PUBLIC NOTICE OF AVAILABILITY

FEDERAL AVIATION ADMINISTRATION

FINAL ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT FOR
Reconstruction, Widening and Extension of Taxiway E Project at the Eastern West Virginia Regional Airport (MRB)
Martinsburg, West Virginia

The Eastern West Virginia Regional Airport Authority (EWVRAA) in conjunction with the Federal Aviation Administration (FAA), is issuing this notice to advise the public of the availability of the Final Environmental Assessment (Final EA) and Finding of No Significant Impact (FONSI) for a proposed Reconstruction, Widening and Extension of Taxiway E Project at the Eastern West Virginia Regional Airport (MRB) in Martinsburg, West Virginia in Berkeley County. The proposed improvements evaluated in the Final EA include a proposed project to provide a full-length parallel Taxiway E on the south side of Runway 8-26.

The Final EA and FONSI document that the project is consistent with the National Environmental Policy Act of 1969 (NEPA) (42 USC § 4321, et seq.), its implementing regulations (40 CFR Parts 1500-1508), and FAA directives (Orders 5050.4B, *Airport Environmental Handbook* and 1050.1F, *Environmental Impacts: Policies and Procedures*), Council on Environmental Quality regulations, the requirements of Section 106 of the National Historic Preservation Act, Department of Transportation Act of 1966 Section 4(f), and all other applicable special purpose laws.

The Final EA responds to comments received by the FAA, and it updates the Draft EA, issued on June 13, 2024. The FONSI sets forth the FAA's final determinations and environmental approvals for the federal actions necessary to implement the Proposed Action. FAA arrived at these determinations by considering comments and reviewing the environmental analysis in the Final EA and all other relevant documents that comprise the EA record. Issuance of this FONSI signifies that the FAA will not prepare an EIS and has completed the NEPA process for the Proposed Action and that the NEPA process for the Proposed Action has been satisfied.

An electronic copy of the Final EA and FONSI are available on the EWVRAA's website at www.flymrb.com/wp-content/uploads/2024/08/Taxiway-E-Final-SEAFFONSI.pdf
Hard copies are available for review at the following locations during regular business hours:

Eastern West Virginia Regional Airport
Authority FBO Building
170 Aviation Way, Martinsburg, WV 25405
Available by appointment: call 304.263.2106 ext. 1 for an appointment.

If you are unable to access the Final EA and FONSI through one of these means, need to request a copy of the document, or require special assistance to review the Final EA and/or the FONSI, please contact Megean Moon (mmoon@flymrb.com or 304.263.2106 ext. 1). Every reasonable effort to accommodate special needs will be made.

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DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

FINDING OF NO SIGNIFICANT IMPACT (FONSI)

Location

Eastern West Virginia Regional Airport (MRB)
Berkeley County, West Virginia

Project Description

Parallel Taxiway A is located on the north side of MRB's Runway 8-26. The taxiway is designed to accommodate critical aircraft based with the West Virginia Air National Guard (ANG) which is the airport's largest tenant. The taxiway also supports general aviation tenants located on the north side of the airfield. Most of the general aviation activity is located on the south side of the airfield and is supported by Taxiway E, which is a partial length parallel taxiway. The project would extend Taxiway E to provide a full-length parallel taxiway on the south side of Runway 8-26.

Taxiway E extension would involve the following activities, completed in four phases:

- New Overlay/Pavement Construction (Pavement Milling, Crack Preparation/Sealing, Pavement Surface Courses, Aggregate Base/Subbase Courses and Tack/Prime coats, as required).
- Electrical Demolition (edge lights, signs, junction structures, conduit, cables, etc.).
- Pavement Demolition (Asphalt Surface Courses, Gravel Base Courses).
- Pavement Marking Removal; New Airfield Pavement Markings.
- Upgrades to the Existing Airfield Electrical Vault to accommodate new airfield lighting circuits.
- Installation of new Airfield Edge Lighting including trenching, conduit, concrete encased duct banks, junction structures/handholes, cables, a counterpoise system, and backfill.
- Excavation, including blasting.
- Embankment Preparation.
- Clearing/Grubbing of proposed areas of work including Safety Areas and Object Free Areas.
- Topsoiling, Sodding, Seeding, and Mulching.
- Open and Closed Drainage System Improvements to accommodate runoff from the proposed development to include trenching and installation of new drainage pipes, pipe bedding, geotextiles, drainage swale linings/matting.
- Installation and removal of required Erosion & Sedimentation Control Features such as filter sock, silt fence, filter bags, diversion dike, sediment traps/basins, outlet control structures and other features as required by the West Virginia Department of Environmental Protection (WVDEP) through their WV/NPDES Construction Stormwater General Permit in accordance with West Virginia Erosion and Sediment Control Best Management Practice Manual.

Proposed Federal Actions

The federal actions subject to the National Environmental Policy Act (NEPA) are the Federal Aviation Administration's (FAA) authority to approve or disapprove changes to the MRB Airport Layout Plan (ALP) that depicts the proposed Taxiway E extension and associated improvements, and FAA approval authority for any eligible projects funded through the Airport Improvement Program (AIP) and any other FAA-administered grant assistance program.

Purpose and Need

The purpose of the project is to provide an additional full-length parallel taxiway on the south side of Runway 8-26. Access to either end of Runway 8-26 for aircraft on the south side of the runway is to either a back-taxi down the runway or cross the runway to utilize Taxiway A. This creates an unsafe airfield condition. With the extension of Taxiway E to both ends of Runway 8-26, this new full-length taxiway is needed to allow general aviation aircraft to taxi, and queue as needed, without creating unsafe airfield operational conditions or inhibiting ANG operations.

Alternatives

Alternatives to the Proposed Action as described above, were considered in the Environmental Assessment (EA) and are described below.

No Action Alternative:

No changes would be made from the existing airfield conditions. Under the No Action Alternative, an additional full-length parallel taxiway would not be constructed to alleviate the current operational constraint as stated in the project's Purpose and Need. Although this alternative does not meet the stated Purpose and Need, it is carried forward for analysis in accordance with Council on Environmental Quality (CEQ) regulations and FAA guidance in FAA Orders 1050.1F and 5050.4B.

Proposed Action Alternative:

The Proposed Action Alternative includes widening and extending Taxiway E and all associated/connected actions documented in the Project Description. General aviation aircraft located on the south side of the airport would no longer be required to access either end of Runway 8-26 by back-taxing down the runway. The proposed full-length and widened Taxiway E on the civilian side of the airfield will allow general aviation aircraft to taxi and queue as needed, without creating unsafe airport operational conditions or inhibiting ANG operations. The Proposed Action Alternative meets the designated Purpose and Need of the Project and promotes safer conditions for aircraft and properties on the ground during the approach and departure phase of flight; therefore, this alternative is considered as the Preferred Alternative.

Discussion

The EA assessed the effects of the Proposed Action on the quality of the human and natural environment and is incorporated into this Finding. The following impact analysis highlights the more thorough analysis presented in the document.

Air Quality

MRB is located in Berkeley County, West Virginia which is an attainment area for National Ambient Air Quality Standards (NAAQS). The county was formally designated as an attainment/maintenance area for the 1997 annual particulate matter (PM2.5). The standard has since been revoked. A construction emissions analysis was conducted to provide an estimate of

construction emissions associated with the Proposed Action. Construction would cause temporary increases in carbon monoxide (CO), volatile organic compounds (VOC), nitrous oxides (NOX), sulfur dioxide (SO2), and particulate matter (PM10 and PM2.5) emissions. Based on the analysis, total emissions associated with all four years of construction are not expected to exceed the *de minimis* thresholds for any NAAQS. As a result, construction of the Proposed Action would not significantly affect air quality or the area's attainment status compared to the No Action Alternative.

The purpose of the project is to provide continuous operations to existing users, the project does not induce additional aviation activity, nor will it introduce a larger type of aircraft; therefore, operational changes in aircraft emissions from the No Action to the Proposed Action condition would be insignificant. There may be very minor increases in emissions due to slightly different taxiing times with the extension of Taxiway E to both ends of Runway 8-26, but taxiing emissions are typically a very small portion of total aircraft operation emissions, and not all aircraft will need to use the full-length taxiway. Also, the need for back-taxiing will be eliminated. There would be no changes to mobile sources including Ground Support Equipment (GSE), Auxiliary Power Unit (APU) emissions, or motor vehicles traveling on and off the roadways. Furthermore, there are no sources of stationary emissions associated with the Proposed Action. For these reasons, operational emissions are not expected to increase, or if so, will increase minimally, as a result of the Proposed Action. Air quality impacts associated with operations are not considered significant compared to the No Action Alternative.

Biological Resources

The U.S. Fish and Wildlife Service's (USFWS) Information for Planning and Conservation (IPaC) website identified the endangered Indiana Bat (*Myotis sodalis)* and Northern Long-eared Bat (NLEB) (*Myotis septentrionalis)*, and the proposed endangered Tricolored Bat (*Perimyotis subflavus*) which may occur in or near the project area. The Monarch Butterfly, a candidate species, and eight (8) migratory birds including the Bald Eagle, were also identified by the IPaC database. The West Virginia Department of Natural Resources' (WVDNR) Natural Heritage Program confirmed that the project is within a five-mile buffer of an identified cave/mine portal associated with the tricolor bat; no other species were identified by the WVDNR.

The Proposed Action will result in approximately eight (8) acres of tree removal. It is located more than 0.25 mile away from any known bat hibernacula. According to the results generated from the IPaC Determination Keys, the USFWS concurred with the Proposed Action's determination of may affect, not likely to adversely affect for the NLEB and not likely to adversely affect for the Indiana Bat. To ensure minimal impact, it is assumed that the Indiana Bat and NLEB as well as the Tricolored Bat species, identified during consultation, are present. Using this assumption, tree clearing associated with the Proposed Action will be limited to the timeframe of November 15 to March 31, inclusive of any construction year, to minimize the potential impacts.

Although there are no current protections or consultation requirements for candidate species, such as the Monarch Butterfly, the USFWS recommends Best Management Practices (BMPs) to benefit the monarch butterfly and other pollinators. MRB will minimize mowing activities (e.g., decrease frequency, increase vegetation height) during spring and summer months, avoid/minimize the use of pesticides, and plant native vegetation, when applicable.

Implementation of time-of-year restrictions for tree removal will also help protect migratory birds. Based on the results of consultation, and implementation of a time-of-year restrictions as well as BMPs, the Proposed Action will not result in significant impacts to biological resources compared to the No Action Alternative.

Department of Transportation Section 4(f)

MRB is located within the defined boundary of the of the Battle of Martinsburg, which is a Section 4(f) resource, identified in the 2010-2011 West Virginia Civil War Conflict Sites and Areas GIS Map project. According to the 2010-2011 project, the proposed boundary serves as "a foundation upon which greater, more in depth projects can be based on." The Battle of Martinsburg has not been formally evaluated but is assumed to be potentially eligible for listing in the National Register of Historic Places (NRHP) for the purposes of this evaluation. Although MRB is within the proposed boundary for the Battle of Martinsburg, the Proposed Action will not affect any off-airport property. Identified historic resources will therefore not be affected by the Proposed Action. The West Virginia State Historic Preservation Office (WVSHPO) concurred with this determination. The Proposed Action will therefore not result in significant Section 4(f) impacts compared to the No Action Alternative.

Hazardous Materials, Solid Waste, and Pollution Prevention

Two hazardous waste facilities/sites are located within airport property and related to ANG operations: 167th Airlift Wing and the Martinsburg Armory. No reported violations relating to releases have been documented by the US Environmental Protection Agency (USEPA) and the Proposed Action would not result in any impacts to, or located within, immediate vicinity to either facility/site as both are located north of Runway 8-26 and all work activities will occur south of the runway.

If any of the soils excavated are suspected of being contaminated, soil samples would be obtained and taken to a certified laboratory and analyzed for the list of priority pollutants. If any soils or other materials removed during the construction are determined to be hazardous waste, the material would be disposed of at a USEPA-approved hazardous waste disposal facility. All waste disposal activities associated with the Proposed Action would comply with all federal, state and local regulations regarding the identification, removal, transportation, and disposal of hazardous and non-hazardous materials.

There will be a temporary increase in solid waste due to the short-term construction activities. Soils will be reused on site to the greatest extent possible. There are local disposal facilities within the area that are capable of handling solid waste associated with construction activities. The closest facility is LCS Services Landfill located in Hedgesville, West Virginia located approximately 19 miles from MRB.

Stringent erosion and sediment (E&S) and stormwater controls will be implemented. The project will require a construction stormwater permit including BMPs for E&S control in compliance with the West Virginia Department of Environmental Protection (WVDEP) through their WV/NPDES Construction Stormwater General Permit and the Berkeley County Stormwater Ordinance in accordance with West Virginia Erosion and Sediment Control Best Management Practice Manual. In addition, vegetation/tree removal activities will involve flush cuts, thereby retaining the root structure to minimize erosion.

There are no anticipated impacts to or from hazardous materials as a result of construction or operation of the Proposed Action compared to the No Action Alternative. The Proposed Action is not anticipated to create a significant amount of solid waste that could not be accommodated by local disposal sites when compared to the No Action Alternative. Compliance with permit regulations, local ordinances, and BMPs will also result in no significant pollution concerns compared to the No Action Alternative.

Historic, Architectural, Archeological, and Cultural Resources

According to the WVSHPO online mapping system and the U.S. Department of Interior (National Park Service) National Register Database (accessed on April 13, 2023), there are no historic/cultural resources listed in, or eligible for inclusion in the NRHP within the immediate vicinity of the Proposed Action. BY-0890 (Shepherd Field ANG Base) and various individual structures located on the property were surveyed by the WVSHPO for eligibility for listing and determined not to be eligible due to age and significant alternations to structures (Attachment 6). The Foltz House/Walter's Farm (BY-0032-0093) is located approximately 0.20 mile south of the proposed undertaking. Based on current aerial imagery, the house as well as ancillary structures are no longer extant.

MRB is located within the defined boundary of the of the Battle of Martinsburg as identified in the 2010-2011 West Virginia Civil War Conflict Sites and Areas GIS Map project. The Battle of Martinsburg has not been formally evaluated but is assumed to be potentially eligible for listing in the NRHP for the purposes of this evaluation. Although MRB is within the proposed boundary for the Battle of Martinsburg, the proposed undertaking is confined to the existing airfield boundary and will not affect any off-airport property. The WVSHPO concurred with the determination that the proposed undertaking would have no adverse effect on historic properties including historic standing structures.

Several archaeological surveys have been conducted surrounding the Proposed Action, including surveys completely on, or partially within, the defined direct and/or indirect Area of Potential Effect (APE). No further investigations were warranted or recommended. The Shepherd and Shewalter Cemetery (46BY166) is located approximately 470 feet south of the existing taxiway pavement edge outside of the direct APE, and site 46BY214, which was previously determined not eligible for listing on the NRHP, is no longer present due to completion of the ANG runway project. These previously recorded sites will not be affected as a result of the proposed undertaking, and no additional archaeological sites would be anticipated within the direct APE. Coordination with the WVSHPO concurred with the determination that the proposed undertaking would have no adverse effect on historic properties including archaeological resources. The Proposed Action will not result in significant impacts to Historic, Architectural, Archeological, and Cultural Resources compared to the No Action Alternative.

Noise and Noise-Compatible Land Use

Noise generated by heavy equipment during construction, which includes blasting activities, would be localized, short term, and temporary and would be minimized to the greatest extent possible by employing appropriate BMPs. Construction activities, including blasting, will be completed with strict adherence to FAA standards and Advisory Circulars as well as Berkeley County's Excessive Noise Ordinance to minimize noise impacts to nearby noise sensitive land uses. In addition, WVDEP processes and required permitting for blasting activities will be adhered to, including notification to all owners and occupants of manmade structures within 0.5

mile of blasting activities at least ten (10) but not more than thirty (30) days prior to any blasting. One place of worship, Grace Church, located immediately adjacent to airport property on Novak Drive, is located approximately 0.48 mile from west-side construction activities; however, it not anticipated to have appreciable long-term or permanent differences in noise resulting from the Proposed Action.

Federal Highway Administration's Noise Fundamentals, Highway Traffic Noise Analysis and Abatement Policy and Guidance indicates that a doubling of noise sources (i.e., construction vehicles) would increase traffic noise levels by approximately 3 decibels (dB) which is the smallest change that humans can detect without specifically listening for a change. Increases in Average Daily Traffic (ADT) will result primarily from dump truck hauling activities during critical stages of construction for earthwork, stone placement, and asphalt paving activities. Any construction traffic during peak hours would not substantially reduce the level of service, nor would it disrupt local traffic patterns, as it is assumed that no more than thirty-five (35) employees would be actively commuting to the site at any given time. Given the overall construction duration, timing of construction equipment, and non-significant increases in ADT compared to existing conditions, the Proposed Action is not anticipated to result in noise levels increasing greater than 3dB; therefore, the Proposed Action will not result in significant noise impacts over the No Action Alternative.

The Proposed Action would not increase aircraft operations and therefore would have no long-term adverse effect on airport operations or noise levels. Noise sensitive land uses surrounding the Proposed Action will be closer to aircraft operations on the south side of the airfield; however, potential noise sensitive land/properties consist of sparse commercial, residential, and institutional use located within a quarter mile of MRB. Appreciable long-term or permanent differences in noise resulting from the Proposed Action is not anticipated. The Proposed Action will be consistent with the 2004 Berkeley County Ordinance to Limit Height of Objects and Regulate Placement of Certain Structures Within Specific Areas of Noise Level Around Eastern West Virginia Regional Airport. Furthermore, the Proposed Action would not change aircraft operations (e.g., flight tracks, fleet mix, runway use, time of day, etc.) compared to the No Action Alternative.

Socioeconomics, Environmental Justice, and Children's Health and Safety Risks

The Proposed Action is not likely to alter surface traffic patterns and cause a notable increase in surface traffic congestion or decrease the Level of Service. Minor temporary socioeconomic impacts would result from construction activities associated with the Proposed Action. Although project duration is anticipated to be four years, the associated traffic impacts would be minimal, spread out during that construction timeframe, and will occur predominately during off-peak hours. Developed traffic management plans would utilize roadways that accommodate larger traffic volumes (e.g., highways) to minimize local traffic impacts. No impacts to local employment resulting from construction activities are anticipated. Operations of the Proposed Action would not permanently adversely affect socioeconomic conditions in the surrounding community, nor permanently alter transportation patterns, divide, or disrupt established communities, disrupt orderly, planned development, nor create an appreciable change in employment compared to the No Action Alternative.

The USEPA EJScreen database reports low-income and minority populations within two census tracts that intersect with the project area. Within a one-mile radius of the project area, the

averages are similar to the census track data with minorities exceeding the 50th percentile and low-income populations below the 50th percentile. The Proposed Action is not likely to have disproportionately high and adverse effects on human health, social, economic, and environmental on EJ populations during construction and/or operation. The Proposed Action is limited to airport property to increase safety during general aviation and taxiing of aircraft. BMPs, such as advanced public notification of blasting/construction activities, evaluation of blasting technologies designed to reduce noise/vibration, monitoring during construction activities, and robust blasting plans and mandatory safety measures will be employed during construction to reduce impacts to EJ populations. These precautions will also reduce impacts to children. The closest school is located 1.32 miles from the project area and no parks are located within the vicinity of MRB. The Proposed Action would therefore not result in significant impacts to those categories that could have a disproportionate impact on minority populations, low-income communities, and/or children's health and safety risks compared to the No Action Alternative.

Water Resources (Including Wetlands, Floodplains, Surface Waters, Groundwater, and Wild and Scenic Rivers)

Wetlands

Wetland investigations conducted for the Proposed Action identified two wetlands, a pond, and a stream. Wetland A is a Palustrine Emergent /Palustrine Scrub Shrub (PEM/PSS) wetland that is approximately 0.73 acre. Wetland B is a PEM wetland that is approximately 0.16 acres in size. Stormwater management (Pond A) is approximately 0.36 acre in size, that Wetland B drains into. Stream A is an ephemeral/intermittent stream that starts at the exit point of Pond A and connects into Wetland B. It is approximately 175 feet in length. A preliminary jurisdictional determination (PJD) received by the US Army Corps of Engineers (USACE) determined that all identified resources included in the wetland delineation report may be considered jurisdictional waters of the United States. Required coordination and permit authorization will be obtained prior to the commencement of construction activities.

To the best extent possible, measures will be taken to minimize impacts to wetlands including adhering to strict E&S control measures, such as filter sock, silt fence, filter bags, diversion dikes, sediment traps/basins, outlet control structures and other features as required by the West Virginia Department of Environmental Protection (WVDEP) and USACE. The increased taxiway to runway centerline separation distance on the project's eastern end helps minimize impacts to Wetland A. In addition, appropriate buffers coupled with fencing/demarcation of jurisdictional systems will be incorporated into construction plans.

Permanent impacts are anticipated for Wetland A as a result of Taxiway E extension (Phase 2). Temporary impacts are anticipated for Wetland B, Pond A, and Stream A as a result of temporary E&S measures for Taxiway E strengthening (Phase 1). Any mitigation required for impacts will be determined by the WVDEP and USACE. Potential mitigation opportunities include the WVDEP In lieu fee stream and wetland mitigation program. If compensatory mitigation (i.e., mitigation bank credits) is required, according to the USACE online database (https:// ribits.ops.usace.army.mil/), there are 1.49 potential wetland credits in the watershed. In consideration of these factors, and with the commitment to secure the appropriate permits before construction, no significant, adverse impacts to wetlands, that cannot be mitigated, are anticipated as a result of the Proposed Actions compared to the No Action Alternative.

Surface Waters

A field review confirmed the presence of surface water resources including one stream channel (Stream A), that connects to Sulphur Spring, a tributary to Opequon Creek, and one pond (Pond A) that Wetland B drains into. Temporary impacts are anticipated to these water resources. Temporary sediment laten runoff impacts will be permitted and impacts minimized through the use of E&S control measures to the greatest extent possible.

The Proposed Action would include approximately 42,250 square yards of additional impervious surfaces on airport property. The Proposed Action is not anticipated to have any adverse water quality impacts from either construction or operations. To avoid adverse impacts to water quality, stringent E&S and stormwater controls will be implemented. The project will require a construction stormwater permit including BMPs for E&S control in compliance with the WVDEP through their WV National Pollution Discharge Elimination System (NPDES) Construction Stormwater General Permit and the Berkeley County Stormwater Ordinance in accordance with the *West Virginia Erosion and Sediment Control Best Management Practice Manual*. Detention basins and/or infiltration trenches will be constructed to manage quality, rate, and volume of post construction stormwater. The detention basin will improve the water quality and slow the rate of water entering the stormwater system. During construction, the Contractor will install E&S controls to filter stormwater and trap sediment from polluting and entering the stormwater system. In addition, vegetation/tree removal activities will involve flush cuts, thereby retaining the root structure to minimize erosion. Flush cuts will retain the root structure to minimize erosion.

Through the implementation of BMPs, adherence to the guidelines set forth in the NPDES program during construction, and compliance with permit requirements, significant impacts to surface waters are not anticipated as a result of the Proposed Action compared to the No Action Alternative.

Other Impact Categories

Additional categories addressed in the attached EA include, but are not limited to, climate, coastal resources, farmlands, land use, natural resources and energy supply, visual effects, floodplains, groundwater, and wild and scenic rivers. It is the FAA's finding that the Proposed Action will not have any significant impacts on any of the above noted categories.

Mitigation Measures/Conditions of Approval

The FAA is conditioning approval of the Proposed Action upon implementation of the measures/conditions outlined below.

Temporary impacts from construction should be mitigated by the Sponsor's adherence to applicable BMPs specified in FAA AC 150/5370-10, *Standards for Specifying Construction of Airports*, Item C-102, "Temporary Air and Water Pollution, Soil Erosion, and Siltation Control."

The sponsor must comply with FAA Advisory Circular 150/5320-5D, *Airport Drainage Design.*

Limit tree clearing to November 15 to March 31, inclusive of any construction year to protect listed bat species.

Minimize mowing activities, avoid/minimize use of pesticides, and planting native vegetation where applicable for preservation of the monarch butterfly and other pollinators.

Comply with all federal, state and local regulations regarding the identification, removal, transportation, and disposal of hazardous and non-hazardous materials.

Adhere to the Berkeley County's Excessive Noise Ordinance to minimize noise impacts to nearby noise sensitive land uses.

Continue coordination with the USACE and WVDEP for wetland and stream permitting and mitigation requirements associated with identified impacts.

Implement appropriate buffers coupled with fencing/demarcation of jurisdictional systems into construction plans and notify contractors of those areas.

Obtain, and comply with, the WV NPDES Construction Stormwater General Permit, including development and adherence to BMPs and E&S controls.

Comply with the Berkeley County Stormwater Ordinance in accordance with the *West Virginia Erosion and Sediment Control Best Management Practice Manual*.

All required permits and approvals for the Proposed Action must be obtained prior to construction.

Public Involvement

A public notice was published in The Journal and the MRB website on June 13, 2024. Copies of the draft EA were made available for the public to review electronically on the MRB website and in hardcopy at the MRB Airport Terminal, 170 Aviation Way, Martinsburg, WV 25405, and the Martinsburg-Berkeley Public Library, 101 King Street, Martinsburg, WV 25401. The thirty (30) day review period ended on July 13, 2024. No public comments were received.

Conclusion and Approval

I have carefully and thoroughly considered the facts contained in the attached EA. Based on that information, I find the proposed Federal action is consistent with existing national environmental policies and objectives of Section 101(a) of the National Environmental Policy Act of 1969 (NEPA) and other applicable environmental requirements. I also find the proposed Federal action will not significantly affect the quality of the human environment or include any condition requiring any consultation pursuant to Section 102(2)(C) of NEPA. As a result, FAA will not prepare an EIS for this action.

Recommended: _____ 8/26/2024

Susan Stafford — Date

Environmental Specialist, Beckley AFO

Approved: MATTHEW DIGIULIAN Digitally signed by MATTHEW DIGIULIAN Date: 2024.08.26 08:38:15 -04'00'

Matthew DiGiulian
Manager, Beckley AFO

Date

Disapproved:

Matthew DiGiulian
Manager, Beckley AFO

Date

RECONSTRUCTION, WIDENING AND EXTENSION OF TAXIWAY E & ASSOCIATED IMPROVEMENTS

EASTERN WEST VIRGINIA REGIONAL AIRPORT AUTHORITY

www.flymrb.com

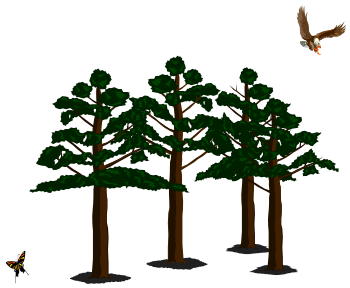
SHORT FORM ENVIRONMENTAL ASSESSMENT

August 2024

FEDERAL AVIATION ADMINISTRATION

EASTERN REGION
AIRPORTS DIVISION

Short Environmental Assessment Form for AIRPORT DEVELOPMENT PROJECTS



Airport Name: Eastern West Virginia Regional Airport Identifier: MRB

Project Title: Reconstruction, Widening and Extension of Taxiway E

This Environmental Assessment becomes a Federal document when evaluated, signed, and dated by the Responsible FAA official.

Responsible FAA Official

8/26/2024
Date

Complete the following information:

Project Location

Airport Name: Eastern West Virginia Regional Airport Identifier: MRB
Airport Address: 170 Aviation Way
City: Martinsburg County: Berkeley County State: WV Zip: 25405

Airport Sponsor Information

Point of Contact: William E. "Bill" Walkup
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City: Martinsburg State: WV Zip: 25405
Telephone: (304) 263-2106, ext. 2 Fax: (304) 579-4141
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1. Introduction/Background:

The Eastern West Virginia Regional Airport (MRB or Airport) is a general aviation reliever airport located approximately two and a half miles south of the City of Martinsburg in Berkeley County, West Virginia (**Attachment 1**). Western access to the airport is made via Interstate 81 and eastern access to the airport is made via West Virginia state highway Route 9.

Owned and operated by the Eastern West Virginia Regional Airport Authority (EWVRAA), the airport's largest tenant is the West Virginia Air National Guard (ANG) and Shepherd Field Base. The Shepherd Field Base is situated on airport property and contains approximately 342 acres. The Air National Guard has had a continuous presence at the airport since 1955.

The existing runway (Runway 8-26) and its parallel taxiway (Taxiway A), located on the northside of the runway, are designed to accommodate critical aircraft based with the Air National Guard. The critical aircraft is defined as the most demanding aircraft type, or grouping of aircraft with similar characteristics, that make regular use of the airport. The C-17 Globemaster III is identified as the ANG's critical aircraft, having an approach speed and wingspan placing it in the category of a C-IV aircraft (Aircraft Approach Category (AAC) "C", Airplane Design Group (ADG) "IV", and Taxiway Design Groups (TDG) 5). The latest MRB Master Plan documents the recommendation that Runway 8-26 and Taxiway A continue to be designed to C-IV design standards to accommodate ANG operations. ANG is the predominant user of Taxiway A; however, a limited number of General Aviation (GA) pilots utilize Taxiway A to access hangars located in the northeast portion of the Airport.

For the majority of general aviation activity, Runway 8-26 is supported by Taxiway E, a partial length parallel taxiway, located on the south side of the runway and approximately 400 feet from the runway centerline. Taxiway E provides an entrance to the runway at approximately 1,600 feet from the Runway 26 threshold and approximately 2,200 feet from the Runway 8 threshold. For the General Aviation facilities, in accordance with the 2019 Airport Master Plan, the design aircraft is the Beechcraft Super King Air B200, which is an Airplane Design Group (ADG) B-II aircraft falling into the TDG 2A design standards.

The terminal apron, general aviation apron, and the fixed base operator (FBO) apron are accessed from three parallel connector taxiways that connect both to Taxiway E and Runway 8-26:

- Taxiway C has been repurposed from a previous runway, Runway 17-35, which no longer exists at MRB. Taxiway C provides direct access to one conventional hangar located at the most southern end of the taxiway;
- Taxiway B provides access to both the terminal apron and general aviation aprons. The segment of Taxiway B south of the general aviation apron (transient) to its terminus at the former south end of Runway 35 is closed to prevent conflicts between aircraft and ground vehicles and traffic. This closure also recognizes that aircraft and vehicles are on the portion of Taxiway C in front of the hangar doors, with the area functioning as apron space; and,
- Taxiway D provides access to the Fixed Base Operator (FBO) and its facilities as well as to one conventional hangar. Aircraft do not access the hangar from Taxiway D to avoid conflicts with vehicular traffic.

2. Project Description:

The Proposed Action will involve the following work activities, completed in four phases, within previously disturbed areas on existing airport property:

- New Overlay/Pavement Construction (Pavement Milling, Crack Preparation/Sealing, Pavement Surface Courses, Aggregate Base/Subbase Courses and Tack/Prime coats, as required).
- Electrical Demolition (edge lights, signs, junction structures, conduit, cables, etc.).
- Pavement Demolition (Asphalt Surface Courses, Gravel Base Courses).
- Pavement Marking Removal; New Airfield Pavement Markings.
- Upgrades to the Existing Airfield Electrical Vault to accommodate new airfield lighting circuits.
- Installation of new Airfield Edge Lighting including trenching, conduit, concrete encased duct banks, junction structures/handholes, cables, a counterpoise system, and backfill.
- Excavation, including blasting.
- Embankment Preparation.
- Clearing/Grubbing of proposed areas of work including Safety Areas and Object Free Areas.
- Topsoiling, Sodding, Seeding, and Mulching.
- Open and Closed Drainage System Improvements to accommodate runoff from the proposed development to include trenching and installation of new drainage pipes, pipe bedding, geotextiles, drainage swale linings/matting.
- Installation and removal of required Erosion & Sedimentation Control Features such as filter sock, silt fence, filter bags, diversion dike, sediment traps/basins, outlet control structures and other features as required by the West Virginia Department of Environmental Protection (WVDEP)

through their WV/NPDES Construction Stormwater General Permit in accordance with West Virginia Erosion and Sediment Control Best Management Practice Manual.

No work is proposed to any standing structure located on or off airport property. All work will be limited to airside facilities adjacent to the south side of Runway 8-26. The proposed action is depicted on the approved Airport Layout Plan (ALP) and included in the Airport Master Plan (Chapter 3, Facility Requirements). Please refer to **Attachment 2** for the MRB ALP and **Attachment 3** depicting the layout for the proposed Taxiway E and connector taxiway pavements and associated development phases.

3. Project Purpose and Need:

The purpose of the project is to provide an additional full-length parallel taxiway for Runway 8-26. Currently, the only full-length parallel taxiway of Runway 8-26 is Taxiway A, which is located on the ANG side of the Airfield. For GA aircraft located on the south side of the airport and transient pilots needing access to MRB facilities[1], back-taxiing on the active Runway 8-26 is required when departing from either end of the runway. Access to either end of Runway 8-26 (either a back-taxi down the runway, or a crossing of the runway to utilize Taxiway A) are required which, in turn, creates an unsafe condition. With the extension of Taxiway E to both ends of Runway 8-26, this new full-length Taxiway on the civilian side of the airfield is needed to allow general aviation aircraft to taxi, and queue as needed, without creating unsafe airport operational conditions or inhibiting ANG operations.

The Airport is classified as an Airport Reference Code (ARC) C-IV due to the based ANG operations; however, the civilian ARC is a B-II[2]. The design standard width for a C-IV runway is 150 feet for all specified visibility minimums. The proposed Runway to Taxiway separation requirements will meet the requirements for an ARC C-IV[3]; however, the pavement geometrics will meet the requirements for an ARC B-II. Existing Taxiway E is a partial parallel taxiway along the south side of Runway 8-26 and is used primarily by general aviation aircraft, with a runway centerline-to-taxiway centerline separation distance of 420 feet; exceeding the 400-foot separation standard for a C-IV runway.

4. Describe the affected environment (existing conditions) and land use in the vicinity of project:

The project location includes areas within airport property that consists of previous airport development and roadways (Attachment 1). The land adjacent to the airport runway and taxiway has undergone previous ground disturbances, featuring a mix of pavement, maintained grassy areas throughout, and scattered small patches of forested areas in the southern portion of the project area.

[1] Transient pilots often need access for fuel, maintenance, or visit the MRB restaurant.

[2] The Airport Reference Code (ARC), used for planning and design, consists of two components: Aircraft Approach Category (AAC) which relates to the speed of the aircraft, and the Airplane Design Group (ADG) which relates to either the aircraft wingspan or tail height. ARC B-II includes an AAC of 91 knots-120 knots (B) and a tail height of 20ft to <30ft, and a wingspan of 49 feet to <79ft (Group II). ARC C-VI includes an AAC of 121 knots-140 knots (C) and a tail height of 45ft to <60ft and a wingspan of 118ft to <171ft (IV).

[3] FAA design standard separation (400 feet) for C-IV facilities with visibility minimums lower than 3/4 mile. The runway separation standard for parallel taxiways on a B-II runway is 300 feet.

MRB is located adjacent to an "Industrial Investment Area." Land uses defined within this area are light industrial, heavy industrial, commercial, office parks, and warehousing.

Land use within the general vicinity of MRB consists of residential, open space/forested/agricultural land, commercial, and institutional land uses. The incorporated City of Martinsburg is located approximately two and a half miles north of MRB and consists of similar land uses surrounding the airport.

5. Alternatives to the Project: Describe any other reasonable actions that may feasibly substitute for the proposed project and include a description of the "No Action" alternative. If there are no feasible or reasonable alternatives to the proposed project, explain why:

According to the MRB Airport Master Plan (April 2019), three design alternatives were previously evaluated for the overall development plan for south of existing Runway 8-26. Evaluation factors included operational performance, best planning tenets, as well as environmental and fiscal factors. All three alternatives, as well as the Preferred Alternative identified in the Master Plan, include the widening and extension of Taxiway E. This EA includes the 2019 MRB Airport Master Plan Preferred Alternative element of widening and extending Taxiway E as the Proposed Action Alternative and a No-Action Alternative. Due to the existing airfield configuration, no other development alternatives were considered.

The existing and planned runway-taxiway separation for Taxiway E exceeds Federal Aviation Administration (FAA) minimum separation requirements because the existing Glide Slope Antenna and required clearances for the Instrument Landing System (ILS) Critical Area. Thus, the planned eastern portion of the Taxiway E extension will have a "jog" that further increases the separation. During Instrument Flight Rules (IFR) conditions, no part of an aircraft can pass through the critical area without Air Traffic Control (ATC) permission. If the taxiway were shifted closer to the runway, all taxiing aircraft would have to stop and hold short of the ILS critical area until permission was granted to pass through. This would create an additional burden on the Air Traffic Controllers. By shifting the taxiway in a manner where the ILS critical area is avoided by taxiing aircraft, this situation is avoided, the flow of traffic is enhanced, and the potential safety issues relating to aircraft interfering with the ILS signal is thereby eliminated.

No Action Alternative

The No Action Alternative describes the existing condition of the Airport and is used as a baseline for comparison with the Proposed Action and Preferred Alternatives to determine potential impacts. Under the No Action Alternative, an additional full-length taxiway would not be constructed and therefore would not meet the project Purpose and Need; however, it has been included in the analysis per National Environmental Policy Act (NEPA) requirements.

Proposed Action Alternative

The Proposed Action Alternative includes widening and extending Taxiway E and all associated/ connected actions documented in Section 2, Project Description. As a result of the widening/ extension, general aviation aircraft located on the south side of the airport would no longer be required to access either end of Runway 8-26 by back-taxing down the runway. The proposed full-length and

widened Taxiway E on the civilian side of the airfield will allow general aviation aircraft to taxi and queue as needed, without creating unsafe airport operational conditions or inhibiting ANG operations.

The Proposed Action Alternative meets the designated Purpose and Need of the Project and promotes safer conditions for aircraft and properties on the ground during the approach and departure phase of flight. Therefore, this alternative is considered as the Preferred Alternative.

PROPOSED FEDERAL ACTION

The requested Federal Action includes the following:

- Approval authority of the portion of the Airport Layout Plan (ALP) that depicts the proposed Taxiway E extension and associated improvements, and
- Approval of further processing of an application for federal grant assistance to implement the Airport Improvement Program (AIP)-eligible project.

6. Environmental Consequences – Special Impact Categories

(A) AIR QUALITY

(1) Will the proposed project(s) cause or create a reasonably foreseeable emission increase?

The No Action alternative, which maintains the current status quo without implementing any new construction or development projects as part of the Proposed Action, would not directly impact air quality as it does not introduce any additional emissions or activities that could contribute to air pollution. Projects such as taxiway improvements (i.e., Proposed Action) may cause or create reasonably foreseeable increases in emissions by changing aircraft and vehicle travel patterns[4]. Therefore, an air quality assessment was conducted to evaluate the potential effects on air quality associated with the Proposed Action. The FAA considers air quality impacts to be significant if the Proposed Action will cause pollutant emissions more than *de minimis* thresholds, or cause pollutant concentrations to exceed one or more of the criteria pollutants designated under the National Ambient Air Quality Standards (NAAQS) for any of the time periods analyzed or increase the frequency or severity of any existing violations.

The US Environmental Protection Agency (USEPA) has identified the following six criteria air pollutants for which NAAQS are applicable: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM_{10} and $PM_{2.5}$), and sulfur dioxide (SO_2).These standards and threshold levels are identified below in **Table 1**.

Operational Emissions

To meet the aircraft operational needs of existing users described in the Purpose and Need for the Proposed Action, safe taxiway access is needed for general aviation aircraft to access either end of Runway 8-26. As the purpose of the project is to provide continuous operations to existing users, the project does not induce additional aviation activity, nor will it introduce a larger type of aircraft.

[4] FAA's *Aviation Emissions and Air Quality Handbook, Version 3 Update 1 (2015)*

Therefore, it is concluded that the changes in aircraft emissions from the No Action to the Proposed Action condition would be insignificant as there would be no change of use resulting from the Proposed Action. Similarly, there would be no changes to mobile sources including Ground Support Equipment (GSE), Auxiliary Power Unit (APU) emissions, or motor vehicles traveling on and off the roadways from the No Action to those with the Proposed Action implemented. There may be very minor increases in emissions due to slightly different taxiing times with the extension of Taxiway E to both ends of Runway 8-26, but taxiing emissions are typically a very small portion of total aircraft operation emissions, and not all aircraft will need to use the full-length taxiway. Also, the need for back-taxiing will be eliminated. Furthermore, there are no sources of stationary emissions associated with the Proposed Action. For these reasons, operational emissions are not expected to increase, or if so, will increase minimally, as a result of the Proposed Action.

Table 1: National Ambient Air Quality Standards

Pollutant		Primary/ Secondary	Averaging Time	Level	Form
Carbon Monoxide (CO)[1]		Primary	8-hour	9 ppm	Not to be exceeded more than once per year
			1-hour	35 ppm	
Lead (Pb)[2]		Primary and Secondary	Rolling 3 month average	0.15 µg/m^3 (1)	Not to be exceeded
Nitrogen Dioxide (NO_2)[3]		Primary	1-hour	100 ppb	98th percentile, averaged over three years
		Primary and Secondary	Annual	53 ppb(2)	Annual mean
Ozone (O_3)[4]		Primary and Secondary	8-hour	0.070 ppm(3)	Annual fourth-highest daily maximum 8-hr concentration, averaged over three years
Particulate Matter[5]	$PM_{2.5}$	Primary	Annual	9.0 µg/m^3	Annual mean, averaged over three years
		Secondary	Annual	15.0 µg/m^3	Annual mean, averaged over three years
		Primary and secondary	24-hour	35 µg/m^3	98th percentile, averaged over three years
	PM_{10}	Primary and Secondary	24-hour	150 µg/m^3	Not to be exceeded more than once per year on average over three years
Sulfur Dioxide (SO_2)[6]		Primary	1-hour	75 ppb(4)	99th percentile of 1-hour daily maximum concentrations, averaged over three years
		Secondary	3-hour	0.5 ppm	Not to be exceeded more than once per year

Source: EPA, *National Ambient Air Quality Standards (NAAQS)* https://www.epa.gov/criteria-air-pollutants/naaqs-table

(1) In areas designated nonattainment for the Pb standards prior to the promulgation of the current (2008) standards, and for which implementation plans to attain or maintain the current (2008) standards have not been submitted and approved, the previous standards (1.5 µg/m3 as a calendar quarter average) also remain in effect.

(2) The level of the annual NO_2 standard is 0.053 ppm. It is shown here in terms of ppb for the purposes of clearer comparison to the 1-hour standard level.

(3) Final rule signed October 1, 2015, and effective December 28, 2015. The previous (2008) O_3 standards are not revoked and remain in effect for designated areas. Additionally, some areas may have certain continuing implementation obligations under the prior revoked 1-hour (1979) and 8-hour (1997) O_3 standards.

(4) The previous SO_2 standards (0.14 ppm 24-hour and 0.03 ppm annual) will additionally remain in effect in certain areas: (1) any area for which it is not yet 1 year since the effective date of designation under the current (2010) standards, and (2)any area for which an implementation plan providing for attainment of the current (2010) standard has not been submitted and approved and which is designated nonattainment under the previous SO_2 standards or is not meeting the requirements of a SIP call under the previous SO_2 standards (40 CFR 50.4(3)).

Construction Emissions

The No Action Alternative would not result in construction emissions as no work would occur under this alternative. Construction activities and associated emissions for the Proposed Action will be temporary and confined to areas of MRB within the vicinity of Taxiway E and access/egress

roadways. Emissions, as well as construction traffic on area roadways, will occur predominantly from the operation of heavy construction equipment (e.g., backhoes, bulldozers), on- and off-road vehicles used for the transport and delivery of supplies and material (e.g., cement trucks, dump trucks), and on-road vehicles used by construction workers getting to and from a construction site (e.g., cars, pick-up trucks). Construction emissions will also result from fugitive dust produced from construction material staging, demolition, and earthwork activities, as well as evaporative emissions from asphalt paving operations.

Construction of the Proposed Project would cause temporary increases in carbon monoxide (CO), volatile organic compounds (VOC), nitrous oxides (NO_X), sulfur dioxide (SO_2), and particulate matter (PM_{10} and $PM_{2.5}$) emissions. However, the increases would not exceed any NAAQS. As a result, the Proposed Action would not significantly affect air quality or the area's attainment status (Section 6(A)(Clean Air Act)(c)). As shown in **Table 2**, construction of the Proposed Project would not exceed *de minimis* thresholds for Nitrogen Oxide (NO_x) and Volatile Organic Compounds (VOC), which are O_3 precursors, CO, $PM_{2.5}$, or any other criteria pollutants during the construction of the Proposed Project. Please refer to **Attachment 4** methodology regarding the Construction Emissions Inventory Assessment.

The FAA Order 1050.1F Desk Reference notes the *de minimis* levels established by the General Conformity Rule. When a project related emission is below the *de minimis* threshold, it is "considered to be too small to adversely affect the air quality status of the area and is automatically considered to conform with the applicable State Implementation Plan (SIP)." Based on this analysis, total emissions associated with all years of construction is not expected to exceed the *de minimis* thresholds listed in the FAA's Aviation Emissions and Air Quality Handbook Version 3, Update 1 (January 2015), as expressed in annual tons and shown in Table 2. Increased emissions associated with project construction will be reduced through use of voluntary best management practices (BMPs), such as engine idling restrictions and maintenance requirements. Therefore, there are no significant air quality impacts associated with construction of the Proposed Action.

Table 2: Construction Emissions Inventory

								GHGs		
Year	Emission Source	CO	VOC	NOx	PM_{10}	$PM_{2.5}$	SOx	CO_2	CH_4	N_2O
2026	NONROAD	0.41	0.60	0.00	0.03	0.03	0.29	888.37	--	--
	ONROAD	1.51	0.09	0.00	0.00	0.00	0.10	187.07	0.03	0.00
	FUGITIVE	0.31	0.02	0.00	0.14	--	4.76	--	--	--
	TOTAL (TPY)	2.23	0.72	0.01	0.17	0.03	5.15	1075.44	0.03	0.00
2027	NONROAD	0.42	0.60	0.00	0.03	0.03	0.30	924.30	--	--
	ONROAD	1.51	0.09	0.00	0.00	0.00	0.10	188.13	0.03	0.00
	FUGITIVE	0.33	0.02	0.00	0.14	--	5.11	--	--	--
	TOTAL (TPY)	2.27	0.71	0.01	0.17	0.03	5.51	1112.44	0.03	0.00
2028	NONROAD	0.21	0.31	0.00	0.01	0.01	0.16	506.87	--	--
	ONROAD	0.88	0.05	0.00	0.00	0.00	0.06	101.14	0.01	0.00
	FUGITIVE	0.15	0.01	0.00	0.07	--	2.32	--	--	--
	TOTAL (TPY)	1.24	0.36	0.01	0.08	0.01	2.54	608.01	0.01	0.00
2029	NONROAD	0.39	0.54	0.00	0.03	0.02	0.28	877.83	--	--
	ONROAD	1.51	0.08	0.00	0.00	0.00	0.10	183.42	0.03	0.00
	FUGITIVE	0.30	0.02	0.00	0.13	--	4.65	--	--	--
	TOTAL (TPY)	2.20	0.64	0.01	0.16	0.03	5.03	1061.25	0.03	0.00
TOTAL	Project	7.94	2.43	0.04	0.59	0.10	18.23	3857.13	0.09	0.01
	de minimis	100.00	50.00	100.00	100.00	100.00	100.00	N/A	N/A	N/A

Note – N/A = not applicable
Source: MOVES4.1, Airport Design Consultants, Inc. (ADCI) Analysis 2024

Other Sources of Emissions

Other emissions considered included onsite electrical generation, the use of refrigerants, and solid waste generation at MRB. Changes in other sources of emissions from the No Action to the Proposed Action condition would be insignificant as there would be no change of use resulting from the Proposed Action.

Conclusions

Increases in operational and other sources of emissions are expected to be very minor as a result of the Proposed Action, and construction emissions fall below the *de minimis* thresholds. While traffic levels will increase temporarily during construction, the impacts to traffic will be minimal due to construction traffic occurring predominately during off-peak hours (early morning or late afternoon during lower peak periods), dedicated routes, and an advanced public notification of construction activities for the traveling public will minimize the overall impact. Emissions inventories concluded that increases in Average Daily Traffic (ADT) will result primarily from dump truck hauling activities during critical stages of construction for earthwork, stone placement and asphalt paving activities. Any construction traffic during peak hours would not substantially reduce the level of service in those locations, nor would they disrupt local traffic patterns, as it was assumed that no more than 35 employees would be actively commuting to the site at any given time. Therefore, impacts to traffic will be minimal and do not require a vehicle emissions analysis. Based on these factors, significant air quality impacts are not anticipated for the Proposed Action or No Action Alternative.

(2) Are there any project components containing unusual circumstances, such as emissions sources in close proximity to areas where the public has access or other considerations that may warrant further analysis?

The sources and types of emissions associated with the Proposed Action are not unusual for general aviation airports. Public access to the landside of the buildings would be used almost entirely by employees of the airport and ANG. There would be no public access to the airside areas.

(3) Is the proposed project(s) located in a nonattainment or maintenance area for the National Ambient Air Quality Standards (NAAQS) established under the Clean Air Act?

The 1990 Clean Air Act Amendments (CAAA) requires that a proposed project not cause any new violation to the NAAQS[5] or increase the frequency or severity of any existing violations, or delay attainment of any NAAQS. The Environmental Protection Agency (EPA) established the NAAQS for Carbon Monoxide (CO), Lead (Pb), Nitrogen Dioxide (NO_2), Ozone (O_3), Particulate Matter ($PM_{2.5}$ and PM_{10}) and Sulfur Dioxide (SO_2). The state of West Virginia adopted the standards set forth in the NAAQS. EPA conducts ambient air monitoring for these pollutants at various locations throughout West Virginia. Areas within the state can be divided into attainment, maintenance and non-attainment areas, with classifications based upon the severity of the air quality problems. Attainment areas are areas that meet the NAAQS.

The study area for the Proposed Action is located within Berkeley County, West Virginia which is designated as an attainment area under the NAAQS for all criteria pollutants. Berkeley County was

[5] Title 40 CFR Part 50 – National Primary and Secondary Ambient Air Quality Standards.

formerly designated by EPA as an attainment/maintenance area for the 1997 annual $PM_{2.5}$ NAAQS. The standard has since been revoked (81 FR 58009).

4) Are all components of the proposed project, including all connected actions, listed as exempt or presumed to conform?

N/A

(5) Would the net emissions from the project result in exceedances of the applicable *de minimis* threshold (reference 1050.1F Desk Reference and the *Aviation Emissions and Air Quality Handbook* for guidance) of the criteria pollutant for which the county is in non-attainment or maintenance?

N/A

(B) BIOLOGICAL RESOURCES

(1) Are there any candidate, threatened, or endangered species listed in or near the project area?

Coordination was conducted with US Fish and Wildlife Service (USFWS) through their online database, Information for Planning and Conservation (IPaC), which generated the IPaC Trust Resource Report originally on October 13, 2023 and re-requested on May 16, 2024 (**Attachment 5**). The IPaC results as the USFWS' Northeast Determination Key (DKey) documented the presence of the following federally listed species: Indiana Bat, endangered (*Myotis sodalist*), Northern Long-eared Bat, endangered (*Myotis septentrionalis*), Tricolored Bat, proposed endangered (*Perimyotis sublavus*), and the candidate species Monarch Butterfly (*Danaus plexippus*). On January 4, 2024, the West Virginia Department of Natural Resources' (WVDNR) Natural Heritage Program confirmed that the project is within a five-mile buffer of an identified cave/mine portal associated with the tricolor bat; no other species were identified by the WVDNR (**Attachment 5**).

(2) Will the action have any long-term or permanent loss of unlisted plants or wildlife species?

The No Action alternative, characterized by maintaining the existing conditions without initiating the Proposed Action, would not result in any long-term or permanent loss of unlisted plants or wildlife species, as it does not introduce any disturbances or alterations to their habitats or ecosystems.

The Proposed Action would not result in long-term or permanent loss of unlisted plants or wildlife species. The Proposed Action would occur entirely on Airport property that has been previously disturbed and reestablished due to prior construction and maintenance activities. The unlisted plant and wildlife species within and surrounding the project area for the Proposed Action are common and secure within region and throughout the state of West Virginia.

(3) Will the action adversely impact any species of concern or their habitat?

The No Action alternative would not adversely impact species of concern, as it does not introduce any disturbances or alterations to their habitat.

According to the results generated from the IPaC DKey, the USFWS concurred with the Proposed Action's determination of may affect, not likely to adversely affect for the NLEB and not likely to adversely affect for the Indiana Bat (**Attachment 5**). The proposed project is located more than 0.25 mile away from any known hibernacula. To ensure minimal impact, it is assumed that the Indiana Bat and NLEB as well as the Tricolored Bat species, identified during consultation, are present. Using this assumption, tree clearing associated with the Proposed Action will be limited to the timeframe of November 15 to March 31, inclusive of any construction year, to minimize the potential impacts.

Although there are no current protections or consultation requirements for candidate species, such as the Monarch Butterfly, the USFWS recommends BMPs to benefit the monarch butterfly and other pollinators. MRB will:

- Minimize mowing activities (e.g., decrease frequency, increase vegetation height) during spring and summer months
- Avoiding/minimize the use of pesticides
- Plant native vegetation, when applicable

(4) Will the action result in substantial loss, reduction, degradation, disturbance, or fragmentation of native species habitats or populations?

The No Action alternative would not result in impacts to native species habitat or populations as existing conditions would remain and no impacts would result. At the time of the original IPaC submission (October 13, 2023), the Proposed Action would result in ten (10) acres of tree removal (see **Attachment 5**). Tree impacts have been minimized to the greatest extent possible and now the Proposed Action will result in approximately eight (8) acres of tree removal. As previously stated, the habitats identified within and surrounding the project area for the Proposed Action are common and secure within the region and in West Virginia. Therefore, the Proposed Action would not result in substantial loss, reduction, degradation, disturbance, or fragmentation of native species habitats or populations.

(5) Will the action have adverse impacts on a species' reproduction rates or mortality rate or ability to sustain population levels?

Neither the No Action alternative nor the Proposed Action is expected to result in adverse impacts on species' reproduction rates or mortality rate or ability to sustain population levels.

(6) Are there any habitats, classified as critical by the federal or state agency with jurisdiction, impacted by the proposed project?

According to the USFWS, there are no critical habitats within the project area for the No Action alternative and the Proposed Action. No state critical habitat was identified by WVDNR. Therefore, no impacts are anticipated.

(7) Would the proposed project affect species protected under the Migratory Bird Act?

According to the USFWS, approximately eight (8) migratory birds of conservation concern have been reported in the vicinity of the project area for the Proposed Action (and No Action alternative). USFWS guidelines will be employed to the greatest extent possible in order to avoid or minimize the

possibility of incidental impacts of migratory birds. This includes but is not limited to completing tree removal activities outside of migratory bird seasons. Therefore, the Proposed Action is not likely to adversely affect species protected under the Migratory Bird Treaty Act (MBTA).

(C) CLIMATE

(1) Would the proposed project or alternative(s) result in the increase or decrease of emissions of Greenhouse gases (GHG)?

Greenhouse gases (GHG) are gases that trap heat in the earth's atmosphere. Both naturally occurring and man-made GHGs primarily include water vapor (H_2O), carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Sources that require fuel or power at an airport are the primary sources that would generate GHGs. Aircraft are probably the most often cited air pollutant source, but they produce the same types of emissions as ground access vehicles and construction equipment.

Neither the No Action alternative nor the Proposed Action induce additional aviation activity, nor will it introduce a larger type of aircraft and therefore would not result in an increase or decrease of GHG emissions from the No Action Alternative. A brief and temporary increase in GHG emissions will result from construction of the Proposed Action; however, any increase in emissions during construction will likely be minimal. Please refer to **Table 2** for GHG emission calculations per construction year of the Proposed Action.

(2) Will the proposed project or alternative(s) result in a net decrease in GHG emissions (as indicated by quantitative data or proxy measures such as reduction in fuel burn, delay, or flight operations)?

The No Action alternative and the Proposed Action would not contribute to a net decrease in GHG emissions.

(3) Will the proposed project or alternative(s) result in an increase in GHG emissions?

The No Action alternative, which involves maintaining current conditions without implementing the Proposed Action, would not lead to increased GHG emissions, as it does not introduce new activities or infrastructure that would generate additional emissions beyond existing levels. A brief and temporary increase in GHG emissions will result from construction of the Proposed Action; however, any increase in emissions during construction will be minimal as shown in **Table 2**.

(D) COASTAL RESOURCES

(1) Would the proposed project occur in a coastal zone, or affect the use of a coastal resource, as defined by your state's Coastal Zone Management Plan (CZMP)?

The No Action alternative and the project area for the Proposed Action is not located within a coastal zone as it is located within the landlocked county of Berkeley County, West Virginia.

(2) If Yes, is the project consistent with the State's CZMP?

N/A. West Virginia does not participate in the CZMP.

(3) Is the location of the proposed project within the Coastal Barrier Resources System?

No, the No Action alternative and the Proposed Action would not occur within the Coastal Barrier Resources System.

(E) SECTION 4(F) RESOURCES

(1) Does the proposed project have an impact on any publicly owned land from a public park, recreation area, or wildlife or waterfowl refuge of national, state, or local significance, or an historic site of national, state, or local significance?

The No Action alternative, maintaining current conditions without implementing the Proposed Action, would not result in any impact to Section 4(f) resources, as it does not involve the use of any land, wildlife refuge, or parkland protected under Section 4(f) of the Department of Transportation Act.

The Proposed Action is located completely within airport property and no use of any Section 4(f) resource will be required. MRB is located within the defined boundary of the of the Battle of Martinsburg as identified in the *2010-2011 West Virginia Civil War Conflict Sites and Areas GIS Map* project. According to the project, the proposed boundary serves as "a foundation upon which greater, more in depth projects can be based on." The Battle of Martinsburg has not been formally evaluated but is assumed to be potentially eligible for listing in the National Register of Historic Places (NRHP) for the purposes of this evaluation. Although MRB is within the proposed boundary for the Battle of Martinsburg, the Proposed Action will not affect any off-airport property. Identified historic resources will therefore not be affected by the Proposed Action. The WVSHPO concurred with this determination on November 9, 2023 (**Attachment 6**).

(2) Is a *De Minimis* impact determination recommended?

N/A

(F) FARMLANDS

Does the project involve acquisition of farmland, or use of farmland, that would be converted to non-agricultural use and is protected by the Federal Farmland Protection Policy Act (FPPA)?

The No Action alternative would not result in any impact to Farmland of Prime Importance (FPPA) or locally important soils, as it does not involve any disturbance or alteration of agricultural land designated as FPPA soils.

According to the Natural Resource Conservation Service (NRCS), several soil classifications in/near the Proposed Action are considered Farmland of statewide importance or locally important farmland (e.g., Carbo-Opequon complex [CgB] and Weikert-Berks channery silt loams [WbC]). However, the

Proposed Action does not involve the acquisition of farmland, or the use of farmland that would be converted to non-agricultural use. It is located within land already committed to "urban development or water storage" (i.e., developed airport areas). Therefore, additional coordination with the NRCS is not required (**Attachments 7 and 8**).

(G) HAZARDOUS MATERIALS, SOLID WASTE, AND POLLUTION PREVENTION

(1) Would the proposed project involve the use of land that may contain hazardous materials or cause potential contamination from hazardous materials?

The No Action alternative may result in potential impacts to land that may contain hazardous materials, as it does not involve any remediation or mitigation efforts to address potentially existing contamination or hazards present at MRB.

The Proposed Action is not expected to require the use of land that may contain hazardous substances or may be contaminated. A review of the USEPA's NEPAssist tool was utilized to view facilities and/or sites subject to environmental regulation and therefore monitored by the United States Environmental Protection Agency (USEPA), including hazardous waste/Resource Conservation and Recovery Act (RCRA) inventoried facilities/sites, Toxic Releases Inventory (TRI), Superfund Sites/National Priorities List (NPL), and known brownfields. Several RCRA inventoried facilities/sites are located immediately adjacent or within proximity to MRB property but will not be impacted by the Proposed Action (**Attachment 9**).

Two hazardous waste facilities/sites are located within airport property and related to ANG operations: 167th Airlift Wing and the Martinsburg Armory. No reported violations relating to releases have been documented by the USEPA and the Proposed Action would not result in any impacts or located within immediate vicinity to either facility/site as both are located north of Runway 8-26 and all work activities will occur south of the runway.

During construction, soils will be excavated for grading and filling for the proposed Taxiway extension and other project activities. If any of the soils excavated are suspected of being contaminated, soil samples would be obtained and taken to a certified laboratory and analyzed for the list of priority pollutants. If any soils or other materials removed during the construction are determined to be hazardous waste, the material would be disposed of at a USEPA-approved hazardous waste disposal facility.[6] All waste disposal activities associated with the Proposed Action would comply with all federal, state and local regulations regarding the identification, removal, transportation, and disposal of hazardous and non-hazardous materials.

(2) Would the operation and/or construction of the project generate significant amounts of solid waste?

The No Action alternative would not generate solid waste, as it does not involve any activities that would produce or require the disposal of solid materials. There would be no adverse impacts related

[6] The WVDEP provides a list of hazardous waste removal services available to provide services within the state of West Virgnia, including emergency response/remediation, transport, treatment, disposal and other services. The closest facilities are located in Morgantown, West Virgnia. https://dep.wv.gov/WWE/ee/hw/Documents/HW_Services.pdf (Accessed 01/03/2024).

to solid waste management from the Proposed Action once construction activities are complete. There will be a temporary increase in solid waste due to the short-term construction activities. Soils will be reused on site to the greatest extent possible. There are local disposal facilities within the area that are capable of handling solid waste associated with construction activities. The closest facility is LCS Services Landfill located in Hedgesville, West Virginia located approximately 19 miles from MRB.

(3) Will the project produce an appreciable different quantity or type of hazardous waste? Will there be any potential impacts that could adversely affect human health or the environment?

The No Action alternative would not produce an appreciably different quantity or type of hazardous waste compared to the Proposed Action. The Proposed Action will not produce an appreciable different quantity of hazardous waste.

(H) HISTORIC, ARCHITECTURAL, ARCHEOLOGICAL, AND CULTURAL RESOURCES

(1) Describe any impact the proposed project might have on any properties listed in, or eligible for inclusion in the National Register of Historic Places.

The No Action alternative would not impact any properties listed in, or eligible for listing in, the NRHP, as it would maintain existing conditions. The Proposed Action will occur within previously disturbed or developed areas on Airport property. According to the West Virginia State Historic Preservation Office (WVSHPO) online mapping system and the U.S. Department of Interior (National Park Service) National Register Database (accessed on April 13, 2023), there are no historic/cultural resources listed in, or eligible for inclusion in the NRHP within the immediate vicinity of the Proposed Action. BY-0890 (Shepherd Field ANG Base) and various individual structures located on the property were surveyed by the WVSHPO for eligibility for listing and determined not to be eligible due to age and significant alternations to structures (**Attachment 6**). The Foltz House/Walter's Farm (BY-0032-0093) is located approximately 0.20 mile south of the proposed undertaking. Based on current aerial imagery, the house as well as ancillary structures are no longer extant.

MRB is located within the defined boundary of the of the Battle of Martinsburg as identified in the 2010-2011 *West Virginia Civil War Conflict Sites and Areas GIS Map* project. The Battle of Martinsburg has not been formally evaluated but is assumed to be potentially eligible for listing in the NRHP for the purposes of this evaluation. Although MRB is within the proposed boundary for the Battle of Martinsburg, the proposed undertaking is confined to the existing airfield boundary and will not affect any off-airport property.

Coordination with the WVSHPO was initiated on October 19, 2023. On November 14, 2023, the WVSHPO concurred with the determination that the proposed undertaking would have No Adverse Effect on historic properties including historic standing structures (**Attachment 6**).

(2) Describe any impacts to archeological resources as a result of the proposed project.

The No Action alternative would not impact archaeological resources as it would maintain existing conditions. Several archaeological surveys have been conducted surrounding the Proposed Action,

including surveys completely on or partially within the defined direct and/or indirect Area of Potential Effect (APE), no further investigations were warranted or recommended. The Shepherd and Shewalter Cemetery (46BY166) is located approximately 470 feet south of the existing taxiway pavement edge outside of the direct APE, and site 46BY214, which was previously determined not eligible for listing on the NRHP, is no longer present due to completion of the ANG runway project. These previously recorded sites will not be affected as a result of the proposed undertaking, and no additional archaeological sites would be anticipated within the direct APE. Coordination with the WVSHPO was initiated on October 19, 2023 and on November 14, 2023, the WVSHPO concurred with the determination that the proposed undertaking would have No Adverse Effect on historic properties including archaeological resources. (**Attachment 6**).

(I) LAND USE

(1) Would the proposed project result in other (besides noise) impacts that have land use ramifications, such as disruption of communities, relocation of residences or businesses, or impact natural resource areas?

The No Action alternative would not impact existing land use, as it entails maintaining current conditions without initiating new construction or development that could alter current land use patterns.

The Proposed Action is located within a designated Growth Area, Industrial Investment Area, and to the north is designated Town Center. The Growth Area comprises a large part of Berkeley County and is characterized by residential land uses (family housing, apartments, higher density housing). The designated growth areas are targeted areas where the County is directing substantial growth and development. MRB is located within this designated Growth Area and is partially on and adjacent to land designated as an Industrial Investment Area. Land uses defined within this area are light industrial, heavy industrial, commercial, office parks, and warehousing and provides new area for relocation of new business. Among the properties there are forested tracts, gas stations, businesses, and residential properties near Airport Road, Paynes Ford Road, and Snooks Lane (**Attachment 10**).

The Proposed Action will not introduce features or land uses inconsistent with the aforementioned uses. There will be no permanent disruption to communities, relocation of residences or businesses as the Proposed Action would be located entirely within airport boundaries.

(2) Would the proposed project be located near or create a wildlife hazard as defined in FAA Advisory Circular 150/5200-33, "Wildlife Hazards On and Near Airports"?

The No Action alternative would not result in any new wildlife hazards; however, existing hazards present within airport property would not be removed and wildlife hazard would remain. The Proposed Action will be located airside within the existing airport boundary and will not be near wildlife or create a wildlife hazard. The Proposed Action will also remove natural resource features south of the proposed taxiway extension that currently serve as wildlife attractants.

(3) Include documentation to support sponsor's assurance under 49 U.S.C. § 47107 (a) (10), of the 1982 Airport Act, that appropriate actions will be taken, to the extent reasonable, to restrict land use to purposes compatible with normal airport operations.

The No Action alternative would be consistent with local land use plans, policies, and regulations; however, it would be inconsistent with MRB's Master Plan which documents the need of the Proposed Action.

The Proposed Action will enhance land use compatibility with normal airport operations. The Proposed Action is consistent with applicable land use plans, policies, and regulations. Additionally, the Proposed Action would not require land acquisition, generate off-Airport land use impacts, or otherwise influence land use patterns or development in the vicinity of the Airport.

(J) NATURAL RESOURCES AND ENERGY SUPPLY

What effect would the project have on natural resource and energy consumption?

The No Action alternative would not impact natural resources or energy consumption, as it involves maintaining current conditions without initiating new construction or development that would require additional resource extraction or energy consumption.

The Proposed Action would not have a significant effect on natural resources or energy supply. Construction of the Proposed Action will consume diesel fuel during the temporary construction period; however, the project will not result in permanent energy consuming operations.

Aircraft traffic patterns between the terminal area/cargo facilities and the runways may change to accommodate temporary taxiway closures during the construction phases. These changes would not be expected to alter fuel usage. Post construction, the Proposed Action will not change the number or type of operations at the Airport or otherwise affect aircraft operations. Additionally, the taxiway extension will reduce current back taxing operations on the runway resulting in a minimal decrease in fuel consumption.

(K) NOISE AND NOISE-COMPATIBLE LAND USE

Will the project increase noise by DNL 1.5 dB or more for a noise sensitive area that is exposed to noise at or above the DNL 65 dB noise exposure level, or that will be exposed at or above the DNL 65 dB level due to a DNL 1.5 dB or greater increase, when compared to the no action alternative for the same timeframe?

The No Action alternative would not increase noise levels at MRB as it does not involve the implementation of activities that would contribute to additional aircraft movements or noise emissions.

The Proposed Action is located on airport property and no land use would change as a result of the project. Furthermore, the Proposed Action would not increase aircraft operations and therefore would have no long-term adverse effect on airport operations or noise levels. Noise sensitive land uses surrounding the Proposed Action will be closer to aircraft operations on the south side of the airfield; however; potential noise sensitive land/properties consist of sparse commercial, residential and institutional use located within a quarter mile of MRB. One place of worship, Grace Church, located immediately adjacent to airport property on Novak Drive, is located approximately 0.48 mile from west-side construction activities; however, it not anticipated to have appreciable long-term or permanent differences in noise resulting from the Proposed Action. Furthermore, the Proposed Action

will be consistent with the 2004 Berkeley County Ordinance to Limit Height of Objects and Regulate Placement of Certain Structures Within Specific Areas of Noise Level Around Eastern West Virginia Regional Airport.

Construction activities and associated noise would be secondary to the existing noise sources in the project area, which include airport operations, aircraft traffic, and nearby roads and highways. Existing topography on and off airport property, distance from proposed activities (quarter to half mile or greater), existing natural and mad-made screening from noise (berms, buildings, etc.) minimize construction noise.

Noise generated by heavy equipment during construction, which includes blasting activities, would be localized, short term, and temporary and would be minimized to the greatest extent possible by employing appropriate BMPs. Construction activities, including blasting, will be completed with strict adherence to FAA standards and Advisory Circulars as well as Berkeley County's Excessive Noise Ordinance pursuant to the provisions of § 7-1-3kk, *Code of West Virginia*, 1931, as amended to minimize noise impacts to nearby noise sensitive land uses. In addition, WVDEP processes and required permitting for blasting activities will be adhered to, including notification to all owners and occupants of manmade structures within 0.5 mile of blasting activities at least ten (10) but not more than thirty (30) days prior to any blasting. Furthermore, the Proposed Action would not change aircraft operations (e.g., flight tracks, fleet mix, runway use, time of day, etc.).

Federal Highway Administration's *Noise Fundamentals, Highway Traffic Noise Analysis and Abatement Policy and Guidance* indicates that a doubling of noise sources (i.e., construction vehicles) would increase traffic noise levels by approximately 3dB, which the guidance reports as the smallest change that humans can detect without specifically listening for a change. Given the overall project duration, timing of construction equipment, overall construction duration, and non-significant increases in ADT compared to existing conditions, the Proposed Action is not anticipated to result in noise levels increasing greater than 3dB.

(L) SOCIOECONOMICS, ENVIRONMENTAL JUSTICE, AND CHILDREN'S HEALTH AND SAFETY RISKS

(1) Would the project cause an alteration in surface traffic patterns, or cause a noticeable increase in surface traffic congestion or decrease in Level of Service?

The No Action alternative would not alter surface traffic patterns as it involves maintaining current conditions without implementing new construction or development that could change the flow or volume of vehicular traffic.

The Proposed Action is not likely to alter surface traffic patterns and cause a notable increase in surface traffic congestion or decrease the Level of Service. Traffic levels will increase temporarily during construction from worker commutes and material delivery/removal primarily occurring during the five-day workweek and an eight-hour workday. Vehicle Miles Traveled (VMT) include hauling, delivering, and pickup trucks based on the number of trips and a roundtrip travel distance of 45 miles. In deriving the VMT for each worker traveling to and from the construction site, it was assumed that a composite of passenger cars and trucks would commute a roundtrip distance of 50 miles. However, the impacts to traffic will be minimal due to construction occurring predominately during off-peak hours (early morning or late afternoon during lower peak periods), dedicated routes, and advanced

public notification of construction activities for the general public will minimize the overall impact. Therefore, impacts to traffic will be minimal during the four-year construction timeframe. The Proposed Action will increase general aviation safety and accommodate existing aviation traffic during taxiing to Runway 26.

(2) Would the project cause induced, or secondary, socioeconomic impacts to surrounding communities, such as changes to business and economic activity in a community; impact public service demands; induce shifts in population movement and growth, etc.?

The No Action alternative would not induce secondary socioeconomic impacts to surrounding communities as it maintains current conditions without introducing new construction or development that could trigger such changes.

The scope of the Proposed Action would not promote shifts in populations, incomes, and growth patterns; public service demands; or negative pressure over healthcare systems, business and economic activity, disruption to established neighborhoods, urban proliferation, or significant changes in transportation patterns. The Proposed Action does not require temporary (construction related) or permanent alterations to public services including fire and police protection, education and utility services, or businesses.

Minor temporary socioeconomic impacts would result from construction activities associated with the Proposed Action. Although project duration is anticipated to be four years in duration, the associated traffic impacts would be minimal, spread out during that construction timeframe, and will occur predominately during off-peak hours. Developed traffic management plans would utilize roadways that accommodate larger traffic volumes (e.g., highways) to minimize local traffic impacts. No impacts to local employment resulting from construction activities are anticipated.

The Proposed Action would not permanently adversely affect socioeconomic conditions in the surrounding community, nor permanently alter transportation patterns, divide, or disrupt established communities, disrupt orderly, planned development, nor create an appreciable change in employment. On the contrary, the Airport plays a vital role in providing general aviation operations and supporting the economic development needs for Martinsburg and Berkeley County.

(3) Would the project have a disproportionate impact on minority and/or low-income communities?

The EPA's EJ Screen tool was accessed during April and May of 2023, to screen for populations with socioeconomic and environmental indicators and considerations that increase vulnerability (**Attachment 11**). The Demographic Indexes chosen in the EJSCREEN were percent low-income population and percent minority population, which are the two (2) demographic factors that are documented in Executive Orders 12898 and 14096 and DOT Order 5610.2(c) regarding Environmental Justice.

Environmental Justice (low-income and/or minority) populations have been identified within two census tracts that intersect with the project area for the Proposed Action. Census Tract 54003971901 covers populations east of I-81 and a small western portion of MRB property, and Census Tract 54003972003 covers a majority of MRB property and portions of populations to the Jefferson County Line and US 19. Table 3 includes a summary of demographic data from the ACS Summary Report.

Table 3: US EPA EJ Screen: ACS Summary Report Summary

	Tract 54003971901	Tract 54003972003
Total Population	6,944	3,922
Population Reporting One Race	6,842	3,830
White	6,093	3,499
Black	663	331
American Indian	0	0
Asian	51	0
Pacific Islander	0	0
Some Other Race	35	0
Population Reporting Two or More Races	102	92
Total Hispanic Population	240	162
Household Income Base	2,465	1,453
< $15,000	145	13
$15,000 - $25,000	130	19
$25,000 - $50,000	463	309
$50,000 - $75,000	582	294
$75,000+	1,145	818

- Source: EJ Screen ACS Summary Reports

Census Tracts 54003971901 and 54003972003 exceed the 50th percentile of other census tracts within West Virginia for minorities (People of Color index) and LEP person (Limited English-Speaking index) and below the 50th percentile for low-income populations. Census tract 54003971901 exceeds the 50th percentile for populations with Less than high school education and for populations under the age of five (5). Within a one-mile radius of the project area, the averages are similar to the census track data with minorities exceeding the 50th percentile and low-income populations below the 50th percentile **(Attachment 11)**.

The Proposed Action is not likely to have disproportionately high and adverse effects on human health, social, economic, and environmental on EJ populations during construction and/or operation. The Proposed Action is limited to airport property to increase safety during general aviation and taxiing of aircraft. BMPs, such as advanced public notification of blasting/construction activities, evaluation of blasting technologies designed to reduce noise/vibration, monitoring during construction activities, and robust blasting plans and mandatory safety measures will be employed during construction to reduce impacts to EJ populations.

(4) Would the project have the potential to lead to a disproportionate health or safety risk to children?

The No Action alternative would not lead to disproportionate health or safety risks to children, as it involves maintaining current conditions without initiating new construction or development that could introduce hazards or increase exposure to potential risks to children.

The Proposed Action would not result in disproportionate health or safety risk to children; however, BMPs will be employed to prevent risks relating to blasting activities associated with the Proposed Action. Identified BMPs include advanced public notification of blasting activities, communication with nearby schools and childcare centers to notify when blasting activities will occur, and pre-blast

surveys to assess nearby properties, including schools, playgrounds, and residential areas. This helps identify potential risks and allows for appropriate safety measures to be implemented

The Proposed Action would not result in negative pressure over healthcare and education systems, disruption, or significant changes to established neighborhoods and public services including fire and police protection and utility services. Two public schools are located within the vicinity of the project area – Valley View Elementary School located on Nadenbousch Lane, west of MRB approximately 1.32 miles from the limits of the Proposed Action, and the Pikeside Learning Center (middle school) located a half-mile north of MRB along Winchester Avenue. There are no parks within the immediate vicinity of MRB.

(M)VISUAL EFFECTS INCLUDING LIGHT EMISSIONS

(1) Would the project have the potential to create annoyance or interfere with normal activities from light emissions for nearby residents?

The No Action alternative would not interfere with normal activities due to light emissions for nearby residents as it does not introduce additional sources of light pollution or alter existing lighting conditions at MRB or in the surrounding area.

The Proposed Action involves the changes in lighting resulting from the construction of additional taxiway lighting associated with the taxiway extension. However, this does not create pathways of additional exposure to the existing lighting at the Airport such that it would result in an increase in annoyance or interference with normal activities of nearby light sensitive properties.

(2) Would the project have the potential to affect the visual character of nearby areas due to light emissions?

The Airport is not located in a high-density residential area and light emission would continue to be less than significant for both the No Action alternative and the Proposed Action. Furthermore, MRB's lighting system is controlled by aircrafts and is only used when needed during takeoff and landing. The Proposed Action will involve approximately eight (8) acres of tree removal which will result in minor changes to the surrounding visual characteristics, but it is anticipated to be less than significant and would continue to be dominated by the existing natural landscape.

(3) Would the project have the potential to block or obstruct views of visual resources?

Neither the No Action Alternative nor the Proposed Action will result in the blocking or obstructing visual resources in the vicinity of the project area.

(N) WATER RESOURCES (INCLUDING WETLANDS, FLOODPLAINS, SURFACE WATERS, GROUNDWATER, AND WILD AND SCENIC RIVERS)

(1) WETLANDS

(a) Does the proposed project involve federal or state regulated wetlands or non-jurisdictional wetlands?

The National Wetlands Inventory Map identified one potential wetland within the project area and Berkeley County GIS data indicated two potential streams inside the project area. Based on this, a field investigation has been conducted and a Wetland Delineation Report has been prepared **(Attachment 12)**. Wetland investigations were conducted within the vicinity of the Proposed Action during the week of October 27, 2022. During the field investigations, determinations were made regarding the presence or absence of wetland resources in accordance with the criteria established in the US Army Corps of Engineers (USACE), Technical Report Y-87-1, *USACE Wetland Delineation Manua*l, 1987 and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region*, Version 2.0 (April 2012).

Two wetlands (Wetlands A and B), one stream channel (Stream A), and one pond (Pond A) were delineated within the project area. Wetland A is a Palustrine Emergent /Palustrine Scrub Shrub (PEM/PSS) wetland that is approximately 0.73 acre in total size. Wetland B is a PEM wetland that is approximately 0.16 acres in size that drains into Pond A. Stormwater management (Pond A), approximately 0.36 acre in size drains into the Sulphur Spring Branch a tributary to Opequon Creek. Stream A was delineated as 175 linear feet in length. No impacts to these resources will result from the No Action alternative. All of the aforementioned water resources and their associated acreage/linear feet are considered to be impacted during construction of the Proposed Action. Temporary impacts are anticipated to Wetland B, Stream A, and Pond A, as a result of temporary E&S measures required for Taxiway E strengthening (Phase 1). Permanent impacts are anticipated to Wetland A as a result of the Taxiway E extension (Phase 2). Additional minimization measures and BMPs will be utilized to further reduce impacts. Refer to **Attachment 12** for the Wetland Delineation Report.

(b) If yes, does the project qualify for an Army Corps of Engineers General permit?

A preliminary jurisdictional determination (PJD) was received by the US Army Corps of Engineers (USACE) on August 7, 2023 and the delineation was field verified by the USACE on September 13, 2023. The USACE has determined that all identified resources included in the wetland delineation report may be considered jurisdictional waters of the United States in accordance with Regulatory Guidance Letter (RGL) No. 16-01[7]. Coordination is ongoing with the USACE to determine if the proposed impacts would qualify for a Nationwide Permit or require an individual Section 404 permit. Any associated compensatory mitigation will be determined by the permit and by USACE. Required coordination and 404 permit authorization will be obtained prior to the commencement of construction activities.

[7] The final rule amending the 2023 definition of "Waters of the US" was published on August 29, 2023. For the purposes of this assessment, all waters are still considered jurisdictional by the USACE and not state waters.

(c) If there are wetlands impacts, are there feasible mitigation alternatives? Explain.

To the best extent possible, measures will be taken to minimize impacts to wetlands including adhering to strict erosion and sediment control measures, such as filter sock, silt fence, filter bags, diversion dikes, sediment traps/basins, outlet control structures and other features as required by the West Virginia Department of Environmental Protection (WVDEP) and USACE. The increased runway to taxiway centerline separation distance on the project's eastern end helps minimize impacts to Wetland A. In addition, appropriate buffers coupled with fencing/demarcation of jurisdictional systems will be incorporated into construction plans. Any mitigation required for impacts will be determined by the USACE and WVDEP. Potential mitigation opportunities include the WVDEP In lieu fee stream and wetland mitigation program instrument utilizing the West Virginia Stream and Wetland Valuation Metric (SWVM) forms will be used to calculate temporal impacts at a standard 3 percent per year.

(d) If there are wetlands impacts, describe the measures to be taken to comply with Executive Order 11990, Protection of Wetlands.

EO 11990 requires federal agencies to ensure their actions minimize the destruction, loss, or degradation of wetlands. It also assures the protection, preservation, and enhancement of the Nation's wetlands to the fullest extent practicable during the planning, construction, funding, and operation of transportation facilities and projects. U.S. Department of Transportation (DOT) Order 5660.1A provides DOT agencies with instructions on how to carry out EO 11990.

To minimize the total area of wetland impacts, grading and other opportunities for minimization will be included to the greatest extent possible during final design. Mitigation will be analyzed as part of the permit application and verification process. If compensatory mitigation (i.e., mitigation bank credits) is required, according to the USACE online database (https://ribits.ops.usace.army.mil/), there are 1.49 potential credits in the watershed.

(2) FLOODPLAINS

(a) Would the proposed project be located in, or would it encroach upon, any 100-year floodplains, as designated by the Federal Emergency Management Agency (FEMA)?

According to a review of the FEMA Flood Insurance Rate Map, the No Action alternative and the Proposed Action are not located within or adjacent to any designated floodplain areas and within a minimal flood hazard area (**Attachment 13**).

(b) If Yes, would the project cause notable adverse impacts on natural and beneficial floodplain values as defined in Paragraph 4.k of DOT Order 5620.2, *Floodplain Management and Protection*?

N/A

(c) If Yes, attach the corresponding FEMA Flood Insurance Rate Map (FIRM) and describe the measures to be taken to comply with Executive Order 11988, including the public notice requirements.

N/A

(3) SURFACE WATERS

(a) Would the project impact surface waters such that water quality standards set by Federal, state, local, or tribal regulatory agencies would be exceeded, or would the project have the potential to contaminate a public drinking water supply such that public health may be adversely affected?

Berkeley County GIS data indicated two potential streams inside the project area, and a field review was conducted and confirmed the presence of surface water resources including one stream channel (Stream A), that connects to Sulphur Spring, a tributary to Opequon Creek and one pond (Pond A) in which wetlands drain into. Stream A is an ephemeral/intermittent stream that starts at the exit point of a stormwater management feature and runs through a wooded section and connects into Wetland B. It is approximately 175 feet in length. Pond A is an open water feature that Wetland B drains into. The pond is approximately 0.36 acre in size. Impacts are anticipated to these water resources and will be permitted accordingly. Impacts to water resources will be minimized through the use of erosion and sedimentation control measures to the greatest extent possible.

The No Action alternative and the Proposed Action do not have the potential to contaminate public drinking water supply. Data regarding West Virginia Public Water Source Protection Areas (dated 03/27/2024) was reviewed.[8] One public water supply was identified within the vicinity of the Proposed Action – the Buckhannon Water Board and associated protection areas. The protected areas are located well outside the limits of the Proposed Action approximately 20 miles to the north. Several private wells are located throughout the region, but none will be impacted by the Proposed Action.

(b) Would the water quality impacts associated with the project cause concerns for applicable permitting agencies or require mitigation in order to obtain a permit?

The No Action alternative would not result in any impacts to water quality and existing conditions would remain. Although the Proposed Action would include approximately 42,250 square yards of additional impervious surfaces on airport property, the Proposed Action is not anticipated to have any adverse water quality impacts from either construction or operations. To avoid adverse impacts to water quality, stringent erosion and sediment (E&S) and stormwater controls will be implemented. The project will require a construction stormwater permit including BMPs for E&S control in compliance with the WVDEP through their WV/NPDES Construction Stormwater General Permit and the Berkeley County Stormwater Ordinance in accordance with *West Virginia Erosion and Sediment Control Best Management Practice Manual*. In addition, vegetation/tree removal activities will involve flush cuts, thereby retaining the root structure to minimize erosion. Flush cuts will retain the root structure to minimize erosion.

The Proposed Action includes detention basins and/or infiltration trenches that will be constructed to manage quality, rate, and volume of post construction stormwater. The detention basin will improve the water quality and slow the rate of water entering the stormwater system. During construction, the

[8] A water source protection area (WSPA) is a defined area surrounding a water source that is designated for the purpose of safeguarding and managing the quality and quantity of water available for human consumption. These areas are established to protect drinking water supplies from contamination, overuse, and other activities that could impair water quality or quantity.

Contractor will install erosion and sedimentation controls to filter stormwater and trap sediment from polluting and entering the stormwater system. Coordination with the WVDEP will be conducted to obtain a WV NPDES General Construction Permit prior to construction.

(4) GROUNDWATER

(a) Would the project impact groundwater such that water quality standards set by Federal, state, local, or tribal regulatory agencies would be exceeded or would the project have the potential to contaminate an aquifer used for public water supply such that public health may be adversely affected?

The Project is not located over an EPA designated sole-source aquifer or WVDEP designated primary or principal aquifer. Based on the size and nature of the project, no significant impacts to groundwater or water quality are anticipated as result of either the No Action alternative or the Proposed Action.

(b) Would the groundwater impacts associated with the project cause concerns for applicable permitting agencies or require mitigation in order to obtain a permit?

There are no anticipated groundwater impacts associated with either the No Action alternative or the Proposed Action.

(c) Is the project to be located over an EPA-designated Sole Source Aquifer?

Neither the No Action Alternative nor the Proposed Action is located over an EPA-designated Sole-Source Aquifer.

(5) WILD AND SCENIC RIVERS

Would the proposed project affect a river segment that is listed in the Wild and Scenic River System or Nationwide River Inventory (NRI)?

According to the U.S. National Wild and Scenic Rivers System, no designated rivers occur in the immediate vicinity of the Airport. There are no river segments listed in the Nationwide River Inventory (NRI) in the immediate vicinity of the project area.

(O) CUMULATIVE IMPACTS

Discuss impacts from past, present, and reasonably foreseeable future projects both on and off the airport. Would the proposed project produce a cumulative effect on any of the environmental impact categories above?

In determining the significance of the impacts associated with the Proposed Action, it is necessary to consider the overall impact of all project components detailed in the EA, combined with past (generally three years), present and foreseeable projects (generally five years out) to be carried out by the Airport and within the surrounding area in the near future. *Past actions,* generally are actions

that occurred in the past and may warrant consideration in determining the environmental impacts of an action. *Present actions* are any other actions that are occurring in the same general time frame as the Proposed Action. *Reasonably foreseeable future actions* are actions that may affect projected impacts of the Proposed Action found in local and regional planning documents. The area of assessment for cumulative impacts analysis is the same area defined for the Proposed Action's area direct and indirect impact, specific to each resource assessed (e.g., water resources, cultural, etc.), and includes both on and off airport property.

Past Actions

According to the Berkeley County Comprehensive Plan Update (June 2016), the biggest impact of past development actions on the general areas surrounding MRB was the construction of I-81 through Berkeley County as well as improvements to other highways in the county. This expansion of the transportation network in the area profoundly impacted the movement of people and goods in and through the county and on area land use patterns (Table 4).

Table 4: Berkeley County Historical Land Use Summary*

	1960s	1970s	1980s	2000 Data		
Classification	**Acres**	**Acres**	**Acres**	**Acres**	**% of Total**	**Square Miles**
Agriculture	115,835[1]	84,591[1]	85,877[1]	39,485[2]	19.21	61.68
Barren				68[2]	0.03	0.11
Developed Areas (minus transportation)	3,851[1]		7,710[1]	45,122[2]	21.96	70.48
Extractive Quarries				24[2]	0.01	0.04
Forested Areas				115,368[2]	56.14	180.20
Open Water			844[1]	460[2]	0.22	0.72
Transportation	778[1]		1,977[1]	3,961[2]	1.93	6.19
Wetlands			1,372[3]	1,007[2]	0.49	1.57
Total	**202,240[1]**	**202,240[1]**	**202,240[1]**	**205,497**	**100.00**	**320.99**

(Source: [1]1990 comprehensive plan; [2]2006 comprehensive plan; [3]1987 National Wetlands Inventory Mapping)

** Extracted from the Berkeley County Comprehensive Plan Update (June 2016)*

MRB has participated in the FAA's Airport Improvement Program (AIP) since 1976. This program currently funds 90 percent of AIP-eligible federal projects. MRB also participates in a state funding program offered through the West Virginia Aeronautics Commission (WVAC), which matches five percent of the remaining project cost that the AIP does not cover and may provide funding for projects ineligible under the AIP. Refer to **Attachment 14** for a timeline of historical development occurring at MRB.

Present & Reasonably Foreseeable Future Actions

Berkeley County, through their 2016 Comprehensive Plan Update, identifies opportunities the county can implement for effective growth management, such as updating land development regulations, establishing a "traditional neighborhood development" concept, preserve agricultural land, revitalize town centers, and promoting infill/redevelopment. **Attachment 13** includes mapping of designated growth areas of the county, as well as plan recommendations for development activities recommended for Berkeley County.

The MRB Master Plan identifies several airport improvement projects planned in the near future and future timeframes. Planned improvements include hangar construction, land acquisitions, rehabilitation of runway/taxiways, etc.; however, the Proposed Action is not dependent on these projects. These proposed improvements would be considered single, complete, or part of a multi-

phase project with independent utility, and according to FAA Order 1050.1F and 5050.4B, will require the applicable level of environmental/NEPA approval. These proposed projects are dependent upon grant funding availability. Table 4 documents the following future, planned airport development activities that are considered part of and as cumulative impact to the Proposed Action.

Table 5: Preferred Airport Development Plan

Project	Phase*
Land Acquisition for Runway Protection Zone (RPZ) and Hangar Development	Phase I
Obstruction Removal	Phase I
Rehabilitate Runway and Taxiway Lighting	Phase I
Construct Fuel Truck Parking Bays	Phase I
Installation of Segmented Circle to Primary Wind Cone	Phase I
Rehabilitate/Improve Aviation Way	Phase I
Land Release for Non-Aeronautical Development	Phase I
Develop Air Cargo Operations Area	Phase I
Taxiway C/Apron Rehabilitation	Complete
Construct One T-hangar Building with Apron (North Apron)	Phase I
Construct New Taxiway (North Apron)	Phase I
Construction of T-Hangar Buildings (South and North Aprons)	Phase II
Perimeter Fence Relocation	Phase II
Construct New Taxiway Connectors	Phase II
Extend and Widen Taxiway E	Proposed Action
Reconstruct Unnamed Taxiway (for ADG II)	Phase II
Construct New Apron with Tie-Downs (for ADG II)	Phase II
Land Acquisition for TTF Operations	Phase III
Remove Taxiways B,C, D, and E3	Phase III
Relocate Supplemental Wind Cone from Runway 8-26 ROFA	Phase III
Rehabilitate Taxiway D	Phase III

- Source: MRB Airport Master Plan (2019)

* Recommendations based on a 20-year planning period (2016-2036) with three phases: Phase I extends to year five, Phases II encompasses years 6-10, and Phase III encompasses years 11-20.

MRB is located adjacent to an "Industrial Investment Area." Land uses defined within this area are light industrial, heavy industrial, commercial, office parks, and warehousing. Land use within the general vicinity of MRB consists of residential, open space/forested/agricultural land, commercial, and institutional land uses. The incorporated City of Martinsburg is located approximately two and a half miles north of MRB.

Potential impacts associated with the Proposed Action are considered less than significant with a low risk of potential long-term direct and indirect impacts. Impacts resulting from the Proposed Action will be minimal, temporary in nature, or determined to be below significance thresholds of impact defined for each applicable impact category analyzed in the EA. Furthermore, BMPs and any required mitigation for impacts will further reduce overall impacts resulting from the Proposed Action.

Based on the above information, anticipated impacts, and lack of meeting significant thresholds for impacted resources, it is not anticipated that implementation of the Proposed Action contributes significantly to cumulative impacts.

7. PERMITS

List all required permits for the proposed project. Has coordination with the appropriate agency commenced? What feedback has the appropriate agency offered in reference to the proposed project? What is the expected time frame for permit review and decision?

- WV/NPDES Construction Stormwater General Permit
- Berkeley County Land Development Plan Approval
- Berkeley County Land Disturbance Permit
- WV Blasting Permit
- Section 404 Permit (assumed to be Nationwide Permit)

Project activities associated with the Proposed Action will be further analyzed and evaluated in more detail and in coordination with local regulatory agencies for permit requirements.

8. MITIGATION

Describe those mitigation measures to be taken to avoid creation of significant impacts to a particular resource as a result of the proposed project, and include a discussion of any impacts that cannot be mitigated.

The following summarizes the mitigation measures proposed to avoid the creation of significant impacts, per resource, as a result of the Proposed Action:

- Limiting tree clearing to the timeframe of November 15 to March 31, any construction year for rare, threatened, and endangered species (i.e., listed bat species)
- Minimize mowing activities, avoid/minimize use of pesticides, and planting native vegetation where applicable for preservation of the monarch butterfly and other pollinators
- Minimizing impacts of blasting activities through innovative blasting techniques, public notification and other identified measures documented in the EA.
- Utilizing E&S measures, BMPs, and any required mitigation for impacts to water resources will further reduce overall impacts.

Other than mitigation measures proposed above, no mitigation will be necessary to avoid creation of significant impacts to a particular resource.

9. PUBLIC INVOLVEMENT

Describe the public review process and any comments received. Include copies of Public Notices and proof of publication.

In accordance with FAA Advisory Circular (AC) 150/5070-6B Airport Master Plan guidance documentation (Change 1, 2007 and change 2, 2015), public involvement is most effective and impactful during early planning, alternatives development, and before decisions have been made. Public Involvement meetings were held in 2019 during the MRB's Airport Master Plan Update, project details and plan elements were presented; the Master Plan was also made available on the Airport Website. The proposed action was among the phases of improvements presented in the Airport Master Plan Update. No comments were received regarding the Taxiway extension or associated improvements.

A Public Notice regarding the availability of the Draft Environmental Assessment was advertised in The Journal and the MRB Website. The Journal is a daily newspaper based in Martinsburg, West Virginia, and serving Berkeley, Jefferson and Morgan counties in the state's Eastern Panhandle. Electronic versions of the document were uploaded, where applicable, and hard copies were made available at the MRB terminal building and local libraries. Local libraries include Martinsburg-Berkeley Public Library. The FAA provided a 30-day review period to receive public comment and input. The comment period closed on July 13, 2024. No comments were received during the public comment period.

In accordance with the objectives of Section 101(a) of the National Environmental Policy Act of 1969 (NEPA) and other applicable environmental requirements, the FAA will assess impacts of the Proposed Action, if none of the potential impacts are determined to be significant, the FAA will issue a Finding of No Significant Impacts (FONSI).

The FAA FONSI and signed Final Environmental Assessment will be made available through the same mechanisms stated above for the Draft Environmental Assessment.

10. LIST OF ATTACHMENTS

Attachment 1: Project Location Map
Attachment 2: MRB Airport Layout Plan (ALP)
Attachment 3: Project Layout
Attachment 4: Air Quality Construction Emissions Inventory Assessment
Attachment 5: Rare, Threatened, and Endangered Species Coordination
Attachment 6: Section 106/Cultural Resources Coordination
Attachment 7: NRCS Soils Mapping
Attachment 8: Farmland Mapping
Attachment 9: Hazardous Waste Mapping
Attachment 10: Land Use Mapping
Attachment 11: Environmental Justice Communities Mapping
Attachment 12: Wetlands and Water Resources Mapping & Coordination
Attachment 13: FEMA Floodplain Mapping
Attachment 14: Cumulative Impacts Supporting Documentation & Mapping
Attachment 15: Public Involvement

Project Title: Reconstruction, Widening and Extension of Taxiway E **Identifier:** MRB

11. PREPARER CERTIFICATION

I certify that the information I have provided above is, to the best of my knowledge, correct.

Jennifer Martin — 06/07/2024
Signature — Date

Jennifer Martin, CEP, ENV SP
Name

Vice President
Title

KLT Group, LLC — 443-960-5956
Affiliation — Phone #

12. AIRPORT SPONSOR CERTIFICATION

I certify that the information I have provided above is, to the best of my knowledge, correct. I also recognize and agree that no construction activity, including but not limited to site preparation, demolition, or land disturbance, shall proceed for the above proposed project(s) until FAA issues a final environmental decision for the proposed project(s), and until compliance with all other applicable FAA approval actions (e.g., ALP approval, airspace approval, grant approval) and special purpose laws has occurred.

Nicholas H. Diehl — August 23, 2024
Signature — Date

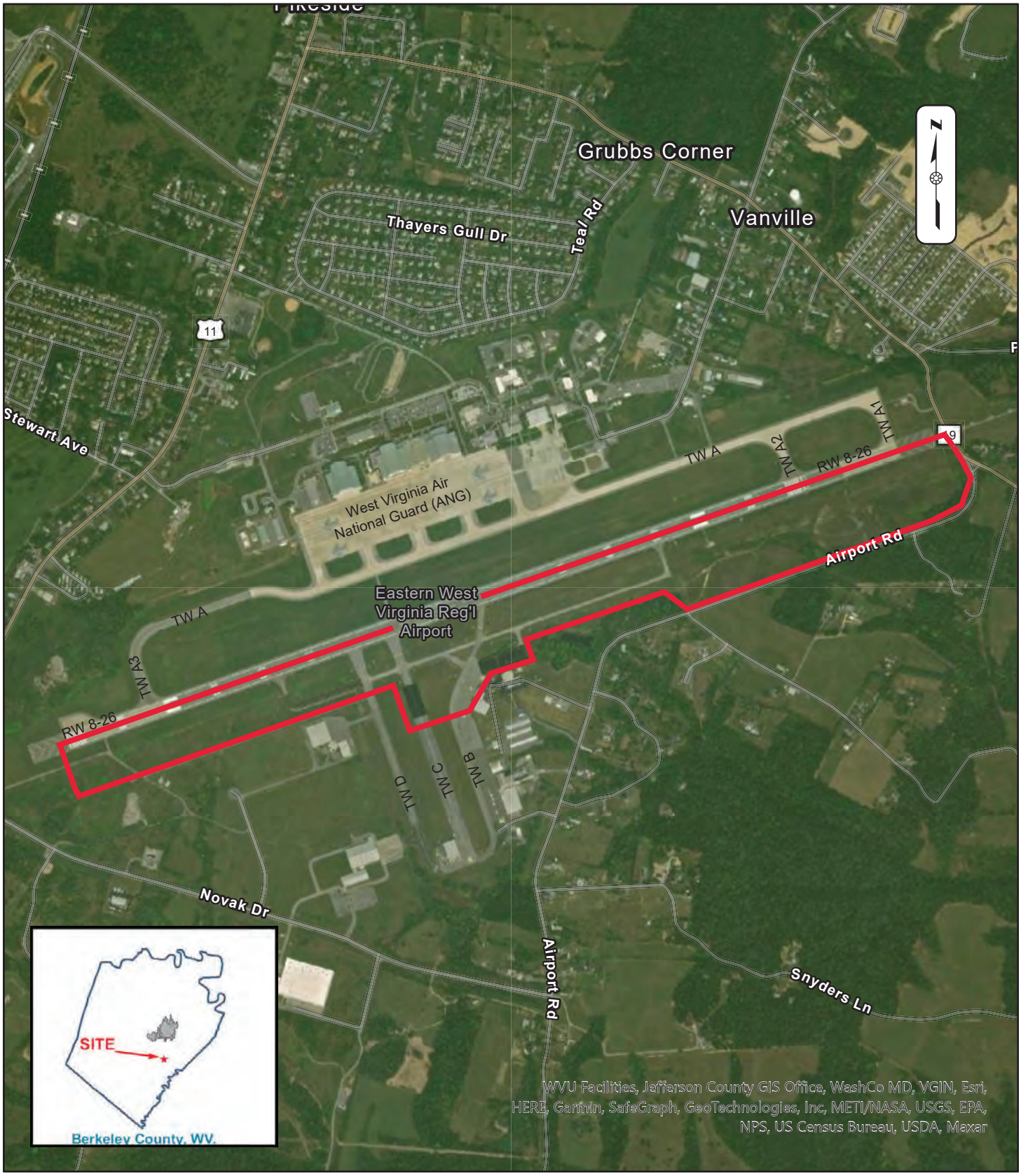
Nicolas H. Diehl
Name

Executive Director & CEO
Title

Eastern West Virginia Regional Airport Authority — (304) 263-2106
Affiliation — Phone #

ATTACHMENT 1:

PROJECT LOCATION MAP



EASTERN WEST VIRGINIA REGIONAL AIRPORT AUTHORITY

LEGEND

Project Review Area

0 1,500 3,000 Feet

ATTACHMENT 1: PROJECT LOCATION MAP

EASTERN WV REGIONAL AIRPORT

LOCATION	BERKELEY COUNTY, WV

Map Data Source: Berkeley County WV. GIS Department, 2019 Data; ESRI: Greenway Engineering

ATTACHMENT 2:

MRB AIRPORT LAYOUT PLAN (ALP)

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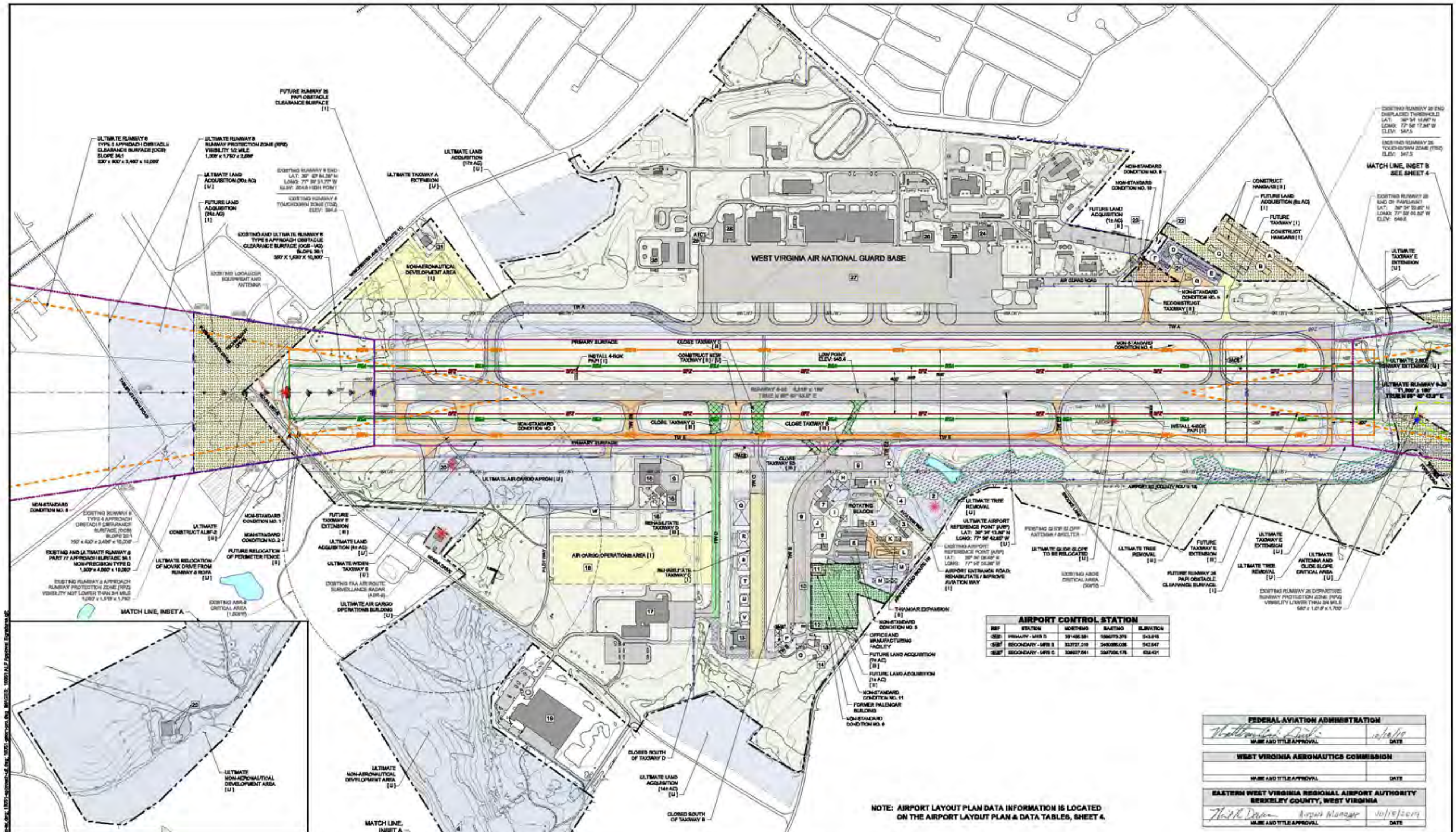


AIRPORT CONTROL STATION				
REF	STATION	NORTHING	EASTING	ELEVATION
[illegible]	PRIMARY - MRB D	[illegible]	[illegible]	[illegible]
[illegible]	SECONDARY - MRB B	[illegible]	[illegible]	542.647
[illegible]	SECONDARY - MRB C	[illegible]	[illegible]	[illegible]

FEDERAL AVIATION ADMINISTRATION	
[signature]	[handwritten date]
NAME AND TITLE APPROVAL	DATE

WEST VIRGINIA AERONAUTICS COMMISSION	
NAME AND TITLE APPROVAL	DATE

EASTERN WEST VIRGINIA REGIONAL AIRPORT AUTHORITY BERKELEY COUNTY, WEST VIRGINIA	
[signature] Airport Manager	10/18/2019
NAME AND TITLE APPROVAL	DATE

NOTE: AIRPORT LAYOUT PLAN DATA INFORMATION IS LOCATED ON THE AIRPORT LAYOUT PLAN & DATA TABLES, SHEET 4.

LEGEND			
DESCRIPTION	EXISTING	FUTURE	ULTIMATE
AIRPORT BUILDING			
AIRPORT PAVEMENT			
AIRPORT PROPERTY			
BODY OF WATER		NA	NA
GLIDE SLOPE CRITICAL AREA		SAME	
LAND ACQUISITION	NA		
LOCALIZER CRITICAL AREA		NA	NA
RUNWAY CENTERLINE MARKING		SAME	
TAXIWAY / TAXILANE MARKING			
BUILDING RESTRICTION 35' LINE (BRL)		NA	NA
FENCE		NA	NA
FENCE (AIRPORT PROPERTY PERIMETER)			NA
GROUND ELEVATION CONTOURS		NA	NA
OBSTACLE FREE ZONE (OFZ)		NA	

LEGEND			
DESCRIPTION	EXISTING	FUTURE	ULTIMATE
PAPI OBSTACLE CLEARANCE SURFACE	NA		
PART 77 APPROACH SURFACE		NA	
PRECISION OBSTACLE FREE ZONE (POFZ)		NA	
RUNWAY OBJECT FREE AREA (ROFA)		NA	
RUNWAY PROTECTION ZONE (RPZ) [APPROACH]		NA	
RUNWAY PROTECTION ZONE (RPZ) [DEPARTURE]		NA	NA
RUNWAY SAFETY AREA (RSA)		NA	
TAXILANE OBJECT FREE AREA (TLOFA)			
TAXILANE SAFETY AREA (TLSA)			
TAXIWAY OBJECT FREE AREA (TOFA)			
TAXIWAY SAFETY AREA (TSA)			
APPROACH OCS*		NA	
VERTICAL GUIDANCE, OCS - VG**		NA	
TREE LINE		NA	NA

LEGEND			
DESCRIPTION	EXISTING	FUTURE	ULTIMATE
TREE REMOVAL	NA	NA	
AIRPORT CONTROL STATIONS (PRIMARY / SECONDARY)		NA	NA
AIRPORT REFERENCE POINT (ARP)		NA	
ANTENNA		NA	
AUTOMATED WEATHER OBSERVING SYSTEMS (AWOS)		NA	NA
CEMETERY		NA	NA
MEDIUM APPROACH LIGHT SYSTEM RUNWAY (MALSR)		NA	
PRECISION APPROACH PATH INDICATOR (PAPI)	NA		
ROADWAYS / APPROACH INTERSECTION		NA	
ROTATING BEACON		NA	NA
VISUAL APPROACH SLOPE INDICATOR (VASI)		NA	NA
WIND CONE / SEGMENTED CIRCLE		NA	NA

DEVELOPMENT PROGRAM	
PHASE I DEVELOPMENT (0 - 5)	[I]
PHASE II DEVELOPMENT (6 - 10)	[II]
PHASE III DEVELOPMENT (11 - 20)	[III]
ULTIMATE DEVELOPMENT (BEYOND 20)	[U]

* OCS = OBSTACLE CLEARANCE SURFACE
** OCS - VG = OBSTACLE CLEARANCE SURFACE WITH VERTICAL GUIDANCE

REFER TO FAA ENGINEERING BRIEF #99 TABLE 3-2 FOR DESCRIPTIONS OF OBSTACLE CLEARANCE SURFACES.

400 0 400 800
SCALE: 1"=400' FEET

NO.	REVISIONS	BY	APP.	DATE

AIRPORT LAYOUT PLAN

EASTERN WEST VIRGINIA REGIONAL AIRPORT
MARTINSBURG, WEST VIRGINIA

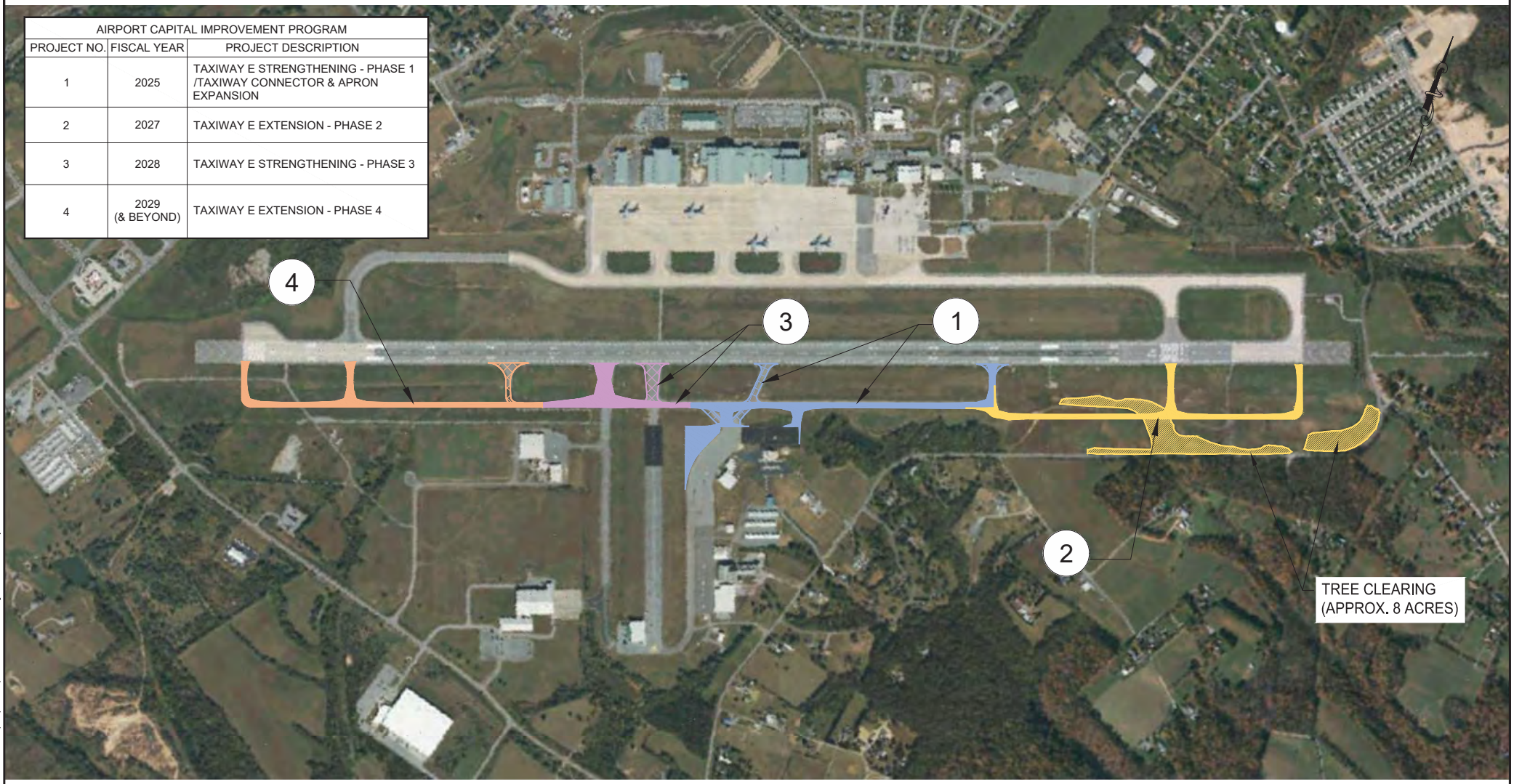
DELTA AIRPORT CONSULTANTS, INC.
www.deltaairport.com

DRAWN BY: RWW	SCALE: 1" = 400'	SHEET 3 OF 11
CHECKED BY: MAP	DATE: MARCH 2019	

ATTACHMENT 3:

PROJECT LAYOUT

AIRPORT CAPITAL IMPROVEMENT PROGRAM		
PROJECT NO.	FISCAL YEAR	PROJECT DESCRIPTION
1	2025	TAXIWAY E STRENGTHENING - PHASE 1 /TAXIWAY CONNECTOR & APRON EXPANSION
2	2027	TAXIWAY E EXTENSION - PHASE 2
3	2028	TAXIWAY E STRENGTHENING - PHASE 3
4	2029 (& BEYOND)	TAXIWAY E EXTENSION - PHASE 4



750 0 375 750 1500

SCALE IN FEET

ADCI

DESIGNED:	AD
DRAWN:	AD
CHECKED:	ZF
APPROVED:	RM

EASTERN WV REGIONAL AIRPORT

EASTERN WEST VIRGINIA REGIONAL AIRPORT AUTHORITY

PROJECT TITLE:	AIRPORT CAPITAL IMPROVEMENT PLAN	CONTRACT NO.:
SHEET TITLE:	FISCAL YEAR 2024-2028	SHEET NO.: 1
SCALE: AS SHOWN	DATE: OCTOBER 2023	

FILE NAME: P:\Airport\MRB\PROJECTS\2022--XXXX--TW E PH1\CAD\EXHIBITS\MRB_TW E EA EXHIBIT.dwg LAYOUT NAME: Layout1 USER: ZFormon

ATTACHMENT 4:

AIR QUALITY CONSTRUCTION EMISSIONS INVENTORY ASSESSMENT

www.flymrb.com

Emissions Analysis, Assumptions, and Methodology

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TABLE OF CONTENTS **Page**

1 Introduction

This Appendix presents the overall data, assumptions, approach, and methodology for preparing the Emissions Analysis for the Reconstruction, Widening and Extension of Taxiway E Project at the Eastern West Virgnia Regional Airport (MRB). The emissions inventories were prepared for the year (2025) and four future years (2026 through 2029) encompassing the timeframe of the proposed improvements at the Airport.

The U.S. Environmental Protection Agency (USEPA) sets National Ambient Air Quality Standards (NAAQS) to protect public health and the environment. The USEPA has identified the following six criteria air pollutants for which NAAQS are applicable: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO2), ozone (O3), particulate matter (PM10 and PM2.5), and sulfur dioxide (SO2). The USEPA calls these pollutants "criteria" air pollutants because it regulates them by developing human health−based and/or environmentally based criteria (science−based guidelines) for setting permissible levels (EPA, 2023). These standards and threshold levels are identified in Table 1 below.

Table 1. National Ambient Air Quality Standards

Pollutant		Primary/ Secondary	Averaging Time	Level	Form
Carbon Monoxide (CO)[1]		Primary	8-hour	9 ppm	Not to be exceeded more than once per year
			1-hour	35 ppm	
Lead (Pb)[2]		Primary and Secondary	Rolling 3 month average	0.15 µg/m^3 (1)	Not to be exceeded
Nitrogen Dioxide (NO_2)[3]		Primary	1-hour	100 ppb	98th percentile, averaged over three years
		Primary and Secondary	Annual	53 ppb(2)	Annual mean
Ozone (O_3)[4]		Primary and Secondary	8-hour	0.070 ppm(3)	Annual fourth-highest daily maximum 8-hr concentration, averaged over three years
Particulate Matter[5]	$PM_{2.5}$	Primary	Annual	9.0 µg/m^3	Annual mean, averaged over three years
		Secondary	Annual	15.0 µg/m^3	Annual mean, averaged over three years
		Primary and secondary	24-hour	35 µg/m^3	98th percentile, averaged over three years
	PM_{10}	Primary and Secondary	24-hour	150 µg/m^3	Not to be exceeded more than once per year on average over three years
Sulfur Dioxide (SO_2)[6]		Primary	1-hour	75 ppb(4)	99th percentile of 1-hour daily maximum concentrations, averaged over three years
		Secondary	3-hour	0.5 ppm	Not to be exceeded more than once per year

Source: EPA, *National Ambient Air Quality Standards (NAAQS)* https://www.epa.gov/criteria-air-pollutants/naaqs-table

(1) In areas designated nonattainment for the Pb standards prior to the promulgation of the current (2008) standards, and for which implementation plans to attain or maintain the current (2008) standards have not been submitted and approved, the previous standards (1.5 µg/m3 as a calendar quarter average) also remain in effect.

(2) The level of the annual NO_2 standard is 0.053 ppm. It is shown here in terms of ppb for the purposes of clearer comparison to the 1-hour standard level.

(3) Final rule signed October 1, 2015, and effective December 28, 2015. The previous (2008) O_3 standards are not revoked and remain in effect for designated areas. Additionally, some areas may have certain continuing implementation obligations under the prior revoked 1-hour (1979) and 8-hour (1997) O_3 standards.

(4) The previous SO_2 standards (0.14 ppm 24-hour and 0.03 ppm annual) will additionally remain in effect in certain areas: (1) any area for which it is not yet 1 year since the effective date of designation under the current (2010) standards, and (2)any area for which an implementation plan providing for attainment of the current (2010) standard has not been submitted and approved and which is designated nonattainment under the previous SO_2 standards or is not meeting the requirements of a SIP call under the previous SO_2 standards (40 CFR 50.4(3)).

The study area for the Proposed Action is located within Berkeley County, West Virginia which is designated as an attainment area under the NAAQS for all criteria pollutants; therefore, the levels in Table 1 apply to this Project.

2 Assessment Methodology

The purpose of this step is to determine the type(s) of air quality analyses that are appropriate for this Project. The range of analyses comprises a qualitative discussion, emissions inventories of various types and sources of emissions (e.g., operational, construction, etc.), and dispersion modeling (e.g., macroscale and "hot-spot"). In addition, this step can involve agency coordination with the development and application of an "Air Quality Assessment Protocol". The main purpose of the protocol is to document the scope, establish a methodology, and resolve any areas of uncertainty regarding the assessment prior to its undertaking. The seven types of methodologies include Qualitative Assessment, Operational Emissions Inventory, Construction Emissions Inventory (CEI), Hazardous Air Pollutant (HAPs) Emissions Inventory, Greenhouse Gas (GHG) Emissions Inventory, Atmospheric Dispersion Modeling, and Roadway Dispersion Modeling.

Using the guidelines presented in the Aviation Emissions and Air Quality Handbook (Version 3, Update 1), Figure 4-5, for this Project it is indicated the relative level of appropriateness of an analysis for this Project/Action that the Construction Emissions Inventory is the appropriate methodology to utilize.

As described under the Air Quality section of the Environmental Consequences contained in this Short EA, this Project is a Safety Project that will actually reduce or maintain current taxiing times of aircraft to both runway ends by eliminating cross over taxi and/or back taxi on the runway to get to and from the runway ends. Given that operational emissions are not expected to increase, the Construction Emission Inventory (CEI) Assessment is the appropriate methodology for this Analysis.

3 Construction Emissions Inventory Assessment

For this assessment, construction-related emissions are primarily associated with the exhaust from heavy equipment (i.e., backhoes, loaders, graders, etc.), delivery trucks (i.e., cement trucks, dump trucks, etc.), and construction worker vehicles getting to and from the airport construction site(s); dust from site preparation, land clearing, material handling, equipment movement on unpaved areas, and demolition activities; and fugitive emissions from the storage/transfer of raw materials. These emissions are temporary in nature and generally confined to the construction site and the access/egress roadways.

Emissions from construction activities were estimated based on the projected construction activity schedule, the number of vehicles/pieces of equipment, the types of equipment/type of fuel used, vehicle/equipment utilization rates, and the year construction occurs. For this assessment, emissions of CO, VOC, NOx, SO2, PM10 and PM2.5, as well as GHGs (i.e., CO2, CH4, and N2O) were evaluated for the construction years. Emission factors for on-road motor vehicles and off-road construction equipment were developed using the USEPA's Motor Vehicle Emissions Simulator (MOVES, Version 4) model.

Data regarding the number of pieces and types of construction equipment to be used on the project, the deployment schedule of equipment (monthly and annually), and the approximate daily operating time (including power level/usage factors) were estimated for each individual construction activity based on the construction schedule.

The construction emissions inventory was developed using 2026-2029 emission factors for on- road vehicle and off-road construction equipment. Emission factors for vehicles and equipment vary only slightly year to year, and generally decrease in future years. For this reason, using emission factors from 2026-2029 represents a more conservative estimate of emissions for construction completed during the Project.

3.1 On-Road Vehicles

For on-road vehicles, the anticipated vehicle-miles-traveled (VMT) were estimated to determine annual emissions. In deriving the VMT, the following was assumed:

VMT by hauling, delivering, and pickup trucks were based on the number of trips and a roundtrip travel distance of 45 miles.

In deriving the VMT for each worker traveling to and from the construction site, it was assumed that a composite of passenger cars and trucks would commute a roundtrip distance of 50 miles.

The following equation was used to obtain annual emission rates for on-road vehicles:

Emissions (tons/year) for on-road vehicles = Emission Factor (g/mile) x vehicle miles travelled per day x days/year x (1 pound/453.59 grams) x (1 ton/2,000 pounds)

MOVES emission factors associated with the hauling, delivering, and pickup trucks for the construction period are presented in **Table 2**.

Table 2. On-Road Vehicle Emission Factors (grams/mile)

On-road Activity	MOVES On-Road	Pollutant	2026	2027	2028	2029
Employee Commute	Composite of Passenger Car/Truck	CO	1.476816	1.478499	0.862007	1.483113
		VOC	0.097237	0.096267	0.056328	0.095392
		NOx	0.066414	0.064530	0.035253	0.062387
		SO2	0.002521	0.002501	0.001390	0.002473
		PM10	0.002343	0.002346	0.001382	0.000095
		PM2.5	0.002157	0.002161	0.001273	0.002171
		CO2	155.664462	154.388827	85.821486	152.699211
		CH4	0.023930	0.023658	0.013823	0.023463
		N2O	0.002025	0.002062	0.001111	0.002067
Material Delivery	Single Unit Short-haul Truck	CO	0.006252	0.006287	0.003767	0.006059
		VOC	0.000261	0.000261	0.000169	0.000258
		NOx	0.003123	0.003195	0.001218	0.002713
		SO2	0.000029	0.000031	0.000014	0.000028
		PM10	0.000095	0.000090	0.000024	0.000067
		PM2.5	0.000092	0.000087	0.000024	0.000065
		CO2	3.818077	4.100259	1.870849	3.736460
		CH4	0.000307	0.000308	0.000107	0.000253
		N2O	0.000187	0.000201	0.000091	0.000184
Material Delivery	Combination Short-haul Truck	CO	0.006987	0.006973	0.004203	0.006706
		VOC	0.002886	0.002922	0.002068	0.002974
		NOx	0.004166	0.004151	0.001435	0.003383
		SO2	0.000037	0.000040	0.000018	0.000036
		PM10	0.000181	0.000167	0.000038	0.000119
		PM2.5	0.000176	0.000162	0.000036	0.000116
		CO2	4.874910	5.237787	2.387478	4.771561
		CH4	0.000330	0.000332	0.000118	0.000274
		N2O	0.000132	0.000143	0.000066	0.000131

Source: USEPA MOVES4 Emissions Model.

3.2 Off-Road Construction Equipment

USEPA's NONROAD 2008 model is used to estimate off-road equipment emissions which is embedded within the latest version of MOVES. **Table 3** presents the off-road equipment included in the analysis along with the corresponding category description used within MOVES, the usage factors, and the horsepower (hp) that was assigned to each type of construction equipment. Emissions factors (grams/hp-hour) for each equipment type were applied to the anticipated work output (hp-hours) of expected equipment use. Operating times for the equipment were based on a five-day workweek and an eight-hour workday during which the equipment may be operating. A usage factor of 0.75 (i.e., 6 hours of operation accounting for the percentage of daily operation) was also used.

The following equation was used to obtain emission estimates for off-road construction equipment:

Construction Equipment Emissions (tons/year) = Emission Factor (grams/hp-hour) x Horsepower (hp) x hours per year x Usage Factor x (1 pound/453.59 grams) x (1 ton/2,000 pounds)

Tables 3 through Table 5 present the construction equipment emission factors based on Source Classification Code (SCC)(in grams per horsepower-hour) for 2026 through 2029, respectively. Notably, NO_2 emission factor are not presented as the MOVES model does not calculate NO_2 emissions for construction equipment.

Table 3. Construction Equipment Characteristics

Equipment	MOVES4 Description	MOVES4 SCC	Fuel	HP	Load Factor
Asphalt Paver	Pavers	2270002003	Diesel	175	0.59
Chain Saw	Concrete/Industrial Saws	2270002039	Diesel	11	0.7
Chipper/Stump Grinder	Off-Highway Tractors	2270002075	Diesel	100	0.43
Concrete Truck	Cement & Mortar Mixers	2270002042	Diesel	600	0.59
Dozer	Crawler Tractor/Dozers	2270002069	Diesel	175	0.59
Dump Truck	Dumpers/Tenders	2270002078	Diesel	600	0.59
Excavator	Excavators	2270002036	Diesel	175	0.59
Flatbed Truck	Bore/Drill Rigs	2270002033	Diesel	600	0.59
Grader	Graders	2270002048	Diesel	300	0.59
Hydroseeder	Other Material Handling Equipment	2270003050	Diesel	600	0.59
Loader	Rubber Tire Loaders	2270002060	Diesel	175	0.59
Off-Road Truck	Off-highway Trucks	2270002051	Diesel	600	0.59
Other General Equipment	Other Construction Equipment	2270002081	Diesel	175	0.43
Pickup Truck	Paving Equipment	2270002021	Diesel	600	0.59
Pumps	Commercial Pumps	2270006010	Diesel	11	0.43
Roller	Rollers	2270002015	Diesel	100	0.59
Scraper	Scrapers	2270002018	Diesel	600	0.59
Skid Steer Loader	Skid Steer Loaders	2270002072	Diesel	75	0.21
Surfacing Equipment (Grooving)	Surfacing Equipment	2270002024	Diesel	25	0.59
Tractors/Loader/Backhoe	Tractors/Loaders/Backhoes	2270002066	Diesel	100	0.21
Water Truck	Other Construction Equipment	2270002081	Diesel	600	0.59

Source: USEPA MOVES4 Emissions Model.

Table 4. 2026 Construction Equipment Emission Factors (g/hp-hr)

Description	CO	NOx	SO2	PM10	PM 2.5	VOC	CO2	CH4
Pavers	0.251484	1.388356	0.002968	0.043037	0.041781	0.048516	1124.788927	0.005137
Tampers/Rammers	0.007991	0.013242	0.000000	0.000799	0.000799	0.002626	1.846689	0.000228
Plate Compactors	0.113242	0.209247	0.000114	0.011872	0.011530	0.034817	30.292922	0.003082
Rollers	1.041667	4.556963	0.007648	0.165753	0.160731	0.192123	2819.234703	0.019064
Scrapers	0.889269	2.011416	0.008333	0.140525	0.136301	0.134361	3065.205023	0.009247
Paving Equipment	0.103425	0.334247	0.000457	0.016210	0.015639	0.021461	172.112785	0.001941
Surfacing Equipment	0.128995	0.422489	0.000342	0.018607	0.018037	0.021689	114.862443	0.001370
Signal Boards/Light Plants	0.607192	1.758904	0.001027	0.071918	0.069749	0.149886	311.553196	0.013470
Trenchers	0.893265	4.162785	0.003653	0.117580	0.114041	0.156849	1336.774658	0.016895
Bore/Drill Rigs	1.482763	5.785845	0.003653	0.266781	0.258790	0.370548	1157.312557	0.020320
Excavators	1.568721	7.729566	0.030365	0.319635	0.310046	0.351941	11417.861187	0.027626
Concrete/Industrial Saws	0.074543	0.323744	0.000228	0.009361	0.009018	0.014384	94.580023	0.001484
Cement & Mortar Mixers	0.111416	0.271804	0.000114	0.016667	0.016210	0.026712	45.006507	0.001598
Cranes	0.594521	2.574886	0.007192	0.114384	0.110959	0.136301	2618.687900	0.009589
Graders	0.347374	1.236073	0.007534	0.077626	0.075228	0.075457	2850.288356	0.005023
Off-highway Trucks	1.330023	25.455137	0.025913	0.353995	0.343379	0.503082	9779.312329	0.041438
Crushing/Proc. Equipment	0.162671	0.881393	0.001256	0.025228	0.024429	0.034703	465.115639	0.003311
Rough Terrain Forklifts	1.893607	6.543607	0.009932	0.315525	0.306050	0.233904	3662.970776	0.021689
Rubber Tire Loaders	4.005936	16.828881	0.033904	0.719863	0.698288	0.721804	12443.221005	0.050000
Tractors/Loaders/Backhoes	14.944292	21.957306	0.021918	2.436073	2.363014	3.081507	7563.060274	0.159817
Crawler Tractor/Dozers	2.786301	12.816096	0.030708	0.511530	0.496119	0.509247	11376.418265	0.037215
Skid Steer Loaders	24.593721	29.156393	0.016324	3.582078	3.474658	4.704680	5184.173516	0.208790
Off-Highway Tractors	0.528767	3.101712	0.003311	0.085959	0.083447	0.100457	1207.738128	0.006849
Dumpers/Tenders	0.071005	0.089840	0.000000	0.010388	0.010046	0.015183	16.090525	0.000799
Other Construction Equipment	0.901142	2.231279	0.003311	0.133219	0.129224	0.126256	1165.409589	0.008105

Source: USEPA MOVES4 Emissions Model.

Table 5. 2027 Construction Equipment Emission Factors (g/hp-hr)

Description	CO	NOx	SO2	PM10	PM 2.5	VOC	CO2	CH4
Pavers	0.220205	1.323858	0.002968	0.037329	0.036301	0.044749	1122.984132	0.004795
Tampers/Rammers	0.007991	0.013128	0.000000	0.000799	0.000799	0.002626	1.843721	0.000228
Plate Compactors	0.111986	0.208447	0.000114	0.011644	0.011301	0.034703	30.244064	0.003082
Rollers	0.862557	4.277854	0.007534	0.133676	0.129680	0.173516	2814.736301	0.017466
Scrapers	0.711187	1.663470	0.008219	0.117922	0.114384	0.115753	3060.310046	0.007648
Paving Equipment	0.091324	0.306735	0.000457	0.014041	0.013584	0.019521	171.840411	0.001826
Surfacing Equipment	0.111301	0.385046	0.000342	0.016096	0.015639	0.019178	114.684361	0.001256
Signal Boards/Light Plants	0.594521	1.738584	0.001027	0.069292	0.067123	0.147489	311.056393	0.013356
Trenchers	0.780479	4.014384	0.003653	0.100114	0.097146	0.141553	1334.660160	0.016096
Bore/Drill Rigs	1.296119	5.134361	0.003539	0.231164	0.224201	0.321918	1155.584932	0.018151
Excavators	1.331735	7.157420	0.030251	0.275799	0.267580	0.322489	11399.512329	0.024543
Concrete/Industrial Saws	0.067808	0.316553	0.000228	0.008333	0.008105	0.013470	94.429909	0.001484
Cement & Mortar Mixers	0.102283	0.251712	0.000114	0.014840	0.014498	0.025000	44.938927	0.001598
Cranes	0.497032	2.237443	0.007078	0.096575	0.093721	0.116096	2614.517123	0.007991
Graders	0.288128	1.084817	0.007534	0.067009	0.064954	0.067808	2845.708904	0.004224
Off-highway Trucks	1.172260	25.178082	0.025799	0.333904	0.323858	0.482078	9763.589041	0.039269
Crushing/Proc. Equipment	0.139498	0.818265	0.001256	0.021575	0.020890	0.030594	464.376598	0.002968
Rough Terrain Forklifts	1.460160	5.953881	0.009817	0.245434	0.238128	0.187900	3657.190183	0.018037
Rubber Tire Loaders	3.358562	15.400571	0.033676	0.609703	0.591438	0.635160	12423.384475	0.043721
Tractors/Loaders/Backhoes	11.892009	19.251598	0.021461	1.969977	1.910959	2.501941	7552.520548	0.126484
Crawler Tractor/Dozers	2.263356	11.754795	0.030479	0.435616	0.422603	0.445890	11358.233790	0.031963
Skid Steer Loaders	22.041895	27.362557	0.016096	3.155594	3.060959	4.172146	5177.350228	0.198174
Off-Highway Tractors	0.462785	2.955251	0.003311	0.077854	0.075457	0.091667	1205.814384	0.006507
Dumpers/Tenders	0.063242	0.084018	0.000000	0.009018	0.008790	0.013584	16.069178	0.000685
Other Construction Equipment	0.723973	1.883790	0.003311	0.106849	0.103653	0.104110	1163.592009	0.006621

Source: USEPA MOVES4 Emissions Model.

Table 6. 2028 Construction Equipment Emission Factors (g/hp-hr)

Description	CO	NOx	SO2	PM10	PM 2.5	VOC	CO2	CH4
Pavers	0.198858	1.276027	0.002968	0.033790	0.032763	0.042237	1120.267237	0.004566
Tampers/Rammers	0.007877	0.013128	0.000000	0.000799	0.000799	0.002626	1.839269	0.000228
Plate Compactors	0.110959	0.207648	0.000114	0.011416	0.011073	0.034589	30.170776	0.003082
Rollers	0.779566	4.118037	0.007534	0.119064	0.115525	0.164384	2807.935845	0.016553
Scrapers	0.553653	1.370205	0.008219	0.097603	0.094635	0.099315	3052.934932	0.006164
Paving Equipment	0.079452	0.286758	0.000457	0.011872	0.011530	0.017922	171.428425	0.001712
Surfacing Equipment	0.096918	0.358676	0.000342	0.013927	0.013584	0.017237	114.411644	0.001256
Signal Boards/Light Plants	0.582763	1.719863	0.001027	0.066781	0.064840	0.145434	310.306621	0.013242
Trenchers	0.673059	3.874201	0.003539	0.084132	0.081507	0.127740	1331.462557	0.015297
Bore/Drill Rigs	1.130594	4.561872	0.003539	0.202055	0.196005	0.280594	1152.900799	0.016096
Excavators	1.168151	6.782877	0.030137	0.244292	0.236986	0.301941	11371.926027	0.022489
Concrete/Industrial Saws	0.061301	0.309361	0.000228	0.007306	0.007078	0.012671	94.203196	0.001370
Cement & Mortar Mixers	0.093607	0.231849	0.000114	0.013242	0.012900	0.023174	44.834932	0.001484
Cranes	0.427283	1.990068	0.007078	0.084132	0.081621	0.102283	2608.215753	0.006849
Graders	0.241553	0.959475	0.007534	0.058447	0.056735	0.061758	2838.823744	0.003539
Off-highway Trucks	1.057420	24.953653	0.025685	0.317466	0.307991	0.466438	9739.950685	0.037900
Crushing/Proc. Equipment	0.121005	0.765411	0.001256	0.018607	0.018037	0.027283	463.259589	0.002740
Rough Terrain Forklifts	1.091667	5.499886	0.009703	0.185959	0.180365	0.152283	3648.422146	0.015068
Rubber Tire Loaders	2.907306	14.321575	0.033447	0.537785	0.521689	0.573858	12393.426484	0.039498
Tractors/Loaders/Backhoes	10.321918	17.752283	0.021233	1.716438	1.664954	2.176598	7535.135616	0.111416
Crawler Tractor/Dozers	1.851598	10.913128	0.030251	0.375342	0.364155	0.396347	11330.825571	0.027854
Skid Steer Loaders	19.396804	25.506849	0.015753	2.711301	2.630023	3.629338	5166.361644	0.186416
Off-Highway Tractors	0.401370	2.820662	0.003311	0.070205	0.068151	0.083447	1202.912443	0.006050
Dumpers/Tenders	0.055936	0.078653	0.000000	0.007877	0.007648	0.012100	16.034475	0.000685
Other Construction Equipment	0.624087	1.665411	0.003196	0.092694	0.089954	0.090982	1160.806849	0.005708

Source: USEPA MOVES4 Emissions Model.

Table 7. 2029 Construction Equipment Emission Factors (g/hp-hr)

Description	CO	NOx	SO2	PM10	PM 2.5	VOC	CO2	CH4
Pavers	0.181050	1.237900	0.002968	0.030822	0.029909	0.040297	1122.088699	0.004338
Tampers/Rammers	0.007763	0.013128	0.000000	0.000799	0.000799	0.002626	1.842237	0.000228
Plate Compactors	0.110274	0.207763	0.000114	0.011187	0.010845	0.034703	30.219749	0.003082
Rollers	0.730822	4.023516	0.007534	0.110388	0.107078	0.159589	2812.501370	0.016096
Scrapers	0.417922	1.126598	0.008105	0.079566	0.077169	0.085388	3057.922831	0.004909
Paving Equipment	0.068721	0.270205	0.000457	0.009817	0.009475	0.016438	171.710502	0.001598
Surfacing Equipment	0.083105	0.334932	0.000342	0.011986	0.011530	0.015411	114.602283	0.001142
Signal Boards/Light Plants	0.577626	1.714498	0.001027	0.065525	0.063470	0.144749	310.812785	0.013128
Trenchers	0.573174	3.775913	0.003539	0.069292	0.067237	0.116553	1333.653425	0.014612
Bore/Drill Rigs	0.967352	4.008790	0.003425	0.173973	0.168721	0.239612	1154.889269	0.013813
Excavators	1.074658	6.608447	0.030137	0.225457	0.218721	0.290525	11390.389954	0.021461
Concrete/Industrial Saws	0.053881	0.303767	0.000228	0.006164	0.006050	0.011872	94.357991	0.001370
Cement & Mortar Mixers	0.085274	0.214041	0.000114	0.011758	0.011416	0.021689	44.912329	0.001484
Cranes	0.376826	1.800913	0.006963	0.075571	0.073402	0.092808	2612.471005	0.006164
Graders	0.202968	0.859132	0.007534	0.051370	0.049772	0.056963	2843.438813	0.003082
Off-highway Trucks	0.992694	24.902854	0.025685	0.307991	0.298744	0.458790	9755.761644	0.037100
Crushing/Proc. Equipment	0.108562	0.727397	0.001256	0.016781	0.016210	0.025114	464.016895	0.002511
Rough Terrain Forklifts	0.885959	5.235959	0.009703	0.153425	0.148744	0.131164	3654.396347	0.013242
Rubber Tire Loaders	2.557991	13.476941	0.033333	0.485731	0.471119	0.527968	12413.645662	0.036530
Tractors/Loaders/Backhoes	9.113927	16.602626	0.021119	1.519064	1.473516	1.921689	7548.103653	0.100342
Crawler Tractor/Dozers	1.467352	10.198744	0.030137	0.317694	0.308219	0.351712	11349.322374	0.023973
Skid Steer Loaders	16.859817	23.851941	0.015525	2.318037	2.248516	3.136644	5176.195434	0.171575
Off-Highway Tractors	0.334475	2.696689	0.003311	0.061872	0.060046	0.075114	1204.887329	0.005594
Dumpers/Tenders	0.049315	0.073858	0.000000	0.006735	0.006621	0.010845	16.064384	0.000571
Other Construction Equipment	0.543379	1.491438	0.003196	0.081164	0.078653	0.080479	1162.719178	0.005137

Source: USEPA MOVES4 Emissions Model.

4 Results

As shown in **Table 8**, the CEI indicates that construction of the Proposed Project would not exceed *de minimis* thresholds for Nitrogen Oxide (NOx) and Volatile Organic Compounds (VOC), which are O_3 precursors, CO, $PM_{2.5}$, or any other criteria pollutants during the construction of the Proposed Project. Therefore, the Proposed Project is presumed to conform to the State Implementation Plan and the Ozone Transport Region.

Table 8. MOVES Results (Tons Per Year or TPY)

								GHGs		
Year	**Emission Source**	**CO**	**VOC**	**NOx**	**PM_{10}**	**$PM_{2.5}$**	**SOx**	**CO_2**	**CH_4**	**N_2O**
2026	**NONROAD**	0.41	0.60	0.00	0.03	0.03	0.29	888.37	--	--
	ONROAD	1.51	0.09	0.00	0.00	0.00	0.10	187.07	0.03	0.00
	FUGITIVE	0.31	0.02	0.00	0.14	--	4.76	--	--	--
	TOTAL (TPY)	2.23	0.72	0.01	0.17	0.03	5.15	1075.44	0.03	0.00
2027	**NONROAD**	0.42	0.60	0.00	0.03	0.03	0.30	924.30	--	--
	ONROAD	1.51	0.09	0.00	0.00	0.00	0.10	188.13	0.03	0.00
	FUGITIVE	0.33	0.02	0.00	0.14	--	5.11	--	--	--
	TOTAL (TPY)	2.27	0.71	0.01	0.17	0.03	5.51	1112.44	0.03	0.00
2028	**NONROAD**	0.21	0.31	0.00	0.01	0.01	0.16	506.87	--	--
	ONROAD	0.88	0.05	0.00	0.00	0.00	0.06	101.14	0.01	0.00
	FUGITIVE	0.15	0.01	0.00	0.07	--	2.32	--	--	--
	TOTAL (TPY)	1.24	0.36	0.01	0.08	0.01	2.54	608.01	0.01	0.00
2029	**NONROAD**	0.39	0.54	0.00	0.03	0.02	0.28	877.83	--	--
	ONROAD	1.51	0.08	0.00	0.00	0.00	0.10	183.42	0.03	0.00
	FUGITIVE	0.30	0.02	0.00	0.13	--	4.65	--	--	--
	TOTAL (TPY)	2.20	0.64	0.01	0.16	0.03	5.03	1061.25	0.03	0.00
TOTAL	**Project**	7.94	2.43	0.04	0.59	0.10	18.23	3857.13	0.09	0.01
	de minimis	100.00	50.00	100.00	100.00	100.00	100.00	N/A	N/A	N/A

Note – N/A = not applicable
Source: MOVES4.1, Airport Design Consultants, Inc. (ADCI) Analysis 2024.

ATTACHMENT 5:

RARE, THREATENED, AND ENDANGERED SPECIES COORDINATION

United States Department of the Interior

FISH AND WILDLIFE SERVICE
West Virginia Ecological Services Field Office
6263 Appalachian Highway
Davis, WV 26260-8061
Phone: (304) 866-3858 Fax: (304) 866-3852

In Reply Refer To: 05/16/2024 14:02:29 UTC
Project Code: 2023-0068677
Project Name: Eastern West Virginia Regional Airport (MRB)- Reconstruct, Widen and Extend Taxiway E (Project)

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

West Virginia Ecological Services Field Office
6263 Appalachian Highway
Davis, WV 26260-8061
(304) 866-3858

PROJECT SUMMARY

Project Code: 2023-0068677

Project Name: Eastern West Virginia Regional Airport (MRB)- Reconstruct, Widen and Extend Taxiway E (Project)

Project Type: Airport - Maintenance/Modification

Project Description: The Federal Aviation Administration (FAA) Eastern West Virginia Region (EWVRAA) proposes an airport maintenance/ modification project at the Martinsburg State Airport (MRB), located at 170 Aviation Way, Martinsburg, WV, 25405, approximately four miles south of the City of Martinsburg in Berkley County, West Virginia. The proposed project would Reconstruct, Widen and Extend Taxiway E. MRB is a general aviation reliever airport.

The EWVRAA owns and operates MRB, and tenants include the West Virginia Air National Guard (ANG) and Shepherd Field Base. Shephard Field Base has been a continued presence at the airport since 1955. The existing runways (Runway 8-26) and its parallel taxiway are designed to accommodate critical aircraft based within the Air National Guard and general aviation activity. General aviation activity is supported on a partial length parallel taxiway E on Runway 8-26. Presently, the only full-length parallel taxiway of Runway 8-26 is Taxiway A, which is located on the Air National Guard (ANG) side of the Airfield. For general aviation aircraft to access either end of Runway 8-26; presently, either a back-taxi down the runway, or a crossing of the runway to utilize Taxiway A are required which in turn creates an unsafe condition. With the extension of Taxiway E to both ends of Runway 8-26, this new full-length Taxiway on the civilian side of the airfield will allow general aviation aircraft to taxi, and queue as needed, without creating unsafe airport operational conditions or inhibiting ANG operations.

This project will involve the following general items of work:

• Installation and removal of required Erosion & Sedimentation Control Features such as filter sock, silt fence, filter bags, diversion dike, sediment traps/basins, outlet control structures and other features as required by the West Virginia Department of Environmental Protection (WV DEP) through their WV/NPDES Construction Stormwater General Permit and in accordance with West Virginia Erosion and Sediment Control Best Management Practice Manual.
• Clearing and Grubbing of proposed areas of work including Safety Areas and Object Free Areas.
• Pavement Demolition (Asphalt Surface Courses, Gravel Base Courses)
• Pavement Marking Removal
• Electrical Demolition (edge lights, signs, junction structures, conduit,

cables, etc.)
• Excavation, including blasting
• Embankment Preparation
• Topsoiling, Sodding, Seeding, and Mulching
• Open and Closed Drainage System Improvements to accommodate runoff from the proposed development to include trenching and installation of new drainage pipes, pipe bedding, geotextiles, drainage swale linings/matting.
• New Overlay/Pavement Construction (Pavement Milling, Crack Preparation/Sealing, Pavement Surface Courses, Aggregate Base/Subbase Courses and Tack/Prime coats, as required)
• New Airfield Pavement Markings
• Installation of new Airfield Edge Lighting including trenching, conduit, concrete encased duct banks, junction structures/handholes, cables, counterpoise and backfill.
• Upgrades to the Existing Airfield Electrical Vault to accommodate the new airfield lighting circuits

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@39.40154975,-77.98259971725496,14z

Counties: Berkeley County, West Virginia

ENDANGERED SPECIES ACT SPECIES

There is a total of 4 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 3 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

---

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Indiana Bat *Myotis sodalis*	Endangered

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
This species only needs to be considered under the following conditions:

- All activities in this location should consider potential effects to this species. This project is not within a known-use area, but potentially occupied habitat may exist. Please contact the WVFO for further coordination.

Species profile: https://ecos.fws.gov/ecp/species/5949

Northern Long-eared Bat *Myotis septentrionalis*	Endangered

No critical habitat has been designated for this species.
This species only needs to be considered under the following conditions:

- This species only needs to be considered if the project includes wind turbine operations.

Species profile: https://ecos.fws.gov/ecp/species/9045

Tricolored Bat *Perimyotis subflavus*	Proposed Endangered

No critical habitat has been designated for this species.
This species only needs to be considered under the following conditions:

- This species only needs to be considered if the project includes wind turbine operations.

Species profile: https://ecos.fws.gov/ecp/species/10515

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus*	Candidate

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/9743

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act[1] and the Migratory Bird Treaty Act[2].

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats[3], should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

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1. The Bald and Golden Eagle Protection Act of 1940.
2. The Migratory Birds Treaty Act of 1918.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are likely bald eagles present in your project area. For additional information on bald eagles, refer to Bald Eagle Nesting and Sensitivity to Human Activity

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

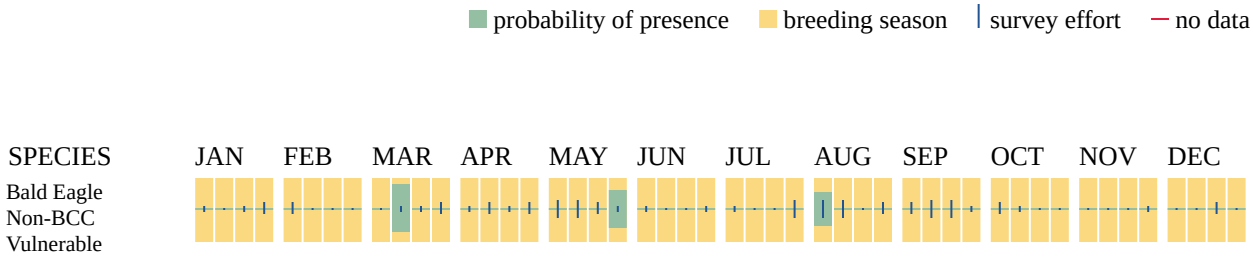
Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

1. The Migratory Birds Treaty Act of 1918.
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For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Aug 31
Black-capped Chickadee *Poecile atricapillus practicus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/10645	Breeds Apr 10 to Jul 31
Canada Warbler *Cardellina canadensis* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9643	Breeds May 20 to Aug 10
Chimney Swift *Chaetura pelagica* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9406	Breeds Mar 15 to Aug 25
Eastern Whip-poor-will *Antrostomus vociferus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10678	Breeds May 1 to Aug 20
Red-headed Woodpecker *Melanerpes erythrocephalus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9398	Breeds May 10 to Sep 10
Rusty Blackbird *Euphagus carolinus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9478	Breeds elsewhere
Wood Thrush *Hylocichla mustelina* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9431	Breeds May 10 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project

activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
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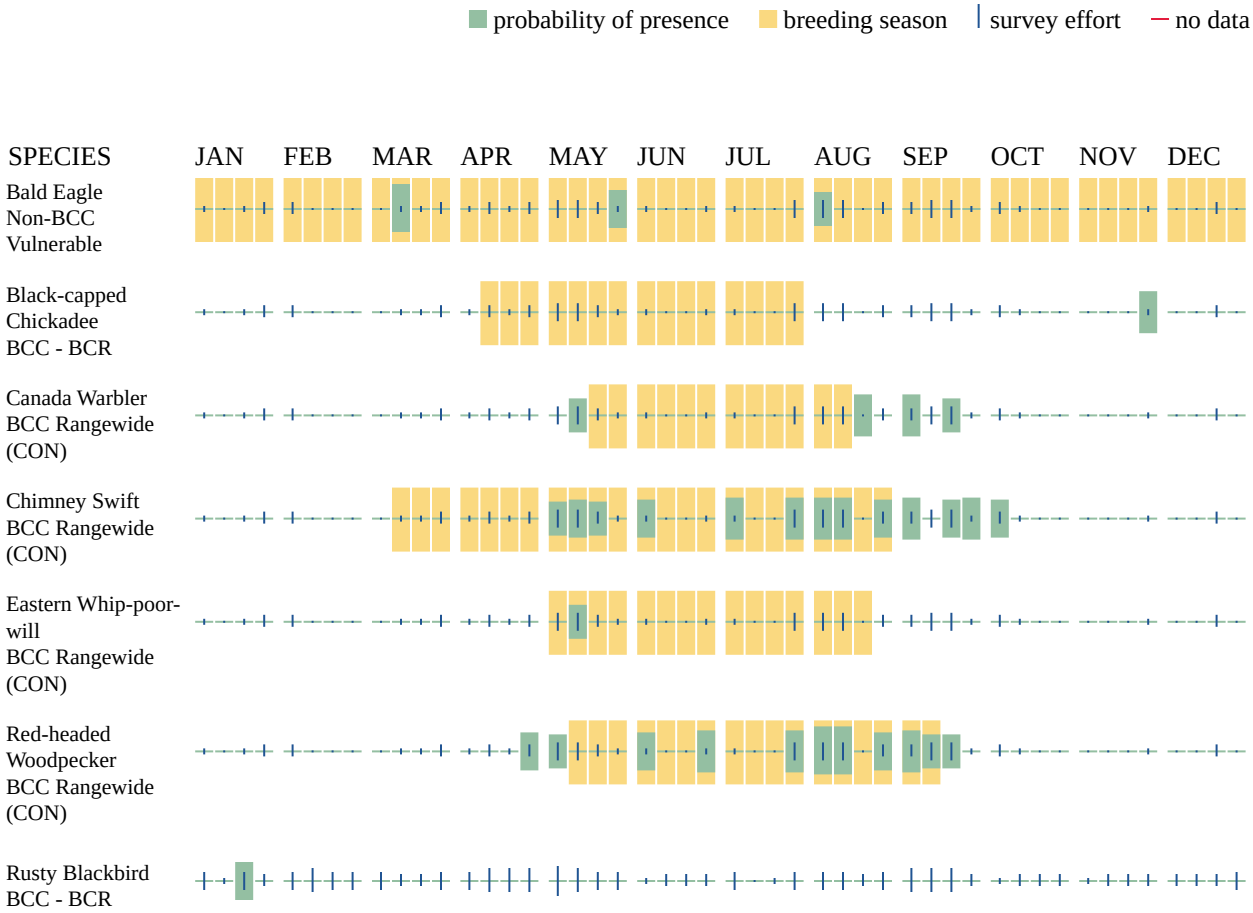
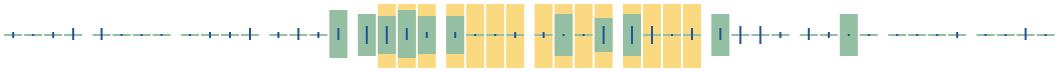


Wood Thrush
BCC Rangewide
(CON)



Additional information can be found using the following links:

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- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

WETLANDS

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

FRESHWATER FORESTED/SHRUB WETLAND

- PFO1/SS1A
- PFO1A
- PSS1/EM1B

FRESHWATER POND

- PUBHh

RIVERINE

- R4SBC

IPAC USER CONTACT INFORMATION

Agency:	Federal Aviation Administration
Name:	Jennifer Martin
Address:	100 International Drive
Address Line 2:	Legg Mason Tower, Floor 23
City:	Baltimore
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United States Department of the Interior

FISH AND WILDLIFE SERVICE
West Virginia Ecological Services Field Office
6263 Appalachian Highway
Davis, WV 26260-8061
Phone: (304) 866-3858 Fax: (304) 866-3852

In Reply Refer To: October 13, 2023
Project Code: 2023-0068677
Project Name: Eastern West Virginia Regional Airport (MRB)- Reconstruct, Widen and Extend Taxiway E (Project)

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

West Virginia Ecological Services Field Office
6263 Appalachian Highway
Davis, WV 26260-8061
(304) 866-3858

PROJECT SUMMARY

Project Code: 2023-0068677

Project Name: Eastern West Virginia Regional Airport (MRB)- Reconstruct, Widen and Extend Taxiway E (Project)

Project Type: Airport - Maintenance/Modification

Project Description: The Federal Aviation Administration (FAA) Eastern West Virginia Region (EWVRAA) proposes an airport maintenance/ modification project at the Martinsburg State Airport (MRB), located at 170 Aviation Way, Martinsburg, WV, 25405, approximately four miles south of the City of Martinsburg in Berkley County, West Virginia. The proposed project would Reconstruct, Widen and Extend Taxiway E. MRB is a general aviation reliever airport.

The EWVRAA owns and operates MRB, and tenants include the West Virginia Air National Guard (ANG) and Shepherd Field Base. Shephard Field Base has been a continued presence at the airport since 1955. The existing runways (Runway 8-26) and its parallel taxiway are designed to accommodate critical aircraft based within the Air National Guard and general aviation activity. General aviation activity is supported on a partial length parallel taxiway E on Runway 8-26. Presently, the only full-length parallel taxiway of Runway 8-26 is Taxiway A, which is located on the Air National Guard (ANG) side of the Airfield. For general aviation aircraft to access either end of Runway 8-26; presently, either a back-taxi down the runway, or a crossing of the runway to utilize Taxiway A are required which in turn creates an unsafe condition. With the extension of Taxiway E to both ends of Runway 8-26, this new full-length Taxiway on the civilian side of the airfield will allow general aviation aircraft to taxi, and queue as needed, without creating unsafe airport operational conditions or inhibiting ANG operations.

This project will involve the following general items of work:

• Installation and removal of required Erosion & Sedimentation Control Features such as filter sock, silt fence, filter bags, diversion dike, sediment traps/basins, outlet control structures and other features as required by the West Virginia Department of Environmental Protection (WV DEP) through their WV/NPDES Construction Stormwater General Permit and in accordance with West Virginia Erosion and Sediment Control Best Management Practice Manual.
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• Upgrades to the Existing Airfield Electrical Vault to accommodate the new airfield lighting circuits

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@39.4024181,-77.97946825744123,14z

Counties: Berkeley County, West Virginia

ENDANGERED SPECIES ACT SPECIES

There is a total of 4 threatened, endangered, or candidate species on this species list.

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IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Indiana Bat *Myotis sodalis* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. This species only needs to be considered under the following conditions: ▪ All activities in this location should consider potential effects to this species. This project is not within a known-use area, but potentially occupied habitat may exist. Please contact the WVFO for additional consultation. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered
Tricolored Bat *Perimyotis subflavus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

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---

1. The Bald and Golden Eagle Protection Act of 1940.
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3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are bald and/or golden eagles in your project area.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

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Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
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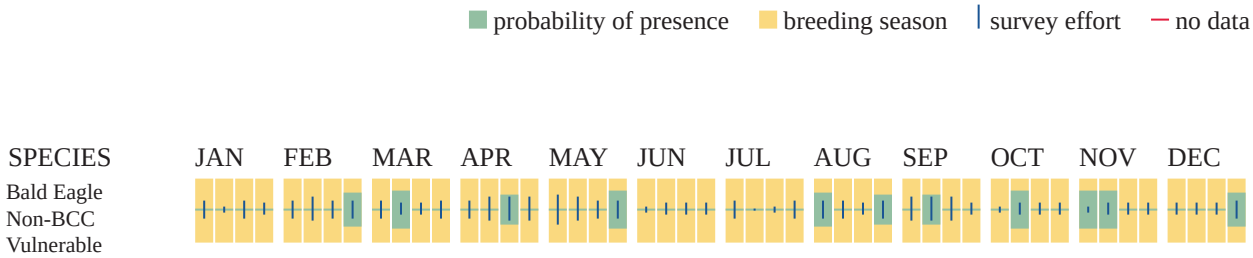

Additional information can be found using the following links:

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2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Aug 31
Black-capped Chickadee *Poecile atricapillus practicus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/10645	Breeds Apr 10 to Jul 31
Canada Warbler *Cardellina canadensis* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9643	Breeds May 20 to Aug 10
Chimney Swift *Chaetura pelagica* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9406	Breeds Mar 15 to Aug 25
Eastern Whip-poor-will *Antrostomus vociferus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10678	Breeds May 1 to Aug 20

NAME	BREEDING SEASON
Red-headed Woodpecker *Melanerpes erythrocephalus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9398	Breeds May 10 to Sep 10
Rusty Blackbird *Euphagus carolinus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9478	Breeds elsewhere
Wood Thrush *Hylocichla mustelina* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9431	Breeds May 10 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read the supplemental information and specifically the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

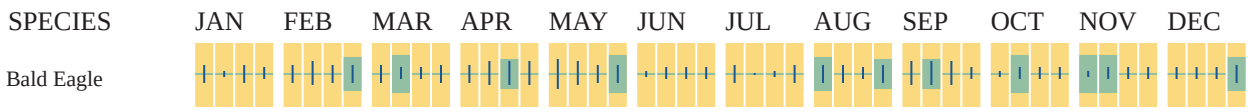
Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

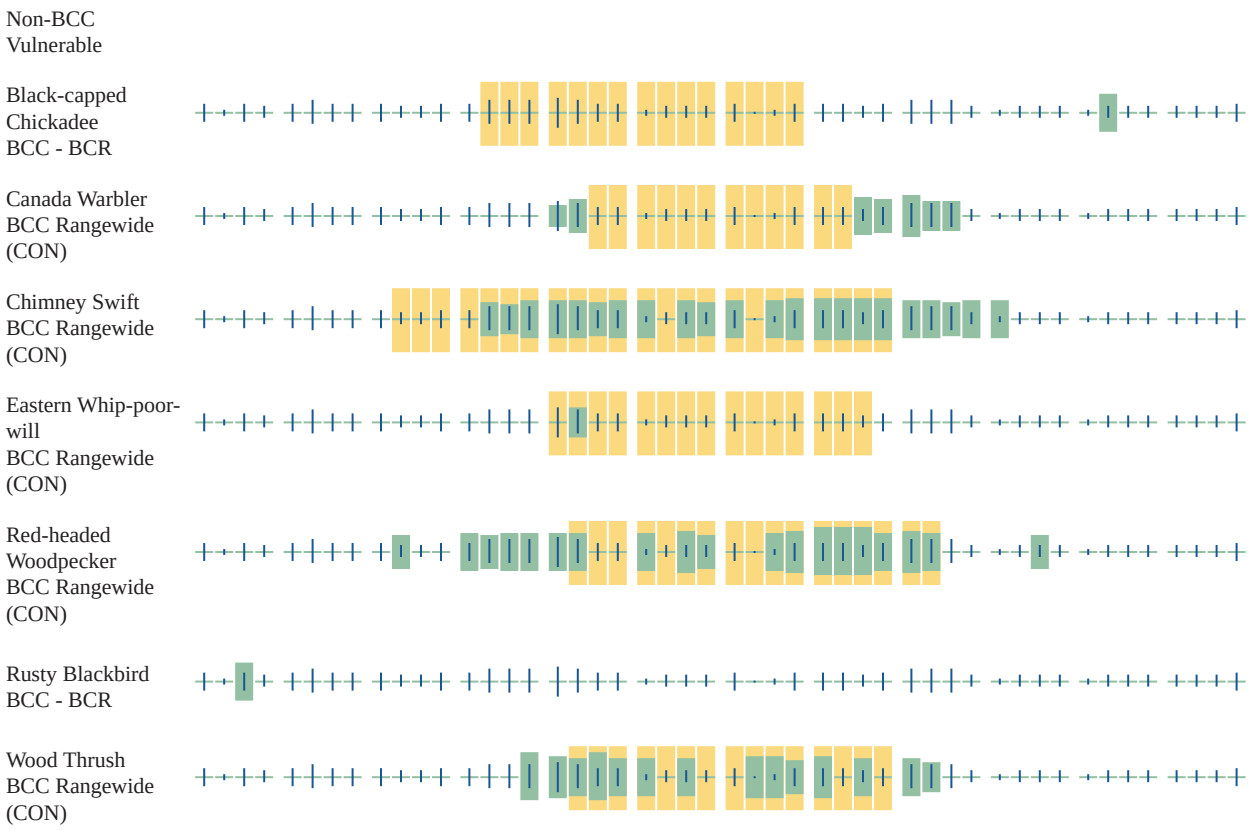
Breeding Season (■)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

■ probability of presence ■ breeding season | survey effort – no data





Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

WETLANDS

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

FRESHWATER POND

- PUBHh

RIVERINE

- R4SBC

FRESHWATER FORESTED/SHRUB WETLAND

- PFO1A
- PSS1/EM1B
- PFO1/SS1A

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Brandi McCoy
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Address Line 2: Legg Mason Tower, Floor 23
City: Baltimore
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Zip: 21202
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Phone: 7578176407

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Aviation Administration

United States Department of the Interior

FISH AND WILDLIFE SERVICE
West Virginia Ecological Services Field Office
6263 Appalachian Highway
Davis, WV 26260-8061
Phone: (304) 866-3858 Fax: (304) 866-3852

In Reply Refer To: October 26, 2023
Project code: 2023-0068677
Project Name: Eastern West Virginia Regional Airport (MRB)- Reconstruct, Widen and Extend Taxiway E (Project)

Federal Nexus: yes
Federal Action Agency (if applicable): Federal Aviation Administration

Subject: Federal agency coordination under the Endangered Species Act, Section 7 for 'Eastern West Virginia Regional Airport (MRB)- Reconstruct, Widen and Extend Taxiway E (Project)'

Dear susan stafford:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on October 26, 2023, for "Eastern West Virginia Regional Airport (MRB)- Reconstruct, Widen and Extend Taxiway E (Project)" (here forward, Project). This project has been assigned Project Code 2023-0068677 and all future correspondence should clearly reference this number.

The Service developed the IPaC system and associated species' determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into the IPaC must accurately represent the full scope and details of the Project. Failure to accurately represent or implement the Project as detailed in IPaC or the Northeast Determination Key (DKey), invalidates this ***Answers to certain questions in the DKey commit the project proponent to implementation of conservation measures that must be followed for the ESA determination to remain valid.***

To make a no effect determination, the full scope of the proposed project implementation (action) should not have any effects (either positive or negative effect(s)), to a federally listed species or designated critical habitat. Effects of the action are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area

involved in the action. (See § 402.17). Under Section 7 of the ESA, if a federal action agency makes a no effect determination, no further consultation with, or concurrence from, the Service is required (ESA §7). If a proposed Federal action may affect a listed species or designated critical habitat, formal consultation is required (except when the Service concurs, in writing, that a proposed action "is not likely to adversely affect (NLAA)" listed species or designated critical habitat [50 CFR §402.02, 50 CFR§402.13]).

The IPaC results indicated the following species is (are) potentially present in your project area and, based on your responses to the Service's Northeast DKey, you determined the proposed Project will have the following effect determinations:

Species	**Listing Status**	**Determination**
Indiana Bat (*Myotis sodalis*)	Endangered	NLAA

Conclusion
The Service concurs to the above-mentioned determination(s) of may affect, not likely to adversely affect. This concurrence confirms receipt of your agencies coordination required under Section 7(a)(2) of the ESA.

In addition to the species listed above, the following species and/or critical habitats may also occur in your project area and are not covered by this conclusion:

- Monarch Butterfly *Danaus plexippus* Candidate
- Northern Long-eared Bat *Myotis septentrionalis* Endangered
- Tricolored Bat *Perimyotis subflavus* Proposed Endangered

If no changes occur with the Project or there are no updates on listed species, no further consultation/coordination for this project is required for the species identified above. However, the Service recommends that project proponents re-evaluate the Project in IPaC if: 1) the scope, timing, duration, or location of the Project changes (includes any project changes or amendments); 2) new information reveals the Project may impact (positively or negatively) federally listed species or designated critical habitat; or 3) a new species is listed, or critical habitat designated. If any of the above conditions occurs, additional consultation with the Service should take place before project implements any changes which are final or commits additional resources.

Please Note: If the Action may impact bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act (BGEPA) (54 Stat. 250, as amended, 16 U.S.C. 668a-d) by the prospective permittee may be required. Please contact the Migratory Birds Permit Office, (413) 253-8643, or PermitsR5MB@fws.gov, with any questions regarding potential impacts to Eagles.

If you have any questions regarding this letter or need further assistance, please contact the West Virginia Ecological Services Field Office and reference the Project Code associated with this Project.

Action Description
You provided to IPaC the following name and description for the subject Action.

1. Name

Eastern West Virginia Regional Airport (MRB)- Reconstruct, Widen and Extend Taxiway E (Project)

2. Description

The following description was provided for the project 'Eastern West Virginia Regional Airport (MRB)- Reconstruct, Widen and Extend Taxiway E (Project)':

> The Federal Aviation Administration (FAA) Eastern West Virginia Region (EWVRAA) proposes an airport maintenance/ modification project at the Martinsburg State Airport (MRB), located at 170 Aviation Way, Martinsburg, WV, 25405, approximately four miles south of the City of Martinsburg in Berkley County, West Virginia. The proposed project would Reconstruct, Widen and Extend Taxiway E. MRB is a general aviation reliever airport.
>
> The EWVRAA owns and operates MRB, and tenants include the West Virginia Air National Guard (ANG) and Shepherd Field Base. Shephard Field Base has been a continued presence at the airport since 1955. The existing runways (Runway 8-26) and its parallel taxiway are designed to accommodate critical aircraft based within the Air National Guard and general aviation activity. General aviation activity is supported on a partial length parallel taxiway E on Runway 8-26. Presently, the only full-length parallel taxiway of Runway 8-26 is Taxiway A, which is located on the Air National Guard (ANG) side of the Airfield. For general aviation aircraft to access either end of Runway 8-26; presently, either a back-taxi down the runway, or a crossing of the runway to utilize Taxiway A are required which in turn creates an unsafe condition. With the extension of Taxiway E to both ends of Runway 8-26, this new full-length Taxiway on the civilian side of the airfield will allow general aviation aircraft to taxi, and queue as needed, without creating unsafe airport operational conditions or inhibiting ANG operations.
>
> This project will involve the following general items of work:
>
> • Installation and removal of required Erosion & Sedimentation Control Features such as filter sock, silt fence, filter bags, diversion dike, sediment traps/basins, outlet control structures and other features as required by the West Virginia Department of Environmental Protection (WV DEP) through their WV/NPDES Construction Stormwater General Permit and in accordance with West Virginia Erosion and Sediment Control Best Management Practice Manual.
> • Clearing and Grubbing of proposed areas of work including Safety Areas and Object Free Areas.
> • Pavement Demolition (Asphalt Surface Courses, Gravel Base Courses)

• Pavement Marking Removal
• Electrical Demolition (edge lights, signs, junction structures, conduit, cables, etc.)
• Excavation, including blasting
• Embankment Preparation
• Topsoiling, Sodding, Seeding, and Mulching
• Open and Closed Drainage System Improvements to accommodate runoff from the proposed development to include trenching and installation of new drainage pipes, pipe bedding, geotextiles, drainage swale linings/matting.
• New Overlay/Pavement Construction (Pavement Milling, Crack Preparation/ Sealing, Pavement Surface Courses, Aggregate Base/Subbase Courses and Tack/ Prime coats, as required)
• New Airfield Pavement Markings
• Installation of new Airfield Edge Lighting including trenching, conduit, concrete encased duct banks, junction structures/handholes, cables, counterpoise and backfill.
• Upgrades to the Existing Airfield Electrical Vault to accommodate the new airfield lighting circuits

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@39.4024181,-77.97946825744123,14z

QUALIFICATION INTERVIEW

1. As a representative of this project, do you agree that all items submitted represent the complete scope of the project details and you will answer questions truthfully?

   Yes

2. Does the proposed project include, or is it reasonably certain to cause, intentional take of listed species?

   Note: This question could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered, or proposed species.

   No

3. Is the action authorized, permitted, licensed, funded, or being carried out by a Federal agency in whole or in part?

   Yes

4. Is the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), or Federal Transit Administration (FTA) the lead agency for this project?

   No

5. Are you including in this analysis all impacts to federally listed species that may result from the entirety of the project (not just the activities under federal jurisdiction)?

   Note: If there are project activities that will impact listed species that are considered to be outside of the jurisdiction of the federal action agency submitting this key, contact your local Ecological Services Field Office to determine whether it is appropriate to use this key. If your Ecological Services Field Office agrees that impacts to listed species that are outside the federal action agency's jurisdiction will be addressed through a separate process, you can answer yes to this question and continue through the key.

   Yes

6. Are you the lead federal action agency or designated non-federal representative requesting concurrence on behalf of the lead Federal Action Agency?

   No

7. Is the lead federal action agency the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC)?

   No

8. Is the lead federal action agency the Federal Energy Regulatory Commission (FERC)?

   No

9. Will the proposed project involve the use of herbicide where listed species are present?

   No

10. Are there any caves or anthropogenic features suitable for hibernating or roosting bats within the area expected to be impacted by the project?

    No

11. Does any component of the project associated with this action include structures that may pose a collision risk to **birds** (e.g., land-based or offshore wind turbines, communication towers, high voltage transmission lines, any type of towers with or without guy wires)?

    Note: For federal actions, answer ‘yes’ if the construction or operation of wind power facilities is either (1) part of the federal action or (2) would not occur but for a federal agency action (federal permit, funding, etc.).

    No

12. Does any component of the project associated with this action include structures that may pose a collision risk to **bats** (e.g., land-based wind turbines)?

    Note: For federal actions, answer ‘yes’ if the construction or operation of wind power facilities is either (1) part of the federal action or (2) would not occur but for a federal agency action (federal permit, funding, etc.).

    No

13. Will the proposed project result in permanent changes to water quantity in a stream or temporary changes that would be sufficient to result in impacts to listed species?

    For example, will the proposed project include any activities that would alter stream flow, such as water withdrawal, hydropower energy production, impoundments, intake structures, diversion structures, and/or turbines? Projects that include temporary and limited water reductions that will not displace listed species or appreciably change water availability for listed species (e.g. listed species will experience no changes to feeding, breeding or sheltering) can answer "No". Note: This question refers only to the amount of water present in a stream, other water quality factors, including sedimentation and turbidity, will be addressed in following questions.

    No

14. Will the proposed project affect wetlands where listed species are present?

    This includes, for example, project activities within wetlands, project activities within 300 feet of wetlands that may have impacts on wetlands, water withdrawals and/or discharge of contaminants (even with a NPDES).

    Yes

15. Will the proposed project directly affect a streambed (below ordinary high water mark (OHWM)) of the stream or tributary where listed species may be present?

    No

16. Will the proposed project bore underneath (directional bore or horizontal directional drill) a stream where listed species may be present?

    No

17. Will the proposed project involve a new point source discharge into a stream or change an existing point source discharge (e.g., outfalls; leachate ponds) where listed species may be present?

    No

18. Will the proposed project involve the removal of excess sediment or debris, dredging or in-stream gravel mining where listed species may be present?

    No

19. Will the proposed project involve the creation of a new water-borne contaminant source where listed species may be present?

    Note New water-borne contaminant sources occur through improper storage, usage, or creation of chemicals. For example: leachate ponds and pits containing chemicals that are not NSF/ANSI 60 compliant have contaminated waterways. Sedimentation will be addressed in a separate question.

    No

20. Will the proposed project involve perennial stream loss, in a stream of tributary of a stream where listed species may be present, that would require an individual permit under 404 of the Clean Water Act?

    No

21. Will the proposed project involve blasting where listed species may be present?

    Yes

22. Will the proposed project include activities that could negatively affect fish movement temporarily or permanently (including fish stocking, harvesting, or creation of barriers to fish passage).

    No

23. Will the proposed project involve earth moving that could cause erosion and sedimentation, and/or contamination along a stream or tributary of a stream where listed species may be present?

    Note: Answer "Yes" to this question if erosion and sediment control measures will be used to protect the stream.

    Yes

24. Will earth moving activities result in sediment being introduced to streams or tributaries of streams where listed species may be present through activities such as, but not limited to, valley fills, large-scale vegetation removal, and/or change in site topography?

    No

25. Will the proposed project involve vegetation removal within 200 feet of a perennial stream bank where aquatic listed species may be present?

    Yes

26. Will erosion and sedimentation control Best Management Practices (BMPs) associated with applicable state and/or Federal permits, be applied to the project? If BMPs have been provided by and/or coordinated with and approved by the appropriate Ecological Services Field Office, answer "Yes" to this question.

    Yes

27. Is the project being funded, lead, or managed in whole or in part by U.S Fish and Wildlife Restoration and Recovery Program (e.g., Partners, Coastal, Fisheries, Wildlife and Sport Fish Restoration, Refuges)?

    No

28. [Semantic] Is the project located on a Group 4 stream: the Ohio River downstream of Hannibal Locks and Dam, Little Kanawha River (slack-water section adjoining the Ohio River), and/or the Kanawha River downstream of Kanawha Falls?

    Automatically answered
    No

29. Have you received a technical assistance communication (email or letter) from the West Virginia Field office?

    No

30. [Semantic] Does the project intersect the Virginia big-eared bat critical habitat?

    Automatically answered
    No

31. [Semantic] Does the project intersect the Indiana bat AOI?

    Automatically answered
    Yes

32. Are trees present within the action area?

    Note: If there are trees within the action area that are of a sufficient size to be potential roosts for bats (i.e., live trees and/or snags ≥5 inches dbh (12.7 centimeter), answer "Yes". If you are unsure, answer “Yes.” Or refer to Appendix A of the Range-wide Indiana Bat and Northern Long-Eared Bat Survey Guidelines for definitions and an assessment form that will assist you in determining if suitable habitat is present within your project's action area. Suitable summer habitat for Indiana bat consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags ≥5 inches dbh (12.7 centimeter) that have exfoliating bark, cracks, crevices, and/or hollows), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet (305 meters) of other forested/wooded habitat

    Yes

33. Has a presence/probable absence bat survey following the Service’s Range-wide Indiana Bat and Northern long-eared Bat Survey Guidelines been conducted within the action area?

    No

34. Does the project involve removal or modification of a human-made structure (barn, house, or other building) known or suspected to contain roosting bats?

    Note: Most maintenance and general human disturbance in and around structures will not affect Indiana bats as bats roosting in human structures are adjusted to a certain level of routine noise and are generally expected to roost away from areas with excessive disturbance. Answer ‘no’ if the proposed action will not include disturbance to human structures known or suspected to contain roosting bats or if the structure does not offer suitable roosting habitat for northern long-eared bats. If unsure, answer ‘yes.’

    No

35. Does the project include removal/modification of an existing bridge or culvert?

    No

36. Will the project include tree cutting, other means of knocking down or bringing down trees, or tree trimming?

    Yes

37. [Semantic] Does the project intersect the Indiana bat critical habitat?

    Automatically answered
    No

38. [Semantic] Does the project intersect the candy darter critical habitat?

    Automatically answered
    No

39. [Semantic] Does the project intersect the diamond darter critical habitat?

    Automatically answered
    No

40. [Semantic] Does the project intersect the Big Sandy crayfish critical habitat?

    Automatically answered
    No

41. [Hidden Semantic] Does the project intersect the Guyandotte River crayfish critical habitat?

    Automatically answered
    No

42. Do you have any other documents that you want to include with this submission?

    No

PROJECT QUESTIONNAIRE

1. Approximately how many acres of trees would the proposed project remove?

   10

2. Approximately how many total acres of disturbance are within the disturbance/ construction limits of the proposed project?

   10

3. Briefly describe the habitat within the construction/disturbance limits of the project site.

   The habitat within the LOD for the proposed action contains vegetation such as field grass, shrubs, trees, and woody vegetation. An existing stormwater pond drains into wetlands, and tributaries of a Sulpher Spring. The habitat within the LOD of the proposed action has been previously disturbed and reestablished due to prior construction/ maintenance activities.

IPAC USER CONTACT INFORMATION

Agency: Federal Aviation Administration
Name: susan stafford
Address: 176 Airport Circle
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State: WV
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Email susan.stafford@faa.gov
Phone: 3042526216

January 4, 2024

Jennifer Martin, CEP
Vice President
KLT Group
Legg Mason Tower
100 International Drive
23rd Floor
Baltimore, MD 21202
jmartin@kltgroup.com

Dear Ms. Martin,

We have reviewed Natural Heritage Program files for information on rare, threatened, and endangered (RTE) species and sensitive habitats for the area of the proposed taxiway extension for the Eastern West Virginia Regional Airport in Martinsburg, Berkeley County.

According to our database, the project is located within the buffer of one bat species and one sensitive habitat as listed on the table below.

Species (Latin Name) or Habitat Feature	Common Name	Location/Description	Status
Perimyotis subflavus	tricolored bat	(1) cave/mine portal 5 mile buffer	Federal: proposed to be listed
PSS/PFO wetland complex	Palustrine Scrub Shrub / Palustrine Forested Wetland complex	abuts the project	NWI wetland

There are no other bats, RTE species, or other sensitive habitats within the project buffer.

The information provided above is the product of a database search and retrieval. This information does not satisfy other consultation or permitting requirements for disturbances to the natural resources of the state, and further consultation may be required.

Additionally, any concurrence requirements for federally listed species must come from the US Fish and Wildlife Service. The Wildlife Resources Section knows of no other surveys

that have been conducted in the area for rare species or rare species habitat. Consequently, this response is based on information currently available and should not be considered a comprehensive survey of the area under review. This response is valid for two years.

The information provided searched the following RTE bat buffers: Indiana bat (roost buffers - 2.5 miles, capture buffers - 5 miles, cave buffers - 5 miles), Northern Long-eared bat (roost buffers - 0.25 miles, capture buffers - 3 miles, cave buffers - 0.5 and 5 miles), tricolored bat (capture buffers - 3 miles, cave buffers - 5 miles) and the Virginia Big-Eared bat (cave buffers - 6 miles). The information provided above is the product of a database search and retrieval. This information does not satisfy other consultation or permitting requirements for disturbances to the natural resources of the state, and further consultation may be required. Additionally, any concurrence requirements for federally listed species must come from the US Fish and Wildlife Service.

Thank you for your inquiry, and should you have any questions please feel free to contact me at the number below, or Anne.M.Wakeford@wv.gov. Enclosed please find an invoice.

Sincerely,

Anne M. Wakeford

Anne M. Wakeford
Wildlife Biologist
Environmental Coordination
Operations Unit

Enclosure

Drive\Invoices\KLT Group 1

United States Department of the Interior

FISH AND WILDLIFE SERVICE
West Virginia Ecological Services Field Office
6263 Appalachian Highway
Davis, WV 26260-8061
Phone: (304) 866-3858 Fax: (304) 866-3852

In Reply Refer To: October 19, 2023
Project code: 2023-0068677
Project Name: Eastern West Virginia Regional Airport (MRB)- Reconstruct, Widen and Extend Taxiway E (Project)

Federal Nexus: yes
Federal Action Agency (if applicable): Federal Aviation Administration

Subject: Federal agency coordination under the Endangered Species Act, Section 7 for 'Eastern West Virginia Regional Airport (MRB)- Reconstruct, Widen and Extend Taxiway E (Project)'

Dear Brandi McCoy:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on October 19, 2023, for 'Eastern West Virginia Regional Airport (MRB)- Reconstruct, Widen and Extend Taxiway E (Project)' (here forward, Project). This project has been assigned Project Code 2023-0068677 and all future correspondence should clearly reference this number. **Please carefully review this letter. Your Endangered Species Act (Act) requirements may not be complete.**

Ensuring Accurate Determinations When Using IPaC

The Service developed the IPaC system and associated species' determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into IPaC must accurately represent the full scope and details of the Project.

Failure to accurately represent or implement the Project as detailed in IPaC or the Northern Long-eared Bat Rangewide Determination Key (DKey), invalidates this letter. ***Answers to certain questions in the DKey commit the project proponent to implementation of conservation measures that must be followed for the ESA determination to remain valid.***

Determination for the Northern Long-Eared Bat

Based upon your IPaC submission and a standing analysis completed by the Service, your project has reached the determination of "May Affect, Not Likely to Adversely Affect" the northern

long-eared bat. Unless the Service advises you within 15 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that consultation on the Action is complete and no further action is necessary unless either of the following occurs:

- new information reveals effects of the action that may affect the northern long-eared bat in a manner or to an extent not previously considered; or,
- the identified action is subsequently modified in a manner that causes an effect to the northern long-eared bat that was not considered when completing the determination key.

15-Day Review Period

As indicated above, the Service will notify you within 15 calendar days if we determine that this proposed Action does not meet the criteria for a “may affect, not likely to adversely affect” (NLAA) determination for the northern long-eared bat. If we do not notify you within that timeframe, you may proceed with the Action under the terms of the NLAA concurrence provided here. This verification period allows the identified Ecological Services Field Office to apply local knowledge to evaluation of the Action, as we may identify a small subset of actions having impacts that we did not anticipate when developing the key. In such cases, the identified Ecological Services Field Office may request additional information to verify the effects determination reached through the Northern Long-eared Bat DKey.

Other Species and Critical Habitat that May be Present in the Action Area

The IPaC-assisted determination for the northern long-eared bat does not apply to the following ESA-protected species and/or critical habitat that also may occur in your Action area:

- Indiana Bat *Myotis sodalis* Endangered
- Monarch Butterfly *Danaus plexippus* Candidate
- Tricolored Bat *Perimyotis subflavus* Proposed Endangered

You may coordinate with our Office to determine whether the Action may affect the species and/or critical habitat listed above. Note that reinitiation of consultation would be necessary if a new species is listed or critical habitat designated that may be affected by the identified action before it is complete.

If you have any questions regarding this letter or need further assistance, please contact the West Virginia Ecological Services Field Office and reference Project Code 2023-0068677 associated with this Project.

Action Description
You provided to IPaC the following name and description for the subject Action.

1. Name

Eastern West Virginia Regional Airport (MRB)- Reconstruct, Widen and Extend Taxiway E (Project)

2. Description

The following description was provided for the project 'Eastern West Virginia Regional Airport (MRB)- Reconstruct, Widen and Extend Taxiway E (Project)':

> The Federal Aviation Administration (FAA) Eastern West Virginia Region (EWVRAA) proposes an airport maintenance/ modification project at the Martinsburg State Airport (MRB), located at 170 Aviation Way, Martinsburg, WV, 25405, approximately four miles south of the City of Martinsburg in Berkley County, West Virginia. The proposed project would Reconstruct, Widen and Extend Taxiway E. MRB is a general aviation reliever airport.
>
> The EWVRAA owns and operates MRB, and tenants include the West Virginia Air National Guard (ANG) and Shepherd Field Base. Shephard Field Base has been a continued presence at the airport since 1955. The existing runways (Runway 8-26) and its parallel taxiway are designed to accommodate critical aircraft based within the Air National Guard and general aviation activity. General aviation activity is supported on a partial length parallel taxiway E on Runway 8-26. Presently, the only full-length parallel taxiway of Runway 8-26 is Taxiway A, which is located on the Air National Guard (ANG) side of the Airfield. For general aviation aircraft to access either end of Runway 8-26; presently, either a back-taxi down the runway, or a crossing of the runway to utilize Taxiway A are required which in turn creates an unsafe condition. With the extension of Taxiway E to both ends of Runway 8-26, this new full-length Taxiway on the civilian side of the airfield will allow general aviation aircraft to taxi, and queue as needed, without creating unsafe airport operational conditions or inhibiting ANG operations.
>
> This project will involve the following general items of work:
>
> • Installation and removal of required Erosion & Sedimentation Control Features such as filter sock, silt fence, filter bags, diversion dike, sediment traps/basins, outlet control structures and other features as required by the West Virginia Department of Environmental Protection (WV DEP) through their WV/NPDES Construction Stormwater General Permit and in accordance with West Virginia Erosion and Sediment Control Best Management Practice Manual.
> • Clearing and Grubbing of proposed areas of work including Safety Areas and Object Free Areas.
> • Pavement Demolition (Asphalt Surface Courses, Gravel Base Courses)

• Pavement Marking Removal
• Electrical Demolition (edge lights, signs, junction structures, conduit, cables, etc.)
• Excavation, including blasting
• Embankment Preparation
• Topsoiling, Sodding, Seeding, and Mulching
• Open and Closed Drainage System Improvements to accommodate runoff from the proposed development to include trenching and installation of new drainage pipes, pipe bedding, geotextiles, drainage swale linings/matting.
• New Overlay/Pavement Construction (Pavement Milling, Crack Preparation/ Sealing, Pavement Surface Courses, Aggregate Base/Subbase Courses and Tack/ Prime coats, as required)
• New Airfield Pavement Markings
• Installation of new Airfield Edge Lighting including trenching, conduit, concrete encased duct banks, junction structures/handholes, cables, counterpoise and backfill.
• Upgrades to the Existing Airfield Electrical Vault to accommodate the new airfield lighting circuits

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@39.4024181,-77.97946825744123,14z

DETERMINATION KEY RESULT

Based on the answers provided, the proposed Action is consistent with a determination of “may affect, but not likely to adversely affect” for the Endangered northern long-eared bat (*Myotis septentrionalis*).

QUALIFICATION INTERVIEW

1. Does the proposed project include, or is it reasonably certain to cause, intentional take of the northern long-eared bat or any other listed species?

   Note: Intentional take is defined as take that is the intended result of a project. Intentional take could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered or proposed species?

   No

2. The action area does not overlap with an area for which U.S. Fish and Wildlife Service currently has data to support the presumption that the northern long-eared bat is present. Are you aware of other data that indicates that northern long-eared bats (NLEB) are likely to be present in the action area?

   Bat occurrence data may include identification of NLEBs in hibernacula, capture of NLEBs, tracking of NLEBs to roost trees, or confirmed NLEB acoustic detections. Data on captures, roost tree use, and acoustic detections should post-date the year when white-nose syndrome was detected in the relevant state. With this question, we are looking for data that, for some reason, may have not yet been made available to U.S. Fish and Wildlife Service.

   No

3. Does any component of the action involve construction or operation of wind turbines?

   Note: For federal actions, answer ‘yes’ if the construction or operation of wind power facilities is either (1) part of the federal action or (2) would not occur but for a federal agency action (federal permit, funding, etc.).

   No

4. Is the proposed action authorized, permitted, licensed, funded, or being carried out by a Federal agency in whole or in part?

   Yes

5. Is the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), or Federal Transit Administration (FTA) funding or authorizing the proposed action, in whole or in part?

   No

6. Are you an employee of the federal action agency or have you been officially designated in writing by the agency as its designated non-federal representative for the purposes of Endangered Species Act Section 7 informal consultation per 50 CFR § 402.08?

   Note: This key may be used for federal actions and for non-federal actions to facilitate section 7 consultation and to help determine whether an incidental take permit may be needed, respectively. This question is for information purposes only.

   Yes

7. Is the lead federal action agency the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC)? Is the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC) funding or authorizing the proposed action, in whole or in part?

   No

8. Is the lead federal action agency the Federal Energy Regulatory Commission (FERC)?

   No

9. Have you contacted the appropriate agency to determine if your action is near any known northern long-eared bat hibernacula?

   Note: A document with links to Natural Heritage Inventory databases and other state-specific sources of information on the locations of northern long-eared bat hibernacula is available here. Location information for northern long-eared bat hibernacula is generally kept in state natural heritage inventory databases – the availability of this data varies by state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited.

   No

10. Will the proposed action result in the cutting or other means of knocking down, bringing down, or trimming of any trees suitable for northern long-eared bat roosting?

    Note: Suitable northern long-eared bat roost trees are live trees and/or snags ≥3 inches dbh that have exfoliating bark, cracks, crevices, and/or cavities.

    Yes

PROJECT QUESTIONNAIRE

Enter the extent of the action area (in acres) from which trees will be removed - round up to the nearest tenth of an acre. For this question, include the entire area where tree removal will take place, even if some live or dead trees will be left standing.

8

In what extent of the area (in acres) will trees be cut, knocked down, or trimmed during the inactive (hibernation) season for northern long-eared bat? **Note:** Inactive Season dates for spring staging/fall swarming areas can be found here: https://www.fws.gov/media/inactive-season-dates-swarming-and-staging-areas

8

In what extent of the area (in acres) will trees be cut, knocked down, or trimmed during the active (non-hibernation) season for northern long-eared bat? **Note:** Inactive Season dates for spring staging/fall swarming areas can be found here: https://www.fws.gov/media/inactive-season-dates-swarming-and-staging-areas

0

Will all potential northern long-eared bat (NLEB) roost trees (trees ≥3 inches diameter at breast height, dbh) be cut, knocked, or brought down from any portion of the action area greater than or equal to 0.1 acre? If all NLEB roost trees will be removed from multiple areas, select 'Yes' if the cumulative extent of those areas meets or exceeds 0.1 acre.

Yes

Enter the extent of the action area (in acres) from which all potential NLEB roost trees will be removed. If all NLEB roost trees will be removed from multiple areas, entire the total extent of those areas. Round up to the nearest tenth of an acre.

8

For the area from which all potential northern long-eared bat (NLEB) roost trees will be removed, on how many acres (round to the nearest tenth of an acre) will trees be allowed to regrow? Enter '0' if the entire area from which all potential NLEB roost trees are removed will be developed or otherwise converted to non-forest for the foreseeable future.

0

Will any snags (standing dead trees) ≥3 inches dbh be left standing in the area(s) in which all northern long-eared bat roost trees will be cut, knocked down, or otherwise brought down?

No

Will all project activities by completed by April 1, 2024?

No

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Brandi McCoy
Address: 100 Interational Drive
Address Line 2: Legg Mason Tower, Floor 23
City: Baltimore
State: MD
Zip: 21202
Email bmccoy@kltgroup.com
Phone: 7578176407

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Aviation Administration
Name: Susan Stafford
Email: Susan.Stafford@faa.gov
Phone: 3042526216

ATTACHMENT 6:

SECTION 106/CULTURAL RESOURCES

U.S. Department of Transportation
Federal Aviation Administration

Beckley Airports Field Office
176 Airport Circle, Room 101
Beaver, West Virginia 25813
Telephone: (304) 252-6216
FAX: (304) 253-8028

October 19, 2023

Ms. Susan Pierce
Director, Deputy State Historic Preservation Officer
WV Division of Culture and History
1900 Kanawha Boulevard East
Charleston, WV 25305

Re: Request for Review and Concurrence Regarding the Area of Potential Effect and Section 106 Determination for the Proposed Runway Taxiway E Extension at Eastern West Virginia Regional Airport (MRB)

Dear Ms. Pierce,

The Federal Aviation Administration (FAA) is funding a development project at Eastern West Virginia Regional Airport (MRB or Airport) which is an 'undertaking' subject to the National Historic Preservation Act (NHPA). In accordance with Section 106 of the NHPA, and its implementing regulations 36 CFR part 800 (as amended), this letter requests your review and concurrence of the FAA's Area of Potential Effect (APE) and finding of no historic properties affected for properties listed in, or eligible for listing in, the National Register of Historic Places (NRHP). In addition, this letter is intended to address Section 4(f) of the United States Department of Transportation Act of 1966 (23 U.S.C. 138).

The Proposed Undertaking

The Eastern West Virginia Regional Airport Authority (EWVRAA) owns and operates MRB. Airport tenants include the West Virginia Air National Guard (ANG) and Shepherd Field Base. The existing runway (Runway 8-26) and its parallel taxiway are designed to accommodate critical aircraft based within the Air National Guard and general aviation activity. General aviation activity is supported on a partial length parallel Taxiway E on the south side of Runway 8-26. Presently, the only full-length parallel taxiway of Runway 8-26 is Taxiway A, which is located on the ANG (north) side of the airfield. For general aviation aircraft to either end of Runway 8-26, aircraft a currently required to either back-taxi down the runway, or cross the runway to utilize Taxiway A, which in turn creates an unsafe condition. With the extension of Taxiway E to both ends of Runway 8-26, this new full-length Taxiway on the civilian side of the airfield will allow general aviation aircraft to taxi, and queue as needed, without creating unsafe airport operational conditions or inhibiting ANG operations.

The proposed undertaking will involve the following work activities, completed in four phases, within previously disturbed areas on existing airport property:

- New Overlay/Pavement Construction (Pavement Milling, Crack Preparation/Sealing, Pavement Surface Courses, Aggregate Base/Subbase Courses and Tack/Prime coats, as required).
- Electrical Demolition (edge lights, signs, junction structures, conduit, cables, etc.).
- Pavement Demolition (Asphalt Surface Courses, Gravel Base Courses).
- Pavement Marking Removal; New Airfield Pavement Markings.
- Upgrades to the Existing Airfield Electrical Vault to accommodate the new airfield lighting circuits.
- Installation of new Airfield Edge Lighting including trenching, conduit, concrete encased duct banks, junction structures/handholes, cables, a counterpoise system, and backfill.
- Excavation, including blasting.
- Embankment Preparation.
- Clearing and Grubbing of proposed areas of work including Safety Areas and Object Free Areas.
- Topsoiling, Sodding, Seeding, and Mulching.
- Open and Closed Drainage System Improvements to accommodate runoff from the proposed development to include trenching and installation of new drainage pipes, pipe bedding, geotextiles, drainage swale linings/matting.
- Installation and removal of required Erosion & Sedimentation Control Features such as filter sock, silt fence, filter bags, diversion dike, sediment traps/basins, outlet control structures and other features as required by the West Virginia Department of Environmental Protection (WVDEP) through their WV/NPDES Construction Stormwater General Permit and in accordance with West Virginia Erosion and Sediment Control Best Management Practice Manual.

No work is proposed to any standing structure located on or off airport property. All work will be limited to airside facilities adjacent to the south side of Runway 8-26. The proposed undertaking is depicted on the approved Airport Layout Plan (ALP). Please refer to Exhibits 1 and 2 for the location of the proposed undertaking and Exhibit 3 for the location of the proposed Taxiway E and connector taxiway pavements as well as the proposed development phases.

The Area of Potential Effect

The proposed undertaking is located on airport property on the south side of Runway 8-26. The FAA has determined the direct APE, defined in blue in Exhibit 4, to be the area where ground disturbing activities associated with the proposed undertaking will occur. This extends approximately 775 feet (236 meters) south of the Runway 8-26 edge of existing pavement and a distance of approximately 8,500 feet (2,590 meters) along the runway's length. The indirect APE, defined in grey in Exhibit 4, is identified as a 0.25-mile radius surrounding the project area where the project could potentially be viewed.

Per the requirements of 36 CFR 800.4(a)(1), the FAA requests your concurrence with the extent of the defined APEs.

Previously Recorded Resources

Archaeological Resources
Archaeological sites within close proximity to the direct APE include Site 46By166 and Site 46By214. Site 46By166 was identified south of the existing portion of Taxiway E (Exhibit 5) that is proposed as Phase 1 on Exhibit 3. A West Virginia Cemetery Survey Form was completed for the site in 2002 identifying the cemetery as the Shepherd and Shewalter Cemeteries (Exhibit 7). The edge of the existing cemetery fence line is located approximately 470 feet (140 meters) south of the existing taxiway edge of pavement. Site 46By214 was identified on the eastern side of the airport as part of an airport runway extension project (04-306-By-7) (Exhibits 5 & 6). An archaeological site form was completed in 2007 identifying the site as a light historic artifact scatter with a recommendation of not eligible for listing in the NRHP (Exhibit 8).

Standing Structures
There are no previously recorded standing structures within the direct APE. Previously recorded standing structures within the northern portion of indirect APE are associated with the Shepherd Field ANG Base. Structures closest to the project area are listed as BY-0621, BY-0622, BY-0625, BY-0626, BY-0627, and BY-0633 (Exhibits 9 & 11). Each of these resources have internal SHPO ratings of not eligible for listing in the NRHP. A Historic Property Inventory Form for the ANG Base is included in Exhibit 12.

Standing Structures within the southern portion of the indirect APE are limited to BY-0032-0093 (Exhibit 9). This property is identified as the Foltz House/Walter's Farm and was recommended eligible for listing in the NRHP under Criteria A and C. Two Historic Property Inventory Forms associated with the property are included in Exhibit 12. The later form appears to have an internal SHPO rating of not eligible for listing in the NRHP.

Prior Surveys

Archaeological Surveys
Several archaeological surveys were conducted surrounding the project area (Exhibit 6). The surveys closest to the project area, completely or partially within the indirect APE, include Survey's 04-306-BY-7, 92-142-BY, 00-513-BY-8, 93-1383-BY, and 99-183-BY. Survey 04-306-BY-7 was conducted for the ANG. The survey is located north of, and adjacent to, the eastern end of the project area and was conducted for the airport runway extension project. As described above, the survey recorded Site 46BY214 within the indirect APE, which is no longer present.

Survey 92-142-BY was also conducted for the ANG. The survey is located north of the project area and was conducted for construction of navy reserve facilities. No archaeological sites were identified.

Survey 00-513-BY-8 was conducted for the Criswell Industrial Park. The survey is located west of the project area. Several archaeological sites were identified, none of which are located within the indirect APE for the proposed undertaking.

Survey 93-1383-BY was conducted for Hallaton, Inc. The survey is located southwest of the project area and was conducted on a two acre tract for a radar installation. No archaeological sites were identified.

Survey 99-183-BY was conducted for the Eastern Panhandle Transit Authority. The survey is also located southwest of the project area and was conducted on a two acre tract. One small, low density prehistoric site (46By129) was recorded within the indirect APE and no further work was recommended.

Historic Surveys
Four historic surveys either include the project area or are immediately adjacent to the project area. The Shepherd Field ANG Base, located on the north side of the airport, was evaluated in 2018 (FR# 18-82-BY) and identified as BY-0890. An internal SHPO rating determined that the base is not eligible for listing in the NRHP (Exhibit 12). Individual structures within the Base, located within the indirect APE and closest to the project area, are identified in the Standing Structures discussion above.

Survey FR# 00-513-BY-8 was conducted for the Criswell Industrial Park. The survey is located west of the project area. Several standing structures were identified, none of which are located within the indirect APE for the proposed undertaking.

MRB is located within the defined boundary of the 2010 Historic Resource Survey of Berkeley County (RBY-016) (Exhibit 10). The survey determined that there is no potential for a historic district in the survey area but there are four NRHP individually eligible properties (Exhibit 13). All four structures are located well outside of both the direct and indirect APEs.

MRB is also located within the defined boundary of the of the Battle of Martinsburg as identified in the *2010-2011 West Virginia Civil War Conflict Sites and Areas GIS Map* project (Exhibit 14). According to the project, the proposed boundary serves as "a foundation upon which greater, more in depth projects can be based on". The Battle of Martinsburg has not been formally evaluated, but is assumed to be potentially eligible for listing in the NRHP for the purposes of this evaluation.

No Historic Properties Affected

Archaeological Resources
Site 46BY166 is located approximately 470 feet (140 meters) south of the existing taxiway edge of pavement and outside of the direct APE. Site 46BY214 was located northeast of the proposed undertaking, outside of the direct APE, and is no longer present due to completion of the ANG runway extension project. The site was previously recommended not eligible for listing in the NRHP. Based on site locations outside of the direct APE and prior impacts, these previously recorded sites will not be affected by the proposed undertaking. Due to activities occurring on an active airfield, adjacent to the runway and impacted by prior grading activities associated with airfield construction, additional archaeological sites are not anticipated within the direct APE and will not be affected by the proposed undertaking.

Historic Resources
Based on prior surveys conducted adjacent to, and within the airport, one property within the indirect APE was previously recommended for listing in the NRHP. The Foltz House/Walter's Farm (BY-0032-0093) is located approximately 0.20 miles south of the proposed undertaking. Based on current aerial imagery, the house as well as ancillary structures, are no longer extant. Although the Airport is within the proposed boundary for the Battle of Martinsburg, the proposed undertaking is confined to the existing airfield boundary and will not affect any off- airport property. Identified historic resources will therefore not be affected by the proposed undertaking.

Based on the information in this letter, per the requirements of 36 CFR 800.11(d), the FAA has determined that no historic properties will be affected by the proposed undertaking. The FAA respectfully requests your concurrence with this determination. Based on the location of the proposed undertaking, there will also be no use of the Battle of Martinsburg, a potential Section 4(f) resource.

Should you have any questions, or require additional information to facilitate your review, please do not hesitate to contact me at susan.stafford@faa.gov or (304) 252-6216 x130.

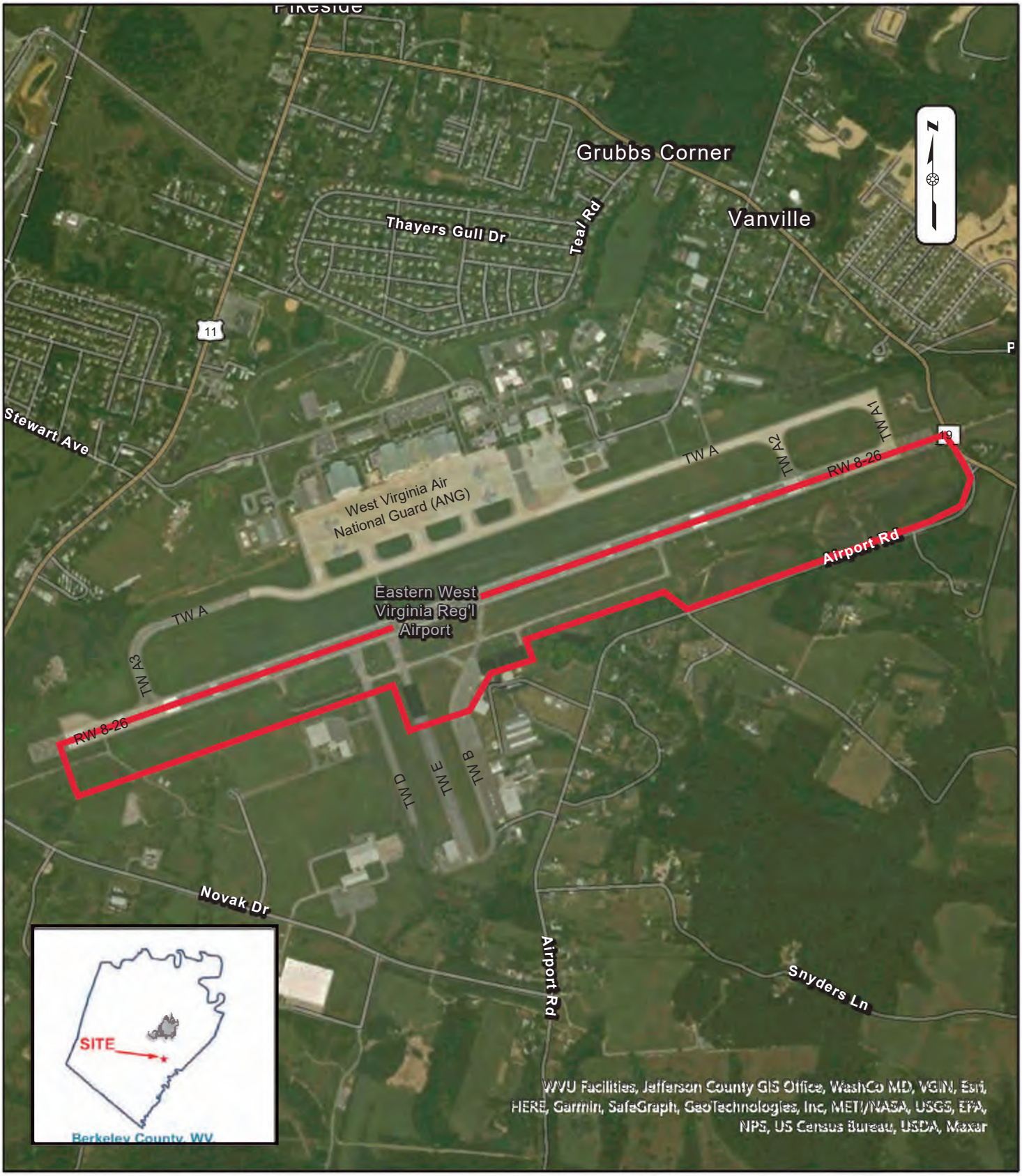
Sincerely,

Susan Stafford
Environmental Protection Specialist

Enclosures

Cc: Mike Waibel, Practice Manager, Airport Design Consultants, Inc. (w/encl via email)
Jennifer Martin, CEP, Director of NEPA/Environmental Services, KTL Group (w/encl via email)
Matthew Di Giulian, P.E., Manager, Beckley Airports Field Office (w/encl via email)

EXHIBIT 1
PROJECT AERIAL



EASTERN WEST VIRGINIA REGIONAL AIRPORT AUTHORITY

LEGEND

Project Review Area

0 1,500 3,000 Feet

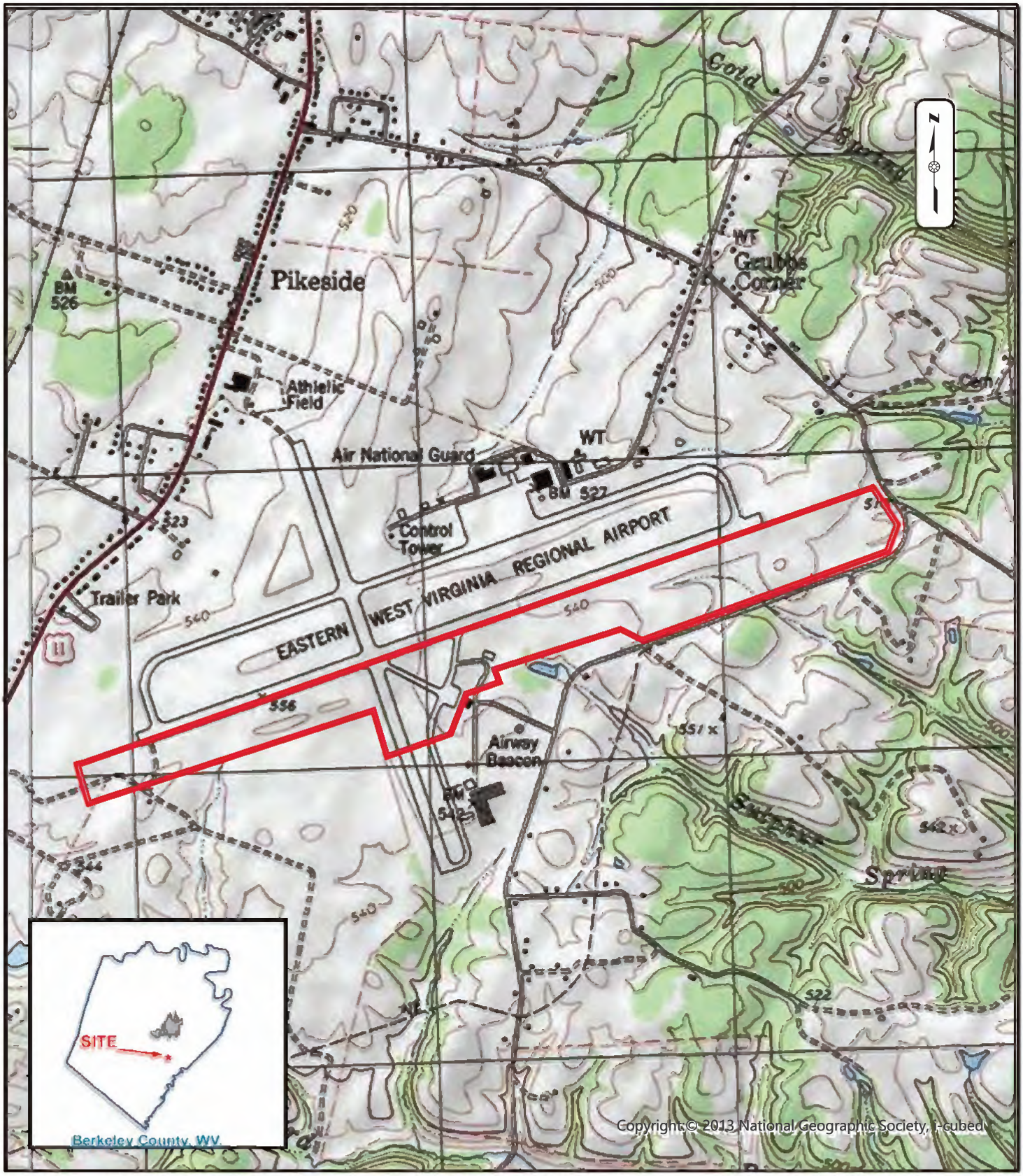
ATTACHMENT 1: PROJECT LOCATION MAP

EASTERN WV REGIONAL AIRPORT

LOCATION	BERKELEY COUNTY, WV

Map Data Source: Berkeley County WV. GIS Department, 2019 Data; ESRI: Greenway Engineering

EXHIBIT 2
PROJECT TOPOGRAPHIC MAP



LEGEND

Project Review Area

Feet

0 1,500 3,000

ATTACHMENT 2: MARTINSBURG, WV USGS QUAD

EASTERN WV REGIONAL AIRPORT

LOCATION | BERKELEY COUNTY, WV

Map Data Source: Berkeley County WV. GIS Department, 2019 Data; ESRI: Greenway Engineering

EXHIBIT 3
PROJECT LAYOUT

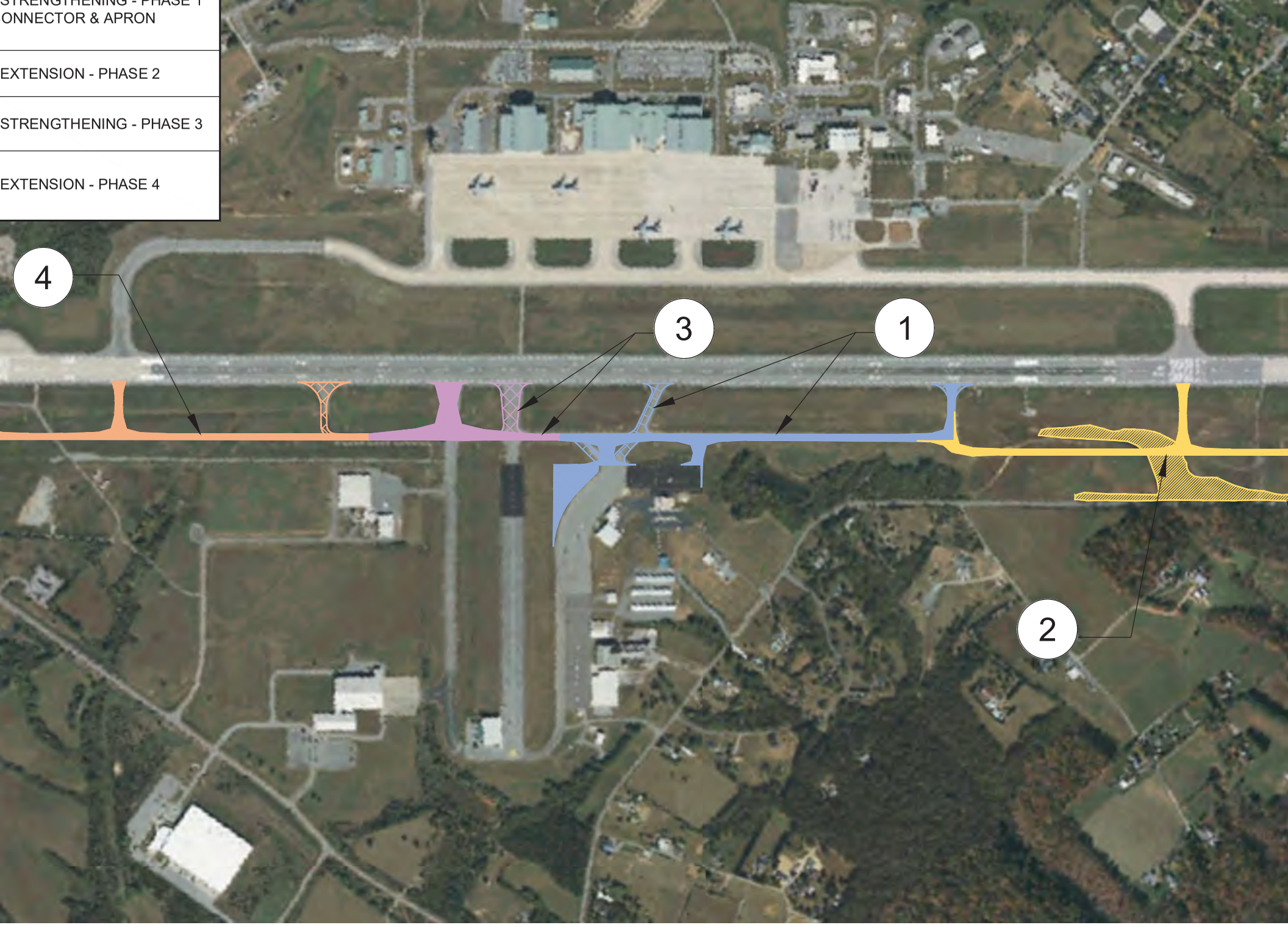

STRENGTHENING - PHASE 1
CONNECTOR & APRON
EXTENSION - PHASE 2
STRENGTHENING - PHASE 3
EXTENSION - PHASE 4
4
3
1
2
750

EXHIBIT 4
DIRECT & INDIRECT APE

Martinsburg Taxiway E APE Map

October 16, 2023

1:36,112

0 0.28 0.55 1.1 mi

Notes:

WVGISTC, WVSHPO

EXHIBIT 5
ARCHAEOLOGICAL
SITE MAP

REDACTED

EXHIBIT 6
ARCHAEOLOGICAL
SURVEY MAP

REDACTED

EXHIBIT 7
46BY166 CEMETERY FORM

West Virginia Cemetery Survey Form

1. Site Number (OFFICE USE ONLY): 46 BY 166
2. Cemetery Name, Historic: SHEPHERD AND SHEWALTER (CEMETERIES OF MARTINSBURG AND BERKELEY COUNTY, WV) Cemetery Name, Common:
3. County: BERKELEY 4. 7.5' Quadrangle Name: MARTINSBURG W. VA.
5. UTM Zone: Easting: 39° 24" Northing: 77° 59"
6. Location: MRB - Eastern WV Regional / SHEPHERD AIRPORT
7. Ownership: Public: Municipal___ County___ State___ Federal ✓

   Private: Family___ Church___ Denomination___

   Fraternal___ Other___
8. Burial Population: 7 with two family groups represented including:
   Shewalter - Joseph (Jan. 7, 1772 - Dec 29, 1827), wife Elizabeth (died Aug 22, 1840, 66 yrs, 7 months 11 days)
   Matilda (died Oct. 7, 1819 - 4 yrs) rebecca (died July 14 ?) Strode - James (died Mar 7, 1795 67 yrs 2 month 9 day
   Ann (died June 29, 1786 44 yrs 8 months 10 da
9. Predominant Surnames: STRODE, SHEWALTER
10. Mass Grave: Yes___ No___ Explain: FOUR STONES MARK MAUSOLEUM BURIAL, TREE ON THE GROUND
11. Public Accessibility: Unrestricted___ WITHIN 15 FEET FROM ST
    Restricted___
    For permission to visit, contact___
12. Access into Cemetery: By foot___ By car ✓
13. Terrain: forested flat slope to the SW 25°
14. Bounded by: Fence ✓ Wall___ Hedge___ Other FENCED FROM RUNWAY ZONES
15. Condition: Well maintained___ Poorly maintained___ Overgrown, easily identifiable ✓
    Overgrown, unidentifiable___ Unidentifiable, but known to exist through tradition or other means (identify source) ✓
16. Disturbances (describe): [illegible]
17. Cemetery Size and Orientation (please give dimensions in feet, and indicate compass direction for long and short axis): Apprx. 25 ft (N-S) by 12 Ft (E-W) 25' x 12' cemetery includi 11' 3" x 11' 3" x 4' 6" burial vault.
18. Historical Background (use continuation sheet if necessary):

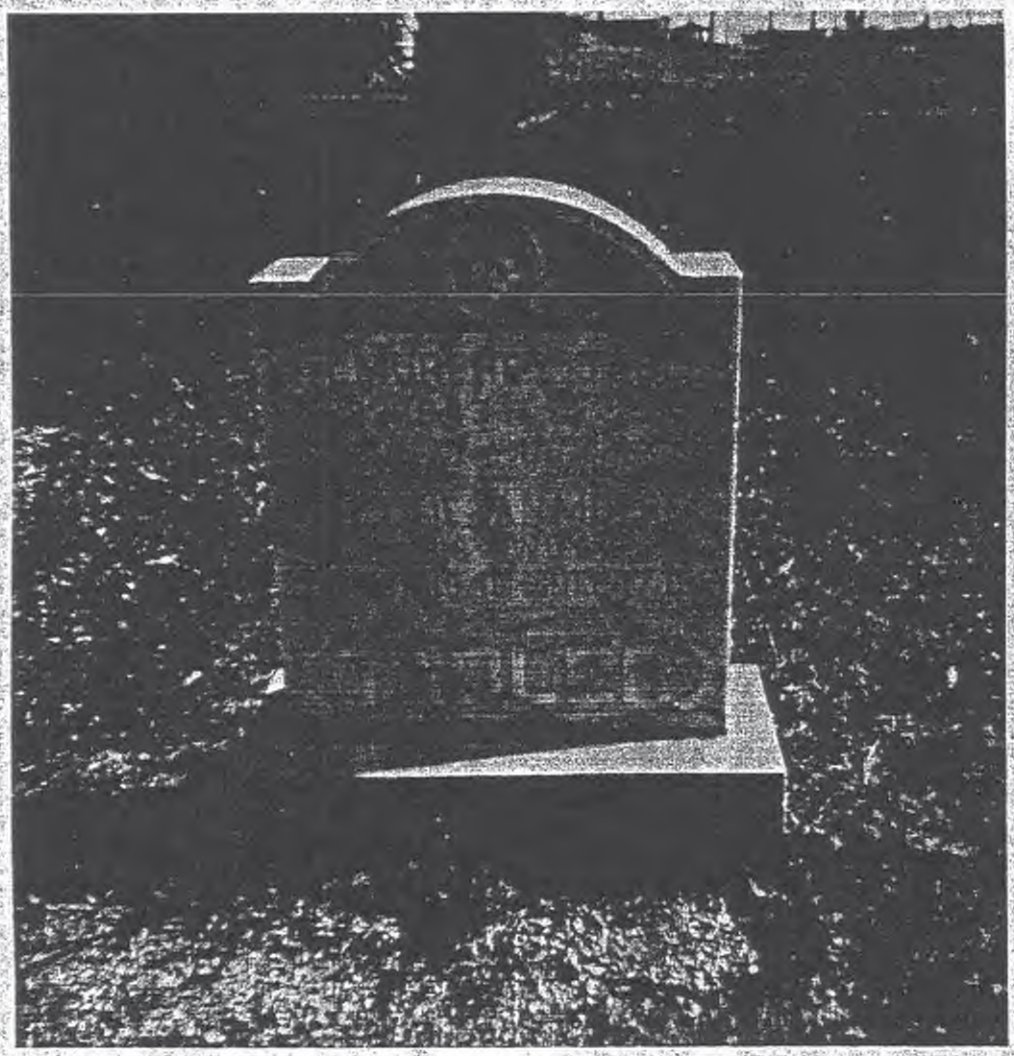
SEE INFO ATTACHED!

1. CEMETERY INFO PAGES
2. HISTORIC LAND SURVEYS
3. STROSE FAMILY HISTORY INFORMATION (FROM BOOKS AND COUNTY ARCHIVES)

CEMETERIES

of

MARTINSBURG and BERKELEY COUNTY
WEST VIRGINIA



Berkeley County Historical Society

Turner, James B.;n.d-May 6,1875; 33yr. 2mo. 2da.
Turner, Mary Morningstar;May 29,1835-July 26,1901;66yr.1mo.27da.
VanMetre, Abraham B.;Apr. 12,1822-Mar. 12,1899; 76yr. 11mo.
VanMetre, Alcinda E.;n.d-Apr. 19,1855; 51yr. 1mo. 15da.
VanMetre, Asabel;n.d-Mar. 17,1870; 84yr. 3mo.
VanMetre, Mary Burns;n.d-Nov. 12,1853; 63yr. 8mo. 25da.;
w.of Asabel
VanMetre, Mary S.;n.d-Dec. 8,1889; 68yr. 5mo. 18da.
Wageley, Ann R.;n.d-July 26,1846; 22yr. 2mo. 29da.;
w.of Jacob W.
Wageley, Charley;n.d-Sep. 22,1895; 21yr. 7mo. 9da.;
s.of J.H. & M.E.
Wageley, H.M.;Apr. 30,1865-May 7,1938
Wageley, Howard William;n.d-July 11,1890;s.of B.F.& B.E.
Wageley, Jacob W.;n.d-Sep. 15,1854; 34yr. 8mo.
Wageley, James W.;Apr. 25,1821-May 18,1895; 71yr. 23da.
Wageley, John H.;Oct. 14,1854-n.d
Wageley, Joseph H.;n.d-May 12,1898; 71yr. 8mo.
Wageley, Lillie L.;Aug. 22,1870-Jan. 26,1928;w.of H.M.
Wageley, Marchel;n.d-Dec. 30,1890
Wageley, Margaret;n.d-Sep. 12,1846; 42yr. 6mo. 7da.;w.of David
Wageley, Marvin Edgar;Feb. 27,1892-July 23,1892;s.of B.F.& B.E.
Wageley, Mary E.;n.d-Aug. 26,1902;60yr.11mo.4da.;w.of Joseph
Wageley, Mary E.;n.d-Mar. 23,1855;27yr.6mo.10da.;w.of James
Wageley, Mary F.;n.d-May 26,1846;4mo.21da.;d.of Jacob & Ann
Wageley, Oscar Thomas;Dec. 23,1894-Oct. 9,1895;s.of B.F.& B.E.
Wageley, Roberta Nettie;Oct. 1,1871-Nov. 15,1901
Wageley, Roy C.;Oct. 9,1886-Nov. 6,1918
Wageley, Sarah E.;Feb. 6,1864-July 1,1899;w.of J.N.
Wageley, Virgie A.;Oct. 28,1889-Apr. 26,1906;16yr5mo.28da.;
d.of H.N.& Lillie
Watson, Barbara Ann;1962-1962
Weisenburger, Lydia;1886-1962
Weisenburger, Thomas H.;1861-1934
Whittington, G.W.Jr.;1869-1957
Whorten, Emily E.;Oct. 5,1870-Aug. 11,1890;d.of I.& A.A.
Whorten, Isaiah;n.d-July 7,1885; 50yr.
Whorten, Mary E.;Jan. 15,1872-May 28,1898;w.of J.W.
Williamson, Elizabeth;Jan. 6,1800-Mar. 24,1888;w.of Wm.
Wilson, Charles W.;Mar. 6,1838-Dec. 31,1907
Yeamans, (Infant);n.d-Sep. 2,1867
Yeamans, Louisa L.;n.d-Aug. 22,1873;41yr.6mo.;w.of Theodore
Yeamans, Maria;n.d-July 21,1860;19yr.10mo.;w.of Theodore
Yeamans, Maria C.;n.d-Apr. 16,1862;d.of Theodore & Maria

OLD WAGNER CEMETERY

Stotelmyer, Ellen C.;n.d-Mar. 3,1888; 28yr.;w.of John

PLEASANT PLAIN UNITED BRETHREN CEMETERY

Bowman, (Infant);n.d-n.d;d.of William
Cook, (Infant);n.d-n.d;s.of Goff
Mason, Harry Grayson;n.d-July 9,1912; 12yr. 10mo. 14da.;
s.of Elijah & Amanda
Mason, Ray;n.d-Aug. 30,1904;9mo.17da.;s.of Elizab & Amanda
Miller, (Infant);n.d-n.d;s.of Rose

PROVIDENCE QUAKER CEMETERY

Hibberd, A.;n.d-1850
Hibberd, M.A.;n.d-1854
Hunter, Moses;n.d-Aug. 2,1798
Keefer, Aaron E.;n.d-Sep. 30,1839; 19yr. 20da.;
s.of Jane M. & Jacob I.
Mendenhall, Martha;1713-1794

SHEPHERD CEMETERY

Bennett, Mrs. Ada S.;Jan. 10,1888-Oct. 18,1952
Brown, Samuel;Jan. 17,1917-Jun. 22,1979;v;WWII
Burke, Bessie Shepherd;Sep. 29,1887-Aug. 28,1929;w.of Conrad H.
Fox, Georgia S.;1881-1967
Fox, Harold F.;Aug. 31,1902-Dec. 12,1959
Fox, Harry;n.d-1969
Gibson, William;n.d-1971
Lewis, Lillie Fox;1902-1968
Pogue, Betty S.;May 21,1926-1983
Porter, John H.;1896-1943
Rideout, William;1885-1963
Shepherd, Dr. Ernet;n.d-1953
Shepherd, Mrs. Ella V.;1877-1955
Shepherd, George H.;1915-1967
Shepherd, Irene;n.d-1962
Shepherd, Joseph L.;Aug. 11,1890-Aug. 2,1960
Shepherd, Joseph L.;Mar. 2,1920-Mar. 30,1981;v;WWII
Shepherd, Lucinda J.;Dec. 23,1892-Mar. 2,1932
Shepherd, Moses J.;1928-1977;v;Korea

SHEPHERD & SHEWALTER CEMETERY

Shewalter, Elizabeth;n.d-Aug. 22,1840; 66yr 7mo. 11da.;
w.of Joseph
Shewalter, Joseph;Jan. 7,1772-Dec. 29,1827; 55yr. 11mo. 22da.
Shewalter, Matilda;n.d-Oct. 7,1819; 4yr.
Shewalter, Rebecca;n.d-July 14,?
Strode, Ann;n.d-Jun. 29,1786; 64yr. 8mo. 10da.
Strode, James;n.d-Mar. 7,1795; 67yr. 2mo. 9da.

In Search of the Strode Orphans

The Ancestry of Edward Strode, Jeremiah Strode, Samuel Strode, and Martha (Strode) Bryan

by
David C. McMurtry, Ed.D.
Michael L. Kallam, Ph.D.
Kerry Ross O'Boran

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Mil-Mac Publishers
303 Zandale Drive
Lexington, KY

Table of Contents

ODE FAMILY

FORWARD: The Strodes were Huguenots whose Mansion House stood 11 miles th of Strasbourg, near the Rhine River, in France. This Alsace/Lorraine ion has been alternately German & French throughout history. (I think ode is a German-sounding name.)

The family was established 1066 in England when Sir John Strode, Earl Strigal, accompanied William the Conquorer to the British Isles. They their coat of arms recorded in England then.

The traditional English ancestor of the American Strodes was Sir liam Strode. He was one of the 5 members who condemed Charles I (1625-9) and signed his death warrant.

Our Strodes came from Strodeville, Devonshire County. An article tten in 1846 by a member of our line states this branch came to the onies, Penn. port, in 1696. A related family of Strodes lived in the acent county of Sommersetshire, England, and are thought to have come the Virginia Tidewater at an earlier date, 1640-1650.

1. X STRODE and WIFE (family historians disagree as to man's given e but it could have been William) chartered the ship "Paysay" and set l for Penn. in 1686. The couple died at sea leaving four sons: liam; George; Samuel; Edward (my 7th. great grandfather).

There was also a daughter or grand-daughter Martha who married gan Bryan; this couple were the grandparents of Rebecca Bryan who ied Daniel Boone. (Martha was the grand-daughter of the "Paysay" odes. Section on the Bryan-Boone marriages follows.)

One account relates that the "Paysay" sailors took care of the ode children until they came of age.

Son William remained in Penn.; George settled in S.C.; Samuel went Georgia; Edward to Va.

2. EDWARD STRODE (I), 7th. great grandfather, made his way from n. to northern Shenandaah Valley of Virginia & settled on Opequon Creek. e area was originally part of Orange Co., became Frederick 1738-43, & s then divided into Berkeley 1772. During the Civil War, this north-stern tip of Va., including Berkeley Co., became part of the newly-formed st Va.

The early settlers entered the Valley through Pack-Horse Ford, a rrow place on the Cohongoroo where the pack-horses could cross the river. ckinburg was erected there in 1762 and the name changed to Shepherdstown 1798.

There was one known child, Edward Strode (II) born 1697.

Edward Strode (I) died in Frederick Co. in 1749.

3. EDWARD STRODE (II) and ELEANOR , 6th. great grandparents, were rried in 1720.

The couple had five children: Susannah born 1721; Edward 1723; mes 1727; John 11 January 1730; Jeremiah 1723.

HOME OF CAP'T. JAMES STRODE, OF BERKELEY COUNTY

RECENTLY LOCATED HERE* BY PERSONS INTERESTED

National Geographic Map on Travels of Washington lists "Strode's " near Martinsburg

" Mansion" located on Shepherd Farm of which Shepherd Flying Field is part

Celebration of the George Washington Bicentennial is bringing out much valuable historically and Berkeley County will reap her share of the benefit from the investigation and research now being carried on by interested persons.

Recently a most valuable addition has been made to authentic historic spots in the county by the location of Captain James Strode's "mansion house" on what is now the Shepherd farm, of which Shepherd Flying Field is a part.

The story of the manner in which the place was finally located, exactly and without any doubt, is told by Mrs. M A. Snodgrass, as follows:

"In the January 1932 issue of the National Geographic there was an article, accompanied by maps, on the travels of George Washington, for as that writer says, "some of the most dramatic episodes in the many- sided career of George Washington are connected with his travels." Many months were spent in careful research to plot the routines carefully or accurately. In one of the maps of this section(, for, as every Berkeley County school child now knows, Washington traveled through this Lower Shenandoah Valley often) the word Strode's was printed very close to Martinsburg. However it has not been actually known until within the last few weeks just where Cap't. James Strode's home was.

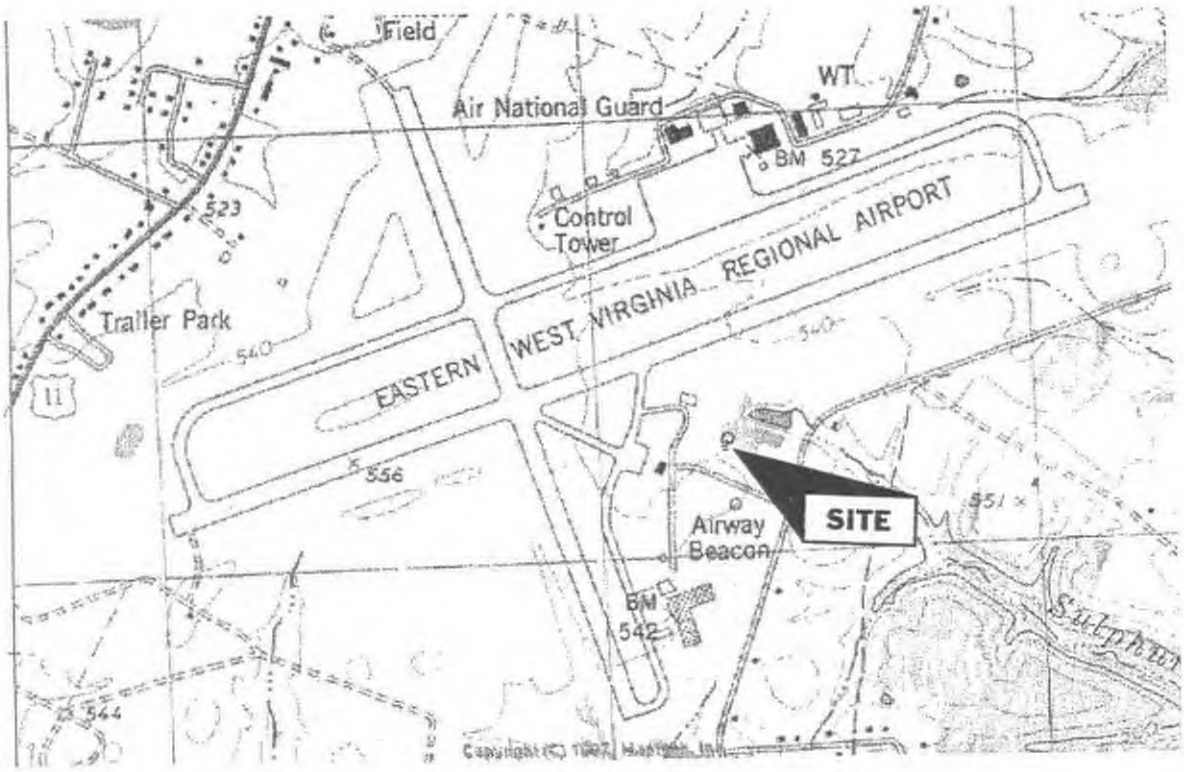
" In his diary Washington records that on September 3, 1784, 'having business to transact with tenants in Berkeley, he set out from Mt. Vernon for his brother's, C Col.Charles Washington's. The next day he sets down these words "Set out after dinner and reached Captain Stroad's , a substantial farmer between Opeckan Creek and Martinsburg - distant by estimation 14 miles from my brother's.

In the county court house, a treasure house of most valuable records, the will of James Strode, dated February 20, 1795, was found which showed him to be a large land owner leaving large farms in this county and several thousand acres in Kentucky and in Ohiocounty to his children . He was/[illegible]//the father of three beautiful daughters, the belles of their day. Rachel, married Cap't Henry Bedinger, of Revolutionary fame, and they built " Protumna "(now owned by Mrs. J.William Stewart) on land Rachel inherited from her father. Phoebe married Cap't Josiah Sweringer and Eleanor married Cap't Abraham Shepherd, both soldiers of the Revolution.

"following up hints and suggestions it has been discovered that the old house burned a few years ago ,on the Shepherd farm of which the Shepherd [illegible]/Flying Field is a part, was Captain Strode's'mansion' as he called it in his will. One wing , in which the old dining room and kitchen were located ,is still standing. And on the present house, built of the old stones, is the date 1763. Nearby is a very handsome monument of cut stone and close to it ,the old grave stones of James Strode who died March 7, 1795, and his wife, Ann, who died June 29, 1786. Captain Strode must have married twice, for in his will reference is made to his, wife Elizabeth, and to his daughters Susannah and Anna and sons John and James, besides the daughters before mentioned.

" The deeds to many of his acres were from Lord Fairfax and besides all their land, the will refers to 'my brick house and four lots in Martinsburg'.,'my house in Shepherdstown' and ' my house and two lots in [illegible] in Buckles' Town'. It also requests his executors, Henry Bedinger and Abraham Shepherd, to see that his children, John, James, and Anna, be educated equal to their estates and prospects in life."

The Shepherd family still owns thehandsome mahogany table which was used when Washington stopped there. The old road from Leetown once passed closer to the Strode' house than the present road. Washington's estimate of 14 miles from his brother's house 'Happy Retreat' or 'Mordington', in Charles Town, as it is now called, as



Site Location Map

Base Map: USGS Topographic Quadrangle – Martinsburg, WV

Coordinates: 39° 24' 08" North Latitude
77° 58' 59" West Longitude

site - CEMETERY LOCATION

Fig. 1

Site Number:_____ Cemetery Name: Shepherd and Shewalter

19. Gravestones (Please list the number of gravestones that fit in the categories below. If this is a guess or an approximation, put "circa" before the number. Include photographs and/or sketches of representative decorative carvings.):

Number of headstones 4 Number of burials 7 Footstones? Yes 3 No___

Number of gravestones with burial dates from the 18th century 1 19th century 3
20th century___

Please list the earliest headstone date 1795 Most recent date 1840 - possibly

Number of gravestones of each material: Slate___ Marble 1 Granite___
Sandstone___ Fieldstone___
Other C. Limestone

Number of gravestones with decorative carvings of: Skulls/Deathsheads___ Lettering
Faces___ Urns/willows___ Other (explain) 5
Headstone too weathered for identification of carvings

Number of gravestones that are: Readable 4 Eroded 3 Badly tilted___
Cracked/broken___ Broken but standing___ Broken, no longer standing___
Location of stones no longer standing_____

Restoration efforts, if any: ___ none known

20. Please attach: 1) a copy of the topographic quadrangle map indicating the cemetery's location, and 2) general photograph(s) of the cemetery showing its setting and/or location. If you have any reference information about the cemetery (books, personal communication, etc.) please include a list.

Recorder: MS. FET, Mr Tyree Survey Date: MARCH 8, 2002

Address: H.C. Nutting
412 MORRIS ST.
WV. 25301

Telephone Number: 304-344-0821

DATE SUBMITTED: APRIL 25, 2002

Please return form to:
Historic Preservation Office
The Cultural Center
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0300

Thank you for your interest in the West Virginia Cemetery Survey.

EXHIBIT 8
46BY214 SITE FORM

REDACTED

WEST VIRGINIA ARCHAEOLOGICAL SITE FORM

(Revised 1999)

Type of Form (Check One): __X__ New Form _____ Revised Form

1. Site No.: 46 BY 214 2. Site Name: Field Site 1

3. County: Berkeley 4. 7.5' Quadrangle: Martinsburg

5. UTM Zone (circle one): 17 18 Northing: 4366312 Easting: 761109

6. Location Description:
This site was located on the eastern end of a proposed runway extension at the Eastern West Virginia Regional Airport just south of Martinsburg, WV. The site was located in a grassy field between the existing runway overrun and Paynes Ford Road.

7. Ownership (Name/Address/Tenant): WV Air National Guard, Martinsburg,WV.

8. Temporal Affiliations: ☐ Prehistoric ☐ Protohistoric ☒ Historic ☐ Prehistoric and Historic

9. Prehistoric Temporal Period(s) Represented: ☐ Unassigned ☐ Paleoindian ☐ Archaic, E M L ☐ Woodland, E M L ☐ Late Prehistoric ☐ Protohistoric

10. Historic Temporal Period(s) Represented: ☐ 1700-1750 ☐ 1751-1800 ☒ 1801-1850 ☒ 1851-1900 ☒ 1901-1950 ☒ 1951-Present ☐ Unassigned

11. Prehistoric Site Type (select as many as appropriate): ☐ Lithic Scatter ☐ Cave/Rockshelter
Habitation: ☐ Camp ☐ Village ☐ Hamlet Extractive: ☐ Quarry ☐ Workshop ☐ Earth Mound ☐ Stone Mound ☐ Earthwork ☐ Burial Area ☐ Petroglyph/Pictograph

12. Historic Site Type (select as many as appropriate): ☐ Residential ☒ Farmstead ☐ Commercial ☐ Industrial ☐ Military ☐ Trail/Trace/Road ☐ Other _____

Is site associated with any standing structures? ☐ Yes ☒ No

Has a WV Historic Inventory Form been completed for the structure? ☐ Yes ☐ No

13. Site Condition: ☐ Unknown ☐ Undisturbed ☐ Destroyed
☒ Disturbed (explain): Historic agricultural/construction practices have deflated the soils

14. Describe current land use: Grassland

15. Topographical Location: ☐ Floodplain ☐ Terrace ____1 ____2 ____3 ☒ Ridgetop

☐ Gap/Saddle ☐ Hillside/Bench ☐ Bluff ☐ Other:_____

16. Physiographic Province: ☐ Appalachian Plateau ☐ Transitional ☒ Ridge and Valley

17. Soils: Soil Association Welkert-Berks-Clearbrook

Soil Series-Phase/Complex Urban Land/Udorthents

18. Vegetation: Grassland 19. Elevation: 940 ft (ft/m amsl)

20. Slope %: 5-10 21. Slope Direction: East

22. Nearest Water Source (select only one, as appropriate):

Name: Unnamed ☐ Spring ☐ River ☐ Perennial Stream

☒ Intermittent Stream ☐ Swamp/Bog ☐ Other: _____

Major Drainage (name): Cold Spring Run Minor Drainage (name): Opequon Creek

23. Distance to water (ft/m) 105 m (horizontal) 20 ft (vertical)

24. Site Area (Dimensions in meters): Approximately 9450 q m

Basis for site area estimate: ☒ Paced ☐ Taped ☐ Historic Maps ☐ Aerial Photograph

☐ Transit/Alidade ☐ Unrecorded ☐ Other _____

25. Site Description (include description of site, setting, nature and location of artifacts and concentrations, features, and significance of site in a local or regional context. Use Continuation Sheet if necessary:

Field Site 1 was identified during shovel testing of a proposed runway extension project at the EWVRA in Martinsburg, West Virginia. Field Site 1 consisted of a light historic artifact scatter located at the far eastern end of the survey area. The site is situated within a mowed grassland located on a rolling ridge overlooking an unnamed intermittent tributary of Cold Spring Run within the current WV ANG property. A narrow gravel road crosses the site area connecting Paynes Ford Road on the eastern boundary of the site to a small FAA building west of the site. Ground surface visibility was poor due to the thick grasses in the area. A total of 61 shovel tests were excavated within the boundaries of Field Site 1. Of these shovel tests, 18 were positive, yielding 58 historic artifacts.

The plowzone soil was a shallow rocky dark yellowish brown (Munsell 10YR 4/4-4/6) silt loam, between 5 and 15 cm thick, overlying a mottled rocky yellowish brown (Munsell 10YR 5/6-5/8) silt clay sterile subsoil. The soils within the site boundaries are considered to be Urban Land by the NRCS which indicates that at least some disturbances have occurred associated with the construction of the EWVRA. The archaeological material recovered was confined to the plowzone and no evidence of subsurface features of other intact cultural deposits was noted in the shovel test profiles. Additionally no evidence of structural features such as foundations, wells, or privies were observed at the site.

26. Investigation Type (select as many as appropriate): ☐ Examination of Collection

☒ Pedestrian Survey ☐ Surface Collection ☒ Shovel Tests ☐ Test Unit(s)

☐ Test Trench(es) ☐ Deep Test(s) ☐ Auger/Soil Corer ☐ PZ Removal

☐ Mitigation/Block Excavation ☐ Aerial Photographs ☐ Remote Sensing _____

☐ Unknown ☐ Other: _____

27. Surface Collection Strategy (select as many as appropriate):

☒ Not Applicable ☐ Grab Sample ☐ Diagnostics ☐ Controlled-Total ☐ Controlled-Sample

☐ Other (specify): _____

28. Surface Visibility (select only one as appropriate): ☐ None ☒ Less than 10%

☐ 11-50% ☐ 51-90% ☐ 91-100% ☐ Unrecorded

29. Has site been excavated? ☐ Yes ☐ No Estimated Percentage of Site Excavated: _____

30. Artifacts Collected (estimate percentage of artifacts collected): 100% identified

Prehistoric Artifacts Collected (select as many as appropriate; include frequencies):

Lithics: ☐ Debitage_____ ☐ Tools_____ ☐ Projectile Points_____ ☐ FCR_____

Ceramics: ☐ Rim Sherds_____ ☐ Body Sherds_____ ☐ Faunal Remains_____

☐ Botanical Remains_____ ☐ Human Skeletal Remains_____ ☐ Other_____

Historic Artifacts Collected (select as many as appropriate; include frequencies):

Architectural: ☐ Bricks_____ ☒ Window Glass__1__ ☒ Nails__6__ ☒ Other__17__

☒ Ceramics__2_ ☒ Bottle Glass__13_ ☐ Military_____ ☐ Weapons_____ ☒ Personal__4_

☒ Food Remains____1__ ☒ Metal__3__ ☒ Other_13_____

Provide a brief description of diagnostic artifacts: See description above

_____

31. Curation Location: _____

32. Is Site Eligible to NRHP?: ☐ Yes ☒ No ☐ Unevaluated ☐ Unknown

Explain: Low density, absence of features/midden, likely disturbance _____

WEST VIRGINIA ARCHAEOLOGICAL SITE FORM CONTINUATION SHEET

Site Number: 46_FS1 **Site Name:** _____

Historic maps were consulted during the background research for this project. Two of these, the 1916 and 1944 USGS topographic maps show a domestic structure relatively close to the identified location of Field Site 1. This indicates that the site dates to at least the early twentieth century.

Fifty-eight historic artifacts were recovered during the reinvestigation of Field Site 1 that dated from the nineteenth to twentieth century. Seven artifact groups, Activities (n=7), Archetectural (n=24), Furniture (n=2), Kitchen (n=18), Other (n=2), Personal (n=1), and Transportation (n=4) were identified during the laboratory analysis.

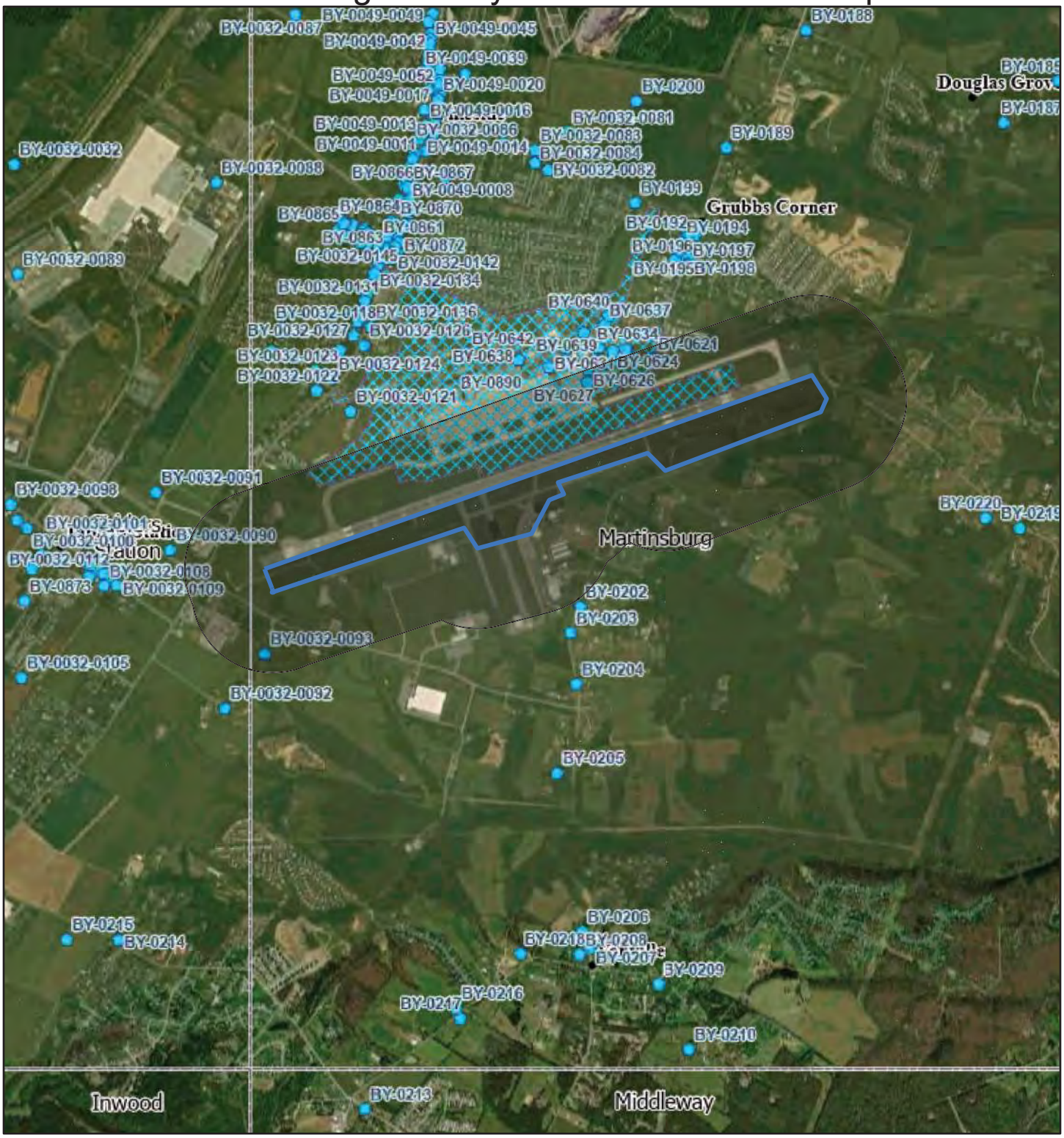
The Activity Group (12.1%) consisted of a machine part (n=1), A metal container seam fragment (n=1), coal fragments (n=2), and Battery core fragment (n=3). The majority of architectural elements recovered (41.4%) from this site were wire fragments (n=14) some of which may have been the remains of fencing. Nails (n=7), that included whole, and fragmented pieces were recovered and included both cut (n=3) and wire (n=4) types. Another architectural element, pieces of ceramic drain tile (n=2) were located on this site. The last type of architectural artifact recovered from this site was window glass (n=1) which in sufficient quantities can help provide a relative date for the site. However, the sample recovered from Field Site 1 was too small to derive a viable occupation date. Furniture glass (n=2) made up the only material recovered from the Furniture Group (3.4%). There were several artifacts belonging to the Kitchen Group (31%) recovered from Field Site 1. The majority of kitchen elements recovered were container glass fragments such as machine-made bottle glass (n=6) of colorless non-leaded, both plain and embossed. Other glass recovered were of undetermined manufacture (n=1). Undetermined glass (n=8) that could not be identified as table glass or bottle glass was collected from this site. Two types of ceramics were recovered including Bristol exterior and Albany interior slipped stoneware (n=1) and pearlware (n=1). One fragment of faunal material (n=1) was also collected. The Other Group (3.4%) consisted unidentified vinyl (n=1) and plastic (n=1) fragments. The personal Group (1.7%) consisted of a single (n=1) ceramic doll part. Finally the Transportation Group Consisted of two (n=2) chrome automotive parts, an antenna (n=1) fragment, and a plastic (n=1) vehicle part.

The analysis of the assemblage indicates that the material largely dates to the late nineteenth to the mid-twentieth century and is most likely the remains of a domestic habitation. The modern material recovered likely relates to the site areas current usage as part of the EWVRA.

Field Site 1 was a light historic scatter that may be associated with an extinct domestic structure identified on early twentieth century maps. No indication of intact above ground or subsurface features was observed and all artifacts were recovered from the plowzone. The soils within the site boundary are considered to be urban land indicating that some level of disturbance has likely occurred associated with the construction of EWVRA. Because Field Site 1 has no evidence of intact cultural features, and is likely disturbed by historic construction activities it is unlikely to contribute to the scientific understanding of late nineteenth and early twentieth century life-ways in Berkeley County. This site is not recommended as eligible for listing to the NRHP, and no additional archaeological investigation is recommended.

EXHIBIT 9
STANDING STRUCTURES

Martinsburg Taxiway E Architecture Site Map



October 16, 2023

1:36,112

0 0.28 0.55 1.1 mi

Architecture Sites - Area

Condition

- Demolished
- Active

Architecture Sites - Point

Condition

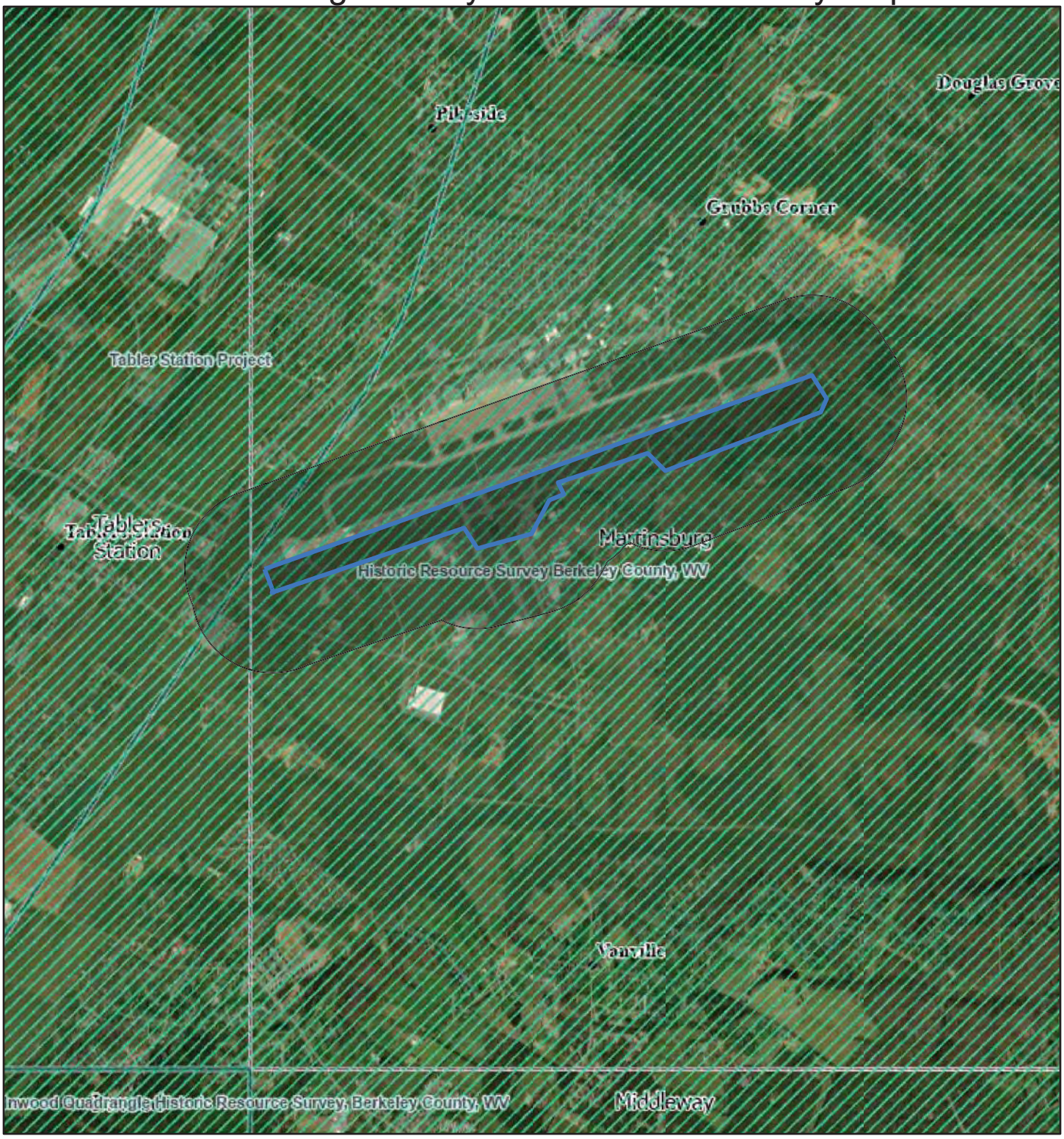
- Demolished
- Active

Notes:

WVGISTC, WVSHPO

EXHIBIT 10
STANDING STRUCTURES
SURVEY

Martinsburg Taxiway E Architecture Survey Map



October 16, 2023

1:36,112

0 0.28 0.55 1.1 mi

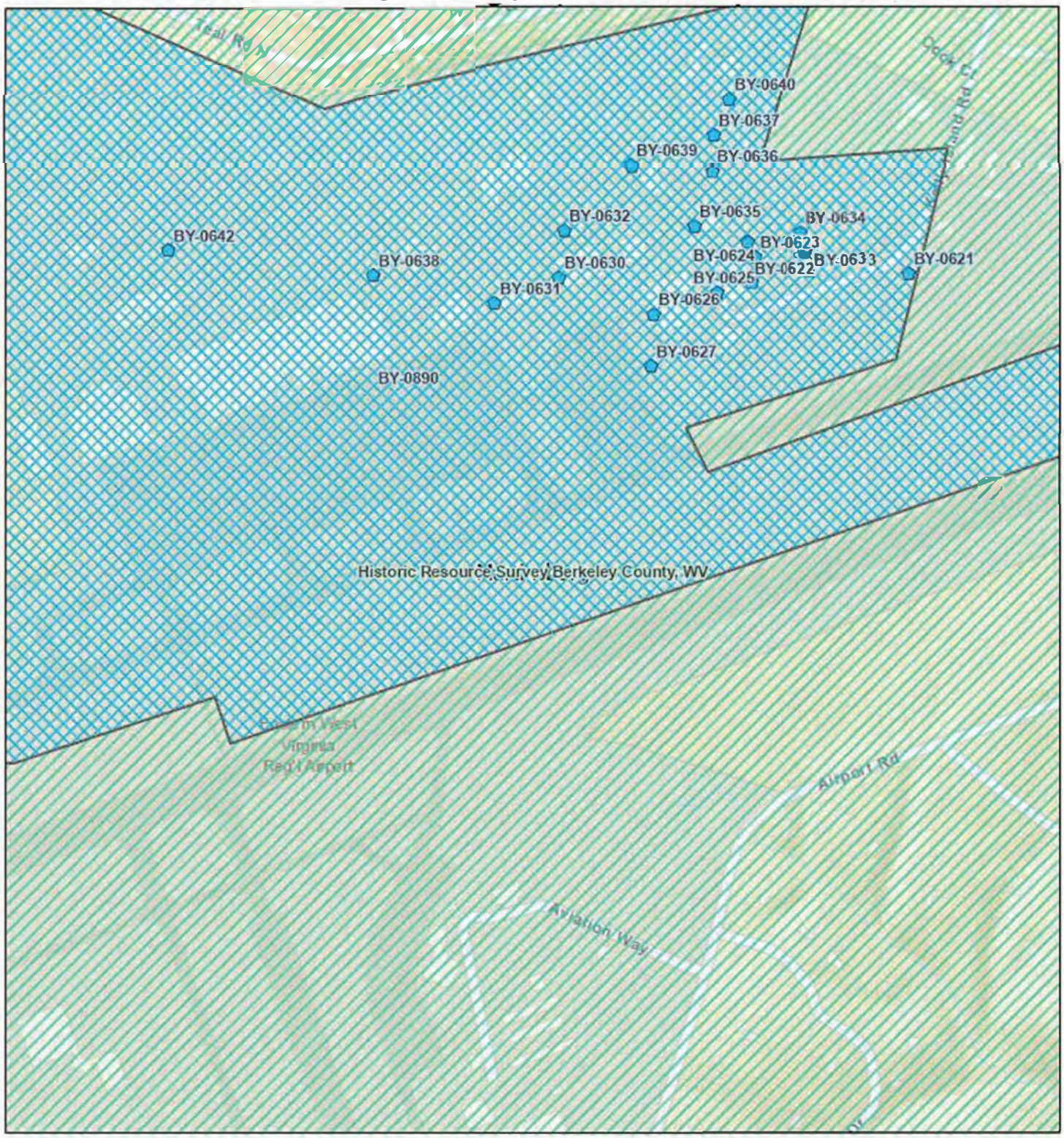
Architecture Survey - Area

Notes:

WVGISTC, WVSHPO

EXHIBIT 11
ANG STANDING STRUCTURES

Martinsburg Taxiway E ANG Detail Map



June 9, 2023

1:9,028

0 0.05 0.1 0.2 mi

Architecture Survey - Area

Cemeteries - Area

National Register - Area Condition

Demolished

Active

Architecture Sites - Area Condition

Demolished

Active

National Register - Point Condition

Demolished

Active

Architecture Sites - Point Condition

Demolished

Active

Notes:

WVGISTC, WVSHPO

EXHIBIT 12
HISTORIC PROPERTY INVENTORY FORMS

WEST VIRGINIA HISTORIC PROPERTY INVENTORY FORM

Street Address Eastern West Virginia Regional Airport Shepherd Field Air National Guard Base	**Common/Historic Name/ Both** ○ ○ ● Eastern West Virginia Regional Airport Shepherd Field	**Field Survey Number**	**Site Number (SHPO Only)** BY—0890
Town or Community South of Martinsburg	**County** Berkeley	**Photograph Name Negative Number**	**NR Listed Date**
Architect/Builder undetermined	**Date of Construction** Various see individual buildings	**Style** Airport/military vernacular	
Existing Siding Material Various see individual buildings	**Roofing Material** Various see individual buildings	**Foundation** Various see individual buildings	
Property Use for Function **Residence** ○ **Commercial** ○ **Other** ● Air National Guard and Airport	**UTM:** X: -77.980277, Y: 39.407840 Long/Lat: (77.980277 W, 39.407840 N) UTM 17N: (759999E, 4366388N)		
Survey Organization & Date West Virginia Air National Guard	**Quadrangle Name** Martinsburg		
	Survey Name or FR# FR# 18-862-BY		

Sketch Map of Property

Or Attach Copy of USGS Map

See Continuation Sheets

Site Number: BY—0890

Present Owners West Virginia Air National Guard **Phone Number**	**Owners Mailing Address (If different than property)**

Describe Setting Airport/Military setting	_____ **Acres** _____ **Archaeological Artifacts Present**
Description of Building or Site (Original and Present) See individual buildings write up below Also see individual HPI forms for some buildings previously recorded.	See individual buildings write up below **Stories** See individual buildings write up below **Front Bays**

Alterations Yes ● No ○	**If yes, describe** See individual buildings write up below and previous HPI forms
Additions Yes ● No ○	**If yes, describe** See individual buildings write up below and previous HPI forms

Describe All Outbuildings

Various see individual buildings and previous HPI forms

Statement of Significance

Due to age the buildings are not eligible at this time.

The field was created in the 1920s, but as most airports has experienced significant alterations including the addition of the ANG base in the 1950s.

Bibliographical References

EA for Installation Development Plan – West Virginia ANG Draft 2018
EA Bibliography at end of document

Form Prepared By Ernest Everett Blevins, MFA **Date:** 10 June 2018
Structural Historian for Review & Compliance
Name/Organization: State Historic Preservation Office
Address: West Virginia Division of Culture & History
1900 Kanawha Boulevard East
Charleston, West Virginia 25305
Phone #: 304-558-0240, ext. 726 ernest.e.blevins@wv.gov

1) ***2018-2020 – Functional Consolidation (PJVY172102, PJVY172103, and PJVY162101).*** Several existing buildings are not currently used for their original design purposes, and in some cases facilities offer substantial excess capacity. In order to consolidate similar functions and enhance efficiency (e.g., by providing more direct access to the airfield for relevant activities [e.g., Aerospace Ground Equipment]), several existing maintenance and operations functions would be consolidated and collocated within buildings that are currently underutilized. For example, Building 309 (Squad Ops) is not configured for the C-17 mission, as it was built for the C-5 mission, and there is currently a 67% surplus of space within Building 309. The current Wing Headquarters (Building 120) is Forced Use (not usable to upgradeable, but use necessary due to lack of useable space) and is not optimally configured, and the Proposed Action would involve the relocation of all functions from Building 120 – and others, including Civil Engineering (CE)/Base Exchange (Building 119), CE Maintenance (Building 121), Dining/Security Forces (Building 134), and Mail Room (Building 137) – into Building 309. These changes would be accomplished by incorporating changes exclusively to the interiors of buildings receiving new functions; importantly, there would be no change to the building footprint or height that would increase the impervious surface associated with the current facility or have the potential to impact airfield management and safety considerations (e.g., imaginary surfaces).

FIGURE 2-1

Proposed Projects at the 167th Airlift Wing

EA

No warranty is made by the State/Territory/National Guard Bureau as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data. This map is a "living document," in that it is intended to change as new data become available and are incorporated into the Enterprise GIS database.

West Virginia Historic Properties Inventory Form

STREET ADDRESS Off US 11 south of Martinsburg	COMMON/HISTORIC NAME Foltz House	NO. IN SURVEY	NO. OF BAYS 3 FRONT 2 SIDE
TOWN OR COMMUNITY Near Tabler's Station	COUNTY Berkeley	NEGATIVE NO.	NOT VISIBLE FROM ROAD ☐
ARCHITECT/BUILDER Unknown	DATE OF CONSTRUCTION ca. 1845	EXTERIOR BUILDING FABRIC clapboard	
DATE NAT. REGISTER LISTED STATE REGISTER LISTED	ROOFING MATERIAL standing seam tin	STYLE (STAFF USE ONLY)	
PROPERTY USE OR FUNCTION Farmhouse to farmstead	TYPE OF FOUNDATION Limestone	PHOTOGRAPH (2" X 3" CONTACT)	
SURVEY ORGANIZATION AND DATE DOH 17 January 1995	QUADRANGLE NAME Martinsburg, WV		
	PART OF WHAT SURVEY WV Eastern Reg. Airport Ind.		

PRESENT OWNERS

Max E. and Elloise V. Foltz

OWNER ADDRESS

GENERAL CONDITION OF PROPERTY

Good

ADDITIONS

○ YES ◉ NO

IF YES, DESCRIBE

ALTERATIONS

◉ YES ○ NO

IF YES, DESCRIBE

Standing seam tin has replaced original, probably wood shingle, roofing material. Northern chimney has had several courses of brick removed.

NO. AND NATURE OF OUTBUILDINGS

3 - outhouse, shed, and barn.

DESCRIPTION OF PROPERTY (ORIGINAL AND PRESENT)

A two-story National style house. It has two brick chimney systems. There is a rear gable wing. The windows are 2/2 and the main central entrance has a paneled door. There is a simple porch which consists of a hipped roof attached to the house without post supports.

HISTORICAL/CULTURAL SIGNIFICANCE

In 1847, E. I. Lee was the tenant of the property which was located at the head of Buzzard Run. by 1894, J. M. Payne lived on this property. While no local, state or national event occurred on this property (criteria a) nor any distinct or noted personage is associated with this property (criteria b), this property is eligible for listing on the National Register of HistoricPlaces because of its retention of originial material and integrity both architecturally and historic (criteria c).

BIBLIOGRAPHIC REFERENCES

Aler, F. Vernon. History of Martinsburg and Berkeley County, West Virginia. 1888.
Berkeley Co. Hist. Soc. Architectural and Pictorial History of Berkeley County, WV. 1991.
Evans, Willis F. History of Berkeley County, West Virginia. 1928.
Kearfott, J. Baker. Map of Berkeley County, West Virginia. 1894.
Kearfott, John W. Map of Berkeley County, Virginia. 1847.
McAlester, Virginia and Lee. A Field Guide to American Houses. New York: Alfred A. Knopf. 1993.

FORM PREPARED BY

Jonathan Bream

DATE

28 February 1995

ADDRESS

Division of Highways
Capitol Complex
Building 5, Rm. A-830
Charleston, West Virginia 25305

WEST VIRGINIA HISTORIC PROPERTY INVENTORY FORM

93

STREET ADDRESS	COMMON/HISTORIC NAME	NO. IN SURVEY	NO. OF BAYS
Route 11	Walter's Farm	BY-0032-0093	FRONT: 3 SIDE: 1
TOWN OR COMMUNITY	**COUNTY**	**NEGATIVE NO.**	**NOT VISIBLE FROM ROAD**
Tablers Station	Berkeley	Roll 12; 23, 24 & 24A.	
ARCHITECT/BUILDER	**DATE OF CONSTRUCTION**	**EXTERIOR BUILDING FABRIC**	
Builder - Mr. Tabs	Ca. 1895	Aluminum siding	
DATE	**ROOFING MATERIAL**	**STYLE (STAFF USE ONLY)**	
NAT. REGISTER LISTED _____	Metal	I-House	
STATE REGISTER LISTED _____			
PROPERTY USE OR FUNCTION	**TYPE OF FOUNDATION**		
Residence	Stone		
	QUADRANGLE NAME Martinsburg	PHOTOGRAPH (2" X 3" CONTACT)	
SURVEY ORGANIZATION AND DATE	**PART OF WHAT SURVEY**		
Berkeley County HLC 126 E. Race Street Martinsburg, WV 25401 Winter 1997	Arden Area		

BY-229

SITE NO.

PRESENT OWNERS
The Walters'

OWNER ADDRESS
Route 11
Martinsburg, WV 25401

GENERAL CONDITION OF PROPERTY

Fair

ADDITIONS

YES	NO
	X

IF YES, DESCRIBE

ALTERATIONS

YES	NO
X	

IF YES, DESCRIBE
Aluminum siding added. Two-story, rear porch has been enclosed.

NO. AND NATURE OF OUTBUILDINGS
1 gable outbuilding - contributing. 1 outhouse - non-contributing. 1 gable garage - contributing. 1 shed roof outbuilding - contributing. 3 outbuildings - non-contributing.

DESCRIPTION OF PROPERTY (ORGINAL AND PRESENT)

Two-story, rear facing "L" house. Two enclosed, brick, end chimneys. Metal roof. Aluminum siding. Vertical, 2/2 and 4/4 windows. Rear, enclosed, two-story porch. Stone foundation. 3 X 1 bays. Ca. 1895.

HISTORICAL/CULTURAL SIGNIFICANCE
Criterion A and C. Fits into the general period of construction and architectural styles of the area.

BIBLIOGRAPHICAL REFERENCES

See report.

FORM PREPARED BY
Michael Gioulis
Historic Preservation Consultant

ADDRESS
612 Main Street
Sutton, WV 26601
(304) 765-5716

DATE
Winter 1997

WEST VIRGINIA HISTORIC PROPERTY FORM
CONTINUATION SHEET

NAME Walter's Farm (#93)

SITE # BY-

West Virginia Historic Properties Inventory Form

STREET ADDRESS	COMMON/HISTORIC NAME	NO. IN SURVEY	NO. OF BAYS
Off US 11 south of Martinsburg	Foltz House		3 FRONT 2 SIDE
TOWN OR COMMUNITY	**COUNTY**	**NEGATIVE NO.**	**NOT VISIBLE FROM ROAD** ☐
Near Tabler's Station	Berkeley		
ARCHITECT/BUILDER	**DATE OF CONSTRUCTION**	**EXTERIOR BUILDING FABRIC**	
Unknown	ca. 1845	clapboard	
DATE	**ROOFING MATERIAL**	**STYLE (STAFF USE ONLY)**	
NAT. REGISTER LISTED STATE REGISTER LISTED	standing seam tin		
PROPERTY USE OR FUNCTION	**TYPE OF FOUNDATION**		
Farmhouse to farmstead	Limestone		
	QUADRANGLE NAME		
	Martinsburg, WV		
SURVEY ORGANIZATION AND DATE	**PART OF WHAT SURVEY**	**PHOTOGRAPH (2" X 3" CONTACT)**	
DOH 17 January 1995	WV Eastern Reg. Airport Ind. Access X302-11/30-0.00		

PRESENT OWNERS

Max E. and Elloise V. Foltz

OWNER ADDRESS

GENERAL CONDITION OF PROPERTY

Good

ADDITIONS

○ YES ◉ NO

IF YES, DESCRIBE

ALTERATIONS

◉ YES ○ NO

IF YES, DESCRIBE

Standing seam tin has replaced original, probably wood shingle, roofing material. Northern chimney has had several courses of brick removed.

NO. AND NATURE OF OUTBUILDINGS

3 - outhouse, shed, and barn.

DESCRIPTION OF PROPERTY (ORIGINAL AND PRESENT)

A two-story National style house. It has two brick chimney systems. There is a rear gable wing. The windows are 2/2 and the main central entrance has a paneled door. There is a simple porch which consists of a hipped roof attached to the house without post supports.

HISTORICAL/CULTURAL SIGNIFICANCE

In 1847, E. I. Lee was the tenant of the property which was located at the head of Buzzard Run. by 1894, J. M. Payne lived on this property. While no local, state or national event occurred on this property (criteria a) nor any distinct or noted personage is associated with this property (criteria b), this property is eligible for listing on the National Register of HistoricPlaces because of its retention of originial material and integrity both architecturally and historic (criteria c).

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Evans, Willis F. History of Berkeley County, West Virginia. 1928.
Kearfott, J. Baker. Map of Berkeley County, West Virginia. 1894.
Kearfott, John W. Map of Berkeley County, Virginia. 1847.
McAlester, Virginia and Lee. A Field Guide to American Houses. New York: Alfred A. Knopf. 1993.

FORM PREPARED BY

Jonathan Bream

DATE

28 February 1995

ADDRESS

Division of Highways
Capitol Complex
Building 5, Rm. A-830
Charleston, West Virginia 25305

EXHIBIT 13
RBY-016

RBY-016

WEST VIRGINIA
DIVISION OF
CULTURE & HISTORY

The Cultural Center
1900 Kanawha Blvd., E.
Charleston, WV
25305-0300

Phone 304.558.0220
Fax 304.558.2779
TDD 304.558.3562
www.wvculture.org
EEO/AA Employer

Date: December 10, 2010

Re: Historic Resource Survey Berkeley County 2010

From: Bethany Canfield

Most resources described as "Eligible" on the HPIs and the Survey Report has integrity but they are not individually eligible for listing in the National Register of Historic Places. There is no potential historic district in the survey area.

Only four properties are individually eligible properties for the National Register. These are BY-0742 (3191 Eagle School Road), BY-0744 (Eagle Chapel), BY-0757 (Wright Motors), and BY-0810 (Second Baptist Church).

EXHIBIT 14
CIVIL WAR BATTLEFIELD MAP

Martinsburg Taxiway E Civil War Map

October 16, 2023

1:36,112

0 0.28 0.55 1.1 mi

Civil War Battlefields

Civil War Sites

Notes:

WVGISTC, WVSHPO

West Virginia Department of
ARTS, CULTURE
AND HISTORY

The Culture Center
1900 Kanawha Blvd., E.
Charleston, WV 25305-0300

Randall Reid-Smith, Curator
Phone 304.558.0220 • www.wvculture.org
Fax 304.558.2779 • TDD 304.558.3562
EEO/AA Employer

November 9, 2023

Ms. Susan Stafford
Environmental Protection Specialist
FAA, Beckley Airport Field Office
176 Airport Circle, Room 101
Beaver, WV 25813
Via email: Susan.Stafford@faa.gov

RE: Eastern West Virginia Regional Airport (MRB) Runway Taxiway E Extension
FR#: 24-0046-BY

Dear Ms. Stafford:

We have reviewed the information submitted in support of the above-referenced project. As required by Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments.

According to the submitted information, the Federal Aviation Administration proposes to extend Taxiway E at the Eastern West Virginia Regional Airport (MRB), located at 170 Aviation Way, Martinsburg, Berkeley County, West Virginia. Work for this project includes demolition of the existing taxiway including pavement and electrical, grading, and installation of a full length taxiway in the same location as the existing. New pavement, electrical, and lighting will be installed as required. The project will also include grading, topsoiling, and seeding of the area for safety and drainage. The project area is approximately 775 feet wide and 8,500 feet long and is located on the south side of runway 8-26.

Architectural Resources:
We have reviewed the submitted information and determined that the proposed project will affect no architectural properties eligible for or included in the National Register of Historic Places. There are no structures within the project's direct Area of Potential Effects (APE). Work is confined to taxiway replacement and will add no additional visual effects that can be seen outside of the airport, no historic structures will have line of sight on the project area. No further consultation is necessary regarding architectural resources; however, we ask that you contact our office if your project should change.

Archaeological Resources:
Although our records indicate that there are five previously recorded archaeological sites within the airport property, no archaeological sites are located within the proposed APE. Available information suggests that the proposed ground disturbing activities will be confined to previously disturbed areas. Therefore, it is unlikely that significant archaeological resources will be encountered during the project's multi-phase activities. In our opinion, the proposed Taxiway E extension project will have no effect on archaeological historic properties. No further consultation is necessary regarding archaeological resources. If, however, intact cultural materials are encountered during construction, cease all work within the area of discovery and contact this office immediately.

We appreciate the opportunity to be of service. *If you have questions regarding our comments or the Section 106 process, please contact Stephen L. Gifford, Structural Historian, or Carolyn M. Kender, Archaeologist, at (304) 558-0240.*

Sincerely,

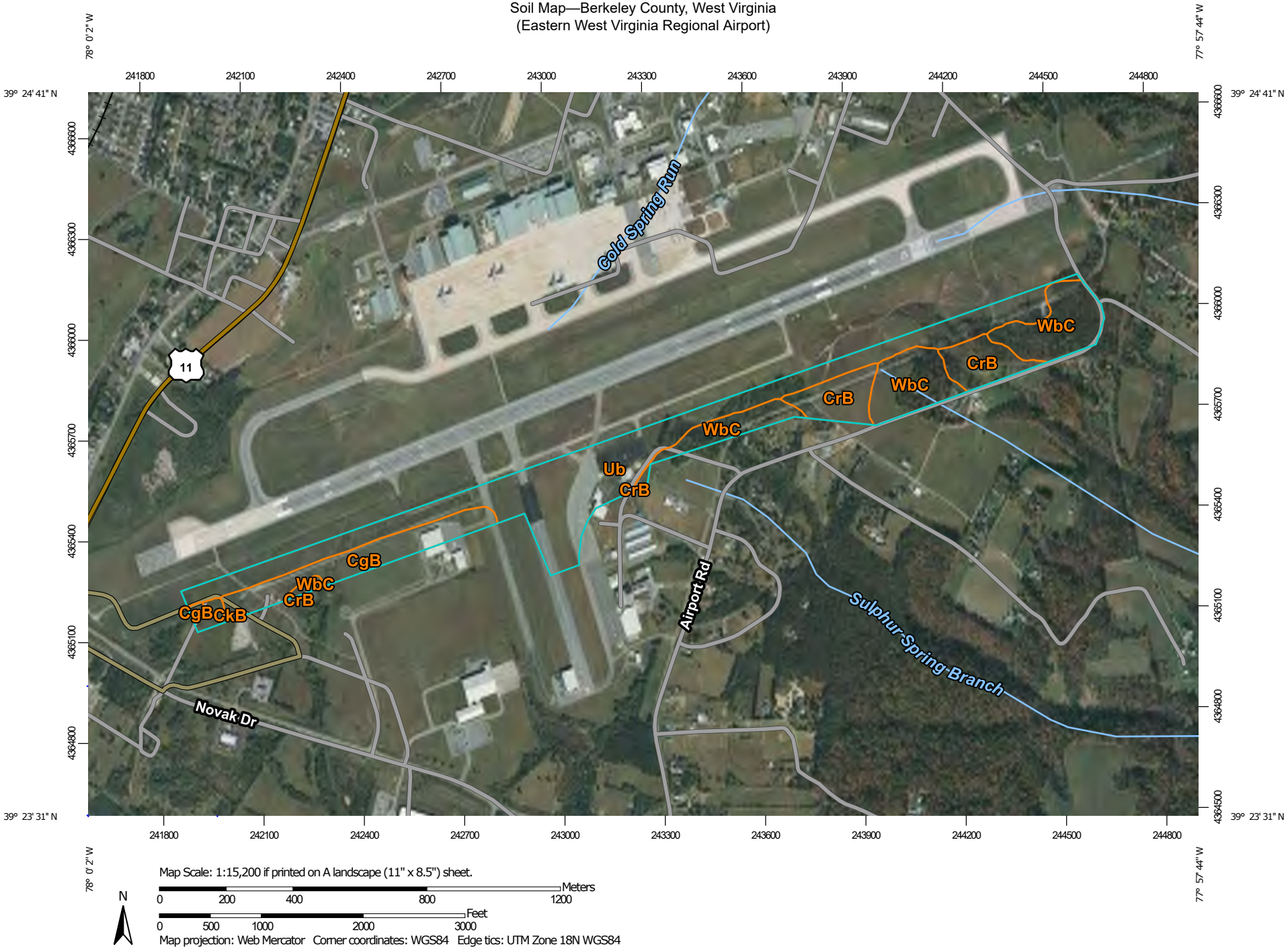
Susan M. Pierce
Deputy State Historic Preservation Officer

SMP/SLG/CMK

ATTACHMENT 7:

NRCS SOILS MAPPING

Soil Map—Berkeley County, West Virginia
(Eastern West Virginia Regional Airport)



Map Scale: 1:15,200 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 200 400 800 1200

Feet: 0 500 1000 2000 3000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

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 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
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: Berkeley County, West Virginia
Survey Area Data: Version 18, Sep 4, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 23, 2020—Nov 3, 2020

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.

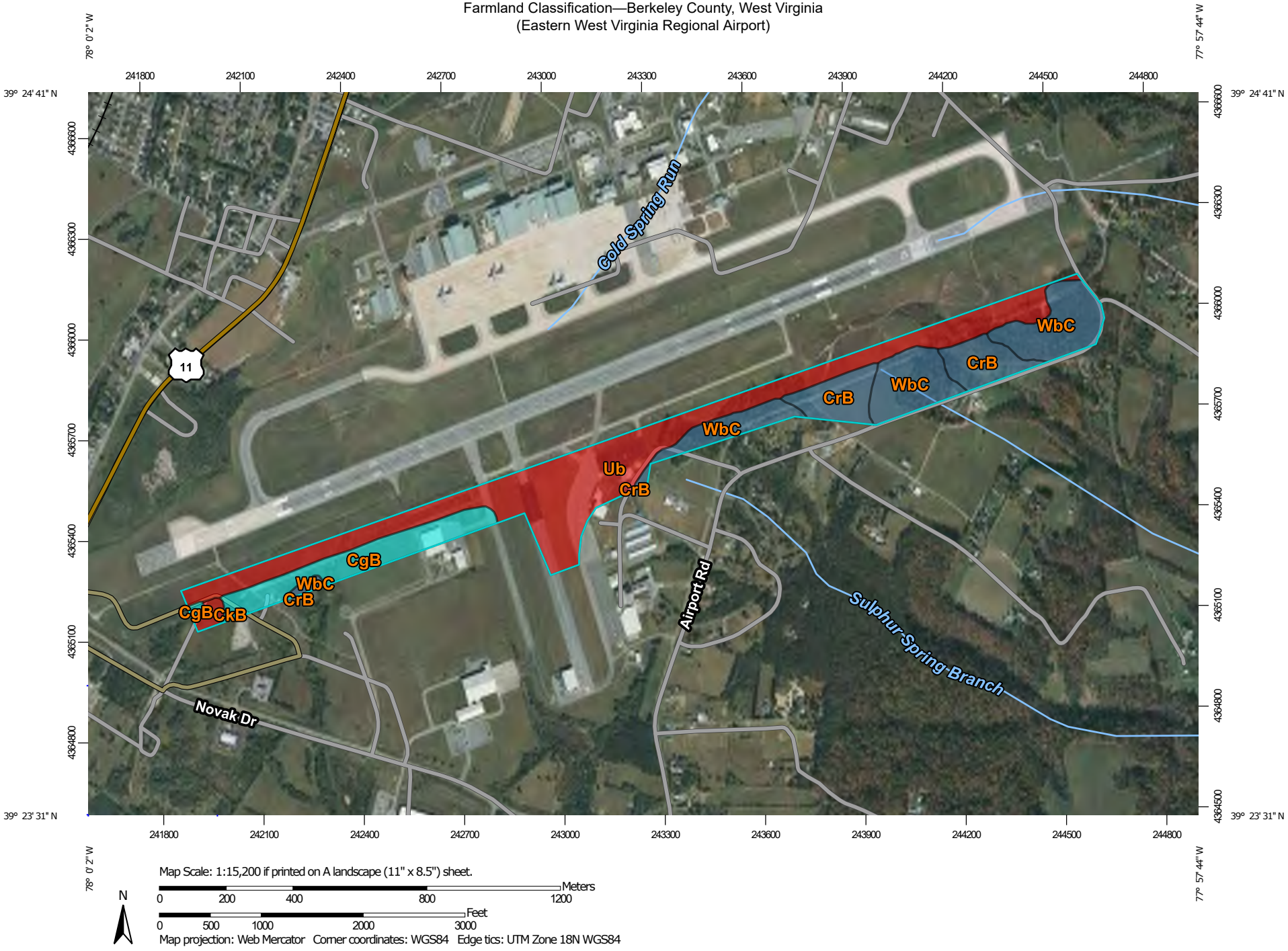
Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
CgB	Carbo-Opequon complex, 3 to 8 percent slopes	15.1	12.8%
CkB	Clearbrook silt loam, 0 to 8 percent slopes	1.5	1.2%
CrB	Clearbrook-Berks channery silt loams, 3 to 8 percent slopes	14.7	12.5%
Ub	Urban land	57.3	48.6%
WbC	Weikert-Berks channery silt loams, 8 to 15 percent slopes	29.2	24.8%
Totals for Area of Interest		**117.8**	**100.0%**

ATTACHMENT 8:

FARMLAND MAPPING

Farmland Classification—Berkeley County, West Virginia
(Eastern West Virginia Regional Airport)



Map Scale: 1:15,200 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 200 400 800 1200

Feet: 0 500 1000 2000 3000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

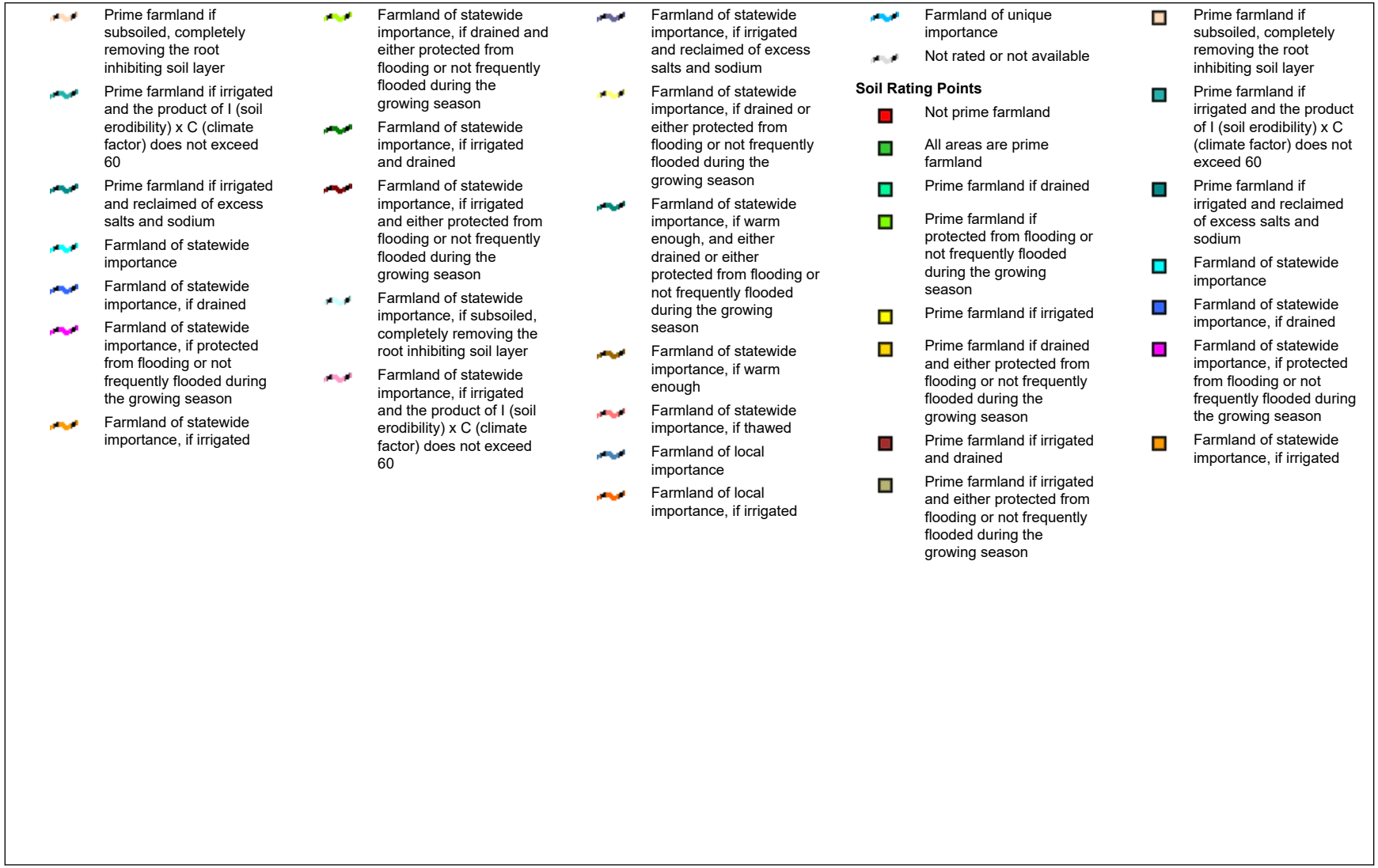
Soils

Soil Rating Polygons

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of statewide importance, if drained
- Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated
- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough
- Farmland of statewide importance, if thawed
- Farmland of local importance
- Farmland of local importance, if irrigated
- Farmland of unique importance
- Not rated or not available

Soil Rating Lines

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season


Prime farmland if subsoiled, completely removing the root inhibiting soil layer
Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
Prime farmland if irrigated and reclaimed of excess salts and sodium
Farmland of statewide importance
Farmland of statewide importance, if drained
Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if irrigated
Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if irrigated and drained
Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if warm enough
Farmland of statewide importance, if thawed
Farmland of local importance
Farmland of local importance, if irrigated
Farmland of unique importance
Not rated or not available
Soil Rating Points
Not prime farmland
All areas are prime farmland
Prime farmland if drained
Prime farmland if protected from flooding or not frequently flooded during the growing season
Prime farmland if irrigated
Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
Prime farmland if irrigated and drained
Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
Prime farmland if subsoiled, completely removing the root inhibiting soil layer
Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
Prime farmland if irrigated and reclaimed of excess salts and sodium
Farmland of statewide importance
Farmland of statewide importance, if drained
Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if irrigated

- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough
- Farmland of statewide importance, if thawed
- Farmland of local importance
- Farmland of local importance, if irrigated
- Farmland of unique importance
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
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: Berkeley County, West Virginia
Survey Area Data: Version 18, Sep 4, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 23, 2020—Nov 3, 2020

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.

Farmland Classification

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
CgB	Carbo-Opequon complex, 3 to 8 percent slopes	Farmland of statewide importance	15.1	12.8%
CkB	Clearbrook silt loam, 0 to 8 percent slopes	Not prime farmland	1.5	1.2%
CrB	Clearbrook-Berks channery silt loams, 3 to 8 percent slopes	Farmland of local importance	14.7	12.5%
Ub	Urban land	Not prime farmland	57.3	48.6%
WbC	Weikert-Berks channery silt loams, 8 to 15 percent slopes	Farmland of local importance	29.2	24.8%
Totals for Area of Interest			**117.8**	**100.0%**

Description

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Rating Options

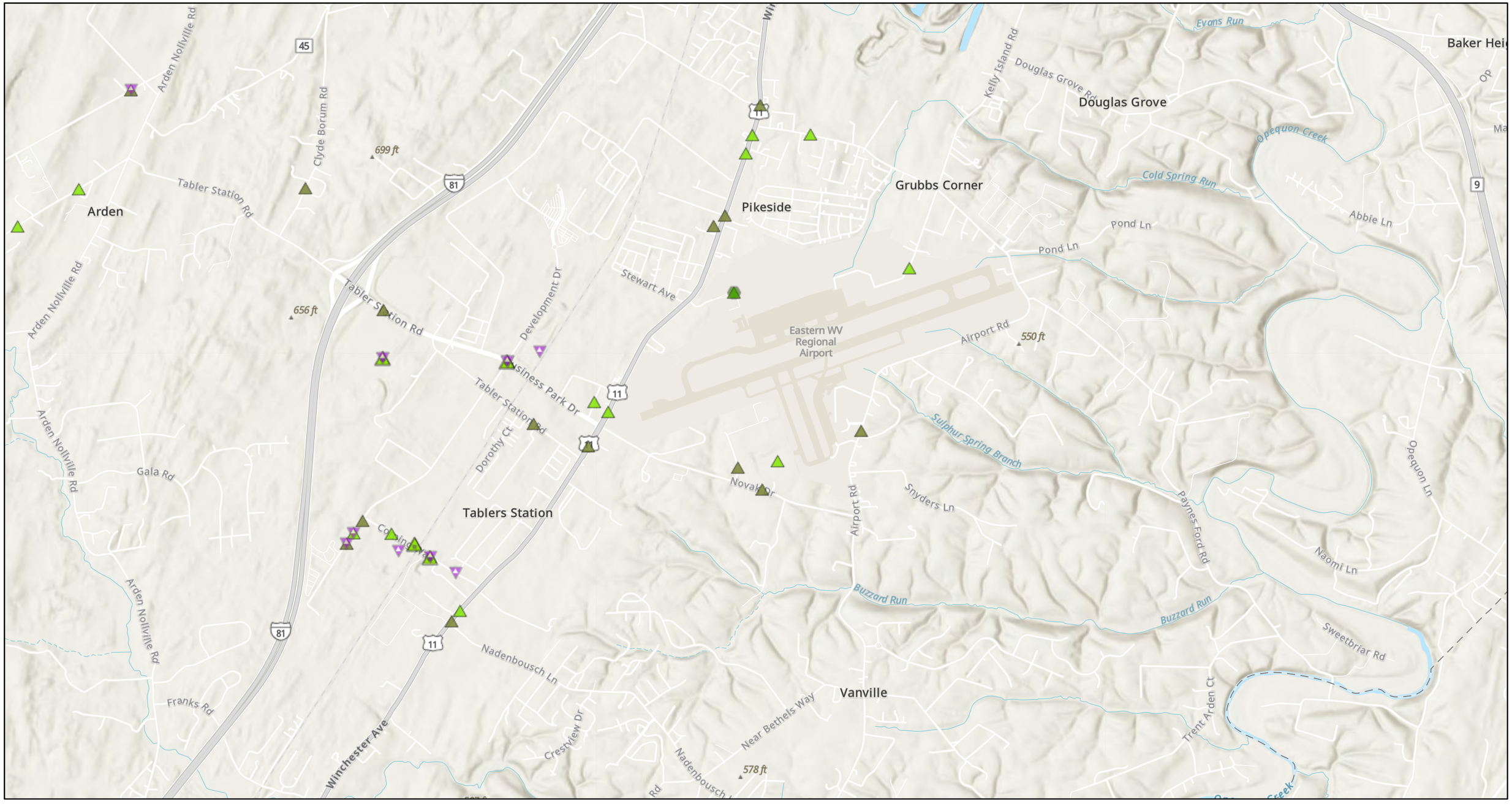
Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower

ATTACHMENT 9:

HAZARDOUS WASTE MAPPING

EnviroAtlas Map Export



3/29/2024, 2:59:11 PM

1:36,112

0 0.35 0.7 1.4 mi

0 0.5 1 2 km

- Toxic Release Inventory (TRI)
- Superfund Sites (SEMS)
- Hazardous Waste Sites (RCRA) - Transporters
- Hazardous Waste Sites (RCRA) - Large Quantity Generators (LQG)
- Hazardous Waste Sites (RCRA) - Inactive
- Hazardous Waste Sites (RCRA) - Active
- Hazardous Waste Sites (RCRA)

EnviroAtlas User
U.S. Environmental Protection Agency

ATTACHMENT 10:

LAND USE MAPPING

BERKELEY COUNTY LAND USE

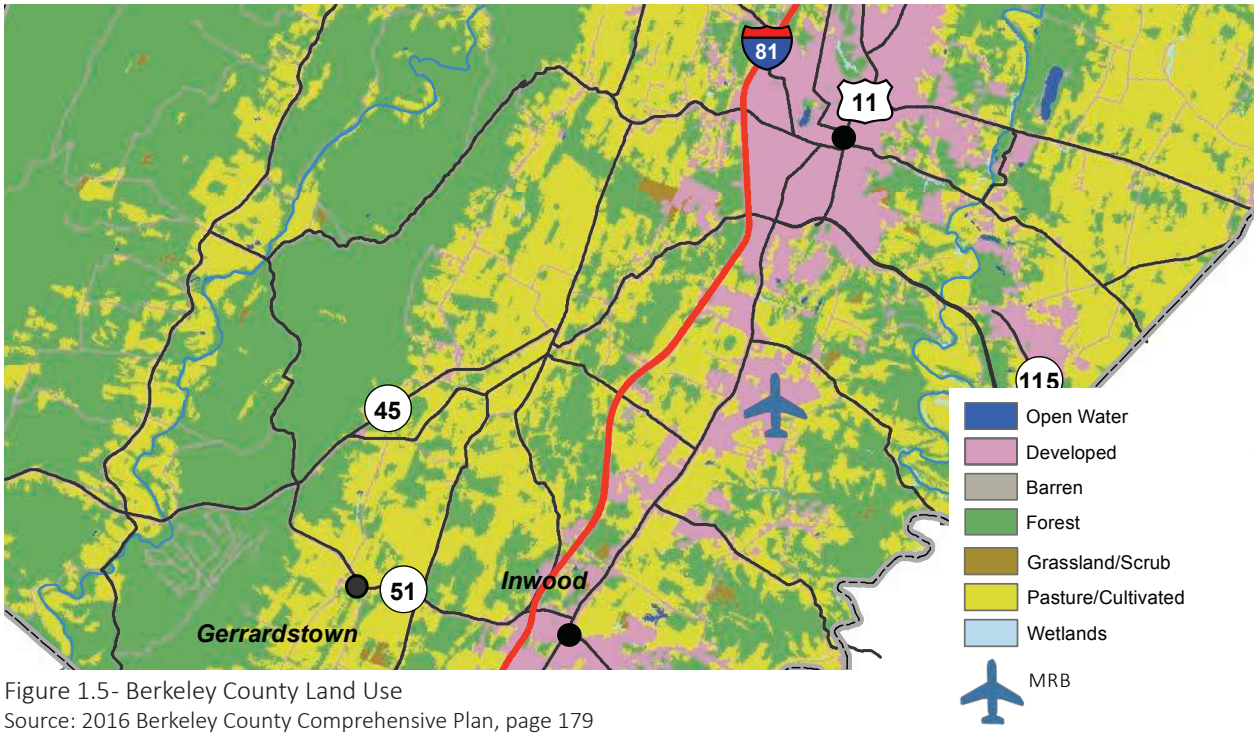


Figure 1.5- Berkeley County Land Use
Source: 2016 Berkeley County Comprehensive Plan, page 179

GROWTH MANAGEMENT AREA

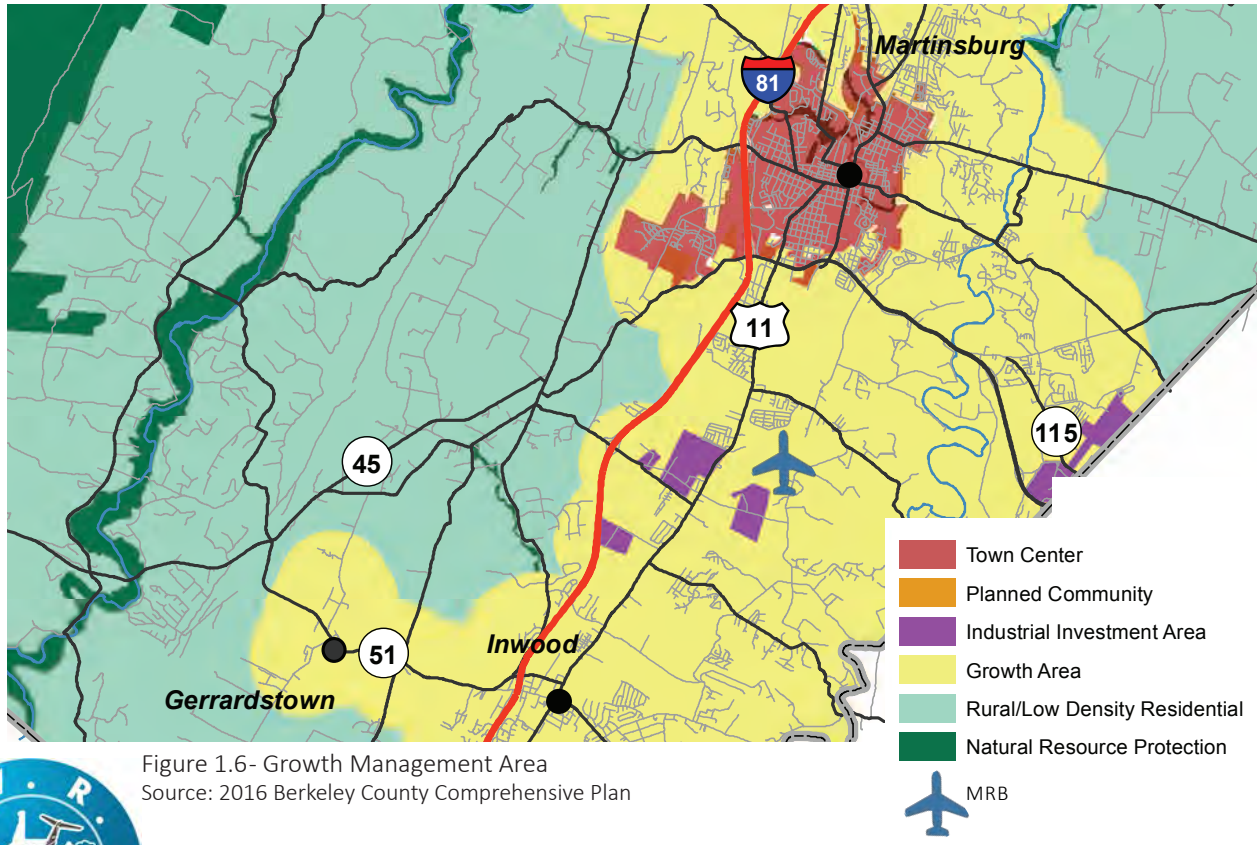


Figure 1.6- Growth Management Area
Source: 2016 Berkeley County Comprehensive Plan

ATTACHMENT 11:

ENIVORNMENTAL JUSTICE COMMUNITIES

www.flymrb.com

EJScreen Community Report

This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.

Berkeley County, WV

1 mile Ring Centered at 39.402344,-77.983017
Population: 1,732
Area in square miles: 3.14

A3 Landscape

COMMUNITY INFORMATION

Low income: 16 percent	People of color: 17 percent	Less than high school education: 13 percent	Limited English households: 3 percent
Unemployment: 1 percent	Persons with disabilities: 19 percent	Male: 56 percent	Female: 44 percent
77 years Average life expectancy	$30,185 Per capita income	Number of households: 689	Owner occupied: 77 percent

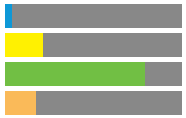
BREAKDOWN BY RACE

White: 83%	Black: 3%	American Indian: 0%	Asian: 0%
Hawaiian/Pacific Islander: 0%	Other race: 0%	Two or more races: 6%	Hispanic: 7%

BREAKDOWN BY AGE

LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	97%
Spanish	3%
Total Non-English	3%



From Ages 1 to 4	4%
From Ages 1 to 18	21%
From Ages 18 and up	79%
From Ages 65 and up	17%

LIMITED ENGLISH SPEAKING BREAKDOWN

Speak Spanish	100%
Speak Other Indo-European Languages	0%
Speak Asian-Pacific Island Languages	0%
Speak Other Languages	0%

Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race.
Source: U.S. Census Bureau, American Community Survey (ACS) 2017 -2021. Life expectancy data comes from the Centers for Disease Control.

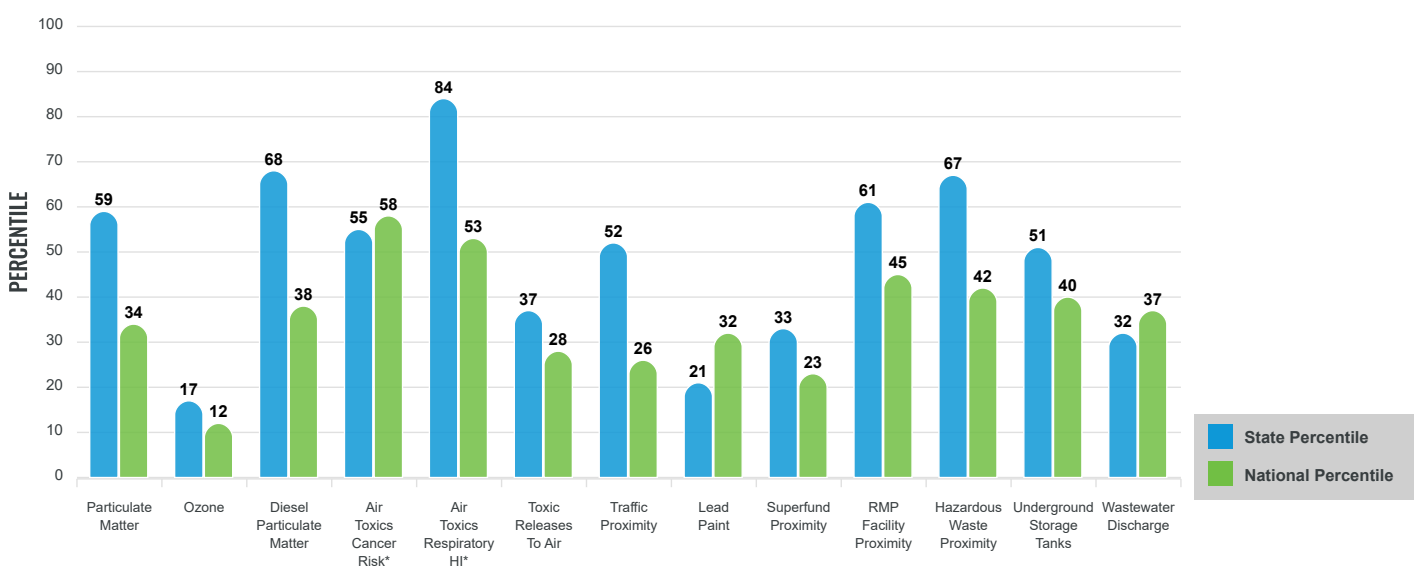
Environmental Justice & Supplemental Indexes

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the EJScreen website.

EJ INDEXES

The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

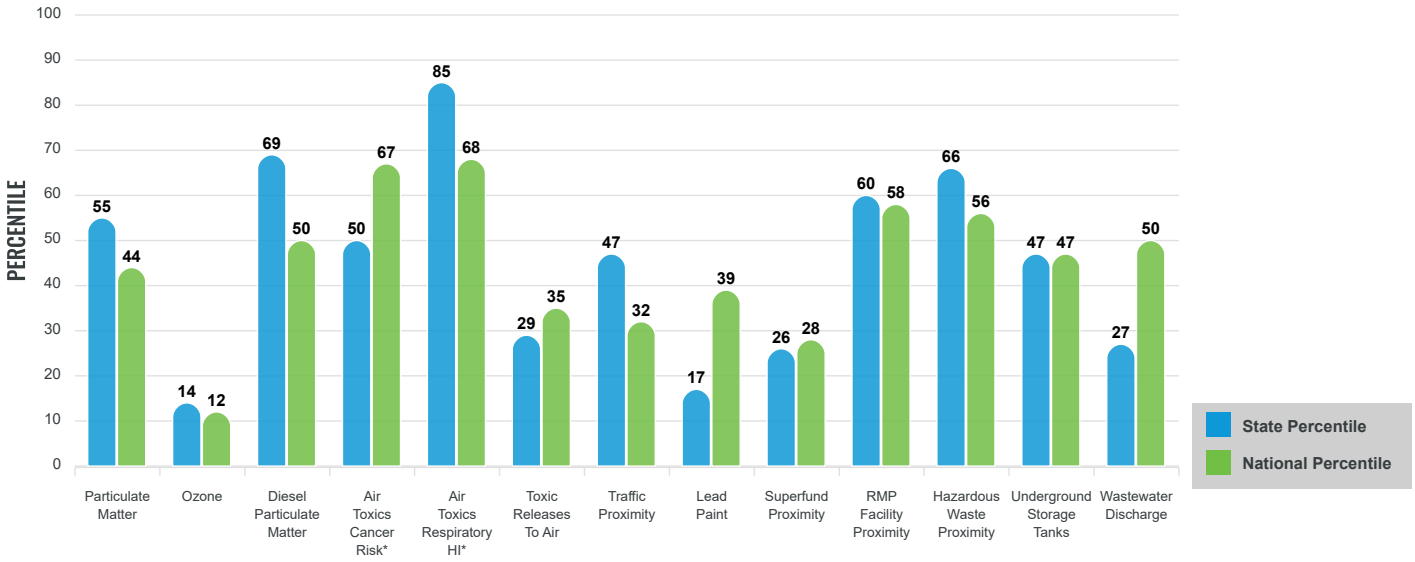
EJ INDEXES FOR THE SELECTED LOCATION



SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.

SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

Report for 1 mile Ring Centered at 39.402344,-77.983017

EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
POLLUTION AND SOURCES					
Particulate Matter (µg/m^3)	7.98	7.47	68	8.08	44
Ozone (ppb)	55.8	57.1	17	61.6	12
Diesel Particulate Matter (µg/m^3)	0.209	0.12	88	0.261	48
Air Toxics Cancer Risk* (lifetime risk per million)	30	28	38	25	52
Air Toxics Respiratory HI*	0.37	0.3	23	0.31	31
Toxic Releases to Air	250	5,200	40	4,600	35
Traffic Proximity (daily traffic count/distance to road)	32	56	60	210	31
Lead Paint (% Pre-1960 Housing)	0.15	0.36	21	0.3	41
Superfund Proximity (site count/km distance)	0.029	0.092	34	0.13	27
RMP Facility Proximity (facility count/km distance)	0.26	0.35	74	0.43	64
Hazardous Waste Proximity (facility count/km distance)	0.93	0.6	83	1.9	60
Underground Storage Tanks (count/km^2)	1	2	63	3.9	48
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.0036	3.3	41	22	59
SOCIOECONOMIC INDICATORS					
Demographic Index	16%	23%	29	35%	23
Supplemental Demographic Index	11%	16%	19	14%	38
People of Color	17%	9%	84	39%	33
Low Income	16%	38%	11	31%	29
Unemployment Rate	1%	7%	31	6%	28
Limited English Speaking Households	3%	0%	95	5%	66
Less Than High School Education	13%	12%	59	12%	67
Under Age 5	4%	5%	48	6%	41
Over Age 64	17%	21%	38	17%	57
Low Life Expectancy	21%	22%	37	20%	64

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: https://www.epa.gov/haps/air-toxics-data-update.

Sites reporting to EPA within defined area:

Superfund 0
Hazardous Waste, Treatment, Storage, and Disposal Facilities 0

Other community features within defined area:

Schools 0
Hospitals 0

Water Dischargers	43
Air Pollution	1
Brownfields	0
Toxic Release Inventory	0

Places of Worship	1

Other environmental data:

Air Non-attainment	Yes
Impaired Waters	Yes

Selected location contains American Indian Reservation Lands*	No
Selected location contains a "Justice40 (CEJST)" disadvantaged community	No
Selected location contains an EPA IRA disadvantaged community	No

Report for 1 mile Ring Centered at 39.402344,-77.983017

EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	21%	22%	37	20%	64
Heart Disease	6.3	8.7	8	6.1	54
Asthma	11	11.7	22	10	79
Cancer	5.7	7	7	6.1	39
Persons with Disabilities	15.2%	19.9%	27	13.4%	66

CLIMATE INDICATORS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	10%	28%	25	12%	67
Wildfire Risk	0%	2%	0	14%	0

CRITICAL SERVICE GAPS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	13%	20%	35	14%	57
Lack of Health Insurance	4%	7%	25	9%	31
Housing Burden	No	N/A	N/A	N/A	N/A
Transportation Access	Yes	N/A	N/A	N/A	N/A
Food Desert	No	N/A	N/A	N/A	N/A

Report for 1 mile Ring Centered at 39.402344,-77.983017

www.epa.gov/ejscreen

Exhibit 1: US EPA EJ SCREEN

Census Tract: 54003971901

EJScreen Report (Version 2.11)

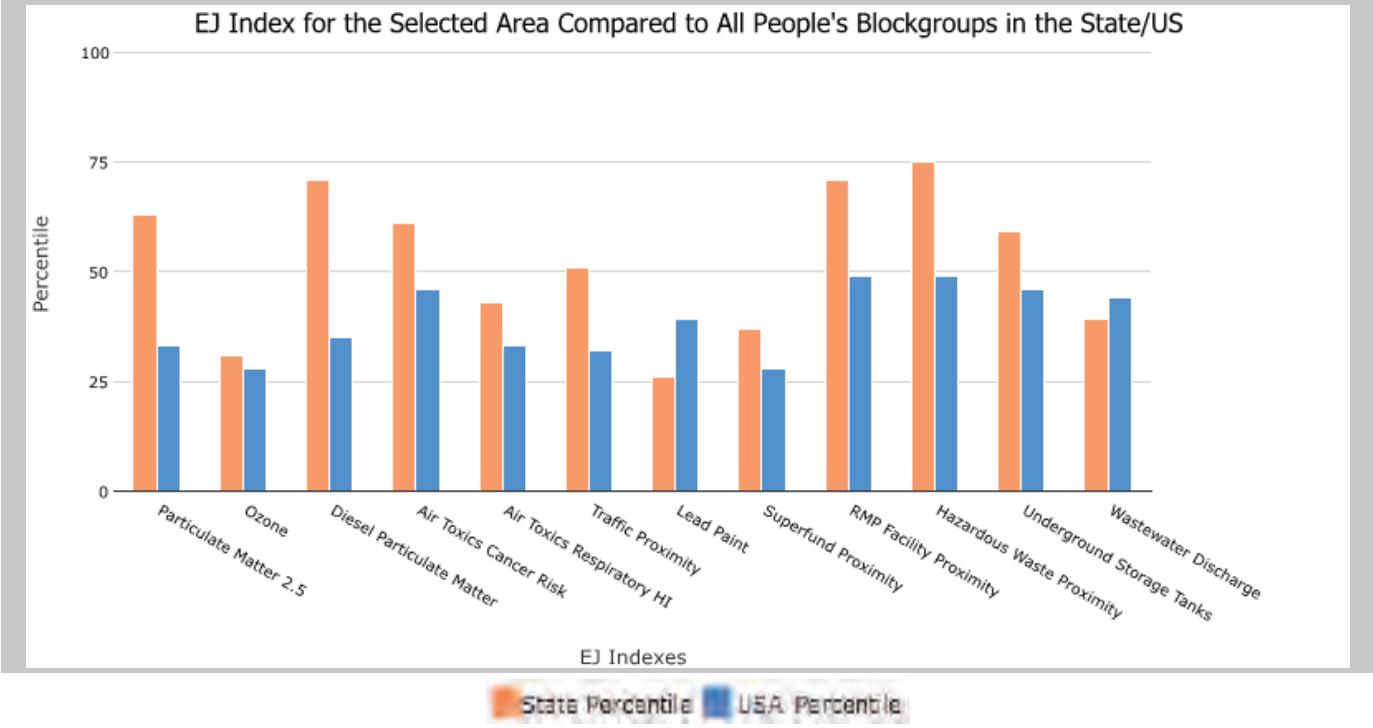
Tract: 54003971901, WEST VIRGINIA, EPA Region 3

Approximate Population: 6,944

Input Area (sq. miles): 9.61

Selected Variables	State Percentile	USA Percentile
Environmental Justice Indexes		
Particulate Matter 2.5 EJ index	63	33
Ozone EJ index	31	28
Diesel Particulate Matter EJ index*	71	35
Air Toxics Cancer Risk EJ index*	61	46
Air Toxics Respiratory HI EJ index*	43	33
Traffic Proximity EJ index	51	32
Lead Paint EJ index	26	39
Superfund Proximity EJ index	37	28
RMP Facility Proximity EJ index	71	49
Hazardous Waste Proximity EJ index	75	49
Underground Storage Tanks EJ index	59	46
Wastewater Discharge EJ index	39	44

EJ Indexes - The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.



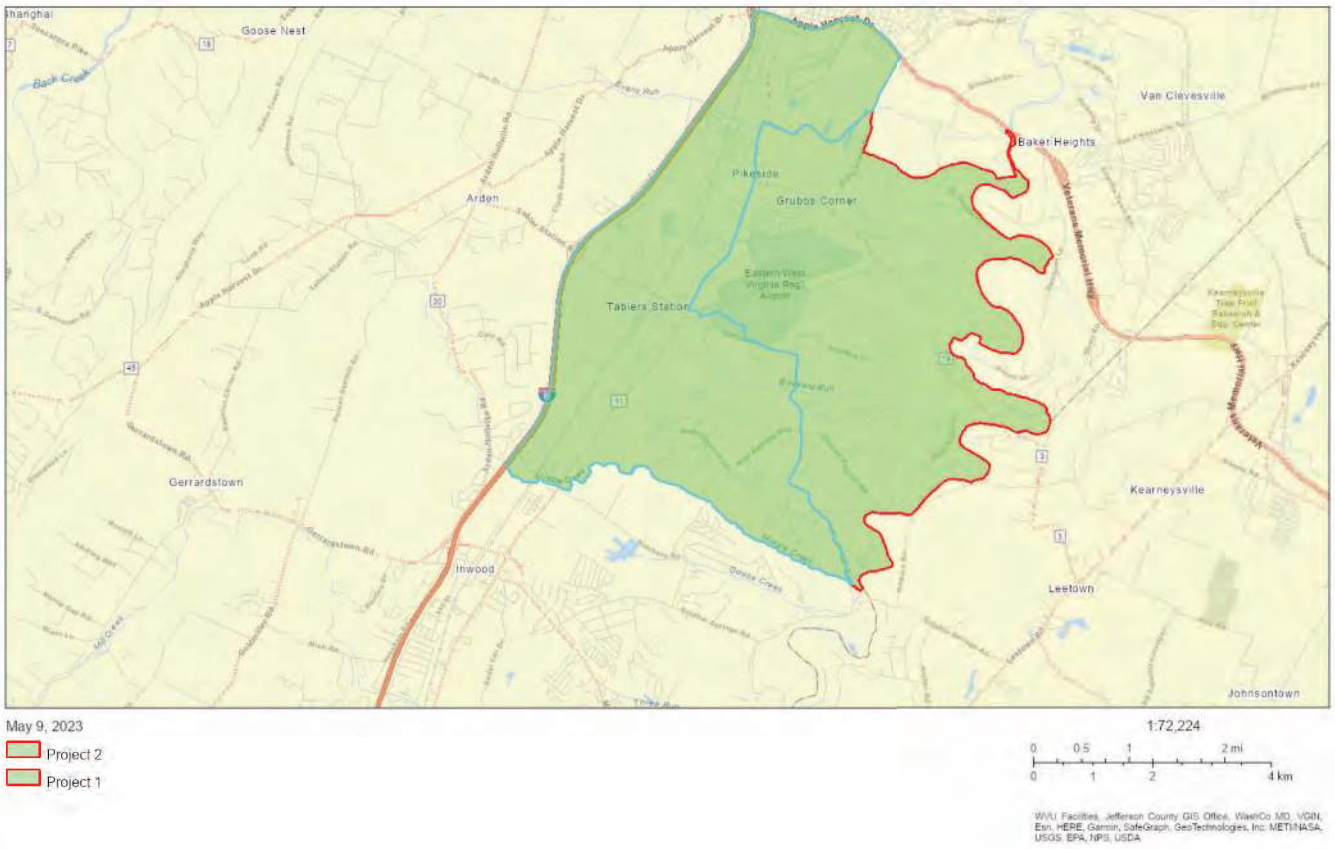
*Diesel particular matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: https://www.epa.gov/haps/air-toxics-data-update.

EJScreen Report (Version 2.11)

Tract: 54003971901, WEST VIRGINIA, EPA Region 3

Approximate Population: 6,944

Input Area (sq. miles): 9.61



Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	2

EJScreen Report (Version 2.11)

Tract: 54003971901, WEST VIRGINIA, EPA Region 3

Approximate Population: 6,944

Input Area (sq. miles): 9.61

Selected Variables	Value	State Avg.	%ile in State	USA Avg.	%ile in USA
Pollution and Sources					
Particulate Matter 2.5 (µg/m^3)	7.95	7.62	61	8.67	32
Ozone (ppb)	39	39.9	27	42.5	26
Diesel Particulate Matter* (µg/m^3)	0.165	0.129	73	0.294	<50th
Air Toxics Cancer Risk* (lifetime risk per million)	30	29	90	28	80-90th
Air Toxics Respiratory HI*	0.3	0.34	64	0.36	<50th
Traffic Proximity (daily traffic count/distance to road)	180	250	65	760	44
Lead Paint (% Pre-1960 Housing)	0.14	0.34	19	0.27	40
Superfund Proximity (site count/km distance)	0.027	0.092	30	0.13	25
RMP Facility Proximity (facility count/km distance)	0.58	0.5	78	0.77	62
Hazardous Waste Proximity (facility count/km distance)	1.2	0.83	82	2.2	60
Underground Storage Tanks (count/km^2)	1	2	63	3.9	48
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.0021	2.5	39	12	55
Socioeconomic Indicators					
Demographic Index	21%	24%	46	35%	34
Supplemental Demographic Index	13%	16%	29	15%	49
People of Color	15%	8%	82	40%	33
Low Income	25%	37%	25	30%	46
Unemployment Rate	3%	7%	41	5%	47
Limited English Speaking Households	0%	0%	92	5%	0
Less Than High School Education	12%	12%	53	12%	62
Under Age 5	5%	5%	54	6%	49
Over Age 64	17%	20%	35	16%	55
Low Life Expectancy	20%	22%	30	20%	59

EJScreen Report (Version 2.11)

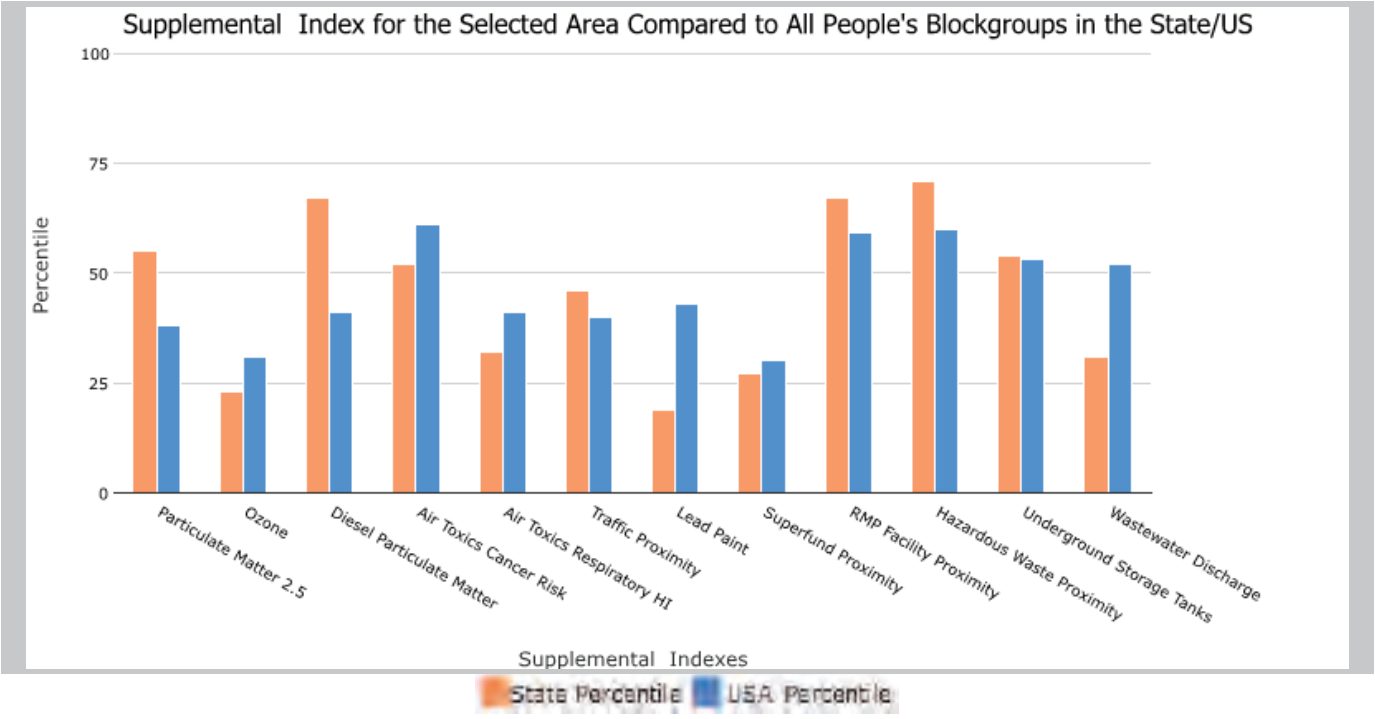
Tract: 54003971901, WEST VIRGINIA, EPA Region 3

Approximate Population: 6,944

Input Area (sq. miles): 9.61

Selected Variables	State Percentile	USA Percentile
Supplemental Indexes		
Particulate Matter 2.5 Supplemental Index	55	38
Ozone Supplemental Index	23	31
Diesel Particulate Matter Supplemental Index*	67	41
Air Toxics Cancer Risk Supplemental Index*	52	61
Air Toxics Respiratory HI Supplemental Index*	32	41
Traffic Proximity Supplemental Index	46	40
Lead Paint Supplemental Index	19	43
Superfund Proximity Supplemental Index	27	30
RMP Facility Proximity Supplemental Index	67	59
Hazardous Waste Proximity Supplemental Index	71	60
Underground Storage Tanks Supplemental Index	54	53
Wastewater Discharge Supplemental Index	31	52

Supplemental Indexes - The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on low-income, limited English speaking, less than high school education, unemployed, and low life expectancy populations with a single environmental indicator.



This report shows the values for environmental and demographic indicators, EJScreen indexes, and supplemental indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJScreen documentation for discussion of these issues before using reports. For additional information, see: www.epa.gov/environmentaljustice.

EJSCREEN ACS Summary Report

Location: Tract: 54003971901
Ring (buffer): 0-mile radius
Description:

Summary of ACS Estimates	2016 - 2020
Population	6,944
Population Density (per sq. mile)	723
People of Color Population	1,072
% People of Color Population	15%
Households	2,465
Housing Units	2,650
Housing Units Built Before 1950	157
Per Capita Income	26,438
Land Area (sq. miles) (Source: SF1)	9.61
% Land Area	100%
Water Area (sq. miles) (Source: SF1)	0.00
% Water Area	0%

	2016 - 2020 ACS Estimates	Percent	MOE (±)
Population by Race			
Total	6,944	100%	1,046
Population Reporting One Race	6,842	99%	1,622
White	6,093	88%	1,071
Black	663	10%	431
American Indian	0	0%	17
Asian	51	1%	44
Pacific Islander	0	0%	17
Some Other Race	35	1%	42
Population Reporting Two or More Races	102	1%	105
Total Hispanic Population	240	3%	218
Total Non-Hispanic Population	6,704		
White Alone	5,872	85%	1,029
Black Alone	663	10%	431
American Indian Alone	0	0%	17
Non-Hispanic Asian Alone	51	1%	44
Pacific Islander Alone	0	0%	17
Other Race Alone	16	0%	26
Two or More Races Alone	102	1%	105
Population by Sex			
Male	3,254	47%	569
Female	3,690	53%	688
Population by Age			
Age 0-4	341	5%	138
Age 0-17	1,472	21%	375
Age 18+	5,472	79%	709
Age 65+	1,150	17%	309

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race.
N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2016 - 2020 .

EJSCREEN ACS Summary Report

Location: Tract: 54003971901
Ring (buffer): 0-mile radius
Description:

	2016 - 2020 ACS Estimates	Percent	MOE (±)
Population 25+ by Educational Attainment			
Total	4,871	100%	774
Less than 9th Grade	195	4%	124
9th - 12th Grade, No Diploma	383	8%	195
High School Graduate	2,095	43%	459
Some College, No Degree	922	19%	305
Associate Degree	327	7%	143
Bachelor's Degree or more	949	19%	289
Population Age 5+ Years by Ability to Speak English			
Total	6,603	100%	1,003
Speak only English	6,343	96%	855
Non-English at Home[1+2+3+4]	260	4%	173
[1]Speak English "very well"	149	2%	97
[2]Speak English "well"	34	1%	41
[3]Speak English "not well"	64	1%	80
[4]Speak English "not at all"	13	0%	29
[3+4]Speak English "less than well"	77	1%	83
[2+3+4]Speak English "less than very well"	111	2%	91
Linguistically Isolated Households*			
Total	12	100%	27
Speak Spanish	12	100%	21
Speak Other Indo-European Languages	0	0%	17
Speak Asian-Pacific Island Languages	0	0%	17
Speak Other Languages	0	0%	17
Households by Household Income			
Household Income Base	2,465	100%	361
< $15,000	145	6%	107
$15,000 - $25,000	130	5%	77
$25,000 - $50,000	463	19%	226
$50,000 - $75,000	582	24%	206
$75,000 +	1,145	46%	302
Occupied Housing Units by Tenure			
Total	2,465	100%	361
Owner Occupied	2,030	82%	342
Renter Occupied	435	18%	145
Employed Population Age 16+ Years			
Total	5,569	100%	855
In Labor Force	3,679	66%	583
Civilian Unemployed in Labor Force	126	2%	93
Not In Labor Force	1,890	34%	510

Data Note: Datail may not sum to totals due to rounding. Hispanic population can be of anyrace.
N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS)
*Households in which no one 14 and over speaks English "very well" or speaks English only.

EJSCREEN ACS Summary Report

Location: Tract: 54003971901
Ring (buffer): 0-mile radius
Description:

	2016 - 2020 ACS Estimates	Percent	MOE (±)
Population by Language Spoken at Home*			
Total (persons age 5 and above)	6,603	100%	1,003
English	6,343	96%	1,005
Spanish	87	1%	117
French, Haitian, or Cajun	0	0%	44
German or other West Germanic	0	0%	17
Russian, Polish, or Other Slavic	0	0%	17
Other Indo-European	25	0%	44
Korean	0	0%	17
Chinese (including Mandarin, Cantonese)	9	0%	16
Vietnamese	0	0%	17
Tagalog (including Filipino)	30	0%	39
Other Asian and Pacific Island	0	0%	17
Arabic	109	2%	147
Other and Unspecified	0	0%	17
Total Non-English	260	4%	1,420

Data Note: Detail may not sum to totals due to rounding. Hispanic popultion can be of any race.
N/A meansnot available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2016 - 2020.
*Population by Language Spoken at Home is available at the census tract summary level and up.

Exhibit 2: US EPA EJ SCREEN

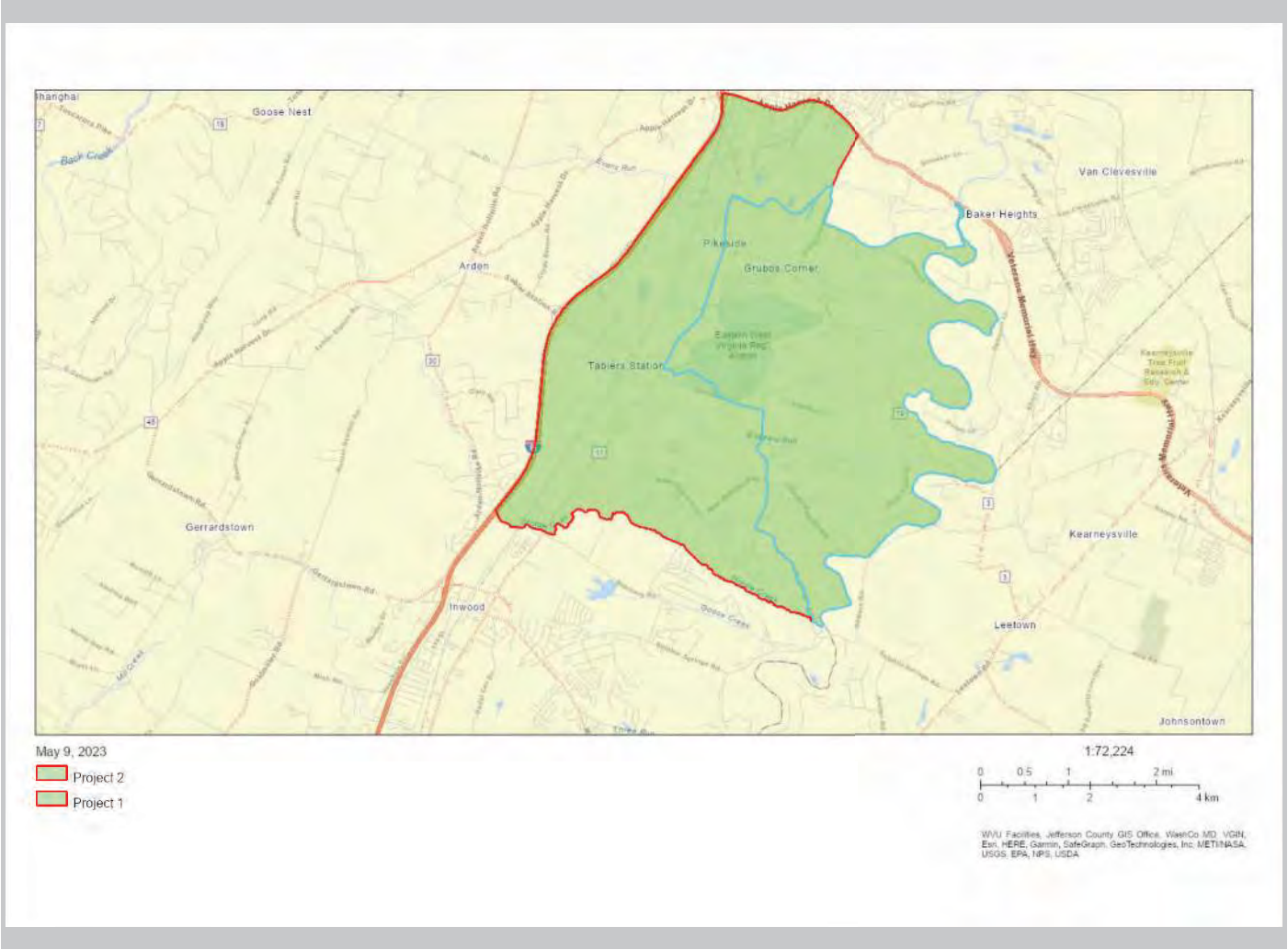
Census Tract: 54003972003

EJScreen Report (Version 2.11)

Tract: 54003972003, WEST VIRGINIA, EPA Region 3

Approximate Population: 3,922

Input Area (sq. miles): 9.45



Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0

EJScreen Report (Version 2.11)

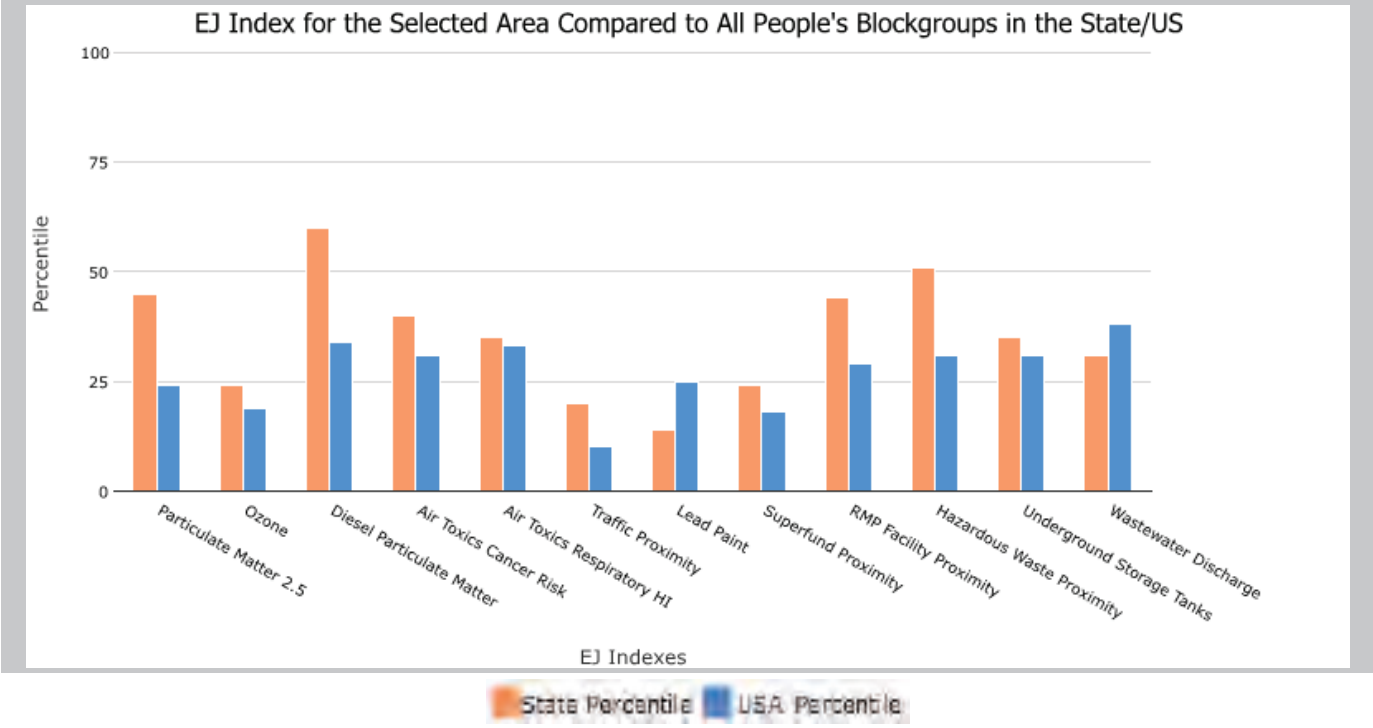
Tract: 54003972003, WEST VIRGINIA, EPA Region 3

Approximate Population: 3,922

Input Area (sq. miles): 9.45

Selected Variables	State Percentile	USA Percentile
Environmental Justice Indexes		
Particulate Matter 2.5 EJ index	45	24
Ozone EJ index	24	19
Diesel Particulate Matter EJ index*	60	34
Air Toxics Cancer Risk EJ index*	40	31
Air Toxics Respiratory HI EJ index*	35	33
Traffic Proximity EJ index	20	10
Lead Paint EJ index	14	25
Superfund Proximity EJ index	24	18
RMP Facility Proximity EJ index	44	29
Hazardous Waste Proximity EJ index	51	31
Underground Storage Tanks EJ index	35	31
Wastewater Discharge EJ index	31	38

EJ Indexes - The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.



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EJScreen Report (Version 2.11)

Tract: 54003972003, WEST VIRGINIA, EPA Region 3

Approximate Population: 3,922

Input Area (sq. miles): 9.45

Selected Variables	Value	State Avg.	%ile in State	USA Avg.	%ile in USA
Pollution and Sources					
Particulate Matter 2.5 (µg/m^3)	8.08	7.62	69	8.67	36
Ozone (ppb)	39.3	39.9	36	42.5	28
Diesel Particulate Matter* (µg/m^3)	0.25	0.129	93	0.294	50-60th
Air Toxics Cancer Risk* (lifetime risk per million)	30	29	90	28	80-90th
Air Toxics Respiratory HI*	0.4	0.34	94	0.36	80-90th
Traffic Proximity (daily traffic count/distance to road)	11	250	21	760	10
Lead Paint (% Pre-1960 Housing)	0.09	0.34	11	0.27	33
Superfund Proximity (site count/km distance)	0.028	0.092	33	0.13	26
RMP Facility Proximity (facility count/km distance)	0.23	0.5	63	0.77	42
Hazardous Waste Proximity (facility count/km distance)	0.5	0.83	70	2.2	44
Underground Storage Tanks (count/km^2)	0.32	2	46	3.9	35
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.0064	2.5	47	12	65
Socioeconomic Indicators					
Demographic Index	12%	24%	15	35%	15
Supplemental Demographic Index	9%	16%	11	15%	29
People of Color	15%	8%	81	40%	32
Low Income	10%	37%	5	30%	17
Unemployment Rate	1%	7%	28	5%	29
Limited English Speaking Households	3%	0%	95	5%	66
Less Than High School Education	10%	12%	45	12%	56
Under Age 5	4%	5%	49	6%	43
Over Age 64	14%	20%	23	16%	42
Low Life Expectancy	21%	22%	40	20%	67

EJScreen Report (Version 2.11)

Tract: 54003972003, WEST VIRGINIA, EPA Region 3

Approximate Population: 3,922

Input Area (sq. miles): 9.45

Selected Variables	State Percentile	USA Percentile
Supplemental Indexes		
Particulate Matter 2.5 Supplemental Index	45	32
Ozone Supplemental Index	22	24
Diesel Particulate Matter Supplemental Index*	62	47
Air Toxics Cancer Risk Supplemental Index*	38	47
Air Toxics Respiratory HI Supplemental Index*	35	49
Traffic Proximity Supplemental Index	15	10
Lead Paint Supplemental Index	11	30
Superfund Proximity Supplemental Index	21	23
RMP Facility Proximity Supplemental Index	42	39
Hazardous Waste Proximity Supplemental Index	50	41
Underground Storage Tanks Supplemental Index	27	30
Wastewater Discharge Supplemental Index	31	52

Supplemental Indexes - The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on low-income, limited English speaking, less than high school education, unemployed, and low life expectancy populations with a single environmental indicator.

This report shows the values for environmental and demographic indicators, EJScreen indexes, and supplemental indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJScreen documentation for discussion of these issues before using reports. For additional information, see: www.epa.gov/environmentaljustice.

EJSCREEN ACS Summary Report

Location: Tract: 54003972003
Ring (buffer): 0-mile radius
Description:

Summary of ACS Estimates	2016 - 2020
Population	3,922
Population Density (per sq. mile)	415
People of Color Population	584
% People of Color Population	15%
Households	1,453
Housing Units	1,453
Housing Units Built Before 1950	90
Per Capita Income	34,297
Land Area (sq. miles) (Source: SF1)	9.45
% Land Area	100%
Water Area (sq. miles) (Source: SF1)	0.00
% Water Area	0%

	2016 - 2020 ACS Estimates	Percent	MOE (±)
Population by Race			
Total	3,922	100%	889
Population Reporting One Race	3,830	98%	1,308
White	3,499	89%	891
Black	331	8%	369
American Indian	0	0%	12
Asian	0	0%	12
Pacific Islander	0	0%	12
Some Other Race	0	0%	12
Population Reporting Two or More Races	92	2%	121
Total Hispanic Population	162	4%	142
Total Non-Hispanic Population	3,760		
White Alone	3,338	85%	933
Black Alone	330	8%	369
American Indian Alone	0	0%	12
Non-Hispanic Asian Alone	0	0%	12
Pacific Islander Alone	0	0%	12
Other Race Alone	0	0%	12
Two or More Races Alone	92	2%	121
Population by Sex			
Male	1,854	47%	431
Female	2,068	53%	556
Population by Age			
Age 0-4	168	4%	137
Age 0-17	826	21%	350
Age 18+	3,096	79%	580
Age 65+	535	14%	186

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race.
N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2016 - 2020 .

EJSCREEN ACS Summary Report

Location: Tract: 54003972003
Ring (buffer): 0-mile radius
Description:

	2016 - 2020 ACS Estimates	Percent	MOE (±)
Population 25+ by Educational Attainment			
Total	2,938	100%	612
Less than 9th Grade	163	6%	109
9th - 12th Grade, No Diploma	126	4%	104
High School Graduate	1,258	43%	433
Some College, No Degree	807	27%	271
Associate Degree	238	8%	165
Bachelor's Degree or more	346	12%	194
Population Age 5+ Years by Ability to Speak English			
Total	3,754	100%	874
Speak only English	3,641	97%	706
Non-English at Home[1+2+3+4]	113	3%	88
[1]Speak English "very well"	0	0%	12
[2]Speak English "well"	0	0%	12
[3]Speak English "not well"	37	1%	45
[4]Speak English "not at all"	76	2%	58
[3+4]Speak English "less than well"	113	3%	72
[2+3+4]Speak English "less than very well"	113	3%	72
Linguistically Isolated Households*			
Total	37	100%	45
Speak Spanish	37	100%	43
Speak Other Indo-European Languages	0	0%	12
Speak Asian-Pacific Island Languages	0	0%	12
Speak Other Languages	0	0%	12
Households by Household Income			
Household Income Base	1,453	100%	285
< $15,000	13	1%	28
$15,000 - $25,000	19	1%	32
$25,000 - $50,000	309	21%	168
$50,000 - $75,000	294	20%	173
$75,000 +	818	56%	331
Occupied Housing Units by Tenure			
Total	1,453	100%	285
Owner Occupied	1,018	70%	263
Renter Occupied	435	30%	281
Employed Population Age 16+ Years			
Total	3,133	100%	634
In Labor Force	2,275	73%	571
Civilian Unemployed in Labor Force	34	1%	44
Not In Labor Force	858	27%	247

Data Note: Datail may not sum to totals due to rounding. Hispanic population can be of anyrace.
N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS)
*Households in which no one 14 and over speaks English "very well" or speaks English only.

EJSCREEN ACS Summary Report

Location: Tract: 54003972003
Ring (buffer): 0-mile radius
Description:

	2016 - 2020 ACS Estimates	Percent	MOE (±)
Population by Language Spoken at Home*			
Total (persons age 5 and above)	3,754	100%	874
English	3,641	97%	919
Spanish	113	3%	119
French, Haitian, or Cajun	0	0%	12
German or other West Germanic	0	0%	12
Russian, Polish, or Other Slavic	0	0%	12
Other Indo-European	0	0%	12
Korean	0	0%	12
Chinese (including Mandarin, Cantonese)	0	0%	12
Vietnamese	0	0%	12
Tagalog (including Filipino)	0	0%	12
Other Asian and Pacific Island	0	0%	12
Arabic	0	0%	12
Other and Unspecified	0	0%	12
Total Non-English	113	3%	1,268

Data Note: Detail may not sum to totals due to rounding. Hispanic popultion can be of any race.
N/A meansnot available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2016 - 2020.
*Population by Language Spoken at Home is available at the census tract summary level and up.

ATTACHMENT 12:

WETLANDS AND WATER RESOURCES MAPPING & COORDINATION

www.flymrb.com

Wetland Delineation Report

Eastern West Virginia Regional Airport
Taxiway Extension

Berkeley County, West Virginia

November 29, 2022

Prepared for:
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File #5097AD/SJW/

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Appendices

Executive Summary

The waters of the U.S., including wetlands, identified during this investigation of the Eastern West Virginia Airport Taxiway Extension project were delineated by Greenway Engineering (Greenway) in accordance with 33 CFR Part 328 – *Definition of Waters of the United States*, the 1987 *Corps of Engineers' Wetlands Delineation Manual* (the Manual)[1], and the Regional Supplement to the Manual (the Supplement)[2], and, represent those areas that are most likely within the regulatory purview of the U.S. Army Corps of Engineers (USACE) and/or state agencies. The delineation of surface waters described by this report and plans constitutes an assessment of features at the site at the time of our site visit during the week of October 27, 2022, and does not represent conditions which may exist in the future. This report outlines the review of the published resource materials, existing site conditions, and the results of the field investigation. This report does not represent a legal jurisdictional determination and any federally jurisdictional or isolated waters and wetlands which may be delineated for this project, and conversely the absence of said waters and wetlands, must be confirmed by the USACE. It is strongly recommended that the USACE be consulted in an effort to gain written confirmation of the delineation described by this report prior to engaging in any design or construction on the property described herein.

The appropriate permits must be obtained from the federal and/or state regulatory agencies prior to any proposed impacts to waters of the U.S./Commonwealth.

Project Contacts

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[1] Environmental Laboratory. (1987). "Corps of Engineers Wetlands Delineation Manual." Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.

[2] U.S. Army Corps of Engineers. 2012. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont*, ed. J.S. Wakeley, R.W. Lickvar, and C.W. Noble. ERDC/EL TR-09-19 Vicksburg, MS: U.S. Army Engineer Research and Development Center.

Project Description

The Eastern West Virginia Airport Taxiway Extension project described herein is located in Berkeley County, West Virginia. The project is located off Airport Road and is approximately 125 acres in size and owned by the Eastern West Virginia Airport Authority. The project consists of expansion to the taxiway and will be located south of the existing runway. The majority of the subject property has historically been cleared and disturbed through past grading work for the airport. The approximate center coordinates are 39.4011N latitude and -77.9838W longitude. The property is located within the Conococheage-Opequon sub-basin area identified by Hydrologic Unit Code 02070004. See Appendix B for an aerial overview of the project area.

Methodology

The Manual outlines a three-parameter approach to identifying wetlands: dominant hydrophytic vegetation, hydric soils, and indicators of surface and subsurface hydrology. All three parameters must be present for an area to be considered a jurisdictional wetland in accordance with these criteria, unless determined to be a "difficult wetland situation" as outlined in the Manual.

Any waters of the U.S. identified in this Project were classified according to the Cowardin System, as described in *Classification of Wetlands and Deepwater Habitats of the United States* (1979). This is a hierarchical system, which aids resource managers and others by providing uniformity of concepts and terms used to define wetlands according to hydrologic, geomorphologic, chemical, and biological factors.

Desktop Evaluation

Greenway Engineering performed a preliminary evaluation using available map resources prior to the field investigation. These resources included, but may not be limited to:

- Berkeley County Soil Survey (Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture, Web Soil Survey. Available online at: http://websoilsurvey.nrcs.usda.gov/)

- USGS 7.5' Quadrangle, Martinsburg WV. (United States Department of the Interior, United States Geological Service, Washington, DC. Available online at: http://www.usgs.gov/)

- GIS data provided by the Berkeley County WV GIS Department.

- National Wetlands Inventory (United States Department of the Interior, United States Fish and Wildlife Service, Washington, DC. Available online at: http://www.fws.gov/)

The National Wetlands Inventory Map identifies one potential wetlands within the project area. The Berkeley County GIS data indicates two potential streams inside the project area. See Appendix C for the Hydrography Map identifying the NWI Wetlands and County GIS hydrography data.

The soils, vegetation, and hydrology conditions are described in more detail in the following sections.

Soils

The National Technical Committee for Hydric Soils defines a hydric soil as a "soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part." Hydric soil indicators are defined in the latest version of Field Indicators of Hydric Soils in the United States.[3] A hydric soil may also be identified by listing in The National List of Hydric Soils, published by the USDA Soil Conservation Service, and state and local hydric soils lists.

The Soil Survey of Berkeley County, West Virginia was accessed through the Web Soil Survey on the Natural Resources Conservation Service (NRCS) website.

The following table summarizes the mapped soils within the project area. (see Appendix D for the Soils Map):

[3] *United States Department of Agriculture, Natural Resources Conservation Service. 2016. Field Indicators of Hydric Soils in the United States, Version 8.0. L.M. Vasilas, G.W. Hurt, and J.F. Berkowitz (eds.). USDA, NRCS, in cooperation with the National Technical Committee for Hydric Soils*

Table 1: Soil Summary Table

Berkeley County, West Virginia

Symbol	Map Unit Name
CgB	Carbo-Opequon complex, 3 to 8 percent slopes
CrB	Clearbrook-Berks channery silt loams, 3 to 8 percent slopes
Ub	Urban Land
WbC	Weikert-Berks channery silt loams, 8 to 15 percent slopes

During the field investigation, soil pits were dug to describe soil morphological characteristics. Soil characteristics including texture, color (hue, value, and chroma), and odor were inspected for each sample. *Munsell Soil Color Charts* were used for determining the moist soil color. In order for the soil to be considered hydric, it must meet the definition of a hydric soil, which is "a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part" (USDA Soil Conservation Service 1994). Hydric soil indicators assist in identifying hydric soils, but an indicator is not required to be present as long as the definition is met, unless determined to be a "difficult wetland situation" as outlined in the Manual. The Results section of this report describes the soils onsite in more detail and also on the attached Data Sheets (Appendix F).

Vegetation

Plant species observed on the site were identified and the wetland indicator status for each species was determined from the 2018 *National Wetland Plant List* (U.S. Army Corps of Engineers 2018. National Wetland Plant List, version 3.4 http://wetland-plants.usace.army.mil/). Table 2 provides the definition for each plant indicator category. In order for the vegetation parameter to be met, the vegetation must meet the rapid test, dominance test, prevalence index, or morphological adaptation definition. Each of these tests is outlined in the Manual. Typically, if more than 50% of the dominant plant species are listed as FAC or wetter, then the hydrophytic vegetation condition is met, unless determined to be a "difficult wetland situation" as outlined in the Manual.

Table 2: Plant Indicator Status

Plant Indicator Category	Indicator Symbol	Definition
Obligate Wetland	OBL	Plants that always occur in standing water or in saturated soils
Facultative Wetland	FACW	Plants that nearly always occur in areas of prolonged flooding or require standing water or saturated soils but may, on rare occasions, occur in non-wetlands
Facultative	FAC	Plants that occur in a variety of habitats, including wetland and mesic to xeric non-wetland habitats but commonly occur in standing water or saturated soils
Facultative Upland	FACU	Plants that typically occur in xeric or mesic non-wetland habitats but may frequently occur in standing water or saturated soils
Obligate Upland	UPL	Plants that rarely occur in water or saturated soils

The vegetation is described in more detail in the Results section of this report and also on the attached Data Sheets (Appendix F).

Hydrology

The Manual and Supplement state that wetland hydrology encompasses all hydrologic characteristics of areas that are periodically inundated or have soils that are saturated to the surface at some time during the growing season. Hydrologic indicators include, but are not limited to, sediment deposits, visual inundation, drift lines, soil erosion, and hummocking. Evidence of these indicators is present even during dry periods, and therefore are useful indicators of wetland hydrology. One primary indicator of hydrology or two secondary indicators must be present for this condition to be met, unless determined to be a “difficult wetland situation” as outlined in the Manual. See Appendix C for Hydrography maps that include NWI, Streams, and Floodplain maps from available GIS data.

The Results section of this report describes the hydrology for each wetland area and also on the attached Data Sheets (Appendix F).

Results

There were two wetlands (Wetlands A and B), one stream channel (Stream A), and one pond (Pond A) delineated within the project area, subject to confirmation by the USACE. Wetland A is a PEM/PSS wetland that is approximately 0.73 acres in total size. Wetland B is a PEM wetland that is approximately 0.16 acres in size. Stormwater management culverts drain into Wetland B. Stream A is an ephemeral/intermittent stream that starts at the exit point of a stormwater management feature and runs through a wooded section and connects into Wetland B. It is approximately 175 feet in length. Pond A is an open water feature that Wetland B drains into. The pond is approximately 0.36 acres in size. There were several other stormwater features and man-made drainage/diversion ditches throughout the review area. A total of five data points were taken throughout the site representing both upland and wetland conditions. See Appendix F for wetland delineation data sheets.

Table 3: Waters Classification and Size in Project Area

Water Feature	Classification	Size
Wetland A	PEM/PSS	0.73 acres
Wetland B	PEM	0.16 acres
Stream A	Ephemeral/Intermittent	175 linear ft.
Pond A	Open Water	0.36 acres

*PEM = Palustrine Emergent

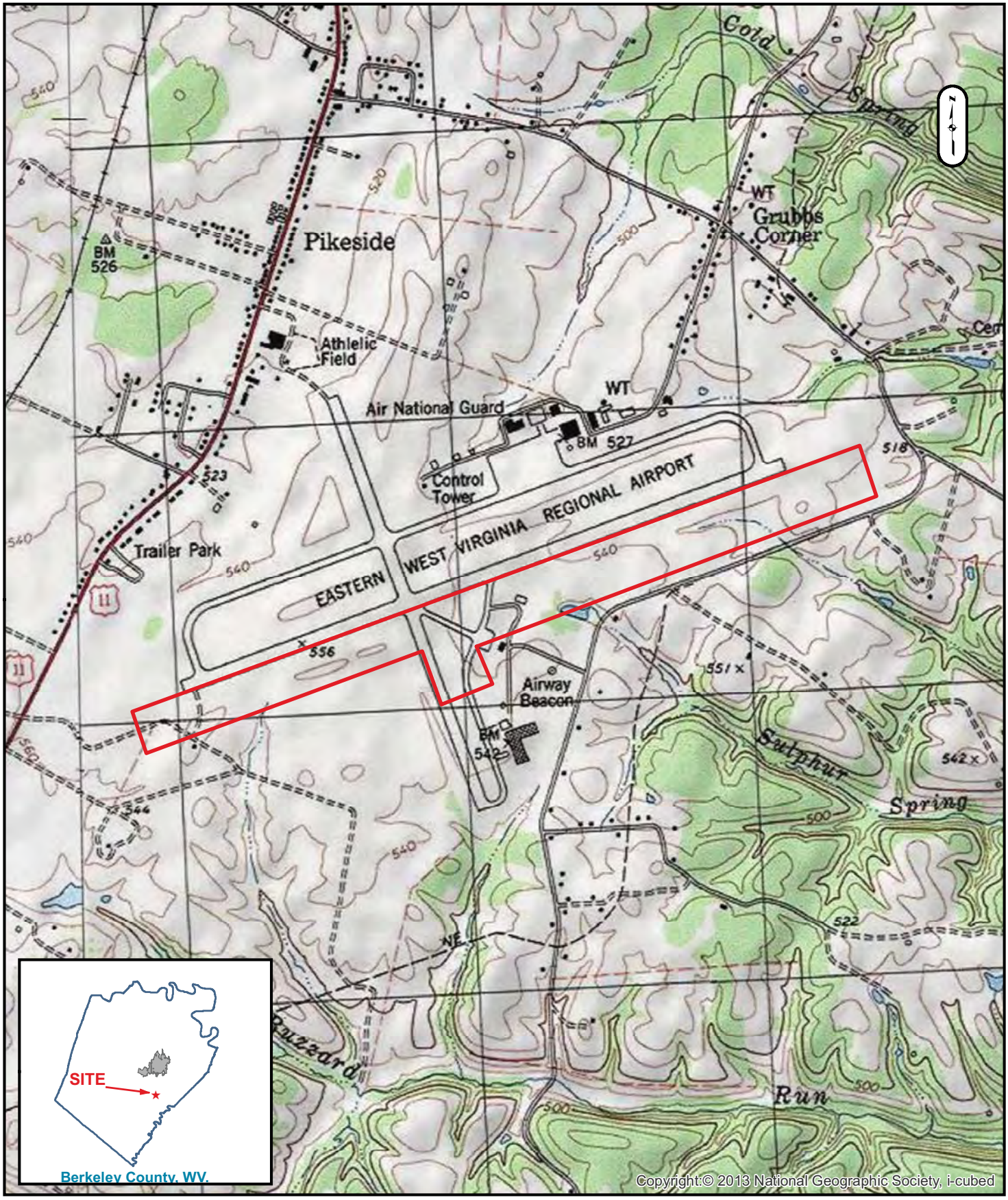
*PSS = Palustrine Scrub Shrub

The delineated features are shown on Appendix E.

Table 4: Data Point Summary Table

Data Point	Mapped Soil Unit	Hydrophytic Vegetation	Wetland Hydrology	Hydric Soils	Community ID
DP1	WbC	Yes	Yes	No	PEM/PSS Wetland
DP2	CrB	Yes	Yes	Yes	PEM/PSS Wetland
DP3	CrB	No	No	No	Upland Drain
DP4	WbC	No	No	No	Upland Field
DP5	WbC	No	No	No	Upland Field

Appendix A:
USGS Quadrangle Map



GREENWAY ENGINEERING

GREENWAY ENGINEERING PROJECT NUMBER:	5097AD

LEGEND

Project Review Area

1 Inch = 1,500 Feet

0 1,500 3,000 Ft.

APPENDIX A: MARTINSBURG, WV USGS QUAD

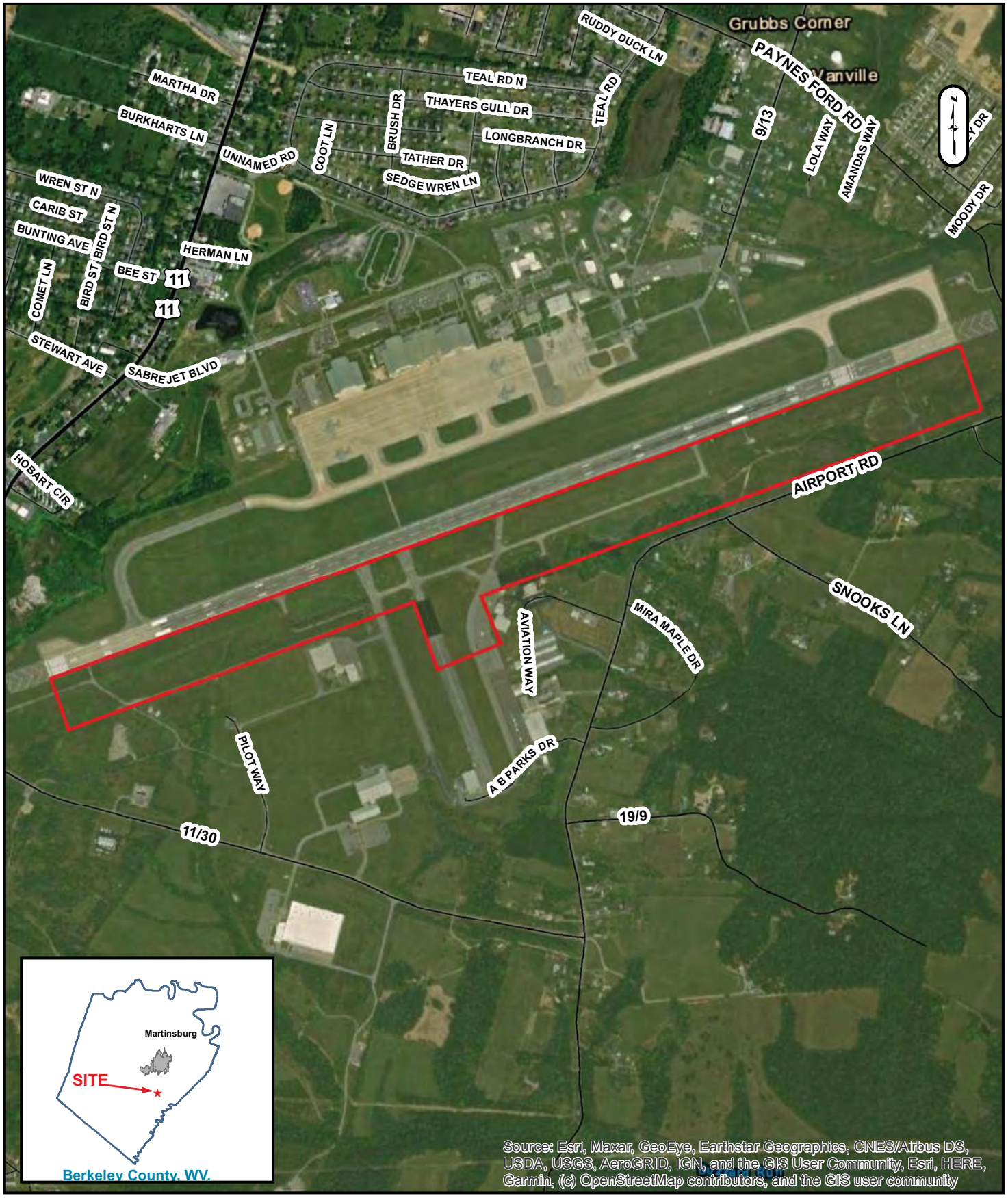
EASTERN WV REGIONAL AIRPORT

WETLAND DELINEATION REPORT

LOCATION	BERKELEY COUNTY, WV

Map Data Source: Bekeley County WV. GIS Department, 2019 Data; ESRI; Greenway Engineering

Appendix B:
Aerial Photograph



GREENWAY ENGINEERING

GREENWAY ENGINEERING PROJECT NUMBER: 5097AD

LEGEND

Project Review Area

1 Inch = 1,200 Feet | 0 | 1,200 | 2,400 Ft.

APPENDIX B: AERIAL OVERVIEW

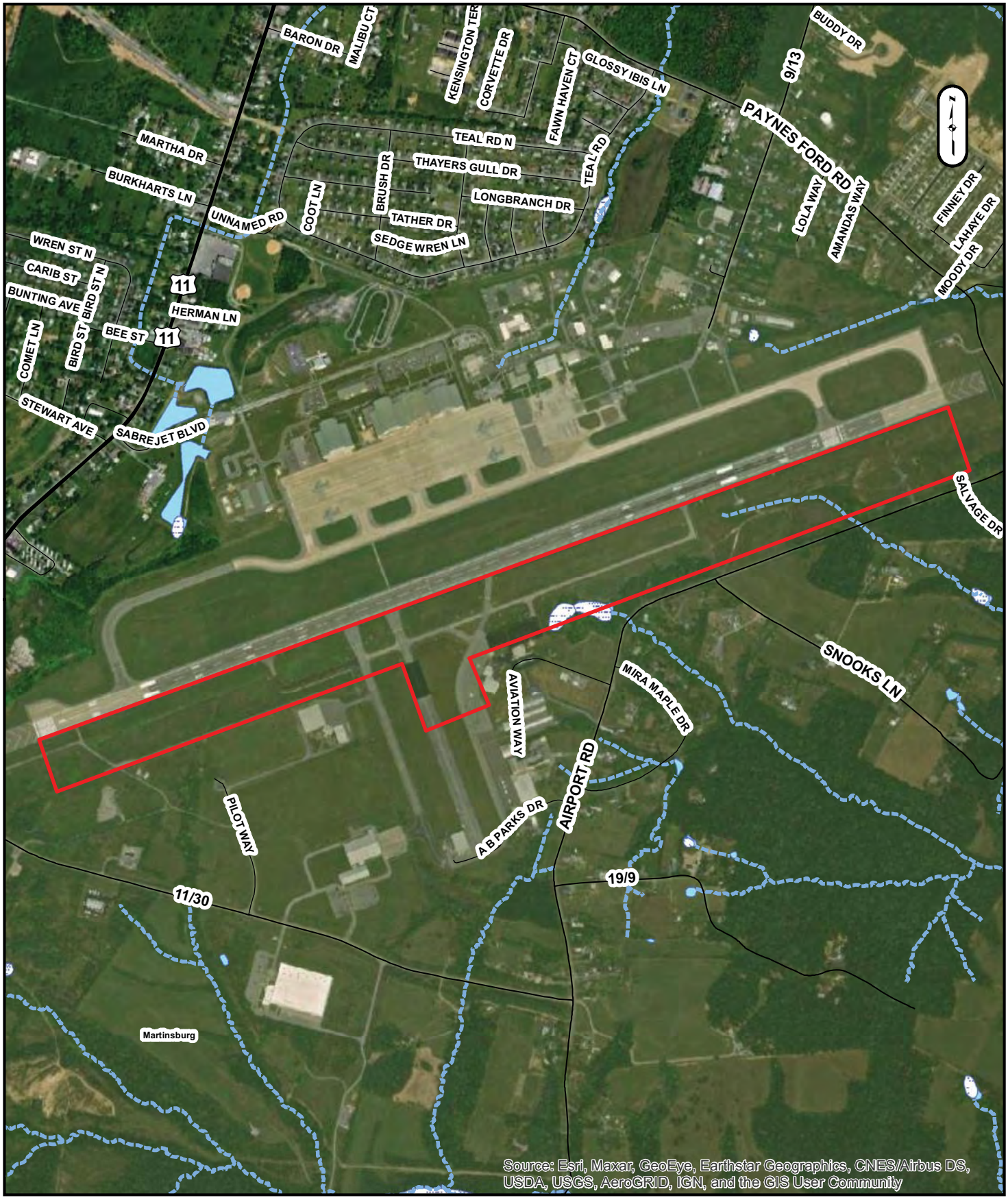
EASTERN WV REGIONAL AIRPORT

WETLAND DELINEATION REPORT

LOCATION: BERKELEY COUNTY, WV

Map Data Source: Bekeley County WV. GIS Department, 2019 Data; ESRI; Greenway Engineering

Appendix C:
Hydrography Map



GREENWAY ENGINEERING

GREENWAY ENGINEERING PROJECT NUMBER: 5097AD

LEGEND

- Project Review Area
- Streams (GIS)
- Wetlands NWI (GIS)
- Ponds and Lakes (GIS)
- 100 Year Floodplain (GIS)

1 Inch = 1,200 Feet

0 1,200 2,400 Ft.

APPENDIX C: HYDROGRAPHY MAP

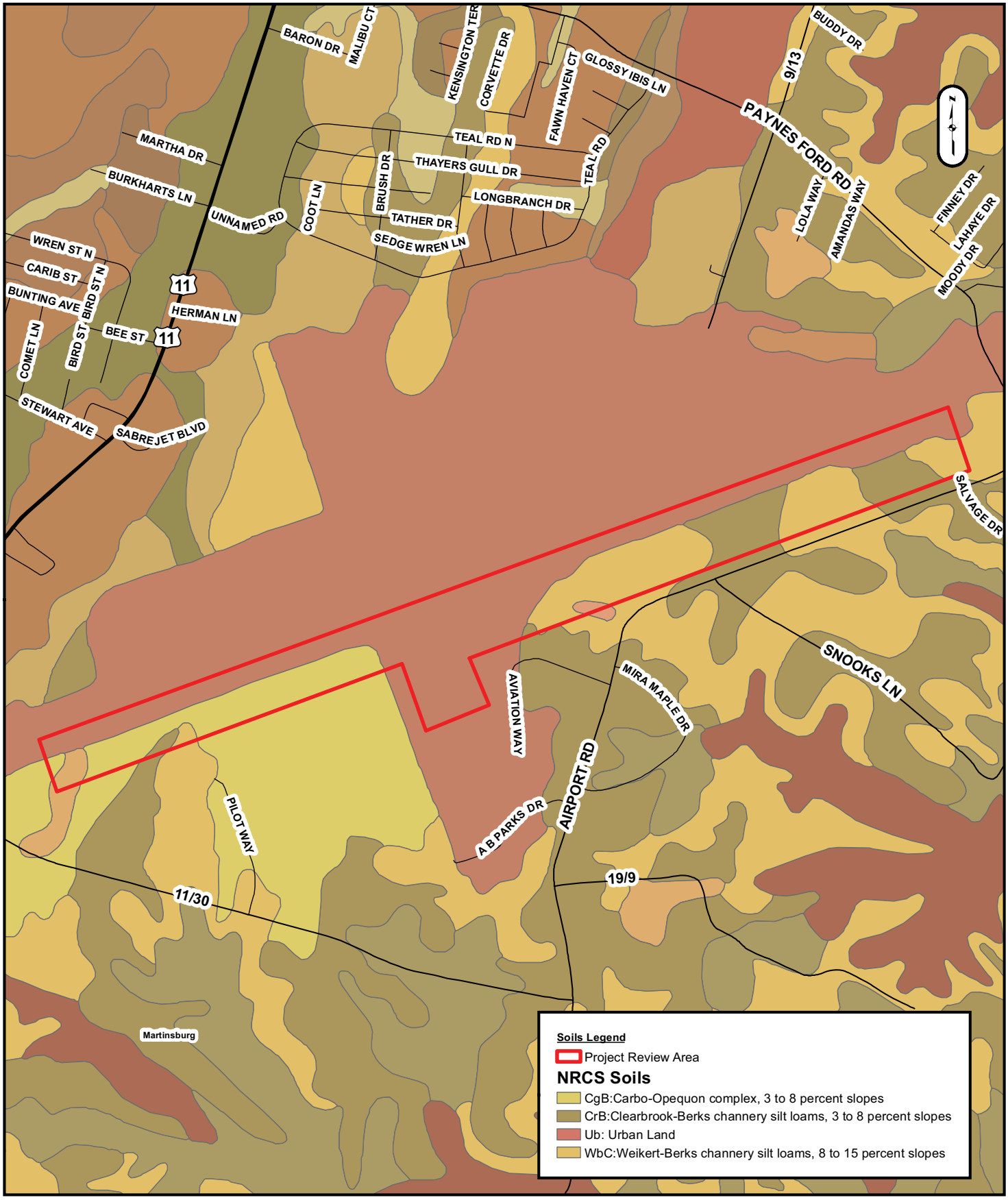
EASTERN WV REGIONAL AIRPORT

WETLAND DELINEATION REPORT

LOCATION: BERKELEY COUNTY, WV

Map Data Source: Bekeley County WV. GIS Department, 2019 Data; ESRI; Greenway Engineering

Appendix D:
NRCS Soils Map



GREENWAY ENGINEERING

GREENWAY ENGINEERING PROJECT NUMBER: 5097AD

LEGEND

Project Review Area

1 Inch = 1,200 Feet

0 1,200 2,400 Ft.

APPENDIX D: SOILS MAP

EASTERN WV REGIONAL AIRPORT

WETLAND DELINEATION REPORT

LOCATION: BERKELEY COUNTY, WV

Map Data Source: Bekeley County WV. GIS Department, 2019 Data; ESRI; Greenway Engineering

Appendix E:
Wetland Delineation Map

LEGEND

- Project Review Area
- Delineated Ponds
- Delineated Streams
- Data Point
- Delineated Wetlands

1 Inch = 1,200 Feet

0 1,200 2,400 Ft.

GREENWAY ENGINEERING

GREENWAY ENGINEERING PROJECT NUMBER: 5097AD

APPENDIX E: DELINEATION MAP

EASTERN WV REGIONAL AIRPORT

WETLAND DELINEATION REPORT

LOCATION: BERKELEY COUNTY, WV

Map Data Source: Bekeley County WV. GIS Department, 2019 Data; ESRI; Greenway Engineering

Appendix F:
Wetland Delineation Data Sheets

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont

Project/Site: Eastern West Virginia Airport Taxiway Ext. City/County: Berkeley County Sampling Date: 10/27/2022

Applicant/Owner: Eastern West Virginia Airport Authority State: WV Sampling Point: DP1

Investigator(s): SJW Section, Township, Range:

Landform (hillslope, terrace, etc.): Drainage Local relief (concave, convex, none): Concave

Slope (%): <3% Lat: 39.40377 Long: -77.97198 Datum: NAD83

Soil Map Unit Name: Weikert-Berks channery silt loams, 8 to 15 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No ____	**Is the Sampled Area within a Wetland?** Yes ✓ No ____
Hydric Soil Present?	Yes ✓	No ____	
Wetland Hydrology Present?	Yes ✓	No ____	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ✓ Surface Water (A1)
- ___ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ✓ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ✓	No ____	Depth (inches): surface
Water Table Present?	Yes ✓	No ____	Depth (inches): 4"-15"
Saturation Present? (includes capillary fringe)	Yes ✓	No ____	Depth (inches): 4"-15"

Wetland Hydrology Present? Yes ✓ No ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five Strata) – Use scientific names of plants.

Sampling Point: DP1

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling Stratum (Plot size: 30)			
1. Salix nigra	20	Yes	OBL
2.			
3.			
4.			
5.			
6.			
7.			
	20 = Total Cover		
Shrub Stratum (Plot size: 30)			
1. Salix nigra	15	Yes	OBL
2.			
3.			
4.			
5.			
6.			
7.			
	15 = Total Cover		
Herb Stratum (Plot size: 30)			
1. Typha latifolia	40	yes	OBL
2. Scirpus cyperinus	15	yes	FACW
3. Juncus effusus	15	yes	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	70 = Total Cover		
Woody Vine Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

✓ 1- Rapid Test for Hydrophytic Vegetation

✓ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ✓ No ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 3/3	100					L	
3-17	10YR 4/2	70	10YR 5/1	20	D	M	L	
			10YR 5/6	10	C	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ___ Thin Dark Surface (S9) **(MLRA 147, 148)**
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- ___ Umbric Surface (F13) **(MLRA 136, 122)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 148)**
- ___ Red Parent Material (F21) **(MLRA 127, 147)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coastal Prairie Redox (A16) (MLRA 147, 148)
- ___ Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ✓ **No** ___

Remarks: Soils were saturated to near surface

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont

Project/Site: Eastern West Virginia Airport Taxiway Ext. City/County: Berkeley County Sampling Date: 10/27/2022

Applicant/Owner: Eastern West Virginia Airport Authority State: WV Sampling Point: DP2

Investigator(s): SJW Section, Township, Range:

Landform (hillslope, terrace, etc.): Drainage Local relief (concave, convex, none): Concave

Slope (%): <2% Lat: 39.40357 Long: -77.97464 Datum: NAD83

Soil Map Unit Name: Clearbrook-Berks channery silt loams, 3 to 8 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓	No _____	
Wetland Hydrology Present?	Yes ✓	No _____	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ✓ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ✓ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes ✓	No _____	Depth (inches): 6"+
Saturation Present? (includes capillary fringe)	Yes ✓	No _____	Depth (inches): 8"+

Wetland Hydrology Present? Yes ✓ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five Strata) – Use scientific names of plants.

Sampling Point: DP2

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Shrub Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 30)			
1. Typha latifolia	15	yes	OBL
2. Scirpus atrovirens	20	yes	OBL
3. Juncus effusus	15	yes	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	50 = Total Cover		
Woody Vine Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

✓ 1- Rapid Test for Hydrophytic Vegetation

✓ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** ✓ **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-1	10YR 3/3	100					L	
1-16	10YR 4/2	70	10YR 5/1	10	D	M	L	
			7.5YR 5/8	10	C	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ___ Thin Dark Surface (S9) **(MLRA 147, 148)**
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- ___ Umbric Surface (F13) **(MLRA 136, 122)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 148)**
- ___ Red Parent Material (F21) **(MLRA 127, 147)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coastal Prairie Redox (A16) (MLRA 147, 148)
- ___ Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ✓ **No** ___

Remarks: Some fill material (gravel and stones) mixed in due to erosion

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont

Project/Site: Eastern West Virginia Airport Taxiway Ext. City/County: Berkeley County Sampling Date: 10/27/2022

Applicant/Owner: Eastern West Virginia Airport Authority State: WV Sampling Point: DP3

Investigator(s): SJW Section, Township, Range: _____

Landform (hillslope, terrace, etc.): flat hill top (previously graded) Local relief (concave, convex, none): Slightly Concave

Slope (%): <2% Lat: 39.40347 Long: -77.97552 Datum: NAD83

Soil Map Unit Name: Clearbrook-Berks channery silt loams, 3 to 8 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes _____	No ✓	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✓	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five Strata) – Use scientific names of plants.

Sampling Point: DP3

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Shrub Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 30)			
1. Unidenfiable field grasses (mowed)	100	Yes	N/A
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	= Total Cover		
Woody Vine Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ 1- Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks: (Include photo numbers here or on a separate sheet.)

Per maintenance staff, this area gets mowed regularly and does not stay wet.

SOIL

Sampling Point: DP3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 4/3	100					L	
2-14	10YR 5/4	100					SiL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ___ Thin Dark Surface (S9) **(MLRA 147, 148)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- ___ Umbric Surface (F13) **(MLRA 136, 122)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 148)**
- ___ Red Parent Material (F21) **(MLRA 127, 147)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coastal Prairie Redox (A16) (MLRA 147, 148)
- ___ Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** ✓

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont

Project/Site: Eastern West Virginia Airport Taxiway Ext. City/County: Berkeley County Sampling Date: 10/27/2022

Applicant/Owner: Eastern West Virginia Airport Authority State: WV Sampling Point: DP4

Investigator(s): SJW Section, Township, Range:

Landform (hillslope, terrace, etc.): side slope Local relief (concave, convex, none): convex

Slope (%): 8% Lat: 39.40354 Long: -77.97223 Datum: NAD83

Soil Map Unit Name: Weikert-Berks channery silt loams, 8 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** **Yes** _____ **No** ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes _____	No ✓	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✓	Depth (inches): _____

Wetland Hydrology Present? **Yes** _____ **No** ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five Strata) – Use scientific names of plants.

Sampling Point: DP4

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Shrub Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 30)			
1. Unidenfiable field grasses (mowed)	50	Yes	N/A
2. Dipsacus fullonum	30	Yes	FACU
3. Solidago altissima	15	Yes	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	85 = Total Cover		
Woody Vine Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ 1- Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ____ No ✓

Remarks: (Include photo numbers here or on a separate sheet.)

Per maintenance staff, this area gets mowed regularly and does not stay wet.

SOIL

Sampling Point: DP4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-15	10YR 4/3	100					SiL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ___ Thin Dark Surface (S9) **(MLRA 147, 148)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- ___ Umbric Surface (F13) **(MLRA 136, 122)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 148)**
- ___ Red Parent Material (F21) **(MLRA 127, 147)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coastal Prairie Redox (A16) (MLRA 147, 148)
- ___ Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** ✓

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont

Project/Site: Eastern West Virginia Airport Taxiway Ext. City/County: Berkeley County Sampling Date: 10/27/2022

Applicant/Owner: Eastern West Virginia Airport Authority State: WV Sampling Point: DP5

Investigator(s): SJW Section, Township, Range:

Landform (hillslope, terrace, etc.): toe slope Local relief (concave, convex, none): flat to slightly concave

Slope (%): 4% Lat: 39.40108 Long: -77.98098 Datum: NAD83

Soil Map Unit Name: Weikert-Berks channery silt loams, 8 to 15 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** **Yes** _____ **No** ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes _____	No ✓	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✓	Depth (inches): _____

Wetland Hydrology Present? **Yes** _____ **No** ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five Strata) – Use scientific names of plants.

Sampling Point: DP5

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Shrub Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 30)			
1. Unidenfiable field grasses (mowed)	100	Yes	N/A
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ 1- Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** _____ **No** ✓

Remarks: (Include photo numbers here or on a separate sheet.)

Per maintenance staff, this area gets mowed regularly and does not stay wet.

SOIL

Sampling Point: DP5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 4/3	100					SiL	
5 - 14	10YR 4/4	100					SiL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ___ Thin Dark Surface (S9) **(MLRA 147, 148)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- ___ Umbric Surface (F13) **(MLRA 136, 122)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 148)**
- ___ Red Parent Material (F21) **(MLRA 127, 147)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coastal Prairie Redox (A16) (MLRA 147, 148)
- ___ Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** ✓

Remarks:

Appendix G:
Project Area Photographs

Photo 1: Wetland A. Photo facing southeast.

Photo 2: Wetland A. Photo facing northwest.

Photo 3: Data Point 1 in Wetland A. Photo facing northwest.

Photo 4: Soil Profile at Data Point 1 in Wetland A.

Photo 5: Data Point 2 in Wetland A. Photo facing north.

Photo 6: Soil Profile at Data Point 2 in Wetland A.

Photo 7: Data Point 3 in Upland Area. Photo facing northwest.

Photo 8: Soil Profile at Data Point 3 in Upland Area.

Photo 9: Data Point 4 in Upland Area. Photo facing north.

Photo 10: Soil Profile at Data Point 4 in Upland Area.

Photo 11: Upland area in southeast portion of project area. Photo facing southeast at Airport Road.

Photo 12: Evidence of past grading work in in southeast portion of project area. Photo facing northwest.

Photo 13: Data Point 5 in Upland adjacent to stormwater feature and start of Stream A. Photo facing west.

Photo 14: Soil Profile at Data Point 5 in Upland Area.

Photo 15: Pond A. Photo facing southeast.

Photo 16: Stormwater culverts draining into Wetland B. Photo facing north.

Photo 17: Wetland B. Photo facing northwest.

Photo 18: Upland area adjacent to Pond A. Photo facing northwest.

Photo 19: Upland area adjacent to Pond A. Photo facing northwest.

Photo 20: Upland area adjacent to Pond A. Photo facing northwest

Photo 21: Stream A (Ephemeral/Intermittent). Photo facing northwest.

Photo 22: Stormwater feature above Stream A. Photo facing east.

Photo 23: Typical stormwater feature in western portion of project area. Photo facing southwest.

Photo 24: Typical stormwater feature in western portion of project area. Photo facing west.

Photo 25: General overview of western portion of project area. Photo facing west.

Photo 26: General overview of western portion of project area. Photo facing south.

Photo 27: General overview of western portion of project area. Photo facing east.

DEPARTMENT OF THE ARMY
PITTSBURGH DISTRICT, CORPS OF ENGINEERS
WILLIAM S. MOORHEAD FEDERAL BUILDING
1000 LIBERTY AVENUE
PITTSBURGH, PA 15222-4186

September 13, 2023

Regulatory Division
LRP-2023-00321

Mike Waibel
Airport Design Consultants, Inc.
6031 University Blvd, Suite 330
Ellicott City, MD 21043

Dear Mr. Waibel:

This letter is in response to your request for a preliminary jurisdictional determination (PJD), received on August 7, 2023 and prepared by Greenway Engineering. A delineation of the Eastern West Virginia Regional Airport Taxiway Extension Project Area, located in Martinsburg, Berkeley County, West Virginia, was verified by Nicholas Franke of this office on September 13, 2023.

You have requested a PJD for the proposed Area of Interest (approximately 155 acres). The waters listed below are potentially waters of the United States:

Wetland A	0.73 acre
Wetland B	0.16 acre
Stream A	175 linear feet
Pond A	0.36 acre

The U.S. Army Corps of Engineers authority to regulate waters of the U.S. is based, in part, on the definitions and limits of jurisdiction contained in 33 CFR 328 and 33 CFR 329. Section 404 of the Clean Water Act (CWA) requires that a Department of the Army (DA) permit be obtained prior to the discharge of dredged or fill material into waters of the U.S., including wetlands. Section 10 of the Rivers and Harbors Act of 1899 requires that a DA permit be obtained for any work in, on, over or under a navigable water.

Based on a review of the information provided, wetlands totaling 0.89 acre, open waters totaling 0.36 acre, and streams totaling 175 linear feet are located within the proposed review area. Stream A flows into Pond A, which outlets into Sulphur Spring Branch, which flows into Opequon Creek, which flows into the Potomac River, a section 10 Traditional Navigable Waterway. This office has determined that these waters **may**

be jurisdictional waters of the United States in accordance with the Regulatory Guidance Letter for Jurisdictional Determinations issued by the U.S. Army Corps of Engineers in October 2016 (RGL No. 16-01). As indicated in the guidance, this **PJD is non-binding and** cannot be appealed (33 C.F.R. 331.2) and only provides a written indication that waters of the U.S, including wetlands, may be present on-site.

The delineation included herein has been conducted to identify the location and extent of the aquatic resources for purposes of the Clean Water Act for the particular site identified in this request. This delineation may not be valid for the Wetland Conservation Provisions of the Food Security Act of 1985, as amended. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should discuss the applicability of an NRCS Certified Wetland Determination with the local USDA service center, prior to starting work.

At this time, you have requested a PJD with an option to request an approved JD later. However, for the purposes of the determination of impacts, compensatory mitigation, and other resource protection measures for activities that require authorization from this office, the streams and wetlands identified above will be evaluated as if they are jurisdictional waters of the United States.

If you have any questions, please contact Nicholas A. Franke by phone at (412) 395-7575 or email at Nicholas.A.Franke@usace.army.mil. Please complete our customer survey online and provide us with feedback at https://regulatory.ops.usace.army.mil/customer-service-survey/.

Sincerely,

//SIGNED//

Alyssa B. Barkley
Chief, South Branch
Regulatory Division

Enclosure

CF: Stephen White, Greenway Engineering (via email)

Appendix 2 - PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PJD: September 13, 2023

B. NAME AND ADDRESS OF PERSON REQUESTING PJD: Mike Waibel, Airport Design Consultants, Inc.
6031 University Blvd, Suite 330
Ellicott City, MD 21043

C. DISTRICT OFFICE, FILE NAME, AND NUMBER: Pittsburgh District, Eastern WV Regional Airport, LRP-2023-00321

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:

(USE THE TABLE BELOW TO DOCUMENT MULTIPLE AQUATIC RESOURCES AND/OR AQUATIC RESOURCES AT DIFFERENT SITES)

State: West Virginia County/parish/borough: Berkeley County City: Martinsburg

Center coordinates of site (lat/long in degree decimal format):

Lat.: 39.4011 Long.: -77.9838

Universal Transverse Mercator: 243069.830335 X, 4365537.246105 Y, Zone 18

Name of nearest waterbody: Sulphur Spring Branch, ~0.204mi

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

☒ Office (Desk) Determination. Date: September 13, 2023

☐ Field Determination. Date(s):

TABLE OF AQUATIC RESOURCES IN REVIEW AREA WHICH "MAY BE" SUBJECT TO REGULATORY JURISDICTION.

Site number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resource in review area (acreage and linear feet, if applicable)	Type of aquatic resource (i.e., wetland vs. non-wetland waters)	Geographic authority to which the aquatic resource "may be" subject (i.e., Section 404 or Section 10/404)
Wetland A	39.403935	-77.971793	0.73 acre	PEM/PSS Wetland	Section 404
Wetland B	39.401275	-77.980462	0.16 acre	PEM Wetland	Section 404
Stream A	39.400896	-77.980814	175 linear feet	Eph/Int Stream	Section 404
Pond A	39.401203	-77.979702	0.36 acre	Open Water	Section 404

1) The Corps of Engineers believes that there may be jurisdictional aquatic resources in the review area, and the requestor of this PJD is hereby advised of his or her option to request and obtain an approved JD (AJD) for that review area based on an informed decision after having discussed the various types of JDs and their characteristics and circumstances when they may be appropriate.

2) In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an AJD for the activity, the permit applicant is hereby made aware that: (1) the permit applicant has elected to seek a permit authorization based on a PJD, which does not make an official determination of jurisdictional aquatic resources; (2) the applicant has the option to request an AJD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an AJD could possibly result in less compensatory mitigation being required or different special conditions; (3) the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) undertaking any activity in reliance upon the subject permit authorization without requesting an AJD constitutes the applicant's acceptance of the use of the PJD; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a PJD constitutes agreement that all aquatic resources in the review area affected in any way by that activity will be treated as jurisdictional, and waives any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an AJD or a PJD, the JD will be processed as soon as practicable. Further, an AJD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331. If, during an administrative appeal, it becomes appropriate to make an official determination whether geographic jurisdiction exists over aquatic resources in the review area, or to provide an official delineation of jurisdictional aquatic resources in the review area, the Corps will provide an AJD to accomplish that result, as soon as is practicable. This PJD finds that there *"may be"* waters of the U.S. and/or that there *"may be"* navigable waters of the U.S. on the subject review area, and identifies all aquatic features in the review area that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA. Data reviewed for PJD (check all that apply)

Checked items should be included in subject file. Appropriately reference sources below where indicated for all checked items:

- [x] Maps, plans, plots or plat submitted by or on behalf of the PJD requestor:
  Map: Wetland Delineation Map (Appendix H), Wetland Delineation Report, Greenway Engineering, 29Nov22.
- [x] Data sheets prepared/submitted by or on behalf of the PJD requestor.
  - [x] Office concurs with data sheets/delineation report.
  - [ ] Office does not concur with data sheets/delineation report. Rationale: _____.
- [ ] Data sheets prepared by the Corps: _____.
- [ ] Corps navigable waters' study: _____.
- [x] U.S. Geological Survey Hydrologic Atlas: HUC8:02070004; HUC12: 020700040908.
  - [ ] USGS NHD data.
  - [x] USGS 8 and 12 digit HUC maps.
- [x] U.S. Geological Survey map(s). Cite scale & quad name: 1:24,000 - Martinsburg (Appx A).
- [x] Natural Resources Conservation Service Soil Survey. Citation: Hybrid mapping by consultant (Appx D).
- [x] National wetlands inventory map(s). Cite name: Hybrid mapping by consultant (Appx C).
- [ ] State/local wetland inventory map(s): _____.
- [ ] FEMA/FIRM maps: _____.
- [ ] 100-year Floodplain Elevation is: _____.(National Geodetic Vertical Datum of 1929)
- [x] Photographs: [x] Aerial (Name & Date): Google Earth, 1985-2021; and provided by consultant (Appx B).
  or [x] Other (Name & Date): Site photographs by consultant (Appx G).
- [ ] Previous determination(s). File no. and date of response letter: _____.
- [ ] Other information (please specify): _____.

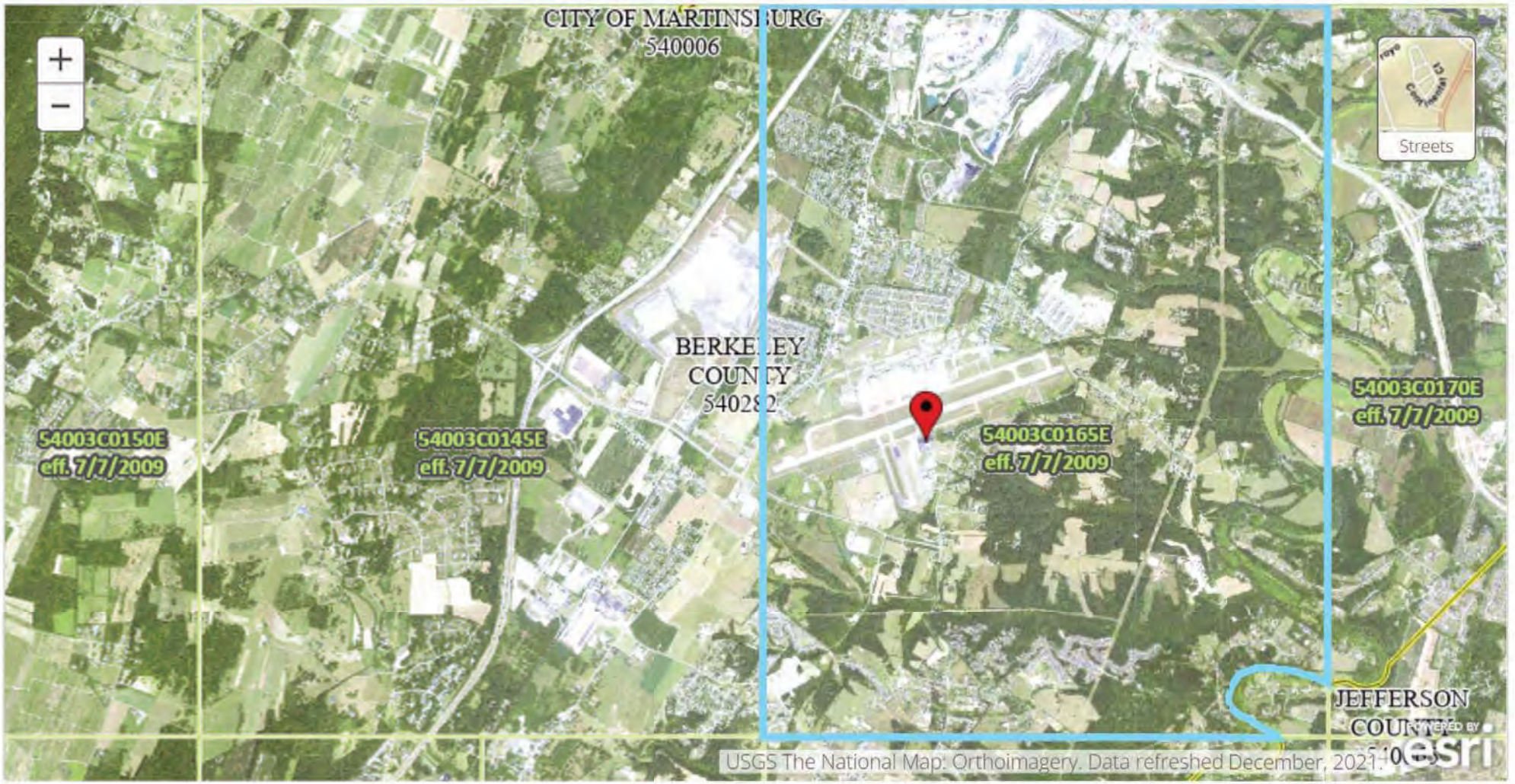
IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

_____	_____
Signature and date of Regulatory staff member completing PJD	Signature and date of person requesting PJD (REQUIRED, unless obtaining the signature is impracticable)[1]

[1] Districts may establish timeframes for requestor to return signed PJD forms. If the requestor does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action.

ATTACHMENT 13:

FEMA FLOODPLAIN MAPPING



PIN
- Approximate location based on user input and does not represent an authoritative property location

MAP PANELS
- Selected FloodMap Boundary
- Digital Data Available
- No Digital Data Available
- Unmapped

OTHER AREAS
- NO SCREEN — Area of Minimal Flood Hazard Zone X
- Effective LOMRs
- Area of Undetermined Flood Hazard Zone D
- Otherwise Protected Area
- Coastal Barrier Resource System Area

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) Zone A, V, A99
- With BFE or Depth
- Regulatory Floodway Zone AE, AO, AH, VE, AR

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
- Future Conditions 1% Annual Chance Flood Hazard Zone X
- Area with Reduced Flood Risk due to Levee. See Notes. Zone X
- Area with Flood Risk due to Levee Zone D

OTHER FEATURES
- 20.2 / 17.5 — Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

EXHIBIT 5 - FEMA Flood Map of MRB

ATTACHMENT 14:

CUMULATIVE IMPACTS SUPPORTING DOCUMENTATION & MAPPING

EASTERN WEST VIRGINIA REGIONAL AIRPORT AUTHORITY

www.flymrb.com

1.1 | Part 02 - Airport History Timeline

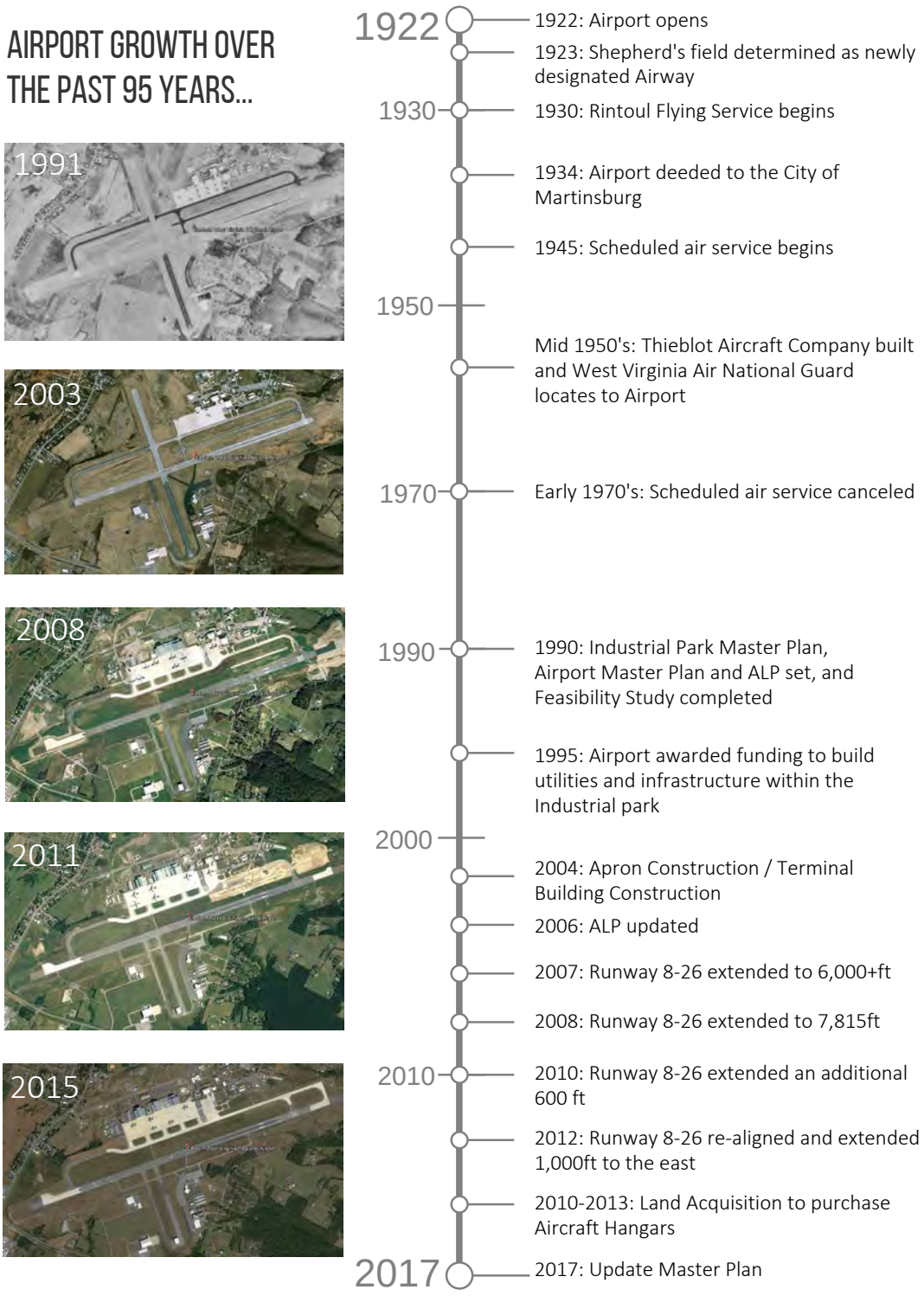
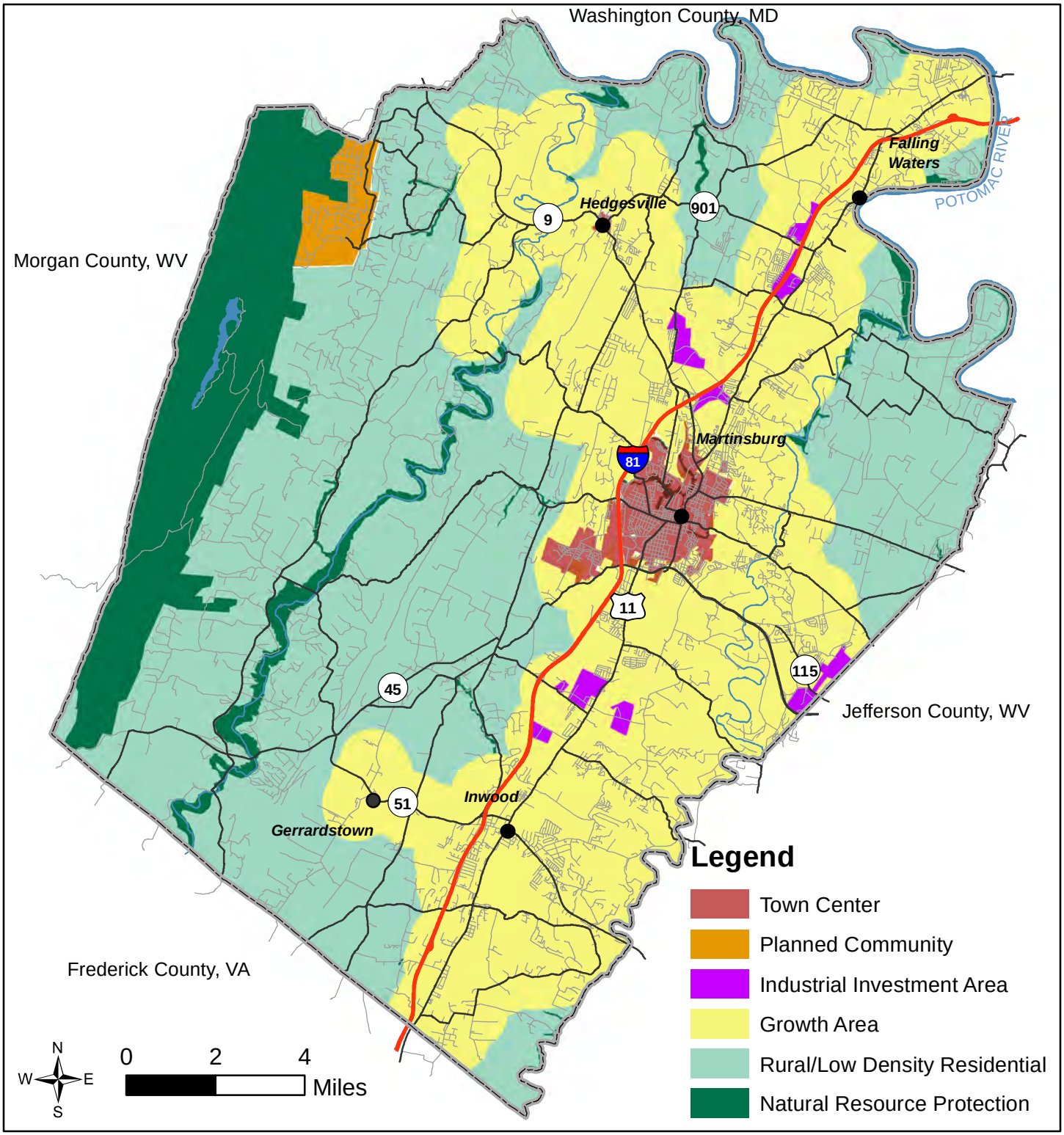
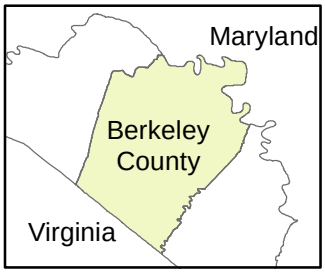


Figure 1.2- Airport History Timeline
Source: Images by Google Earth, Delta Airport Consultants, Inc.





This map is a broad guide for future land use in Berkeley County and is not intended as a specific map for land use decision making.

Data Source: Berkeley County GIS

Berkeley County Growth Management Map

Berkeley County Comprehensive Plan Update 2016

While one agency might take the lead on a particular plan element initiative, it is important to have involvement from the other agencies and the citizens of Berkeley County because all are impacted by these decisions and efforts. The following is a list of consolidated plan elements and the recommended lead agencies.

Table 12-3 – Lead Agency Recommendations

Lead Agency(ies)	Plan Element
ALL	Build partnerships
ALL	Comply with the Federal Endangered Species Act in order to protect threatened or endangered species which reside in Berkeley County.
ALL	Work with and support Berkeley County Public Schools, and all of the region's secondary and post secondary educational providers to ensure a skilled workforce for existing and future businesses.
ALL	Develop Alternatives to Zoning
ALL	Education and Outreach
ALL	Establish a recovery center that will house a full range of rehabilitative services: substance abuse counseling, family counseling, recover support groups, job and educational counseling.
ALL	Support HOA's covenants, restrictions and by-laws
ALL	Support the revitalization efforts of the City of Martinsburg by encouraging the reuse of older buildings in the downtown for much needed office space
BC Ambulance Authority	Increase EMS station coverage and build new Central Station as outlined in the plan.
BC Council	Adopt and Implement the Proposed Stormwater Management and Sediment and Erosion Control Ordinance Revisions.
BC Council	Adopt most current building codes through an updated Building Code Ordinance.
BC Council	Adopt the updated Floodplain Ordinance.
BC Council	Annexation
BC Council	Work with the HEPMPO while also researching other tools and opportunities for funding, including the FAST Act, to improve Berkeley County roadways.
BC Council	Construct and renovate the existing and future county owned and operated facilities.
BC Council	Encourage existing owners of vacant retail and industrial properties to redevelop/revitalize them
BC Council	Enforce the County Clean/Safe Ordinance
BC Council	Enhance opportunities to establish historical, cultural and recreational tourism-related businesses.
BC Council	Infill with New Buildings
BC Council	Link Mobility and Access with Development Patterns and Design
BC Council	Preventing Neighborhood Deterioration
BC Council	Promote Mixed Use Development to Create Livelier Communities
BC Council	Redevelopment Planning and Implementation Programs
BC Council & HEPMPO	Complete EPTA Bus Transfer Point Study and Implement Recommendations When Available
BC Council; BC Engineering & Permitting Dept	Capacity building – staff
BC Development Authority	Brownfield/Land Recycling
BC Development Authority	Conduct Eastern Panhandle Entrepreneur Forums regularly for those already in business or wishing to start a business in the Eastern Panhandle Counties.
BC Development Authority	Develop and maintain a county-level database of all available development sites, including brownfields and other sites that could be redeveloped
BC Development Authority	Protect sites near the interstate interchanges, along the rail lines, and in proximity to the airport for light industry and transportation related industries
BC Farmland Protection Board	Agricultural Land Preservation
BC Farmland Protection Board	Purchase conservation easements through the Farmland Protection Program.
BC Farmland Protection Board	Work with the farming community to identify future role of agriculture in the county's economy

Lead Agency(ies)	Plan Element
BC Fire Service Board	Review and update The 2011 Berkeley County Fire Service Board Five-Year Strategic Plan.
BC Office of Homeland Security and Emergency Management	Provide information to county residents and officials regarding disaster planning management.
BC Office of Homeland Security and Emergency Management	Coordinate the Berkeley County Emergency Operations Plan along with ensuring that police, fire and EMS have current homeland protection training through The Office of Homeland Security and Emergency Management.
BC Planning Commission	Additional Research and Data Compilation on Current Land Use
BC Planning Commission	Bring all subdivision proposals under one set of subdivision regulations.
BC Planning Commission	Develop a source water protection plan to safe guard drinking water supply from wells.
BC Planning Commission	Develop Land Use Policy Education Program
BC Planning Commission	Develop Supporting Groundwater Studies
BC Planning Commission	Evaluate the WV DEP groundwater protection permit process to determine if it is meeting the needs of Berkeley County in regards to groundwater preservation, or if additional steps need to be taken.
BC Planning Commission	Implement and Expand Upon the North Martinsburg Area Pedestrian Plan
BC Planning Commission	Update Subdivision and Land Development Regulations
BC Planning Commission	Utilize groundwater studies to determine densities for future development in rural/non-growth areas of the county.
BC Planning Commission & BC Council	Make provisions, where appropriate, for home-based businesses by including standards in the Subdivision and Land Development Ordinance to mitigate possible light and noise issues
BC Planning Commission & BC Council	Participate in HEPMPO Bicycle Study and Implement Recommendations When Available
BC Planning Commission & BC Council	Participate in Quarterly HEPMPO TAC (Technical Advisory Committee) and ISC (Interstate Council) Meetings
BC Planning Commission & BC Council	Promote Pedestrian Access
BC Planning Commission & BC Public Service Water District	Water Availability Land Use Plan
BC Planning Commission; BC Council; Martinsburg-Berkeley County Parks and Recreation	Acquire property through hazard mitigation grants and convert Sportsman's Paradise into a county park with public access to the Potomac River.
BC Public Service Sewer District	Add wastewater capacity as needed but within annual nutrient load caps.
BC Public Service Sewer District	Create an inventory of on-lot wastewater systems and put an inspection protocol into place.
BC Public Service Sewer District	Upgrade sewer and septic services, as outlined in The Infrastructure Plan chapter.
BC Public Service Water District	Update and adopt the next 20-year Water Facility Plan
BC Solid Waste Authority	Build and operate Entsorga, WV.
BC Solid Waste Authority	Search for potential funding sources and other resources in order to expand the public recycling programs, the litter control program, and open dumping program.
Eastern WV Regional Airport	Complete and implement the Airport Master Plan
Emergency Response Agencies	Collaborate with public safety, public health agencies and educational institutions throughout the region to meet public safety staffing needs
Emergency Response Agencies	Utilize new technology by dispatch and first responders to monitor response times and ensure emergency needs are being met.
HEPMPO & WV DOH	Support and Construct the Priority Transportation Network
Martinsburg Housing Authority	Monitor Housing Affordability and Choices
Martinsburg-Berkeley County Parks and Recreation	Acquire and construct at least 700 acres or more of park land as the county population continues to grow.
Martinsburg-Berkeley County Parks and Recreation	Create regional parks of approximately 100 plus acres in both North and South Berkeley County.
Martinsburg-Berkeley County Parks and Recreation	Develop an adult softball complex.
Martinsburg-Berkeley County Parks and Recreation	Expand the W. Randy Smith Recreation Center in South Berkeley County by building Phase II and Phase III.
Martinsburg-Berkeley County Parks and Recreation & ALL	Build an Indoor Aquatic Center

Lead Agency(ies)	Plan Element
Martinsburg-Berkeley County Parks and Recreation & HEPMPO	Build biking/hiking trails throughout the Eastern Panhandle connecting all three counties.
Region 9	Evaluate and implement a feasible option for bringing broadband to the area.
Region 9	Evaluate and implement a feasible option for bringing natural gas to the area.
Region 9	Encourage the development of an adequate communications technology network in the county
Region 9	Evaluate and update The 2015 Hazard Mitigation Plan before its expiration in January 2018.
Region 9	Evaluate the impaired streams on the 303(d) List and obtain data more recent than 2008, in order to determine BMPs for water quality improvement.
Region 9 & BC Council	Evaluate Options and Implement Appropriate Tools That Are Available for MS4 Compliance.

Source: Berkeley County Planning Commission

ATTACHMENT 15:

PUBLIC INVOLVEMENT

Taxiway E Rehab NOA

Public Notice of Availability (West Virginia Press)
NOTICE OF AVAILABILITY
Publication Date: 06/13/2024
Expiration Date: 07/13/2024 (30 Days After Date of Publication)

TO WHOM IT MAY CONCERN:

Pursuant to the requirements of Section 102(2)(c) of the National Environmental Policy Act of 1969 (NEPA), and in accordance with Federal Aviation Administration Orders 1050.1F and 5050.4B, the Eastern West Virginia Regional Airport Authority (EWVRAA) is hereby providing official notice of availability for review of the Draft Environmental Assessment document prepared for the following project:
Eastern West Virginia Regional Airport (MRB) –
Reconstruction, Widening and Extension of Taxiway E (Name of Project)
Eastern West Virginia Regional Airport Authority
170 Aviation Way, Martinsburg, WV 25405

(Name and address of Sponsor)

DESCRIPTION OF THE ACTIVITY: The Proposed Action will involve the following work activities, completed in four phases, within previously disturbed areas on existing airport property:
- New Overlay/Pavement Construction (Pavement Milling, Crack Preparation/Sealing, Pavement Surface Courses, Aggregate Base/Subbase Courses and Tack/Prime coats, as required).
- Electrical Demolition (edge lights, signs, junction structures, conduit, cables, etc.).
- Pavement Demolition (Asphalt Surface Courses, Gravel Base Courses).
- Pavement Marking Removal; New Airfield Pavement Markings.
- Upgrades to the Existing Airfield Electrical Vault to accommodate the new airfield lighting circuits.
- Installation of new Airfield Edge Lighting including trenching, conduit, concrete encased duct banks, junction structures/handholes, cables, a counterpoise system, and backfill.
- Excavation, including blasting.
- Embankment Preparation.
- Clearing and Grubbing of proposed areas of work.
- Topsoiling, Sodding, Seeding, and Mulching.
- Open and Closed Drainage System Improvements to accommodate runoff from the proposed development to include trenching and installation of new drainage pipes, pipe bedding, geotextiles, drainage swale linings/matting.
- Installation and removal of required Erosion & Sedimentation Control Features such as filter sock, silt fence, filter bags, diversion dike, sediment traps/basins, outlet control structures and other features

No work is proposed to any standing structure located on or off airport property. All work will be limited to airside facilities adjacent to the south side of Runway 8-26.

INFORMATION AVAILABLE: The Draft Environmental Assessment will be available for public review until 07/13/2024, Monday through Friday, at the following locations:

Eastern West Virginia Regional Airport Terminal
170 Aviation Way, Martinsburg, WV 25405

Martinsburg-Berkeley Public Library
101 King Street, Martinsburg, WV 25401

The Final Environmental Assessment and FONSI documents -will also be available for public viewing on the EWVRAA's website:

https://www.flymrb.com/wp-content/uploads/2024/06/Final-Draft-Short-Form-EA-MRB-TW-E_.pdf

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Details for Taxiway E Rehab NOA

Jun 17, 2024

Public Notice of Availability (West Virginia Press)

NOTICE OF AVAILABILITY

Publication Date: 06/13/2024

Expiration Date: 07/13/2024 (30 Days After Date of Publication)

TO WHOM IT MAY CONCERN:

Pursuant to the requirements of Section 102(2)(c) of the National Environmental

Policy Act of 1969 (NEPA), and in accordance with Federal Aviation

Administration Orders 1050.1F and 5050.4B, the Eastern West Virginia Regional

Airport Authority (EWVRAA) is hereby providing official notice of availability

for review of the Draft Environmental Assessment document prepared for the

following project:

Eastern West Virginia Regional Airport (MRB) –

Reconstruction, Widening and Extension of Taxiway E (Name of Project)

Eastern West Virginia Regional Airport Authority

170 Aviation Way, Martinsburg, WV 25405

(Name and address of Sponsor)

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* Pavement Marking Removal; New Airfield Pavement Markings.

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* Excavation, including blasting.

* Embankment Preparation.

* Clearing and Grubbing of proposed areas of work.

* Topsoiling, Sodding, Seeding, and Mulching.

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pipes, pipe bedding, geotextiles, drainage swale linings/matting.

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such as filter sock, silt fence, filter bags, diversion dike, sediment

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