



**U.S. Army Corps
of Engineers
Baltimore District**

Public Notice

In Reply to Application Numbers:



**CORPS: CENAB-OPR-M (MTA/PURPLE LINE) 2016-61278-M07
MDE, Nontidal Wetlands and Waterways 201661278/16-NT-0297/AI153609
MD DNR CASE NUMBER FCA S14-07**

PN# 16-54 COMMENT PERIOD: September 13, 2016 through November 2, 2016

THE PURPOSE OF THIS JOINT PUBLIC NOTICE IS TO ANNOUNCE THE SCHEDULING OF TWO JOINT PUBLIC HEARINGS, AND TO SOLICIT COMMENTS FROM THE PUBLIC ABOUT THE WORK DESCRIBED BELOW. AT THIS TIME, NO DECISION HAS BEEN MADE AS TO WHETHER OR NOT PERMITS WILL BE ISSUED. THE CORPS/MDE /DNR HEARING WILL BE HELD AT THE FOLLOWING TIMES AND LOCATIONS:

Monday, October 17, 2016
Silver Spring Civic Building, Auditorium
1 Veterans Place
Silver Spring, MD 20910
(240) 777-5350
6:00 pm – 7:00 pm: Poster Session
7:00 pm: Public Hearing

Tuesday, October 18, 2016
Northwestern High School, Auditorium
7000 Adelphi Road
Hyattsville, MD 20782
(301) 985-1820
6:00 pm – 7:00 pm: Poster Session
7:00 pm: Public Hearing

The U.S. Army Corps of Engineers, Baltimore District (COE), the Maryland Department of the Environment (MDE), and the Maryland Department of Natural Resources (DNR) joint public hearing provides members of the public the opportunity to present views, opinions, and information which will be considered by the COE and MDE in evaluating the Joint Federal/State Application for the Alteration of any Floodplain, Waterway, Tidal or Non-tidal Wetland in Maryland, and the DNR in evaluating the Forest Conservation Plan (S14-07) proposed for the project. The purpose of the hearing is for the COE, MDE, and DNR to receive oral or written comments that will enable them to evaluate the impacts of the proposed project on the public interest. All interested parties, including representatives of Federal, State, and local governments and private individuals and organizations, are invited to be present or to be represented. Each will be given an opportunity to express their views regarding the proposed project.

Prior to the public hearing, from 6:00 pm to 7:00 pm, a poster session will be held where the public will have an opportunity to review exhibits and ask general questions of the applicant, Maryland Transit Administration (MTA), and their representatives. Representatives from the COE, MDE, and DNR will also be available during the poster session. Beginning at 7:00 pm, the formal public hearing will begin with agency statements, followed by public testimony. Please note that a time limit of three minutes per speaker may be set, depending on the number of speakers, to ensure that all interested parties have an opportunity to voice their views. The public hearings will be recorded and transcribed.

Anyone who is hearing impaired and/or is non-English speaking; who wishes to attend the public hearings should notify Ms. Maria Teresi at 410-962-4501 or in writing to her address below. All requests for an oral, sign language, or non-English language interpreter must be received by September 28, 2016. To the extent possible and feasible, an interpreter will be provided.

The COE and MDE have received and are evaluating a joint permit application as described below for Department of the Army authorization pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344) and State authorization pursuant to Title 5, Subtitle 5 (Waterway Construction) and Title 5, Subtitle 9 (Nontidal Wetlands) of the Environment Article, Annotated Code of Maryland. The DNR has received and

are evaluating the Forest Conservation Plan (S14-07) submitted to the State of Maryland Forest Conservation Program pursuant to the Forest Conservation Act (Natural Resources Article 5-1601 through 5-1613).

APPLICANT: Maryland Transit Administration
Attn: Mr. William Parks
6 Saint Paul Street
Baltimore, Maryland 21202-1614

LOCATION: The proposed project is located in Montgomery and Prince George's counties just inside the Washington DC area I-495/Capital Beltway. The 16.2 mile light rail transit begins just west of Wisconsin Avenue and the Bethesda Metro Station (Montgomery County) and continues to its eastern terminus at the New Carrollton Metro Station (Prince George's County). Waterways that are to be impacted include: unnamed streams, five named perennial waterways (Rock Creek, Sligo Creek, Long Branch, Northwest Branch and Northeast Branch) and adjacent jurisdictional wetlands. The named perennial streams are classified by the State of Maryland as Use I waterways (Water Contact Recreation and Protection of Nontidal Warm Water Aquatic Life) with the exception of Northwest Branch, north of East West Highway which is designated as Use IV: Recreational Trout Waters. The project is occurring in the Anacostia, Potomac, and Rock Creek watersheds.

WORK: The MTA proposes to construct a 16.2 mile light-rail transit (LRT) line, known as the Purple Line, from the Bethesda Metro Station in Montgomery County to the New Carrollton Station in Prince George's County. The proposed project utilizes existing trails and roadways for the majority of its length. The transit way would be constructed largely at grade with one tunnel section at Plymouth Road, three sections elevated on structures, and several bridge structures. The project would service five major activity centers and 16 stations. Two storage and maintenance facilities are proposed (Lyttonsville Yard and Glenridge Yard).

The project proposes the discharge of fill material into waters of the U.S., including jurisdictional wetlands, and would permanently impact approximately 0.27 acre (11,937 square feet) of forested nontidal wetlands, 0.22 acre (9,552 square feet) of emergent nontidal wetlands, 1.64 acres (71,328 square feet) of 25-foot nontidal wetland buffer, 0.13 acre (5,598 square feet) of palustrine open water, 1,304 linear feet (15,346 square feet) of perennial stream, 3,450 linear feet (19,851 square feet) intermittent stream, and 315 linear feet (1,461 square feet) of ephemeral stream. The project would also temporarily impact approximately 0.13 acre (5,582 square feet) of forested nontidal wetland, 0.34 acre (14,946 square feet) of emergent nontidal wetland, 0.46 acre (20,140 square feet) of 25-foot nontidal wetland buffer, 864 linear feet (22,039 square feet) of perennial stream, and 988 linear feet (4,125 square feet) of intermittent stream. The project would also cause disturbance in approximately 5.74 acres (250,144 square feet) of the 100-year floodplain.

The proposed project would impact approximately 367.26 acres with 42.49 acres of forest clearing as part of the Forest Conservation Plan (S14-07) submitted to the State of Maryland Forest Conservation Program.

The applicant has submitted a conceptual mitigation plan to compensate for the proposed, unavoidable permanent impacts to wetlands and waterways by restoring approximately 2,585 linear feet (108,047 square feet) of Paint Branch stream located north of 1909 Corporal Frank Scott Drive, College Park, MD, and creating 1.63 acres (71,003 square feet) of nontidal wetlands and enhancing 1.89 acres (82,328 square feet) of nontidal wetlands at the Ken-Gar Palisades Wetland Mitigation Site located at 4140 Wexford Drive, Kensington, MD. Impacts associated with Paint Branch Stream Restoration Site include permanent impacts to 2,585 linear feet (108,047 square feet) of stream, and disturbance of 4.71 acres

(204,900 square feet) of the 100-year floodplain. The proposed work at the Ken-Gar Mitigation Site will temporarily impact 1.76 acres (76,446 square feet) of emergent nontidal wetlands, 0.19 acre (8,763 square feet) of forested wetlands, and permanently impact 0.57 acre (24,829 square feet) of 25-foot nontidal wetland buffer, and cause 3.15 acres (137,293 square feet) of disturbance in the 100-year floodplain. Temporary impacts will be restored. As part of the restoration efforts, approximately 3,015 cubic yards of soil/material would be removed from the proposed wetland mitigation site. The disposal site for the soil/material has not been identified at this time.

The Federal Transit Administration (FTA) was the lead federal agency and approved the Final Environmental Impact Statement (FEIS) for the project. The FEIS can be found at www.purplelinemd.com/en/about-the-project/studies-reports/feis-document. Additional project documentation and reports can be found on the MTA Purple Line website at: www.purplelinemd.com/en/.

All work will be completed in accordance with the plans submitted with the Joint Permit Application (JPA). Copies of the plans are available at www.purplelinejpa.com, and at the following library locations. Hard copies can also be requested from the COE and MDE reviewers.

Silver Spring Library
900 Wayne Avenue
Silver Spring, MD 20910
(240) 773-9420

Prince George's Memorial Library, Hyattsville Branch
6530 Adelphi Road
Hyattsville, MD 20782
(301) 985-4690

PURPOSE: The purpose of the project is to provide faster, more direct, and more reliable east-west transit service connecting the major activity centers in the Purple Line corridor at Bethesda, Silver Spring, Takoma/Langley Park, College Park, and New Carrollton; provide better connections to Metrorail Services located in the corridor; and improve connectivity to the communities in the corridor located between the Metrorail lines.

WRITTEN COMMENTS: To be included in the official record, written comments and information provided by interested parties must be received by the COE, MDE, and DNR by the closing date of this notice's comment period, November 2, 2016, to receive consideration. The mailing addresses for submission of written comments are:

U.S. Army Corps of Engineers
Baltimore District
Attn: Ms. Maria Teresi, CENAB-OPR-M
10 S. Howard Street
Baltimore, Maryland 21201

Maryland Department of the Environment
Wetlands and Waterways Program
Attn: Ms. Emily Dolbin or Mr. Steve Hurt
1800 Washington Blvd., Suite 430
Baltimore, Maryland 21230-1708

Maryland Department of Natural Resources
Forest Service
Attn.: Ms. Marian Honecny
Supervisor, Urban and Community Forestry
580 Taylor Avenue E-1
Annapolis, Maryland 21401

If you have any questions concerning this matter, please contact Ms. Maria Teresi, COE, at (410) 962-4501 or by email at maria.teresi@usace.army.mil, Ms. Emily Dolbin, MDE, at (410) 662-7464 ext. 1653 or by email at Emily.Dolbin@maryland.gov, Mr. Steve Hurt, MDE at (410) 662-7400 or by email at Steve.Hurt@maryland.gov, and/or Ms. Marian Honecny, MD DNR, at (410) 260-8511 or by email at Marian.Honecny@maryland.gov.

The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit, which may reasonably be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors, which may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are conservation, economic, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, and consideration of property ownership and in general, the needs and welfare of the people.

The evaluation of the impact of the work described above on the public interest will include the application of the Clean Water Act Section 404(b)(1) Guidelines promulgated by the Administrator, U.S. Environmental Protection Agency, under authority of Section 404 of the Clean Water Act.

Comments are being solicited from the public; Federal, State, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the COE and MDE to determine whether to issue, modify, condition or deny each agency's permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments provided will become part of the public record for this action. Comments are also used to determine the overall public interest of the proposed activity.

For MDE, only those issues subject to regulation by the MDE Nontidal Wetlands and Waterway Construction Divisions (impacts to nontidal wetlands, wetland buffer, waterways, and the 100-year floodplain) will be considered in rendering a decision to grant or deny the MDE Permit. Written comments, and requests to be included on the interested persons list may be sent by November 2, 2016 to the Maryland Department of the Environment, Attn: Emily Dolbin or Steve Hurt, 1800 Washington Boulevard, Baltimore, Maryland 21230 or at Emily.Dolbin@maryland.gov or 410-662-7464 extension 1653, or at Steve.Hurt@maryland.gov, or 410-662-7400. Any further notices concerning actions on the application will be provided only by mail to those persons on the interested persons list. Please refer to Subsection 5-907 of the Annotated Code of Maryland or the Code of Maryland Regulations 26.23.02 for information regarding the application process.

SECTION 401 WATER QUALITY CERTIFICATION: The applicant is required to obtain a Water Quality Certification, (WQC) in accordance with Section 401 of the Clean Water Act from MDE, the Section 401 certifying agency. Any written comments concerning the work described above which relate to the WQC must be received by the Wetlands and Waterways Program, Maryland Department of the Environment, Montgomery Park Business Center, 1800 Washington Boulevard, Suite 430, Baltimore, Maryland 21230-1708 within the comment period as specified above to receive consideration. MDE has a statutory limit of one year from the date of this public notice to make its decision.

COASTAL ZONE MANAGEMENT PROGRAM: The applicant has certified in this application that the proposed activity complies with and will be conducted in a manner consistent with Maryland's federally-approved Coastal Zone Management Program (CZMP) as required by Section 307 of the Federal Coastal Zone Management Act of 1972. Public comments relating to consistency must be received by the Wetlands and Waterways Program, Maryland Department of the Environment, Montgomery Park Business Center, 1800 Washington Boulevard, Suite 430, Baltimore, Maryland, 21230-1708, within the comment period as specified above. By this public notice, the COE is requesting the State concurrence or

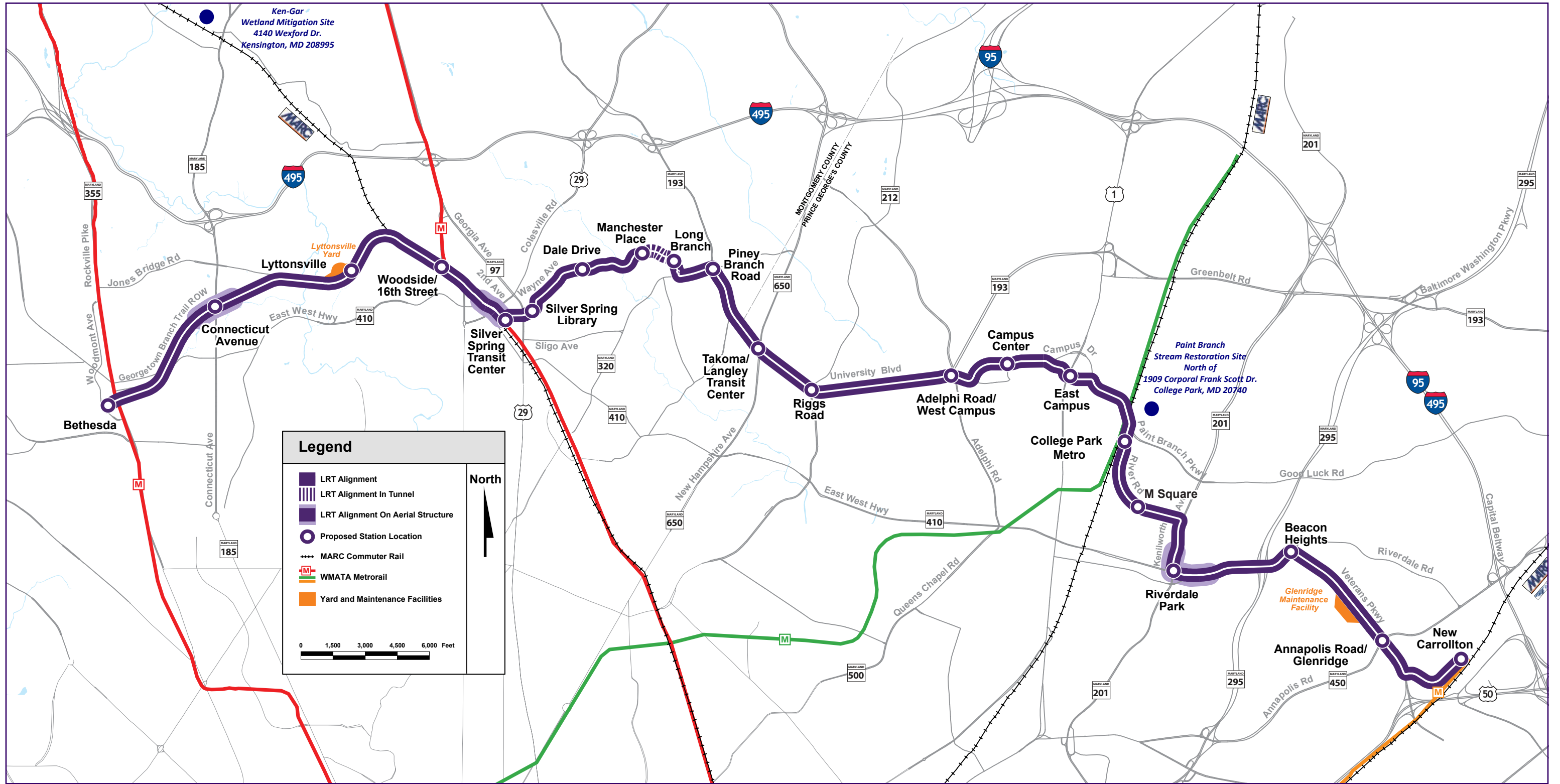
objection to the applicant's consistency statement. It should be noted that the CZMP has a statutory limit of 6 months to make its consistency determination.

The applicant must obtain any other State and local permits/approvals which are required for the proposed activities.

A preliminary review of this application indicates that the proposed work will not affect Federal listed threatened or endangered species or their critical habitat, pursuant to Section 7 of the Endangered Species Act, as amended. As the evaluation of this application continues, additional information may become available which could modify this preliminary determination.

Review of the latest published version of the National Register of Historic Places indicates that registered properties listed as eligible for inclusion, therein, may be located within the limits of disturbance associated with the proposed work. A Programmatic Agreement between MTA, the National Park Service (NPS), MD State Historic Preservation Officer (SHPO), and the Federal Transit Administration (FTA) was signed in March 2014. This agreement stipulates appropriate actions and ongoing coordination requirements for the project in regard to historic or archeological resources.

It is requested that you communicate this information concerning the proposed work to any persons known by you to be interested, but may not have not received a copy of this public notice.



Ken-Gar
Wetland Mitigation Site
4140 Wexford Dr.
Kensington, MD 20895

Legend

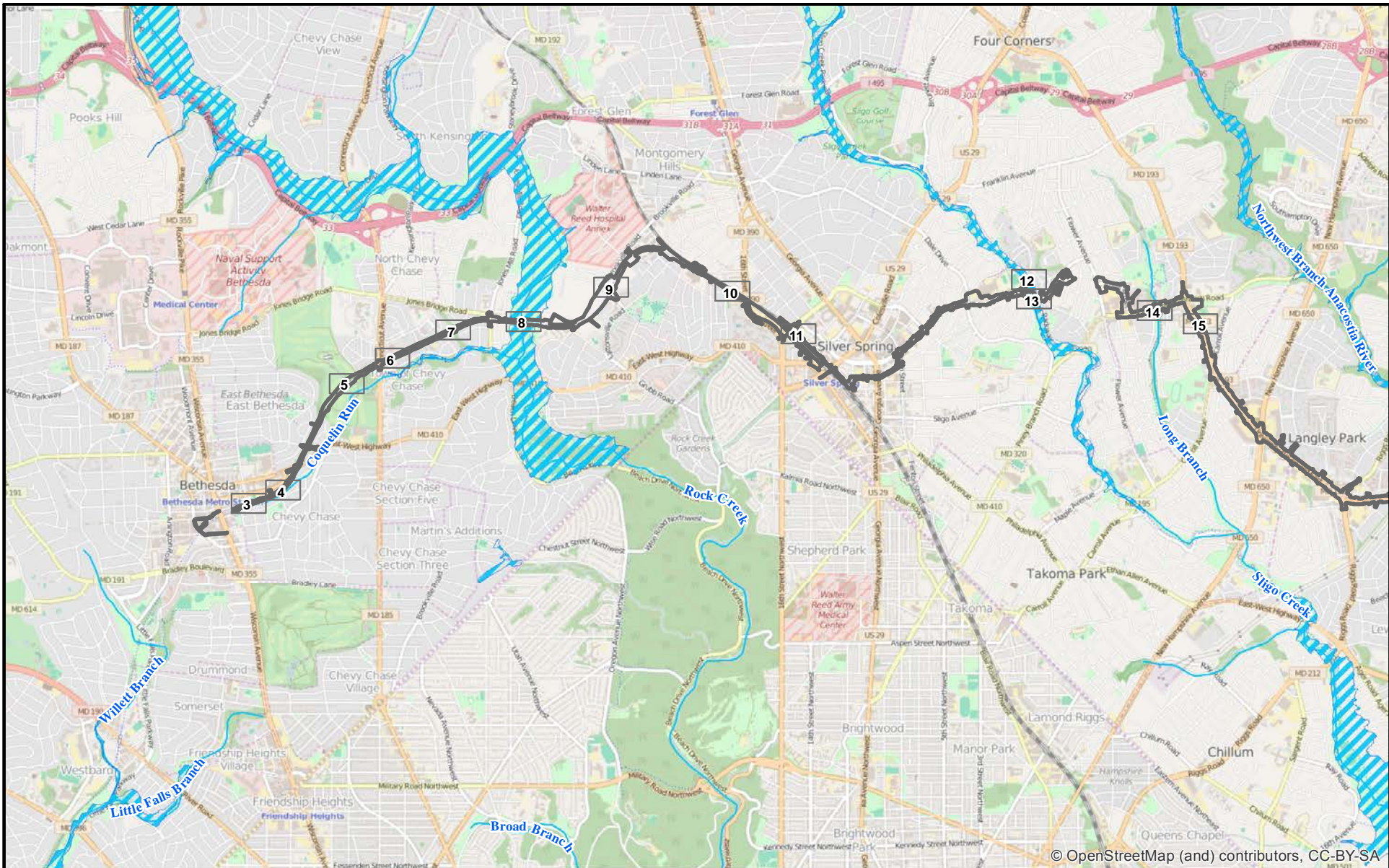
- LRT Alignment
- LRT Alignment in Tunnel
- LRT Alignment On Aerial Structure
- Proposed Station Location
- MARC Commuter Rail
- WMATA Metrorail
- Yard and Maintenance Facilities

0 1,500 3,000 4,500 6,000 Feet

North
↑

Point Branch
Stream Restoration Site
North of
1909 Corporal Frank Scott Dr.
College Park, MD 20740

Glenridge
Maintenance
Facility



© OpenStreetMap (and) contributors, CC-BY-SA

MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND TRANSIT ADMINISTRATION

PURPLE LINE
TRANSIT PARTNERS

ATKINS

3901 Calverton Blvd, Suite 400
Calverton, Maryland 20705
Telephone: 301-210-8800
www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

- Tributary / Stream
- 1 Index Sheet
- Project Limits of Disturbance
- FEMA 100-Year Floodplain (Zone AE)

0 2,000 4,000
Feet

PURPLE LINE LIGHT RAIL

**MONTGOMERY AND PRINCE GEORGE'S
COUNTIES, MARYLAND**

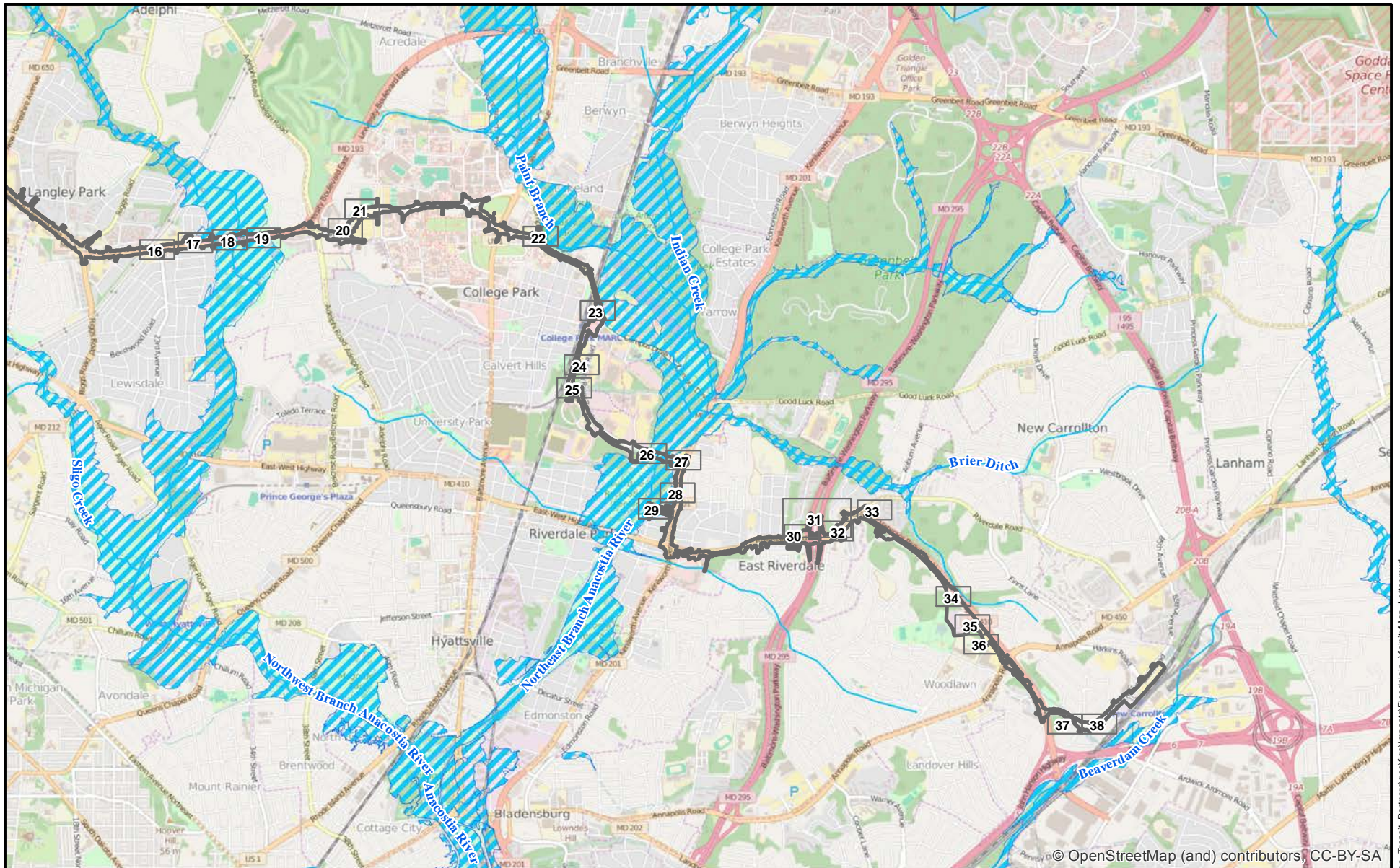
FLOODPLAIN MAP

DATE: 8/18/2016 SCALE: 1 in = 4,000ft

CONTRACT NO.

DRAWING NO.

PLANVIEW SHEET NO.
1 OF 38



© OpenStreetMap (and) contributors, CC-BY-SA

MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND TRANSIT ADMINISTRATION

PURPLE LINE
TRANSIT PARTNERS

ATKINS

3901 Calverton Blvd, Suite 400
Calverton, Maryland 20705
Telephone: 301-210-8800
www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

- Tributary / Stream
- 1 Index Sheet
- Project Limits of Disturbance
- FEMA 100-Year Floodplain (Zone AE)

0 2,000 4,000
Feet

PURPLE LINE LIGHT RAIL

**MONTGOMERY AND PRINCE GEORGE'S
COUNTIES, MARYLAND**

FLOODPLAIN MAP

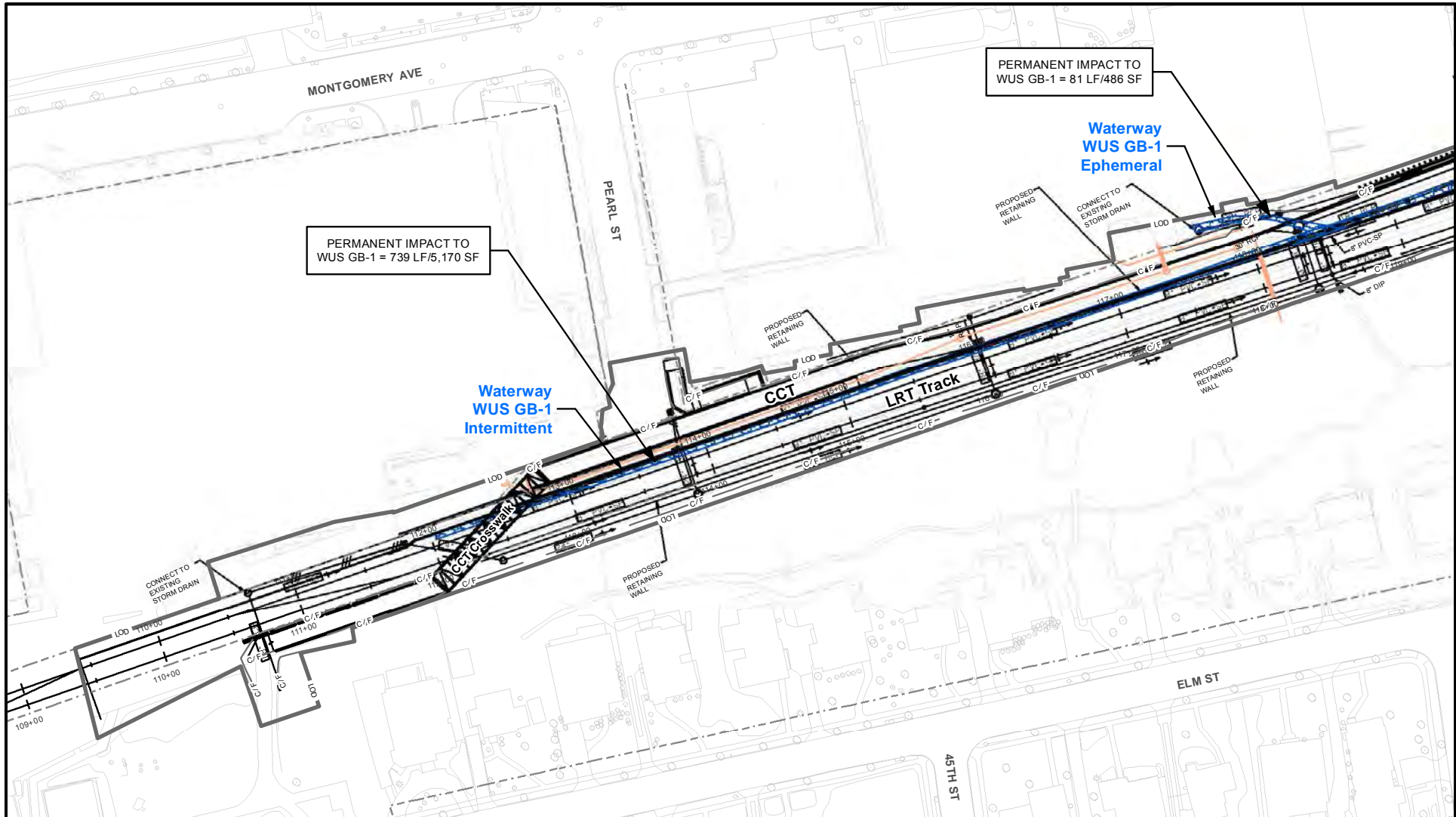
DATE: 8/18/2016 SCALE: 1 in = 4,000ft

CONTRACT NO.

DRAWING NO.

PLANVIEW SHEET NO.
2 OF 38

FILE: N:\Geospatial\Clients\O_PurpleLine_Transit_Partners\geofigs\impacts\Floodplain_VicinityMap_Letter.mxd
DATE: 8/18/2016



<ul style="list-style-type: none"> WETLAND BOUNDARY OPEN WATER UNIMPACTED STREAMS UNIMPACTED WETLANDS UNIMPACTED ROW 	<ul style="list-style-type: none"> WB 25-FT WETLAND BUFFER FLP 100-YEAR FLOODPLAIN PROJECT LIMITS OF DISTURBANCE Stream Flow 	<ul style="list-style-type: none"> C/F LIMITS OF CUT/FILL ROW PROPOSED UTILITIES PROPOSED RAIL ALIGNMENT ARCHAEOLOGICAL SITE 	WETLAND IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND IMPACTS = 0 SF/0 AC PERMANENT WETLAND IMPACTS = 0 SF/0 AC 	WETLAND BUFFER IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND BUFFER IMPACTS = 0 SF/0 AC PERMANENT WETLAND BUFFER IMPACTS = 0 SF/0 AC
STREAM AND OPEN WATER IMPACTS <ul style="list-style-type: none"> TEMPORARY WUS IMPACTS = 0 LF/0 SF PERMANENT WUS IMPACTS = 820 LF/5656 SF 			<ul style="list-style-type: none"> PERMANENT POW IMPACTS = 0 SF/0 AC 	100-YEAR FLOODPLAIN IMPACTS <ul style="list-style-type: none"> TEMPORARY FLOODPLAIN IMPACTS = 0 SF/0 AC PERMANENT FLOODPLAIN IMPACTS = 0 SF/0 AC

MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND TRANSIT ADMINISTRATION

District of Columbia

ATKINS

3901 Calverton Blvd, Suite 400
Calverton, Maryland 20735
Telephone: 301-210-6800
www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

STREAM IMPACTS

- TEMPORARY PERENNIAL IMPACT = 0 SF/0 LF
- PERMANENT PERENNIAL IMPACT = 0 SF/0 LF
- TEMPORARY INTERMITTENT IMPACT = 0 SF/0 LF
- PERMANENT INTERMITTENT IMPACT = 5170 SF/739 LF
- TEMPORARY EPHEMERAL IMPACT = 0 SF/0 LF
- PERMANENT EPHEMERAL IMPACT = 486 SF/61 LF

0 50 100 Feet

PURPLE LINE LIGHT RAIL

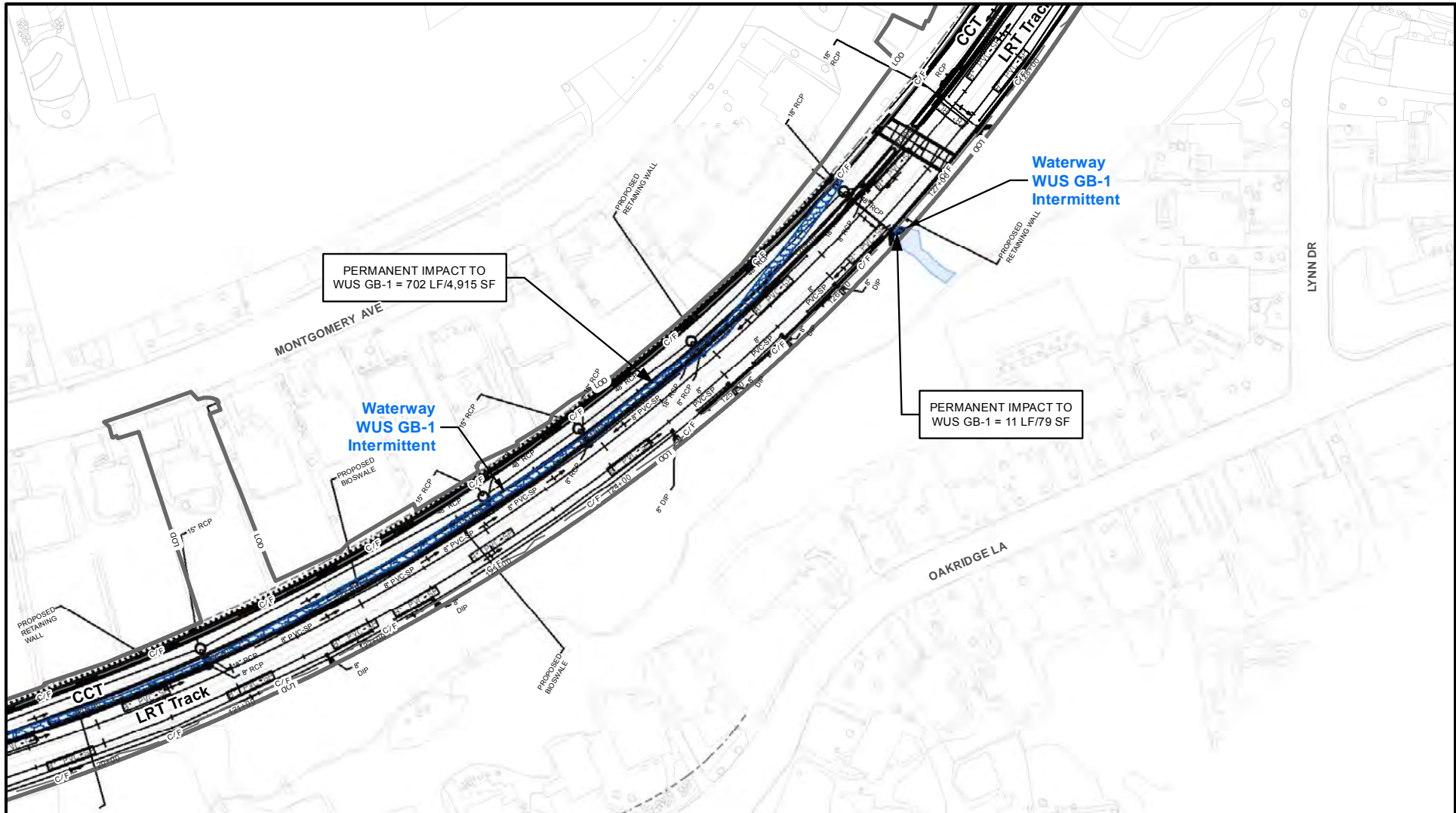
MONTGOMERY AND PRINCE GEORGE'S COUNTIES, MARYLAND

WATERS OF THE U.S. IMPACTS

DATE: 8/18/2016 SCALE: 1in = 100ft

CONTRACT NO.
DRAWING NO.
PLANVIEW SHEET NO.
3 OF 38

FILE: N:\Geospatial\Clients\O_PurpleLine_Transit_Partners\geofigs\impacts\impact_Map_1eter_v13.mxd DATE: 8/19/2016



<ul style="list-style-type: none"> WETLAND BOUNDARY OPEN WATER UNIMPACTED STREAMS UNIMPACTED WETLANDS UNIMPACTED ROW 	<ul style="list-style-type: none"> WB 25-FT WETLAND BUFFER FLP 100-YEAR FLOODPLAIN PROJECT LIMITS OF DISTURBANCE Stream Flow 	<ul style="list-style-type: none"> C/F LIMITS OF CUT/FILL ROW PROPOSED UTILITIES PROPOSED RAIL ALIGNMENT ARCHAEOLOGICAL SITE 	WETLAND IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND IMPACTS = 0 SF/0 AC PERMANENT WETLAND IMPACTS = 0 SF/0 AC STREAM AND OPEN WATER IMPACTS <ul style="list-style-type: none"> TEMPORARY WUS IMPACTS = 0 LF/0 SF PERMANENT WUS IMPACTS = 713 LF/4994 SF 	WETLAND BUFFER IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND BUFFER IMPACTS = 0 SF/0 AC PERMANENT WETLAND BUFFER IMPACTS = 0 SF/0 AC 100-YEAR FLOODPLAIN IMPACTS <ul style="list-style-type: none"> TEMPORARY FLOODPLAIN IMPACTS = 0 SF/0 AC PERMANENT FLOODPLAIN IMPACTS = 0 SF/0 AC
---	--	---	--	--

MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND TRANSIT ADMINISTRATION

District of Columbia

ATKINS
3901 Calverton Blvd, Suite 400
Calverton, Maryland 20705
Telephone: 301-210-6800
www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

STREAM IMPACTS

- TEMPORARY PERENNIAL IMPACT = 0 SF/0 LF
- PERMANENT PERENNIAL IMPACT = 0 SF/0 LF
- TEMPORARY INTERMITTENT IMPACT = 0 SF/0 LF
- PERMANENT INTERMITTENT IMPACT = 4994 SF/713 LF
- TEMPORARY EPHEMERAL IMPACT = 0 SF/0 LF
- PERMANENT EPHEMERAL IMPACT = 0 SF/0 LF

0 50 100 Feet

PURPLE LINE LIGHT RAIL

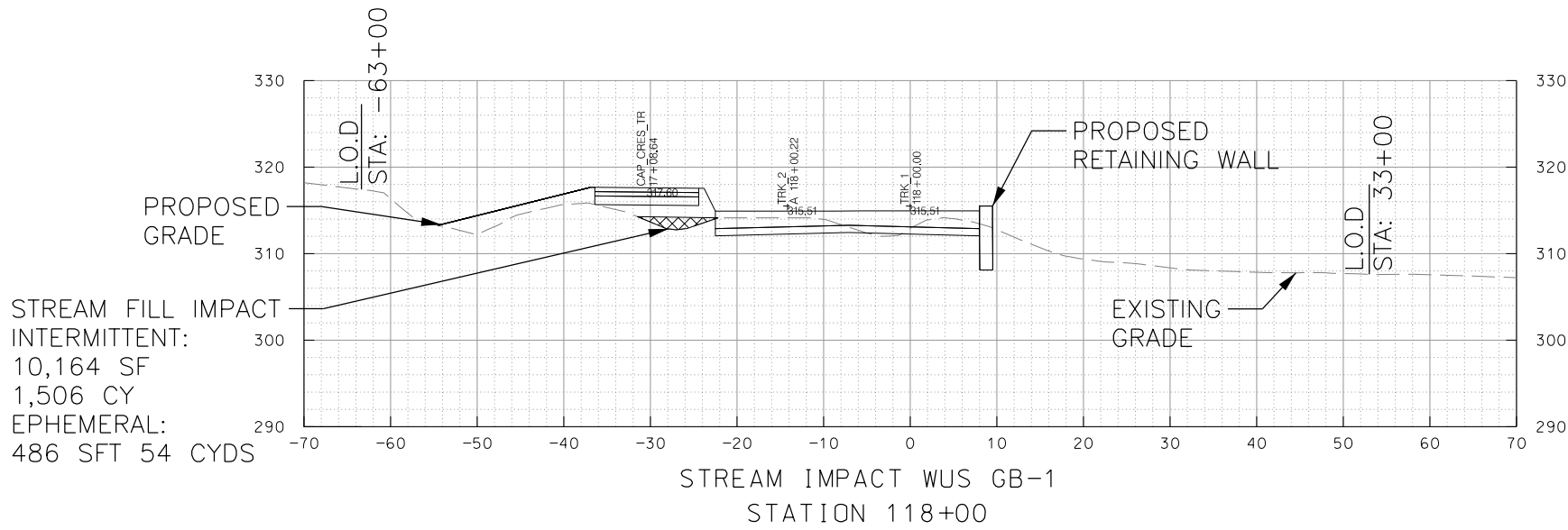
MONTGOMERY AND PRINCE GEORGE'S COUNTIES, MARYLAND

WATERS OF THE U.S. IMPACTS

DATE: 8/18/2016 SCALE: 1in = 100ft

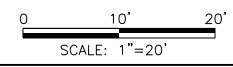
CONTRACT NO.
DRAWING NO.
PLANVIEW SHEET NO.
4 OF 38

FILE: N:\Geospatial\Clients\O_PurpleLine_Transit_Partners\geofigs\impacts\impact_Map_Jeter_v13.mxd DATE: 8/19/2016



STREAM IMPACT WUS GB-1
STATION 118+00

SCALE: 1"=20'



MARYLAND DEPARTMENT OF TRANSPORTATION
MARYLAND TRANSIT ADMINISTRATION



ATKINS
 350 Calverton Blvd, Suite 400
 Calverton, Maryland 20705
 Telephone: 301-210-6800
 www.atkinsglobal.com

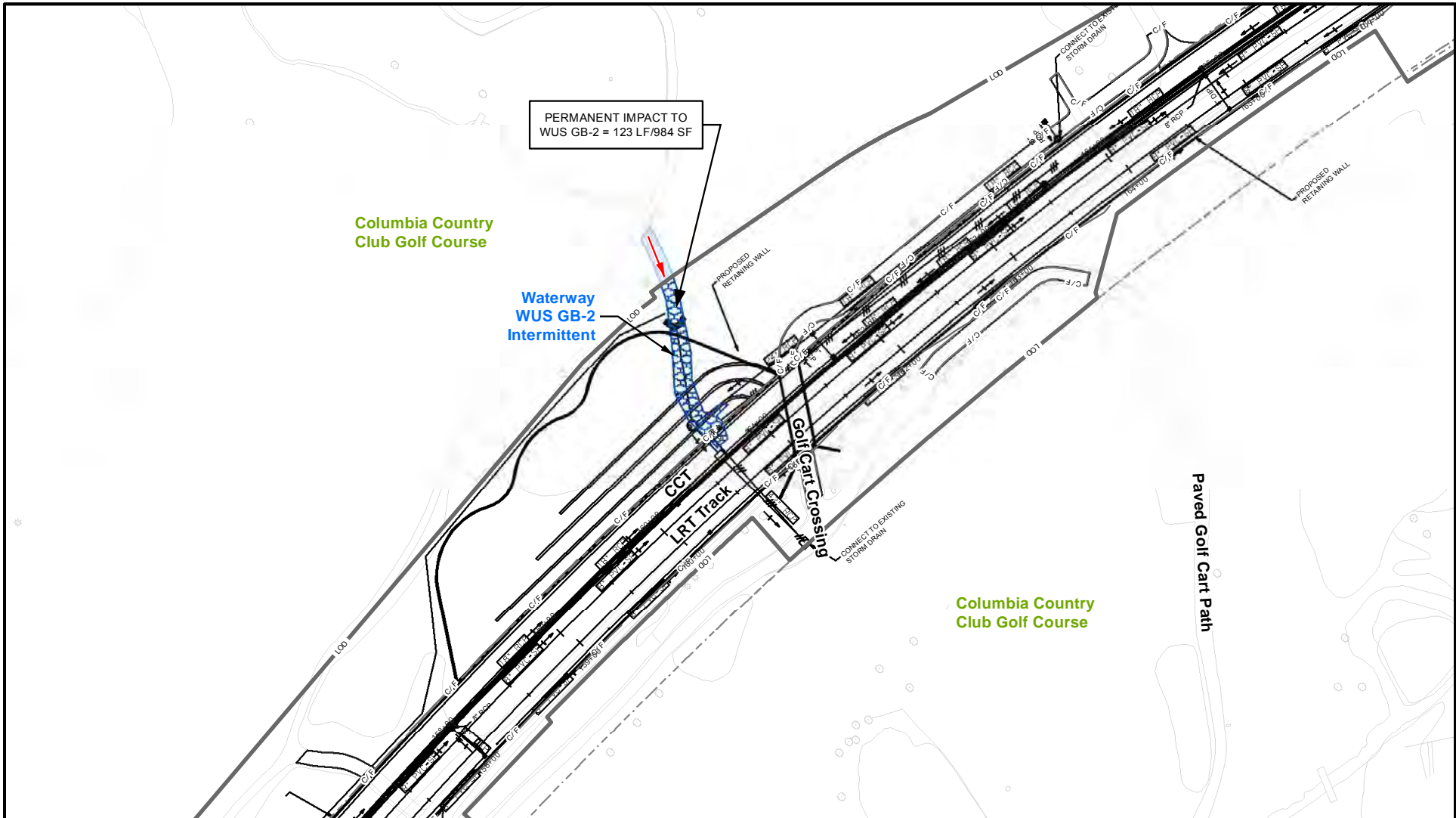
PROFESSIONAL CERTIFICATION
 I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. _____ Expiration Date _____

NO.	DESCRIPTION	BY	DATE

APPR. CHECK DRAWN DESIGN

PURPLE LINE LIGHT RAIL
 MONTGOMERY AND PRINCE GEORGES COUNTIES,
 MARYLAND
WUS GB-1 STREAM IMPACT
 DATE: 06/28/2016 SCALE: 1"=20'

CONTRACT NO.
0-0000-0000
 DRAWING NO.
 CROSS SECTION SHEET NO.
 1 OF 22



<ul style="list-style-type: none"> WETLAND BOUNDARY OPEN WATER UNIMPACTED STREAMS UNIMPACTED WETLANDS UNIMPACTED ROW 	<ul style="list-style-type: none"> 25-FT WETLAND BUFFER 100-YEAR FLOODPLAIN PROJECT LIMITS OF DISTURBANCE Stream Flow 	<ul style="list-style-type: none"> LIMITS OF CUT/FILL ROW PROPOSED UTILITIES PROPOSED RAIL ALIGNMENT ARCHEOLOGICAL SITE 	WETLAND IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND IMPACTS = 0 SF/0 AC PERMANENT WETLAND IMPACTS = 0 SF/0 AC STREAM AND OPEN WATER IMPACTS <ul style="list-style-type: none"> TEMPORARY WUS IMPACTS = 0 LF/0 SF PERMANENT WUS IMPACTS = 123 LF/984 SF 	WETLAND BUFFER IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND BUFFER IMPACTS = 0 SF/0 AC PERMANENT WETLAND BUFFER IMPACTS = 0 SF/0 AC 100-YEAR FLOODPLAIN IMPACTS <ul style="list-style-type: none"> TEMPORARY FLOODPLAIN IMPACTS = 0 SF/0 AC PERMANENT FLOODPLAIN IMPACTS = 0 SF/0 AC
---	---	--	---	--

MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND TRANSIT ADMINISTRATION

District of Columbia

ATKINS
3901 Calverton Blvd, Suite 400
Calverton, Maryland 20735
Telephone: 301-210-6800
www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

STREAM IMPACTS

- TEMPORARY PERENNIAL IMPACT = 0 SF/0 LF
- PERMANENT PERENNIAL IMPACT = 0 SF/0 LF
- TEMPORARY INTERMITTENT IMPACT = 0 SF/0 LF
- PERMANENT INTERMITTENT IMPACT = 984 SF/123 LF
- TEMPORARY EPHEMERAL IMPACT = 0 SF/0 LF
- PERMANENT EPHEMERAL IMPACT = 0 SF/0 LF

0 50 100 Feet

PURPLE LINE LIGHT RAIL

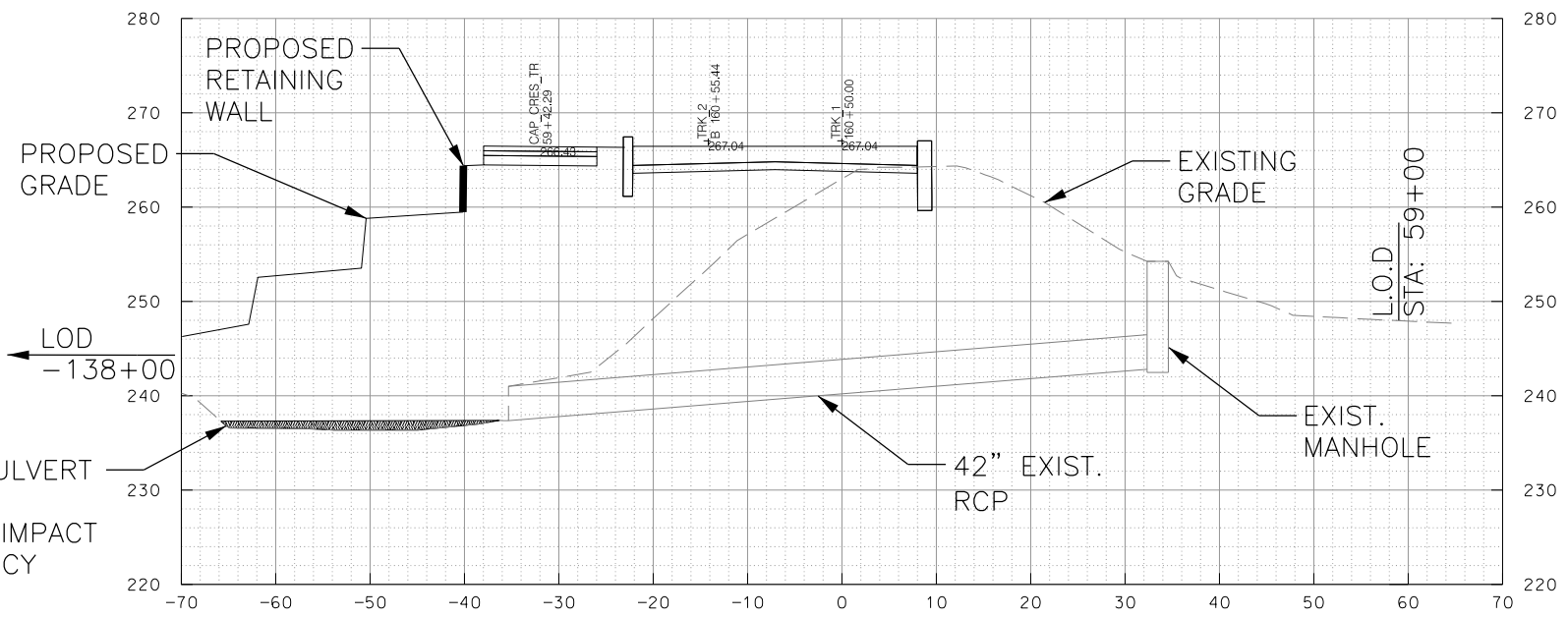
MONTGOMERY AND PRINCE GEORGE'S COUNTIES, MARYLAND

WATERS OF THE U.S. IMPACTS

DATE: 8/18/2016 SCALE: 1in = 100ft

CONTRACT NO.
DRAWING NO.
PLANVIEW SHEET NO. 5 OF 38

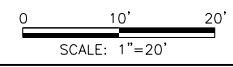
FILE: N:\Geospatial\Clients\O_P\PurpleLine_Transit_Partners\geofigs\impacts\impact_Map_letter_v13.mxd DATE: 8/19/2016



PROPOSED CULVERT LOCATION
 STREAM FILL IMPACT
 984 SF 128 CY

STREAM IMPACT WUS GB-2
 STATION 160+50

SCALE: 1"=20'



MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND TRANSIT ADMINISTRATION

PURPLE LINE
 TRANSIT PARTNERS

ATKINS
 350 Calverton Blvd, Suite 400
 Calverton, Maryland 20705
 Telephone: 301-210-6800
 www.atkinsglobal.com

PROFESSIONAL CERTIFICATION
 I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No. _____ Expiration Date _____

NO.	DESCRIPTION	BY	DATE

APPR. CHECK DRAWN DESIGN

PURPLE LINE LIGHT RAIL
 MONTGOMERY AND PRINCE GEORGES COUNTIES,
 MARYLAND

WUS GB-2 STREAM IMPACT

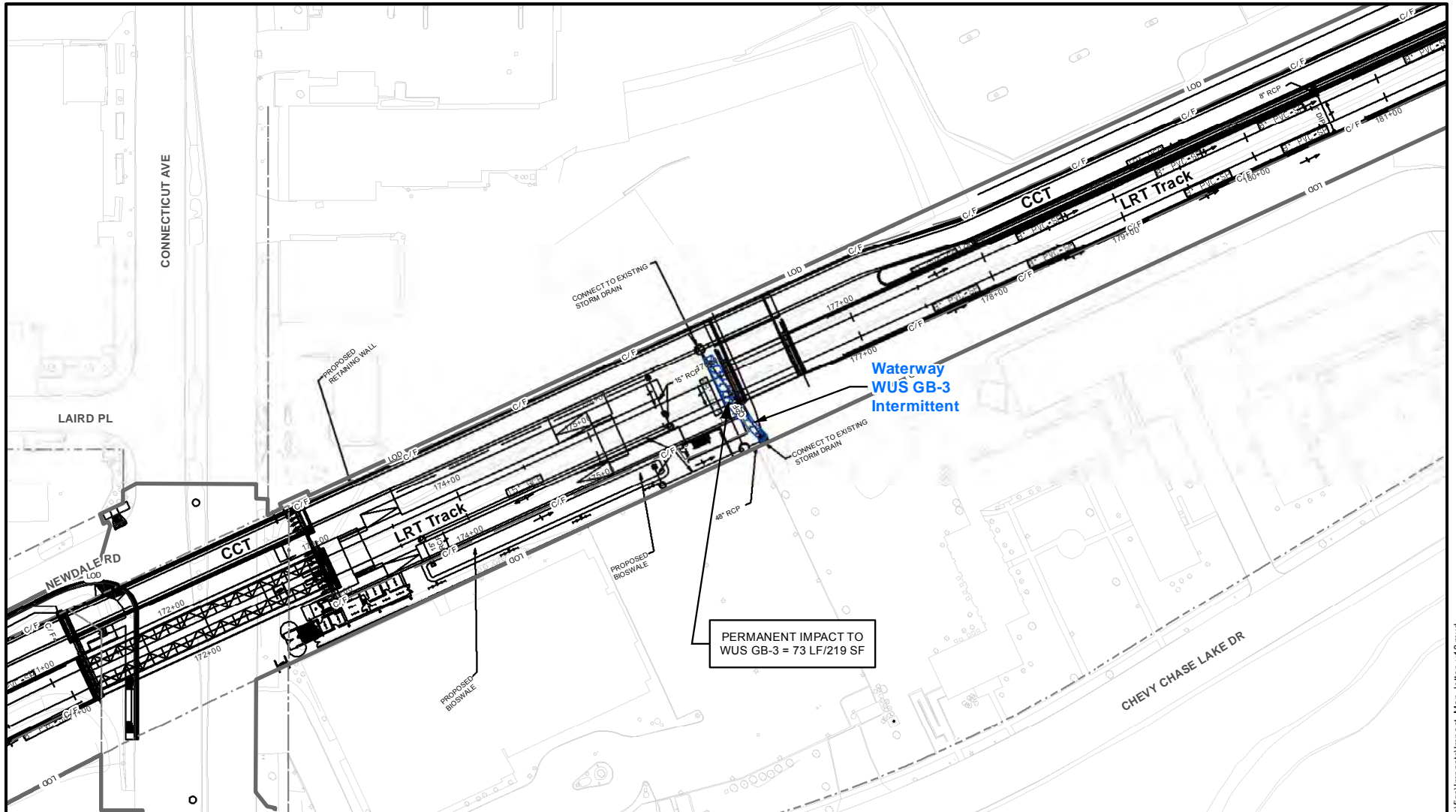
DATE: 06/28/2016 SCALE: 1"=20'

CONTRACT NO.
 0-0000-0000

DRAWING NO.

CROSS SECTION SHEET NO.
 2 OF 22

pw://c:\p-fms-1801\pos\com\AKNAND\PL01\Documents\Purple Line P3 Design\4.0 CAD (Work in Progress)\Environmental\General\Sketches\Cross Sections Segment 1



<ul style="list-style-type: none"> WETLAND BOUNDARY OPEN WATER UNIMPACTED STREAMS UNIMPACTED WETLANDS UNIMPACTED ROW 	<ul style="list-style-type: none"> WB 25-FT WETLAND BUFFER FLP 100-YEAR FLOODPLAIN PROJECT LIMITS OF DISTURBANCE Stream Flow 	<ul style="list-style-type: none"> C/F LIMITS OF CUT/FILL ROW PROPOSED UTILITIES PROPOSED RAIL ALIGNMENT ARCHAEOLOGICAL SITE 	WETLAND IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND IMPACTS = 0 SF/0 AC PERMANENT WETLAND IMPACTS = 0 SF/0 AC 	WETLAND BUFFER IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND BUFFER IMPACTS = 0 SF/0 AC PERMANENT WETLAND BUFFER IMPACTS = 0 SF/0 AC
STREAM AND OPEN WATER IMPACTS <ul style="list-style-type: none"> TEMPORARY WUS IMPACTS = 0 LF/0 SF PERMANENT WUS IMPACTS = 73 LF/219 SF 			<ul style="list-style-type: none"> PERMANENT POW IMPACTS = 0 SF/0 AC 	100-YEAR FLOODPLAIN IMPACTS <ul style="list-style-type: none"> TEMPORARY FLOODPLAIN IMPACTS = 0 SF/0 AC PERMANENT FLOODPLAIN IMPACTS = 0 SF/0 AC

MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND TRANSIT ADMINISTRATION

District of Columbia

ATKINS

3901 Calverton Blvd, Suite 400
Calverton, Maryland 20705
Telephone: 301-210-6800
www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

STREAM IMPACTS

- TEMPORARY PERENNIAL IMPACT = 0 SF/0 LF
- PERMANENT PERENNIAL IMPACT = 0 SF/0 LF
- TEMPORARY INTERMITTENT IMPACT = 0 SF/0 LF
- PERMANENT INTERMITTENT IMPACT = 219 SF/73 LF
- TEMPORARY EPHEMERAL IMPACT = 0 SF/0 LF
- PERMANENT EPHEMERAL IMPACT = 0 SF/0 LF

0 50 100
Feet

PURPLE LINE LIGHT RAIL

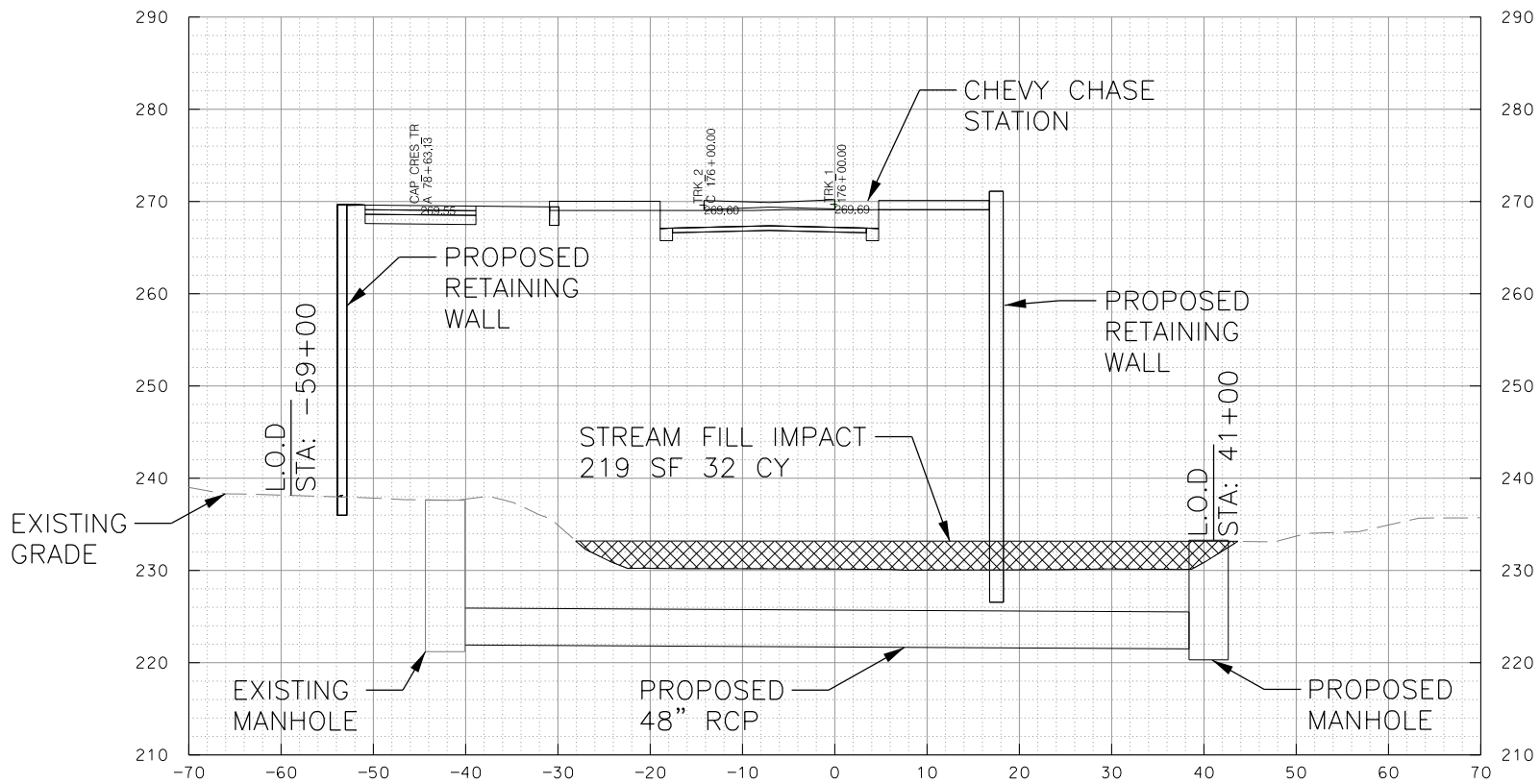
MONTGOMERY AND PRINCE GEORGE'S COUNTIES,
MARYLAND

WATERS OF THE U.S. IMPACTS

DATE: 8/18/2016 SCALE: 1in = 100ft

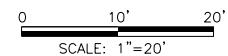
CONTRACT NO.
DRAWING NO.
PLANVIEW SHEET NO. 6 OF 38

FILE: N:\Geospatial\Clients\O_PurpleLine_Transit_Partners\geofigs\impacts\impact_Map_letter_v13.mxd DATE: 8/19/2016



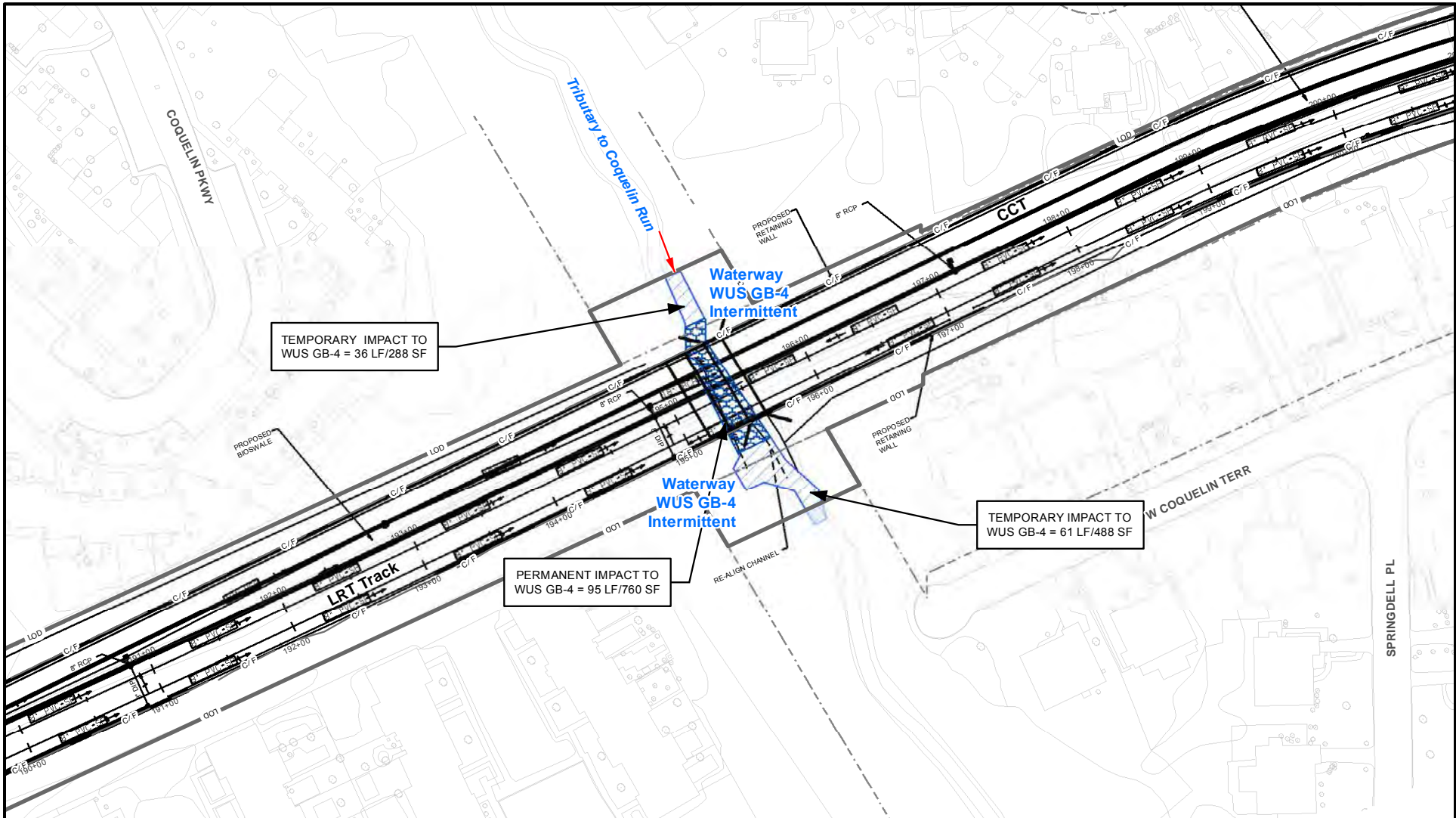
STREAM IMPACT WUS GB-3
STATION 176+00

SCALE: 1"=20'



NO.	DESCRIPTION	BY	DATE

APPR	CHECK	DRAWN	DESIGN
------	-------	-------	--------



<ul style="list-style-type: none"> WETLAND BOUNDARY OPEN WATER UNIMPACTED STREAMS UNIMPACTED WETLANDS UNIMPACTED ROW 	<ul style="list-style-type: none"> WB 25-FT WETLAND BUFFER FLP 100-YEAR FLOODPLAIN PROJECT LIMITS OF DISTURBANCE Stream Flow 	<ul style="list-style-type: none"> C/F LIMITS OF CUT/FILL ROW PROPOSED UTILITIES PROPOSED RAIL ALIGNMENT ARCHEOLOGICAL SITE 	WETLAND IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND IMPACTS = 0 SF/0 AC PERMANENT WETLAND IMPACTS = 0 SF/0 AC 	WETLAND BUFFER IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND BUFFER IMPACTS = 0 SF/0 AC PERMANENT WETLAND BUFFER IMPACTS = 0 SF/0 AC
STREAM AND OPEN WATER IMPACTS <ul style="list-style-type: none"> TEMPORARY WUS IMPACTS = 97 LF/776 SF PERMANENT WUS IMPACTS = 95 LF/760 SF 			<ul style="list-style-type: none"> PERMANENT POW IMPACTS = 0 SF/0 AC 	100-YEAR FLOODPLAIN IMPACTS <ul style="list-style-type: none"> TEMPORARY FLOODPLAIN IMPACTS = 0 SF/0 AC PERMANENT FLOODPLAIN IMPACTS = 0 SF/0 AC

MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND TRANSIT ADMINISTRATION

District of Columbia

ATKINS

3901 Calverton Blvd, Suite 400
Calverton, Maryland 20735
Telephone: 301-210-6800
www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

STREAM IMPACTS

TEMPORARY PERENNIAL IMPACT = 0 SF/0 LF
 PERMANENT PERENNIAL IMPACT = 0 SF/0 LF
 TEMPORARY INTERMITTENT IMPACT = 776 SF/97 LF
 PERMANENT INTERMITTENT IMPACT = 760 SF/95 LF
 TEMPORARY EPHEMERAL IMPACT = 0 SF/0 LF
 PERMANENT EPHEMERAL IMPACT = 0 SF/0 LF

0 50 100
Feet

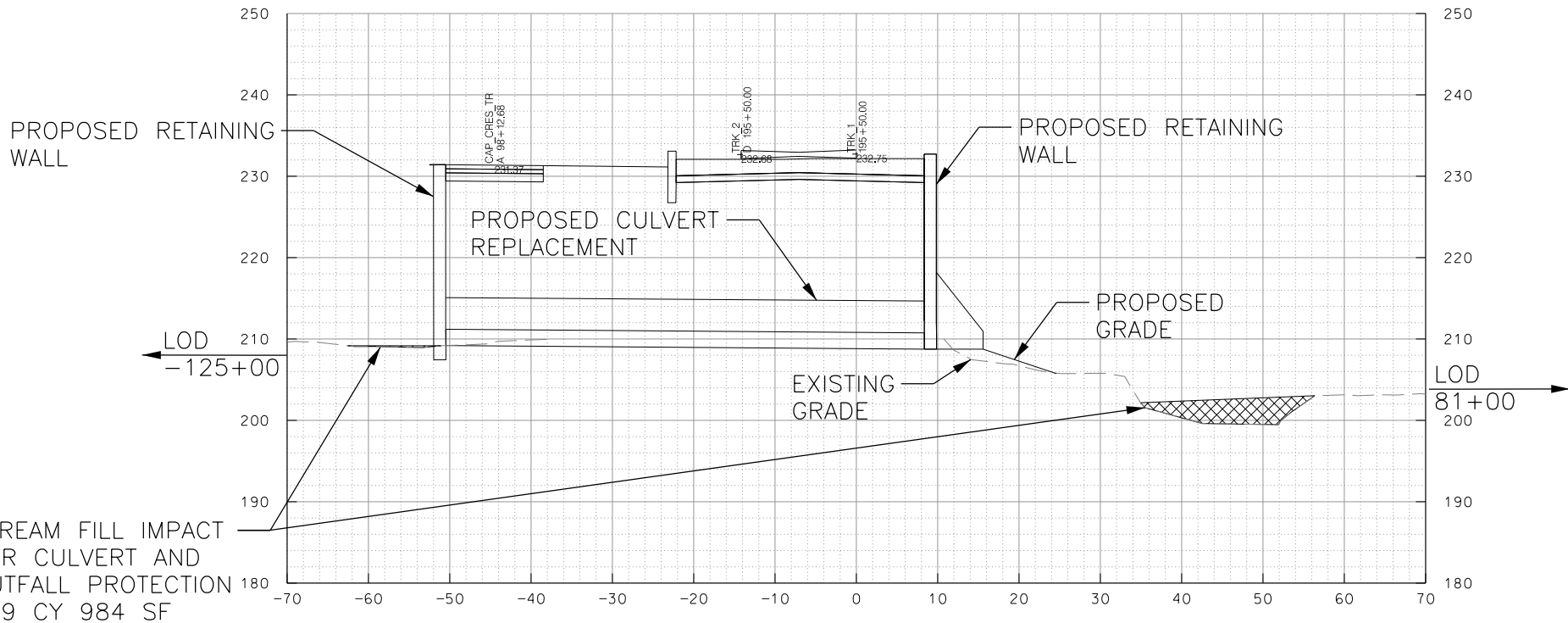
PURPLE LINE LIGHT RAIL

MONTGOMERY AND PRINCE GEORGE'S COUNTIES,
MARYLAND

WATERS OF THE U.S. IMPACTS

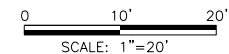
DATE: 8/18/2016 SCALE: 1in = 100ft

CONTRACT NO.
DRAWING NO.
PLANVIEW SHEET NO. 7 OF 38



STREAM IMPACT WUS GB-4
STATION 195+50

SCALE: 1"=20'



ATKINS
350 Calverton Blvd, Suite 400
Calverton, Maryland 20705
Telephone: 301-210-6800
www.atkinsglobal.com

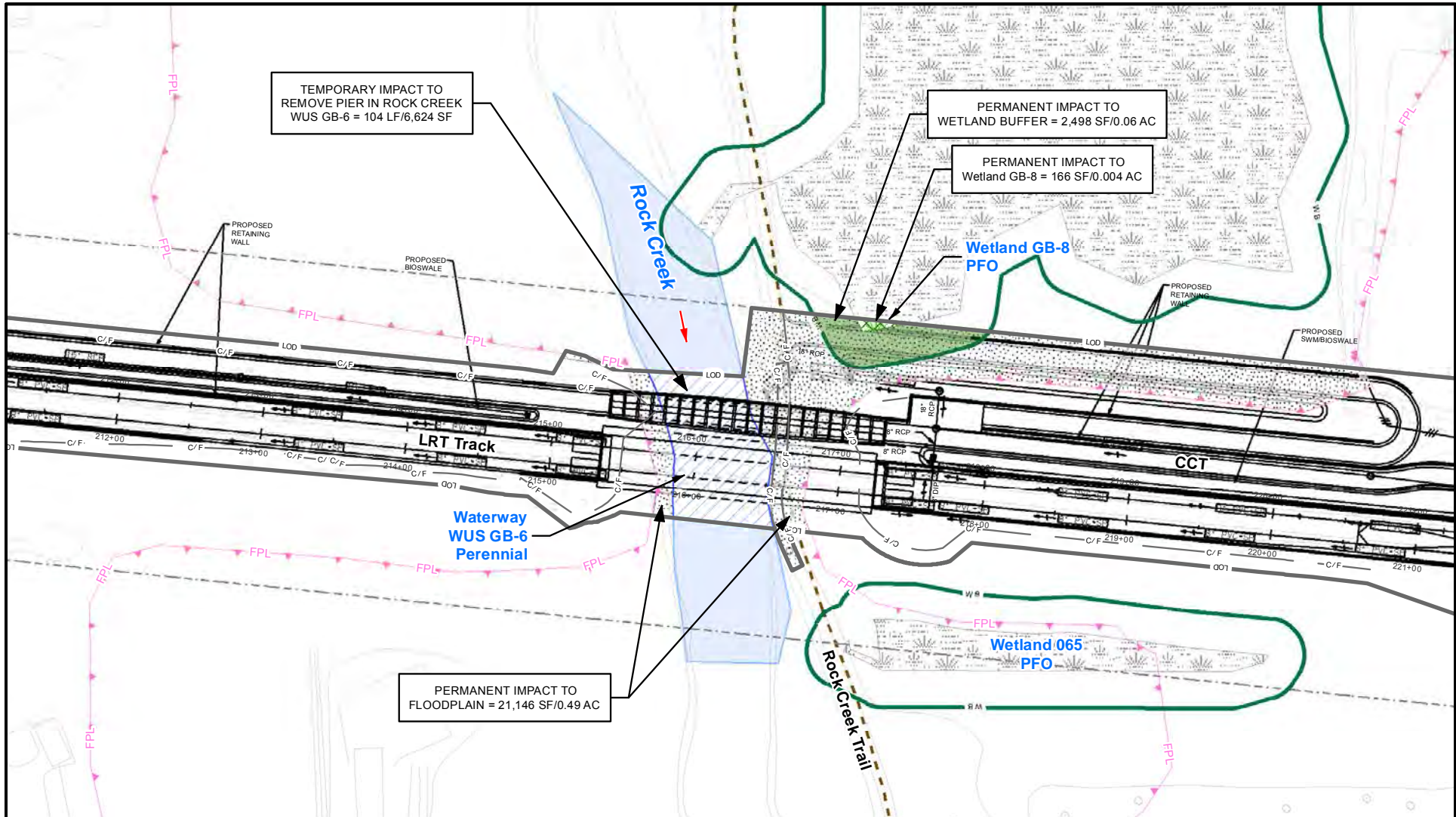
PROFESSIONAL CERTIFICATION
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. _____ Expiration Date _____

NO.	DESCRIPTION	BY	DATE

PURPLE LINE LIGHT RAIL
MONTGOMERY AND PRINCE GEORGES COUNTIES,
MARYLAND
WUS GB-4 STREAM IMPACT
DATE: 06/28/2016
SCALE: 1"=20'

CONTRACT NO.
0-0000-0000
DRAWING NO.
CROSS SECTION SHEET NO.
4 OF 22
DATE: 7/25/2016

I:\Projects\2016\06\WUS GB-4\Drawings\General\Sketches\Cross Sections\Segment 1



<ul style="list-style-type: none"> WETLAND BOUNDARY OPEN WATER UNIMPACTED STREAMS UNIMPACTED WETLANDS UNIMPACTED ROW 	<ul style="list-style-type: none"> 25-FT WETLAND BUFFER 100-YEAR FLOODPLAIN PROJECT LIMITS OF DISTURBANCE Stream Flow 	<ul style="list-style-type: none"> LIMITS OF CUT/FILL ROW PROPOSED UTILITIES PROPOSED RAIL ALIGNMENT ARCHEOLOGICAL SITE 	WETLAND IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND IMPACTS = 0 SF/0 AC PERMANENT WETLAND IMPACTS = 166 SF/0 AC STREAM AND OPEN WATER IMPACTS <ul style="list-style-type: none"> TEMPORARY WUS IMPACTS = 104 LF/6624 SF PERMANENT WUS IMPACTS = 0 LF/0 SF 	WETLAND BUFFER IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND BUFFER IMPACTS = 0 SF/0 AC PERMANENT WETLAND BUFFER IMPACTS = 2498 SF/0.06 AC 100-YEAR FLOODPLAIN IMPACTS <ul style="list-style-type: none"> TEMPORARY FLOODPLAIN IMPACTS = 0 SF/0 AC PERMANENT FLOODPLAIN IMPACTS = 21146 SF/0.49 AC
---	---	--	--	---

MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND TRANSIT ADMINISTRATION

MTA
Maryland

District of Columbia

PURPLE LINE
TRANSIT PARTNERS

ATKINS
3901 Calverton Blvd, Suite 400
Calverton, Maryland 20735
Telephone: 301-210-6800
www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

STREAM IMPACTS

TEMPORARY PERENNIAL IMPACT = 6624 SF/104 LF
 PERMANENT PERENNIAL IMPACT = 0 SF/0 LF
 TEMPORARY INTERMITTENT IMPACT = 0 SF/0 LF
 PERMANENT INTERMITTENT IMPACT = 0 SF/0 LF
 TEMPORARY EPHEMERAL IMPACT = 0 SF/0 LF
 PERMANENT EPHEMERAL IMPACT = 0 SF/0 LF

0 50 100
Feet

N

PURPLE LINE LIGHT RAIL

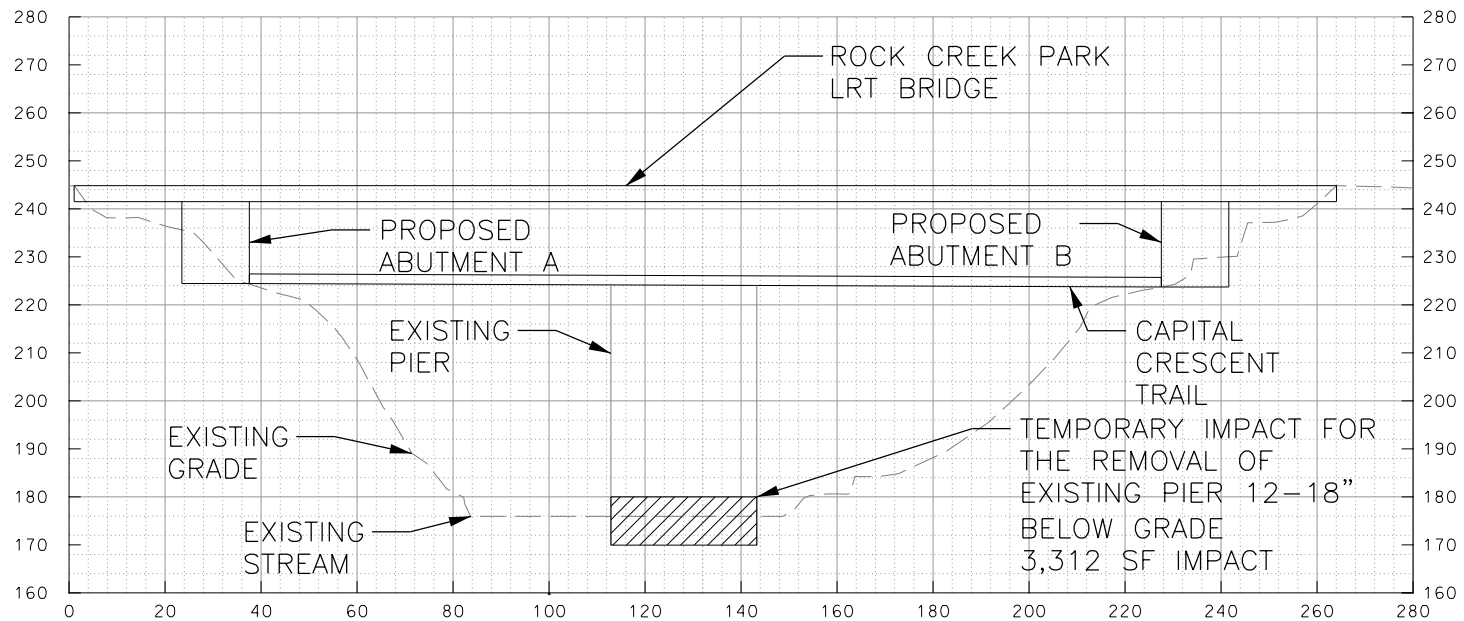
MONTGOMERY AND PRINCE GEORGE'S COUNTIES,
MARYLAND

WATERS OF THE U.S. IMPACTS

DATE: 8/18/2016 SCALE: 1in = 100ft

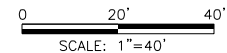
CONTRACT NO.
DRAWING NO.
PLANVIEW SHEET NO.
8 OF 38

FILE: N:\Geospatial\Clients\O_PurpleLine_Transit_Partners\geofigs\impacts\impact_Map_Jetter_v13.mxd
DATE: 8/19/2016



ROCK CREEK
 STREAM IMPACT WUS GB-6
 STATION 216+00 - STATION 217+80

SCALE: 1"=40'



PROFESSIONAL CERTIFICATION
 I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. _____ Expiration Date _____

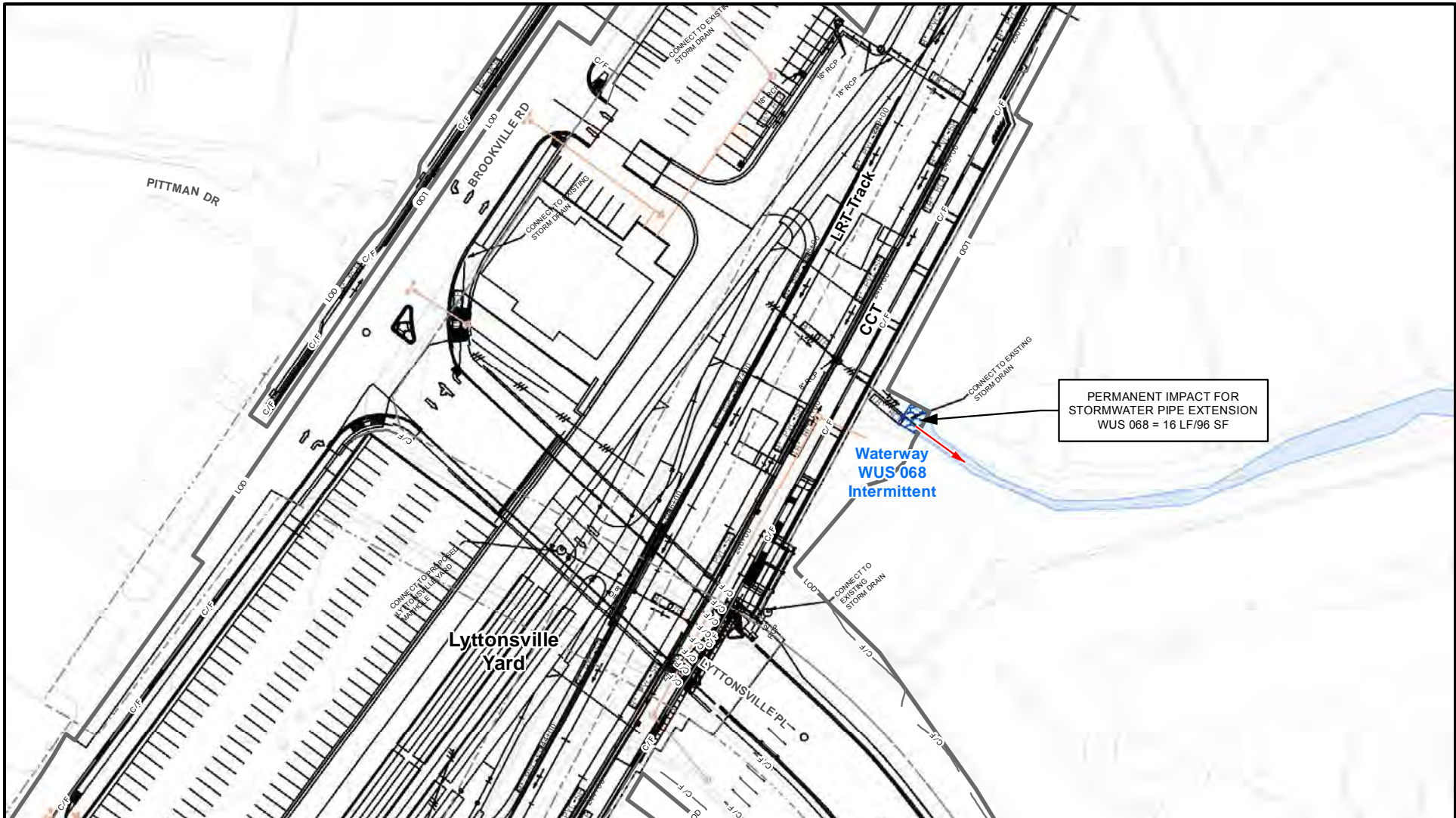
NO.	DESCRIPTION	BY	DATE

APPR	CHECK	DRAWN	DESIGN

PURPLE LINE LIGHT RAIL
 MONTGOMERY AND PRINCE GEORGES COUNTIES,
 MARYLAND
WUS GB-6 STREAM IMPACT
 DATE: 06/28/2016 SCALE: 1" : 40'

CONTRACT NO.
 0-0000-0000
 DRAWING NO.
 CROSS SECTION SHEET NO.
 5 OF 22

P:\Projects\2016\06\06-0000\Drawings\General\General\Sketches\Cross Sections Segment 1



<ul style="list-style-type: none"> WETLAND BOUNDARY OPEN WATER UNIMPACTED STREAMS UNIMPACTED WETLANDS UNIMPACTED ROW 	<ul style="list-style-type: none"> WB 25-FT WETLAND BUFFER FLP 100-YEAR FLOODPLAIN PROJECT LIMITS OF DISTURBANCE Stream Flow 	<ul style="list-style-type: none"> C/F LIMITS OF CUT/FILL ROW PROPOSED UTILITIES PROPOSED RAIL ALIGNMENT ARCHEOLOGICAL SITE 	WETLAND IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND IMPACTS = 0 SF/0 AC PERMANENT WETLAND IMPACTS = 0 SF/0 AC STREAM AND OPEN WATER IMPACTS <ul style="list-style-type: none"> TEMPORARY WUS IMPACTS = 0 LF/0 SF PERMANENT WUS IMPACTS = 16 LF/96 SF 	WETLAND BUFFER IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND BUFFER IMPACTS = 0 SF/0 AC PERMANENT WETLAND BUFFER IMPACTS = 0 SF/0 AC 100-YEAR FLOODPLAIN IMPACTS <ul style="list-style-type: none"> TEMPORARY FLOODPLAIN IMPACTS = 0 SF/0 AC PERMANENT FLOODPLAIN IMPACTS = 0 SF/0 AC
---	--	--	---	--

MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND TRANSIT ADMINISTRATION

District of Columbia

ATKINS

3901 Calverton Blvd, Suite 400
Calverton, Maryland 20735
Telephone: 301-210-6800
www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

STREAM IMPACTS

TEMPORARY PERENNIAL IMPACT = 0 SF/0 LF
 PERMANENT PERENNIAL IMPACT = 0 SF/0 LF
 TEMPORARY INTERMITTENT IMPACT = 0 SF/0 LF
 PERMANENT INTERMITTENT IMPACT = 96 SF/16 LF
 TEMPORARY EPHEMERAL IMPACT = 0 SF/0 LF
 PERMANENT EPHEMERAL IMPACT = 0 SF/0 LF

0 50 100
Feet

PURPLE LINE LIGHT RAIL

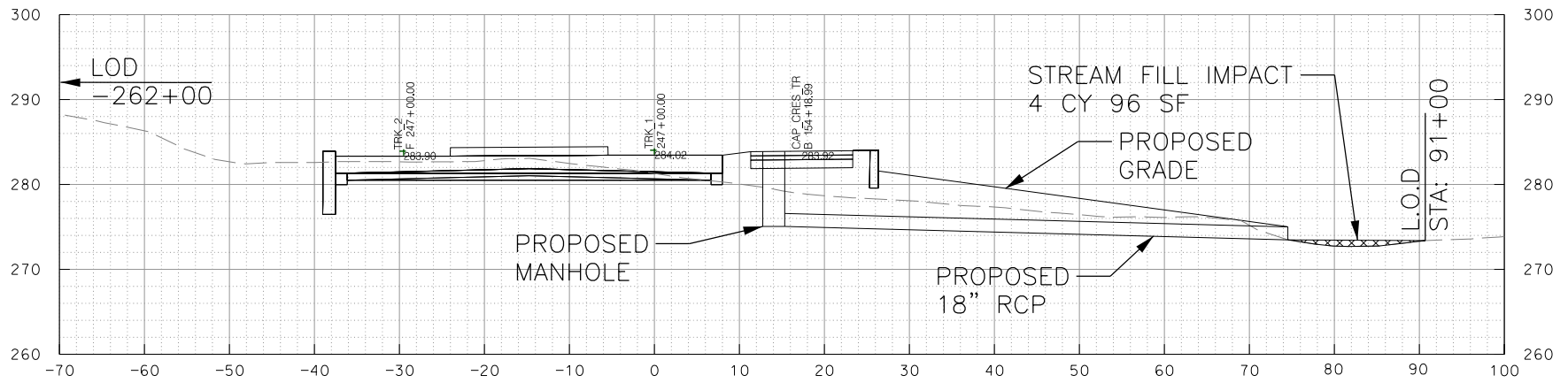
MONTGOMERY AND PRINCE GEORGE'S COUNTIES,
MARYLAND

WATERS OF THE U.S. IMPACTS

DATE: 8/18/2016 SCALE: 1in = 100ft

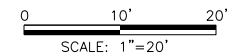
CONTRACT NO.
DRAWING NO.
PLANVIEW SHEET NO. 9 OF 38

FILE: N:\Geospatial\Clients\O_PurpleLine_Transit_Partners\geofigs\impacts\impact_Map_Jeffer_v13.mxd
DATE: 8/19/2016



STREAM IMPACT WUS 068
STATION 247+40

SCALE: 1"=20'



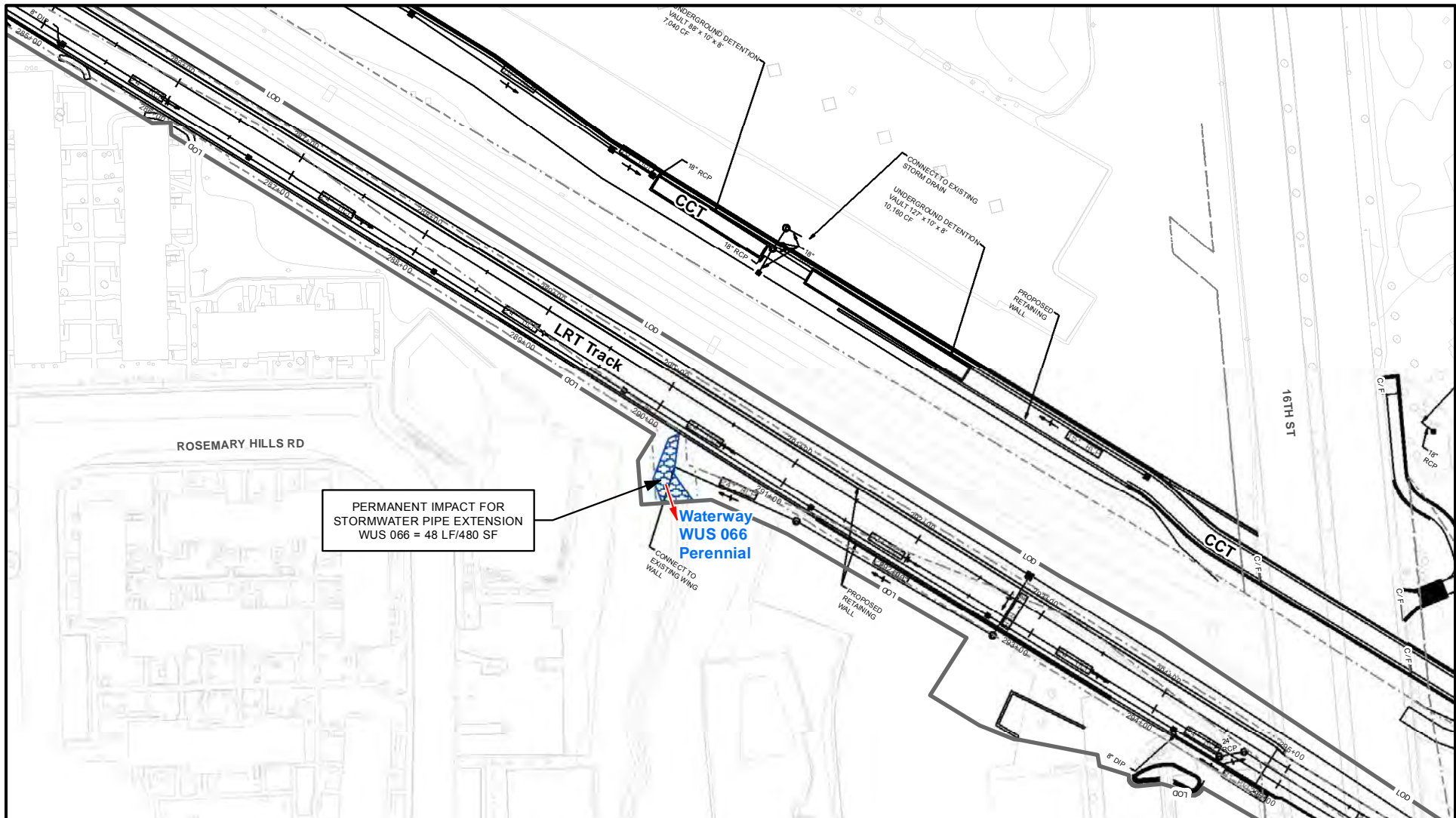
PROFESSIONAL CERTIFICATION
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. _____ Expiration Date _____

NO.	DESCRIPTION	BY	DATE

APPR	CHECK	DRAWN	DESIGN
------	-------	-------	--------

PURPLE LINE LIGHT RAIL
MONTGOMERY AND PRINCE GEORGES COUNTIES.
MARYLAND
WUS 068 STREAM IMPACT
DATE: 06/28/2016 SCALE: 1"=20'

CONTRACT NO.
0-0000-0000
DRAWING NO.
CROSS SECTION SHEET NO.
6 OF _22_



<ul style="list-style-type: none"> WETLAND BOUNDARY OPEN WATER UNIMPACTED STREAMS UNIMPACTED WETLANDS UNIMPACTED ROW 	<ul style="list-style-type: none"> 25-FT WETLAND BUFFER 100-YEAR FLOODPLAIN PROJECT LIMITS OF DISTURBANCE Stream Flow 	<ul style="list-style-type: none"> LIMITS OF CUT/FILL ROW PROPOSED UTILITIES PROPOSED RAIL ALIGNMENT ARCHAEOLOGICAL SITE 	WETLAND IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND IMPACTS = 0 SF/0 AC PERMANENT WETLAND IMPACTS = 0 SF/0 AC STREAM AND OPEN WATER IMPACTS <ul style="list-style-type: none"> TEMPORARY WUS IMPACTS = 0 LF/0 SF PERMANENT WUS IMPACTS = 48 LF/480 SF 	WETLAND BUFFER IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND BUFFER IMPACTS = 0 SF/0 AC PERMANENT WETLAND BUFFER IMPACTS = 0 SF/0 AC 100-YEAR FLOODPLAIN IMPACTS <ul style="list-style-type: none"> TEMPORARY FLOODPLAIN IMPACTS = 0 SF/0 AC PERMANENT FLOODPLAIN IMPACTS = 0 SF/0 AC
---	---	---	--	--

MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND TRANSIT ADMINISTRATION

District of Columbia

ATKINS
3901 Calverton Blvd, Suite 400
Calverton, Maryland 20735
Telephone: 301-210-6800
www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

STREAM IMPACTS

- TEMPORARY PERENNIAL IMPACT = 0 SF/0 LF
- PERMANENT PERENNIAL IMPACT = 480 SF/48 LF
- TEMPORARY INTERMITTENT IMPACT = 0 SF/0 LF
- PERMANENT INTERMITTENT IMPACT = 0 SF/0 LF
- TEMPORARY EPHEMERAL IMPACT = 0 SF/0 LF
- PERMANENT EPHEMERAL IMPACT = 0 SF/0 LF

0 50 100
Feet

PURPLE LINE LIGHT RAIL

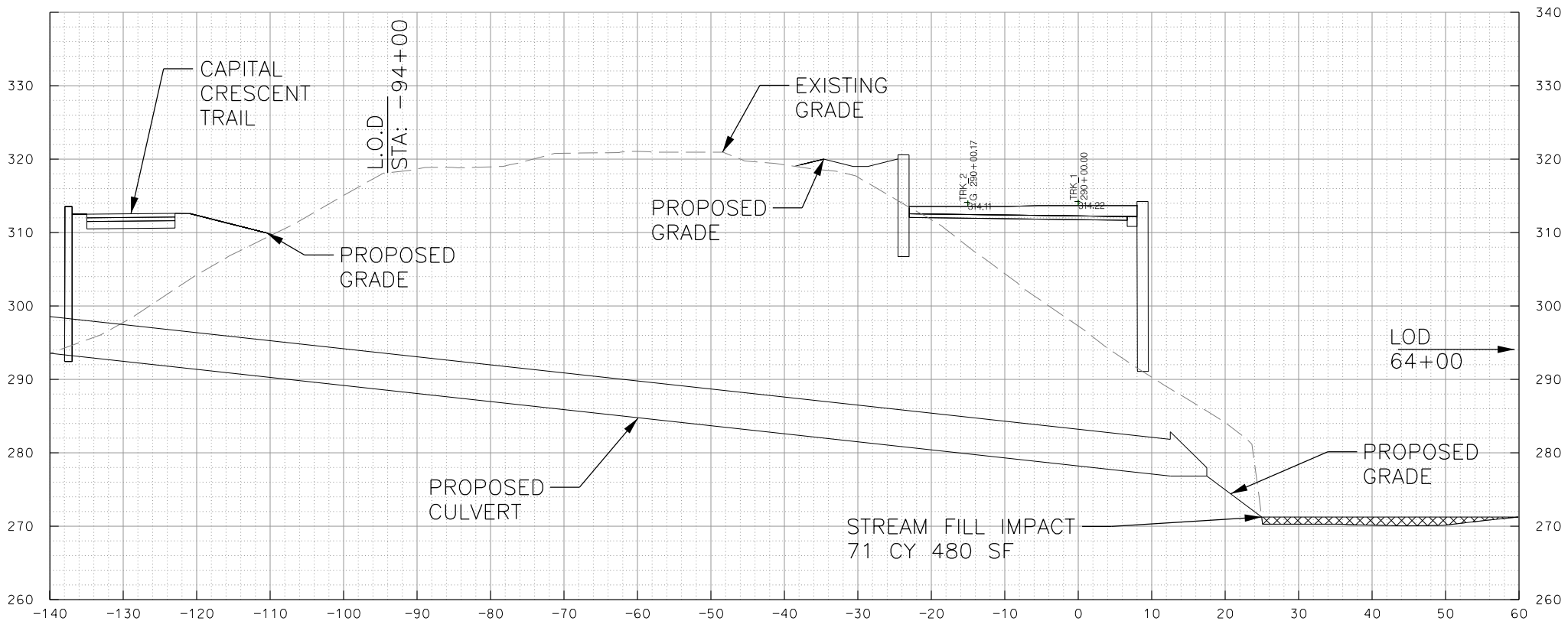
MONTGOMERY AND PRINCE GEORGE'S COUNTIES,
MARYLAND

WATERS OF THE U.S. IMPACTS

DATE: 8/18/2016 SCALE: 1in = 100ft

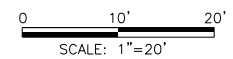
CONTRACT NO.
DRAWING NO.
PLANVIEW SHEET NO. 10 OF 38

FILE: N:\Geospatial\Clients\O_PurpleLine_Transit_Partners\geotiffs\impacts\Impact_Map_letter_v13.mxd
DATE: 8/19/2016



STREAM IMPACT WUS 066
STATION 290+25

SCALE: 1"=20'



MARYLAND DEPARTMENT OF TRANSPORTATION
MARYLAND TRANSIT ADMINISTRATION



ATKINS
 350 Calverton Blvd, Suite 400
 Calverton, Maryland 20705
 Telephone: 301-210-6800
 www.atkinsglobal.com

PROFESSIONAL CERTIFICATION
 I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. _____ Expiration Date _____

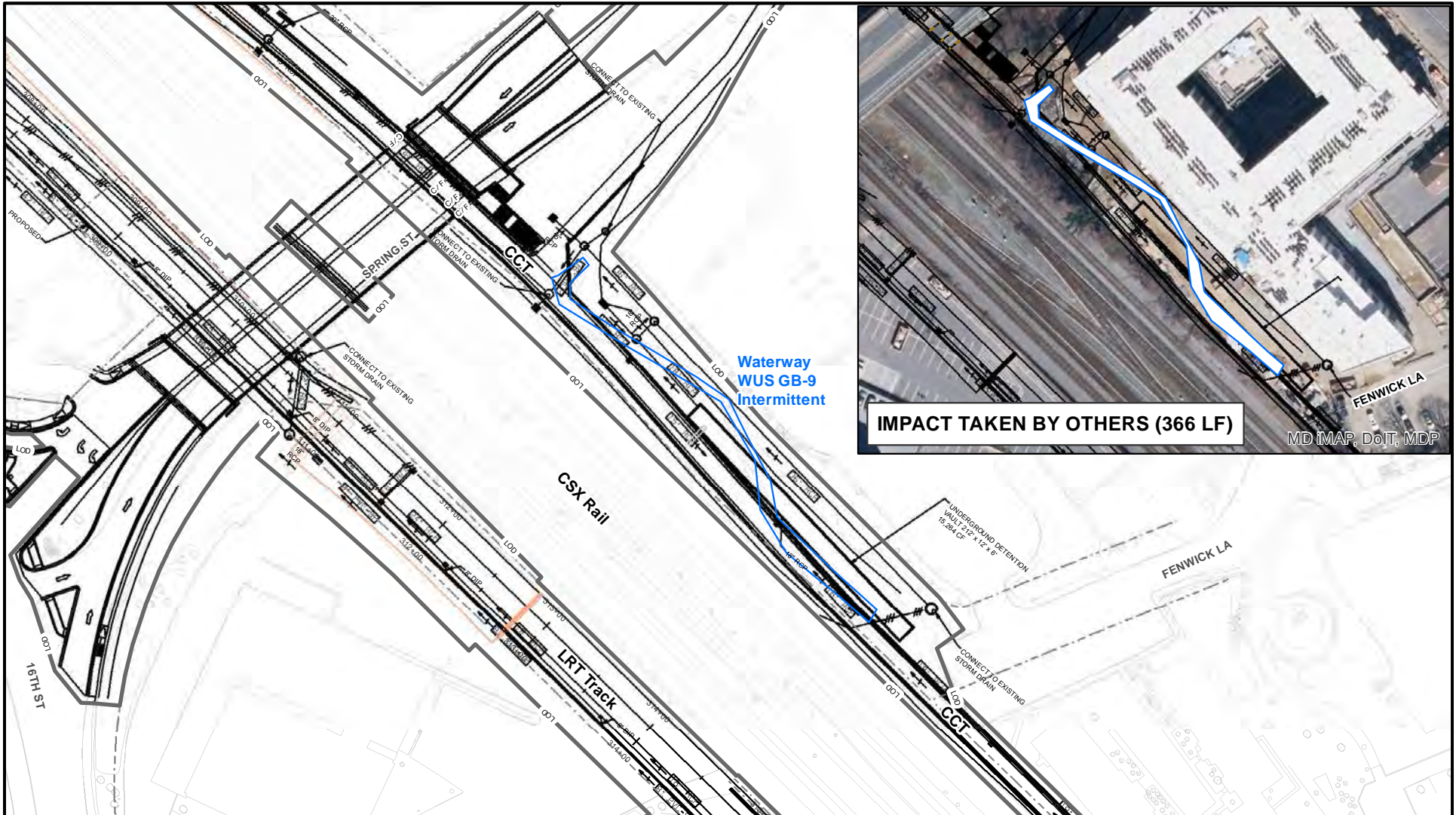
NO.	DESCRIPTION	BY	DATE

APPR. CHECK DRAWN DESIGN

PURPLE LINE LIGHT RAIL
 MONTGOMERY AND PRINCE GEORGES COUNTIES,
 MARYLAND
WUS 066 STREAM IMPACT
 DATE: 06/28/2016 SCALE: 1"=20'

CONTRACT NO.
0-0000-0000
 DRAWING NO.
 CROSS SECTION SHEET NO.
7 OF 22

P:\CP-FMS-1801\pos\com\AKNAMD\PL01\Documents\Purple Line P3 Design\4.0 CAD (Work in Progress)\Environmental\General\Sketches\Cross Sections Segment 1



<ul style="list-style-type: none"> WETLAND BOUNDARY OPEN WATER UNIMPACTED STREAMS UNIMPACTED WETLANDS UNIMPACTED ROW 	<ul style="list-style-type: none"> WB 25-FT WETLAND BUFFER FLP 100-YEAR FLOODPLAIN PROJECT LIMITS OF DISTURBANCE Stream Flow 	<ul style="list-style-type: none"> C/F LIMITS OF CUT/FILL ROW PROPOSED UTILITIES PROPOSED RAIL ALIGNMENT ARCHEOLOGICAL SITE 	WETLAND IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND IMPACTS = 0 SF/0 AC PERMANENT WETLAND IMPACTS = 0 SF/0 AC 	WETLAND BUFFER IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND BUFFER IMPACTS = 0 SF/0 AC PERMANENT WETLAND BUFFER IMPACTS = 0 SF/0 AC
STREAM AND OPEN WATER IMPACTS <ul style="list-style-type: none"> TEMPORARY WUS IMPACTS = 0 LF/0 SF PERMANENT WUS IMPACTS = 0 LF/0 SF 			<ul style="list-style-type: none"> PERMANENT POW IMPACTS = 0 SF/0 AC 	100-YEAR FLOODPLAIN IMPACTS <ul style="list-style-type: none"> TEMPORARY FLOODPLAIN IMPACTS = 0 SF/0 AC PERMANENT FLOODPLAIN IMPACTS = 0 SF/0 AC

MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND TRANSIT ADMINISTRATION

District of Columbia

ATKINS

3901 Calverton Blvd, Suite 400
Calverton, Maryland 20735
Telephone: 301-210-6800
www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

STREAM IMPACTS

- TEMPORARY PERENNIAL IMPACT = 0 SF/0 LF
- PERMANENT PERENNIAL IMPACT = 0 SF/0 LF
- TEMPORARY INTERMITTENT IMPACT = 0 SF/0 LF
- PERMANENT INTERMITTENT IMPACT = 0 SF/0 LF
- TEMPORARY EPHEMERAL IMPACT = 0 SF/0 LF
- PERMANENT EPHEMERAL IMPACT = 0 SF/0 LF

0 50 100
Feet

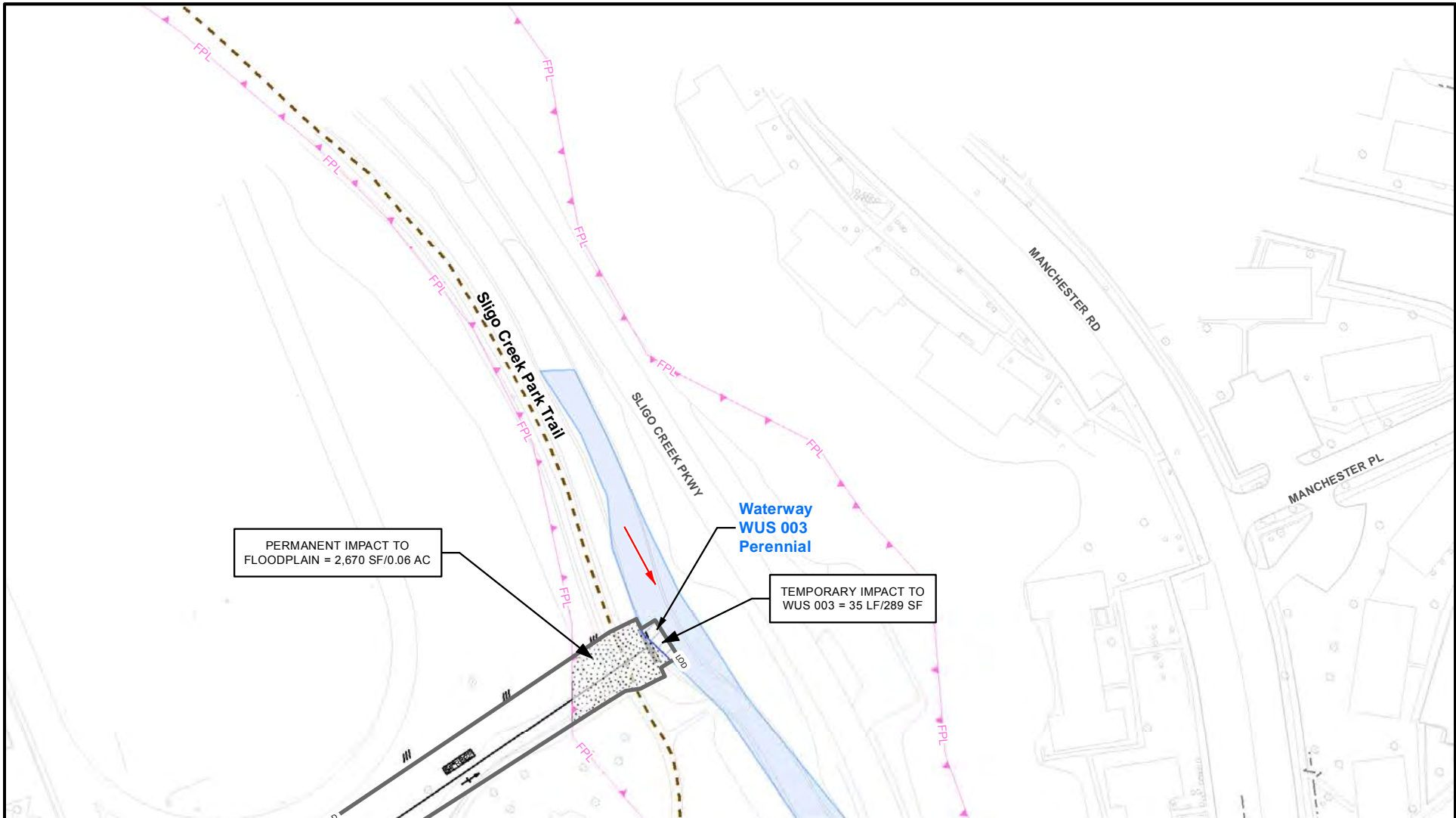
PURPLE LINE LIGHT RAIL

MONTGOMERY AND PRINCE GEORGE'S COUNTIES,
MARYLAND

WATERS OF THE U.S. IMPACTS

DATE: 8/18/2016 SCALE: 1in = 100ft

CONTRACT NO.
DRAWING NO.
PLANVIEW SHEET NO.
11 OF 38



<ul style="list-style-type: none"> WETLAND BOUNDARY OPEN WATER UNIMPACTED STREAMS UNIMPACTED WETLANDS UNIMPACTED ROW 	<ul style="list-style-type: none"> WB 25-FT WETLAND BUFFER FPL 100-YEAR FLOODPLAIN PROJECT LIMITS OF DISTURBANCE Stream Flow 	<ul style="list-style-type: none"> C/F LIMITS OF CUT/FILL ROW PROPOSED UTILITIES PROPOSED RAIL ALIGNMENT ARCHEOLOGICAL SITE 	WETLAND IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND IMPACTS = 0 SF/0 AC PERMANENT WETLAND IMPACTS = 0 SF/0 AC STREAM AND OPEN WATER IMPACTS <ul style="list-style-type: none"> TEMPORARY WUS IMPACTS = 35 LF/289 SF PERMANENT WUS IMPACTS = 0 LF/0 SF 	WETLAND BUFFER IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND BUFFER IMPACTS = 0 SF/0 AC PERMANENT WETLAND BUFFER IMPACTS = 0 SF/0 AC 100-YEAR FLOODPLAIN IMPACTS <ul style="list-style-type: none"> TEMPORARY FLOODPLAIN IMPACTS = 0 SF/0 AC PERMANENT FLOODPLAIN IMPACTS = 2670 SF/0.06 AC
---	--	--	--	--

MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND TRANSIT ADMINISTRATION

District of Columbia

ATKINS
3901 Calverton Blvd, Suite 400
Calverton, Maryland 20735
Telephone: 301-210-6800
www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

STREAM IMPACTS

- TEMPORARY PERENNIAL IMPACT = 289 SF/35 LF
- PERMANENT PERENNIAL IMPACT = 0 SF/0 LF
- TEMPORARY INTERMITTENT IMPACT = 0 SF/0 LF
- PERMANENT INTERMITTENT IMPACT = 0 SF/0 LF
- TEMPORARY EPHEMERAL IMPACT = 0 SF/0 LF
- PERMANENT EPHEMERAL IMPACT = 0 SF/0 LF

0 50 100
Feet

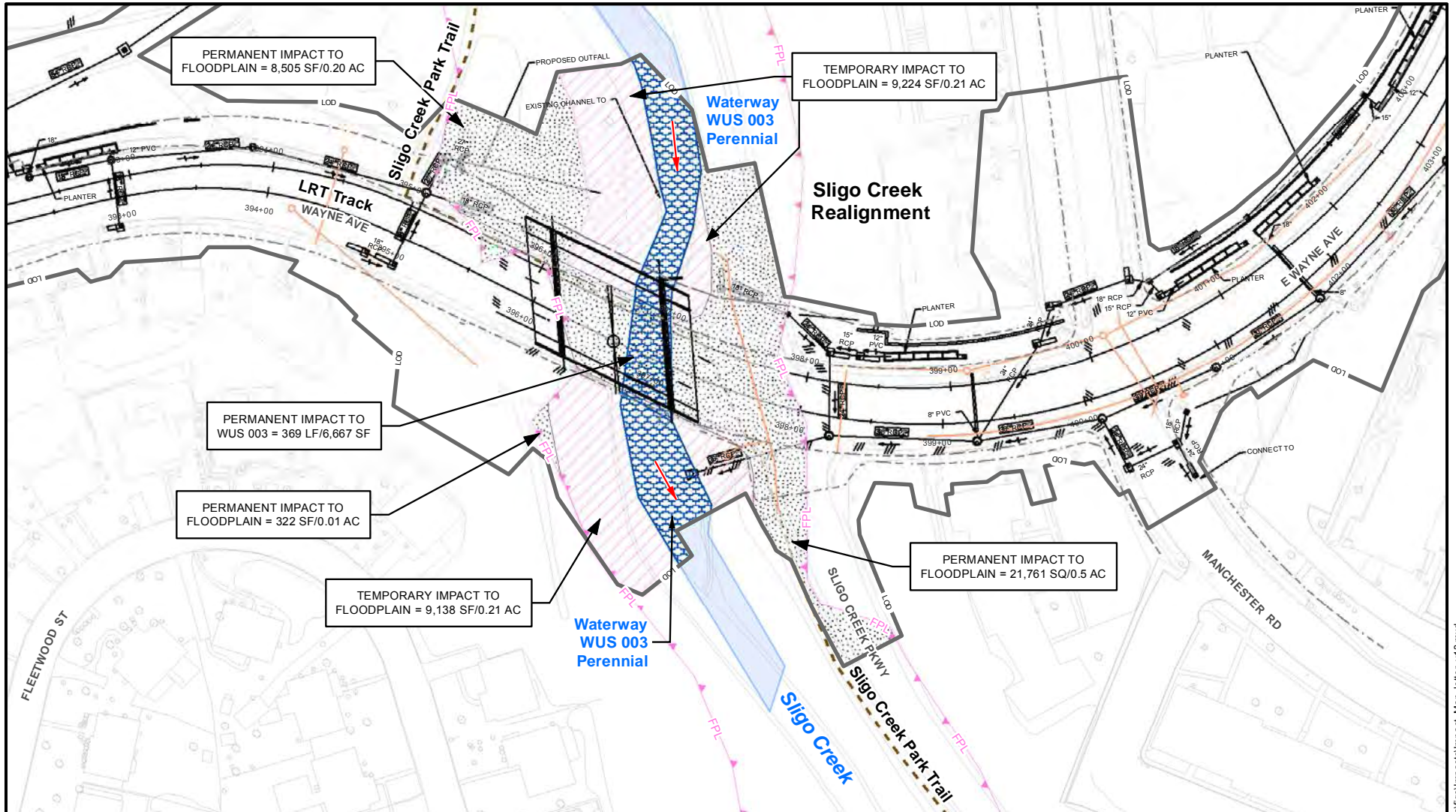
PURPLE LINE LIGHT RAIL

MONTGOMERY AND PRINCE GEORGE'S COUNTIES,
MARYLAND

WATERS OF THE U.S. IMPACTS

DATE: 8/18/2016 SCALE: 1in = 100ft

CONTRACT NO.
DRAWING NO.
PLANVIEW SHEET NO. 12 OF 38



<ul style="list-style-type: none"> WETLAND BOUNDARY OPEN WATER UNIMPACTED STREAMS UNIMPACTED WETLANDS UNIMPACTED ROW 	<ul style="list-style-type: none"> WB 25-FT WETLAND BUFFER FPL 100-YEAR FLOODPLAIN PROJECT LIMITS OF DISTURBANCE Stream Flow 	<ul style="list-style-type: none"> C/F LIMITS OF CUT/FILL ROW PROPOSED UTILITIES PROPOSED RAIL ALIGNMENT ARCHAEOLOGICAL SITE 	WETLAND IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND IMPACTS = 0 SF/0 AC PERMANENT WETLAND IMPACTS = 0 SF/0 AC STREAM AND OPEN WATER IMPACTS <ul style="list-style-type: none"> TEMPORARY WUS IMPACTS = 0 LF/0 SF PERMANENT WUS IMPACTS = 369 LF/6667 SF 	WETLAND BUFFER IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND BUFFER IMPACTS = 0 SF/0 AC PERMANENT WETLAND BUFFER IMPACTS = 0 SF/0 AC 100-YEAR FLOODPLAIN IMPACTS <ul style="list-style-type: none"> TEMPORARY FLOODPLAIN IMPACTS = 18362 SF/0.42 AC PERMANENT FLOODPLAIN IMPACTS = 30588 SF/0.7 AC
---	--	---	--	---

MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND TRANSIT ADMINISTRATION

District of Columbia

ATKINS
3901 Calverton Blvd, Suite 400
Calverton, Maryland 20705
Telephone: 301-210-6800
www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

STREAM IMPACTS

- TEMPORARY PERENNIAL IMPACT = 0 SF/0 LF
- PERMANENT PERENNIAL IMPACT = 6667 SF/369 LF
- TEMPORARY INTERMITTENT IMPACT = 0 SF/0 LF
- PERMANENT INTERMITTENT IMPACT = 0 SF/0 LF
- TEMPORARY EPHEMERAL IMPACT = 0 SF/0 LF
- PERMANENT EPHEMERAL IMPACT = 0 SF/0 LF

0 50 100
Feet

PURPLE LINE LIGHT RAIL

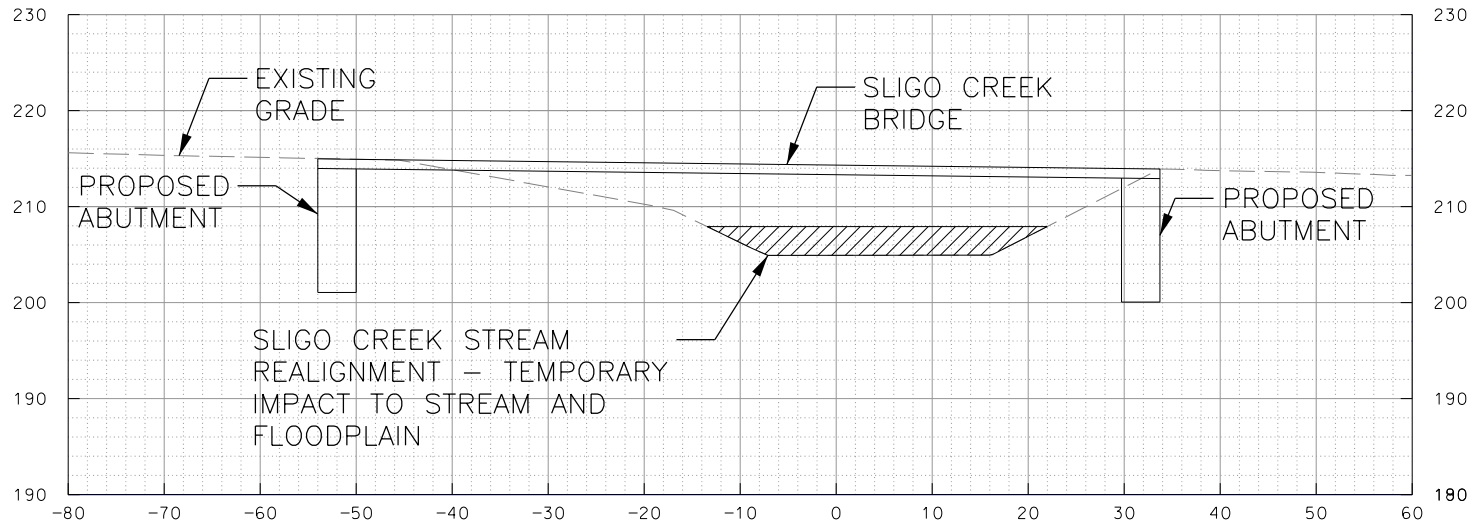
MONTGOMERY AND PRINCE GEORGE'S COUNTIES,
MARYLAND

WATERS OF THE U.S. IMPACTS

DATE: 8/18/2016 SCALE: 1in = 100ft

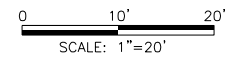
CONTRACT NO.
DRAWING NO.
PLANVIEW SHEET NO.
13 OF 38

FILE: N:\Geospatial\Clients\O_PurpleLine_Transit_Partners\geofigs\impacts\impact_Map_letter_v13.mxd
DATE: 8/19/2016



SLIGO CREEK
 STREAM IMPACT WUS 003
 STATION 396+00 - 397+50

SCALE: 1"=20'



MARYLAND DEPARTMENT OF TRANSPORTATION
MARYLAND TRANSIT ADMINISTRATION



ATKINS
 390 Calverton Blvd, Suite 400
 Calverton, Maryland 20705
 Telephone: 301-210-6800
 www.atkinsglobal.com

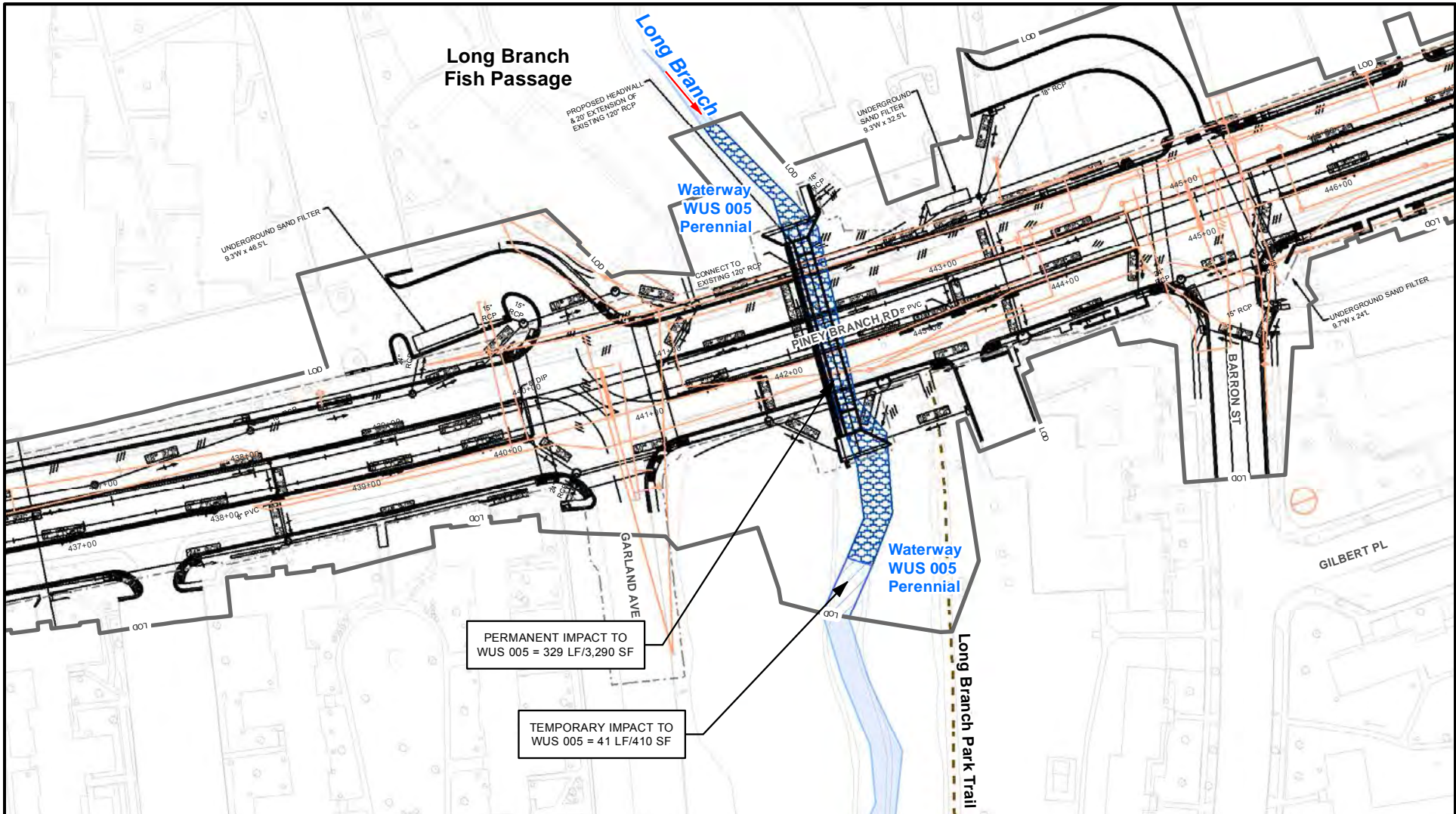
PROFESSIONAL CERTIFICATION
 I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. _____ Expiration Date _____

NO.	DESCRIPTION	BY	DATE

APPR. CHECK DRAWN DESIGN

PURPLE LINE LIGHT RAIL
 MONTGOMERY AND PRINCE GEORGES COUNTIES.
 MARYLAND
WUS 003 STREAM IMPACT
 DATE: 06/28/2016 SCALE: 1"=20'

CONTRACT NO.
 0-0000-0000
 DRAWING NO.
 CROSS SECTION SHEET NO.
 8 OF 22



<p>WETLAND BOUNDARY</p> <p>OPEN WATER</p> <p>UNIMPACTED STREAMS</p> <p>UNIMPACTED WETLANDS</p> <p>UNIMPACTED ROW</p>	<p>WB 25-FT WETLAND BUFFER</p> <p>FLP 100-YEAR FLOODPLAIN</p> <p>PROJECT LIMITS OF DISTURBANCE</p> <p>Stream Flow</p>	<p>C/F LIMITS OF CUT/FILL</p> <p>ROW</p> <p>PROPOSED UTILITIES</p> <p>PROPOSED RAIL ALIGNMENT</p> <p>ARCHEOLOGICAL SITE</p>	<p>WETLAND IMPACTS</p> <p>TEMPORARY WETLAND IMPACTS = 0 SF/0 AC</p> <p>PERMANENT WETLAND IMPACTS = 0 SF/0 AC</p>	<p>WETLAND BUFFER IMPACTS</p> <p>TEMPORARY WETLAND BUFFER IMPACTS = 0 SF/0 AC</p> <p>PERMANENT WETLAND BUFFER IMPACTS = 0 SF/0 AC</p>
<p>STREAM AND OPEN WATER IMPACTS</p> <p>TEMPORARY WUS IMPACTS = 41 LF/410 SF</p> <p>PERMANENT WUS IMPACTS = 329 LF/3290 SF</p>			<p>PERMANENT POW IMPACTS = 0 SF/0 AC</p>	<p>100-YEAR FLOODPLAIN IMPACTS</p> <p>TEMPORARY FLOODPLAIN IMPACTS = 0 SF/0 AC</p> <p>PERMANENT FLOODPLAIN IMPACTS = 0 SF/0 AC</p>

MARYLAND DEPARTMENT OF TRANSPORTATION

District of Columbia

3901 Calverton Blvd, Suite 400
 Calverton, Maryland 20705
 Telephone: 301-210-6800
 www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

STREAM IMPACTS

TEMPORARY PERENNIAL IMPACT = 410 SF/41 LF

PERMANENT PERENNIAL IMPACT = 3290 SF/329 LF

TEMPORARY INTERMITTENT IMPACT = 0 SF/0 LF

PERMANENT INTERMITTENT IMPACT = 0 SF/0 LF

TEMPORARY EPHEMERAL IMPACT = 0 SF/0 LF

PERMANENT EPHEMERAL IMPACT = 0 SF/0 LF

0 50 100 Feet

N

PURPLE LINE LIGHT RAIL

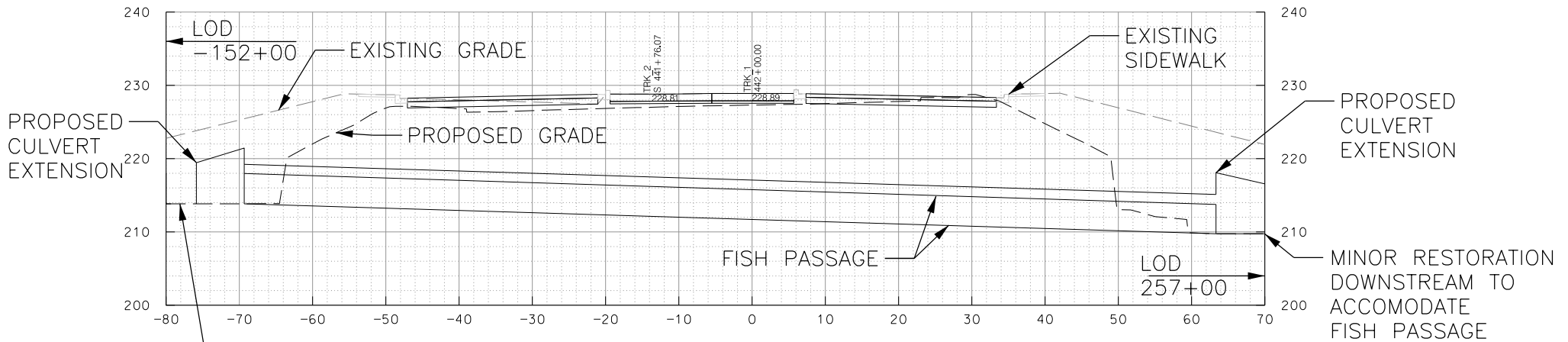
MONTGOMERY AND PRINCE GEORGE'S COUNTIES, MARYLAND

WATERS OF THE U.S. IMPACTS

DATE: 8/18/2016 SCALE: 1in = 100ft

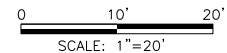
CONTRACT NO.
DRAWING NO.
PLANVIEW SHEET NO.
14 OF 38

FILE: N:\Geospatial\Clients\0_PurpleLine_Transit_Partners\geofigs\impacts\impact_Map_letter_v13.mxd
DATE: 8/19/2016



LONG BRANCH FISH PASSAGE
 STREAM IMPACT WUS 005
 323 CY AND 2,910 SF
 STATION 442+25

SCALE: 1"=20'



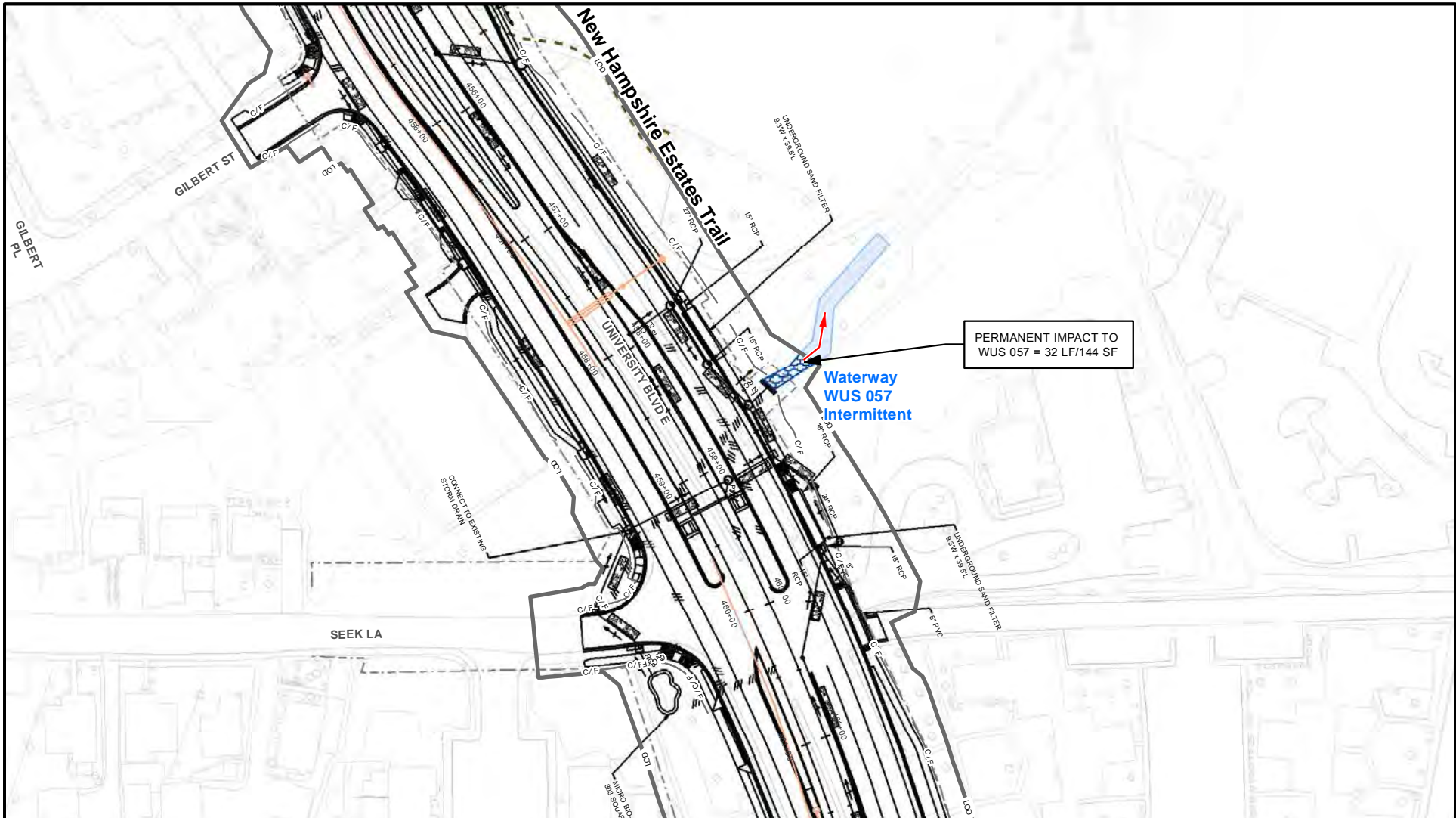
PROFESSIONAL CERTIFICATION
 I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. _____ Expiration Date _____

NO.	DESCRIPTION	BY	DATE

APPR. CHECK DRAWN DESIGN

PURPLE LINE LIGHT RAIL
 MONTGOMERY AND PRINCE GEORGES COUNTIES,
 MARYLAND
WUS 005 STREAM IMPACT
 DATE: 06/28/2016 SCALE: 1"=20'

CONTRACT NO.
 0-0000-0000
 DRAWING NO.
 CROSS SECTION SHEET NO.
 9 OF 22



<ul style="list-style-type: none"> WETLAND BOUNDARY OPEN WATER UNIMPACTED STREAMS UNIMPACTED WETLANDS UNIMPACTED ROW 	<ul style="list-style-type: none"> WB 25-FT WETLAND BUFFER FLP 100-YEAR FLOODPLAIN PROJECT LIMITS OF DISTURBANCE Stream Flow 	<ul style="list-style-type: none"> C/F LIMITS OF CUT/FILL ROW PROPOSED UTILITIES PROPOSED RAIL ALIGNMENT ARCHEOLOGICAL SITE 	WETLAND IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND IMPACTS = 0 SF/0 AC PERMANENT WETLAND IMPACTS = 0 SF/0 AC 	WETLAND BUFFER IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND BUFFER IMPACTS = 0 SF/0 AC PERMANENT WETLAND BUFFER IMPACTS = 0 SF/0 AC
STREAM AND OPEN WATER IMPACTS <ul style="list-style-type: none"> TEMPORARY WUS IMPACTS = 0 LF/0 SF PERMANENT WUS IMPACTS = 32 LF/144 SF 			<ul style="list-style-type: none"> PERMANENT POW IMPACTS = 0 SF/0 AC 	100-YEAR FLOODPLAIN IMPACTS <ul style="list-style-type: none"> TEMPORARY FLOODPLAIN IMPACTS = 0 SF/0 AC PERMANENT FLOODPLAIN IMPACTS = 0 SF/0 AC

MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND TRANSIT ADMINISTRATION

District of Columbia

ATKINS

3901 Calverton Blvd, Suite 400
 Calverton, Maryland 20735
 Telephone: 301-210-6800
 www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

STREAM IMPACTS

TEMPORARY PERENNIAL IMPACT = 0 SF/0 LF
 PERMANENT PERENNIAL IMPACT = 0 SF/0 LF
 TEMPORARY INTERMITTENT IMPACT = 0 SF/0 LF
 PERMANENT INTERMITTENT IMPACT = 144 SF/32 LF
 TEMPORARY EPHEMERAL IMPACT = 0 SF/0 LF
 PERMANENT EPHEMERAL IMPACT = 0 SF/0 LF

0 50 100
 Feet

PURPLE LINE LIGHT RAIL

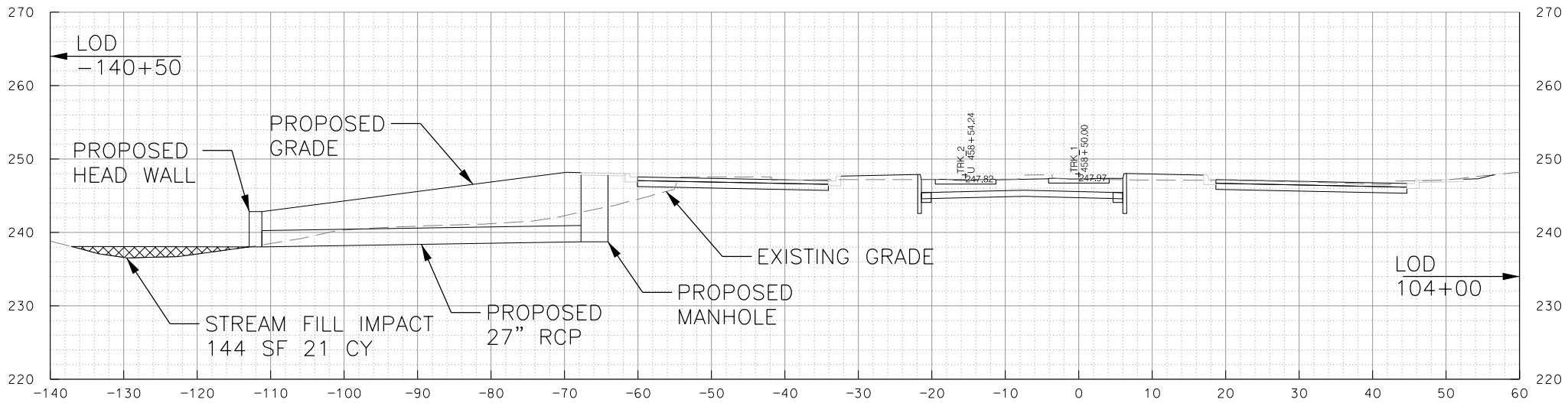
MONTGOMERY AND PRINCE GEORGE'S COUNTIES,
 MARYLAND

WATERS OF THE U.S. IMPACTS

DATE: 8/18/2016 SCALE: 1in = 100ft

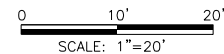
CONTRACT NO.
DRAWING NO.
PLANVIEW SHEET NO.
15 OF 38

FILE: N:\Geospatial\Clients\O_PurpleLine_Transit_Partners\geofigs\impacts\impact_Map_letter_v13.mxd
 DATE: 8/19/2016



STREAM IMPACT WUS 057
STATION 458+50

SCALE: 1"=20'



PROFESSIONAL CERTIFICATION
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No. _____ Expiration Date _____

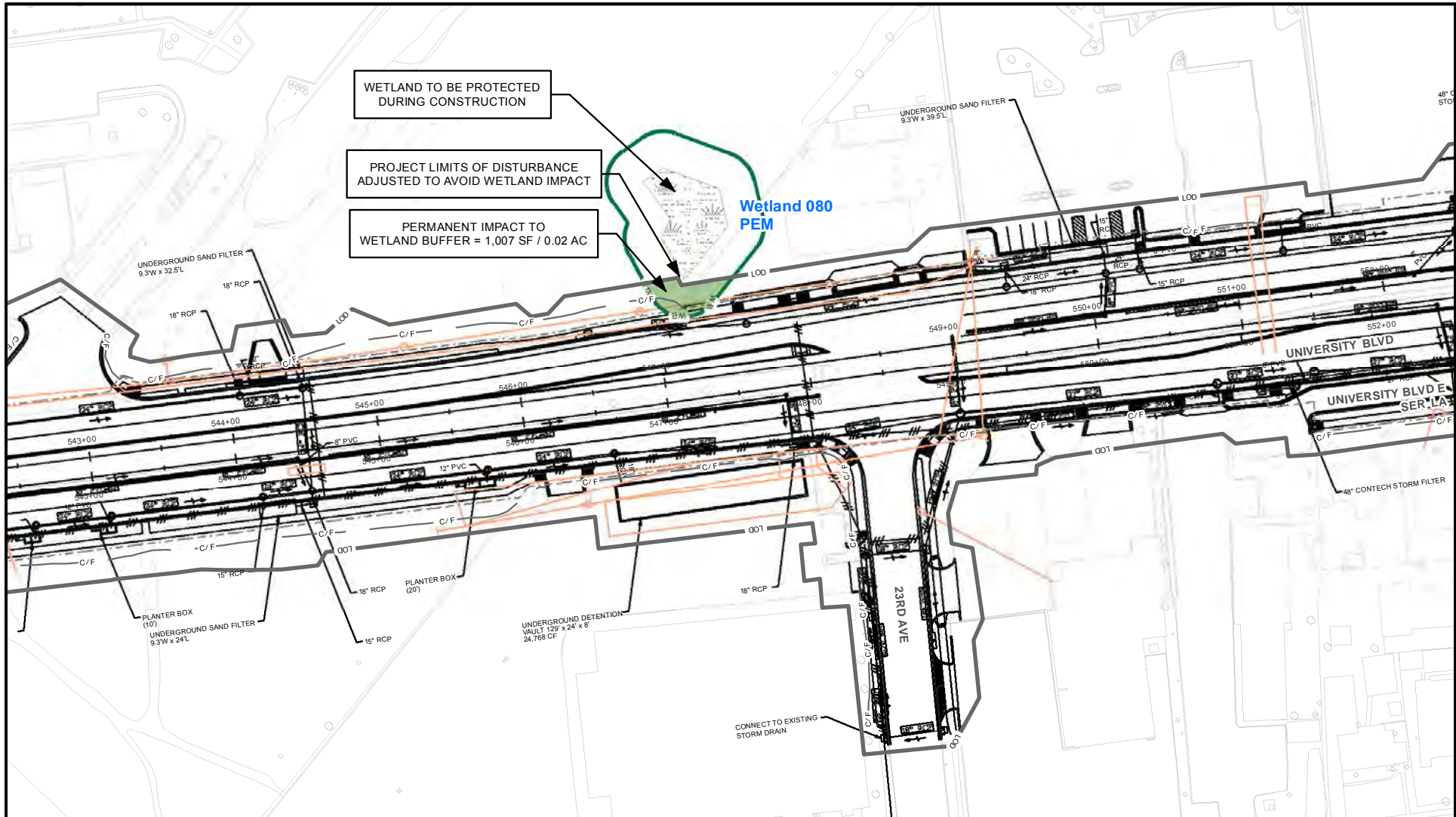
NO.	DESCRIPTION	BY	DATE

APPR	CHECK	DRAWN	DESIGN

PURPLE LINE LIGHT RAIL
MONTGOMERY AND PRINCE GEORGES COUNTIES,
MARYLAND
WUS 057 STREAM IMPACT
DATE: 06/28/2016 SCALE: 1"=20'

CONTRACT NO. 0-0000-0000
DRAWING NO. _____
CROSS SECTION SHEET NO. 10 OF 22

pww://pww-fms-1801-pds.com/ATKINMD/PL1/Drawings/Purple Line P3 Design/4.0 CAD (Work in Progress)/Environmental/General/Sketches/Cross Sections/Segment 5 7/25/2016



WETLAND TO BE PROTECTED DURING CONSTRUCTION

PROJECT LIMITS OF DISTURBANCE ADJUSTED TO AVOID WETLAND IMPACT

PERMANENT IMPACT TO WETLAND BUFFER = 1,007 SF / 0.02 AC

Wetland 080 PEM

<ul style="list-style-type: none"> WETLAND BOUNDARY OPEN WATER UNIMPACTED STREAMS UNIMPACTED WETLANDS UNIMPACTED ROW 	<ul style="list-style-type: none"> WB 25-FT WETLAND BUFFER FIP 100-YEAR FLOODPLAIN PROJECT LIMITS OF DISTURBANCE Stream Flow 	<ul style="list-style-type: none"> C/F LIMITS OF CUT/FILL ROW PROPOSED UTILITIES PROPOSED RAIL ALIGNMENT ARCHEOLOGICAL SITE 	<p>WETLAND IMPACTS</p> <ul style="list-style-type: none"> TEMPORARY WETLAND IMPACTS = 0 SF/0 AC PERMANENT WETLAND IMPACTS = 0 SF/0 AC <p>STREAM AND OPEN WATER IMPACTS</p> <ul style="list-style-type: none"> TEMPORARY WUS IMPACTS = 0 LF/0 SF PERMANENT WUS IMPACTS = 0 LF/0 SF 	<p>WETLAND BUFFER IMPACTS</p> <ul style="list-style-type: none"> TEMPORARY WETLAND BUFFER IMPACTS = SF/0 AC PERMANENT WETLAND BUFFER IMPACTS = 1007 SF/0.02 AC <p>100-YEAR FLOODPLAIN IMPACTS</p> <ul style="list-style-type: none"> TEMPORARY FLOODPLAIN IMPACTS = 0 SF/0 AC PERMANENT FLOODPLAIN IMPACTS = 0 SF/0 AC
---	--	--	---	--

MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND TRANSIT ADMINISTRATION

District of Columbia

ATKINS

3901 Calverton Blvd, Suite 400
Calverton, Maryland 20705
Telephone: 301-210-6800
www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

STREAM IMPACTS

- TEMPORARY PERENNIAL IMPACT = 0 SF/0 LF
- PERMANENT PERENNIAL IMPACT = 0 SF/0 LF
- TEMPORARY INTERMITTENT IMPACT = 0 SF/0 LF
- PERMANENT INTERMITTENT IMPACT = 0 SF/0 LF
- TEMPORARY EPHEMERAL IMPACT = 0 SF/0 LF
- PERMANENT EPHEMERAL IMPACT = 0 SF/0 LF

0 50 100 Feet

PURPLE LINE LIGHT RAIL

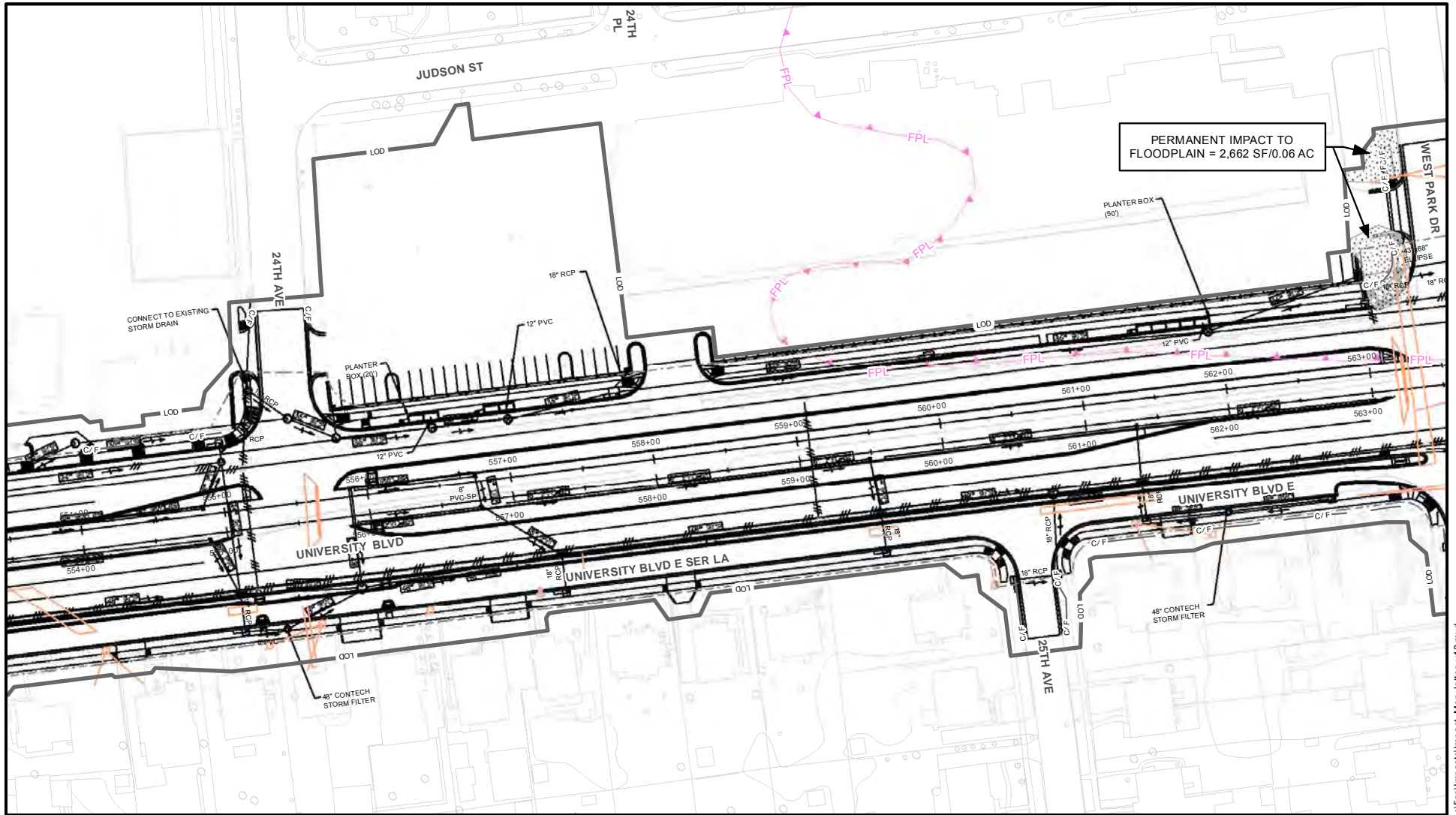
MONTGOMERY AND PRINCE GEORGE'S COUNTIES, MARYLAND

WATERS OF THE U.S. IMPACTS

DATE: 8/18/2016 SCALE: 1in = 100ft

CONTRACT NO.
DRAWING NO.
PLANVIEW SHEET NO.
16 OF 38

FILE: N:\Geospatial\Clients\0_PurpleLine_Transit_Partners\geospatial\impacts\Impact_Map_Jetter_v13.mxd
DATE: 8/19/2016



PERMANENT IMPACT TO FLOODPLAIN = 2,662 SF/0.06 AC

<ul style="list-style-type: none"> WETLAND BOUNDARY OPEN WATER UNIMPACTED STREAMS UNIMPACTED WETLANDS UNIMPACTED ROW 	<ul style="list-style-type: none"> WB 25-FT WETLAND BUFFER FPL 100-YEAR FLOODPLAIN PROJECT LIMITS OF DISTURBANCE Stream Flow 	<ul style="list-style-type: none"> C/F LIMITS OF CUT/FILL ROW PROPOSED UTILITIES PROPOSED RAIL ALIGNMENT ARCHEOLOGICAL SITE 	WETLAND IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND IMPACTS = 0 SF/0 AC PERMANENT WETLAND IMPACTS = 0 SF/0 AC STREAM AND OPEN WATER IMPACTS <ul style="list-style-type: none"> TEMPORARY WUS IMPACTS = 0 LF/0 SF PERMANENT WUS IMPACTS = 0 LF/0 SF 	WETLAND BUFFER IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND BUFFER IMPACTS = 0 SF/0 AC PERMANENT WETLAND BUFFER IMPACTS = 0 SF/0 AC 100-YEAR FLOODPLAIN IMPACTS <ul style="list-style-type: none"> TEMPORARY FLOODPLAIN IMPACTS = 0 SF/0 AC PERMANENT FLOODPLAIN IMPACTS = 2662 SF/0.06 AC
---	--	--	---	--

MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND TRANSIT ADMINISTRATION

District of Columbia

3901 Calverton Blvd, Suite 400
Calverton, Maryland 20735
Telephone: 301-210-6800
www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

STREAM IMPACTS

- TEMPORARY PERENNIAL IMPACT = 0 SF/0 LF
- PERMANENT PERENNIAL IMPACT = 0 SF/0 LF
- TEMPORARY INTERMITTENT IMPACT = 0 SF/0 LF
- PERMANENT INTERMITTENT IMPACT = 0 SF/0 LF
- TEMPORARY EPHEMERAL IMPACT = 0 SF/0 LF
- PERMANENT EPHEMERAL IMPACT = 0 SF/0 LF

0 50 100
Feet

PURPLE LINE LIGHT RAIL

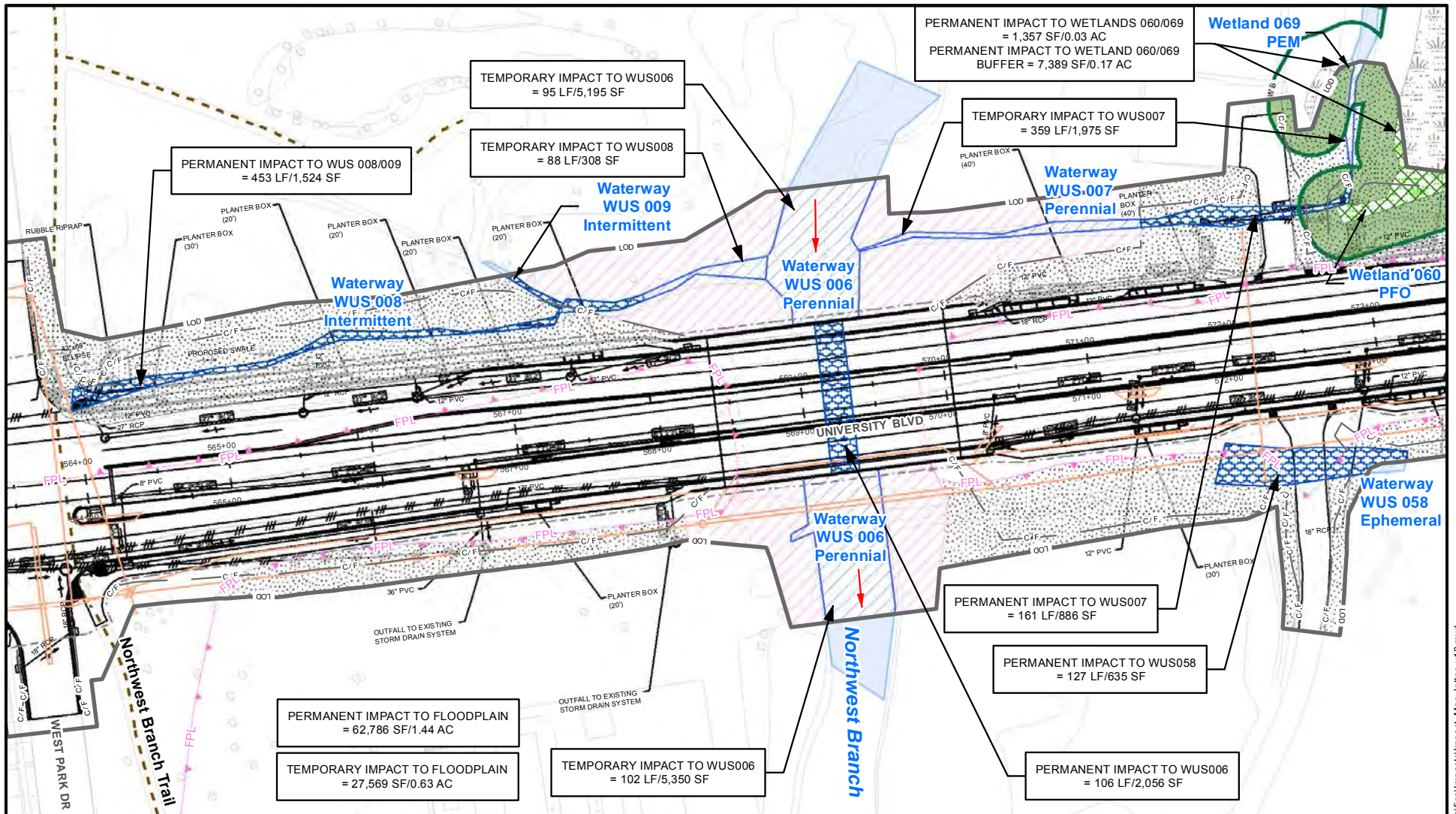
MONTGOMERY AND PRINCE GEORGE'S COUNTIES,
MARYLAND

WATERS OF THE U.S. IMPACTS

DATE: 8/18/2016 SCALE: 1in = 100ft

CONTRACT NO.
DRAWING NO.
PLANVIEW SHEET NO. 17 OF 38

FILE: N:\Geospatial\Clients\O_PurpleLine_Transit_Partners\geofigs\impacts\impact_Map_Jetter_v13.mxd DATE: 8/19/2016



WETLAND BOUNDARY OPEN WATER UNIMPACTED STREAMS UNIMPACTED WETLANDS UNIMPACTED ROW	25-FT WETLAND BUFFER 100-YEAR FLOODPLAIN PROJECT LIMITS OF DISTURBANCE Stream Flow	LIMITS OF CUT/FILL ROW PROPOSED UTILITIES PROPOSED RAIL ALIGNMENT ARCHAEOLOGICAL SITE	WETLAND IMPACTS TEMPORARY WETLAND IMPACTS = 0 SF/0 AC PERMANENT WETLAND IMPACTS = 1357 SF/0.03 AC STREAM AND OPEN WATER IMPACTS TEMPORARY WUS IMPACTS = 644 LF/12828 SF PERMANENT WUS IMPACTS = 847 LF/5101 SF PERMANENT POW IMPACTS = 0 SF/0 AC	WETLAND BUFFER IMPACTS TEMPORARY WETLAND BUFFER IMPACTS = 0 SF/0 AC PERMANENT WETLAND BUFFER IMPACTS = 7389 SF/0.17 AC 100-YEAR FLOODPLAIN IMPACTS TEMPORARY FLOODPLAIN IMPACTS = 27569 SF/0.63 AC PERMANENT FLOODPLAIN IMPACTS = 62786 SF/1.44 AC
---	---	---	--	---

MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND TRANSIT ADMINISTRATION

MTA Maryland

District of Columbia

PURPLE LINE TRANSIT PARTNERS

ATKINS
3901 Calverton Blvd, Suite 400
Calverton, Maryland 20735
Telephone: 301-210-6800
www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

STREAM IMPACTS

TEMPORARY PERENNIAL IMPACT = 12520 SF/556 LF
 PERMANENT PERENNIAL IMPACT = 2942 SF/267 LF
 TEMPORARY INTERMITTENT IMPACT = 308 SF/88 LF
 PERMANENT INTERMITTENT IMPACT = 1524 SF/453 LF
 TEMPORARY EPHEMERAL IMPACT = 0 SF/0 LF
 PERMANENT EPHEMERAL IMPACT = 835 SF/127 LF

0 50 100
Feet

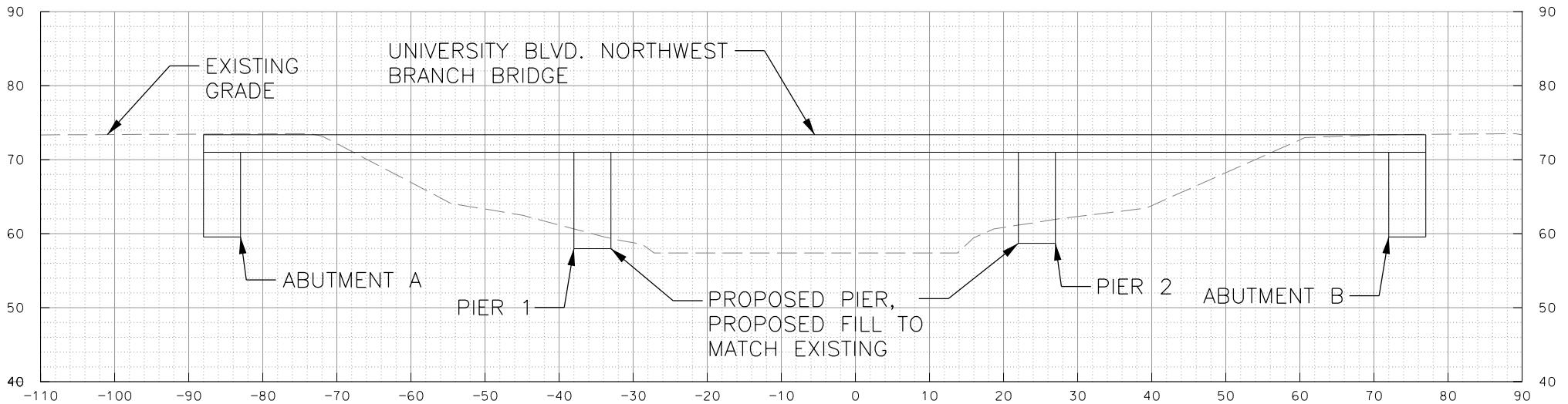
PURPLE LINE LIGHT RAIL

MONTGOMERY AND PRINCE GEORGE'S COUNTIES,
MARYLAND

WATERS OF THE U.S. IMPACTS

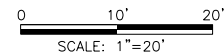
DATE: 8/18/2016 SCALE: 1in = 100ft

CONTRACT NO.
DRAWING NO.
PLANVIEW SHEET NO. 18 OF 38



NORTHWEST BRANCH
 STREAM IMPACT WUS 006
 STATION 568+00 - STATION 570+00

SCALE: 1"=20'



PROFESSIONAL CERTIFICATION
 I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. _____ Expiration Date _____

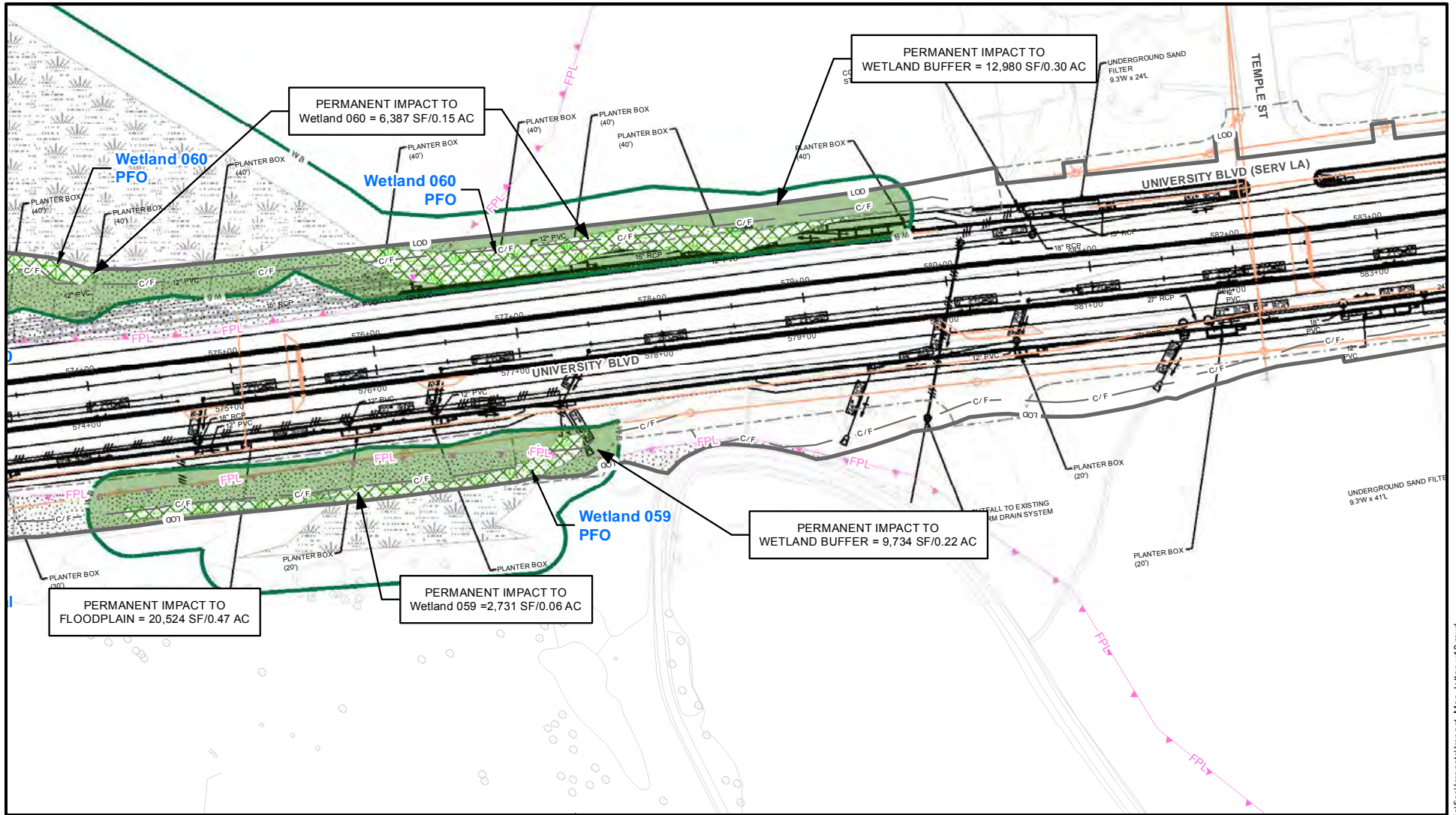
NO.	DESCRIPTION	BY	DATE

APPR. CHECK DRAWN DESIGN

PURPLE LINE LIGHT RAIL
 MONTGOMERY AND PRINCE GEORGES COUNTIES,
 MARYLAND
WUS 006 STREAM IMPACT
 DATE: 06/28/2016 SCALE: 1"=20'

CONTRACT NO.
 0-0000-0000
 DRAWING NO.
 CROSS SECTION SHEET NO.
 11 OF 22

p:\p\p-fms-1801.ppsj.com\AKNAND\PL01\Documents\Purple Line P3 Design\4.0 CAD (Work in Progress)\Environmental\General\Sketches\Cross Sections\Segment 5



PERMANENT IMPACT TO Wetland 060 = 6,387 SF/0.15 AC

PERMANENT IMPACT TO WETLAND BUFFER = 12,980 SF/0.30 AC

PERMANENT IMPACT TO FLOODPLAIN = 20,524 SF/0.47 AC

PERMANENT IMPACT TO Wetland 059 = 2,731 SF/0.06 AC

PERMANENT IMPACT TO WETLAND BUFFER = 9,734 SF/0.22 AC

WETLAND BOUNDARY	25-FT WETLAND BUFFER	LIMITS OF CUT/FILL	WETLAND IMPACTS	WETLAND BUFFER IMPACTS
OPEN WATER	100-YEAR FLOODPLAIN	ROW	TEMPORARY WETLAND IMPACTS = 0 SF/0 AC	PERMANENT WETLAND BUFFER IMPACTS = 22714 SF/0.52 AC
UNIMPACTED STREAMS	PROJECT LIMITS OF DISTURBANCE	PROPOSED UTILITIES	STREAM AND OPEN WATER IMPACTS	100-YEAR FLOODPLAIN IMPACTS
UNIMPACTED WETLANDS	Stream Flow	PROPOSED RAIL ALIGNMENT	TEMPORARY WUS IMPACTS = 0 LF/0 SF	TEMPORARY FLOODPLAIN IMPACTS = 0 SF/0 AC
UNIMPACTED ROW	ARCHAEOLOGICAL SITE	PERMANENT POW IMPACTS = 0 SF/0 AC	PERMANENT WUS IMPACTS = 0 LF/0 SF	PERMANENT FLOODPLAIN IMPACTS = 20524 SF/0.47 AC

MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND TRANSIT ADMINISTRATION

District of Columbia

ATKINS
3901 Calverton Blvd, Suite 400
Calverton, Maryland 20705
Telephone: 301-210-6800
www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

STREAM IMPACTS

TEMPORARY PERENNIAL IMPACT = 0 SF/0 LF
 PERMANENT PERENNIAL IMPACT = 0 SF/0 LF
 TEMPORARY INTERMITTENT IMPACT = 0 SF/0 LF
 PERMANENT INTERMITTENT IMPACT = 0 SF/0 LF
 TEMPORARY EPHEMERAL IMPACT = 0 SF/0 LF
 PERMANENT EPHEMERAL IMPACT = 0 SF/0 LF

0 50 100
Feet

PURPLE LINE LIGHT RAIL

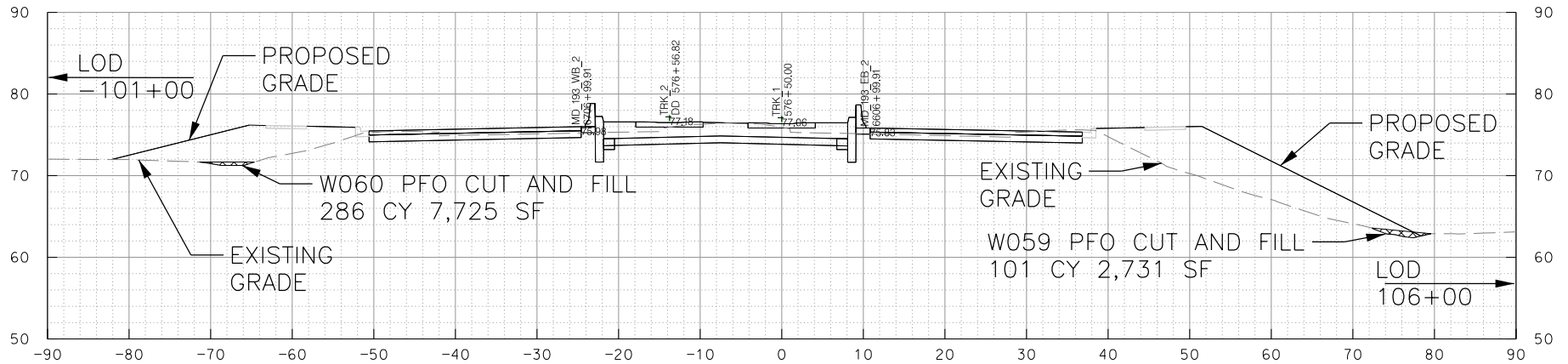
MONTGOMERY AND PRINCE GEORGE'S COUNTIES,
MARYLAND

WATERS OF THE U.S. IMPACTS

DATE: 8/18/2016 SCALE: 1in = 100ft

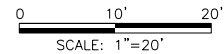
CONTRACT NO.
DRAWING NO.
PLANVIEW SHEET NO. 19 OF 38

FILE: N:\Geospatial\Clients\O_PurpleLine_Transit_Partners\geotiffs\impacts\impact_Map_letter_v13.mxd
DATE: 8/19/2016



WETLAND IMPACT W059 & W060
STATION 576+50

SCALE: 1"=20'



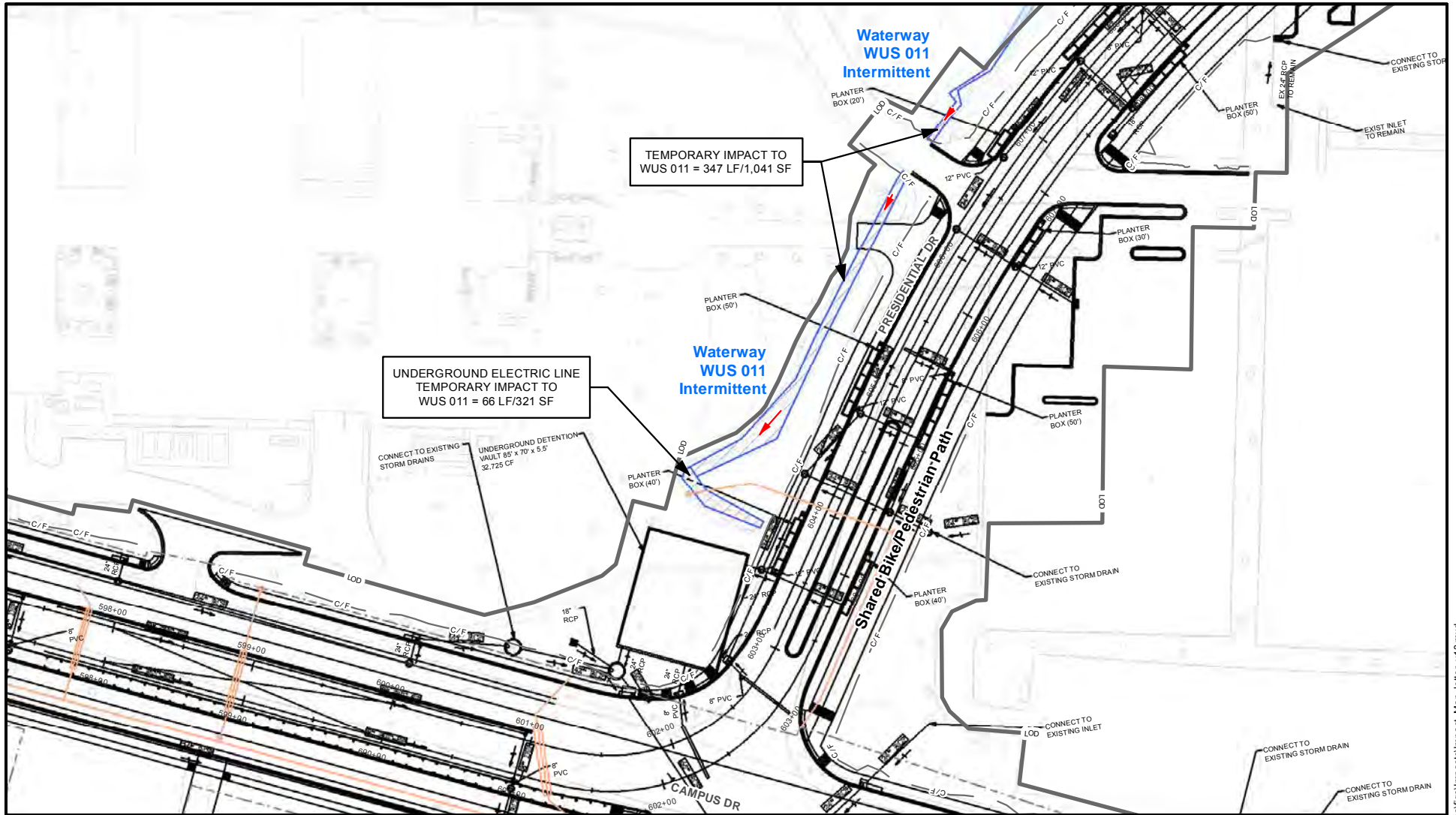
PROFESSIONAL CERTIFICATION
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. _____ Expiration Date _____

NO.	DESCRIPTION	BY	DATE

APPR. CHECK DRAWN DESGN

PURPLE LINE LIGHT RAIL
MONTGOMERY AND PRINCE GEORGES COUNTIES,
MARYLAND
W059 & W060 WETLAND IMPACT
DATE: 06/28/2016 SCALE: 1"=20'

CONTRACT NO.
0-0000-0000
DRAWING NO.
CROSS SECTION SHEET NO.
12 OF 22



TEMPORARY IMPACT TO WUS 011 = 347 LF/1,041 SF

UNDERGROUND ELECTRIC LINE TEMPORARY IMPACT TO WUS 011 = 66 LF/321 SF

<ul style="list-style-type: none"> WETLAND BOUNDARY OPEN WATER UNIMPACTED STREAMS UNIMPACTED WETLANDS UNIMPACTED ROW 	<ul style="list-style-type: none"> WB 25-FT WETLAND BUFFER FLP 100-YEAR FLOODPLAIN PROJECT LIMITS OF DISTURBANCE Stream Flow 	<ul style="list-style-type: none"> C/F LIMITS OF CUT/FILL ROW PROPOSED UTILITIES PROPOSED RAIL ALIGNMENT ARCHEOLOGICAL SITE 	<p>WETLAND IMPACTS</p> <ul style="list-style-type: none"> TEMPORARY WETLAND IMPACTS = 0 SF/0 AC PERMANENT WETLAND IMPACTS = 0 SF/0 AC <p>STREAM AND OPEN WATER IMPACTS</p> <ul style="list-style-type: none"> TEMPORARY WUS IMPACTS = 413 LF/1362 SF PERMANENT WUS IMPACTS = 0 LF/0 SF 	<p>WETLAND BUFFER IMPACTS</p> <ul style="list-style-type: none"> TEMPORARY WETLAND BUFFER IMPACTS = 0 SF/0 AC PERMANENT WETLAND BUFFER IMPACTS = 0 SF/0 AC <p>100-YEAR FLOODPLAIN IMPACTS</p> <ul style="list-style-type: none"> TEMPORARY FLOODPLAIN IMPACTS = 0 SF/0 AC PERMANENT FLOODPLAIN IMPACTS = 0 SF/0 AC
---	--	--	--	--

MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND TRANSIT ADMINISTRATION

District of Columbia

ATKINS
3901 Calverton Blvd, Suite 400
Calverton, Maryland 20735
Telephone: 301-210-6800
www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

STREAM IMPACTS

- TEMPORARY PERENNIAL IMPACT = 0 SF/0 LF
- PERMANENT PERENNIAL IMPACT = 0 SF/0 LF
- TEMPORARY INTERMITTENT IMPACT = 1362 SF/413 LF
- PERMANENT INTERMITTENT IMPACT = 0 SF/0 LF
- TEMPORARY EPHEMERAL IMPACT = 0 SF/0 LF
- PERMANENT EPHEMERAL IMPACT = 0 SF/0 LF

0 50 100
Feet

PURPLE LINE LIGHT RAIL

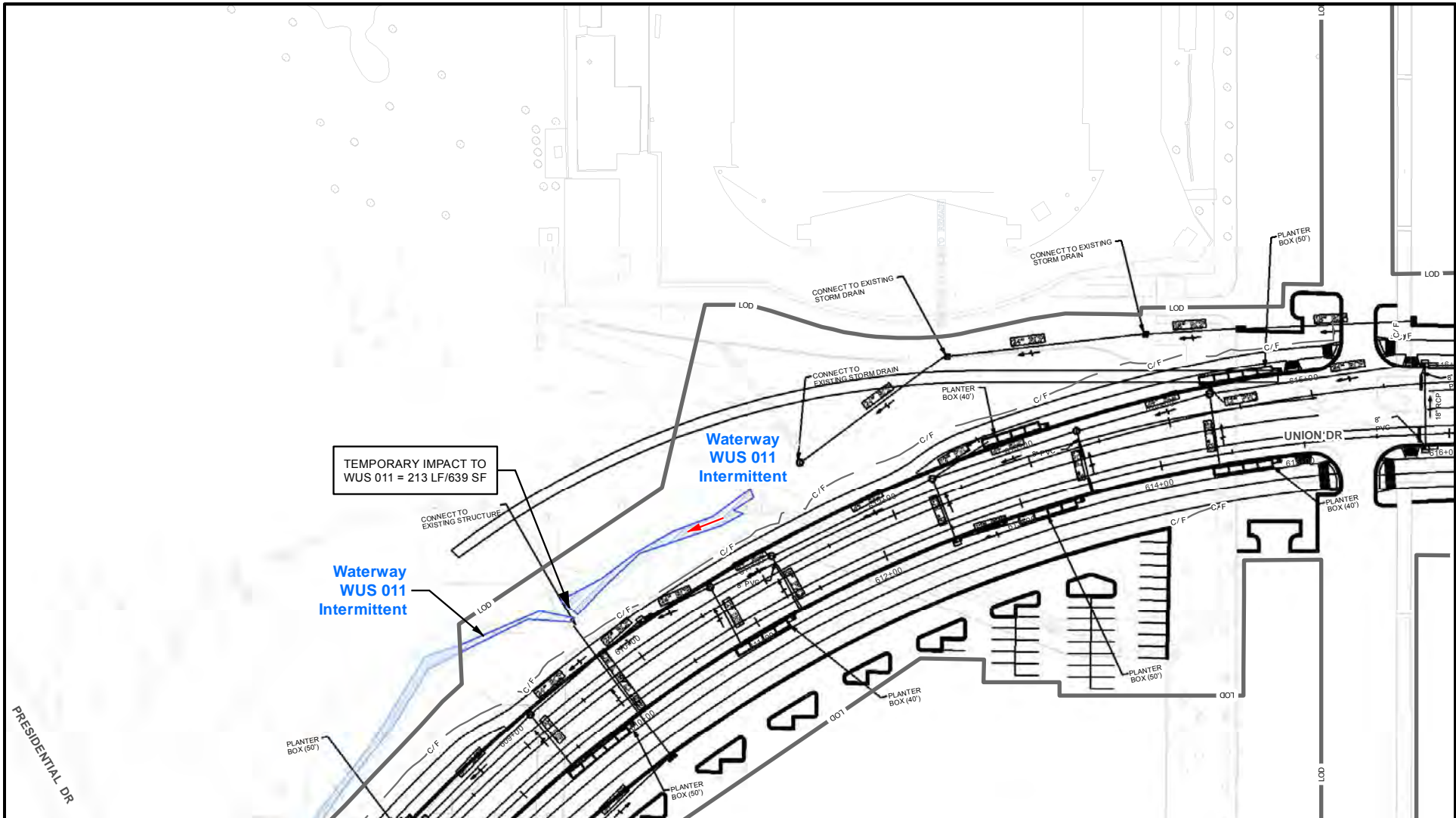
MONTGOMERY AND PRINCE GEORGE'S COUNTIES,
MARYLAND

WATERS OF THE U.S. IMPACTS

DATE: 8/18/2016 SCALE: 1in = 100ft

CONTRACT NO.
DRAWING NO.
PLANVIEW SHEET NO.
20 OF 38

FILE: N:\Geospatial\Clients\O_PurpleLine_Transit_Partners\geofigs\impacts\impact_Map_Jeter_v13.mxd
DATE: 8/19/2016



<ul style="list-style-type: none"> WETLAND BOUNDARY OPEN WATER UNIMPACTED STREAMS UNIMPACTED WETLANDS UNIMPACTED ROW 	<ul style="list-style-type: none"> 25-FT WETLAND BUFFER 100-YEAR FLOODPLAIN PROJECT LIMITS OF DISTURBANCE Stream Flow 	<ul style="list-style-type: none"> LIMITS OF CUT/FILL ROW PROPOSED UTILITIES PROPOSED RAIL ALIGNMENT ARCHAEOLOGICAL SITE 	WETLAND IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND IMPACTS = 0 SF/0 AC PERMANENT WETLAND IMPACTS = 0 SF/0 AC STREAM AND OPEN WATER IMPACTS <ul style="list-style-type: none"> TEMPORARY WUS IMPACTS = 213 LF/639 SF PERMANENT WUS IMPACTS = 0 LF/0 SF 	WETLAND BUFFER IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND BUFFER IMPACTS = 0 SF/0 AC PERMANENT WETLAND BUFFER IMPACTS = 0 SF/0 AC 100-YEAR FLOODPLAIN IMPACTS <ul style="list-style-type: none"> TEMPORARY FLOODPLAIN IMPACTS = 0 SF/0 AC PERMANENT FLOODPLAIN IMPACTS = 0 SF/0 AC
---	---	---	---	--

MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND TRANSIT ADMINISTRATION

District of Columbia

ATKINS

3901 Calverton Blvd, Suite 400
Calverton, Maryland 20705
Telephone: 301-210-6800
www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

STREAM IMPACTS

- TEMPORARY PERENNIAL IMPACT = 0 SF/0 LF
- PERMANENT PERENNIAL IMPACT = 0 SF/0 LF
- TEMPORARY INTERMITTENT IMPACT = 639 SF/213 LF
- PERMANENT INTERMITTENT IMPACT = 0 SF/0 LF
- TEMPORARY EPHEMERAL IMPACT = 0 SF/0 LF
- PERMANENT EPHEMERAL IMPACT = 0 SF/0 LF

0 50 100
Feet

PURPLE LINE LIGHT RAIL

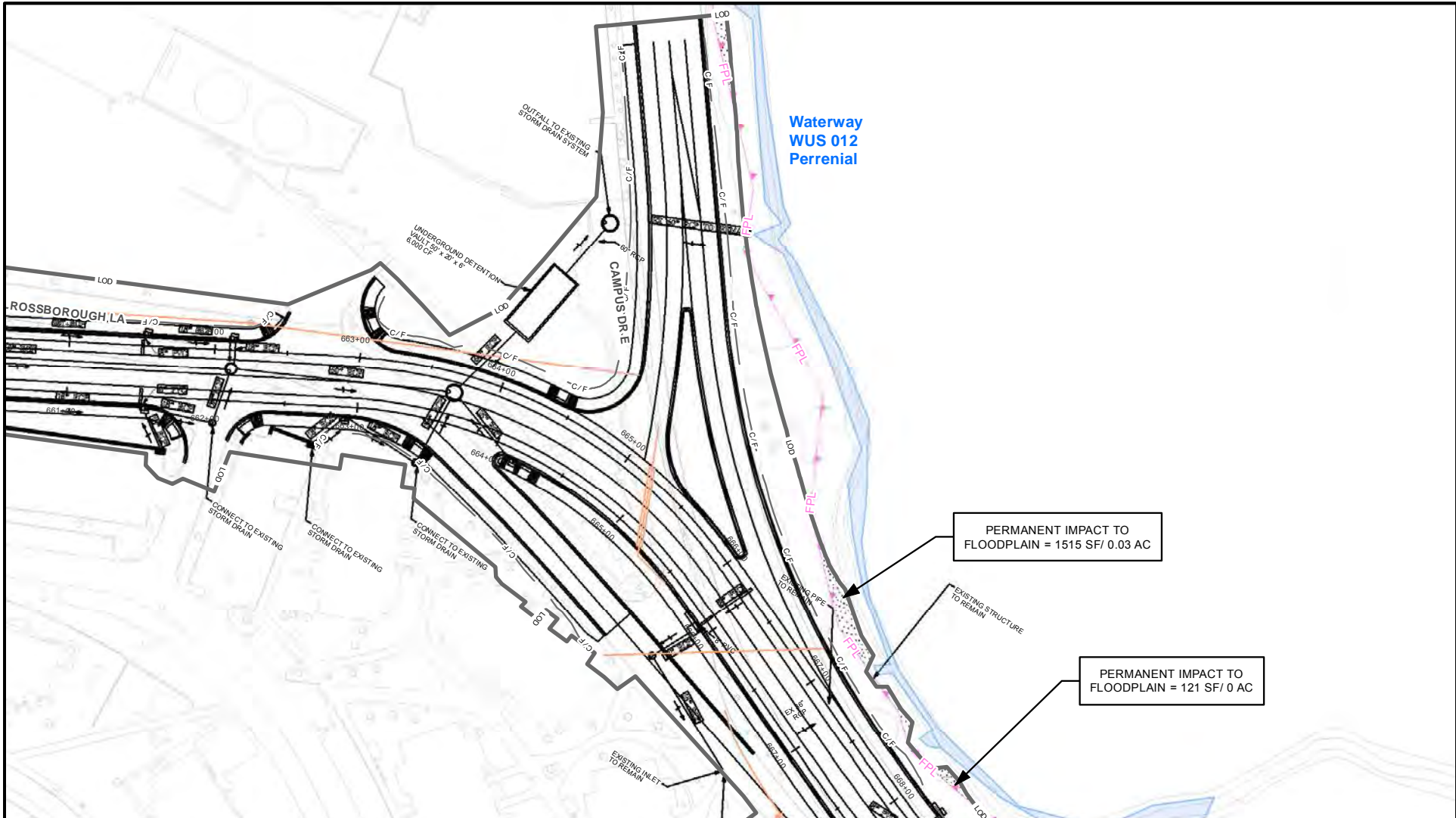
MONTGOMERY AND PRINCE GEORGE'S COUNTIES,
MARYLAND

WATERS OF THE U.S. IMPACTS

DATE: 8/18/2016 SCALE: 1in = 100ft

CONTRACT NO.
DRAWING NO.
PLANVIEW SHEET NO.
21 OF 38

FILE: N:\Geospatial\Clients\O_PurpleLine_Transit_Partners\geofigs\impacts\impact_Map_1eter_v13.mxd
DATE: 8/19/2016



PERMANENT IMPACT TO FLOODPLAIN = 1515 SF/ 0.03 AC

PERMANENT IMPACT TO FLOODPLAIN = 121 SF/ 0 AC

<ul style="list-style-type: none"> WETLAND BOUNDARY OPEN WATER UNIMPACTED STREAMS UNIMPACTED WETLANDS UNIMPACTED ROW 	<ul style="list-style-type: none"> WB 25-FT WETLAND BUFFER FPL 100-YEAR FLOODPLAIN PROJECT LIMITS OF DISTURBANCE Stream Flow 	<ul style="list-style-type: none"> C/F LIMITS OF CUT/FILL ROW PROPOSED UTILITIES PROPOSED RAIL ALIGNMENT ARCHEOLOGICAL SITE 	WETLAND IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND IMPACTS = 0 SF/0 AC PERMANENT WETLAND IMPACTS = 0 SF/0 AC 	WETLAND BUFFER IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND BUFFER IMPACTS = 0 SF/0 AC PERMANENT WETLAND BUFFER IMPACTS = 0 SF/0 AC
STREAM AND OPEN WATER IMPACTS <ul style="list-style-type: none"> TEMPORARY WUS IMPACTS = 0 LF/0 SF PERMANENT WUS IMPACTS = 0 LF/0 SF 			<ul style="list-style-type: none"> PERMANENT POW IMPACTS = 0 SF/0 AC 	100-YEAR FLOODPLAIN IMPACTS <ul style="list-style-type: none"> TEMPORARY FLOODPLAIN IMPACTS = 0 SF/0 AC PERMANENT FLOODPLAIN IMPACTS = 1636 SF/0.03 AC

MARYLAND DEPARTMENT OF TRANSPORTATION

District of Columbia

ATKINS
3901 Calverton Blvd., Suite 400
Calverton, Maryland 20735
Telephone: 301-210-6800
www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

STREAM IMPACTS

- TEMPORARY PERENNIAL IMPACT = 0 SF/0 LF
- PERMANENT PERENNIAL IMPACT = 0 SF/0 LF
- TEMPORARY INTERMITTENT IMPACT = 0 SF/0 LF
- PERMANENT INTERMITTENT IMPACT = 0 SF/0 LF
- TEMPORARY EPHEMERAL IMPACT = 0 SF/0 LF
- PERMANENT EPHEMERAL IMPACT = 0 SF/0 LF

0 50 100
Feet

PURPLE LINE LIGHT RAIL

MONTGOMERY AND PRINCE GEORGE'S COUNTIES,
MARYLAND

WATERS OF THE U.S. IMPACTS

DATE: 8/18/2016 SCALE: 1in = 100ft

CONTRACT NO.
DRAWING NO.
PLANVIEW SHEET NO.
22 OF 38



<ul style="list-style-type: none"> WETLAND BOUNDARY OPEN WATER UNIMPACTED STREAMS UNIMPACTED WETLANDS UNIMPACTED ROW 	<ul style="list-style-type: none"> WB 25-FT WETLAND BUFFER FLP 100-YEAR FLOODPLAIN PROJECT LIMITS OF DISTURBANCE Stream Flow 	<ul style="list-style-type: none"> C/F LIMITS OF CUT/FILL ROW PROPOSED UTILITIES PROPOSED RAIL ALIGNMENT ARCHEOLOGICAL SITE 	WETLAND IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND IMPACTS = 0 SF/0 AC PERMANENT WETLAND IMPACTS = 0 SF/0 AC 	WETLAND BUFFER IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND BUFFER IMPACTS = 0 SF/0 AC PERMANENT WETLAND BUFFER IMPACTS = 0 SF/0 AC
STREAM AND OPEN WATER IMPACTS <ul style="list-style-type: none"> TEMPORARY WUS IMPACTS = 0 LF/0 SF PERMANENT WUS IMPACTS = 0 LF/0 SF 			<ul style="list-style-type: none"> PERMANENT POW IMPACTS = 0 SF/0 AC 	100-YEAR FLOODPLAIN IMPACTS <ul style="list-style-type: none"> TEMPORARY FLOODPLAIN IMPACTS = 4675 SF/0.11 AC PERMANENT FLOODPLAIN IMPACTS = 3212 SF/0.07 AC

MARYLAND DEPARTMENT OF TRANSPORTATION

District of Columbia

ATKINS
3901 Calverton Blvd, Suite 400
Calverton, Maryland 20735
Telephone: 301-210-6800
www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

STREAM IMPACTS

- TEMPORARY PERENNIAL IMPACT = 0 SF/0 LF
- PERMANENT PERENNIAL IMPACT = 0 SF/0 LF
- TEMPORARY INTERMITTENT IMPACT = 0 SF/0 LF
- PERMANENT INTERMITTENT IMPACT = 0 SF/0 LF
- TEMPORARY EPHEMERAL IMPACT = 0 SF/0 LF
- PERMANENT EPHEMERAL IMPACT = 0 SF/0 LF

0 50 100
Feet

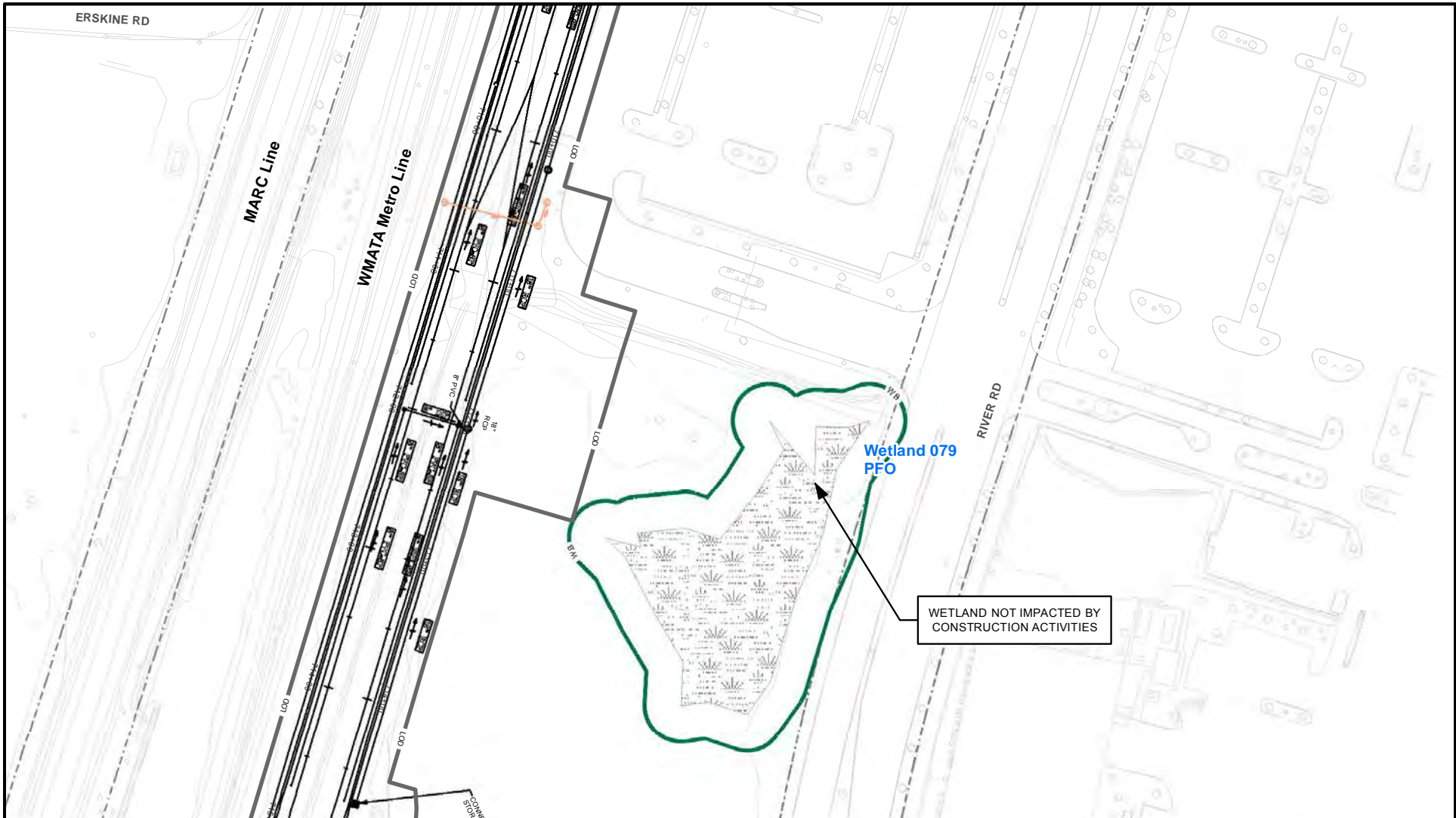
PURPLE LINE LIGHT RAIL

MONTGOMERY AND PRINCE GEORGE'S COUNTIES,
MARYLAND

WATERS OF THE U.S. IMPACTS

DATE: 8/18/2016 SCALE: 1in = 100ft

CONTRACT NO.
DRAWING NO.
PLANVIEW SHEET NO. 23 OF 38



<ul style="list-style-type: none"> WETLAND BOUNDARY OPEN WATER UNIMPACTED STREAMS UNIMPACTED WETLANDS UNIMPACTED ROW 	<ul style="list-style-type: none"> 25-FT WETLAND BUFFER 100-YEAR FLOODPLAIN PROJECT LIMITS OF DISTURBANCE Stream Flow 	<ul style="list-style-type: none"> LIMITS OF CUT/FILL ROW PROPOSED UTILITIES PROPOSED RAIL ALIGNMENT ARCHEOLOGICAL SITE 	WETLAND IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND IMPACTS = 0 SF/0 AC PERMANENT WETLAND IMPACTS = 0 SF/0 AC STREAM AND OPEN WATER IMPACTS <ul style="list-style-type: none"> TEMPORARY WUS IMPACTS = 0 LF/0 SF PERMANENT WUS IMPACTS = 0 LF/0 SF 	WETLAND BUFFER IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND BUFFER IMPACTS = 0 SF/0 AC PERMANENT WETLAND BUFFER IMPACTS = 0 SF/0 AC 100-YEAR FLOODPLAIN IMPACTS <ul style="list-style-type: none"> TEMPORARY FLOODPLAIN IMPACTS = 0 SF/0 AC PERMANENT FLOODPLAIN IMPACTS = 0 SF/0 AC
---	---	--	---	--

MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND TRANSIT ADMINISTRATION

District of Columbia

ATKINS

3901 Calverton Blvd, Suite 400
Calverton, Maryland 20735
Telephone: 301-210-6800
www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

STREAM IMPACTS

TEMPORARY PERENNIAL IMPACT = 0 SF/0 LF
 PERMANENT PERENNIAL IMPACT = 0 SF/0 LF
 TEMPORARY INTERMITTENT IMPACT = 0 SF/0 LF
 PERMANENT INTERMITTENT IMPACT = 0 SF/0 LF
 TEMPORARY EPHEMERAL IMPACT = 0 SF/0 LF
 PERMANENT EPHEMERAL IMPACT = 0 SF/0 LF

0 50 100
Feet

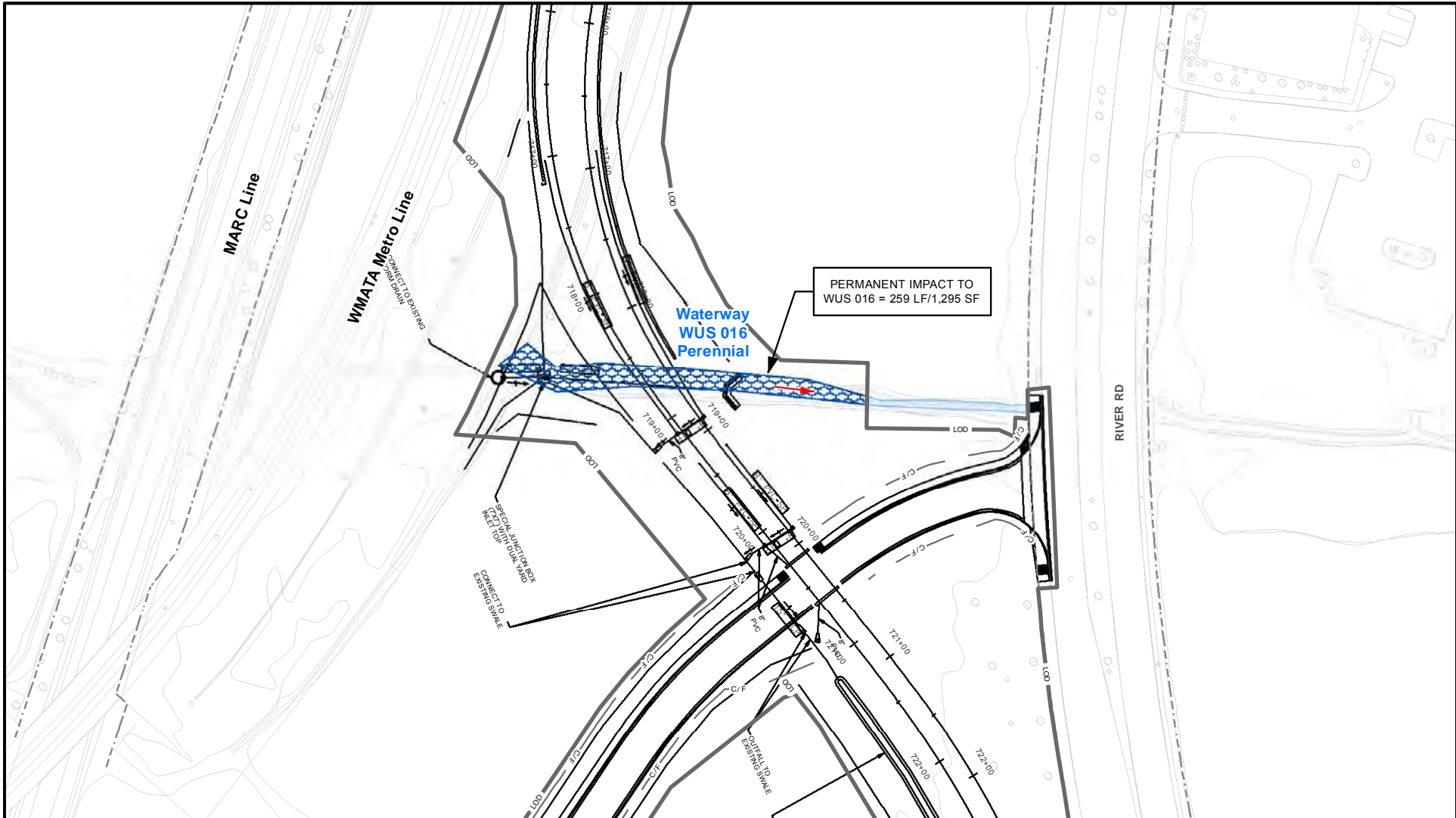
PURPLE LINE LIGHT RAIL

MONTGOMERY AND PRINCE GEORGE'S COUNTIES,
MARYLAND

WATERS OF THE U.S. IMPACTS

DATE: 8/18/2016 SCALE: 1in = 100ft

CONTRACT NO.
DRAWING NO.
PLANVIEW SHEET NO. 24 OF 38



<ul style="list-style-type: none"> WETLAND BOUNDARY OPEN WATER UNIMPACTED STREAMS UNIMPACTED WETLANDS UNIMPACTED ROW 	<ul style="list-style-type: none"> WB 25-FT WETLAND BUFFER FLP 100-YEAR FLOODPLAIN PROJECT LIMITS OF DISTURBANCE Stream Flow 	<ul style="list-style-type: none"> LIMITS OF CUT/FILL ROW PROPOSED UTILITIES PROPOSED RAIL ALIGNMENT ARCHEOLOGICAL SITE 	WETLAND IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND IMPACTS = 0 SF/0 AC PERMANENT WETLAND IMPACTS = 0 SF/0 AC 	WETLAND BUFFER IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND BUFFER IMPACTS = 0 SF/0 AC PERMANENT WETLAND BUFFER IMPACTS = 0 SF/0 AC
STREAM AND OPEN WATER IMPACTS <ul style="list-style-type: none"> TEMPORARY WUS IMPACTS = 0 LF/0 SF PERMANENT WUS IMPACTS = 259 LF/1,295 SF 			<ul style="list-style-type: none"> PERMANENT POW IMPACTS = 0 SF/0 AC 	100-YEAR FLOODPLAIN IMPACTS <ul style="list-style-type: none"> TEMPORARY FLOODPLAIN IMPACTS = 0 SF/0 AC PERMANENT FLOODPLAIN IMPACTS = 0 SF/0 AC

MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND TRANSIT ADMINISTRATION

District of Columbia

ATKINS

3901 Calverton Blvd, Suite 400
Calverton, Maryland 20735
Telephone: 301-210-6800
www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

STREAM IMPACTS

- TEMPORARY PERENNIAL IMPACT = 0 SF/0 LF
- PERMANENT PERENNIAL IMPACT = 1295 SF/259 LF
- TEMPORARY INTERMITTENT IMPACT = 0 SF/0 LF
- PERMANENT INTERMITTENT IMPACT = 0 SF/0 LF
- TEMPORARY EPHEMERAL IMPACT = 0 SF/0 LF
- PERMANENT EPHEMERAL IMPACT = 0 SF/0 LF

0 50 100
Feet

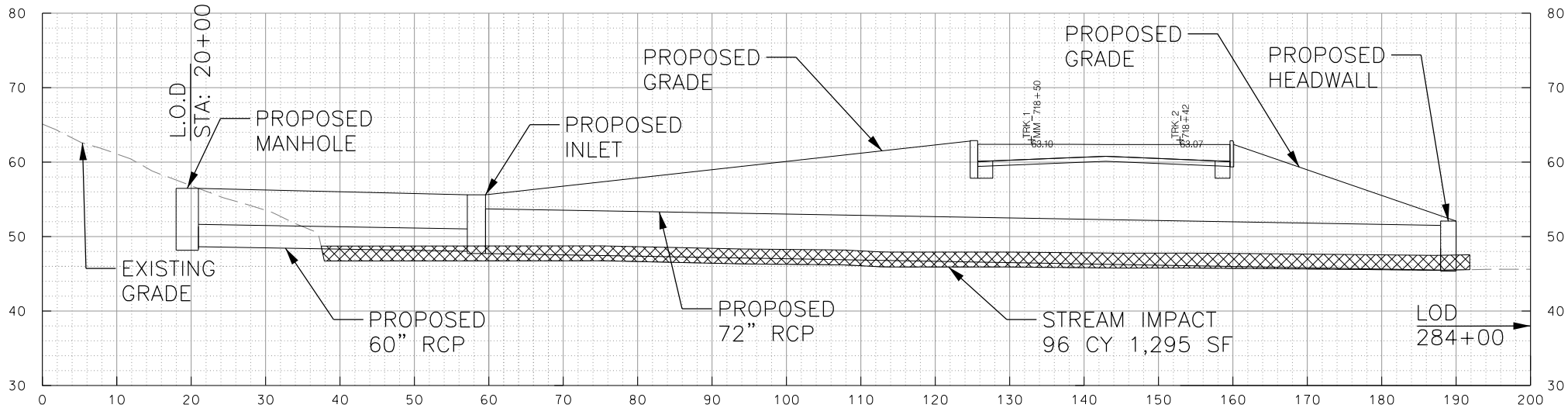
PURPLE LINE LIGHT RAIL

MONTGOMERY AND PRINCE GEORGE'S COUNTIES,
MARYLAND

WATERS OF THE U.S. IMPACTS

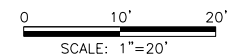
DATE: 8/18/2016 SCALE: 1in = 100ft

CONTRACT NO.
DRAWING NO.
PLANVIEW SHEET NO.
25 OF 38



STREAM IMPACT WUS 016
STATION 718+50

SCALE: 1"=20'



PROFESSIONAL CERTIFICATION
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. _____ Expiration Date _____

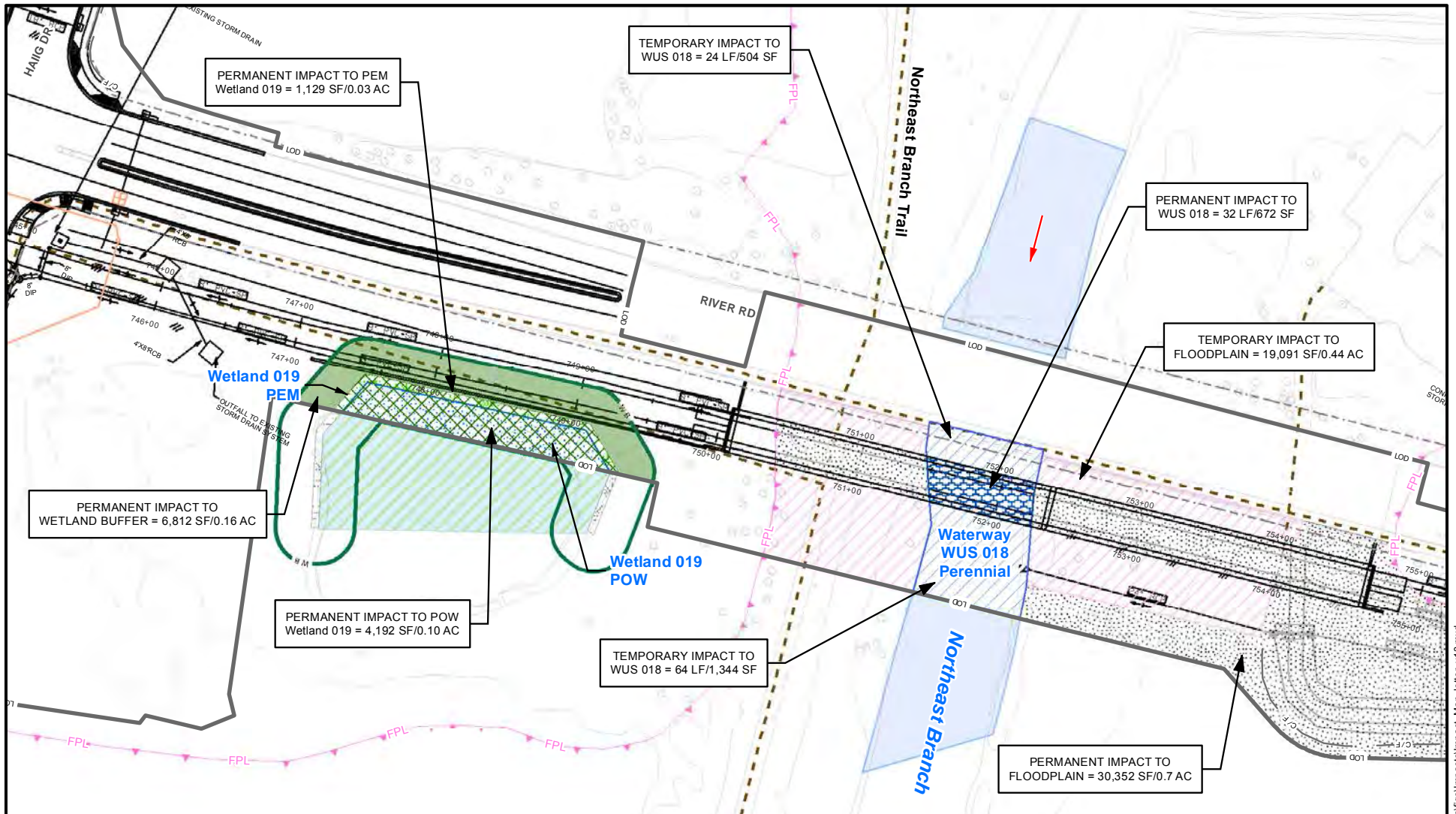
NO.	DESCRIPTION	BY	DATE

APPR. CHECK DRAWN DESIGN

PURPLE LINE LIGHT RAIL
MONTGOMERY AND PRINCE GEORGES COUNTIES,
MARYLAND
DATE: 06/28/2016
SCALE: 1"=20'

CONTRACT NO.
0-0000-0000
DRAWING NO.
CROSS SECTION SHEET NO.
13 OF 22

p:\work\pms-1801\pos\com\AKNAND\171\Documents\Purple Line P3 Design\4.0 CAD (Work in Progress)\Environmental\General\Sketches\Cross Sections Segment 7 7/25/2016



<ul style="list-style-type: none"> WETLAND BOUNDARY OPEN WATER UNIMPACTED STREAMS UNIMPACTED WETLANDS UNIMPACTED ROW 	<ul style="list-style-type: none"> 25-FT WETLAND BUFFER 100-YEAR FLOODPLAIN PROJECT LIMITS OF DISTURBANCE Stream Flow 	<ul style="list-style-type: none"> LIMITS OF CUT/FILL ROW PROPOSED UTILITIES PROPOSED RAIL ALIGNMENT ARCHEOLOGICAL SITE 	WETLAND IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND IMPACTS = 0 SF/0 AC PERMANENT WETLAND IMPACTS = 1129 SF/0.03 AC STREAM AND OPEN WATER IMPACTS <ul style="list-style-type: none"> TEMPORARY WUS IMPACTS = 88 LF/1848 SF PERMANENT WUS IMPACTS = 32 LF/672 SF 	WETLAND BUFFER IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND BUFFER IMPACTS = 0 SF/0 AC PERMANENT WETLAND BUFFER IMPACTS = 6812 SF/0.16 AC 100-YEAR FLOODPLAIN IMPACTS <ul style="list-style-type: none"> TEMPORARY FLOODPLAIN IMPACTS = 19091 SF/0.44 AC PERMANENT FLOODPLAIN IMPACTS = 30352 SF/0.7 AC
---	---	--	--	---

MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND TRANSIT ADMINISTRATION

District of Columbia

ATKINS

3901 Calverton Blvd, Suite 400
Calverton, Maryland 20705
Telephone: 301-210-6800
www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

STREAM IMPACTS

- TEMPORARY PERENNIAL IMPACT = 1848 SF/88 LF
- PERMANENT PERENNIAL IMPACT = 672 SF/32 LF
- TEMPORARY INTERMITTENT IMPACT = 0 SF/0 LF
- PERMANENT INTERMITTENT IMPACT = 0 SF/0 LF
- TEMPORARY EPHEMERAL IMPACT = 0 SF/0 LF
- PERMANENT EPHEMERAL IMPACT = 0 SF/0 LF

0 50 100
Feet

PURPLE LINE LIGHT RAIL

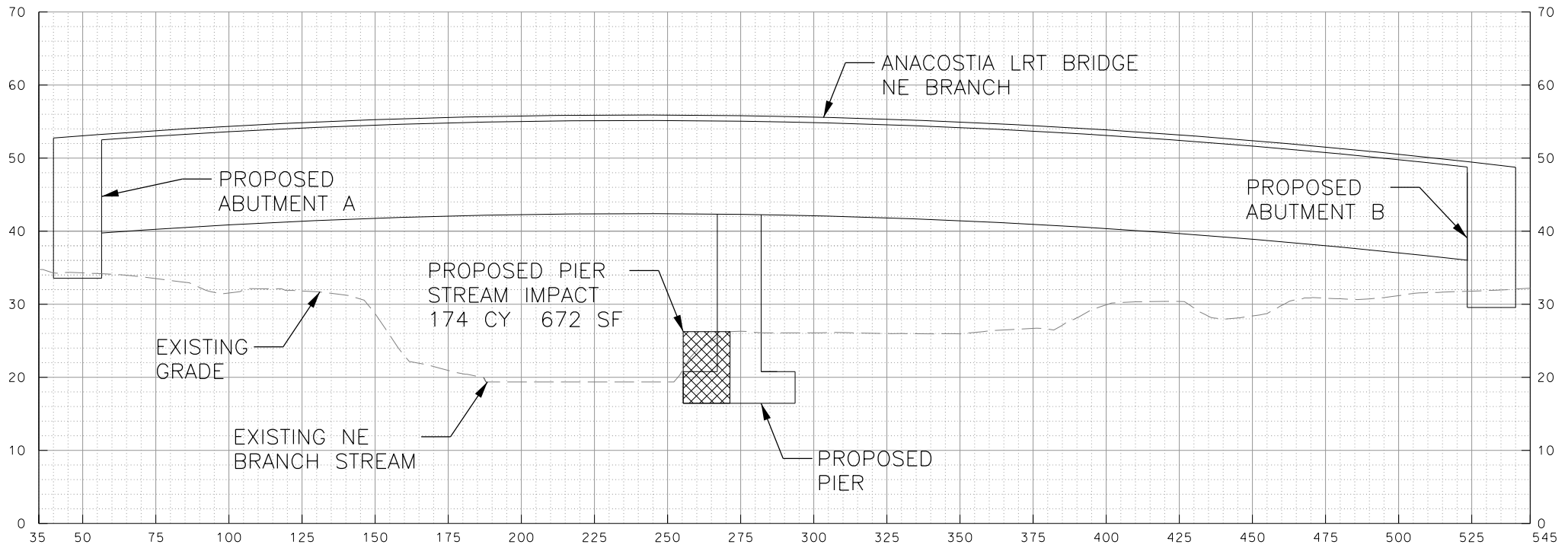
MONTGOMERY AND PRINCE GEORGE'S COUNTIES,
MARYLAND

WATERS OF THE U.S. IMPACTS

DATE: 8/18/2016 SCALE: 1in = 100ft

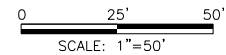
CONTRACT NO.
DRAWING NO.
PLANVIEW SHEET NO.
26 OF 38

FILE: N:\Geospatial\Clients\O_PurpleLine_Transit_Partners\geospatial\impacts\impact_Map_letter_v13.mxd
DATE: 8/19/2016



NORTHEAST BRANCH
 STREAM IMPACT WUS 018
 STATION 752+00 - 754+50

SCALE: 1"=50'



PROFESSIONAL CERTIFICATION
 I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. _____ Expiration Date _____

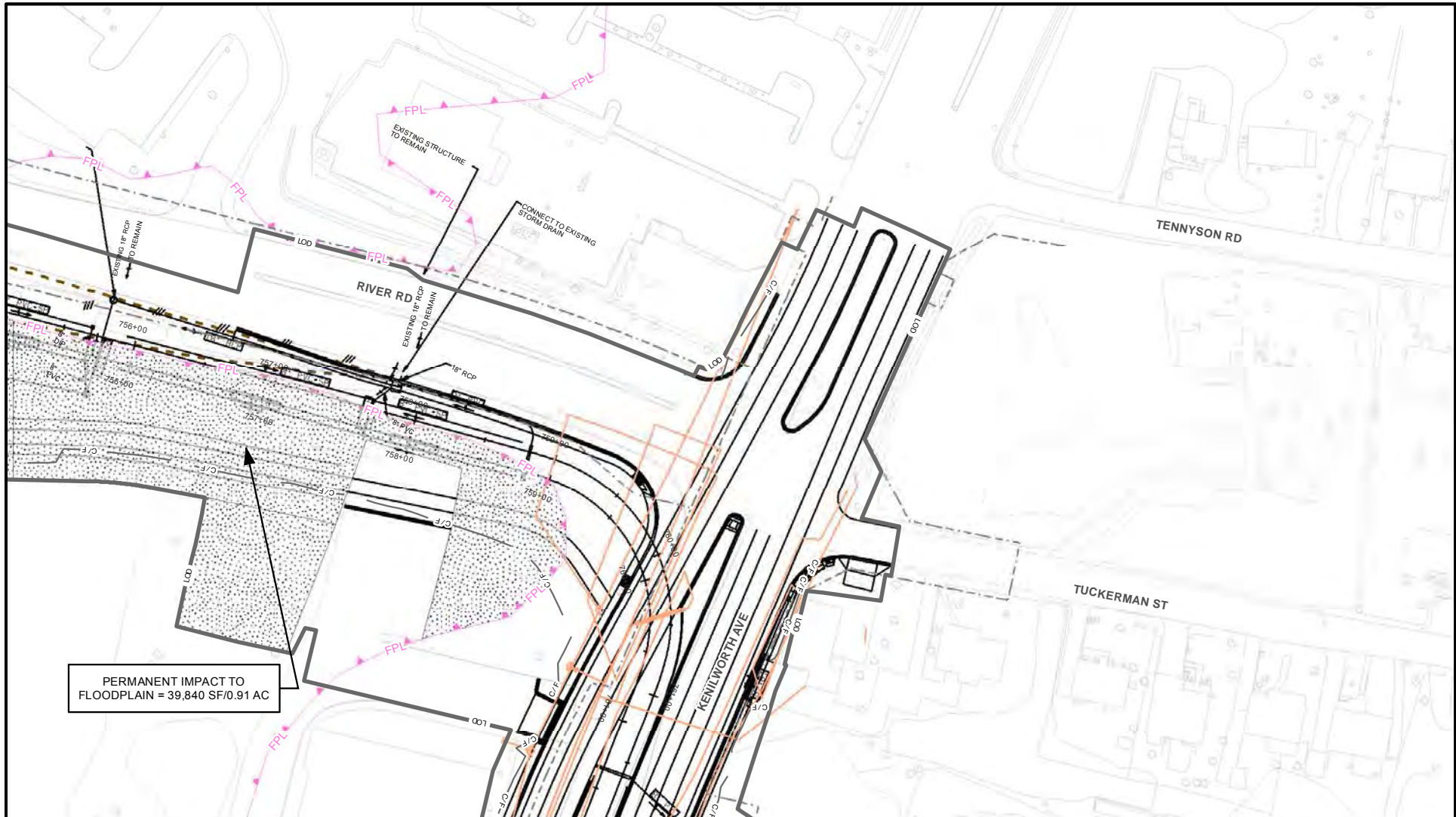
NO.	DESCRIPTION	BY	DATE
REVISIONS			

APPR. CHECK DRAWN DESIGN

PURPLE LINE LIGHT RAIL
 MONTGOMERY AND PRINCE GEORGES COUNTIES,
 MARYLAND
WUS 018 STREAM IMPACT
 DATE: 06/28/2016 SCALE: 1"=50'

CONTRACT NO.
 0-0000-0000
 DRAWING NO.
 CROSS SECTION SHEET NO.
 14 OF 22

pw://c:\pws-fms-1801\pos\com\AKNAND\PL17\Documents\Purple Line P3 Design\4.0 CAD (Work in Progress)\Environmental\General\Sketches\Cross Sections\Segment 7



PERMANENT IMPACT TO FLOODPLAIN = 39,840 SF/0.91 AC

<ul style="list-style-type: none"> WETLAND BOUNDARY OPEN WATER UNIMPACTED STREAMS UNIMPACTED WETLANDS UNIMPACTED ROW 	<ul style="list-style-type: none"> 25-FT WETLAND BUFFER 100-YEAR FLOODPLAIN PROJECT LIMITS OF DISTURBANCE Stream Flow 	<ul style="list-style-type: none"> LIMITS OF CUT/FILL ROW PROPOSED UTILITIES PROPOSED RAIL ALIGNMENT ARCHEOLOGICAL SITE 	WETLAND IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND IMPACTS = 0 SF/0 AC PERMANENT WETLAND IMPACTS = 0 SF/0 AC STREAM AND OPEN WATER IMPACTS <ul style="list-style-type: none"> TEMPORARY WUS IMPACTS = 0 LF/0 SF PERMANENT WUS IMPACTS = 0 LF/0 SF 	WETLAND BUFFER IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND BUFFER IMPACTS = 0 SF/0 AC PERMANENT WETLAND BUFFER IMPACTS = 0 SF/0 AC 100-YEAR FLOODPLAIN IMPACTS <ul style="list-style-type: none"> TEMPORARY FLOODPLAIN IMPACTS = 0 SF/0 AC PERMANENT FLOODPLAIN IMPACTS = 39840 SF/0.91 AC
---	---	--	---	---

MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND TRANSIT ADMINISTRATION

District of Columbia

ATKINS

3901 Calverton Blvd, Suite 400
Calverton, Maryland 20735
Telephone: 301-210-6800
www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

STREAM IMPACTS

TEMPORARY PERENNIAL IMPACT = 0 SF/0 LF
 PERMANENT PERENNIAL IMPACT = 0 SF/0 LF
 TEMPORARY INTERMITTENT IMPACT = 0 SF/0 LF
 PERMANENT INTERMITTENT IMPACT = 0 SF/0 LF
 TEMPORARY EPHEMERAL IMPACT = 0 SF/0 LF
 PERMANENT EPHEMERAL IMPACT = 0 SF/0 LF

PERMANENT POW IMPACTS = 0 SF/0 AC

0 50 100
Feet

PURPLE LINE LIGHT RAIL

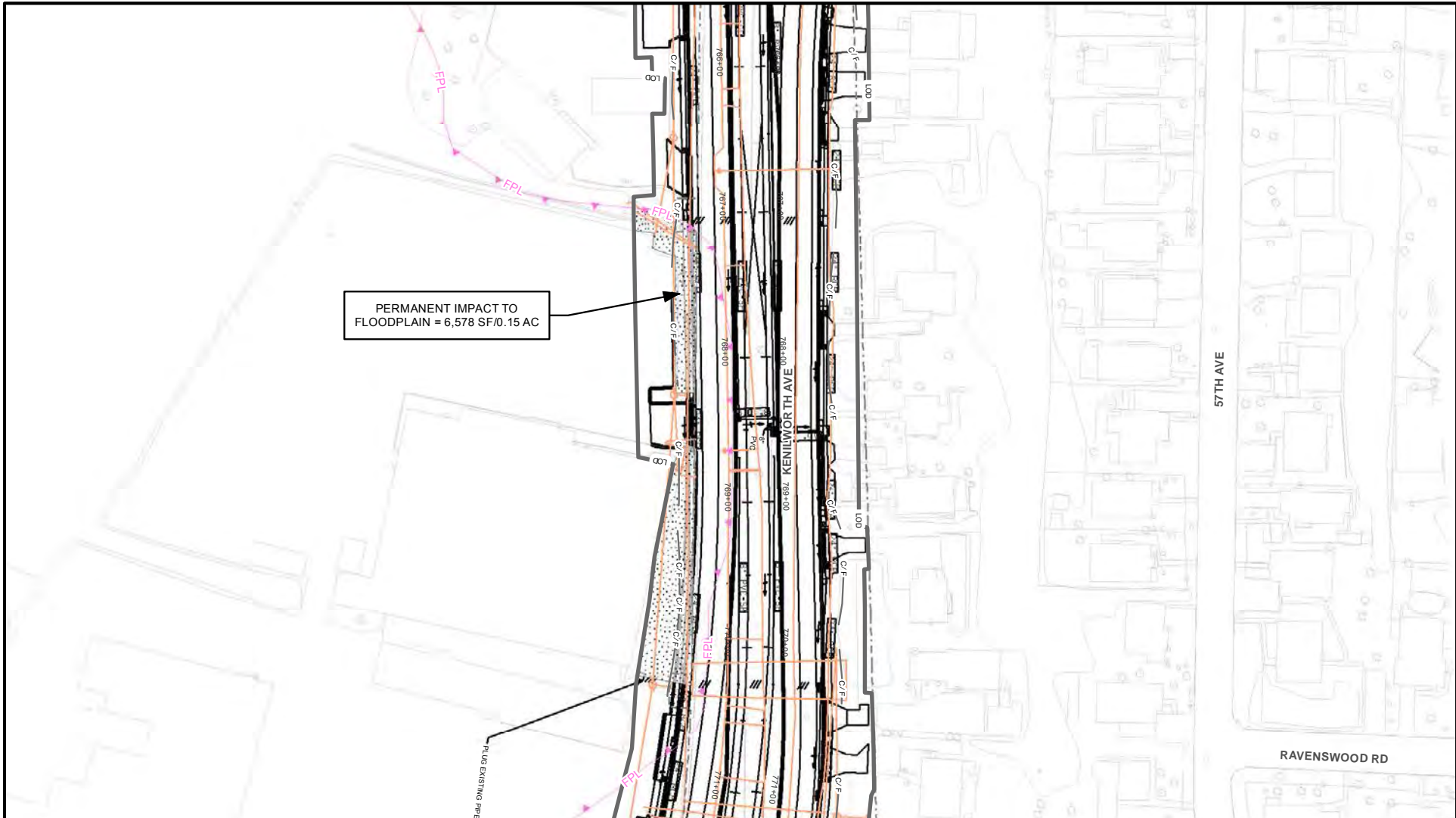
MONTGOMERY AND PRINCE GEORGE'S COUNTIES,
MARYLAND

WATERS OF THE U.S. IMPACTS

DATE: 8/18/2016 SCALE: 1in = 100ft

CONTRACT NO.
DRAWING NO.
PLANVIEW SHEET NO. 27 OF 38

FILE: N:\Geospatial\Clients\O_PurpleLine_Transit_Partners\geofigs\impacts\impact_Map_1eater_v13.mxd
DATE: 8/19/2016



<ul style="list-style-type: none"> WETLAND BOUNDARY OPEN WATER UNIMPACTED STREAMS UNIMPACTED WETLANDS UNIMPACTED ROW 	<ul style="list-style-type: none"> WB 25-FT WETLAND BUFFER FPL 100-YEAR FLOODPLAIN PROJECT LIMITS OF DISTURBANCE Stream Flow 	<ul style="list-style-type: none"> C/F LIMITS OF CUT/FILL ROW PROPOSED UTILITIES PROPOSED RAIL ALIGNMENT ARCHEOLOGICAL SITE 	WETLAND IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND IMPACTS = 0 SF/0 AC PERMANENT WETLAND IMPACTS = 0 SF/0 AC 	WETLAND BUFFER IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND BUFFER IMPACTS = 0 SF/0 AC PERMANENT WETLAND BUFFER IMPACTS = 0 SF/0 AC
STREAM AND OPEN WATER IMPACTS <ul style="list-style-type: none"> TEMPORARY WUS IMPACTS = 0 LF/0 SF PERMANENT WUS IMPACTS = 0 LF/0 SF 			<ul style="list-style-type: none"> PERMANENT POW IMPACTS = 0 SF/0 AC 	100-YEAR FLOODPLAIN IMPACTS <ul style="list-style-type: none"> TEMPORARY FLOODPLAIN IMPACTS = 0 SF/0 AC PERMANENT FLOODPLAIN IMPACTS = 6578 SF/0.15 AC

MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND TRANSIT ADMINISTRATION

District of Columbia

ATKINS
3901 Calverton Blvd, Suite 400
Calverton, Maryland 20735
Telephone: 301-210-6800
www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

STREAM IMPACTS

- TEMPORARY PERENNIAL IMPACT = 0 SF/0 LF
- PERMANENT PERENNIAL IMPACT = 0 SF/0 LF
- TEMPORARY INTERMITTENT IMPACT = 0 SF/0 LF
- PERMANENT INTERMITTENT IMPACT = 0 SF/0 LF
- TEMPORARY EPHEMERAL IMPACT = 0 SF/0 LF
- PERMANENT EPHEMERAL IMPACT = 0 SF/0 LF

0 50 100
Feet

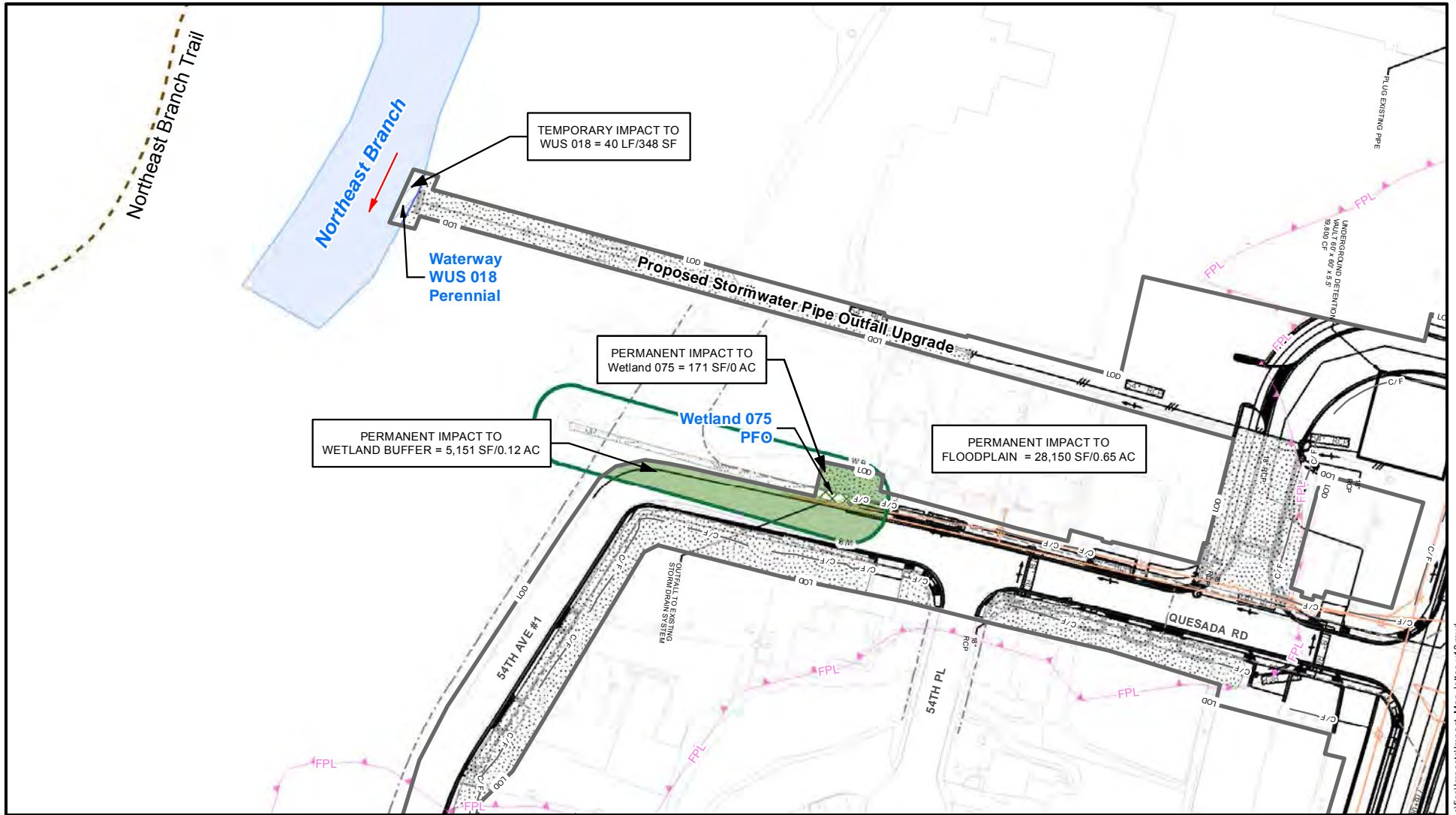
PURPLE LINE LIGHT RAIL

MONTGOMERY AND PRINCE GEORGE'S COUNTIES,
MARYLAND

WATERS OF THE U.S. IMPACTS

DATE: 8/18/2016 SCALE: 1in = 100ft

CONTRACT NO.
DRAWING NO.
PLANVIEW SHEET NO.
28 OF 38



<ul style="list-style-type: none"> WETLAND BOUNDARY OPEN WATER UNIMPACTED STREAMS UNIMPACTED WETLANDS UNIMPACTED ROW 	<ul style="list-style-type: none"> WB 25-FT WETLAND BUFFER FPL 100-YEAR FLOODPLAIN PROJECT LIMITS OF DISTURBANCE Stream Flow 	<ul style="list-style-type: none"> C/F LIMITS OF CUT/FILL ROW PROPOSED UTILITIES PROPOSED RAIL ALIGNMENT ARCHEOLOGICAL SITE 	WETLAND IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND IMPACTS = 0 SF/0 AC PERMANENT WETLAND IMPACTS = 171 SF/0 AC 	WETLAND BUFFER IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND BUFFER IMPACTS = 0 SF/0 AC PERMANENT WETLAND BUFFER IMPACTS = 5151 SF/0.12 AC
STREAM AND OPEN WATER IMPACTS <ul style="list-style-type: none"> TEMPORARY WUS IMPACTS = 40 LF/348 SF PERMANENT WUS IMPACTS = 0 LF/0 SF 			<ul style="list-style-type: none"> PERMANENT POW IMPACTS = 0 SF/0 AC 	100-YEAR FLOODPLAIN IMPACTS <ul style="list-style-type: none"> TEMPORARY FLOODPLAIN IMPACTS = 0 SF/0 AC PERMANENT FLOODPLAIN IMPACTS = 28150 SF/0.65 AC

MARYLAND DEPARTMENT OF TRANSPORTATION

District of Columbia

ATKINS
 3901 Calverton Blvd, Suite 400
 Calverton, Maryland 20735
 Telephone: 301-210-6800
 www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

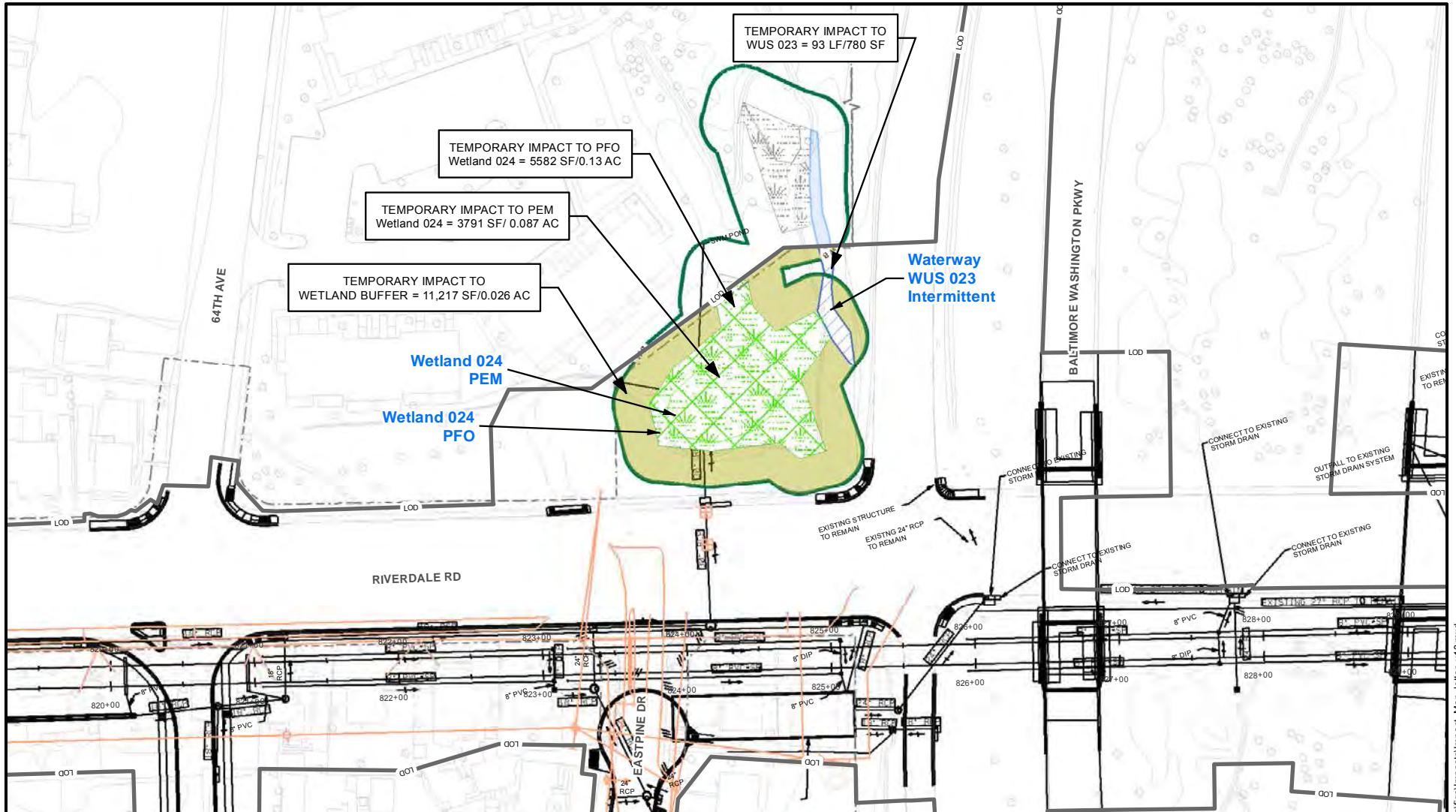
STREAM IMPACTS
 TEMPORARY PERENNIAL IMPACT = 348 SF/40 LF
 PERMANENT PERENNIAL IMPACT = 0 SF/0 LF
 TEMPORARY INTERMITTENT IMPACT = 0 SF/0 LF
 PERMANENT INTERMITTENT IMPACT = 0 SF/0 LF
 TEMPORARY EPHEMERAL IMPACT = 0 SF/0 LF
 PERMANENT EPHEMERAL IMPACT = 0 SF/0 LF

0 50 100
 Feet

PURPLE LINE LIGHT RAIL
 MONTGOMERY AND PRINCE GEORGE'S COUNTIES,
 MARYLAND
WATERS OF THE U.S. IMPACTS
 DATE: 8/18/2016 SCALE: 1in = 100ft

CONTRACT NO.
DRAWING NO.
PLANVIEW SHEET NO.
29 OF 38

FILE: N:\Geospatial\Clients\O_PurpleLine_Transit_Partners\geospatial\impacts\impact_Map_letter_v13.mxd
 DATE: 8/19/2016



<ul style="list-style-type: none"> WETLAND BOUNDARY OPEN WATER UNIMPACTED STREAMS UNIMPACTED WETLANDS UNIMPACTED ROW 	<ul style="list-style-type: none"> WB 25-FT WETLAND BUFFER FLP 100-YEAR FLOODPLAIN PROJECT LIMITS OF DISTURBANCE Stream Flow 	<ul style="list-style-type: none"> C/F LIMITS OF CUT/FILL ROW PROPOSED UTILITIES PROPOSED RAIL ALIGNMENT ARCHEOLOGICAL SITE 	WETLAND IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND IMPACTS = 9373 SF/0.22 AC PERMANENT WETLAND IMPACTS = 0 SF/0 AC 	WETLAND BUFFER IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND BUFFER IMPACTS = 11217 SF/0.26 AC PERMANENT WETLAND BUFFER IMPACTS = 0 SF/0 AC
			STREAM AND OPEN WATER IMPACTS <ul style="list-style-type: none"> TEMPORARY WUS IMPACTS = 93 LF/780 SF PERMANENT WUS IMPACTS = 0 LF/0 SF 	100-YEAR FLOODPLAIN IMPACTS <ul style="list-style-type: none"> TEMPORARY FLOODPLAIN IMPACTS = 0 SF/0 AC PERMANENT FLOODPLAIN IMPACTS = 0 SF/0 AC

MARYLAND DEPARTMENT OF TRANSPORTATION

District of Columbia

3901 Calverton Blvd, Suite 400
 Calverton, Maryland 20735
 Telephone: 301-210-6800
 www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

STREAM IMPACTS

- TEMPORARY PERENNIAL IMPACT = 0 SF/0 LF
- PERMANENT PERENNIAL IMPACT = 0 SF/0 LF
- TEMPORARY INTERMITTENT IMPACT = 780 SF/93 LF
- PERMANENT INTERMITTENT IMPACT = 0 SF/0 LF
- TEMPORARY EPHEMERAL IMPACT = 0 SF/0 LF
- PERMANENT EPHEMERAL IMPACT = 0 SF/0 LF

0 50 100
 Feet

N

PURPLE LINE LIGHT RAIL

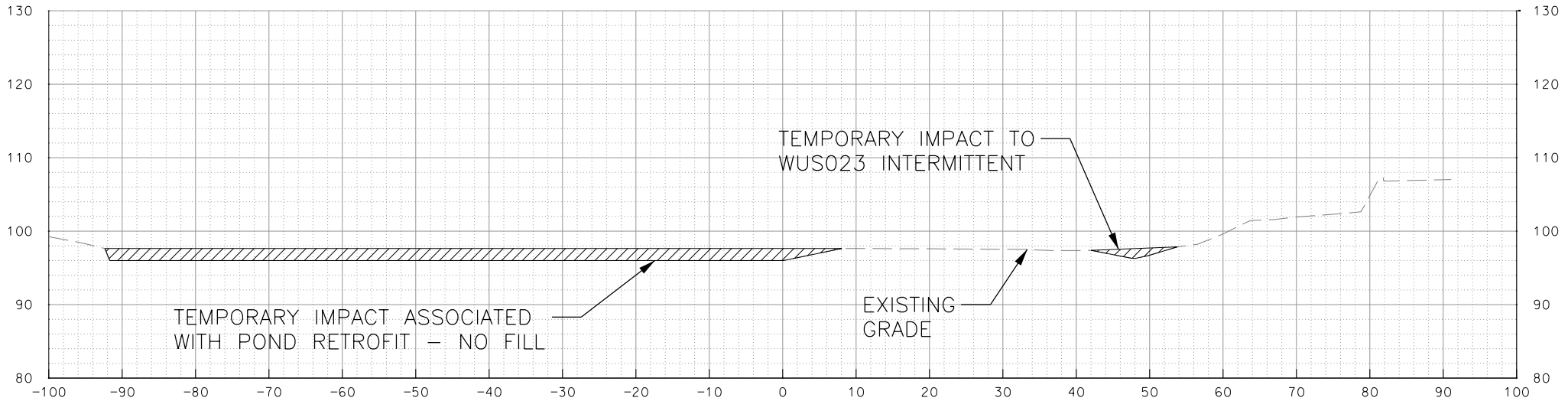
MONTGOMERY AND PRINCE GEORGE'S COUNTIES,
 MARYLAND

WATERS OF THE U.S. IMPACTS

DATE: 8/18/2016 SCALE: 1in = 100ft

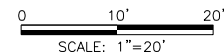
CONTRACT NO.
DRAWING NO.
PLANVIEW SHEET NO.
30 OF 38

FILE: N:\Geospatial\Clients\0_PurpleLine_Transit_Partners\geospatial\impacts\impact_Map_Jetter_v13.mxd
 DATE: 8/19/2016



STREAM IMPACT WUS 023
AND W024
STATION 824+50

SCALE: 1"=20'



PROFESSIONAL CERTIFICATION
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. _____ Expiration Date _____

NO.	DESCRIPTION	BY	DATE

APPR. CHECK DRAWN DESIGN

PURPLE LINE LIGHT RAIL
MONTGOMERY AND PRINCE GEORGES COUNTIES,
MARYLAND
WUS 023 & W024 STREAM IMPACT
DATE: 06/28/2016 SCALE: 1"=20'

CONTRACT NO.
0-0000-0000
DRAWING NO.
CROSS SECTION SHEET NO.
15 OF 22

p:\work\CP-FMS-1801\pos\com\AKN\MD\PL17\Documents\Purple Line P3 Design\4.0 CAD (Work in Progress)\Environmental\General\Sketches\Cross Sections\Segment 7



<ul style="list-style-type: none"> WETLAND BOUNDARY OPEN WATER UNIMPACTED STREAMS UNIMPACTED WETLANDS UNIMPACTED ROW 	<ul style="list-style-type: none"> WB 25-FT WETLAND BUFFER FLP 100-YEAR FLOODPLAIN PROJECT LIMITS OF DISTURBANCE Stream Flow 	<ul style="list-style-type: none"> C/F LIMITS OF CUT/FILL ROW PROPOSED UTILITIES PROPOSED RAIL ALIGNMENT ARCHEOLOGICAL SITE 	WETLAND IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND IMPACTS = 0 SF/0 AC PERMANENT WETLAND IMPACTS = 0 SF/0 AC STREAM AND OPEN WATER IMPACTS <ul style="list-style-type: none"> TEMPORARY WUS IMPACTS = 0 LF/0 SF PERMANENT WUS IMPACTS = 0 LF/0 SF PERMANENT POW IMPACTS = 0 SF/0 AC 	WETLAND BUFFER IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND BUFFER IMPACTS = 0 SF/0 AC PERMANENT WETLAND BUFFER IMPACTS = 0 SF/0 AC 100-YEAR FLOODPLAIN IMPACTS <ul style="list-style-type: none"> TEMPORARY FLOODPLAIN IMPACTS = 0 SF/0 AC PERMANENT FLOODPLAIN IMPACTS = 0 SF/0 AC
---	--	--	--	--

MARYLAND DEPARTMENT OF TRANSPORTATION

District of Columbia

3901 Calverton Blvd, Suite 400
 Calverton, Maryland 20705
 Telephone: 301-210-6800
 www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

STREAM IMPACTS

- TEMPORARY PERENNIAL IMPACT = 0 SF/0 LF
- PERMANENT PERENNIAL IMPACT = 0 SF/0 LF
- TEMPORARY INTERMITTENT IMPACT = 0 SF/0 LF
- PERMANENT INTERMITTENT IMPACT = 0 SF/0 LF
- TEMPORARY EPHEMERAL IMPACT = 0 SF/0 LF
- PERMANENT EPHEMERAL IMPACT = 0 SF/0 LF

0 50 100
Feet

N

PURPLE LINE LIGHT RAIL

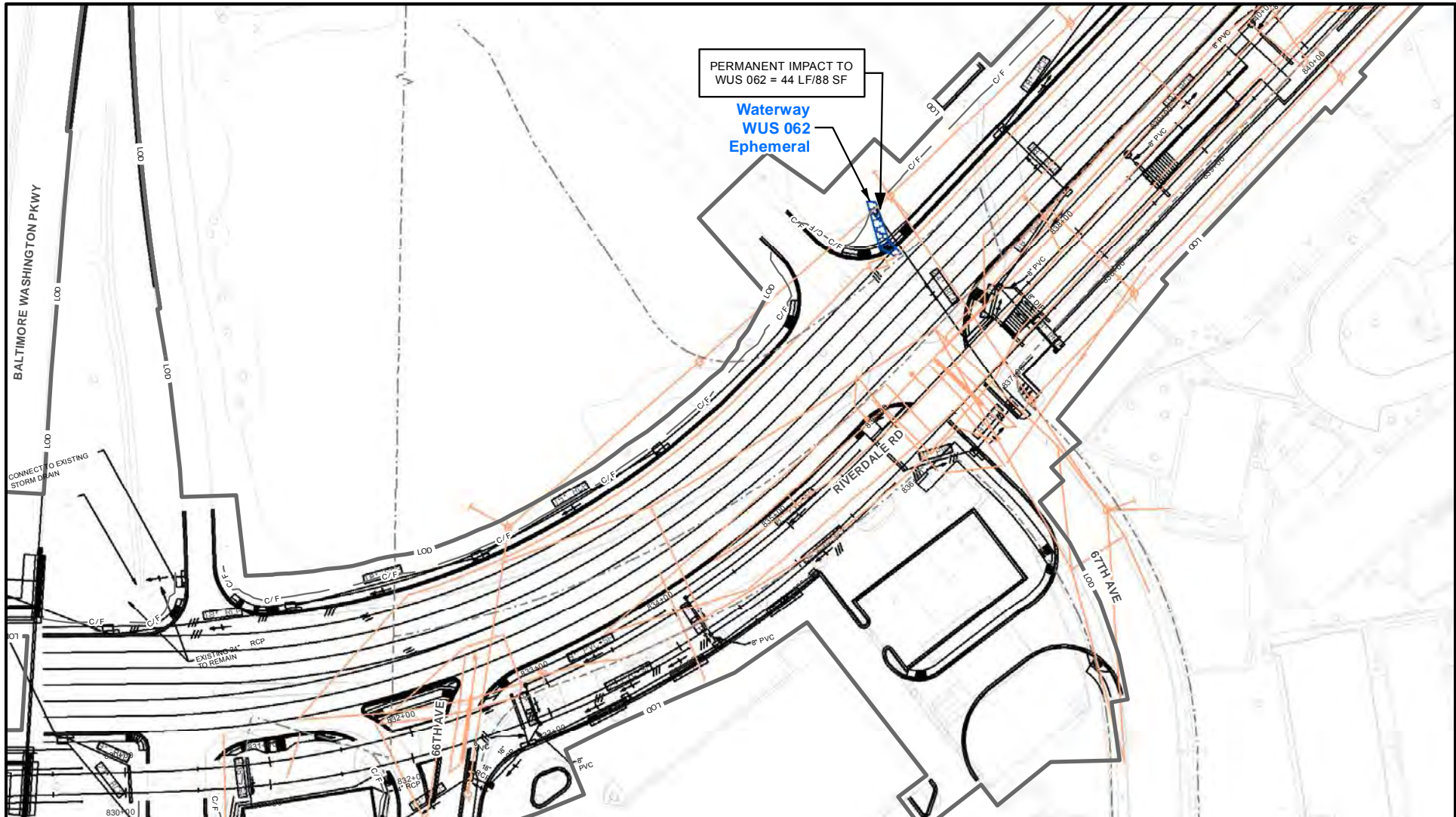
MONTGOMERY AND PRINCE GEORGE'S COUNTIES,
MARYLAND

WATERS OF THE U.S. IMPACTS

DATE: 8/18/2016 SCALE: 1in = 200ft

CONTRACT NO.
DRAWING NO.
PLANVIEW SHEET NO.
31 OF 38

FILE: N:\Geospatial\Clients\O_PurpleLine_Transit_Partners\geospatial\impacts\impact_Map_letter_v13.mxd
DATE: 8/19/2016



<ul style="list-style-type: none"> WETLAND BOUNDARY OPEN WATER UNIMPACTED STREAMS UNIMPACTED WETLANDS UNIMPACTED ROW 	<ul style="list-style-type: none"> WB 25-FT WETLAND BUFFER FLP 100-YEAR FLOODPLAIN PROJECT LIMITS OF DISTURBANCE Stream Flow 	<ul style="list-style-type: none"> C/F LIMITS OF CUT/FILL ROW PROPOSED UTILITIES PROPOSED RAIL ALIGNMENT ARCHEOLOGICAL SITE 	WETLAND IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND IMPACTS = 0 SF/0 AC PERMANENT WETLAND IMPACTS = 0 SF/0 AC STREAM AND OPEN WATER IMPACTS <ul style="list-style-type: none"> TEMPORARY WUS IMPACTS = 0 LF/0 SF PERMANENT WUS IMPACTS = 44 LF/88 SF 	WETLAND BUFFER IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND BUFFER IMPACTS = 0 SF/0 AC PERMANENT WETLAND BUFFER IMPACTS = 0 SF/0 AC 100-YEAR FLOODPLAIN IMPACTS <ul style="list-style-type: none"> TEMPORARY FLOODPLAIN IMPACTS = 0 SF/0 AC PERMANENT FLOODPLAIN IMPACTS = 0 SF/0 AC
---	--	--	---	--

MARYLAND DEPARTMENT OF TRANSPORTATION

MTA Maryland

District of Columbia

ATKINS
3901 Calverton Blvd, Suite 400
Calverton, Maryland 20705
Telephone: 301-210-6800
www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

STREAM IMPACTS

- TEMPORARY PERENNIAL IMPACT = 0 SF/0 LF
- PERMANENT PERENNIAL IMPACT = 0 SF/0 LF
- TEMPORARY INTERMITTENT IMPACT = 0 SF/0 LF
- PERMANENT INTERMITTENT IMPACT = 0 SF/0 LF
- TEMPORARY EPHEMERAL IMPACT = 0 SF/0 LF
- PERMANENT EPHEMERAL IMPACT = 88 SF/44 LF

0 50 100
Feet

PURPLE LINE LIGHT RAIL

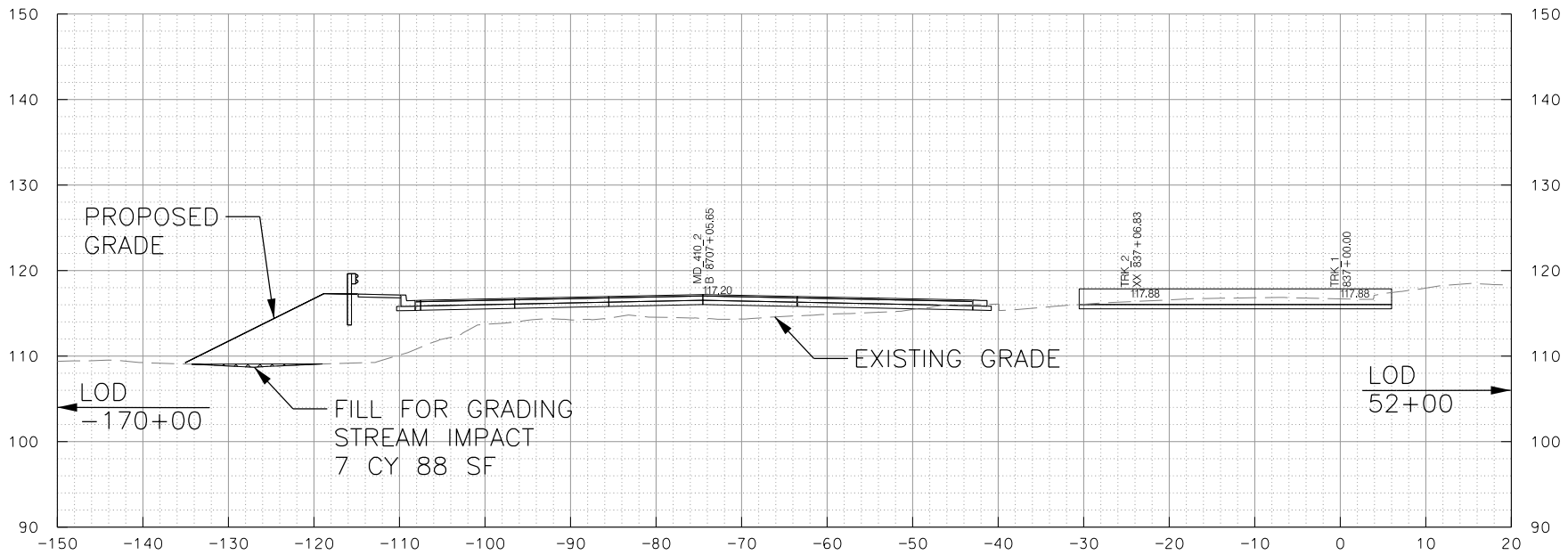
MONTGOMERY AND PRINCE GEORGE'S COUNTIES,
MARYLAND

WATERS OF THE U.S. IMPACTS

DATE: 8/18/2016 SCALE: 1in = 100ft

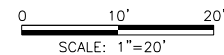
CONTRACT NO.
DRAWING NO.
PLANVIEW SHEET NO. 32 OF 38

FILE: N:\Geospatial\Clients\0_PurpleLine_Transit_Partners\geofigs\impacts\impact_Map_Jeter_v13.mxd
DATE: 8/19/2016



STREAM IMPACT WUS 062
STATION 837+00

SCALE: 1"=20'



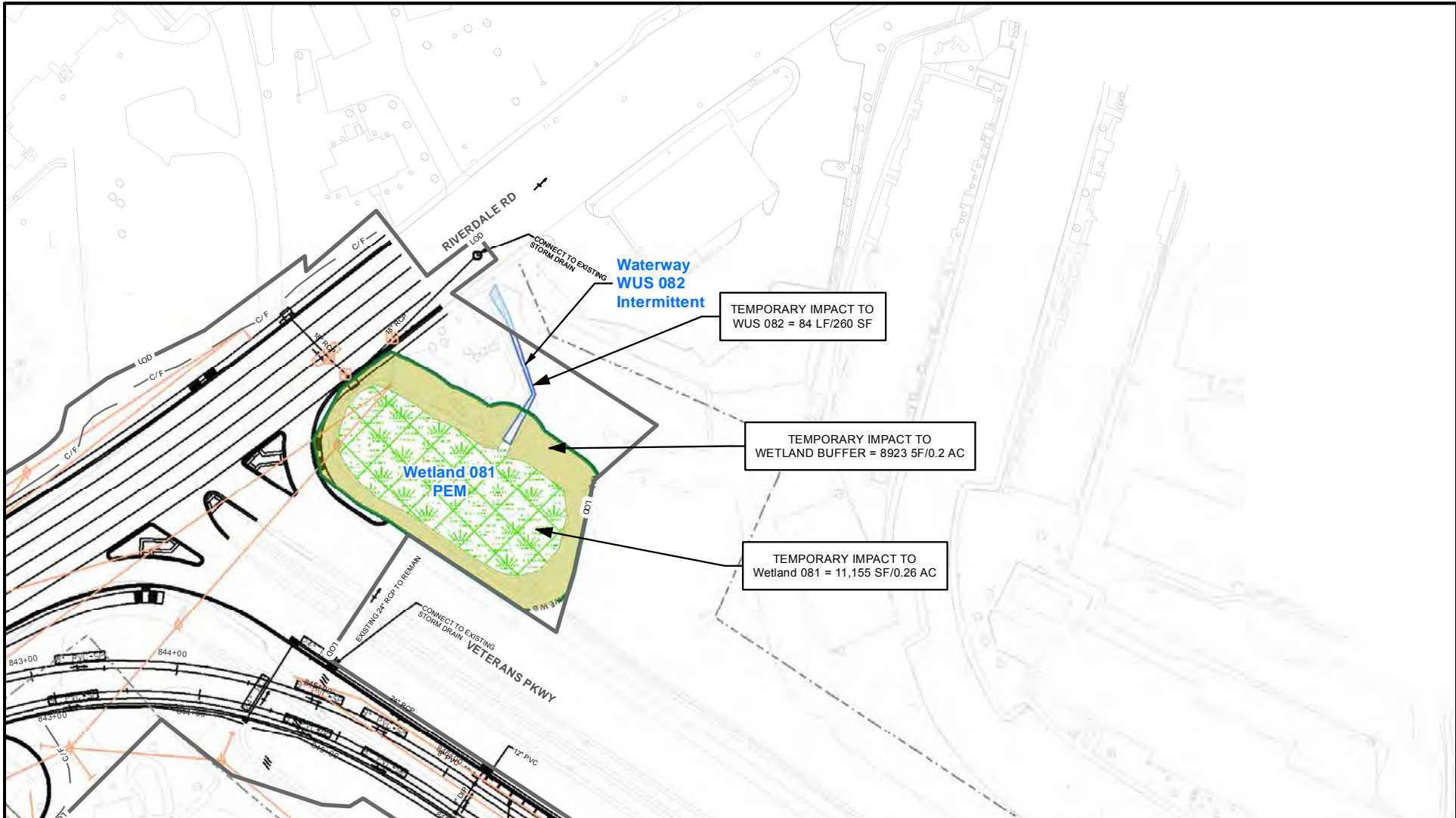
PROFESSIONAL CERTIFICATION
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. _____ Expiration Date _____

NO.	DESCRIPTION	BY	DATE

APPR. CHECK DRAWN DESIGN

PURPLE LINE LIGHT RAIL
MONTGOMERY AND PRINCE GEORGES COUNTIES,
MARYLAND
WUS 062 STREAM IMPACT
DATE: 06/28/2016 SCALE: 1"=20'

CONTRACT NO. 0-0000-0000
DRAWING NO. _____
CROSS SECTION SHEET NO. 16 OF 22



<ul style="list-style-type: none"> WETLAND BOUNDARY OPEN WATER UNIMPACTED STREAMS UNIMPACTED WETLANDS UNIMPACTED ROW 	<ul style="list-style-type: none"> 25-FT WETLAND BUFFER 100-YEAR FLOODPLAIN PROJECT LIMITS OF DISTURBANCE Stream Flow 	<ul style="list-style-type: none"> LIMITS OF CUT/FILL ROW PROPOSED UTILITIES PROPOSED RAIL ALIGNMENT ARCHEOLOGICAL SITE 	WETLAND IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND IMPACTS = 11155 SF/0.26 AC PERMANENT WETLAND IMPACTS = 0 SF/0 AC 	WETLAND BUFFER IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND BUFFER IMPACTS = 8923 SF/0.2 AC PERMANENT WETLAND BUFFER IMPACTS = 0 SF/0 AC
STREAM AND OPEN WATER IMPACTS <ul style="list-style-type: none"> TEMPORARY WUS IMPACTS = 84 LF/260 SF PERMANENT WUS IMPACTS = 0 LF/0 SF 			<ul style="list-style-type: none"> PERMANENT POW IMPACTS = 0 SF/0 AC 	100-YEAR FLOODPLAIN IMPACTS <ul style="list-style-type: none"> TEMPORARY FLOODPLAIN IMPACTS = 0 SF/0 AC PERMANENT FLOODPLAIN IMPACTS = 0 SF/0 AC

MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND TRANSIT ADMINISTRATION

District of Columbia

ATKINS
3901 Calverton Blvd, Suite 400
Calverton, Maryland 20735
Telephone: 301-210-6800
www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

STREAM IMPACTS

- TEMPORARY PERENNIAL IMPACT = 0 SF/0 LF
- PERMANENT PERENNIAL IMPACT = 0 SF/0 LF
- TEMPORARY INTERMITTENT IMPACT = 260 SF/84 LF
- PERMANENT INTERMITTENT IMPACT = 0 SF/0 LF
- TEMPORARY EPHEMERAL IMPACT = 0 SF/0 LF
- PERMANENT EPHEMERAL IMPACT = 0 SF/0 LF

0 50 100
Feet

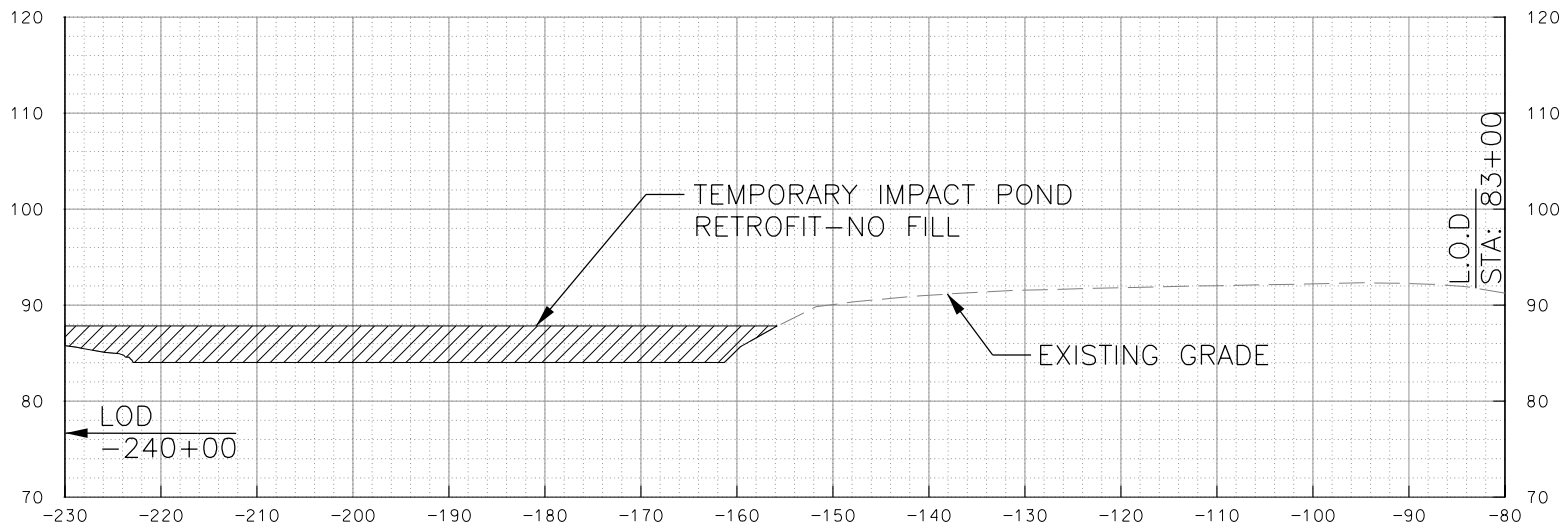
PURPLE LINE LIGHT RAIL

MONTGOMERY AND PRINCE GEORGE'S COUNTIES,
MARYLAND

WATERS OF THE U.S. IMPACTS

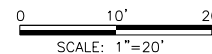
DATE: 8/18/2016 SCALE: 1in = 100ft

CONTRACT NO.
DRAWING NO.
PLANVIEW SHEET NO. 33 OF 38



STREAM IMPACT W081
STATION 845+00

SCALE: 1"=20'



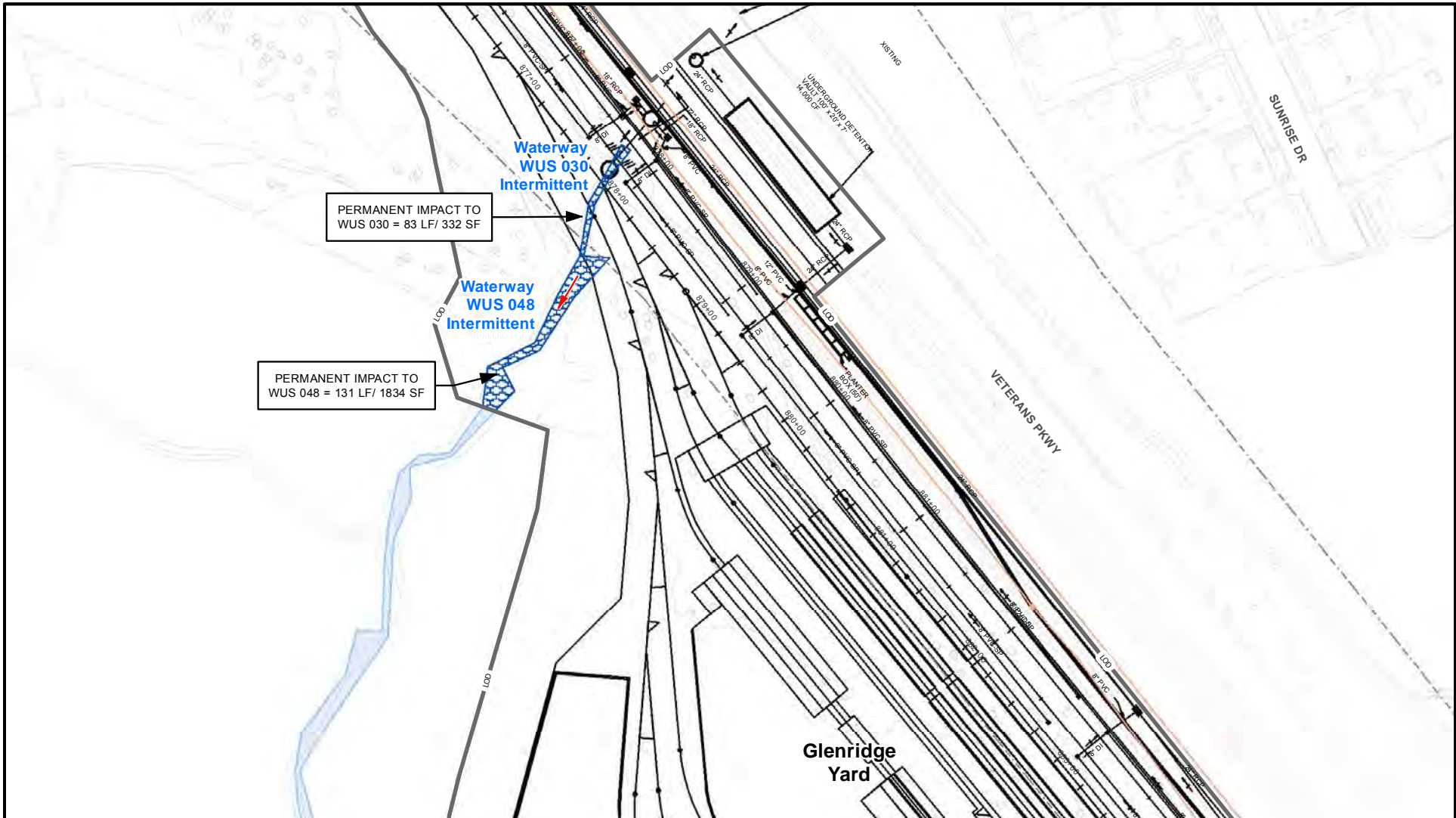
PROFESSIONAL CERTIFICATION
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. _____ Expiration Date _____

NO.	DESCRIPTION	BY	DATE

APPR. CHECK DRAWN DESIGN

PURPLE LINE LIGHT RAIL
MONTGOMERY AND PRINCE GEORGES COUNTIES,
MARYLAND
W081 STREAM IMPACT
DATE: 06/28/2016 SCALE: 1" : 20'

CONTRACT NO.
0-0000-0000
DRAWING NO.
CROSS SECTION SHEET NO.
17 OF 22



<ul style="list-style-type: none"> WETLAND BOUNDARY OPEN WATER UNIMPACTED STREAMS UNIMPACTED WETLANDS UNIMPACTED ROW 	<ul style="list-style-type: none"> WB 25-FT WETLAND BUFFER FLP 100-YEAR FLOODPLAIN PROJECT LIMITS OF DISTURBANCE Stream Flow 	<ul style="list-style-type: none"> C/F LIMITS OF CUT/FILL ROW PROPOSED UTILITIES PROPOSED RAIL ALIGNMENT ARCHEOLOGICAL SITE 	WETLAND IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND IMPACTS = 0 SF/0 AC PERMANENT WETLAND IMPACTS = 0 SF/0 AC STREAM AND OPEN WATER IMPACTS <ul style="list-style-type: none"> TEMPORARY WUS IMPACTS = 0 LF/0 SF PERMANENT WUS IMPACTS = 214 LF/2166 SF 	WETLAND BUFFER IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND BUFFER IMPACTS = 0 SF/0 AC PERMANENT WETLAND BUFFER IMPACTS = 0 SF/0 AC 100-YEAR FLOODPLAIN IMPACTS <ul style="list-style-type: none"> TEMPORARY FLOODPLAIN IMPACTS = 0 SF/0 AC PERMANENT FLOODPLAIN IMPACTS = 0 SF/0 AC
---	--	--	--	--

MARYLAND DEPARTMENT OF TRANSPORTATION

District of Columbia

ATKINS
 3901 Calverton Blvd, Suite 400
 Calverton, Maryland 20735
 Telephone: 301-210-6800
 www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

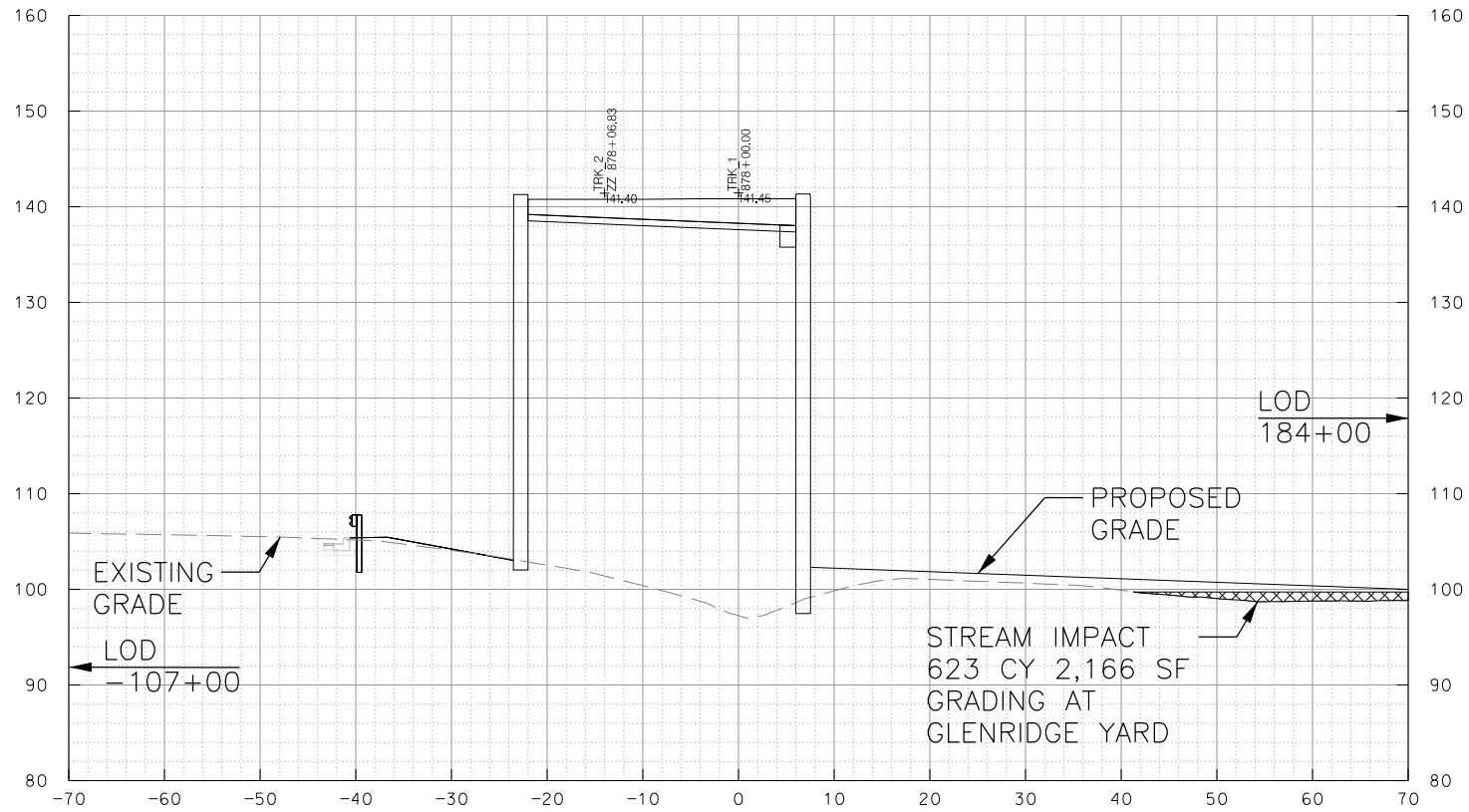
STREAM IMPACTS
 TEMPORARY PERENNIAL IMPACT = 0 SF/0 LF
 PERMANENT PERENNIAL IMPACT = 0 SF/0 LF
 TEMPORARY INTERMITTENT IMPACT = 0 SF/0 LF
 PERMANENT INTERMITTENT IMPACT = 2166 SF/214 LF
 TEMPORARY EPHEMERAL IMPACT = 0 SF/0 LF
 PERMANENT EPHEMERAL IMPACT = 0 SF/0 LF

0 50 100
 Feet

PURPLE LINE LIGHT RAIL
 MONTGOMERY AND PRINCE GEORGE'S COUNTIES,
 MARYLAND
WATERS OF THE U.S. IMPACTS
 DATE: 8/18/2016 SCALE: 1in = 100ft

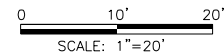
CONTRACT NO.
DRAWING NO.
PLANVIEW SHEET NO. 34 OF 38

FILE: N:\Geospatial\Clients\O_PurpleLine_Transit_Partners\geofigs\impacts\impact_Map_letter_v13.mxd
 DATE: 8/19/2016



STREAM IMPACT WUS 030
AND WUS 048
STATION 878+50

SCALE: 1"=20'



PROFESSIONAL CERTIFICATION
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No. _____ Expiration Date _____

NO.	DESCRIPTION	BY	DATE

APPR. CHECK DRAWN DESIGN

PURPLE LINE LIGHT RAIL
MONTGOMERY AND PRINCE GEORGES COUNTIES,
MARYLAND

WUS 030 & WUS 048 STREAM IMPACT

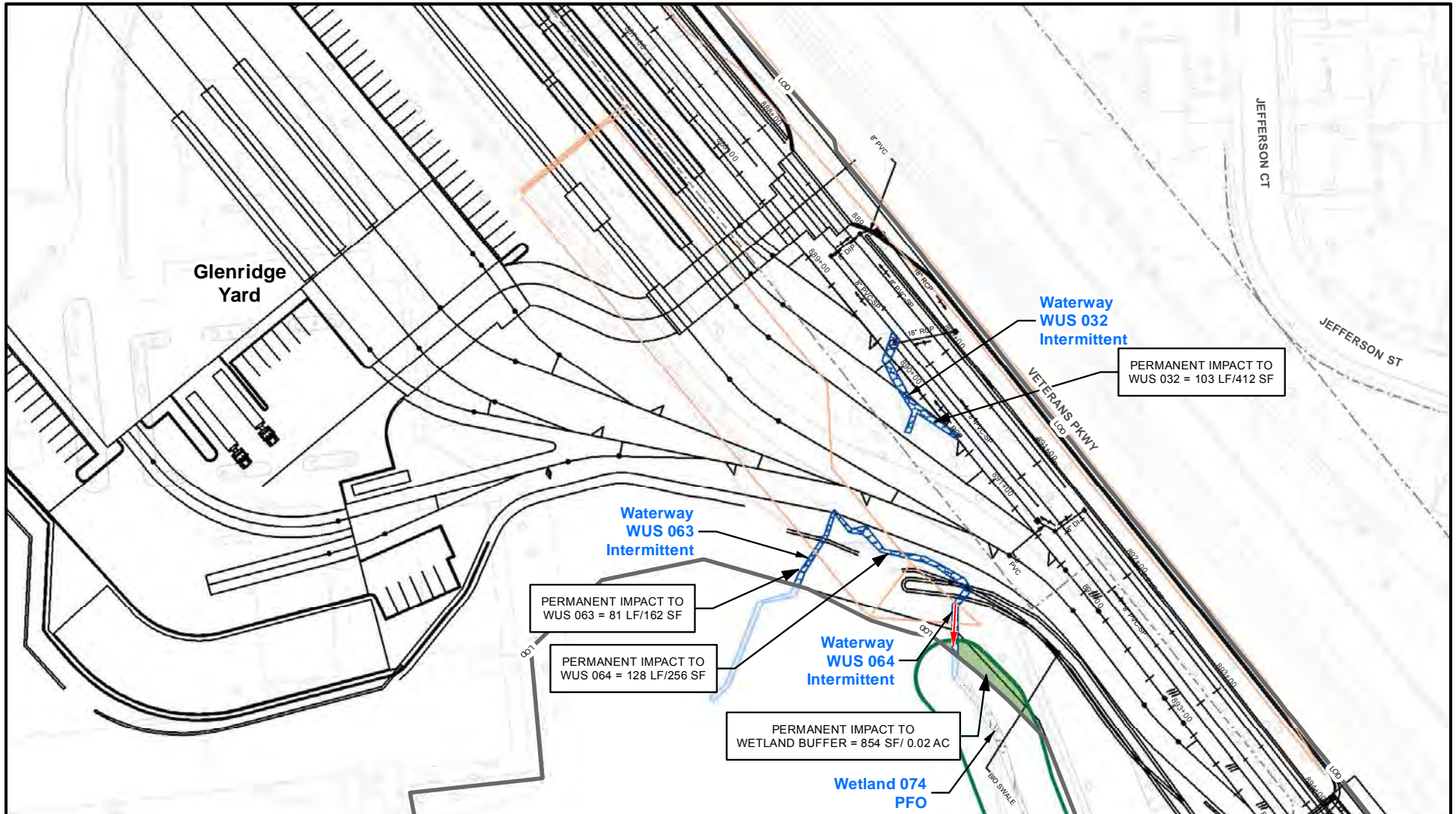
DATE: 06/28/2016 SCALE: 1"=20'

CONTRACT NO.
0-0000-0000

DRAWING NO.

CROSS SECTION SHEET NO.
18 OF 22

p:\proj\03-PWS-1801\pos\com\AKN\MD\PL17\Documents\Purple Line P3 Design\4.0 CAD (Work in Progress)\Environmental\General\Sketches\Cross Sections Segment 7



<ul style="list-style-type: none"> WETLAND BOUNDARY OPEN WATER UNIMPACTED STREAMS UNIMPACTED WETLANDS UNIMPACTED ROW 	<ul style="list-style-type: none"> 25-FT WETLAND BUFFER 100-YEAR FLOODPLAIN PROJECT LIMITS OF DISTURBANCE Stream Flow 	<ul style="list-style-type: none"> LIMITS OF CUT/FILL ROW PROPOSED UTILITIES PROPOSED RAIL ALIGNMENT ARCHAEOLOGICAL SITE 	WETLAND IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND IMPACTS = 0 SF/0 AC PERMANENT WETLAND IMPACTS = 0 SF/0 AC 	WETLAND BUFFER IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND BUFFER IMPACTS = 0 SF/0 AC PERMANENT WETLAND BUFFER IMPACTS = 854 SF/0.02 AC
STREAM AND OPEN WATER IMPACTS <ul style="list-style-type: none"> TEMPORARY WUS IMPACTS = 0 LF/0 SF PERMANENT WUS IMPACTS = 312 LF/830 SF 			<ul style="list-style-type: none"> PERMANENT POW IMPACTS = 0 SF/0 AC 	100-YEAR FLOODPLAIN IMPACTS <ul style="list-style-type: none"> TEMPORARY FLOODPLAIN IMPACTS = 0 SF/0 AC PERMANENT FLOODPLAIN IMPACTS = 0 SF/0 AC

MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND TRANSIT ADMINISTRATION

District of Columbia

ATKINS

3901 Calverton Blvd, Suite 400
Calverton, Maryland 20735
Telephone: 301-210-6800
www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

STREAM IMPACTS

- TEMPORARY PERENNIAL IMPACT = 0 SF/0 LF
- PERMANENT PERENNIAL IMPACT = 0 SF/0 LF
- TEMPORARY INTERMITTENT IMPACT = 0 SF/0 LF
- PERMANENT INTERMITTENT IMPACT = 630 SF/312 LF
- TEMPORARY EPHEMERAL IMPACT = 0 SF/0 LF
- PERMANENT EPHEMERAL IMPACT = 0 SF/0 LF

0 50 100 Feet

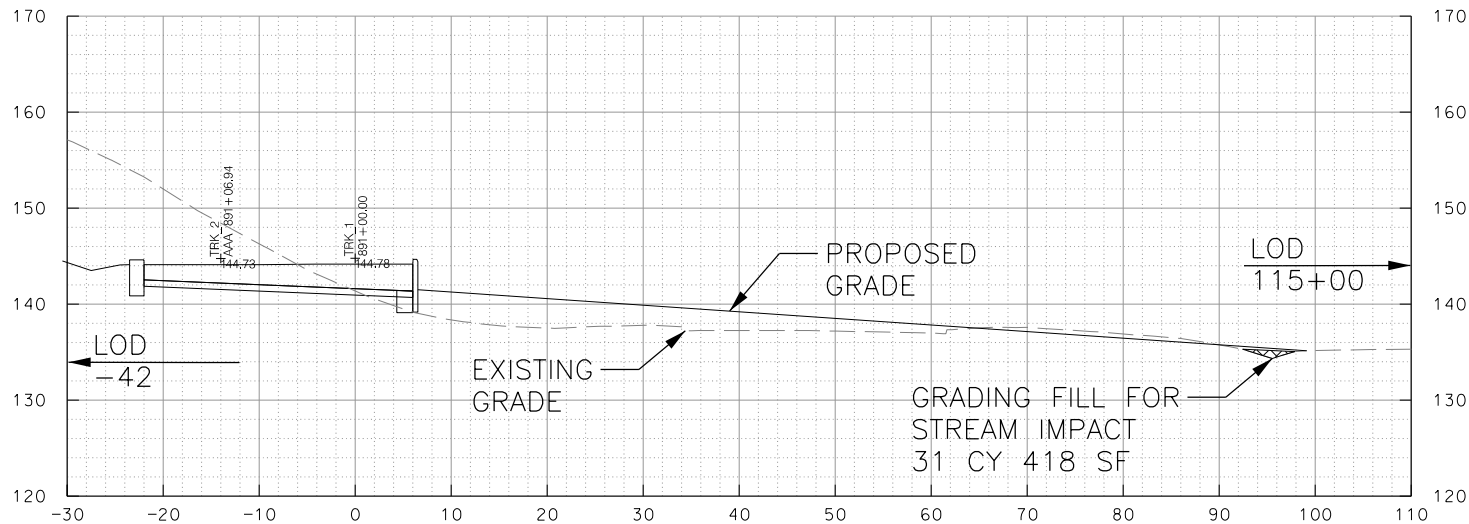
PURPLE LINE LIGHT RAIL

MONTGOMERY AND PRINCE GEORGE'S COUNTIES, MARYLAND

WATERS OF THE U.S. IMPACTS

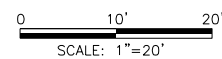
DATE: 8/18/2016 SCALE: 1in = 100ft

CONTRACT NO.
DRAWING NO.
PLANVIEW SHEET NO.
35 OF 38



STREAM IMPACT WUS 063
AND WUS 064
STATION 891+25

SCALE: 1"=20'



MARYLAND DEPARTMENT OF TRANSPORTATION
MARYLAND TRANSIT ADMINISTRATION



ATKINS
 350 Calverton Blvd, Suite 400
 Calverton, Maryland 20705
 Telephone: 301-210-6800
 www.atkinsglobal.com

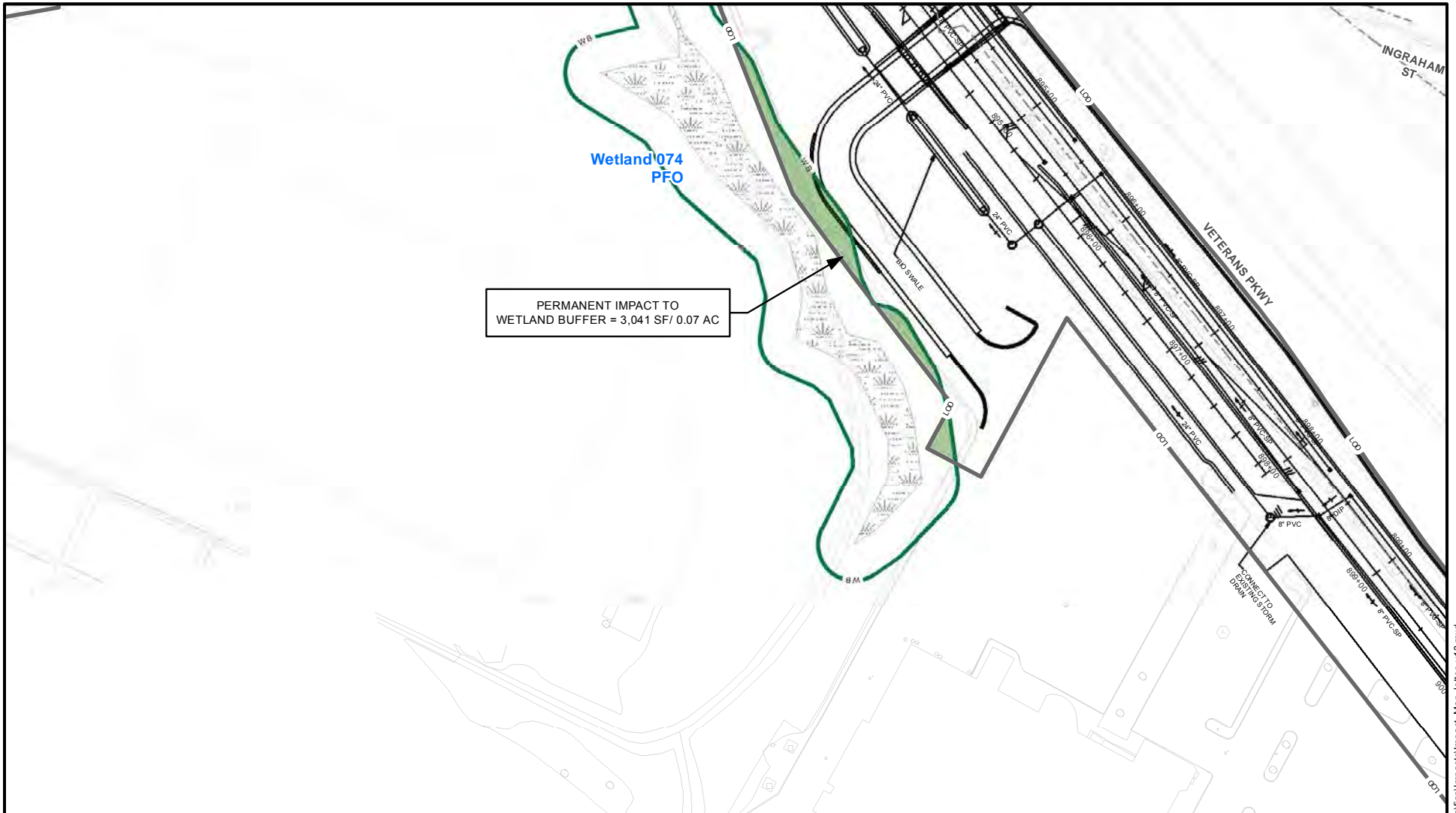
PROFESSIONAL CERTIFICATION
 I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. Expiration Date

NO.	DESCRIPTION	BY	DATE
REVISIONS			

APPR. CHECK DRAWN DESIGN

PURPLE LINE LIGHT RAIL
 MONTGOMERY AND PRINCE GEORGES COUNTIES,
 MARYLAND
WUS 063 & WUS 064 STREAM IMPACT
 DATE: 06/28/2016 SCALE: 1"=20'

CONTRACT NO.
0-0000-0000
 DRAWING NO.
 CROSS SECTION SHEET NO.
20 OF 22



<ul style="list-style-type: none"> WETLAND BOUNDARY OPEN WATER UNIMPACTED STREAMS UNIMPACTED WETLANDS UNIMPACTED ROW 	<ul style="list-style-type: none"> 25-FT WETLAND BUFFER 100-YEAR FLOODPLAIN PROJECT LIMITS OF DISTURBANCE Stream Flow 	<ul style="list-style-type: none"> LIMITS OF CUT/FILL ROW PROPOSED UTILITIES PROPOSED RAIL ALIGNMENT ARCHEOLOGICAL SITE 	WETLAND IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND IMPACTS = 0 SF/0 AC PERMANENT WETLAND IMPACTS = 0 SF/0 AC STREAM AND OPEN WATER IMPACTS <ul style="list-style-type: none"> TEMPORARY WUS IMPACTS = 0 LF/0 SF PERMANENT WUS IMPACTS = 0 LF/0 SF 	WETLAND BUFFER IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND BUFFER IMPACTS = 0 SF/0 AC PERMANENT WETLAND BUFFER IMPACTS = 3041 SF/0.07 AC 100-YEAR FLOODPLAIN IMPACTS <ul style="list-style-type: none"> TEMPORARY FLOODPLAIN IMPACTS = 0 SF/0 AC PERMANENT FLOODPLAIN IMPACTS = 0 SF/0 AC
---	---	--	---	--

MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND TRANSIT ADMINISTRATION

District of Columbia

PURPLE LINE
TRANSIT PARTNERS

ATKINS
3901 Calverton Blvd, Suite 400
Calverton, Maryland 20705
Telephone: 301-210-6800
www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

STREAM IMPACTS

- TEMPORARY PERENNIAL IMPACT = 0 SF/0 LF
- PERMANENT PERENNIAL IMPACT = 0 SF/0 LF
- TEMPORARY INTERMITTENT IMPACT = 0 SF/0 LF
- PERMANENT INTERMITTENT IMPACT = 0 SF/0 LF
- TEMPORARY EPHEMERAL IMPACT = 0 SF/0 LF
- PERMANENT EPHEMERAL IMPACT = 0 SF/0 LF

50 Feet

PURPLE LINE LIGHT RAIL

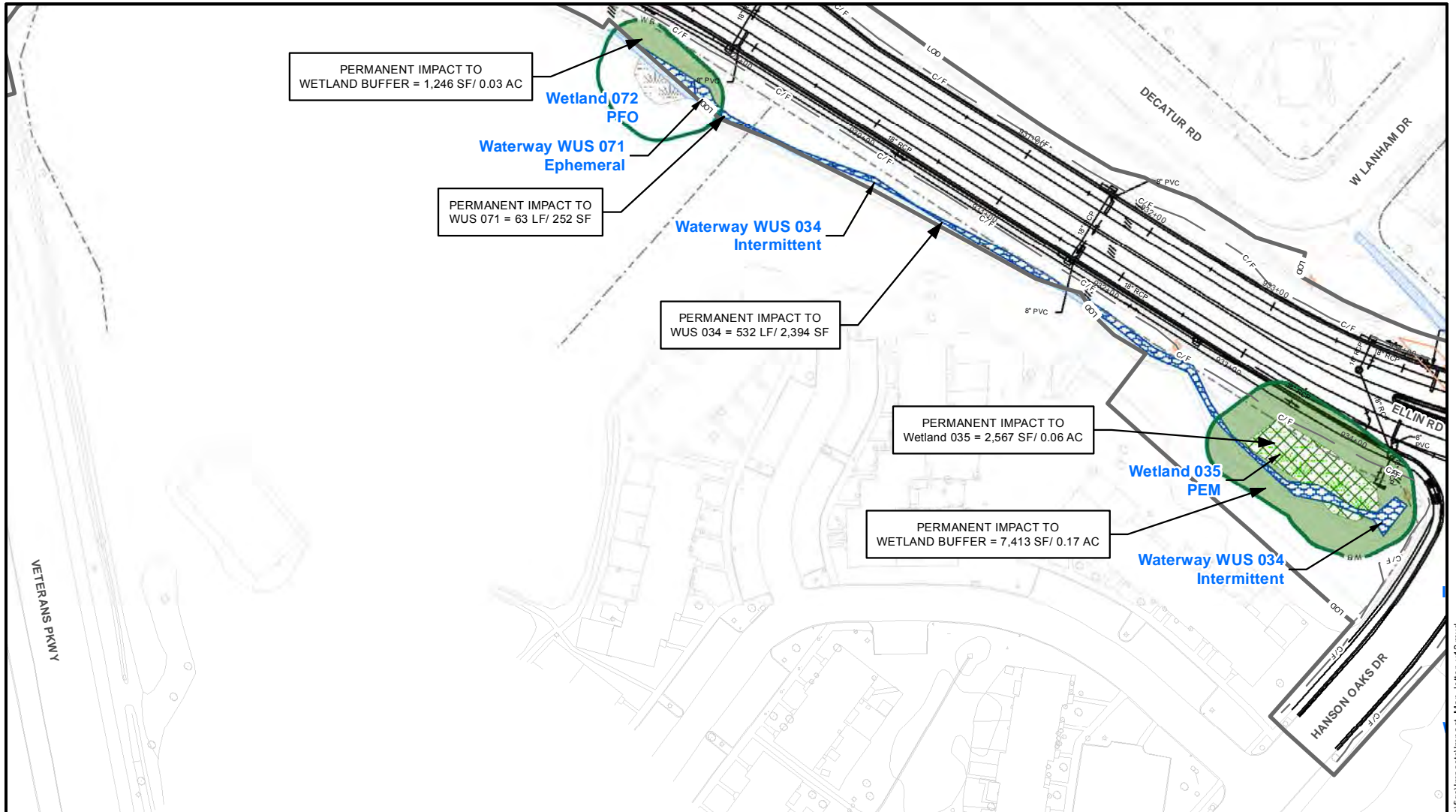
MONTGOMERY AND PRINCE GEORGE'S COUNTIES,
MARYLAND

WATERS OF THE U.S. IMPACTS

DATE: 8/18/2016 SCALE: 1in = 100ft

CONTRACT NO.
DRAWING NO.
PLANVIEW SHEET NO.
36 OF 38

FILE: N:\Geospatial\Clients\O_PurpleLine_Transit_Partners\geospatial\impacts\impact_Map_Jetter_V13.mxd
DATE: 8/19/2016



<ul style="list-style-type: none"> WETLAND BOUNDARY OPEN WATER UNIMPACTED STREAMS UNIMPACTED WETLANDS UNIMPACTED ROW 	<ul style="list-style-type: none"> WB 25-FT WETLAND BUFFER FLP 100-YEAR FLOODPLAIN PROJECT LIMITS OF DISTURBANCE Stream Flow 	<ul style="list-style-type: none"> C/F LIMITS OF CUT/FILL ROW PROPOSED UTILITIES PROPOSED RAIL ALIGNMENT ARCHAEOLOGICAL SITE 	WETLAND IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND IMPACTS = 0 SF/0 AC PERMANENT WETLAND IMPACTS = 2567 SF/0.06 AC 	WETLAND BUFFER IMPACTS <ul style="list-style-type: none"> TEMPORARY WETLAND BUFFER IMPACTS = 0 SF/0 AC PERMANENT WETLAND BUFFER IMPACTS = 8659 SF/0.2 AC
STREAM AND OPEN WATER IMPACTS <ul style="list-style-type: none"> TEMPORARY WUS IMPACTS = 0 LF/0 SF PERMANENT WUS IMPACTS = 595 LF/2646 SF PERMANENT POW IMPACTS = 0 SF/0 AC 			100-YEAR FLOODPLAIN IMPACTS <ul style="list-style-type: none"> TEMPORARY FLOODPLAIN IMPACTS = 0 SF/0 AC PERMANENT FLOODPLAIN IMPACTS = 0 SF/0 AC 	

MARYLAND DEPARTMENT OF TRANSPORTATION

District of Columbia

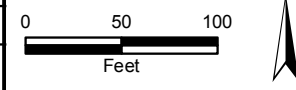
ATKINS
 3901 Calverton Blvd, Suite 400
 Calverton, Maryland 20705
 Telephone: 301-210-6800
 www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

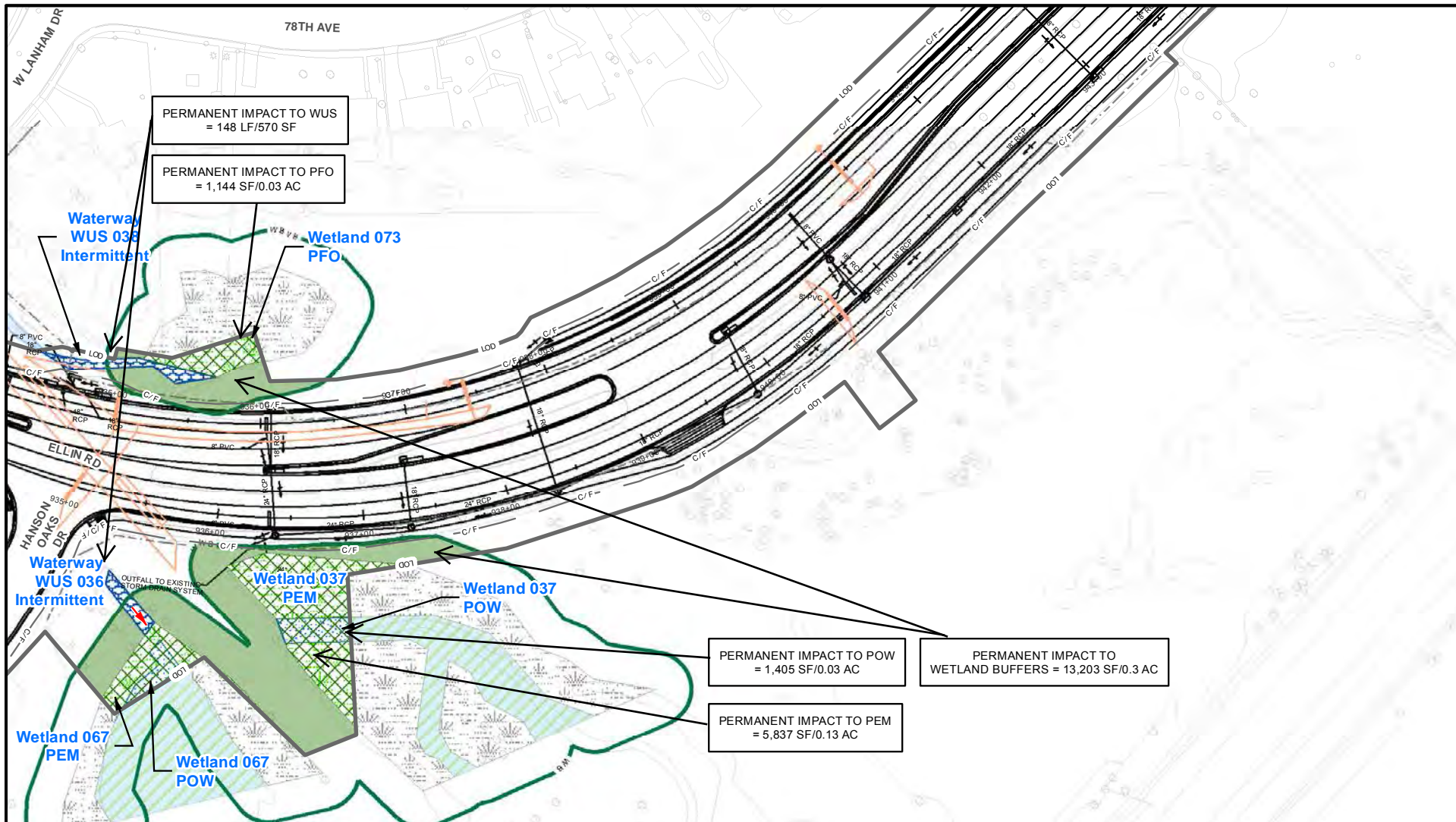
STREAM IMPACTS
 TEMPORARY PERENNIAL IMPACT = 0 SF/0 LF
 PERMANENT PERENNIAL IMPACT = 0 SF/0 LF
 TEMPORARY INTERMITTENT IMPACT = 0 SF/0 LF
 PERMANENT INTERMITTENT IMPACT = 2394 SF/532 LF
 TEMPORARY EPHEMERAL IMPACT = 0 SF/0 LF
 PERMANENT EPHEMERAL IMPACT = 252 SF/63 LF

PURPLE LINE LIGHT RAIL
 MONTGOMERY AND PRINCE GEORGE'S COUNTIES,
 MARYLAND
WATERS OF THE U.S. IMPACTS
 DATE: 8/18/2016 SCALE: 1in = 100ft

CONTRACT NO.
DRAWING NO.
PLANVIEW SHEET NO.
37 OF 38



FILE: N:\Geospatial\Clients\0_PurpleLine_Transit_Partners\geospatial\impacts\impact_Map_letter_v13.mxd
 DATE: 8/19/2016



PERMANENT IMPACT TO WUS
= 148 LF/570 SF

PERMANENT IMPACT TO PFO
= 1,144 SF/0.03 AC

PERMANENT IMPACT TO POW
= 1,405 SF/0.03 AC

PERMANENT IMPACT TO
WETLAND BUFFERS = 13,203 SF/0.3 AC

PERMANENT IMPACT TO PEM
= 5,837 SF/0.13 AC

<ul style="list-style-type: none"> WETLAND BOUNDARY OPEN WATER UNIMPACTED STREAMS UNIMPACTED WETLANDS UNIMPACTED ROW 	<ul style="list-style-type: none"> WB 25-FT WETLAND BUFFER FLP 100-YEAR FLOODPLAIN PROJECT LIMITS OF DISTURBANCE Stream Flow 	<ul style="list-style-type: none"> C/F LIMITS OF CUT/FILL ROW PROPOSED UTILITIES PROPOSED RAIL ALIGNMENT ARCHAEOLOGICAL SITE 	<p>WETLAND IMPACTS</p> <ul style="list-style-type: none"> TEMPORARY WETLAND IMPACTS = 0 SF/0 AC PERMANENT WETLAND IMPACTS = 6981 SF/0.16 AC <p>STREAM AND OPEN WATER IMPACTS</p> <ul style="list-style-type: none"> TEMPORARY WUS IMPACTS = 0 LF/0 SF PERMANENT WUS IMPACTS = 148 LF/570 SF 	<p>WETLAND BUFFER IMPACTS</p> <ul style="list-style-type: none"> TEMPORARY WETLAND BUFFER IMPACTS = 0 SF/0 AC PERMANENT WETLAND BUFFER IMPACTS = 13203 SF/0.3 AC <p>100-YEAR FLOODPLAIN IMPACTS</p> <ul style="list-style-type: none"> TEMPORARY FLOODPLAIN IMPACTS = 0 SF/0 AC PERMANENT FLOODPLAIN IMPACTS = 0 SF/0 AC
---	--	---	---	--

MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND TRANSIT ADMINISTRATION

District of Columbia

ATKINS
3901 Calverton Blvd, Suite 400
Calverton, Maryland 20705
Telephone: 301-210-6800
www.atkinsglobal.com

NO.	DESCRIPTION	BY	DATE
REVISIONS			

STREAM IMPACTS

- TEMPORARY PERENNIAL IMPACT = 0 SF/0 LF
- PERMANENT PERENNIAL IMPACT = 0 SF/0 LF
- TEMPORARY INTERMITTENT IMPACT = 0 SF/0 LF
- PERMANENT INTERMITTENT IMPACT = 570 SF/148 LF
- TEMPORARY EPHEMERAL IMPACT = 0 SF/0 LF
- PERMANENT EPHEMERAL IMPACT = 0 SF/0 LF

0 50 100
Feet

PURPLE LINE LIGHT RAIL

MONTGOMERY AND PRINCE GEORGE'S COUNTIES,
MARYLAND

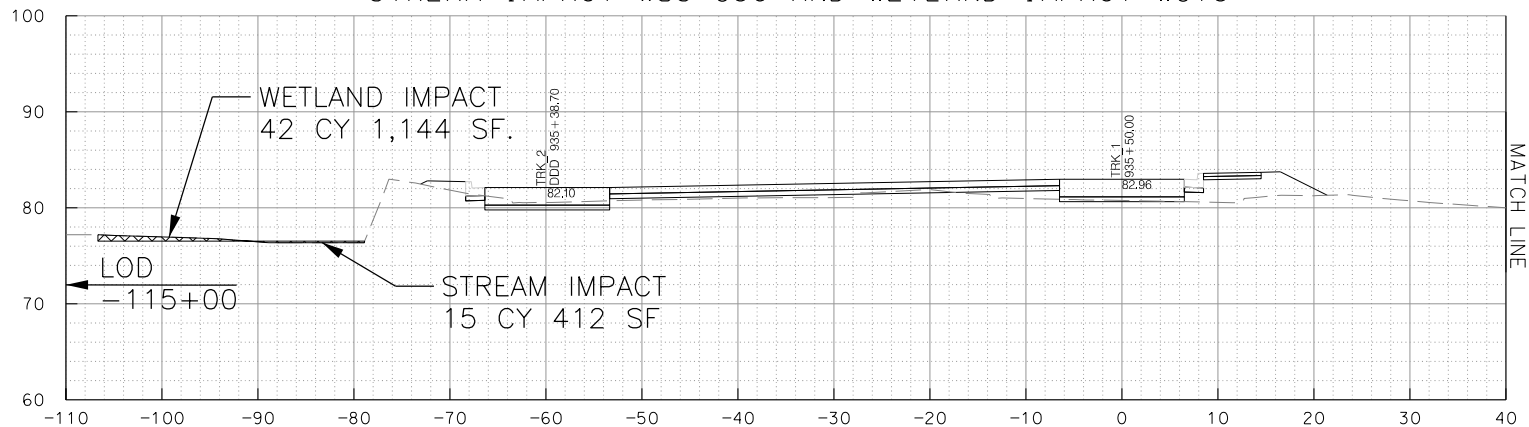
WATERS OF THE U.S. IMPACTS

DATE: 8/18/2016 SCALE: 1in = 100ft

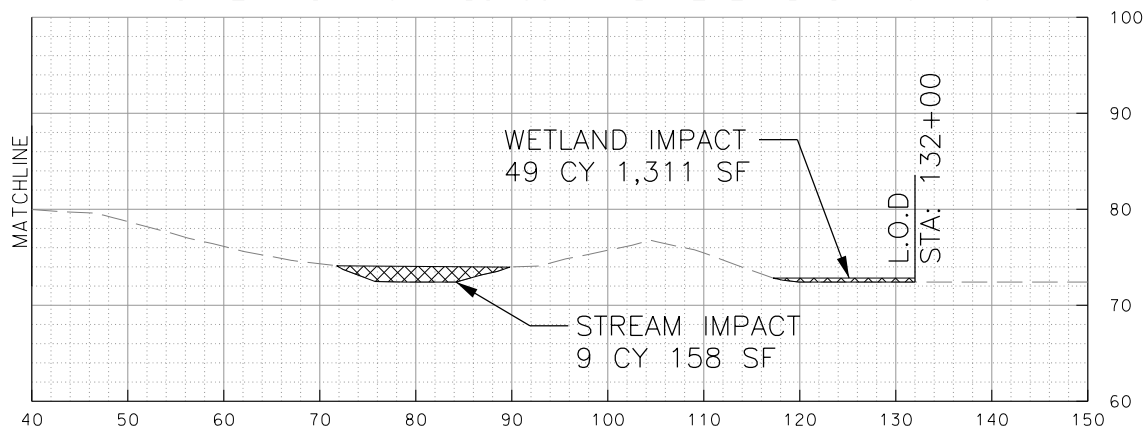
CONTRACT NO.
DRAWING NO.
PLANVIEW SHEET NO. 38 OF 38

FILE: N:\Geospatial\Clients\O_PurpleLine_Transit_Partners\geospatial\impacts\impact_Map_Jeter_v12.mxd
DATE: 8/19/2016

STREAM IMPACT WUS 038 AND WETLAND IMPACT W073

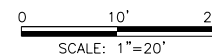


STREAM IMPACT WUS 036 AND WETLAND IMPACT W067



STREAM IMPACT WUS 036 AND WUS 038
WETLAND IMPACT W067 AND W073
STATION 935+50

SCALE: 1"=20'



PROFESSIONAL CERTIFICATION
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. Expiration Date

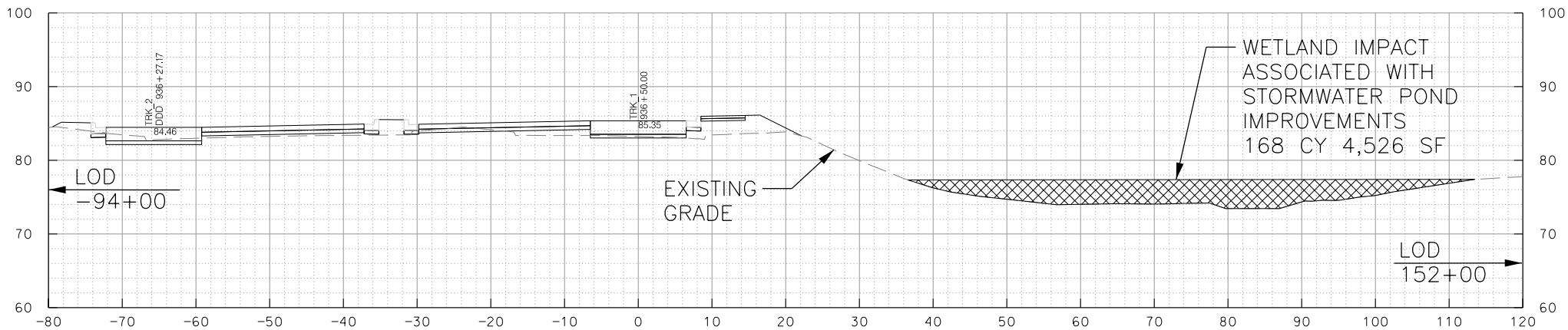
NO.	DESCRIPTION	BY	DATE

APPR. CHECK DRAWN DESIGN

PURPLE LINE LIGHT RAIL
MONTGOMERY AND PRINCE GEORGES COUNTIES,
MARYLAND
WUS 036, 038 STREAM
W067, 073 WETLAND IMPACT
DATE: 06/28/2016 SCALE: 1"=20'

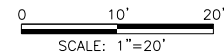
CONTRACT NO.
0-0000-0000
DRAWING NO.
CROSS SECTION SHEET NO.
21 OF 22
DATE: 7/26/2016

p:\work\pms-1801\pms-1801\docs\AKNAND\PL17\Documents\Purple Line P3 Design\4.0 CAD (Work in Progress)\Environmental\General\Sketches\Cross Sections Segment 7



WETLAND IMPACT W037
STATION 936+50

SCALE: 1"=20'



PROFESSIONAL CERTIFICATION
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. _____ Expiration Date _____

NO.	DESCRIPTION	BY	DATE

APPR. CHECK DRAWN DESIGN

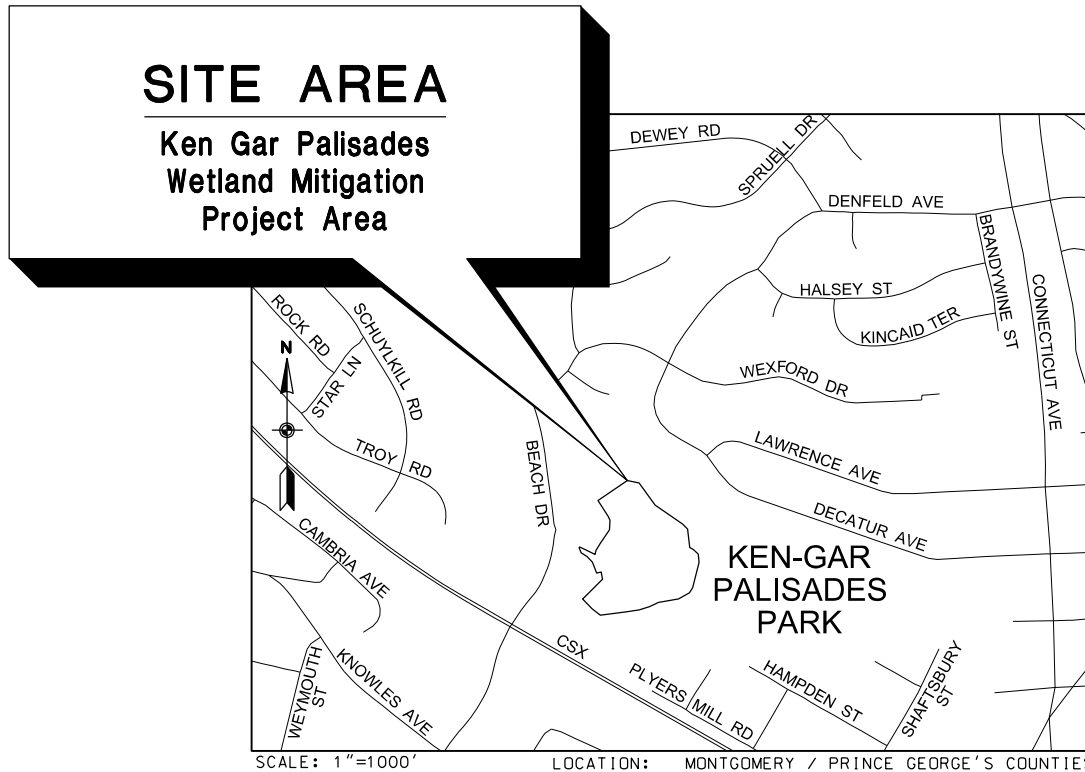
PURPLE LINE LIGHT RAIL
MONTGOMERY AND PRINCE GEORGES COUNTIES,
MARYLAND
W037 WETLAND IMPACT
DATE: 06/28/2016 SCALE: 1"=20'

CONTRACT NO.
0-0000-0000
DRAWING NO.
CROSS SECTION SHEET NO.
22 OF 22

pw://p:\pms-1801\pos\com\AKNAND\PL17\Documents\Purple Line P3 Design\4.0 CAD (Work in Progress)\Environmental\General\Sketches\Cross Sections\Segment 7

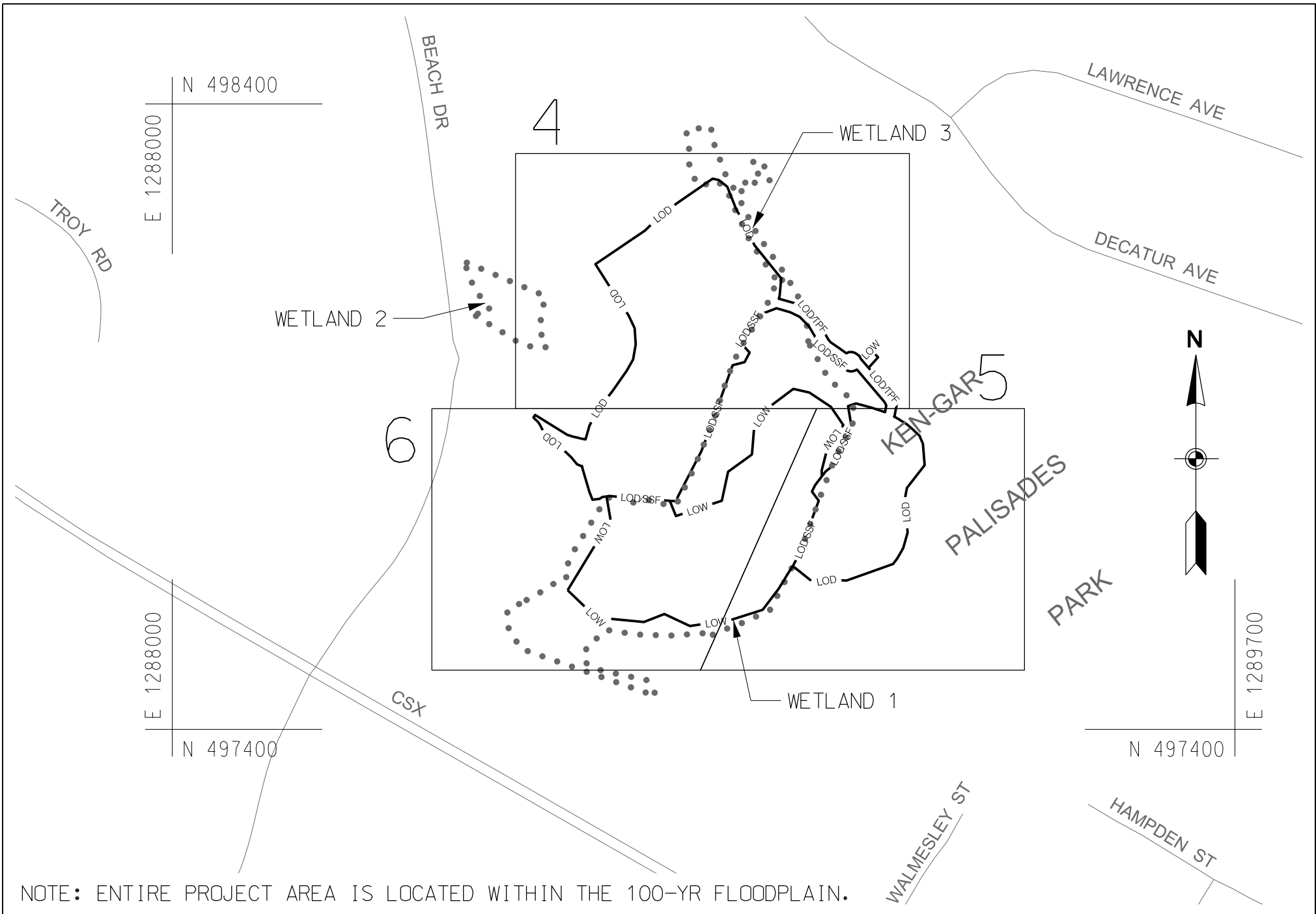


MARYLAND DEPARTMENT OF TRANSPORTATION
MARYLAND TRANSIT ADMINISTRATION
 FACILITIES ENGINEERING, ADA & SUSTAINABILITY DIVISION
KEN GAR PALISADES WETLAND MITIGATION
 CONTRACT NO. T-1042-0220



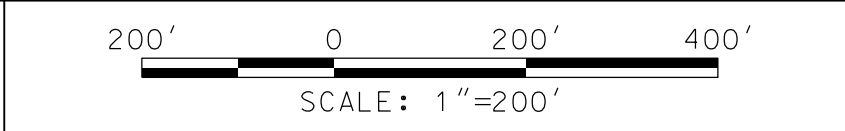
VICINITY MAP

 General Engineering Consultant Team <small>100 North Charles Street, 8th Floor ■ Baltimore, MD 21202 P: 410-244-6046</small>	CONTRACT NO. T-1042-0220
	DRAWING NO. TI-0700
	SHEET NO. 1 OF 6





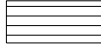

NOTE: ENTIRE PROJECT AREA IS LOCATED WITHIN THE 100-YR FLOODPLAIN.

	MARYLAND DEPARTMENT OF TRANSPORTATION	



APPR CHECK DRAWING DESIGN	DRS	PURPLE LINE LIGHT RAIL KEN-GAR PALISADES WETLAND MITIGATION	CONTRACT NO. T-1042-0220
	SCN		DRAWING NO. KEY MAP
	MJF	IMPACT PLATE KEY SHEET	SHEET NO.
	MJF		DATE: _____

LEGEND

LIMIT OF WORK	— LOW —
LIMIT OF DISTURBANCE	— LOD —
EXISTING WETLAND	
WETLAND BUFFER	— B —
TEMPORARY WETLAND IMPACT	
WETLAND BUFFER IMPACT	
MEADOW AREA	
TREE PROTECTION FENCE	— TPF —
SUPER SILT FENCE	— SSF —

SUMMARY TABLE OF IMPACTS BY SHEET						
SHEET	TEMPORARY WETLAND		WETLAND BUFFER		FLOODPLAIN	
	(SF)	(AC)	(SF)	(AC)	(SF)	(AC)
4	3701	0.09	11187	0.26	70063	1.61
5	20393	0.47	7128	0.16	29669	0.68
6	60607	1.39	6513	0.15	37561	0.86
TOTAL	84701	1.94	24828	0.57	137293	3.15



APPR | CHECK | DRAWN | DESGN
 MJF | MJF

PURPLE LINE LIGHT RAIL
KEN-GAR PALISADES
WETLAND MITIGATION

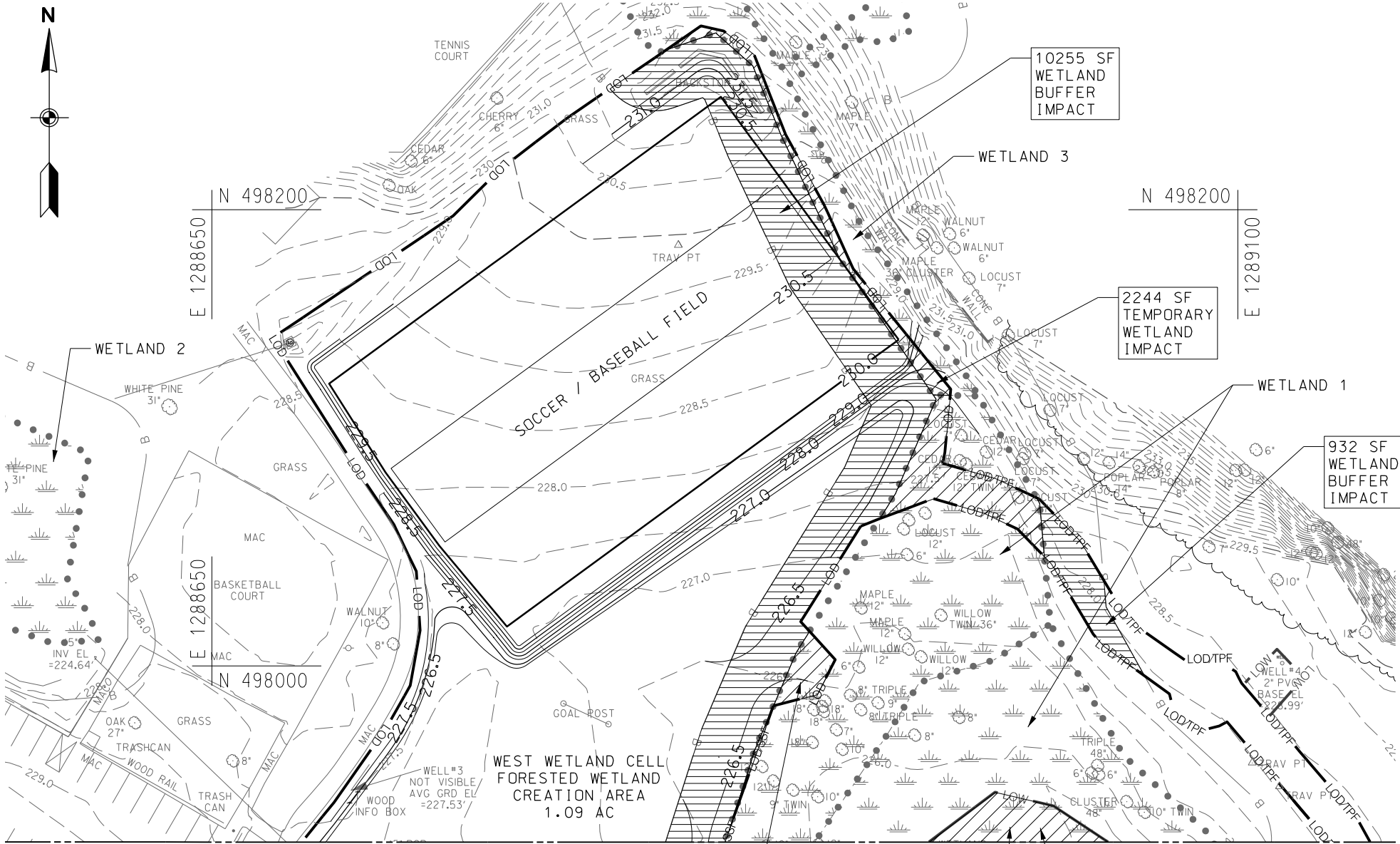
IMPACT PLATE LEGEND

DATE: SCALE: N/A

CONTRACT NO.
T-1042-0220

DRAWING NO.
LEGEND

SHEET NO.
3 OF 6



MATCH TO PLATE 6

MATCH TO PLATE 5

LEGEND OF WETLAND AND WATERS IMPACTS

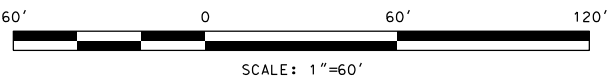
- LIMITS OF DISTURBANCE — LOD —
- EXISTING WETLAND
- WETLAND BUFFER — B —
- IMPACTS:
- 100-YR FLOODPLAIN 70063 SF / 1.61 AC
- TEMPORARY WETLAND 3701 SF / 0.09 AC
- WETLAND BUFFER 11187 SF / 0.26 AC



471 SF
TEMPORARY
WETLAND
IMPACT

986 SF
TEMPORARY
WETLAND
IMPACT

WETLAND ENHANCEMENT AREA
1.89 AC



APP'D CHECKED DESIGN ISSUED	DRS	PURPLE LINE LIGHT RAIL KEN-GAR PALISADES WETLAND MITIGATION	CONTRACT NO. T-1042-0220
	SCN		DRAWING NO. EF-0701
	MJF	IMPACT PLATE	SHEET NO. 4 OF 6
	MJF		DATE:

MATCH TO PLATE 4

N 497900

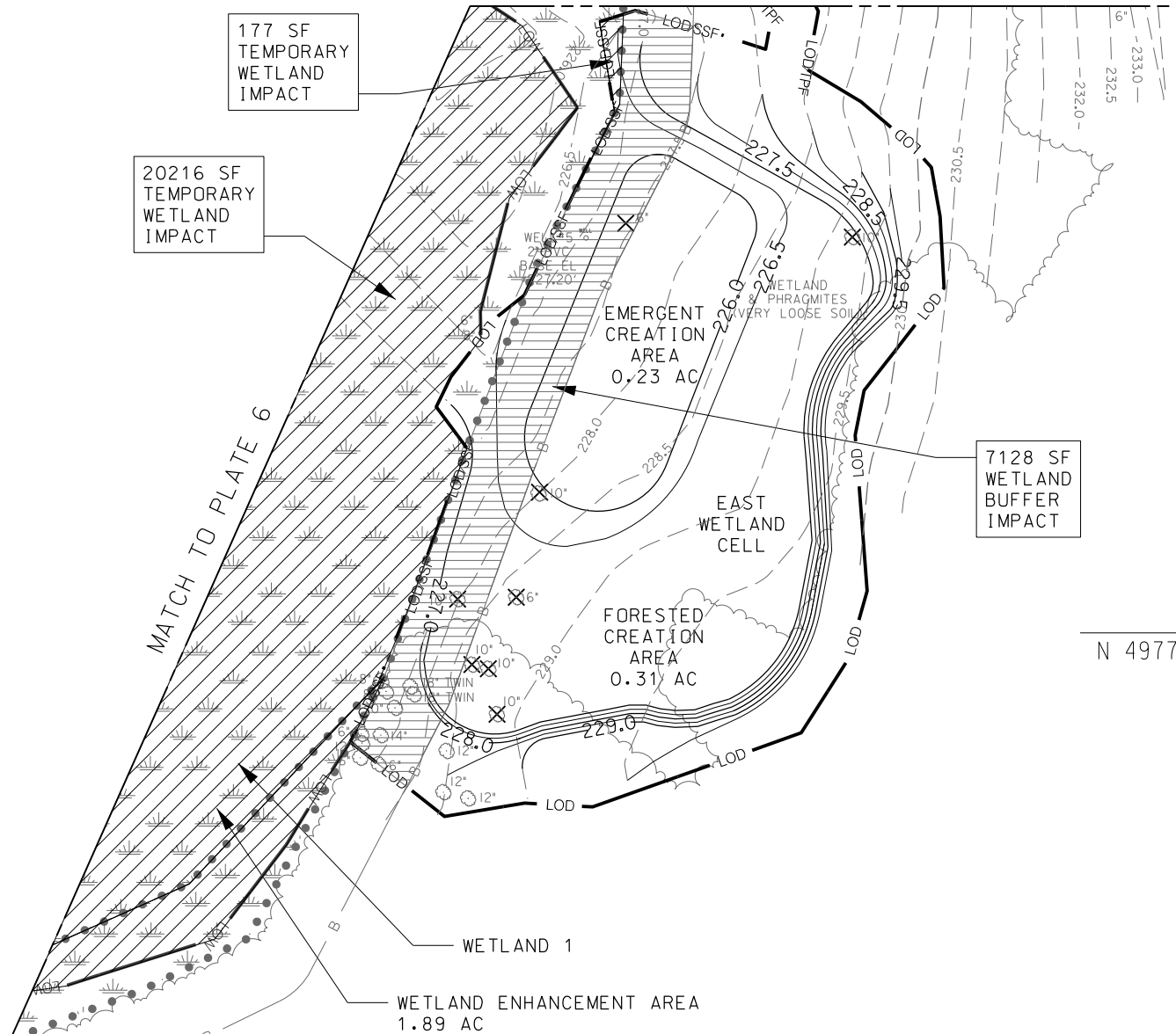
E 1288800

E 1288800

N 497700

N 497700

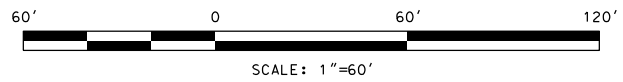
E 1289300



LEGEND OF WETLAND AND WATERS IMPACTS

- LIMITS OF DISTURBANCE — LOD —
- EXISTING WETLAND
- WETLAND BUFFER — B —

- IMPACTS:
- 100-YR FLOODPLAIN 29669 SF / 0.68 AC
 - TEMPORARY WETLAND 20393 SF / 0.47 AC
 - WETLAND BUFFER 7128 SF / 0.16 AC



APPROVED	DRS
CHECKED	SCN
DRAWN	MJF
DESIGN	MJF

PURPLE LINE LIGHT RAIL
KEN-GAR PALISADES
WETLAND MITIGATION

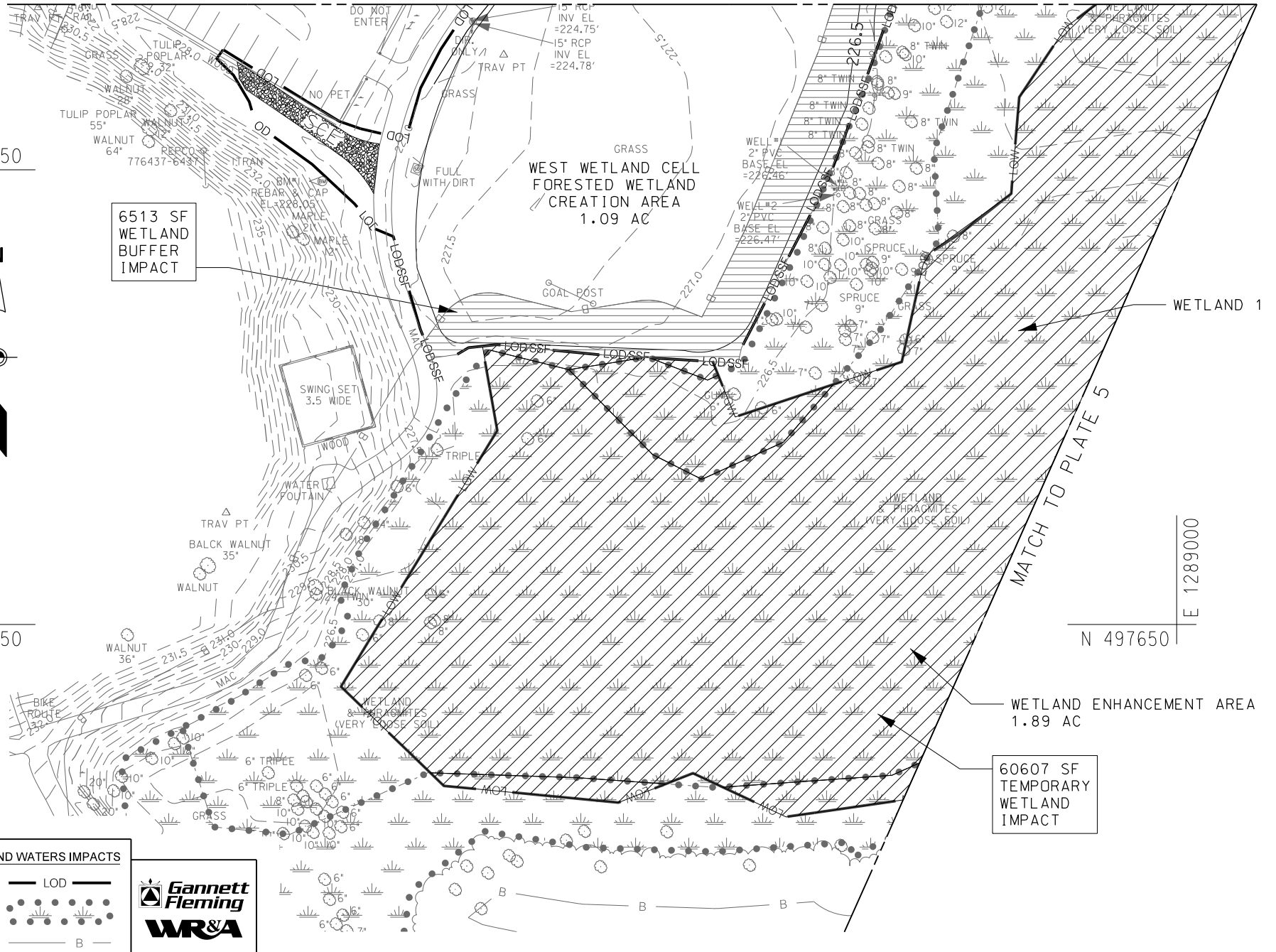
IMPACT PLATE

DATE: _____ SCALE: 1"=60'

CONTRACT NO. T-1042-0220
DRAWING NO. EF-0702
SHEET NO. 5 OF 6

MATCH TO PLATE 4

N 497850
E 1288450
N
E 1288450
N 497650



6513 SF
WETLAND
BUFFER
IMPACT

SWING SET
3.5 WIDE

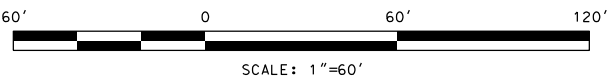
WEST WETLAND CELL
FORESTED WETLAND
CREATION AREA
1.09 AC

60607 SF
TEMPORARY
WETLAND
IMPACT

WETLAND ENHANCEMENT AREA
1.89 AC

LEGEND OF WETLAND AND WATERS IMPACTS

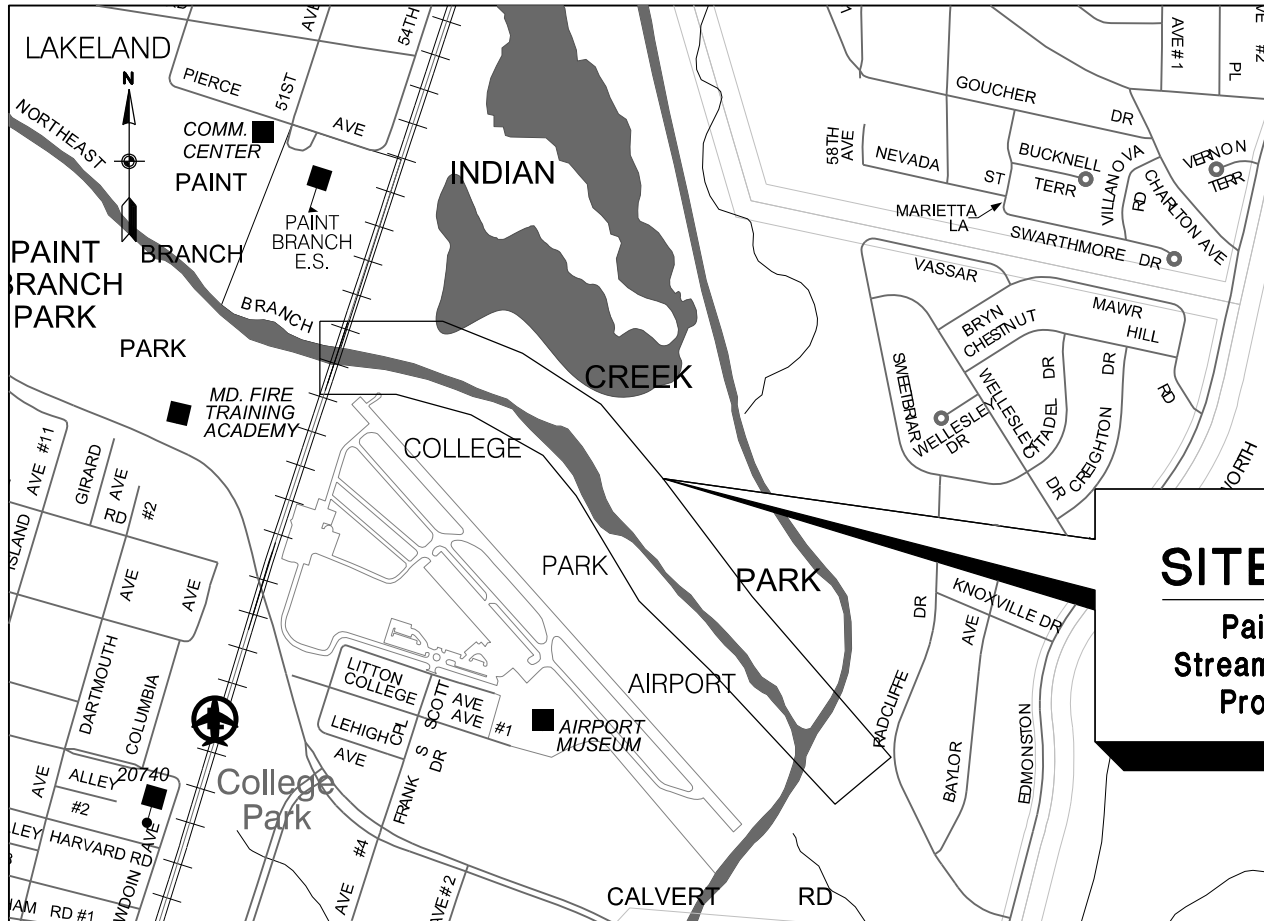
- LIMITS OF DISTURBANCE — LOD —
- EXISTING WETLAND
- WETLAND BUFFER — B —
- IMPACTS:
- 100-YR FLOODPLAIN 37561 SF / 0.86 AC
- TEMPORARY WETLAND 60607 SF / 1.39 AC
- WETLAND BUFFER 6513 SF / 0.15 AC



APPR CHECK DRAWN DESGN MJF MJF MJF MJF	DRS	PURPLE LINE LIGHT RAIL KEN-GAR PALISADES WETLAND MITIGATION	CONTRACT NO. T-1042-0220
	SCN		DRAWING NO. EF-0703
	DATE:		IMPACT PLATE



MARYLAND DEPARTMENT OF TRANSPORTATION
MARYLAND TRANSIT ADMINISTRATION
 FACILITIES ENGINEERING, ADA & SUSTAINABILITY DIVISION
PAINT BRANCH STREAM MITIGATION
 CONTRACT NO. T-1042-XX40

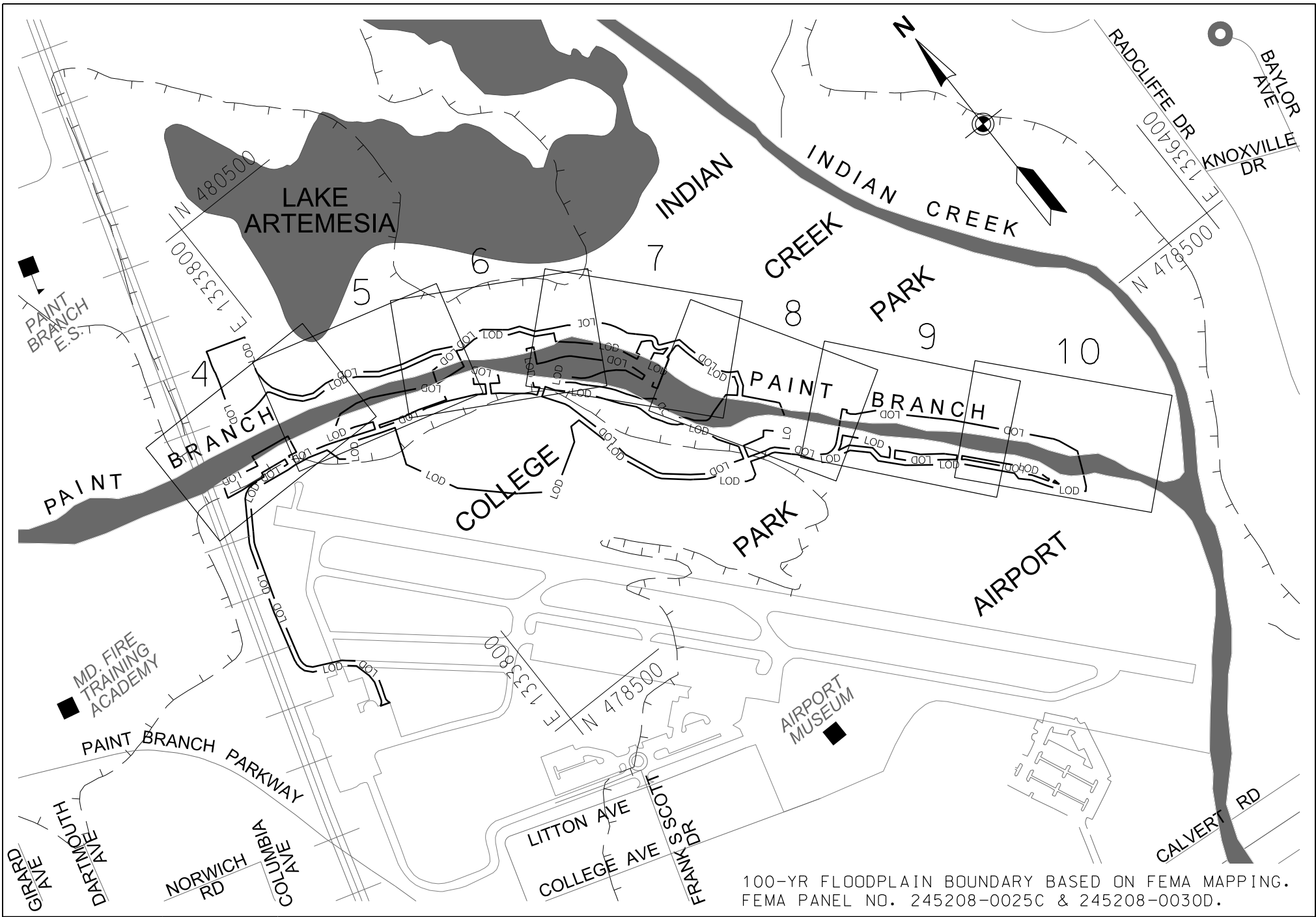


SCALE: 1"=1000'

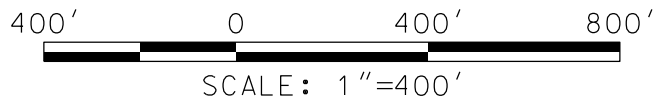
LOCATION: MONTGOMERY / PRINCE GEORGE'S COUNTIES

VICINITY MAP

 General Engineering Consultant Team <small>100 North Charles Street, 8th Floor ■ Baltimore, MD 21202 P: 410-244-6046</small>	CONTRACT NO. T-1042-XX40
	DRAWING NO. VICINITY MAP
	SHEET NO. 1 OF 10









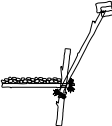

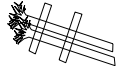
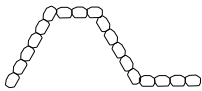


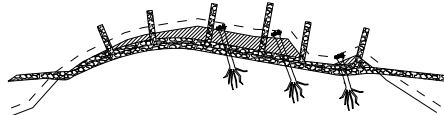
100-YR FLOODPLAIN BOUNDARY BASED ON FEMA MAPPING.
 FEMA PANEL NO. 245208-0025C & 245208-0030D.



APPR CHECK DRAWING DESIGN	KLJ	PURPLE LINE PAINT BRANCH STREAM RESTORATION	CONTRACT NO. T-1042-XX40
	LLW		DRAWING NO. KEY MAP
	ETK	IMPACT PLATE KEY SHEET	SHEET NO. 2 OF 10
	ETK		DATE:

LEGEND

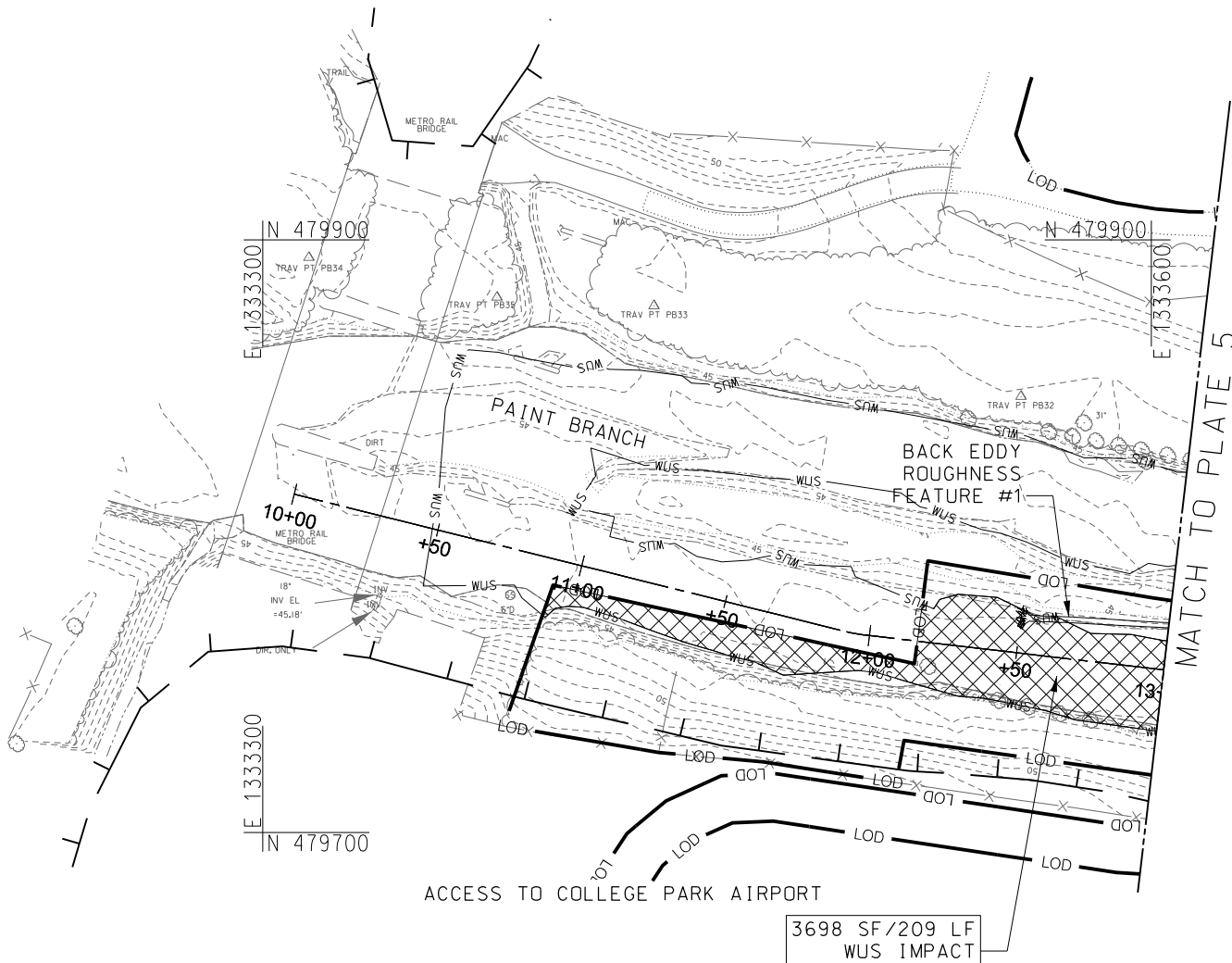
- LIMIT OF DISTURBANCE  LOD
- 100-YEAR FLOODPLAIN  100-YR FLOODPLAIN
- WATERS OF THE US  WUS
- WATERS OF THE US IMPACT  WATERS OF THE US IMPACT

- SOIL STABILIZATION MATTING 
- RIFFLE POOL SEQUENCE FEATURE (RPSF) 
- BRANCHED LOG VANE 
- BACK EDDY ROUGHNESS FEATURE 
- ENGINEERED LOG JAM 
- ROCK CROSS VANE 
- LOG VANE 
- LOG CROSS VANE 
- LONGITUDINAL FILL STONE TOE PROTECTION (LFSTP) 

SUMMARY TABLE OF IMPACTS BY SHEET				
SHEET	100-YR FLOODPLAIN		WATERS OF THE US	
	(SF)	(AC)	(SF)	(LF)
4	32868	0.75	3698	209
5	32486	0.75	5903	250
6	34289	0.79	7802	333
7	28426	0.65	21963	656
8	23053	0.53	20885	305
9	25628	0.59	23705	385
10	28150	0.65	24091	407
TOTAL	204900	4.71	108047	2585



APPR CHECK DRAWN DESIGN ETK ETK LLW KLJ	PURPLE LINE PAINT BRANCH STREAM RESTORATION	CONTRACT NO. T-1042-XX40
	IMPACT PLATE LEGEND	DRAWING NO. LEGEND
	DATE:	SHEET NO. 3 OF 10
	SCALE: 1" = 500'	



LEGEND OF WETLAND AND WATERS IMPACTS

- LIMITS OF DISTURBANCE **— LOD —**
- 100-YR FLOODPLAIN **— T —**
- WATERS OF THE US **— WUS —**

IMPACTS:

100-YR FLOODPLAIN 32868 SF / 0.75 AC

WATERS OF THE US 3698 SF / 209 LF



MARYLAND DEPARTMENT OF TRANSPORTATION



SCALE: 1"=60'

LAYER CHECK DRAWING DESIGN
KLJ
LLW
ETK
ETK

PURPLE LINE
PAINT BRANCH
STREAM RESTORATION

IMPACT PLATE

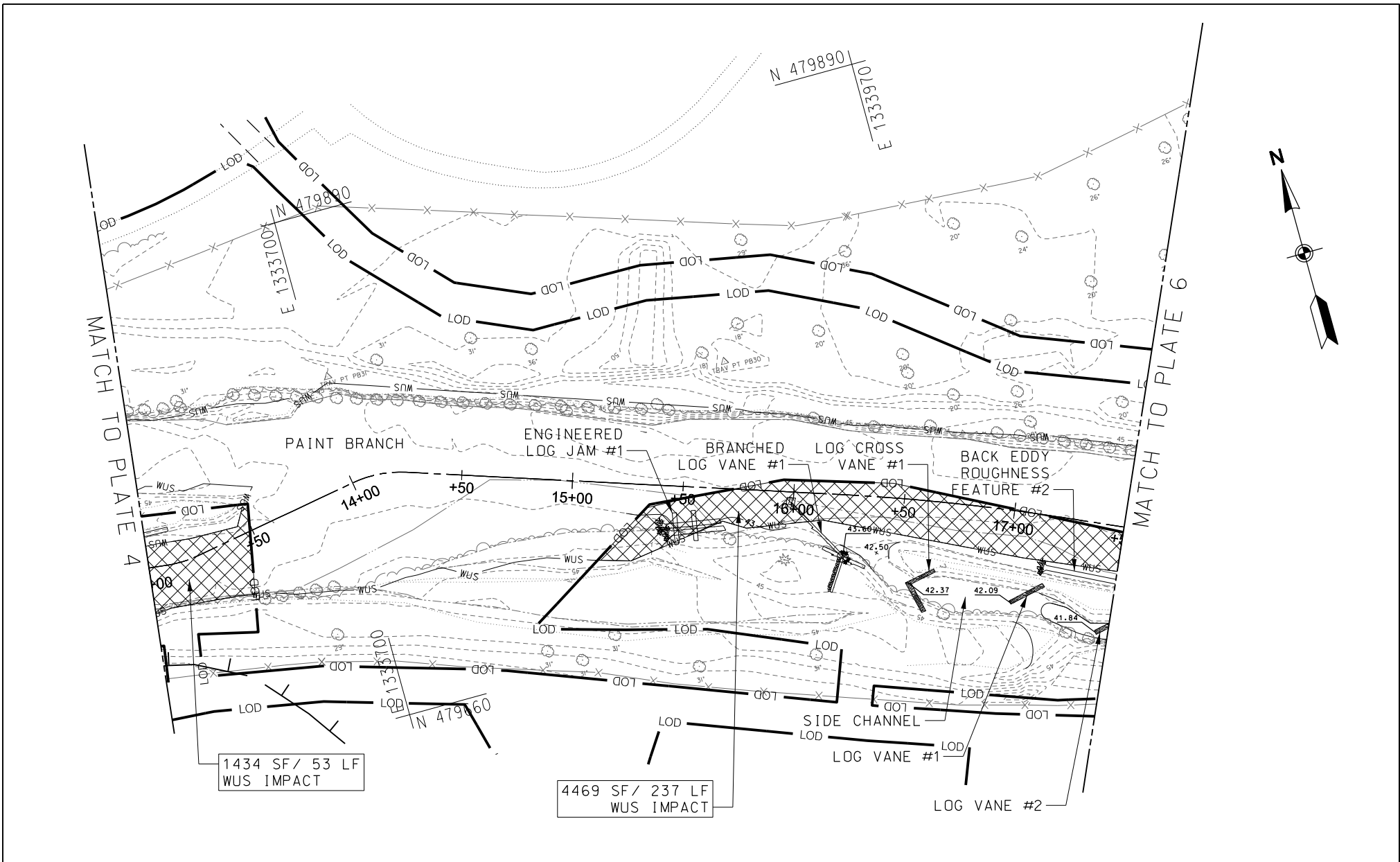
DATE:

SCALE: 1"=60'

CONTRACT NO.
T-1042-XX40

DRAWING NO.
EF-0701

SHEET NO.
4 OF 10



LEGEND OF WETLAND AND WATERS IMPACTS

LIMITS OF DISTURBANCE **— LOD —**

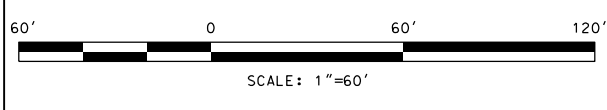
100-YR FLOODPLAIN **— F —**

WATERS OF THE US **— WUS —**

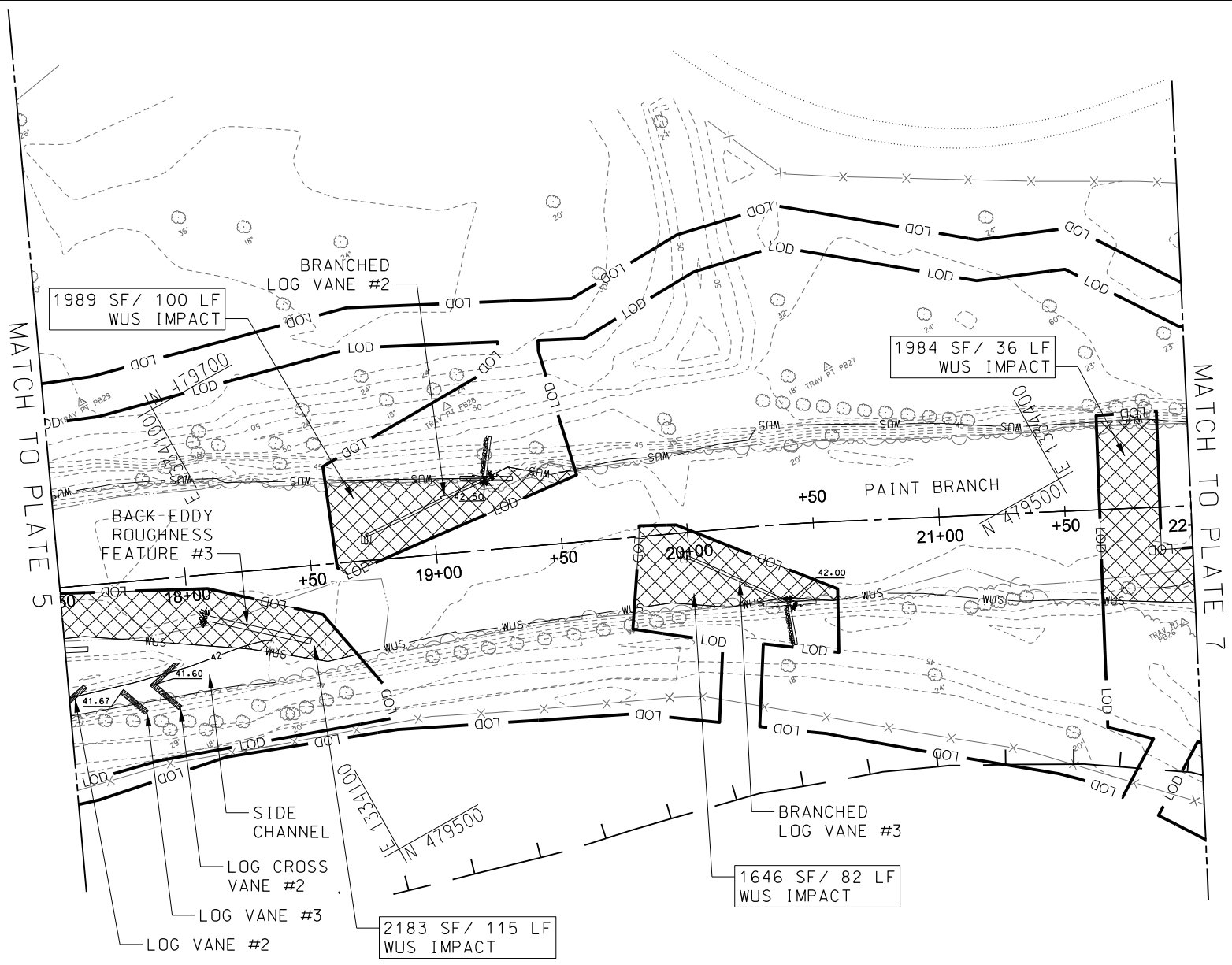
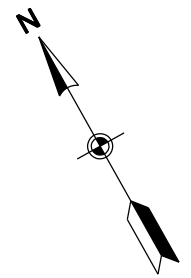
IMPACTS:

100-YR FLOODPLAIN 32486 SF / 0.75 AC

WATERS OF THE US 5903 SF / 290 LF



LAYER CHECK DRAWING DESIGN KLL LLW ETK ETK	PURPLE LINE PAINT BRANCH STREAM RESTORATION	CONTRACT NO. T-1042-XX40
	IMPACT PLATE	DRAWING NO. EF-0702
	DATE:	SHEET NO. 5 OF 10



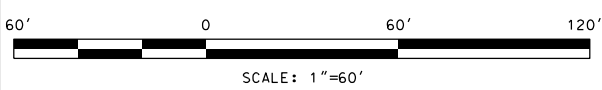
MATCH TO PLATE 5

MATCH TO PLATE 7

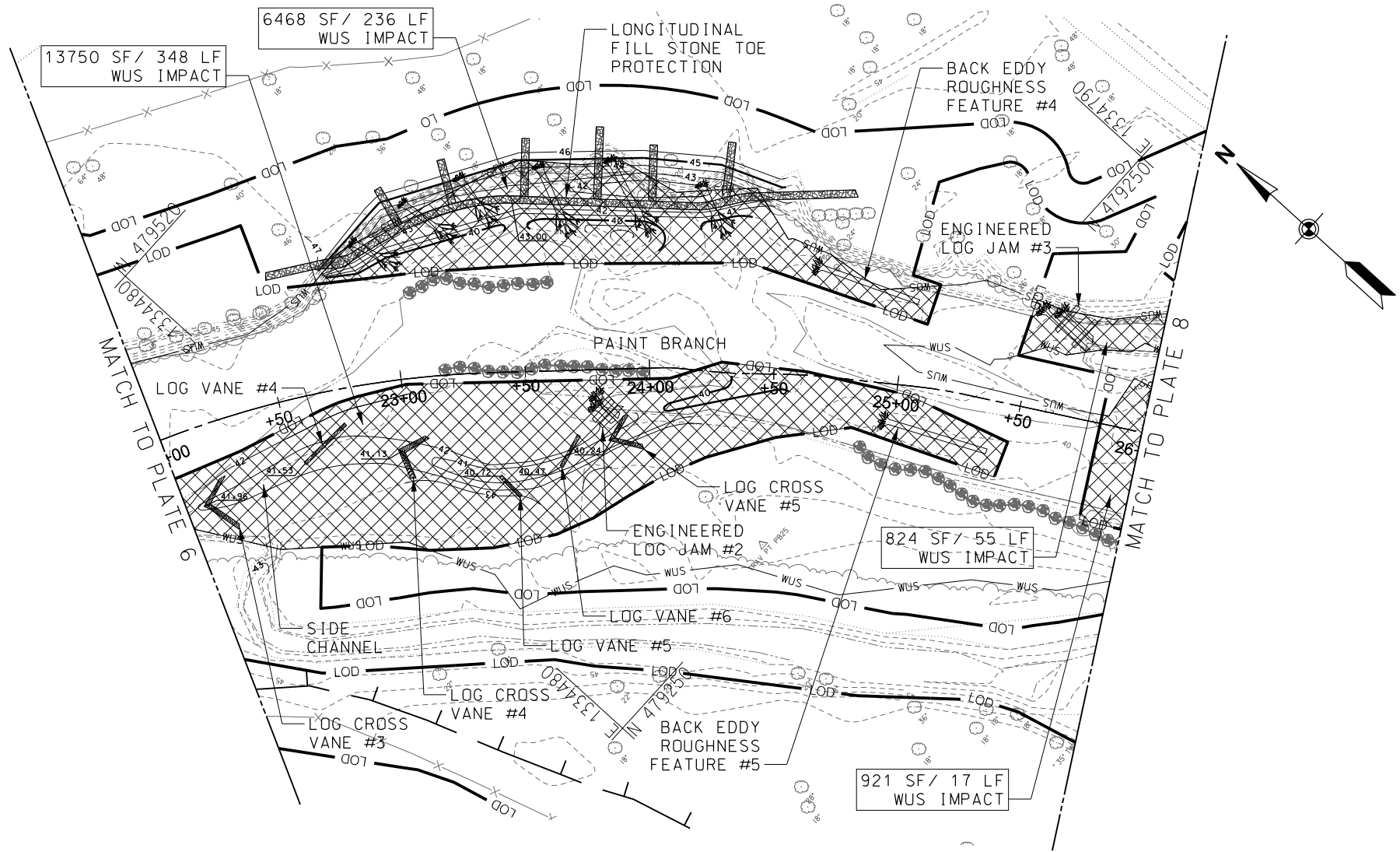
LEGEND OF WETLAND AND WATERS IMPACTS

- LIMITS OF DISTURBANCE **— LOD —**
- 100-YR FLOODPLAIN **— F —**
- WATERS OF THE US **— WUS —**

- IMPACTS:**
- 100-YR FLOODPLAIN 34289 SF / 0.79 AC
 - WATERS OF THE US 7802 SF / 333 LF



APPR CHECK DRAWING DESIGN	KLLJ LLW ETK ETK	PURPLE LINE PAINT BRANCH STREAM RESTORATION IMPACT PLATE DATE: _____ SCALE: 1"=60'	CONTRACT NO. T-1042-XX40 DRAWING NO. EF-0703 SHEET NO. 6 OF 10
------------------------------------	---------------------------	--	---



LEGEND OF WETLAND AND WATERS IMPACTS

- LIMITS OF DISTURBANCE — LOD —
- 100-YR FLOODPLAIN ——— F ———
- WATERS OF THE US ——— WUS ———

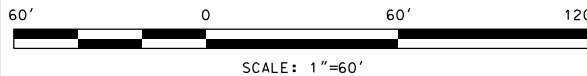
IMPACTS:

100-YR FLOODPLAIN 28426 SF / 0.65 AC

WATERS OF THE US 21963 SF / 656 LF



MARYLAND DEPARTMENT OF TRANSPORTATION



LAYER	KLJ
CHECK	LLW
DRAWING	ETK
DESIGN	ETK

PURPLE LINE
PAINT BRANCH
STREAM RESTORATION

IMPACT PLATE

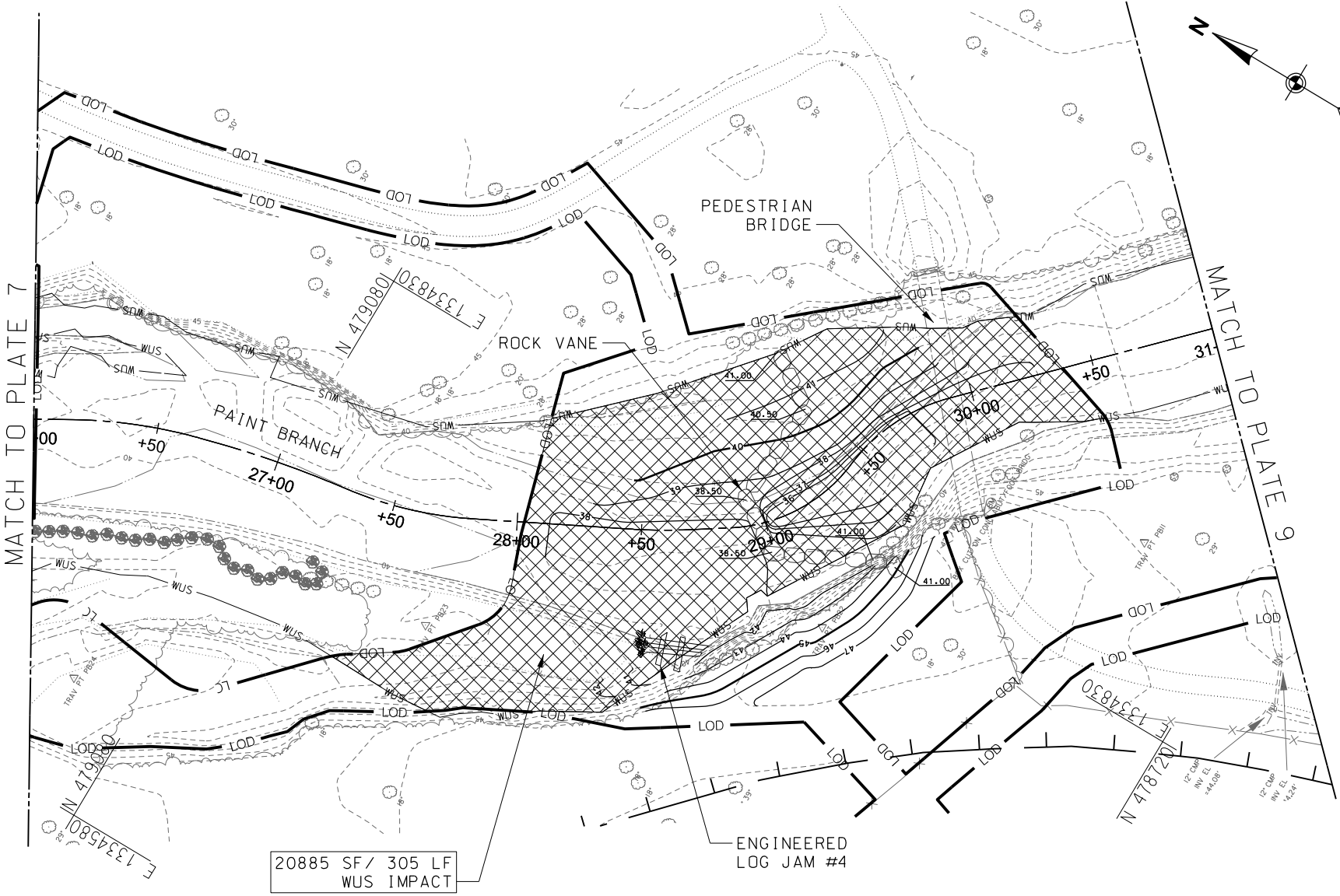
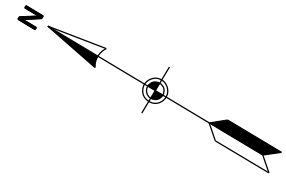
DATE:

SCALE: 1"=60'

CONTRACT NO.
T-1042-XX40

DRAWING NO.
EF-0704

SHEET NO.
7 OF 10



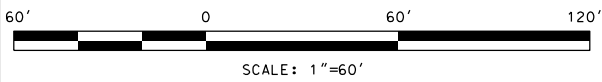
20885 SF / 305 LF
WUS IMPACT

LEGEND OF WETLAND AND WATERS IMPACTS

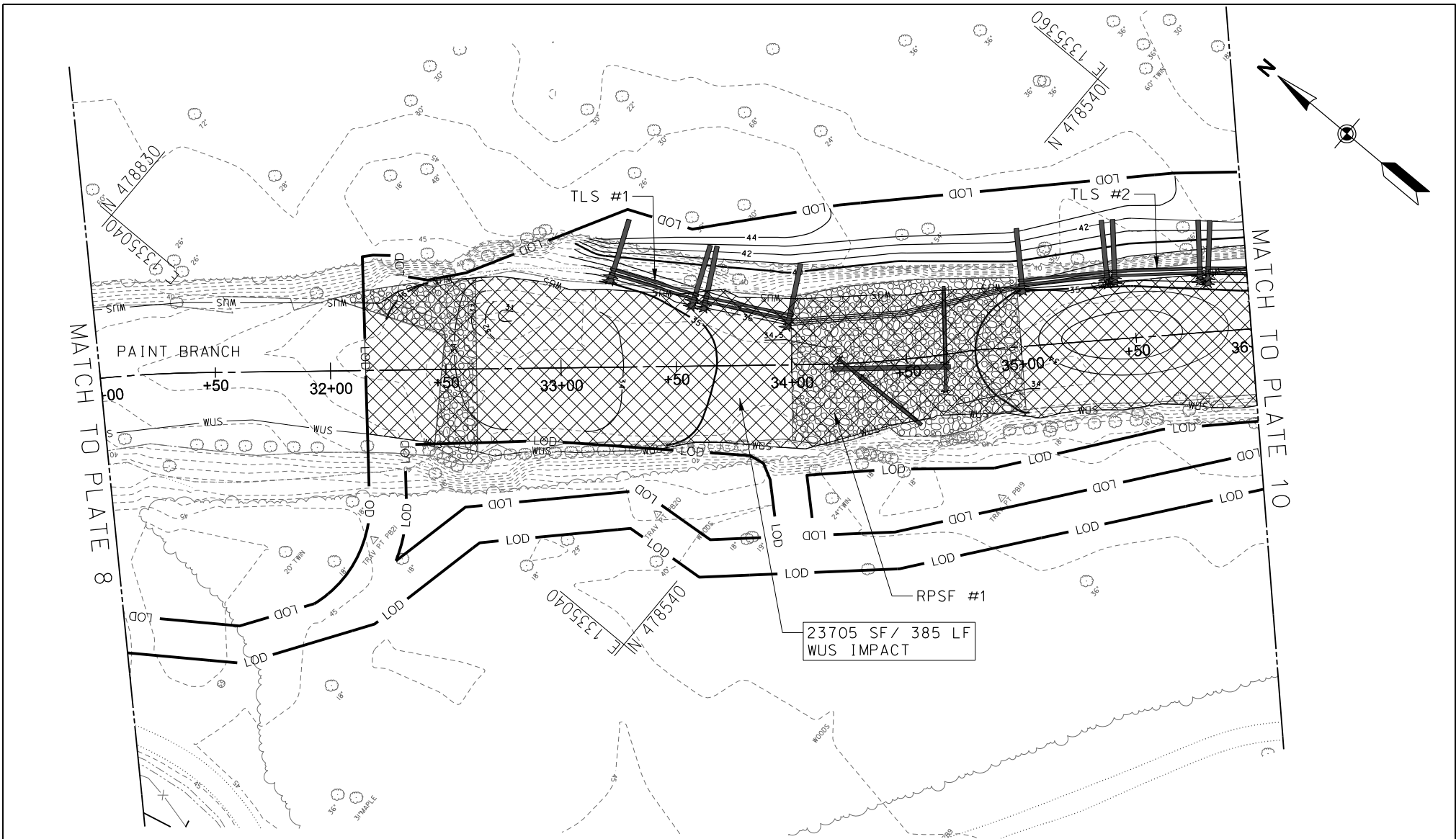
LIMITS OF DISTURBANCE	— LOD —
100-YR FLOODPLAIN	— F —
WATERS OF THE US	— WUS —

IMPACTS:

100-YR FLOODPLAIN	23053 SF / 0.53 AC
WATERS OF THE US	20885 SF / 305 LF



LAYER CHECK DRAWING DESIGN ETK ETK	KLJ	PURPLE LINE PAINT BRANCH STREAM RESTORATION	CONTRACT NO. T-1042-XX40
	LLW		DRAWING NO. EF-0705
	ETK	ETK	IMPACT PLATE
DATE:		SCALE: 1"=60'	



LEGEND OF WETLAND AND WATERS IMPACTS

- LIMITS OF DISTURBANCE **— LOD —**
- 100-YR FLOODPLAIN **— F —**
- WATERS OF THE US **— WUS —**

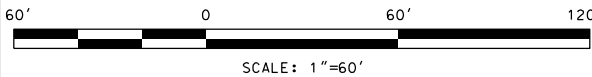
IMPACTS:

100-YR FLOODPLAIN 25628 SF / 0.59 AC

WATERS OF THE US 23705 SF / 385 LF



MARYLAND DEPARTMENT OF TRANSPORTATION



KLJ
LLW
ETK
ETK

PURPLE LINE
PAINT BRANCH
STREAM RESTORATION

IMPACT PLATE

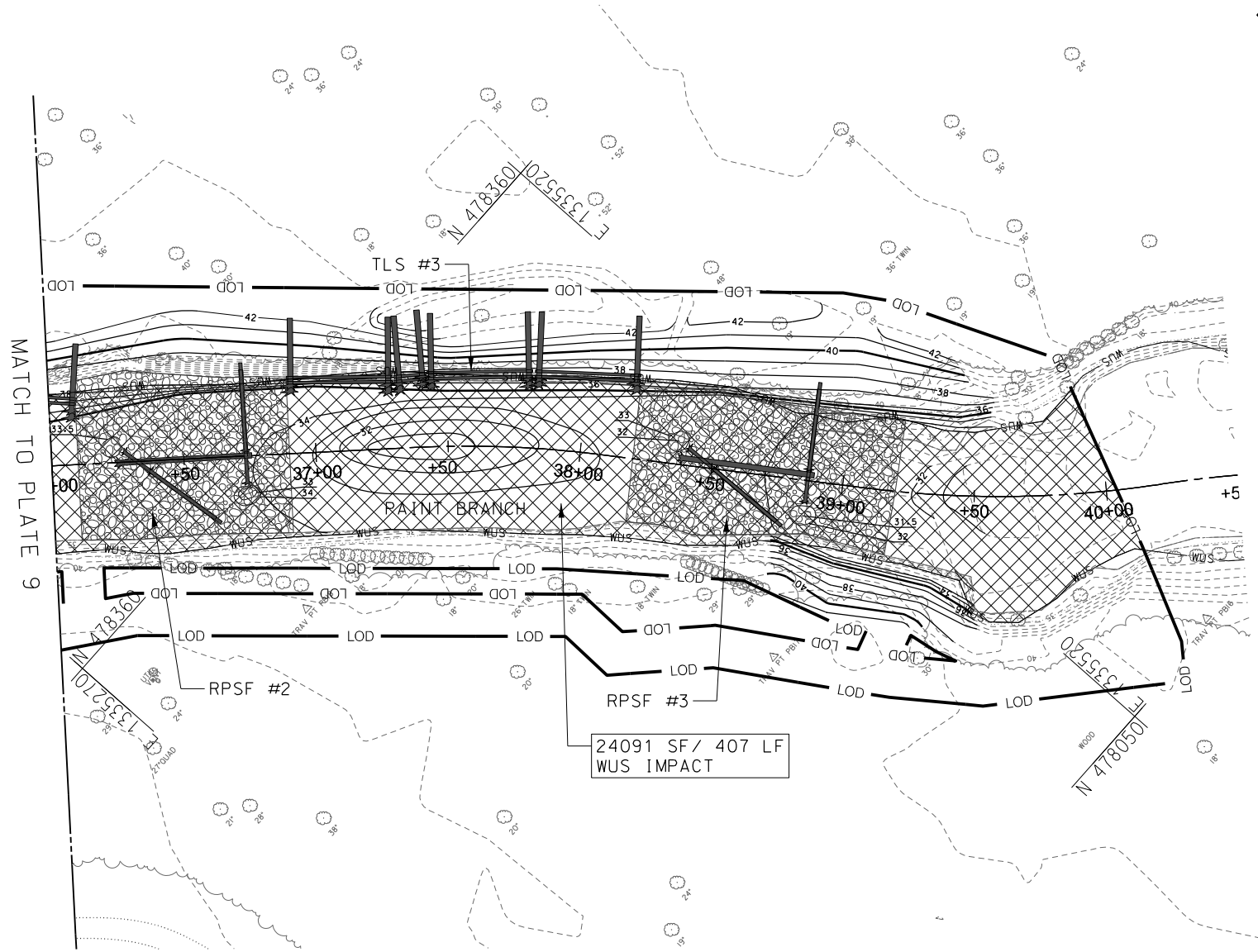
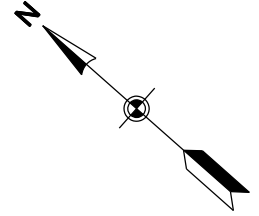
DATE:

SCALE: 1"=60'

CONTRACT NO.
T-1042-XX40

DRAWING NO.
EF-0706

SHEET NO.
9 OF 10



LEGEND OF WETLAND AND WATERS IMPACTS

- LIMITS OF DISTURBANCE — LOD —
- 100-YR FLOODPLAIN — F —
- WATERS OF THE US — WUS —

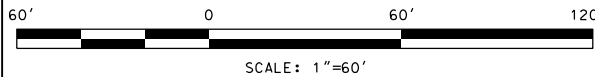
IMPACTS:

100-YR FLOODPLAIN 28150 SF / 0.65 AC

WATERS OF THE US 24091 SF / 407 LF



MARYLAND DEPARTMENT OF TRANSPORTATION



KLJ
LLW
ETK
ETK

PURPLE LINE
PAINT BRANCH
STREAM RESTORATION

IMPACT PLATE

DATE:

SCALE: 1"=60'

CONTRACT NO.

T-1042-XX40

DRAWING NO.

EF-0707

SHEET NO.

10 OF 10