

U.S. Army Corps
of Engineers
Baltimore District
PN 20-35

Public Notice

In Reply to Application Number
NAB-2020-00172 (RES MD UMBI - Even Flow Mitigation Bank)

Comment Period: June 17, 2020 to July 17, 2020

THE PURPOSE OF THIS PUBLIC NOTICE IS TO SOLICIT COMMENTS FROM INTERESTED PARTIES CONCERNING THE PROSPECTUS FOR DEVELOPMENT OF A PRIVATE COMMERCIAL UMBRELLA COMPENSATORY MITIGATION BANK.

The Baltimore District, U.S. Army Corps of Engineers (Corps) and the Maryland Department of the Environment (MDE) have received a complete prospectus pursuant to the 2008 Mitigation Rule (33 CFR 332) proposing to establish an Umbrella Compensatory Mitigation Bank ("Bank") and generate mitigation credits to offset unavoidable impacts to waters of the United States (U.S.) authorized under Section 10 of the Rivers and Harbors Act (33 USC 403) and Section 404 of the Clean Water Act (33 USC 1344). In addition, the Bank is proposed to generate mitigation credits to offset unavoidable impacts to waters of the State of Maryland authorized under Titles 5 and 16 Environment Article Annotated Code of Maryland. Finally, the proposed Bank may also provide Total Maximum Daily Load (TMDL) and/or National Pollutant Discharge Elimination Systems Municipal Separate Storm Sewer System (MS4) nutrient and sediment credits, alternative types of mitigation for Corps of Engineers civil works projects, as well as mitigation in connection with resolving Clean Water Act enforcement cases.

BANK SPONSOR: HGS, LLC

(a wholly owned subsidiary of Resources Environmental Solutions (RES))

ATTN: Mr. Travis Cooke, Client Solutions Manager

3000 Falls Road, Suite 300A

Baltimore, Maryland 21211

WATERWAY AND LOCATION OF THE PROPOSED BANK: The proposed approximately 100-acre Bank is located on the North Fork of Linganore Creek, Talbot Branch, and unnamed tributaries in Frederick County, Maryland. The site is divided into multiple parcels and consists of six reaches of streams. The central point at the confluence of two main tributaries is located at 39.46549 Latitude, -77.192910 Longitude. A central address for the various properties is 8520 Woodville Road, Mt Airy, MD, 21771. The Bank is located within the Lower Monocacy River Watershed, 8-digit U.S. Geological Survey Hydrologic Unit Code (USGS HUC) 02-07-00-09.

OVERALL PROJECT PURPOSE: The Bank Sponsor proposes to establish, design, construct, operate, and maintain an approximately 100 acre private commercial wetland and stream compensatory mitigation bank to be known as Even Flow Mitigation Bank. The proposed Bank will provide off-site compensatory mitigation for unavoidable impacts to wetlands and other waters of the U.S. and/or the State of Maryland authorized by Department of the Army (DA) and MDE permits within the proposed geographic service area described below. The proposed Resources Environmental Solutions Maryland Umbrella Mitigation Banking Instrument (RES MD UMBI) will establish the framework for the development, implementation, and protection of the initial Even Flow Mitigation Bank

and future individual umbrella mitigation bank sites to be approved under this RES MD UMBI.

The attached prospectus provides a summary of the development of the proposed Bank and initiates the Corps' and MDE's review associated with establishment of this Bank, including the development of an approved UMBI. A draft UMBI may be prepared by the Bank Sponsor following the Corps' and MDE's review of the comments received in response to this public notice and determination that the proposed Bank has potential for providing appropriate compensatory mitigation for activities authorized by DA and MDE permits. An approved UMBI is the legal document for the establishment, operation, use, and maintenance of the Bank in a way that complies with the regulations governing compensatory mitigation for activities authorized by DA and MDE permits.

Pursuant to 33 CFR 332.8(d)(4), the Corps has posted a full copy of the subject prospectus online so that it is available for review by the public. The prospectus may be downloaded from the Regulatory In-Lieu Fee and Bank Information Tracking System (RIBITS) at web address:

https://ribits.ops.usace.army.mil/ords/f?p=107:278:3037756837224::NO:RP,278:P278_BA_NK_ID:5632

PROJECT DESCRIPTION: The proposed establishment of the approximate 100-acre Even Flow Mitigation Bank site involves establishment, rehabilitation, enhancement, and preservation of aquatic resources. It is proposed that ecological lift associated with establishment of this mitigation bank, including flood attenuation, water quality treatment, nutrient cycling, aquifer recharge, wildlife habitat, creation of intact habitat corridors with adjacent conservation lands would generate wetland and/or stream credits that are to provide off-site compensatory mitigation for activities authorized under a DA and MDE permits or would generate nutrient and/or sediment credits under the TMDL/MS4 Implementation Programs. Bank credits may only be used for a single purpose (i.e., compensatory mitigation credit for stream and/or wetland impacts or as nutrient/sediment credit for TMDL/MS4 programs, not both). Specifically, the following is a list of project objectives as described by the Bank Sponsor:

- Establish approximately 55.68 acres of nontidal forested, shrub-scrub, and emergent wetlands
- Rehabilitate approximately 21,588 linear feet (LF) of perennial stream, including
 - Approximately 2,620 LF of North Fork Linganore Creek
 - Approximately 18,968 LF of five tributaries to North Fork Linganore Creek, including:
 - 9,861 LF of Talbot Branch
 - 841 LF of Unnamed Tributary to Talbot Branch Extension
 - 3,202 LF of Unnamed Tributary 1 to North Fork Linganore Creek
 - 4,326 LF of Unnamed Tributary 2 to North Fork Linganore Creek
 - 738 LF of Unnamed Tributary 3 to North Fork Linganore Creek
- Enhance approximately 1.24 acres of nontidal wetlands
- Preserve approximately 4.56 acres of nontidal wetlands and 4,449 LF of perennial stream
- The Bank is proposed to be protected in perpetuity via recordation of a real estate

instrument (i.e., a conservation easement).

- Upon Bank closure, the Sponsor intends to transition stewardship to a long-term steward to maintain the site. The site ownership will remain with the current site owner, however, the easement established on the site will provide the Sponsor and its successors the ability to maintain the restoration project.

Proposed TMDL credits are calculated using Protocol 1, 2, and 3 from the Expert Panel Report methodology. A summary of each Even Flow Mitigation Bank design phase is provided in the Prospectus. The summary includes the estimated TMDL credits and approximate length of restored stream and area of restored/rehabilitated wetlands within the restored floodplain area and a summary of the proposed compensatory mitigation credits for streams and wetlands.

PROPOSED SERVICE AREA: The service area of a bank is a geographic area, such as a watershed or ecoregion, within which the mitigation bank is authorized to provide compensatory mitigation required by Department of the Army permits. The proposed primary service area for the Bank would include the Lower Monocacy River Watershed, 8 digit USGS HUC: 02-07-00-09. The proposed secondary service area would include the adjacent HUC 8 watersheds located within the Potomac River Basin within Maryland and include portions of the Middle Potomac-Catoctin Watershed (HUC 02-07-00-08), and the Conococheague-Opequon Watershed (HUC 02-07-00-04). The use of the secondary service area would be considered by the Corps and MDE only when credits are not available from another approved mitigation bank within the primary service area and the applicant demonstrates that the mitigation credits will replace the lost aquatic functions and services at the impact site. Impacts to coastal and tidal aquatic resources would be excluded from mitigating at this nontidal Bank.

MITIGATION BANK APPROVAL AND PERMITTING PROCESSES: This Bank may be one of a number of practicable options available to applicants to compensate for unavoidable impacts associated with permits issued under the authority of Section 404 of the Clean Water Act and the Maryland's Nontidal Wetlands Protection Act and/or a Maryland Waterways Construction Act. Released mitigation bank credits are generally the preferred option for compensatory mitigation because banks consolidate resources, involve more financial planning and scientific expertise, and must meet certain performance standards, thereby reducing risks associated with mitigation projects. Approval to use an approved Bank site to offset impacts for a specific project is the decision of the Corps and MDE pursuant to Section 404 of the Clean Water Act and the Maryland Nontidal Wetlands Protection Act and/or a Maryland Waterways Construction Act, respectively. The Corps and MDE provide no guarantee that any particular individual or general permit will be granted authorization to use an approved Bank site to compensate for unavoidable impacts associated with a proposed permit.

Issuance of a public notice regarding proposed compensatory mitigation bank sites is required pursuant to 33 C.F.R. § 332.8(d)(4) and 40 C.F.R. § 230.98(d)(4). The proposed establishment of the compensatory mitigation Bank will be evaluated pursuant to the 2008 Mitigation Rule (33 CFR Part 332).

The Sponsor must obtain the appropriate federal, state, and local permits required to implement the Bank restoration activities. The Bank Sponsor would submit an application for Corps and MDE permits should the Bank mitigation activities involve impacts to State

aquatic resources and/or a discharge of dredge or fill material into waters of the U.S. or work within navigable waters of the U.S. and receive appropriate authorizations prior to initiating construction activities. The Corps would complete consultation, if appropriate, under the Endangered Species Act, the National Historic Preservation Act and other applicable federal laws, prior to any DA permit authorization for construction of the Bank site.

Based upon a preliminary review of the prospectus, the proposed work to develop the compensatory mitigation Bank site may result in temporary and/or permanent impacts to waters of the U.S. and waters of the State or work within navigable waters of the U.S. No permit application has been submitted to date for the proposed construction activities associated with development of the Bank. A preliminary review indicates that the proposed work may qualify for Corps authorization under the Nationwide Permit (NWP) #27 (Aquatic Habitat Restoration, Enhancement, and Establishment Activities) or State Programmatic General Permit (SPGP). Both the SPGP and NWP #27 have undergone a full public interest review as required by Corps regulations (33 CFR 320.4(a)), and NEPA documentation has been prepared that addresses environmental considerations. Authorization for the proposed impacts will also be required by MDE.

Please refer below for a summary of approximate aquatic resource impacts to construct the compensatory mitigation bank.

APPROXIMATE EFFECTS ON AQUATIC RESOURCES:

Activity (i.e. culvert)	Stream Impact (lf)	Wetland Impact (acre)	Authority (Section 10/404/408)
Ecological restoration (i.e., using selective grading, excavating, filling, and planting)	21,588	1.24 (1.12 acre emergent and 0.12 acre scrub-shrub nontidal wetlands)	Section 404

In addition, the proposed work would impact approximately 5.24 acres of State regulated nontidal wetland buffer and 47.11 acres of State regulated FEMA 100-year floodplain.

LEAD FEDERAL AGENCY: The U.S. Army Corps of Engineers, as the lead federal agency, is responsible for all coordination pursuant to applicable federal authorities.

The Interagency Review Team (IRT) responsible for review, approval, and oversight of the proposed mitigation bank includes representatives from the Corps, the U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, National Marine Fisheries Service, Maryland Department of Natural Resources, and MDE. The Baltimore District of the U.S. Army Corps of Engineers chairs the IRT and MDE co-chairs the IRT.

ENDANGERED SPECIES: A preliminary review of this prospectus indicates that the proposal will have no effect Federally-listed threatened or endangered species or their

critical habitat, pursuant to Section 7 of the Endangered Species Act, as amended. As the evaluation of this application continues, additional information may become available which could modify this preliminary determination.

ESSENTIAL FISH HABITAT: The Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), as amended by the Sustainable Fisheries Act of 1996 (Public Law 04-267), requires all Federal agencies to consult with the National Marine Fisheries Service (NMFS) on all actions, or proposed actions, permitted, funded, or undertaken by the agency that may adversely affect Essential Fish Habitat (EFH), including species of concern, life cycle habitat, or Habitat Areas of Particular Concern. The project site does not lie in or adjacent to EFH as described under MSFCMA for managed species under the MSFCMA. The Baltimore District has made a preliminary determination that the project is not within EFH. The Baltimore District has made a preliminary determination that mitigative measures are not required to minimize adverse effects on EFH at this time. This determination may be modified if additional information indicates otherwise.

HISTORIC RESOURCES:

Pursuant to Section 106 of the National Historic Preservation Act of 1966 and applicable guidance, the Corps has reviewed the latest published version of the National Register of Historic Places and initially determined that no properties listed or eligible for inclusion, in the National Register of Historic Places, are located at the site of the proposed Bank. The Corps has made the preliminary determination that the proposed project has no potential to cause effects on historic properties. The Corps final eligibility and effect determination will be based on coordination with the State Historic Preservation Office as appropriate and required, and with full consideration given to the proposed undertaking's potential direct and indirect effects on historic properties within the Corps' identified permit area.

TRIBAL RESOURCES: Section 106 of the National Historic Preservation Act also requires federal agencies to consult with federally-recognized American Indian tribes that attach religious and cultural significance to historic properties that may be affected by the agency's undertaking. Corps Tribal Consultation Policy mandates an open, timely, meaningful, collaborative, and effective deliberative communication process that emphasizes trust, respect, and shared responsibility. The policy further emphasizes that, to the extent practicable and permitted by law, consultation works toward mutual consensus and begins at the earliest planning stages, before decisions are made and actions taken. The Corps final eligibility and effect determination will be based on coordination with interested tribes, in accordance with the Corps current tribal standard operating procedures as appropriate and required, and with full consideration given to the proposed undertaking's potential direct and indirect effects on tribal resources.

MODIFICATION OF CIVIL WORKS PROJECTS: 33 USC 408 (SECTION 408): All Section 408 proposals will be coordinated internally at USACE. The Section 408 decision will be issued along with the Section 404 and/or Section 10 decision. Please see the following link for more information regarding Section 408:
<https://www.nab.usace.army.mil/section408/>.

The applicant must obtain any State or local government permits which may be required.

NOTE: This public notice is being issued based on information furnished by the Bank

Sponsor. This information has not been verified or evaluated to ensure compliance with laws and regulation governing the regulatory program.

REQUEST FOR PUBLIC HEARING: Any person may request a public hearing. The request must be submitted in writing to the District Engineer and MDE (see Corps and MDE addresses below) within the designated comment period of the notice and must state the specific reasons for requesting the public hearing.

SUBMISSION OF COMMENTS: The Corps of Engineers and MDE are soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other interested parties to help inform the Corps, MDE, and the IRT as to the overall merits of the proposed UMBI and Bank, the scope of the proposed mitigation bank, the delineation of the proposed service area, the ecological suitability of the Bank site to achieve restoration of waters of the U.S. and waters of the State, and to identify project aspects that should be addressed during the development of a draft UMBI. Any comments received will be considered by the Corps of Engineers and MDE to determine whether the proposal has the potential to provide mitigation opportunities for project proponents (permittees) authorized to impact waters of the U.S. under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act and waters of the State under Titles 5 and 16 Environment Article Annotated Code of Maryland, or as a means of resolving Section 404 and/or Section 10 enforcement actions. Comments provided will become part of the public record for this action and are subject to release to the public through the Freedom of Information Act.

Written comments concerning the proposed Bank must be received by the U.S. Army Corps of Engineers, Baltimore District within the comment period specified above through postal mail at the address below or electronic submission to the project manager's email address below. All comments should reference the Application Number (2020-00172).

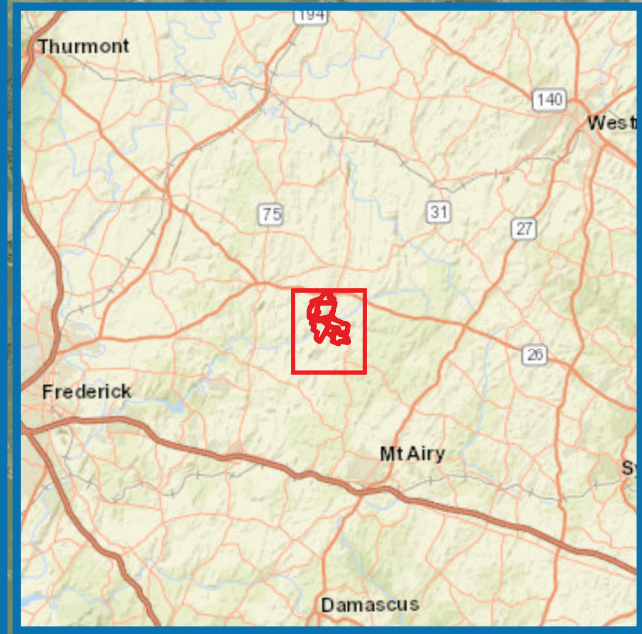
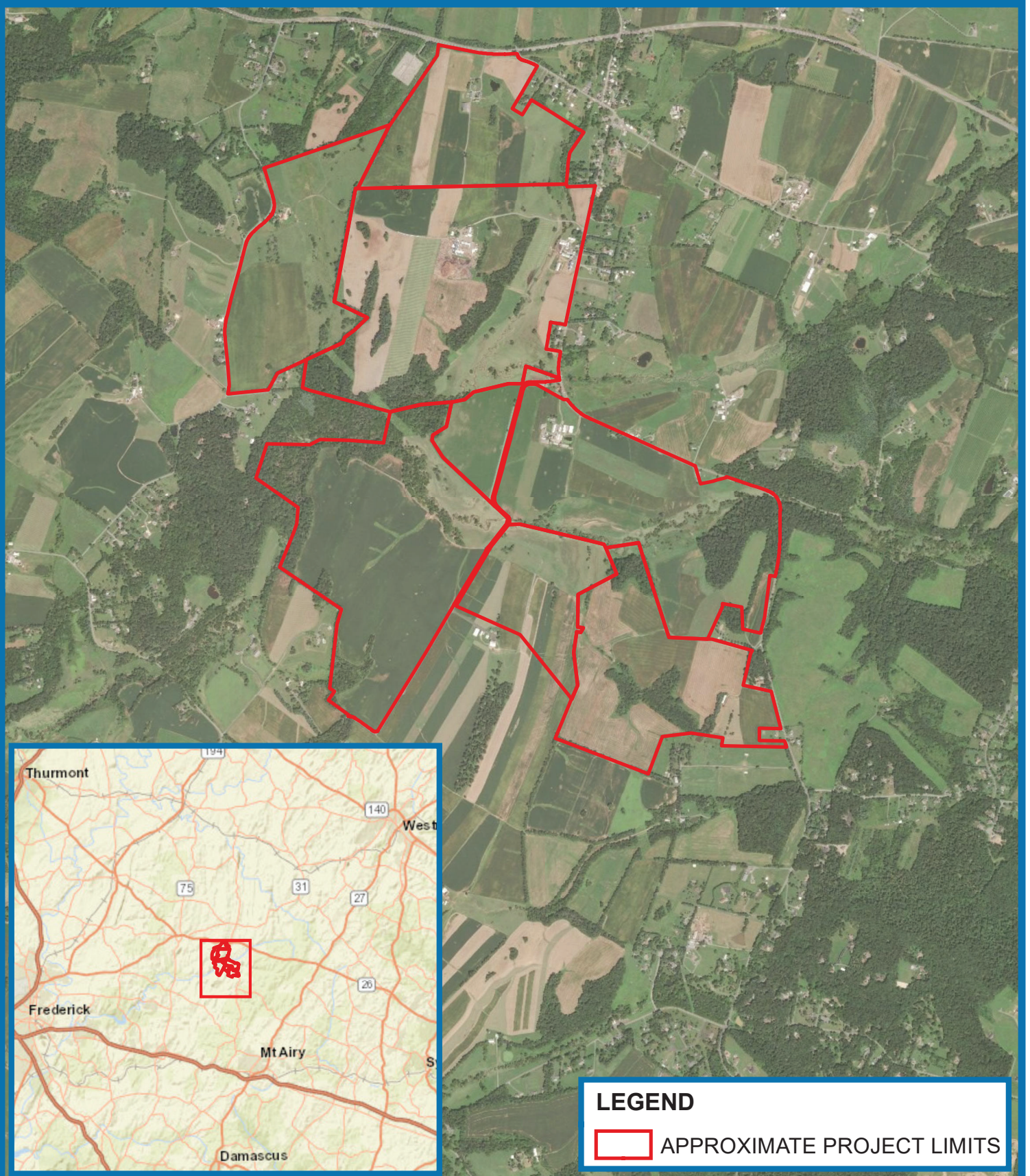
Mr. Jack Dinne
(john.j.dinne@usace.army.mil)
U.S. Army Corps of Engineers, Baltimore District
Regulatory Branch
2 Hopkins Plaza
Baltimore, MD 21201-2930

Ms. Kelly Neff MDE
(kelly.neff@maryland.gov)
MDE, Mitigation and Technical Assistance Section
1800 Washington Boulevard, Suite 430
Baltimore, Maryland 21230-1708

Please share this information concerning the proposed work with any persons known by you to be interested, who did not receive a copy of this notice.

General information regarding the Corps' permitting and mitigation processes can be found on our website at <https://www.nab.usace.army.mil/Missions/Regulatory.aspx>. This

public notice has been prepared in accordance with Corps implementing regulations at 33 CFR 325.3. If you have any questions concerning this specific project, or would like to request a paper copy of this public notice, please contact contacting Mr. Jack Dinne, Baltimore District, Corps, at 410.962.6005 (john.j.dinne@usace.army.mil) or by contacting Ms. Kelly Neff, MDE, Wetlands and Waterways Program at 410.537.4018 (kelly.neff@maryland.gov). This public notice is issued by the Chief, Regulatory Branch.



LEGEND

 APPROXIMATE PROJECT LIMITS



CORPORATE | 6575 WEST LOOP SOUTH, SUITE 300, BELLAIRE, TX 77401
 P: 713.520.5400
www.res.us

VICINITY MAP

EVEN FLOW MITIGATION BANK

**FREDERICK COUNTY,
MARYLAND**

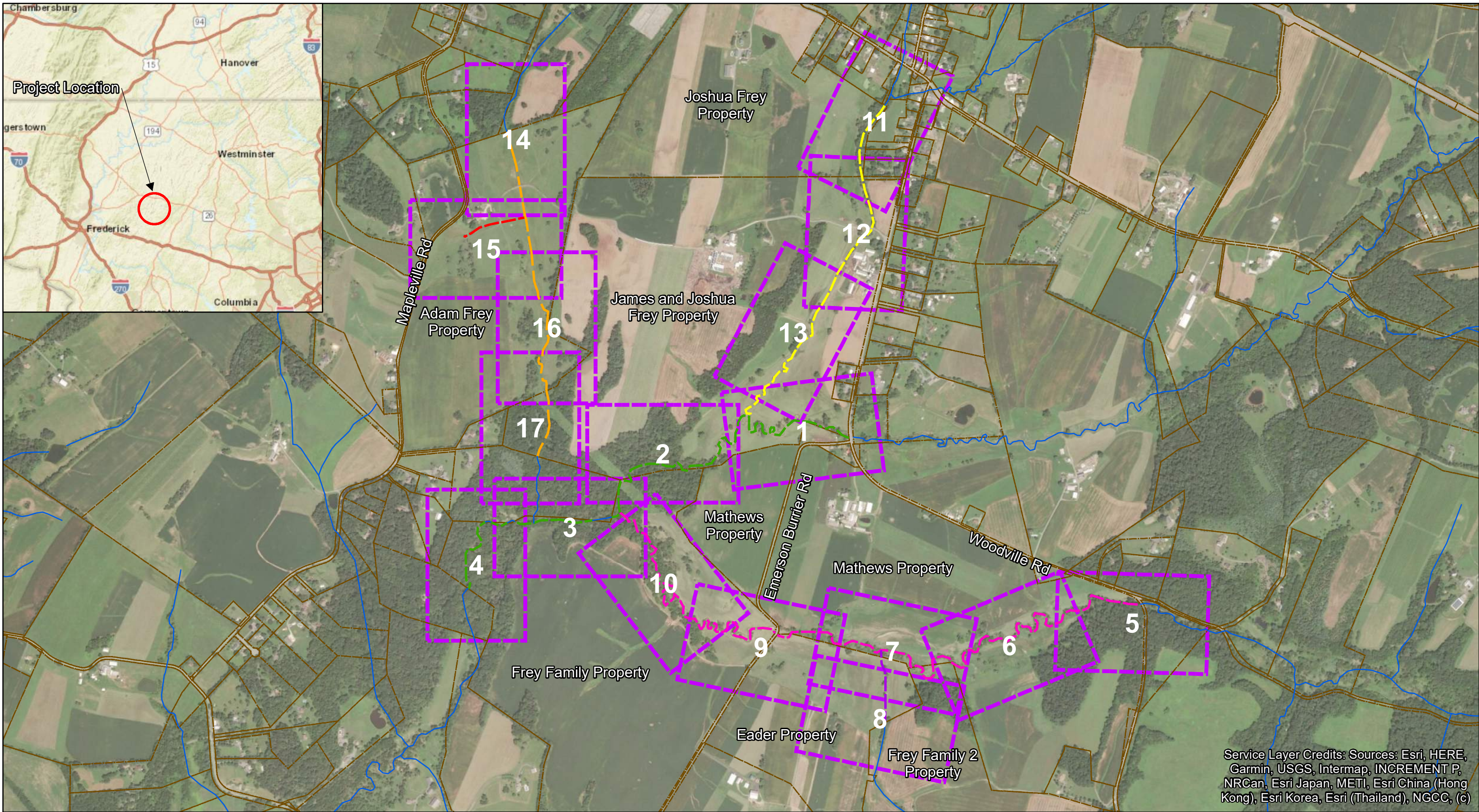
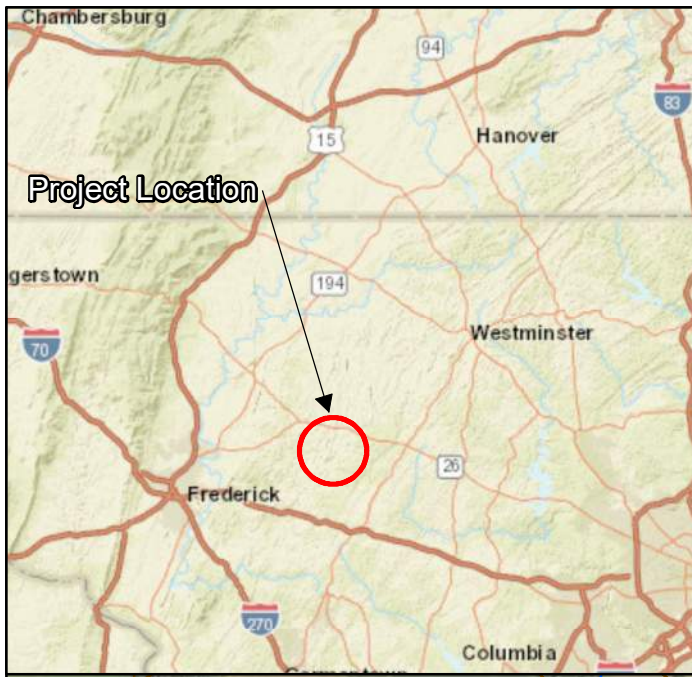
Street Map Source:
 World Street Map
 ESRI ArcGIS Online



1 inch = 2,000 feet



Even Flow Concept Mitigation Plan and Impact Sheets



Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c)

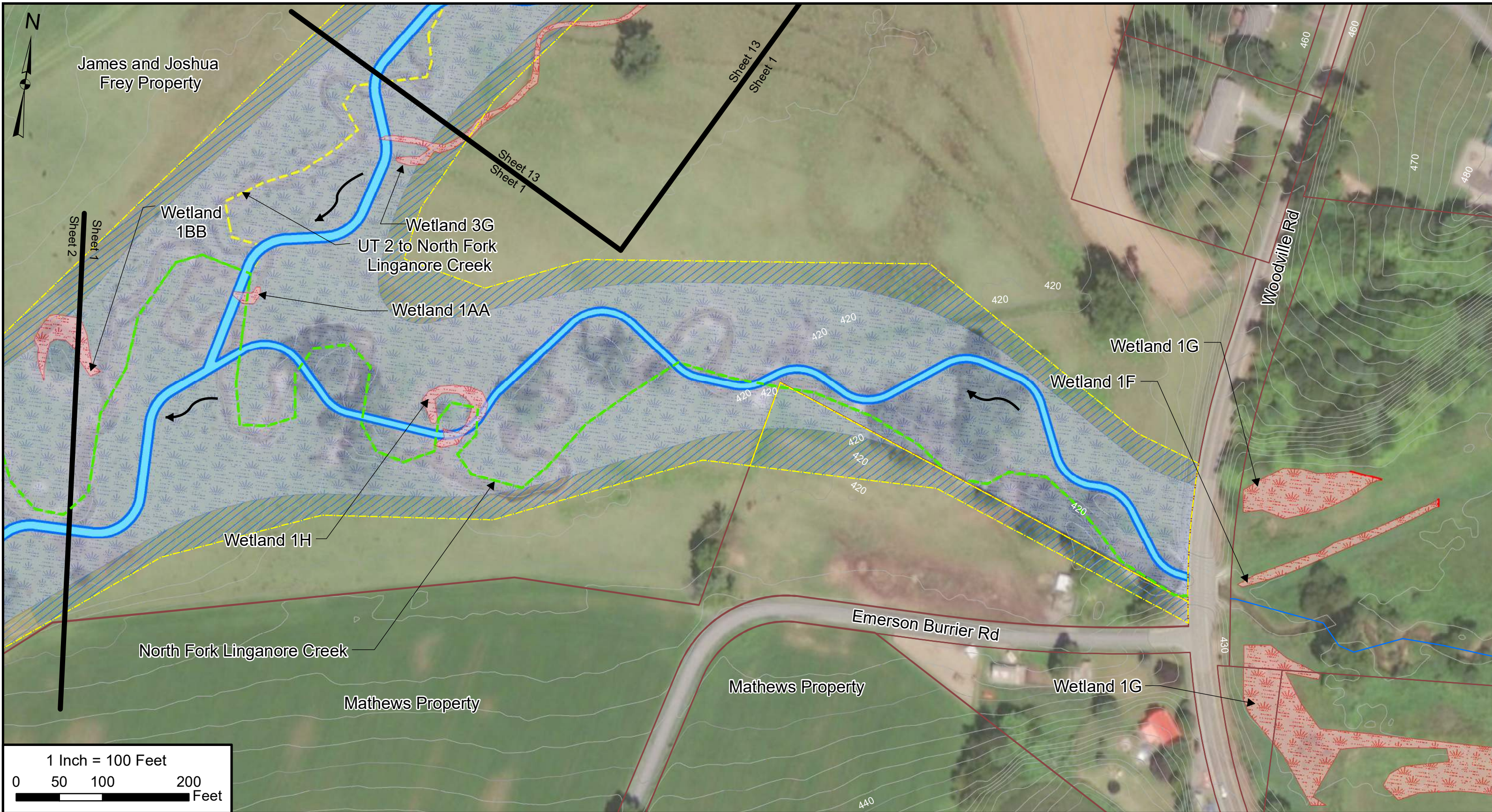
Legend

- Streams (Non-Targeted for Even Flow Bank)
- Parcels Boundaries
- Targeted Existing Stream Reach for Even Flow Bank**
- North Fork Linganore Creek
- UT 1 to North Fork Linganore Creek
- UT 2 to North Fork Linganore Creek
- UT 3 to UT 1
- Talbot Branch
- UT to Talbot Branch Extension

**EVEN FLOW MITIGATION BANK
PROPOSED CONCEPTUAL PLAN**

Key Sheet 1 of 1
Frederick County,
Maryland


0 500 1,000 2,000 Feet
1 inch = 1,000 feet




Legend			
	Easements		Proposed Wetlands/Restored Floodplain
	Parcels		Existing Wetlands
	Streams (Non-Targeted for Even Flow Bank)		Wetland Continues
	Additional Existing Tributary		Targeted Existing Stream Reach for Even Flow Bank
	Matchline		UT 1 to North Fork Linganore Creek
			UT 2 to North Fork Linganore Creek
			Flow Direction
			Proposed Wetland Buffer
			UT 3 to UT 1
			Talbot Branch
			UT to Talbot Branch Extension
			Proposed Channel
			Proposed Preservation Area

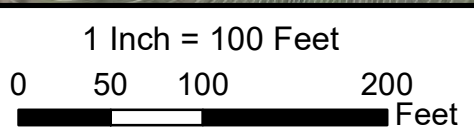
**EVEN FLOW MITIGATION BANK
PROPOSED CONCEPTUAL PLAN**

Plan Sheet 1 of 17



Frederick County,
Maryland



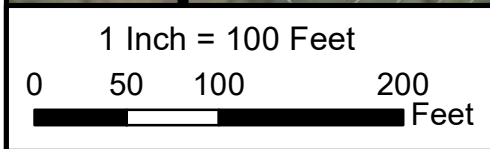


Legend			
	Easements		Proposed Preservation Area
	Parcels		Proposed Wetland Buffer
	Streams (Non-Targeted for Even Flow Bank)		Proposed Wetlands/Restored Floodplain
	Additional Existing Tributary		Existing Wetlands
	Matchline		Wetland Continues
		Targeted Existing Stream Reach for Even Flow Bank	
			North Fork Linganore Creek
			UT 1 to North Fork Linganore Creek
			UT 2 to North Fork Linganore Creek
			Flow Direction
			UT 3 to UT 1
			Talbot Branch
			UT to Talbot Branch Extension
			Proposed Channel

**EVEN FLOW MITIGATION BANK
PROPOSED CONCEPTUAL PLAN**

Plan Sheet 2 of 17

Frederick County, Maryland

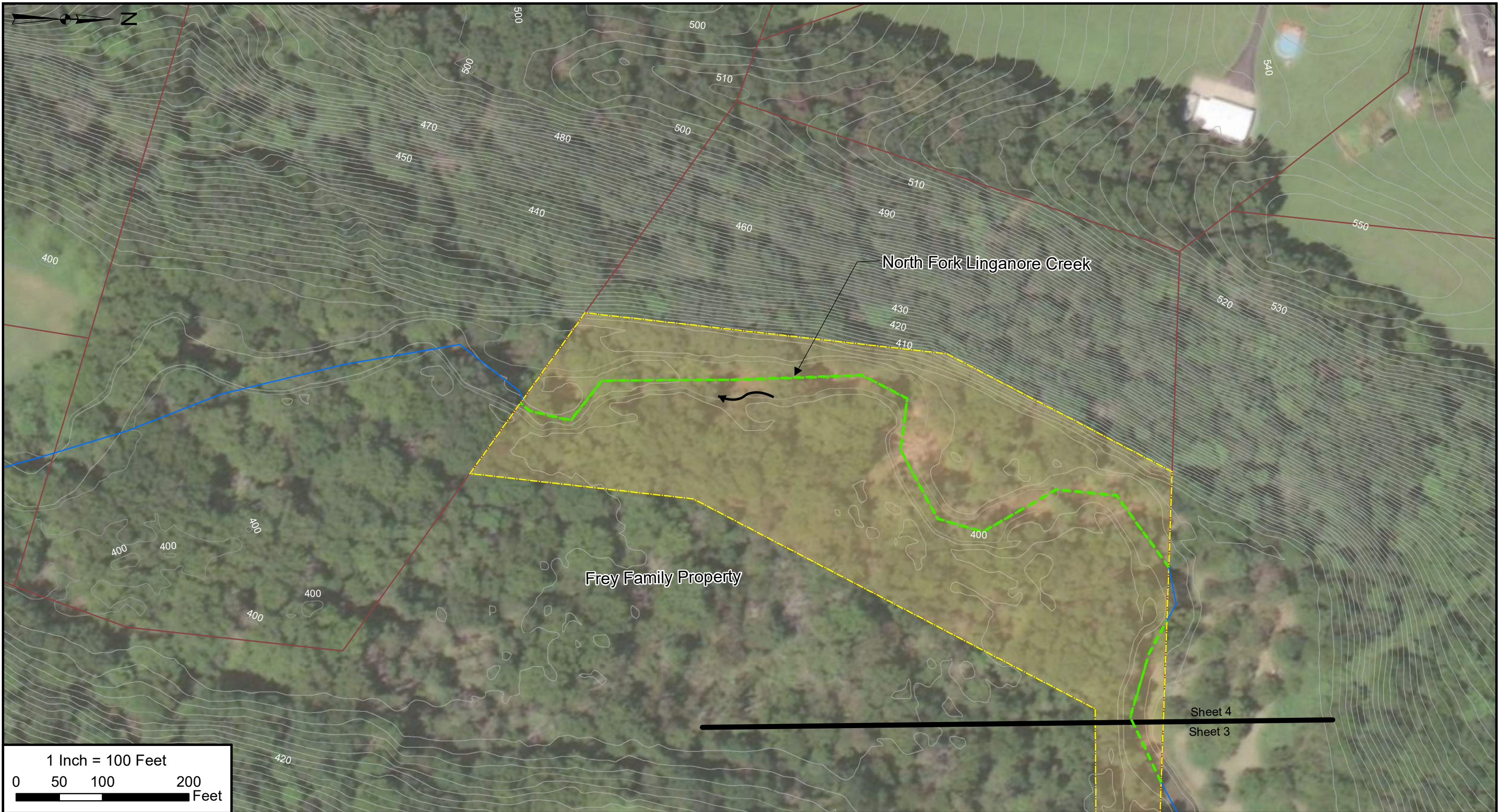


Legend			
	Easements		Proposed Preservation Area
	Parcels		Proposed Wetland Buffer
	Streams (Non-Targeted for Even Flow Bank)		Proposed Wetlands/Restored Floodplain
	Additional Existing Tributary		Existing Wetlands
	Matchline		Wetland Continues
			Targeted Existing Stream Reach for Even Flow Bank
			North Fork Linganore Creek
			UT 1 to North Fork Linganore Creek
			UT 2 to North Fork Linganore Creek
			Flow Direction
			UT 3 to UT 1
			Talbot Branch
			UT to Talbot Branch Extension
			Proposed Channel

**EVEN FLOW MITIGATION BANK
PROPOSED CONCEPTUAL PLAN**

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Frederick County,
Maryland



Legend	
	Easements
	Parcels
	Streams (Non-Targeted for Even Flow Bank)
	Additional Existing Tributary
	Matchline
	Proposed Preservation Area
	Proposed Wetland Buffer
	Proposed Wetlands/Restored Floodplain
	Existing Wetlands
	Wetland Continues
Targeted Existing Stream Reach for Even Flow Bank	
	North Fork Linganore Creek
	UT 1 to North Fork Linganore Creek
	UT 2 to North Fork Linganore Creek
	Flow Direction
	UT 3 to UT 1
	Talbot Branch
	UT to Talbot Branch Extension
	Proposed Channel

**EVEN FLOW MITIGATION BANK
PROPOSED CONCEPTUAL PLAN**

Plan Sheet 4 of 17

Frederick County, Maryland

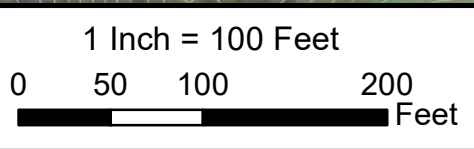


Legend			
	Easements		Proposed Preservation Area
	Parcels		Proposed Wetland Buffer
	Streams (Non-Targeted for Even Flow Bank)		Proposed Wetlands/Restored Floodplain
	Additional Existing Tributary		Existing Wetlands
	Matchline		Wetland Continues
		Targeted Existing Stream Reach for Even Flow Bank	
			North Fork Linganore Creek
			UT 1 to North Fork Linganore Creek
			UT 2 to North Fork Linganore Creek
			Flow Direction
			UT 3 to UT 1
			Talbot Branch
			UT to Talbot Branch Extension
			Proposed Channel

**EVEN FLOW MITIGATION BANK
PROPOSED CONCEPTUAL PLAN**

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Frederick County,
Maryland




Legend			
	Easements		Proposed Preservation Area
	Parcels		Proposed Wetland Buffer
	Streams (Non-Targeted for Even Flow Bank)		Proposed Wetlands/Restored Floodplain
	Additional Existing Tributary		Existing Wetlands
	Matchline		Wetland Continues
		Targeted Existing Stream Reach for Even Flow Bank	
			North Fork Linganore Creek
			UT 1 to North Fork Linganore Creek
			UT 2 to North Fork Linganore Creek
			Flow Direction
			UT 3 to UT 1
			Talbot Branch
			UT to Talbot Branch Extension
			Proposed Channel

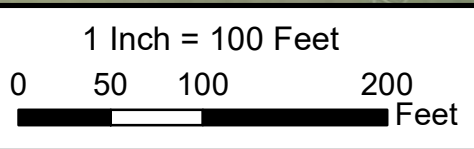
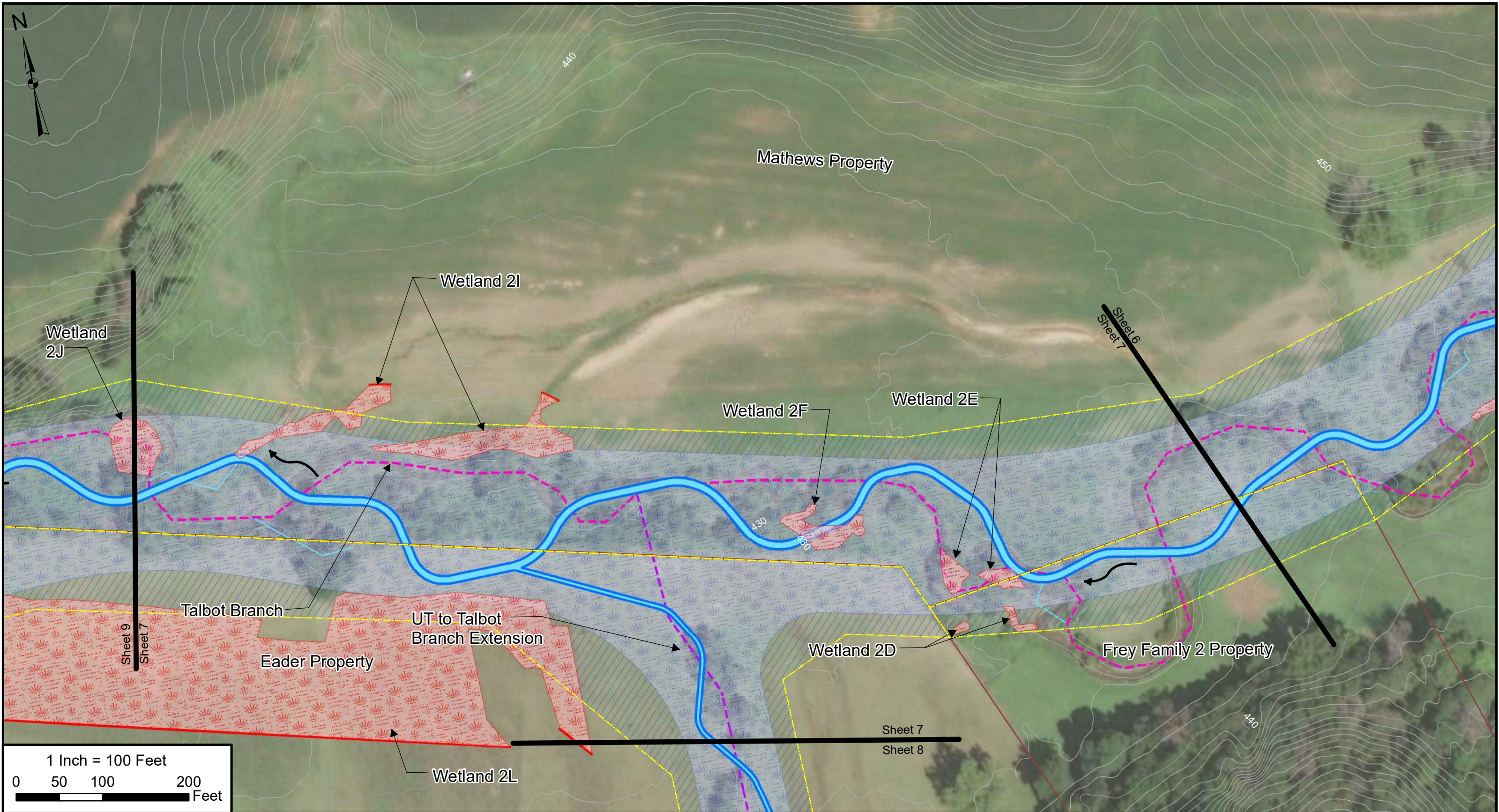
**EVEN FLOW MITIGATION BANK
PROPOSED CONCEPTUAL PLAN**

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Frederick County,
Maryland



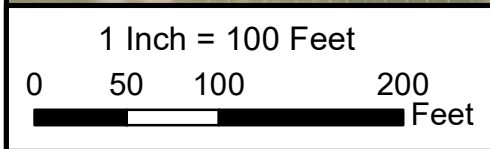


Legend			
	Easements		Proposed Preservation Area
	Parcels		Proposed Wetland Buffer
	Streams (Non-Targeted for Even Flow Bank)		Proposed Wetlands/Restored Floodplain
	Additional Existing Tributary		Existing Wetlands
	Matchline		Wetland Continues
			Targeted Existing Stream Reach for Even Flow Bank
			North Fork Linganore Creek
			UT 1 to North Fork Linganore Creek
			UT 2 to North Fork Linganore Creek
			Flow Direction
			UT 3 to UT 1
			Talbot Branch
			UT to Talbot Branch Extension
			Proposed Channel

**EVEN FLOW MITIGATION BANK
PROPOSED CONCEPTUAL PLAN**

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Frederick County,
Maryland

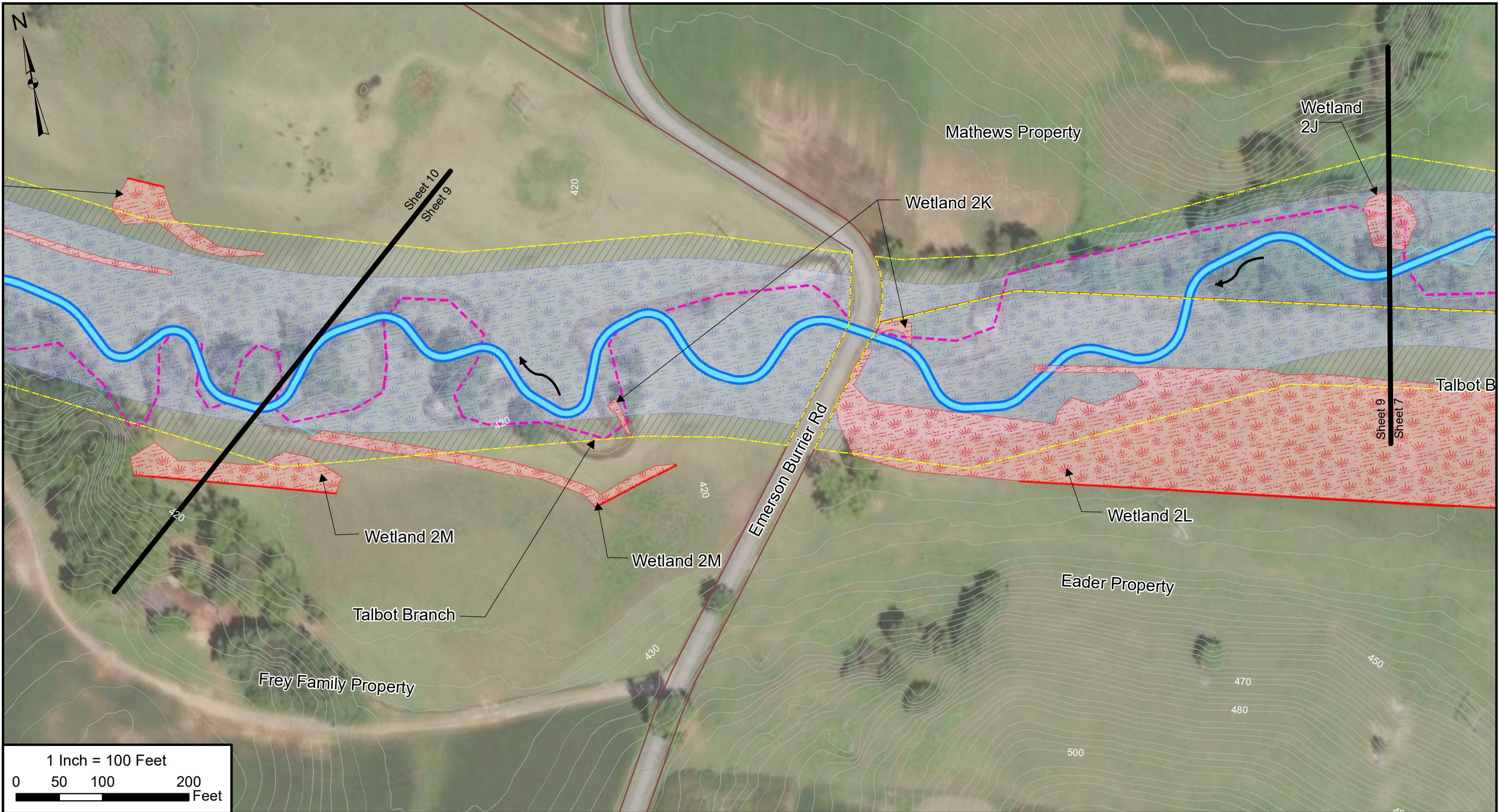


Legend			
	Easements		Proposed Preservation Area
	Parcels		Proposed Wetland Buffer
	Streams (Non-Targeted for Even Flow Bank)		Proposed Wetlands/Restored Floodplain
	Additional Existing Tributary		Existing Wetlands
	Matchline		Wetland Continues
		Targeted Existing Stream Reach for Even Flow Bank	
			North Fork Linganore Creek
			UT 1 to North Fork Linganore Creek
			UT 2 to North Fork Linganore Creek
			Flow Direction
			UT 3 to UT 1
			Talbot Branch
			UT to Talbot Branch Extension
			Proposed Channel

**EVEN FLOW MITIGATION BANK
PROPOSED CONCEPTUAL PLAN**

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Frederick County,
Maryland




Legend			
	Easements		Proposed Preservation Area
	Parcels		Proposed Wetland Buffer
	Streams (Non-Targeted for Even Flow Bank)		Proposed Wetlands/Restored Floodplain
	Additional Existing Tributary		Existing Wetlands
	Matchline		Wetland Continues
		Targeted Existing Stream Reach for Even Flow Bank	
			North Fork Linganore Creek
			UT 1 to North Fork Linganore Creek
			UT 2 to North Fork Linganore Creek
			Flow Direction
			UT 3 to UT 1
			Talbot Branch
			UT to Talbot Branch Extension
			Proposed Channel

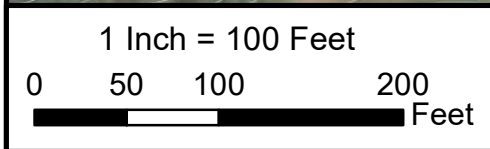
**EVEN FLOW MITIGATION BANK
PROPOSED CONCEPTUAL PLAN**

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Frederick County,
Maryland





Legend			
	Easements		Existing Wetlands
	Parcels		Proposed Wetlands/Restored Floodplain
	Streams (Non-Targeted for Even Flow Bank)		Wetland Continues
	Additional Existing Tributary		North Fork Linganore Creek
	Matchline		UT 1 to North Fork Linganore Creek
			UT 2 to North Fork Linganore Creek
			Flow Direction
			UT 3 to UT 1
			Talbot Branch
			UT to Talbot Branch Extension
			Proposed Channel
			Proposed Preservation Area
			Proposed Wetland Buffer

**EVEN FLOW MITIGATION BANK
 PROPOSED CONCEPTUAL PLAN**

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Frederick County, Maryland



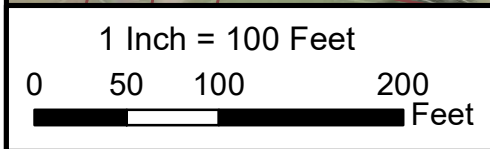
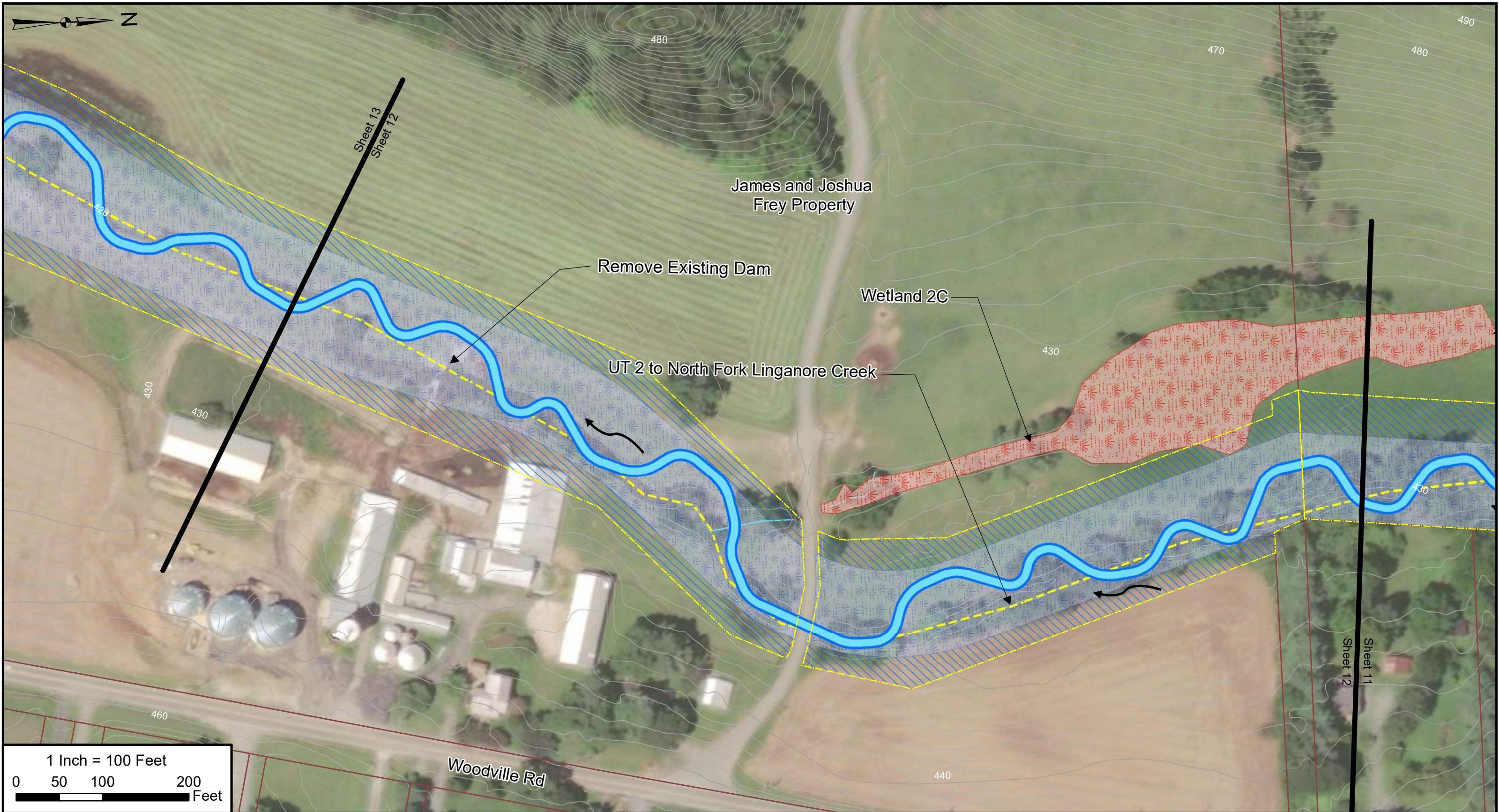
Legend

Easements	Proposed Wetland Buffer	Targeted Existing Stream Reach for Even Flow Bank	UT 3 to UT 1
Parcels	Proposed Wetlands/Restored Floodplain	North Fork Linganore Creek	Talbot Branch
Streams (Non-Targeted for Even Flow Bank)	Existing Wetlands	UT 1 to North Fork Linganore Creek	UT to Talbot Branch Extension
Additional Existing Tributary	Wetland Continues	UT 2 to North Fork Linganore Creek	Proposed Channel
Matchline		Flow Direction	

**EVEN FLOW MITIGATION BANK
PROPOSED CONCEPTUAL PLAN**

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Frederick County, Maryland



Legend			
	Easements		Proposed Preservation Area
	Parcels		Proposed Wetland Buffer
	Streams (Non-Targeted for Even Flow Bank)		Proposed Wetlands/Restored Floodplain
	Additional Existing Tributary		Existing Wetlands
	Matchline		Wetland Continues
		Targeted Existing Stream Reach for Even Flow Bank	
			North Fork Linganore Creek
			UT 1 to North Fork Linganore Creek
			UT 2 to North Fork Linganore Creek
			Flow Direction
			UT 3 to UT 1
			Talbot Branch
			UT to Talbot Branch Extension
			Proposed Channel

EVEN FLOW MITIGATION BANK
PROPOSED CONCEPTUAL PLAN
 Plan Sheet 12 of 17



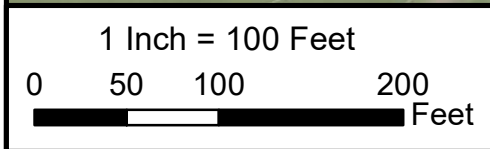
Legend

Easements	Proposed Preservation Area	Targeted Existing Stream Reach for Even Flow Bank	UT 3 to UT 1
Parcels	Proposed Wetland Buffer	North Fork Linganore Creek	Talbot Branch
Streams (Non-Targeted for Even Flow Bank)	Proposed Wetlands/Restored Floodplain	UT 1 to North Fork Linganore Creek	UT to Talbot Branch Extension
Additional Existing Tributary	Existing Wetlands	UT 2 to North Fork Linganore Creek	Proposed Channel
Matchline	Wetland Continues	Flow Direction	

**EVEN FLOW MITIGATION BANK
PROPOSED CONCEPTUAL PLAN**

Plan Sheet 13 of 17

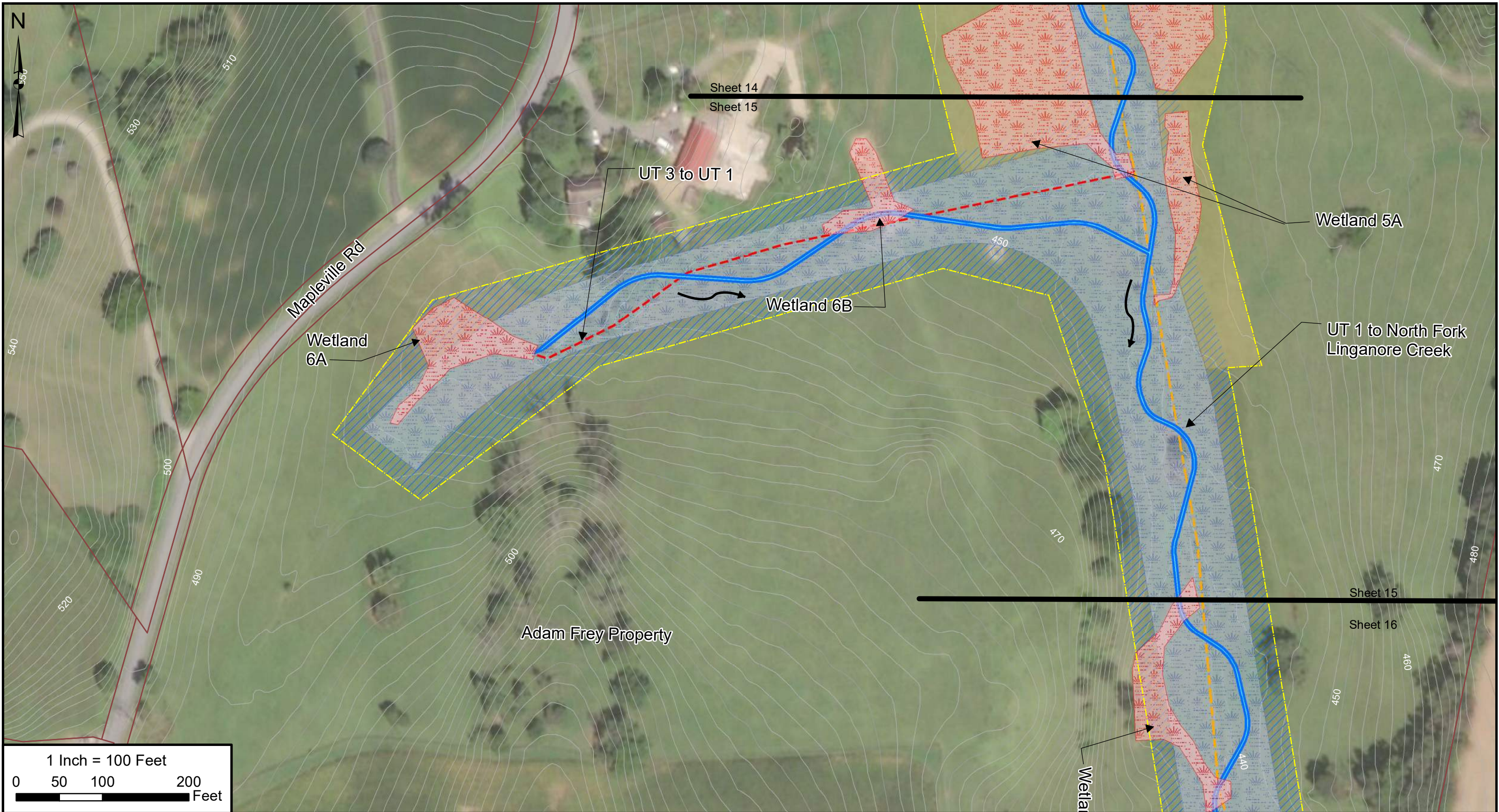
res Frederick County, Maryland RK&K



Legend			
	Easements		Proposed Preservation Area
	Parcels		Proposed Wetland Buffer
	Streams (Non-Targeted for Even Flow Bank)		Proposed Wetlands/Restored Floodplain
	Additional Existing Tributary		Existing Wetlands
	Matchline		Wetland Continues
		Targeted Existing Stream Reach for Even Flow Bank	
			North Fork Linganore Creek
			UT 1 to North Fork Linganore Creek
			UT 2 to North Fork Linganore Creek
			Flow Direction
			UT 3 to UT 1
			Talbot Branch
			UT to Talbot Branch Extension
			Proposed Channel

**EVEN FLOW MITIGATION BANK
 PROPOSED CONCEPTUAL PLAN**
 Plan Sheet 14 of 17

Frederick County,
Maryland

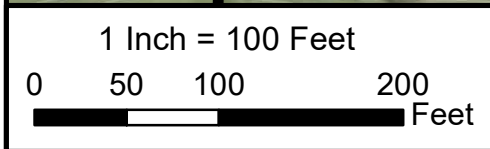


Legend	
	Easements
	Parcels
	Streams (Non-Targeted for Even Flow Bank)
	Additional Existing Tributary
	Matchline
	Proposed Preservation Area
	Proposed Wetland Buffer
	Proposed Wetlands/Restored Floodplain
	Existing Wetlands
	Wetland Continues
Targeted Existing Stream Reach for Even Flow Bank	
	North Fork Linganore Creek
	UT 1 to North Fork Linganore Creek
	UT 2 to North Fork Linganore Creek
	Flow Direction
	UT 3 to UT 1
	Talbot Branch
	UT to Talbot Branch Extension
	Proposed Channel

**EVEN FLOW MITIGATION BANK
PROPOSED CONCEPTUAL PLAN**

Plan Sheet 15 of 17

Frederick County, Maryland



Legend			
	Easements		Proposed Preservation Area
	Parcels		Proposed Wetland Buffer
	Streams (Non-Targeted for Even Flow Bank)		Proposed Wetlands/Restored Floodplain
	Additional Existing Tributary		Existing Wetlands
	Matchline		Wetland Continues
		Targeted Existing Stream Reach for Even Flow Bank	
			North Fork Linganore Creek
			UT 1 to North Fork Linganore Creek
			UT 2 to North Fork Linganore Creek
			Flow Direction
			UT 3 to UT 1
			Talbot Branch
			UT to Talbot Branch Extension
			Proposed Channel

**EVEN FLOW MITIGATION BANK
PROPOSED CONCEPTUAL PLAN**

Plan Sheet 16 of 17

Frederick County,
Maryland



Legend












Easements	Proposed Preservation Area	Targeted Existing Stream Reach for Even Flow Bank	UT 3 to UT 1
Parcels	Proposed Wetland Buffer	North Fork Linganore Creek	Talbot Branch
Streams (Non-Targeted for Even Flow Bank)	Proposed Wetlands/Restored Floodplain	UT 1 to North Fork Linganore Creek	UT to Talbot Branch Extension
Additional Existing Tributary	Existing Wetlands	UT 2 to North Fork Linganore Creek	Proposed Channel
Matchline	Wetland Continues	Flow Direction	

**EVEN FLOW MITIGATION BANK
PROPOSED CONCEPTUAL PLAN**

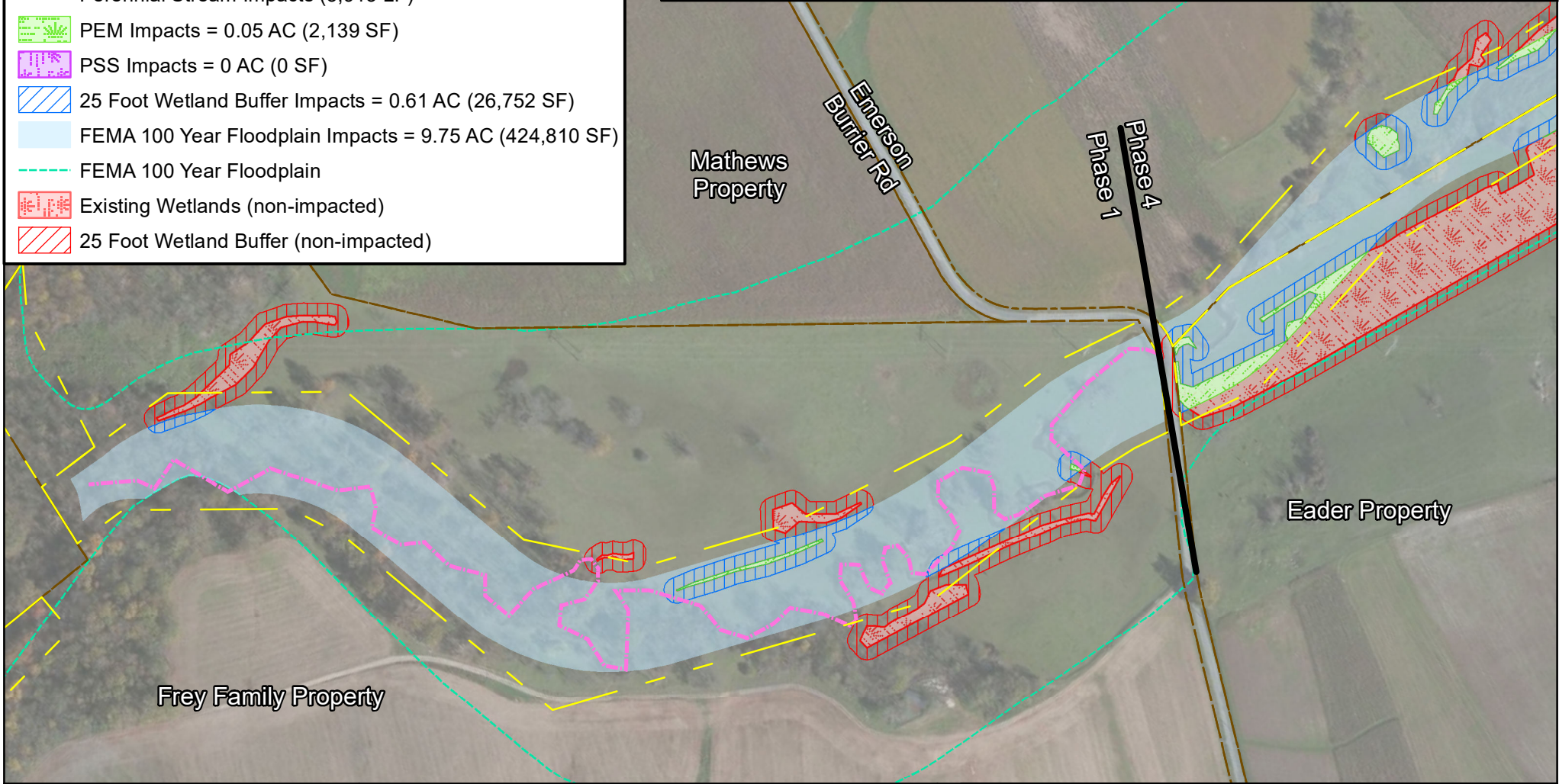
Plan Sheet 17 of 17

Frederick County,
Maryland

Legend

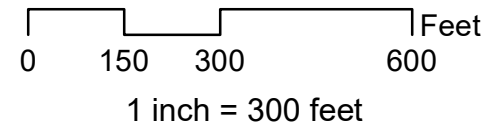
-  Matchline
-  Easement Boundary = 13.64 AC
-  Parcels
-  Perennial Stream Impacts (3,913 LF)
-  PEM Impacts = 0.05 AC (2,139 SF)
-  PSS Impacts = 0 AC (0 SF)
-  25 Foot Wetland Buffer Impacts = 0.61 AC (26,752 SF)
-  FEMA 100 Year Floodplain Impacts = 9.75 AC (424,810 SF)
-  FEMA 100 Year Floodplain
-  Existing Wetlands (non-impacted)
-  25 Foot Wetland Buffer (non-impacted)

Aquatic Resource Type	USACE Impacts		MDE Impacts	
	Impact Duration	Area/Length (AC(SF)LF)	Impact Duration	Area/Length (AC(SF)LF)
Perennial Stream	Permanent	3,913	Temporary	3,913
PEM	Permanent	0.05 (2,139)	Temporary	0.05 (2,139)
PSS	Permanent	0	Temporary	0
Wetland Buffer	N/A	N/A	Temporary	0.61 (26,752)
FEMA 100 Year Floodplain	N/A	N/A	Temporary	9.75 (424,810)














Even Flow Mitigation Bank Impacted Features Phase 1

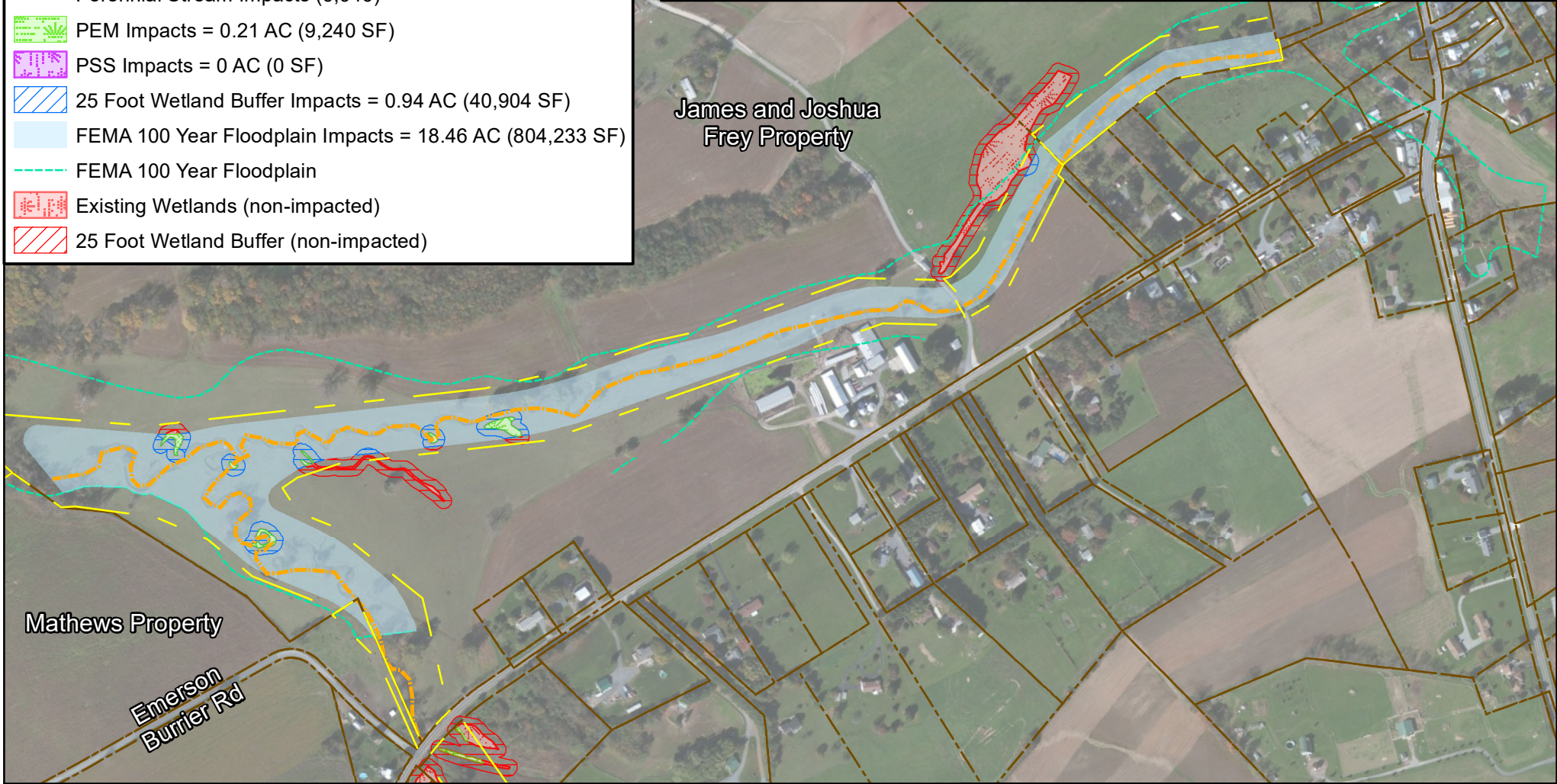
Frederick County, Maryland
Sheet 1 of 4



Legend

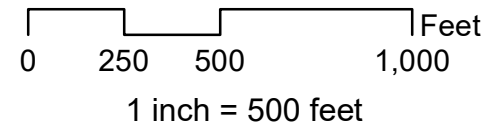
-  Matchline
-  Easement Boundary = 40.48 AC
-  Parcels
-  Perennial Stream Impacts (6,946)
-  PEM Impacts = 0.21 AC (9,240 SF)
-  PSS Impacts = 0 AC (0 SF)
-  25 Foot Wetland Buffer Impacts = 0.94 AC (40,904 SF)
-  FEMA 100 Year Floodplain Impacts = 18.46 AC (804,233 SF)
-  FEMA 100 Year Floodplain
-  Existing Wetlands (non-impacted)
-  25 Foot Wetland Buffer (non-impacted)

Aquatic Resource Type	USACE Impacts		MDE Impacts	
	Impact Duration	Area/Length (AC(SF)LF)	Impact Duration	Area/Length (AC(SF)LF)
Perennial Stream	Permanent	6,946	Temporary	6,946
PEM	Permanent	0.21 (9,240)	Temporary	0.21 (9,240)
PSS	Permanent	0	Temporary	0
Wetland Buffer	N/A	N/A	Temporary	0.94 (40,904)
FEMA 100 Year Floodplain	N/A	N/A	Temporary	18.46 (804,233)














Even Flow Mitigation Bank Impacted Features Phase 2

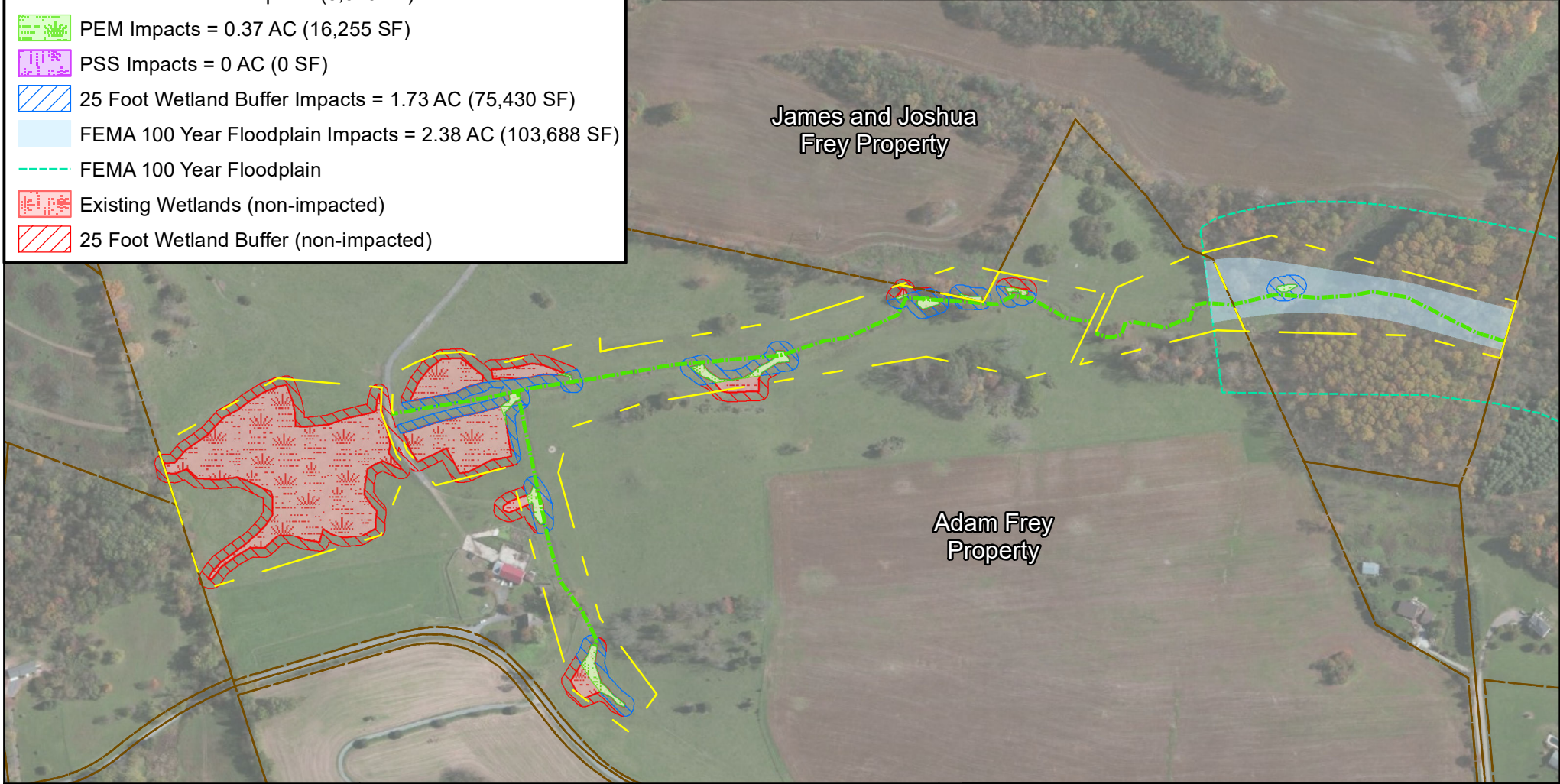
Frederick County, Maryland
Sheet 2 of 4



Legend

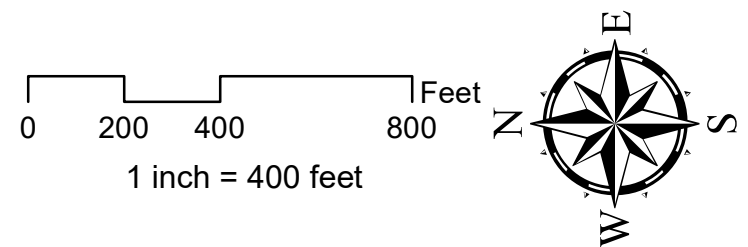
-  Matchline
-  Easement Boundary = 23.61 AC
-  Parcels
-  Perennial Stream Impacts (3,940 LF)
-  PEM Impacts = 0.37 AC (16,255 SF)
-  PSS Impacts = 0 AC (0 SF)
-  25 Foot Wetland Buffer Impacts = 1.73 AC (75,430 SF)
-  FEMA 100 Year Floodplain Impacts = 2.38 AC (103,688 SF)
-  FEMA 100 Year Floodplain
-  Existing Wetlands (non-impacted)
-  25 Foot Wetland Buffer (non-impacted)

Aquatic Resource Type	USACE Impacts		MDE Impacts	
	Impact Duration	Area/Length (AC(SF)LF)	Impact Duration	Area/Length (AC(SF)LF)
Perennial Stream	Permanent	3,940	Temporary	3,940
PEM	Permanent	0.37 (16,255)	Temporary	0.37 (16,255)
PSS	Permanent	0	Temporary	0
Wetland Buffer	N/A	N/A	Temporary	1.73 (75,430)
FEMA 100 Year Floodplain	N/A	N/A	Temporary	2.38 (103,688)














Even Flow Mitigation Bank Impacted Features Phase 3

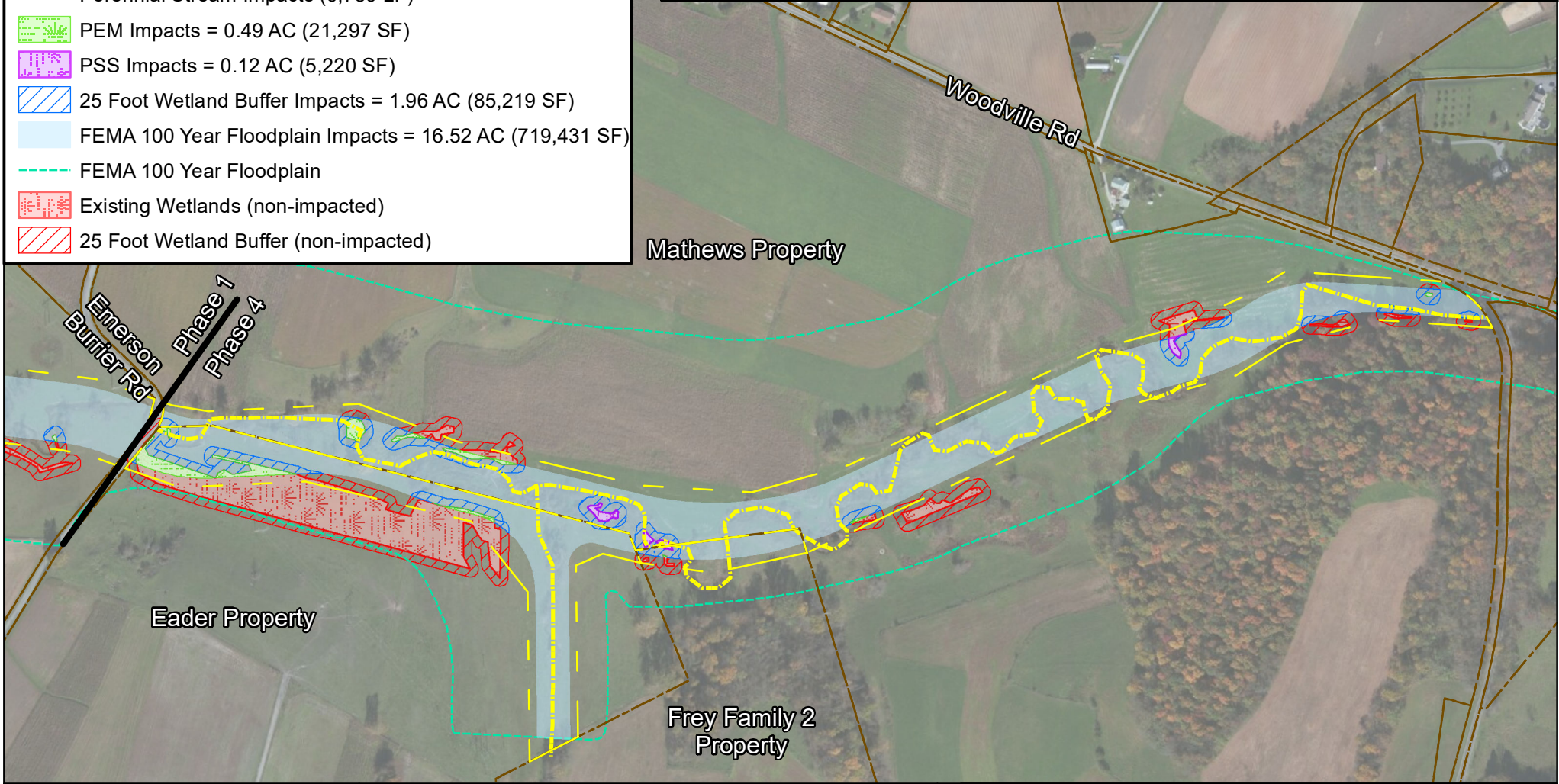
Frederick County, Maryland
Sheet 3 of 4



Legend

-  Matchline
-  Easement Boundary = 22.96 AC
-  Parcels
-  Perennial Stream Impacts (6,789 LF)
-  PEM Impacts = 0.49 AC (21,297 SF)
-  PSS Impacts = 0.12 AC (5,220 SF)
-  25 Foot Wetland Buffer Impacts = 1.96 AC (85,219 SF)
-  FEMA 100 Year Floodplain Impacts = 16.52 AC (719,431 SF)
-  FEMA 100 Year Floodplain
-  Existing Wetlands (non-impacted)
-  25 Foot Wetland Buffer (non-impacted)

Aquatic Resource Type	USACE Impacts		MDE Impacts	
	Impact Duration	Area/Length (AC(SF)LF)	Impact Duration	Area/Length (AC(SF)LF)
Perennial Stream	Permanent	6,789	Temporary	6,789
PEM	Permanent	0.49 (21,297)	Temporary	0.49 (21,297)
PSS	Permanent	0.12 (5,220)	Temporary	0.12 (5,220)
Wetland Buffer	N/A	N/A	Temporary	1.96 (85,219)
FEMA 100 Year Floodplain	N/A	N/A	Temporary	16.52 (719,431)



Even Flow Mitigation Bank Impacted Features Phase 4

Frederick County, Maryland
Sheet 4 of 4

