



U.S. Army Corps
of Engineers
Baltimore District

Public Notice

In Reply to Application Number:
CENAB-OP-RMN (MDOT SHA/Bridge No. 108600/MD
355 over Bennett Creek) 2017-61055-M15

PN 17- 39

COMMENT PERIOD: August 7, 2017- September 6, 2017

THE PURPOSE OF THIS PUBLIC NOTICE IS 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 has received and is 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)**.

APPLICANT: Maryland Department of Transportation
State Highway Administration
Attn: Mr. Todd Nichols
707 North Calvert Street Mailstop –C-303
Baltimore, Maryland 21202

LOCATION: The proposed bridge replacement is located on MD 355 in Ijamsville, Frederick County, Maryland. Waterways that are to be impacted include Bennett Creek and the adjacent nontidal wetlands.

WORK: To improve traffic safety and reduce storm flows overtopping the roadway, the Maryland Department of Transportation State Highway Administration (SHA) proposes to replace and relocate Bridge No. 1008600 on MD 355 over Bennett Creek. To improve stream conveyance through the roadway crossing, MD SHA also proposes to relocate a portion of Bennett Creek. A temporary bridge would be constructed to maintain traffic during construction. The proposed bridge replacement/relocation will permanently impact approximately 2,494 linear feet (101,551 square feet) of Bennett Creek and approximately 2.8 acres of nontidal emergent wetlands. The project will temporarily impact approximately 493 linear feet (8,429 square feet) of Bennett Creek and approximately 8.3 acres of nontidal emergent wetlands.

SHA has proposed to provide compensatory mitigation for unavoidable permanent impacts to wetlands adjacent to the project site. The proposed mitigation site would include the creation of 1.42 acres of nontidal forested wetlands and the conversion/enhancement of 4.80 acres of notidal emergent wetlands (reed Canary grass monoculture) to nontidal forested wetlands. The enhancement activities will include initial mowing and controlled burning of the reed canary grass along with

chemical treatment prior to planting native herbaceous species and ultimately woody vegetation.

PURPOSE: The purpose of this project is to provide transportation improvements that improve traffic safety, improve the efficiency of stream conveyance through the roadway crossing, and reduce stormwater overtopping the roadway.

WRITTEN COMMENTS: To be included in the official record, written comments concerning the work described above and information provided by interested parties must be received by the Corps by the closing date of this notice's comment period, September 6, 2017, to receive consideration. The mailing address for submission of written comments is:

U.S. Army Corps of Engineers
Baltimore District
Attn: Mr. Jack Dinne, CENAB-OPR-M
10 South Howard Street
Baltimore, Maryland 21201

If you have any questions concerning this matter, please contact Mr. Jack Dinne, Corps at (410) 962-6005 or by email at john.j.dinne@usace.army.mil.

The decision whether to issue a DA 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 Corps 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 by in the preparation of a Corps Environmental Assessment (EA) 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.

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.

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

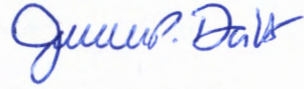
A preliminary review of this application indicates that the proposed work will not affect Federal listed threatened or endangered species or their critical habitat, pursuant to Section 7 of the Endangered Species Act, as amended. As the evaluation of this application continues, additional information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

Review of the latest published version of the National Register of Historic Places indicates that no registered properties listed as eligible for inclusion, therein, are located at the site of the proposed work. Currently unknown archeological, scientific, prehistoric, or historical data may be lost or destroyed by the work to be accomplished under the requested permits.

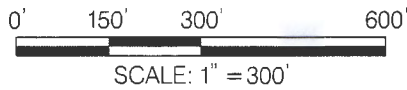
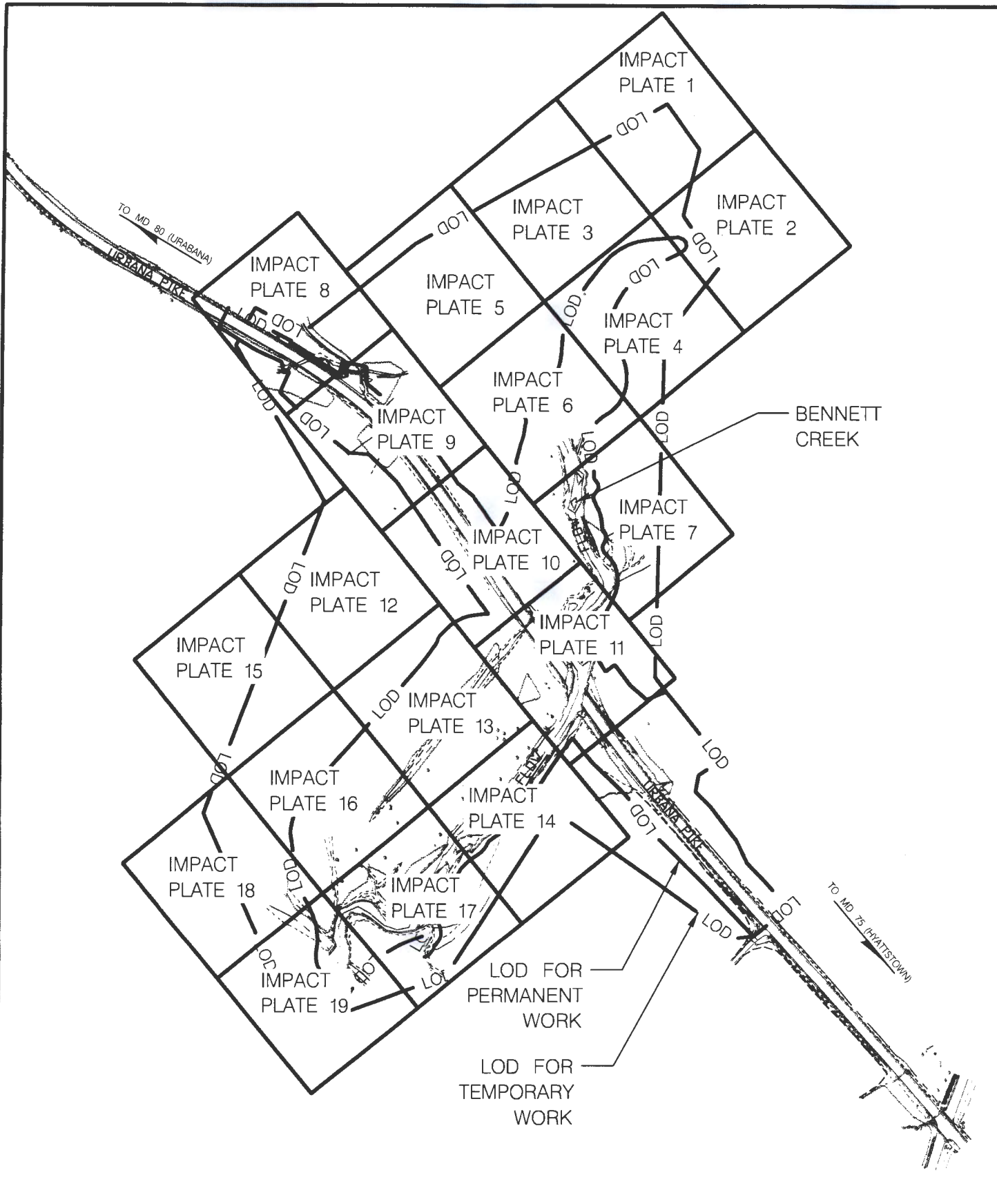
Any person who has an interest which may be adversely affected by the issuance of this permit may request a public hearing. The request, which must be in writing, must be received by the District Engineer, U.S. Army Corps of Engineers, Baltimore District, Attn: Mr. Jack Dinne, CENAB-OP-RMN, 10 South Howard Street, Baltimore, Maryland 21201, within the comment period as specified above to receive consideration. Also, it must clearly state forth the interest which may be adversely affected by this activity in the manner in which the interest may be adversely affected.

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.

FOR THE DISTRICT ENGINEER:



Joseph P. DaVia
Chief, Maryland Section Northern



APPLICANT:



CONSULTANT:



**BRIDGE REPLACEMENT
MD 355 OVER BENNETT CREEK**

COUNTY: FREDERICK COUNTY
 APPLICATION BY: STATE HIGHWAY ADMINISTRATION
 INDEX SHEET: 1 OF 1
 APRIL 2017

SUMMARY OF IMPACTS

TYPE OF IMPACT	PERMANENT IMPACTS		
	(LF)	(SF)	(AC)
WETLAND IMPACTS	-	119,817	2.75
WETLAND BUFFER IMPACTS	-	88,434	2.03
WATERS OF US IMPACTS	2,494	101,551	2.33
100-YR FLOODPLAIN IMPACTS	-	365,840	8.40

TYPE OF IMPACT	TEMPORARY IMPACTS		
	(LF)	(SF)	(AC)
WETLAND IMPACTS	-	363,238	8.34
WETLAND BUFFER IMPACTS	-	79,962	1.84
WATERS OF US IMPACTS	493	8,429	0.19
100-YR FLOODPLAIN IMPACTS	-	152,650	3.50

APPLICANT:

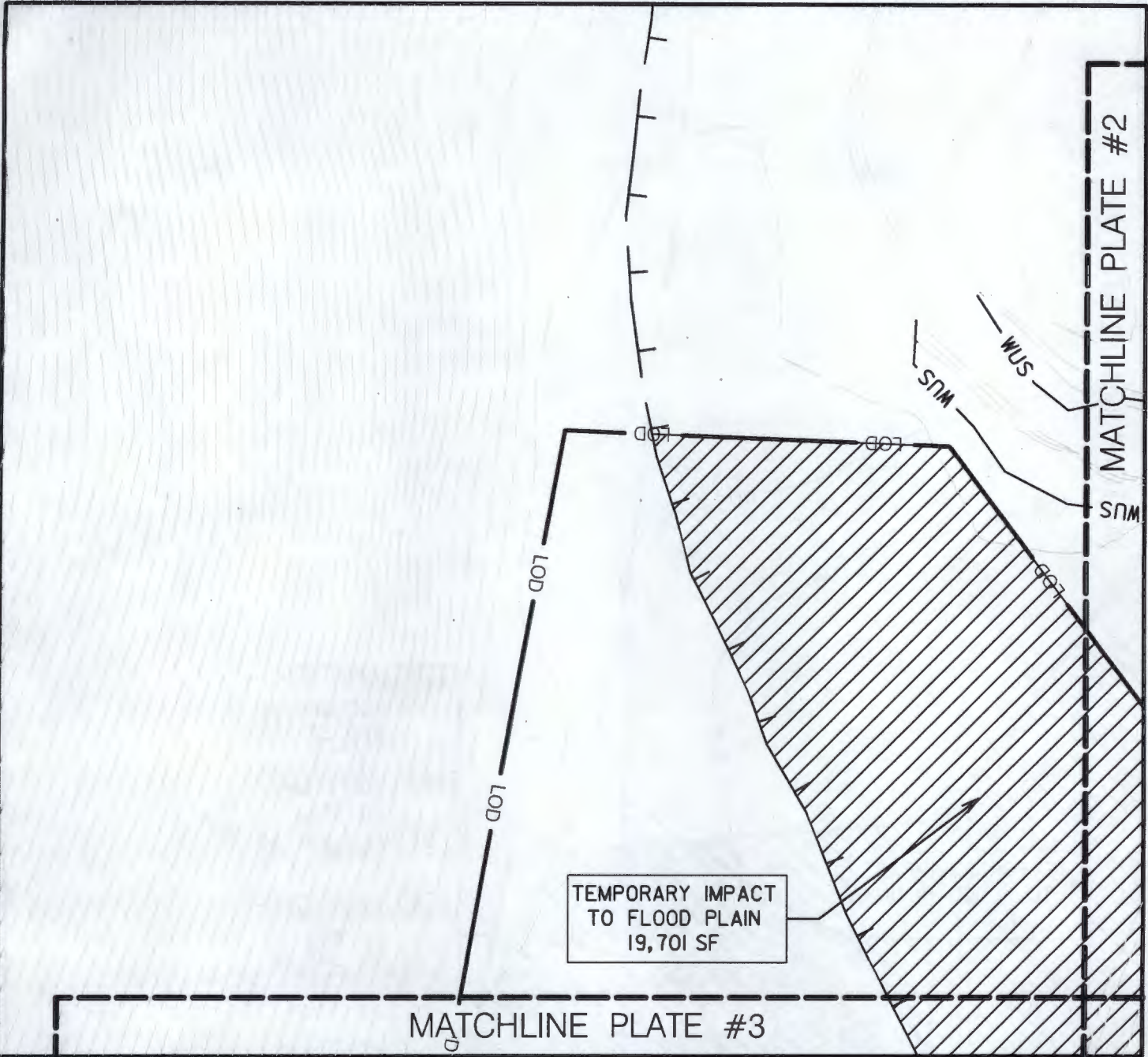


CONSULTANT:



**BRIDGE REPLACEMENT
MD 355 OVER BENNETT CREEK**

COUNTY: FREDERICK COUNTY
APPLICATION BY: STATE HIGHWAY ADMINISTRATION
SUMMARY SHEET: 1 OF 1
APRIL 2017



TEMPORARY IMPACT
TO FLOOD PLAIN
19,701 SF

MATCHLINE PLATE #3

MATCHLINE PLATE #2

••••• WETLAND BOUNDARY	— PROPOSED PIPE	— LOD LIMIT OF DISTURBANCE	— PERPETUAL EASEMENT
B — WETLAND BUFFER	— EDGE OF ROAD	— MATCHLINE	— C — CUT LINE
— WUS WETLAND BUFFER	— EXISTING CONTOUR	— EXISTING RIGHT OF WAY	— F — FILL LINE
— 100-YEAR FLOODPLAIN	— 315 PROPOSED CONTOUR	— PROPOSED RIGHT OF WAY	— TRAFFIC BARRIER
— TREE LINE	— DITCH FLOWLINE	— TEMPORARY EASEMENT	— SHARED-USE PATHWAY

WETLAND IMPACTS

[Hatched Box]	TEMPORARY WETLAND IMPACTS = N-A
[Solid Box]	PERMANENT WETLAND IMPACTS = N-A

WETLAND BUFFER IMPACTS

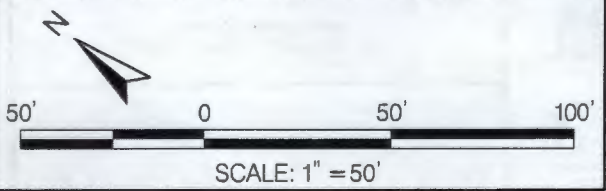
[Dotted Box]	TEMPORARY WETLAND BUFFER IMPACTS = N-A
[Cross-hatched Box]	PERMANENT WETLAND BUFFER IMPACTS = N-A

WATERS OF THE U.S. (WUS) IMPACTS - PERENNIAL FLOW

[Cross-hatched Box]	TEMPORARY WUS IMPACTS = N-A
[Dotted Box]	PERMANENT WUS IMPACTS = N-A

100-YEAR FLOODPLAIN IMPACTS

[Hatched Box]	TEMPORARY FLOODPLAIN IMPACTS = 19,701 SF / 0.45 AC
[Solid Box]	PERMANENT FLOODPLAIN IMPACTS = N-A

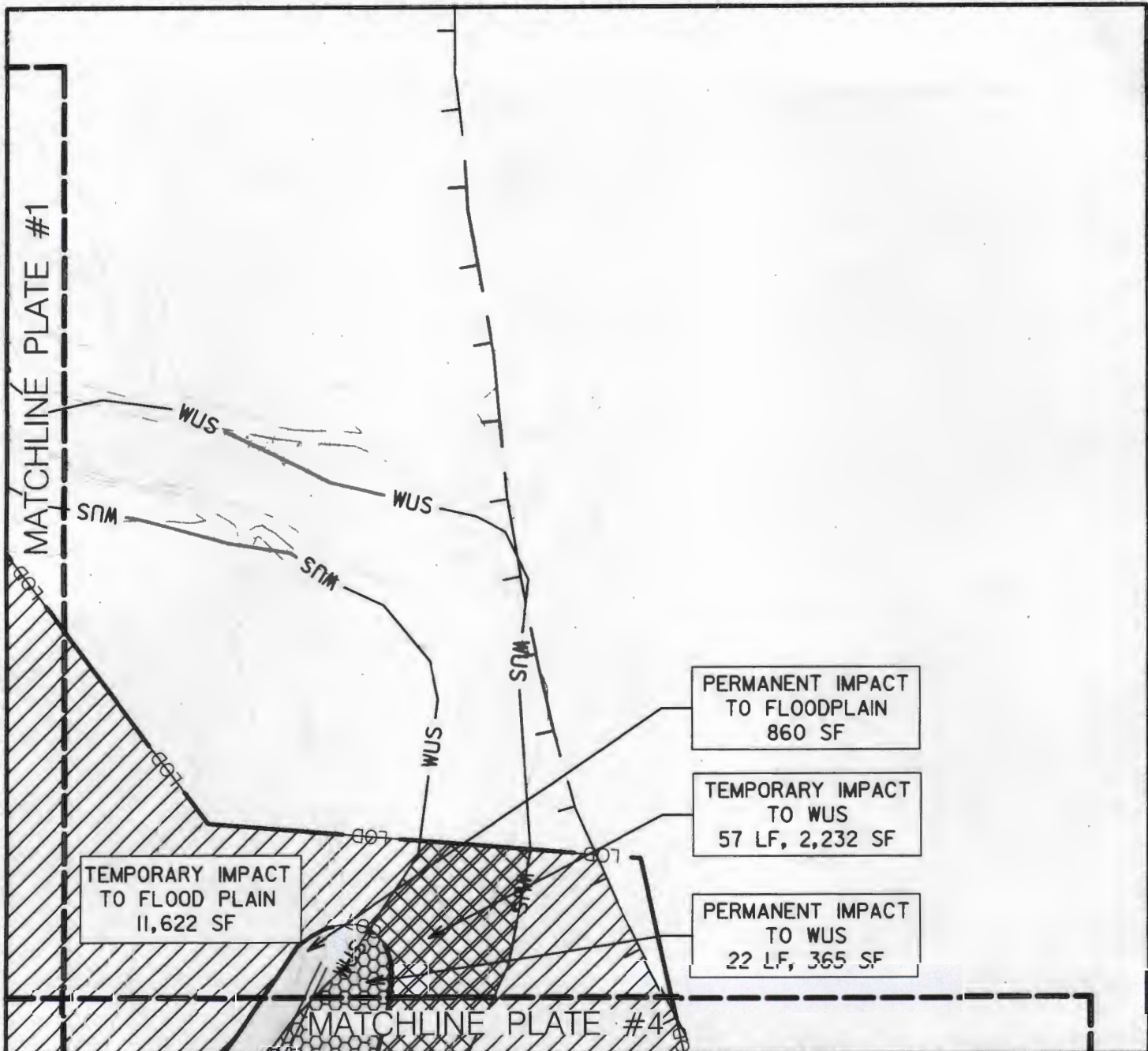


APPLICANT: **SHA**
State Highway Administration

CONSULTANT: **BAI**
BRUDIS & ASSOCIATES, INC.
Consulting Engineers

BRIDGE REPLACEMENT
MD 355 OVER BENNETT CREEK

COUNTY: FREDERICK COUNTY
APPLICATION BY: STATE HIGHWAY ADMINISTRATION
IMPACT PLATE: 1 OF 19
APRIL 2017



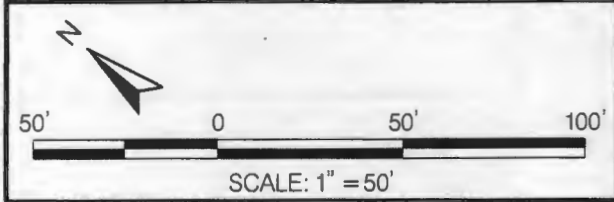
..... WETLAND BOUNDARY	— PROPOSED PIPE	— LOD	— LIMIT OF DISTURBANCE	— PERPETUAL EASEMENT
— B — WETLAND BUFFER	— EDGE OF ROAD	— MATCHLINE	— CUT LINE	— C — CUT LINE
— WUS — WUS BOUNDARY	— EXISTING CONTOUR	— EXISTING RIGHT OF WAY	— F — FILL LINE	— F — FILL LINE
— 100-YEAR FLOODPLAIN	— 315 — PROPOSED CONTOUR	— PROPOSED RIGHT OF WAY	— TRAFFIC BARRIER	— TRAFFIC BARRIER
— TREE LINE	— DITCH FLOWLINE	— TEMPORARY EASEMENT	— SHARED-USE PATHWAY	— SHARED-USE PATHWAY

WETLAND IMPACTS	
[Pattern]	TEMPORARY WETLAND IMPACTS = N-A
[Pattern]	PERMANENT WETLAND IMPACTS = N-A

WETLAND BUFFER IMPACTS	
[Pattern]	TEMPORARY WETLAND BUFFER IMPACTS = N-A
[Pattern]	PERMANENT WETLAND BUFFER IMPACTS = N-A

WATERS OF THE U.S. (WUS) IMPACTS - PERENNIAL FLOW	
[Pattern]	TEMPORARY WUS IMPACTS = 57 LF, 2,232 SF / 0.05 AC
[Pattern]	PERMANENT WUS IMPACTS = 22 LF, 365 SF / 0.01 AC

100-YEAR FLOODPLAIN IMPACTS	
[Pattern]	TEMPORARY FLOODPLAIN IMPACTS = 11,622 SF / 0.27 AC
[Pattern]	PERMANENT FLOODPLAIN IMPACTS = 860 SF / 0.02 AC



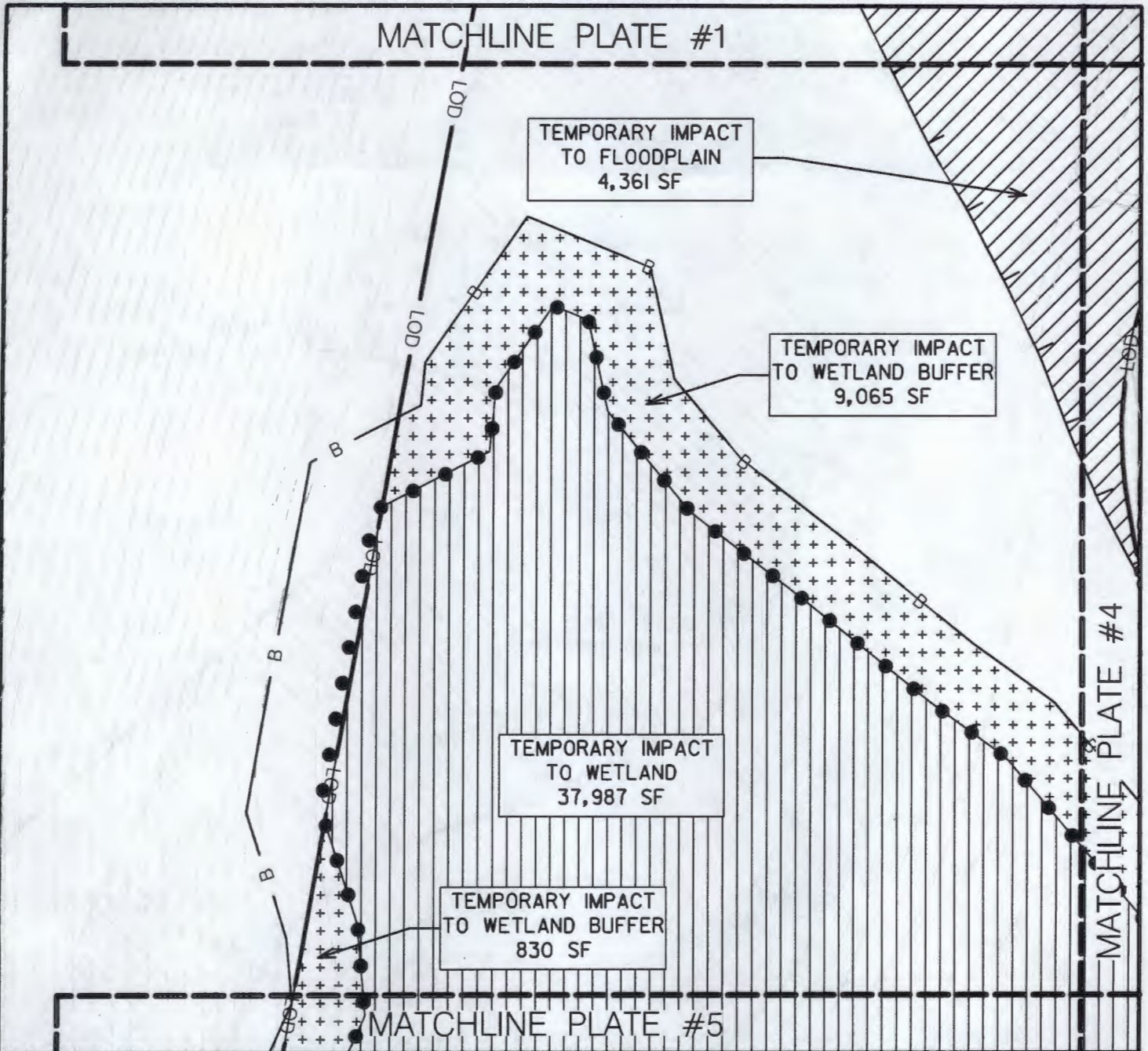
APPLICANT: **SHA**
State Highway
Maryland Department of Transportation

CONSULTANT: **BAI**
BRUDIS & ASSOCIATES, INC.
Consulting Engineers

**BRIDGE REPLACEMENT
MD 355 OVER BENNETT CREEK**

COUNTY: FREDERICK COUNTY
APPLICATION BY: STATE HIGHWAY ADMINISTRATION
IMPACT PLATE: 2 OF 19
APRIL 2017

MATCHLINE PLATE #1



TEMPORARY IMPACT TO FLOODPLAIN
4,361 SF

TEMPORARY IMPACT TO WETLAND BUFFER
9,065 SF

TEMPORARY IMPACT TO WETLAND
37,987 SF

TEMPORARY IMPACT TO WETLAND BUFFER
830 SF

MATCHLINE PLATE #4

MATCHLINE PLATE #5

••••• WETLAND BOUNDARY	— PROPOSED PIPE	— LOD — LIMIT OF DISTURBANCE	— PERPETUAL EASEMENT
B — WETLAND BUFFER	— EDGE OF ROAD	— MATCHLINE	— C — CUT LINE
— WUS — WUS BOUNDARY	— EXISTING CONTOUR	— EXISTING RIGHT OF WAY	— F — FILL LINE
— 100-YEAR FLOODPLAIN	— 315 — PROPOSED CONTOUR	— PROPOSED RIGHT OF WAY	— TRAFFIC BARRIER
— TREE LINE	— DITCH FLOWLINE	— TEMPORARY EASEMENT	— SHARED-USE PATHWAY

WETLAND IMPACTS

	TEMPORARY WETLAND IMPACTS = 37,987 SF / 0.87 AC
	PERMANENT WETLAND IMPACTS = N-A

WETLAND BUFFER IMPACTS

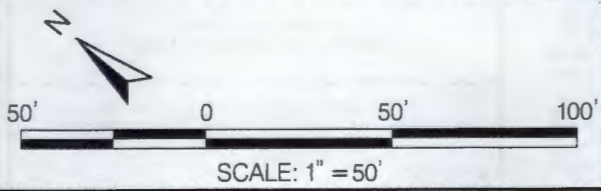
	TEMPORARY WETLAND BUFFER IMPACTS = 9,895 SF / 0.23 AC
	PERMANENT WETLAND BUFFER IMPACTS = N-A

WATERS OF THE U.S. (WUS) IMPACTS – PERENNIAL FLOW

	TEMPORARY WUS IMPACTS = N-A
	PERMANENT WUS IMPACTS = N-A

100-YEAR FLOODPLAIN IMPACTS

	TEMPORARY FLOODPLAIN IMPACTS = 4,361 SF / 0.10 AC
	PERMANENT FLOODPLAIN IMPACTS = N-A



APPLICANT: **SHA**
State Highway Administration

CONSULTANT: **BAI**
BRUDIS & ASSOCIATES, INC.
Consulting Engineers

BRIDGE REPLACEMENT
MD 355 OVER BENNETT CREEK

COUNTY: FREDERICK COUNTY
APPLICATION BY: STATE HIGHWAY ADMINISTRATION
IMPACT PLATE: 3 OF 19
APRIL 2017

MATCHLINE PLATE #2

TEMPORARY IMPACT TO WUS
58 LF, 2,123 SF

PERMANENT IMPACT TO WUS
347 LF, 13,139 SF

PERMANENT IMPACT TO FLOODPLAIN
31,724 SF

TEMPORARY IMPACT TO FLOOD PLAIN
47,028 SF

TEMPORARY IMPACT TO WETLAND BUFFER
2,270 SF

TEMPORARY IMPACT TO WETLAND
1,106 SF

MATCHLINE PLATE #3

MATCHLINE PLATE #6

●●●●● WETLAND BOUNDARY	— PROPOSED PIPE	— LOD LIMIT OF DISTURBANCE	— PERPETUAL EASEMENT
— B WETLAND BUFFER	— EDGE OF ROAD	— MATCHLINE	— C CUT LINE
— WUS WUS BOUNDARY	— EXISTING CONTOUR	— EXISTING RIGHT OF WAY	— F FILL LINE
— 100-YEAR FLOODPLAIN	— 315 PROPOSED CONTOUR	— PROPOSED RIGHT OF WAY	— TRAFFIC BARRIER
— TREE LINE	— DITCH FLOWLINE	— TEMPORARY EASEMENT	— SHARED-USE PATHWAY

WETLAND IMPACTS

[Pattern]	TEMPORARY WETLAND IMPACTS = 1,106 SF / 0.03 AC
[Pattern]	PERMANENT WETLAND IMPACTS = N-A

WETLAND BUFFER IMPACTS

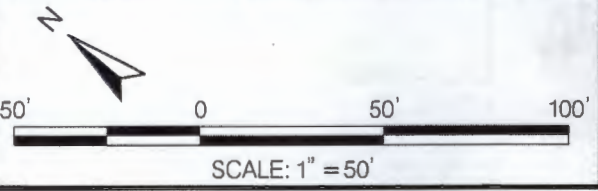
[Pattern]	TEMPORARY WETLAND BUFFER IMPACTS = 2,270 SF / 0.05 AC
[Pattern]	PERMANENT WETLAND BUFFER IMPACTS = N-A

WATERS OF THE U.S. (WUS) IMPACTS – PERENNIAL FLOW

[Pattern]	TEMPORARY WUS IMPACTS = 58 LF, 2,123 SF / 0.05 AC
[Pattern]	PERMANENT WUS IMPACTS = 347 LF, 13,139 SF / 0.30 AC

100-YEAR FLOODPLAIN IMPACTS

[Pattern]	TEMPORARY FLOODPLAIN IMPACTS = 47,028 SF / 1.08 AC
[Pattern]	PERMANENT FLOODPLAIN IMPACTS = 31,724 SF / 0.73 AC



APPLICANT: **SHA** State Highway Administration

CONSULTANT: **BAI** BRUDIS & ASSOCIATES, INC. Consulting Engineers

BRIDGE REPLACEMENT
MD 355 OVER BENNETT CREEK

COUNTY: FREDERICK COUNTY
APPLICATION BY: STATE HIGHWAY ADMINISTRATION
IMPACT PLATE: 4 OF 19
APRIL 2017

MATCHLINE PLATE #3

MATCHLINE PLATE #6

TEMPORARY IMPACT TO WETLAND
69,881 SF

TEMPORARY IMPACT TO WETLAND BUFFER
10,604 SF

MATCHLINE PLATE #8

MATCHLINE PLATE #9

••••• WETLAND BOUNDARY	— PROPOSED PIPE	— LOD LIMIT OF DISTURBANCE	— PERPETUAL EASEMENT
B — WETLAND BUFFER	— EDGE OF ROAD	— MATCHLINE	— C — CUT LINE
— WUS BOUNDARY	— EXISTING CONTOUR	— EXISTING RIGHT OF WAY	— F — FILL LINE
— 100-YEAR FLOODPLAIN	— 315 PROPOSED CONTOUR	— PROPOSED RIGHT OF WAY	— TRAFFIC BARRIER
— TREE LINE	— DITCH FLOWLINE	— TEMPORARY EASEMENT	— SHARED-USE PATHWAY

WETLAND IMPACTS

	TEMPORARY WETLAND IMPACTS = 69,881 SF / 1.60 AC
	PERMANENT WETLAND IMPACTS = N-A

WETLAND BUFFER IMPACTS

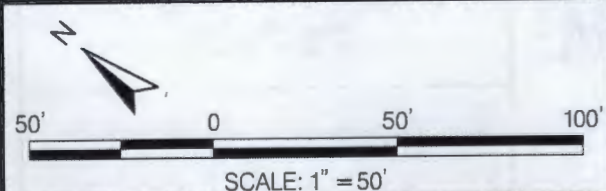
	TEMPORARY WETLAND BUFFER IMPACTS = 10,604 SF / 0.24 AC
	PERMANENT WETLAND BUFFER IMPACTS = N-A

WATERS OF THE U.S. (WUS) IMPACTS – PERENNIAL FLOW

	TEMPORARY WUS IMPACTS = N-A
	PERMANENT WUS IMPACTS = N-A

100-YEAR FLOODPLAIN IMPACTS

	TEMPORARY FLOODPLAIN IMPACTS = N-A
	PERMANENT FLOODPLAIN IMPACTS = N-A

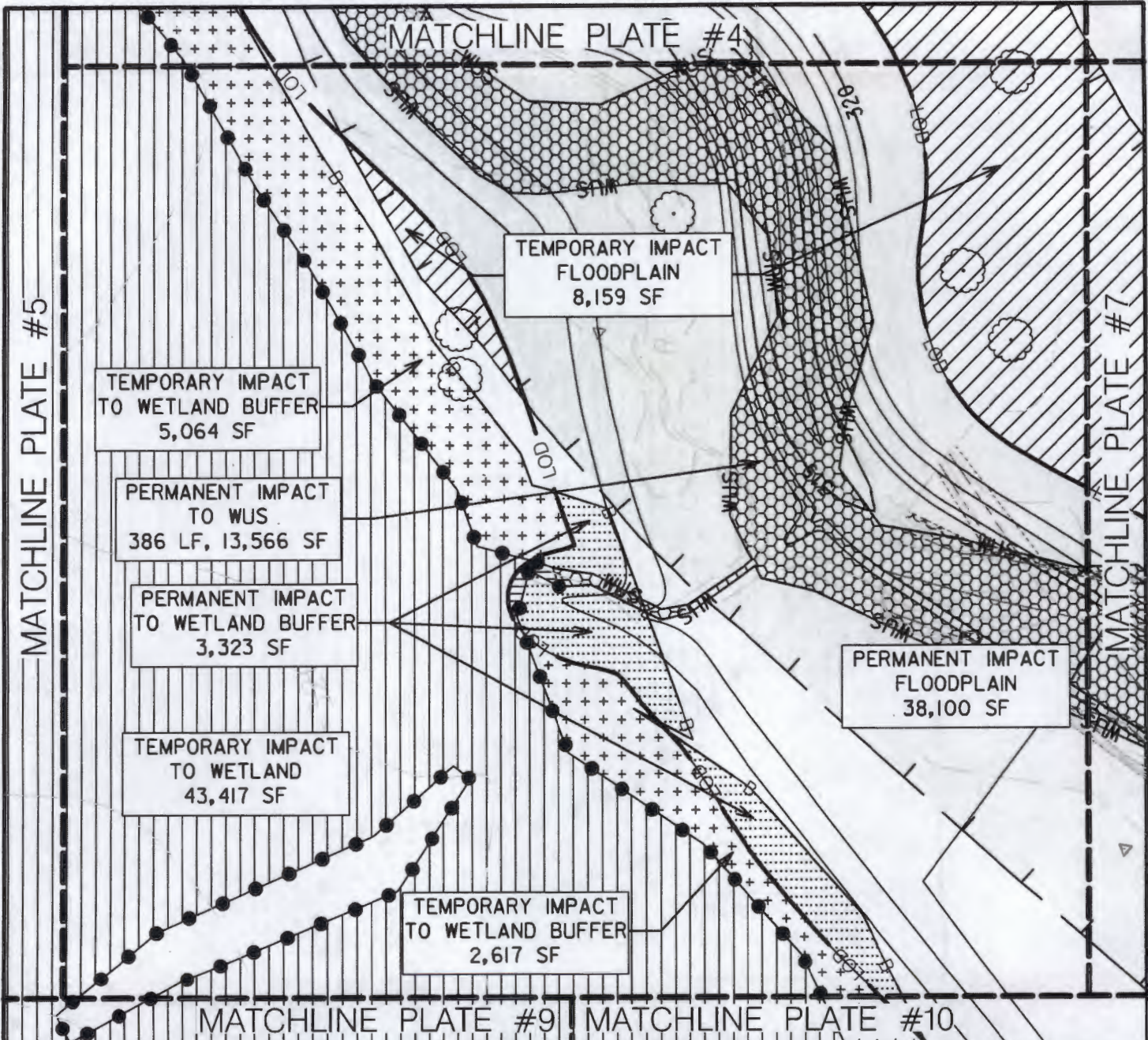


APPLICANT: **SHA** State Highway Administration

CONSULTANT: **BAI** BRUDIS & ASSOCIATES, INC. Consulting Engineers

BRIDGE REPLACEMENT
MD 355 OVER BENNETT CREEK

COUNTY: FREDERICK COUNTY
APPLICATION BY: STATE HIGHWAY ADMINISTRATION
IMPACT PLATE: 5 OF 19
APRIL 2017



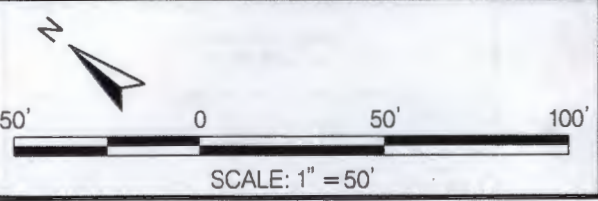
••••• WETLAND BOUNDARY	— PROPOSED PIPE	— LOD LIMIT OF DISTURBANCE	— PERPETUAL EASEMENT
— WETLAND BUFFER	— EDGE OF ROAD	— MATCHLINE	— C CUT LINE
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WETLAND IMPACTS	
	TEMPORARY WETLAND IMPACTS = 43,417 SF / 1.00 AC
	PERMANENT WETLAND IMPACTS = N-A

WETLAND BUFFER IMPACTS	
	TEMPORARY WETLAND BUFFER IMPACTS = 7,681 SF / 0.18 AC
	PERMANENT WETLAND BUFFER IMPACTS = 3,323 SF / 0.08 AC

WATERS OF THE U.S. (WUS) IMPACTS – PERENNIAL FLOW	
	TEMPORARY WUS IMPACTS = N-A
	PERMANENT WUS IMPACTS = 386 LF, 13,566 SF / 0.31 AC

100-YEAR FLOODPLAIN IMPACTS	
	TEMPORARY FLOODPLAIN IMPACTS = 8,159 SF / 0.19 AC
	PERMANENT FLOODPLAIN IMPACTS = 38,100 SF / 0.87 AC

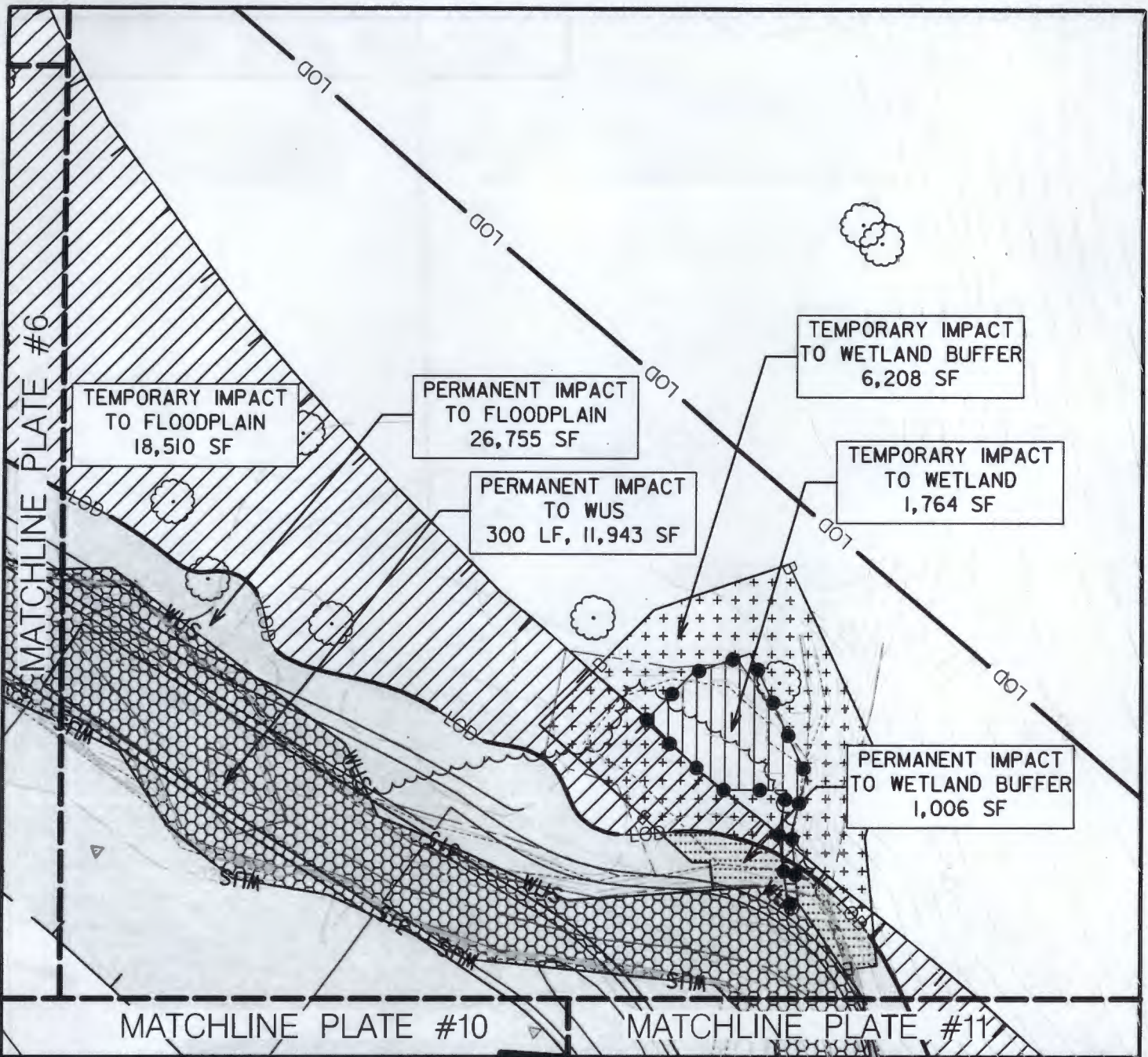


APPLICANT: **SHA**
State Highway Administration

CONSULTANT: **BAI**
BRUDIS & ASSOCIATES, INC.
Consulting Engineers

BRIDGE REPLACEMENT
MD 355 OVER BENNETT CREEK

COUNTY: FREDERICK COUNTY
APPLICATION BY: STATE HIGHWAY ADMINISTRATION
IMPACT PLATE: 6 OF 19
APRIL 2017



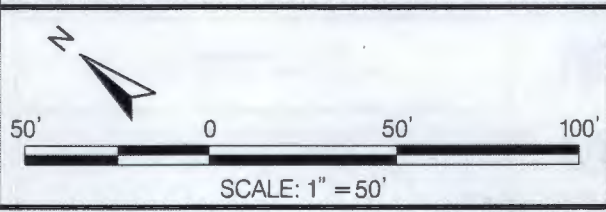
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WETLAND IMPACTS	
	TEMPORARY WETLAND IMPACTS = 1,764 SF /0.04 AC
	PERMANENT WETLAND IMPACTS = N-A

WETLAND BUFFER IMPACTS	
	TEMPORARY WETLAND BUFFER IMPACTS = 6,208 SF /0.14 AC
	PERMANENT WETLAND BUFFER IMPACTS = 1,006 SF /0.02 AC

WATERS OF THE U.S. (WUS) IMPACTS - PERENNIAL FLOW	
	TEMPORARY WUS IMPACTS = N-A
	PERMANENT WUS IMPACTS = 300 LF, 11,943 SF /0.27 AC

100-YEAR FLOODPLAIN IMPACTS	
	TEMPORARY FLOODPLAIN IMPACTS = 18,510 SF /0.42 AC
	PERMANENT FLOODPLAIN IMPACTS = 26,755 SF /0.61 AC



APPLICANT: **SHA**
State Highway Administration

CONSULTANT: **BAI**
BRUDIS & ASSOCIATES, INC.
Consulting Engineers

**BRIDGE REPLACEMENT
MD 355 OVER BENNETT CREEK**

COUNTY: FREDERICK COUNTY
APPLICATION BY: STATE HIGHWAY ADMINISTRATION
IMPACT PLATE: 7 OF 19
APRIL 2017

MATCHLINE PLATE #5

MATCHLINE PLATE #9

TEMPORARY IMPACT TO WUS
84 LF, 463 SF

PERMANENT IMPACT TO WUS
77 LF, 513 SF

TEMPORARY IMPACT TO WUS
105 LF, 540 SF

••••• WETLAND BOUNDARY	— PROPOSED PIPE	— LOD — LIMIT OF DISTURBANCE	— PERPETUAL EASEMENT
B — WETLAND BUFFER	— EDGE OF ROAD	— MATCHLINE	— C — CUT LINE
— WUS — WUS BOUNDARY	— EXISTING CONTOUR	— EXISTING RIGHT OF WAY	— F — FILL LINE
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— TREE LINE	— DITCH FLOWLINE	— TEMPORARY EASEMENT	— SHARED-USE PATHWAY

WETLAND IMPACTS

[Pattern]	TEMPORARY WETLAND IMPACTS = N-A
[Pattern]	PERMANENT WETLAND IMPACTS = N-A

WETLAND BUFFER IMPACTS

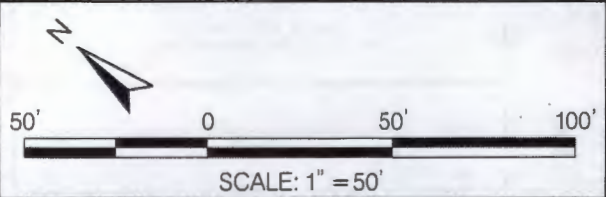
[Pattern]	TEMPORARY WETLAND BUFFER IMPACTS = N-A
[Pattern]	PERMANENT WETLAND BUFFER IMPACTS = N-A

WATERS OF THE U.S. (WUS) IMPACTS – PERENNIAL FLOW

[Pattern]	TEMPORARY WUS IMPACTS = 84 LF, 463 SF /0.02 AC
[Pattern]	PERMANENT WUS IMPACTS = 77 LF, 513 SF /0.01 AC

100-YEAR FLOODPLAIN IMPACTS

[Pattern]	TEMPORARY FLOODPLAIN IMPACTS = N-A
[Pattern]	PERMANENT FLOODPLAIN IMPACTS = N-A

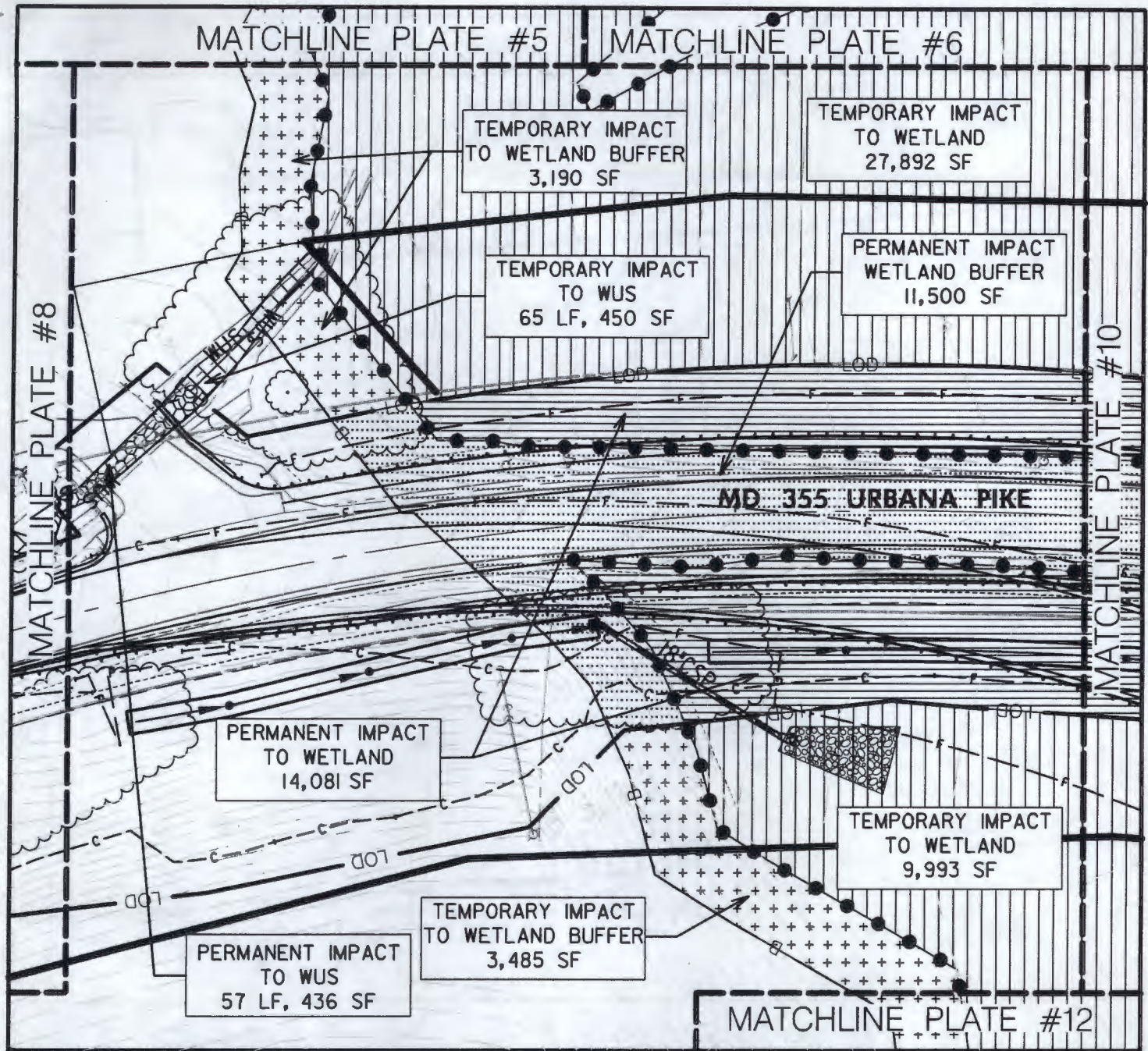


APPLICANT: **SHA**
State Highway Administration
Maryland Department of Transportation

CONSULTANT: **BAI**
BRUDIS & ASSOCIATES, INC.
Consulting Engineers

**BRIDGE REPLACEMENT
MD 355 OVER BENNETT CREEK**

COUNTY: FREDERICK COUNTY
APPLICATION BY: STATE HIGHWAY ADMINISTRATION
IMPACT PLATE: 8 OF 19
APRIL 2017



●●●●● WETLAND BOUNDARY	— PROPOSED PIPE	— LOD	— LIMIT OF DISTURBANCE	— PERPETUAL EASEMENT
— B — WETLAND BUFFER	— EDGE OF ROAD	— MATCHLINE	— MATCHLINE	— CUT LINE
— WUS — WUS BOUNDARY	— EXISTING CONTOUR	— EXISTING RIGHT OF WAY	— EXISTING RIGHT OF WAY	— F — FILL LINE
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— TREE LINE	— DITCH FLOWLINE	— TEMPORARY EASEMENT	— TEMPORARY EASEMENT	— SHARED-USE PATHWAY

WETLAND IMPACTS

	TEMPORARY WETLAND IMPACTS = 37,885 SF /0.87 AC
	PERMANENT WETLAND IMPACTS = 14,081 SF /0.32 AC

WETLAND BUFFER IMPACTS

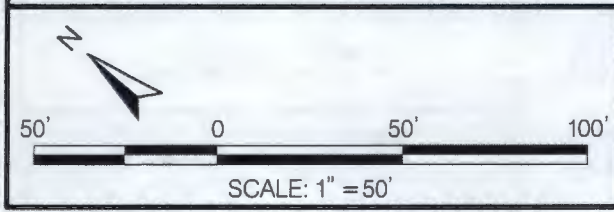
	TEMPORARY WETLAND BUFFER IMPACTS = 6,675 SF /0.15 AC
	PERMANENT WETLAND BUFFER IMPACTS = 11,500 SF /0.26 AC

WATERS OF THE U.S. (WUS) IMPACTS - PERENNIAL FLOW

	TEMPORARY WUS IMPACTS = 65 LF, 450 SF /0.01 AC
	PERMANENT WUS IMPACTS = 57 LF, 436 SF /0.01 AC

100-YEAR FLOODPLAIN IMPACTS

	TEMPORARY FLOODPLAIN IMPACTS = N-A
	PERMANENT FLOODPLAIN IMPACTS = N-A

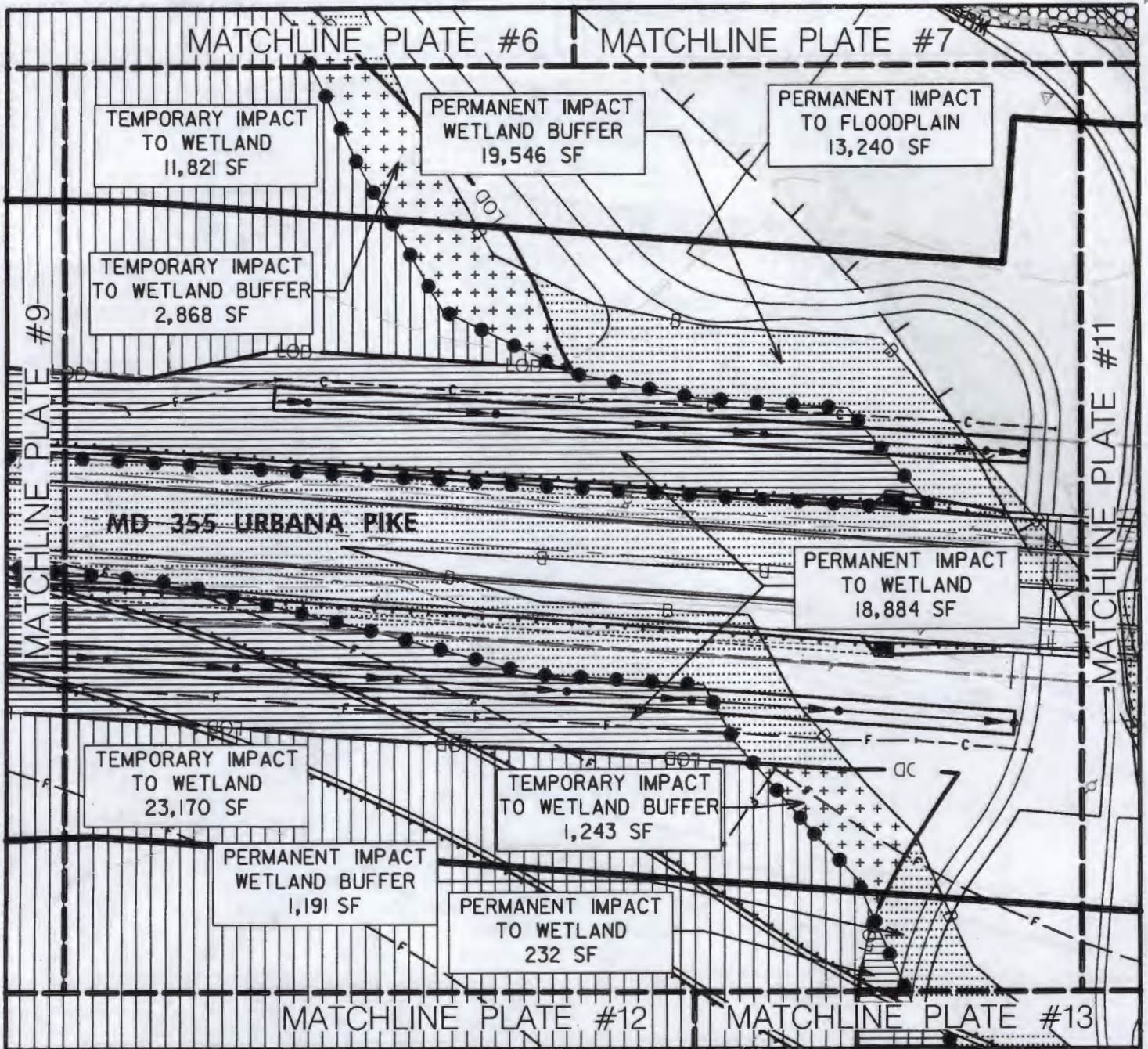


APPLICANT: **SHA**
State Highway Administration

CONSULTANT: **BAI**
BRUDIS & ASSOCIATES, INC.
Consulting Engineers

**BRIDGE REPLACEMENT
MD 355 OVER BENNETT CREEK**

COUNTY: FREDERICK COUNTY
APPLICATION BY: STATE HIGHWAY ADMINISTRATION
IMPACT PLATE: 9 OF 19
APRIL 2017



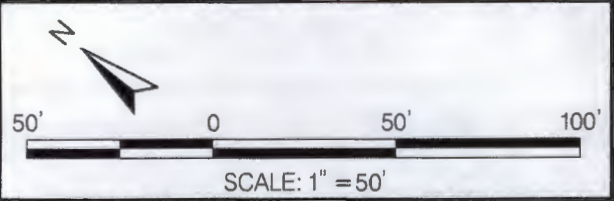
••••• WETLAND BOUNDARY	— PROPOSED PIPE	— LOD — LIMIT OF DISTURBANCE	— PERPETUAL EASEMENT
— B — WETLAND BUFFER	— EDGE OF ROAD	— MATCH-LINE	— C — CUT LINE
— WUS — WUS BOUNDARY	— EXISTING CONTOUR	— EXISTING RIGHT OF WAY	— F — FILL LINE
— 100-YEAR FLOODPLAIN	— 315 — PROPOSED CONTOUR	— PROPOSED RIGHT OF WAY	— TRAFFIC BARRIER
— TREE LINE	— DITCH FLOWLINE	— TEMPORARY EASEMENT	— SHARED-USE PATHWAY

WETLAND IMPACTS	
	TEMPORARY WETLAND IMPACTS = 34,999 SF /0.80 AC
	PERMANENT WETLAND IMPACTS = 19,116 SF /0.44 AC

WETLAND BUFFER IMPACTS	
	TEMPORARY WETLAND BUFFER IMPACTS = 4,111 SF /0.09 AC
	PERMANENT WETLAND BUFFER IMPACTS = 20,737 SF /0.48 AC

WATERS OF THE U.S. (WUS) IMPACTS - PERENNIAL FLOW	
	TEMPORARY WUS IMPACTS = N-A
	PERMANENT WUS IMPACTS = N-A

100-YEAR FLOODPLAIN IMPACTS	
	TEMPORARY FLOODPLAIN IMPACTS = N-A
	PERMANENT FLOODPLAIN IMPACTS = 13,240 SF /0.30 AC

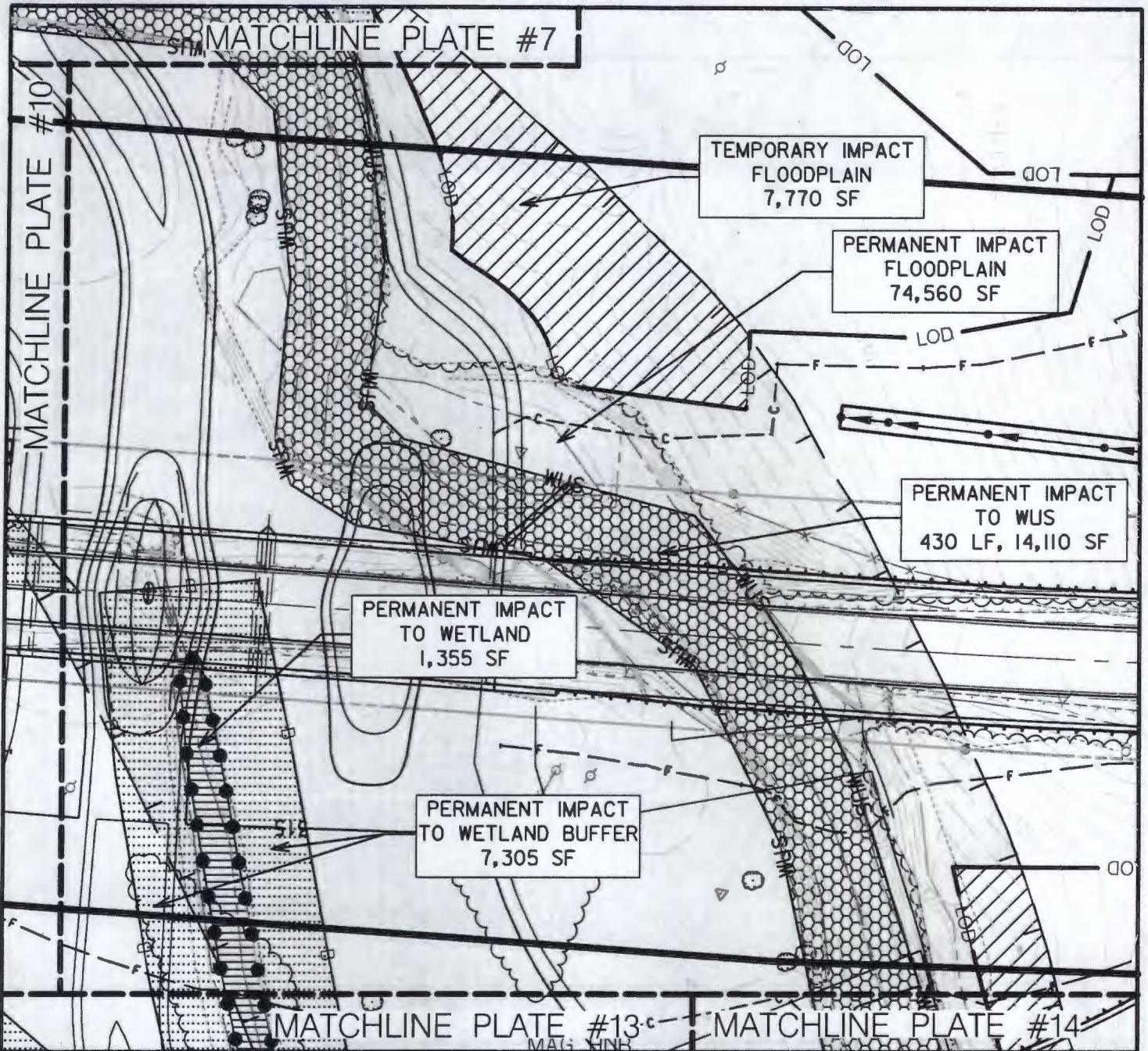


APPLICANT: **SHA**
State Highway Administration

CONSULTANT: **BAI**
BRUDIS & ASSOCIATES, INC.
Consulting Engineers

BRIDGE REPLACEMENT
MD 355 OVER BENNETT CREEK

COUNTY: FREDERICK COUNTY
APPLICATION BY: STATE HIGHWAY ADMINISTRATION
IMPACT PLATE: 10 OF 19
APRIL 2017



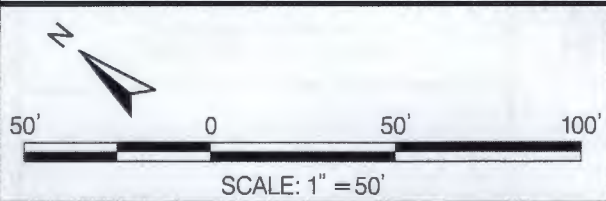
●●●●● WETLAND BOUNDARY	— PROPOSED PIPE	— LOD	— LIMIT OF DISTURBANCE	— PERPETUAL EASEMENT
— WETLAND BUFFER	— EDGE OF ROAD	— MATCHLINE	— CUT LINE	
— WUS BOUNDARY	— EXISTING CONTOUR	— EXISTING RIGHT OF WAY	— FILL LINE	
— 100-YEAR FLOODPLAIN	— 315 PROPOSED CONTOUR	— PROPOSED RIGHT OF WAY	— TRAFFIC BARRIER	
— TREE LINE	— DITCH FLOWLINE	— TEMPORARY EASEMENT	— SHARED-USE PATHWAY	

WETLAND IMPACTS	
	TEMPORARY WETLAND IMPACTS = N-A
	PERMANENT WETLAND IMPACTS = 1,355 SF /0.03 AC

WETLAND BUFFER IMPACTS	
	TEMPORARY WETLAND BUFFER IMPACTS = N-A
	PERMANENT WETLAND BUFFER IMPACTS = 7,305 SF /0.17 AC

WATERS OF THE U.S. (WUS) IMPACTS - PERENNIAL FLOW	
	TEMPORARY WUS IMPACTS = N-A
	PERMANENT WUS IMPACTS = 430 LF, 14,110 SF /0.32 AC

100-YEAR FLOODPLAIN IMPACTS	
	TEMPORARY FLOODPLAIN IMPACTS = 7,770 SF /0.18 AC
	PERMANENT FLOODPLAIN IMPACTS = 74,560 SF /1.71 AC

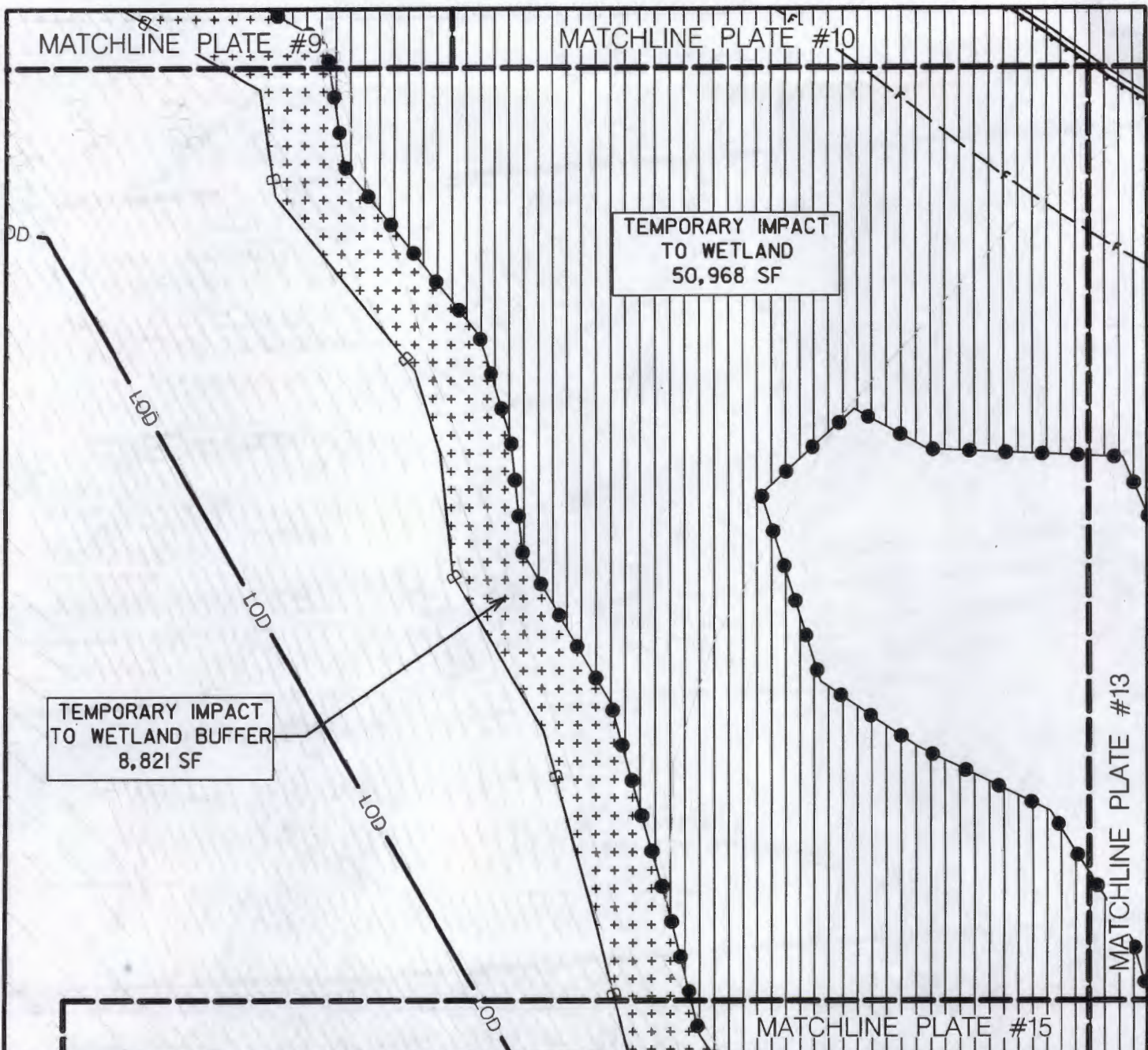


APPLICANT: **SHA**
State Highway Administration

CONSULTANT: **BAI**
BRUHS & ASSOCIATES, INC.
Consulting Engineers

BRIDGE REPLACEMENT
MD 355 OVER BENNETT CREEK

COUNTY: FREDERICK COUNTY
APPLICATION BY: STATE HIGHWAY ADMINISTRATION
IMPACT PLATE: 11 OF 19
APRIL 2017



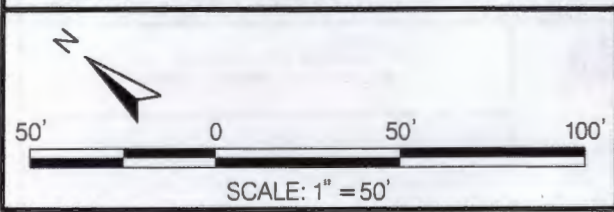
••••• WETLAND BOUNDARY	— PROPOSED PIPE	— LOD LIMIT OF DISTURBANCE	— PERPETUAL EASEMENT
— B — WETLAND BUFFER	— EDGE OF ROAD	— MATCHLINE	— C — CUT LINE
— WUS — WUS BOUNDARY	— EXISTING CONTOUR	— EXISTING RIGHT OF WAY	— F — FILL LINE
— 100-YEAR FLOODPLAIN	— 315 PROPOSED CONTOUR	— PROPOSED RIGHT OF WAY	— TRAFFIC BARRIER
~ TREE LINE	— DITCH FLOWLINE	— TEMPORARY EASEMENT	— SHARED-USE PATHWAY

WETLAND IMPACTS	
	TEMPORARY WETLAND IMPACTS = 50,968 SF / 1.17 AC
	PERMANENT WETLAND IMPACTS = N-A

WETLAND BUFFER IMPACTS	
	TEMPORARY WETLAND BUFFER IMPACTS = 8,821 SF / 0.20 AC
	PERMANENT WETLAND BUFFER IMPACTS = N-A

WATERS OF THE U.S. (WUS) IMPACTS – PERENNIAL FLOW	
	TEMPORARY WUS IMPACTS = N-A
	PERMANENT WUS IMPACTS = N-A

100-YEAR FLOODPLAIN IMPACTS	
	TEMPORARY FLOODPLAIN IMPACTS = N-A
	PERMANENT FLOODPLAIN IMPACTS = N-A

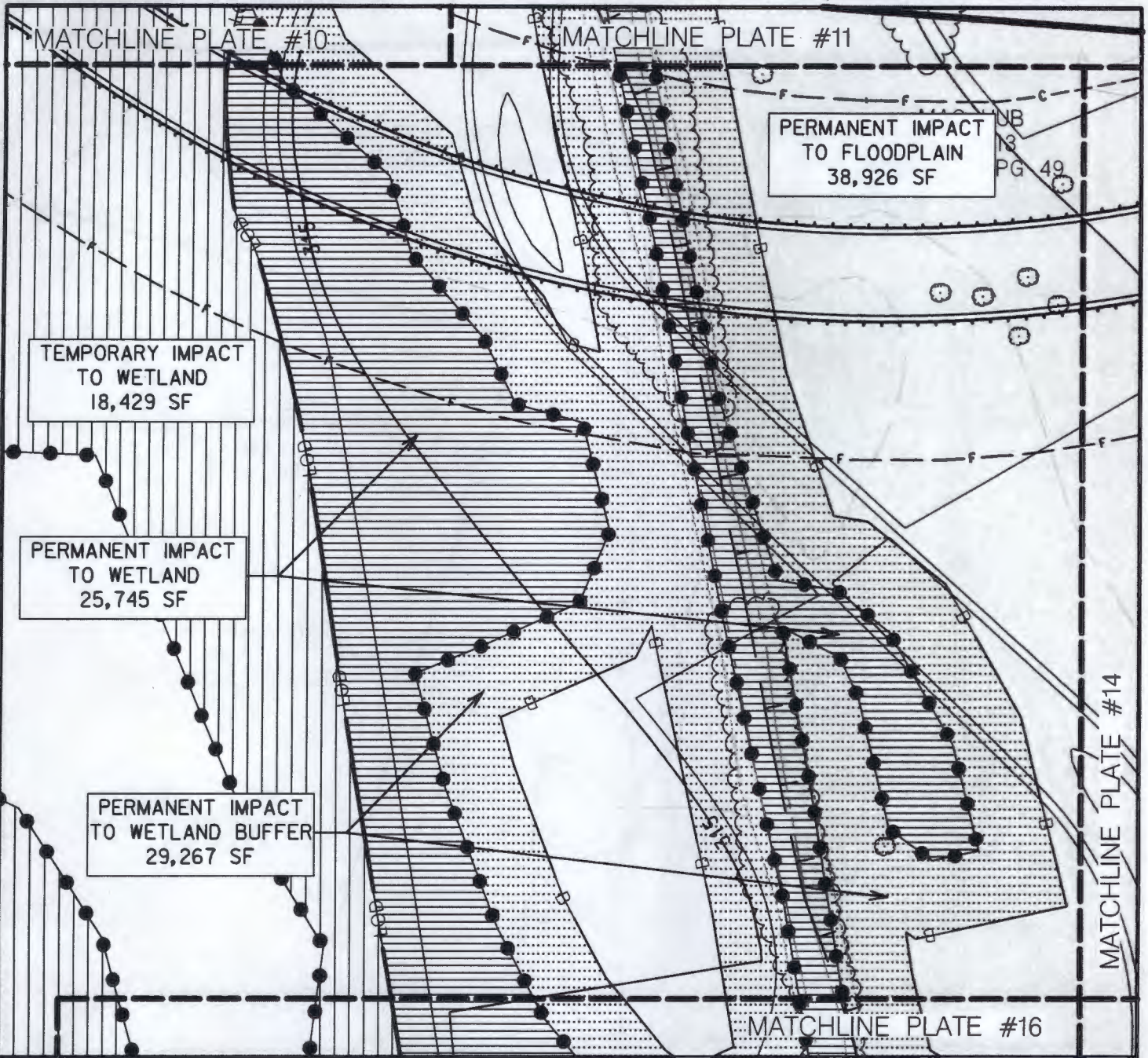


APPLICANT: **SUA**
State Highway Administration

CONSULTANT: **BAI**
BRUDIS & ASSOCIATES, INC.
Consulting Engineers

**BRIDGE REPLACEMENT
MD 355 OVER BENNETT CREEK**

COUNTY: FREDERICK COUNTY
APPLICATION BY: STATE HIGHWAY ADMINISTRATION
IMPACT PLATE: 12 OF 19
APRIL 2017



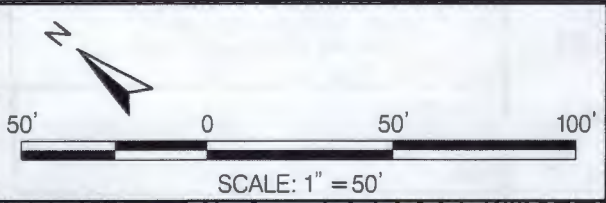
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B — WETLAND BUFFER	— EDGE OF ROAD	— MATCHLINE	— C — CUT LINE
— WUS BOUNDARY	— EXISTING CONTOUR	— EXISTING RIGHT OF WAY	— F — FILL LINE
— 100-YEAR FLOODPLAIN	— 315 — PROPOSED CONTOUR	— PROPOSED RIGHT OF WAY	— TRAFFIC BARRIER
— TREE LINE	— DITCH FLOWLINE	— TEMPORARY EASEMENT	— SHARED-USE PATHWAY

WETLAND IMPACTS	
	TEMPORARY WETLAND IMPACTS = 18,429 SF / 0.42 AC
	PERMANENT WETLAND IMPACTS = 25,745 SF / 0.59 AC

WETLAND BUFFER IMPACTS	
	TEMPORARY WETLAND BUFFER IMPACTS = N-A
	PERMANENT WETLAND BUFFER IMPACTS = 29,267 SF / 0.67 AC

WATERS OF THE U.S. (WUS) IMPACTS – PERENNIAL FLOW	
	TEMPORARY WUS IMPACTS = N-A
	PERMANENT WUS IMPACTS = N-A

100-YEAR FLOODPLAIN IMPACTS	
	TEMPORARY FLOODPLAIN IMPACTS = N-A
	PERMANENT FLOODPLAIN IMPACTS = 38,926 SF / 0.89 AC

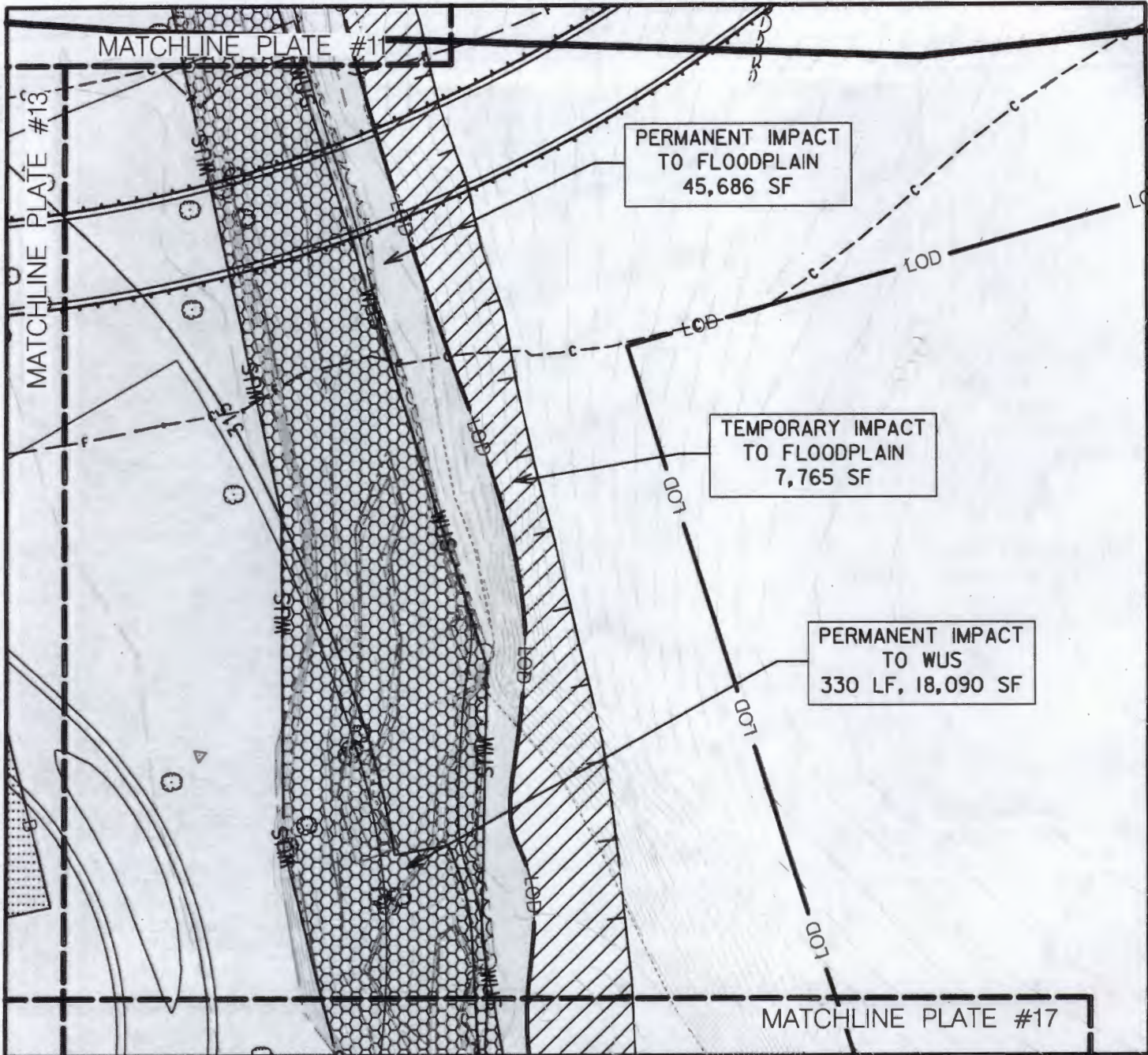


APPLICANT: **SHA**
State Highway

CONSULTANT: **BAI**
BRUDIS & ASSOCIATES, INC.
Consulting Engineers

BRIDGE REPLACEMENT
MD 355 OVER BENNETT CREEK

COUNTY: FREDERICK COUNTY
APPLICATION BY: STATE HIGHWAY ADMINISTRATION
IMPACT PLATE: 13 OF 19
APRIL 2017



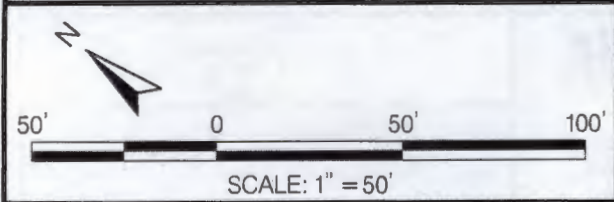
..... WETLAND BOUNDARY	— PROPOSED PIPE	— LOD — LIMIT OF DISTURBANCE	— PERPETUAL EASEMENT
— B — WETLAND BUFFER	— EDGE OF ROAD	— MATCHLINE	— C — CUT LINE
— WUS — WUS BOUNDARY	— EXISTING CONTOUR	— EXISTING RIGHT OF WAY	— F — FILL LINE
— 100-YEAR FLOODPLAIN	— 315 — PROPOSED CONTOUR	— PROPOSED RIGHT OF WAY	— TRAFFIC BARRIER
— TREE LINE	— DITCH FLOWLINE	— TEMPORARY EASEMENT	— SHARED-USE PATHWAY

WETLAND IMPACTS	
	TEMPORARY WETLAND IMPACTS = N-A
	PERMANENT WETLAND IMPACTS = N-A

WETLAND BUFFER IMPACTS	
	TEMPORARY WETLAND BUFFER IMPACTS = N-A
	PERMANENT WETLAND BUFFER IMPACTS = N-A

WATERS OF THE U.S. (WUS) IMPACTS – PERENNIAL FLOW	
	TEMPORARY WUS IMPACTS = N-A
	PERMANENT WUS IMPACTS = 330 LF, 18,090 SF / 0.42 AC

100-YEAR FLOODPLAIN IMPACTS	
	TEMPORARY FLOODPLAIN IMPACTS = 7,765 SF / 0.18 AC
	PERMANENT FLOODPLAIN IMPACTS = 45,686 SF / 1.05 AC



APPLICANT: **SHA**
State Highway Administration

CONSULTANT: **BAI**
BRUDIS & ASSOCIATES, INC.
Consulting Engineers

**BRIDGE REPLACEMENT
MD 355 OVER BENNETT CREEK**

COUNTY: FREDERICK COUNTY
APPLICATION BY: STATE HIGHWAY ADMINISTRATION
IMPACT PLATE: 14 OF 19
APRIL 2017

MATCHLINE PLATE #12

MATCHLINE PLATE #16

TEMPORARY IMPACT TO WETLAND
15,520 SF

TEMPORARY IMPACT TO WETLAND BUFFER
7,615 SF

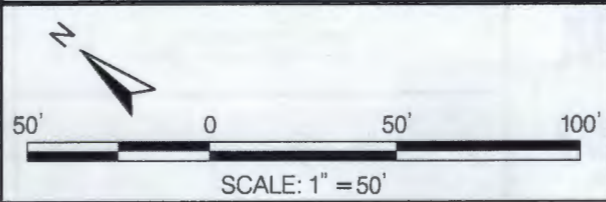
••••• WETLAND BOUNDARY	— PROPOSED PIPE	— LOD LIMIT OF DISTURBANCE	— PERPETUAL EASEMENT
— B WETLAND BUFFER	— EDGE OF ROAD	— MATCHLINE	— C CUT LINE
— WUS WATERS OF THE U.S. BOUNDARY	— EXISTING CONTOUR	— EXISTING RIGHT OF WAY	— F FILL LINE
— 100-YEAR FLOODPLAIN	— 315 PROPOSED CONTOUR	— PROPOSED RIGHT OF WAY	— TRAFFIC BARRIER
— TREE LINE	— DITCH FLOWLINE	— TEMPORARY EASEMENT	— SHARED-USE PATHWAY

WETLAND IMPACTS	
	TEMPORARY WETLAND IMPACTS = 15,520 SF / 0.36 AC
	PERMANENT WETLAND IMPACTS = N-A

WETLAND BUFFER IMPACTS	
	TEMPORARY WETLAND BUFFER IMPACTS = 7,615 SF / 0.17 AC
	PERMANENT WETLAND BUFFER IMPACTS = N-A

WATERS OF THE U.S. (WUS) IMPACTS - PERENNIAL FLOW	
	TEMPORARY WUS IMPACTS = N-A
	PERMANENT WUS IMPACTS = N-A

100-YEAR FLOODPLAIN IMPACTS	
	TEMPORARY FLOODPLAIN IMPACTS = N-A
	PERMANENT FLOODPLAIN IMPACTS = N-A

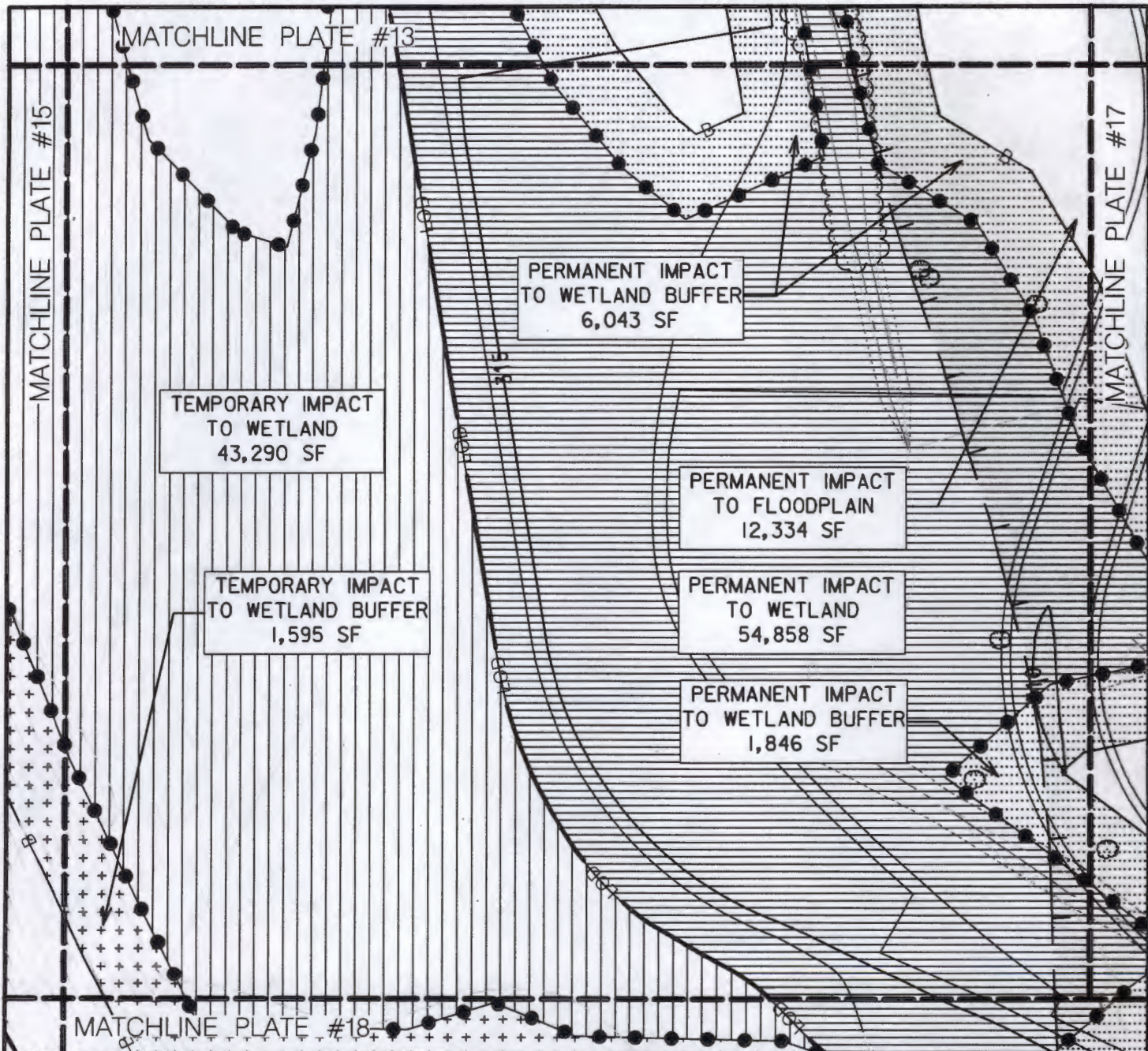


APPLICANT: **SHA**
State Highway Administration

CONSULTANT: **BAI**
BRUDIS & ASSOCIATES, INC.
Consulting Engineers

BRIDGE REPLACEMENT
MD 355 OVER BENNETT CREEK

COUNTY: FREDERICK COUNTY
APPLICATION BY: STATE HIGHWAY ADMINISTRATION
IMPACT PLATE: 15 OF 19
APRIL 2017



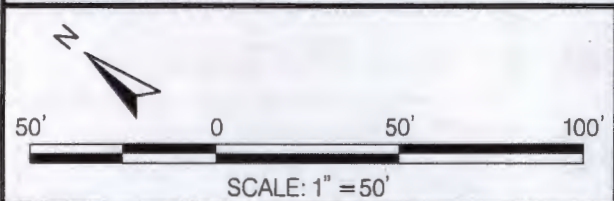
••••• WETLAND BOUNDARY	— PROPOSED PIPE	— LOD	— LIMIT OF DISTURBANCE	— PERPETUAL EASEMENT
— WETLAND BUFFER	— EDGE OF ROAD	— MATCHLINE	— CUT LINE	
— WUS BOUNDARY	— EXISTING CONTOUR	— EXISTING RIGHT OF WAY	— FILL LINE	
— 100-YEAR FLOODPLAIN	— 315 PROPOSED CONTOUR	— PROPOSED RIGHT OF WAY	— TRAFFIC BARRIER	
— TREE LINE	— DITCH FLOWLINE	— TEMPORARY EASEMENT	— SHARED-USE PATHWAY	

WETLAND IMPACTS	
	TEMPORARY WETLAND IMPACTS = 43,290 SF / 0.99 AC
	PERMANENT WETLAND IMPACTS = 54,858 SF / 1.26 AC

WETLAND BUFFER IMPACTS	
	TEMPORARY WETLAND BUFFER IMPACTS = 1,595 SF / 0.04 AC
	PERMANENT WETLAND BUFFER IMPACTS = 7,889 SF / 0.18 AC

WATERS OF THE U.S. (WUS) IMPACTS - PERENNIAL FLOW	
	TEMPORARY WUS IMPACTS = N-A
	PERMANENT WUS IMPACTS = N-A

100-YEAR FLOODPLAIN IMPACTS	
	TEMPORARY FLOODPLAIN IMPACTS = N-A
	PERMANENT FLOODPLAIN IMPACTS = 12,334 SF / 0.28 AC

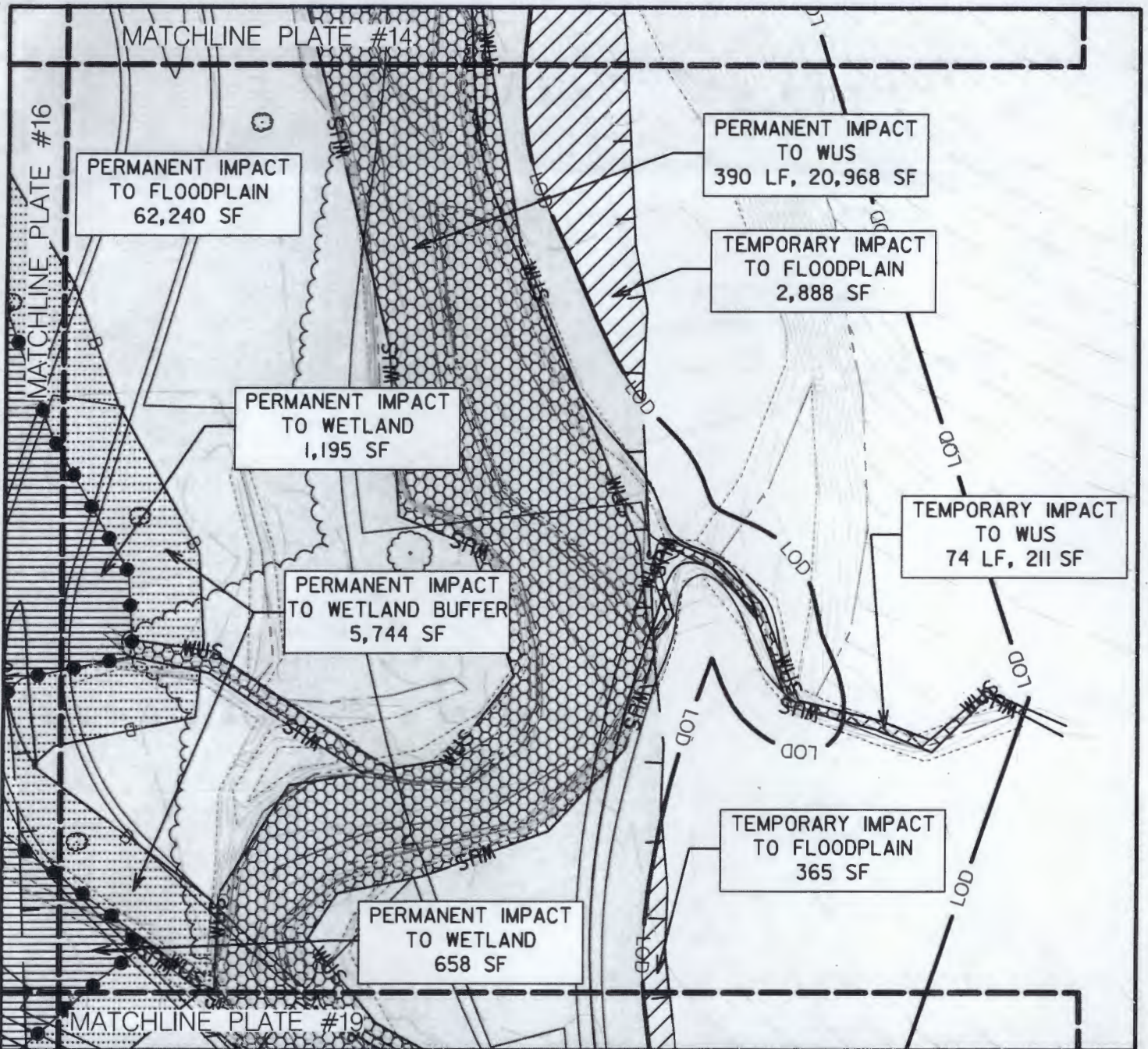


APPLICANT: **SHA**
State Highway

CONSULTANT: **BAI**
BRUDIS & ASSOCIATES, INC.
Consulting Engineers

BRIDGE REPLACEMENT
MD 355 OVER BENNETT CREEK

COUNTY: FREDERICK COUNTY
APPLICATION BY: STATE HIGHWAY ADMINISTRATION
IMPACT PLATE: 16 OF 19
APRIL 2017



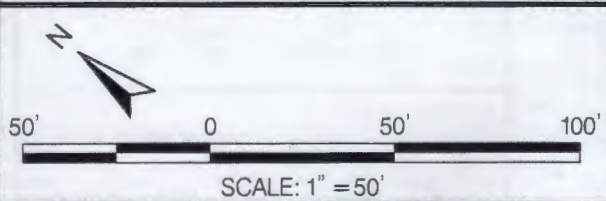
••••• WETLAND BOUNDARY	— PROPOSED PIPE	— LOD	— LIMIT OF DISTURBANCE	— PERPETUAL EASEMENT
— WETLAND BUFFER	— EDGE OF ROAD	— MATCHLINE	— EXISTING RIGHT OF WAY	— CUT LINE
— WUS BOUNDARY	— EXISTING CONTOUR	— PROPOSED RIGHT OF WAY	— FILL LINE	— TRAFFIC BARRIER
— 100-YEAR FLOODPLAIN	— 315 PROPOSED CONTOUR	— TEMPORARY EASEMENT	— SHARED-USE PATHWAY	
— TREE LINE	— DITCH FLOWLINE			

WETLAND IMPACTS	
	TEMPORARY WETLAND IMPACTS = N-A
	PERMANENT WETLAND IMPACTS = 1,853 SF / 0.04 AC

WETLAND BUFFER IMPACTS	
	TEMPORARY WETLAND BUFFER IMPACTS = N-A
	PERMANENT WETLAND BUFFER IMPACTS = 5,744 SF / 0.13 AC

WATERS OF THE U.S. (WUS) IMPACTS - PERENNIAL FLOW	
	TEMPORARY WUS IMPACTS = 74 LF, 211 SF / 0.01
	PERMANENT WUS IMPACTS = 390 LF, 20,756 SF / 0.48

100-YEAR FLOODPLAIN IMPACTS	
	TEMPORARY FLOODPLAIN IMPACTS = 3,253 SF / 0.07 AC
	PERMANENT FLOODPLAIN IMPACTS = 62,240 SF / 1.43 AC

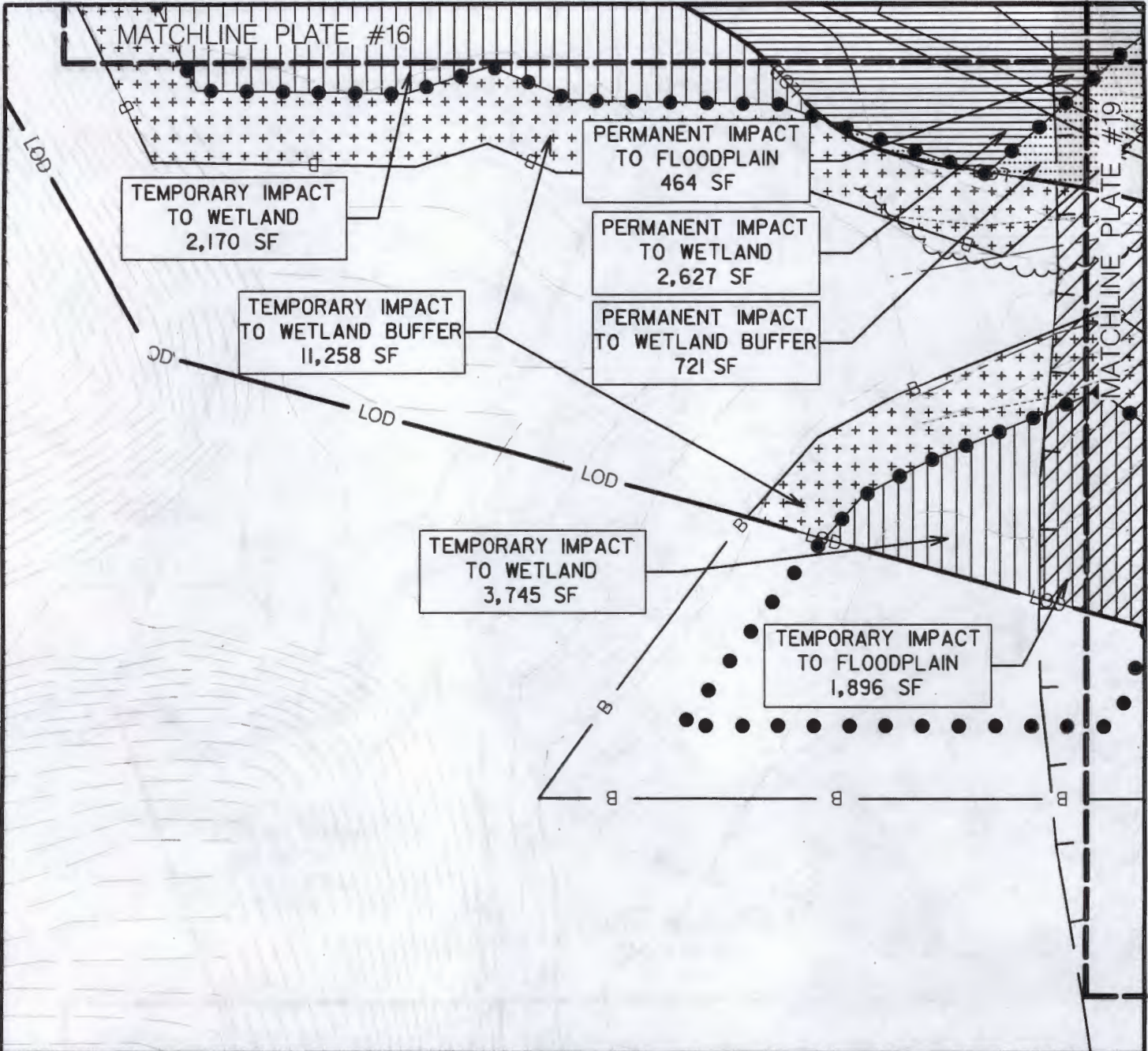


APPLICANT: **SHA**
State Highway
Maintenance Administration

CONSULTANT: **BAI**
BRUDIS & ASSOCIATES, INC.
Consulting Engineers

BRIDGE REPLACEMENT
MD 355 OVER BENNETT CREEK

COUNTY: FREDERICK COUNTY
APPLICATION BY: STATE HIGHWAY ADMINISTRATION
IMPACT PLATE: 17 OF 19
APRIL 2017



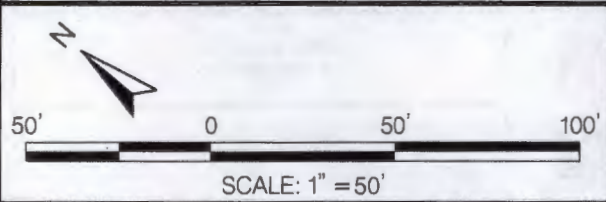
••••• WETLAND BOUNDARY	— PROPOSED PIPE	— LOD LIMIT OF DISTURBANCE	— PERPETUAL EASEMENT
— B — WETLAND BUFFER	— EDGE OF ROAD	— MATCHLINE	— C — CUT LINE
— WUS WETLAND BUFFER BOUNDARY	— EXISTING CONTOUR	— EXISTING RIGHT OF WAY	— F — FILL LINE
— 100-YEAR FLOODPLAIN	— 315 PROPOSED CONTOUR	— PROPOSED RIGHT OF WAY	— TRAFFIC BARRIER
— TREE LINE	— DITCH FLOWLINE	— TEMPORARY EASEMENT	— SHARED-USE PATHWAY

WETLAND IMPACTS	
	TEMPORARY WETLAND IMPACTS = 5,915 SF / 0.14 AC
	PERMANENT WETLAND IMPACTS = 2,627 SF / 0.06 AC

WETLAND BUFFER IMPACTS	
	TEMPORARY WETLAND BUFFER IMPACTS = 11,258 SF / 0.26 AC
	PERMANENT WETLAND BUFFER IMPACTS = 721 SF / 0.02 AC

WATERS OF THE U.S. (WUS) IMPACTS - PERENNIAL FLOW	
	TEMPORARY WUS IMPACTS = N-A
	PERMANENT WUS IMPACTS = N-A

100-YEAR FLOODPLAIN IMPACTS	
	TEMPORARY FLOODPLAIN IMPACTS = 1,896 SF / 0.04 AC
	PERMANENT FLOODPLAIN IMPACTS = 464 SF / 0.01 AC

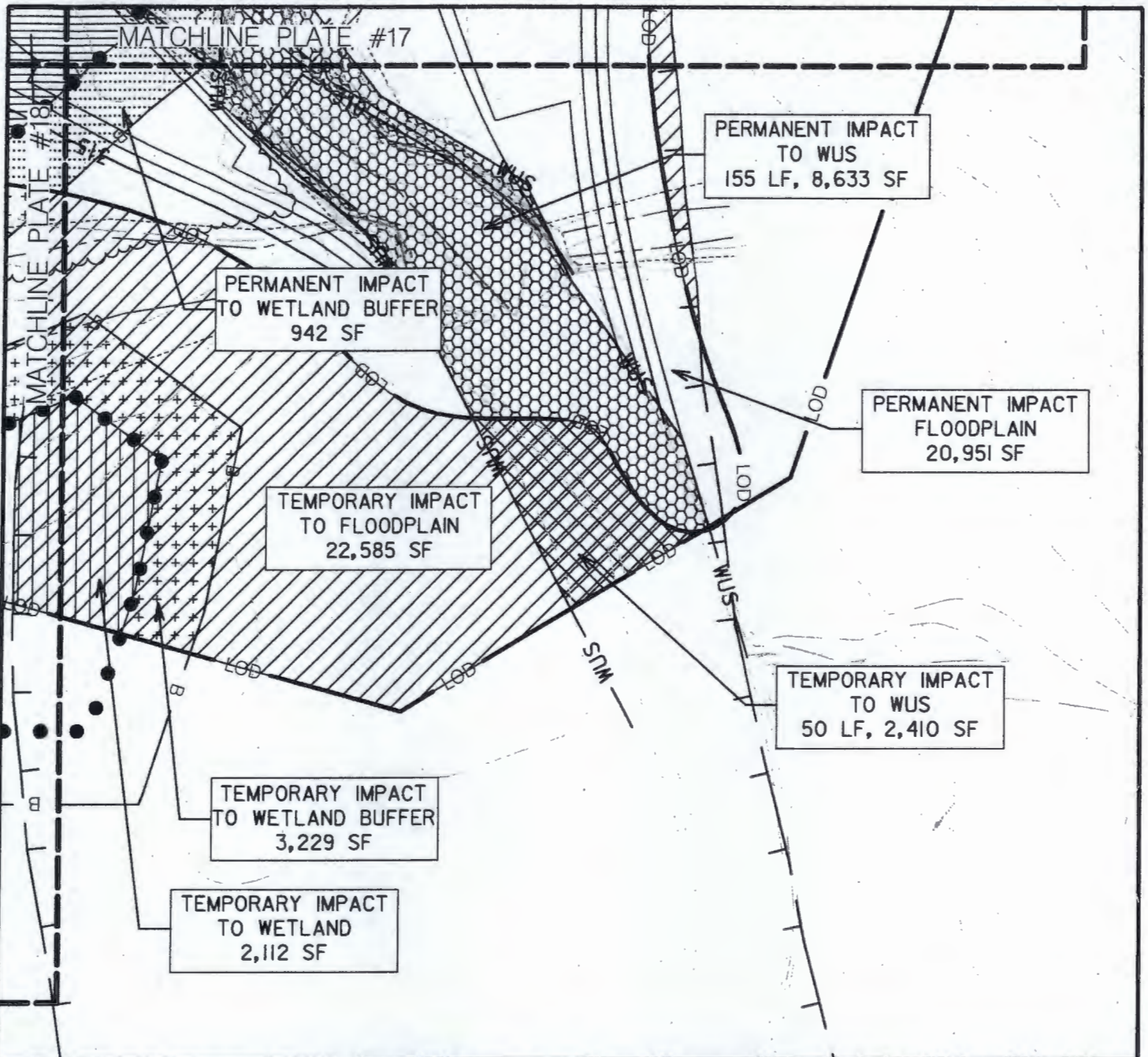


APPLICANT: **SHA**
State Highway Administration

CONSULTANT: **BAI**
BRUDIS & ASSOCIATES, INC.
Consulting Engineers

**BRIDGE REPLACEMENT
MD 355 OVER BENNETT CREEK**

COUNTY: FREDERICK COUNTY
APPLICATION BY: STATE HIGHWAY ADMINISTRATION
IMPACT PLATE: 18 OF 19
APRIL 2017



●●●●● WETLAND BOUNDARY	— PROPOSED PIPE	— LOD	— LIMIT OF DISTURBANCE	— PERPETUAL EASEMENT
B — WETLAND BUFFER	— EDGE OF ROAD	— MATCHLINE	— MATCHLINE	— C — CUT LINE
— WUS WETLAND BOUNDARY	— EXISTING CONTOUR	— EXISTING RIGHT OF WAY	— EXISTING RIGHT OF WAY	— F — FILL LINE
— 100-YEAR FLOODPLAIN	— 315 PROPOSED CONTOUR	— PROPOSED RIGHT OF WAY	— PROPOSED RIGHT OF WAY	— TRAFFIC BARRIER
— TREE LINE	— DITCH FLOWLINE	— TEMPORARY EASEMENT	— TEMPORARY EASEMENT	— SHARED-USE PATHWAY

WETLAND IMPACTS

[Hatched Pattern]	TEMPORARY WETLAND IMPACTS = 2,077 SF / 0.05 AC
[Diagonal Lines]	PERMANENT WETLAND IMPACTS = N-A

WETLAND BUFFER IMPACTS

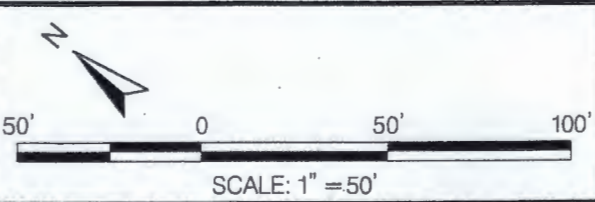
[Dotted Pattern]	TEMPORARY WETLAND BUFFER IMPACTS = 3,229 SF / 0.07 AC
[Cross-hatched Pattern]	PERMANENT WETLAND BUFFER IMPACTS = 942 SF / 0.02 AC

WATERS OF THE U.S. (WUS) IMPACTS – PERENNIAL FLOW

[Cross-hatched Pattern]	TEMPORARY WUS IMPACTS = 50 LF, 2,410 SF / 0.06
[Hexagonal Pattern]	PERMANENT WUS IMPACTS = 155 LF, 8,633 SF / 0.20

100-YEAR FLOODPLAIN IMPACTS

[Diagonal Lines]	TEMPORARY FLOODPLAIN IMPACTS = 22,585 SF / 0.52 AC
[White Box]	PERMANENT FLOODPLAIN IMPACTS = 20,951 SF / 0.48 AC



APPLICANT: **SHA**
State Highway Administration

CONSULTANT: **BAI**
BRUDIS & ASSOCIATES, INC.
Consulting Engineers

BRIDGE REPLACEMENT
MD 355 OVER BENNETT CREEK

COUNTY: FREDERICK COUNTY
APPLICATION BY: STATE HIGHWAY ADMINISTRATION
IMPACT PLATE: 19 OF 19
APRIL 2017