NLR, FINDS |
| MASON SPRINGS | S104637656 | MATTAWOMAN TREATMENT PLANT | ROUTE 2 | 20640 | HIST UST |
| PISGAH | S110090103 | CHARLES COUNTY SANITARY LANDFILL | ROUTE 425 AND ROUTE 484 | 20646 | LRP |
| PISGAH | S110090037 | MATTAWOMAN CREEK | NORTH OF ROUTE 225 AND ROUTE 2 | 20640 | LRP |

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/09/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 62

Source: EPA
Telephone: N/A
Last EDR Contact: 10/11/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/09/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 62

Source: EPA
Telephone: N/A
Last EDR Contact: 10/11/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425 (e), sites may be deleted from the NPL where no further response is appropriate.

| | |
|---|--|
| Date of Government Version: 04/26/2013 | Source: EPA |
| Date Data Arrived at EDR: 05/09/2013 | Telephone: N/A |
| Date Made Active in Reports: 07/10/2013 | Last EDR Contact: 10/11/2013 |
| Number of Days to Update: 62 | Next Scheduled EDR Contact: 01/20/2014 |
| | Data Release Frequency: Quarterly |

Federal CERCLIS list

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

| | |
|---|--|
| Date of Government Version: 04/26/2013 | Source: EPA |
| Date Data Arrived at EDR: 05/29/2013 | Telephone: 703-412-9810 |
| Date Made Active in Reports: 08/09/2013 | Last EDR Contact: 10/18/2013 |
| Number of Days to Update: 72 | Next Scheduled EDR Contact: 12/09/2013 |
| | Data Release Frequency: Quarterly |

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

| | |
|---|---|
| Date of Government Version: 07/31/2012 | Source: Environmental Protection Agency |
| Date Data Arrived at EDR: 10/09/2012 | Telephone: 703-603-8704 |
| Date Made Active in Reports: 12/20/2012 | Last EDR Contact: 10/11/2013 |
| Number of Days to Update: 72 | Next Scheduled EDR Contact: 01/20/2014 |
| | Data Release Frequency: Varies |

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

| | |
|---|--|
| Date of Government Version: 04/26/2013 | Source: EPA |
| Date Data Arrived at EDR: 05/29/2013 | Telephone: 703-412-9810 |
| Date Made Active in Reports: 08/09/2013 | Last EDR Contact: 10/18/2013 |
| Number of Days to Update: 72 | Next Scheduled EDR Contact: 12/09/2013 |
| | Data Release Frequency: Quarterly |

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: 800-438-2474
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: 800-438-2474
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: 800-438-2474
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: 800-438-2474
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Institutional controls / engineering controls registries

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

| | |
|---|---|
| Date of Government Version: 06/17/2013 | Source: Environmental Protection Agency |
| Date Data Arrived at EDR: 06/21/2013 | Telephone: 703-603-0695 |
| Date Made Active in Reports: 10/03/2013 | Last EDR Contact: 09/10/2013 |
| Number of Days to Update: 104 | Next Scheduled EDR Contact: 12/23/2013 |
| | Data Release Frequency: Varies |

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

| | |
|---|---|
| Date of Government Version: 06/17/2013 | Source: Environmental Protection Agency |
| Date Data Arrived at EDR: 06/21/2013 | Telephone: 703-603-0695 |
| Date Made Active in Reports: 10/03/2013 | Last EDR Contact: 09/10/2013 |
| Number of Days to Update: 104 | Next Scheduled EDR Contact: 12/23/2013 |
| | Data Release Frequency: Varies |

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

| | |
|---|--|
| Date of Government Version: 08/20/2013 | Source: Department of the Navy |
| Date Data Arrived at EDR: 08/23/2013 | Telephone: 843-820-7326 |
| Date Made Active in Reports: 11/01/2013 | Last EDR Contact: 08/15/2013 |
| Number of Days to Update: 70 | Next Scheduled EDR Contact: 09/02/2013 |
| | Data Release Frequency: Varies |

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

| | |
|---|---|
| Date of Government Version: 12/31/2012 | Source: National Response Center, United States Coast Guard |
| Date Data Arrived at EDR: 01/17/2013 | Telephone: 202-267-2180 |
| Date Made Active in Reports: 02/15/2013 | Last EDR Contact: 10/01/2013 |
| Number of Days to Update: 29 | Next Scheduled EDR Contact: 01/13/2014 |
| | Data Release Frequency: Annually |

State- and tribal - equivalent CERCLIS

SHWS: Notice of Potential Hazardous Waste Sites

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

| | |
|---|--|
| Date of Government Version: 10/01/2009 | Source: Department of the Environment |
| Date Data Arrived at EDR: 12/11/2009 | Telephone: 410-537-3000 |
| Date Made Active in Reports: 12/14/2009 | Last EDR Contact: 08/23/2013 |
| Number of Days to Update: 3 | Next Scheduled EDR Contact: 11/25/2013 |
| | Data Release Frequency: Semi-Annually |

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Permitted Solid Waste Disposal Facilities

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

| | |
|---|--|
| Date of Government Version: 07/01/2013 | Source: Department of the Environment |
| Date Data Arrived at EDR: 08/07/2013 | Telephone: 410-537-3375 |
| Date Made Active in Reports: 08/26/2013 | Last EDR Contact: 11/04/2013 |
| Number of Days to Update: 19 | Next Scheduled EDR Contact: 02/17/2014 |
| | Data Release Frequency: Annually |

State and tribal leaking storage tank lists

OCPCASES: Oil Control Program Cases

Cases monitored by the Oil Control Program. these cases can be leaking underground storage tanks and other belowground releases, leaking aboveground storage tanks, spills and inspections.

| | |
|---|--|
| Date of Government Version: 06/30/2013 | Source: Department of Environment |
| Date Data Arrived at EDR: 07/12/2013 | Telephone: 410-537-3433 |
| Date Made Active in Reports: 08/26/2013 | Last EDR Contact: 10/07/2013 |
| Number of Days to Update: 45 | Next Scheduled EDR Contact: 01/20/2014 |
| | Data Release Frequency: Semi-Annually |

HIST LUST: Recovery Sites

In 1999, the Department of the Environment stopped adding new sites to its Recovery Sites Database. Current leaking underground storage tank information maybe found in the OCPCASES database.

| | |
|---|---|
| Date of Government Version: 03/01/1999 | Source: Department of the Environment |
| Date Data Arrived at EDR: 03/22/1999 | Telephone: 410-537-3433 |
| Date Made Active in Reports: 04/16/1999 | Last EDR Contact: 02/19/2001 |
| Number of Days to Update: 25 | Next Scheduled EDR Contact: N/A |
| | Data Release Frequency: No Update Planned |

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

| | |
|---|--|
| Date of Government Version: 08/01/2013 | Source: EPA Region 4 |
| Date Data Arrived at EDR: 08/02/2013 | Telephone: 404-562-8677 |
| Date Made Active in Reports: 11/01/2013 | Last EDR Contact: 10/28/2013 |
| Number of Days to Update: 91 | Next Scheduled EDR Contact: 02/11/2014 |
| | Data Release Frequency: Semi-Annually |

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

| | |
|---|--|
| Date of Government Version: 09/12/2011 | Source: EPA Region 6 |
| Date Data Arrived at EDR: 09/13/2011 | Telephone: 214-665-6597 |
| Date Made Active in Reports: 11/11/2011 | Last EDR Contact: 10/28/2013 |
| Number of Days to Update: 59 | Next Scheduled EDR Contact: 02/11/2014 |
| | Data Release Frequency: Varies |

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

| | |
|---|--|
| Date of Government Version: 08/27/2013 | Source: EPA Region 7 |
| Date Data Arrived at EDR: 08/27/2013 | Telephone: 913-551-7003 |
| Date Made Active in Reports: 11/01/2013 | Last EDR Contact: 10/28/2013 |
| Number of Days to Update: 66 | Next Scheduled EDR Contact: 02/11/2014 |
| | Data Release Frequency: Varies |

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

| | |
|---|--|
| Date of Government Version: 08/27/2012 | Source: EPA Region 8 |
| Date Data Arrived at EDR: 08/28/2012 | Telephone: 303-312-6271 |
| Date Made Active in Reports: 10/16/2012 | Last EDR Contact: 10/28/2013 |
| Number of Days to Update: 49 | Next Scheduled EDR Contact: 02/11/2014 |
| | Data Release Frequency: Quarterly |

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

| | |
|---|---|
| Date of Government Version: 03/01/2013 | Source: Environmental Protection Agency |
| Date Data Arrived at EDR: 03/01/2013 | Telephone: 415-972-3372 |
| Date Made Active in Reports: 04/12/2013 | Last EDR Contact: 10/28/2013 |
| Number of Days to Update: 42 | Next Scheduled EDR Contact: 02/11/2014 |
| | Data Release Frequency: Quarterly |

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

| | |
|---|--|
| Date of Government Version: 07/29/2013 | Source: EPA Region 10 |
| Date Data Arrived at EDR: 07/30/2013 | Telephone: 206-553-2857 |
| Date Made Active in Reports: 11/01/2013 | Last EDR Contact: 10/28/2013 |
| Number of Days to Update: 94 | Next Scheduled EDR Contact: 02/11/2014 |
| | Data Release Frequency: Quarterly |

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

| | |
|---|--|
| Date of Government Version: 02/01/2013 | Source: EPA Region 1 |
| Date Data Arrived at EDR: 05/01/2013 | Telephone: 617-918-1313 |
| Date Made Active in Reports: 11/01/2013 | Last EDR Contact: 11/01/2013 |
| Number of Days to Update: 184 | Next Scheduled EDR Contact: 02/11/2014 |
| | Data Release Frequency: Varies |

State and tribal registered storage tank lists

UST: Registered Underground Storage Tank List

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

| | |
|---|--|
| Date of Government Version: 06/30/2013 | Source: Department of the Environment |
| Date Data Arrived at EDR: 07/12/2013 | Telephone: 410-537-3433 |
| Date Made Active in Reports: 08/26/2013 | Last EDR Contact: 10/10/2013 |
| Number of Days to Update: 45 | Next Scheduled EDR Contact: 01/27/2014 |
| | Data Release Frequency: Varies |

AST: Permitted Aboveground Storage Tanks

Registered Aboveground Storage Tanks.

| | |
|---|--|
| Date of Government Version: 08/23/2013 | Source: Department of The Environment |
| Date Data Arrived at EDR: 08/27/2013 | Telephone: 410-537-3000 |
| Date Made Active in Reports: 10/01/2013 | Last EDR Contact: 10/10/2013 |
| Number of Days to Update: 35 | Next Scheduled EDR Contact: 01/27/2014 |
| | Data Release Frequency: Quarterly |

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 05/10/2011
Date Data Arrived at EDR: 05/11/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 34

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Semi-Annually

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 02/28/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 43

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 08/20/2013
Date Data Arrived at EDR: 08/23/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 70

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 02/21/2013
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 45

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 02/05/2013
Date Data Arrived at EDR: 02/06/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 65

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 09/28/2012
Date Data Arrived at EDR: 11/07/2012
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 156

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 11/01/2014
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations).

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 08/02/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 91

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Semi-Annually

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 07/29/2013
Date Data Arrived at EDR: 08/01/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 92

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 10/17/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

ENG CONTROLS: Engineering Controls Site listing

Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 11/10/2008
Date Data Arrived at EDR: 11/21/2008
Date Made Active in Reports: 12/17/2008
Number of Days to Update: 26

Source: Department of the Environment
Telephone: 410-537-3422
Last EDR Contact: 09/16/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Varies

INST CONTROL: Voluntary Cleanup Program Applicants/Participants

Sites included in the Voluntary Cleanup Program Applicants/Participants listing that have Deed Restrictions.

Date of Government Version: 02/21/2013
Date Data Arrived at EDR: 03/28/2013
Date Made Active in Reports: 04/29/2013
Number of Days to Update: 32

Source: Department of the Environment
Telephone: 410-537-3493
Last EDR Contact: 09/20/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Semi-Annually

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/28/2012
Date Data Arrived at EDR: 10/02/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 14

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 10/01/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Applicants/Participants

The Voluntary Cleanup Program, administrated by the Dept. of the Environment, streamlines the environmental cleanup process for sites, usually industrial or commercial properties, that are contaminated, or perceived to be contaminated, by hazardous substances. Developers and lenders are provided with certain limitations on liability and participants in the program are provided certainty in the process by knowing exactly what will be required.

Supplemental Environmental Assessment for Easement Acquisition/Obstruction

Removal, Maryland Airport, Indian Head

Maryland Department of the Environment - Science Services Administration

REVIEW FINDING: R1 Consistent with Qualifying Comments

(MD20141015-0831)

The following additional comments are intended to alert interested parties to issues regarding water quality standards. The comments address:

A. Water Quality Impairments: Section 303(d) of the federal Clean Water Act requires the State to identify impaired waters and establish Total Maximum Daily Loads (TMDLs) for the substances causing the impairments. A TMDL is the maximum amount of a substance that can be assimilated by a waterbody such that it still meets water quality standards.

Planners should be aware of existing water quality impairments identified on Maryland's 303(d) list. The Project is situated in the Mattawoman watershed, identified by the MD 8-digit code 02140111 which is currently impaired by several substances and subject to regulations regarding the Clean Water Act.

Planners may find a list of nearby impaired waters by entering the 8-digit basin code into an on-line database linked to the following URL:
<http://www.mde.state.md.us/programs/Water/TMDL/Integrated303dReports/Pages/303d.aspx>.

This list is updated every even calendar year. Planners should review this list periodically to help ensure that local decisions consider water quality protection and restoration needs. **Briefly, the current impairments that are relevant to the Project include the following:**

Mattawoman (02140111):

Nutrients: Tidal. A TMDL was written and approved by EPA
Biological: Tidal. A TMDL is pending development.

B. TMDLs: Development and implementation of the any Plan should take into account consistency with TMDLs developed for the impaired waterbodies referenced above. Decisions made prior to the development of a TMDL should strive to ensure no net increase of impairing substances. TMDLs are made available on an updated basis at the following web site:

<http://www.mde.state.md.us/programs/Water/TMDL/CurrentStatus/Pages/Programs/WaterPrograms/TMDL/Summittals/index.aspx>

Special protections for high-quality waters in the local vicinity, which are identified pursuant to Maryland's anti-degradation policy;

C. Anti-degradation of Water Quality: Maryland requires special protections for waters of very high quality (Tier II waters). The policies and procedures that govern these special waters are commonly called "anti-degradation policies." This policy states that "proposed amendments to county plans or discharge permits for discharge to Tier II waters that will result in a new, or an increased, permitted annual discharge of pollutants and a potential impact to water quality, shall evaluate alternatives to eliminate or reduce discharges or impacts." These permitted annual discharges are not just traditional Point Sources, it can include all discharges such as Stormwater.

Currently, Tier II waters are not present in the area surrounding the project.

Planners should be aware of legal obligations related to Tier II waters described in the Code of Maryland Regulations (COMAR) 26.08.02.04 with respect to current and future land use plans. Information on Tier II waters can be obtained online at: <http://www.dsd.state.md.us/comar/comarhtml/26/26.08.02.04.htm> and policy implementation procedures are located at <http://www.dsd.state.md.us/comar/comarhtml/26/26.08.02.04-1.htm>

Planners should also note that since the Code of Maryland Regulations is subject to periodic updates. A list of Tier II waters pending Departmental listing in COMAR can be found, with a discussion and maps for each county, at the following website:

<http://www.mde.state.md.us/programs/Water/TMDL/Water%20Quality%20Standards/Pages/HighQualityWatersMap.aspx>

ADDITIONAL COMMENTS

Chesapeake Bay TMDL

With the completion of the Chesapeake Bay TMDL, the Chesapeake Bay Program Office (CBPO) will be able to provide loading data at a more refined scale than in the past. MDE will be able to use the CBPO data to estimate pollution allocations at the jurisdictional level (which will include Federal Facilities) to provide allocations to the Facilities. These allocations, both Wasteload (WLA) and Load Allocation (LA) could call for a reduction in both Point Sources and Nonpoint Sources. Facilities should be aware of reductions and associated implementation required by WIPs or FIPs.



Greg Golden -DNR- <greg.golden@maryland.gov>

MD DNR preliminary comment on the Supplemental EA, Maryland Airport, Charles County

1 message

Greg Golden -DNR- <greg.golden@maryland.gov>
To: marylandairport@hotmail.com
Cc: jwellman@tbric.com

Thu, Oct 30, 2014 at 9:48 PM

Mr. Bauserman:

The Maryland Department of Natural Resources (Project Review Division, Integrated Policy and Review Unit) has been made aware of the "Draft Supplemental Environmental Assessment (EA), Easement Acquisition/Obstruction Removal, Maryland Airport, Indian Head" through the Maryland State Clearinghouse system, and a private citizen contact to our agency. To our knowledge, we did not receive a direct copy of the original public notice distribution of the EA document. I spoke with Mr. Wellman of Talbert and Bright this morning, and he believes that may be correct. Mr. Wellman promptly mailed out an electronic and hard copy of the document to us today, and was very helpful in answering several of my review questions. I also was able to confirm that our review team does have access to the document through the State Clearinghouse process.

The Department was an active interagency review participant for the Federal funds-assisted Maryland Airport improvement/expansion project over the past 10-plus years, and we request that we be directly included in any and all future interagency and/or NEPA review documents, meetings, and related action for the project. Such review opportunities for the overall project should be addressed to the Project Review Division of the Integrated Policy and Review Unit of MD DNR, by mail, or to the following electronic inbox address: environmentalreview.dnr@maryland.gov

Areas adjacent to and nearby the Maryland Airport site are rich in natural resource values, and we are very interested to complete our review of the subject document and provide comments to the project team. Please consider this comment a preliminary comment, and we will plan to complete our comments to the Maryland State Clearinghouse Process by their November 12, 2014 due date.

In our initial review of the document, we noted that direct coordination has been conducted and documented with our Wildlife and Heritage Service (WHS) regarding any potential occurrences or concerns for State-listed rare, threatened, and endangered species. We appreciate these important considerations being addressed in the document. We will conduct further review of terrestrial and aquatic habitat issues, water quality concerns, public lands, and related conservation priorities. We will also need to confirm with WHS the review considerations and conclusions on the small vegetation management area to the south of the new runway, as this general area was reviewed for potential sensitive species concerns in previous review phases. We will compare the EA information with that information provided to WHS in 2013.

We also appreciate the information provided on terrestrial and aquatic habitats in the project area. We will evaluate this information further for accuracy and completeness, or potential additional notes and references that could be added. We especially will need to check for any references or indications of future associated construction phases or development, and indirect or cumulative effects, as required in the NEPA process. The Mattawoman Creek stream and estuary system is a high quality, high priority natural resource in Maryland, and is a resource dependent on natural groundwater and tributary functions and values to maintain its significant health. Development activities in the region and associated impervious surfaces add risks to the successful conservation of this important natural resource, and therefore our critical agency goals and objectives include advocating resource protection and impact avoidance and minimization measures for any new development. In such high quality watersheds with important fisheries, we first advocate avoidance and strict minimization of impacts to natural hydrologic cycles, and then advanced stormwater/water quality management for any development. However, we emphasize that stormwater management Best Management Practices are not found to be adequate full replacements for natural hydrology formed by mature forested areas, natural soils, and natural grades and geography. Therefore, we advocate careful consideration of impact avoidance and

11/14/2014

Maryland.gov Mail - MD DNR preliminary comment on the Supplemental EA, Maryland Airport, Charles County

minimization, and close scrutiny of purpose and need for any proposed forest clearing.

We are continuing our review, and will be able to further address any additional concerns or recommendations in our Clearinghouse comments.

It is not a familiar process for our office in NEPA work involving a Federal Action and Federal Agency to have no identified Federal contact person for the public notice and document. However, Mr, Wellman has provided me with process information for the study and assures me that comments made to Maryland Airport will be forwarded to the Federal Agency lead for Federal agency consideration.

Thank you for the opportunity to provide this preliminary comment; we will promptly continue our review and comment to the Maryland State Clearinghouse by the November comment date.

Greg Golden
Project Review Division
Integrated Policy and Review Unit
MD Department of Natural Resources
410-260-8331
please note my new email address: greg.golden@maryland.gov



*Martin O'Malley, Governor
Anthony G. Brown, Lt. Governor
Joseph P. Gill, Secretary
Frank W. Dawson III, Deputy Secretary*

MEMORANDUM

TO: Nasrin Rahman, Planner, MDP
Nasrin Rahman

FROM: Greg Golden, Project Review Division, IPR Unit, MD DNR

DATE: November 14, 2014

SUBJECT: MD State Clearinghouse Review: MD20141015-0831, Draft Supplemental Environmental Assessment (EA) for Easement Acquisition/Obstruction Removal, Maryland Airport, Indian Head, Charles County

This memo provides MD Department of Natural Resources (MD DNR) comments on the referenced Supplemental EA document for specific aspects of proposed work for improvements being made at Maryland Airport, in Indian Head, Charles County.

MD DNR has participated in past review of the subject airport improvements, including review of the earlier EA for the project, and review of State and Federal wetlands and waterways permit applications. The project site is in the vicinity of many sensitive natural resources, ranging from: rare, threatened, and endangered species and their habitat; to vast forest blocks and natural riparian buffer areas; to important aquatic and fisheries resources downstream. Please refer to the following 2012 MD DNR/interagency document for natural resources background for the region and watershed, "The Case for Protection of the Watershed Resources of Mattawoman Creek" (http://dnr2.maryland.gov/fisheries/Documents/Mattawoman_Ecosystem_Final_Report_March_2012.pdf).

Typically, MD DNR receives direct copies of EA and Environmental Impact Statements (EIS's) for review through the Federal NEPA process, during agency and/or public review and commenting periods. We received a direct copy relatively late in the public commenting period, but were still able to provide preliminary comments to the NEPA process itself (see attached email comments, Greg Golden to marylandairport@hotmail.com and jwellman@tburic.com, dated October 30, 2014). We also were able to conduct productive project

coordination with the consultant preparing the document.

We have strived to complete our coordinated Departmental review for the MD State Clearinghouse review process, and have the following comments for consideration on the Draft EA document:

1. Planning, review, permitting, and construction for the Maryland Airport improvements have taken place over 10-plus years. Based on our history of review, we understand that most of the improvements have been previously approved. The current Supplemental EA addresses easement Acquisition and Obstruction Removal. Those familiar with the project, regional planning, natural resources of the area, and the various public interests involved will understand why there are many important planning matters associated with the project beyond the scope of this specific Supplemental EA. By the time Indirect and Cumulative Effects (Secondary and Cumulative Impacts) are considered, those connections are quite clear. For the most part, we are providing comments specific to this particular document and the subject current proposal in this memo, but with reasonable recognition to the past review, and broader planning issues.
2. While we have referred to the very detailed Mattawoman watershed natural resource protection document above, to briefly summarize our natural resources concerns for the subject obstruction removal, note here that protection of downstream aquatic resources of State-wide significance depends on maintaining natural hydrology and water cycle components, good water quality, and strict minimization of sediment and erosion. This is to protect downstream anadromous fish spawning reaches, resident fish populations in tributaries, and the highly valued and economically important estuarine habitat for submerged aquatic vegetation (SAV) and the tidal sports fishery (largemouth bass and other gamefish species). Natural vegetation, especially forest vegetation, is critically important for maintaining soil properties essential to infiltration of rainfall for the natural hydrology of the watershed.
3. Given the safety elements of the project purpose and need, we understand the importance of the obstruction removal elements of the project. We advocate the very careful planning, practicable minimization of impacts, implementation, and strategic follow through associated with the obstruction removal, with specific comments provided below.
4. A tributary headwater is present in portions of the clearing and easement area. It is very important to plan for a healthy riparian buffer of natural vegetation along this headwater. We understand that the clearing requirements will influence what types of vegetation will be used for this riparian buffer. To the extent practicable, we advocate native forest

species in this area, including trees, shorter tree species of limited height where taller trees are not allowable for safety reasons, shrubs, and/or herbaceous vegetation, as necessary and as feasible. Additionally, it is important to optimize planning for access, clearing practices, stabilization measures, re-vegetation, and long term maintenance in order to protect natural features of the headwater, nearby wetlands, and groundwater recharge areas. Use of optimized sediment and erosion control, other Best Management Practices (BMPs), and long term management plans are essential elements to protect downstream water quality and habitat.

5. Additional information for planning on obstruction removal should include more details and determinations on methods of clearing and how and where they will be applied (i.e topping, selective cut, clearcut); access & staging area identification and delineation, assessment of other temporary impacts, and methods of debris removal. These topics have current references in the draft document. Consideration should be given to any other available details to include in the document now, and to set up future steps to provide upcoming planning details to the local, State, and Federal authorization processes. Ultimately, it is important to demonstrate that all associated impacts are avoided and strictly minimized for any required obstruction removal, within the precisely defined purpose and need safety elements for the project.
6. Better detail is needed on planting and vegetation management approach and methods, and this should address both short term stabilization and long term vegetation management. We were not able to get a reasonable vision yet for what the area vegetation will look like after work is completed, any phasing aspects, and species composition details, once obstruction removal occurs, and this is an important vision to convey in the document.
7. We also were not able to get a full vision of what future activities may occur in the easement areas outside the initial clearing delineation. Is further clearing possible? What additional coordination would occur, or be required, if additional clearing is proposed? What types of airport management and planning decisions might affect future clearing? Additional text or graphics could clarify this.
8. In general, we would expect more detail in the Cumulative Impacts section. We agree with importance of the reference back to the 2003 EA (page 37 of the Draft Supplement EA), and the references to past history and future plans. We would recommend adding more detail and context to future plans, what studies and authorizations might be required for future improvements or upgrades, and what effects to a broader surrounding area (regional context) might result. Ultimately, it is for the Federal lead agency to take a proactive role in defining

what information and study area should be included in the Cumulative Impacts section, but we advocate that the regional issues provide an excellent case for additional information. The section 6.14 on Secondary (Induced Impacts) was apparently used only for socioeconomic impacts. Secondary Impacts assessment for natural resource concerns is also very important, and is often addressed in combination with Cumulative Impacts (i.e. Indirect and Cumulative Effects). Is the Federal lead agency in agreement with how this information is analyzed and presented in the document?

9. Please note that the comments and recommendations provided here are specific to the activities proposed and addressed in this specific document. Other natural resource elements, and concerns, exist in the area and downstream. Different proposed project elements and activities in the area, especially vegetation clearing, soil grading and alteration, hydrologic impacts, impervious surface additions, stormwater management proposals, and related activities, would require additional review, and depending on the specific details of other proposals, would warrant additional natural resource concerns, comments and recommendations.
10. In section 6.2 Coastal Zone Management (page 16), we offer this more appropriate and accurate language. We can coordinate further on this, in partnership with the document preparers and with Maryland Department of the Environment:

"The Maryland Coastal Program, administered by the Maryland Department of Natural Resources (MDDNR), is a networked program comprised of several State agencies that collectively implement the Program. The Federal Consistency Review requirements are implemented through the Wetlands & Waterways Program within the Water Management Administration of the Maryland Department of the Environment. Maryland Airport, which received funding and other support from the FAA, is located within the Maryland Coastal Zone and will likely have foreseeable coastal effects. The Maryland Airport project is therefore subject to Federal Coastal Consistency Review. The FAA, or its agent acting on its behalf, is required to receive concurrence from the State of Maryland to ensure that the Maryland Airport project is consistent to the maximum extent practicable with Maryland's enforceable policies."

The document contains updated 2013 coordination information regarding rare, threatened, and endangered species, which was conducted with the MD DNR Wildlife and Heritage Service. Our review has confirmed that this information is still accurate and correct for the proposed activities.

In summary, we fully understand that the scope of this Supplemental EA document is for Easement Acquisition and Obstruction Removal related to previously reviewed and approved airport improvements, and that these elements have very strong safety importance to the airport users, and surrounding residents. But the nature of the additional work, the future development outlook for the airport itself and surrounding

areas, and sensitive natural resources of both ecological and economic value make it important to give close attention to the details of this study and proposed work.

Thank you for providing the opportunity to review and provide comments on the subject document and project. If you have any questions concerning these comments please contact me at your convenience at 410-260-8331 or greg.golden@maryland.gov.

attachment

cc: Chris Aadland, MD DNR
Lori Byrne, MD DNR
Joe Abe, MD DNR
Margaret McGinty, MD DNR
Elder Ghigiarelli, MDE
Lisa Dosmann, MDE



Maryland Department of Planning

Sustainable _____ Attainable _____

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: MD20141015-0831
Project Description: Supplemental Environmental Assessment for Easement Acquisition/Obstruction Removal, Maryland Airport, Indian Head

| | | |
|------------------------------|-----------------------------------|---|
| PROJECT APPROVAL | | |
| This project/plan was: | <input type="checkbox"/> Approved | <input type="checkbox"/> Approved with Modification |
| | | <input type="checkbox"/> Disapproved |
| Name of Approving Authority: | Date Approved: | |
| _____ | _____ | |

| | | | |
|---|-----------|-----------|-----------|
| FUNDING APPROVAL | | | |
| <i>The funding (if applicable) has been approved for the period of:</i> | | | |
| _____, 201__ to _____, 201__ as follows: | | | |
| Federal \$: | Local \$: | State \$: | Other \$: |
| _____ | _____ | _____ | _____ |

| |
|---|
| OTHER |
| <input type="checkbox"/> Further comment or explanation is attached |

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

Richard Eberhart Hall, AICP, Secretary
Amanda Stakem Conn, Esq., Deputy Secretary



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

October 30, 2014

Mr. Gilbert Bauserman
Maryland Airport Manager
3900 Livingston Road
Indian Head, MD 20640

Mr. Marcus Brundage
Environmental Specialist
Washington Airports District Office
Federal Aviation Administration
23723 Air Freight Lane, Suite 210
Dulles, Virginia 20166

RE: Maryland Airport Supplemental Environmental Assessment, Indian Head Maryland
October 2014

Dear Mr. Bauserman and Mr. Brundage:

The U.S. Environmental Protection Agency has received and reviewed the Supplemental Environmental Assessment (EA) for the Maryland Airport, located in Indian Head, Maryland. EPA has reviewed this project in conjunction with our responsibilities under the National Environmental Policy Act (NEPA), Section 309 of the Clean Air Act, and the Council of Environmental Quality regulations implementing NEPA (40 CFR 1500-1508). This EA supplements the 2003 Maryland Airport Environmental Assessment for Capital Development. The analysis for the proposed easement acquisition and obstruction removal was not included in the original 2003 EA. According to this EA, the purpose and need for the project is to allow the airport to construct the final phase of the runway development project by acquiring easements and removing obstructions to the future approach area for Runway 20. The acquisition of 23.4 acres of off-airport property, via easements or fee-simple acquisition, will allow the airport to clear 6.5 acres of obstruction in the approach for Runway 20 on property not currently owned by the airport. An additional 2.2 acres of obstruction located on airport property also need to be removed which results in a total of 8.7 acres of on and off- airport obstruction removal. Runway 2-20 was constructed in 2013 and measures 3, 740 feet long. According to the EA, the runway was designed to be 4,300 feet long and cannot be extended without the obstruction removal.

The EA considers two alternatives including the no action alternative and the proposed action alternative. EPA recognizes that this is a supplement to an existing EA however the information provided in this document is vague and confusing. The EA should clearly state the work completed and what was evaluated in the original EA and the reason this additional area

was not included. We also have concerns about the segmentation of projects at the airport and assessment of potential secondary and cumulative impacts. Please see the enclosed technical comments.

Please provide copies of Maryland Airport's NEPA documentation to EPA in the future. We look forward to working with the Airport and Federal Aviation Administration on future projects. If you have any questions or would like to discuss our comments, the staff contact for this project is Ms. Barbara Okorn; she can be reached at 215-814-3330.

Sincerely,



Barbara Rudnick
NEPA Team Leader
Office of Environmental Programs

Enclosure

Enclosure
Technical Comments

- The current EA is very vague and important information is scattered throughout the document. The history of why the supplement was needed, what was evaluated in the 2003 EA, and what the scope of this EA should be clearly explained. Detailed maps and plans should be provided showing the current conditions at the airport and project area and depicting the potential impacts from the Proposed Action.
- Chapter 2- Purpose and Need - This chapter fails to identify the project needs. The EA states that “since these obstructions were not included in the original EA, it was determined that the new runway would be constructed at a shorter length until the obstructions could be removed. This runway length allows the Airport to meet the future operational needs.” The purpose and need for this supplement should be clearly explained.
- Chapter 3- Proposed Action- The discussion should provide more detail about what will be done as part of the Proposed Action. The EA only states obstructions will be removed from 6.5 acres once the easements have been purchased by the airport from the land owners. Additional information on methods of tree topping and clear cutting should be provided. Will access roads and staging areas be used? What will be allowed to grow in these areas? How often will the areas be maintained and by what methods?
- Chapter 4- Alternatives Analysis should clearly describe why the proposed project is the preferred alternative compared to other alternatives.
- Chapter 5- Affected Environment- The chapter should provide detail on the environmental and community resources for the study area.
- Chapter 6- Environmental Consequences- The chapter should clearly describe the potential impacts from the project. Figures and maps should be provided to show the locations of these areas.
 - Page 24 – The study describes the intermittent stream segment but does not provide information about potential for benthic organisms or how the intermittent status was determined. Additional discussion and evaluation should be provided for this resource and its connections. While the EA states there will be no impacts related to this project, the document fails to address potential indirect and cumulative impacts. In addition, this project is in the Mattawoman watershed which is under many stresses and significant efforts have been made to protect this resource.
 - Page 24- The discussion of species of concern is vague. The qualifications of those conducting the physical inspection of the survey area is not specified. The EA states that Maryland Department of Natural Resources (MDNR) has no concern regarding state-listed species within the boundaries of the survey area; it is unclear if this is the same as the project areas discussed in the EA. It appears the proposed project area is adjacent to a Targeted Ecological Area and is located partially in a Sensitive Species Project Area as defined by MDNR. Further documentation should be provided to ensure protection of any State-identified species of concern or habitats related to any species of concern.
 - Page 26 - discusses disposal of debris but does not mention burning. Page 2-13 states that burning may contribute to air quality impacts. There are concerns associated with the burning of materials. It is unclear what will be burned. All air emission

related to this project should be evaluated in the air quality section. This includes burning, construction vehicles, dust, etc. In addition the EA states that water will be used to suppress dust. Details should be provided to identify sources of water supply to be used.

- Page 31- Additional information should be provided for methods used in the environmental justice assessment in this study. The EA states that the proposed action will have no impact on minority populations and low-income populations, as construction will not require relocation of residences. It should be noted that there could be other potential impacts in addition to relocation and these should be evaluated in the EA. These impacts could include, noise, dust, vibration, traffic, etc.
- Page 31- The EA states that the Proposed Action is not anticipated to cause adverse impacts to Children's health and safety. Additional information should be provided justifying this conclusion.
- It is unclear if access roads and staging areas are needed for the Proposed Action. Direct and indirect impacts associated with these features should be evaluated.
- It is unclear if there will be potential indirect impacts to resources such as changes in hydrology, increased stormwater loss of shade/buffer, habitat fragmentation, etc. This should be analyzed in the EA.
- Stormwater management should be discussed in detail in this EA.
- The project should comply with EO 13112 regarding invasive species.
- The project should address EO 13508 calling on the federal agencies to work to protect and restore the Chesapeake Bay watershed.
- Chapter 7- Cumulative Impacts- This section should evaluate a longer time period and all potential projects, not only airport related projects. This assessment should look at any foreseeable projects that may impact resources (i.e. potential loss of additional forest habitat, impacts to Mattawoman Creek, etc). Projects that may be associated with the expansion of the airport (secondary impacts), business it brings or serves along with any infrastructure needs, should be assessed as well as any other foreseeable projects in the study area impacting resources (cumulative impacts). The study area for Secondary and Cumulative impacts is typically larger than the project area. This assessment is important to a complete view of potential effects on the vital natural resources in the watershed.
 - Page 37 states that the Phase IV construction of the runway, taxiway, and yard apron were reevaluated as part of the Supplemental EA and that no adverse environmental impacts will result from the completion of these three projects. This analysis should be clearly described and presented in the EA.
- Chapter 8 – Mitigation-
 - Page 38 states that precautions will be taken during maintenance and fueling of equipment so that no hazardous material are dumped onto the ground. The precautions should be discussed.
 - Page 9 states that restrictions governing the time of day in which construction activities can take place may be necessary to minimize disruptions to nearby residences. The team should work with the community and address their concerns.
 - Page 39- It is unclear if there will be mitigation for tree removal we suggest this be considered. Forest habitat provides many ecological services that should not be lost.



Mattawoman Watershed Society

Protecting and preserving Mattawoman Creek for the enjoyment of all.

And

Sierra Club, Maryland Chapter Accokeek, Mattawoman, Piscataway Creeks Council Maryland Bass Nation

Mr. Gilbert Bauserman
Maryland Airport Manager
3900 Livingston Road
Indian Head, MD 20640

October 30, 2014

via email: marylandairport@hotmail.com

via : hand delivery

Re: Maryland Airport draft Supplemental Environmental Assessment

Dear Mr. Bauserman:

Please accept these comments from the Mattawoman Watershed Society on the draft Supplemental Environmental Assessment (DSEA) for the Maryland Airport. Please note that we also include by reference all citations in these comments.

The Mattawoman Watershed Society ("MWS") is a 501(c)3 organization with over 1000 supporters that seeks to protect and preserve Mattawoman Creek. We are continually engaged in activities that directly use Mattawoman Creek for recreational, educational, and scientific purposes, and for public outreach in support of the Creek and in financial support of our organization. Among our activities that regularly occur or have occurred downstream of the subject project are ichthyoplankton surveys documenting a very significant decline in anadromous fish usage of the nontidal Creek, benthic macro-invertebrate surveys under the Maryland StreamWaders program, a freshwater mussel survey (conducted by our predecessor organization, Friends of Mattawoman Creek), and assistance to other organizations conducting field trips on and along the Creek. In addition, an MWS board member owns land adjacent to the Creek downstream of the subject proposal.

The Sierra Club, Maryland Chapter is a statewide organization that enables its members and the public to explore, enjoy, and protect the planet. The Club has supported a Mattawoman campaign for a number of years, and sponsors outings for its members and the public on the Mattawoman downstream of the airport. The Sierra Club takes specific interest in socioeconomic issues as they relate to the natural and human environment.

The airport has been controversial because of its impacts to Mattawoman Creek. A deep stream valley was filled for the runway extension and a tributary culverted over strong objections from the public, the National Marine Fisheries Service, the National Park Service, and, until a permit was granted, the Army Corps of Engineers. [EA, 2003] The DSEA concerns clearing forest in an area with an intermittent tributary and a wetland, and lies within a Maryland Stronghold Watershed, deemed by the state as "important for the

protection of Maryland's aquatic biodiversity." [DNR, 2008] The original EA failed to address the considerable cumulative impacts to Mattawoman, and ignored the secondary induced effects of the airport, even though these were called out by agency comments. [EA, 2003; agency comments from Wink Hastings, National Park Service ("NPS") and John Nichols, National Marine Fisheries Service ("NMFS")] The original EA also failed to fully consider alternatives, including alternative sites. Because the airport cannot be utilized as intended without the forest clearing that is the subject of the DSEA, approval of this DSEA would permit significant secondary impacts to Mattawoman Creek. There would also be adverse impacts to the communities surrounding the airport, and to the larger region that have never been addressed or analyzed. The DSEA should therefore conclude in favor of an Environmental Impact Statement ("EIS").

In addition to arguing that an EIS is finally necessary, we believe that a public hearing should be held to address the issues raised by increased air traffic that would be enabled by approval of the DSEA.

Approving the supplemental EA without an EIS constitutes segmentation. The supplemental EA, in and of itself, provides concrete evidence that the Maryland Airport project is being segmented, in violation of the National Environmental Policy Act ("NEPA"):

"Proposals or parts of proposals which are related to each other closely enough to be, in effect, a single course of action shall be evaluated in a single impact statement."
[40 CFR 1502.4(a)]

The record shows clearly that the project constitutes a "major federal action" through the administration of 404 wetland permits, the substantial financial investment by the Federal Aviation Administration, and the numerous strong agency comments in the original EA calling out the significant adverse environmental impacts of the project, including indirect and cumulative impacts that have so far not been addressed. As such, this supplemental EA should trigger a long overdue Environmental Impact Statement.

Furthermore, the original EA acknowledged the final goal of a 4,300 foot runway, but failed to include in its analysis the effects of the current draft EA states, which states that these additional actions and effects are *necessary* to realize a usable 4,300 foot runway:

"The removal of additional trees which are obstructions to the approach to Runway 20 will allow the Airport to complete the final obstruction removal phase for the runway construction." [DSEA, 2014; p. 4]

"The purpose of the Proposed Action is to allow the airport to construct the final phase of the runway development project by acquiring easements and removing obstructions to the future approach area for Runway 20." [Purpose and Need, DSEA, 2014; p. 7]

The DSEA presents as "new information" the additional forest clearing discovered in 2007 that is required to enable use of a 4,300 foot runway. [DSEA, 2014; p. 7] The omission of such a fundamental issue central to any airport establishes the incomplete nature of original EA. Because the present DSEA also gives evidence of being seriously incomplete, it is

reasonable to ask if additional omissions await discovery; even if not, the process is *de facto* piece-mealing the analysis of the project's adverse effects.

We question why airport construction was permitted to begin *after* it was known (in 2007) that additional steps were necessary to clear land on the north end of the runway. The process appears to be have designed to produce stepwise momentum making in politically difficult change course.

Furthermore, the DSEA anticipates yet another supplemental EA in the future if fee-simple acquisition of properties within the zone in question is decided, rather than imposing or acquiring avigation easements:

“If the Maryland Airport sponsor decides to acquire these properties in fee-simple in the future, additional environmental analysis via a supplemental EA would be required prior to fee simple acquisitions.” [DSEA, 2014; p. 12]

The DSEA is silent on which alternative will be pursued, calling into question the adequacy of the present alternatives analysis (DSEA, Chapter 4). That is, not only would a later supplemental EA constitute additional segmentation, the uncertainty of which alternative is preferred—fee simple acquisition or avigation easements—documents that the present DSEA itself is incomplete, as discussed further below with additional examples.

In addition, the DSEA anticipates yet another supplemental EA “[i]f obstructions need to be removed within this [wetland] buffer in the future.” [DSEA, 2014; p. 36] Of this wetland, the Maryland Department of the Environment has “determined that the depressional area is a regulated wetland and is considered connected by the State. If any impacts are proposed for this area or its adjacent 25-foot buffer then a Joint Federal/State Permit for Alteration to a Nontidal Wetland Waterway or 100-year floodplain needs to be submitted to the State.” About this wetland, the DSEA makes the unsupported claim that “removal of trees within this wetlands buffer is not anticipated to adversely impact wetlands.” Among other functions, forested wetlands are reliant on forest buffers for regulation of overland water flow, for thermal regulation, for leaf duff to support biota, and to provide habitat for amphibians (e.g., American toad, woodfrog, and an ambystoma salamanders) that breed in wetlands but live elsewhere.

The draft EA is incomplete. It fails to acknowledge cumulative and secondary effects that should be evaluated in an EIS.

Section 6.14 purports to consider Secondary Impacts. However, it considers only economic impacts. At that, it considers only “positive economic impacts” based on a generic Maryland-wide study of public-use airports. We note that by touting an overall economic effect, the DSEA confirms our contention that it represents an action that would trigger vast secondary impacts. We emphasize that the DSEA is incomplete in this specific regard, as no mention is made of the negative costs to the public of providing additional infrastructure the airport will spawn, such as road re-alignments, new highways like the Pomonkey Connector, or mitigation, water, and sewer. At least some of these costs are known but not reported.

The proposed expansion takes place in part in a Maryland Stronghold Watershed. Stronghold Watersheds “are most important for the protection of Maryland’s aquatic biodiversity.” [DNR, 2008] Clearing forest in a Stronghold Watershed suggests the possibility of adverse impacts to aquatic resources and is a rudimentary a consideration when assessing direct, indirect, or cumulative impacts. Yet no mention of a Stronghold Watershed occurs in the DSEA. An EIS would include such considerations in its scope.

Additional underlying environmental attributes of the land under consideration for clearing are not acknowledged in the DSEA. These include the Department of Natural Resource’s (DNR) Green Infrastructure in the form of Hub forest, and DNR Focal Area in the form and Targeted Ecological Area.

Secondary impacts of the airport have never been considered, despite being called out in agency comments in the EA (emphasis added):

NPS: It is our opinion that the proposed airport improvements *would cause significant long- term adverse effects to Mattawoman Creek...* Such adverse effects would degrade the existing high-water quality...¹

NMFS: The runway realignment will have devastating impacts on the subject watershed. We are particularly concerned with the destruction of the sloped, forested riparian zone, which will drastically alter instream hydrology... *We are also concerned about cumulative impacts this proposal will have on wetlands and instream habitat throughout the local region...* development of infrastructure must occur in the local region to facilitate transport of passengers to and from the airport and their destinations. Consequently, widening of roads; upgrading of bridges and other stream crossings, improvement of public transportation systems, and Commercial development must occur to support use of Maryland Airport as a diversion facility. Cumulative resource impacts of this proposal, therefore, should weigh heavily in your permit decision.²

The concern expressed by NPS and NMFS for adverse effects to natural resources reflects the environmental sensitivity of the area. Attached to these comments are comments that MWS submitted for the ongoing Charles County airport study. These comments document some of these natural attributes.

Furthermore, *new information* since the previous EA unambiguously establishes the significant indirect effects that would be precipitated if the DSEA fails to require an EIS:

- (i) The above excerpts from agency comments on the 2003 EA were concerned over plans to make Maryland Airport a reliever airport for National Reagan, as has long been advertised. Now, in addition, the opening of an MGM gambling casino at National Harbor is anticipated to multiplicatively increase air traffic if the Maryland airport runway allows jet traffic:

¹ Letter from Wink Hastings, National Park Service, to Maria Stevens, FAA, dated June 29, 2001

² Letter from John Nichols, National Marine Fisheries Service, to Rich Bulavinetz, ACOE, Baltimore District dated Oct. 12, 2001

The Office of Regional Aviation Assistance, a section of the Maryland Aviation Administration, estimates that the casino could quadruple the number of flights to and from the airport from 12,000 to 48,000 annually, Charles County Department of Economic Development Director Kwasi Holman told the county commissioners Wednesday.

The increase in flights could mean an extra 100,000 annual visitors to the county, Holman said, "which creates the opportunity for other retail and other kinds of activities along that corridor to National Harbor, with almost half a million dollars in fuel sales." [Independent, 2013]

(ii) The DSEA itself acknowledges that the "[t]he airport owners are working closely with the County to enact zoning laws to restrict the use of land adjacent to and in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations." [DSEA, p. 18] The county is currently conducting an airport land-use study that encompasses an area around the airport that, while too small to capture all the effects, nonetheless demonstrates that the expansion of airport operations enabled by the DSEA is anticipated to induce significant development. *The study is tied directly to the airport expansion.* The induced development would occur in areas of great natural and ecological significance that an EIS should consider. For an outline of the natural resources in the area, see the appended MWS comments to the contractors developing the airport study for the county.

(iii) An industrial technology park across from the airport is linked to the airport. While original plans for this public-private entity, which included the airport owner, have collapsed, the county continues to promote its development, and to that end is currently conducting a market survey. The concurrent airport land-use study that is being conducted by the county *is presently awaiting the outcome of the market study* [ERM, 2014], *thus establishing a clear linkage between the "tech park" and the airport.* The tech park is therefore a clear secondary effect of the airport and its significant adverse impacts to the environment should be considered in an EIS.

(iv) The Charles County draft Comprehensive Plan includes a proposed Cross County Connector. The county Capital Improvement Project budget has included a "Pomomkey Connector," a new spur highway that would connect the Cross County Connector specifically to the airport.

(v) New cumulative adverse effects to Mattawoman Creek are also anticipated by: (a) the Waldorf Station project where U.S. 301 crosses the Mattawoman. This project includes dense development and the four-lane Western Parkway. It lies entirely within the Tier II catchment of a segment of the Mattawoman; (b) the county recently adopted a septic-sewer plan, the "Tier Map" (not to be confused with Tier II stream designation) that plans for major subdivisions on septic along the Mattawoman estuary; (c) the county draft comprehensive plan continues to call for an 18,000 acre "deferred development district" in land near the airport. This area awaits infrastructure before being developed. It is reasonably foreseeable that expanded operations at the airport would likely lead to such infrastructure.

We also question issuing an EA for comment without first collecting all information known to be needed. For example, the EA states that “[t]he Draft EA will be submitted to MDE for the Coastal Zone Consistency Determination.”

Environmental Justice section is incomplete, inconsistent, and employs circular reasoning

The DSEA is inconsistent. It states on the one hand: “The Proposed Action would have no impact on minority populations and low-income populations, as construction of the Proposed Action will not require relocation of residences.” [DSEA, 2014; p. 31] On the other hand, as noted above, it acknowledges that residences may in fact be acquired with a fee-simple approach to effect the purpose of the EA. Fee-simple acquisition would force the residents move.

The following dismissal of Environmental Justice (“EJ”) issues employs circular reasoning:

“In addition, the analysis of environmental justice centers around demonstrating if there are any adverse impacts based on the impact categories evaluated in this EA. The results of the EA indicate that there are no adverse impacts related to environmental justice and therefore there is no adverse effect to minority or low-income populations.”

EJ has been given short shrift in the entire process to date. Adjacent land owners to the airport, many of whom were minorities, were uniformly opposed to moving to make way for the expansion. See petitions appended to the EA [EA, 2003] occur around pages 274 and 275 (as counted in a 281 page pdf of the EA). These landowners were evidently eventually compelled to sell. Yet no comprehensive EJ analysis was conducted in the EA. In addition, nearby Brawner’s Estates was established as a “sweat equity” development subsidized for economically stressed residents. It lies beneath the flight path. The impact to this community, and other EJ issues should be examined in an EIS.

In summary, greatly expanded airport operations would result from the clearing of land that is the subject of the DSEA because the runway could then be extended to 4300 feet, which would precipitate very significant increases in air traffic and very significant growth-inducing effects . If the DSEA does not find for an EIS, very significant adverse impacts impact to the environment and to the social well being of the surrounding community would result without adequate review, as explained above and in agency comments to the original EA. An EIS is required to gage the costs and benefits of the action, an analysis that yet to have conducted. We also request that a hearing be held by the agencies with oversight of this supplemental EA.

Sincerely,

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References

DSEA. Draft Supplemental Environmental Assessment, Maryland Airport. Talbert & Bright, Inc. (2014).

DNR, 2008. *Stream Ecology Fact Sheet* <http://www.dnr.state.md.us/streams/pdfs/StrongholdFactSheet.pdf>

EA, 2003. Environmental Assessment, Maryland Airport. Talbert & Bright, Inc. (2003).

Independent, 2013. *P.G. casino could quadruple flights to Charles' Maryland Airport*, Maryland Independent, Jeff Newman, staff writer (April 5, 2013).

ERM, 2014. Personal communication from Jennifer Huff, Environmental Resources Management, to Bonnie Bick (October 29, 2014).

Maryland Airport Supplemental Environmental Assessment

Environmental Protection Agency Comments/Responses

| Comment Number | Page Number | Section/Figure/Table/Appendix | Commenter | Org | Comment | Response By | Response |
|----------------|-------------|--|-----------------|-------|---|------------------------|--|
| 1 | | | Barbara Rudnick | USEPA | The current EA is very vague and important information is scattered throughout the document. The history of why the supplement was needed, what was evaluated in the 2003 EA, and what the scope of this EA should be clearly explained. Detailed maps and plans should be provided showing the current conditions at the airport and project area and depicting the potential impacts from the Proposed Action. | Talbert & Bright, Inc. | Page 1 of the EA has been revised to note that the obstructions and easements identified in the Supplemental EA were not identified nor anticipated when the original EA was developed in 2003. The Scope of the Supplemental EA is discussed on page 1. Detailed maps and plans for the easement acquisition and obstruction removal areas are included throughout the Supplemental EA and depict potential impacts. |
| 2 | | Chapter 2 - Purpose and Need | Barbara Rudnick | USEPA | This chapter fails to identify the project needs. The EA states that "since these obstructions were not included in the original EA, it was determined that the new runway would be constructed at a shorter length until the obstructions could be removed. This runway length allows the Airport to meet the future operational needs." The purpose and need for this supplement should be clearly explained. | Talbert & Bright, Inc. | The project Purpose and Need is described in Chapter 2 of the Supplemental EA and discusses the federal and State requirements required to maintain safe approaches at a public-use airport. |
| 3 | | Chapter 3 - Proposed Action | Barbara Rudnick | USEPA | The discussion should provide more detail about what will be done as part of the Proposed Action. The EA only states obstructions will be removed from 8.5 acres once the easements have been purchased by the airport from the land owners. Additional information on methods of tree topping and clear cutting should be provided. Will access roads and staging areas be used? What will be allowed to grow in these areas? How often will the areas be maintained and by what methods? | Talbert & Bright, Inc. | The Proposed Action description on page 8 has been revised to include additional information about the type of proposed clearing. A reference has been added to this section noting the project staging area depicted on Exhibit 3.2. |
| 4 | | Chapter 4 - Alternatives Analysis | Barbara Rudnick | USEPA | Alternatives Analysis should clearly describe why the proposed project is the preferred alternative compared to other alternatives. | Talbert & Bright, Inc. | Section 4.3 "Alternatives Analysis" has been added which discusses the reasons for selecting the Proposed Action over the two alternatives. |
| 5 | | Chapter 5 - Affected Environment | Barbara Rudnick | USEPA | The chapter should provide detail on the environmental and community resources for the study area. | Talbert & Bright, Inc. | This section has been revised to include additional information on the existing environmental features of the study area. |
| 6 | | Chapter 6 - Environmental Consequences | Barbara Rudnick | USEPA | The chapter should clearly describe the potential impacts from the project. Figures and maps should be provided to show the locations of these areas. | Talbert & Bright, Inc. | Exhibits 3.2 and 3.3 show the locations of the obstruction removal areas identified in the Proposed Action. Nearby wetlands and streams are also identified in this exhibit and the potential impacts are described throughout Chapter 6 of the EA. |
| 7 | 24 | Chapter 6 - Environmental Consequences | Barbara Rudnick | USEPA | The study describes the intermittent stream segment but does not provide information about potential for benthic invertebrates or how the intermittent status was determined. Additional discussion and evaluation should be provided for this resource and its connections. While the EA states there will be no impacts related to this project, the document fails to address potential indirect and cumulative impacts. In addition, this project is in the Mattawoman watershed which is under many stresses and significant efforts have been made to protect this resource. | Talbert & Bright, Inc. | Section 6.7 has been revised to include the analysis for the stream delineation in the EA study area. Also, a reference to benthic organisms has been added to this section. Potential cumulative impacts are discussed in Chapter 7 of the Supplemental EA. |
| 8 | 24 | Chapter 6 - Environmental Consequences | Barbara Rudnick | USEPA | The discussion of species of concern is vague. The qualifications of those conducting the physical inspection of the survey area is not specified. The EA states that Maryland Department of Natural Resources (MDNR) has no concern regarding state-listed species within the boundaries of the survey area; it is unclear if this is the same as the project areas discussed in the EA. It appears the proposed project area is adjacent to a Targeted Ecological Area and is located partially in a Sensitive Species Project Area as defined by MDNR. Further documentation should be provided to ensure protection of any State-identified species of concern or habitats related to any species of concern. | Talbert & Bright, Inc. | Section 6.7 has been revised to note that the MDNR analysis regarding T&E species relates to the Supplemental EA study area. In addition to the physical site inspection of the survey area, the Chesapeake Bay Ecological Services Field Office online species review process did not list any potential threatened or endangered species within any of the survey area's distinct parcels. Additionally, the Wildlife and Heritage Service of the Maryland Department of Natural Resources (MDNR) stated in a letter dated 5 December 2013 |
| 9 | 26 | Chapter 6 - Environmental Consequences | Barbara Rudnick | USEPA | discusses disposal of debris but does not mention burning. Page 2-13 states that burning may contribute to air quality impacts. There are concerns associated with the burning of materials. It is unclear what will be burned. All air emission related to this project should be evaluated in the air quality section. This includes burning, construction vehicles, dust, etc. In addition the EA states that water will be used to suppress dust. Details should be provided to identify sources of water supply to be used. | Talbert & Bright, Inc. | Burning of vegetative debris is not included as part of the Proposed Action. Section 6.4 and Chapter 8 have been revised to reflect this. Also, Chapter 8 was also revised to note that water that will be used to manage fugitive dust will be provided by the contractor and brought to the project site via tanker trucks. |
| 10 | 31 | Chapter 6 - Environmental Consequences | Barbara Rudnick | USEPA | Additional information should be provided for methods used in the environmental justice assessment in this study. The EA states that the proposed action will have no impact on minority populations and low-income populations, as construction will not require relocation of residences. It should be noted that there could be other potential impacts in addition to relocation and these should be evaluated in the EA. These impacts could include, noise, dust, vibration, traffic, etc. | Talbert & Bright, Inc. | Section 6.15.2 has been revised to include potential temporary impacts to minority populations. |
| 11 | 31 | Chapter 6 - Environmental Consequences | Barbara Rudnick | USEPA | The EA states that the Proposed Action is not anticipated to cause adverse impacts to Children's health and safety. Additional information should be provided justifying this conclusion. | Talbert & Bright, Inc. | Section 6.15.3 has been expanded to include rationale for no impacts to the stated resources. |
| 12 | | Chapter 6 - Environmental Consequences | Barbara Rudnick | USEPA | It is unclear if access roads and staging areas are needed for the Proposed Action. Direct and indirect impacts associated with these features should be evaluated. | Talbert & Bright, Inc. | A staging area will be required for the Proposed Action as shown in Exhibit 3.2. The impacts associated with this staging area are discussed in Chapter 6 of the EA. |
| 13 | | Chapter 6 - Environmental Consequences | Barbara Rudnick | USEPA | It is unclear if there will be potential indirect impacts to resources such as changes in hydrology, increased stormwater loss of shade/buffer, habitat fragmentation, etc. This should be analyzed in the EA. | Talbert & Bright, Inc. | Section 6.12 has been revised to discuss the temporary impacts to habitat fragmentation, hydrology, and loss of shade/buffer. |

Environmental Protection Agency Comments/Responses

| Comment Number | Page Number | Section/Figure/Table/Appendix | Commenter | Org | Comment | Response By | Response |
|----------------|-------------|--|-----------------|-------|--|------------------------|--|
| 14 | | Chapter 6 - Environmental Consequences | Barbara Rudnick | USEPA | Stormwater management should be discussed in detail in this EA. | Talbert & Bright, Inc. | Section 6.16 has been revised to include information regarding the already approved stormwater management requirements in the erosion control plan. |
| 15 | | Chapter 6 - Environmental Consequences | Barbara Rudnick | USEPA | The project should comply with EO 13112 regarding invasive species. | Talbert & Bright, Inc. | Reference to EO 13112 has been added to Section 6.7 of the EA. |
| 16 | | Chapter 6 - Environmental Consequences | Barbara Rudnick | USEPA | The project should address EO 13508 calling on the federal agencies to work to protect and restore the Chesapeake Bay watershed. | Talbert & Bright, Inc. | Reference to EO 13508 has been added to Section 6.2 of the EA. |
| 17 | | Chapter 7 - Cumulative Impacts | Barbara Rudnick | USEPA | This section should evaluate a longer time period and all potential projects, not only airport related projects. This assessment should look at any foreseeable projects that may impact resources (i.e. potential loss of additional forest habitat, impacts to Mattawoman Creek, etc). Projects that may be associated with the expansion of the airport (secondary impacts), business it brings or serves along with any infrastructure needs, should be assessed as well as any other foreseeable projects in the study area impacting resources (cumulative impacts). The study area for Secondary and Cumulative impacts is typically larger than the project area. This assessment is important to a complete view of potential effects on the vital natural resources in the watershed. | Talbert & Bright, Inc. | Chapter 7 has been expanded to include information regarding potential indirect cumulative impacts. |
| 18 | 37 | Chapter 7 - Cumulative Impacts | Barbara Rudnick | USEPA | Page 37 states that the Phase IV construction of the runway, taxiway, and yard apron were reevaluated as part of the Supplemental EA and that no adverse environmental impacts will result from the completion of these three projects. This analysis should be clearly described and presented in the EA. | Talbert & Bright, Inc. | This paragraph has been clarified to note the review of past projects at the Maryland Airport. |
| 19 | 38 | Chapter 8 - Mitigation | Barbara Rudnick | USEPA | Page 38 states that precautions will be taken during maintenance and fueling of equipment so that no hazardous material are dumped onto the ground. The precautions should be discussed. | Talbert & Bright, Inc. | This Section has been revised to note that construction equipment refueling will be conducted in the staging area. |
| 20 | 9 | Chapter 8 - Mitigation | Barbara Rudnick | USEPA | Page 9 states that restrictions governing the time of day in which construction activities can take place may be necessary to minimize disruptions to nearby residences. The team should work with the community and address their concerns. | Talbert & Bright, Inc. | During the design phase, coordination with the residents that will be impacted by the Proposed Action will ensure that disruptions from construction activities will be minimized. |
| 21 | 39 | Chapter 8 - Mitigation | Barbara Rudnick | USEPA | It is unclear if there will be mitigation for tree removal we suggest this be considered. Forest habitat provides many ecological services that should not be lost. | Talbert & Bright, Inc. | Mitigation for the proposed tree removal associated with the Proposed action is included in the existing Airport Forest Conservation Plan as discussed in Chapter 8 of the EA. |
| 22 | | | Greg Golden | MDNR | Planning, review, permitting, and construction for the Maryland Airport improvements have taken place over 10-plus years. Based on our history of review, we understand that most of the improvements have been previously approved. The current Supplemental EA addresses easement Acquisition and Obstruction Removal. Those familiar with the project, regional planning, natural resources of the area, and the various public interests involved will understand why there are many important planning matters associated with the project beyond the scope of this specific Supplemental EA. By the time Indirect and Cumulative Effects (Secondary and Cumulative Impacts) are considered, those connections are quite clear. For the most part, we are providing comments specific to this particular document and the subject current proposal in this memo, but with reasonable recognition to the past review, and broader planning issues. | Talbert & Bright, Inc. | Comment noted. |
| 23 | | | Greg Golden | MDNR | While we have referred to the very detailed Mattawoman watershed natural resource protection document above, to briefly summarize our natural resources concerns for the subject obstruction removal, note here that protection of downstream aquatic resources of State-wide significance depends on maintaining natural hydrology and water cycle components, good water quality, and strict minimization of sediment and erosion. This is to protect downstream anadromous fish spawning reaches, resident fish populations in tributaries, and the highly valued and economically important estuarine habitat for submerged aquatic vegetation (SAV) and the tidal sports fishery (largemouth bass and other gamefish species). Natural vegetation, especially forest vegetation, is critically important for maintaining soil properties essential to infiltration of rainfall for the natural hydrology of the watershed. | Talbert & Bright, Inc. | The area identified for obstruction removal in the Supplemental EA will be allowed to regenerate naturally after the obstructions have been removed. This will help maintain existing hydrology and water quality standards in the EA study area and the Mattawoman watershed. |
| 24 | | | Greg Golden | MDNR | Given the safety elements of the project purpose and need, we understand the importance of the obstruction removal elements of the project. We advocate the very careful planning, practicable minimization of impacts, implementation, and strategic follow through associated with the obstruction removal, with specific comments provided below. | Talbert & Bright, Inc. | Comment noted. |
| 25 | | | Greg Golden | MDNR | A tributary headwater is present in portions of the clearing and easement area. It is very important to plan for a healthy riparian buffer of natural vegetation along this headwater. We understand that the clearing requirements will influence what types of vegetation will be used for this riparian buffer. To the extent practicable, we advocate native forest species in this area, including trees, shorter tree species of limited height where taller trees are not allowable for safety reasons, shrubs, and/or herbaceous vegetation, as necessary and as feasible. Additionally, it is important to optimize planning for access, clearing practices, stabilization measures, re-vegetation, and long term maintenance in order to protect natural features of the headwater, nearby wetlands, and groundwater recharge areas. Use of optimized sediment and erosion control, other Best Management Practices (BMPs), and long term management plans are essential elements to protect downstream water quality and habitat. | Talbert & Bright, Inc. | The proposed obstruction removal area will be allowed to regenerate with native vegetation to minimize hydrology, water quality, and habitat impacts. Sediment and erosion controls will be utilized to reduce the impacts associated with stormwater runoff. |

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| 26 | | | Greg Golden | MDNR | Additional information for planning on obstruction removal should include more details and determinations on methods of clearing and how and where they will be applied (i.e. topping, selective cut, clearcut); access & staging area identification and delineation, assessment of other temporary impacts, and methods of debris removal. These topics have current references in the draft document. Consideration should be given to any other available details to include in the document now, and to set up future steps to provide upcoming planning details to the local, State, and Federal authorization processes. Ultimately, it is important to demonstrate that all associated impacts are avoided and strictly minimized for any required obstruction removal, within the precisely defined purpose and need safety elements for the project. | Talbert & Bright, Inc. | Additional information provided regarding the staging area and temporary impacts associated with the proposed obstruction removal. |
| 27 | | | Greg Golden | MDNR | Better detail is needed on planting and vegetation management approach and methods, and this should address both short term stabilization and long term vegetation management. We were not able to get a reasonable vision yet for what the area vegetation will look like after work is completed, any phasing aspects, and species composition details. Once obstruction removal occurs, and this is an important vision to convey in the document. | Talbert & Bright, Inc. | Native vegetation in the obstruction removal area will be allowed to regenerate and include grasses, shrubs, and trees. This area is included in the existing Maryland Airport Forest Conservation Plan and the obstruction will be removed in accordance with this plan. |
| 28 | | | Greg Golden | MDNR | We also were not able to get a full vision of what future activities may occur in the easement areas outside the initial clearing delineation. Is further clearing possible? What additional coordination would occur, or be required, if additional clearing is proposed? What types of airport management and planning decisions might affect future clearing? Additional text or graphics could clarify this. | Talbert & Bright, Inc. | The easement area identified in the Supplemental EA is sized so that trees in this area can be removed by the Maryland Airport to eliminate potential future obstructions. |
| 29 | | | Greg Golden | MDNR | In general, we would expect more detail in the Cumulative Impacts section. We agree with importance of the reference back to the 2003 EA (page 37 of the Draft Supplement EA), and the references to past history and future plans. We would recommend adding more detail and context to future plans, what studies and authorizations might be required for future improvements or upgrades, and what effects to a broader surrounding area (regional context) might result. Ultimately, it is for the Federal lead agency to take a proactive role in defining what information and study area should be included in the Cumulative Impacts section, but we advocate that the regional issues provide an excellent case for additional information. The section 8.14 on Secondary (Induced Impacts) was apparently used only for socioeconomic impacts. Secondary Impacts assessment for natural resource concerns is also very important, and is often addressed in combination with Cumulative Impacts (i.e. Indirect and Cumulative Effects). Is the Federal lead agency in agreement with how this information is analyzed and presented in the document? | Talbert & Bright, Inc. | The cumulative impact descriptions have been expanded to note potential environmental impacts associated with recently completed and future projects in proximity to the proposed easement acquisition/obstruction removal area. |
| 30 | | | Greg Golden | MDNR | Please note that the comments and recommendations provided here are specific to the activities proposed and addressed in this specific document. Other natural resource elements, and concerns, exist in the area and downstream. Different proposed project elements and activities in the area, especially vegetation clearing, soil grading and alteration, hydrologic impacts, impervious surface additions, stormwater management proposals, and related activities, would require additional review, and depending on the specific details of other proposals, would warrant additional natural resource concerns, comments and recommendations. | Talbert & Bright, Inc. | Comment noted. |
| 31 | | | Greg Golden | MDNR | In section 6.2 Coastal Zone Management (page 16), we offer this more appropriate and accurate language. We can coordinate further on this, in partnership with the document preparers and with Maryland Department of the Environment: "The Maryland Coastal Program, administered by the Maryland Department of Natural Resources (MDDNR), is a networked program comprised of several State agencies that collectively implement the Program. The Federal Consistency Review requirements are implemented through the Wetlands & Waterways Program within the Water Management Administration of the Maryland Department of the Environment. Maryland Airport, which received funding and other support from the FAA, is located within the Maryland Coastal Zone and will likely have foreseeable coastal effects. The Maryland Airport project is therefore subject to Federal Coastal Consistency Review. The FAA, or its agent acting on its behalf, is required to receive concurrence from the State of Maryland to ensure that the Maryland Airport project is consistent to the maximum extent practicable with Maryland's enforceable policies." | Talbert & Bright, Inc. | Section 6.2 of the EA has been revised to include the language provided by MDDNR regarding the Coastal Zone Consistency Review. |

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| 32 | | | | Mattawoman Watershed Society, Sierra Club, Maryland Chapter Accokeek, Mattawoman, Piscataway Creeks Council Maryland Bass Nation | Approving the supplemental EA without an EIS constitutes segmentation. (see attached comment letter) | Talbert & Bright | The Supplemental Environmental Assessment was developed in accordance with FAA requirements for a Supplemental EA (FAA Order 5050.4B NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) IMPLEMENTING INSTRUCTIONS FOR AIRPORT ACTIONS. The purpose of the Supplemental EA is to evaluate an area identified for obstruction removal since the issuance of the original EA FONSI. The 4,300' runway was included in the original EA. |
| 33 | | | | Mattawoman Watershed Society, Sierra Club, Maryland Chapter Accokeek, Mattawoman, Piscataway Creeks Council Maryland Bass Nation | The draft EA is incomplete. It fails to acknowledge cumulative and secondary effects that should be evaluated in an EIS. (see attached comment letter) | Talbert & Bright | Secondary and cumulative impacts are addressed in Chapter 7 of the Draft Supplemental Environmental Assessment (EA). Evaluation of past and future projects in relation to the EA Proposed Action determined that secondary and cumulative impacts are not likely if proper stormwater management and erosion and sediment controls are implemented during construction. |
| 34 | | | | Mattawoman Watershed Society, Sierra Club, Maryland Chapter Accokeek, Mattawoman, Piscataway Creeks Council Maryland Bass Nation | Environmental Justice section is incomplete, inconsistent, and employs circular reasoning. (see attached comment letter) | Talbert & Bright | The Proposed Action does not require the relocation of any residences or businesses in order to remove the obstructions to the Maryland Airport. |
| 35 | | | Tene' Lewis | Public | I would like to be on the record to request a public hearing as part of the Maryland Airport draft Supplemental Environmental Assessment. There will be significant secondary and cumulative impacts that have not been addressed that need to be addressed before there is a decision on this Environmental Assessment. Charles County is in the process of their Comprehensive Plan and that should be finalized before any decision is made for this Environmental Assessment. Charles County is conducting a Maryland Airport Study and the public should have a chance to review that study before the Environmental Assessment record closes and any regulatory decisions are made. | Talbert & Bright | Secondary and cumulative impacts are addressed in Chapter 7 of the Draft Supplemental Environmental Assessment (EA). Evaluation of past and future projects in relation to the EA Proposed Action determined that secondary and cumulative impacts are not likely if proper stormwater management and erosion and sediment controls are implemented during construction. The Draft 2014 Charles County Comprehensive Plan Update Identifies Proposed Action obstruction removal areas as Watershed Conservation District (WC). The EA included a detailed site assessment and Jurisdictional Determination by the US Army Corps of Engineers. Wetlands are not located in areas identified for obstruction removal. The Maryland Airport Study is being developed by Charles County to determine the future land uses around the Maryland Airport and is not related to the Draft EA. |

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| 36 | | | Marsha Back | Public | <p>I would like to be on the record to request a public hearing as part of the Maryland Airport draft Supplemental Environmental Assessment. There will be significant secondary and cumulative impacts that have not been addressed before the pending decision on this Assessment.</p> <p>Charles County is in the process of approving their Comprehensive Plan and that critical document should be finalized before any decision is made on this Environmental Assessment because designation of the area around the airport is yet to be undetermined.</p> <p>Charles County is conducting a Maryland Airport Study and the public should have a chance to review and comment on that study before the Environmental Assessment (EA) record closes and any regulatory decisions are made.</p> <p>The EA states that the Applicant is working closely with the county. This means that yourself or your agent and the county most likely are privileged to know details of the MD Airport Study. The public is the only sector that has no details and the public has a right to know.</p> <p>The county is also doing a 'Market Study' for the Indian head Science and Technology Park, the fate of that very sensitive land is very much tied to decisions about MD Airport. The county has said the MD Airport is being held up until the completion of the Tech Park Market Study.</p> <p>The public should have all of this information prior to decision being made regarding this Supplemental Environment Assessment.</p> | Talbert & Bright | <p>Secondary and cumulative impacts are addressed in Chapter 7 of the Draft Supplemental Environmental Assessment (EA). Evaluation of past and future projects in relation to the EA Proposed Action determined that secondary and cumulative impacts are not likely if proper stormwater management and erosion and sediment controls are implemented during construction. The Draft 2014 Charles County Comprehensive Plan Update identifies Proposed Action obstruction removal areas as Watershed Conservation District (WC). The EA included a detailed site assessment and Jurisdictional Determination by the US Army Corps of Engineers. Wetlands are not located in areas identified for obstruction removal. The Maryland Airport Study is being developed by Charles County to determine the future land uses around the Maryland Airport and is not related to the Draft EA.</p> |
| 37 | | | John and Meredith Sweet | Public | <p>As Charles County taxpayers, we are requesting a public hearing for the Maryland Airport draft Supplemental Environmental Assessment. As residents' tax dollars are to be used in the building of infrastructure to support the airport's proposed expansion, we believe it is more than equitable that taxpayers have an active voice in how those dollars are spent.</p> <p>Additionally, there are other considerations that have impact on the planning of the Maryland Airport and therefore the timing of the present supplemental environmental assessment. One is the county's 2012 Comprehensive Plan, which is still in the process of being updated, and the other the Maryland Airport Study, which has yet to go before the public for hearing and review. Both should be finalized and then taken into consideration during this assessment process before the record closes and regulatory decisions are made.</p> <p>Thank you for your kind attention in this matter.</p> | Talbert & Bright | <p>Secondary and cumulative impacts are addressed in Chapter 7 of the Draft Supplemental Environmental Assessment (EA). Evaluation of past and future projects in relation to the EA Proposed Action determined that secondary and cumulative impacts are not likely if proper stormwater management and erosion and sediment controls are implemented during construction. The Draft 2014 Charles County Comprehensive Plan Update identifies Proposed Action obstruction removal areas as Watershed Conservation District (WC). The EA included a detailed site assessment and Jurisdictional Determination by the US Army Corps of Engineers. Wetlands are not located in areas identified for obstruction removal. The Maryland Airport Study is being developed by Charles County to determine the future land uses around the Maryland Airport and is not related to the Draft EA.</p> |
| 38 | | | Bonnie Bick | Public | <p>Attached please find comments from the Mattawoman Watershed Society, Sierra Club, MD Chapter, Accokeek, Mattawoman, Piscataway Creek Council and Maryland Bass Nation on the Maryland Airport draft Supplemental Environmental Assessment. Also attached are stakeholder interview notes from the Mattawoman Watershed Society to ERM regarding the Charles County Airport Study, for the record of the Maryland Airport draft Supplemental Environmental Assessment.</p> <p>Members of our organizations feel the Maryland Airport draft Supplemental Environmental Assessment should require distribution of an electronic copy of the document, an extended comment period, more public participation - including Environmental Justice outreach and a public hearing.</p> <p>Members of our organizations question sending comments for the Maryland Airport draft Supplemental Environmental Assessment to the applicant and airport owner, National Environmental Policy Act should be conducted by a federal agency.</p> | Talbert & Bright | <p>Secondary and cumulative impacts are addressed in Chapter 7 of the Draft Supplemental Environmental Assessment (EA). Evaluation of past and future projects in relation to the EA Proposed Action determined that secondary and cumulative impacts are not likely if proper stormwater management and erosion and sediment controls are implemented during construction. The Draft EA was made available for public review as per FAA and NEPA requirements. All comments received by the Maryland Airport have been forwarded to the FAA and will be included in the Final EA document.</p> |

