



U.S. Army Corps
of Engineers
Baltimore District
PN- 22-09

Public Notice

In Reply to Application Number
NAB-2021-61802 (RES UMBI/McGill Run
Mitigation Bank)
Comment Period: May 6, 2022 to June 6, 2022



Maryland Department of
the Environment

THE PURPOSE OF THIS PUBLIC NOTICE IS TO SOLICIT COMMENTS FROM INTERESTED PARTIES CONCERNING THE PROSPECTUS FOR DEVELOPMENT OF A PRIVATE COMMERCIAL 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 amend a proposed Umbrella Compensatory Mitigation Instrument (UMBI) to include a proposed Compensatory Mitigation Bank Site to 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). The proposed second addendum to the Umbrella Compensatory Mitigation Instrument will also generate mitigation credits to offset unavoidable impacts to waters of the State of Maryland authorized under Title 5 Environment Article Annotated Code of Maryland.

BANK SPONSOR:

HGS, LLC (a wholly owned subsidiary of Resource Environmental Solutions (RES))
Ms. Laura Callens
6958 Aviation Boulevard, Suite C
Glen Burnie, Maryland 21061

WATERWAY AND LOCATION OF THE PROPOSED BANK: The proposed McGill Run Mitigation Bank Site is the second addendum to the RES Umbrella Mitigation Bank Instrument (RES UMBI). The McGill Mitigation Bank Site is located at 15320 Dover Road in Upperco, Maryland. Latitude/Longitude of a center point on the site is: N 39.5440°, W -76.8100°. The McGill Mitigation Bank is located within the Piedmont physiographic region of the Gunpowder-Patapsco watershed (8-digit Hydrologic Unit Code (HUC) 02060003) located in central northwestern Baltimore County, Maryland.

OVERALL PROJECT PURPOSE: The Bank Sponsor proposes to use a combination of restoration, enhancement, and preservation of aquatic resources (wetlands and streams) and uplands for the purpose of generating compensatory mitigation credits for 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. The Bank Sponsor proposes to manage the development, release, and use of mitigation credits under the proposed RES UMBI addendum with approval by the Maryland Interagency Review Team (IRT). The McGill Run Mitigation Bank Site is the second mitigation bank site identified for inclusion in the proposed RES UMBI. The McGill Run Mitigation Bank Site Final Prospectus, including a Conceptual Mitigation Plan and impact exhibits, is included as Addendum 2 to the proposed RES UMBI. Mitigation credit will be generated on a site-specific basis and approved by the IRT and may be used as compensatory mitigation for jurisdictional impacts within the mitigation site-specific service area. As additional bank sites are developed, addenda for newly proposed mitigation bank sites will be prepared and submitted to the IRT for review and approval. The proposed McGill Run Mitigation Bank Site will provide off-site compensatory mitigation for unavoidable impacts to nontidal 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 prospectus provides a summary of the development of the proposed RES McGill Run Mitigation Bank Site. A draft Mitigation Site Plan (MSP) 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 Site has potential for providing appropriate compensatory mitigation for activities authorized by DA and MDE permits. An approved UMBI with Bank Site addendum 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=107:278:4446758943874:::RP,278:P278_BANK_ID:6175

PROJECT DESCRIPTION (McGill Run Mitigation Bank Site): The proposed establishment of the McGill Run Mitigation Bank Site involves re-establishment, rehabilitation, preservation, and enhancement of aquatic resources. It is proposed that ecological lift associated with establishment of this mitigation bank site will restore the integrated stream wetland system that once existed with an enhanced stream buffer. The restoration efforts will improve hydraulic functions including physicochemical functions, for example, nutrient cycling through hyporheic exchange. In addition, the proposed restoration will address existing degradation and impacts to water quality and biology of the stream and improve channel alignment. The restoration will remove legacy floodplain sediments, establish new floodplain/wetland benches, or connect the stream to a terrace floodplain. The restoration will reduce instream energy, distribute flood flows to an adjacent floodplain, and address the current and future sediment and hydrologic regime. The restored stream systems will have a higher capacity for increased aquatic function due to their proximity to similar adjacent resources and would generate stream credits that are to provide off-site compensatory mitigation for activities authorized under a DA and MDE permits. Specifically, the project objectives as described by the Bank Sponsor are:

- Restore approximately 5,820 linear feet of intermittent and perennial stream channel along the main stem of McGill Run and three (3) of its unnamed tributaries
- Enhance and preserve approximately 21.3 acres of riparian buffer, which will incorporate approximately 0.5 acres of enhanced nontidal wetlands and approximately 3.5 acres of restored nontidal wetlands

Upon Bank closure, the Sponsor may transition stewardship to a long-term steward to maintain the site. The proposed site protection will provide the Sponsor and its successors the ability to maintain the restoration project.

A summary of the proposed mitigation resource type and crediting is provided in the Prospectus.

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 primary service area for the proposed McGill Run Mitigation Bank Site is the Gunpowder-Patapsco watershed (8-digit Hydrologic Unit Code (HUC) 02060003).

The proposed secondary service areas are the Piedmont physiographic region portions of the Patuxent (HUC 02060006) and the Lower Susquehanna (HUC 02050306) watersheds. 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 an applicant

demonstrates that the mitigation credits will replace the lost aquatic functions and services at the impact site. Certain types of impacts, including impacts to coastal and tidal aquatic resources, would be excluded from mitigating at the McGill Run Mitigation Bank Site.

MITIGATION BANK APPROVAL AND PERMITTING PROCESSES: An approved Compensatory Mitigation Bank Site 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 Nontidal Wetlands Protection Act, Maryland Tidal Wetlands 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, Maryland Tidal Wetlands 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. A permit application was previously submitted for stream restoration efforts at the site unrelated to the proposed mitigation bank. The DA permit associated with the previous stream restoration permit application will require modification/reverification 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	Nontidal Wetland Impact (acres)	Stream Impact (linear feet)	Authority (Section 10/404/408)
Ecological restoration/enhancement)	0.53	6,098 (perennial and intermittent stream)	Section 404

In addition, the proposed work would impact approximately 33,917 square feet and 230,116 square feet of State regulated nontidal wetland buffer and 100-year floodplain, respectively.

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 Maryland Interagency Review Team is responsible for review, approval, and oversight of the proposed UMBI and mitigation bank site. The IRT 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 to 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 RES McGill Run Mitigation Bank Site, 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 Mitigation Site Plan for the McGill Run Mitigation Bank site. 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 Title 5 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 (2021-61802).

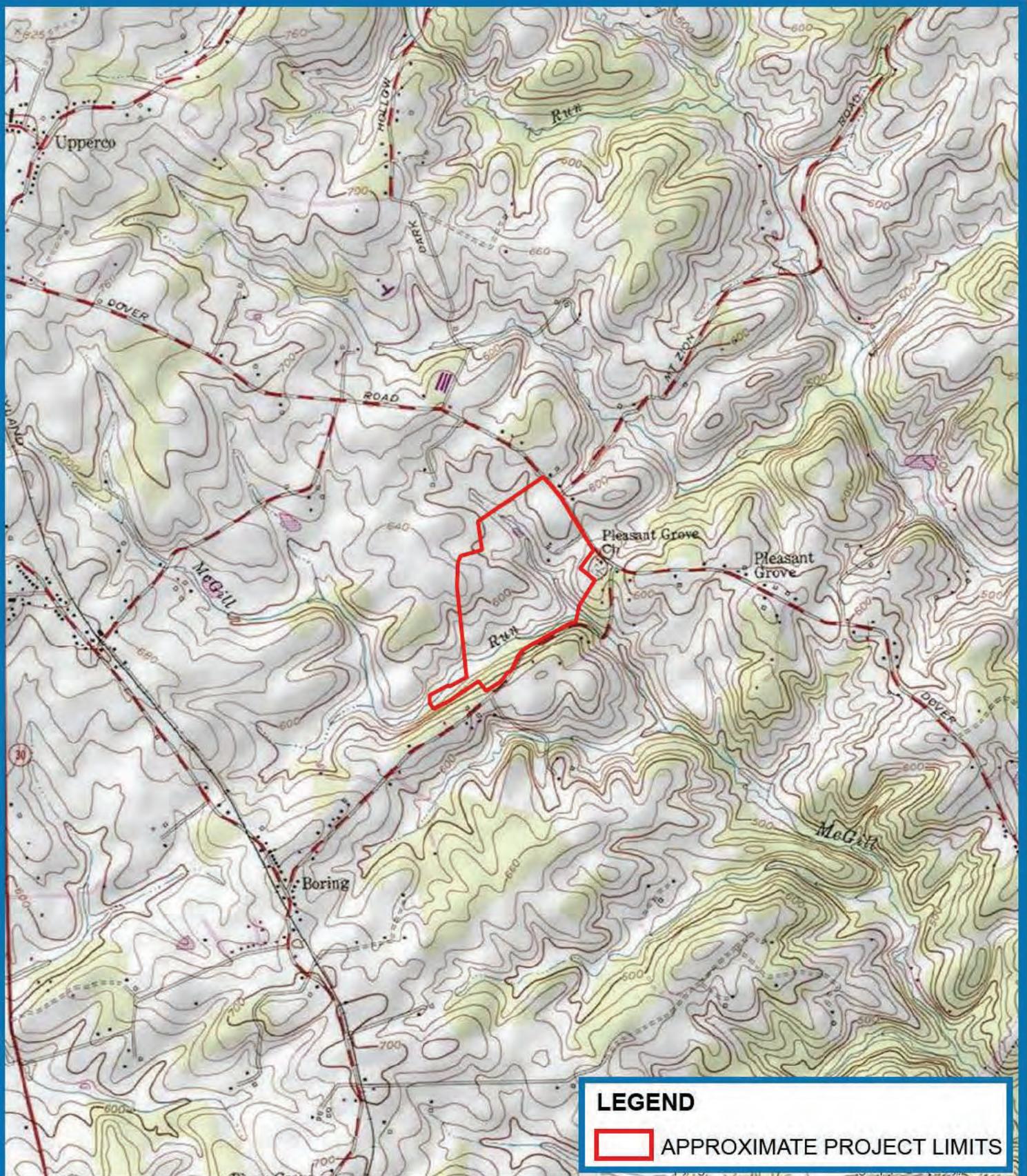
Mr. Jack Dinne
(john.j.dinne@usace.army.mil)
U.S. Army Corps of Engineers, Baltimore District
Regulatory Branch
2 Hopkins Plaza
Baltimore, MD 21201-2930

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 john.j.dinne@usace.army.mil or by contacting Ms. Kelly Neff, MDE, Wetlands and Waterways Program at 410.537.4018 or kelly.neff@maryland.gov. This public notice is issued by the Chief, Regulatory Branch.

PROJECT LOCATION



LEGEND

APPROXIMATE PROJECT LIMITS



res

CORPORATE | 6575 WEST LOOP SOUTH, SUITE 300, BELLAIRE, TX 77481
 P: 713.529.5400
 www.res.us

PROJECT LOCATION MAP

MCGILL RUN

BALTIMORE COUNTY, MARYLAND

USGS Topo Quads: Hampstead
Latitude: 39.5440
Longitude: -76.8100
Approx. Project Area: 99.12 acres
Elevation: 512 - 644 feet
Scale: 1 inch = 2,000 feet
Source: <http://resources.arcgis.com/>
 USA Topo Maps



AERIAL IMAGERY



LEGEND

 APPROXIMATE PROJECT LIMITS



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AERIAL IMAGERY

MCGILL RUN

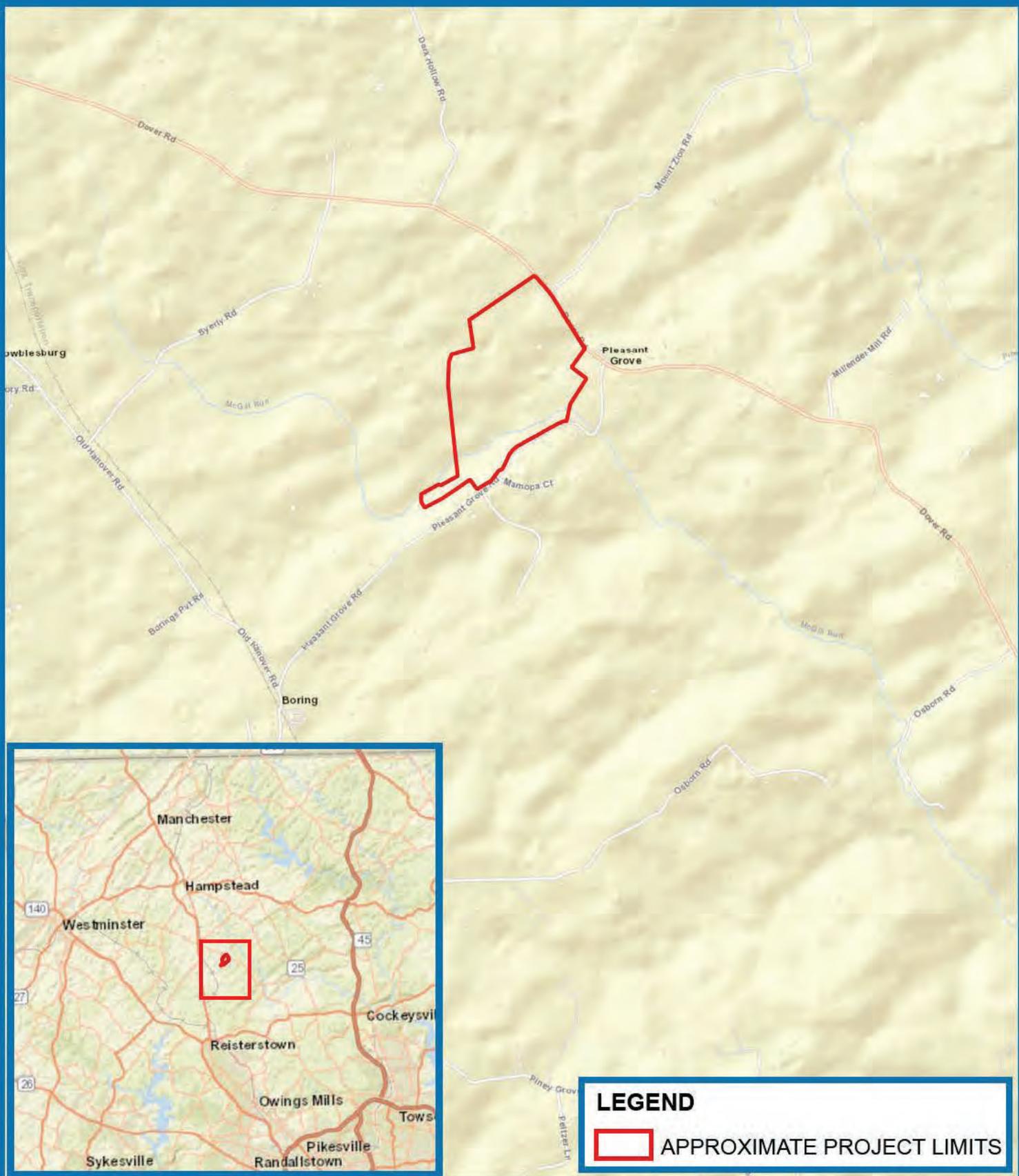
**BALTIMORE COUNTY,
MARYLAND**

Digital Orthophoto Source:
VBMP Most Recent Imagery
Virginia Lambert (VGIN)



1 inch = 400 feet

VICINITY MAP



LEGEND

 APPROXIMATE PROJECT LIMITS



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VICINITY MAP

MCGILL RUN

BALTIMORE COUNTY,
MARYLAND

Street Map Source:
World Street Map
ESRI ArcGIS Online



1 inch = 2,000 feet

Appendix E

**Conceptual Mitigation Plan
and Impact Plates**

Legend

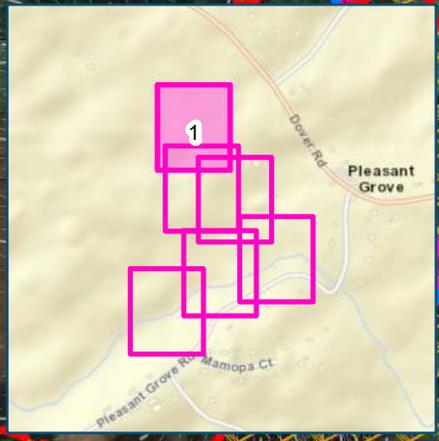
- CONSERVATION EASEMENT (28.99 AC)
- PROPOSED RESTORED / ENHANCED STREAM (5,817 LF)
- WETLAND RESTORATION AREA (3.48 AC)
- WETLAND PRESERVATION AREA (0.53 AC)
- STREAM RESTORATION BANK PLANTING (0.54 AC)
- RIPARIAN FORESTED BUFFER (27.25 AC)

PRESERVED WETLAND = 6,694 SF

35.0'

62.0'

UT-1 US



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CONCEPT PLATES

MCGILL RUN
MITIGATION BANK SITE
APPLICANT: RES

BALTIMORE COUNTY, MD

NAD 1983 Stateplane Maryland
FIPS 1900 Feet

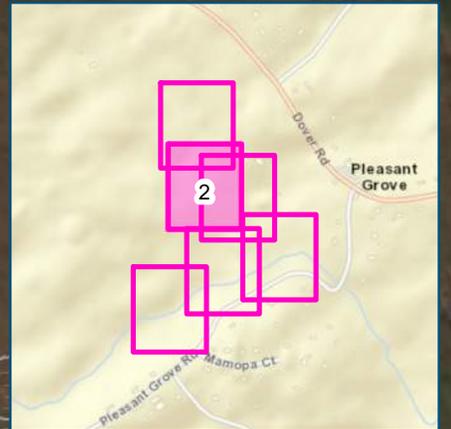
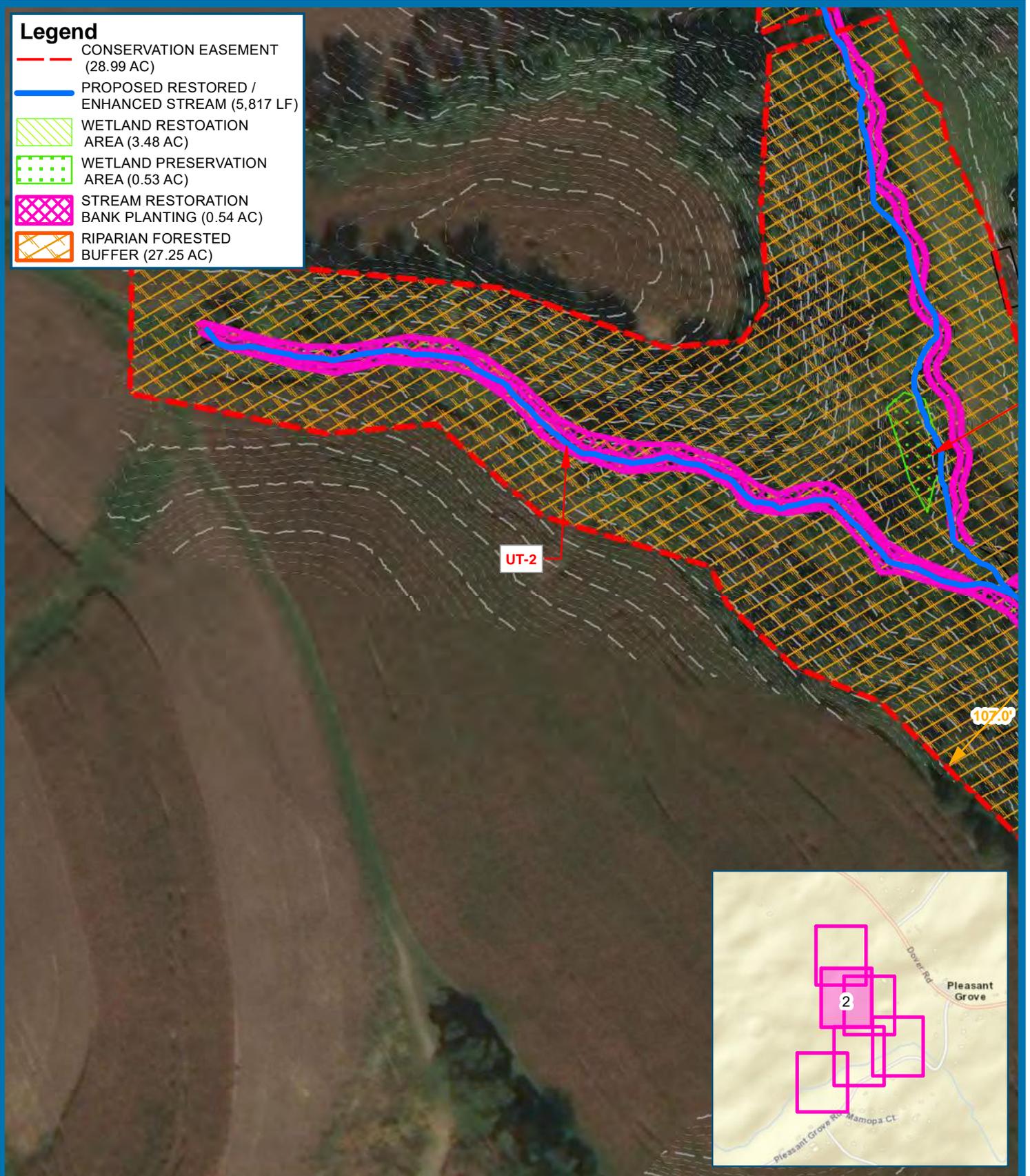
SHEET 1



1 inch = 100 feet

Legend

-  CONSERVATION EASEMENT (28.99 AC)
-  PROPOSED RESTORED / ENHANCED STREAM (5,817 LF)
-  WETLAND RESTOATION AREA (3.48 AC)
-  WETLAND PRESERVATION AREA (0.53 AC)
-  STREAM RESTORATION BANK PLANTING (0.54 AC)
-  RIPARIAN FORESTED BUFFER (27.25 AC)




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CONCEPT PLATES

MCGILL RUN
MITIGATION BANK SITE
APPLICANT: RES

BALTIMORE COUNTY, MD

NAD 1983 Stateplane Maryland
FIPS 1900 Feet

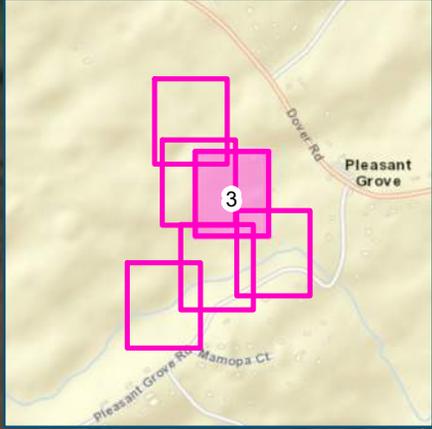
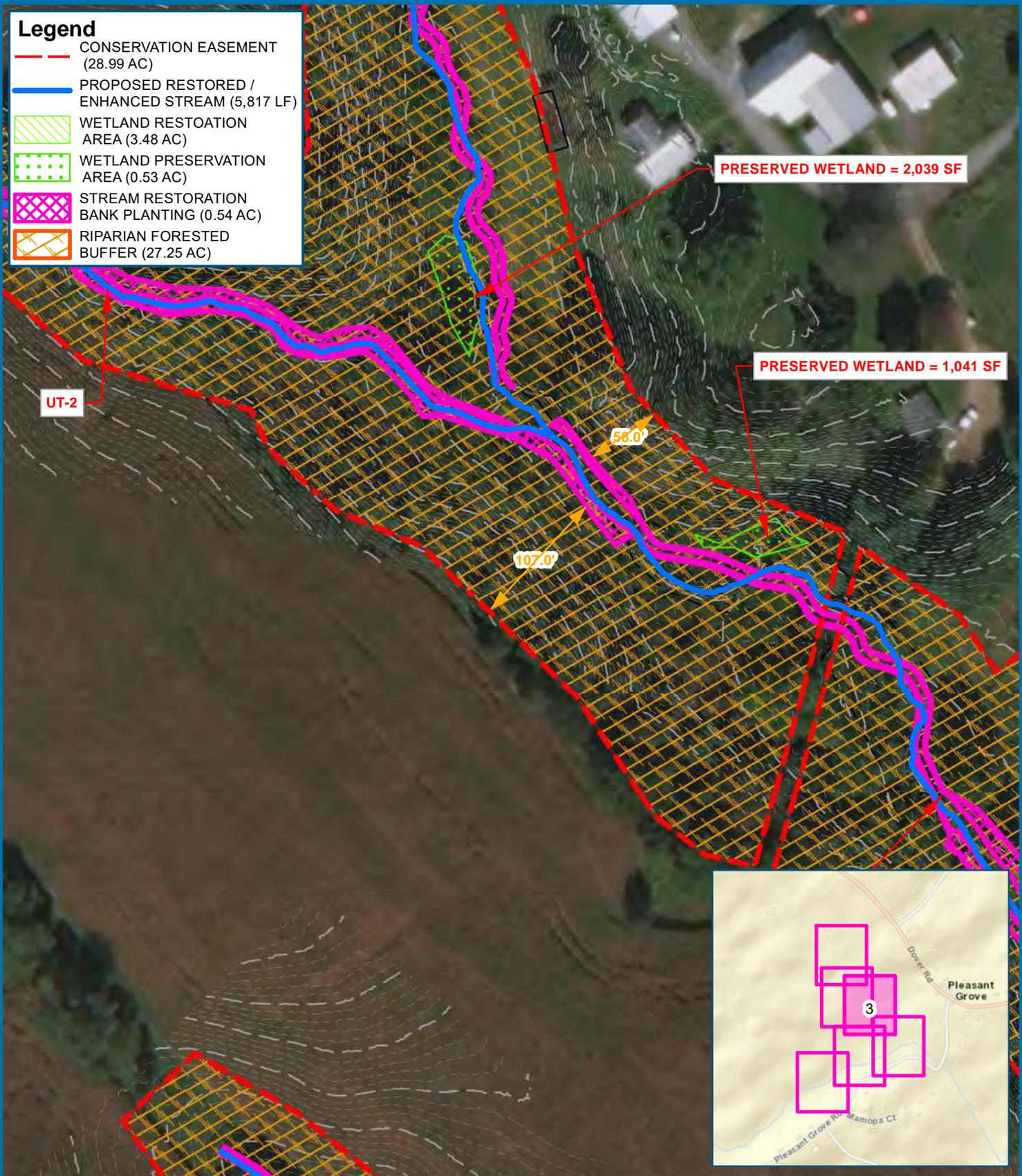
SHEET 2



1 inch = 100 feet

Legend

- CONSERVATION EASEMENT (28.99 AC)
- PROPOSED RESTORED / ENHANCED STREAM (5,817 LF)
- WETLAND RESTORATION AREA (3.48 AC)
- WETLAND PRESERVATION AREA (0.53 AC)
- STREAM RESTORATION BANK PLANTING (0.54 AC)
- RIPARIAN FORESTED BUFFER (27.25 AC)




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CONCEPT PLATES

MCGILL RUN
MITIGATION BANK SITE
APPLICANT: RES

BALTIMORE COUNTY, MD

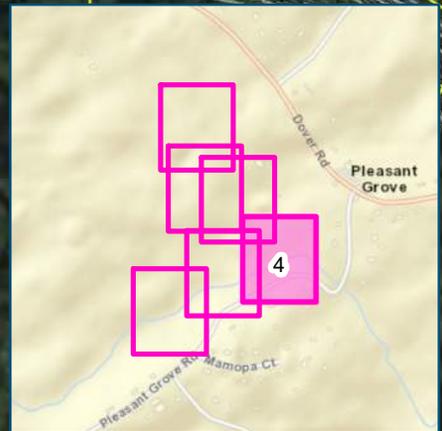
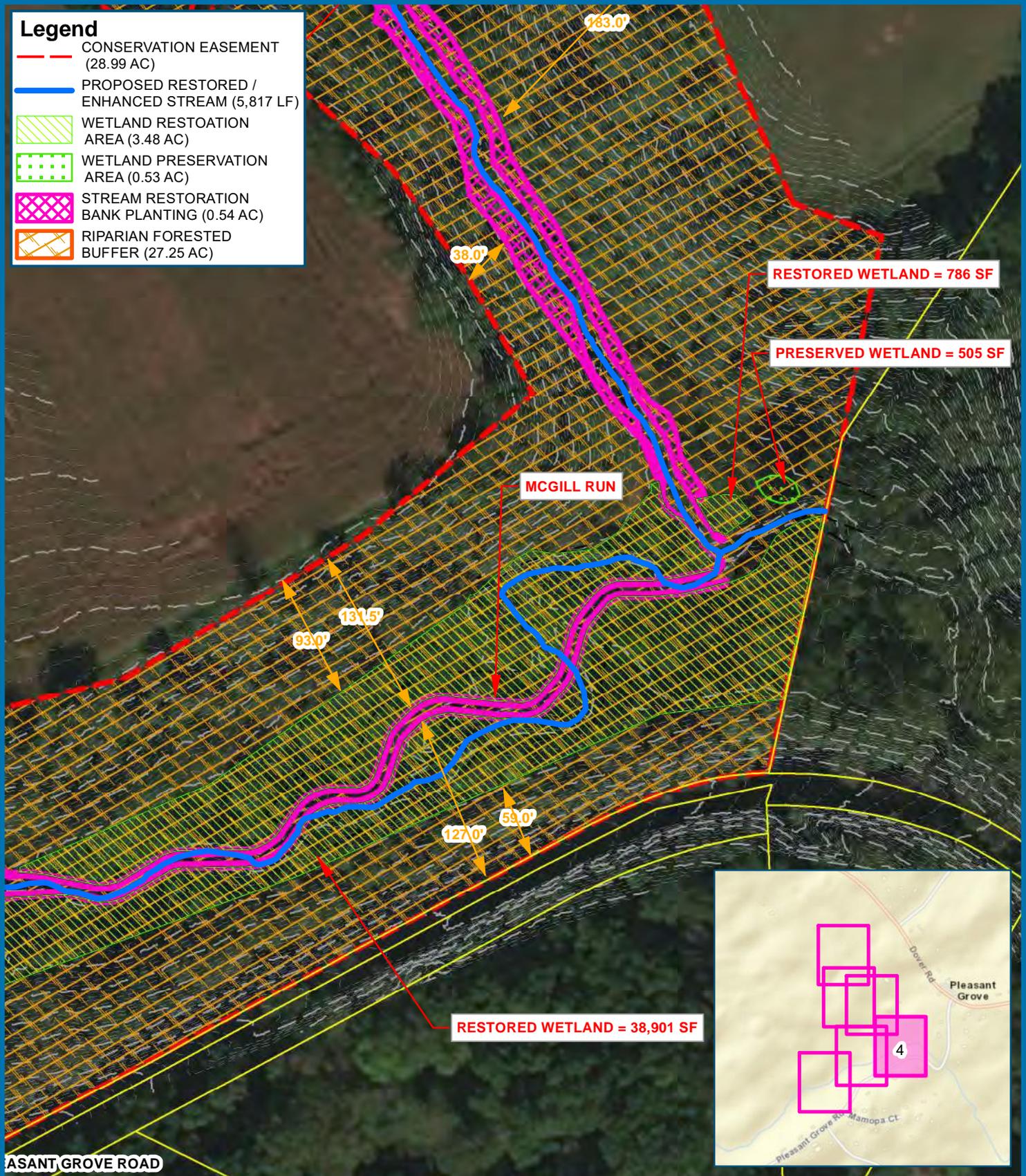
NAD 1983 Stateplane Maryland
FIPS 1900 Feet
SHEET 3

N
↑
↓
N

1 inch = 100 feet

Legend

- CONSERVATION EASEMENT (28.99 AC)
- PROPOSED RESTORED / ENHANCED STREAM (5,817 LF)
- WETLAND RESTOATION AREA (3.48 AC)
- WETLAND PRESERVATION AREA (0.53 AC)
- STREAM RESTORATION BANK PLANTING (0.54 AC)
- RIPARIAN FORESTED BUFFER (27.25 AC)



ASANT GROVE ROAD



CORPORATE | 6575 WEST LOOP SOUTH, SUITE 300, BELLAIRE, TX 77401
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CONCEPT PLATES

MCGILL RUN
MITIGATION BANK SITE
APPLICANT: RES

BALTIMORE COUNTY, MD

NAD 1983 Stateplane Maryland
FIPS 1900 Feet

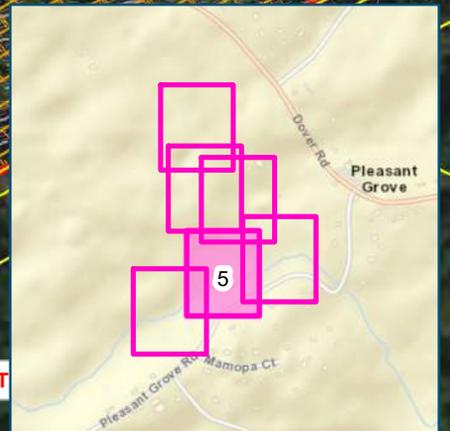
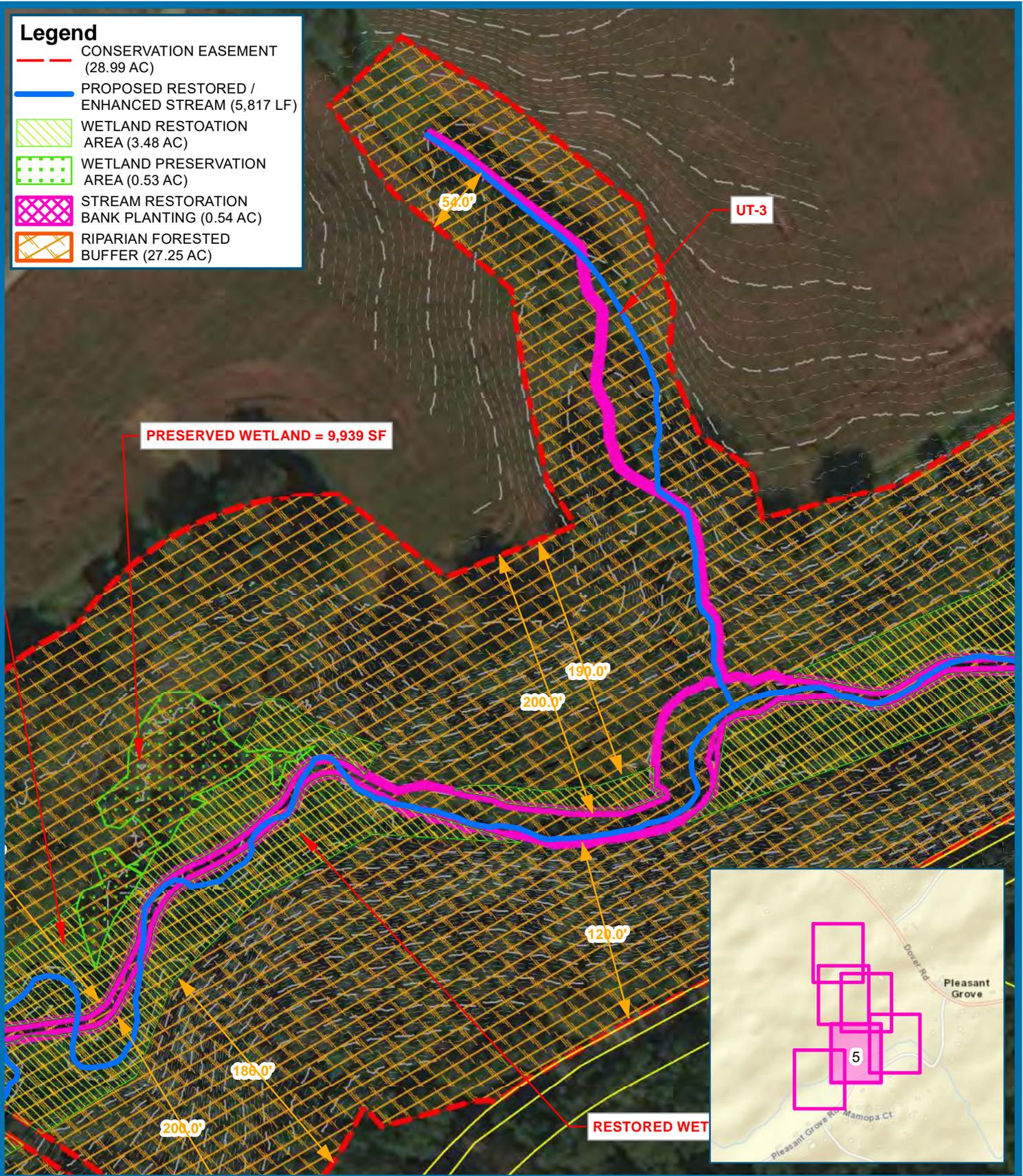
SHEET 4



1 inch = 100 feet

Legend

- CONSERVATION EASEMENT (28.99 AC)
- PROPOSED RESTORED / ENHANCED STREAM (5,817 LF)
- ▨ WETLAND RESTORATION AREA (3.48 AC)
- ▤ WETLAND PRESERVATION AREA (0.53 AC)
- ▨ STREAM RESTORATION BANK PLANTING (0.54 AC)
- ▨ RIPARIAN FORESTED BUFFER (27.25 AC)



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CONCEPT PLATES

MCGILL RUN
 MITIGATION BANK SITE
 APPLICANT: RES

BALTIMORE COUNTY, MD

NAD 1983 Stateplane Maryland
 FIPS 1900 Feet
 SHEET 5

N

 1 inch = 100 feet

Legend

- CONSERVATION EASEMENT (28.99 AC)
- PROPOSED RESTORED / ENHANCED STREAM (5,817 LF)
- ▨ WETLAND RESTORATION AREA (3.48 AC)
- ▤ WETLAND PRESERVATION AREA (0.53 AC)
- ▨ STREAM RESTORATION BANK PLANTING (0.54 AC)
- ▨ RIPARIAN FORESTED BUFFER (27.25 AC)

RESTORED WETLAND = 15,620 SF

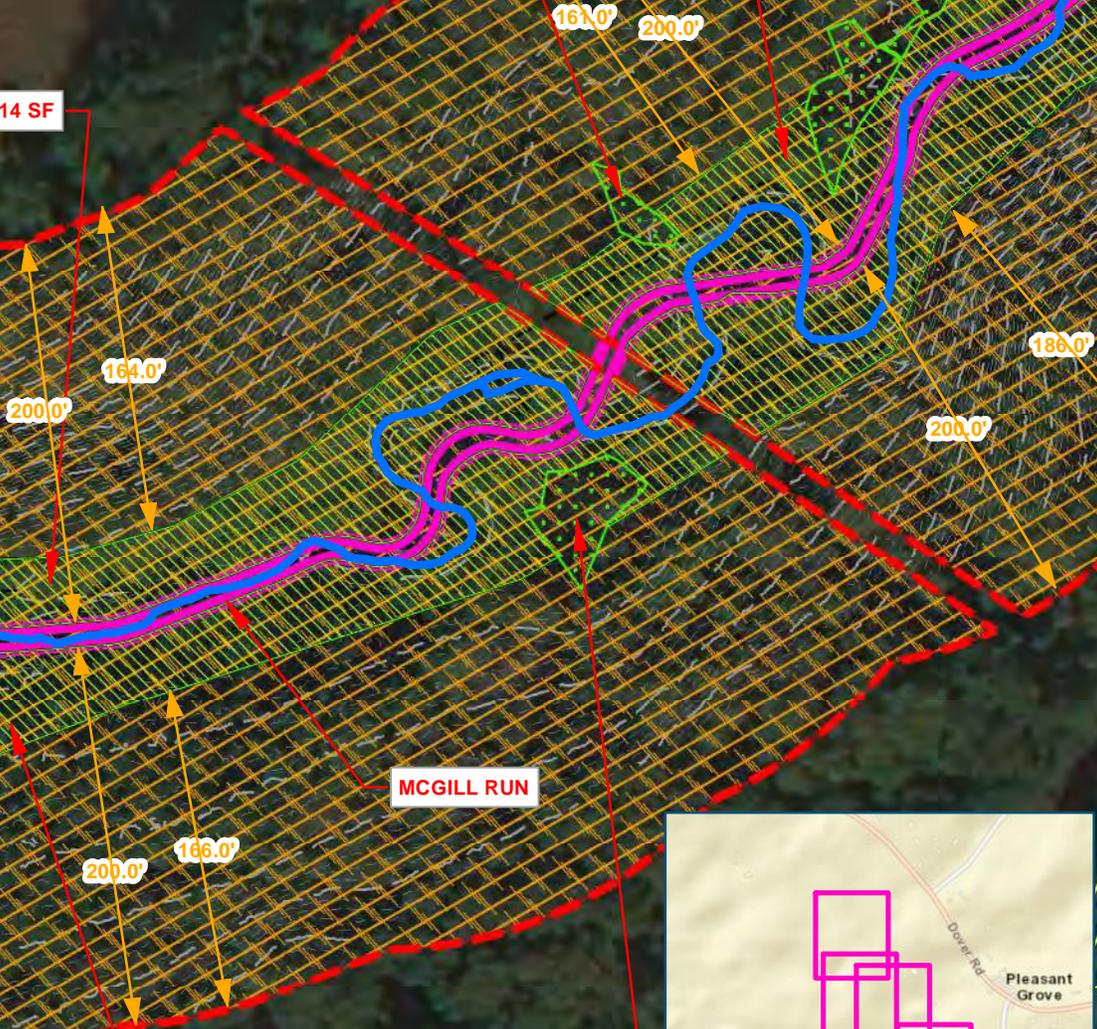
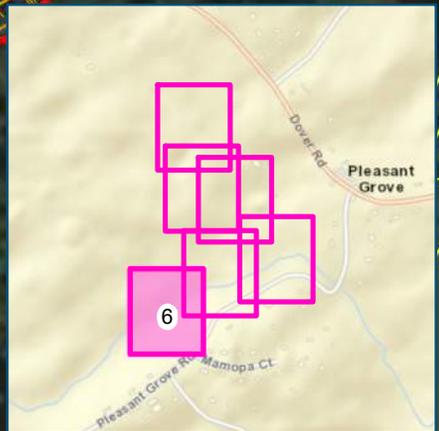
PRESERVED WETLAND = 711 SF

RESTORED WETLAND = 23,514 SF

PRESERVED WETLAND = 2,117 SF

RESTORED WETLAND = 21,859 SF

MCGILL RUN



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CONCEPT PLATES

MCGILL RUN
MITIGATION BANK SITE
APPLICANT: RES

BALTIMORE COUNTY, MD

NAD 1983 Stateplane Maryland
FIPS 1900 Feet

SHEET 6



1 inch = 100 feet

McGill Run Stream Credits with No Wetlands

Reach	Existing Length (ft)	Proposed Length (ft)		Credits
		Primary	Secondary	
McGill Run	2743	2249	1012	735
UT1US	1627	1629	-	363
UT1DS	547	547	-	53
UT2	726	726	-	146
UT3	552	538	201	104
Subtotal	6,194	5,688	1,213	1,401
3% Bonus for Conservation Easement				42.03
Total Stream Credits				1,443

McGill Run Stream Credits with Wetlands Excluded from Buffer

Reach	Existing Length (ft)	Proposed Length (ft)		Credits
		Primary	Secondary	
McGill Run	2743	2249	1012	609
UT1US	1627	1629	-	402
UT1DS	547	547	-	44
UT2	726	726	-	140
UT3	552	538	201	102
Subtotal	6,194	5,688	1,213	1,297
3% Bonus for Conservation Easement				38.91
Total Stream Credits				1,336

McGill Run Wetland Credits

Reach	Enhanced Wetland Area (AC)	Restored Wetland Area (AC)	Enhancement Credits (2:1)	Restoration Credits (1:1)	Total Wetland Mitigation Credits
McGill Run	0.31	3.41	0.15	3.41	3.56
UT1US	0.20	-	0.10	-	0.10
UT1DS	0.02	-	0.01	-	0.01
Subtotal	0.53	3.41	0.26	3.41	3.67
3% Bonus for Conservation Easement					0.11
Total Wetland Credits					3.78



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NOTES AND DETAILS

MCGILL RUN
MITIGATION BANK SITE

BALTIMORE COUNTY, MD

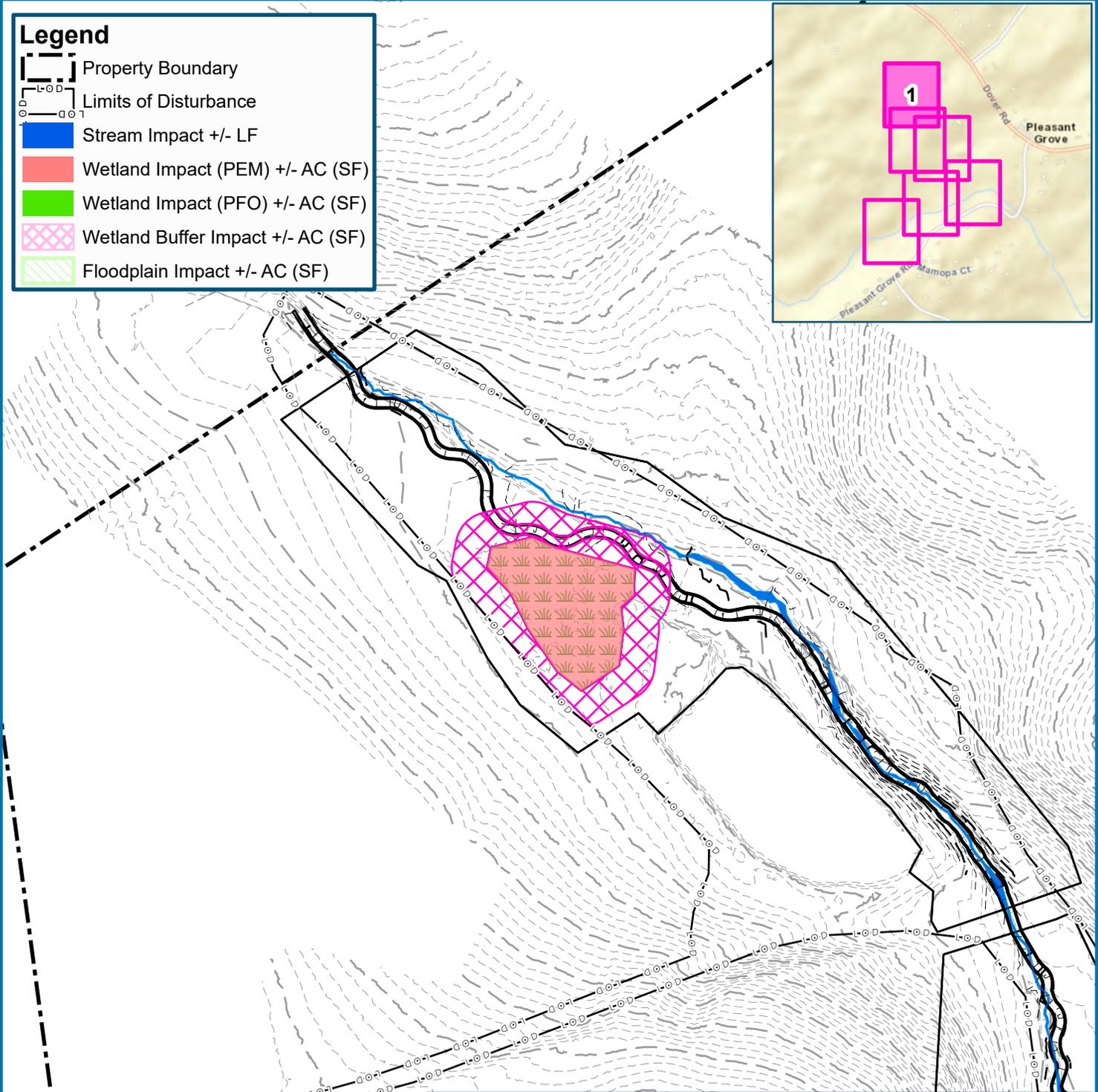
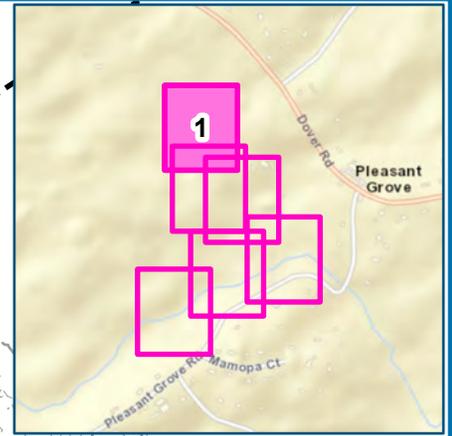
Digital Orthophoto Source:
MD IMAP, DoIT



1 inch = 200 feet

Legend

-  Property Boundary
-  Limits of Disturbance
-  Stream Impact +/- LF
-  Wetland Impact (PEM) +/- AC (SF)
-  Wetland Impact (PFO) +/- AC (SF)
-  Wetland Buffer Impact +/- AC (SF)
-  Floodplain Impact +/- AC (SF)



Values shown for this sheet only.

Aquatic Resource Type	Impact Duration	USACE Impacts		MDE Impacts		
		Area/Length (AC(SF)/LF)	Impact Duration	Area/Length (AC(SF)/LF)	Impact Duration	
Perennial Stream (R3)	Permanent	854	Temporary	0	Temporary	854
Intermittent Stream (R4)	Permanent	10	Temporary	0	Temporary	10
Ephemeral Stream (R6)	Permanent	N/A	Temporary	N/A	Temporary	N/A
PFO Wetlands	Permanent	0 (0)	Temporary	0 (0)	Temporary	0 (0)
PEM Wetlands	Permanent	0 (0)	Temporary	0.15 (6,694)	Temporary	0.15 (6,694)
Wetland Buffer	Permanent	N/A	Temporary	N/A	Temporary	0.22 (9,279)
100 Year Floodplain	Permanent	N/A	Temporary	N/A	Temporary	0 (0)



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RESOURCE IMPACTS

MCGILL RUN
MITIGATION BANK SITE

BALTIMORE COUNTY, MD

NAD 1983 Stateplane Maryland
FIPS 1900 Feet

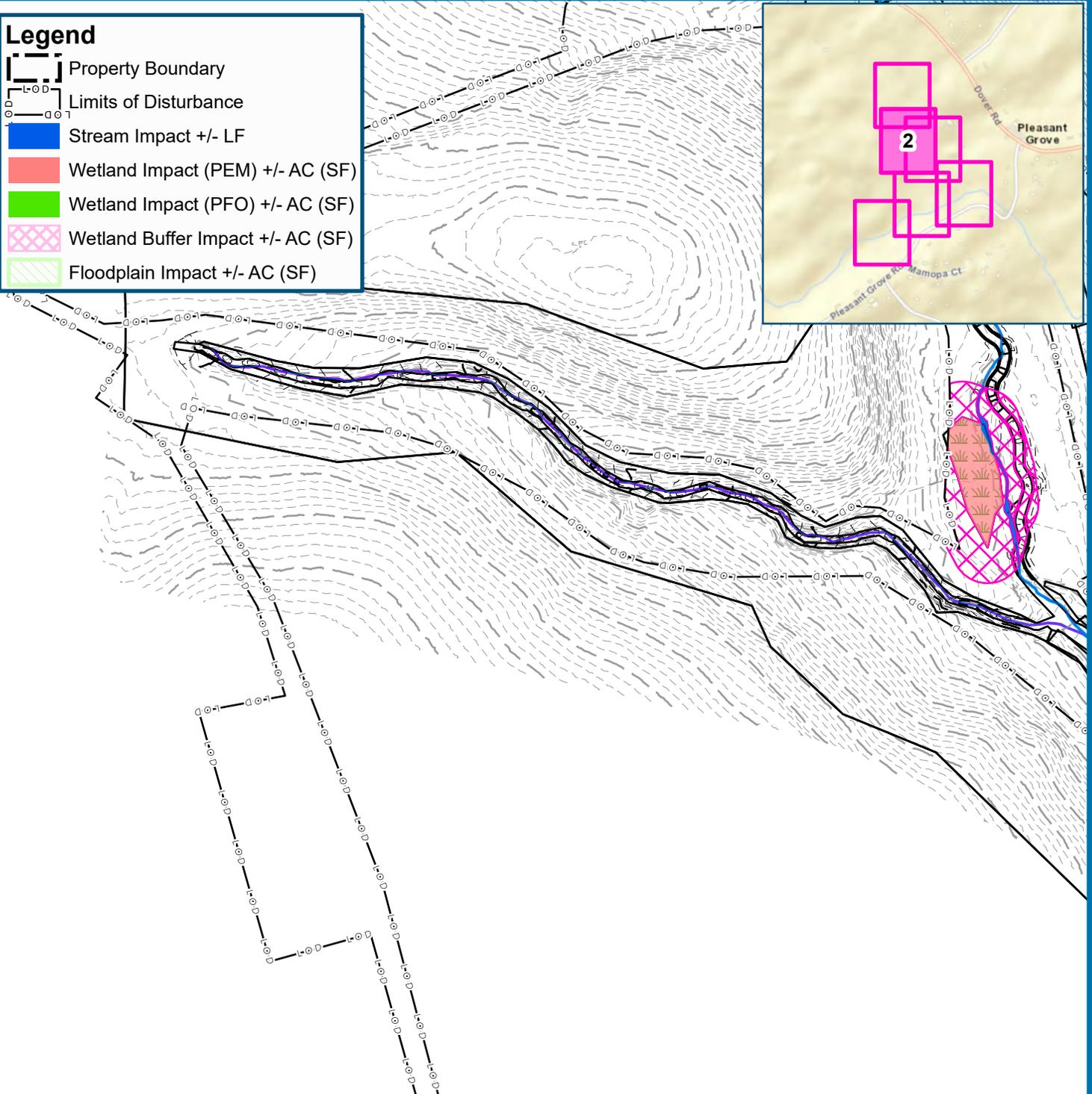
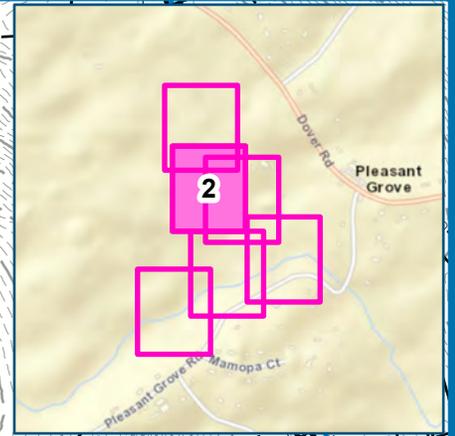
SHEET 1



1:1,200 1 inch = 100 feet

Legend

-  Property Boundary
-  Limits of Disturbance
-  Stream Impact +/- LF
-  Wetland Impact (PEM) +/- AC (SF)
-  Wetland Impact (PFO) +/- AC (SF)
-  Wetland Buffer Impact +/- AC (SF)
-  Floodplain Impact +/- AC (SF)



Values shown for this sheet only.

Aquatic Resource Type	Impact Duration	USACE Impacts		MDE Impacts		
		Area/Length (AC(SF)/LF)	Impact Duration	Area/Length (AC(SF)/LF)	Impact Duration	
Perennial Stream (R3)	Permanent	453	Temporary	53	Temporary	506
Intermittent Stream (R4)	Permanent	665	Temporary	19	Temporary	684
Ephemeral Stream (R6)	Permanent	N/A	Temporary	N/A	Temporary	N/A
PFO Wetlands	Permanent	0 (0)	Temporary	0 (0)	Temporary	0 (0)
PEM Wetlands	Permanent	0 (0)	Temporary	0.05 (1,976)	Temporary	0.05 (1,976)
Wetland Buffer	Permanent	N/A	Temporary	N/A	Temporary	0.11 (5,003)
100 Year Floodplain	Permanent	N/A	Temporary	N/A	Temporary	0 (0)



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RESOURCE IMPACTS

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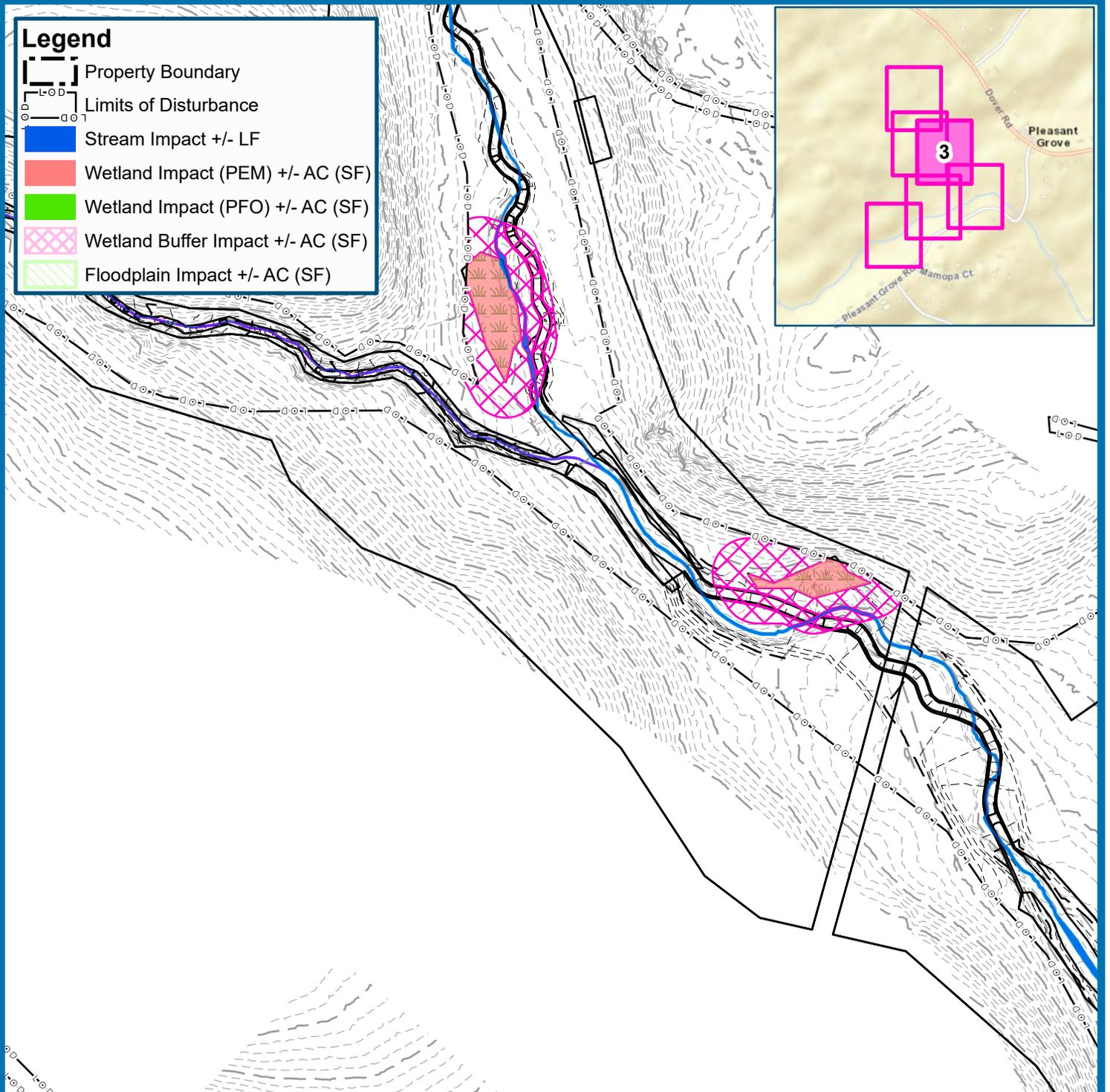
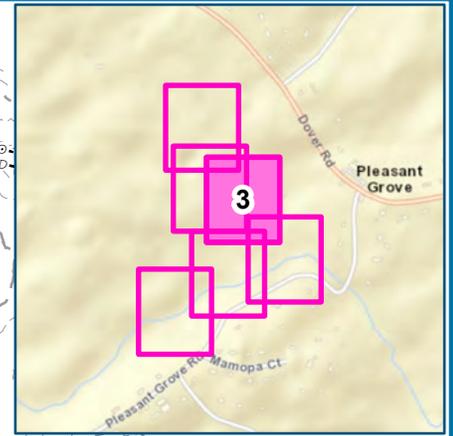
SHEET 2



1:1,200 1 inch = 100 feet

Legend

-  Property Boundary
-  Limits of Disturbance
-  Stream Impact +/- LF
-  Wetland Impact (PEM) +/- AC (SF)
-  Wetland Impact (PFO) +/- AC (SF)
-  Wetland Buffer Impact +/- AC (SF)
-  Floodplain Impact +/- AC (SF)



Values shown for this sheet only.

Aquatic Resource Type	Impact Duration	USACE Impacts		MDE Impacts		
		Area/Length (AC)(SF)/LF	Impact Duration	Area/Length (AC)(SF)/LF	Impact Duration	Area/Length (AC)(SF)/LF
Perennial Stream (R3)	Permanent	703	Temporary	258	Temporary	961
Intermittent Stream (R4)	Permanent	503	Temporary	19	Temporary	522
Ephemeral Stream (R6)	Permanent	N/A	Temporary	N/A	Temporary	N/A
PFO Wetlands	Permanent	0 (0)	Temporary	0 (0)	Temporary	0 (0)
PEM Wetlands	Permanent	0 (0)	Temporary	0.07 (3,008)	Temporary	0.07 (3,008)
Wetland Buffer	Permanent	N/A	Temporary	N/A	Temporary	0.22 (9,822)
100 Year Floodplain	Permanent	N/A	Temporary	N/A	Temporary	0 (0)



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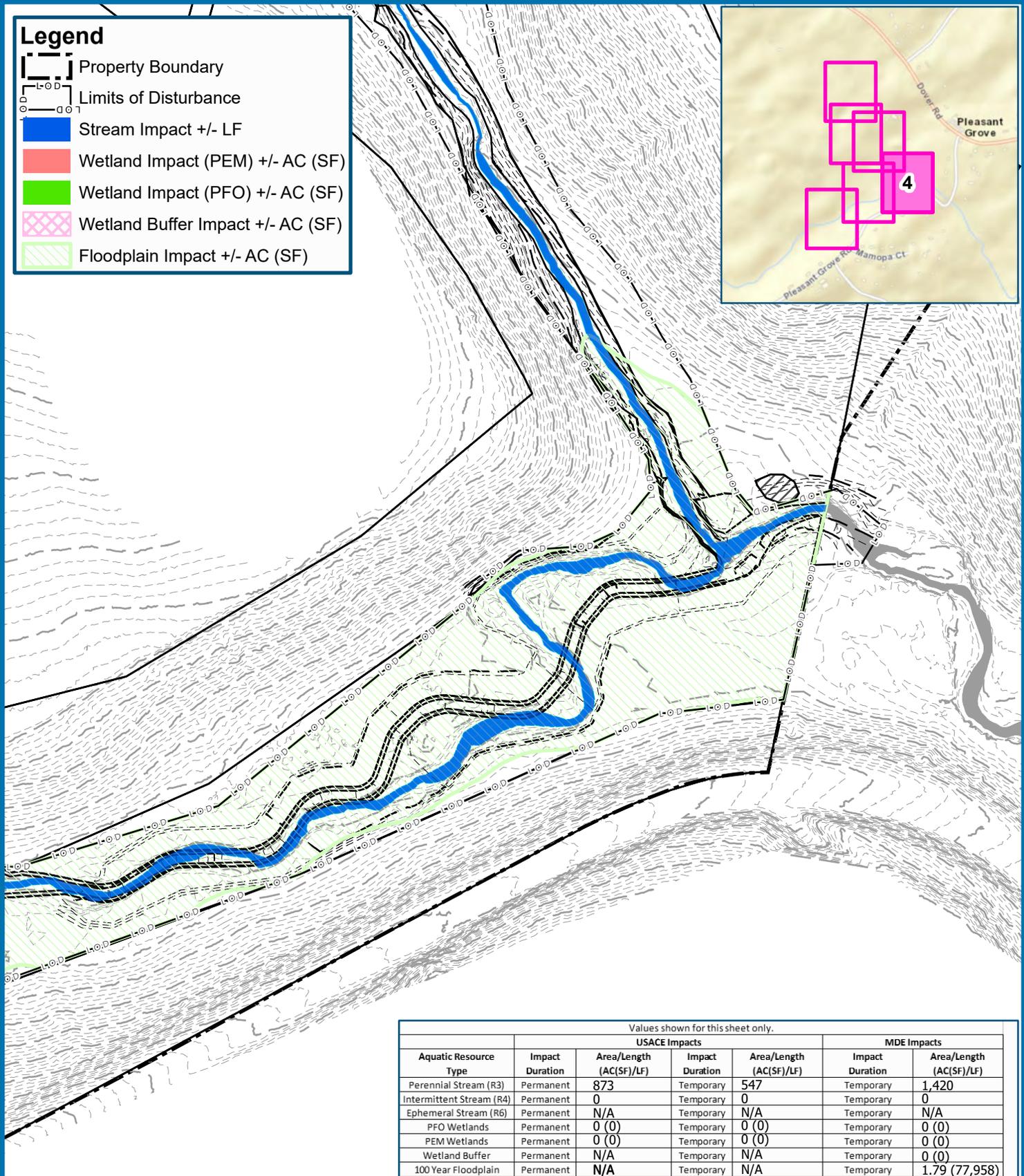
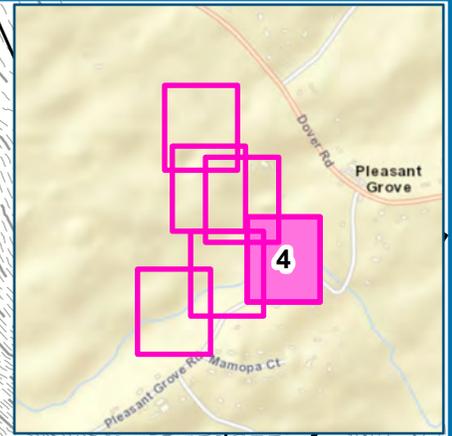
SHEET 3



1:1,200 1 inch = 100 feet

Legend

-  Property Boundary
-  Limits of Disturbance
-  Stream Impact +/- LF
-  Wetland Impact (PEM) +/- AC (SF)
-  Wetland Impact (PFO) +/- AC (SF)
-  Wetland Buffer Impact +/- AC (SF)
-  Floodplain Impact +/- AC (SF)



Values shown for this sheet only.

Aquatic Resource Type	USACE Impacts				MDE Impacts	
	Impact Duration	Area/Length (AC)(SF)/LF	Impact Duration	Area/Length (AC)(SF)/LF	Impact Duration	Area/Length (AC)(SF)/LF
Perennial Stream (R3)	Permanent	873	Temporary	547	Temporary	1,420
Intermittent Stream (R4)	Permanent	0	Temporary	0	Temporary	0
Ephemeral Stream (R6)	Permanent	N/A	Temporary	N/A	Temporary	N/A
PFO Wetlands	Permanent	0 (0)	Temporary	0 (0)	Temporary	0 (0)
PEM Wetlands	Permanent	0 (0)	Temporary	0 (0)	Temporary	0 (0)
Wetland Buffer	Permanent	N/A	Temporary	N/A	Temporary	0 (0)
100 Year Floodplain	Permanent	N/A	Temporary	N/A	Temporary	1.79 (77,958)



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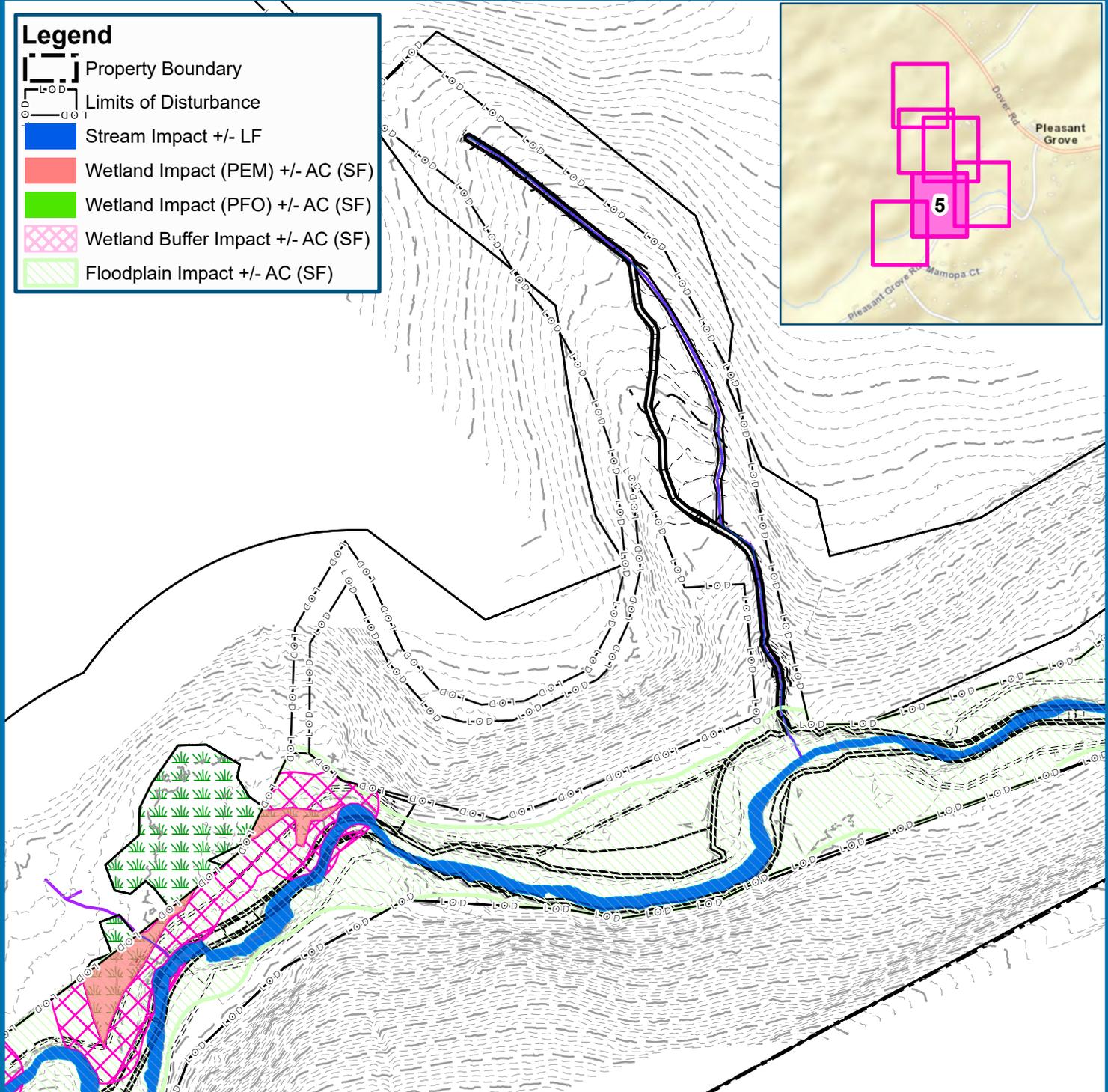
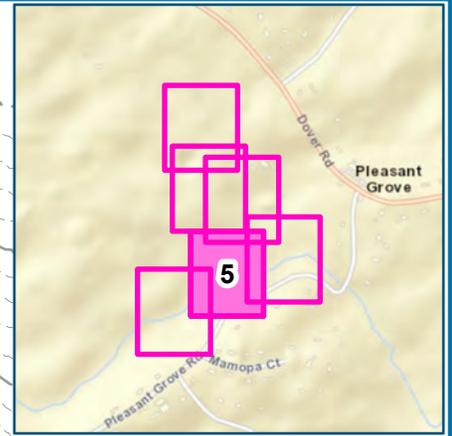
SHEET 4



1:1,200 1 inch = 100 feet

Legend

-  Property Boundary
-  Limits of Disturbance
-  Stream Impact +/- LF
-  Wetland Impact (PEM) +/- AC (SF)
-  Wetland Impact (PFO) +/- AC (SF)
-  Wetland Buffer Impact +/- AC (SF)
-  Floodplain Impact +/- AC (SF)



Values shown for this sheet only.

Aquatic Resource Type	Impact Duration	USACE Impacts		MDE Impacts		
		Area/Length (AC(SF)/LF)	Impact Duration	Area/Length (AC(SF)/LF)	Impact Duration	Area/Length (AC(SF)/LF)
Perennial Stream (R3)	Permanent	735	Temporary	411	Temporary	1,146
Intermittent Stream (R4)	Permanent	474	Temporary	81	Temporary	555
Ephemeral Stream (R6)	Permanent	N/A	Temporary	N/A	Temporary	N/A
PFO Wetlands	Permanent	0 (0)	Temporary	0 (0)	Temporary	0 (0)
PEM Wetlands	Permanent	0 (0)	Temporary	0.06 (2,478)	Temporary	0.06 (2,478)
Wetland Buffer	Permanent	N/A	Temporary	N/A	Temporary	0.21 (9,278)
100 Year Floodplain	Permanent	N/A	Temporary	N/A	Temporary	1.6 (69,644)



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RESOURCE IMPACTS

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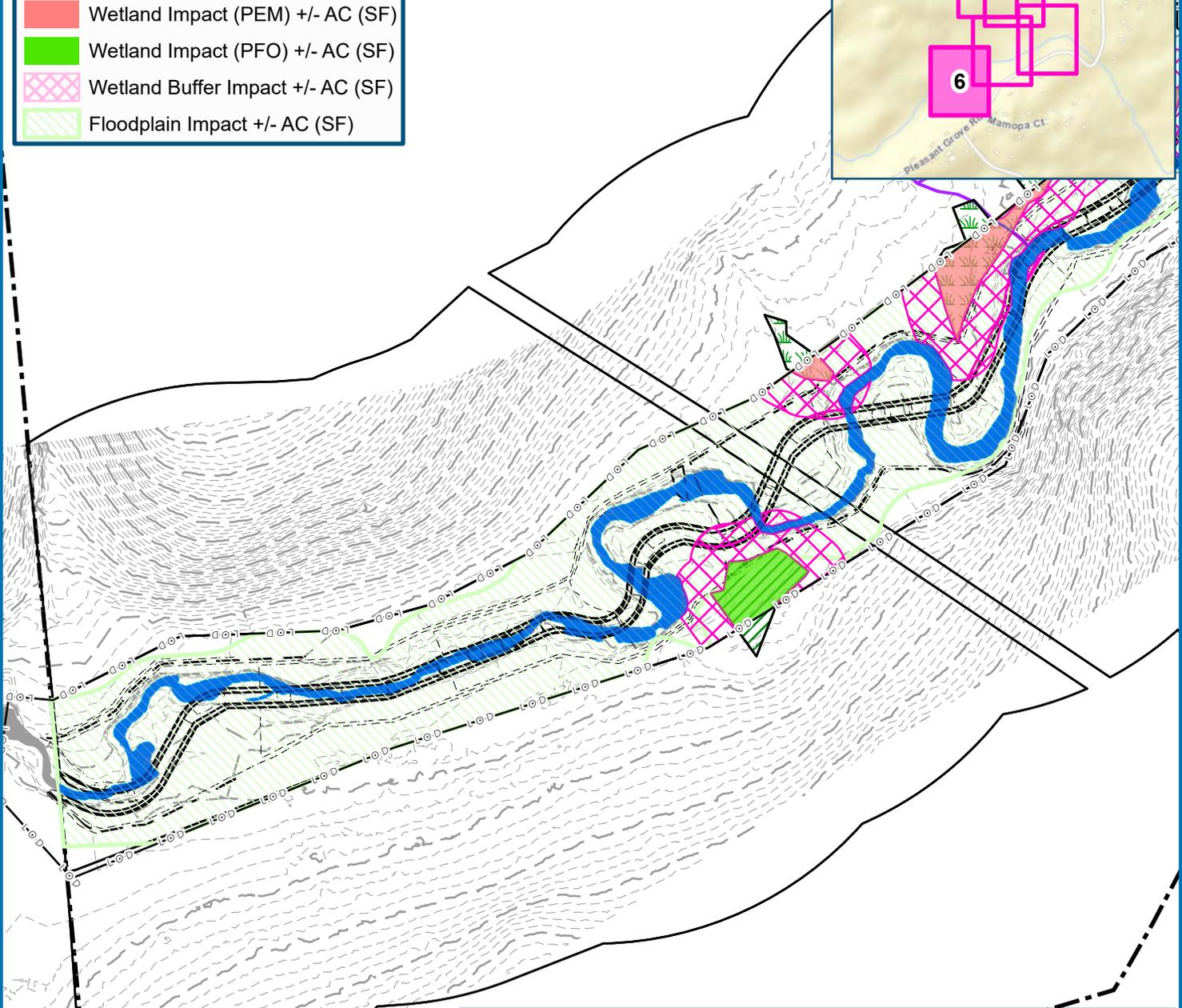
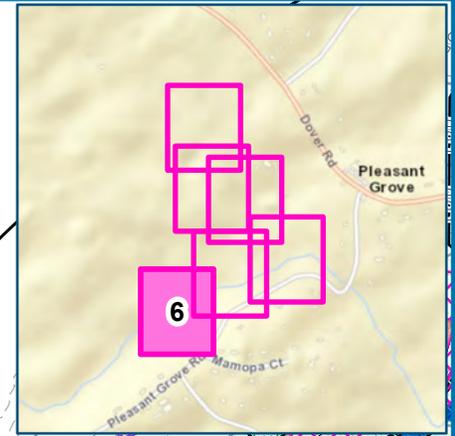
SHEET 5



1:1,200 1 inch = 100 feet

Legend

-  Property Boundary
-  Limits of Disturbance
-  Stream Impact +/- LF
-  Wetland Impact (PEM) +/- AC (SF)
-  Wetland Impact (PFO) +/- AC (SF)
-  Wetland Buffer Impact +/- AC (SF)
-  Floodplain Impact +/- AC (SF)



Values shown for this sheet only.

Aquatic Resource Type	Impact Duration	USACE Impacts		MDE Impacts		
		Area/Length (AC(SF)/LF)	Impact Duration	Area/Length (AC(SF)/LF)	Impact Duration	
Perennial Stream (R3)	Permanent	1,291	Temporary	0	Temporary	1,291
Intermittent Stream (R4)	Permanent	17	Temporary	11	Temporary	28
Ephemeral Stream (R6)	Permanent	N/A	Temporary	N/A	Temporary	N/A
PFO Wetlands	Permanent	0 (0)	Temporary	0.04 (1,799)	Temporary	0.04 (1,799)
PEM Wetlands	Permanent	0 (0)	Temporary	0.06 (2,617)	Temporary	0.06 (2,617)
Wetland Buffer	Permanent	N/A	Temporary	N/A	Temporary	0.31 (13,112)
100 Year Floodplain	Permanent	N/A	Temporary	N/A	Temporary	1.89 (82,514)



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SHEET 6



1:1,200 1 inch = 100 feet

Total Project Resource Impacts						
Aquatic Resource Type	USACE Impacts				MDE Impacts	
	Impact Duration	Area/Length (AC(SF)/LF)	Impact Duration	Area/Length (AC(SF)/LF)	Impact Duration	Area/Length (AC(SF)/LF)
Perennial Stream (R3)	Permanent	3,767	Temporary	1,083	Temporary	4,850
Intermittent Stream (R4)	Permanent	1,145	Temporary	103	Temporary	1248
Ephemeral Stream (R6)	Permanent	N/A	Temporary	N/A	Temporary	N/A
PFO Wetlands	Permanent	N/A	Temporary	0.04 (1,799)	Temporary	0.04 (1,799)
PEM Wetlands	Permanent	N/A	Temporary	0.29 (12,449)	Temporary	0.29 (12,449)
Wetland Buffer	Permanent	N/A	Temporary	N/A	Temporary	0.78 (33,917)
100 Year Floodplain	Permanent	N/A	Temporary	N/A	Temporary	5.00 (230,116)

Impacts areas overlap sheets, therefore the totals for each sheet table combined will be greater than the project totals table.



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RESOURCE IMPACTS MAP

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SHEET 7



1:1,200 1 inch = 100 feet