
APPENDIX C—AGENCY CONSULTATION

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This appendix contains documentation of all agency consultation conducted during development of this EA. This includes documents pertaining to two separate agency scoping meetings conducted to coordinate with relevant resource agencies, an initial scoping meeting conducted on December 13, 2012 and a full Joint Evaluation Committee Meeting conducted March 27, 2013. Other documents in this appendix include agency review request letters and responses/comments received from the agencies.

The initial scoping meeting was held at MTN and included staff from the following agencies:

- Maryland Critical Area Commission
- Maryland Tidal Wetlands Division
- Maryland Non-tidal Wetlands Division
- Maryland Department of the Environment Remediation
- United States Army Corps of Engineers
- Maryland Aviation Administration

The initial scoping meeting included a presentation of the conceptual plan for the preferred action alternative and an overview of expected resource impacts. The initial scoping meeting also included receiving comments and suggestions from agency staff in attendance. Documents related to this meeting including the presentation given, meeting minutes, and list of attendees are included as part of this appendix.

The full JEC meeting was a follow up to the initial agency meeting and presented a more refined preferred action plan based on comments received during the initial agency review. The full JEC meeting was attended by a wide spectrum of agency staff representing all of the resource disciplines associated with permitting and environmental review for the project. Agencies represented at the JEC meeting included:

- United States Army Corps of Engineers
- NOAA Fisheries
- U.S. Fish and Wildlife Service

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- MDE Tidal Wetlands Division
 - MDE Non-tidal Wetlands Division
 - MDE Stormwater and E&S Control
 - Maryland Department of Natural Resources
 - Maryland State Superfund
 - Maryland Critical Area Commission and to gain early feedback and to provide

The JEC meeting included a presentation of the updated plan for the preferred action alternative and an overview of expected resource impacts. The initial scoping meeting also included receiving comments and suggestions from agency staff in attendance. Documents related to this meeting including the presentation given, meeting minutes, and list of attendees are included as part of this appendix.

Agency review request letters were sent to the following agencies. A copy of the review request letter is included in this appendix:

- US Fish and Wildlife Service (Protected Species Division)
- US Fish and Wildlife Service (Bald and Golden Eagle Act Coordinator)
- NOAA Fisheries (Protected Resources Division)
- NOAA Fisheries (Essential Fish Habitat Protection Division)
- US Coast Guard
- US Army Corps of Engineers
- MDE Federal Consistency Program
- Maryland DNR
- Maryland Historical Trust
- Maryland Critical Area Commission
- MDE Air Quality Planning and Monitoring Program
- USDA APHIS
- Baltimore County Department of Environmental Protection and Sustainability

Agency responses were received from the following agencies. A copy of these responses is included in this appendix:

- NOAA Fisheries, Protected Resources Division
- Maryland Historical Trust
- USDA APHIS
- Maryland DNR

The public and agencies were provided an opportunity to review and comment on the Draft Environmental Assessment during a public review period from October 2, 2014 to November 21, 2014. A Notice of Availability (NOA) was published in *The Baltimore Sun* on October 2 and 5, 2014. Notice of availability of the draft and links to the Draft EA document were also available on the MAA website beginning October 2, 2014. Hard copies of the document were made available to the public during the review period at the FAA Washington Airports District Office, MAA offices, Martin State Airport and the North Point Area branch public library in Baltimore County. The Draft EA was submitted to the Maryland Department of Planning State Clearinghouse for distribution to relevant agencies. In addition, a copy of the Draft EA was also submitted to the USEPA for review and comment.

No comments were received from the public in response to the Draft EA. Eleven agencies and agency departments submitted comments, recommendations, and consistency determinations, which are included below.

Document: Draft Environmental Assessment Groundwater Plume Treatment Facility
 Submitted: for Public and Agency Review (10/2/14 – 11/21/14)
 State Application Identifier: MD 20141002-0807

#	Reviewer	Date	Comment	Action	Section
1	Maryland Department of Natural Resources	5/9/2013	The Wildlife and Heritage Service has determined that there are no State or Federal records for rare, threatened or endangered species within the boundaries of the project site as delineated. As a result, we have no specific comments or requirements pertaining to protection measures at this time. This statement should not be interpreted however as meaning that rare, threatened or endangered species are not in fact present. If appropriate habitat is available, certain species could be present without documentation because adequate surveys have not been conducted.	Comment noted.	No edits to text
2	Maryland Department of Transportation, Maryland Department of Planning (including the Maryland Historical Trust)*	11/11/14	Found this project to be consistent with their plans, programs, and objectives.	Comment Noted	No edits to text
3	Baltimore County*	11/11/14	Found this project to be consistent with their plans, programs, and objectives.	Comment noted.	No edits to text

4	Maryland Department of the Environment (MDE)*	11/11/14	<p>Found this project to generally be consistent with their plans, programs, and objectives, but included certain qualifying comments summarized as follows (comments 1 – 5):</p> <ol style="list-style-type: none"> 1. Any above ground or below ground petroleum storage tanks, which may be utilized, must be installed and maintained in accordance with applicable state and federal laws and regulations. Underground storage tanks must be registered and the installation must be conducted and performed by a contractor certified to install underground storage tanks by the Land Management Administration in accordance with COMAR 26.10 	<p>Comment noted. No underground storage tanks are proposed as part of this project. Any above ground storage of petroleum products will be installed and maintained in accordance with all applicable state and federal laws and regulations.</p>	No edits to Text
5	MDE*		<ol style="list-style-type: none"> 2. If the proposed project involves demolition – any above ground or underground storage tanks that may be on site must have contents and tanks along with any contamination removed. 	<p>Comment Noted. No existing above or underground storage tanks are currently known at the site. Any such tanks encountered will have the contents/contamination removed</p>	No edits to text
6	MDE*		<ol style="list-style-type: none"> 3. Any solid waste including construction, demolition, and land clearing debris generated from the subject project, must be properly disposed of at a permitted solid waste acceptance facility, or recycled if possible. 	<p>Comment Noted. All solid waste generated will be properly disposed of at a permitted solid waste acceptance facility or recycled if possible.</p>	No edits to text
7	MDE*		<ol style="list-style-type: none"> 4. The Waste Diversion and Utilization Program should be contacted directly by those facilities that generate or propose to generate or handle hazardous waste to ensure these activities are being conducted with applicable state and federal laws and regulations. The Program should also be contacted prior to construction activities to ensure that the treatment, storage, or disposal of hazardous wastes and low level radioactive wastes at the facility will be conducted in compliance with applicable state and federal laws and regulations. 	<p>Comment noted. The selected remediation strategy (limiting lateral migration of contaminated groundwater by extracting and treating groundwater), as well as the disposal of all hazardous wastes associated with the project has been reviewed and approved by MDE per regulations found in the Maryland Hazardous Substance Response Plan (Code of Maryland Regulations [COMAR], Title 26, Subtitle 14).</p>	No edits to text

8	MDE*		5. The proposed project may involve rehabilitation, redevelopment, revitalization, or property acquisition of commercial, industrial property. Accordingly, MDE's Brownfields Site Assessment and Voluntary Cleanup (VCP) may provide valuable assistance to you in this project. These programs include environmental site assessment in accordance with accepted industry and financial institution standards for property transfer.	Comment noted.	No edits to text
9	Maryland Historical Trust*	4/30/13	The MHT has determined that the project will have "no effect" on historic properties and that the federal and/or state historic preservation requirements have been met.	Comment noted.	No edits to text
10	NOAA Fisheries Service	5/3/13	Currently, there are no records of listed species under our jurisdiction within Frog Mortar Creek. However, the endangered short-nosed sturgeon and all five distinct population segments of Atlantic sturgeon...are known to occur in the Potomac River and the Maryland portion of the Chesapeake Bay. Four listed species of sea turtle may also occur in the upper Chesapeake Bay at specific times of the year. If the proposed project has the potential to affect listed species...the lead federal agency...is responsible for determining whether the proposed action is likely to affect the listed species. The federal agency would submit their determination along with justification for their determination to NOAA for concurrence.	Comment noted. As determined in Section 5.0 of the Draft EA the proposed project is expected to have "no effect", or at most "may affect but not likely to adversely affect" on these species. In addition, as stated in Section 5.7.8 and as found in an email dated May 15, 2015 in Appendix C, NOAA concluded that "the proposed project will have no effect on listed species under NOAA Fisheries jurisdiction and that no further coordination on this activity with the NMFS Protected Resources Division is necessary at this time	No edits to text
11	United States Fish and Wildlife Service (USFWS) Section 7 ESA/Threatened and Endangered Species	6/12/13	Except for occasional transient individuals, no federally proposed or listed threatened or endangered species are known to exist within the project impact area. Therefore, no Biological Assessment or further Section 7 consultation with the USFWS is required.	Comment noted.	No edits to text
12	USDA APHIS Wildlife Service	11/9/12	We have determined that we do not see anything at this time that would pose an increased threat to aircraft safety.	Comment noted.	No edits to text
13	USFWS – Bald and Golden Eagle Protection Act – Bald Eagle	10/29/14	Traffic volumes with an average of 10 to 15 trucks per day may constitute harassment (take) of the existing bald eagle nest site located along the currently proposed access road in the Draft EA.	Comment noted. The access route to the DRA has been relocated over 600 feet to the west during nesting season to avoid/minimize any effect on the nest site. While the relocated access route is still just within the standard 660 foot buffer, the rout has been relocated to the maximum extent practicable and it is expected that impacts to the nest site from the relocated access route will be insignificant.	Sections 3.2.4, 3.2.6, 4.7.6, 5.7.8, 5.7.10 Figure 3-1

14	MDE – Section 307 of the Federal Coastal Zone Management Act (Coastal Zone Consistency Determination)	11/20/14	Based on the information provided, the proposed project is consistent with the Maryland Coastal Zone Management Program, as required by Section 307 of the CZMA, contingent upon authorization of the proposed wetlands and waterways impacts by the Wetlands and Waterways Program, and compliance with the Chesapeake Bay Critical Area requirements. Please note that this determination does not obviate the responsibility to obtain any other State approvals that are necessary for the project.	Comment noted.	No edits to text
15	USEPA	6/23/15	EPA supports the use of stormwater BMPs, including Low-Impact Development, during the construction and operation of this project. Additionally, EPA suggests stormwater management systems be located outside of jurisdictional features including streams and wetlands and, in this case, their associated buffers.	Comment noted. During the USACE and MDE wetland permitting process, avoidance and minimization measures were implemented to the maximum extent practicable as required under federal CWA Section 404 and state wetland regulations. This also included an investigation of various alternatives to the proposed action. The final design as described in the approved USACE and MDE non-tidal wetlands permits and soon to be approved tidal wetland permits (MDE Agency Interest No. 89904; USACE Tracking No. 201461074) represents the least damaging practicable alternative.	No edits to text
16	USEPA	6/23/15	While this proposed project is intended to limit lateral migration of contaminated groundwater, EPA requests the document further discuss Environmental Justice. This may include analysis and discussion of the surrounding population that may be impacted by the construction and operation of the proposed project either directly or indirectly.	The text has been revised to reflect a more complete assessment of potential impacts on low income and minority populations in the surrounding area from increased truck traffic. No other elements of the proposed action would have the potential to negatively affect nearby populations or communities.	Section 5.15.1
17	USEPA	6/23/15	EPA suggests an avoidance and minimization alternatives analysis be developed for the CWA 404 application that will address the layout of the facilities. We understand that the wells are sited in particular areas for their intended purpose. However, the building, roads, stormwater facilities and submerged discharge pipe are in the least environmentally damaging practicable alternative placement as proposed.	Comment noted. During the USACE and MDE wetland permitting process, avoidance and minimization measures were implemented to the maximum extent practicable as required under federal CWA Section 404 and state wetland regulations. This also included an investigation of various alternatives to the proposed action. The final design as described in the approved USACE and MDE non-tidal wetlands permits and soon to be approved tidal wetland permits (MDE Agency Interest No. 89904; USACE Tracking No. 201461074) represents the least damaging practicable alternative.	No edits to text.

18	USEPA	6/23/15	<p>EPA requests the applicant develop monitoring and an adaptive management plan to address the potential adverse impacts associated with the discharge pipe as listed in Section 5.16.1. Will the temperature of the treated water flowing from the discharge pipe be close to the temperature of the receiving waterway Frog Mortar Creek? And will the discharge be a constant flow? Does the applicant see future implications for the proposal as a result of sea level rise? And are there considerations for potentially drawing in of brackish water into the groundwater?</p>	<p>Comment noted. During the NPDES permitting process through the MDE Wastewater Management Program, MAA and Lockheed Martin were required to design an outfall that meets all federal and state NPDES discharge criteria and water quality standards. As part of this process these and other issues were addressed and the NPDES permit for the discharge is currently (June 2015) pending approval by MDE. As part of an approved permit, MAA/Lockheed Martin will be required to regularly monitor the discharge and have contingencies in place for potential changes that could affect the system. Sea level rise would not negatively affect the outfall, and the treatment building is situated over 20 feet above sea level and outside the 100-year flood zone. The groundwater treatment system extraction-well flow rates have been designed to avoid drawing brackish water from Frog Mortar Creek into the treatment system. Also, the flow will be constant, although there may be temporary shutdown of the system for operational or maintenance reasons or if there is very low water level in the creek due to tidal and meteorological influences. The water temperature in Frog Mortar Creek varies seasonally between 32F and 90F and the outfall discharge temperature will also vary seasonally. On average, the temperature of the water discharged by the treatment system to Frog Mortar Creek is expected to be in the range of 60F to 70F.</p>	<p>No edits to text.</p>
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*Received as part of the response from the Maryland Department of Planning State Clearinghouse on 11/11/14

AGENCY SCOPING INVITATION LIST

Mr. Vincent J. Gardina, Director

Baltimore County Department of Environmental
Protection and Sustainability
Jefferson Building
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**Ms. Kate Charbonneau,
Regional Program Chief**

State of Maryland
Critical Area Commission
Chesapeake and Atlantic Coastal Bays
1804 West Street, Suite 100
Annapolis MD 21401

Ms. Julie Roberts, Natural Resources Planner

State of Maryland
Critical Area Commission
Chesapeake and Atlantic Coastal Bays
1804 West Street, Suite 100
Annapolis MD 21401

Mr. Devin Ray

US Fish and Wildlife Service
Chesapeake Bay Field Office
177 Admiral Cochran Drive
Annapolis MD 21401

Mr. Bob Zepp

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Mr. Craig Koppie

Bald Eagle Coordinator
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177 Admiral Cochrane Drive
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Mr. John Nichols

NOAA Fisheries HCD
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Maryland Historical Trust
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Federal Consistency Coordinator
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Mr. Dave Walbeck, Mitigation Specialist

Maryland Department of the Environment
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Ms. Cheryl Kerr, Non-tidal Wetlands

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Marcus Brundage, REM, CHS-V
Environmental Protection Specialist
Federal Aviation Administration
Washington Airports District Office
23723 Air Freight Lane, Suite 210
Dulles VA 20166

April 2, 2013

Ms. Lori Byrne
Environmental Review Specialist
Maryland Department of Natural Resources
Wildlife and Heritage Division
580 Taylor Avenue, E1
Annapolis, Maryland 21401

SUBJECT: Agency Scoping for a Short Environmental Assessment (EA) Form for
Groundwater Remediation at the Dump Road Area of Martin State Airport, Baltimore
County, Maryland

Dear Ms. Byrne:

On behalf of the Lockheed Martin Corporation, the Maryland Aviation Administration (MAA) is preparing a Short Environmental Assessment (EA) Form to fulfill the legal requirements of the National Environmental Policy Act (NEPA) of 1969 and FAA Order 1050.1E for a proposed groundwater remediation facility at the Dump Road Area (DRA) at Martin State Airport (MTN). The proposed site of the groundwater remediation facility in relation to airport property and the surrounding area is illustrated on **Figure 1**. The proposed groundwater remediation facility (Proposed Action Alternative) is located between the existing Taxiway T (Tango) and Frog Mortar Creek on the east side of the airport property, and includes a treated water discharge outfall that extends approximately 50 feet into Frog Mortar Creek. Groundwater in the DRA is currently impacted by volatile organic compounds (VOCs), including trichloroethene (TCE) and associated breakdown products, 1,4-dioxane, and heavy metals. The proposed groundwater remediation project is needed to provide containment and minimize the migration of these contaminants into the adjacent Frog Mortar Creek. Conceptual design for the proposed groundwater remediation facility consists of installation of 16 groundwater extraction wells, construction and operation of a groundwater treatment system housed within an approximately 10,000 square feet treatment building, installation of an outfall discharge from the treatment building to Frog Mortar Creek, and improvement of existing access roads and installation of adjacent utilities.

As the landowner of MTN, the MAA must obtain an environmental finding from the Federal Aviation Administration (FAA) for the Proposed Action prior to development of the groundwater remediation facility. The Eastern Region Short EA Form (www.faa.gov/airports/eastern/environmental/media/C10.doc) will be completed for review of the Proposed Action. Based on preliminary screening of alternatives in studies and analysis conducted to date, the Short EA Form is limited to the Proposed Action Alternative and the No Action Alternative (as required by the Council on Environmental Quality regulations). The Short EA Form will identify the project's purpose and need and evaluate the potential environmental impacts of the Proposed Action and No Action alternatives. Other recently completed and ongoing projects at MTN will be considered for analysis of potential cumulative impacts associated with the proposed groundwater remediation facility.

Environmental Analysis

All FAA Order 1050.1E impact categories will be addressed to complete the Short EA Form; however the level of analysis for each impact category will vary by its anticipated potential impact. It is expected that the following categories will require analysis, although for most of the listed categories, the analysis will be limited:

- Air Quality
- Biotic Resources
- Construction Impacts
- Threatened and Endangered Species
- Wetlands and Floodplains
- Coastal Resources
- Hazardous Materials
- Energy Supplies, Natural Resources & Sustainable Design
- Social Impacts
- Solid Waste
- Water Quality
- Cumulative Impacts

Preliminary Schedule

The analysis for potential impacts will be completed for 2014 (first year of project implementation) and 2019 (five years beyond project implementation).

The MAA is soliciting comments from your agency regarding the preparation of the Short EA Form for the proposed groundwater remediation facility at MTN in Baltimore County, Maryland. The MAA encourages each agency to review the information and provide comments. To request further information about this proposed project, please contact me by phone at 410-859-7103 or via e-mail at rbowie@bwiairport.com.

Please submit written comments by mail to me by May 22, 2013, so that pertinent input from agencies can be incorporated at an early stage to ensure open and continuous coordination throughout the EA process.

Sincerely,

Robin M. Bowie, Manager
Division of Environmental Planning

Enclosure

cc: Marcus Brundage, Environmental Protection Specialist, FAA
Paul Calligan, Project Manager, LMC
Paul Myers, Tetra Tech
Laura Burbage, CDM Smith





MARYLAND
DEPARTMENT OF
NATURAL RESOURCES

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

May 9, 2013

Robin Bowie
Maryland Aviation Administration
PO Box 8766
BWI Airport, MD 21240-0766

RE: Environmental Review for Agency Scoping for EA for Groundwater Remediation at Martin State Airport, Dump Road area, Baltimore County, MD.

Dear Ms. Bowie:

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

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

Sincerely,

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

ER# 2013.0538.ba





201301656

Maryland Aviation Administration

Martin O'Malley
Governor
Anthony G. Brown
Lt. Governor
Darrell B. Mobley
Acting Secretary

F
MAA
EJR/ARA

Paul J. Wiedefeld, A.A.E.
Executive Director/CEO

RECEIVED
MAY - 3 2013
RECEIVED
APR 16 2013
BY: _____

MEMORANDUM

TO: Distribution
FROM: Robin M. Bowie, Manager *RMB*
Division of Environmental Planning
DATE: April 15, 2013
SUBJECT: Agency Scoping for an Environmental Assessment (EA) for Groundwater Remediation at the Dump Road Area (DRA) of Martin State Airport (MTN), Baltimore County, Maryland

On behalf of the Lockheed Martin Corporation (LMC), the Maryland Aviation Administration (MAA) is preparing an EA to fulfill the legal requirements of the National Environmental Policy Act (NEPA) of 1969 and Federal Aviation Administration (FAA) Order 1050.1E for a proposed groundwater remediation facility at the DRA at MTN. The proposed site of the groundwater remediation facility in relation to airport property and the surrounding area is illustrated in **Figure 1**. The proposed groundwater remediation facility (Proposed Action Alternative) is located between the existing Taxiway T (Tango) and Frog Mortar Creek on the east side of the airport property, and includes a treated water discharge outfall that extends approximately 50 feet below ground surface into Frog Mortar Creek. Groundwater in the DRA is currently impacted by volatile organic compounds (VOCs), including trichloroethene (TCE) and associated breakdown products, 1,4-dioxane, and heavy metals. The proposed groundwater remediation project is needed to provide containment and minimize the migration of these contaminants into the adjacent Frog Mortar Creek. Conceptual design for the proposed groundwater remediation facility consists of installation of 16 groundwater extraction wells, construction and operation of a groundwater treatment system housed within an approximately 10,000 square foot treatment building, installation of an outfall discharge from the treatment building to Frog Mortar Creek, and improvement of existing access roads and installation of adjacent utilities.

As the landowner of MTN, the MAA must obtain an environmental finding from the FAA for the Proposed Action prior to development of the groundwater remediation facility and all connected activities. The EA will identify the project's purpose and need and evaluate the potential environmental impacts of the Proposed Action and No action alternatives.

Other recently completed and ongoing projects at MTN will be considered for analysis of potential cumulative impacts associated with the proposed groundwater remediation facility. These projects include work completed within the past 3 years and proposed construction in the 5-year foreseeable future. The specific projects which will be included for cumulative impacts in the EA are:

- Two Maryland Air National Guard (MANG) Projects, the Lynbrook Gatehouse and the Operations and Medical Training Facility; and
- The MAA proposed projects, which include runway and taxiway improvements, relocation of navigational aids, and other general aviation, support facility improvements as shown on the FAA-approved Airport Layout Plan (ALP).

Attachments: 1A
BC 4/29/13

Prior survey - Goodwin et al. 2007 (MAY Sp. BA 186)
South of 18BA 848
Not Eligible

BA-2081
2nd
ARA
4/30/13

The MANG projects listed above were analyzed in an EA conducted by the Department of Defense and received a Finding of No Significant Impact (FONSI) in June 2010. No FAA finding was issued for these projects. The MAA proposed projects will be the subject of a separate EA that will be conducted concurrently (or will overlap) with the Groundwater Remediation EA. Both EA efforts will include analysis of the cumulative impacts of projects within the geographic area of MTN.

Environmental Analysis

All FAA Order 1050.0E impact categories will be addressed to complete the EA; however the level of analysis for each impact category will vary by its anticipated potential impact. It is expected that the following categories will require analysis, although for most of the listed categories, the analysis will be limited:

- Air Quality
- Biotic Resources
- Construction Impacts
- Threatened and Endangered Species
- Wetlands and Floodplains
- Coastal Resources
- Hazardous Materials
- Energy Supplies, Natural Resources & Sustainable Design
- Social Impacts
- Solid Waste
- Water Quality
- Cumulative Impacts

Preliminary Schedule

The analysis for potential impacts will be completed for 2014 (first years of project implementation) and 2019 (five years beyond project implementation).

The MAA is soliciting comments from your agency regarding the preparation of an EA for the proposed groundwater remediation facility at MTN in Baltimore County, Maryland. The MAA encourages each agency to review the information and provide comments. To request further information about this proposed project, please contact me at 410-859-7103 or via email at rbowie@bwiaairport.com.

Please submit written comments by mail to me by May 22, 2013, so that pertinent input from agencies can be incorporated at an early stage to ensure open and continuous coordination throughout the EA process.

Enclosure

- cc: Mr. Marcus Brundage, Environmental Protection Specialist, Washington Area Districts Office, FAA
Ms. Laura Burbage, PWD, Environmental Scientist, CDM Smith
Mr. Paul Calligan, P.G., Project Lead, Environmental Remediation, LMC
Mr. Paul Myers, PWD, Senior Environmental Scientist, Tetra Tech, Inc.





UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
NORTHEAST REGION
55 Great Republic Drive
Gloucester, MA 01930-2276

MAY - 3 2013

Robin Bowie
Maryland Aviation Administration
P.O. Box 8766
BWI Airport, MD 21240

Re: Groundwater Remediation at the Dump Road Area (DRA) of Martin State Airport (MTN),
Baltimore County, Maryland

Dear Mr./Ms. Bowie,

Your letter dated April 15, 2013, requested information about the presence of federally listed species and essential fish habitat (EFH) under the jurisdiction of NOAA's National Marine Fisheries Service (NMFS) in the vicinity of a proposed groundwater remediation facility at the DRA of MTN in Baltimore County, Maryland. The remediation project is needed to provide containment and minimize the migration of contaminants into the adjacent Frog Mortar Creek. Project work calls for the installation of 16 groundwater extraction wells, construction and operation of a groundwater treatment system, installation of an outfall discharge from the treatment system building to Frog Mortar Creek, and improvement of existing access roads and installation of adjacent utilities. We offer the following comments on the presence of listed species and EFH in the area of interest about which you have inquired.

Listed Species in the Action Area

Currently, there are no records of any federally listed species under our jurisdiction in Frog Mortar Creek. However, the endangered shortnose sturgeon (*Acipenser brevirostrum*) and all five distinct population segments of Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*) (Gulf of Maine—threatened; New York Bight, Chesapeake Bay, Carolina, and South Atlantic—endangered) are known to occur in the Potomac River and the Maryland portion of Chesapeake Bay. Four species of listed sea turtles may also be found in the upper Chesapeake Bay at specific times of the year.

Shortnose Sturgeon

Twelve shortnose sturgeon have been captured in the Potomac River since 1996. Shortnose sturgeon captured in the Potomac River and reported via the U.S. Fish and Wildlife Service reward program were documented in the following locations: six at the mouth of the river (May 3, 2000; March 26, 2001; two on March 8, 2002; December 10, 2004; May 22, 2005), one at the mouth of the Saint Mary's River (April 21, 1998), one at the mouth of Potomac Creek (May 17, 1996), one at river kilometer (rkm) 63 (March 22, 2006), one at rkm 57 (Cobb Bar; December



23, 2007), and one at rkm 48 (March 14, 2008). Additionally, one adult female was captured by U.S. Geological Survey and National Park Service researchers at rkm 103 in September 2005.

Investigations into the characteristics of the habitat in the Potomac River indicated that habitat suitable for spawning is located just downstream of Little Falls Dam and in the Fletchers-Chain Bridge reach. Bottom velocities, depth, and substrate type were all consistent with areas in other rivers where shortnose sturgeon spawning has been confirmed. Kynard (2007) concluded that the wide range of acceptable velocity, the multiple sites with one meter/second velocity, and the widespread availability of a rocky bottom strongly suggest spawning conditions exist at many locations in the Fletchers-Chain Bridge area of the Potomac River.

Atlantic Sturgeon

The Atlantic sturgeon is a subspecies of sturgeon distributed along the eastern coast of North America from Hamilton Inlet, Labrador, Canada to Cape Canaveral, Florida, USA. Currently, Atlantic sturgeon in Chesapeake Bay are known to spawn in the James River. However, historic spawning habitat is thought to exist in the Potomac River, and Atlantic sturgeon have been recorded in the Potomac River in recent years. In addition, Secor *et al.* (2000) documented the capture of a juvenile Atlantic sturgeon in the Patuxent River in the winter of 1997; a sturgeon that was originally released by scientists into the Nanticoke River in July 1996.

Sea Turtles

Several species of sea turtles are known to be present in the Chesapeake Bay and off the Atlantic coast of Maryland. Leatherback sea turtles (*Dermochelys coriacea*) are present off the Maryland coast but are predominantly pelagic. Loggerhead (*Caretta caretta*), Kemp's ridley (*Lepidochelys kempi*), and green (*Chelonia mydas*) sea turtles are present in the Chesapeake Bay area mainly during late spring, summer, and early fall when water temperatures are relatively warm. Sea turtles are expected to be present in the Chesapeake Bay between April 1 and November 30. In Maryland waters of the Chesapeake Bay, sea turtles are most often documented in waters below the Bay's confluence with the Potomac River. Occurrences further north are considered rare.

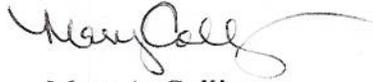
Conclusions

As you may know, any discretionary Federal action, such as the approval or funding of a project by a Federal agency, that may affect a listed species must undergo consultation pursuant to section 7 of the Endangered Species Act (ESA) of 1973, as amended. If the proposed project has the potential to affect listed species and it is being approved, permitted, or funded by a Federal agency, the lead Federal agency, or their designated non-Federal representative, is responsible for determining whether the proposed action is likely to affect these species. The Federal agency would submit their determination along with justification for their determination and a request for concurrence, to the attention of the Section 7 Coordinator, NMFS Northeast Regional Office, Protected Resources Division, 55 Great Republic Drive, Gloucester, MA 01930. After reviewing this information, NMFS would then be able to conduct a consultation under section 7 of the ESA.

Should you have any questions regarding these comments, please contact Chris Vaccaro at 978-281-9167 or by email at Christine.Vaccaro@noaa.gov. For information on EFH located in the vicinity of the project area, please contact John Nichols in our Annapolis field office at 410-267-

5675 or by email at John.Nichols@noaa.gov. Additionally, you may consult our EFH mapper website at <http://www.habitat.noaa.gov/protection/efh/habitatmapper.html>.

Sincerely,

A handwritten signature in black ink, appearing to read "Mary Colligan", with a long, sweeping flourish extending to the right.

Mary A. Colligan
Assistant Regional Administrator
for Protected Resources

File Code: Species Presence 2013



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Chesapeake Bay Field Office
177 Admiral Cochrane Drive
Annapolis, Maryland 21401
<http://www.fws.gov/chesapeakebay>

June 12, 2013



Maryland Aviation Administration
P.O. Box 8766
BWI Airport, MD 21240-0766

*RE: Groundwater Remediation at the Dump Road Area (DRA) of Martin State Airport (MTN)
Baltimore county MD*

Dear Robin M. Bowie:

This responds to your letter, received April 15, 2013, requesting information on the presence of species which are federally listed or proposed for listing as endangered or threatened within the vicinity of the above referenced project area. We have reviewed the information you enclosed and are providing comments in accordance with section 7 of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*).

Except for occasional transient individuals, no federally proposed or listed endangered or threatened species are known to exist within the project impact area. Therefore, no Biological Assessment or further section 7 Consultation with the U.S. Fish and Wildlife Service is required. Should project plans change, or if additional information on the distribution of listed or proposed species becomes available, this determination may be reconsidered.

This response relates only to federally protected threatened or endangered species under our jurisdiction. For information on the presence of other rare species, you should contact Lori Byrne of the Maryland Wildlife and Heritage Division at (410) 260-8573.

Effective August 8, 2007, under the authority of the Endangered Species Act of 1973, as amended, the U.S. Fish and Wildlife Service (Service) removed (delist) the bald eagle in the lower 48 States of the United States from the Federal List of Endangered and Threatened Wildlife. However, the bald eagle will still be protected by the Bald and Golden Eagle Protection Act, Lacey Act and the Migratory Bird Treaty Act. As a result, starting on August 8, 2007, if your project may cause "disturbance" to the bald eagle, please consult the "National Bald Eagle Management Guidelines" dated May 2007.



If any planned or ongoing activities cannot be conducted in compliance with the National Bald Eagle Management Guidelines (Eagle Management Guidelines), please contact the Chesapeake Bay Ecological Services Field Office at 410-573-4573 for technical assistance. The Eagle Management Guidelines can be found at:

<http://www.fws.gov/northeast/ecologicalservices/pdf/NationalBaldEagleManagementGuidelines.pdf>

In the future, if your project can not avoid disturbance to the bald eagle by complying with the Eagle Management Guidelines, you will be able to apply for a permit that authorizes the take of bald and golden eagles under the Bald and Golden Eagle Protection Act, generally where the take to be authorized is associated with otherwise lawful activities.

An additional concern of the Service is wetlands protection. Federal and state partners of the Chesapeake Bay Program have adopted an interim goal of no overall net loss of the Basin's remaining wetlands, and the long term goal of increasing the quality and quantity of the Basin's wetlands resource base. Because of this policy and the functions and values wetlands perform, the Service recommends avoiding wetland impacts. All wetlands within the project area should be identified, and if construction in wetlands is proposed, the U.S. Army Corps of Engineers, Baltimore District, should be contacted for permit requirements. They can be reached at (410) 962-3670.

We appreciate the opportunity to provide information relative to fish and wildlife issues, and thank you for your interests in these resources. If you have any questions or need further assistance, please contact Trevor Clark at (410) 573-4527.

Sincerely,

A handwritten signature in blue ink that reads "G. LaRouche". The signature is written in a cursive, flowing style.

Genevieve LaRouche
Supervisor

April 2, 2013

Ms. Lori Byrne
Environmental Review Specialist
Maryland Department of Natural Resources
Wildlife and Heritage Division
580 Taylor Avenue, E1
Annapolis, Maryland 21401

SUBJECT: Agency Scoping for a Short Environmental Assessment (EA) Form for
Groundwater Remediation at the Dump Road Area of Martin State Airport, Baltimore
County, Maryland

Dear Ms. Byrne:

On behalf of the Lockheed Martin Corporation, the Maryland Aviation Administration (MAA) is preparing a Short Environmental Assessment (EA) Form to fulfill the legal requirements of the National Environmental Policy Act (NEPA) of 1969 and FAA Order 1050.1E for a proposed groundwater remediation facility at the Dump Road Area (DRA) at Martin State Airport (MTN). The proposed site of the groundwater remediation facility in relation to airport property and the surrounding area is illustrated on **Figure 1**. The proposed groundwater remediation facility (Proposed Action Alternative) is located between the existing Taxiway T (Tango) and Frog Mortar Creek on the east side of the airport property, and includes a treated water discharge outfall that extends approximately 50 feet into Frog Mortar Creek. Groundwater in the DRA is currently impacted by volatile organic compounds (VOCs), including trichloroethene (TCE) and associated breakdown products, 1,4-dioxane, and heavy metals. The proposed groundwater remediation project is needed to provide containment and minimize the migration of these contaminants into the adjacent Frog Mortar Creek. Conceptual design for the proposed groundwater remediation facility consists of installation of 16 groundwater extraction wells, construction and operation of a groundwater treatment system housed within an approximately 10,000 square feet treatment building, installation of an outfall discharge from the treatment building to Frog Mortar Creek, and improvement of existing access roads and installation of adjacent utilities.

As the landowner of MTN, the MAA must obtain an environmental finding from the Federal Aviation Administration (FAA) for the Proposed Action prior to development of the groundwater remediation facility. The Eastern Region Short EA Form (www.faa.gov/airports/eastern/environmental/media/C10.doc) will be completed for review of the Proposed Action. Based on preliminary screening of alternatives in studies and analysis conducted to date, the Short EA Form is limited to the Proposed Action Alternative and the No Action Alternative (as required by the Council on Environmental Quality regulations). The Short EA Form will identify the project's purpose and need and evaluate the potential environmental impacts of the Proposed Action and No Action alternatives. Other recently completed and ongoing projects at MTN will be considered for analysis of potential cumulative impacts associated with the proposed groundwater remediation facility.

Environmental Analysis

All FAA Order 1050.1E impact categories will be addressed to complete the Short EA Form; however the level of analysis for each impact category will vary by its anticipated potential impact. It is expected that the following categories will require analysis, although for most of the listed categories, the analysis will be limited:

- Air Quality
- Biotic Resources
- Construction Impacts
- Threatened and Endangered Species
- Wetlands and Floodplains
- Coastal Resources
- Hazardous Materials
- Energy Supplies, Natural Resources & Sustainable Design
- Social Impacts
- Solid Waste
- Water Quality
- Cumulative Impacts

Preliminary Schedule

The analysis for potential impacts will be completed for 2014 (first year of project implementation) and 2019 (five years beyond project implementation).

The MAA is soliciting comments from your agency regarding the preparation of the Short EA Form for the proposed groundwater remediation facility at MTN in Baltimore County, Maryland. The MAA encourages each agency to review the information and provide comments. To request further information about this proposed project, please contact me by phone at 410-859-7103 or via e-mail at rbowie@bwiairport.com.

Please submit written comments by mail to me by May 22, 2013, so that pertinent input from agencies can be incorporated at an early stage to ensure open and continuous coordination throughout the EA process.

Sincerely,

Robin M. Bowie, Manager
Division of Environmental Planning

Enclosure

cc: Marcus Brundage, Environmental Protection Specialist, FAA

Paul Calligan, Project Manager, LMC
Paul Myers, Tetra Tech
Laura Burbage, CDM Smith

Agency	Permit Description	JEC Contact/Invitee
U.S. Army Corps of Engineers (USACE) and Environmental Protection Agency (EPA)	Section 404 Clean Water Act Joint Permit: Dredge and Fill of Waters of the U.S. Including Wetlands	Abbie Hopkins - 410 962-6080 abbie.hopkins@usace.army.mil Jon Romeo - 410-692-6079 jon.romeo@usace.army.mil
USCG	USCG review authority for potential impacts on navigation and installation of markers for navigation	Ron Houck (410) 576-2674 Ronald.L.Houck@uscg.mil.
National Oceanic and Atmospheric Administration (NOAA) Fisheries	Essential Fish Habitat (EFH) Consultation and Review: Potential impacts on EFH	John Nichols - 410-267-5675 john.nichols@noaa.gov
U.S. Fish and Wildlife Service	Section 7 Endangered Species Act Consultation and Review: Potential impacts to listed species and/or critical habitat	Bob Zepp 410-573-4536 bob_zepp@fws.gov Cherry Keller 410-573-4532 cherry_keller@fws.gov
USDA APHIS	Wildlife Hazard	Kevin Sullivan 410-349-8055 kevin.sullivan@aphis.usda.gov
U.S. Fish and Wildlife Service	USFWS review of potential impacts on bald eagle	Craig Koppie 410-573-4534 craig_koppie@fws.gov
Maryland Department of the Environment (MDE)/Board of Public Works	MDE Tidal Wetlands Protection Act License Joint Permit: Impacts to Tidal Wetlands and Waters of the State	Robert Rushlow 410-537-4023 rrushlow@mde.state.md.us
MDE Wetlands/Waterways Division	MDE Non-Tidal Wetlands Protection Permit: Impacts to Non-tidal Wetlands and Waters of the State	Cheryl Kerr 410-537-3911 ckerr@mde.state.md.us
MDE Coast Zone Consistency	Coastal Zone Consistency Compliance	Elder Ghigiarelli 410-537-3763 eghigiarelli@mde.state.md.us
MDE Stormwater E&S Control Program	Stormwater and E&S control	Jim Tracy jtracy@mde.state.md.us (410) 537-3563
Maryland Historic Trust	Section 106 of the National Historic Preservation Act Historic/Cultural Resource Review: Potential impacts to any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register	Beth Cole (410) 514-7631 bcole@mdp.state.md.us
MD DNR	Nongame and Endangered Species Conservation Act, Listed Species and Habitat Review: Potential impacts to state listed species and habitat	Marian Hoenczy 410-260-8511 mhoenczy@dnr.state.md.us
MDE	Air emissions permit	Nolan Penney npenney@mde.state.md.us (410) 537-3230
MDE Water Appropriation and Use	Water appropriation	Norman Lazarus 410-537-4167 nlazarus@mde.state.md.us
MDE State Superfund	Controlled Hazardous Substance (CHS) Enforcement Division	Art O'Connell aoconnell@mde.state.md.us 410-537-3493
MDE - Surface Water Discharge	Treated discharge from outfall	Ed Gertler egertler@mde.state.md.us 410-537- 3651
Chesapeake Bay Protection Act	Critical Area Plan/Permit Approval: Potential impacts to critical area resources	Julie Roberts 410-260-3476 jroberts@dnr.state.md.us



**Joint Evaluation Meeting
- Martin State Airport -
Dump Road Area
Groundwater Treatment Facility**

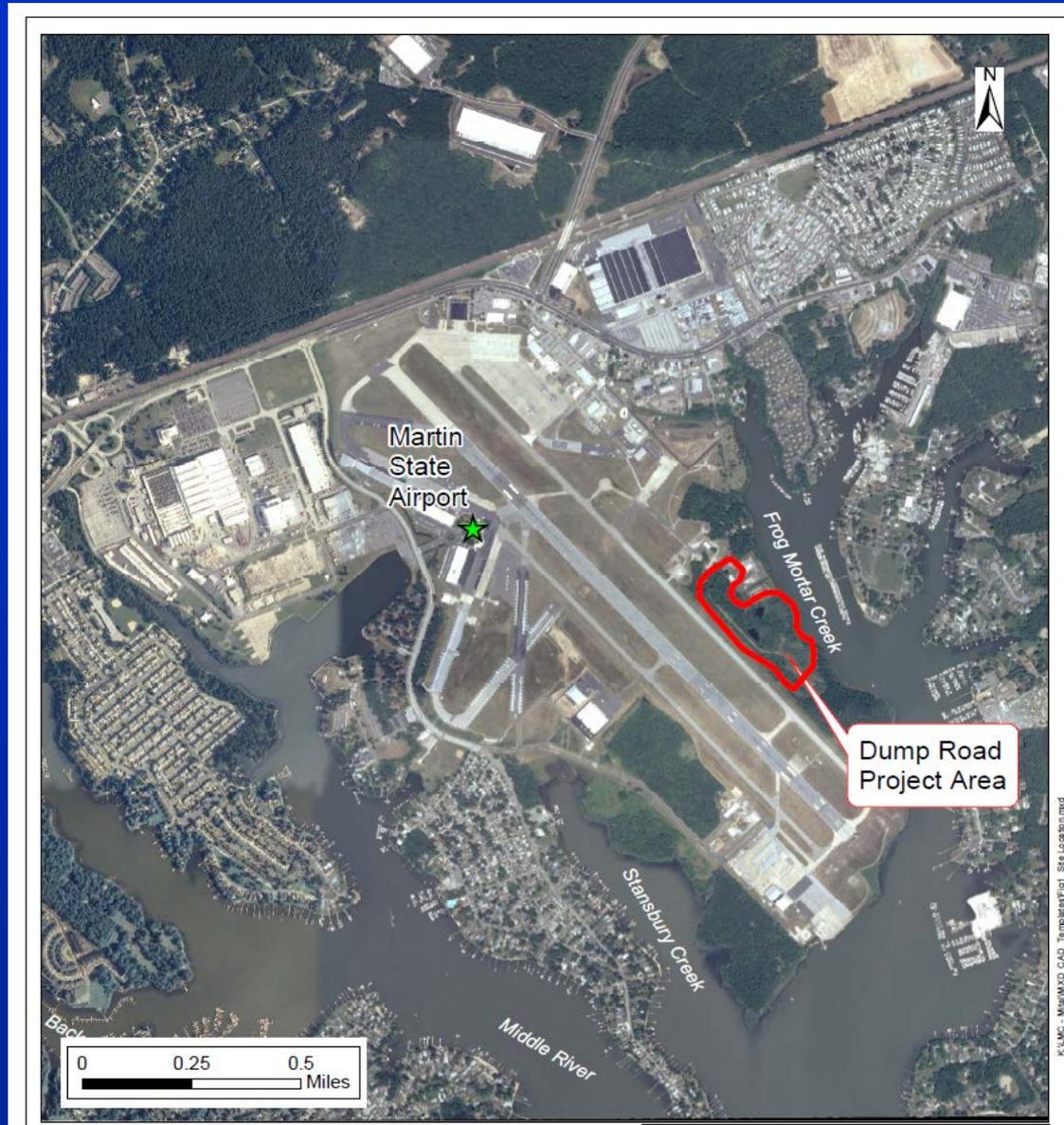
**March 27, 2013
USFWS Office
Annapolis, Maryland**

Introduction



- Lockheed Martin proposes to construct a groundwater treatment facility at the Dump Road Area (DRA) at Martin State Airport
- DRA groundwater found to be impacted by volatile organic compounds (VOCs), including trichloroethene (TCE) and associated breakdown products, 1,4-dioxane, and heavy metals
- MDE Water Contact Advisory in Frog Mortar Creek adjacent to Site
- Purpose of the facility is to contain the migration of the contamination into adjacent Frog Mortar Creek

Project Location



Project Overview



To Achieve the Stated Purpose the Project Will:

1. Extract Groundwater Using a System of Wells



2. Treat Groundwater Using a Multistage Treatment Process

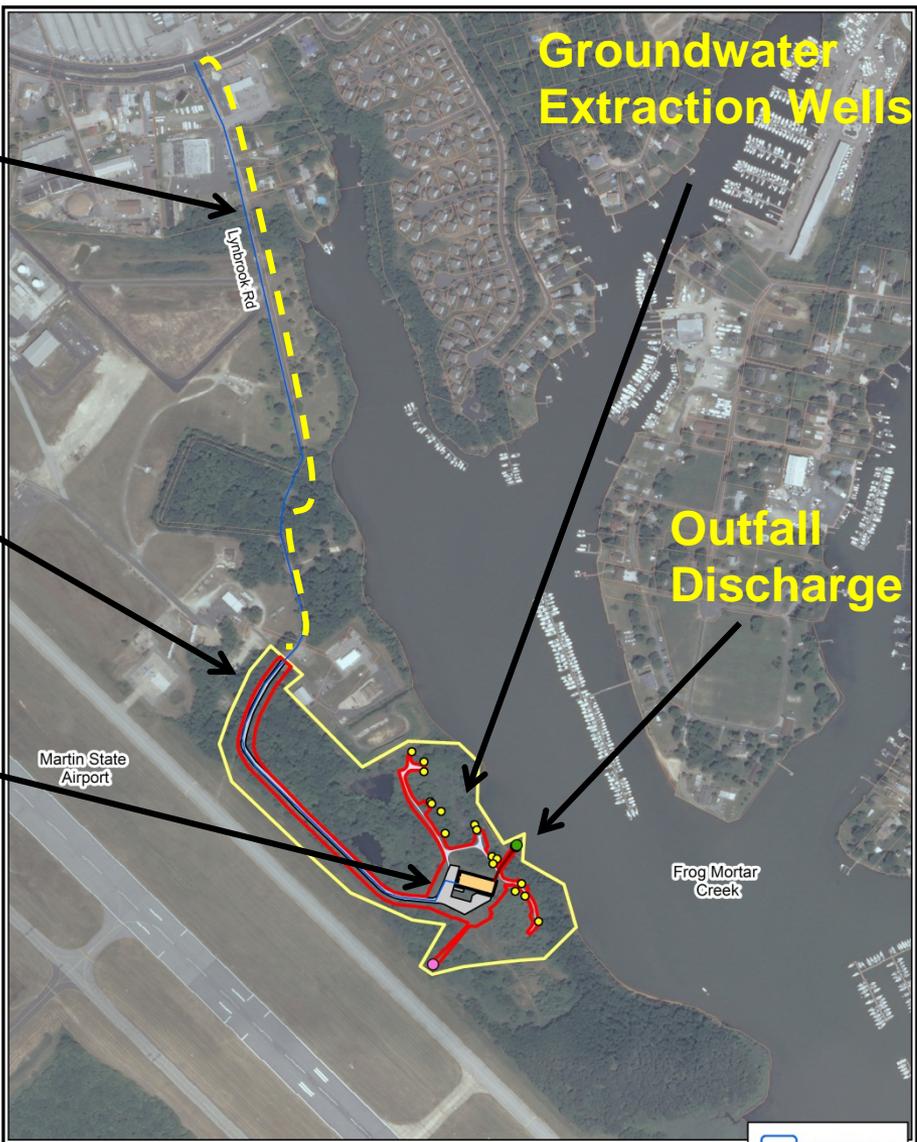


3. Discharge Treated Groundwater to Frog Mortar Creek

Project Plan



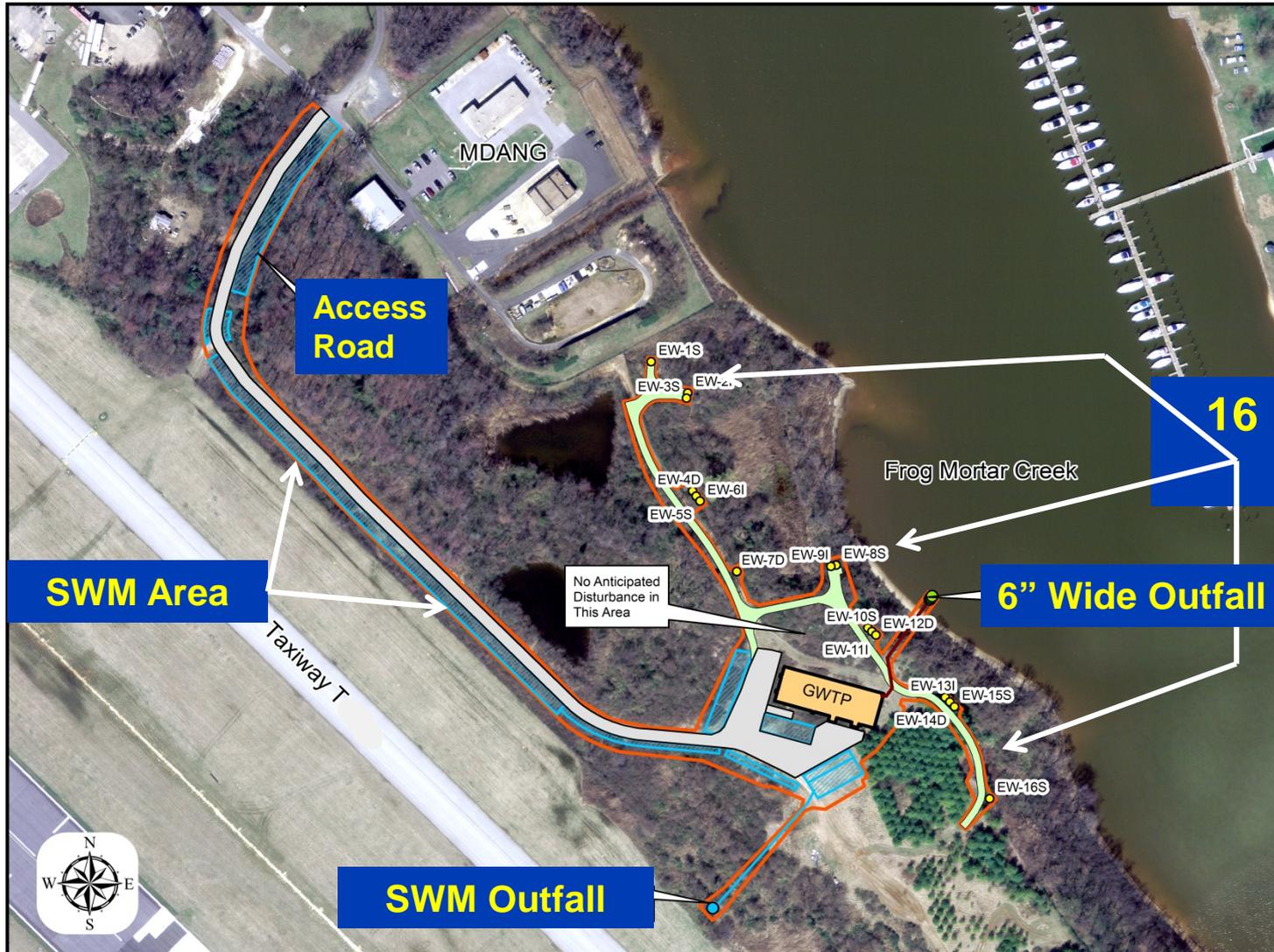
- Utility Installation
- Access Road Widened
- Treatment Building



Map Document: (K:\LMC - Mital\103IP2599 Task 13 (permitting)-DRA-GWTP\NEPA EA\DWG\103IP2599-Figure_2-2.mxd)
3/20/2013 11:55:19 AM



Treatment Facility and Well Layout



16 Extraction Wells

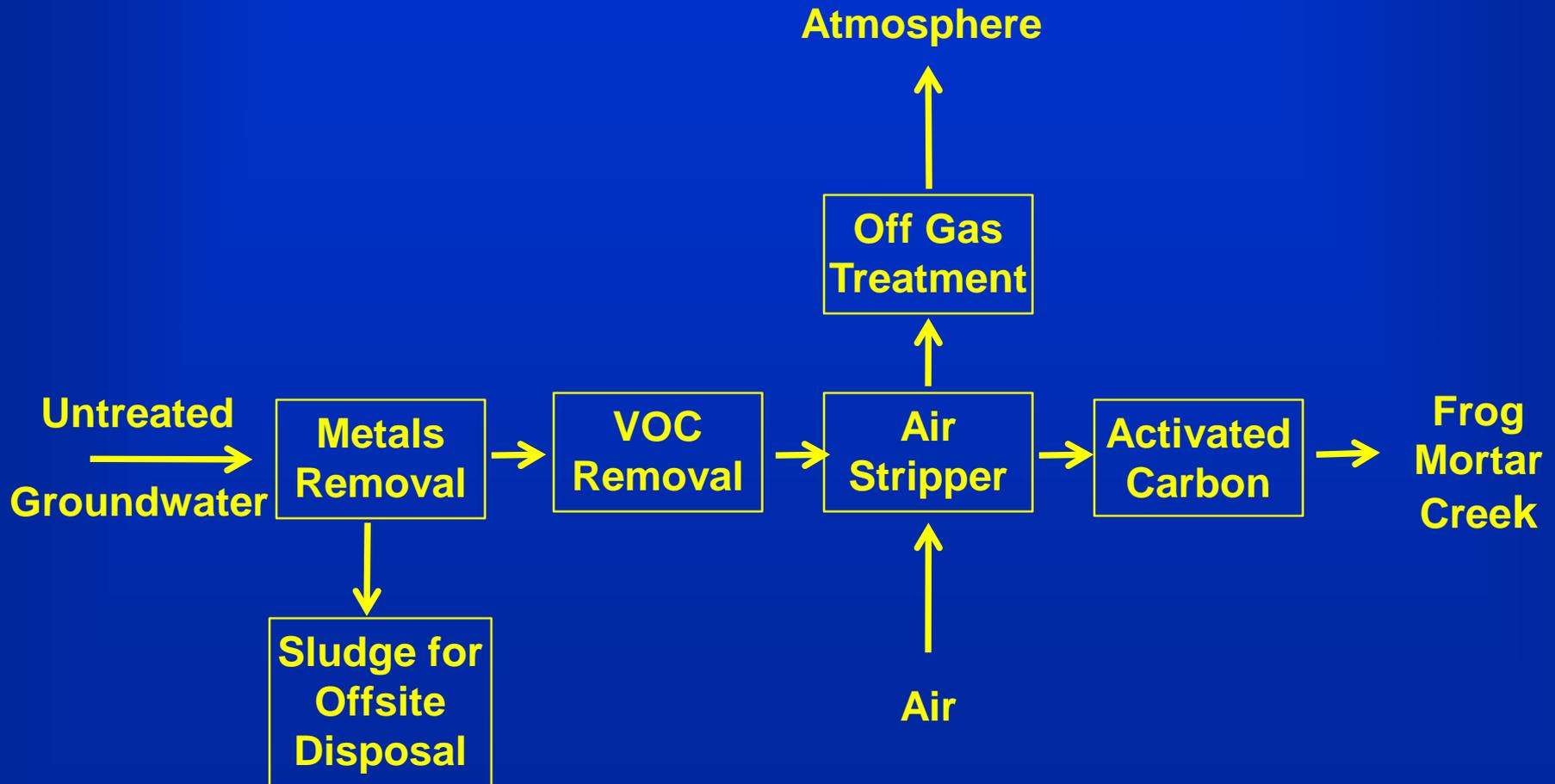
6" Wide Outfall 50' in FMC

SWM Area

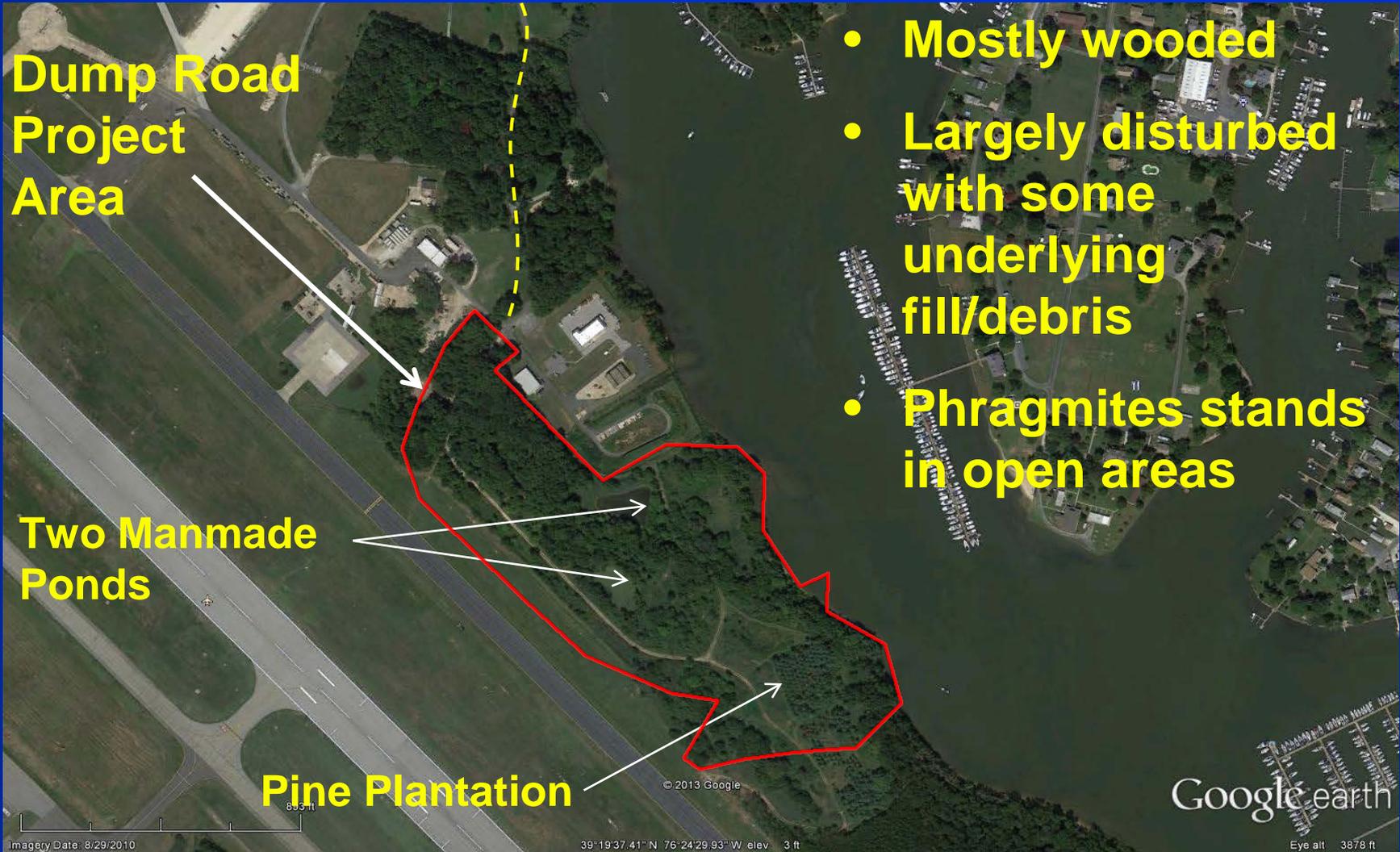
SWM Outfall



Treatment Process



Existing Conditions



Regulated Resources



➤ Wetlands, Waterways

- Non-tidal wetlands – ponds, scrub, and Phragmites
- Tidal wetlands/waters – Frog Mortar Creek

➤ Federal/State Threatened & Endangered Species and Essential Fish Habitat (EFH)

- No listed species listed for Middle River USGS Quad
- EFH in tidal areas of the bay

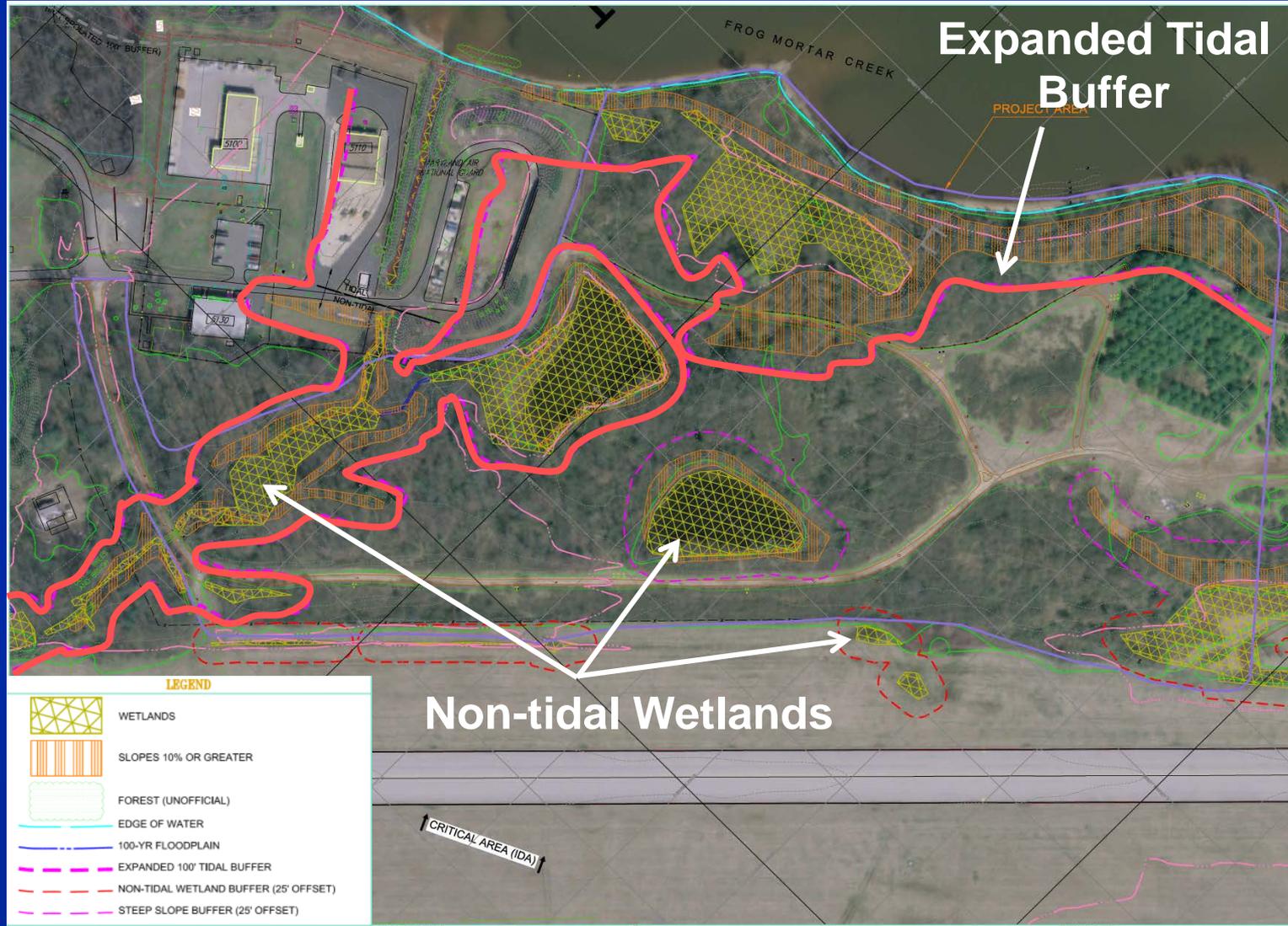
➤ Bald Eagle

- Active nest near entrance road

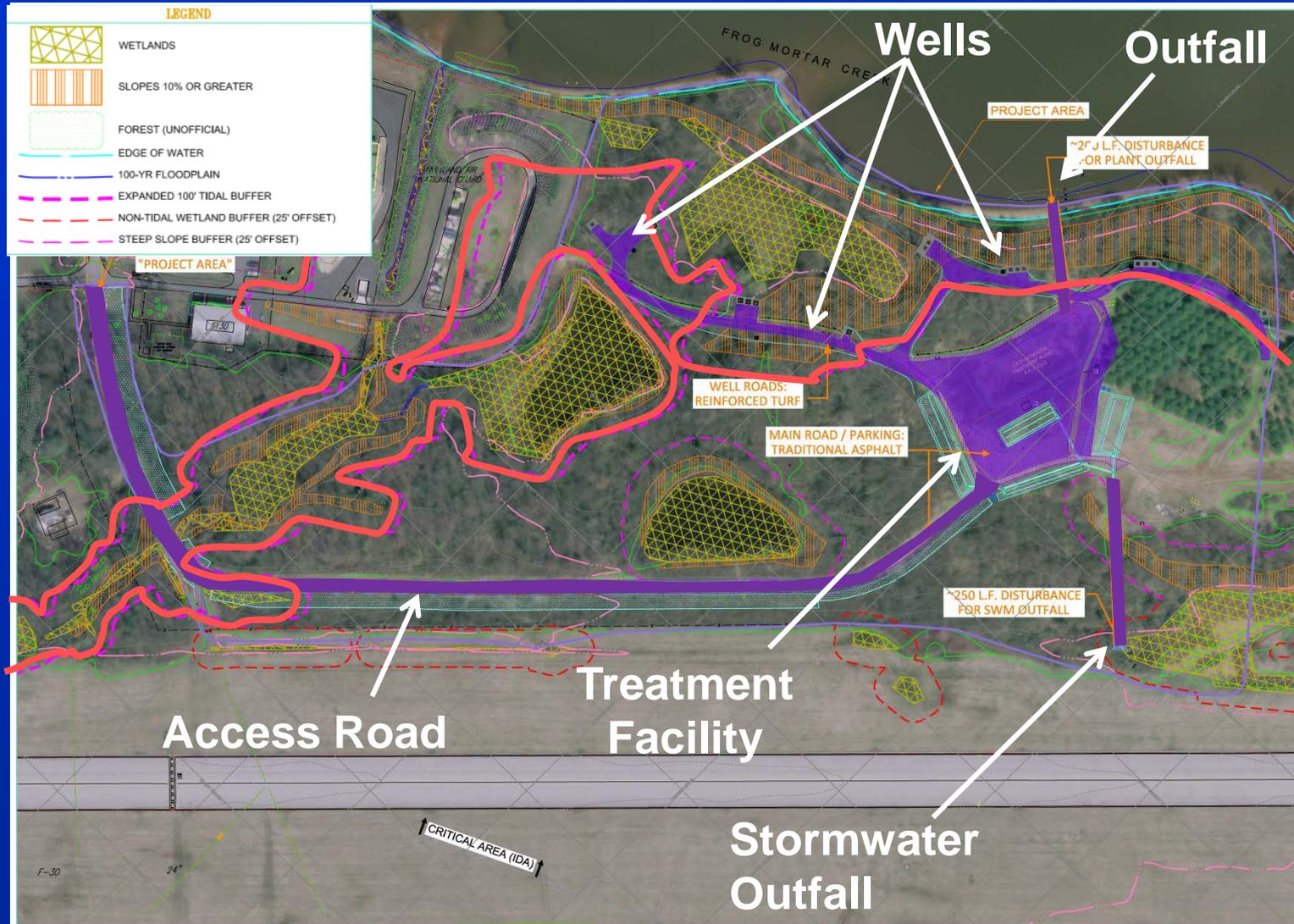
➤ State Critical Area Resources

- Forest/Woodland – majority of the site
- Expanded Tidal Buffer

Regulated Resources



Project Footprint/Resource Impacts



Resource Impacts



	Temporary	Permanent
Total Ground Disturbance (s.f./ac)	TBD upon development of plans	~170,000 s.f./~4 ac
Non-tidal Waters (l.f./s.f.)	TBD	
Intermittent	TBD	~50 l.f./~500 s.f.
Non-tidal Wetlands (s.f.)	TBD	
PSS	TBD	~900 s.f.
PEM	TBD	~900 s.f.
Buffer	TBD	~1,500 s.f.
Tidal Wetlands/Waters (s.f./c.y.)	TBD	~300 s.f./~75 cy
Critical Area Resources (s.f.)	TBD	
Forest	TBD	~97,000 s.f.
Expanded Tidal Buffer	TBD	~23,000 s.f.

Resource Impacts Cont'd



- EFH:
 - Minor physical and chemical impacts to EFH

- Bald Eagle:
 - Utility installation near existing Bald Eagle nest

- Water Quality:
 - Improvement in water quality (eventual lifting of water contact advisory)
 - Stormwater impacts during construction
 - Stormwater runoff from impervious surfaces
 - Direct discharge from outfall

Avoidance and Minimization



- **Off-site treatment alternative → impractical**
 - Long piping distance
 - Potential for offsite leaks/spillage
 - Lack of suitable nearby sites
- **On-site location avoids impacts to identified resources to the maximum extent practicable**
 - Wetlands and critical area avoided with exception of road improvements and outfall discharge
 - Treatment facility avoids forested areas and rotated “best fit” to minimize disturbance
 - Existing roads used for access
 - Outfall length reduced to avoid and minimize tidal impacts
- **Remaining impacts to be mitigated per MDE, CAC, USFWS, NOAA Fisheries, and USACE requirements**

Permitting



NEPA

FAA Short-form Environmental Assessment

Wetlands/Waters

Less than ½ acre and <400 cy in tidal waters

Review under MDSPGP-4

Essential Fish Habitat

Minor physical and chemical changes

Bald Eagle

No take expected based on avoidance/minimization

Chesapeake Bay Critical Area Act

Required plan for site protection and replacement of impacted resources.

Section 402 NPDES and MDE Water Quality

Construction Stormwater General Permit, SWM Plan, Erosion and sediment control, NPDES for outfall discharge

Questions/Discussion



- **Project Description, Activities, Schedule**
- **Section 404**
- **Section 10 & USCG Navigation**
- **Protected Species/Habitat**
- **Critical Area**
- **Historic - Cultural Resources**
- **Stormwater, Sediment Control, Ground and Surface Water Quality**
- **NEPA**
- **Other?**

LMC / MAA AGENCY PRE-APP SCOPING

12/13/2012

<u>Name</u>	<u>Organization</u>	<u>Email</u>	<u>Phone</u>
Laura Burbage	CDM Smith	burbage.la@cdmsmith.com	757-597-2650
Arthur O'Connell	MDE/Site Remediation	aoconnell@mde.state.md.us	(410) 537-3493
KIM HUGHES	HNTB	khughes@hntb.com	203.253.5856
Bridley Gallagher	ADCI	bgallagher@bwiairport.com	410 859 7713
John Hurt	MAA	jhurt@bwiairport.com	410 859-7384
Abbie Hopkins	DEPT OF ENRS	abbie.hopkins@usace.army.mil	(410) 962-6080
Jon Romeo	" "	jon.romeo@usace.army.mil	410 962-6079
Robin Bowie	MAA	RBOWIE@BWI.AIRPORT.COM	410-859-7103
Cheryl Kew	MDE	ckew@mde.state.md.us	410-537-3911
ROBERT RUSHLOW	MDE	RRUSHLOW@mde.state.md.us	410-537-4023
Julie Roberts	CAZ	jroberts@dnr.state.md.us	410-260-
Mike Martin	Tetra Tech	michael.martin@tetratech.com	3476
Paul Myers	tetra tech	paul.myers@tetratech.com	410 707 5259 202-749-0500

DRAFT Meeting Notes
Lockheed Martin Groundwater Interim Remedial Action
Agency Scoping Meeting for Permitting
December 13, 2012, 9:00 am
Martin State Airport, MD

ATTENDEES:

Cheryl Kerr, Robert Rushlow – MDE
Art O’Connell, MDE
Abbie Hopkins, Jon Romeo – USACE
Julie Roberts – Critical Area Commission
Robin Bowie, John Hurt – MAA
Bridey Gallagher – ADCI
Mike Martin, Paul Myers – Tetra Tech
Laura Burbage – CDM Smith
Kim Hughes – HNTB Engineering

MEETING NOTES:

General Introduction

Robin Bowie welcomed the meeting attendees and gave general background information about the site. The groundwater treatment facility will be on Martin State Airport, which is state-owned land; as such, all permitting and signatures will come from the Maryland Aviation Administration (MAA). She further explained that the airport has a facility layout plan, which is approved by the Federal Aviation Administration (FAA). The layout plan must be changed to show the groundwater treatment facility. This change requires FAA approval and thus becomes a federal action subject to the National Environmental Policy Act (NEPA). To comply with NEPA, FAA has indicated that a short form Environmental Assessment (EA) will be required. A scope for the short form EA was sent to FAA, and MAA is awaiting approval.

Ms. Bowie also noted that MAA has submitted a scope to FAA for a full EA for other changes to the airport layout plan that involve airport activities. This EA will likely take two years to complete. Since the groundwater treatment facility is important to public health and safety, MAA and LMC would like to keep it separate from other airport layout plan changes so that it might proceed expeditiously. Additionally, Ms. Bowie and others indicated that a strong rationale under NEPA for separating the remediation project from the other airport work is that neither project is dependent upon the other.

Abbie Hopkins noted that USACE permits are issued to whoever was in control of the work, and this entity would be responsible for any violations as well. Ms. Bowie explained that MAA, as the property owner, applies for all permits associated with their two airports because there are usually many projects occurring at once and it can become very complicated if permits are

issued to different parties. Ms. Hopkins said that so long as MAA is okay with the responsibility of being the permit holder, then it is okay with USACE.

Groundwater Remediation Project Presentation

Paul Myers gave a PowerPoint presentation with an overview of the site and project; the slides are attached to these notes. Mr. Myers noted that the site is basically a 20-acre dump site that was operated from World War II to the 1960s, and that this project is one stage of a remediation process to stop the migration of contaminants to Frog Mortar Creek. Art O'Connell noted that the groundwater is contaminated with volatiles which are decomposing into vinyl chloride in part due to the presence of petroleum products. Mike Martin added that LMC has information on the remediation project on their website as well as other related information on the site's history.

Mr. Myers said that slide 5 (an aerial photograph) was of existing conditions and included the project area as well as vehicular access. He noted two manmade ponds, one of which was used for acid disposal. A larger printout of the figure is attached to the slide handouts.

On Slide 6, Mr. Myers said that wetland resources were well defined and were delineated in the field. He noted that the tidal area could possibly contain essential fish habitat (EFH) but that the topic has not been discussed with NOAA to determine exact EFH areas and any implications this may have. He also noted that there is a bald eagle nest located within 100 feet of the access road.

Slide 7 illustrated the areas where regulated resources are located. Julie Roberts asked if any soil borings had been done, and whether the site was all fill, or if any hydric soils were found. Mr. Myers responded that soils were hydric in the wetland areas, but that the area largely consists of fill. Mr. Martin added that Pond 1 was constructed for acid disposal and that the engineering drawings for the pond are available; Pond 2 was created when a tidal embayment was filled and water ponded behind an earthen berm created in the fill.

On Slide 8, Mr. Myers said that an effort was made to minimize the impact of the outfall by minimizing the distance it protrudes into Frog Mortar Creek while providing appropriate submergence for the diffusers.

On Slide 9 (Project Description/Layout), Mr. Myers noted that while the layout is still evolving, this slide shows the concept of the project work. During design, the layout was placed over the regulated resources figure in order to minimize impacts to those areas. The outfall would impact tidal wetlands and the expanded buffer, as would some of the wells and well access routes.

On Slide 10, (Resource Impacts) Mr. Myers noted that the impact area estimates were preliminary. Impacts to intermittent non-tidal waters are where Lynbrook Road crosses a drainageway, and impacts to tidal waters are below mean high water at the outfall location. Ms. Roberts noted that the slide shows about 23,000 square feet of impact to the expanded

tidal buffer in the Critical Area, but in the figure, it looks like this area is largely avoided. Mr. Myers said that impacts in the expanded tidal buffer include access roads to wells, the outfall corridor, and the main road. Ms. Roberts asked if mitigation were needed, would there be enough room? Ms. Bowie stated that mitigation would need to be offsite because stream, wetland, and forest mitigation cannot occur onsite due to the potential of attracting wildlife hazards to airplanes. She added that MAA has been working with LMC for a long time to try to reduce impacts as much as possible. Ms. Roberts said that it looks like the expanded buffer area may be overestimated, so the actual area of impact might be reduced by a few thousand square feet. Ms. Bowie said that MAA and LMC erred conservatively for now with the expanded buffer boundaries and will refine the actual area as design goes on. Julie Roberts stated that steep slopes areas are >15% and no critical area buffer need be applied for the middle pond.

On Slide 11 (Resource Impacts Cont'd), Mr. Myers explained that the impacts to EFH were due to a 50-ft by 4- or 5-ft wide corridor for the outfall and that these impacts were expected to be minimal. He reiterated that discussion with NOAA was needed to be sure that there were no problems related to EFH impacts. He added that discussions were also needed with USFWS regarding the bald eagle to avoid a take. Regarding water quality, he said that this impact was currently being addressed through the development of permit applications for these activities.

On Slide 12 (Avoidance and Minimization), Mr. Myers said that offsite treatment would be impractical. One goal project design is to find a way to treat onsite while minimizing impacts.

During the post-presentation question and answer session, Ms. Hopkins stated that the State Programmatic General Permit thresholds include temporary impacts. Mr. Myers responded that, so far, a lot of the temporary impact areas (such as laydown) have been factored in. Ms. Hopkins said that each category in the MDSPGP-4 has specific conditions. She then asked if the ponds needed to be treated. Mr. Martin stated that the ponds would ultimately be part of the full remedy, but not part of the groundwater treatment plan. Ms. Hopkins then asked if the access roads would be used for other remediation projects. Ms. Bowie responded that she thinks so. Laura Burbage noted that any new roads that might be added in the future would likely change the airport layout plan and additional NEPA review would be required, so there is an incentive to re-use the access roads. Ms. Hopkins noted that a buffer for the bald eagle nest should be shown on the plans. Ms. Bowie replied that MAA has a contact with USFWS that LMC can coordinate with.

Project Schedule Issues and Discussion Related to Further Review

Mr. Myers reiterated that the permit application and design are still being developed and that the goal of this meeting is to take agency comments from this meeting and incorporate them into the permit applications and design plans. Mr. Martin added that the current plans are about 30 percent design stage and may be finalized in the next month or so. He furthered stated that this project has a shorter timeline than the projects at LMC Middle River because of health issues related to contamination leaching into Frog Mortar Creek, and that MDE has placed a health advisory sign on the creek. Ms. Bowie estimated that a late February or early

March submittal date might be feasible. Ms. Burbage stressed that an extensive internal review process was necessary before the Joint Application could be submitted.

Robert Rushlow recommended that LMC give this presentation to the Joint Evaluation Committee (JEC). Mr. Martin commented as an aside that LMC presented the sediment project to the JEC and they were getting ready to issue a feasibility study next week. The group discussed at what design stage would be best for a presentation to the JEC and agency representatives agreed that the more complete the plan is, the more useful the agencies' comments would be. Robin Bowie suggested that the design stage is a couple steps too early yet to be presented to the JEC. Abbie Hopkins suggested that it might be good to give the presentation to the JEC just before submitting permit applications, in case any changes to the design need to be made.

Mr. Martin commented that LMC will also need to get Maryland Air National Guard (MDANG) input on the design and what their future site use will be, since utilities will need to be installed along their access route. In response to a question as to whether public participation was needed, he discussed the level of public participation that has occurred for the various mitigation projects and added that more information is available on the LMC website.

It was discussed whether a similar inter-agency meeting should be held prior to submittal of the JE to discuss mitigation requirements. Ms. Roberts said that she does not think one is necessary from her end, and there was general similar consensus from all agencies present. It was noted that if additional meetings were needed, it would be best to keep USACE and MDE meetings together. Ms. Hopkins noted that staff availability is an issue and that it would be best if additional meetings were held only if particularly necessary.

Ms. Kerr stated that MDE will need to get their mitigation group involved in permit review. . John Hurt noted that USACE will be issuing a Preliminary Jurisdictional Determination (JD) for the entire Martin State Airport property.

Ms. Hopkins noted the need to determine if a State Programmatic General Permit (SPGP) would be applicable or if an individual permit would be needed. If an individual permit is needed, a NEPA EA may be required and they would need to discuss whether FAA or USACE would be the lead agency. Mr. Myers and Mr. Martin said that at this stage, it is expected that a SPGP would apply.

Site Walkover and Discussion

A subset of the meeting attendees toured the project site. Tour participants included Cheryl Kerr, Abbie Hopkins, Jon Romeo, Julie Roberts, John Hurt, Bridey Gallagher, Paul Myers, Mike Martin, and Laura Burbage. The tour proceeded by car along the access road to the site of the proposed facility building. The group then walked to Pond 2 along the existing access path. Mr. Myers noted that the boundary shown on the plans between tidal wetlands and non-tidal wetlands was not yet finalized. Ms. Kerr said that LMC should go by the tidal/non-tidal boundary on the MDE map, but that Mr. Rushlow should be contacted for details. Mr. Myers

noted that Pond 2 was not the acid disposal pond, but was man-made pond. Mr. Martin furthered that this was the pond that was created when an embayment was filled and a berm was left that ponded drainage.

The group drove to the stream crossing on the proposed access road. Agency representatives stated that the design needs to make sure that impacts to the stream are minimized, especially the width of any road improvements. Ms. Kerr asked if the existing culvert was in good repair and would withstand construction traffic. Ms. Burbage and Mr. Myers said that they would bring the issue up with the design team. Ms. Kerr also expressed concern regarding the site topography shown on the handouts. She stated that there seems to be a lot of topographic features that are left out, such as small mounds. Mr. Martin responded that an aerial survey was performed with some areas surveyed on the ground, and that he would look into the survey methodology further.

Action Items (LMC, Tetra Tech, CDM Smith):

1. The Critical Area expanded buffer area boundary will be further refined as design continues.
2. USFWS will be consulted regarding the bald eagle nest in order to avoid a take.
3. NOAA will be consulted to discuss any potential impacts to EFH.
4. A presentation will be given to the JEC prior to permit application.
5. MDANG will be consulted regarding their future site use and the use of the access road for utility installation.
6. MDE will be contacted to discuss mitigation coordination
7. MDE (Robert Rushlow) will be contacted regarding the MDE mapped tidal/non-tidal boundary.
8. Survey methodology will be reviewed to assure that the survey is adequate for permitting.



**Pre-application Meeting
- Martin State Airport -
Dump Road Area
Groundwater Interim Remedial
Action**

Background and Purpose



- **Background**

- In 1991 MAA discovered buried drums adjacent to the taxiway
- Dump road area found to be impacted by volatile organic compounds (VOCs), including trichloroethene (TCE) and associated breakdown products, 1,4-dioxane, and heavy metals
- Currently migrating into Frog Mortar Creek (FMC)

- **Purpose**

- Provide remediation by extracting and treating groundwater

Project Overview

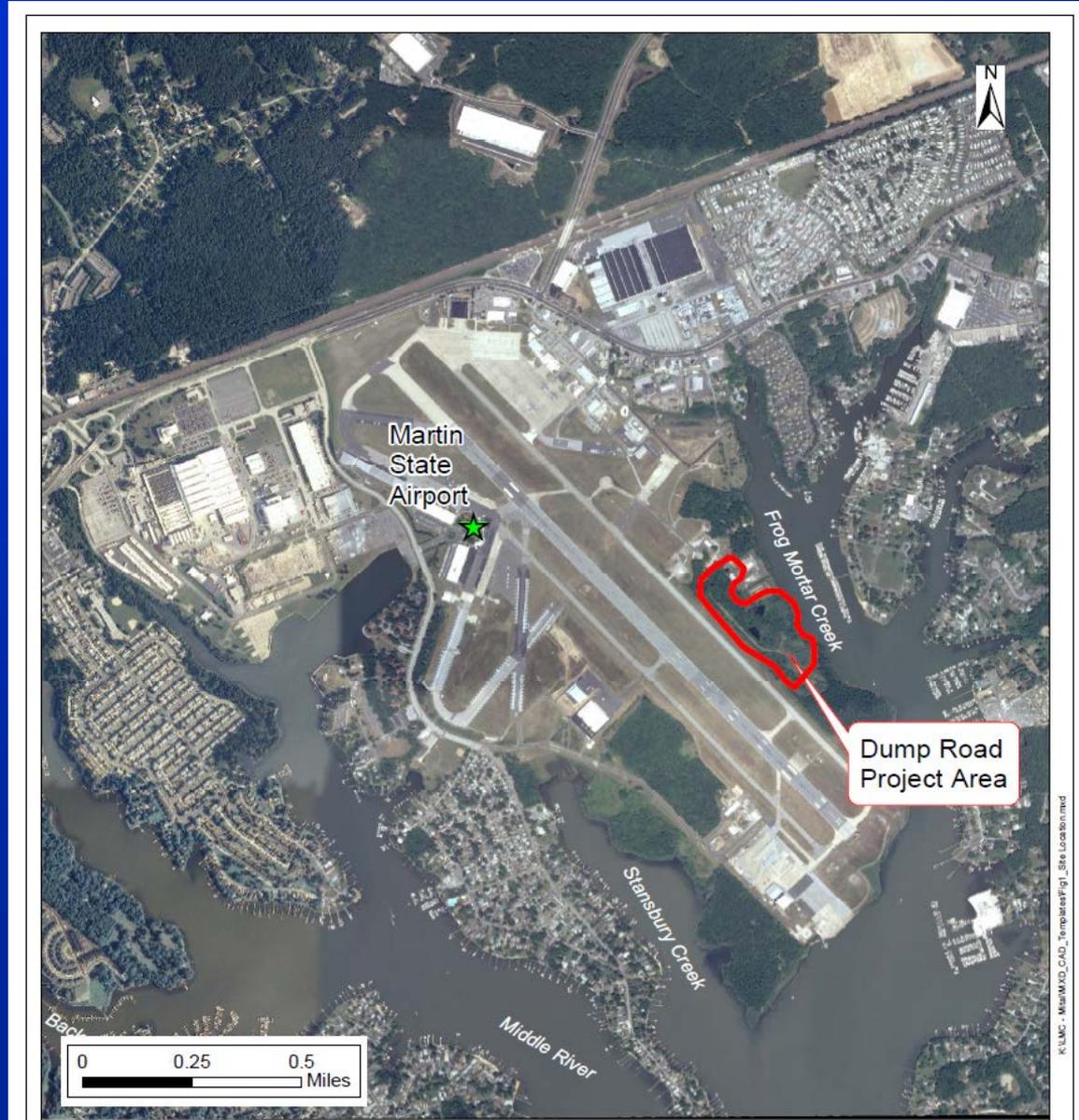


- 1) Installation of groundwater extraction wells
- 2) Construction of treatment plant and associated facilities
- 3) Placement of outfall discharge in Frog Mortar Creek
- 4) Existing access road improvement and utility installation

Project Location



- Approximately 22 acre site
- Between MSA Runway and Frog Mortar Creek



Existing Conditions



- Mostly wooded
- Highly disturbed
- Underlying fill and other disposed material
- Two manmade ponds

Existing Conditions



Regulated Resources



➤ Wetlands, Waterways

- Non-tidal wetlands – ponds, scrub, and phragmites
- Tidal wetlands/waters – Frog Mortar Creek

➤ Federal/State T&E Species and EFH

- No listed species and/or habitat
- EFH in tidal areas of the bay

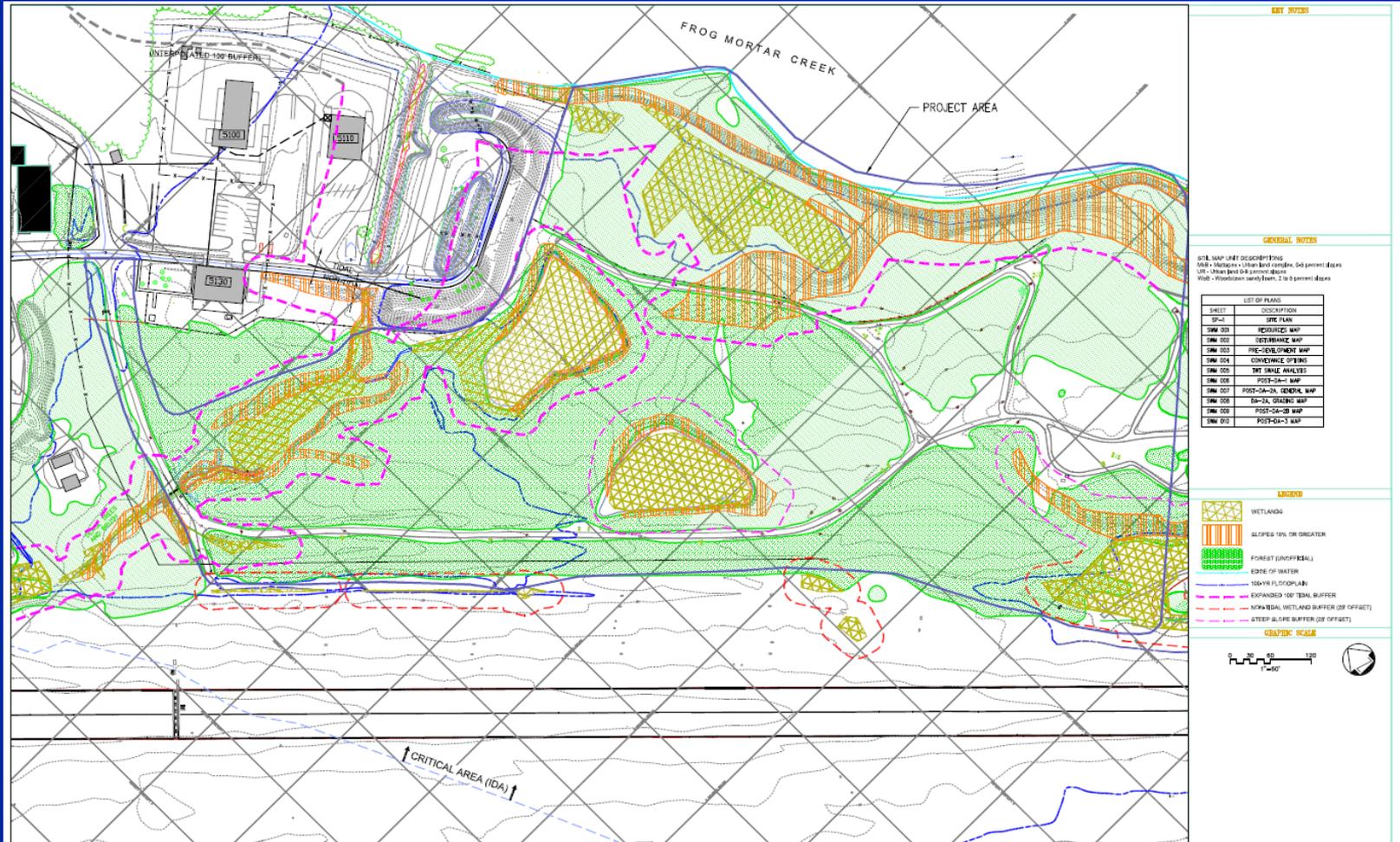
➤ Bald Eagle

- Active nest located adjacent to entrance road

➤ State Critical Area Resources

- Forest/Woodland -19 acres or 90% of the site
- Expanded Tidal Buffer

Regulated Resources



Project Description



1) Extraction Wells

- 16 wells, minor site impact

2) Treatment Plant:

- 1-acre footprint - 0.33 ac building; 0.66 ac storage/parking

3) Outfall Discharge

- 200' of 6" pipe to Frog Mortar Creek; 50' beyond MHWL
- At least 1-ft of submergence at low-tide
- Portadam (dewatering device) may be used.

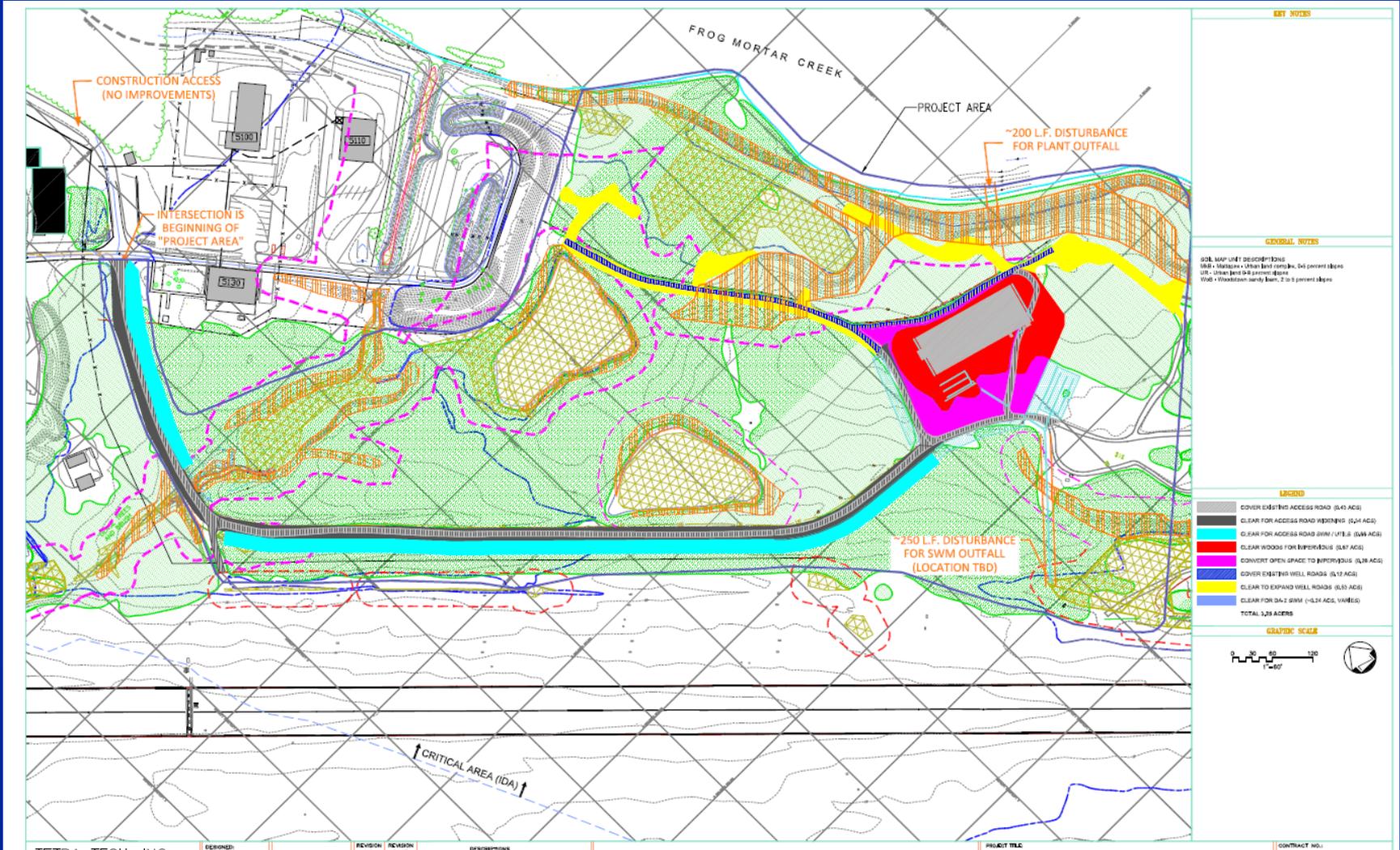
4) Access and Infrastructure:

- Roads widened from 8 to 20 ft; Utility installation

Treatment Plant Operations:

- Oxidation, Air stripping, Carbon Adsorption, Zeolite treatment
- 100 gpm Flow Rate

Project Description/Layout



Resource Impacts



	Temporary	Permanent
Total Ground Disturbance (s.f./ac)		167,706 s.f./3.85 ac
Non-tidal Waters (l.f./s.f.)		
Intermittent		50 l.f./500 s.f.
Non-tidal Wetlands (s.f.)		
PSS		900 s.f.
PEM		900 s.f.
Buffer		1,500 s.f.
Tidal Wetlands/Waters (s.f./c.y.)		300 s.f./150 cy
Critical Area Resources (s.f.)		
Forest		97,574 s.f.
Expanded Tidal Buffer		23,522 s.f.

Resource Impacts Cont'd



- EFH:
 - Minor physical and chemical impacts to EFH

- Bald Eagle:
 - Potential disturbance during utility installation

- Water Quality:
 - Construction stormwater impacts
 - Impervious surface stormwater runoff
 - Direct discharge from outfall

Avoidance and Minimization



- No alternative siting given airport constraints and location of contamination
- Alternatives considered included off-site treatment - impractical
- Sited to avoid identified resources to the maximum extent practicable
 - Wetland and critical area avoided with exception of road improvements and outfall discharge
 - Treatment facility avoids forested areas and rotated “best fit” to minimize disturbance
 - Existing roads used for access.
 - Outfall length reduced to avoid and minimize tidal impacts
 - **Remaining impacts will be mitigated per MDE and USACE requirements; however, mitigation specifics TBD.**

Permitting



- Wetlands/Waters
 - Less than ½ acre and <400 cy in tidal waters
 - Review under MDSPGP-4
- EFH
 - Minor physical and chemical changes
 - Expect informal consultation with NOAA Fisheries
- Bald Eagle
 - No take expected based on avoidance/minimization
 - Anticipate informal consultation
- Chesapeake Bay Critical Area Act
 - Required plan for site protection and replacement of impacted resources.
- Section 402 NPDES and MDE Water Quality
 - Construction Stormwater General Permit, SWM Plan, NPDES for outfall discharge (in process)



Questions/Discussion



APHIS Wildlife Services
1568 Whitehall Rd.
Annapolis, MD 21409

Phone: (410) 349-8055
FAX: (410) 349-8258

November 9, 2012

Ms. Robin M. Bowie
Manager, Division of Environmental Planning
Maryland Aviation Administration
Baltimore/Washington International Thurgood Marshall Airport

Dear Robin Bowie,

Thank you for the opportunity to review the specifications for the Lockheed Martin Corporation (Lockheed Martin) Proposed Plan for the groundwater Interim Remedial Action (IRA) at the Dump Road Area (DRA) Site at Martin State Airport (MSA) in Middle River, Maryland.

The FAA Advisory Circular (AC) 150/5200-33B strongly recommends against the construction of new wastewater treatment facilities on airport property because it may improve soil moisture and quality of unpaved areas and lead to improved turf growth that can be an attractive food source for many species of animals.

My Staff and I have reviewed AC 150/5200-33B and the material provided by MAA with a critical attention to detail to determine if any of the activities during the construction of the facility or if the facility and its operations as proposed will attract wildlife in the numbers and composition to be a negative impact to aircraft safety.

We have determined that we do not see anything at this time that would pose an increased threat to aircraft safety. The plan as proposed may actually reduce the attractiveness of this area to wildlife that may pose a threat to aircraft.

We are committed to continue to work closely with Environmental Planning as well with others in MAA to keep an increased surveillance of this area throughout all stages of this project to insure there is no increase wildlife activity that would pose a threat to safe aircraft operations.

We look forward to working with MAA on this effort.

If you have any questions please do not hesitate to contact me. Again thanks for letting us review this project.

Sincerely,


Kevin J. Sullivan
State Director, MD/DE/DC

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Coastal Zone Consistency Determination -- Lockheed Martin Groundwater Remediation Facility -- Martin State Airport

Robin Bowie [rbowie@bwiairport.com]

Sent: Friday, November 21, 2014 7:59 AM

To: Myers, Paul; Burbage, Laura [BurbageLE@cdmsmith.com]

Cc: Shilland, Peter [ShillandPJ@cdmsmith.com]; Calligan, Paul (paul.calligan@lmco.com)

Importance: High

Attachments: DRAFT ENVIRONMENTAL ASSES~1.pptx (5 MB)

Paul:

Please find below the Coastal Zone Consistency Determination from MDE, and attached, the exhibits that were submitted to MDE for their consideration in making this determination. The entire package should be included in the Final EA in the Agency Coordination Section.

Let me know if you have any questions! Thanks!

[Ms. Robin M. Bowie](#)

[Manager, Division of Environmental Planning](#)

[Maryland Aviation Administration](#)

[Baltimore/Washington International Thurgood Marshall Airport](#)

[410-859-7103 \(office\)](#)

[410-859-7082 \(fax\)](#)

rbowie@bwiairport.com

Mailing Address

[P.O. Box 8766](#)

[BWI Airport, MD 21240](#)

Overnight Shipping Address

[991 Corporate Boulevard](#)

[Linthicum, MD 21090](#)

From: Robin Bowie
Sent: Friday, November 21, 2014 7:53 AM
To: 'Elder Ghigiarelli -MDE-'
Subject: Lockheed Martin Groundwater Remediation Facility -- Martin State Airport

Elder:

MAA has reviewed the information provided below in your Coast Zone Consistency Determination for this project and agrees with the determination. Thank you so much for getting back to us so quickly! Have a great Thanksgiving!

Ms. Robin M. Bowie
Manager, Division of Environmental Planning
Maryland Aviation Administration
Baltimore/Washington International Thurgood Marshall Airport
410-859-7103 (office)
410-859-7082 (fax)
rbowie@bwiairport.com

Mailing Address

P.O. Box 8766
BWI Airport, MD 21240

Overnight Shipping Address

991 Corporate Boulevard
Linthicum, MD 21090

From: Elder Ghigiarelli -MDE- [<mailto:elder.ghigiarelli@maryland.gov>]
Sent: Thursday, November 20, 2014 2:24 PM
To: Robin Bowie
Subject: Re: Lockheed Martin Groundwater Remediation Facility -- Martin State Airport

Robin,

I am responding to your request for a Federal Consistency determination, pursuant to Section 307 of the Federal Coastal Zone Management Act of 1972, as amended (CZMA), for the proposal by Lockheed Martin to construct a Groundwater Remediation Treatment Facility at Martin State Airport. The purpose of the project is to control migration of the contaminated groundwater plume from the Dump Road area at concentrations that can lead to exceedances of water quality standards in the adjacent Frog Mortar Creek. The facility will pump and extract groundwater from beneath the Dump Road area to limit the migration of contaminated groundwater into Frog Mortar Creek.

The proposed facility will impact 0.27 acre of wetlands, 55 linear feet of stream, and 2.7 acres of forest within the Chesapeake Bay Critical Area. The information indicates that an application for the proposed wetlands and waterway impacts is currently under review and coordination is ongoing with the Chesapeake Bay Critical Area Commission.

Based on the information provided, the proposed project is consistent with the Maryland Coastal Zone Management Program, as required by Section 307 of the CZMA, contingent upon authorization of the proposed wetlands and waterways impacts by the Wetlands and Waterways Program, and compliance with the Chesapeake Bay Critical Area requirements. Please note that this determination does not obviate the responsibility to obtain any other State approvals that are necessary for the project.

If you have any questions, please contact me.

Elder

Elder Ghigiarelli, Jr.

Deputy Program Administrator

Federal Consistency Coordinator

Wetlands and Waterways Program

Maryland Department of the Environment

Phone: (410) 537-3763

Fax: (410) 537-3751

On Tue, Nov 18, 2014 at 12:19 PM, Robin Bowie <rbowie@bwiairport.com> wrote:

Elder:

As discussed with you today, Lockheed Martin is proposing the construction of a Groundwater Plume Treatment Facility at Martin State Airport. As a result, an Environmental Assessment is being prepared for FAA review and approval. As part of the EA process, MAA is seeking a Coastal Zone Consistency determination from MDE for this project.

The primary purpose of the proposed Groundwater Remediation Treatment Facility is to control migration of the contaminated groundwater plume from the Dump Road Area (DRA) at concentrations that can lead to exceedances of water quality standards in adjacent Frog Mortar Creek. Groundwater in the DRA is currently impacted by elevated levels of volatile organic compounds (VOCs), petroleum hydrocarbons, 1,4-dioxane, and heavy metals, and the groundwater contamination plume is currently migrating into adjacent Frog Mortar Creek, a tidal estuary of Chesapeake Bay. The proposed facility will pump and extract groundwater from beneath the DRA in order to gain hydraulic control of the contamination plume and limit the migration of contaminated groundwater into Frog Mortar Creek.

The Draft EA is currently in an agency and public for comment period which closes on November 21, 2014. A public workshop was held on November 6, 2014. The attached file contains the boards that were presented at this workshop that describe the proposed impacts with the construction of this facility as follows:

Wetlands – 0.27 acres

Streams – 55 linear feet

Forest (within Critical Area) – 2.7 acres

Habitat Protection Area (within Critical Area) – 1.0 acre

A Joint Permit Application was filed with MDE and USCOE for the wetland and stream impacts in July 2014. We submitted a package to and are working with the Critical Area Commission on their presentation at the Commission meeting to be held December 3, 2014. Finally, we are in the final approval stages of correcting minor comments for the SWM/E&S permit for this project.

If you need any additional information, please do not hesitate to give me a call!

Ms. Robin M. Bowie

Manager, Division of Environmental Planning

Maryland Aviation Administration

Baltimore/Washington International Thurgood Marshall Airport

[410-859-7103](tel:410-859-7103) (office)

[410-859-7082](tel:410-859-7082) (fax)

rbowie@bwiairport.com

Mailing Address

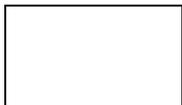
P.O. Box 8766

BWI Airport, MD 21240

Overnight Shipping Address

991 Corporate Boulevard

Linthicum, MD 21090

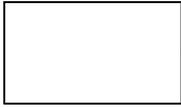


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RECEIVED NOV 11, 2014



Sustainable _____ Attainable _____

Maryland Department of Planning

November 5, 2014

Mr. Paul Calligan
Project Lead, Environmental Remediation
Lockheed Martin Corporation
1195 Sarasota Center Blvd.
Sarasota, FL 34240

STATE CLEARINGHOUSE RECOMMENDATION

State Application Identifier: MD20141002-0807

Applicant: Lockheed Martin Corporation

Project Description: Draft Environmental Assessment: For the Proposed Dump Road Area Groundwater Plume Treatment Facility for the Martin State Airport, Middle River, Maryland

Project Address: 701 Wilson Point, Middle River, MD 21220

Project Location: County of Baltimore

CFDA Number: None

Recommendation: Consistent Contingent Upon Certain Action(s)

Dear Mr. Calligan:

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

Review comments were requested from the Maryland Department(s) of Natural Resources, Transportation, the Environment; Baltimore County; and the Maryland Department of Planning, including the Maryland Historical Trust. As of this date, the Maryland Department of Natural Resources has not submitted comments. **Any comments received will be forwarded.**

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

The Maryland Department of Transportation in conjunction with MAA has stated that this is Consistent with our plans, programs, and objectives.

The Maryland Historical Trust has determined that the project will have "no effect" on historic properties and that the federal and/or State historic preservation requirements have been met.

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

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

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

1. Any above ground or underground petroleum storage tanks, which may be utilized, must be installed and maintained in accordance with applicable State and federal laws and regulations. Underground storage tanks must be registered and the installation must be conducted and performed by a contractor certified to install underground storage tanks by the Land Management Administration in accordance with COMAR 26.10. Contact the Oil Control Program at (410) 537-3442 for additional information.
2. If the proposed project involves demolition – Any above ground or underground petroleum storage tanks that may be on site must have contents and tanks along with any contamination removed. Please contact the Oil Control Program at (410) 537-3442 for additional information.
3. Any solid waste including construction, demolition and land clearing debris, generated from the subject project, must be properly disposed of at a permitted solid waste acceptance facility, or recycled if possible. Contact the Solid Waste Program at (410) 537-3315 for additional information regarding solid waste activities and contact the Waste Diversion and Utilization Program at (410) 537-3314 for additional information regarding recycling activities.
4. The Waste Diversion and Utilization Program should be contacted directly at (410) 537-3314 by those facilities which generate or propose to generate or handle hazardous wastes to ensure these activities are being conducted in compliance with applicable State and federal laws and regulations. The Program should also be contacted prior to construction activities to ensure that the treatment, storage or disposal of hazardous wastes and low-level radioactive wastes at the facility will be conducted in compliance with applicable State and federal laws and regulations.
5. The proposed project may involve rehabilitation, redevelopment, revitalization, or property acquisition of commercial, industrial property. Accordingly, MDE's Brownfields Site Assessment and Voluntary Cleanup Programs (VCP) may provide valuable assistance to you in this project. These programs involve environmental site assessment in accordance with accepted industry and financial institution standards for property transfer. For specific information about these programs and eligibility, please contact the Land Restoration Program at (410) 537-3437.

Any statement of consideration given to the comments(s) should be submitted to the approving authority, with a copy to the State Clearinghouse.

The State Application Identifier Number must be placed on any correspondence pertaining to this project. The State Clearinghouse must be kept informed if the approving authority cannot accommodate the recommendation.

Mr. Paul Calligan
November 5, 2014
Page 3

State Application Identifier: **MD20141002-0807**

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

Thank you for your cooperation with the MIRC process.

Sincerely,


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

LCJ:MP

Enclosure(s)

cc: Robin Bowie

Tina Quinichette - MDOT

Amanda Degen - MDE

Greg Golden - DNR
Jessie Bialek - BLCO

LaVerne Gray - MDPLR&WC
Peter Conrad - MDPL

Beth Cole - MHT

14-0807_CRR.CLS.doc



Maryland Department of Planning

Sustainable _____ Attainable _____

PROJECT STATUS FORM

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

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

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

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

PHONE: _____
(Area Code & Phone number)

RE: State Application Identifier: MD20141002-0807
Project Description: Draft Environmental Assessment: For the Proposed Dump Road Area Groundwater Plume Treatment Facility for the Martin State Airport, Middle River, Maryland

PROJECT APPROVAL	
This project/plan was:	<input type="checkbox"/> Approved <input type="checkbox"/> Approved with Modification <input type="checkbox"/> Disapproved
Name of Approving Authority:	Date Approved:
_____	_____

FUNDING APPROVAL			
<i>The funding (if applicable) has been approved for the period of:</i>			
_____, 201__ to _____, 201__ as follows:			
Federal \$:	Local \$:	State \$:	Other \$:
_____	_____	_____	_____

OTHER	
<input type="checkbox"/> <i>Further comment or explanation is attached</i>	

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

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

MDPCH-1F

Critical Area Commission

STAFF REPORT December 3, 2014

APPLICANT: Maryland Aviation Authority
(Lockheed Martin Corporation)

JURISDICTION: Baltimore County

PROPOSAL: Groundwater Remediation Facility

COMMISSION ACTION: Vote

STAFF RECOMMENDATION: Approval with Conditions

STAFF: Julie Roberts

**APPLICABLE LAW/
REGULATIONS:** Code of Maryland Regulations 27.02.06
Conditional Approval of State or Local Agency Programs
in the Critical Area

DISCUSSION:

Lockheed Martin Corporation, tenant of the Maryland Aviation Administration (MAA), seeks review and approval to construct a groundwater treatment facility in the Critical Area. The proposed facility will be located between an existing taxiway and Frog Mortar Creek (off of Middle River) in Baltimore County. Although the airport itself is considered to be intensely developed, this forested peninsula is not considered to be intensely developed.

Proposed Impacts

Lockheed Martin has been a long-term lessee of property at Martin State Airport. The dump road area, the subject area of this proposal, was historically used as an industrial landfill where waste material from former aircraft manufacturing activities was deposited. During the tenure of Lockheed Martin, the groundwater in the general vicinity of this site has been impacted by volatile organic compounds (VOCs), including trichloroethene, 1,4-dioxane, and heavy metals.

The proposed groundwater remediation facility is needed to provide containment and to minimize the migration of the contaminants into Frog Mortar Creek. The design of the project includes 16 groundwater extraction wells, construction and operation of a groundwater treatment system housed within an approximately 10,000 square foot treatment building, installation of an outfall discharge from the treatment building to the Creek, and improvement of existing access roads and installation of adjacent utilities. Areas to be treated include several former projects of

the Commission, including Lynbrook Gatehouse and the O+T Building, which were reviewed and approved within the last few years. The treatment facility capacity also anticipates projects to be constructed within the next five years, including taxiway improvements.

The area proposed for this treatment facility is covered with low quality developed woodlands/forest. The area can be characterized as scrub/shrub with several young tree stands commensurate in age with the previous use of the site as a dump area. Much of the site is located within the expanded Buffer. There are also forested and non-forested nontidal wetlands in the area. The applicant is required to mitigate both for clearing in the expanded Buffer and for clearing outside of the Buffer. Mitigation will also be required by Maryland Department of the Environment (MDE) for nontidal wetland impacts.

Mitigation

The proposed clearing inside of the expanded Buffer is 37,957 square feet. Due to both the use and Federal Aviation Administration requirements (FAA) for safety reasons, 2:1 mitigation will be required for Buffer clearing at airports. Proposed clearing outside of Buffer is 120,567 square feet, requiring mitigation at a ratio of 1:1. The total mitigation required associated with this project is 196,481 square feet, or 4.5 acres.

Critical Area Commission staff will be working closely with the applicant in regard to mitigation. Airports pose unique difficulties in conducting mitigation plantings on site due to strict FAA guidelines, including avoidance of creating habitat for bird species due to threats of air strike to the planes. In addition, in the next few years, Martin State Airport will potentially be conducting major forest clearing due to revised FAA restrictions and the availability of one-time funds for this purpose. The applicant will need to secure a large swath of land adequate to accommodate the 4.5 acres of required mitigation.

To that end, Commission staff is requiring, as a condition of project approval, that within two years, an appropriate mitigation site is secured. Staff will require that formal documentation be provided regarding the progress being made on securing the mitigation site during that time period. Updates will be required every three months to that end. Written confirmation will also be requested from the applicant confirming this agreement once the project has been approved.

A planting plan will be required for review and approval by Commission staff once the applicant has secured a mitigation property.

Compliance with Environmental Site Design Practices

Multiple Environmental Site Design (ESD) practices are being proposed to meet current stormwater management requirements. These ESD practices include microbioretention areas, grass swales, reinforced turf in the form of permeable pavement (for certain access roads), and nonrooftop disconnect.

Agency Reviews

The Department of Natural Resources Wildlife and Heritage Service (WHS) has determined that there are no rare, threatened or endangered species located on this site.

Stormwater Management and Sediment and Erosion Control authorizations from the MDE are forthcoming. The remaining comments to be addressed by the applicant were minor in detail and not related to Critical Area issues. Receipt of the permits is expected soon after the Commission meeting.

Authorization is also required by MDE for impacts to the nontidal wetlands and their buffers. This authorization is also forthcoming.

The Maryland Historic Trust has determined that there will be no impacts to historic sites.

Public Notice Requirements

Notice of the project was published on November 18, 2014 in *The Baltimore Sun*. A sign with information about the project was also posted on the property as required by COMAR 27.03.01.03. Any comments received will be noted at the Commission meeting.

Recommendation

Commission staff recommends approval with following condition:

1. Prior to the start of construction, the applicant will provide copies of the Stormwater Management and Sediment and Erosion Control authorizations from the Maryland Department of the Environment, as well as applicable nontidal wetland authorization.
2. The applicant must secure appropriately sized acreage to accommodate the mitigation plantings within two years. The applicant will provide updates every three months regarding the progress made to that end. Once the acreage is secured, a planting plan will be furnished to Commission staff for review and approval.

From: Brian D Hopper - NOAA Federal [brian.d.hopper@noaa.gov]
Sent: Friday, May 15, 2015 9:49 AM
To: Marcus.Brundage@faa.gov
Cc: Christine Vaccaro - NOAA Federal; Mark Murray-Brown - NOAA Federal; Myers, Paul
Subject: MTN DRA Project and ESA consultation

Mr. Brundage,

Your email dated April 30, 2015, regarding the proposed Martin State project, requested clarification regarding a letter we sent to the MAA on May 3, 2013. To date, the FAA has not initiated consultation with us under section 7 of the Endangered Species Act and this email has been prepared to provide technical assistance on the aforementioned project.

Although four species of sea turtles and Atlantic sturgeon originating from five listed Distinct Population Segments (DPS) are known to occur in the Chesapeake Bay, based on the activities associated with the project and the project's location, we do not object to the determination that these species will not be exposed to any direct or indirect effects of the action. We have not identified any effects on listed species from this proposed action and do not see a need to consult, however, under the statute and our regulations, it is up to the action agency to make the determination of whether to consult. As such, no further coordination on this activity with the NMFS Protected Resources Division is necessary at this time. Should project plans change or new information become available that changes the basis for this determination, further coordination should be pursued. Please me at 410-573-4592 or brian.d.hopper@noaa.gov<mailto:brian.d.hopper@noaa.gov>, should you have any questions regarding these comments.

Regards,
-Brian

--

Brian D. Hopper
Protected Resources Division
NOAA Fisheries
Greater Atlantic Regional Fisheries Office
177 Admiral Cochrane Dr.
Annapolis, MD 21401
(410) 573-4592
Brian.D.Hopper@noaa.gov<mailto:brian.d.hopper@noaa.gov>
<http://www.greateratlantic.fisheries.noaa.gov/>
[https://lh3.googleusercontent.com/g1N3SaXB9jgdWErNU-AYziYT0hEdk0NuY_4vh1ZPI_jUNFff8THgzxAlLrgHdINagzwg2x-lqzK01dZ9XWV5KcgikKauB4xl1yrHuY3erZCS]

From: Robin Bowie [rbowie@bwiairport.com]
Sent: Wednesday, June 24, 2015 9:46 AM
To: Myers, Paul; burbagele@cdmsmith.com
Subject: Martin State Airport Draft EA comments

Paul/Laura:

Please find below comments from EPA on the EA. I've sent an email back asking if we can prepare a Matrix with how we would address these comments before we actual change the document. I'm awaiting a response and will pass it along when I get it. In the meantime, I wanted you to have these and to get started on them. We can chat more about them tomorrow.

Ms. Robin M. Bowie
Manager, Division of Environmental Planning Maryland Aviation Administration Baltimore/Washington
International Thurgood Marshall Airport
410-859-7103 (office)
410-859-7082 (fax)
rbowie@bwiairport.com

Mailing Address
P.O. Box 8766
BWI Airport, MD 21240

Overnight Shipping Address
991 Corporate Boulevard
Linthicum, MD 21090

From: Douglas, Mark [<mailto:douglas.mark@epa.gov>]
Sent: Tuesday, June 23, 2015 3:29 PM
To: Robin Bowie
Subject: Martin State Airport Draft EA comments

Robin,

Thank you for the opportunity to comment on the Draft EA for the Martin State Airport Groundwater Plume Treatment Facility.

Below are EPA's comments:

EPA supports the use of stormwater BMPs, including Low-Impact Development, during the construction and operation of this project. Additionally, EPA suggests stormwater management systems be located outside of jurisdictional features including streams and wetlands and, in this case, their associated buffers.

While this proposed project is intended to limit lateral migration of contaminated groundwater, EPA requests the document further discuss Environmental Justice. This may include analysis and discussion of the surrounding population that may be impacted by the construction and operation of the proposed project either directly or indirectly.

EPA suggests an avoidance and minimization alternatives analysis be developed for the CWA 404 application that will address the layout of the facilities. We understand that the wells are sited in particular areas for their intended purpose. However, the building, roads, stormwater facilities and submerged discharge pipe are in the least environmentally damaging practicable alternative placement as proposed.

EPA requests the applicant develop monitoring and an adaptive management plan to address the potential adverse impacts associated with the discharge pipe as listed in Section 5.16.1.

Will the temperature of the treated water flowing from the discharge pipe be close to the temperature of the receiving waterway Frog Mortar Creek? And will the discharge be a constant flow?

Does the applicant see future implications for the proposal as a result of sea level rise? And are there considerations for potentially drawing in of brackish water into the groundwater?

Please do not hesitate contacting me with any questions.

Thank you,

Mark Douglas
Environmental Protection Agency, Region 3 Environmental Assessment and Innovation Division
1650 Arch Street, 3EA30
Philadelphia, PA 19103
Phone: 215-814-2767
Fax: 215-814-2783
douglas.mark@epa.gov<<mailto:douglas.mark@epa.gov>>

[http://www.roads.maryland.gov/OCImages/511_logo_sm.JPG]Maryland now features 511 traveler information!

Call 511 or visit: www.md511.org<<http://www.md511.org>>

P Please consider the environment before printing this email LEGAL DISCLAIMER - The information contained in this communication (including any attachments) may be confidential and legally privileged. This email may not serve as a contractual agreement unless explicit written agreement for this purpose has been made. If you are not the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this communication or any of its contents is strictly prohibited. If you have received this communication in error, please re-send this communication to the sender indicating that it was received in error and delete the original message and any copy of it from your computer system.



Maryland Aviation Administration

Martin O'Malley
Governor

Anthony G. Brown
Lt. Governor

Darrell B. Mobley
Acting Secretary

Paul J. Wiedefeld, A.A.E.
Executive Director

January 9, 2013

Ms. Abbie Hopkins
U.S. Army Corps of Engineers
CENAB-OP-RMN, Room 8600
10 South Howard Street
Baltimore MD 21203-1715

Dear Ms. Hopkins:

SUBJECT: Preliminary Jurisdictional Determination (JD) Request
Maryland Aviation Administration
Martin State Airport
Baltimore County, MD

Maryland Aviation Administration (MAA) is pleased to submit one copy of the *Waters of the U.S. Delineation Report, Martin State Airport (MTN) Wetland Verification*. Our primary goal in preparation of this report is to maintain a baseline wetland map for use in planning and permitting for future projects at MTN. It is our hope that a Preliminary JD will assist in project planning to effectively avoid and minimize impacts to Federal and State jurisdictional waters and facilitate agencies review and approval of future projects.

Field review of the wetland delineation was conducted on December 8, 2011 and October 11, 2012. It is the MAA's understanding that a Preliminary JD finding indicates that there "may be" waters of the United States on the subject property and that permitting of future projects which may impact these areas will be subject to a verification associated with a Joint Permit Application.

Please contact me at 410-859-7384 or jhurt@bwiairport.com if you have any questions.

Sincerely,

John Hurt, Environmental Analyst
Division of Environmental Planning

Enclosures

cc: Ms. Cheryl Kerr, Environmental Specialist, Wetlands and Waterways Division, MDE
Ms. Tennile Rubin, Chesapeake Environmental Management, Inc.
Ms. Robin Bowie, Manager, Division of Environmental Planning, MAA

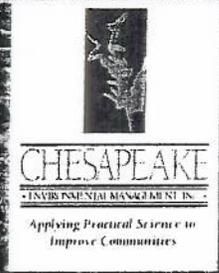
"Waters of the US" Delineation Report

Martin State Airport

Wetland Verification

for

Maryland Aviation Administration



December 2012

cc: Cheryl Kerr has a copy -



CHESAPEAKE
• ENVIRONMENTAL MANAGEMENT, INC. •

Applying Practical Science to
Improve Communities

CEM MEMORANDUM OF MEETING

October 23, 2012

MEETING DATE: October 11, 2012

PLACE: Martin State Airport

TIME: 10:00 AM

SUBJECT: Follow-up Preliminary Jurisdictional Determination (PJD) Meeting:
Martin State Airport
(MAA-AE-11-001, Task 4)
(CEM Project C11-013.002)

ATTENDEES: Tennile Rubin, Chesapeake Environmental Management, Inc. (CEM)
Erin Markel, Chesapeake Environmental Management, Inc. (CEM)
John Hurt, Maryland Aviation Administration (MAA)
Abbie Hopkins, US Army Corps of Engineers (USACE)
Cheryl Kerr, Maryland Department of the Environment (MDE)

A Preliminary JD meeting was held on December 8, 2011 at the Martin State Airport with Cheryl Kerr from MDE and Abbie Hopkins from USACE. The purpose of the meeting was to review the CEM wetland delineation. Only some areas on the airport section and Maryland Air National Guard (MANG) section were reviewed. This meeting was documented in the December 8, 2011 meeting minutes. A follow-up meeting was scheduled from October 11, 2012 to visit the remaining wetlands. The wetlands visited are included in the table below.

Wetland	CEM Map
Wetland II	3
Wetland T (CEM proposed Removed)	3
Wetland XX	5
Wetland YY	5
Wetland G	1
Wetland H	1
Wetland I	1
Wetland J	1
Wetland MM	1
Wetland JJ	1
Wetland KK	1

A brief summary of the items discussed are provided below.

- Draft Wetland Reports, dated April 2012, were provided to Cheryl Kerr and Abbie Hopkins for review and comment. All comments on the report are to be provided to MAA by December 3, 2012.

MEMORANDUM OF MEETING

Martin State Airport – Preliminary Jurisdictional Determination Meeting

October 23, 2012

Page 2 of 2

- Cheryl Kerr asked to visit Wetland II. In January, MAA drained the wetland to minimize wildlife hazard attractants to the airport. The activities were authorized under MDE Permit Number 12—NT-0232/201260929. She further requested that the wetland map is updated to show a dashed line around the wetland and indicate that the area was drained.
- Wetland T was visited to determine if it was Jurisdictional. It had been previously delineated as a wetland. However, it has been determined that the drainage at this location is part of the Illicit discharge Detection and Elimination System for Martin State Airport.
- Wetland YY and XX are located on the park property adjacent to the firehouse on Wilson Point Road. Wetland XX was determined confirmed as delineated. Wetland YY is isolated; however, concerns were expressed regarding a possible sewage or grey water discharge from either a residence or sanitary sewer. Additional investigation will be coordinated by MAA to determine if the hydrology source is natural or a result of sanitary waste water.
- Wetlands G, H, I and J and Wetlands JJ, MM, and KK were confirmed as delineated.
- A possible vernal pool is located within Wetland H near the PEM inclusion shown on the map. Cheryl Kerr indicated that MDE regulates vernal pools differently from non-tidal wetlands. She indicated she would follow-up on the permitting requirements and provide the information to MAA. A visit in the spring may be required to determine if the area is a vernal pool and to delineate the boundary.

CEM believes that the above accurately reflects what was discussed during this meeting. However, we will appreciate comments involving a difference in understanding of what occurred. Unless we are notified in writing to the contrary within ten (10) days after receipt, we will assume that all in attendance concur in the accuracy of this transcription.



Tennile T. Rubin

cc: All Attendees
C11-013.002 file



Maryland Aviation Administration

Martin O'Malley
Governor

Anthony G. Brown
Lt. Governor

James T. Smith, Jr.
Secretary

Paul J. Wiedefeld, A.A.E.
Executive Director/CEO

July 7, 2014

Ms. Andi Cunabaugh
Maryland Department of Environment
Regulatory Services Coordination Office
1800 Washington Boulevard, Suite 430
Baltimore Maryland 21230

Dear Ms. Cunabaugh:

SUBJECT: Joint Permit Application (JPA) – MDSPGP-4
Groundwater Remediation Project at the Dump Road Area of Martin State Airport
(MTN)

Please find enclosed a Joint Permit Application (JPA) for the Lockheed Martin Corporation (LMC) Groundwater Remediation Project at the Dump Road Area of Martin State Airport. Additional information is enclosed in Attachment A for your use. We have already begun pre-application coordination for this project with Mr. Jon Romeo, Ms. Abbie Hopkins, Ms. Cheryl Kerr and Mr. Robert Rushlow, including an on-site review and scoping presentation on December 13, 2012.

If you have any comments or additional questions, please contact me directly at 410-859-7103 or rbowie@bwiairport.com.

Sincerely,

Robin M. Bowie, Manager
Division of Environmental Planning

Enclosures

cc: Abbie Hopkins, US Army Corps of Engineers
John Hurt, Environmental Analyst, Maryland Aviation Administration
Cheryl Kerr, Maryland Department of the Environment
Paul Myers, Tetra Tech
Jon Romeo, US Army Corps of Engineers
Robert Rushlow, Maryland Department of the Environment

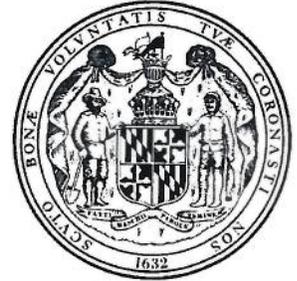
STATE OF MARYLAND
DEPARTMENT OF THE ENVIRONMENT
WATER MANAGEMENT ADMINISTRATION
LETTER OF AUTHORIZATION

AUTHORIZATION NUMBER: 14-NT-0235/201461074

EFFECTIVE DATE: January 8, 2015

EXPIRATION DATE: January 8, 2018

AUTHORIZED PERSON: Maryland Aviation Administration - Martin State Airport
Ste 101F-Terminal Building 701 Wilson Point Rd
Baltimore, Maryland 21220
Attn: Al Pollard, Director



IN ACCORDANCE WITH ENVIRONMENT ARTICLE §5-503(a) AND §5-906(b), ANNOTATED CODE OF MARYLAND (2007 REPLACEMENT VOLUME), COMAR 26.17.04 AND 26.23.01, AND 26.08.02 AND THE ATTACHED CONDITIONS OF AUTHORIZATIONS, Maryland Aviation Administration - Martin State Airport (AUTHORIZED PERSON"), IS HEREBY AUTHORIZED BY THE WATER MANAGEMENT ADMINISTRATION ("ADMINISTRATION") TO CONDUCT A REGULATED ACTIVITY IN A NONTIDAL WETLAND, BUFFER, OR EXPANDED BUFFER, AND/OR TO CHANGE THE COURSE, CURRENT OR CROSS-SECTION OF WATERS OF THE STATE, IN ACCORDANCE WITH THE ATTACHED PLANS APPROVED BY THE ADMINISTRATION ON January 8, 2015 ("APPROVED PLAN") AND PREPARED BY Tetra Tech, Inc. AND INCORPORATED HEREIN, AS DESCRIBED BELOW:

For the construction of a new groundwater treatment facility. The new facility will include installation of 16 groundwater extraction wells, construction of the treatment facility, widening and upgrade of an existing site access road and stormwater management system facilities. The project will result in permanent impacts to 2,948 square feet of nontidal wetlands, 14,676 square feet of 25 foot buffer, 174 linear feet (1,048 square feet) of an un-named tributary to Frog Mortar Creek, a Use I waterway. The project is located at 701 Wilson Point Rd, Middle River, in Baltimore County.

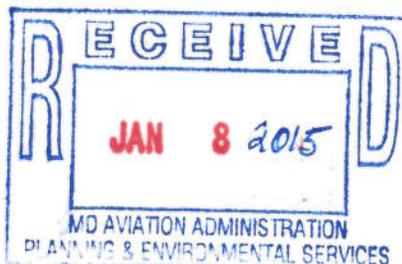
MD Grid Coordinates: 184260 x 451075

Jeffrey L. Thompson for

Amanda Sigillito
Division Chief
Nontidal Wetlands Division

Attachments: Conditions of Authorization

cc: MDE Compliance w/file
US Army Corps of Engineers-Abbie Hopkins
MAA-John Hurt



THE FOLLOWING CONDITIONS OF AUTHORIZATION APPLY TO ALL ACTIVITIES AUTHORIZED BY
AUTHORIZATION NUMBER 14-NT-0235/201461074

Page 2 of 3

1. **Validity:** Authorization is valid only for use by Authorized Person. Authorization may be transferred only with prior written approval of the Administration. In the event of transfer, transferee agrees to comply with all terms and conditions of Authorization.
2. **Initiation of Work, Modifications and Extension of Term:** Authorized Person shall initiate authorized activities with two (2) years of the Effective Date of this Authorization or the Authorization shall expire. Authorized Person may submit written requests to the Administration for (a) extension of the period for initiation of work, (b) modification of Authorization, including the Approved Plan, or, (c) not later than 45 days prior to Expiration Date, an extension of the term. Requests for modification shall be in accordance with applicable regulations and shall state reasons for changes, and shall indicate the impacts on nontidal wetlands, streams, and the floodplain, as applicable. The Administration may grant a request at its sole discretion.
3. **Responsibility and Compliance:** Authorized Person is fully responsible for all work performed and activities authorized by this Authorization shall be performed in compliance with this Authorization and Approved Plan. Authorized Person agrees that a copy of the Authorization and Approved Plan shall be kept at the construction site and provided to its employees, agents and contractors. A person (including Authorized Person, its employees, agents or contractors) who violates or fails to comply with the terms and conditions of this Authorization, Approved Plan or an administrative order may be subject to penalties in accordance with §5-514 and §5-911, Department of the Environment Article, Annotated Code of Maryland (2007 Replacement Volume).
4. **Failure to Comply:** If Authorized Person, its employees, agents or contractors fail to comply with this Authorization or Approved Plan, the Administration may, in its discretion, issue an administrative order requiring Authorized Person, its employees, agents and contractors to cease and desist any activities which violate this Authorization, or the Administration may take any other enforcement action available to it by law, including filing civil or criminal charges.
5. **Suspension or Revocation:** Authorization may be suspended or revoked by the Administration, after notice of opportunity for a hearing, if Authorized Person: (a) submits false or inaccurate information in Permit application or subsequently required submittals; (b) deviates from the Approved Plan, specifications, terms and conditions; (c) violates, or is about to violate terms and conditions of this Authorization; (d) violates, or is about to violate, any regulation promulgated pursuant to Title 5, Department of the Environment Article, Annotated Code of Maryland as amended; (e) fails to allow authorized representatives of the Administration to enter the site of authorized activities at any reasonable time to conduct inspections and evaluations; (f) fails to comply with the requirements of an administrative action or order issued by the Administration; or (g) does not have vested rights under this Authorization and new information, changes in site conditions, or amended regulatory requirements necessitate revocation or suspension.
6. **Other Approvals:** Authorization does not authorize any injury to private property, any invasion of rights, or any infringement of federal, State or local laws or regulations, nor does it obviate the need to obtain required authorizations or approvals from other State, federal or local agencies as required by law.
7. **Site Access:** Authorized Person shall allow authorized representatives of the Administration access to the site of authorized activities during normal business hours to conduct inspections and evaluations necessary to assure compliance with this Authorization. Authorized Person shall provide necessary assistance to effectively and safely conduct such inspections and evaluations.
8. **Inspection Notification:** Authorized Person shall notify the Administration's Compliance Program at least five (5) days before starting authorized activities and five (5) days after completion. For Allegany, Garrett, and Washington Counties, Authorized Person shall call 301-689-1480. For Carroll, Frederick, Howard, Montgomery and Prince George's Counties, Authorized Person shall call 301-665-2850. For Baltimore City, Anne Arundel, Baltimore, Calvert, Charles, and St. Mary's Counties, Authorized Person shall call 410-537-3510. For Caroline, Cecil, Dorchester, Harford, Kent, Queen Anne's, Somerset, Talbot, Wicomico and Worcester Counties, Authorized Person shall call 410-901-4020. If Authorization is for a project that is part of a mining site, please contact the Land Management Administration's Mining Program at 410-537-3557 at least five (5) days before starting authorized activities and five (5) days after completion.
9. **Sediment Control:** Authorized Person shall obtain approval from the Baltimore Soil Conservation District for a grading and sediment control plan specifying soil erosion control measures. The approved grading and sediment control plan shall be included in the Approved Plan, and shall be available at the construction site.
10. **Federally Mandated State Authorizations:**
 - X Water Quality Certification:** Water Quality Certification is granted for this project provided that all work is performed in accordance with the authorized project description and associated conditions.
 - X Coastal Zone Consistency:** This Authorization constitutes official notification that authorized activities are consistent with the Maryland Coastal Zone Management Program, as required by Section 307 of the Federal Coastal Zone Management Act of 1972, as amended. Activities within the following counties are not subject to this requirement:
Allegany, Carroll, Frederick, Garrett, Howard, Montgomery, and Washington.

11. **Best Management Practices During Construction:** Authorized Person, its employees, agents and contractors shall conduct authorized activities in a manner consistent with the Best Management Practices specified by the Administration.
12. **Disposal of Excess:** Unless otherwise shown on the Approved Plan, all excess fill, spoil material, debris, and construction material shall be disposed of outside of nontidal wetlands, nontidal wetlands buffers, and the 100-year floodplain, and in a location and manner which does not adversely impact surface or subsurface water flow into or out of nontidal wetlands.
13. **Temporary Staging Areas:** Temporary construction trailers or structures, staging areas and stockpiles shall not be located within nontidal wetlands, nontidal wetlands buffers, or the 100-year floodplain unless specifically included on the Approved Plan.
14. **Temporary Stream Access Crossings:** Temporary stream access crossings shall not be constructed or utilized unless shown on the Approved Plan. If temporary stream access crossings are determined necessary prior to initiation of work or at any time during construction, Authorized Person, its employees, agents or contractors shall submit a written request to the Administration and secure the necessary permits or approvals for such crossings before installation of the crossings. Temporary stream access crossings shall be removed and the disturbance stabilized prior to completion of authorized activity or within one (1) year of installation.
15. **Discharge:** Runoff or accumulated water containing sediment or other suspended materials shall not be discharged into waters of the State unless treated by an approved sediment control device or structure.
16. **Instream Construction Prohibition:** To protect important aquatic species, motor driven construction equipment shall not be allowed within stream channels unless on authorized ford crossings. Activities within stream channels are prohibited as determined by the classification of the stream (COMAR 26.08.02.08): Frog Mortar Creek is a Use II waterway; in-stream work may not be conducted from February 15 through April 30 inclusive, of any year.
17. **Instream Blasting:** Authorized Person shall obtain prior written approval from the Administration before blasting or using explosives in the stream channel.
18. **Minimum Disturbance:** Any disturbance of stream banks, channel bottom, wetlands, and wetlands buffer authorized by this Authorization or Approved Plan shall be the minimum necessary to conduct permitted activities. All disturbed areas shall be stabilized vegetatively no later than seven (7) days after construction is completed or in accordance with the approved grading or sediment and erosion control plan.
19. **Restoration of Construction Site:** Authorized Person shall restore the construction site upon completion of authorized activities. Undercutting, meandering or degradation of the stream banks or channel bottom, any deposition of sediment or other materials, and any alteration of wetland vegetation, soils, or hydrology, resulting directly or indirectly from construction or authorized activities, shall be corrected by Authorized Person as directed by the Administration.
20. **Mitigation:** Mitigation is not required by this project.

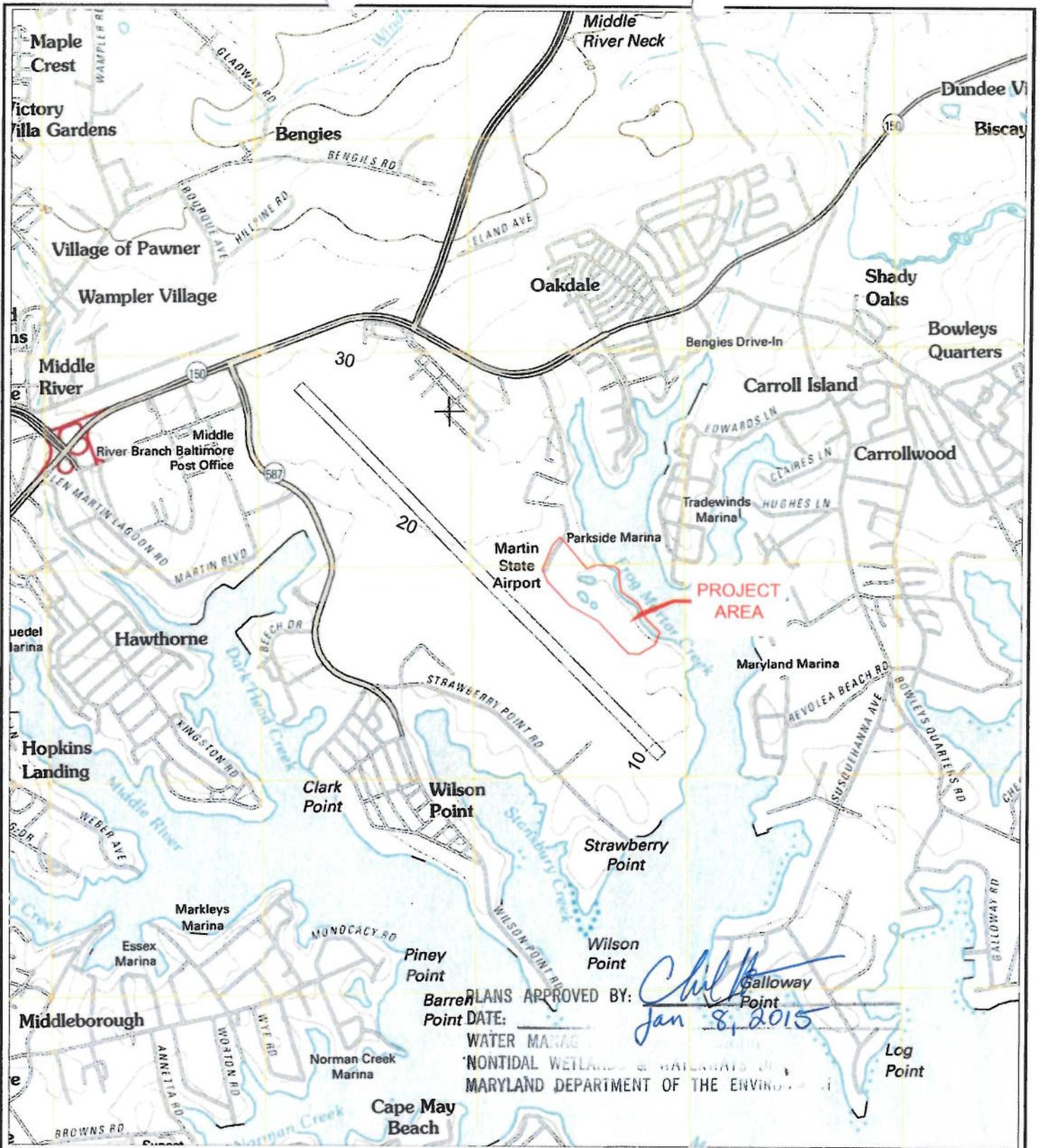
U.S. ARMY CORPS OF ENGINEERS AUTHORIZATION

The U.S. Army Corps of Engineers has reviewed this activity and has granted authorization under the Maryland State Programmatic General Permit (MDSPGP-4), as a Category A, Activity (A-b(2)) and (A-e(1)). The terms and conditions of the MDSPGP-4, as outlined in the enclosed attachment, should be followed when performing the authorized work.

14-NT-0235/201461074
BEST MANAGEMENT PRACTICES FOR WORKING IN
NONTIDAL WETLANDS, WETLAND BUFFERS,
WATERWAYS, AND 100-YEAR FLOODPLAINS

- 1) No excess fill, construction material, or debris shall be stockpiled or stored in nontidal wetlands, nontidal wetland buffers, waterways, or the 100-year floodplain.
- 2) Place materials in a location and manner which does not adversely impact surface or subsurface water flow into or out of nontidal wetlands, nontidal wetland buffers, waterways, or the 100-year floodplain.
- 3) Do not use the excavated material as backfill if it contains waste metal products, unsightly debris, toxic material, or any other deleterious substance. If additional backfill is required, use clean material free of waste metal products, unsightly debris, toxic material, or any other deleterious substance.
- 4) Place heavy equipment on mats or suitably operate the equipment to prevent damage to nontidal wetlands, nontidal wetland buffers, waterways, or the 100-year floodplain.
- 5) Repair and maintain any serviceable structure or fill so there is no permanent loss of nontidal wetlands, nontidal wetland buffers, or waterways, or permanent modification of the 100-year floodplain in excess of that lost under the originally authorized structure or fill.
- 6) Rectify any nontidal wetlands, wetland buffers, waterways, or 100-year floodplain temporarily impacted by any construction.
- 7) All stabilization in the nontidal wetland and nontidal wetland buffer shall consist of the following species: Annual Ryegrass (Lolium multiflorum), Millet (Setaria italica), Barley (Hordeum sp.), Oats (Uniola sp.), and/or Rye (Secale cereale). These species will allow for the stabilization of the site while also allowing for the voluntary revegetation of natural wetland species. Other non-persistent vegetation may be acceptable, but must be approved by the Nontidal Wetlands and Waterways Division. **Kentucky 31 fescue shall not be utilized in wetland or buffer areas.** The area should be seeded and mulched to reduce erosion after construction activities have been completed.
- 8) After installation has been completed, make post-construction grades and elevations the same as the original grades and elevations in temporarily impacted areas.
- 9) To protect aquatic species, in-stream work is prohibited as determined by the classification of the stream:

Use I waters: In-stream work shall not be conducted during the period March 1 through June 15, inclusive, during any year.
- 10) Stormwater runoff from impervious surfaces shall be controlled to prevent the washing of debris into the waterway.
- 11) Culverts shall be constructed and any riprap placed so as not to obstruct the movement of aquatic species, unless the purpose of the activity is to impound water.



PLANS APPROVED BY: *Chill*
 DATE: *Jan 8, 2015*
 WATER MANAGER
 TIDAL WETLANDS & WATERWAYS DIVISION
 MARYLAND DEPARTMENT OF THE ENVIRONMENT

11° 16' 200 MILS
 0° 55' 16 MILS

UTM GRID AND 2011 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET



MIDDLE RIVER, MD
 2011
 SCALE 1:24 000

CONTOUR INTERVAL 10 FEET
 NORTH AMERICAN VERTICAL DATUM OF 1988



Joint Permit Application for the
 Dump Road Area Groundwater
 Remediation Project

14-NT-0235/201461074

SITE LOCATION



SCALE:
 AS SHOWN

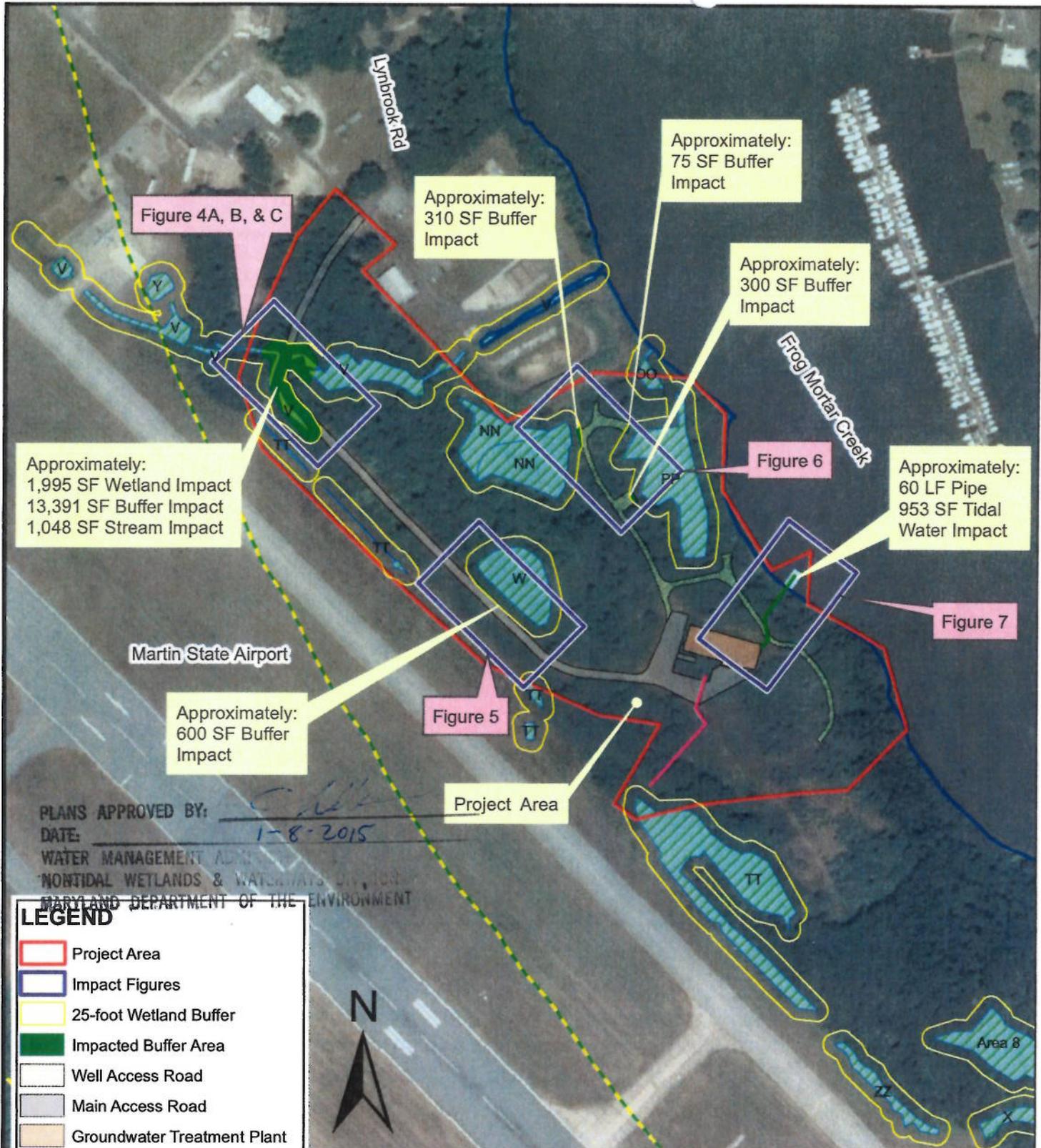
FIGURE:
 1



PLANS APPROVED BY: *[Signature]*
 DATE: *Jun 8 2015*
 WATER MANAGEMENT ADMINISTRATION
 NONTIDAL WETLANDS & WATERWAYS DIV. FOR
 MARYLAND DEPARTMENT OF THE ENVIRONMENT

LEGEND	
	Project Area
	Groundwater Treatment Plant
	Main Access Road Improvements
	Parking Area
	Well Access Road
	Stormwater Management Features
	Utilities
	Plant Effluent
	Stormwater Discharge Pipe
	Effluent Discharge
	Stormwater Outfall
	Extraction Well

	Joint Permit Application for the Dump Road Area Groundwater Remediation Project	
	<i>14-NF-0835/201461074</i>	
PROJECT OVERVIEW		
	SCALE: AS SHOWN	FIGURE: 2



PLANS APPROVED BY: *[Signature]*
 DATE: 1-8-2015
 WATER MANAGEMENT ADMIN.
 NONTIDAL WETLANDS & WATERWAYS DIVISION
 MARYLAND DEPARTMENT OF THE ENVIRONMENT

LEGEND

- Project Area
- Impact Figures
- 25-foot Wetland Buffer
- Impacted Buffer Area
- Well Access Road
- Main Access Road
- Groundwater Treatment Plant
- Impacted Wetland Area
- Site Specific Wetlands Study
- Impacted Tidal Area
- Critical Area - Baltimore County
- Plant Effluent
- Stormwater Discharge
- Mean High Water Line

WETLAND DESIGNATIONS

- V - Non-tidal waterway and PFO/PSS wetland
- PP - Non-tidal PFO/PSS Wetland
- W - Non-tidal PUB/PSS Wetland
- NN - Non-tidal PUB/PSS Wetland
- OO - Non-tidal PSS Wetland
- TT - Non-tidal PSS/PEM Wetland
- ZZ - Non-tidal PSS/PEM Wetland
- Area 8 - Non-tidal PSS/PEM Wetland
- X - Non-tidal PSS/PEM Wetland
- Frog Mortar Creek - Tidal Navigable Waterway

NOTES
 LF = Liner Foot
 SF = Square Foot

0 150 300 600 Feet

MARTIN STATE AIRPORT

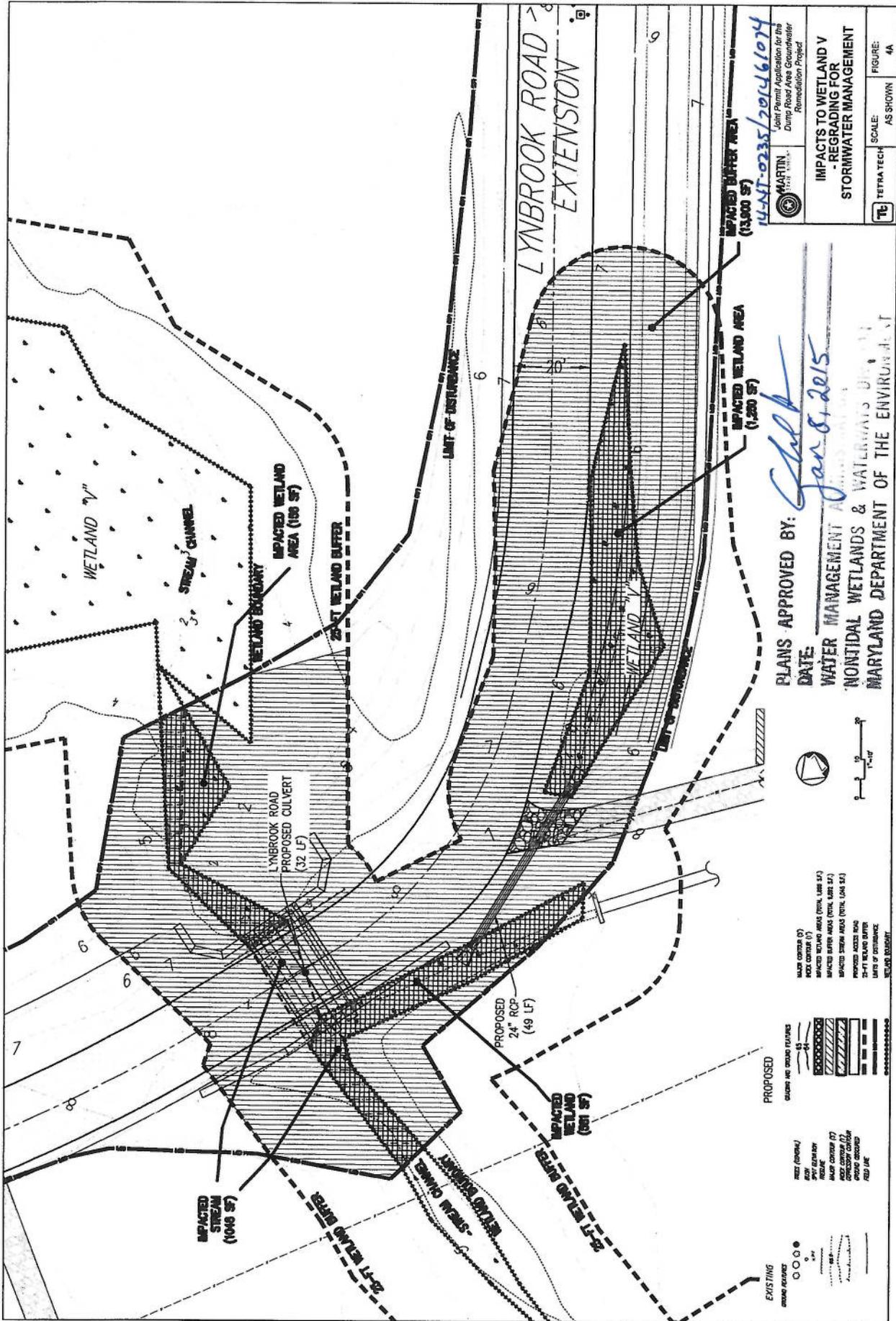
Joint Permit Application
for the Dump Road Area
Groundwater Remediation Project

OVERVIEW OF IMPACTS TO WETLANDS AND WATERS
 14-MT-0235 / 20461074

TETRA TECH

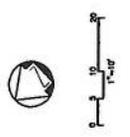
SCALE:
AS SHOWN

FIGURE:
3

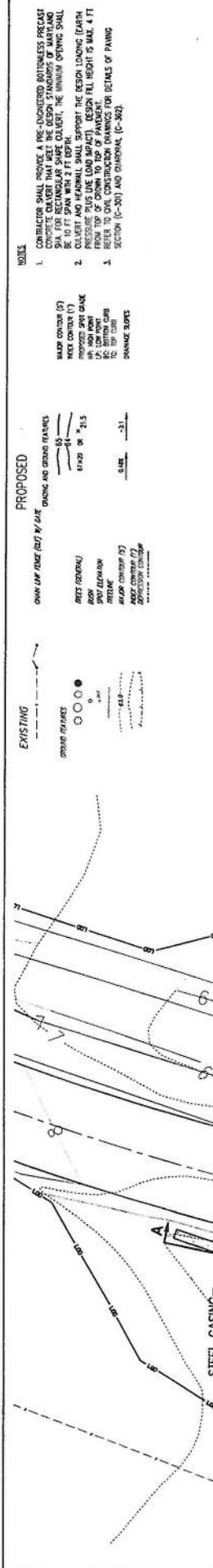


14-NT-0233/2015
 Least Impact Application for the
 Dump Road Area Groundwater
 Remediation Project
 MARTIN
 IMPACTS TO WETLAND V
 - REGRADING FOR
 STORMWATER MANAGEMENT
 SCALE: AS SHOWN
 FIGURE: 4A

PLANS APPROVED BY: *John K. [Signature]*
 DATE: *Jan 8, 2015*
 WATER MANAGEMENT & WATERSHEDS DIVISION
 NONTIDAL WETLANDS & WATERWAYS UNIT
 MARYLAND DEPARTMENT OF THE ENVIRONMENT



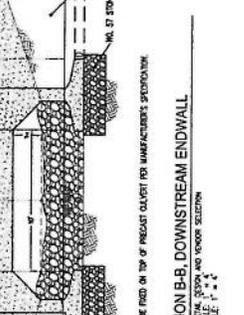
- EXISTING**
- 15' WETLAND CENTER (C1)
 - 30' WETLAND CENTER (C2)
 - 60' WETLAND CENTER (C3)
 - 120' WETLAND CENTER (C4)
 - 240' WETLAND CENTER (C5)
 - 480' WETLAND CENTER (C6)
 - 960' WETLAND CENTER (C7)
 - 1920' WETLAND CENTER (C8)
 - 3840' WETLAND CENTER (C9)
 - 7680' WETLAND CENTER (C10)
 - 15360' WETLAND CENTER (C11)
 - 30720' WETLAND CENTER (C12)
 - 61440' WETLAND CENTER (C13)
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 - ▬ 60' WETLAND CENTER (C3)
 - ▬ 120' WETLAND CENTER (C4)
 - ▬ 240' WETLAND CENTER (C5)
 - ▬ 480' WETLAND CENTER (C6)
 - ▬ 960' WETLAND CENTER (C7)
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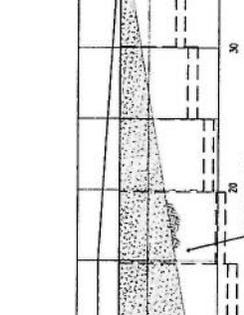
- EXISTING**
- EXISTING ROAD
 - EXISTING STREAM
 - EXISTING CULVERT
 - EXISTING PROPERTY LINE
- PROPOSED**
- PROPOSED ROAD
 - PROPOSED STREAM
 - PROPOSED CULVERT
 - PROPOSED PROPERTY LINE

NOTES

- CONCRETE SHALL BE TYPE I AND SHALL BE PLACED IN THE FORMS. THE MINIMUM CURING SHALL BE 10 FT SPAN WITH 2 FT DEPTH.
- ALL CONCRETE SHALL BE SUPPORTED BY THE DESIGN LOADS (DEAD AND LIVE) AND SHALL BE PROTECTED FROM THE TOP OF FANDED. REFER TO CIVIL CONSTRUCTION DRAWINGS FOR DETAILS OF FILING SECTION (C-301) AND CURBING (C-302).



SECTION A-A, UPSTREAM ENDWALL
 HORIZONTAL SCALE: 1" = 10'
 VERTICAL SCALE: 1" = 4'



SECTION B-B, DOWNSTREAM ENDWALL
 HORIZONTAL SCALE: 1" = 10'
 VERTICAL SCALE: 1" = 4'

NOTES

- PRECAST MANHOLE SHALL BE FIED ON TOP OF PRECAST CULVERT FOR MANUFACTURER'S SPECIFICATION.

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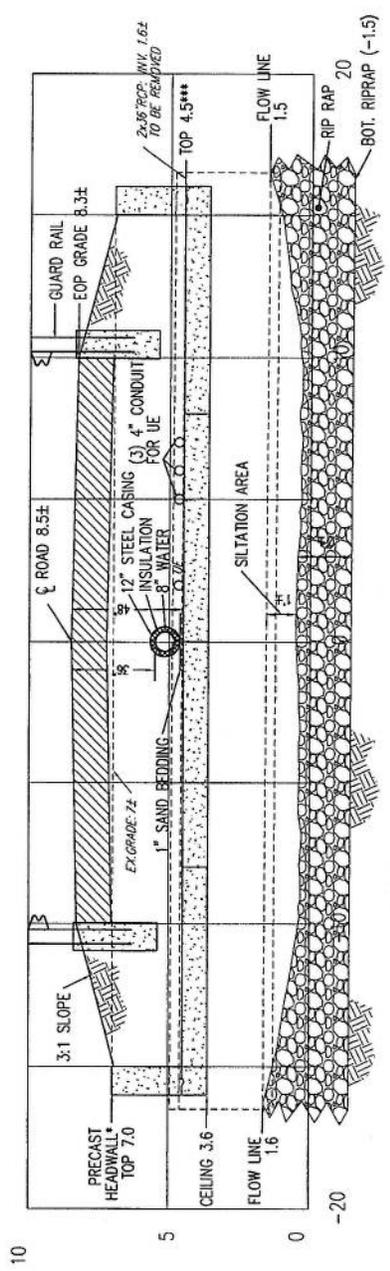
PLANS APPROVED BY: *[Signature]*
 DATE: Jan 5, 2015

WATER MANAGEMENT AUTHORITY
 NONTIDAL WETLANDS & WATERWAYS DIVISION
 MARYLAND DEPARTMENT OF THE ENVIRONMENT

14-NF-0235/2014.61274
 MARTIN STATE LAB
 Joint Permit Application for the
 Dump Road Area Groundwater
 Remediation Project

IMPACTS TO WETLAND/STREAM V
 - ACCESS ROAD WIDENING
 AND CULVERT INSTALLATION

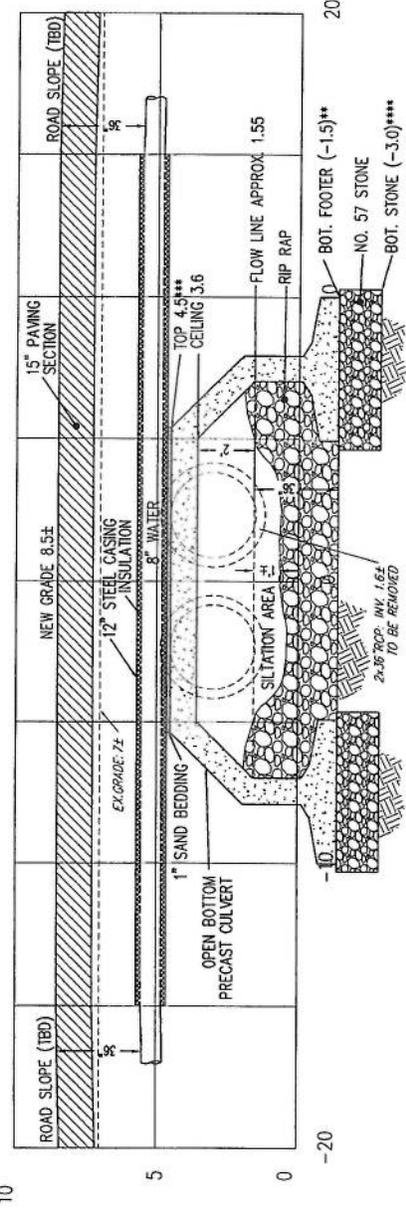
TETRA TECH SCALE: AS SHOWN
 FIGURE: 4B



1
C-172 PROFILE C-C: LENGTH

PENDING DETAIL DESIGN AND VENDOR SELECTION
 HORZ. SCALE: 1" = 2'
 VERT. SCALE: 1" = 2'

* PRECAST HEADWALL SHALL BE FIXED ON TOP OF PRECAST CULVERT PER MANUFACTURER'S SPECIFICATION
 ** FOOTING WIDTH SHALL BE DETERMINED BY MANUFACTURER AND THE BOTTOM SHALL BE EXTENDED TO THE FROST LINE.
 *** BASED ON 11" CROWN, DIMENSION MAY VARY PER CULVERT MANUFACTURER
 **** ALLOWABLE BEARING CAPACITY 2,000 LB/SF. THE STONE (AASHTO NO.57) SHALL BE WRAPPED WITH 4 OZ/SY NON-WOVEN GEOTEXTILE FABRIC.



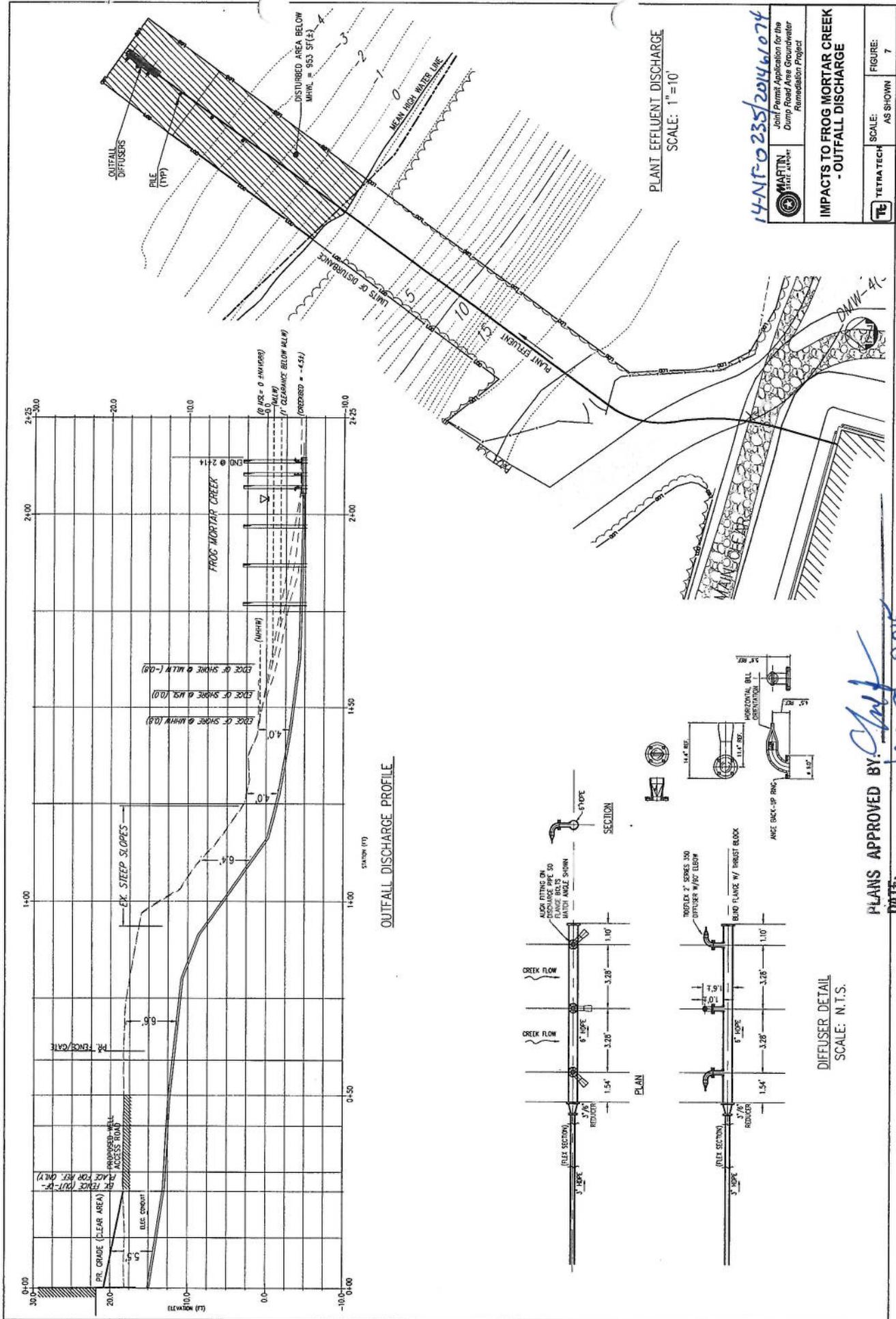
2
C-172 SECTION D-D: INTERIOR SECTION

PENDING DETAIL DESIGN AND VENDOR SELECTION
 HORZ. SCALE: 1" = 2'
 VERT. SCALE: 1" = 2'

PLANS APPROVED BY: *Chad H.*
 DATE: *Jan 8, 2015*
 WATER MANAGEMENT
 NONTIDAL WETLANDS & WATERWAYS DIVISION
 MARYLAND DEPARTMENT OF THE ENVIRONMENT

H-N-T-0235/2015/6/014
 MARTIN STATE LABOR
 Joint Permit Application for the
 Dump Road Area Groundwater
 Remediation Project

IMPACTS TO WETLAND/STREAM V - ACCESS ROAD WIDENING AND CULVERT INSTALLATION (CONTINUED)	
SCALE: AS SHOWN	FIGURE: 4C



PLANS APPROVED BY: *[Signature]*
 DATE: *Jan 21 2015*
 WATER MANAGEMENT & WETLANDS DIVISION
 NONTIDAL WETLANDS & WATERWAYS DIVISION
 MARYLAND DEPARTMENT OF THE ENVIRONMENT

**Non-tidal Wetland, Stream, and Buffer Impacts
Dump Road Area
Martin State Airport
AI Number 89904
Tidal Wetland Application Number 14-WL-0609/201461074
Non-tidal Wetlands Application Number 14-NT-0235/201461074**

The following includes a breakdown of all non-tidal wetland impacts including those to the intermittent stream/Wetland V complex, Wetland W Buffer, Wetland NN Buffer, and Wetland PP Buffer.

	Wetland (sq. ft.)		Intermittent Stream (sq. ft.)	Buffer (sq. ft.)	Totals (sq. ft.)
	PEM	PFO			
Permanent	1,501 (excavation and grading)	494 (rip rap placement)	538 (rip rap and 246 (excavation and grading)	14,676 (grade, fill, paving)	17,455
Temporary			264 (area under box culvert)		264
Totals (sq. ft.)	1,501	494	1,048	14,676	17,719
	1,995				



REPLY TO
ATTENTION OF

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

IMPORTANT INFORMATION ABOUT YOUR PROJECT

Corps Permit Tracking No.: 201461074 Date: January 8, 2015

Permittee/Project Name: MAA/Martin State Airport/DRA/Outfall & Culvert
MDSPGP-4 Category and Activity No.: A(A-b(2)), (A-e(1))

Dear Applicant:

The U. S. Army Corps of Engineers, Baltimore District, has determined that the proposed work meets the enclosed terms and conditions of the Maryland State Programmatic General Permit-4 (MDSPGP-4). A requisite of permit issuance requires that the applicant comply with any specific terms and conditions associated with the authorized project (conditions enclosed). This MDSPGP-4 verification is provided pursuant to Section 10 of the Rivers and Harbors Act of 1899 and/or Section 404 of the Clean Water Act. If any of the information contained in your application and/or plans is later found to be in error, the MDSPGP-4 authorization for your project may be modified, suspended, or revoked.

As a condition of the MDSPGP-4 authorization, you, the permittee, are required to complete and sign the enclosed Compliance Self-Certification Form regarding the completed work and any required mitigation. The signed form should be returned to the Regulatory Branch at the above address within 60 days following completion of the authorized work and any required mitigation.

Please be aware that the terms and conditions of this permit will continue to be binding on the new property owner(s) if structures or work authorized by this permit exist at the time of ownership transfer of the associated property. Although the construction period for work authorized by this MDSPGP-4 is finite, the permit itself, with its limitations, does not expire. To validate the transfer of this permit and the legal responsibility to comply with its terms and conditions, the transferee (new owner) must provide the Corps a mailing address and telephone number along with their signature and date in the space provided below and mail a copy to the above address.

Your MDSPGP-4 authorization is valid until September 30, 2016 unless the permit is modified, reissued, or revoked. You must remain informed of the changes to the MDSPGP-4. When changes to the MDSPGP-4 occur, a public notice announcing the changes will be issued. Be advised that you have 12 months from the effective date of the MDSPGP-4's expiration, modification or revocation to complete the work under the present terms and conditions provided you have commenced construction or are under contract to commence construction of the authorized work.

In order for this authorization to be valid, you must obtain all required Federal, State, and local permits.

William P. Seib

William P. Seib
Chief, Regulatory Branch

TRANSFEREE SIGNATURE

DATE

AREA CODE / TELEPHONE NO.

PRINTED NAME

ADDRESS



REPLY TO
ATTENTION OF

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

Effective October 1, 2011

201461074
Corps Permit Number

CENAB-OP-R-MDSPGP-4 (MARYLAND STATE PROGRAMMATIC GENERAL PERMIT-4)

TO WHOM IT MAY CONCERN:

Upon the recommendation of the Chief of Engineers, and under the provisions of Section 404 of the Clean Water Act, as amended, and Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403), the Secretary of the Army hereby authorizes the discharge of dredged or fill material or the placement of structures into Waters of the United States, including wetlands and navigable waters. These discharges and structures must comply with all the terms and conditions identified in this MDSPGP-4. It has been determined that the project qualifies for the MDSPGP-4. Accordingly, you are authorized to undertake the activity pursuant to:

1. Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403); and/or
2. Section 404 of the Clean Water Act (33 U.S.C. 1344).

You are authorized to perform work in accordance with the terms and conditions specified in Section VII of the MDSPGP-4 effective on October 1, 2011.

VII. General Conditions: To qualify for MDSPGP-4 authorization, the prospective permittee must comply with the following general conditions, as appropriate, in addition to any activity-specific conditions in the MDSPGP-4 category list and any case-specific special conditions imposed by the Corps.

A. General Requirements:

1. **Other Permits:** Authorization under the MDSPGP-4 does not obviate the need to obtain other Federal, State, or local authorizations required by law.
2. **Geographic Jurisdiction:** This MDSPGP-4 will authorize work undertaken within the geographic limits of the State of Maryland under the regulatory jurisdiction of the Baltimore District.
3. **Applicability:** Applicability of the MDSPGP-4 shall be reviewed with reference to the Corps definition of waters of the United States, including wetlands, and navigable waters of the United States. Applicants are responsible for delineating boundaries of all waters of the United States, including wetland boundaries. The delineation of wetland boundaries shall be accomplished in accordance with the current Federal manual for identifying jurisdictional wetlands and appropriate guidance issued by the Corps of Engineers.
4. **Minimal Effects:** Projects authorized by the MDSPGP-4 shall have no more than minimal individual and cumulative adverse environmental effects.
5. **Discretionary Authority:** Notwithstanding compliance with the terms and conditions of the MDSPGP-4, the Corps retains discretionary authority to require an alternate Corps permit review for any project under all categories of the MDSPGP-4 based on concerns for the aquatic environment or for any other factor of the public interest. This authority may be invoked on a case-by-case basis during the review process for Category B activities whenever the Corps determines that, based on the concerns stated above, the potential consequences of the proposed project warrant individual review. In some rare instances, the Corps may have concerns for the aquatic environment or for any other public interest factor pertaining to a specific proposed project, which has already received a case-specific verification as a Category A activity. In order to evaluate this project under an alternate Corps permit review, the verification must be suspended in accordance with Section VIII.E of the MDSPGP-4.

Whenever the Corps notifies an applicant that an alternate Corps permit may be required, authorization under the MDSPGP-4 is voided. No work may be conducted until the individual Corps permit is obtained, or until the Corps notifies the applicant that further review has demonstrated that the work may proceed under the MDSPGP-4.

6. **Single and Complete Projects:** The MDSPGP-4 shall not be used for piecemeal work and shall be applied to single and complete projects, including maintenance activities. For purposes of this MDSPGP-4, a single and complete project means the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers and which has independent utility. All components of a project, including all attendant features both temporary and permanent, shall be reviewed together as constituting one single and complete project. All planned phases of multi-phased projects (e.g., subdivisions should include all work such as roads, utilities, and lot development) shall be applied for and reviewed together as constituting one single and complete project. The MDSPGP-4 shall not be used for any activity or portion of a project (e.g., a pier or boat ramp), that is part of, or dependent on, an overall project (e.g., the dredging of a main navigation channel or a spur channel), for which an individual permit or some other alternate Corps permit is required.

7. **Use of Multiple MDSPGP-4 Activities:** More than one MDSPGP-4 activity may be used to authorize a single and complete project. However, the specific requirements, including all activity-specific requirements and impact thresholds, must be met for each MDSPGP-4 activity and the total extent of project impacts must not exceed the acreage and/or linear foot limit of the MDSPGP-4 activity with the highest specified acreage and/or linear foot limit. For example, if a road crossing is authorized under Category A of Section IV.B.1.(d)(1) with an associated nontidal bank stabilization authorized under Section IV.B.1.f.(4)(a), the maximum total impact limits to nontidal waters of the United States for the single and complete project may not exceed 10,000 square feet in total area and/or 500 linear feet in total length. The road crossing and nontidal bank stabilization activities must still meet all Category A activity-specific requirements and impact thresholds.

A single and complete project with multiple impacts, that may be eligible for authorization under a Category A and a Category B activity, requires an application submittal to the Corps and review under the MDSPGP-4 Category B verification procedures. All specific requirements, including the activity-specific requirements and impact thresholds of the Category A activity and the Category B activity must be met and the total extent of project impacts must not exceed to total acreage and/or linear foot limit of the MDSPGP-4 activity with the highest specified acreage and/or linear foot limit. For example, if a road crossing is authorized under Category A of Section IV.B.1.(d)(1) with an associated nontidal bank stabilization authorized under Section IV.B.f.(4)(b), the maximum total impact limits to waters of the United States for the single and complete project may not exceed 1/2 acre (21,780 square feet) in total area and/or 2,000 linear feet in total length. The road crossing activity must meet the Category A activity-specific requirements and impact thresholds, and the nontidal bank stabilization activity must meet the Category B activity-specific requirements and impact thresholds.

8. **Permit On-Site:** The permittee shall ensure that a copy of the MDSPGP-4 and the accompanying authorization letter are at the work site at all times. These copies must be made available to any regulatory representative upon request. Although the permittee may assign various aspects of the work to different contractors or sub-contractors, all contractors and sub-contractors shall be expected to comply with all conditions of any general permit authorization.

9. **Authorized Activities in Navigable Waters Subject to Section 10 of the Rivers and Harbors Act of 1899:**

a. If future operations by the United States require removal, relocation, or other alteration of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable water, the permittee will be required, upon due notice from the Corps, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

b. The permittee acknowledges the possibility that the structure permitted herein may be subject to damage by wave wash from passing vessels and/or ice flows within the waterway. The issuance of this permit does not relieve the permittee from taking all proper steps to ensure the integrity of the structure permitted herein and the safety of vessels moored thereto from damage by wave wash and/or ice flows, and the permittee shall not hold the United States liable for such damage.

c. The permittee must install and maintain, at his/her expense any safety lights, markers, and/or signals prescribed by the USCG, through regulations or otherwise, on the authorized facilities and/or structures. The permittee must contact the Commander (AOWW), Fifth Coast Guard District, Federal Building, 431 Crawford 3

Street, Portsmouth, Virginia, 23704, to ascertain the need for obstruction lights. Prior to commencing the construction or installation of an authorized structure in navigable waters of the United States, the permittee must submit a "Private Aids to Navigation Application" to the Commander of the USCG.

d. The permittee must provide location coordinates of the authorized structures, including minimum depth and other pertinent information to the USCG and request that a Local Notice to Mariners is issued regarding the authorized work.

10. **For Aerial Transmission Lines Across Navigable Waters:** The following minimum clearances are required for aerial electric power transmission lines crossing navigable waters of the United States. These clearances are related to the clearances over the navigable channel provided by existing fixed bridges, or the clearances which would be required by the USCG for new fixed bridges, in the vicinity of the proposed aerial transmission line. These clearances are based on the low point of the line under conditions producing the greatest sag, taking into consideration temperature, load, wind, length of span, and type of supports as outlined in the National Electrical Safety Code:

NOMINAL SYSTEM VOLTAGE (kV)	Minimum additional clearance (ft.) above clearance required for bridges.
115 and below	20
138	22
161	24
230	26
350	30
500	35
700	42
750-765	45

a. Clearances for communication lines, stream gauging cables, ferry cables, and other aerial crossings must be a minimum of ten feet above clearances required for bridges, unless specifically authorized otherwise by the District Engineer.

b. Corps Regulation ER 1110-2-4401 prescribes minimum vertical clearances for power communication lines over Corps lake projects. In instances where both the National Electrical Safety Code requirements and ER 1110-2-4401 apply, the greater minimum clearance is required.

B. National Concern:

1. **Historic Properties:** Any activity authorized by the MDSPGP-4 shall comply with Section 106 of the National Historic Preservation Act. Maryland Department of the Environment, in cooperation with the Maryland Historic Preservation Office, shall conduct an initial review and notify the Corps if any archaeological or other cultural resources are in the vicinity of the project. The Corps may require applicants to perform a survey of archaeological and historical resources in the project area. The Corps shall determine whether National Historic Preservation Act Section 106 consultation is required. The applicant must notify the Corps if they have knowledge that the activity may affect any historic properties listed or eligible for listing, or that the applicant has reason to believe may be eligible for listing on the National Register of Historic Places. If the permittee discovers any previously unknown archaeological or other cultural resource while accomplishing the work authorized by the MDSPGP-4, the permittee shall immediately notify the Corps of what has been found and stop work in the permit area until the required coordination has been completed. The permittee shall not begin or continue work until notified by the District Engineer that the requirements of the National Historic Preservation Act have been satisfied

and that the activity may proceed. Information on the location and existence of historical resources can be obtained from the MHT, Office of Preservation Services, and the National Register of Historic Places.

2. **Tribal Rights:** No activity or its operation may impair reserved tribal rights, including but not limited to, reserved water rights and treaty fishing and hunting rights.

3. **National Lands:** Activities authorized by the MDSPGP-4 shall not impinge upon the value of any Federal land, including but not limited to, National Wildlife Refuges, National Forests, National Parks, National Marine Sanctuaries, or any area administered by the FWS, U.S. Forest Service, or National Park Service (e.g., Assateague Island National Seashore).

4. **Endangered Species:** The MDSPGP-4 does not authorize any activity that may directly or indirectly affect a threatened or endangered species or a species proposed for such designation, as identified under the Federal ESA; or which may directly or indirectly destroy or adversely modify the critical habitat of such species unless and until appropriate coordination with the applicable resource agency(s) is complete and all such issues are resolved in accordance with the applicable regulations and procedures. MDE, in cooperation with MD DNR, shall conduct an initial review and notify the Corps and FWS or NMFS if any Federally listed species or critical habitat is likely to be in the vicinity of the project. The Corps shall determine if consultation with FWS or NMFS is required under Section 7 of the ESA. If consultation is required, the applicant, after notification, shall not begin or continue work until notified by the Corps that the requirements of the ESA have been satisfied and that the activity is eligible for authorization. Information on the location of threatened and endangered species and their critical habitat can be obtained from FWS and NMFS. The Corps will be initiating consultation under the Endangered Species Act on this MDSPGP-4 and any conditions from that consultation will be inserted into the MDSPGP-4.

National Marine Fisheries Service – Endangered Species Act Requirements:

a. **Interactions with National Marine Fisheries Service Federally Threatened or Endangered Species:** Any interaction between a sea turtle or any species listed now or in the future under Federal law as a threatened or endangered species (“listed species”) (e.g., North Atlantic right whale, humpback whale, shortnose sturgeon) and the vessels associated with the project must be reported to the NMFS as follows: If the animal appears alive and uninjured (i.e., breathing normally, no visible wounds, movement uninhibited), the permittee or its representative must report the incident to the NMFS Northeast Region Marine Mammal and Sea Turtle Stranding and Entanglement Hotline at (866) 755-6622 within 24 hours of returning from the trip on which they made the discovery. If the animal requires assistance, the call to the hotline must be made immediately. If the animal appears to be injured (i.e. bleeding, gasping for air, etc.) or dead, the permittee or its representative must also immediately call the hotline so the appropriate rehabilitation or stranding network representative can be contacted. The applicant shall also notify the Corps of all correspondence and interaction with the NMFS within two calendar days. Additional information about any Federally threatened or endangered species may be obtained from the attached fact sheet or online at http://www.nero.noaa.gov/prot_res/stranding/SpeciesOverview.html and at: http://www.nero.noaa.gov/prot_res/esp/. An interaction is defined as an entanglement or capture of a listed species or a strike/direct contact between vessels or equipment used for the project and a listed species.

b. **Vessel Buffer:** When listed species are sighted, vessels must attempt to maintain a distance of 50 yards (150 feet) or greater between the animal and the vessel whenever possible. State and Federal regulations prohibit approaching a right whale within a 500 yard (1,500 foot) buffer zone. Any vessel finding itself within the 500 yard (1,500 foot) buffer zone created by a surfacing right whale must depart immediately at a safe, slow speed. If other listed species are detected, vessels will reduce their speeds to 10 knots or to the maximum extent practicable to ensure human safety. If listed species are sighted off of a moving dredge, intentional approaches within 100 yards (300 feet) of the animal must be avoided. Vessels must reduce speeds to 4 knots or the lowest speed practicable to ensure human safety. Any interactions must be reported to the NMFS.

c. Best Management Practices Applicable to Category A Activities Within Tidal Waters Having Salinity Levels Less Than 6 Parts Per Thousand (ppt) (See Appendix B):

(i) **Pile Driving:** For the protection of listed species within all tidal waters of the Chesapeake Bay in Maryland and its tidal tributaries with salinity levels <6 ppt, pile driving methods must maintain noise level thresholds not to exceed 187dB SEL re 1µPa or 206dB peak re 1µPa at a distance of >10m from the pile being installed; and for levels >155dB peak re 1µPa must not exceed 12 consecutive hours on any given day and a 12 hour

recovery period (i.e., in-water noise levels below 155dB peak re 1µPa) must be provided between work days. Pile driving construction must adhere to one of the following methods: (a) piles must be installed in-the-dry during low water; or (b) piles must be drilled and pinned to ledge; or (c) vibratory hammers must be used to install any size and quantity of wood, concrete, or steel pilings; or (d) impact hammers must be limited to one hammer and <50 piles installed per day with the following: wood piles of any size; concrete piles <18-inches diameter; steel piles <12-inch diameter if the hammer is <3,000 pounds and a wood cushion is used between the hammer and steel pile; or (e) approved pile driving methods that will allow noise level thresholds to be met.

(ii) **Sediment Disturbing Activities Time-of-Year Restriction:** Sediment disturbing activities, which includes pile driving activities, are prohibited during the period April 1 through June 30 within all tidal waters of the Chesapeake Bay in Maryland and its tidal tributaries with salinity levels <6 ppt for the protection of shortnose sturgeon and early life stages in these waters.

5. **Essential Fish Habitat (EFH) and Fish and Wildlife Coordination Act:** Section 305(b)(2) of the Magnuson-Stevens Fishery Conservation and Management Act requires an EFH consultation with the NMFS for any action or proposed action authorized, funded, or undertaken by a Federal agency that may adversely affect EFH. Essential Fish Habitat has been defined by Congress as “those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.” The designation and conservation of EFH seeks to minimize adverse effects on habitat caused by fishing and non-fishing activities. NMFS has determined that many of the MDSPGP-4 Category A activities are eligible for EFH general or programmatic concurrence and require no further EFH consultation. National Marine Fisheries Service, in consultation with the District, has determined that individual EFH consultation is needed for some projects potentially eligible for authorization under Category A of the MDSPGP-4 that may adversely affect EFH. The Corps will coordinate with NMFS as part of the Category B review procedures. EFH conservation recommendations made by NMFS will normally be included as a permit requirement by the Corps. If the EFH coordination and consultation requirements cannot be resolved under the MDSPGP-4 process, an alternate Corps permit review process is required for the project. The Corps will be initiating consultation under these authorities on this MDSPGP-4, and any conditions from that consultation to protect NOAA trust resources will be inserted into this MDSPGP-4.

6. **Wild and Scenic Rivers:** No activity is authorized under the MDSPGP-4 that occurs in a component of the National Wild and Scenic River System, including rivers officially designated by Congress as study rivers for possible inclusion in the system, while such rivers are in an official study status, unless the appropriate Federal agency, with direct management responsibility for the river, has determined in writing that the proposed activity will not adversely affect any National Wild and Scenic River, including study rivers. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, U. S. Forest Service, Bureau of Land Management, or FWS).

7. **Federally Authorized Civil Works Projects:**

a. **Federal Navigation Projects:** The MDSPGP-4 does not authorize interference with any existing or proposed Federal navigation projects. The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration. (See VII.A.9.a.)

b. **Federal Navigation Channel Setbacks:** All activities must comply with the Baltimore District Minimum Setback Guidance for Structures Along Federally Authorized Channels. Please see the Baltimore District’s Regulatory webpage to view this guidance: <http://www.nab.usace.army.mil/Wetlands%20Permits/publications.htm>.

c. **Other Federally Authorized Civil Work Projects (e.g., flood control, dams, and reservoirs):** The MDSPGP-4 does not authorize interference with any proposed or existing Federally authorized civil works project.

8. **Federal Liability:** In issuing this permit, the Federal Government does not assume any liability for the following:

- a. Damages to the permitted project, or uses thereof, as a result of other permitted or unpermitted activities or from natural causes;
- b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest;
- c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit;
- d. Design or construction deficiencies associated with the permitted work; and
- e. Damage claims associated with any future modification, suspension or revocation of the MDSPGP-4 or any specific MDSPGP-4 verification.

9. **Navigation:** Projects authorized under the MDSPGP-4 shall not cause interference with navigation, and no attempt shall be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to projects authorized under the MDSPGP-4. Nothing in the MDSPGP-4 shall in any way restrict the District Engineer, U.S. Army Engineer District, Baltimore, from exercising his legal authority to protect the public interest in navigation or from exercising his authority under the Navigation Servitude of the United States. (See VII.B.8.)

10. **Fills Within 100-Year Floodplain:** The activity must comply with applicable Federal Emergency Management Agency approved State or local floodplain management requirements.

11. **Safety of Impoundment Structures:** To ensure that all impoundment structures are safely designed, the Corps may require non-Federal applicants to demonstrate that the structures comply with established State dam safety criteria or have been designed by qualified persons. The Corps may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

C. **Minimization of Environmental Impacts:**

1. **Avoidance and Minimization:** Discharges of dredged or fill material into waters of the United States and adverse impacts of such discharges on the aquatic ecosystem shall be avoided and minimized to the maximum extent practicable at the project site (i.e., on-site).

2. **Mitigation Standards:** A proposed compensatory mitigation proposal may be submitted with the application to expedite the process. The Corps will determine if the project is eligible for authorization under the MDSPGP-4 subject to the applicant's submittal of a compensatory mitigation proposal for stream and wetland impacts. Compensatory mitigation plans will generally include a requirement for the establishment, performance, maintenance, legal protection (e.g., conservation easements), and long-term management of the mitigation area. Applicants may propose the use of mitigation banks, in-lieu-fee programs, or separate permittee-responsible mitigation. In general, maintenance of previously authorized activities typically does not require mitigation. All mitigation must be in compliance with the 2008 Mitigation Rule (73 FR 70).

a. Wetland mitigation will generally be required for all permanent tidal or nontidal wetland losses either through the use of the State's tidal or nontidal programmatic wetland compensation, mitigation banks, in-lieu-fee programs, and/or by the permittee as required by special condition of the MDSPGP-4 or the State authorization. Generally, the minimum required wetland mitigation ratios will be as follows: 2:1 for forested and scrub-shrub wetlands; 1:1 for herbaceous emergent wetlands, and 1:1 for permanent conversion of forested wetlands to herbaceous emergent wetlands. Wetland mitigation can include wetland restoration, establishment, enhancement (including restoration or enhancement of upland forested buffers), and/or wetland preservation, unless the Corps determines in writing that some other form of mitigation would be more appropriate and provides a project-specific waiver of this requirement. Since the likelihood of success is greater and the impacts are reduced, wetland restoration should be the first compensatory mitigation option considered.

b. Stream mitigation, focusing on functional replacement, will generally be required for any project that involves losses of more than 200 linear feet to stream channels and rivers through the use of mitigation banks, in-lieu-fee programs, or by the permittee as required by special condition of the MDSPGP-4 and/or the State authorization. Stream mitigation can include stream restoration, establishment, enhancement (including enhancement of riparian buffers), and stream preservation. Riparian buffer areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat impact concerns. The need to require mitigation for impacts to open waters will be determined on a case-by-case basis.

c. For activities resulting in the loss of marine or estuarine resources, permittee-responsible compensatory mitigation may be environmentally preferable if there are no mitigation banks or in-lieu-fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee.

d. For permittee-responsible mitigation, the special conditions of the MDSPGP-4 verification must clearly indicate the party or parties responsible for the implementation, performance, and long-term management of the compensatory mitigation project.

3. **Work in Wetlands:** Heavy equipment working in wetlands shall be avoided if possible and, if required, soil and vegetation disturbance shall be minimized by using techniques such as timber mats, geotextile fabric, and vehicles with low-pressure tires. Disturbed areas in wetlands shall be restored to preconstruction contours and elevations upon completion of the work.

4. **Temporary Fill and Mats:** Temporary fill and the use of mats are both considered a discharge of fill material and must be included in the quantification of impact area authorized by the MDSPGP-4. Temporary fill (e.g., access roads, cofferdams) in waters and wetlands authorized by the MDSPGP-4 shall be properly stabilized during use to prevent erosion. Temporary fill in wetlands shall be placed on geotextile fabric laid on the existing wetland grade. Upon completion of the work, all temporary fills shall be disposed of at an upland site, suitably contained to prevent erosion and transport to a waterway or wetland. Temporary fill areas shall be restored to their original, pre-construction contours and revegetated with native wetland species.

5. **Erosion and Sediment Control:** Adequate erosion and sediment control measures, practices, and devices, such as turbidity curtains in tidal waters, vegetated filter strips, geotextile silt fences, phased construction, or other devices or methods, shall be used to reduce erosion and retain sediment on-site during and after construction. These devices and methods shall be capable of (a) preventing erosion, (b) collecting sediment and suspended and floating materials, and (c) filtering fine sediment. Erosion and sediment control devices shall be removed when the work is complete and the site has been successfully stabilized. The sediment collected by these devices shall be removed and placed at an upland location, in a manner that will prevent its later erosion into a waterway or wetland. All exposed soil and other fills shall be permanently stabilized at the earliest practicable date. In-stream work shall be conducted "in the dry" whenever practicable. This should be accomplished using stream diversion devices, other than earthen or stone cofferdams. In addition, work in waters of the United States should be performed during periods of low-flow or no-flow, whenever practicable.

6. **Aquatic Life Movements:** No activity may substantially disrupt the necessary life-cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through, or spawn/nursery within the area (e.g., anadromous/catadromous fish); unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions. A low flow channel must be maintained through any discharges placed for armoring across the channel so as to not impede flow in the waterway and/or not to block or impede the movements of anadromous, estuarine, and resident fish. Permanent culvert or pipes placed in streams must be depressed in accordance with the State of Maryland regulations. If depression of the culvert is not practicable, the applicant must submit a narrative, along with their application, documenting measures evaluated to minimize disruption of the movement of aquatic life, as well as specific documentation concerning site conditions and limitations on depressing the culvert, cost, and engineering factors that prohibit depressing the pipe/culvert. Options that need to be considered include the use of a bridge, bottomless pipe, partial depression, or other measures to provide for the movement of aquatic organisms. The documentation must also include photographs documenting site conditions. The applicant may find it helpful to contact their regional fishery agency for recommendations about the measures to be taken to allow for fish passage

7. Water Crossings:

a. All temporary and permanent crossings of waterbodies shall be suitably bridged, culverted, or otherwise constructed to withstand and to prevent the restriction of high flows and tidal flows; to maintain existing low flows; and to prevent the obstruction of movement by aquatic life indigenous to the water body, including anadromous, estuarine, and resident fish species.

b. All water crossings (e.g., utility lines and road crossings) must be constructed roughly perpendicular to waters of the United States, including streams and wetlands. Where a utility line or access road is constructed parallel to a stream corridor, an undisturbed buffer shall be maintained between the utility line/access road and the waterway to avoid or minimize potential future impacts to waters of the United States. These potential impacts would include such issues as sewer line leaks or failures, future stream channel meandering, stream bank instability and failure, and right-of-way maintenance.

c. Water crossings must be constructed "in the dry" whenever practicable. This should be accomplished by using stream diversion devices other than earthen or stone cofferdams.

d. Equipment shall cross streams only at suitably constructed permanent or temporary crossings.

e. Temporary structures and fills shall be removed and the area restored to its original contours and elevations, or to the conditions specified in the approved plans. The temporary structures and the areas of fill associated with these structures must be included in the total waterway/wetlands impacts.

8. Discharge of Pollutants: All activities that are authorized under the MDSPGP-4 and that involve any discharge or relocation of pollutants into waters of the United States shall be consistent with applicable water quality standards, effluent limitations, standards of performance, prohibitions, and pretreatment standards and management practices established pursuant to the CWA (33 U.S.C. 1251 et. Seq.), and applicable State and local laws and regulations. No discharge of dredged or fill material in association with this authorization may consist of unsuitable material such as trash, debris, car bodies, asphalt, etc.

9. Spawning Areas: Activities, including structures and work in navigable waters of the United States or discharges of dredged or fill materials in fish and shellfish spawning or nursery areas during spawning seasons, shall be avoided. Impacts to these areas shall be avoided or minimized to the maximum extent practicable during all other times of year. Activities that result in the physical destruction (e.g., through excavation, dredging, mining, fill, or significant downstream sedimentation by substantial turbidity) of an important spawning/nursery area are not authorized by this MDSPGP-4.

10. Waterfowl Breeding and Wintering Areas: Discharges into breeding and wintering areas for migratory waterfowl shall be avoided to the maximum extent practicable.

11. Environmental Values: The permittee shall make every reasonable effort to construct or operate the work authorized under the MDSPGP-4 in a manner that maintains as many environmental values as practicable, and that avoids or minimizes any adverse impacts on existing fish, wildlife, and natural environmental values.

12. Management of Water Flows: To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

13. Water Supply Intakes: No discharge of dredged or fill material may occur in the proximity of a public water supply intake.

D. Procedural Conditions:

1. **Inspections:** The permittee shall permit the District Engineer or his authorized representative(s) to make periodic inspections at any time deemed necessary to ensure that the work is being performed in accordance with the terms and conditions of the MDSPGP-4. The District Engineer may also require post-construction engineering drawings (as-built plans) for completed work, and post-dredging survey drawings for any dredging work.

2. **Compliance Certification:** Every permittee who receives a written MDSPGP-4 verification shall submit a signed Compliance Certification Form within 60 days following completion of the authorized work and any required mitigation (but not mitigation monitoring, which requires separate submittals). Failure to submit the Compliance Certification Form by the permittee could result in the Corps taking appropriate non-compliance enforcement action against the permit holder. The Corps will provide a blank copy of the Compliance Certification Form to the permittee with the MDSPGP-4 verification. The completed form will include the following:

a. A statement that the authorized work either was or was not done in accordance with the MDSPGP-4 verification, including any general and/or specific conditions. If the activity was not done in accordance with the MDSPGP-4 verification, including any general and/or specific conditions and requirements, the permittee shall describe the specifics of the deviation from the authorized activity.

b. A statement that any required mitigation was or was not completed in accordance with the permit conditions. If the mitigation was not completed in accordance with the permit conditions, the permittee shall describe the specifics of the deviation from the permit conditions.

c. The signature of the permittee, certifying the completion of the work and compensatory mitigation.

After the project is completed, the certification shall be sent to the Baltimore District at the following address:

**U. S. Army Corps of Engineers
Baltimore District
Attn: CENAB-OP-R
P. O. Box 1715
Baltimore, Maryland 21203-1715**

3. **Transfer of MDSPGP-4 Verifications:** If the permittee sells the property associated with a MDSPGP-4 verification, the permittee may transfer the MDSPGP-4 verification to the new owner by submitting a letter to the Baltimore District Corps of Engineers office to validate the transfer. A copy of the MDSPGP-4 verification must be attached to the letter, and the letter must contain the following statement and signature:

“When the structures or work authorized by this MDSPGP-4 are still in existence at the time the property is transferred, the terms and conditions of this MDSPGP-4, including special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this MDSPGP-4 permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.”

(Transferee)

(Date)

4. **Maintenance:** The permittee shall properly maintain the work or structure authorized by the MDSPGP-4 in good condition and in compliance with the terms and conditions of the MDSPGP-4, including maintenance to ensure public safety.

5. **Property Rights:** The MDSPGP-4 does not convey any property rights, either in real estate or material, or any exclusive privileges, nor does it authorize any injury to property or invasion of rights or any infringement of Federal, State, or local laws or regulations.

6. **Modification, Suspension and Revocation:** The MDSPGP-4, or any verification under it, may be either modified, suspended, or revoked, in whole or in part, pursuant to DA policies and procedures and any such action shall not be the basis for any claim for damages against the United States.

7. **Restoration:** The permittee, upon receipt of a notice of revocation of authorization under the MDSPGP-4, shall restore the wetland or waterway to its former condition, without expense to the United States and as directed by the Secretary of the Army or his authorized representative. If the permittee fails to comply with such a directive, the Secretary or his designee may restore the wetland or waterway to its former condition, by contract or otherwise, and recover the cost from the permittee.

8. **Special Conditions:** The Corps may impose special conditions on any project authorized under the MDSPGP-4, in cases where the Corps determines that special conditions are necessary to avoid or minimize adverse effects on the environment or on any other factor of the public interest. Failure to comply with all conditions of the authorization/ verification, including special conditions, will constitute a permit violation/unauthorized work and may subject the permittee to criminal, civil, or administrative penalties, and/or restoration.

9. **False or Incomplete Information:** In granting authorization pursuant to this permit, the Baltimore District will rely upon information and data provided by the permittee. If the project is verified by the Corps or MDE under the MDSPGP-4 and subsequently discovers that it has relied on false, incomplete, or inaccurate information provided by the permittee, the MDSPGP-4 verification may be revoked, in whole or in part, and/or the United States may institute appropriate legal proceedings.

10. **Compliance:** Any activity performed in waters of the United States, including wetlands and navigable waters, that is not in compliance with all the terms and conditions of the MDSPGP-4, which includes the MDSPGP-4 authorized activity activity-specific requirements, constitutes unauthorized work and is subject to an enforcement action by the Corps or the EPA. Furthermore, the MDSPGP-4 does not delegate any Section 404 enforcement or regulatory authority. Unauthorized work in waters of the United States, including wetlands and navigable waters, is subject to one or more of the following responses by EPA and/or the Corps:

- a. A Cease and Desist order and/or an administrative compliance order requiring remedial action.
- b. Initiation and assessment of a Class I administrative penalty order pursuant to Section 309(g) of the CWA.
- c. Initiation and assessment of a Class II administrative penalty for continuing violation pursuant to Section 309(g) of the CWA.
- d. Referral of the case to the U. S. Attorney with a recommendation for a civil or criminal action.
- e. If the Corps determines that an after-the-fact application is appropriate, it will be reviewed following the appropriate procedures.
- f. Any other appropriate response.



REPLY TO
ATTENTION OF

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

201461074
Corps Permit Tracking Number

MDSPGP-4
CATEGORY A, ACTIVITY (A-b(2))
Armoring Bridges, Causeways, and Culverts

The projects, structures and activities, listed below, must comply with all activity-specific conditions, in addition to all of the general conditions of this general permit.

This activity authorizes discharges of dredged or fill material associated with armoring or strengthening of bridges, causeways, and culverts, including excavation to construct a toe for placement of armoring for the purpose of protecting any previously authorized, currently serviceable bridge, causeway, or culvert. Any bank stabilization measures not directly associated with the structure will require a separate Corps authorization (Sections 10 and 404; all waters of the United States).

Impact Limits and Requirements:

- i. The total temporary and permanent impacts to all waters of the United States, which includes tidal and nontidal wetlands, streams, rivers, navigable waters, and other open waters, is limited to the minimum necessary to protect the structure or to ensure the safety of the structure and are not to exceed 10,000 square feet and/or 500 linear feet of streams, rivers, and other open waters.
- ii. Discharge must not extend any further than 200 linear feet in any direction from the structure.

Requirements Applicable to Both Category A and Category B Activities:

- iii. Application must be submitted to MDE for Corps authorization.
- iv. The armoring must be the minimum necessary to protect the structure or to ensure the safety of the structure.
- v. This activity does not authorize stream channelization or stream relocation projects. This activity does not authorize the construction of any dams or dikes.
- vi. Material used (in order of preference) must be clean stone, broken concrete, or grout bags. If broken concrete is used for armoring, it must be clean and free of rebar or other protruding reinforcement.
- vii. This activity does not authorize dredging.
- viii. The armoring material must not extend into a marked, lighted, charted, or Federal navigation channel.
- ix. The following conditions are applicable to Coastal Plain streams (tidal and nontidal), and Piedmont streams in Cecil and Harford Counties:

- (1) Armoring and/or scour protection for bridges, arches, and culverts shall provide a low flow channel that will pass anadromous fish during the spring mandatory season (February 15 - June 15). The low flow channels shall provide a flow depth not less than 12 inches, and never less than 8 inches during the spring migratory period. For armoring culverts of diameter equal to or less than 24 inches, flow depth in the low flow channel shall be comparable to depths in adjacent, undisturbed reaches of stream. Flow velocities in the low flow channel should also be comparable to flows in adjacent, undisturbed reaches of stream, as experienced during the spring migratory season. For projects where on-site conditions (e.g., design of the

MDSPGP-4
CATEGORY A, ACTIVITY (A-b(2))

-2-

existing culvert or other crossing structure) limit the ability to construct a low flow channel with the latter specifications, the applicant shall submit a narrative, along with their application, documenting site conditions and limitations that prohibit compliance with these low flow channel specifications.

- (2) Armoring and/or scour protection for bridges, arches, and culverts that cannot be constructed with low flow channels in accordance with the requirements in (1) above, are not eligible for Category A and must be reviewed under Category B or alternate Corps permit review procedures, as appropriate.



REPLY TO
ATTENTION OF

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

201461074
Corps Permit Tracking Number

MDSPPG-4
CATEGORY A, ACTIVITY (A-e(1))
Minor Nontidal Fills

The projects, structures and activities, listed below, must comply with all activity-specific conditions, in addition to all of the general conditions of this general permit.

This activity authorizes discharges of dredged or fill material in nontidal wetlands and nontidal streams (Sections 10 and 404; limited to nontidal wetlands and streams, including navigable nontidal Section 10 waters, e.g., Potomac and Susquehanna Rivers, etc.).

Impact Limits and Requirements: The total temporary and permanent impacts to waters of the United States, which includes nontidal wetlands, streams, rivers, and other nontidal open waters, are not to exceed 5,000 square feet and/or 200 linear feet of streams, rivers, and other nontidal open waters.

Requirements Applicable to Both Category A and Category B Activities:

- i. Application must be submitted to MDE for Corps authorization.
- ii. This activity authorizes work only in nontidal wetlands, streams, rivers, and other nontidal open waters.
- iii. If there is a specific activity for the proposed work type, this activity does not authorize types of work for which there are specific Category A/B activities, such as Linear Transportation Activities, Utility Lines, etc.
- iv. This activity does not authorize stream restoration projects or construction associated with mitigation banks or in-lieu fee mitigation projects.
- v. This activity does not authorize the discharge of fill into streams for the construction of berms for in-line (i.e., in-stream) stormwater management facilities, permanent dikes, dams, water withdrawals, or water diversions. This activity also does not authorize the construction of any kind of pond that would impound water into a stream or wetland. It does authorize impacts for the purpose of enhancing farmed wetlands located in agriculture fields or restoring or enhancing hydrology to a prior-converted wetland.



REPLY TO
ATTENTION OF

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

Operations Division

MDSPGP-4 PERMIT COMPLIANCE CERTIFICATION FORM (10/1/11)

Corps Permit Tracking No. 201461074 Category & Activity Number A(A-b(2)),
A(A-e(1))

Project Name MAA/Martin State
Airport/DRA/Outfall & Culvert Applicant Name MAA

Waterway Frog Mortar Creek County Baltimore

Dear Permittee:

In accordance with the compliance certification condition of your MDSPGP-4 authorization, you are required upon completion of all permitted work, or if mitigation/compensation is required, within 60 days following completion of the authorized work and any required mitigation (but not the mitigation monitoring, which requires separate submittals), to complete and sign this certification form and return it to the Corps of Engineers, Baltimore District, ATTN: CENAB-OP-R, P.O. Box 1715, Baltimore, Maryland 21203-1715.

Please note that the permitted activity is subject to compliance inspections by U.S. Army Corps of Engineers representatives. As a condition of this permit, failure to return this notification form, provide the required information below, or to perform the authorized work in compliance with the permit, can result in suspension, modification or revocation of your authorization in accordance with 33 CFR Part 325.7 and/or administrative, civil, and/or criminal penalties, in accordance with 33 CFR part 326.

Please provide the following information:

1. Date authorized work commenced: _____ 2. Date authorized work completed: _____

3. Was all work and any required mitigation, completed in accordance with your MDSPGP-4 authorization, including all general and/or specific conditions? YES ___ NO ___

4. For Category A projects involving pile driving activities that are within all tidal waters of the Chesapeake Bay in Maryland and its tidal tributaries with salinity levels less than 6 parts per thousand (See Appendix B of the MDSPGP-4), please indicate the pile driving method that was used for the authorized work:

- ____ (a) Piles must be installed in-the-dry during low water;
- ____ (b) Piles must be drilled and pinned to ledge;
- ____ (c) Vibratory hammers must be used to install any size and quantity of wood, concrete, or steel pilings;
- ____ (d) Impact hammers must be limited to one hammer and <50 piles installed per day with the following: wood piles of any size; concrete piles <18-inches diameter; steel piles <12-inch diameter if the hammer is <3,000 pounds and a wood cushion is used between the hammer and steel pile;
- ____ (e) Approved pile driving methods that will allow noise level thresholds to be met.
Describe: _____



MARYLAND DEPARTMENT OF THE ENVIRONMENT

1800 Washington Boulevard • Baltimore MD 21230

410-537-3000 • 1-800-633-6101 • www.mde.state.md.us

Martin O'Malley
Governor

Robert M. Summers, Ph.D.
Secretary

Anthony G. Brown
Lieutenant Governor

September 4, 2014

Maryland Aviation Administration
c/o
Paul Myers
Tetra Tech, Inc.
20251 Century Blvd., Suite 200
Germantown, MD 20874

Re: AI Number 89904

Tidal Wetlands License Application Number: 14-WL-0609

Non Tidal Wetlands and Waterways Application Number: 14-NT-0235

Agency Tracking Number: 201461074

Response Due Date: October 6, 2014

Location: Baltimore County

Dear Mr. Myers:

The Maryland Department of the Environment ("MDE" or "the Department") received your Joint Federal/State Application for the Alteration of Any Floodplain, Waterway, Tidal or Nontidal Wetland in Maryland ("Application") on July 8, 2014. In your Application, you requested authorization to construct a facility to limit the migration of contaminated groundwater into Frog Mortar Creek. The facility includes the installation of 16 groundwater extraction wells, construction of the treatment facility, placement of the outfall for discharge into Frog Mortar Creek, widening of the site access and well roads, and development of a stormwater management system. This letter is to inform you that the MDE Tidal Wetland section has determined that your Application is incomplete. Please find below an explanation of the additional information necessary to complete your Tidal Wetland Application.

Per our phone call conducted on September 3, 2014, it has been determined that the Tidal Wetland portion of your project will be identified in revised site plans that clarify/detail the culvert structure and revetment that will be placed channelward of the mean high water line (MHW) in Frog Mortar Creek.

The following information will be required by MDE, prior to continuing the processing of your requested Wetland License.

1. Fill out attached Public Notice Billing form; identify all adjacent property owners and return.



2. Revise plans on an 8.5 by 11 inch format, to include the following information:

- Identify on the overview of project sheet, the specific portion of the outfall (make this stand out) and overall length of channelward encroachment.
- On separate sheet; dimension the culvert, areas of rock placement, diffusers and placement of warning piles.
- Identify on separate sheet a profile view (scaled dimensioned); culvert, rock revetment, piles, diffusers with current depths identified.

If you have any questions regarding the Tidal Wetland portion of the project or if I can assist you in any way, please contact me at Robert.Rushlow@maryland.gov or by calling 410-537-4023. It is important to refer to the above referenced AI Number when corresponding with this office.

Sincerely,



Robert P. Rushlow
Natural Resources Manager
Tidal Wetlands Division
Wetlands and Waterways Program

Enclosure

cc: Cheryl Kerr, MDE, Non-Tidal Wetlands
Phatta Thapa, MDE, Non-Tidal Wetlands, Waterway Construction
Abbie Hopkins, USACOE, Regulatory Branch

NOTICE TO TIDAL WETLAND APPLICANTS

Certain projects involving tidal wetlands licenses and permits require that a description of the proposed project be published in a local newspaper. This advertisement is necessary to fulfill legal public notice requirements. Projects that require public notice include but are not limited to the following:

- Bulkheads greater than 300 feet long and 10 feet channelward of the mean high water line.
- Stone revetments greater than 500 feet long and 10 feet channelward of the mean high water line.
- Marsh creation projects greater than 500 feet long and 35 feet channelward of the mean high water line.
- Dredging projects that have a surface area greater than 1,500 square feet or result in the removal of more than 100 cubic yards of material.
- Jetties, breakwaters, and groins.
- All marina creation and expansion projects.

The Water Management Administration will advertise the project for you. However, as the applicant for the project you are responsible for paying the publishing costs. The publishers will bill you directly. In order for this process of public notice to occur, your approval is necessary prior to publishing. Please complete the form on the back of this page and return it to the Water Management Administration with your application so that your proposed project may be advertised without delay. Please make sure to sign the form. Processing of your application cannot continue until a signed form is received.

Please call the Tidal Wetlands Division at (410) 537-3837 if you have any questions.

Thank you for assistance in this matter.

**Department of the Environment
Water Management Administration
Tidal Wetlands Division
1800 Washington Boulevard
Baltimore, Maryland 21230
(410) 537-3837**

"A Commitment to Excellence in Managing Maryland's Water Resources"

PUBLIC NOTICE BILLING APPROVAL FORM

I agree to pay all expenses associated with the publishing of a public notice for the wetland application of

_____ (Applicant's Name) which is dated _____.

Applicant/Agent Signature

Printed Name of Signee

Billing Address: _____

Telephone Number: _____

Please provide the names and mailing addresses of the adjacent property owners:

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____



TETRA TECH

October 15, 2014

Robert P. Rushlow
Natural Resources Planner
Tidal Wetlands Division
Wetlands & Waterways Program
Maryland Dept. of the Environment
1800 Washington Blvd, Suite 430
Baltimore, MD 21230

Subject: Response to Comments on Lockheed Martin Corporation Dump Road Area Joint
Permit Application
AI Number 89904
Tidal Wetland Application Number 14-WL-0609/201461074
Non-tidal Wetlands Application Number 14-NT-0235/201461074

Dear Mr. Rushlow:

The following provides responses to comments received from the Maryland Department of the Environment, Tidal Wetlands Division, on September 4, 2014 regarding the joint permit application (JPA) for the Lockheed Martin Corporation Dump Road Area Groundwater Plume Remediation Project at Martin State Airport. In addition, attached please find a completed public notice billing form, list of adjacent land owners, and a set of figures for the public notice that have been revised per your comments. If you have any further questions or comments, please do not hesitate to contact me at 207-299-0594. Thank you again for your time and assistance with this important project.

Comment No. 1: Fill out attached Public Notice Billing Form; identify all adjacent property owners and return.

Response to Comment No. 1: Attached please find the completed public notice billing form and list of adjacent property owners.

Tetra Tech, Inc.

2025 I Century Blvd., Suite 200, Germantown, MD 20874-7114
Tel 301.528.5552 Fax 301.528.3000 www.tetrattech.com

Comment No. 2: Revise plans on 8.5 by 11 format, to include the following information:

- *Identify on the overview of project sheet, the specific portion of the outfall (make this stand out) and overall length of channel ward encroachment.*
- *On separate sheet; dimension the culvert, areas of rock placement, diffusers, and placement of warning piles.*
- *Identify on a separate sheet a profile view (scaled dimensioned); culvert, rock revetment, piles, diffusers, with current depths identified.*

Response to Comment No. 2: Attached please find revised plans per your request that include:

- 1) Revised Figure 1 – Site Location that includes a depiction of the specific location of the outfall discharge location
- 2) Figure 2 – Project Overview/Layout that includes all project components
- 3) Revised Figure 3 – Impact Overview that includes a depiction of the specific location of the tidal wetland impacts for the project
- 4) Revised Figures for the outfall impact area that include Figures 4a, 4b, and 4c that depict the specific dimensions and other features related to the impacts to Frog Mortar Creek associated with the project.

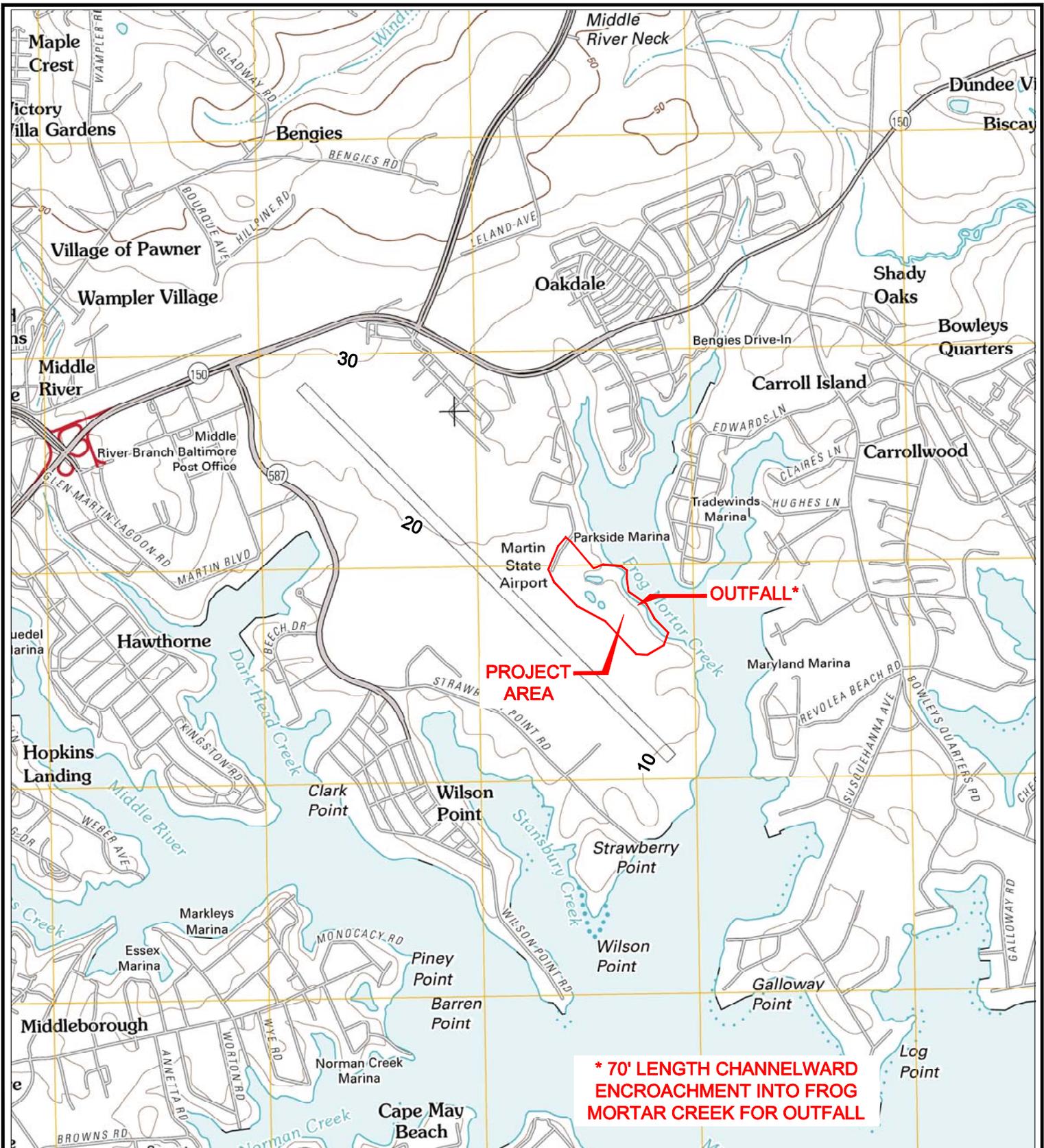
Sincerely,



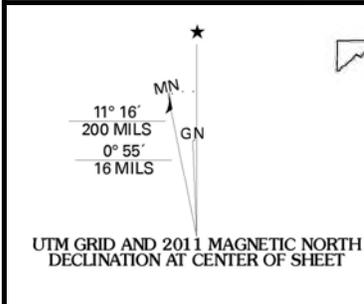
Paul Myers
Senior Environmental Scientist

CC: Paul Calligan (LMC)
Mike Martin (Tetra Tech)
Laura Burbage (CDM Smith)
Peter Shilland (CDM Smith)
Cheryl Kerr (MDE Nontidal Wetlands Division)
Robin Bowie (MAA Environmental Planning)

File



*** 70' LENGTH CHANNELWARD ENCROACHMENT INTO FROG MORTAR CREEK FOR OUTFALL**



MIDDLE RIVER, MD

2011

SCALE 1:24 000

CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988



**Joint Permit Application for the
Dump Road Area Groundwater
Remediation Project**

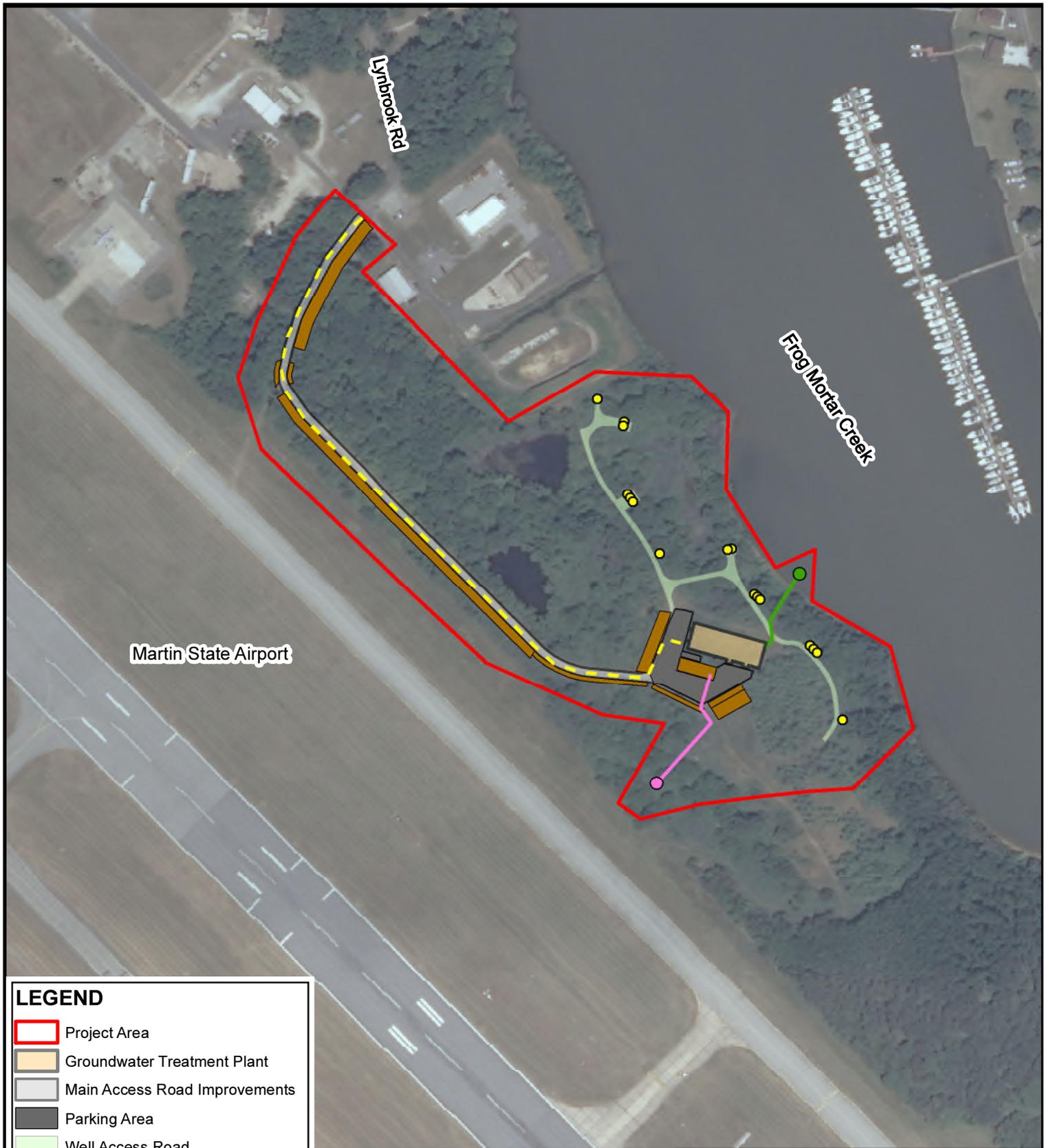
SITE LOCATION

AI Number 89904
Tidal Wetland Application Number 14-WL-0609/201461074
Non-tidal Wetlands Application Number 14-NT-0235/201461074



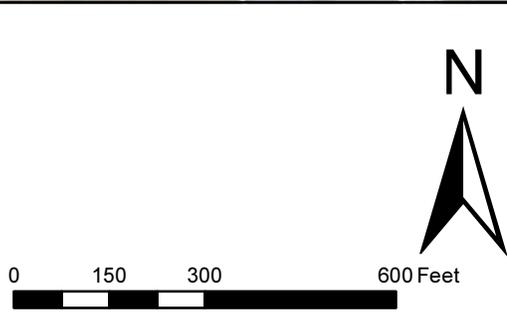
**SCALE:
AS SHOWN**

**FIGURE:
1**

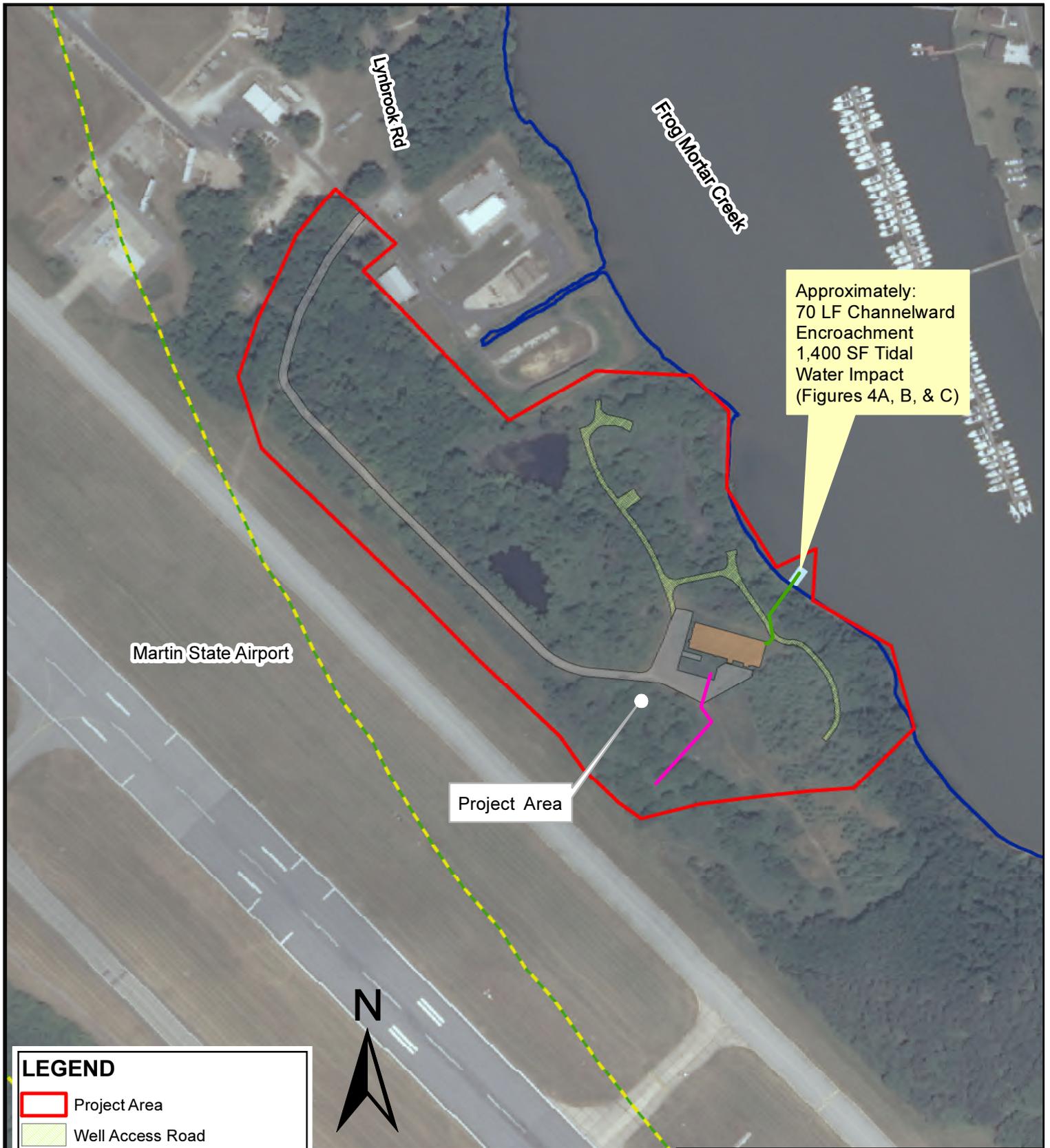


LEGEND

- Project Area
- Groundwater Treatment Plant
- Main Access Road Improvements
- Parking Area
- Well Access Road
- Stormwater Management Features
- Utilities
- Plant Effluent
- Stormwater Discharge Pipe
- Effluent Discharge
- Stormwater Outfall
- Extraction Well



	<p><i>Joint Permit Application for the Dump Road Area Groundwater Remediation Project</i></p>
<p>PROJECT OVERVIEW</p> <p>AI Number 89904 Tidal Wetland Application Number 14-WL-0609/201461074 Non-tidal Wetlands Application Number 14-NT-0235/201461074</p>	
	<p>SCALE: AS SHOWN</p>
<p>FIGURE: 2</p>	



Approximately:
 70 LF Channelward
 Encroachment
 1,400 SF Tidal
 Water Impact
 (Figures 4A, B, & C)

Project Area

Martin State Airport

Lynbrook Rd

Frog Morlar Creek

LEGEND

- Project Area
- Well Access Road
- Main Access Road
- Groundwater Treatment Plant
- Impacted Tidal Area
- Critical Area - Baltimore County
- Plant Effluent
- Stormwater Discharge
- Mean High Water Line

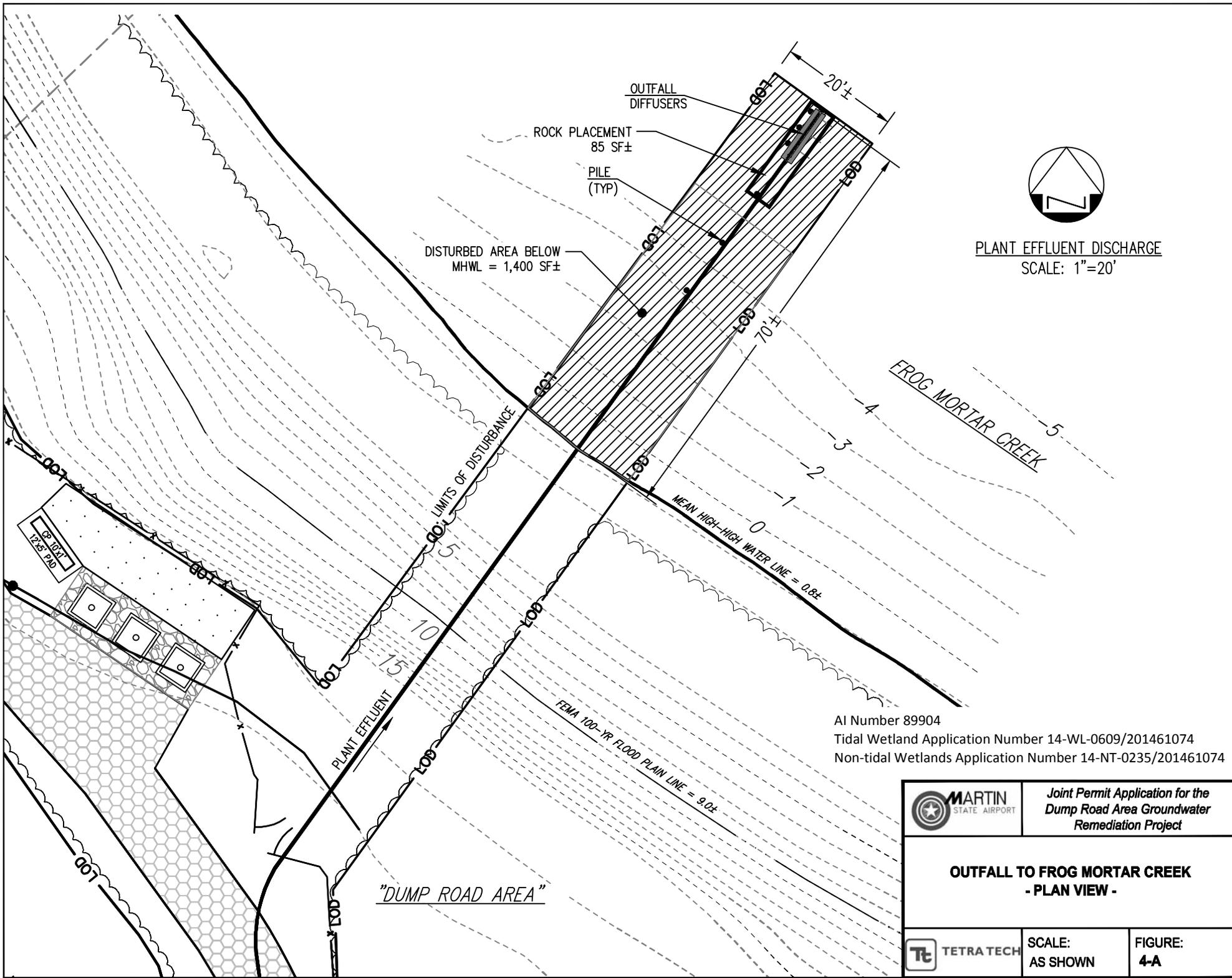


NOTES
 LF = Liner Foot
 SF = Square Foot

	<i>Joint Permit Application for the Dump Road Area Groundwater Remediation Project</i>
<p>OVERVIEW OF IMPACTS TO WETLANDS AND WATERS</p> <p style="font-size: small; color: red;">AI Number 89904 Tidal Wetland Application Number 14-WL-0609/201461074 Non-tidal Wetlands Application Number 14-NT-0235/201461074</p>	
	<p>SCALE: AS SHOWN</p>
<p>FIGURE: 3</p>	

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PLOT DATE: Oct 01, 2014 - 12:34pm



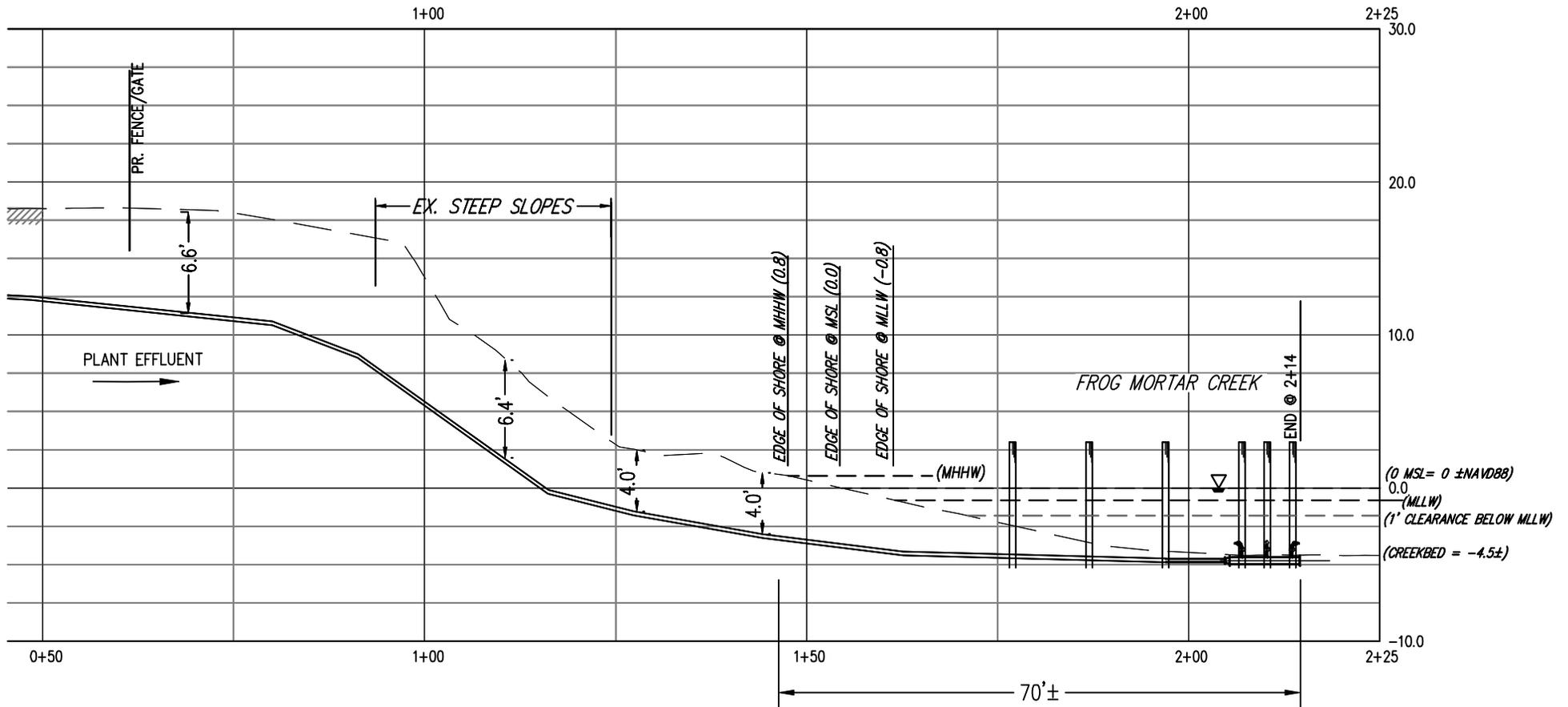
PLANT EFFLUENT DISCHARGE
SCALE: 1"=20'

AI Number 89904
Tidal Wetland Application Number 14-WL-0609/201461074
Non-tidal Wetlands Application Number 14-NT-0235/201461074

	Joint Permit Application for the Dump Road Area Groundwater Remediation Project	
OUTFALL TO FROG MORTAR CREEK - PLAN VIEW -		
	SCALE: AS SHOWN	FIGURE: 4-A

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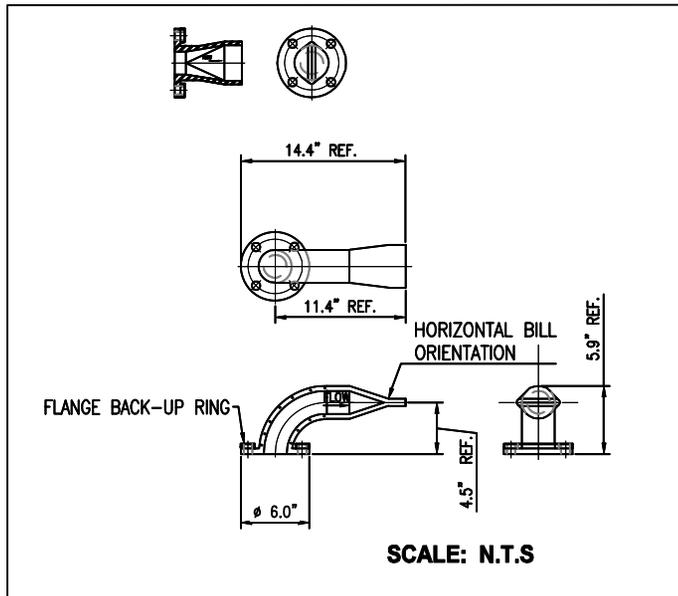
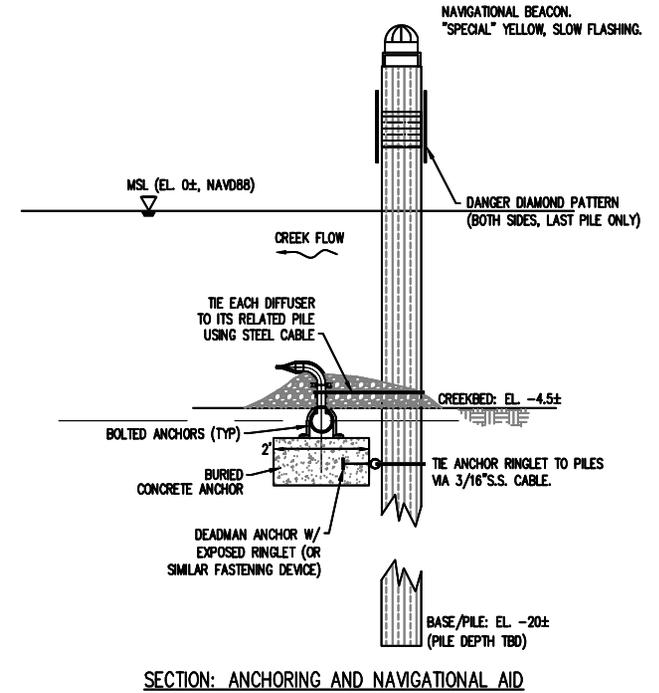
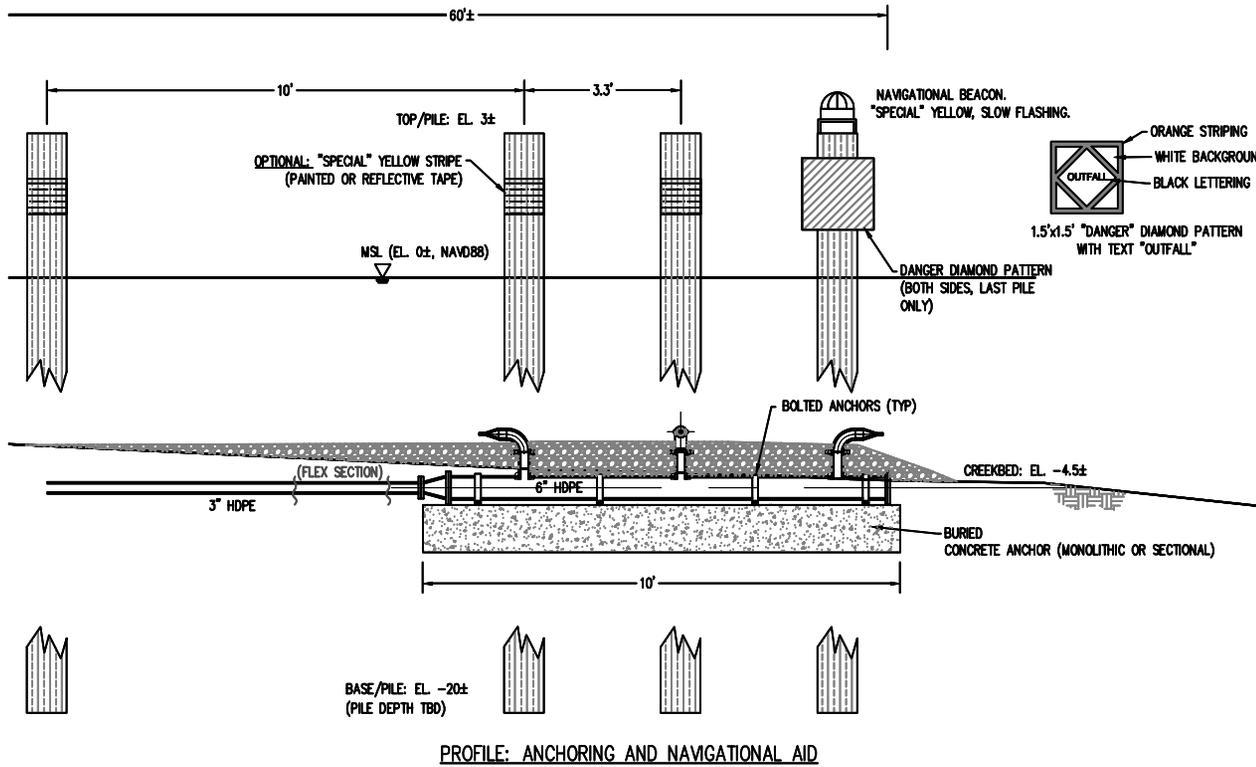


PLANT EFFLUENT DISCHARGE
 HORIZ. SCALE: 1"=20'
 VERT. SCALE: 1"=10'

AI Number 89904
 Tidal Wetland Application Number 14-WL-0609/201461074
 Non-tidal Wetlands Application Number 14-NT-0235/201461074

	Joint Permit Application for the Dump Road Area Groundwater Remediation Project	
OUTFALL TO FROG MORTAR CREEK - DIFFUSER PROFILE -		
	SCALE: AS SHOWN	FIGURE: 4-B

PLOT DATE: Oct 01, 2014 - 12:35pm
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AI Number 89904
 Tidal Wetland Application Number 14-WL-0609/201461074
 Non-tidal Wetlands Application Number 14-NT-0235/201461074

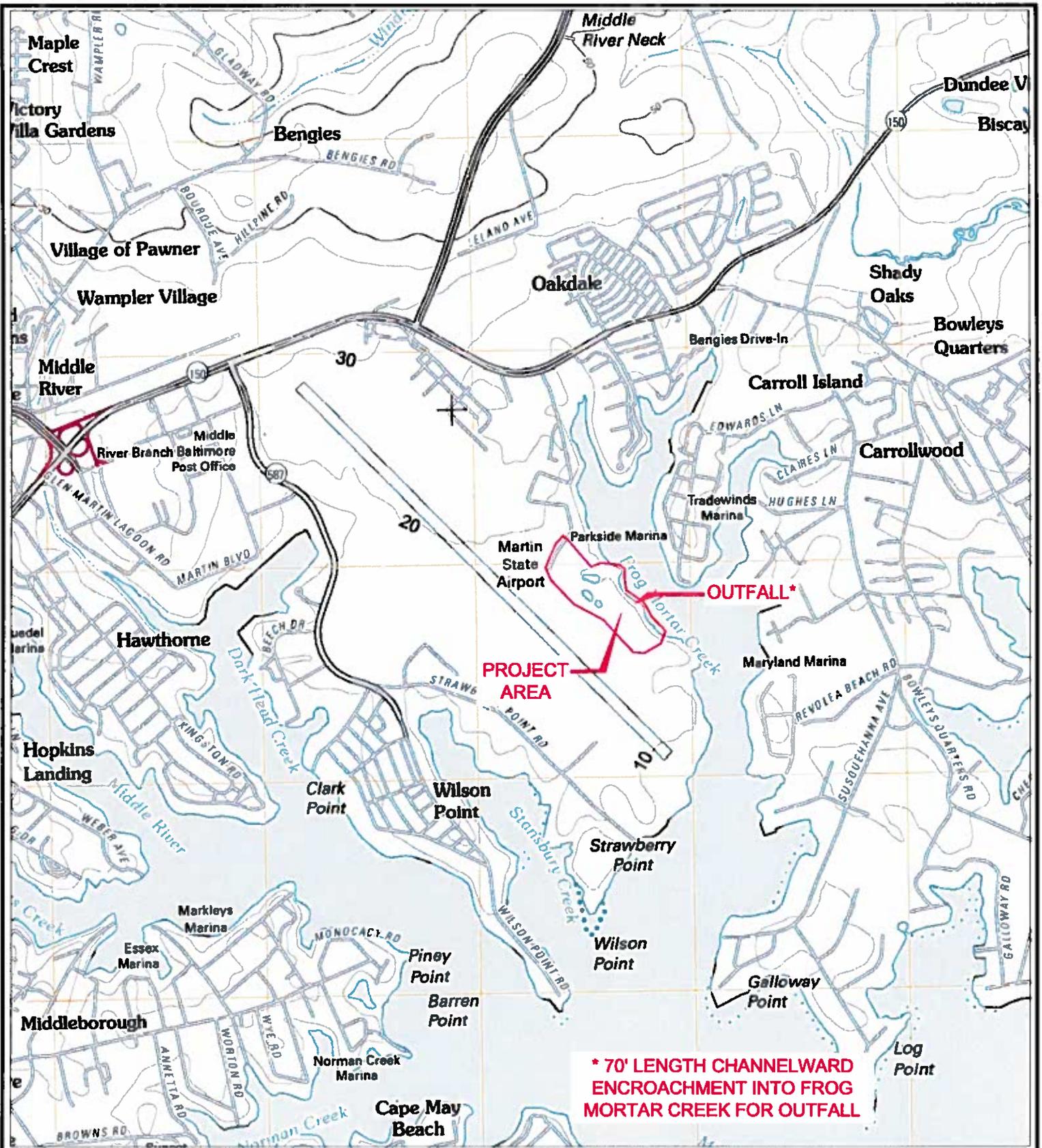
	Joint Permit Application for the Dump Road Area Groundwater Remediation Project
OUTFALL TO FROG MORTAR CREEK - DIFFUSER DETAIL -	
	SCALE: AS SHOWN
FIGURE: 4-C	

PUBLIC NOTICE

1. **Application:** License #: 14-WL-0609 Tracking #: 201461074 AI#: 89904
2. **Reviewer:** Robert Rushlow
3. **Principal Contact:** Paul Meyers
Tetra Tech, Inc.
20251 Century Blvd #200
Germantown, MD 20874
4. **Publication:** The Avenuc- Baltimore County
5. **PN Period:** 12/15 to 1/14/15
6. **Location:** Martin State Airport, Middle River, Baltimore County, Maryland
7. **Waterway:** Frog Mortar Creek

8. **Public Notice Description:**

MARYLAND AVIATION ADMINISTRATION, P.O. Box 8766, Baltimore Washington International, MD 21240 has applied to emplace a 70-foot long, six inch diameter high density polyethylene outfall discharge pipe with three diffusers and six marker/location piles in Frog Mortar Creek. The outfall pipe will include placement of 10 cubic yards of riprap to cover and hold the pipe in place on the creek bed all within a maximum encroachment of 70-feet from the mean high water line. The pipe serves an adjacent upland groundwater treatment facility and the purpose of the project is to limit the migration of contaminated groundwater into Frog Mortar Creek. The project is located adjacent to the Martin State Airport, Middle River, Baltimore County, Maryland. For more information please contact Robert Rushlow at Robert.Rushlow@maryland.gov or 410-537-4023.



*
 11° 16' MN
 200 MILS GN
 0° 55'
 18 MILS
 UTM GRID AND 2011 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET



MIDDLE RIVER, MD

2011

SCALE 1:24 000

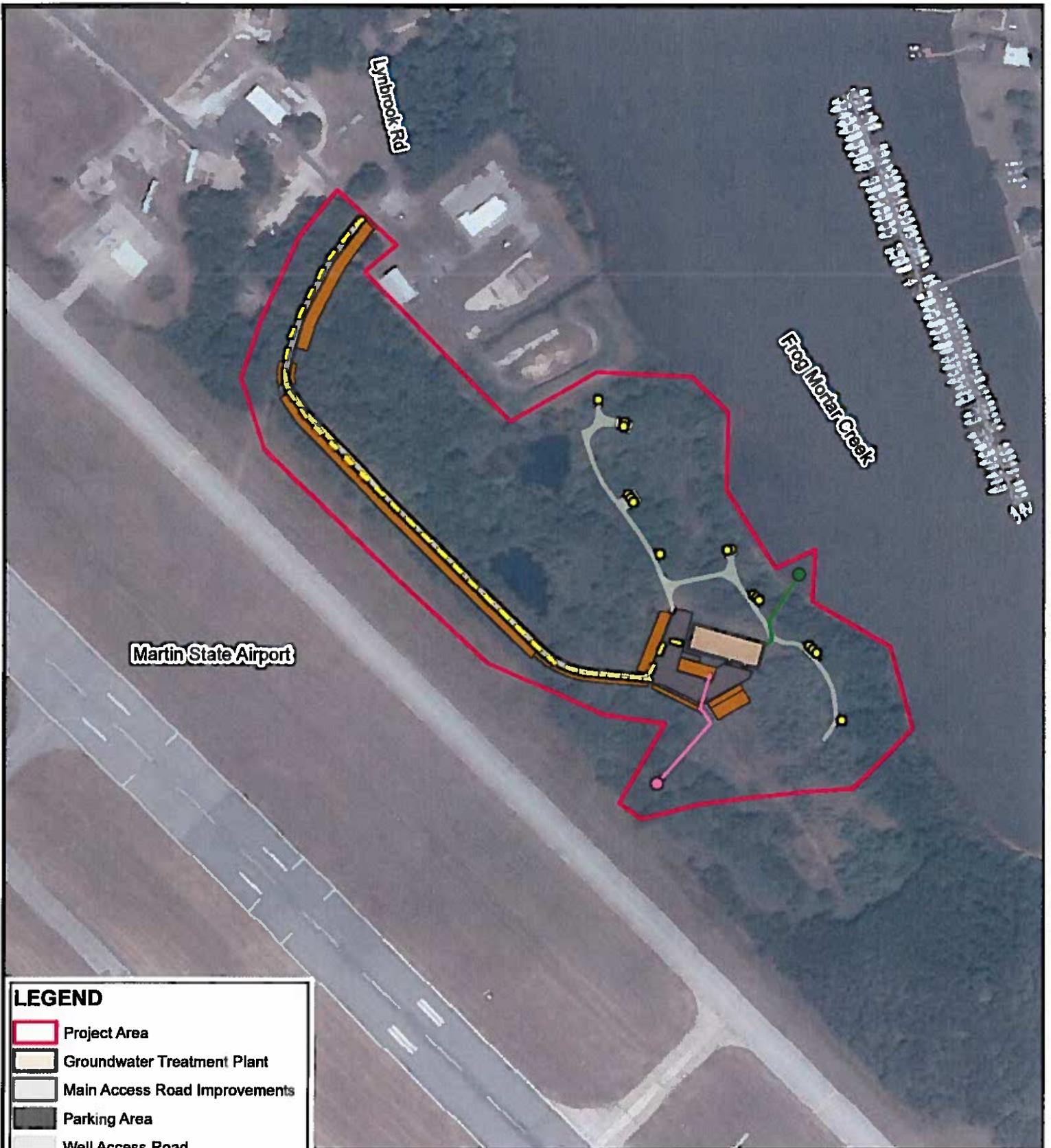
CONTOUR INTERVAL 10 FEET
 NORTH AMERICAN VERTICAL DATUM OF 1988

SHT 1 of 6
 REVISED



Joint Permit Application for the
 Dump Road Area Groundwater
 Remediation Project

MARYLAND AVIATION
 ADMINISTRATION
 14-WL-0609
 201461074
 AI 89904
 10/15/14



LEGEND

- Project Area
- Groundwater Treatment Plant
- Main Access Road Improvements
- Parking Area
- Well Access Road
- Stormwater Management Features
- Utilities
- Plant Effluent
- Stormwater Discharge Pipe
- Effluent Discharge
- Stormwater Outfall
- Extraction Well



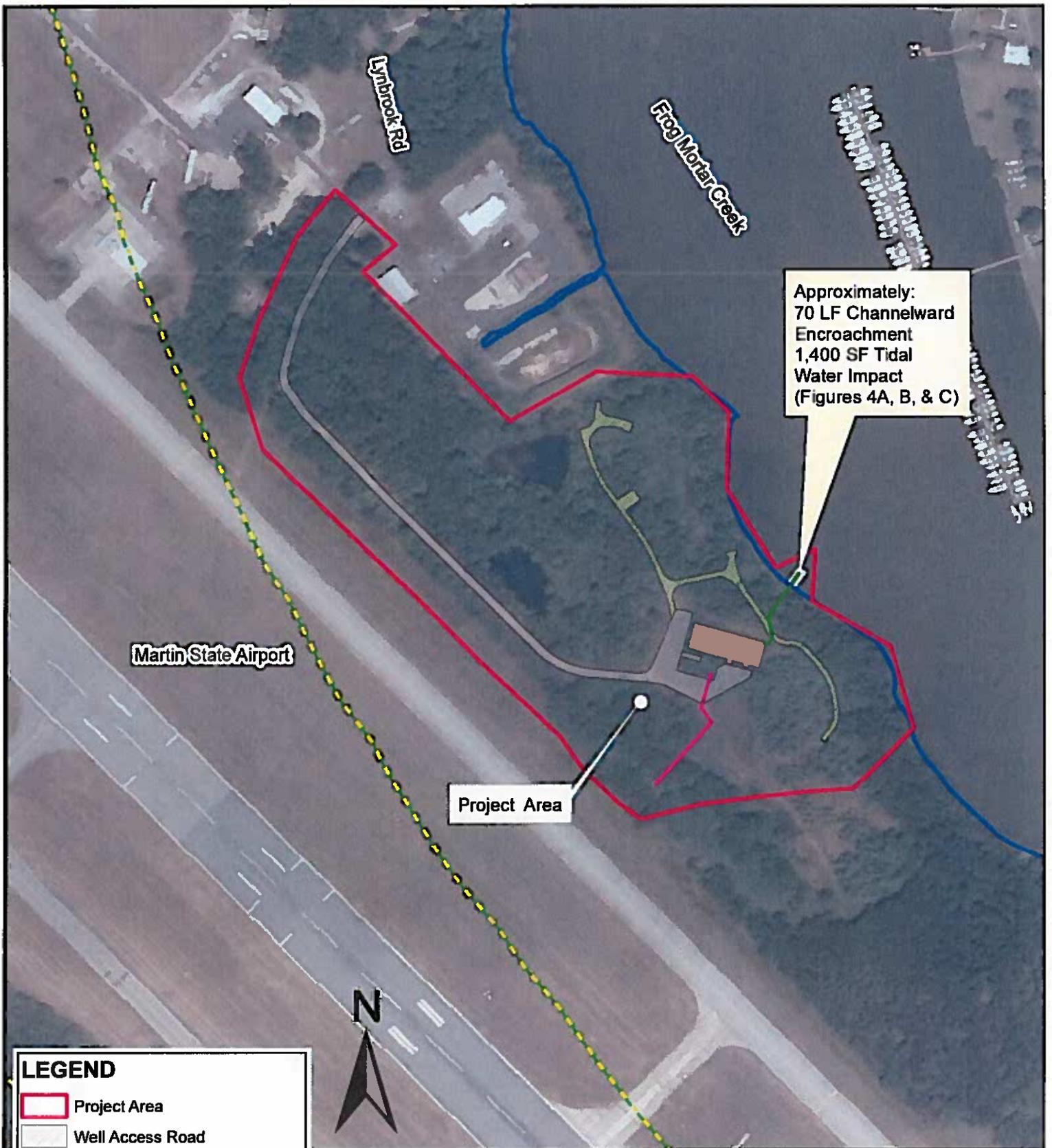
SHT 286



Joint Permit Application
for the Dump Road Area
Groundwater Remediation Project

At N
Tide
Non

14-WL-0609
201461074
AI 89904
10/15/14



Approximately:
 70 LF Channelward
 Encroachment
 1,400 SF Tidal
 Water Impact
 (Figures 4A, B, & C)

Project Area

Martin State Airport

Lyndbrook Rd

Fico Motor Creek



LEGEND

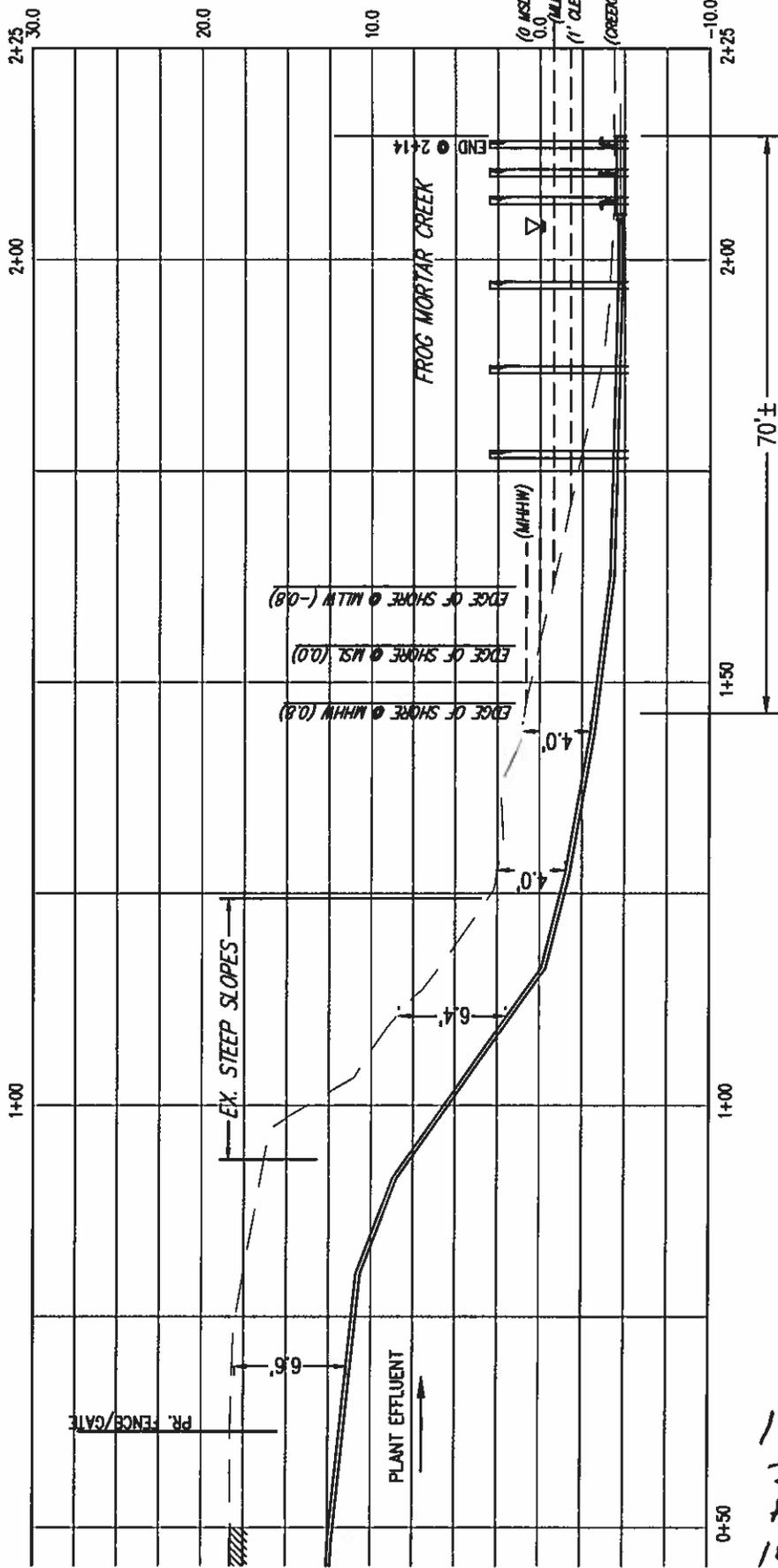
- Project Area
- Well Access Road
- Main Access Road
- Groundwater Treatment Plant
- Impacted Tidal Area
- Critical Area - Baltimore County
- Plant Effluent
- Stormwater Discharge
- Mean High Water Line

NOTES
 LF = Liner Foot
 SF = Square Foot



Joint Permit Application
 for the Dump Road Area
 Groundwater Remediation Project

14-WL-0609
 201461074
 AI 89904
 10/15/14 386



PLANT EFFLUENT DISCHARGE

HORIZ. SCALE: 1"=20'

VERT. SCALE: 1"=10'

14-WL-0609
 201461074
 AI 89904
 10/15/14 SH 5 of 5

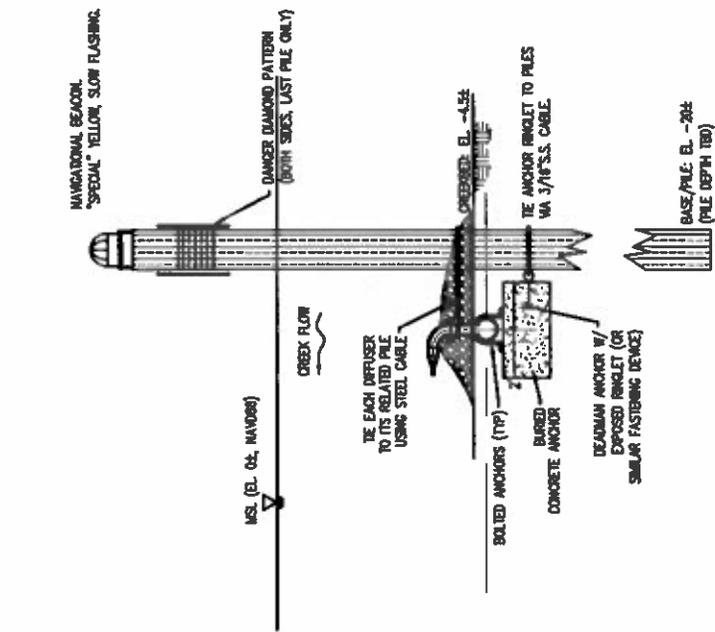


Joint Permit Application for the
 Dump Road Area Groundwater
 Remediation Project

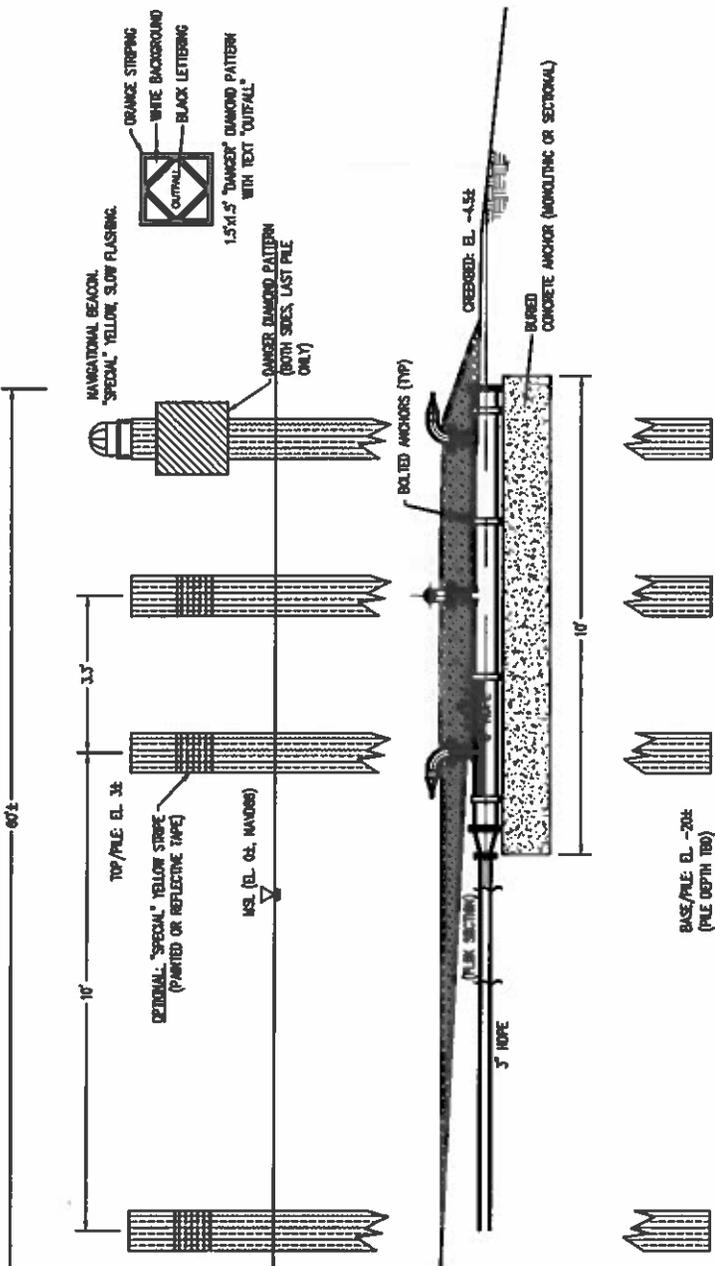
**OUTFALL TO FROG MORTAR CREEK
 - DIFFUSER PROFILE -**

TETRA TECH
 SCALE: AS SHOWN
 FIGURE: 4B

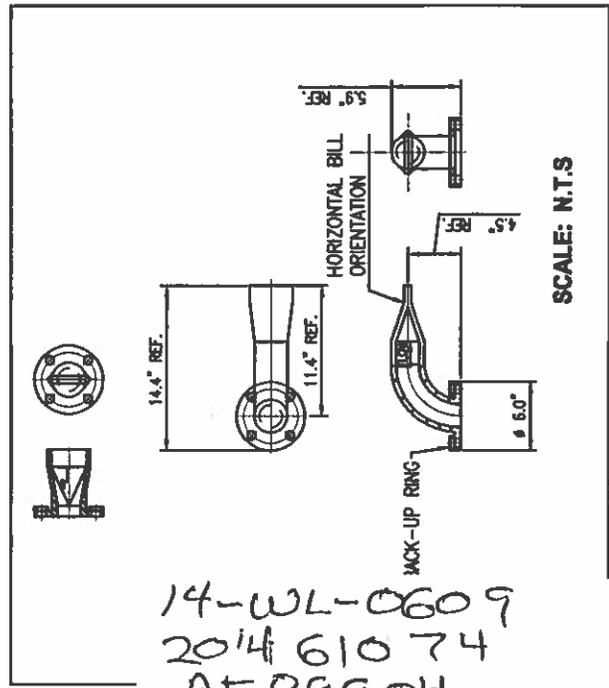
AI Number 89904
 Tidal Wetland Application Number 14-WL-0609/201461074
 Non-tidal Wetlands Application Number 14-NT-0235/201461074



SECTION: ANCHORING AND NAVIGATIONAL AID



PROFILE: ANCHORING AND NAVIGATIONAL AID



14-WL-0609
2014 610 74
AT 89904
10/15/14 SHT 5 of 6



Joint Permit Application for the
Dump Road Area Groundwater
Remediation Project

OUTFALL TO FROG MORTAR CREEK
- DIFFUSER DETAIL -

TETRA TECH
SCALE: AS SHOWN
FIGURE: 4-C

AI Number 89904
Tidal Wetland Application Number 14-WL-0609/201461074
Non-tidal Wetlands Application Number 14-NT-0235/201461074

Permit Application Screening Form

Tracking No: 201461074
 Applicant: MAA/Martin State Airport, DRA
 County: Baltimore ADC Map: 38 C 7 Ed: 28
 Project Type: Culvert
 Waterbody: Frog Mortar Creek
 Stream Use: II Fed. Nav. Channel? No
 100 Year Floodplain: Yes Within 150' of channel? No
 Critical Area/1000' Buffer: Yes FEMA FIRM Index: 2400100435F
 Floodway? No Floodplain Description: AE

Location

State Plane 83 Meters: N 184260 E 451075 MD Watershed (8 Digit): 02130807
 Latitude/Longitude 83: N 39° 19'30" W -76° 24'28" HUC Basin: 020600
 DOQQ: MIDDLE RIVER NE HUC Watershed: 02060003

Tidal Wetland Boundary #: 033
 Aerial Photo #: BA1-25RL-103
 6" Statewide Photo Grid #: CA298
 Taxmap: BACO091

Reference Information

Tier II Streams	No	Polygon ID:	
Tier II Catchments	No	N/A	
Stronghold Watershed	No	Has Interest Points?	N/A
MBSS	No	Has Records?	N/A
TMDL	Yes	Has Attachments?	N/A
NWI Wetlands:	Yes	Types (if any):	
		EIUBL	
		PUBHh	
DNR Wetlands:	Yes	Types (if any):	
		EIUBL	
		E2US2P	
		PUBF _x	
MHT:	Yes	ARCH	
Sens/Endg Species:	No		
NOB:	No		
WSSC:	No	SAV:	Yes

Screened By: sm Date Screened: 7/9/2014
 Comments: Project Type: Culvert, Outfall, Road Crossing
 MHT: ARCH, MIHP
 SAV: 2009-2010
 Mitigation: Within buffer of MD AIR NATL GUARD/MARTIN AIRPO mitigation site.
 Field Comments:



MARYLAND DEPARTMENT OF THE ENVIRONMENT

1800 Washington Boulevard • Baltimore MD 21230
410-537-3000 • 1-800-633-6101 • www.mde.maryland.gov

Larry Hogan
Governor

Ben Grumbles
Secretary

Boyd Rutherford
Lieutenant Governor

Date of Permit Issuance: 7/16/2015

Maryland Aviation Administration
P.O. Box 8766
BWI Airport, Maryland 21204

RE: **MDRCCS07D**

Dear Mr. John Hurt:

Please find enclosed documentation of coverage under the 2014 General Permit for Stormwater Associated with Construction Activity (MDRC) for:

Lockheed Martin Temporary Groundwater Remediation Facility

issued to

Maryland Aviation Administration

Please note that the effective date of coverage under the General Permit is the date on the attached cover sheet. If the current erosion and sediment control plan approval covers only part of the entire site covered by this permit, be advised that this permit does not authorize discharges from the other portions of the site until the appropriate erosion and sediment control approval authority approves the erosion and sediment control plan for those portions. The permit also requires that the site have an approved stormwater management plan (unless exempt or waived by the stormwater approval authority) prior to earth disturbance. Part IV.C.3 of the permit requires the permittee to use the standard written report form as provided by MDE. The form is available on MDE's website at the following location both as a fillable Microsoft Word form and as an Adobe Acrobat file.

<http://go.usa.gov/gFMW>

Print this letter and the cover sheet and keep them with your permit file. In addition, download the 2014 General Permit from the above website, print it for your permit file, and refer to it to ensure compliance with its terms. Submit any modifications to this coverage, Transfers of Authorization, or Notices of Termination via the ePermits portal. If your contact information changes, update it through the ePermits portal.

Your cooperation in this matter is appreciated. If you have any questions, please call the administrative team for the General Permit at (410) 537-3019.

Sincerely,

Heather L. Nelson, Acting Director
Compliance Program
Water Management Administration





**GENERAL PERMIT FOR STORMWATER ASSOCIATED
WITH CONSTRUCTION ACTIVITY**

State Discharge Permit Number:

MDRCCS07D

Effective Date: 7/16/2015

Expiration Date: 12/31/2019

NOTE: If site work is complete per Part II. I. prior to the expiration date, the permittee must submit a Notice of Termination and terminate the permit.

Pursuant to the provisions of Title 9 of the Environment Article, Annotated Code of Maryland, and regulations promulgated thereunder, and the provisions of the Clean Water Act, 33 U.S.C., Section 1251 et. seq., and implementing regulations 40 CFR Parts 122, 123, 124 and 125, the Department of the Environment hereby establishes conditions and requirements pertinent to stormwater associated with construction activity at the site described below and authorizes:

**Maryland Aviation Administration
P.O. Box 8766
BWI Airport, Maryland 21204**

TO DISCHARGE STORMWATER FROM:

Lockheed Martin Temporary Groundwater Remediation Facility
construction project on
4.99 acres
at property located at
Martin State Airport
701 Wilson Point Road, Middle River, Maryland 21220

If the current erosion and sediment control plan approval covers only part of the entire site covered by this permit, this permit does not authorize discharges from the other portions of the site until the appropriate erosion and sediment control approval authority approves the erosion and sediment control plan for those portions.

TO:

Surface waters -- Frog Mortar Creek

which is

Waters protected for Support of Estuarine and Marine Aquatic Life and Shellfish Harvesting

in accordance with the 2014 General Permit. The vicinity map submitted with the Notice of Intent is considered incorporated herein and made a part hereof.



MARYLAND DEPARTMENT OF THE ENVIRONMENT

1800 Washington Boulevard • Baltimore MD 21230

410-537-3000 • 1-800-633-6101 • www.mde.maryland.gov

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

Robert M. Summers, Ph.D., Secretary

STORMWATER MANAGEMENT AND SEDIMENT & EROSION CONTROL
APPROVAL STATE/FEDERAL PROJECTS

MDE NUMBER: 13-SF-0255

APPROVED BY: *Michelle Korman*
Sediment & Stormwater Plan Review Division

EFFECTIVE DATE: December 2, 2014 (Pursuant to Criteria Noted Below)

IN COMPLIANCE WITH: Environment Article, Sections 4-106 and 4-205 Annotated Code of Maryland

APPROVAL IS HEREBY GRANTED: Maryland Aviation Administration
ADDRESS: P.O. Box 8766
BWI Airport, Maryland 21240
Attn: Mr. John Hurt



HEREINAFTER KNOWN AS OWNER,
FOR THE PLANS AND SPECIFICATIONS PRESENTED FOR: Contract No. N/A

AI No. 106887

Lockheed Martin Groundwater Treatment Plant at the Dump Road Area - Baltimore County

PREPARED BY: Tetra Tech

PLANS DATED: November 7, 2014

REVISIONS DATED: November 24, 2014

This APPROVAL is granted subject to the following conditions:

1. This Approval shall become null and void if the construction authorized herein has not begun within two (2) years from the granting of this Approval. If the construction authorized herein has not been completed within five (5) years from the granting of this Approval, the Approval shall become null and void except that these limits may be extended at the discretion of the Department.
2. The Approval is subject to all laws and regulations now in effect and may be revoked if it is subsequently determined that this authorization violates other laws of the State. Construction shall comply with approved terms.
3. The location and dimensions of all Sediment Control structures, excavation and filling shall be in accordance with plans approved by the Department of the Environment Water Management Administration (MDE/WMA). Owner or authorized agent must obtain written approval from the MDE/WMA for any plan modifications or changes. A copy of the approved plan with any approved modifications and this Approval shall be available at the construction site for reference during the construction period.
4. Off-site borrow or waste sites require local county and Soil Conservation District approvals if they are located on private property or MDE/WMA approval if on State or Federal property. Local approval numbers shall be furnished to the MDE/WMA Inspector.
5. The Owner or his authorized agent shall notify the MDE/WMA Compliance Program at (410) 537-3510, at least seven (7) days prior to initiation of the project and five (5) days after work ends.
6. This project has an earth disturbance of greater than 1.0 acre. Prior to any earth disturbance an NPDES Application for an Individual or a General Permit to Discharge Stormwater Associated with Construction Activities must be submitted to and approved by MDE.
7. Stormwater management and Environmental Site Design requirements have been met by 14 non-roof top disconnection areas, 1 rooftop disconnection, 4 micro-bioretenion facilities, and 4 grass swales. The maintenance access path to the well heads will be constructed out of reinforced turf.

cc: MDE/WMA Wetlands and Waterways
Chesapeake Bay Critical Area Commission
1804 West Street, Suite 100
Annapolis, Maryland 21401

MEK

NPDES PERMIT E-MAIL DOCUMENTATION

From: Robin Bowie [rbowie@bwiairport.com]
Sent: Wednesday, September 9, 2015 1:26 PM
To: 'Shilland, Peter'; Paul Calligan; Myers, Paul; Kumar, Shiva
Subject: RE: Lockheed Martin Corporation - Application No.:14-DP-3820/MD0071773

Thank you!

Ms. Robin M. Bowie
Manager, Division of Environmental Planning Maryland Aviation Administration Baltimore/Washington
International Thurgood Marshall Airport
410-859-7103 (office)
410-859-7082 (fax)
rbowie@bwiairport.com

Mailing Address
P.O. Box 8766
BWI Airport, MD 21240

Overnight Shipping Address
991 Corporate Boulevard
Linthicum, MD 21090

From: Shilland, Peter [<mailto:ShillandPJ@cdmsmith.com>]
Sent: Wednesday, September 09, 2015 12:44 PM
To: Robin Bowie; Paul Calligan; Paul Myers; Shiva Kumar
Subject: Fwd: Lockheed Martin Corporation - Application No.:14-DP-3820/MD0071773

Robin, this is the latest news on the NPDES permit.

Peter

Sent from my iPhone

Begin forwarded message:

From: "Kumar, Shiva" <Shiva.Kumar@tetrattech.com<<mailto:Shiva.Kumar@tetrattech.com>>>>
Date: September 8, 2015 at 12:37:00 PM EDT
To: "Calligan, Paul" (paul.calligan@lmco.com<<mailto:paul.calligan@lmco.com>>)"
<paul.calligan@lmco.com<<mailto:paul.calligan@lmco.com>>>, "Shilland, Peter"
(ShillandPJ@cdmsmith.com<<mailto:ShillandPJ@cdmsmith.com>>)"
<ShillandPJ@cdmsmith.com<<mailto:ShillandPJ@cdmsmith.com>>>, "Salvetti, Mark"
(SalvettiMJ@cdmsmith.com<<mailto:SalvettiMJ@cdmsmith.com>>)"
<SalvettiMJ@cdmsmith.com<<mailto:SalvettiMJ@cdmsmith.com>>>, "
Darrylkay@aol.com<<mailto:Darrylkay@aol.com>>" <Darrylkay@aol.com<<mailto:Darrylkay@aol.com>>>>
Cc: "Martin, Michael" <Michael.Martin@tetrattech.com<<mailto:Michael.Martin@tetrattech.com>>>, "Pike,
Chris" <Chris.Pike@tetrattech.com<<mailto:Chris.Pike@tetrattech.com>>>, "Brenner, Samantha"
<Samantha.Brenner@tetrattech.com<<mailto:Samantha.Brenner@tetrattech.com>>>>
Subject: FW: Lockheed Martin Corporation - Application No.:14-DP-3820/MD0071773 FYI – NPDES
permit TD Advertisement; see below

From: Michael Richardson -MDE- [<mailto:michael.richardson@maryland.gov>]
Sent: Tuesday, September 08, 2015 12:31 PM
To: Kumar, Shiva <Shiva.Kumar@tetrattech.com<<mailto:Shiva.Kumar@tetrattech.com>>>>
Cc: Olukayode Abiodun -MDE-
<olukayode.abiodun@maryland.gov<<mailto:olukayode.abiodun@maryland.gov>>>>
Subject: Re: Lockheed Martin Corporation - Application No.:14-DP-3820/MD0071773

Shiva,

Letters announcing the publication of the tentative determination are going out today. The notices will be published September 17 and 24 in The Sun. Thus the request for public hearing period will end on October 8 and the comment period (unless an extension is requested) will end on October 19, 2015.

Regards,

Michael

Michael Richardson, Chief
Industrial and General Permits Division
Wastewater Permits Program
Water Management Administration
Maryland Department of the Environment
Voice ': 410-537-3323
Fax ': 410-537-3163
Email: M<<mailto:mrichardson@mde.state.md.us>>ichael.Richardson@Maryland.gov<<mailto:ichael.Richardson@Maryland.gov>>
•www.mde.state.md.us<<http://www.mde.state.md.us/>>

On Tue, Sep 8, 2015 at 11:11 AM, Kumar, Shiva
<Shiva.Kumar@tetrattech.com<mailto:Shiva.Kumar@tetrattech.com>> wrote:
Hello Olu,

Hope you had a good Labor Day weekend. Any news on publishing the Notice of Tentative Determination?

Thank you.

-Shiva

From: Olukayode Abiodun -MDE-
[<mailto:olukayode.abiodun@maryland.gov><mailto:olukayode.abiodun@maryland.gov>]
Sent: Tuesday, August 25, 2015 10:41 AM
To: Kumar, Shiva <Shiva.Kumar@tetrattech.com<mailto:Shiva.Kumar@tetrattech.com>>
Cc: Michael Richardson -MDE-
<michael.richardson@maryland.gov<mailto:michael.richardson@maryland.gov>>
Subject: Re: Lockheed Martin Corporation - Application No.:14-DP-3820/MD0071773

Shiva,

Publishing the Notice Of Tentative Determination is in progress. We will inform you when it is done.

Sincerely,

Olu

On Tue, Aug 25, 2015 at 9:36 AM, Kumar, Shiva
<Shiva.Kumar@tetrattech.com<mailto:Shiva.Kumar@tetrattech.com>> wrote:

Hello Olu,

I am getting ready to get on a LM conference call. Any word on when this permit will be advertised?

Thank you.

Shiva

[http://www.roads.maryland.gov/OCImages/511_logo_sm.JPG]Maryland now features 511 traveler information!

Call 511 or visit: www.md511.org<<http://www.md511.org/>>

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