

 Table 1. Soils Mapping Units and Hydric Status

Mapping Unit	Series	Hydric Status
AdA	Aldino silt loam, 0 to 3 % slopes	Non-Hydric
AdB	Aldino silt loam, 3 to 8 % slopes	Non-Hydric
AdC	Aldino silt loam, 8 to 15 % slopes	Non-Hydric
AsB	Aldino very stony silt loam, 0 to 8 % slopes	Non-Hydric
Av	Alluvial land	Hydric
BeA	Beltsville silt loam, 0 to 2 % slopes	Non-Hydric
BeB	Beltsville silt loam, 2 to 5 % slopes	Non-Hydric
BeC	Beltsville silt loam, 5 to 10 % slopes	Non-Hydric
Br	Barclay silt loam	Non-Hydric
BtA	Beltsville silt loam, 0 to 2 % slopes	Non-Hydric
BtB	Beltsville silt loam, 2 to 5 % slopes	Non-Hydric
BtC2	Beltsville silt loam, 5 to 10 % slopes, moderately eroded	Non-Hydric
CcC2	Chester silt loam, 8 to 15 % slopes moderately eroded	Non-Hydric
ChB2	Chillum silt loam, 2 to 5 % slopes, moderately eroded	Non-Hydric
ChC2	Chillum silt loam, 5 to 10 % slopes, moderately eroded	Non-Hydric
ChC3	Chillum silt loam, 5 to 10 % slopes, severely eroded	Non-Hydric
CIB	Chillum-Urban land complex, 0 to 5 % slopes	Non-Hydric
	Chillum-Neshaminy silt loams, 5 to 10 % slopes,	Non-Hydric
CkC2	moderately eroded	rvon 11y une
	Chillum-Neshaminy gravelly silt loams, 10 to 15 %	Non-Hydric
CkD2	slopes, moderately eroded	rvon rry urre
Cu	Codorus silt loam	Non-Hydric
Cv	Comus silt loam	Non-Hydric
Cx	Cut and fill land	Non-Hydric
DcA	Delanco silt loam, 0 to 3 % slopes	Non-Hydric
DcB	Delanco silt loam, 3 to 8 % slopes	Non-Hydric
En	Elkton silt loam	Hydric
EsA	Elsinboro loam, 0 to 2 % slopes	Non-Hydric
EsB	Elsinboro loam, 3 to 8 % slopes	Non-Hydric
EsB2	Elsinboro loam, 2 to 5 % slopes moderately eroded	Non-Hydric
EsB2 EsC2	Elsinboro loam, 5 to 10 % slopes, moderately eroded	Non-Hydric
Fs	Fallsington loam	Hydric
GcB2	8	Non-Hydric
GcC2	Glenelg loam, 3 to 8 % slopes, moderately eroded	
	Glenelg loam, 8 to 15 % slopes, moderately eroded	Non-Hydric
GcD2 GcD3	Glenelg loam, 15 to 25 % slopes, moderately eroded	Non-Hydric
	Glenelg loam, 15 to 25 % slopes, severely eroded	Non-Hydric
GgC2	Glenelg channery loam, 8 to 15 % slopes, moderately eroded	Non-Hydric
Hb	Hatboro silt loam	Hydric
JpB	Joppa gravelly sandy loam, 2 to 5 % slopes	Non-Hydric
•		·
JpC KnA	Joppa gravelly sandy loam, 5 to 10 % slopes	Non-Hydric
KpA VpP	Keyport silt loam, 0 to 2 % slopes	Non-Hydric
KpB VnA	Keyport silt loam, 2 to 5 % slopes	Non-Hydric
KrA V-D	Kinkora silt loam, 0 to 3 % slopes	Hydric
KrB	Kinkora silt loam, 3 to 8 % slopes	Hydric Non-Hadria
LeB2	Legore silt loam, 3 to 8 % slopes moderately eroded	Non-Hydric
LeD2	Legore silt loam, 15 to 25 % slopes, moderately eroded	Non-Hydric
LeE	Legore silt loam, 25 to 45 % slopes	Non-Hydric
LeE	Legore very stony silt loam, 0 to 15 % slopes	Non-Hydric
LfD	Legore very stony silt loam, 15 to 25 % slopes	Non-Hydric

 Table 1. Soils Mapping Units and Hydric Status

Mapping Unit	Series	Hydric Status	
LfE	Legore very stony silt loam, 25 to 45 % slopes	Non-Hydric	
LgC3	Legore silty clay loam, 8 to 15 % slopes, severely eroded	Non-Hydric	
LgD3	Legore silty clay loam 15 to 25 % slopes, severely eroded	Non-Hydric	
Lr	Leonardtown silt loam	Hydric	
LyB	Loamy and clayey land, 0 to 5 % slopes	Non-Hydric	
LyD	Loamy and clayey land, 5 to 15 % slopes	Non-Hydric	
LyE	Loamy and clayey land, 15 to 30 % slopes	Non-Hydric	
MIA	Mattapex silt loam, 0 to 2 % slopes	Non-Hydric	
MIB	Mattapex silt loam, 2 to 5 % slopes	Non-Hydric	
MkA	Matapeake silt loam, 0 to 2 % slopes	Non-Hydric	
MkB	Matapeake silt loam, 2 to 5 % slopes	Non-Hydric	
MsB2	Montalto silt loam, 0 to 3 % slopes	Non-Hydric	
MsC2	Montalto silt loam, 8 to 15 % slopes, moderately eroded	Non-Hydric	
NeA	Neshaminy silt loam, 0 to 3 % slopes	Non-Hydric	
NeB2	Neshaminy silt loam, 3 to 8 % slopes, moderately eroded	Non-Hydric	
NeC2	Neshaminy silt loam, 8 to 15 % slopes, moderately eroded	Non-Hydric	
NsC	Neshaminy & Montalto very stony silt loams 0 to 15 % slopes	Non-Hydric	
NsD	Neshaminy & Montalto very stony silt loams, 15 to 25 % slopes	Non-Hydric	
NsE	Neshaminy & Montalto very stony silt loams, 25 to 45 % slopes	Non-Hydric	
Sa	Sand and gravel pits	Non-Hydric	
ShC2	Sassafras sandy loam, 5 to 10 % slopes, moderately eroded	Non-Hydric	
SIB	Sassafras loam, 2 to 5 % slopes	Non-Hydric	
SIB2	Sassafras loam, 2 to 5 % slopes, moderately eroded	Non-Hydric	
SIC2	Sassafras loam, 5 to 10 % slopes, moderately eroded	Non-Hydric	
SsD	Sassafras and Joppa soils, 10 to 15 % slopes	Non-Hydric	
SsE	Sassafras and Joppa soils, 15 to 30 % slopes	Non-Hydric	
St	Stony land, steep	Non-Hydric	
SuB2	Sunnyside fine sandy loam, 0 to 5 % slopes, moderately eroded	Non-Hydric	
WaA	Watchung silt loam, 0 to 3 % slopes	Hydric	
WaB	Watchung silt loam, 3 to 8 % slopes	Hydric	
WcB	Watchung very stony silt loam, 0 to 8 % slopes	Hydric	
WoB	Woodstown loam, 0 to 5 % slopes	Non-Hydric	

TABLE 2. Soil Series Descriptions

Soil Series	Description
Aldino series	The Aldino series consists of deep, moderately well drained soils on uplands.
(AdA, AdB, AdC, AsB)	They formed in material weathered from serpentine and are overlain by a silty
	mantle. Typically, these soils have a brown silt surface layer, 10 inches thick. The subsoil from 10 to 14 inches is yellowish-brown silt loam, and from 14 to
	22 inches is light yellowish-brown silty clay loam. A very firm and brittle
	fragipan from 22 to 36 inches is light yellowish-brown and olive silty clay
	loam. The substratum from 36 to 60 inches is light brownish-gray and
A33 • 1 T 3	yellowish-brown loam. Slopes range from 0 to 15%.
Alluvial Land	Alluvial land consists of soil material washed from uplands and recently deposited on flood plains. The materials are sands and sandy loams. Slopes
(Av)	range from 0 to 8 percent.
Beltsville series	The Beltsville series consists of deep, moderately well-drained soils on
(BeA, BeB, BeC, BtC2,	uplands. They formed in coastal plain sediments. Typically, these soils have
BtB, BtA)	grayish-brown and light olive brown silt loam surface layers to a depth of 9
	inches. The subsoil, from 9 to 25 inches, is yellowish-brown silt loam and silty clay loam from 25 to 50 inches is a very firm and brittle silty clay loam
	fragipan. The substratum, from 50 to 72 inches, is very pale brown gravelly
	sandy loam. Slopes range from 0 to 15 percent.
Barclay series	The Barclay series consists of somewhat poorly drained soils on the lower
(Br)	coastal plain land surfaces generally at elevations less than 25 feet. The surface
	layer is grayish brown very fine sandy loam over a pale brown very fine sandy loam upper b horizon and light gray very fine sandy loam lower b horizon,
	light gray fine sandy loam b3 and a mottled horizon of loamy sand. Slopes are
	0 to 2 percent.
Chester series	The Chester series consists of very deep, well drained soils on uplands. They
(CcC2)	formed in material weathered from micaceous schist. Typically these soils have
	a dark brown silt loam surface layer 8 inches thick. The subsoil layers from 8 to 27 inches are brown silt loam and silty clay loam and from 27 to 42 inches
	are yellowish red silty clay loam and loam. The substratum from 42 to 62
	inches is yellowish red and reddish yellow loam. Slopes range from 0 to 65
CI III	percent.
Chillum series	The Chillum series consists of very deep, well-drained soils on uplands. They formed in coastal plain sediments. Typically, these soils have a brown silt loam
(ChB2, CkB2, ChC2)	surface and subsurface layer, 8 inches thick. The subsoil from 8 to 16 inches is
	brown heavy silt loam and from 16 to 28 inches is strong brown silty clay
	loam. The substratum from 28 to 32 inches is pale brown gravelly sandy loam
	and from 32 to 96 inches is pale brown very gravelly sandy loam. Slopes range
Chillum-Urban land	from 0 to 60 percent. Urban land is land mostly covered by streets, parking lots, buildings, and other
complex	structures of urban areas. Slopes range from 0 to 45 percent. This complex
(CIB)	consists of approximately 20 percent undisturbed Chillum soils.
Chillum/ Neshaminy	The series consists of a mix of Chillum and Neshaminy soils.
soils	
(CkC2, CkD2)	

TABLE 2. Soil Series Descriptions

Soil Series	Description
Codorus series	The Codorus series consist of very deep moderately well drained and
(Cu)	somewhat poorly drained soils on flood plains formed in recently deposited
	micaceous sediments washed from uplands. Typically they have a dark brown
	silt loam surface layer 9 inches thick. The subsoil from 9 to 54 inches is dark
	yellowish brown, brown and light yellowish brown silt loam and loam. The
	substratum to 60 inches is stratified sand, silt and gravel. Slopes range from 0 to 5 percent.
Comus series	The Comus series consists of deep, well drained soils on flood plains. They
(Cv)	formed in micaceous alluvial material washed from uplands. Typically, comus
(64)	soils have a dark brown silt loam surface layer, 12 inches thick. The subsoil
	from 12 to 30 inches is dark yellowish-brown and brown silt loam. The
	unconforming substratum from 30 to 60 inches is strong brown gravelly sandy
	loam. Slopes range from 0 to 5 percent.
Cut and Fill Land	Cut and fill land consists of areas where the soil has been cut away by grading
(Cx)	or land leveling and of areas that have been filled with soil and other materials, commonly to a depth of many feet. The soil material is very variable.
Delanco series	The Delanco series consists of very deep, moderately well to somewhat poorly
(DcB)	drained soils on stream terraces, foot slopes or drainage heads. They formed in
(DCB)	alluvium washed from areas of micaceous crystalline rocks. Typically, these
	soils have dark brown and dark yellowish brown silt loam surface and
	subsurface layers, 13 inches thick. The subsoil layers from 13 to 39 inches are
	brown silty clay loam and strong brown clay loam. The substratum from 39 to
	72 inches is yellowish-red clay loam and loam. Slopes range from 0 to 15
Elkton series	percent. The Elkton series consists of very deep, poorly drained soils formed in loamy
(En)	(silty)/ clayey deposits of the mid Atlantic coastal plain. They are on lowlands,
(EII)	depressions, and ancient floodplains. Typically the surface layer is dark olive
	gray silt loam 1 inch thick. The subsruface layer is gray silt loam 9 inches
	thick. The subsoil from 10 to 14 inches is gray silty clay loam with prominent
	mottles. The substratum from 40 to 65 inches is gray very fine sandy loam.
	Slopes range from 0 to 5 percent.
Elsinboro series	The Elsinboro series consists of deep, well-drained soils on stream terraces.
(EsA, EsB, EsB2, EsC2)	They formed in old alluvium washed from areas of micaceous crystalline rock. Typically, these soils have brown silt loam surface layers, 15 inches thick. The
	subsoil layers from 15 to 36 inches are strong brown and yellowish-red silty
	clay loam. The substratum from 36 to 60 inches is red gravelly sandy loam.
	Slopes range from 0 to 15 percent.
Fallsington series	The Fallsington series consists of very deep, poorly drained soils on upland
(Fs)	flats and in depressions. They formed in stratified coastal plain sediments of
	marine or alluvial origin. Typically these soils have a dark gray sandy loam
	surface layer 10 inches thick. The subsoils, from 10 to 40 inches is mottled
	gray sandy clay loam to 32 inches and mottled light gray loamy sand to 40 inches. The substratum is stratified light gray sandy clay loam and sand. Slopes
	inches. The substratum is stratified light gray sandy clay loam and sand. Slopes range from 0 to 10 percent.
	Tange from 0 to 10 percent.

TABLE 2. Soil Series Descriptions

Soil Series	Description
Glenelg series	The Glenelg series consists of very deep, well-drained soils on uplands. They
(GcB2, GcC2, GcD2,	formed in micaceous material weathered mainly from schist and gneiss.
GcD3, GgC2)	Typically, these soils have a dark yellowish-brown channery loam surface
(CE25, CgC2)	layer, 6 inches thick. The subsoil, from 6 to 13 inches, is strong brown
	channery silt loam and, from 13 to 24 inches, is strong brown channery silty
	clay loam. The substratum, from 24 to 60 inches, is yellowish-red loam. Slopes
	range from 0 to 50 percent.
Hatboro series	The Hatboro series consists of deep poorly drained soils on floodplains formed
(Hb)	in recently deposited micaceous sediments washed from uplands. Typically
(110)	they have a dark grayish brown silt loam surface layer about 9 inches thick.
	The subsoil to 44 inches is gray and grayish brown silt loam. The substratum to
	70 inches is 12 inches of light brownish gray sandy clay loam over stratified
	sandy to clayey and gravelly materials. Slopes range from 0 to 3 percent.
Joppa series	The Joppa series consists of very deep, somewhat excessively-drained soils on
(JpB, JpC)	uplands. They formed in coastal plain sediments. Typically, these soils have a
	dark brown gravelly sandy loam surface layer, 6 inches thick. The subsoil,
	from 6 to 13 inches, is yellowish-red gravelly sandy loam, and, from 13 to 23
	inches, is reddish-brown very gravelly sandy loam. The substratum, from 23 to
	72 inches, is yellowish red very gravelly sand. Slopes range from 0 to 60
	percent.
Keyport series	The Keyport series consists of very deep, moderately well drained soils on
(KpA, KpB)	uplands. They formed in northern coastal plain sediments. Typically these soils
(have a dark brown silt loam surface layer 10 inches thick. The subsoil layers
	from 10 to 44 inches are yellowish brown and dark yellowish brown silty clay
	loam. The upper substratum from 44 to 60 inches is dark gray silty clay loam
	and the lower substratum from 60 to 72 inches is dark gray stratified clay to
	loamy sand. Slopes range from 0 to 25 percent.
Kinkora series	The Kinkora series consists of deep, poorly drained soils on stream terraces.
(KrA, KrB)	They formed in alluvial material derived from acid crystalline rocks. Typically,
	these soils have a dark gray silt loam surface layer, 8 inches thick. A
	subsurface layer from 8 to 12 inches is mottled gray silt loam. The mottled
	subsoil from 12 to 30 inches is gray, heavy, silty clay loam. The substratum
	from 30 to 36 inches is mottled gray silt loam, and from 36 to 60 inches is gray
T	fine sandy loam. Slopes range from 0 to 8 percent.
Legore series	The Legore series consists of very deep well drained soils on uplands. They formed in material weathered from diabase, diorite and related rocks. Typically
(LeB2, LeD2, LeE, LfC,	these soils have a dark brown, gravelly, silty clay loam surface layer, 4 inches
LfD, LfE, LgC3, LgD3)	thick. The subsoil from 4 to 10 inches is brown, gravelly, silty clay loam, and
	from 10 to 24 inches is brown, gravelly clay loam. The substratum from 24 to
	66 inches is yellowish-brown gravelly silt loam. Hard bedrock is at 66 inches.
	slopes range from 0 to 50 percent.
Leonardtown series	The Leonardtown series consists of very deep poorly drained soils on uplands.
	They formed in coastal plain sediments. Typically, these soils have a dark gray
(Lr)	and light brownish-gray silt loam surface layer, 5 inches thick. The subsoil
	from 5 to 12 inches is light brownish-gray silt loam. A mottled grayish-brown
	and gray, very firm and brittle fragipan is from 12 to 49 inches. It is silty clay
	loam in the upper part, ranging to loam in the lower part. From 49 to 70 inches
	the substratum is gray loam. Slopes range from 0 to 8 percent.
	and succession to gray found stopes funde from 0 to 0 percent.

TABLE 2. Soil Series Descriptions

Soil Series	Description
Loamy and Clayey	Loamy and clayey land consists of deep, well-drained to somewhat
Land	excessively-drained soils on upland. They formed in coastal plain sediments.
(LyB, LyD, LyE)	Typically, these soils have an olive brown and yellowish-brown loamy sand
	surface layer, 23 inches thick. The subsoil, from 23 to 28 inches, is strong
	brown loamy sand, from 28 to 36 inches, is red sandy loam, and, from 36 to 60
	inches, is red clay. Slope ranges from 0 to 40 percent.
Mattapex series	The Mattapex series consists of very deep, moderately well drained soils formed in silty sediments overlying coarser sediments of marine or alluvial
(MIA, MIB)	origin. Typically, these soils have a dark grayish-brown loam surface layer, 11
	inches thick. The subsoil from 11 to 15 inches is brown loam, from 15 to 26
	inches is yellowish-brown silty clay loam, and from 26 to 36 inches is mottled
	light olive brown silty clay loam. The mottled substratum from 36 to 60 inches
	is yellowish-brown fine sandy loam. Slopes range from 0 to 30 percent.
Montalto series	The Montalto series consists of very deep well drained soils on uplands. They
(MsA, MsB2, MsC2)	formed in material weathered from basic igneous rocks. Typically these soils
	have a brown silt loam surface layer 7 inches thick. The subsoil from 7 to 27
	inches is dark red silty clay loam and silty clay and from 27 to 45 inches is
	dark red clay. The substratum from 45 to 52 inches is red silt loam and from 52
No. 1	to 62 inches is yellowish red loam. Slopes range from 0 to 25 percent. The Neshaminy series consists of deep and very deep well drained soils on
Neshaminy series	uplands. They formed in material weathered from mixed basic and acidic
(NeA, NeB2, NeC2, NsC, NsD, NsE)	rocks. Typically these soils have a yellowish brown channery silt loam surface
(NSD, NSE)	layer 11 inches thick. The subsoil from 11 to 39 inches is mostly strong brown
	and yellowish red channery clay loam and from 39 to 52 inches is yellowish
	red channery sandy clay loam the substratum from 52 to 54 inches is yellowish
	red channery sandy loam. Bedrock is at 54 inches. Slopes range from 0 to 60
	percent.
Montalto series	The Montalto series consists of very deep well drained soils on uplands. They
(MsA, MsB2, MsC2)	formed in material weathered from basic igneous rocks. Typically these soils have a brown silt loam surface layer 7 inches thick. The subsoil from 7 to 27
	inches is dark red silty clay loam and silty clay and from 27 to 45 inches is dark
	red clay. The substratum from 45 to 52 inches is red silt loam and from 52 to
	62 inches is yellowish red loam. Slopes range from 0 to 25 percent.
Sand and gravel pits	Pits, gravel are open excavations from which soil and gravel have been
(Sa)	removed, exposing the gravelly material. Slopes are 0 to 3 percent.
Sassafras series	The sassafras series consists of very deep, well-drained soils on uplands. They
(ShC2, SIB, SIB2, SIC2)	formed in marine or alluvial coastal plain sediments. Typically, these soils have
(-, , , , , , , , , , , , , , , , , , ,	a brown sandy loam surface layer, 9 inches thick. The subsoil, from 9 to 21
	inches, is yellowish-brown loam, from 21 to 32 inches, is brown sandy clay
	loam, and, from 32 to 40 inches, is strong brown sandy loam. The substratum,
	from 40 to 52 inches, is strong brown gravelly sandy loam and, from 52 to 70
Sassafras and Joppa	inches, is brownish-yellow loamy sand. Slopes range from 0 to 60 percent.
soils	
(SsD, SsE)	The series unit contains soils of Sassafras, Joppa or both.
(555, 555)	
Stony land	Stony land consists of areas that are much too stony for normal soil
(St)	development. Most stones are 1 to 2 feet in diameter, and they are about 1 to 3
	feet apart. The stones vary and can be schist, gabbro, diorite, or other related
	material. Slopes range from 0 to 75 percent.

TABLE 2. Soil Series Descriptions

Soil Series	Description			
Sunnyside series	The Sunnyside series consists of very deep, well-drained soils on uplands.			
(SuB2)	They formed in reddish fine sandy coastal plain sediments. Typically, these			
	soils have very dark grayish-brown to brown surface layers, 8 inches thick. The			
	subsoil is reddish-brown and red fine sandy loam and sandy clay loam to 48			
	inches. The substratum, from 48 to 60 inches, is reddish brown loamy fine			
	sand. Plastic red clay is commonly encountered between 60 and 72 inches.			
	Slopes range from 0 to 50 percent.			
Watchung series	The Watchung series consists of very deep, poorly drained soils on upland flats			
(WaA, WaB, WcB)	and in depressions. They formed in material weathered from basic rocks.			
	Typically, these soils have a dark grayish-brown silt loam surface layer, 7			
	inches thick. A subsurface layer from 7 to 9 inches is mottled gray silt loam.			
	The mottled subsoil from 9 to 51 inches is mostly gray silty clay, but is			
	yellowish-brown from 33 to 51 inches. The substratum from 51 to 66 inches is			
	mottled strong brown and yellowish-brown silt loam. Slopes range from 0 to 8			
	percent.			
Woodstown series	The Woodstown series consists of deep, moderately well-drained soils on			
(WoB)	uplands and terraces. They formed in marine and alluvial coastal plain			
	sediments. Typically, these soils have a dark grayish-brown sandy loam surface			
	layer, 7 inches thick, and a subsurface layer, from 7 to 11 inches, of light			
	yellowish-brown sandy loam. The light olive brown sandy clay loam subsoil,			
	from 11 to 29 inches, is mottled in the lower part. The substratum layers, from			
	29 to 70 inches, are sandy loam and loamy sand slopes range from 0 to 30			
	percent.			

Source: Soil Survey of Baltimore County (SCS, 1976), Soil Survey of Harford County (SCS, 1975)

3.2 Waters of the U.S. and Wetland Identification

Wetlands were identified in the field in accordance with the *U.S. Army Corps of Engineers Wetland Delineation Manual, Technical Report Y-87-1* (Environmental Laboratory 1987), as well as supplemental guidance papers issued by the USACE and the United States Fish and Wildlife Service (USFWS). In order to make a determination that an area is a wetland, the 1987 USACE Delineation Manual requires that, under natural (typical) conditions, a minimum of one primary wetland indicator be confirmed for each of the three wetland parameters: hydrophytic vegetation, hydric soils, and wetland hydrology. Failure to confirm all three parameters results in the finding that the area under evaluation is a non-wetland under typical conditions. After identification in the field, wetlands were then classified according to the Cowardin System, as described in *A Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al. 1979). This wetland evaluation was based on the delineation criteria and primary field indicators discussed in Section 3 of the USACE Delineation Manual. Sections 3.2.1, 3.2.2, and 3.2.3 summarize the criteria and field indicators utilized to determine wetlands.

3.2.1 Hydrophytic Vegetation

A finding of the occurrence of hydrophytic vegetation means that more than 50 % of the dominant plant community is of a type adapted to frequent flooding and associated anaerobic soil conditions. The *National List of Plant Species that Occur in Wetlands: Northeast (Region 1)* (Reed, 1988) provides the wetland indicator status for thousands of plant species. The wetland indicator status is based on a species frequency of occurrence in wetlands. The wetland indicator rating and the corresponding frequency of occurrence (under normal conditions) are explained in **Table 3**.

Table 3. Wetland Indicator Ratings

Code	Wetland Indicator Status	Probability of Occurrence in Wetland
OBL	Obligate Wetland species	> 99 percent
FACW	Facultative Wetland species	67 to 99 percent
FAC	Facultative	34 to 66 percent
FACU	Facultative upland	1 to 33 percent
UPL	Obligate upland	< 1 percent

A positive (+) or negative (-) sign may modify the indicator status for some species in order to more specifically define the regional frequency of occurrence in wetlands. A positive sign indicates a frequency toward the higher end of the category (more frequently found in wetlands), and a negative sign indicates a frequency to the lower end of the category (less frequently found in wetlands).

3.2.2 Hydric Soils

Hydric soils are saturated to the surface for sufficiently long periods during the growing season to create oxygen-free conditions in the upper layer of the soil profile. Visual evidence of oxygen-free conditions may be evaluated through the observance of primary field indicators such as color (gleying, chromas of 1 or less in unmottled soils, chromas of 2 or less in mottled soils), odor (hydrogen sulfide), mineral concretions and depletions in upper layers, high organic material content in sandy soils, organic streaking in sandy

soils, and/or the observance of an aquic or peraquic moisture regime. Some soils (e.g., newly formed soils from recent disturbance, rocky landscapes, red parent material and sandy soils) are somewhat more difficult to identify as hydric soil based on color. As such, other indicators of hydric soils are weighed more heavily in the determination.

3.2.3 Wetland Hydrology

Wetland hydrology means that water is present at or above the ground's surface for long periods of time during the growing season, usually greater than 12.5% of the growing season (approximately 25 days near the Chesapeake Bay and its' estuaries in Baltimore County, MD and approximately 23 days near Bel Air, MD in Harford County, MD). Primary indicators of wetland hydrology include direct observation of inundation or saturation at the surface, recorded stream gage data (where available), water marks on objects and vegetation, water-carried debris drift lines, sediment deposits, and wetland drainage patterns. Some vegetative physiological adaptations such as tree buttressing, shallow rooting, and multiple stems may also indicate wetland hydrology.

3.2.4 Waters of the United States

The USACE in Regulatory Guidance Letter 95-1 establishes some basic guidance for determining whether a stream channel will be regulated as WUS. The determination of whether a channel is considered jurisdictional as WUS involves the identification of the hydrologic regime (perennial and intermittent streams are jurisdictional while only certain ephemeral streams are jurisdictional), the presence of an ordinary high water mark (OHWM), and (sometimes) establishing a connection to other WUS. The primary indicator for a channel to be considered jurisdictional is the presence of an OHWM defined in 33 CFR Part 328.3 as "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as: a clear, natural line impressed in the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation, the presence of litter or debris, or other appropriate means that considers the characteristics of the surrounding areas". Other criterion includes designations on official maps, such as soil surveys and USGS or county topographic maps that map the channel as a perennial or intermittent stream.

The 2000 Nationwide Permit (NWP) Regulations (March 9, 2000 Federal Register, 65 CFR 12823) further clarify the definition of WUS to include certain ephemeral streams and drainage channels (streams that receive storm water flows only). The 2000 NWP Guidance considers an ephemeral stream to be jurisdictional if it is a tributary to other WUS and exhibits an OHWM. The upstream limit of WUS is the point where the OHWM is no longer perceptible. A drainage ditch constructed in a stream, wetland, or other WUS remains WUS, provided an OHWM is still present. Furthermore, drainage ditches constructed in uplands that connect two WUS may be considered WUS if those ditches constitute a surface water connection between those two WUS. Perennial, intermittent, ephemeral channel segments and ditches that satisfy the above definitions, but do not satisfy the technical criteria for wetlands, were delineated as WUS.

3.2.5 Sampling

Sampling was conducted within suspect wetland areas and in adjacent upland areas for the collection of data pertinent to the assessment of the three mandatory technical criteria. Information was recorded on wetland data sheets appropriate for application of the 1987 USACE Delineation Manual "routine" method. Field notes and photographs were also recorded for each wetland. Soils were observed for hydric soil characteristics by digging pits at representative locations and periodically along the wetland boundary. Pits were dug up to a maximum depth of 24 inches to confirm hydric soil characteristics. Soil color determinations were defined using Munsell soil color charts. The WUS and wetland boundaries were marked using colored pink "Wetland Boundary" flagging which was tied to live, woody vegetation or pin flags. Each wetland flag was individually lettered and numbered (e.g., WET 1A-1, WET 1A-2, WET 1A-3, etc.) and WUS were identified as WUS 1A-1, WUS 1A-2, WUS 1A-3 and so forth. Each flag was located by a Trimble GeoXT Global Positioning System. Due to the extensive study area, the 16 mile corridor was divided into segments; Segment A: New Forge Road to MD 152, approximately 4.5 miles), Segment B: MD 152 to MD 24, (approximately 1.6 miles), Segment C/D: MD 24 to MD 543, approximately 3.6 miles, Segment E: MD 543 to Stephey Rd, approximately 3.1 miles, and Segment F Stephey Rd to Maxa Road, approximately 2.2 miles. Major intersections and roads crossing I-95 were used as breakpoints for the segments.

4.0 FINDINGS

The field investigation involved an inspection of the entire study area to identify areas that satisfy the three wetland criteria or meet the definition of WUS. Field investigations were conducted between November 2005 and March 2006 for the purpose of identifying and delineating the extent of jurisdictional waterways and wetlands in the study area. The field study area encompassed 200 linear feet from the edge of pavement from New Forge Road to Maxa Road. The acreage of wetlands calculated is only within the study area boundary. Wetlands and WUS that continued outside of the study area boundary were left open-ended (o.e.). Some of the wetlands delineated during the field investigation when mapped were outside of, or on the line of the study area. These wetlands were still cataloged to keep conformity. The field investigation resulted in the delineation of 121 wetlands and 198 WUS. A detailed description of the findings is provided (**Table 4** through **Table 9A**).

Table 4. Wetlands Delineated Within Segment A (New Forge Road to MD 152)

Wetland ID	Cowardin Classification	Dominant Vegetation	Acreage Within Study Area	Comments	MAP #
WET-1A	PEM1/PFO1	Sweet gum, red maple, spicebush, arrow-wood, and greenbrier.	0.20 acre	Soils in the wetland have heavy clay content and receive drainage from a SWM pond. Classified as a PEM surrounded by a PFO wetland, this wetland connects to WUS-1A. Delineated with flags # 1-18.	A-1
WET-2A	PEM1	Red maple, moss spp. and grass spp.	.004 acre	This wetland is fed from a spring house located adjacent to the Gunpowder Falls. Delineated by flags #1-6.	A-2
WET-3A	PFO1	Red maple, sycamore, winterberry, spice bush and skunk cabbage; tulip poplar along wetland fringe.	0.56 acre	Wetland is located in the forested floodplain of WUS-9A. Spring seeps and surface runoff provide hydrology. Delineated by flags #1-20.	A-3
WET-4A	PFO1	Red maple, sycamore, winterberry, spice bush and skunk cabbage.	0.18 acre	This wetland is similar in nature to WET-3A, but separated by a stream channel (WUS-10A). Delineated by flags #1-8.	A-3
WET-5A	PFO1	Red maple, Japanese honeysuckle and sedge spp.	0.02 acre	This forested wetland receives its hydrology from flood flow of WUS-11A and a high ground water table. Water stained leaves indicate long term hydrology. Water impounded by an insufficient drainage culvert under Old Long Calm Rd. Delineated by flags #1-6.	A-3
WET-6A	PFO/PSS	Red maple, silky dogwood, spicebush, arrow-wood, sensitive fern, and greenbrier.	0.34 acre	Old Long Calm Rd. separates this wetland from WET-5A. Wetland has a surface connection with WUS-11A. Delineated by flags #1-14.	A-3
WET-7A	PFO1	Red maple, winterberry, honeysuckle, and greenbrier.	0.17 acre	Wetland has surface connection to watercourse, WUS-11A. It receives additional hydrology from a farm pond outfall pipe. Delineated by flags #1-12.	A-3
WET-8A	PFO1	Red maple, green ash, sycamore, and multiflora rose.	0.39 acre	Located within the Little Gunpowder Falls floodplain, hydrology comes from runoff from I-95 and flood waters. Delineated by flags #1-28.	A-5
WET-9A	PFO1	Red maple.	0.01 acre	A small, isolated wetland located between the housing development and I-95 ROW. Delineated by flags #1-8.	A-6
WET-10A	PFO1	Green ash, sycamore, silky dogwood, Oriental bittersweet, and multiflora rose.	0.05 acre	Wetland located in the floodplain of the Little Gunpowder Falls. Additional hydrology was coming from a storm water retention pond. Wetland waters drain into Little Gunpowder Falls. Delineated by flags #1-32.	A-5
WET-11A	PFO1/PSS	Pin oak, silver maple, red maple, soft rush, and black willow.	0.02 acre	This is an isolated forested wetland along I-95 and Old Joppa Road. Flags #1-9.	A-7
WET-12A	PFO1	Sweetgum, pin oak, river birch, and red maple.	1.0 acre	This forested wetland has surface connection to watercourse, WUS-20A. A leaking underground water line aids hydrology. Delineated with flags #1-20.	A-7

Table 4. Wetlands Delineated Within Segment A (New Forge Road to MD 152)

Wetland ID	Cowardin Classification	Dominant Vegetation	Acreage Within Study Area	Comments	MAP #
WET-13A	PFO1/PEM1	Sweetgum, phragmites, pin oak, arrow-wood, sensitive fern, and greenbrier.	0.40 acre	A high ground water table and surface runoff from I-95 keep this area wet. The PEM section is dominated by phragmites. Delineated by flags #1-21 & 36-40.	A-7
WET-14A	PFO1	Pin oak, high bush blueberry, sweetgum, and greenbrier.	0.42 acre	Fed from a groundwater spring seep that has a surface connection to WUS-23A. Wetland continued out of study area and was left openended. Shown as flags #1-16.	A-7 & A-8
WET-15A	PFO1	Red maple and spicebush.	0.49 acre	Wetland comes from a spring seep and flows into a channel that connects to WUS-23A. Flags #1-11.	A-8
WET-16A	PEM/PSS	Rice cutgrass, smartweed, and highbush blueberry.	0.07 acre	This wetland is located within a drainage swale along the highway ramp. Delineated by Flags #1-13.	A-8
WET-17A	PFO1	Red maple, arrow- wood, and greenbrier.	0.01 acre	An isolated wetland confined to a swale which is fed by upland drainage. Shown as Flags #1-10.	A-8
WET-18A	PEM1	Broadleaf cattail, phragmites, and seedbox spp.	0.08 acre	A trench/swale which retains waters and exhibited all three wetland parameters. Flows into a channel delineated as WUS-30A which connects to WUS-23A. Wetland delineated with Flags #1-20.	A-7 & A-8
WET-20A	PFO1	Skunk cabbage, spicebush, red maple, and tulip popular.	0.003 acre	Wetland located from a small spring seep which connects to WUS-18A. Flagged by numbers #1-4.	A-6
WET-21A	PFO1	Spicebush, greenbrier, and skunk cabbage.	0.005 acre	Wetland located along the forested floodplain of WUS-18A. Wetland left open-ended outside of study area. Delineated by flags #1-4 o.e.	A-6
WET-22A	PFO1	Arrow-wood, spicebush, poison ivy, and skunk cabbage.	0.18 acre	Located in a forested floodplain of the Little Gunpowder Falls. A spring seep and runoff from Interstate 95 contribute to hydrology. Delineated by flags #1-13.	A-5
WET-23A	PFO1	Arrow-wood, spicebush, red maple, skunk cabbage, poison ivy, and Japanese honeysuckle.	0.14 acre	Wetland is located next to a watercourse WUS-35A. Drainage patterns in wetland indicated frequent flooding and a high water table. A surface connected to WUS-35A. Delineated by flags #1-26.	A-5
WET-24A	PFO1	Red maple and sweetgum.	0.04 acre	A small isolated wetland which collects and holds water from adjacent uplands. Flags #1-7.	A-4
WET-25A	PFO1	Red maple, winterberry, and greenbrier.	0.02 acre	A small isolated wetland which receives runoff from bordering uplands. Wetland is located within I-95 ROW. Flags #1-4.	A-4
WET-27A	PEM1	Broadleaf cattail, soft rush, smartweed, and sedge spp.	0.02 acre	An isolated wetland in the middle of an active agriculture field. Standing water was present at the time of delineation. Wetland flags #1-5.	A-4

Table 4. Wetlands Delineated Within Segment A (New Forge Road to MD 152)

Wetland ID	Cowardin Classification	Dominant Vegetation	Acreage Within Study Area	Comments	MAP #
WET-28A	PFO1	Red maple, spicebush, arrow-wood, skunk cabbage, greenbrier, and Japanese honeysuckle.	0.26 acre	This forested wetland originates from a seep zone along the forest/field edge. Drainage channels from this wetland connect into WUS-40A. Delineated by flags #1-30.	A-3
WET-29A	PFO1	Red maple, spicebush, greenbrier, Japanese honeysuckle, and soft rush.	0.10 acre	Ground water and surface runoff from I-95 provide hydrology on this forested slope. Delineated by Flags #1-13.	A-3
WET-30A	PFO1	Silver maple, red maple, tulip poplar, beech, and American Holly.	0.44 acre	This wetland is located in a forested floodplain terrace along WUS-43A. Runoff from an adjacent housing development increases hydrology. Delineated by flags #1-12.	A-1
WET-31A	PEM1	Broadleaf cattail, straw- color sedge, and path rush.	0.01 acre	A PEM wetland located within the MD 152/I-95 interchange ramp. Connects to WUS by a storm drain. Delineated by flags #1-12.	A-8
WET-32A	PEM1	Broadleaf cattail, Pennsylvania smartweed, soft rush, flat sedge, and groundsel tree.	0.05 acre	A roadside channel within MD 152/I-95 interchange which exhibited wetland characteristics. Connects to WUS-44A. Delineated with flags #1-29.	A-8
WET-33A	PSS1	Groundsel tree, sweet gum, red cedar, broadleaf cattail, and poison ivy.	0.02 acre	Wetland located within the MD 152/I-95 interchange. Hydrology from surface runoff from a Park & Ride facility. Delineated by flags #1-10.	A-8
WET-34A	PSS1	Sweet gum, groundsel tree, broadleaf cattail, and poison ivy.	0.03 acre	Wetland located within the MD 152/I-95 interchange. Wetland is fed by surface runoff from I-95 and Park & Ride facility. Delineated as flags #1-12.	A-8
WET-35A	PFO1	Red maple, sweetgum, green ash, elderberry, arrow-wood, and Japanese honeysuckle.	0.09 acre	This wetland appears to be a older storm water retention area in the intersection of I-95/MD 152. Ponded water is laying long enough to cause hydric conditions. Delineated by flags #1-19.	A-8
WET-36A	PFO1	Red maple, pin oak, arrow-wood, sweetgum, poison ivy, greenbrier, and trumpet creeper.	0.02 acre	A drainage swale which gathers and holds water within the MD 152/I-95 interchange. Wetland delineated by flags #1-9.	A-8
WET-37A	PEM1	Barnyard grass, duckweed, poison ivy, and red maple.	0.02 acre	An isolated wetland within the MD 152/I-95 interchange. Signs indicate area remains ponded for long periods of time. Delineated by flags #1-15.	A-8
WET-38A	PEM1	Broadleaf cattail, least spikerush, and barnyard grass.	0.01 acre	Wetland is located within drainage channel along I-95/MD 152 interchange. Poor drainage has aided wetland conditions. Delineated by flags # 1-6.	A-8
WET-40A	PEM1	Broadleaf cattail.	0.02 acre	Surface runoff is retained in a drainage channel. The grade does not allow outflow causing hydric conditions. Delineated by flags # 1-6.	A-2
		TOTAL ACREAGE	5.89 ac.		

Table 4A. Waters of the U.S. Delineated within Segment A (New Forge Road to MD 152)

WUS ID	Hydrologic Description		Associated Wetlands	Map #
WUS-1A	Intermittent	Tributary to Gunpowder Falls	WET-1A	A-1
WUS-2A (N.B.) GPJR WUS10 / WUS-43A (S.B.)	Perennial	Tributary to Gunpowder Falls	N/A	A-1
WUS-3A	Ephemeral	Tributary to Gunpowder Falls	N/A	A-1
WUS-4A	Ephemeral	Tributary to Gunpowder Falls	N/A	A-1
WUS-6A (N.B.) WUS-41A (S.B.)	Perennial	Gunpowder Falls	WET-2A	A-2
WUS-7A	Ephemeral	Tributary to Gunpowder Falls	N/A	A-2
WUS-8A	Ephemeral	Tributary to Gunpowder Falls	N/A	A-3
WUS-9A (N.B.) WUS-40A (S.B.)	Perennial	Tributary to Gunpowder Falls	WET-3A,WET-4A, WET-28A,WET-29A	A-3
WUS-10A	Ephemeral	Tributary to Gunpowder Falls	WET-3A, WET-4A	A-3
WUS-11A (N.B.) WUS-39A (S.B.)	Perennial	Tributary to Gunpowder Falls	WET-5A, WET-6A, WET- 7A	A-3
WUS-11A-cc	Ephemeral	Drainage channel to tributary of Gunpowder Falls	WET-7A	A-3
WUS-12A (N.B.) WUS-38 A (S.B.)	Perennial	Tributary to Gunpowder Falls	N/A	A-4
WUS-13A	Intermittent	Tributary to Little Gunpowder Falls	N/A	A-4
WUS-13A-a	Ephemeral	Drainage channel to tributary of Little Gunpowder Falls	WET-13A	A-7
WUS-14A (N.B. & S.B.)	US-14A Perennial Tributary to Gunnowder Falls		N/A	A-5
WUS-15A	Ephemeral	Drainage channel to tributary of Gunpowder Falls	N/A	A-5
WUS-16A (N.B.) WUS-34A (S.B.)	Perennial	Little Gunpowder Falls	WET-8A, WET-10A	A-5
WUS-17A	Ephemeral	Drainage channel to tributary to Little Gunpowder Falls	N/A	A-5
WUS-18A (N.B. & S.B.)	Intermittent	Tributary to Little Gunpowder Falls	WET-20A, WET-21A	A-6
WUS-18A-c	Ephemeral	Drainage channel to tributary of Little Gunpowder Falls	WET-20A	A-6
WUS-19A	Ephemeral	Tributary to Little Gunpowder Falls	WET-8A	A-5
WUS-20A (N.B. & S.B.)	Perennial	Tributary to Little Gunpowder Falls	WET-12A	A-7
WUS-21A	Ephemeral	Tributary to Little Gunpowder Falls	N/A	A-7
WUS-22A	Ephemeral	Tributary to Little Gunpowder Falls	WET-12A	A-7
WUS-23A	Perennial	Tributary to Little Gunpowder Falls	WET-13A, WET-14A, WET-15A, WET- 16A,WET-18A	A-7 & A-8

Table 4A. Waters of the U.S. Delineated within Segment A (New Forge Road to MD 152)

WUS ID	Hydrologic Regime	Description	Associated Wetlands	Map #
WUS-24A	Ephemeral	Tributary to Little Gunpowder Falls	WET-14A	A-7
WUS-25A	Ephemeral	Tributary to Little Gunpowder Falls	WET-14A	A-8
WUS-26A	Intermittent	Tributary to Gunpowder Falls	WET-16A	A-8
WUS-27A	Intermittent	Tributary to Little Gunpowder Falls	N/A	A-8
WUS-29A	Ephemeral	Drainage channel to tributary of Little Gunpowder Falls	N/A	A-8
WUS-30A	Ephemeral	Drainage channel to tributary of Little Gunpowder Falls	WET-18A	A-8
WUS-31A	Ephemeral	Drainage channel to tributary of Little Gunpowder Falls	N/A	A-6
WUS-32A	Ephemeral	Drainage channel flows into Little Gunpowder Falls	N/A	A-6
WUS-33A	Ephemeral	Drainage channel into Little Gunpowder Falls	N/A	A-6
WUS-35A	Perennial	Tributary to Little Gunpowder Falls	WET-23A	A-5
WUS-36A	Ephemeral	Tributary to Little Gunpowder Falls	N/A	A-5
WUS-37A	Ephemeral	Tributary to Gunpowder Falls	N/A	A-4
WUS-38A-cc	Ephemeral	Tributary to Gunpowder Falls	N/A	A-4
WUS-39A	Perennial	Tributary to Little Gunpowder Falls	N/A	A-3
WUS-39A-a	Ephemeral	Drainage channel to tributary of Little Gunpowder Falls	N/A	A-3
WUS-39A-c	Ephemeral	Drainage channel to tributary of Little Gunpowder Falls	N/A	A-3
WUS-39A-e	Ephemeral	Drainage channel to tributary of Little Gunpowder Falls	N/A	A-3
WUS-40A-a	Ephemeral	Drainage channel to tributary of Little Gunpowder Falls	N/A	A-3
WUS-40A-c	Ephemeral	Drainage channel into tributary of Little Gunpowder Falls	WET-29A	A-3
WUS-42A	Intermittent	Tributary to Gunpowder Falls	WET-30A	A-1
WUS-44A	Ephemeral	Tributary to Gunpowder Falls	N/A	A-1
WUS-45A-aa	Ephemeral	Drainage channel into tributary of Little Gunpowder Falls	WET-32A	A-8
WUS-46A-aa	Ephemeral	Drainage channel into tributary of Little Gunpowder Falls	WET-32A	A-8

Table 5. Wetlands Delineated within Segment B (MD 152 to MD 24)

Wetland ID	Cowardin Classification	Dominant Vegetation	Acreage Within Study Area	Comments	Map #
WET-1B	PEMJh	Broadleaf cattail.	0.04 ac.	An impounded drainage channel forms this emergent wetland. WUS-1B flows into and out of this wetland. Vegetation was dominated by cattails. Flags #1-4 delineated this area.	B-1
WET-2B	PFO1	Red maple, sweet gum, and willow oak.	0.21 ac.	Wetland formed from several spring seeps and runoff from the surrounding upslope development. Wetland connects to WUS-4B. Delineated by flags #1-34.	B-2
WET-3B	PFO1	Red maple, sweet gum	0.00 ac.	This wetland connects to WUS-6B. A high ground water table and runoff provide hydrology. Located in an early successional red maple/sweet gum forest. Delineated with flags #1-13. Wetland delineated was outside of study area.	B-2
WET-4B	PFO1	Red maple and sweet gum.	0.00 ac.	Wetland connects into WUS-6B. Delineated with flags #1-6. Wetland was outside of study boundary.	B-2
WET-5B	PEM1	Broadleaf cattail and soft rush.	0.005 ac.	Leaching water coming from underneath I- 95 forms this wet area. Water connects to WUS-5B. Vegetation within the ROW mowed. Delineated with flags #1-5.	B-2
WET-6B	PFO1/PEM1	Phragmites, soft rush, multiflora rose, red maple, and sweet gum.	0.04 ac.	Located inside of ROW. Wetland contained some emergent and part forested vegetation. Delineated with flags #1-23.	B-2
WET-7B	PFO1	Sweet gum, red maple, and loblolly pine.	0.01 ac.	This wetland is isolated and soils were heavy clay. Located in a red maple/loblolly pine woods. Flagged as #1-7.	B-2
WET-8B	PEM1	Broadleaf cattail and phragmites.	0.03 ac.	Located behind an industrial park development. Wetland line extended outside of study area and left open-ended. Wetland delineated as flags #1-6 and A-H.	B-4
WET-WPO- 24	PFO1	Red maple, green ash, and poison ivy.	0.07 ac.	Previously delineated by another firm for interchange work, labeled as WPO-24. Wetland buffers a WUS which connects directly into Winters Run.	B-4
WET-10B	PFO1	Silky dogwood, red maple, sensitive fern, and poison ivy.	0.03 ac.	Located at the base of a fill slope at the interchange ramp of MD 24 / I-95. Wetland connects into WUS-16B. Delineated with flags #1-8.	B-6

Table 5. Wetlands Delineated within Segment B (MD 152 to MD 24)

Wetland ID	Cowardin Classification	Dominant Vegetation	Acreage Within Study Area	Comments	Map #
WET-11B	PEM1/PSS	Broadleaf cattail, black willow, green ash, and soft rush.	0.02 ac.	This wetland is isolated but receives surface flow runoff from a self-storage facility. Left opened ended as it continued out of the study area. Delineated by flags #1-8 and #1-6.	B-4
WET-12B	PEM1/PSS1	Black willow, phragmites, and broadleaf cattail.	0.06 ac.	This wetlands hydrology is from a storm water management pond. Wetland drains directly into Winters Run. Delineated by flags #1-20.	B-4
WET-13B	PFO1	Sycamore, red maple, and green ash.	0.06 ac.	Located in the floodplain between Winters Run and Fashion Way Rd. Wetlands drains into Winters Run. Delineated by flags #1-12.	B-4
WET-14B	PFO1	Sweet gum, Virginia pine, and soft rush.	0.06 ac.	Wetland retains surface runoff from uplands because of heavy clay soils. Connects into WUS-20B. Flags #1-14.	B-2
WET-15B	PEM1	Red maple, spicebush, and skunk cabbage.	0.00 ac.	Wetland is formed within an old stream channel. Wetland drains into WUS-19B. Delineated by flags 1-15 but is outside of study boundary.	B-3
WET-16B	PFO1	Red maple spice bush, and skunk cabbage.	0.00 ac.	Wetland drains into WUS-19 as it captures runoff from farm and spring seeps. Delineated by flags #1-11. Outside of study area.	B-3
WET-17B	PFO1	Red maple, sweetgum, and silky dogwood.	0.07 ac.	Located in the Clayton Rd. Conservation Area. Wetland retains upland runoff. Wetland delineated by flags #1-37.	B-2
WET-18B	PFO1	Pin oak, sweet gum, green briar, and red maple.	0.09 ac.	Wetland retains highway runoff. Connected to WUS-23B. Delineated by flags #1-15.	B-2
WET-19B	PFO1	Skunk cabbage, spicebush, and red maple.	0.00 ac.	Receives floodwaters from WUS-27B. Wetland drains to WUS-23B. Delineated flags #1-19. Outside of study area.	B-1
WET-20B	PFO1	Skunk cabbage, red maple, and spice bush.	0.07 ac.	This wetland is fed by a seep which then connects into WUS-23B and WUS-27B. Delineated with flags #1-21.	B-1
WET-21B	PEM2	Spicebush, Mountain laurel and moss.	0.01 ac.	Wetland consisted of small open pools of water surrounded by forest. It was noted for potential amphibian vernal pools. Delineated by flags #1-11.	B-1
WET-22B	PEM2	Arrow-wood, spicebush, skunk cabbage, and Mountain laurel on fringe.	0.004 ac.	Wetland is a small, open pool of water. Potential vernal pool habitat and surrounded by forest. Shown as flags #1-6.	B-1

Table 5. Wetlands Delineated within Segment B (MD 152 to MD 24)

Wetland ID	Cowardin Classification	Dominant Vegetation	Acreage Within Study Area	Comments	Map #
WET-23B	PFO1	Spicebush, red maple, and sweet gum.	0.01 ac.	Drainage patterns from wetland connect to WUS-24B. Left opened-ended outside of study area. Delineated by flags #1-5 and flags A-E.	B-1
WET-24B	PFO1	Red maple and sweetgum.	0.02 ac.	This wetland is formed from a forested hillside seep. Drainage flows into WUS-23B by flags A-F and flags #1-6.	B-1
WET-25B	PFO1	Red maple, American holly, and black gum.	0.06 ac.	An isolated wetland inside of the interchange MD 24/I-95. Potential vernal breeding pool. Flags #1-4.	B-6
WET-26B	PEM1	Broadleaf cattail, soft rush, smartweed, and sedge spp.	0.01 ac.	An emergent wetland formed from poor drainage in channel. Receives runoff from MD 152 ramp. Delineated as flags #1-6.	B-1
WET-27B	PEM1	Broadleaf cattail and and narrow leaf cattail.	0.01 ac.	A fringe wetland which borders WUS-24B. Inside of interchange ramp of I-95 and MD 152. Flags #1-6.	B-1
		TOTAL ACREAGE	0.989 ac.		

Table 5A. Waters of the U.S. Delineated within Segment B (MD 152 to MD 24)

WUS ID Hydrologic Regime		Description	Associated Wetlands	Map #
WUS-1B	Ephemeral	Tributary to Winters Run	WET-1B	B-1
WUS-2B	Ephemeral	Tributary to Winters Run	N/A	B-1
WUS- 3B (N.B.) WUS-26B (S.B.)	Ephemeral	Tributary to Winters Run	N/A	B-1
WUS-4B	Ephemeral	Tributary to Winters Run	WET-2B	B-2
WUS-5B (N.B.) WUS-23B (S.B.)	Perennial	Tributary to Winters Run	WET-1-4B, WET-18 through 24B	B-1/B-2
WUS 5B-f (N.B.) WUS-22B (S.B.) WUS-22B-b (S.B.)	Perennial	Tributary to Winters Run	WET-5B	B-2
WUS-5B-aa, WUS-5B-bb	Ephemeral	Drainage channel to tributary of Winters Run	N/A	B-2
WUS-5B-cc	Ephemeral	Drainage channel to tributary of Winters Run	WET-5B	B-2
WUS-6B	Intermittent	Tributary to Winters Run	WET-3B, WET-4B	B-2
WUS-7B	Intermittent	Tributary to Winters Run	N/A	B-2
WUS-8B	Ephemeral	Drainage channel to tributary of Winters Run	N/A	B-2
WUS-9B	Intermittent	Tributary to Winters Run	N/A	B-2
WUS-10B (N.B.) WUS-19B (S.B.)	Perennial	Tributary to Winters Run	WET-15B, WET- 16B	B-3
WUS-11B	Ephemeral	Drainage channel to tributary to Winters Run	N/A	B-3
WUS-12B (N.B.) WUS-21B (S.B.)	Perennial	Tributary to Winters Run	N/A	B-3
WUS-12B-s	Intermittent	Tributary to Winters Run	N/A	B-3
WL 004/ WUS-15B	Intermittent	Tributary to Winters Run	WPO-24	B-4
WUS-16B	Ephemeral	Highway drainage channel into Tributary of Winters Run	WET-10B	B-6
WL 001A, WL 001, WL 008	Perennial	Tributary to Winters Run	WP-001, WP-002, WP-003, WP-004, WP-004A, WP-004B	B-5
WUS-18B/ WL-005	Perennial	Tributary to Winters Run	N/A	B-4

Table 5A. Waters of the U.S. Delineated within Segment B (MD 152 to MD 24)

WUS ID	Hydrologic Regime	Description	Associated Wetlands	Map #
WUS-19B-a	Ephemeral	Drainage channel into tributary of Winters Run	WET-16B	B-3
WUS-20B	Ephemeral	Drainage channel into tributary of Winters Run	WET-14B	B-2/B-3
WUS-22B-a, WUS- 22B-c, WUS-22B-d, WUS-22B-e	Ephemeral	Drainage channels into tributary of Winters Run	N/A	B-2
WUS-23B-b	Ephemeral	Drainage channel into tributary of Winters Run	N/A	B-1
WUs-23B-cc	Ephemeral	Drainage channel into tributary of Winters Run	N/A	B-1
WUS-24B	Perennial	Tributary to Winters Run	WET-23B & WET-24B	B-1
WUS-25B	Intermittent	Tributary to Winters Run	N/A	B-1
WUS-27B	Ephemeral	Drainage channel to tributary of Winters Run	WET-19B, WET-20 B	B-1
WUS-28B-aa	Ephemeral	Drainage channel to tributary of Winters Run	WET-27B	B-1
WL 030	Perennial	Winters Run	WET-12B, WET-13B, WPO-24	B-4
WL 030A	Ephemeral	hemeral Tributary to Winters Run		B-4
WL 031	Intermittent	Tributary to Winters Run	N/A	B-4

Table 6. Wetlands Delineated within Segment C (MD 24 to Abington Rd)

Wetland ID	Cowardin Classification	Dominant Vegetation	Acreage Within Study Area	Comments	Map #
WET-1C/ WP 015	PFO1	Japanese stilt grass, sweet gum, and red maple, snags.	0.21 ac.	Wetland continued from a previous delineation by "others" as (WP-015). Severe sloughing of soils was noted in this area. Drainage patterns flow to WUS-2C. Delineated by flags #1-6. & A-E.	C/D-2
WET-2C	PFO1/PSS	Red maple and sweet gum.	0.02 ac.	Wetland is fed from a spring seep emerging from nearby fill slope. Soil was very mucky with orange color stains in water. Wetland drains into WUS-8C. Delineated by flags #1-13.	C/D-4
WET-3C	PFO1	Sweet gum and red maple.	0.00 ac.	The water of WUS-11C loses its defined channel and forms this small forested wetland before becoming defined again as WUS-11C. Delineated with flags #1-6. Wetland was delineated but when mapped was outside of study area.	C/D-4
WET-4C	PFO1	Highbush blueberry, red maple, and sweet gum.	0.001 ac.	Surface runoff and a high ground water table provide hydrology to this wetland. Delineated with flags #1-7.	C/D-4
WET-5C	PFO1	Sweet gum, red maple, Japanese stilt grass, and greenbrier.	0.00 ac.	Wetland hydrology comes from ground water seepage and is retained by clay soils. Wetland near border of study area. Wetland when mapped was outside of study area and open-ended with flags #1-14 o.e.	C/D-4
WET-6C	PFO1/PEM	Phragmites, cattails, red maple, and sweet gum.	0.19 ac	This wetland is a deep swale with poor drainage between the I-95 fill slope and uplands border. It receives drainage from several intermittent waters before flowing into WUS-14C. Flags #1-14.	C/D-4
WET-7C	PFO1	Pin oak, sweet gum, and red maple.	0.18 ac.	Wetland receives highway road drainage. Water seeps through wetland area before entering the channel of WUS-16C. Flags #1-29.	C/D-3
WET-8C	PFO1	Red maple, pin oak.	0.00 ac.	Wetland receives runoff from WUS-16C before entering WUS-17C. Flags #1-5. Wetland was delineated but when mapped was outside study area.	C/D-3
WET-9C	PEM1	Sensitive fern, cattails, and eastern false willow.	0.04 ac.	Wetland fed from spring seeps emerging out of a hillside slope. Waters flows into a drainage pipe. Flags #1-9.	C/D-2
		TOTAL ACREAGE	0.64 ac.		

Table 6A. Waters of the U.S. Delineated within Segment C (MD 24 to Abington Rd)

WUS ID	Hydrologic Regime	Description	Associated Wetlands	Map #
WL-010	Intermittent	Tributary to Winters Run	N/A	C/D-2
WUS-1C/ WL 009	Perennial	Tributary to Winters Run	WP-015/WET- 1C	C/D-2
WUS-2C	Ephemeral	Tributary to Winters Run	WET-1C	C/D-2
WUS 18C (S.B.) / WL 012 (N.B. & S.B.)	Perennial	Haha Branch	N/A	C/D-3
WUS-3C	Ephemeral	Tributary to Winters Run	N/A	C/D-3
WUS-4C	Ephemeral	Drainage channel to tributary to Winters Run	N/A	C/D-3
WUS-5C	Intermittent	Drainage channel to tributary to Winters Run	N/A	C/D-3
WUS-5C-A/O	Ephemeral	Tributary to Winters Run	N/A	C/D-3
WUS-6C	Ephemeral	Tributary to Winters Run	N/A	C/D-3
WUS-7C	Ephemeral	Drainage channel to tributary of Winters Run	N/A	C/D-4
WUS -7C-a	Ephemeral	Drainage channel to tributary of Winters Run	N/A	C/D-4
WUS -7C-c	Ephemeral	Drainage channel to tributary of Winters Run	N/A	C/D-4
WUS-8C	Intermittent	Tributary to Winters Run	WET-2C	C/D-4
WUS-9C	Ephemeral	Tributary to Winters Run	N/A	C/D-4
WUS-10C	Perennial	Tributary to Winters Run	N/A	C/D-4

Table 6A. Waters of the U.S. Delineated in Segment C (MD 24 to Abington Rd)

WUS ID	Hydrologic Regime	Description	Associated Wetlands	Map #
WUS-10C-b	Ephemeral	Tributary to Winters Run	N/A	C/D-4
WUS-11C	Intermittent	Tributary to Winters Run	WET-3C, WET- 4C	C/D-4
WUS-11C-a	Ephemeral	Drainage channel to tributary of Winters Run	N/A	C/D-4
WUS-12C	Ephemeral	Drainage channel to tributary of Winters Run	N/A	C/D-4
WUS-13C	Intermittent	Tributary to Winters Run	N/A	C/D-4
WUS-14C	Perennial	Tributary to Winters Run	WET-6C	C/D-4
WUS-14C-a	Ephemeral	Tributary to Winters Run	N/A	C/D-4
WUS-15C	Intermittent	Drainage channel to tributary of Winters Run	WET-6C	C/D-4
WUS-16C	Ephemeral	Drainage channel to tributary to Winters Run	WET-7C	C/D-3
WUS-17C	Perennial	Tributary of Haha Branch to Winters Run	N/A	C/D-3
WUS-19C	Ephemeral	Drainage channel to tributary of Winters Run	N/A	C/D-1
WUS-20C/ WL 011	Ephemeral	Drainage channel to tributary to Winters Run	N/A	C/D-1
WUS-21C	Ephemeral	Drainage channel to tributary of Winters Run	N/A	C/D-1
WL 001	Perennial	Tributary to Winters Run	WP 005	C/D-1
WL 002	Intermittent	Drainage channel to tributary to Winters Run N/A		C/D-1
WL 003	Intermittent	Tributary to Winters Run	N/A	C/D-1
WL 006	Intermittent	Tributary to Winters Run	WP006, WP 007	C/D-1

Table 7. Wetlands Delineated within Segment D (Abington Rd to MD 543)

Wetland ID	Cowardin Classification	Dominant Vegetation	Acreage Within Study Area	Comments	Map #
WET-1D	PFO/PEM	Sweet gum, red maple, American hornbeam, and Japanese stilt grass.	0.14 ac.	A PEM surrounded by a PFO wetland within the floodplain of Bynum Run. No surface connection to Bynum Run was found. Delineated with flags #1-13.	C/D-6
WET-2D	PFO1	Sweet gum, red maple, silver maple, and American hornbeam.	0.10 ac.	Wetland was inundated with pocket pools and drainage patterns. Delineated by flags #1- 20.	C/D-5
WET-3D	PFO1	Sycamore, sweet gum, and green ash.	0.02 ac.	A forested wetland which is fed from spring seeps along the surrounding upslope. Wetland drains into WUS-13D. Delineated by flags #1-6.	C/D-6
WET-4D	PFO1	Red maple and sweet gum.	0.04 ac.	This wetland has similar features as WET-3D and drains into WUS-13D as well. Delineated with flags #1-7.	C/D-6
WET-5D	PEM1	Broadleaf cattail and soft rush.	0.01 ac.	Wetland is fed from water seeping from a cut/fill slope adjacent to the MD-543 ramp. Wetland appears to be isolated and vegetation within wetland gets mowed. Defined by flags #1-6.	C/D-8
WET-6D	PEM1	Japanese stilt grass, poison ivy, soft rush, and swamp milkweed.	0.07 ac.	Wetland is old retention pond which has developed wetland characteristic. Wetland drains into WUS-16D. Delineated with flags #1-12 o.e. and left open-ended.	C/D-7
WET-7D	PEM1	Black willow, deer tongue grass, and broadleaf cattail.	0.02 ac.	Wetland is formed from a man-made storm water retention area which has taken on wetland characteristics. Wood duck boxes placed in wetland were noted. Delineated by flags # 1-12.	C/D-8
WET-9D	PEM1/PFO	Sweet gum, red maple, soft rush, grass spp. and sedge spp.	0.12 ac	This wetland extended beyond the study area and was left open-ended. Wetland contained some ponded open water areas. Mallard ducks were present on water. Delineated by flags #1-17.	C/D-7
WET-10D	PFO1	Sweet gum, red maple, soft rush, swamp milkweed, and American sycamore.	0.06 ac.	Wetland is formed from a man made catch basin. Wetland drains into WUS-19D and flows to WUS-14D (Bynum Run).	C/D-7
WET-18D	PEM1	Broadleaf cattail and phragmites.	0.02 ac.	A small, emergent wetland formed from roadway drainage. Wetland drains into WUS-18D. Delineated by flags #1-4.	C/D-8
		TOTAL ACREAGE	0.60 ac.		

Table 7A. Waters of the U.S. Delineated within Segment D (Abington Rd to MD 543)

WUS ID	Hydrologic Regime	Stream name / Tributary to	Associated Wetlands	Мар #
WUS-1D	Intermittent	Tributary to Bynum Run	N/A	C/D-5
WUS-1D-b	Ephemeral	Tributary to Bynum Run	N/A	C/D-5
WUS-1D-c	Intermittent	Tributary to Bynum Run	N/A	C/D-5
WUS –1D-d	Ephemeral	Tributary to Bynum Run	N/A	C/D-5
WUS-2D	Ephemeral	Tributary to Bynum Run	N/A	C/D-5
WUS-2D-a	Intermittent	Tributary to Bynum Run	N/A	C/D-5
WUS-2D-b	Ephemeral	Tributary to Bynum Run	N/A	C/D-5
WUS-3D (N.B. & S.B.)	Perennial	Bynum Run	WET-1D	C/D-6
WUS-4D	Perennial	Tributary to Bynum Run	WET-2D, WET-1D	C/D-5 & C/D-6
WUS-4D-c	Ephemeral	Tributary to Bynum Run	WET-2D	C/D-5
WUS-4D-d	Ephemeral	Tributary to Bynum Run	WET-2D	C/D-5
WUS-5D	Ephemeral	Drainage channel to tributary of Bynum Run	N/A	C/D-6
WUS-6D	Ephemeral	Drainage channel into tributary of Bynum Run	N/A	C/D-5
WUS-7D	Ephemeral	Tributary to Bynum Run	N/A	C/D-5
WUS-8D	Perennial	Tributary to Bynum Run	N/A	C/D-4 & C/D-5
WUS-8D-a	Ephemeral	Drainage channel to tributary of Bynum Run	N/A	C/D-4

Table 7A. Waters of the U.S. Delineated within Segment D (Abington Rd to MD 543)

WUS ID	Hydrologic Regime	Description	Associated Wetlands	Map #
WUS-9D	Intermittent	Tributary to Bynum Run	N/A	C/D-4
WUS-10D	Intermittent	Tributary to Bynum Run	N/A	C/D-4
WUS-11D/ WUS-8D	Perennial	Tributary to Bynum Run	N/A	C/D-5
WUS-12D	Ephemeral	Drainage channel to tributary of Bynum Run	N/A	C/D-6
WUS-13D	Intermittent	Drainage channel to tributary of Bynum Run	N/A	C/D-6
WUS-13D-b	Ephemeral	Drainage channel to tributary of Bynum Run	WET-3D & WET-4D	C/D-6
WUS-14D (N.B. & S.B.)	Perennial	James Run	N/A	C/D-7
WUS-15D	Intermittent	Tributary to James Run	N/A	C/D-7
WUS-16D	Intermittent	Tributary to James Run	WET-6D	C/D-7
WUS-17D	Intermittent	Tributary to Bush River	WET-7D	C/D-8
WUS-18D	Intermittent	Tributary to Bush River	WET-9D	C/D-7
WUS-19D	Intermittent	Tributary to James Run	WET-10D	C/D-7
WUS-20 D	Ephemeral	Tributary to James Run	WET-10D	C/D-7
WUS-21D	Intermittent	Tributary to Bush River	N/A	C/D-8
WUS-21D-b	Ephemeral	Drainage channel to tributary of Bush River	N/A	C/D-8
WUS-22D	Intermittent	Tributary to Bush River	N/A	C/D-8
WUS-23D	Intermittent	Tributary to Bush River	WET-1E	C/D-8

Table 8. Wetlands Delineated within Segment E (MD 543 to Stepney Rd.)

Wetland ID	Cowardin Classification	Dominant Vegetation	Acreage Within Study Area	Comments	Map #
WET-1E	PEM1	Phragmites	0.001 ac.	Wetland vegetation dominated by phragmites. Storm water runoff from WUS-1E flows into this wetland. Wetland left opened-ended as it extended outside of study area. Flags #1-4 o.e. & A-C o.e.)	E-1
WET-2E	PEM1	Phragmites, sweet gum and groundsel tree	0.41 ac.	Wetland is fed by small spring seeps and dominated by phragmites. Wetland drains into WUS 4E/WUS-3E. One line of wetland left opened-ended outside of study area. Delineated #1a-7a o.e. & 1-18.	E-2
WET-3E	PEM1	Broadleaf cattail and phragmites	0.04 ac.	This wetland is a storm water channel that has developed wetland characteristics. Waters drain into WUS-4E. Delineated with flags #1-6 and A-F.	E-2
WET-4E	PEM1	Broadleaf cattail, phragmites, and silky dogwood	0.06 ac.	This wetland is located within a storm water drainage channel into WUS-4E. Flags #1-11.	E-2
WET-5E	PSS1	Sweet gum, red maple, and soft rush	0.01 ac.	This isolated wetland is along a gas line. Heavy clay soils help retains surface water. Flushed an Am. woodcock from area.	E-2
WET-6E	PFO/PEM	Sweet gum, red maple, green ash, green briar, and multi flora rose.	0.05 ac.	Wetland in the floodplain forest of WUS-7E. Delineated with flags #1-6.	E-2
WET-7E	PFO1	Sweet gum, red maple, and elm spp.	0.06 ac.	Wetland located in a floodplain forest and helps buffers WUS-10E. Flows into WUS-10E. Delineated by flags #1-11.	E-3
WET-8E	PFO1	Pin oak, sweet gum, green briar, and Japanese honeysuckle	0.07 ac.	This floodplain wetland fed from a spring seep and helps buffers other side of WUS-10E. Wetland drains into WUS-10E and WUS-11E. Flags #1-6.	E-3
WET-9E	PFO1	Red maple, sweet gum, ironwood, and green ash.	0.15 ac.	The wetland drains into WUS-14E. Hydrology is fed from spring seeps and upland runoff. ATV vehicle disturbance in wetland was noted. Flags #1-11.	E-4
WET-10E	PFO1	Skunk cabbage, sweet gum, and ironwood.	0.06 ac.	Wetland is in a low swale next to WUS-14E. Standing water in areas of wetland which act as amphibian breeding pools. Flags #1-19.	E-4
WET-11E	PFO1	Red maple, sweet gum, black gum, spice bush, skunk cabbage, and cinnamon fern.	0.37 ac.	A forested wetland which buffers WUS-14E. Spring seeps and a high ground water table feed this wetland. The channel of WUS-14 adjacent to this wetland is concrete lined. Flags #1-44.	E-5
WET-11E-a	PEM1	Phragmites, broadleaf cattail, and stilt grass.	0.00 ac.	Wetland located at the edge of a large pond created by a beaver dam. Area located outside of study area and left open-ended. Flags #1a-7a o.e.	E-5
WET-12E	PFO1	Sweet gum, red maple, and deer tongue grass	0.03 ac.	Wetland within a natural drainage swale which connects to WUS-14E. Some ATV trail disturbance was noted. Flags #1-9.	E-5
WET-13E	PFO1	Red maple, poison ivy, soft rush, and Japanese honeysuckle	0.05 ac.	Wetland within a drainage swale. Spring peepers (herps) were noted using the wetland for breeding. Flags #1-10.	E-6

Table 8. Wetlands Delineated within Segment E (MD 543 to Stepney Rd.)

Wetland ID	Cowardin Classification	Dominant Vegetation	Acreage Within Study Area	Comments	Map #
WET-14E	PFO1/PEM	Soft rush, sedge, grass spp, and red maple.	0.04 ac.	A PEM wetland surrounded by deciduous forest. American toads observed laying eggs in wetland. Ties into WUS-18E. Flags #1- 9.	E-5
WET-15E	PFO1	Ironwood, skunk cabbage, red maple, spice bush, and black gum.	0.26 ac.	A hillside spring seep which flows into WUS-18E. Very stony land. Skunk cabbage thick in herb layer. Flags #1-10 & A-Q.	E-5
WET-16E	PFO1	Green ash, American beech, red maple, skunk cabbage, and ironwood.	0.03 ac.	Hillside seep, natural drainage valley. Connected to WUS-18E. Flags #1- 12.	E-5
WET-17E	PFO1	Green ash, red maple, soft rush, grasses and sedges.	0.02 ac.	Stony land. Hillside seeps into ridge and valley. Poorly drained soil. Flags #1-15.	E-4
WET-18E	PFO1	Skunk cabbage, s. arrow- wood, red maple and ironwood	0.10 ac.	Wetland is in a natural drainage valley. Amphibian egg masses in pocket pools were found. Water connects to WUS-14E. Flags #1-17.	E-4
WET-19E	PFO1	Red maple, hornbeam, s. arrow-wood, sweet gum, and skunk cabbage	0.18 ac.	Wetland is in a natural drainage valley with spring seeps. Water drains into WUS-14E. Flags #1-28.	E-4
WET-20E	PFO1	Red maple, skunk cabbage, sweet gum, spice bush, and high bush blueberry.	0.15 ac.	Wetland is located in a natural drainage ridge and valley with spring seeps with stony ground. Waters flows into WUS-15E. Flags #1-25.	E-4
WET-21E	PFO1	Spice bush, red maple, sweet gum. Skunk cabbage and Jap. stilt grass	0.26 ac.	Wetland is fed from upland drainage and spring seeps. Forested landscape with herbaceous layer. Waters connect to WUS-16E. Flags #1-39.	E-4
WET- 22E	PFO1	Red maple, sweetgum, skunk cabbage, spice bush, arrow wood, ironwood.	0.26 ac.	Valley drainage plus spring seeps feed this forested wetland. Wetland was left openended as it extends outside of study area. Connects to WUS-17E. Flags #1-30 o.e., A-l o.e., #a-13a.	E-3
WET-23E	PFO1	Southern arrow wood, spice bush, red maple, and sweet gum.	0.03 ac.	Forested area in a valley and ridge landscape. Waters of wetland flow into WUS-18E. Flags #1-13.	E-3
WET-24E	PEM1/POW	Broadleaf cattail, soft rush, red maple and sedge spp.	0.11 ac.	An emergent open-water wetland formed from a water impoundment. Amphibian breeding pond. Drains into WUS-19E. Flags #1-12.	E-3
WET-25E	PEM1	Broadleaf cattail, watercress spp. groundsel tree	0.10 ac.	A linear narrow strip of emergent wetland/drainage swale which receives runoff from impervious surfaces. Connects to WUS-5E on north bound side. Flags #1-25.	E-2
WET-26E	PEM1	Broadleaf cattail and marshmallow	0.04 ac	A linear emergent wetland located in a swale. Connects to WUS-22E and drains into WUS-23E. Flags #1-16.	E-1

Table 8. Wetlands Delineated Within Segment E (MD 543 to Stepney Rd.)

Wetland ID	Cowardin Classification	Dominant Vegetation	Acreage Within Study Area	Comments	Map #
MH WET-1	PEM1	Broadleaf cattail and narrowleaf cattail	.05 ac	Emergent wetland influenced by roadway drainage. Flags # 1a-4a & 1-4.	E-3
MH WET-2	PFO1	Sweetgum, green ash, arrowwood, and sensitive fern	.02 ac	Forested wetland connects to concrete drainage swale and may receive floodflow from MH WUS-2. Flags # 1-5.	E-3
MH WET-3	PFO1	Green ash, sensitive fern, and arrowwood	.04 ac	Isolated wetland, no surface water connection. Flags # 1-17.	E-3
MH WET-4	PSS1	Broadleaf cattail, sweetgum, and red maple	.03 ac	Wetland influenced by roadway drainage. Disturbed soils with sulfuric odor. Drains into MH WUS-8. Flags # 1a-5a & 1-5.	E-4
		TOTAL ACREAGE	3.08 ac.		

Table 8A. Waters of the U.S. Delineated within Segment E (MD 543 to Stepney Rd.)

WUS ID	Hydrologic Regime	Description	Associated Wetlands	Map #
WUS-1E	Ephemeral	Tributary to Bush River	WET-1E	E-1
WUS-3E	Intermittent	Tributary to Bush River	WET-2E	E-2
WUS-4E	Intermittent	Tributary to Bush River	WET-2E, WET-3E, WET-4E	E-2
WUS-5E	Intermittent	Tributary to Bush River	N/A	E-2
WUS-6E	Intermittent	Tributary to Bush River	WET-6E	E-2
WUS-7E N.B. WUS-20E S.B.	Perennial	Tributary to Bush River	WET-6E	E-2
WUS-8E	Intermittent	Tributary to Bush River	N/A	E-2
WUS-9E	Intermittent	Tributary to Bush River	N/A	E-2
WUS-10E	Perennial	Tributary to Bush River	WET-7E, WET-8E	E-3
WUS-10E-A	Intermittent	Tributary to Bush River	WET-7E	E-3
WUS-11E	Ephemeral	Drainage channel to tributary of Bush River WET-8E		E-3
WUS-12E	Perennial	Tributary to Grays Run to Bush River	N/A	E-4
WUS-13E	Perennial	Tributary to Grays Run to Bush River	N/A	E-4
WUS-13E-a	Ephemeral	Tributary to Bush River	N/A	E-4
WUS-13E-s	Ephemeral	Tributary to Bush River	N/A	E-4
WUS-14E	Perennial	Tributary to Bush River	WET-9E, WET-10E, WET-11E, WET 12E	E-4
WUS-14E-a	Ephemeral	Tributary to Bush River	N/A	E-4

Table 8A. Waters of the U.S. Delineated within Segment E (MD 543 to Stepney Rd.)

WUS ID Hydrologic Regime		Description	Associated Wetlands	Map #
WUS-14E-c	Ephemeral	Tributary to Bush River	WET-9E	E-4
WUS-14E-d	Intermittent	Tributary to Bush River	N/A	E-5
WUS-14E-e	Ephemeral	Tributary to Bush River	N/A	E-5
WUS-14E-f	Ephemeral	Tributary to Bush River	N/A	E-5
WUS-14E-aa	Ephemeral	Tributary to Bush River	N/A	E-4
WUS-14E-cc	Ephemeral	Tributary to Bush River	N/A	E-4
WUS-14E-dd	Intermittent	Tributary to Bush River	WET-17E &WET-18E	E-4
WUS-15E (N.B.) WUS-17E (S.B.)	Perennial	Grays Run	N/A	E-5
WUS-15E-a	Ephemeral	Tributary to Bush River	N/A	E-5
WUS-15E-c	Ephemeral	Tributary to Bush River	N/A	E-5
WUS-15E-aa	Intermittent	Tributary to Bush River	WET-19E	E-4
WUS-15E-bb	Intermittent	Tributary to Bush River	WET-19E & WET-20E	E-4
WUS-16E	Ephemeral	Tributary to Bush River	N/A	E-6
WUS-16E-a	Ephemeral	Tributary to Bush River	N/A	E-6
WUS-16E-c	Intermittent	Tributary to Bush River	WET-21A	E-4
WUS-16E-d	Ephemeral	Tributary to Bush River	N/A	E-4
WUS-16E-aa	Ephemeral	Tributary to Bush River	N/A	E-4
WUS-16E-bb	Intermittent	Tributary to Bush River	N/A	E-6
WUS-16E-ee/ MH WUS 8	Perennial	Tributary to Bush River	WET-21E	E-4
WUS-17E-a	Intermittent	Tributary to Bush River	N/A	E-5
WUS-17E-c	Intermittent	Tributary to Bush River	N/A	E-5

Table 8A. Waters of the U.S. Delineated within Segment E (MD 543 to Stepney Rd.)

WUS ID	Hydrologic Regime	Description	Associated Wetlands	Map #
WUS-17E-aa	Intermittent	Tributary to Bush River	WET-22E	E-3
WUS-17E-dd	Perennial	Tributary to Bush River	WET-22E	E-4
WUS-18E	Intermittent	Tributary to Bush River	WET-14E, WET-15E, WET-16E	E-5
WUS-18E-a	Ephemeral	Tributary to Bush River	N/A	E-5
WUS-18E-b	Intermittent	Tributary to Bush River	N/A	E-5
WUS-18E-aa	Intermittent	Tributary to Bush River	N/A	E-3
WUS-18E-bb	Perennial	Tributary to Bush River	N/A	E-3
WUS-18E-cc	Intermittent	Tributary to Bush River	N/A	E-3
WUS-18E-dd	Ephemeral	Tributary to Bush River	N/A	E-3
WUS-18E-ee	Ephemeral	Tributary to Bush River	N/A	E-3
WUS-18E-ff	Perennial	Tributary to Bush River	WET-23E	E-3
WUS-18E-gg	Perennial	Tributary to Bush River	N/A	E-3
WUS-19E	Intermittent	Tributary to Bush River	WET-24E	E-3
WUS-20E-a Ephemeral		Drainage channel to tributary of Bush River	N/A	E-2
WUS-21E	Ephemeral	Tributary to Bush River	N/A	E-1
WUS-22E	Ephemeral	Tributary to Bush River	WET-26E	E-1
WUS-23E	Ephemeral	Tributary to Bush River	WET-27E	E-1

Table 8A. Waters of the U.S. Delineated within Segment E (MD 543 to Stepney Rd.)

WUS ID	Hydrologic Regime	Description	Associated Wetlands	Map #
MH WUS-1	Ephemeral	Tributary to Bush River	N/A	E-3
MH WUS-2	Intermittent	Tributary to Bush River	MH-WET-2	E-3
MH-WUS-3	Ephemeral	Tributary to Bush River	N/A	E-3
MH WUS-4	Perennial	Tributary to Bush River	N/A	E-3
MH WUS-4-a	Ephemeral	Tributary to Bush River	N/A	E-3
MH WUS-5	Perennial	Tributary to Bush River	N/A	E-3
MH WUS-6	Perennial	Tributary to Bush River	N/A	E-3
MH WUS-6a	Ephemeral	Tributary to Bush River	N/A	E-3

 Table 9. Wetlands Delineated Within Segment F (Stepney Road to Maxa Road)

Wetland ID	Cowardin Classification	Dominant Vegetation	Acreage Within Study Area	Comments	Map #
WET-1F	PFO1	Sweet gum, red maple, skunk cabbage and greenbrier	0.03 ac.	This wetland is fed from a spring seep. Left opened ended outside of study area. Wetland drains into WUS-5F. Flags #1-18 o.e.	F-2
WET-2F	PEM1	Phragmites, sweet gum, and red maple.	0.06 ac.	The soil profile was disturbed. Vegetation is dominated by phragmites. Wetland line left open outside the study area. Flags #1- 12, o.e. @ flags 7 & 8.	F-4
WET-3F	PEM1	Phragmites, sweet gum, and red maple.	0.08 ac.	Wetland dominated by phragmites. Left openended outside of study area. Flags 1-14, o.e. @ flags 1& 14.	F-4
WET-4F	PFO1	Phragmites, sweet gum, red maple, and soft rush	0.08 ac.	Wetland connection to WUS-7F and extends outside of study area. Flags a-f, & #1-9.	F-4
WET-5F	PSS/PEM	Skunk cabbage, red maple, sweet gum, and ironwood,	0.01 ac.	Wetland is a swale holding water between forested uplands and WUS-5E. This wetland extends outside of study area where it connects to WUS-5E. Flags #1-11 o.e.	F-5
WET-6F	PFO1	Swamp white oak, pin oak, spicebush, arrow-wood, sensitive fern, and skunk cabbage	0.25 ac.	This wetland was shown on NWI mapping and confirmed. A large PFO wetland with a diversity of plant species. Flags #1-29 and left open-ended as it extended outside of study area.	F-5
WET-7F	PEM	Black willow, touch me not, and Stilt grass.	0.09 ac.	WUS-7F flows into and out of this wetland. Wetland extends outside of study area. Flags #1-16.	F-4
WET-8F	PEM1	Red maple, black willow, soft rush, broad leaved cattail, and sensitive fern.	0.12 ac.	Wetland located downstream from a retention pond. Wetland drains into WUS-8F and extends outside of study area, Delineated by Flags #1-15.	F-3
WET-9F	PEM1	Broad leaved cattail, sweet gum, soft rush, Stilt grass.	0.03 ac.	Wetland is located above a sewer line. The soil profile was disturbed. Wetland connects into WUS-9F. Delineated by Flags #1-11.	F-2
WET-10F	PEM1	Skunk cabbage, touch me not, and spice bush,	0.01 ac.	Drainage seeping into a swale forms this wetland, and then it flows into WUS -9F. Extends outside of study area, Delineated by Flags #1-12.	F-2
WET-11F	PFO,	Open water, skunk cabbage, and red maple	0.01 ac.	Small ponded wetland along side WUS-9F. Delineated by Flags #1-6.	F-2
WET-12F	PFO	Red maple, and skunk cabbage.	0.01 ac.	Wetland lies in a old stream tributary next to WUS-10 F. Extends outside of study area, Delineated by Flags #1-8.	F-1
		TOTAL ACREAGE	0.78 ac.		

Table 9A. Waters of the U.S. delineated within Segment F (Stepney Road to Maxa Road)

WUS ID	Hydrologic Regime	Description	Associated Wetlands	Map #
WUS-1F	Ephemeral	Tributary to Bush River	N/A	F-1
WUS-2F (N.B.) WUS 11F (S.B.)	Intermittent	Tributary to Bush River	N/A	F-1
WUS-3F (N.B.) WUS-10F (S.B.)	Perennial	Cranberry Run	N/A	F-1
WUS-4F (N.B.) WUS-9F (S.B.)	Perennial	Tributary to Cranberry Run	WET-9F, WET- 10F, WET-11F	F-2
WUS-5F	Perennial	Tributary to Cranberry Run	ibutary to Cranberry Run WET-1F	
WUS-6F (N.B.) WUS-7F-ff (S.B.)	Perennial	Carsins Run	WET-2F, WET-3F, WET-7F	F-4
WUS-7F	Intermittent	Tributary to Bush River	WET-4F	F-4
WUS-7F-b	Ephemeral	Tributary to Bush River	N/A	F-4
WUS-5F-F	Perennial	Carsins Run to Bush River	WET-5F	F-5
WUS-5F-cc	Ephemeral	Tributary to Bush River	N/A	F-5
WUS -5F-aa	Ephemeral	Tributary to Bush River	N/A	F-5
WUS-6F-cc	Intermittent	Tributary to Bush River	N/A	F-5
WUS-8F	Perennial	Unnamed tributary flows into Cranberry Run	WET-8F	F-3

5.0 SUMMARY

There were 121 wetlands totaling 11.80 acres and 198 WUS identified within the study area. The wetlands' hydrology was fed from a variety of sources including spring seeps, seasonally high ground water tables, highway drainage, and surface water runoff. All of the WUS delineated in the study area are connected to either the Gunpowder River or the Bush River watersheds. Appendix A contains the wetland data forms. Appendix B contains representative photographs of the wetlands and WUS. Appendix C contains the WUS and wetland delineation maps.

6.0 JURISDICTIONAL DETERMINATION

The Jurisdictional Determination (JD) process establishes boundaries that identifies and separates the USACE regulated wetland areas or MDE regulated areas from non-wetland (upland) areas that are not regulated. Wetland and WUS delineations were conducted for the purpose of jurisdictional review by the USACE. Wetland investigations of this type reflect the current state of variable conditions and require a level of professional judgment. Verification of the jurisdictional boundaries by the USACE and/or MDE is recommended. Authorization from the USACE and MDE is required prior to conducting activities that may directly or indirectly affect waters of the U.S., including all wetlands. A JD is tentatively scheduled for September 2006. Any impacts to the delineated areas may require a permit from the U.S. Army Corps of Engineers (USACE) and/or the Maryland Department of the Environment (MDE) prior to the initiation of any construction activities.

7.0 REFERENCES

- Cowardin, L.M., V. Carter, F.C. Golet and E.T. Laroe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. U.S. Fish and Wildlife Service Pub. FWS/OBS-79/31, Washington, D.C., 103p.
- Environmental Laboratory. 1987. Corps of Engineers Wetland Delineation Manual, Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi.
- Kollmorgen Instruments Corporation. 1988. Munsell Soil Color Charts, Baltimore, Maryland.
- National Technical Committee for Hydric Soils. 1985. *Hydric Soils of the United States*. U.S. Department of Agriculture, Washington, D.C.
- U.S. Department of Agriculture, Soil Conservation Service (SCS) in cooperation with Maryland Agricultural Experiment Station. 1976. *Soil Survey of Baltimore County, Maryland*.
- U.S. Department of Agriculture, Soil Conservation Service (SCS) in cooperation with Maryland Agricultural Experiment Station. 1975. *Soil Survey of Harford County Area, Maryland*.
- Reed, P.B. 1988. *National List of Plant Species that Occur in Wetlands: Northeast (Region 1)*. United States Fish and Wildlife Service Biological Report 88(24). 244pp.

APPENDIX A: DATA FORMS

WETLAND IDENTIFICATION AND DELINEATION REPORT

Project/Site: I-95 Sect	tion 200				Date:	1/16/	2006
· —	sportation Au	ıthority			Date: 1/ 16/ 2006 County: Harford		
	C. Brudin	attriority			State:	Maryl	
Do Normal Circumstances exist			⊠Yes	□No	Community ID:		
Is the site significantly disturbed		ion\2	⊠ res □Yes	⊠No	Transect ID:	vveu	and iA
Is the area a potential Problem A		ion):	_	⊠No	Plot ID:	\\/otlo	nd Plot
(If needed, explain on reverse			∐Yes	MINO	PIOUID.	vveua	na Piot
(ii fleeded, explain on reverse	.)						
EGETATION							
Dominant Plant Species	Stratum	Indicator	Don	ninant Plant	Species	Stratum	Indicator
1.Liquidambar styraciflua	S	FAC	9.				
2. Acer rubrum	S	FAC					
3. Lonicera japonica	V	FAC-					
4. Allium vineale		FACU-					
5. Smilax rotundifolia	S	FAC					
6. Lindera benzoin	S	FACW-					
7. Viburnum dentatum	S	FAC					
8							
o			10				
IYDROLOGY							
Recorded Data (Describe in			Wetland F	ydrology Ind	dicators:		
Stream, Lake, or Tide	Gauge			y Indicators	i:		
Aerial Photographs				Inundated			
☐ Other					n Upper 12 Inches		
No Recorded Data Availab	le			Water Mark	(S		
			ᅴ	Drift Lines			
				Sediment D	•		
Field Observations:			Secon		atterns in Wetlands		
			Occor	daily illuloat			
Depth of Surface Water	_	(in)		Oxidized Ro		,	
Depth of Surface Water:		(in.)			oot Channels in Up	,	
·				Water-Stair	oot Channels in Up ned Leaves	,	
Depth of Surface Water: Depth to Free Water in Pit:		(in.) (in.)		Water-Stair	oot Channels in Up ned Leaves Survey Data	,	
·				Water-Stair Local Soil S FAC-Neutra	oot Channels in Up ned Leaves Survey Data	,	
Depth to Free Water in Pit:	6	(in.)		Water-Stair Local Soil S FAC-Neutra	oot Channels in Up ned Leaves Survey Data al Test	,	
Depth to Free Water in Pit: Depth to Saturated Soil: Remarks:	6	(in.) (in.)		Water-Stair Local Soil S FAC-Neutra Other (Expl	oot Channels in Up ned Leaves Survey Data al Test lain in Remarks)	per 12 Inches	
Depth to Free Water in Pit: Depth to Saturated Soil: Remarks: Wetland seems to receive a I	6 0 arge amount o	(in.)(in.) of water from su	rface flow v	Water-Stair Local Soil S FAC-Neutra Other (Expl	oot Channels in Up ned Leaves Survey Data al Test lain in Remarks)	per 12 Inches	zon. A SWM
Depth to Free Water in Pit: Depth to Saturated Soil: Remarks:	6 0 arge amount o	(in.)(in.) of water from su	urface flow v	Water-Stair Local Soil S FAC-Neutra Other (Expl	oot Channels in Up ned Leaves Survey Data al Test lain in Remarks)	per 12 Inches	zon. A SWM
Depth to Free Water in Pit: Depth to Saturated Soil: Remarks: Wetland seems to receive a I	6 0 arge amount o	(in.)(in.) of water from su	rface flow v	Water-Stair Local Soil S FAC-Neutra Other (Expl	oot Channels in Up ned Leaves Survey Data al Test lain in Remarks)	per 12 Inches	zon. A SWM
Depth to Free Water in Pit: Depth to Saturated Soil: Remarks: Wetland seems to receive a I	6 0 arge amount o	(in.)(in.) of water from su	rface flow v	Water-Stair Local Soil S FAC-Neutra Other (Expl	oot Channels in Up ned Leaves Survey Data al Test lain in Remarks)	per 12 Inches	zon. A SWM

Map Unit Name (Series and Phase):	Alluvial land		Drainage Class:	SWP - VP
Taxonomy (Subgroup):	NA		Field Observations Confirm Mapped Type?	No
Profile Descriptions: Depth (inches) Horizon 0-6 A 6-8 AB 8-16 B	Matrix Color (Munsell Moist) 10YR 3/2 10 YR 4/2 2.5 Y 5/4	Mottle Colors (Munsell Moist) 5 YR 4/6 5 YR 4/6 10 YR 5/8	Mottle Abundance/ Size/Contrast common many many	Texture, Concretions, Structure, etc, Sand/clay loam Sandy/clay loam Sandy/clay loam
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regin Reducing Conditions Gleyed or Low-Chron Remarks: B layer is restricting infi	S	Organ Listed Listed Other	Organic Content in Surface Layic Streaking in Sandy Soils on Local Hydric Soils List on National Hydric Soils List (Explain in Remarks)	er in Sandy Soils
WETLAND DETERMIN	ATION			
Hydrophytic Vegetation Pr Wetland Hydrology Preser Hydric Soils Present?			s Sampling Point Within a Wetla	(Check) and? ⊠Yes ⊡No
Classified as a PFO/PE	EM wetland	,		

Approved by HQUSACE 3/92

Applicant/Owner: MD Transportation Authority Investigator: H. Canfield, C. Brudin, J. Reed Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.) County: Baltimore State: Maryland Community ID: Wetland 3A Transect ID: Plot ID: Wetland plot (Flags 1-20) DP @ 3A-1	Project/Site: 1-30 Oct	vtion 200				Data	lanuary 1	0.000
Investigator: H. Canfield, C. Brudin, J. Reed State: Maryland	Applicant/Owner: MD Tran		ıthority			Date:		
Do Normal Circumstances exist on the site? Site is est esignificantly disturbed (Atypical Situation)? Site are as potential Problem Area? Site area as potential Problem Are		•	•					
Is the site significantly disturbed (Atypical Situation)? Yes			, J. INGGU				· ·	
Is the area a potential Problem Area? (If needed, explain on reverse.) Ves No Plot ID: Wetland plot			\0				VVEuc	ana sa
Continue Continue	,	` ' ' '	on) :				\/\otlo	nd plot
Dominant Plant Species Stratum Indicator Dominant Plant Species Stratum Indicator 1. Acer rubrum T				∟res	MINO			
Dominant Plant Species Stratum Indicator 1, Acer rubrum T FAC 2, Liriodendron tulipifera T FAC 10.	(If fleeded, explain on reverse	<u>.)</u>				(Fia	gs 1-20) Dr w	2 3A-1
1, Acer rubrum T FAC 9. 2, Liriodendron tulipifera T FACW 10. 4, llex verticilitata S FACW+ 11. 4, llex verticilitata S FACW+ 12. 5, Lindera benzoin S FACW+ 13. 6, Symplocarpus foetidus H OBL 14. 7. 15. 16. 8. 16. 16. Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 5/6= 83 % Remarks: Located along the floodplain of WUS-9A **Piper Company in C	/EGETATION							
2. Liriodendron tulipifera	Dominant Plant Species	Stratum	Indicator	Dom	ninant Plant	Species	Stratum	Indicator
10	1. Acer rubrum	T	FAC	9				
11.	2. Liriodendron tulipifera	T	FACU					
4. llex verticillata	3. Platanus occidentalis	T	FACW-					
5. Lindera benzoin S FACW 13, 14, 14, 15. 15. 15. 16. 15. 16. 16. 16. 16. 17. 16. 17. 18. 18. 19.	4. Ilex verticillata	S	FACW+					
6. Symplocarpus foetidus H OBL 14.	5. Lindera benzoin	S	FACW					
15.								
8								
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 5/6= 83 % Remarks: Located along the floodplain of WUS-9A YDROLOGY Georded Data (Describe in Remarks): Wetland Hydrology Indicators:	0							
Remarks: Located along the floodplain of WUS-9A			-					
□ Recorded Data (Describe in Remarks): Wetland Hydrology Indicators: □ Stream, Lake, or Tide Gauge Primary Indicators: □ Aerial Photographs □ Inundated □ Other □ Saturated in Upper 12 Inches □ No Recorded Data Available □ Water Marks □ Drift Lines □ Sediment Deposits □ Sediment Deposits □ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): □ Oxidized Root Channels in Upper 12 Inches □ Water-Stained Leaves □ Water-Stained Leaves Depth to Free Water in Pit: 8" (in.) □ Local Soil Survey Data □ FAC-Neutral Test □ Other (Explain in Remarks)	YDROLOGY							
☐ Stream, Lake, or Tide Gauge Primary Indicators: ☐ Aerial Photographs ☐ Inundated ☐ Other ☐ Saturated in Upper 12 Inches ☐ No Recorded Data Available ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Depth of Surface Water:		n Remarks):		Wetland H	vdrology Inc	dicators:		
□ Aerial Photographs □ Inundated □ Other □ Saturated in Upper 12 Inches □ Water Marks □ Drift Lines □ Sediment Deposits □ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): □ Depth of Surface Water: n/a (in.) □ Oxidized Root Channels in Upper 12 Inches □ Water-Stained Leaves □ Depth to Free Water in Pit: 8" (in.) □ Depth to Saturated Soil: 0 (in.) Other (Explain in Remarks)								
☐ Other ☐ Saturated in Upper 12 Inches ☐ No Recorded Data Available ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Depth of Surface Water:		Ü				:		
No Recorded Data Available	Aerial Photographs				•	:		
Drift Lines Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)					Inundated			
Field Observations: Depth of Surface Water:		le			Inundated Saturated in	n Upper 12 Inches		
Depth of Surface Water:		le			Inundated Saturated in Water Mark	n Upper 12 Inches		
Depth of Surface Water: n/a (in.) Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Depth to Saturated Soil: 0 (in.) Other (Explain in Remarks)		le			Inundated Saturated ir Water Mark Drift Lines	n Upper 12 Inches s		
Depth to Free Water in Pit: 8" (in.) Depth to Saturated Soil: 0 (in.) Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)	No Recorded Data Availab	le			Inundated Saturated ir Water Mark Drift Lines Sediment D Drainage Pa	n Upper 12 Inches s Deposits atterns in Wetlands		
Depth to Free Water in Pit:8"(in.) Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)	No Recorded Data Availab	le 			Inundated Saturated ir Water Mark Drift Lines Sediment D Drainage Pa dary Indicate	n Upper 12 Inches is peposits atterns in Wetlands ors (2 or more requ	ıired):	
Depth to Saturated Soil: O (in.) FAC-Neutral Test Other (Explain in Remarks)	No Recorded Data Availab Field Observations:		_(in.)	Secon	Inundated Saturated ir Water Mark Drift Lines Sediment D Drainage Pa dary Indicate Oxidized Re	n Upper 12 Inches is Deposits atterns in Wetlands ors (2 or more requoot Channels in Up	ıired):	
Depth to Saturated Soil: (in.)	No Recorded Data Availab Field Observations: Depth of Surface Water:	n/a		Secon	Inundated Saturated ir Water Mark Drift Lines Sediment D Drainage Padary Indicate Oxidized Ro Water-Stain	n Upper 12 Inches is Deposits atterns in Wetlands ors (2 or more requot Channels in Up	ıired):	
	No Recorded Data Availab Field Observations: Depth of Surface Water:	n/a		Secon	Inundated Saturated ir Water Mark Drift Lines Sediment D Drainage Padary Indicate Oxidized Ro Water-Stain Local Soil S	n Upper 12 Inches is Deposits atterns in Wetlands ors (2 or more requot Channels in Upped Leaves Survey Data	ıired):	
Remarks:	No Recorded Data Availab Field Observations: Depth of Surface Water: Depth to Free Water in Pit:	n/a 8"	(in.)	Secon	Inundated Saturated ir Water Mark Drift Lines Sediment D Drainage Pa dary Indicate Oxidized Ro Water-Stain Local Soil S FAC-Neutra	n Upper 12 Inches is Peposits atterns in Wetlands ors (2 or more requoot Channels in Upped Leaves Survey Data al Test	ıired):	
Remarks.	No Recorded Data Availab Field Observations: Depth of Surface Water: Depth to Free Water in Pit:	n/a 8"	(in.)	Secon	Inundated Saturated ir Water Mark Drift Lines Sediment D Drainage Pa dary Indicate Oxidized Ro Water-Stain Local Soil S FAC-Neutra	n Upper 12 Inches is Peposits atterns in Wetlands ors (2 or more requoot Channels in Upped Leaves Survey Data al Test	ıired):	
	No Recorded Data Availab Field Observations: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil:	n/a 8"	(in.)	Secon	Inundated Saturated ir Water Mark Drift Lines Sediment D Drainage Pa dary Indicate Oxidized Ro Water-Stain Local Soil S FAC-Neutra	n Upper 12 Inches is Peposits atterns in Wetlands ors (2 or more requoot Channels in Upped Leaves Survey Data al Test	ıired):	
	No Recorded Data Availab Field Observations: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil:	n/a 8"	(in.)	Secon	Inundated Saturated ir Water Mark Drift Lines Sediment D Drainage Pa dary Indicate Oxidized Ro Water-Stain Local Soil S FAC-Neutra	n Upper 12 Inches is Peposits atterns in Wetlands ors (2 or more requoot Channels in Upped Leaves Survey Data al Test	ıired):	
	No Recorded Data Availab Field Observations: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil:	n/a 8"	(in.)	Secon	Inundated Saturated ir Water Mark Drift Lines Sediment D Drainage Pa dary Indicate Oxidized Ro Water-Stain Local Soil S FAC-Neutra	n Upper 12 Inches is Peposits atterns in Wetlands ors (2 or more requoot Channels in Upped Leaves Survey Data al Test	ıired):	

Map Unit Name (Series and Phase):	Watchung silt loam, 3-	·8% slopes		Drainage Class:	PD		
Taxonomy (Subgroup):	Typic Ochraqualfs			Field Observations Confirm Mapped Type?	⊠Yes	□ No	
Profile Descriptions: Depth (inches) Horizon 0-8 8-12	Matrix Color (Munsell Moist) 10YR 5/2 10 YR 6/1	Mottle Colors (Munsell Mois 10 YR 10YR 6	st) 5/6	Mottle Abundance/ Size/Contrast Many, distinct Many, med, dist.		loam loam	
Hydric Soil Indicators:							
☐ Histosol ☐ Concretions ☐ Histic Epipedon ☐ High Organic Content in Surface Layer in Sandy Soils ☐ Sulfidic Odor ☐ Organic Streaking in Sandy Soils ☐ Aquic Moisture Regime ☐ Listed on Local Hydric Soils List ☐ Reducing Conditions ☐ Listed on National Hydric Soils List ☐ Gleyed or Low-Chroma Colors ☐ Other (Explain in Remarks)							
Remarks:							
WETLAND DETERMINA	ATION						
Hydrophytic Vegetation Pres Wetland Hydrology Present? Hydric Soils Present?		(Check)	Is this Sa	mpling Point Within a Wetla	_	heck)	
Remarks: A PFO wetland	at base of slope along t	he floodplain o	of WUS	9A.			

Approved by HQUSACE 3/92 Forms version 1/02

Project/Site: I-95 Sec	tion 200				Data	lanuam. 1	6 2006
· —	sportation Au	ıthority			Date:	6, 2006	
	eld, C. Brudin	•			County:	Baltim	-
		, J. Reed	<u> </u>		State:	Maryl	
Do Normal Circumstances exist			⊠Yes	□No		Wetla	and 4A
Is the site significantly disturbed		on)?	□Yes	⊠No	Transect ID:		
Is the area a potential Problem A			□Yes	⊠No	Plot ID:		and plot
(If needed, explain on reverse	.)				Di	P same as @ V	Vet 3A
'EGETATION							
Dominant Plant Species	Stratum	Indicator	Dor	ninant Plant	t Species	Stratum	Indicator
1. Acer rubrum	T	FAC					
2. Liriodendron tulipifera	T	FACU					
3. Platanus occidentalis	T	FACW-					
4. Ilex verticillata		FACW+					
5. Lindera benzoin	S	FACW					
6. Symplocarpus foetidus		OBL			_		
7							
8							
0			_ 10				
IVDBOLOGY							
IYDROLOGY	- Damada))	li rahas la sur la	d't		
Recorded Data (Describe i	*			Hydrology In			
☐ Stream, Lake, or Tide☐ Aerial Photographs	Gauge			ry Indicators Inundated	S.		
Other					in I Innar 12 Inahaa		
	I.				in Upper 12 Inches	•	
No Recorded Data Availab	le			Water Mark Drift Lines	KS		
			\dashv \exists	Sediment [Denneite		
Field Observations:					Patterns in Wetland	le	
rield Observations.			_		tors (2 or more req		
Depth of Surface Water:	n/a	(in.)		-	toot Channels in U		
·		_` ′		Water-Stai	ned Leaves	•	
Depth to Free Water in Pit:	8"	(in.)		Local Soil	Survey Data		
		_		FAC-Neutr	al Test		
Depth to Saturated Soil:	0	(in.)		Other (Exp	lain in Remarks)		
Remarks:							

Map Unit Name (Series and Phase):	Watchung silt loam, 3-	·8% slopes		Drainage Class:	F	. D	
Taxonomy (Subgroup):	Typic Ochraqualfs			Field Observations Confirm Mapped Type?	⊠Yes	□ No	
Profile Descriptions: Depth (inches) Horizon 0-8 8-12	Matrix Color (Munsell Moist) 10YR 5/2 10 YR 6/1	Mottle Colors (Munsell Mois 10 YR 5 10YR 6	Moist) Size/Contrast Structure, etc, YR 5/6 Many, distinct Silt loam				
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Organic Streaking in Sandy Soils Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Colors Remarks: Same as Wet 3A, continuation of Wet 3A, separated by small trib of WUS 10A. Groundwater seep zone out of side hill.							
WETLAND DETERMINA	ATION	<u>, </u>					
Hydrophytic Vegetation Pres Wetland Hydrology Present? Hydric Soils Present?		(Check)	Is this Sar	mpling Point Within a Wetla		check)	
Remarks: A PFO wetland	at base of slope along t	he floodplain o	f WUS 9	A.			

Project/Site: I-95 Sec	ction 200			Date:	January 1	6 2006
•	nsportation Au	ıthority		County:	Baltim	
	eld, C. Brudin			State:	Maryla	
Do Normal Circumstances exist		, 0	⊠Yes □No	Community ID:		
s the site significantly disturbed		on)?	□Yes □No	Transect ID:	******	and on
s the area a potential Problem		511).	□Yes ⊠No	Plot ID:	wetla	and plot
(If needed, explain on reverse				1 100 12.	Dp @ 5A-2	
(II Hooded, explain on levels	5.)				Dp ⊕ 0/. 2	
GETATION						
Dominant Plant Species	Stratum	Indicator	Dominant Pla	ant Species	Stratum	Indicator
1. Acer rubrum	T	FAC	9			
2. Acer rubrum	S	FAC				
3. Lonicera japonica	WV	FAC-				
4. Carex spp.						
5		_				
6						
7						
3			16			
'DROLOGY						
/DROLOGY	in Domarke)		Wotland Hydrology	Indicators		
Recorded Data (Describe			Wetland Hydrology			
Recorded Data (Describe			Primary Indicat	ors:		
Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs			Primary Indicat	ors: ed		
Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other	e Gauge		Primary Indicat Inundate Saturate	ors: ed d in Upper 12 Inches		
Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other	e Gauge		Primary Indicat Inundate Saturate Water M	ors: ed d in Upper 12 Inches arks		
Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other	e Gauge		Primary Indicat Inundate Saturate Water M Drift Line	ors: ed d in Upper 12 Inches arks es		
Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availat	e Gauge		Primary Indicat Inundate Saturate Water M Drift Line Sedimer	ors: ed d in Upper 12 Inches arks es nt Deposits		
Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other	e Gauge		Primary Indicat Inundate Saturate Water M Drift Line Sedimer Drainage	ors: ed d in Upper 12 Inches arks es	s	
Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availat	e Gauge	(in.)	Primary Indicat Inundate Saturate Water M Drift Line Sedimer Drainage Secondary Indi	ors: ed d in Upper 12 Inches arks es at Deposits e Patterns in Wetlands	s uired):	
Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availat Field Observations:	e Gauge ble	_(in.)	Primary Indicat Inundate Saturate Water M Drift Line Sedimer Drainage Secondary Indi	ors: ed d in Upper 12 Inches larks es at Deposits e Patterns in Wetlands cators (2 or more requ	s uired):	
Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availat Field Observations:	e Gauge ble	(in.) (in.)	Primary Indicat Inundate Saturate Water M Drift Line Sedimer Drainage Secondary Indi Moxidized Water-S	ors: ed d in Upper 12 Inches larks es at Deposits e Patterns in Wetlands cators (2 or more requ I Root Channels in Up	s uired):	
Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water:	e Gauge ble	<u> </u>	Primary Indicat Inundate Saturate Water M Drift Line Sedimer Drainage Secondary Indi Mater-S Local Sc	ors: ed d in Upper 12 Inches arks es at Deposits e Patterns in Wetlands cators (2 or more requ I Root Channels in Up	s uired):	
Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water:	e Gauge ble	<u> </u>	Primary Indicat Inundate Saturate Water M Drift Line Sedimer Drainage Secondary Indi Water-S Local Sc FAC-Ne	ors: ed d in Upper 12 Inches arks es at Deposits e Patterns in Wetland cators (2 or more requ I Root Channels in Up tained Leaves oil Survey Data	s uired):	

Map Unit Name (Series and Phase):	Alluvial land		Drainage Class: Field Observations	SWP to VP
Taxonomy (Subgroup):	NA		Confirm Mapped Type?	⊠Yes □ No
Profile Descriptions: Depth (inches) Horizon 0-4	Matrix Color (Munsell Moist) 10YR 5/3	Mottle Colors (Munsell Moist) 10YR 6/8	Mottle Abundance/ Size/Contrast Many, med, distinct	Texture, Concretions, Structure, etc, silt loam
4-8 8-12	10YR 6/4 10 YR 4/2	10 YR 6/8	medium, distinct	sand
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Remarks: Inunuated at driveway to draining properly.	a Colors	Hig Org List Oth	ncretions gh Organic Content in Surface Layi ganic Streaking in Sandy Soils ted on Local Hydric Soils List ted on National Hydric Soils List ner (Explain in Remarks)	·
WETLAND DETERMINA	ATION			
Hydrophytic Vegetation Pres Wetland Hydrology Present? Hydric Soils Present?			this Sampling Point Within a Wetla	(Check) and? ⊠Yes □No
Remarks: PFO, water stained leave	es, evidence of Hydrolog	ду		

Approved by HQUSACE 3/92

Project/Site: I-95 Section Applicant/Owner: MD Transpor Investigator: H. Canfield, C Do Normal Circumstances exist on the Is the site significantly disturbed (Atyp Is the area a potential Problem Area? (If needed, explain on reverse.) //EGETATION Dominant Plant Species S 1. Acer rubrum 2. Cornus amomum 3. Lindera benzoin 4. Viburnum dentatum 5. Symplocarpus foetidus 6. Smilax rotundifolia 7. Lonicera japonica 8. Onoclea sensibilis	c. Brudin, e site? bical Situatio Stratum T S S H	, J. Reed	9 10	□No ⊠No ⊠No			ore and
Investigator: H. Canfield, C Do Normal Circumstances exist on the Is the site significantly disturbed (Atyp Is the area a potential Problem Area? (If needed, explain on reverse.) //EGETATION Dominant Plant Species S 1. Acer rubrum 2. Cornus amomum 3. Lindera benzoin 4. Viburnum dentatum 5. Symplocarpus foetidus 6. Smilax rotundifolia 7. Lonicera japonica	C. Brudin, e site? bical Situation Stratum T S S S H	Indicator FAC FACW FACW-	☐Yes☐Yes☐Dom☐9.☐10.☐	⊠No ⊠No minant Plant	State: Community ID: Transect ID: Plot ID:	Maryla Wetla wetlar	and and 6A and plot
Do Normal Circumstances exist on the Is the site significantly disturbed (Atyp Is the area a potential Problem Area? (If needed, explain on reverse.) /EGETATION Dominant Plant Species S 1. Acer rubrum 2. Cornus amomum 3. Lindera benzoin 4. Viburnum dentatum 5. Symplocarpus foetidus 6. Smilax rotundifolia 7. Lonicera japonica	e site? bical Situation Stratum T S S H	Indicator FAC FACW FACW-	☐Yes☐Yes☐Dom☐9.☐10.☐	⊠No ⊠No minant Plant	Community ID: Transect ID: Plot ID:	Wetlar	and 6A
Is the site significantly disturbed (Atyp Is the area a potential Problem Area? (If needed, explain on reverse.) /EGETATION Dominant Plant Species 1. Acer rubrum 2. Cornus amomum 3. Lindera benzoin 4. Viburnum dentatum 5. Symplocarpus foetidus 6. Smilax rotundifolia 7. Lonicera japonica	Stratum T S S H	Indicator FAC FACW	☐Yes☐Yes☐Dom☐9.☐10.☐	⊠No ⊠No minant Plant	Transect ID: Plot ID:	wetlar	nd plot
Is the area a potential Problem Area? (If needed, explain on reverse.) /EGETATION Dominant Plant Species S 1. Acer rubrum 2. Cornus amomum 3. Lindera benzoin 4. Viburnum dentatum 5. Symplocarpus foetidus 6. Smilax rotundifolia 7. Lonicera japonica	Stratum T S S H	Indicator FAC FACW		⊠No	Plot ID:		
(If needed, explain on reverse.) /EGETATION Dominant Plant Species S 1. Acer rubrum 2. Cornus amomum 3. Lindera benzoin 4. Viburnum dentatum 5. Symplocarpus foetidus 6. Smilax rotundifolia 7. Lonicera japonica	Stratum T S S S H	FAC FACW-		ninant Plant	t Species		
Dominant Plant Species S 1. Acer rubrum 2. Cornus amomum 3. Lindera benzoin 4. Viburnum dentatum 5. Symplocarpus foetidus 6. Smilax rotundifolia 7. Lonicera japonica	T S S S	FAC FACW-	9 10			Stratum	Indicator
Dominant Plant Species 1. Acer rubrum 2. Cornus amomum 3. Lindera benzoin 4. Viburnum dentatum 5. Symplocarpus foetidus 6. Smilax rotundifolia 7. Lonicera japonica	T S S S	FAC FACW-	9 10			Stratum	Indicator
1. Acer rubrum 2. Cornus amomum 3. Lindera benzoin 4. Viburnum dentatum 5. Symplocarpus foetidus 6. Smilax rotundifolia 7. Lonicera japonica	T S S S	FAC FACW-	9 10			Stratum	Indicator
2. Cornus amomum 3. Lindera benzoin 4. Viburnum dentatum 5. Symplocarpus foetidus 6. Smilax rotundifolia 7. Lonicera japonica	\$ \$ \$ H	FACW-	9 10				maioator
3. Lindera benzoin 4. Viburnum dentatum 5. Symplocarpus foetidus 6. Smilax rotundifolia 7. Lonicera japonica	S S H	FACW-	_ 10				
4. Viburnum dentatum 5. Symplocarpus foetidus 6. Smilax rotundifolia 7. Lonicera japonica	S H						
4. Viburnum dentatum 5. Symplocarpus foetidus 6. Smilax rotundifolia 7. Lonicera japonica	Н		11				
6. Smilax rotundifolia 7. Lonicera japonica		1 70					
6. Smilax rotundifolia 7. Lonicera japonica		OBL					
7. Lonicera japonica	V	FAC					
	H/V	FAC-					
0.01100104 00110.2	H	FACW					
			- '				
IYDROLOGY							
Recorded Data (Describe in Rer	marks):		Wetland F	lydrology In	dicators:		
Stream, Lake, or Tide Gaug				ry Indicators			
Aerial Photographs	,-		☐ Inundated				
Other			Saturated in Upper 12 Inches				
No Recorded Data Available			☐ Water Marks				
				Drift Lines			
				Sediment [Deposits		
Field Observations:					Patterns in Wetlands		
				•	tors (2 or more requ	•	
Depth of Surface Water:	n/a	_(in.)			Root Channels in Up	per 12 Inches	
~ =					ned Leaves		
Depth to Free Water in Pit:	8"	_(in.)		Local Soil S	Survey Data		
Depth to Saturated Soil:	0	(in.)			rai rest plain in Remarks)		
		_("".)		סנווטו (באף	idili ili ittoriidinoj		
Remarks:							
Troma							

Map Unit Name (Series and Phase):	A Alluvia		Drainage Class:	SWP to VP
Taxonomy (Subgroup):	NA		Field Observations Confirm Mapped Type?	No
Profile Descriptions: Depth (inches) Horizon 0-3 3-12	Matrix Color (Munsell Moist) 10YR 5/2 10YR 6/1	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast few, large, distinct	Texture, Concretions, Structure, etc, silty loam sandy loam
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma		High Orga Liste Liste	cretions Organic Content in Surface Lay nic Streaking in Sandy Soils d on Local Hydric Soils List d on National Hydric Soils List r (Explain in Remarks)	er in Sandy Soils
Remarks:				
WETLAND DETERMINA	ATION			
Hydrophytic Vegetation Pres Wetland Hydrology Present? Hydric Soils Present?			is Sampling Point Within a Wetla	(Check) and? ⊠Yes ⊡No
Remarks: PSS and PFO v	vetland associated with	seeps, stream ov	erflow and upland drainage.	

Approved by HQUSACE 3/92 Forms version 1/02

Applicant/Owner: MD Transportation Authority Investigator: H. Canfield, C. Brudin, J. Reed Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.) County: Baltimore State: Maryland Community ID: Wetland 7A Transect ID: Plot ID: Wetland plot DP @ 7A-9 (flags- 1-13)	Designation I-05 So	ction 200				Data	January 1	10, 0006
Investigator: H. Canfield, C. Brudin, J. Reed State: Maryland			uthority			Date:		
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.) Ves	··· 	•	•					
Is the site significantly disturbed (Atypical Situation)? Yes \(\begin{align*}{ c c c c c c c c c c c c c c c c c c c	<u> </u>		I, J. Keeu					
Is the area a potential Problem Area? (If needed, explain on reverse.) Ves			·\0			-	vveu	and /A
Commonstrated Commonstrate			on)?				10/-41	1 1 1
Dominant Plant Species Stratum Indicator 1. Acer rubrum T FAC 9. 9. 9. 9. 9. 9. 9. 9				∐Yes	⊠No			
Dominant Plant Species Stratum Indicator 1.Acer rubrum T FAC 9.	(If needed, explain on reverse) .)				UP	@ /A-9 (flags-	- 1-13)
1, Acer rubrum T FAC 9. 2, liex verticillata S FACW+ 10. 3, Acer rubrum S FAC 11. 4, Lonicera latarica S FACU 12. 5, Lonicera japonica WW/H FAC- 13. 6, Ulmus americana S FACW- 14. 7, Smilax rotundifolia H/V FAC 15. 8. 16. Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 4/6=67 % Remarks: Arrial Photographs Other Stream, Lake, or Tide Gauge Primary Indicators: Primary Indicators: Primary Indicators: Primary Indicators: Inundated Saturated in Upper 12 Inches Saturated in Upper 12 Inches Primary Indicators: Primary Indicators	/EGETATION							
2.	Dominant Plant Species	Stratum	Indicator	Dor	ninant Plant	t Species	Stratum	Indicator
2. lex verticillata	1. Acer rubrum	T	FAC	9				
11.	2. Ilex verticillata	S	FACW+					
4. Lonicera tatarica	3. Acer rubrum	S	FAC					
5. Lonicera japonica WV/H FAC-6. Units americana S FACW-7. Smilax rotundifolia H/V FAC 15.	4. Lonicera tatarica	S	FACU					<u> </u>
6. Ulmus americana	5. Lonicera japonica	WV/H	FAC-					
7. Smilax rotundifolia	6. Ulmus americana	S	FACW-					
8		H/V	FAC					
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 4/6=67 % Remarks: Primary Indicators:								
YDROLOGY								
☐ Recorded Data (Describe in Remarks): Wetland Hydrology Indicators: ☐ Stream, Lake, or Tide Gauge Primary Indicators: ☐ Aerial Photographs ☐ Inundated ☐ Other ☐ Saturated in Upper 12 Inches ☐ No Recorded Data Available ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12 Inches ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (Explain in Remarks)	YDROLOGY							
☐ Stream, Lake, or Tide Gauge Primary Indicators: ☐ Aerial Photographs ☐ Inundated ☐ Other ☐ Saturated in Upper 12 Inches ☐ No Recorded Data Available ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Depth of Surface Water:		in Remarks):		Wetland I				
□ Aerial Photographs □ Inundated □ Other □ Saturated in Upper 12 Inches □ Water Marks □ Drift Lines □ Sediment Deposits □ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): □ Depth of Surface Water: n/a (in.) □ Oxidized Root Channels in Upper 12 Inches □ Water-Stained Leaves □ Depth to Free Water in Pit: 8" (in.) □ Depth to Saturated Soil: 0 (in.) Other (Explain in Remarks)								
☐ Other ☐ Saturated in Upper 12 Inches ☐ No Recorded Data Available ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12 Inches ☐ Water-Stained Leaves ☐ Water-Stained Leaves ☐ Depth to Free Water in Pit: 8" (in.) ☐ Depth to Saturated Soil: ☐ Omain (in.) ☐ Depth to Saturated Soil: ☐ Omain (in.) ☐ Other (Explain in Remarks)		Caago			•			
No Recorded Data Available □ Water Marks □ Drift Lines □ Sediment Deposits □ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): □ Depth of Surface Water: □ n/a (in.) □ Oxidized Root Channels in Upper 12 Inches □ Water-Stained Leaves □ Local Soil Survey Data □ FAC-Neutral Test □ Depth to Saturated Soil: □ Other (Explain in Remarks)						in Upper 12 Inches		
Drift Lines Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Depth to Saturated Soil: 0 (in.) Other (Explain in Remarks)		ole		_				
Field Observations: Depth of Surface Water:		,,,,						
Field Observations: Depth of Surface Water:					Sediment Γ	Deposits		
Depth of Surface Water:	Field Observations:				Drainage P	Patterns in Wetlands		
Depth to Free Water in Pit: 8" (in.) Depth to Saturated Soil: 0 (in.) Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)					•	•	•	
Depth to Free Water in Pit:8"(in.) Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)	Depth of Surface Water:	n/a	(in.)				oper 12 Inches	
Depth to Saturated Soil: 0 (in.) FAC-Neutral Test Other (Explain in Remarks)								
Depth to Saturated Soil: (in.)	Depth to Free Water in Pit	:8"	(in.)			•		
Remarks:	Depth to Saturated Soil:	0	(in.)					
Tomans.	Remarks:							
	Nomano.							

Map Unit Name (Series and Phase):	Alluvial land		Drainage Class: Field Observations	SWP to VP
Taxonomy (Subgroup):	NA		Confirm Mapped Type?	Yes □ No
Profile Descriptions: Depth (inches) Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Mois		Texture, Concretions, Structure, etc,
0-2	10 YR 2/1		Many, medium,	Silt loam
2-9	10 YR 2/1	10 YR	6/6 distinct	Silt loam
9-12	10 YR 5/1	10 YR (Many, medium, 6/8 distinct	Silt loam
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regim Reducing Conditions Gleyed or Low-Chrom Remarks:			Concretions High Organic Content in Surface Lay Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks)	/er in Sandy Soils
WETLAND DETERMINA	ATION			
Hydrophytic Vegetation Pres Wetland Hydrology Present' Hydric Soils Present?			Is this Sampling Point Within a Wetl	(Check) land? ⊠Yes ⊡No
Remarks:				

Approved by HQUSACE 3/92

Project/Site: I-95 Sec	rtion 200				Data:	January 2	2006
•	sportation Au	uthority			Date:	January 2	
	eld, C. Brudin				County:	Baltim	
-		i, J. Reeu			State:	Maryla	
Do Normal Circumstances exist of		\0	⊠Yes	□No ⊠No	Community ID:	vveud	ana 8A
Is the site significantly disturbed		on)?	□Yes	⊠No	Transect ID:	\\/otis	
Is the area a potential Problem A			□Yes	⊠No	Plot ID:		and plot
(If needed, explain on reverse	.)					(Flags 1-28)	
EGETATION							
Dominant Plant Species	Stratum	Indicator	Dor	minant Plant	t Species	Stratum	Indicator
1. Acer rubrum	T	FAC	9				
2. Fraxinus pennsylvanica	T	FACW					
3. Platanus occidentalis	T	FACW-					
4. Nepal microstegium	Н	FAC					
5. Lonicera japonia	V	FAC-					
6. Fraxinus pennsylvanica	S	FACW					
7. Rosa multiflora	S	FACU					
8.							
<u> </u>			- '				
IYDROLOGY							
	- Domorko):		Matland L	ludrology In	diantara		
Recorded Data (Describe in Stream, Lake, or Tide				Hydrology In- ry Indicators			
Aerial Photographs	Gauge			ry indicators Inundated	5.		
Other					in Unner 12 Inches		
No Recorded Data Available	I.				in Upper 12 Inches		
No Recorded Data Avaliable	ie			Water Mark Drift Lines	KS		
			- 	Sediment [Denosits		
Field Observations:				Drainage P	Patterns in Wetlands stors (2 or more requ		
Depth of Surface Water:	n/a	(in.)		Oxidized R	Root Channels in Up		
Depth to Free Water in Pit:	14"	(in.)		Local Soil S	ined Leaves Survey Data		
Depth to Saturated Soil:	0	(in.)		FAC-Neutra Other (Exp	ral Test blain in Remarks)		
Remarks: Increased hydrology inputs from Some trees have been dying	-	-		g this area	more wet.		

Map Unit Name (Series and Phase):		AV al land	Drainage Class:	SWP to VP
Taxonomy (Subgroup):	NA		Field Observations Confirm Mapped Type?	No
Profile Descriptions: Depth (inches) Horizon 0-3 3-16	Matrix Color (Munsell Moist) 2.5 Y 3/1 7.5 YR 4/6	Mottle Colors (Munsell Moist) 7.5 YR 4/6	Mottle Abundance/ Size/Contrast Many, distinct .	Texture, Concretions, Structure, etc, Silt loam Silt loam
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor		Hig	ncretions Ih Organic Content in Surface Layo ganic Streaking in Sandy Soils	er in Sandy Soils
Aquic Moisture Reg Reducing Conditions Gleyed or Low-Chro Remarks: Some mixing of the soi	s ma Colors	List	ted on Local Hydric Soils List ted on National Hydric Soils List ner (Explain in Remarks)	
WETLAND DETERMI	NATION			
Hydrophytic Vegetation P Wetland Hydrology Prese Hydric Soils Present?	resent? ⊠Yes □No		this Sampling Point Within a Wetla	(Check) and? ⊠Yes □No
Remarks: A PFO wetlar	d within the floodplain of	the Little Gunpow	der River.	

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Desire at Otto	otion 200				D-1-	1	0.0000
· -	ction 200	thority			Date:	January 2	
	nsportation Au				County:	Harfo	
	eld, C. Brudin	, J. Reed	——————————————————————————————————————		State:	Maryla	
Do Normal Circumstances exist			⊠Yes	□No	Community ID:	Wetla	and 9A
Is the site significantly disturbed		on)?	□Yes	⊠No	Transect ID:		
Is the area a potential Problem			□Yes	⊠No	Plot ID:		and plot
(If needed, explain on reverse	e.)					9 flags	
VEGETATION							
Dominant Plant Species	Stratum	Indicator	Don	ninant Plant	t Species	Stratum	Indicator
1. Acer rubrum	T	FAC	·		. • • • • • • • • • • • • • • • • • • •	<u> </u>	
2. Acer rubrum	S	FAC					
		1710					
		-					
		-					
5							
6							
7							
8			16				
Percent of Dominant Species th	at are OBL_FAC	W or FAC					
(excluding FAC-). 1/1= 100							
Remarks:	, ,						
Mostly devoid of vegetation.	Located behind	N Logan's Pun	housing day	/alanment	and I-05 right of v	MOV.	
Standing water	Located bernine	Logan 3 Itan	nousing dev	relopinent	and 1-35 right of v	way.	
Stariding water							
HYDROLOGY							
Recorded Data (Describe	in Pomarks):		Watland L	lydrology In	dicators:		
Stream, Lake, or Tide				lydrology In- ry Indicators			
_	Gauge			Inundated	S.		
Aerial Photographs Other			. =				
					in Upper 12 Inches		
No Recorded Data Availab	ole			Water Mark	ks		
			∃	Drift Lines Sediment [Donosito		
Field Observations:							
Field Observations:					Patterns in Wetlands tors (2 or more requ		
Depth of Surface Water:	1	(in.)		-	toot Channels in Up		
Dopar or Ouridoo Water.	<u> </u>	_ \/			ned Leaves	P 01 12 11101103	
Depth to Free Water in Pit	: -	(in.)			Survey Data		
-1		_` /		FAC-Neutra	•		
Depth to Saturated Soil:	0	_(in.)		Other (Exp	lain in Remarks)		
Remarks:							
Recent heavy rains likely car							
recent heavy fains likely cal							
	usea ponaing o	f water, combir	nea with tim	e or year.			
	usea ponaing o	f water, combir	ied with tim	e or year.			
	usea ponaing o	f water, combir	nea with tim	e or year.			

Map Unit Name (Series and Phase):	Delanco silt loam, 3-89	% slopes		Drainage Class:	M\	WD
Taxonomy (Subgroup):	Aquic Hapludults			Field Observations Confirm Mapped Type?	□Yes	⊠ No
Profile Descriptions: Depth (inches) Horizon 0-3 3-7 7-10 10-13 13-16	Matrix Color (Munsell Moist) 2.5 YR 4/2 2.5 Y 5/2 2.5 Y 5/2 2.5 Y 4/1 10 YR 5/8	Mottle Colors (Munsell Mois 5 YR 3 2.5 YR	st) 3/4	Mottle Abundance/ Size/Contrast common common	Clay Grave Clay	etions, loam loam el mix loam clay
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chrome			Organic Solitisted on I Listed on I	ns nic Content in Surface Lay treaking in Sandy Soils Local Hydric Soils List National Hydric Soils List Dlain in Remarks)	er in Sandy Soil:	s
Remarks: Soil shows some evidence	ce of mixing likely from g	grading due to	highway	construction.		
WETLAND DETERMINA	ATION					
Hydrophytic Vegetation Pres Wetland Hydrology Present' Hydric Soils Present?		(Check)	Is this Sar	mpling Point Within a Wetla		heck)
Remarks:						

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Project/Site: I-95 Sect	ion 200				Date:	1-20-	-06
	sportation Au	ıthority			County:	Harfo	
	ed, Carl Bru				State:	ME	
Do Normal Circumstances exist of		dii i	⊠Yes	□No	Community ID:		
Is the site significantly disturbed (n)2	□Yes	⊠No	Transect ID:		
Is the area a potential Problem A	` .)ii):	□162		Transect ib.		
http://www.mde.state.md.us/Pern			□Yes	⊠No	Plot ID:	Wetla	nd 10 A
(If needed, explain on reverse.	.)						
EGETATION							
Dominant Plant Species	Stratum	Indicator	Don	ninant Plant	Species	Stratum	Indicator
1. Fraxinus pennsylvanica	T	FACW	9.				
2. Platanus occidentalis	T	FACW-					
3. Cornus amomum		FACW				_	
4. Celastrus orbiculatus	WV	UPL					
5. Rosa multiflora		FACU					
6							
7							
8			16				
Remarks: Floodplain of Little Gunpowde	er River						
Floodplain of Little Gunpowde	er River						
Floodplain of Little Gunpowde			Wotland	udralagu la	diactors		
Floodplain of Little Gunpowde YDROLOGY Recorded Data (Describe in	n Remarks):			ydrology Inc			
YDROLOGY Recorded Data (Describe in Stream, Lake, or Tide 6	n Remarks):		Primai	y Indicators			
YDROLOGY Recorded Data (Describe ir Stream, Lake, or Tide of Aerial Photographs	n Remarks):		Prima	y Indicators Inundated	s:		
YDROLOGY Recorded Data (Describe in Stream, Lake, or Tide of Aerial Photographs Other	n Remarks): Gauge		Primai	ry Indicators Inundated Saturated in	s: n Upper 12 Inches		
YDROLOGY Recorded Data (Describe ir Stream, Lake, or Tide of Aerial Photographs	n Remarks): Gauge		Prima	ry Indicators Inundated Saturated in Water Mark	s: n Upper 12 Inches		
YDROLOGY Recorded Data (Describe in Stream, Lake, or Tide of Aerial Photographs Other	n Remarks): Gauge		Primai	y Indicators Inundated Saturated in Water Mark Drift Lines	s: n Upper 12 Inches ks		
YDROLOGY Recorded Data (Describe in Stream, Lake, or Tide of Aerial Photographs Other No Recorded Data Available	n Remarks): Gauge		Primal	y Indicators Inundated Saturated in Water Mark Drift Lines Sediment D	n Upper 12 Inches ks Deposits		
YDROLOGY Recorded Data (Describe in Stream, Lake, or Tide of Aerial Photographs Other	n Remarks): Gauge		Primal	y Indicators Inundated Saturated ii Water Mark Drift Lines Sediment D Drainage P	s: n Upper 12 Inches ks Deposits Patterns in Wetlands		
YDROLOGY Recorded Data (Describe in Stream, Lake, or Tide of Aerial Photographs Other No Recorded Data Available	n Remarks): Gauge	(in.)	Primal	y Indicators Inundated Saturated ii Water Mark Drift Lines Sediment E Drainage P dary Indicat	n Upper 12 Inches ks Deposits	ired):	
YDROLOGY Recorded Data (Describe in Stream, Lake, or Tide of Aerial Photographs Other No Recorded Data Available Field Observations:	n Remarks): Gauge le	_(in.)	Primal	y Indicators Inundated Saturated ii Water Mark Drift Lines Sediment E Drainage P dary Indicat	n Upper 12 Inches ss Deposits Patterns in Wetlands tors (2 or more required to the control of t	ired):	
YDROLOGY Recorded Data (Describe in Stream, Lake, or Tide of Aerial Photographs Other No Recorded Data Available Field Observations:	n Remarks): Gauge le	_(in.) _(in.)	Primal Primal	y Indicators Inundated Saturated ii Water Mark Drift Lines Sediment E Drainage P dary Indicat Oxidized R: Water-Stair	n Upper 12 Inches ss Deposits Patterns in Wetlands tors (2 or more required to the control of t	ired):	
YDROLOGY Recorded Data (Describe ir Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availabl Field Observations: Depth of Surface Water:	n Remarks): Gauge le	_ `	Primal Primal Secon	y Indicators Inundated Saturated ii Water Mark Drift Lines Sediment E Drainage P dary Indicat Oxidized R: Water-Stair	n Upper 12 Inches Seposits Patterns in Wetlands fors (2 or more requipont Channels in Upped Leaves Survey Data	ired):	
YDROLOGY Recorded Data (Describe ir Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availabl Field Observations: Depth of Surface Water:	n Remarks): Gauge le	_ `	Primal Primal Secon	y Indicators Inundated Saturated in Water Mark Drift Lines Sediment D Drainage P dary Indicat Oxidized R Water-Stair Local Soil S FAC-Neutra	n Upper 12 Inches Seposits Patterns in Wetlands fors (2 or more requipont Channels in Upped Leaves Survey Data	ired):	
YDROLOGY Recorded Data (Describe in Stream, Lake, or Tide of Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: Depth to Free Water in Pit:	n Remarks): Gauge e	_(in.)	Primal Primal Secon	y Indicators Inundated Saturated in Water Mark Drift Lines Sediment D Drainage P dary Indicat Oxidized R Water-Stair Local Soil S FAC-Neutra	n Upper 12 Inches Seposits Patterns in Wetlands fors (2 or more requested to the content of the	ired):	
YDROLOGY Recorded Data (Describe in Stream, Lake, or Tide of Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil:	n Remarks): Gauge le40	(in.) (in.)	Primate Primat	y Indicators Inundated Saturated in Water Mark Drift Lines Sediment E Drainage P dary Indicat Oxidized R Water-Stair Local Soil S FAC-Neutra Other (Expl	n Upper 12 Inches Seposits Patterns in Wetlands fors (2 or more requested to the content of the	ired): per 12 Inches	
YDROLOGY Recorded Data (Describe in Stream, Lake, or Tide of Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil:	n Remarks): Gauge le40 surface hydrolog	_(in.) _(in.) y from adjacent	Primate Primat	y Indicators Inundated Saturated in Water Mark Drift Lines Sediment E Drainage P dary Indicat Oxidized R: Water-Stain Local Soil S FAC-Neutra Other (Expl	n Upper 12 Inches ss Deposits Patterns in Wetlands fors (2 or more requ oot Channels in Upped Leaves Survey Data al Test lain in Remarks)	ired): per 12 Inches	

Map Unit Name (Series and Phase):	Codorus				Drainage Class:	MWD - PD	_
Taxonomy (Subgroup)): <u>NA</u>				Field Observations Confirm Mapped Type?	∐Yes	⊠ No
2-8 E	A 10 B ₁ 10		Mottle Colors (Munsell Moi	st)	Mottle Abundance/ Size/Contrast Few distinct	Texture, Concre Structure, etc, Sandy Silt lo	loam
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture F Reducing Condii Gleyed or Low-C	Regime tions			Organic St Listed on L Listed on N	nis nic Content in Surface Lay treaking in Sandy Soils Local Hydric Soils List National Hydric Soils List olain in Remarks)	er in Sandy Soils	
VETLAND DETERN	//INATION						
Hydrophytic Vegetatio Wetland Hydrology Pr Hydric Soils Present?	n Present? esent?	⊠Yes □No ⊠Yes □No ⊠Yes □No			mpling Point Within a Wetla areas retaining water fi	and? ⊠Yes	
and high river flows	. Bridge spannir	ng I-95 allows	s wildlife corrid	dor passa	ge or greenway under l	-95.	na, mgnway,

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Project/Site: I-95 Sec	tion 200				Doto		1 26	06
	sportation Au	ıthority			Date:		1-26-	
	eed, Carl Bru	•			County:	Harford MD		
nvestigator: Jason Ro Do Normal Circumstances exist		uiii	M∨oo	ПМо	State:	, ID:		
s the site significantly disturbed		22/2	⊠Yes □Yes	□No ⊠No	Transect IE		VVEua	and 11A
s the area a potential Problem A	` , ,	JH) :	⊟Yes	⊠No	Plot ID:). _	wetla	and plot
If needed, explain on reverse			□169		רוטנוש.	Wetl:	and 11A (Flag	•
(Il flooded, explain on foreles	·.)					VVOII	3110 1171 (110)	<u> </u>
GETATION			T					
Dominant Plant Species	Stratum	Indicator			Species		Stratum	Indicator
1. Quercus palustris	T	FACW	9					
2. Acer saccharinum	T	FACW	10					
s. Acer rubrum	T	FAC	11					
.Juncus effusus		FACW+	12					
Sedge spp.								
. Salix nigra	S	FACW+						
			15					
ercent of Dominant Species the (excluding FAC-). 5/5 = 10/2 temarks: erees have been cut and have	at are OBL, FAC	W or FAC						
ercent of Dominant Species that (excluding FAC-). 5/5 = 10/1 (emarks: rees have been cut and have	at are OBL, FAC	W or FAC						
recent of Dominant Species that (excluding FAC-). 5/5 = 100 remarks: rees have been cut and have	at are OBL, FAC 0% ve re-grown as	W or FAC						
ercent of Dominant Species the (excluding FAC-). 5/5 = 10/9 emarks: rees have been cut and have been c	at are OBL, FAC 0% ve re-grown as in Remarks):	W or FAC		ydrology In				
ercent of Dominant Species that (excluding FAC-). 5/5 = 10/2 emarks: ees have been cut and have been cut and have been cut and have been cut and bee	at are OBL, FAC 0% ve re-grown as in Remarks):	W or FAC	Pr <u>im</u> ar	y Indicators				
ercent of Dominant Species that (excluding FAC-). 5/5 = 10/2 emarks: ees have been cut and have DROLOGY Recorded Data (Describe in Stream, Lake, or Tide Aerial Photographs	at are OBL, FAC 0% ve re-grown as in Remarks):	W or FAC	Primar	y Indicators Inundated	3:	has		
ercent of Dominant Species that (excluding FAC-). 5/5 = 100 emarks: ees have been cut and have been c	at are OBL, FAC 0% ve re-grown as in Remarks):	W or FAC	Primar	ry Indicators Inundated Saturated i	s: n Upper 12 Inc	ches		
procent of Dominant Species that (excluding FAC-). 5/5 = 100 per services have been cut and have been	at are OBL, FAC 0% ve re-grown as in Remarks):	W or FAC	Primar	y Indicators Inundated	s: n Upper 12 Inc	hes		
procent of Dominant Species that (excluding FAC-). 5/5 = 100 per services have been cut and have been	at are OBL, FAC 0% ve re-grown as in Remarks):	W or FAC	Primar	y Indicators Inundated Saturated i Water Mark Drift Lines	s: n Upper 12 Ind ks	ches		
ercent of Dominant Species that (excluding FAC-). 5/5 = 10/2 emarks: rees have been cut and have been	at are OBL, FAC 0% ve re-grown as in Remarks):	W or FAC	Primar	y Indicators Inundated Saturated i Water Mark Drift Lines Sediment I	s: n Upper 12 Ind ks			
procent of Dominant Species that (excluding FAC-). 5/5 = 100 per shares: Pees have been cut and have	at are OBL, FAC 0% ve re-grown as in Remarks):	W or FAC	Primar	y Indicators Inundated Saturated i Water Mark Drift Lines Sediment I Drainage P dary Indicat	n Upper 12 Ind ks Deposits Patterns in Wet tors (2 or more	tlands e requii		
procent of Dominant Species that (excluding FAC-). 5/5 = 100 per shares: Pees have been cut and have	at are OBL, FAC 0% ve re-grown as in Remarks):	W or FAC	Primar	y Indicators Inundated Saturated i Water Mark Drift Lines Sediment I Drainage P dary Indicat Oxidized R	n Upper 12 Indexs Deposits Patterns in Wettors (2 or more oot Channels	tlands e requii		
ercent of Dominant Species that (excluding FAC-). 5/5 = 10/10 emarks: rees have been cut and have rees have rees have been cut and have rees have	at are OBL, FAC 0% ve re-grown as in Remarks): Gauge	wor FAC stump shoots.	Primar	y Indicators Inundated Saturated i Water Marl Drift Lines Sediment I Drainage P dary Indicat Oxidized R Water-Stain	n Upper 12 Indexs Deposits Patterns in Wettors (2 or more oot Channels and Leaves	tlands e requii		
ercent of Dominant Species that (excluding FAC-). 5/5 = 10/10 emarks: rees have been cut and have bee	at are OBL, FAC 0% ve re-grown as in Remarks): Gauge	w or FAC	Primar	y Indicators Inundated Saturated i Water Mark Drift Lines Sediment I Drainage P dary Indicat Oxidized R Water-Stail Local Soil S	n Upper 12 Indexs Deposits Patterns in Wettors (2 or more oot Channels ined Leaves Survey Data	tlands e requii		
ercent of Dominant Species that (excluding FAC-). 5/5 = 10/1 emarks: rees have been cut and have rees have rees have been cut and have rees have ree	at are OBL, FAC 0% ve re-grown as in Remarks): Gauge	wor FAC stump shoots.	Primar	y Indicators Inundated Saturated i Water Mark Drift Lines Sediment I Drainage P dary Indicat Oxidized R Water-Stain Local Soil S FAC-Neutr	n Upper 12 Indexs Deposits Patterns in Wettors (2 or more oot Channels ined Leaves Survey Data	tlands e requii in Upp		

Map Unit Name (Series and Phase):	Neshaminy silt le	oam, 0-3% slopes	Drainage Class:	WD
Taxonomy (Subgroup):	Ultic Hapludalfs		Field Observations Confirm Mapped Type?	? ⊠Yes □ No
Profile Descriptions: Depth (inches) Horizon 0-12	Matrix Color (Munsell Moist) 10YR 5/8 10 YR 4/2		st) Size/Contrast	Texture, Concretions, Structure, etc, Mixed clay loam
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regim Reducing Conditions Gleyed or Low-Chrom Remarks: Disturbed ground, soil diperiods.	a Colors		Concretions High Organic Content in Surface La Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks) d Old Joppa Road. Clay loam h	
WETLAND DETERMINA	TION			
Hydrophytic Vegetation Pre Wetland Hydrology Present Hydric Soils Present? Remarks: Sweet gum, re abrupt. Isolated PFO W	? ⊠Yes ⊠Yes d cedar, mulitflora	□No □No	Is this Sampling Point Within a Wet	

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Project/Site: I-95 Sect	ion 200				Date:	1-25	-06
Applicant/Owner: MD Tran	sportation Au	uthority			County:	Harf	ord
Investigator: J.Reed,	H. Canfield				State:	M)
Do Normal Circumstances exist	on the site?		□Yes	⊠No	Community ID:	Wetla	and 12A
Is the site significantly disturbed	(Atypical Situati	on)?	□Yes	⊠No	Transect ID:		
Is the area a potential Problem A	rea?		⊠Yes	□No	Plot ID:		and plot
	,				Wetland 12A f	flags 1- 20 (incl	. 16 A-Q) ties into
(If needed, explain on reverse	.)					WUS 21A	
VEGETATION							
Dominant Plant Species	Stratum	Indicator	Domii	nant Plant	Species	Stratum	Indicator
1. Liquidambar styraciflua	T	FAC	9				
2. Quercus palustris	T	FACW					
3.Betula nigra	T	FACW					
4. Acer rubrum	T	FAC	12				
5. Smilax rotundifolia	H	FAC	13				
6			14				
7							
8			16				
Percent of Dominant Species that	ODL FAO	\\\ \					
discharge from a water main	pipe leakage p	olus upslope dr	rainage.				
HYDROLOGY							
Recorded Data (Describe in			Wetland Hy	drology Ind	dicators:		
Stream, Lake, or Tide	Gauge			Indicators	::		
Aerial Photographs				nundated			
U Other				aturated in	n Upper 12 Inches	i	
No Recorded Data Availab	le		=	Vater Mark	(S		
			_	rift Lines	N		
Field Observations				ediment D	•	lo.	
Field Observations:					atterns in Wetland ors (2 or more req		
Depth of Surface Water:	0-2	(in.)		•	oot Channels in U	•	
			_		ned Leaves		
Depth to Free Water in Pit:	0	(in.)		ocal Soil S	Survey Data		
			☐ F	AC-Neutra	al Test		
Depth to Saturated Soil:	0	(in.)		ther (Expl	lain in Remarks)		
Remarks: This is a low area continuous source of water di						-	

Map Unit Name (Series and Phase):	Leonardtown silt lo	am	Drainage Class:	PD	
Taxonomy (Subgroup):	Typic Fragiaquults		Field Observations Confirm Mapped		
Profile Descriptions: Depth (inches) Horizon 0-3 3-11 11-16	Matrix Color (Munsell Moist) 2.5 Y 3/3 10 YR 4/1 2.5 Y 5/6	Mottle Colors (Munsell Moi 7.5 YR 10 YR	st) Size/Contraste 4/6 common	/ Texture, Concretions, Structure, etc, silt loam clay loam clay loam	
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regim Reducing Conditions Gleyed or Low-Chrom			Concretions High Organic Content in Surfactoria Streaking in Sandy Solisted on Local Hydric Soils Listed on National Hydric Soils Other (Explain in Remarks)	oils ist	
WETLAND DETERMINA	TION				
Hydrophytic Vegetation Pre Wetland Hydrology Present Hydric Soils Present?			Is this Sampling Point Within a	(Check) a Wetland? ⊠Yes □No	
Leaking/broken water pip Spring seep + leaking wa			s of hydrology.		

Approved by HQUSACE 3/92

Project/Site: I-95 Sect	ion 200				D-4	4.05	00
Applicant/Ourser, MD Tran	sportation Au	ıthority			Date:	1-25-	
• • • • • • • • • • • • • • • • • • • •	H. Canfield	itilotity			County:	Harfo	-
Investigator: J. Reed, Do Normal Circumstances exist			⊠Yes □]No	State:	: Wetla	
Is the site significantly disturbed		on\2]No	Transect ID:	vveua	nu isa
Is the area a potential Problem A		orr) :]No	Plot ID:	wotla	nd plot
(If needed, explain on reverse			□162 区	7140		etland 13A (18	
(ii fieeded, explain on reverse	.)				V	elianu 13A (10	ilags)
/EGETATION							
Dominant Plant Species	Stratum	Indicator	Domina	nt Plant	Species	Stratum	Indicator
1. Liquidambar styraciflua	Т	FAC	9.				
2. Quercus palustris		FACW					
3. Viburnum dentatum	Т Т	FAC					
4. Juncus effusus	Т Т	FACW					
5. Onoclea sensibilis		FACW					
6. Smilax rotundifolia	Н	FAC					
7		-					
8.		-					
			-				
Percent of Dominant Species that	at are OBL, FAC	W or FAC					
(excluding FAC-). $6/6 = 100$)%						
Remarks:							
IYDROLOGY							
Decembed Data (Data 11)	- D l \						
i i Recorded Data (Describe ii	n Remarks):		Wetland Hydro	ology Inc	dicators:		
Recorded Data (Describe in Stream, Lake, or Tide			Wetland Hydro				
Stream, Lake, or Tide			Primary In	dicators			
Stream, Lake, or Tide Aerial Photographs			Primary In	dicators ndated	:	s	
Stream, Lake, or Tide Aerial Photographs Other	Gauge		Primary In	dicators ndated urated ir	: n Upper 12 Inche	s	
Stream, Lake, or Tide Aerial Photographs	Gauge		Primary In Inui Sat Wa	dicators ndated urated ir ter Mark	: n Upper 12 Inche	s	
Stream, Lake, or Tide Aerial Photographs Other	Gauge		Primary In Inui Sat Wa Drif	dicators ndated urated ir ter Mark it Lines	: n Upper 12 Inche s	s	
Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab	Gauge		Primary In Inui Sat Wa Drif Sec	dicators ndated urated ir ter Mark t Lines diment D	: n Upper 12 Inche s reposits		
Stream, Lake, or Tide Aerial Photographs Other	Gauge		Primary In Inui Sat Wa Drif Sec	dicators ndated urated ir ter Mark t Lines diment D inage Pa	: n Upper 12 Inche s leposits atterns in Wetlan	ds	
Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations:	Gauge	(in.)	Primary In Inui Sat Drif Secondary	dicators ndated urated ir ter Mark it Lines diment D inage Pa	: n Upper 12 Inche s reposits atterns in Wetlan ors (2 or more re	ds quired):	
Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab	Gauge	_(in.)	Primary In Inui Sat Wa Drif Secondary Scoondary Oxi	dicators ndated urated ir ter Mark it Lines diment D inage Pa / Indicate dized Ro	: n Upper 12 Inche s leposits atterns in Wetlan	ds quired):	
Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water:	Gauge le 		Primary In Inui Sat Wa Drif Sec Dra Secondary Na Wa	dicators ndated urated ir ter Mark it Lines diment D inage Pa y Indicate dized Ro ter-Stain	: n Upper 12 Inche s deposits atterns in Wetlan ors (2 or more re pot Channels in U	ds quired):	
Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations:	Gauge le 		Primary In Inui Sat Wa Drif Sec Dra Secondary Na U Dxi Loc	dicators ndated urated ir ter Mark it Lines diment D inage Pa y Indicate dized Ro ter-Stain	the Upper 12 Inches Reposits Reterns in Wetlan Rors (2 or more report Channels in Used Leaves Burvey Data	ds quired):	
Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water:	Gauge le 	(in.)	Primary In Inui Sat Wa Drif Secondary Oxi Wa Loc	dicators ndated urated ir ter Mark it Lines diment D inage Pa / Indicate dized Re ter-Stain cal Soil S C-Neutra	the Upper 12 Inches Reposits Reterns in Wetlan Rors (2 or more report Channels in Used Leaves Burvey Data	ds quired):	
Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water:	Gauge le 		Primary In Inui Sat Wa Drif Sec Dra Secondary Na U Dxi Loc	dicators ndated urated ir ter Mark t Lines diment D inage Pa / Indicate dized Ro ter-Stain sal Soil S	the Upper 12 Inches Reposits Reterns in Wetlan Rors (2 or more report Channels in Used Leaves Burvey Data	ds quired):	
Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water: Depth to Free Water in Pit:	Gauge le	(in.)	Primary In Inui Sat Wa Drif Secondary Oxi Wa Loc	dicators ndated urated ir ter Mark it Lines diment D inage Pa / Indicate dized Re ter-Stain cal Soil S C-Neutra	the Upper 12 Inches Reposits Reterns in Wetlan Rors (2 or more report Channels in Used Leaves Reterns Data Reterns In Lactor Channels in Lactor C	ds quired):	
Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water: Depth to Free Water in Pit:	Gauge le	(in.)	Primary In Inui Sat Wa Drif Secondary Oxi Wa Loc	dicators ndated urated ir ter Mark it Lines diment D inage Pa / Indicate dized Re ter-Stain cal Soil S C-Neutra	the Upper 12 Inches Reposits Reterns in Wetlan Rors (2 or more report Channels in Used Leaves Reterns Data Reterns In Lactor Channels in Lactor C	ds quired):	

Map Unit Name (Series and Phase): Taxonomy (Subgroup):		Keyport silt loam, 0-2% slopes Aquic Hapludults			Drainage Class:	MWD	
					Field Observations Confirm Mapped Type?	⊠Yes	□No
Profile Desc Depth (inches) 0-5 5-14	Horizon	Matrix Color (Munsell Moist) 2.5 Y 4/2 2.5 Y 5/2	Mottle Colors (Munsell Moi: 7.5 YR 10 YR	ist) 2 4/6	Mottle Abundance/ Size/Contrast common many	Texture, Concre Structure, etc, Clay	
Sulfidic Aquic I Reduci Gleyed	sol Epipedon ic Odor Moisture Regin cing Conditions d or Low-Chron	ma Colors		Organic S Listed on I Listed on I Other (Exp	ns anic Content in Surface Layetreaking in Sandy Soils Local Hydric Soils List National Hydric Soils List plain in Remarks) d reduced infiltration, cre	·	
ETLAND I	DETERMINA	ATION					
	: Vegetation Prediction Prediction Presents: Present?		lo	Is this Sa	mpling Point Within a Wetla		heck)
-		- ·			reas of Hydric soil seem 13A-22 to WUS 13 A-35		

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Project/Site: I-95 Sect	ion 200	Date:	1-25-06					
Applicant/Owner: MD Tran		County:	Harford					
Investigator: J. Reed,			State:	MD				
Do Normal Circumstances exist		⊠Yes	□No	Community ID:	Wetland 1	4A		
Is the site significantly disturbed	on)?	□Yes	⊠No	Transect ID:				
Is the area a potential Problem A		□Yes	⊠No	Plot ID:	Wetland P	lot		
(If needed, explain on reverse	.)							
VEGETATION					C	onnects to WUS 24	A. Flags 1-21	
Dominant Plant Species	Stratum	Indicator	Dor	ninant Plant	Species	Stratum Ir	ndicator	
1. Quercus palustris	T	FACW						
2. Smilax rotundifolia	S	FAC						
3. Vaccinum corybosum	S	FACW-						
4. Liquidambar styraciflua	T	FAC						
5								
8								
					_			
Percent of Dominant Species that		W or FAC						
(excluding FAC-). 4/4= 100	%							
Remarks:								
HYDROLOGY			1					
Recorded Data (Describe in	n Remarks):		Wetland F	lydrology In	dicators:			
Stream, Lake, or Tide	Gauge		Prima	ry Indicators	s:			
Aerial Photographs			☐ Inundated					
Other			Saturated in Upper 12 Inches					
No Recorded Data Availab	e			Water Mark	KS			
			⊣ □	Drift Lines				
				Sediment D				
Field Observations:			Drainage Patterns in Wetlands					
Darith of C. C. W.	="	(**)			tors (2 or more requ			
Depth of Surface Water:	<.5"	(in.)			oot Channels in Up	per 12 inches		
Depth to Free Water in Pit:	0	(in.)		Water-Stair	ned Leaves Survey Data			
Deptil to Flee Water III Pit.		_(11.)		FAC-Neutra	•			
Depth to Saturated Soil:	0	(in.)			lain in Remarks)			
Bopan to datarated con.		_\''''		Julion (Exp	ian in Romanoj			
Remarks:			1					
. tomano.								

Map Unit Name (Series and Phase):	Elkton silt loam Typic Ochraquults			Drainage Class:	Р	D			
Taxonomy (Subgroup):				Field Observations Confirm Mapped Type?	⊠Yes	□ No			
Profile Descriptions: Depth (inches) Horizon 0-3 3-5 5-16	Matrix Color (Munsell Moist) 10YR 2/2 2.5 Y 5/2 2.5 6/3	Mottle Colors (Munsell Moi 10 YR 2.5 Y t 10 YR	st) 4/6 5/6	Mottle Abundance/ Size/Contrast Common many	Texture, Concre Structure, etc, loa silt le	am pam			
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Organic Streaking in Sandy Soils Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Colors Concretions High Organic Content in Surface Layer in Sandy Soils Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks)									
Remarks:									
WETLAND DETERMINA	ATION								
Hydrophytic Vegetation Pre Wetland Hydrology Presen Hydric Soils Present?		(Check)	Is this Sai	npling Point Within a Wetla		neck)			
Remarks: Wetland 14 A	is similar in nature to wet	land 15 A							

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Do Normal Circumstances exist on the s Is the site significantly disturbed (Atypical Is the area a potential Problem Area? (If needed, explain on reverse.) VEGETATION Dominant Plant Species Strational Strati	ation Authority udin. H. Canfield site? al Situation)? Connects to atum Indicator T FAC S FAC S FAC S FACW	9. 10. 13. 14. 15.	ninant Plant	Date: County: State: Community ID: Transect ID: Plot ID: Species	Stratum	rd	
Investigator: J. Reed, C. Bru Do Normal Circumstances exist on the s Is the site significantly disturbed (Atypica Is the area a potential Problem Area? (If needed, explain on reverse.) VEGETATION Dominant Plant Species Stra 1. Acer rubrum 2. Acer rubrum 3. Lindera benzoin 4. 5. 8. Percent of Dominant Species that are Of (excluding FAC-). 3/3= 100 % Remarks: HYDROLOGY Recorded Data (Describe in Rema	udin. H. Canfield site? al Situation)? Connects to atum Indicator T FAC S FAC S FAC S FACW	☐Yes☐Yes☐Don 910131415	⊠No ⊠No ags 1-12 ninant Plant	State: Community ID: Transect ID: Plot ID: Species	Wetlan Wetlan Wetlan Stratum	nd 15A nd DP	
Do Normal Circumstances exist on the s Is the site significantly disturbed (Atypical Is the area a potential Problem Area? (If needed, explain on reverse.) VEGETATION Dominant Plant Species Strational Strati	Connects to atum Indicator T FAC S FAC S FACW	☐Yes☐Yes☐Don 910131415	⊠No ⊠No ags 1-12 ninant Plant	Community ID: Transect ID: Plot ID: Species	Wetlan Wetlan	nd 15A	
Is the site significantly disturbed (Atypical Is the area a potential Problem Area? (If needed, explain on reverse.) VEGETATION Dominant Plant Species Strational S	Connects to atum Indicator T FAC S FAC S FACW	☐Yes☐Yes☐Don 910131415	⊠No ⊠No ags 1-12 ninant Plant	Transect ID: Plot ID: Species	Stratum	nd DP	
Is the area a potential Problem Area? (If needed, explain on reverse.) VEGETATION Dominant Plant Species Stra 1. Acer rubrum 2. Acer rubrum 3. Lindera benzoin 4. 5. 8. Percent of Dominant Species that are Off (excluding FAC-). 3/3= 100 % Remarks: HYDROLOGY Recorded Data (Describe in Rema	Connects to atum Indicator T FAC S FAC S FACW	□Yes Down 9. 10. 13. 14. 15.	⊠No ags 1-12 ninant Plant	Plot ID: Species	Stratum		
VEGETATION Dominant Plant Species Stra 1. Acer rubrum 2. Acer rubrum 3. Lindera benzoin 4. 5. 8. Percent of Dominant Species that are Of (excluding FAC-). 3/3= 100 % Remarks: HYDROLOGY Recorded Data (Describe in Rema	atum Indicator T FAC S FAC S FAC	Dom 9 10 13 14 15	ags 1-12 ninant Plant	Species	Stratum		
VEGETATION Dominant Plant Species Stra 1. Acer rubrum 2. Acer rubrum 3. Lindera benzoin 4. 5. 8. Percent of Dominant Species that are Of (excluding FAC-). 3/3= 100 % Remarks: HYDROLOGY Recorded Data (Describe in Rema	atum Indicator T FAC S FAC S FAC	9. 10. 13. 14. 15. 15.	ninant Plant			Indicator	
Dominant Plant Species Stra 1. Acer rubrum 2. Acer rubrum 3. Lindera benzoin 4 5 8 Percent of Dominant Species that are Of (excluding FAC-). 3/3= 100 % Remarks: HYDROLOGY Recorded Data (Describe in Rema	atum Indicator T FAC S FAC S FAC	9. 10. 13. 14. 15. 15.	ninant Plant			Indicator	
1. Acer rubrum 2. Acer rubrum 3. Lindera benzoin 4. 5. 8. Percent of Dominant Species that are Of (excluding FAC-). 3/3= 100 % Remarks: HYDROLOGY Recorded Data (Describe in Rema	T FAC S FAC S FACW	9. 10. 13. 14. 15.				Indicator	
2. Acer rubrum 3. Lindera benzoin 4 5 8 Percent of Dominant Species that are Of (excluding FAC-). 3/3= 100 % Remarks: HYDROLOGY Recorded Data (Describe in Rema	S FAC S FACW	9. 10. 13. 14. 15.					
3. Lindera benzoin 4. 5. 8. Percent of Dominant Species that are Of (excluding FAC-). 3/3= 100 % Remarks: HYDROLOGY Recorded Data (Describe in Rema	S FACW	10 13 14 15					
4. 5. 8. Percent of Dominant Species that are Of (excluding FAC-). 3/3= 100 % Remarks: HYDROLOGY Recorded Data (Describe in Rema		13 14 15					
4		14 15					
5		15					
Percent of Dominant Species that are Of (excluding FAC-). 3/3= 100 % Remarks: HYDROLOGY Recorded Data (Describe in Rema							
Percent of Dominant Species that are Ole (excluding FAC-). 3/3= 100 % Remarks: HYDROLOGY Recorded Data (Describe in Remarks)							
(excluding FAC-). 3/3= 100 % Remarks: HYDROLOGY Recorded Data (Describe in Rema	DBL, FACW or FAC						
Recorded Data (Describe in Rema							
		<u> </u>					
Ctroom Lake or Tide Course	arks):	Wetland H	ydrology Ind	dicators:			
Stream, Lake, or Tide Gauge			y Indicators	:			
Aerial Photographs		☐ Inundated					
Other		Saturated in Upper 12 Inches					
No Recorded Data Available		Water Marks					
		_ =	Drift Lines				
F: 1101			Sediment D				
Field Observations:				atterns in Wetlands ors (2 or more requ			
Depth of Surface Water:	2 (in.)		-	oot Channels in Up			
	\/	—	Water-Stair		- 3		
Depth to Free Water in Pit:	0 (in.)		Local Soil S				
			FAC-Neutra	al Test			
Depth to Saturated Soil:	0 (in.)		Other (Expl	ain in Remarks)			
Remarks:							

Map Unit Name (Series and Ph		Elkton silt loam			Drainage Class:	P	D			
Taxonomy (Sub	bgroup): <u> </u>	Typic Ochraquults			Field Observations Confirm Mapped Type?	⊠Yes	□ No			
Profile Descript Depth (inches) 0-2 2-12	Horizon	Matrix Color (Munsell Moist) 10YR 2/1 10 YR 6/1	Mottle Colors (Munsell Moi	ist)	Mottle Abundance/ Size/Contrast many, distinct	Texture, Concre Structure, etc, loa silt lo	am			
Histosol Histic Epi Sulfidic O Aquic Mo Reducing Gleyed or	Histic Epipedon Sulfidic Odor Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Reducing Conditions Gleyed or Low-Chroma Colors High Organic Content in Surface Layer in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks)									
WETLAND DE	TERMINATI	ON		1						
Hydrophytic Ve Wetland Hydrol Hydric Soils Pro			No (Check) No	Is this Sa	mpling Point Within a Wetla		heck)			
Remarks:										

Approved by HQUSACE 3/92

Applicant/Owner: MD Transportation Authority Investigator: J. Reed, H Canfield. C. Brudin			1-25-0			
· · · · · · · · · · · · · · · · · · ·						
= :: : : : : : : : : : : : : : : : : :		State:	MD			
Do Normal Circumstances exist on the site?	⊠Yes □No	Community ID:	Wetlar	nd 16A		
Is the site significantly disturbed (Atypical Situation)?	Yes ⊠No	Transect ID:				
Is the area a potential Problem Area?	 □Yes ⊠No	Plot ID:	Wet	land		
(If needed, explain on reverse.)			flags 1-13			
		<u> </u>				
EGETATION						
Dominant Plant Species Stratum Indicato			Stratum	Indicator		
1. Vaccinium corymbosum S FACW	9					
2. Leersia oryzoides H OBL	10					
3. Polygonum pensylvanicum H FACW	<u>/</u>					
4						
5	13.					
6						
7	15.					
8	16					
	_					
(excluding FAC-). 3/3= 100 % Remarks:						
Remarks:						
YDROLOGY	Marie de Lindrology In					
YDROLOGY Recorded Data (Describe in Remarks):	Wetland Hydrology In					
YDROLOGY Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge	Primary Indicators					
Remarks: YDROLOGY	Primary Indicators Inundated	s:				
PROLOGY Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other	Primary Indicators Inundated Saturated	s: in Upper 12 Inches				
Remarks: YDROLOGY	Primary Indicators Inundated Saturated Water Mar	s: in Upper 12 Inches ks				
Remarks: YDROLOGY Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other	Primary Indicators Inundated Saturated Water Mar Drift Lines	s: in Upper 12 Inches ks				
YDROLOGY Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available	Primary Indicators Inundated Saturated Water Mar Drift Lines Sediment I	s: in Upper 12 Inches ks Deposits				
YDROLOGY Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other	Primary Indicators Inundated Saturated Water Mar Drift Lines Sediment I	s: in Upper 12 Inches ks Deposits Patterns in Wetlands				
Remarks: YDROLOGY	Primary Indicators Inundated Saturated Water Mar Drift Lines Sediment I Drainage F Secondary Indica	s: in Upper 12 Inches ks Deposits	uired):			
Remarks: YDROLOGY	Primary Indicators Inundated Saturated Water Mar Drift Lines Sediment I Drainage F Secondary Indica Oxidized R	s: in Upper 12 Inches rks Deposits Patterns in Wetlands ators (2 or more requ	uired):			
Remarks: YDROLOGY	Primary Indicators Inundated Saturated Water Mar Drift Lines Sediment I Drainage F Secondary Indica Oxidized R Water-Stai	s: in Upper 12 Inches rks Deposits Patterns in Wetlands ators (2 or more requ	uired):			
IYDROLOGY	Primary Indicators Inundated Saturated Water Mar Drift Lines Sediment I Drainage F Secondary Indica Oxidized R Water-Stai	s: in Upper 12 Inches rks Deposits Patterns in Wetlands stors (2 or more requ Root Channels in Up ined Leaves Survey Data	uired):			

Map Unit Name (Series and Phase):	Elkton silt loam		Drainage Class:		PD					
Taxonomy (Subgroup):	Typic Ochraquults		Field Observations Confirm Mapped Typ	 oe? ⊠]Yes □ No					
Profile Descriptions: Depth (inches) Horizon 0-16	n Matrix Color Mc es) Horizon (Munsell Moist) (M		Mottle Abundance/) Size/Contrast /6 few	Texture, Structure	Concretions, e, etc, silt loam					
Lhudria Cail Indiantara										
Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regim Reducing Conditions	Histic Epipedon Sulfidic Odor Organic Streaking in Sandy Soils Aquic Moisture Regime Reducing Conditions High Organic Content in Surface Layer in Sandy Soils Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List									
Remarks: Oxidized roots heavy thre	oughout the upper part of	f profile.								
WETLAND DETERMINA	TION									
Hydrophytic Vegetation Pres Wetland Hydrology Present Hydric Soils Present?		(Check)	s this Sampling Point Within a V	Vetland?	(Check) ⊠Yes					
Flagged as wetland due hydric.	to the presence of the Of	BL and FACW	species and wetland hydrolo	ogy. Soils w	rere not strongly					

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Project/Site: I-95 Sec	tion 200				Date:	1-26-	-06
	nsportation Au	County:	Harfo				
	, C. Brudin, H	•			State:	ME	
Do Normal Circumstances exist		<u> </u>	⊠Yes	□No	Community ID:		
s the site significantly disturbed		nn\?	∐Yes	⊠No	Transect ID:	***************************************	IIU IIA
s the area a potential Problem	` ,,	Jil).	□Yes	⊠No	Plot ID:	We	etland
(If needed, explain on reverse			□.00	MI	Wetland 17A Flags (1-10)		
(II flooded, explain on foreign	5.)				*****	alla iiii lago	(1-10)
GETATION							
Dominant Plant Species	Stratum	Indicator	Don	ninant Plant	Species	Stratum	Indicator
1. Viburnum dentatum	urnum dentatum S FAC		9				
2. Smilax rotundifolia	S	FAC					
3. Acer rubrum	Т	FAC					
4.							
5							
6							
7							-
							-
8			. 10				
Remarks: Plants all located a							
YDROLOGY	in Remarks):		Wetland H	bydrology In	dicators:		
YDROLOGY Recorded Data (Describe				lydrology In			
YDROLOGY Recorded Data (Describe Stream, Lake, or Tide			Primai	ry Indicators			
YDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs			Primai	ry Indicators Inundated	s:		
YDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other	e Gauge		Primai	ry Indicators Inundated Saturated i	s: n Upper 12 Inches		
YDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs	e Gauge		Primai	ry Indicators Inundated Saturated i Water Marl	s: n Upper 12 Inches		
YDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other	e Gauge		Primai	ry Indicators Inundated Saturated i Water Marl Drift Lines	s: n Upper 12 Inches ks		
YDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab	e Gauge		Primal	ry Indicators Inundated Saturated i Water Marl Drift Lines Sediment [s: n Upper 12 Inches ks Deposits		
YDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other	e Gauge		Primal	ry Indicators Inundated Saturated i Water Marl Drift Lines Sediment I Drainage F	s: n Upper 12 Inches ks		
YDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab	e Gauge	_(in.)	Primal	ry Indicators Inundated Saturated i Water Marl Drift Lines Sediment I Drainage F dary Indica	n Upper 12 Inches ks Deposits Patterns in Wetlands	uired):	
YDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations:	e Gauge ole		Primal	ry Indicators Inundated Saturated i Water Marl Drift Lines Sediment I Drainage F dary Indica Oxidized R	n Upper 12 Inches ss Deposits Patterns in Wetlands fors (2 or more requ	uired):	
YDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations:	e Gauge Die 1.0"	_(in.)	Primal	ry Indicators Inundated Saturated i Water Marl Drift Lines Sediment I Drainage F dary Indicat Oxidized R Water-Stail	n Upper 12 Inches ss Deposits latterns in Wetlands lors (2 or more requioot Channels in Up	uired):	
YDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water:	e Gauge Die 1.0"	_(in.)	Primal	ry Indicators Inundated Saturated i Water Marl Drift Lines Sediment I Drainage F dary Indicat Oxidized R Water-Stail	n Upper 12 Inches Seposits Patterns in Wetlands fors (2 or more required Channels in Upped Leaves Survey Data	uired):	
YDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water:	e Gauge Die 1.0"	_(in.)	Primal	ry Indicators Inundated Saturated i Water Marl Drift Lines Sediment I Drainage F dary Indica Oxidized R Water-Stai Local Soil S FAC-Neutr	n Upper 12 Inches Seposits Patterns in Wetlands fors (2 or more required Channels in Upped Leaves Survey Data	uired):	
PDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availat Field Observations: Depth of Surface Water: Depth to Free Water in Pit	e Gauge 1.0"	_(in.) _(in.)	Primal	ry Indicators Inundated Saturated i Water Marl Drift Lines Sediment I Drainage F dary Indica Oxidized R Water-Stai Local Soil S FAC-Neutr	n Upper 12 Inches s Deposits datterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data al Test	uired):	
PDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availat Field Observations: Depth of Surface Water: Depth to Free Water in Pit	e Gauge 1.0"	_(in.) _(in.) _(in.)	Primal	ry Indicators Inundated Saturated i Water Marl Drift Lines Sediment I Drainage F dary Indica Oxidized R Water-Stai Local Soil S FAC-Neutr	n Upper 12 Inches s Deposits datterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data al Test	uired):	
PROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water: Depth to Free Water in Pit Depth to Saturated Soil:	e Gauge 1.0"	_(in.) _(in.) _(in.)	Primal	ry Indicators Inundated Saturated i Water Marl Drift Lines Sediment I Drainage F dary Indica Oxidized R Water-Stai Local Soil S FAC-Neutr	n Upper 12 Inches s Deposits datterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data al Test	uired):	

SUILS										
Map Unit Name (Series and Phase):				Drainage Class:	PD					
Taxonomy (Subgroup):				Field Observations Confirm Mapped Type?	⊠Yes	□ No				
Profile Descriptions: Depth (inches) Horizon 0-4 4-7 7-13	Matrix Color Mottle Colors (Munsell Moist) (Munsell Moist) 10YR 3/3 7.5 Y/R 2.5 Y 4/2 7.5 YR 10Y/R 6/6 2.5 Y 7		ist) R 4/6	Mottle Abundance/ Size/Contrast common common common	Texture, Concre Structure, etc, Loa Silt clay Mixed distu	am y loam				
Reducing Conditions Gleyed or Low-Chrom Remarks:	Hydric Soil Indicators: Histosol									
WETLAND DETERMINA										
Hydrophytic Vegetation Pre Wetland Hydrology Present Hydric Soils Present?	esent? ⊠Yes ⊡No		Is this Sa	ampling Point Within a Wetla	<u>-</u>	neck)				
Remarks: This wetland is in a char pulling hydrology from the			surface o	connection to WUS23. Th	nis area acts as	a ditch				

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	oortation Au			Date:	1-26-	^^
Investigator: J. Reed, C Do Normal Circumstances exist on Is the site significantly disturbed (A Is the area a potential Problem Are		· · · · · · · · · · · · · · · · · · ·				
Do Normal Circumstances exist on Is the site significantly disturbed (A Is the area a potential Problem Are				County:	Harfo	
Is the site significantly disturbed (A Is the area a potential Problem Are		Carillelu		State:	MD	
Is the area a potential Problem Are		\0	⊠Yes □No	Community ID:	VVEllai	10 18 A
	,,	n)?	□Yes ⊠No	Transect ID:	10/0:	·
(If needed, explain on reverse.)	a?		∐Yes ⊠No	Plot ID:		tland
				VVeu	and 18 A Flags	(1-20)
EGETATION						
Dominant Plant Species	Stratum	Indicator	Dominant Pla	ant Species	Stratum	Indicator
1. Typha latifolia	Н	OBL	9			
2. Phragmites communis	Н	OBL	10.			
3. Ludwigia alternifolia	Н	FACW+				
4						
5						
6						
7						
8		-	. 10			
YDROLOGY						
Recorded Data (Describe in F	Pomorke):		Wetland Hydrology	Indicators:		
Stream, Lake, or Tide G			Primary Indicate			
□ JUEAIII, LANE, UL LIUE U	auge			JIS.		
				٨		
Aerial Photographs						
Aerial Photographs Other			⊠ Saturated	d in Upper 12 Inches		
Aerial Photographs			Saturated Water Ma	d in Upper 12 Inches arks		
Aerial Photographs Other			Saturated Water Ma	d in Upper 12 Inches arks es		
Aerial Photographs Other No Recorded Data Available			Saturated Water Ma Drift Line Sedimen	d in Upper 12 Inches arks es at Deposits	2	
Aerial Photographs Other			Saturated Water Ma Drift Line Sedimen Drainage	d in Upper 12 Inches arks es		
Aerial Photographs Other No Recorded Data Available Field Observations:	1.0"	(in.)	Saturated Water Ma Drift Line Sedimen Drainage Secondary Indic	d in Upper 12 Inches arks es it Deposits e Patterns in Wetlands	uired):	
Aerial Photographs Other No Recorded Data Available	1.0"	(in.)	Saturated Water Ma Drift Line Sedimen Drainage Secondary Indic	d in Upper 12 Inches arks es at Deposits e Patterns in Wetlands cators (2 or more requ	uired):	
Aerial Photographs Other No Recorded Data Available Field Observations:		_ ` '	Saturated Water Ma Drift Line Sedimen Drainage Secondary Indic	d in Upper 12 Inches arks es at Deposits e Patterns in Wetlands cators (2 or more requ I Root Channels in Up	uired):	
Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water:		_ ` '	Saturated Water Ma Drift Line Sedimen Drainage Secondary Indic	d in Upper 12 Inches arks es at Deposits e Patterns in Wetlands cators (2 or more requ I Root Channels in Up tained Leaves il Survey Data	uired):	
Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: Depth to Free Water in Pit:		(in.)	Saturated Water Ma Drift Line Sedimen Drainage Secondary Indic Mater-St Local So FAC-Neu	d in Upper 12 Inches arks es at Deposits e Patterns in Wetlands cators (2 or more requ I Root Channels in Up tained Leaves il Survey Data	uired):	
Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil:	-	(in.)	Saturated Water Ma Drift Line Sedimen Drainage Secondary Indic Mater-St Local So FAC-Neu	d in Upper 12 Inches arks es at Deposits e Patterns in Wetlands cators (2 or more requ I Root Channels in Up tained Leaves iil Survey Data utral Test	uired):	
Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil: Remarks:	-	(in.) (in.)	Saturated Water Ma Drift Line Sedimen Drainage Secondary Indic Mater-St Local So FAC-Neu	d in Upper 12 Inches arks es at Deposits e Patterns in Wetlands cators (2 or more requ I Root Channels in Up tained Leaves iil Survey Data utral Test	uired):	
Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil:	-	(in.) (in.)	Saturated Water Ma Drift Line Sedimen Drainage Secondary Indic Mater-St Local So FAC-Neu	d in Upper 12 Inches arks es at Deposits e Patterns in Wetlands cators (2 or more requ I Root Channels in Up tained Leaves iil Survey Data utral Test	uired):	

						
Map Unit Name (Series and Phase): Keyport silt loam, 2-5% slopes				ainage Class:	MV	VD
Taxonomy (Subgroup):	Aquic Ha	pludults		onfirm Mapped Type?	□Yes	⊠ No
Profile Descriptions: Depth (inches) Horizon 0-4 4-12	Matrix Color (Munsell Moist) 10YR 2/1 10 YR 5/2	Mottle Colors (Munsell Mois 7.5 Y/R	st) Siz	ottle Abundance/ .e/Contrast	Texture, Concre	
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regim Reducing Conditions Gleyed or Low-Chrom			Organic Streak ∟isted on Loca	Content in Surface Lay king in Sandy Soils Il Hydric Soils List onal Hydric Soils List in Remarks)	er in Sandy Soils	5
WETLAND DETERMINA	TION					
Hydrophytic Vegetation Pre Wetland Hydrology Present Hydric Soils Present?			Is this Samplir	ng Point Within a Wetla		neck)
Remarks:						

Approved by HQUSACE 3/92

Forms version 1/02

	Febru	uary 1, 2006	3
County: Harford			
State:	Maryl	land	
Communi			and 21A
Transect			
Plot ID:		W	etland
	_		
ecies		Stratum	Indicator
		<u> </u>	<u> </u>
ators:			
lpper 12 lı	nches		
pper 12 II	licies		
osits			
erns in We	etlands		
		ed):	
(2 or mo	s in Uppe	er 12 Inches	3
(2 or mo			
(2 or mo			
(2 or mono Channels Leaves vey Data			
(2 or mono Channels Leaves vey Data			
(2 or mono Channels Leaves vey Data	rks)		
(2 or mono Channels Leaves vey Data	rks)		
(2 or mono Channels Leaves vey Data	irks)		
(2 or mono Channels Leaves vey Data	rks)		
(2 or mono Channels Leaves vey Data	rks)		
(2 Cl Le vey	Rema	Remarks)	Remarks)

Map Unit Name (Series and Phase): Taxonomy (Subgroup):	ase): Alluvial land		Drainage Class: Field Observations Confirm Mapped Type?	SWP - VP	
Profile Descriptions: Depth (inches) Horizon 0-2 2-6 6-12	Matrix Color (Munsell Moist) 10YR 2/1 10YR 4/2 10YR 6/1	Mottle Colors (Munsell Mois 10YR 5	Size/Contrast 5/6 few, med., distinct	Texture, Concretions, Structure, etc, silt loam, organic silt loam sand loam, wet	
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma			Concretions High Organic Content in Surface Lay Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks)	rer in Sandy Soils	
WETLAND DETERMINA	ATION				
Hydrophytic Vegetation Pres Wetland Hydrology Present? Hydric Soils Present? Remarks:		(Check)	Is this Sampling Point Within a Wetla	(Check) and? ⊠Yes ⊡No	

Project/Site: I-95 Section 200 Applicant/Owner: MD Transportation Authority Investigator: H. Canfield, C. Brudin, J. Reed Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.) EGETATION	9. 10. 11. 12. 13. 14. 15. 16.		wetla 13 flags Stratum	ord and
Investigator: H. Canfield, C. Brudin, J. Reed Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.) Common	Yes No No Yes No No No No No No No N	State: Community ID: Transect ID: Plot ID:	Maryla Wetla wetla 13 flags Stratum	and nd 22 A and plot
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.) FEGETATION Dominant Plant Species Stratum Indicator 1. Symplocarpus foetidus H OBL 2. Viburnum dentatum S FAC 3. Lindera benzoin S FACW 4. Toxicodendron radicans WV FAC 5. 6. 7. 8. Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 4/4 = 100 % Remarks:	Yes No No Yes No No No No No No No N	Community ID: Transect ID: Plot ID: It Species	Wetla wetla 13 flags Stratum	nd 22 A and plot
Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.) EGETATION Dominant Plant Species Stratum Indicator 1. Symplocarpus foetidus H OBL 2. Viburnum dentatum S FAC 3. Lindera benzoin S FACW 4. Toxicodendron radicans WV FAC 5. 6. 7. 8. Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 4/4 = 100 % Remarks:	Yes No No Yes No No No No No No No N	Transect ID: Plot ID:	wetla 13 flags Stratum	ind plot
Is the area a potential Problem Area? (If needed, explain on reverse.) Dominant Plant Species Stratum Indicator	Dominant Plar 9. 10. 11. 12. 13. 14. 15. 16.	Plot ID:	13 flags Stratum	
(If needed, explain on reverse.) EGETATION Dominant Plant Species Stratum Indicator 1. Symplocarpus foetidus H OBL 2. Viburnum dentatum S FAC 3. Lindera benzoin S FACW 4. Toxicodendron radicans WV FAC 5. 6. 7. 8. Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 4/4 = 100 % Remarks:	Dominant Plan 9. 10. 11. 12. 13. 14. 15. 16.	nt Species	13 flags Stratum	
Dominant Plant Species Stratum Indicator 1. Symplocarpus foetidus H OBL 2. Viburnum dentatum S FAC 3. Lindera benzoin S FACW 4. Toxicodendron radicans WV FAC 5. 6. 7. 8. Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 4/4 = 100 % Remarks:	9. 10. 11. 12. 13. 14. 15. 16.		Stratum	Indicator
Dominant Plant Species Stratum Indicator 1. Symplocarpus foetidus H OBL 2. Viburnum dentatum S FAC 3. Lindera benzoin S FACW 4. Toxicodendron radicans WV FAC 5.	9. 10. 11. 12. 13. 14. 15. 16.			Indicator
1. Symplocarpus foetidus H OBL 2. Viburnum dentatum S FAC 3. Lindera benzoin S FACW 4. Toxicodendron radicans WV FAC 5. 6. 7. 8. Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 4/4 = 100 % Remarks:	9. 10. 11. 12. 13. 14. 15. 16.			Indicator
2. Viburnum dentatum S FAC 3. Lindera benzoin S FACW 4. Toxicodendron radicans WV FAC 5. 6. 7. 8. Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 4/4 = 100 % Remarks:	10			
2. Viburnum dentatum S FAC 3. Lindera benzoin S FACW 4. Toxicodendron radicans WV FAC 5. 6. 7. 8. Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 4/4 = 100 % Remarks:	10			
4. Toxicodendron radicans WV FAC 5. 6. 7. 8. Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 4/4 = 100 % Remarks:	11.			
4. Toxicodendron radicans WV FAC 5. 6. 7. 8. Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 4/4 = 100 % Remarks:	12. 13. 14. 15. 16.			
5	13. 14. 15. 16.			
6	14 15 16			
7	15 16			
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 4/4 = 100 % Remarks:	16			
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 4/4 = 100 % Remarks:				
(excluding FAC-). 4/4 = 100 % Remarks:	of Little Gunpowder W	/US 34 A		
VDBOLOCY				
YDROLOGY	l,, , ,			
Recorded Data (Describe in Remarks):	Wetland Hydrology In			
Stream, Lake, or Tide Gauge	Primary Indicator			
☐ Aerial Photographs				
☐ Other		in Upper 12 Inches		
No Recorded Data Available	☐ Water Mai			
	Drift Lines			
Field Observations	☐ Sediment	•	_	
Field Observations:		Patterns in Wetlands ators (2 or more requ		
Depth of Surface Water: 2 (in.)	<u> </u>	Root Channels in Up		
Depth of Sunace water.		ined Leaves	per iz monos	
Depth to Free Water in Pit: 0 (in.)		Survey Data		
()	FAC-Neut	,		
Depth to Saturated Soil: 0 (in.)		plain in Remarks)		
, , ,		,		
Remarks:				
Nemarks.				

Map Unit Name (Series and Phase):	Codorus silt loam	Drainage Class: Field Observations	MWD / SWP	
Taxonomy (Subgroup):	Fluvaquentic Dystroch	repts	Confirm Mapped Ty	pe? ⊠Yes □ No
Profile Descriptions: Depth (inches) Horizon 0-3 3-6 6-12	Matrix Color (Munsell Moist) 10YR 2/1 10YR 5/2 10 YR 5/3	Mottle Colors (Munsell Moist)		Texture, Concretions, Structure, etc, Silty loam Sandy loam Sandy loam
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma		Hi O Li:	oncretions gh Organic Content in Surface rganic Streaking in Sandy Soils sted on Local Hydric Soils List sted on National Hydric Soils Li ther (Explain in Remarks)	
WETLAND DETERMINA	ATION			
Hydrophytic Vegetation Pres Wetland Hydrology Present? Hydric Soils Present? Remarks: Standing water	? ⊠Yes □No ⊠Yes □No	Is	s this Sampling Point Within a V	(Check) Vetland? ⊠Yes ⊡No

- : :::: LOE Cooti	200				<u></u>		: 2222
Project/Site: I-95 Section 200 Applicant/Owner: MD Transportation Authority					Date:	February	
··· ··· · · · · · · · · · · · · · · · 					County:	Baltim	
	ld, C. Brudin,	, J. Keea			State:	Maryla	
Do Normal Circumstances exist or			⊠Yes	□No	Community ID:	Wetla	ınd 23A
Is the site significantly disturbed (A		n)?	□Yes	⊠No	Transect ID:		
Is the area a potential Problem Are			□Yes	⊠No	Plot ID:		and plot
(If needed, explain on reverse.)						27 flags	
/EGETATION							
Dominant Plant Species	Stratum	Indicator	Dor	ninant Plant	t Species	Stratum	Indicator
1. Symplocarpus foetidus	Н	OBL	_				
2. Viburnum dentatum	S	FAC					
3. Lindera benzoin		FACW					
4. Acer rubrum		FAC					
5. Lonicera japonica	Н	FAC-					
6. Toxicodendron radicans	V	FAC					
7							
0							
8			. 10				
HYDROLOGY							
Recorded Data (Describe in	Remarks):		Wetland F	Hydrology In	idicators:		
Stream, Lake, or Tide G				ry Indicators			
Aerial Photographs	J			Inundated			
Other				Saturated i	in Upper 12 Inches		
No Recorded Data Available	;		☐ Water Marks				
				Drift Lines			
				Sediment D	Deposits		
Field Observations:					Patterns in Wetlands		
				•	itors (2 or more requ	•	
Depth of Surface Water:		_(in.)	. =		Root Channels in Up	per 12 Inches	
			=		ined Leaves		
Depth to Free Water in Pit:	1	_(in.)			Survey Data		
Depth to Saturated Soil:	0	_(in.)		FAC-Neutra Other (Exp	ral Test blain in Remarks)		
Remarks:							

Map Unit Name (Series and Phase): Codorus silt loam Taxonomy (Subgroup): Fluvaquentic Dystrochrepts Profile Descriptions: Deoth Matrix Color Mottle Colors		Fi	rainage Class: eld Observations Confirm Mapped Type?	MWD / SWP ⊠Yes □ No			
Depth	Matrix Color	Mottle Colors		ottle Abundance/	Texture, Concre	etions,	
(inches) Horizon 0-3	(Munsell Moist) 10YR 2/2	(Munsell Moist	t) <u>Si</u>	ze/Contrast	trast Structure, etc, silt loam		
3-6	10YR 4/3				silt le	•	
6-12	10 YR 5/1	10 YR 6	 6/4	Med, distinct	silt le		
Hydric Soil Indicators: Histosol							
Remarks: WETLAND DETERMINA	ATION						
Hydrophytic Vegetation Pres	sent? ⊠Yes □No	(Check)			(C	neck)	
Wetland Hydrology Present?		((-	,	
Hydric Soils Present?	⊠Yes □No	ļ.	ls this Sampl	ing Point Within a Wetla	and? Xes	No	
Remarks: Wetland drains	s into WUS 35A Palustri	ne Forested we	etland. Trail	ls run through wetlan	d.		

Project/Site: I-95 Sect					Date:	February 1	1, 2006
	sportation Author			County:	Baltimo	ore	
Investigator: H. Canfie	eld, C. Brudin, J	. Reed			State:	Maryla	and
Do Normal Circumstances exist of	on the site?		⊠Yes	□No	Community ID:	Wetlar	nd 24A
Is the site significantly disturbed		?	□Yes	⊠No	Transect ID:		
- · · · · · · · · · · · · · · · · · · ·	Is the area a potential Problem Area?			⊠No	Plot ID:	Wetlar	nd plot
(If needed, explain on reverse.			∐Yes	MILLO	l locib.		ila piot
(II Heeded, Explain on 10voloc	<u>.)</u>						
/EGETATION							
Dominant Plant Species	Stratum	Indicator	Dor	minant Plant	t Species	Stratum	Indicator
1. Acer rubrum	T	FAC				Stratum	mulcator
2. Liquidambar styraciflua		FAC					
		FAU					
3							
4							
5							
6							
7			15				
8			16				
Percent of Dominant Species tha							
JADDOI OGA							
HYDROLOGY			$\overline{}$				
Recorded Data (Describe in				Hydrology Inc			
Stream, Lake, or Tide	Gauge			ry Indicators	; :		
Aerial Photographs				Inundated			
Other				Saturated in	in Upper 12 Inches		
No Recorded Data Availabl	ile			Water Mark	(S		
			니 닏	Drift Lines			
				Sediment D	•		
Field Observations:					Patterns in Wetlands		
5 4 45 4 144	2.0 "		Secon	-	tors (2 or more requ		
Depth of Surface Water:	(ii	in.)			loot Channels in Up	per 12 Inches	
D. H. Sana Water in Dit	<i>(</i> *			Water-Stair			
Depth to Free Water in Pit:	(II	in.)			Survey Data		
Death to Coturated Coile	/:	· · · ·		FAC-Neutra			
Depth to Saturated Soil:	(II	in.)		Otner (Expi	lain in Remarks)		
	1	المرابعة المالية					
Remarks: Inundated in low of	depressions, satu	rated through	hout wetlan	nd area			
Remarks: Inundated in low (depressions, satu	rated through	hout wetlar	nd area			
Remarks: Inundated in low (depressions, satu	rated througl	hout wetlar	nd area			
Remarks: Inundated in low (depressions, satu	ırated througl	hout wetlar	nd area			

Map Unit Name (Series and Phase):	Beltsville silt loam, 2-5	loam, 2-5% slopes		Drainage Class:	MWD	
Taxonomy (Subgroup):	Typic Fragiudults			Field Observations Confirm Mapped Type?	Yes ⊠ No	
Profile Descriptions: Depth (inches) Horizon 0-2 2-8 8-12	Matrix Color (Munsell Moist) 10YR 2/1 10YR 4/1 10YR 3/1	Mottle Colors (Munsell Mois 10YR 5		Mottle Abundance/ Size/Contrast sev, fine, distinct	Texture, Concretions, Structure, etc, organic silt loam silt loam	
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chrome			Organic St _isted on L _isted on N	is nic Content in Surface Lay reaking in Sandy Soils .ocal Hydric Soils List National Hydric Soils List Ilain in Remarks)	er in Sandy Soils	
WETLAND DETERMINA	ATION					
Hydrophytic Vegetation Pres Wetland Hydrology Present' Hydric Soils Present? Remarks: Isolated PFO w	? ⊠Yes □No ⊠Yes □No	(Check)	ls this Sar	npling Point Within a Wetla	(Check) and? ⊠Yes □No	

							
Project/Site: I-95 Sec					Date:	February 1	1, 2006
	nsportation Au				County:	Baltime	ore
Investigator: H. Canfie	eld, C. Brudin	ı, J. Reed			State:	Maryla	and
Do Normal Circumstances exist	on the site?		⊠Yes	□No	Community ID:	Wetlar	nd 25 A
Is the site significantly disturbed	(Atypical Situati	on)?	□Yes	⊠No	Transect ID:		·
Is the area a potential Problem A		,	_ □Yes	_ ⊠No	Plot ID:	Wetla	nd Plot
(If needed, explain on reverse			_	<u> </u>			
(ii iioooca, oxpia	•-/				I		
VEGETATION							
Dominant Plant Species	Stratum	Indicator	Don	ninant Plant	t Species	Stratum	Indicator
1. Acer rubrum	T	FAC			Соролого	<u> Ctrata</u>	maioc.c.
2. llex verticillata	S	FACW+					
3. Smilax rotundifolia		FAC					
4							
5							
6							
7			_ 15				
8			_ 16				
Percent of Dominant Species that							
LIVEROLOCY							
HYDROLOGY							
Recorded Data (Describe i	n Remarks):		Wetland H	lydrology In	idicators:		
Stream, Lake, or Tide	Gauge		Primar	y Indicators	s:		
Aerial Photographs				Inundated			
Other				Saturated i	in Upper 12 Inches		
No Recorded Data Availab	ole		☐ Water Marks				
				Drift Lines			
				Sediment [•		
Field Observations:					Patterns in Wetlands		
I				-	itors (2 or more requ		
Depth of Surface Water:	2-3	(in.)			Root Channels in Up	per 12 Inches	
					ined Leaves		
Depth to Free Water in Pit:	:	(in.)			Survey Data		
				FAC-Neutr			
Depth to Saturated Soil:		(in.)		Other (Exp	olain in Remarks)		
Remarks:							

Map Unit Name (Series and Phase):	Beltsville silt loam, 2-5	Beltsville silt loam, 2-5% slopes			M\/	WD
Taxonomy (Subgroup):	Typic Fragiudults			Field Observations Confirm Mapped Type?	□Yes	 ⊠ No
Profile Descriptions: Depth (inches) Horizon 0-2 2-8 8-12	Matrix Color (Munsell Moist) 10YR 2/1 10YR 4/1 10YR 3/1	Mottle Colors (Munsell Mois 10YR 5	st)	Mottle Abundance/ Size/Contrast Sev, fine, distinct	silt le	etions, anic oam oam
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma	a Colors		Organic St Listed on L Listed on N	ns nic Content in Surface Lay treaking in Sandy Soils Local Hydric Soils List National Hydric Soils List Dlain in Remarks)	er in Sandy Soils	s
WETLAND DETERMINA	ATION					
Hydrophytic Vegetation Pres Wetland Hydrology Present? Hydric Soils Present? Remarks:			Is this Sar	mpling Point Within a Wetla		heck)

Applicant/Owner: MD Transportation Authority Investigator: H. Canffeld, C. Brudin, J. Reed No Normal Circumstances exist on the site? State: Manyland No Normal Circumstances exist on the site? State significantly disturbed (Atypical Situation)? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? Yes No Transect ID:	Project/Site: I-95 Sec				Date:	February	1, 2006	
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.) Community ID:			•			County:	Baltim	nore
Is the site significantly disturbed (Atypical Situation)? Yes No Plot ID: wetland plot	Investigator: H. Canfi	eld, C. Brudin	, J. Reed			State:	Maryl	and
s the area a potential Problem Area? (If needed, explain on reverse.) SEFTATION	Do Normal Circumstances exist	on the site?		⊠Yes	□No	Community ID:	Wetla	and 27A
### Companies of the control of the	Is the site significantly disturbed	(Atypical Situation	on)?	□Yes	⊠No	Transect ID:		
Dominant Plant Species	Is the area a potential Problem	Area?		□Yes	⊠No	Plot ID:	wetla	and plot
Dominant Plant Species Stratum Indicator Dominant Plant Species Stratum Indicator 1. Typha latifolia H OBL 9.	(If needed, explain on reverse	∍.)						
1. Typha latifolia	GETATION							
1. Typha latifolia	Dominant Plant Species	Stratum	Indicator	Don	ninant Plant	Species	Stratum Indica	
2. Juncus effusus		Н						
3. Polygonum spp.		Н	FACW+					
12. 13. 14. 15. 16. 16. 16. 17. 18. 16.								
13.								
6.		-						
7.								
8								
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 2/2 = 100% Remarks: Isolated PEM in Ag. field. Recently mowed. Possible Possible Percent Perc								
YDROLOGY Pecorded Data (Describe in Remarks): Wetland Hydrology Indicators: Primary Indicators: Primary Indicators: Inundated Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Depth to Free Water in Pit: na	8			16				
□ Recorded Data (Describe in Remarks): Wetland Hydrology Indicators: □ Stream, Lake, or Tide Gauge Primary Indicators: □ Aerial Photographs □ Inundated □ Other □ Saturated in Upper 12 Inches □ No Recorded Data Available □ Water Marks □ Drift Lines □ Sediment Deposits □ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): □ Depth of Surface Water: 4 (in.) □ Oxidized Root Channels in Upper 12 Inches □ Water-Stained Leaves □ Water-Stained Leaves □ Depth to Free Water in Pit: na (in.) □ Local Soil Survey Data □ FAC-Neutral Test □ Other (Explain in Remarks)			ly mowed.					
☐ Stream, Lake, or Tide Gauge Primary Indicators: ☐ Aerial Photographs ☐ Inundated ☐ Other ☐ Saturated in Upper 12 Inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12 Inches ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ Depth to Free Water in Pit: _ na (in.) ☐ FAC-Neutral Test Depth to Saturated Soil: _ 0 (in.) ☐ Other (Explain in Remarks)	Remarks: Isolated PEM in A		ly mowed.					
□ Aerial Photographs □ Other □ Other □ Saturated in Upper 12 Inches □ Water Marks □ Drift Lines □ Sediment Deposits □ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): □ Oxidized Root Channels in Upper 12 Inches □ Depth of Surface Water: 4 (in.) □ Depth to Free Water in Pit: na (in.) □ Depth to Saturated Soil: 0 (in.) Other (Explain in Remarks)	YDROLOGY	g. field. Recent	ly mowed.	Wetland H	ludralogy la	dicators		
□ Other □ Saturated in Upper 12 Inches □ No Recorded Data Available □ Water Marks □ Drift Lines □ Sediment Deposits □ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): □ Depth of Surface Water: 4 (in.) □ Depth to Free Water in Pit: na (in.) □ Depth to Saturated Soil: 0 (in.) Saturated in Upper 12 Inches Water-Stained Leaves □ Local Soil Survey Data □ FAC-Neutral Test □ Other (Explain in Remarks)	YDROLOGY Recorded Data (Describe	g. field. Recent	ly mowed.					
No Recorded Data Available	YDROLOGY Recorded Data (Describe Stream, Lake, or Tide	g. field. Recent	ly mowed.	Primai	ry Indicators			
Drift Lines Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)	YDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs	g. field. Recent	ly mowed.	Primai	ry Indicators Inundated	s:		
Field Observations: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil: Depth to Saturated Soil: Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)	YDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other	g. field. Recent in Remarks): e Gauge	ly mowed.	Primai	ry Indicators Inundated Saturated i	s: n Upper 12 Inches		
Field Observations: Depth of Surface Water: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil: Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)	YDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other	g. field. Recent in Remarks): e Gauge	ly mowed.	Primai	ry Indicators Inundated Saturated i Water Marl	s: n Upper 12 Inches		
Secondary Indicators (2 or more required): Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil: Depth to Saturated Soil: Secondary Indicators (2 or more required): Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)	YDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other	g. field. Recent in Remarks): e Gauge	ly mowed.	Primai	ry Indicators Inundated Saturated i Water Marl Drift Lines	s: n Upper 12 Inches ks		
Depth of Surface Water: 4 (in.) Depth to Free Water in Pit: Depth to Saturated Soil: (in.) Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)	YDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab	g. field. Recent in Remarks): e Gauge	ly mowed.	Primal	ry Indicators Inundated Saturated i Water Marl Drift Lines Sediment [n Upper 12 Inches ks Deposits		
Depth to Free Water in Pit: na (in.) Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Depth to Saturated Soil: Other (Explain in Remarks)	YDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab	g. field. Recent in Remarks): e Gauge	ly mowed.	Primal	ry Indicators Inundated Saturated i Water Marl Drift Lines Sediment I Drainage F	n Upper 12 Inches ks Deposits Patterns in Wetlands		
Depth to Saturated Soil: 0 (in.) FAC-Neutral Test Other (Explain in Remarks)	YDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availate Field Observations:	in Remarks): e Gauge		Primal	ry Indicators Inundated Saturated i Water Marl Drift Lines Sediment I Drainage F dary Indica	n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ	ired):	
Depth to Saturated Soil: O (in.) FAC-Neutral Test Other (Explain in Remarks)	YDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availat Field Observations:	in Remarks): e Gauge		Primal	ry Indicators Inundated Saturated i Water Marl Drift Lines Sediment I Drainage F dary Indica Oxidized R	n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Up	ired):	
	YDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water:	in Remarks): Gauge	_(in.)	Primal	ry Indicators Inundated Saturated i Water Marl Drift Lines Sediment [Drainage F dary Indicators Oxidized R Water-Stail	n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requioot Channels in Up	ired):	
Remarks: Inundated to 4" in tire ruts.	YDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water:	in Remarks): Gauge	_(in.)	Primal	ry Indicators Inundated Saturated i Water Marl Drift Lines Sediment I Drainage F dary Indicat Oxidized R Water-Stail Local Soil S	n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data	ired):	
Remarks: Inundated to 4" in tire ruts.	YDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availat Field Observations: Depth of Surface Water: Depth to Free Water in Pit	in Remarks): e Gauge ble 4 :	_(in.) _(in.)	Primal	ry Indicators Inundated Saturated i Water Marl Drift Lines Sediment I Drainage F dary Indica Oxidized R Water-Stai Local Soil S FAC-Neutr	n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data al Test	ired):	
	YDROLOGY Recorded Data (Describe Stream, Lake, or Tide Acrial Photographs Other No Recorded Data Availate Field Observations: Depth of Surface Water: Depth to Free Water in Pit Depth to Saturated Soil:	in Remarks): e Gauge le 4 le na 0	_(in.) _(in.)	Primal	ry Indicators Inundated Saturated i Water Marl Drift Lines Sediment I Drainage F dary Indica Oxidized R Water-Stai Local Soil S FAC-Neutr	n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data al Test	ired):	
	YDROLOGY Recorded Data (Describe Stream, Lake, or Tide Acrial Photographs Other No Recorded Data Availate Field Observations: Depth of Surface Water: Depth to Free Water in Pit Depth to Saturated Soil:	in Remarks): e Gauge le 4 le na 0	_(in.) _(in.)	Primal	ry Indicators Inundated Saturated i Water Marl Drift Lines Sediment I Drainage F dary Indica Oxidized R Water-Stai Local Soil S FAC-Neutr	n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data al Test	ired):	

00.20				
Map Unit Name (Series and Phase):	Beltsville silt loam, 2-59	% slones	Drainage Class:	MWD
(Deltaville silt loam, 2-5	70 SIOPES	Field Observations	
Taxonomy (Subgroup):	Typic Fragiudults		Confirm Mapped Type?	Yes ⊠ No
Profile Descriptions: Depth (inches) Horizon 0-4 4-8 8-12	Matrix Color (Munsell Moist) 10YR 2/1 10YR 5/1 10 YR 7/2	Mottle Colors (Munsell Moist) 10YR 5/8	many, med., distinct	Texture, Concretions, Structure, etc, organic silt loam silt loam clayey silt loam
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroms Remarks: Ag field. Area	a Colors	Hiệ Or Lis Lis Ot	oncretions gh Organic Content in Surface Layerganic Streaking in Sandy Soils sted on Local Hydric Soils List sted on National Hydric Soils List ther (Explain in Remarks) area; infrequently tilled.	er in Sandy Soils
WETLAND DETERMINA	ATION			
Hydrophytic Vegetation Pres Wetland Hydrology Present' Hydric Soils Present?	sent? ⊠Yes □No	(Check)	s this Sampling Point Within a Wetla	(Check) and? ⊠Yes □No
Remarks: Isolated PEM v	vetland in Ag field.			

Approved by HQUSACE 3/92

Forms version 1/02

- LOE Con	tion 200				<u> </u>		
Project/Site: I-95 Sec		.41= a u:4: .			Date:	February	<u> </u>
	sportation Au				County:	Baltin	
	eld, C. Brudin	, J. Reed			State:	Maryl	
Do Normal Circumstances exist			⊠Yes	□No	Community ID:	Wetla	and 28A
Is the site significantly disturbed		on)?	□Yes	⊠No	Transect ID:		
Is the area a potential Problem A			□Yes	⊠No	Plot ID:	wetla	and plot
(If needed, explain on reverse	9.)						
VEGETATION							
Dominant Plant Species	Stratum	Indicator	Dor	ninant Plant	Species	Stratum	Indicator
1.Acer rubrum	T	FAC					
2. Fagus grandifolia	Т	FACU	10.				
3. Lindera benzoin		FACW-					
4. Viburnum dentatum	S	FAC					
5. Symplocarpus foetidus	H	OBL					
6. Smilax rotundifolia	V	FAC					
7. Lonicera japonica	H/V	FAC-					
8. Carex spp.	H	1710					
о. <u>сагох орр.</u>		-	10				
HYDROLOGY							
Recorded Data (Describe i	n Remarks):		Wetland F	lydrology In	dicators:		
Stream, Lake, or Tide				ry Indicators			
Aerial Photographs	Caago			Inundated			
Other					in Upper 12 Inches		
No Recorded Data Availab	le			Water Marl	• •		
				Drift Lines			
				Sediment [Deposits		
Field Observations:					Patterns in Wetlands		
				-	tors (2 or more requ		
Depth of Surface Water:	0	(in.)			loot Channels in Up	per 12 Inches	
5 4 5 5 74 5 50		<i>(</i> ;)			ned Leaves		
Depth to Free Water in Pit:	na	(in.)		FAC-Neutr	Survey Data		
Depth to Saturated Soil:	5	_(in.)			lain in Remarks)		
Remarks: spring seeps alon	a lower one-th	ird of slope					
Tromains. Opining scops alon	.g 101101 0110-111	or oropo					

Map Unit Name (Series and Phase):	Watchung silt loam, 3-8% slopes	Drainage Class: Field Observations	PD
Taxonomy (Subgroup):	Typic Ochraqualfs	Confirm Mapped Type?	No
Profile Descriptions: Depth (inches) Horizon 0-5 5-12	Matrix Color Mottle Col (Munsell Moist) (Munsell M 10YR 3/1 10YR 6/2 10YR 5/	oist) Size/Contrast	Texture, Concretions, Structure, etc, silt loam sand and gravel loam
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma		Concretions High Organic Content in Surface Lay Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks)	er in Sandy Soils
WETLAND DETERMINA	ATION		
Hydrophytic Vegetation Pres Wetland Hydrology Present? Hydric Soils Present?	sent? ⊠Yes □No (Check)	Is this Sampling Point Within a Wetla	(Check) and? ⊠Yes □No
Remarks: PFO wetland as	sociated with spring seeps.		

Applicant/Owner: MD Transportation Authority Investigator: H. Canfield, C. Brudin, J. Reed Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.) County: Baltimore State: Maryland Vetland 29 Transect ID: Plot ID: wetland plot	Project/Site: I-95 Sec	ction 200				Data:	Eshruary (2 2006
Investigator: H. Canfield, C. Brudin, J. Reed State: Manyland	· -		ıthority			Date:		
Do Normal Circumstances exist on the site?		-						
Is the site significantly disturbed (Atypical Situation)? Yes			, J. INEGU					
Is the area a potential Problem Area? (If needed, explain on reverse.) Plot ID:			·nn\2				VVCua	IIIU 29
Common Plant Species Stratum Indicator Dominant Plant Species Stratum Indicator 1. Acer rubrum T	- · · · · · · · · · · · · · · · · · · ·		JII) :				wetlar	ad plot
Dominant Plant Species Stratum Indicator Dominant Plant Species Stratum Indicator 1. Acer rubrum T FAC 9. 9. 9. 9. 9. 9. 9. 9				□163	MINO	FIULID.	WCliai	ια ρισι
Dominant Plant Species	(Il riceueu, expiairi ori revorso	:.)						
1, Acer rubrum	EGETATION							
2. Acer rubrum	Dominant Plant Species	Stratum	Indicator	Dor	ninant Plant	t Species	Stratum	Indicator
2. Acer rubrum			FAC	_				
3. Lindera benzoin S FACW- 11. 4. Smilax rotundifolia V FAC 12. 5. Lonicera japonica HW FAC- 13. 6. Juncus effusus H FACW+ 14. 7. Symplocarpus foetidus H OBL 15. 8. Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 5/6 = 83% Remarks: Mathematical Species (excluding FAC-). 5/6 = 83% Mathematical Speci	2. Acer rubrum	S	FAC					
4. Smilax rotundifolia	3. Lindera benzoin	S	FACW-					
5. Lonicera japonica	4. Smilax rotundifolia	V	FAC					
6. Juncus effusus	5. Lonicera japonica	H/V	FAC-					
7. Symplocarpus foetidus H OBL 15. 8.	6. Juncus effusus	H	FACW+					
8	7. Symplocarpus foetidus	Н	OBL					
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 5/6 = 83% Remarks: YDROLOGY								
YDROLOGY								
☐ Recorded Data (Describe in Remarks): Wetland Hydrology Indicators: ☐ Stream, Lake, or Tide Gauge Primary Indicators: ☐ Aerial Photographs ☐ Inundated ☐ Other ☐ Saturated in Upper 12 Inches ☐ No Recorded Data Available ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Depth of Surface Water: _ na(in.) ☐ Oxidized Root Channels in Upper 12 Inches ☐ Water-Stained Leaves ☐ Water-Stained Leaves Depth to Free Water in Pit: _ na(in.) ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (Explain in Remarks)	VDROLOGY							
☐ Stream, Lake, or Tide Gauge Primary Indicators: ☐ Aerial Photographs ☐ Inundated ☐ Other ☐ Saturated in Upper 12 Inches ☐ No Recorded Data Available ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Depth of Surface Water: ☐ na (in.) ☐ Depth to Free Water in Pit: ☐ na (in.) ☐ Depth to Saturated Soil: ☐ (in.) ☐ Other (Explain in Remarks)		in Romarke):		Wetland F	lydrology In	adicatore:		
□ Aerial Photographs □ Inundated □ Other □ Saturated in Upper 12 Inches □ Water Marks □ Drift Lines □ Sediment Deposits □ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): □ Depth of Surface Water: na (in.) □ Oxidized Root Channels in Upper 12 Inches □ Water-Stained Leaves □ Depth to Free Water in Pit: na (in.) □ Depth to Saturated Soil: 0 (in.) □ Other (Explain in Remarks)								
□ Other □ Saturated in Upper 12 Inches No Recorded Data Available □ Water Marks □ Drift Lines □ Sediment Deposits □ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): □ Depth of Surface Water: na (in.) □ Depth to Free Water in Pit: na (in.) □ Depth to Saturated Soil: 0 (in.) Saturated in Upper 12 Inches Water-Stained Leaves Uccal Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)		Cauge			•	3.		
No Recorded Data Available □ Water Marks □ Drift Lines □ Sediment Deposits □ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): □ Depth of Surface Water: na (in.) □ Oxidized Root Channels in Upper 12 Inches □ Water-Stained Leaves □ Local Soil Survey Data □ FAC-Neutral Test □ Depth to Saturated Soil: 0 (in.) □ Other (Explain in Remarks)						in Upper 12 Inches		
Drift Lines Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)		nle						
Field Observations: □ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): □ Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves □ Local Soil Survey Data □ FAC-Neutral Test □ Other (Explain in Remarks)								
Depth of Surface Water:					Sediment [Deposits		
Depth of Surface Water: na (in.) Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Depth to Saturated Soil: 0 (in.) Other (Explain in Remarks)	Field Observations:							
Depth to Free Water in Pit: na (in.) Local Soil Survey Data FAC-Neutral Test Depth to Saturated Soil: 0 (in.) Other (Explain in Remarks)				Secon	-			
Depth to Free Water in Pit: (in.)	Depth of Surface Water:	na	(in.)			•	per 12 Inches	
Depth to Saturated Soil: 0 (in.) FAC-Neutral Test Other (Explain in Remarks)	Dentity to Face Materia Dita		0 - 1					
Depth to Saturated Soil: (in.)	Depth to Free water in Fit:	na na	(in.)			,		
	Depth to Saturated Soil:	0	"					
Remarks:	· -r	U	(in.)			nain in Remarks)		
			(in.)			olain in Remarks)		
	Remarks:		(in.)			olain in Remarks)		
	Remarks:		(in.)			olain in Remarks)		
	Remarks:		(in.)		<u> </u>	olain in Remarks)		

Map Unit Name (Series and Phase):	Watchung silt loam, 3-8	3% slopes	Drainage Class:	PD
Taxonomy (Subgroup):	Typic Ochraqualfs		Field Observations Confirm Mapped Type?	No
Profile Descriptions: Depth (inches) Horizon 0-2 2-5 5-12	Matrix Color (Munsell Moist) 5YR 4/2 10YR 4/2 10YR 6/1	Mottle Colors (Munsell Moist) 5YR 4/6 7.5YR 5/8 7.5YR 5/8	Mottle Abundance/ Size/Contrast many, fine, distinct many, fine, distinct many, fine, distinct	Texture, Concretions, Structure, etc, sandy silt loam sandy silt loam clay loam
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma		Higl Org List	ncretions h Organic Content in Surface Lay ganic Streaking in Sandy Soils ged on Local Hydric Soils List ged on National Hydric Soils List ger (Explain in Remarks)	er in Sandy Soils
WETLAND DETERMINA	ATION			
Hydrophytic Vegetation Pres Wetland Hydrology Present? Hydric Soils Present?		(Check)	this Sampling Point Within a Wetla	(Check) and? ⊠Yes □No
Remarks: Distinct wetland	d area at toe of road slope	e. Seep wetland	ds.	

Project/Site: I-95 Sec Applicant/Owner: MD Tran	±! ~ ~ ∩∩∩						
Applicant/Owner: IVID ITAL		-41- a uit			Date:	February 2	
11.0	nsportation Au	·			County:	Baltim	
· · ·	eld, C. Brudin	, J. Reed			State:	Maryla	
Do Normal Circumstances exist			⊠Yes	□No	Community ID:	Wetla	nd 30A
Is the site significantly disturbed		on)?	□Yes	⊠No	Transect ID:		
Is the area a potential Problem A			□Yes	⊠No	Plot ID:	wetla	nd plot
(If needed, explain on reverse	<u>;.)</u>						
EGETATION							
Dominant Plant Species	Stratum	Indicator	Dom	ninant Plant	Species	Stratum	Indicator
1. Acer saccharinum	Т	FACW	9.				
2. Acer rubrum	T	FAC					
3. Liriodendron tulipifera	T	FACU					
4. Acer rubrum		FAC					
5. Fagus grandifolia	S	FACU					
6. Ilex opaca		FACU+					
7							
8			. 10.				
YDROLOGY							
Recorded Data (Describe i	in Remarks).		Wetland H	ydrology Inc	dicators.		
Stream, Lake, or Tide							
	Caago		u	v Indicators			
Aerial Photographs				y Indicators Inundated			
_	Other			Inundated	s :		
Other	le.			Inundated Saturated in	s: n Upper 12 Inches		
Other	ile			Inundated	s: n Upper 12 Inches		
Other	ole			Inundated Saturated in Water Mark	s: n Upper 12 Inches ks		
Other	ole			Inundated Saturated in Water Mark Drift Lines Sediment D	s: n Upper 12 Inches ks	,	
Other No Recorded Data Availab	ole 			Inundated Saturated in Water Mark Drift Lines Sediment E Drainage P	n Upper 12 Inches ks Deposits		
Other No Recorded Data Availab	ole 0	_(in.)	Second	Inundated Saturated in Water Mark Drift Lines Sediment E Drainage P dary Indicat Oxidized R	n Upper 12 Inches cs Deposits Patterns in Wetlands tors (2 or more required to the control of t	iired):	
Other No Recorded Data Availab Field Observations:		_(in.)	Second	Inundated Saturated in Water Mark Drift Lines Sediment E Drainage P dary Indicat Oxidized R Water-Stain	n Upper 12 Inches ss Deposits Patterns in Wetlands tors (2 or more required to the content of t	iired):	
Other No Recorded Data Availab Field Observations:	0	(in.) (in.)	Second	Inundated Saturated in Water Mark Drift Lines Sediment Drainage P dary Indicat Oxidized R Water-Stair Local Soil S	n Upper 12 Inches Seposits Patterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data	iired):	
Other No Recorded Data Availab Field Observations: Depth of Surface Water: Depth to Free Water in Pit:	0 :na	(in.)	Second	Inundated Saturated in Water Mark Drift Lines Sediment D Drainage P dary Indicat Oxidized R Water-Stair Local Soil S FAC-Neutra	n Upper 12 Inches Seposits Patterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data al Test	iired):	
Other No Recorded Data Availab Field Observations: Depth of Surface Water:	0		Second	Inundated Saturated in Water Mark Drift Lines Sediment D Drainage P dary Indicat Oxidized R Water-Stair Local Soil S FAC-Neutra	n Upper 12 Inches Seposits Patterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data	iired):	

Map Unit Name (Series and Phase): Taxonomy (Subgroup): Profile Descriptions: Depth (inches) Horizon 0-4 4-7 7-12	Leonardtown silt loam Typic Fragiaquults Matrix Color (Munsell Moist) 10YR 5/2 10YR 5/2 10YR 7/1	Mottle Colo (Munsell Mo 10YR 5/6	Size/Contrast few, fine, faint	PD Yes No No Texture, Concretions, Structure, etc, silt loam silt loam mixed clay, wet at 6"
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma			Concretions High Organic Content in Surface Lay Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks)	er in Sandy Soils
WETLAND DETERMINA	ATION			,
Hydrophytic Vegetation Pres Wetland Hydrology Present? Hydric Soils Present?	sent? ⊠Yes □No	(Check)	Is this Sampling Point Within a Wetla	(Check) and? ⊠Yes □No
Remarks: mixed wetland/u	upland matrix in floodpla	in.		

Project/Site: I-95 Se	ction 200				Date:	11-07	'-05
Applicant/Owner: MD Tra	insportation Aut	thority			County:	Harfo	ord
nvestigator: J. Reed	d, C. Brudin				State:	Maryl	and
Do Normal Circumstances exi	st on the site?		⊠Yes	□No	Community ID:	Wetla	ınd 31A
s the site significantly disturbe	d (Atypical Situatio	n)?	□Yes	⊠No	Transect ID:		
s the area a potential Problem	Area?		□Yes	⊠No	Plot ID:	Wetla	and Plot
(If needed, explain on rever	se.)					(Flags # 1-12)	
GETATION							
Dominant Plant Species	Stratum	Indicator	Don	ninant Plant	Species	Stratum	Indicator
1. Pluchea purpurascens	Н	OBL					,
2. Typha latifolia	Н	OBL					,
3. Cyperus striqosus		FACW					,
4. Juncus tenuis		FAC-					,
5.							
6.							,
7.							,
8.							
	· -						
Percent of Dominant Species (excluding FAC-). 3/4= 75/4 Remarks: A PEM forming from a seep and surrounding wetland (excluding wetland)	% o area adjacent fr	rom the 152/ I-		-	and then connect	ts to WUS	
(excluding FAC-). 3/4= 75° Remarks: A PEM forming from a seep	% o area adjacent fr	rom the 152/ I-		-	and then connect	ts to WUS	
(excluding FAC-). ³ 4= 75 ⁰ Remarks: A PEM forming from a seep and surrounding wetland i	% o area adjacent fr	rom the 152/ I-		-	and then connect	ts to WUS	
(excluding FAC-). 3/4= 750 Remarks: A PEM forming from a seep and surrounding wetland of the control of the con	% area adjacent fr maintained. This	rom the 152/ I-	flow into a c	drain pipe		ts to WUS	
(excluding FAC-). 3/4= 750 Remarks: A PEM forming from a seep and surrounding wetland of the following wetland wetland of the following wetland we	o area adjacent fr maintained. This	rom the 152/ I-	flow into a c	drain pipe	dicators:	ts to WUS	
(excluding FAC-). 3/4= 750 Remarks: A PEM forming from a seep. and surrounding wetland of the second	o area adjacent fr maintained. This	rom the 152/ I-	Wetland H	drain pipe	dicators:	ts to WUS	
(excluding FAC-). 3/4= 750 Remarks: A PEM forming from a seep and surrounding wetland of the following wetland wetland of the following wetland we	o area adjacent fr maintained. This	rom the 152/ I-	Wetland H	drain pipe a	dicators:	ts to WUS	
(excluding FAC-). 3/4= 750 Remarks: A PEM forming from a seep and surrounding wetland of the surroundi	o area adjacent fr maintained. This e in Remarks): le Gauge	rom the 152/ I-	Wetland H	lydrology In- ry Indicators Inundated Saturated i	dicators: s: n Upper 12 Inches	ts to WUS	
(excluding FAC-). 3/4= 750 Remarks: A PEM forming from a seep and surrounding wetland of the second	o area adjacent fr maintained. This e in Remarks): le Gauge	rom the 152/ I-	Wetland H	drain pipe a	dicators: s: n Upper 12 Inches	ts to WUS	
(excluding FAC-). 3/4= 750 Remarks: A PEM forming from a seep and surrounding wetland of the surroundi	o area adjacent fr maintained. This e in Remarks): le Gauge	rom the 152/ I-	Wetland H Primar	lydrology In- ry Indicators Inundated Saturated i Water Mark	dicators: s: n Upper 12 Inches	ts to WUS	
(excluding FAC-). 3/4= 750 Remarks: A PEM forming from a seep and surrounding wetland of the surroundi	o area adjacent fr maintained. This e in Remarks): le Gauge	rom the 152/ I-	Wetland H Primar	lydrology In- ry Indicators Inundated Saturated i Water Mark Drift Lines Sediment I Drainage P	dicators: s: n Upper 12 Inches ss Deposits	S	
(excluding FAC-). 3/4= 750 Remarks: A PEM forming from a seep and surrounding wetland of the seep and	o area adjacent fr maintained. This e in Remarks): le Gauge	rom the 152/ I- wetland does	Wetland H Primar	dydrology In ry Indicators Inundated Saturated i Water Mark Drift Lines Sediment I Drainage P dary Indicat	dicators: s: n Upper 12 Inches ss Deposits latterns in Wetlands tors (2 or more requ	s uired):	
(excluding FAC-). 3/4= 750 Remarks: A PEM forming from a seep. and surrounding wetland of the second surrounding sur	o area adjacent fr maintained. This e in Remarks): le Gauge	rom the 152/ I- wetland does	Wetland H Primar	lydrology In ry Indicators Inundated Saturated i Water Mark Drift Lines Sediment I Drainage P dary Indicat Oxidized R	dicators: s: n Upper 12 Inches ss Deposits catterns in Wetlands tors (2 or more requioot Channels in Up	s uired):	
(excluding FAC-). 3/4= 750 Remarks: A PEM forming from a seep and surrounding wetland of the surroundi	area adjacent fr naintained. This e in Remarks): le Gauge	rom the 152/ I- wetland does	Wetland H Primar	lydrology In- ry Indicators Inundated Saturated i Water Mark Drift Lines Sediment I Drainage P dary Indicat Oxidized R Water-Stain	dicators: s: n Upper 12 Inches ss Deposits retterns in Wetlands tors (2 or more requiont Channels in Up	s uired):	
(excluding FAC-). 3/4= 750 Remarks: A PEM forming from a seep and surrounding wetland of the seep and	area adjacent fr naintained. This e in Remarks): le Gauge	rom the 152/ I- wetland does	Wetland H Primar	lydrology In- ry Indicators Inundated Saturated i Water Marl Drift Lines Sediment I Drainage P dary Indicat Oxidized R Water-Stait Local Soil S	dicators: s: n Upper 12 Inches ss Deposits retterns in Wetlands tors (2 or more required Channels in Up	s uired):	
(excluding FAC-). 3/4= 750 Remarks: A PEM forming from a seep and surrounding wetland of the surroundi	area adjacent fr naintained. This e in Remarks): le Gauge	rom the 152/ I- wetland does _(in.) _(in.)	Wetland H Primar Secon	lydrology In- ry Indicators Inundated Saturated i Water Mark Drift Lines Sediment I Drainage P dary Indicat Oxidized R Water-Stain Local Soil S FAC-Neutr	dicators: s: n Upper 12 Inches ss Deposits retterns in Wetlands tors (2 or more required Channels in Up	s uired):	
(excluding FAC-). 3/4= 750 Remarks: A PEM forming from a seep and surrounding wetland of the surroundi	o area adjacent fr maintained. This e in Remarks): le Gauge	rom the 152/ I- wetland does _(in.) _(in.)	Wetland H Primar Secon	lydrology In- ry Indicators Inundated Saturated i Water Mark Drift Lines Sediment I Drainage P dary Indicat Oxidized R Water-Stain Local Soil S FAC-Neutr	dicators: s: n Upper 12 Inches cs Deposits datterns in Wetlands tors (2 or more required to the content of the	s uired):	

Map Unit Name (Series and Phase):	LyD Loamy and Cl	ayey Land	Drainage Class:	Poorly drained
Taxonomy (Subgroup):	NA		Field Observations Confirm Mapped Type?	No
Profile Descriptions: Depth (inches) Horizon 0-2.5 2.5-12 12-refusal	Matrix Color (Munsell Moist) 5YR 4/6 GY 2.5/N rock	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc, loam clay loam
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma G		Organic Listed c Listed c Other (I	ions ganic Content in Surface Lay Streaking in Sandy Soils In Local Hydric Soils List In National Hydric Soils List Explain in Remarks)	er in Sandy Soils
WETLAND DETERMINAT	TION			
Hydrophytic Vegetation Prese Wetland Hydrology Present? Hydric Soils Present? Remarks: Land area around wetland	⊠Yes □No ⊠Yes □No		Sampling Point Within a Wetla	
into other waters of U.S				

Project/Site:	I-95 Sect		-41- a uit			Date:	11-09	
Applicant/Owner:		sportation Au	itnority			County:	Harfo	
nvestigator:	· · · · · · · · · · · · · · · · · · ·	C. Brudin		M./		State:	Maryl	
Oo Normal Circums			. =	⊠Yes	□No	Community ID:	vvetia	nd 32 A
=	s the site significantly disturbed (Atypical Situation)?			□Yes	⊠No	Transect ID:	20/-11	
s the area a potential Problem Area? (If needed, explain on reverse.)				□Yes	⊠No	Plot ID:	Wetia	and DP
(If needed, explai	n on reverse.	.)						
GETATION								
Dominant Plant S	Species	Stratum	Indicator	Domi	inant Plant	Species	Stratum	Indicator
ı.Typha latifolia		Н	OBL					
.Typha angustif	olia	Н	OBL					
Polygnum								
s.pennsylvanicur		<u>H</u>	FACW					
. Juncus effusus		H	FACW+					
5. Cypercus escu		H	FACW+	13				
Baccharis halin	nifolia	S	FACW					
7		-						
3				16	_			
(excluding FAC-)	•	•	W or FAC					
(excluding FAC-) emarks:	•	•	W or FAC					
(excluding FAC-) remarks: DROLOGY). 6/6=100%	//o	W or FAC	I				
(excluding FAC-) remarks: **TOROLOGY** Recorded Data	o. 6/6=100%	n Remarks):	W or FAC	Wetland Hy				
(excluding FAC-) emarks: DROLOGY Recorded Data Stream, L	a (Describe ir	n Remarks):	W or FAC	Primary	/ Indicators			
(excluding FAC-) temarks: 'DROLOGY ☐ Recorded Data ☐ Stream, L ☐ Aerial Pho	o. 6/6=100%	n Remarks):	W or FAC	Primary	y Indicators Inundated	s:		
(excluding FAC-) temarks: **DROLOGY** Recorded Data Stream, L Aerial Photo Other	a (Describe in ake, or Tide otographs	n Remarks): Gauge	W or FAC	Primary	y Indicators Inundated Saturated i	s: n Upper 12 Inches		
(excluding FAC-) Remarks: 'DROLOGY ☐ Recorded Data ☐ Stream, L ☐ Aerial Pho	a (Describe in ake, or Tide otographs	n Remarks): Gauge	W or FAC	Primary	y Indicators Inundated Saturated i Water Mark	s: n Upper 12 Inches		
/DROLOGY Recorded Data Stream, L Aerial Pho	a (Describe in ake, or Tide otographs	n Remarks): Gauge	W or FAC	Primary □ II □ S □ V □ II	y Indicators Inundated Saturated i	s: n Upper 12 Inches ks		
(excluding FAC-) Remarks: /DROLOGY Recorded Data Stream, L Aerial Pho	a (Describe ir ake, or Tide otographs	n Remarks): Gauge	W or FAC	Primary Primary S S S S S S S S S S S S S S S S S S	y Indicators Inundated Saturated in Water Mark Drift Lines Sediment E Drainage P	n Upper 12 Inches ks Deposits Patterns in Wetlands		
(excluding FAC-) Remarks: /DROLOGY Recorded Data Stream, L Aerial Pho Other No Recorded	a (Describe ir ake, or Tide otographs	n Remarks): Gauge	W or FAC	Primary Primary S S S S S S S S Second	y Indicators Inundated Saturated i Water Mark Drift Lines Sediment D Drainage P dary Indicat	s: n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ	uired):	
(excluding FAC-) Remarks: /DROLOGY Recorded Data Stream, L Aerial Pho Other No Recorded	a (Describe ir ake, or Tide otographs Data Available	n Remarks): Gauge	(in.)	Primary Primary S S S S S S S Second	y Indicators Inundated Saturated i Water Mark Drift Lines Sediment E Drainage P dary Indicat Oxidized R	n Upper 12 Inches ss Deposits Patterns in Wetlands tors (2 or more requicot Channels in Up	uired):	
(excluding FAC-) Remarks: /DROLOGY Recorded Data Stream, L Aerial Pho Other No Recorded I Field Observation Depth of Surfa	a (Describe in Lake, or Tide otographs Data Available ons:	n Remarks): Gauge	_(in.)	Primary Primary S S S S S S S S S S S S S S S S S S	y Indicators Inundated Saturated i Water Mark Drift Lines Sediment E Drainage P dary Indicat Oxidized R Water-Stain	n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Up	uired):	
(excluding FAC-) Remarks: /DROLOGY Recorded Data Stream, L Aerial Pho Other No Recorded I	a (Describe in Lake, or Tide otographs Data Available ons:	n Remarks): Gauge		Primary Primary S S S S S S S S S S S S S S S S S S	y Indicators Inundated Saturated i Water Mark Drift Lines Sediment E Drainage P dary Indicat Oxidized R Water-Stair Local Soil S	n Upper 12 Inches Seposits Patterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data	uired):	
(excluding FAC-) Remarks: /DROLOGY Recorded Data Stream, L Aerial Pho Other No Recorded I Field Observation Depth of Surfa	a (Describe ir ake, or Tide otographs Data Available ns: ace Water: Water in Pit:	n Remarks): Gauge	_(in.)	Primary Primary Second Second	y Indicators Inundated Saturated i Water Mark Drift Lines Sediment E Drainage P dary Indicat Oxidized R Water-Stain Local Soil S FAC-Neutra	n Upper 12 Inches Seposits Patterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data	uired):	

Map Unit Name (Series and Phase):	Ly Loamy and C			Drainage Class: Field Observations	Poorly drained	
Taxonomy (Subgroup):	N/	A		Confirm Mapped Type?	□Yes □ No	
Profile Descriptions: Depth (inches) Horizon 0-4 4-6 6-7 7-15	Matrix Color (Munsell Moist) 10 YR 3/2 2.5 Y 3/1 2.5 Y 4/1 5Y 4/1	Mottle Colors (Munsell Moist 5 YR 4/6	t) :	Mottle Abundance/ Size/Contrast common	Texture, Concretions, Structure, etc, loam loam sand sandy loam	
					Sundy Islam	
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma (Remarks: Oxidized roots at 4-6 inche		H	Organic Stre Listed on Lo Listed on Na	ic Content in Surface Lay eaking in Sandy Soils ocal Hydric Soils List ational Hydric Soils List ain in Remarks)	er in Sandy Soils	
WETLAND DETERMINAT	ΓΙΟΝ					
Hydrophytic Vegetation Presel Wetland Hydrology Present? Hydric Soils Present?	nt? ⊠Yes □No ⊠Yes □No ⊠Yes □No	(Check)	Is this Sam	pling Point Within a Wetla	(Check) and? ⊠Yes □No	
Remarks:						

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Forms version 1/02

1.05.0					<u> </u>		
Project/Site: I-95 Section	Date:	11-07	_				
	portation Au	ithority			County:	Harfo	
	C. Brudin				State:	Maryla	
Do Normal Circumstances exist o			⊠Yes	□No	Community ID:	Wetla	nd 33 A
Is the site significantly disturbed (,,	on)?	□Yes	⊠No	Transect ID:		
Is the area a potential Problem Area?		□Yes	⊠No	Plot ID:		tland	
(If needed, explain on reverse.)	<u> </u>					(Flags # 1-10)
VEGETATION							
Dominant Plant Species	Stratum	Indicator	Don	ninant Plant	Species	Stratum	Indicator
1. Baccharis halimifolia	S	FACW	9				
2. Toxicodendron radicans	Н	FAC					
3. Typha latifolia	Н	OBL				·	
4. Liquidambar styraciflua	Т	FAC					
5. Juniperus virginianus	T	FACU					
6							
7							
8.							
Wetland vegetation species su	irrounded by	upland					
HYDROLOGY Recorded Data (Describe in	Remarks):		Wetland H	ydrology Inc	dicators:		
Stream, Lake, or Tide (y Indicators			
Aerial Photographs	zaago			Inundated	·•		
Other					n Upper 12 Inches		
No Recorded Data Available	ž			Water Mark			
	•			Drift Lines	.0		
				Sediment D	Deposits		
Field Observations:				Drainage P	atterns in Wetlands	S	
			Secon	dary Indicat	ors (2 or more requ	uired):	
Depth of Surface Water:	-	_(in.)			oot Channels in Up	per 12 Inches	
			=	Water-Stair			
Depth to Free Water in Pit:		_(in.)			Survey Data		
Depth to Saturated Soil:	6	_(in.)		FAC-Neutra Other (Expl	al Test lain in Remarks)		
Remarks: Hydrology from upland draina	ge only. Impe	rvious surfaces	run off into	this swale			

Map Unit Name (Series and Phase):	LyD Loamy and Clayey Land NA		Drainage Class:	Poorly drained
Taxonomy (Subgroup):			Field Observations Confirm Mapped Type?	Yes □ No
Profile Descriptions: Depth (inches) Horizon 0-5 5-9	Matrix Color (Munsell Moist) 10 YR 3/1 5 YR 5/4	Mottle Colors (Munsell Mo none none	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc, Clay disturbed
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma of the conditions Remarks: Soils disturbed. Close to reconditions		H	Concretions High Organic Content in Surface Lay Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks) facility.	er in Sandy Soils
WETLAND DETERMINAT	ΓΙΟΝ			
Hydrophytic Vegetation Prese Wetland Hydrology Present? Hydric Soils Present?	nt? ⊠Yes □No ⊠Yes □No ⊠Yes □No	(Check)	ls this Sampling Point Within a Wetl	(Check) and? ⊠Yes ⊡No
Remarks: A PSS wetland receiving d	rainage from surround	ing bridge and	parking lot runoff. Clayey soil	nolding water.

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Forms version 1/02

Project/Site: I-95 Section	on 200				Date:	11-07	-():5
· —	sportation Au	ıthority			County:	Harfo	
nvestigator: J. Reed ,		Miloney			State:	Maryla	
Do Normal Circumstances exist o			⊠Yes	□No	Community ID:		nd 34 A
	s the site significantly disturbed (Atypical Situation)?		□Yes	⊠No	Transect ID:		14 0 1 7 1
s the area a potential Problem Ar				⊠No	Plot ID:	We	tland
(If needed, explain on reverse.)			□.~~	M 140	1 100 12.		Папа
(II Hoodod, Oxpidin on Torolog,)							
GETATION							
Dominant Plant Species	Stratum	Indicator	Dom	ninant Plant	Species	Stratum	Indicator
1. Baccharis halimifolia	S	FACW	9				
2. Toxicodendron radicans	Н	FAC	10				
3. Typha latifolia	Н	OBL					
4. Liquidambar styarciflua	T	FAC					
5							
6							
7							
8							
			- '				
Percent of Dominant Species that (excluding FAC-). 4/4= 100% Remarks: Wetland adjacent to roadway.	6		d				
(excluding FAC-). 4/4= 100% Remarks: Wetland adjacent to roadway.	6		d				
(excluding FAC-). 4/4= 100% Remarks: Wetland adjacent to roadway.	% Vegetation ha			- dealogy In	diagtors:		
(excluding FAC-). 4/4= 100% Remarks: Vetland adjacent to roadway. /DROLOGY Recorded Data (Describe in	Vegetation ha		Wetland H	lydrology Inc			
(excluding FAC-). 4/4= 100% Temarks: Vetland adjacent to roadway. VDROLOGY Recorded Data (Describe in Stream, Lake, or Tide Company)	Vegetation ha		Wetland H Primar	ry Indicators			
(excluding FAC-). 4/4= 100% Remarks: Vetland adjacent to roadway. VDROLOGY Recorded Data (Describe in Stream, Lake, or Tide C Aerial Photographs	Vegetation ha		Wetland H Primar	ry Indicators Inundated	s:		
(excluding FAC-). 4/4= 100% Remarks: Vetland adjacent to roadway. **DROLOGY** Recorded Data (Describe in Stream, Lake, or Tide Carried Photographs Other*)	Wegetation ha		Wetland H Primar \[\]	ry Indicators Inundated Saturated in	s: n Upper 12 Inches		
(excluding FAC-). 4/4= 1009 Remarks: Wetland adjacent to roadway. YDROLOGY Recorded Data (Describe in Stream, Lake, or Tide Care) Aerial Photographs	Wegetation ha		Wetland H Primar	ry Indicators Inundated Saturated ii Water Mark	s: n Upper 12 Inches		
(excluding FAC-). 4/4= 100% Remarks: Wetland adjacent to roadway. **POROLOGY** Recorded Data (Describe in Stream, Lake, or Tide Control Aerial Photographs Other	Wegetation ha		Wetland H Primar 	ry Indicators Inundated Saturated in Water Mark Drift Lines	s: n Upper 12 Inches ks		
(excluding FAC-). 4/4= 100% Remarks: Vetland adjacent to roadway. /DROLOGY Recorded Data (Describe in Stream, Lake, or Tide Carried Photographs Other	Wegetation ha		Wetland H Primar 	ry Indicators Inundated Saturated in Water Mark Drift Lines Sediment D	n Upper 12 Inches ks Deposits	1	
(excluding FAC-). 4/4= 1009 Remarks: Wetland adjacent to roadway. YDROLOGY Recorded Data (Describe in Stream, Lake, or Tide Carriel Photographs Other No Recorded Data Available	Wegetation ha		Wetland H Primar 	ry Indicators Inundated Saturated ii Water Mark Drift Lines Sediment E Drainage P	s: n Upper 12 Inches ks		
(excluding FAC-). 4/4= 1009 Remarks: Wetland adjacent to roadway. YDROLOGY Recorded Data (Describe in Stream, Lake, or Tide Carriel Photographs Other No Recorded Data Available	Vegetation has Remarks): Gauge	as been mowed	Wetland H Primar	ry Indicators Inundated Saturated in Water Mark Drift Lines Sediment D Drainage P dary Indicat	n Upper 12 Inches ks Deposits Patterns in Wetlands	uired):	
(excluding FAC-). 4/4= 1009 Remarks: Wetland adjacent to roadway. YDROLOGY Recorded Data (Describe in Stream, Lake, or Tide Carriel Photographs Other No Recorded Data Available Field Observations:	Vegetation has Remarks): Gauge	as been mowed	Wetland H Primar	ry Indicators Inundated Saturated in Water Mark Drift Lines Sediment D Drainage P dary Indicat	n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Up	uired):	
(excluding FAC-). 4/4= 1009 Remarks: Wetland adjacent to roadway. YDROLOGY Recorded Data (Describe in Stream, Lake, or Tide Carriel Photographs Other No Recorded Data Available Field Observations:	Vegetation has Remarks): Gauge	as been mowed	Wetland H Primar	ry Indicators Inundated Saturated in Water Mark Drift Lines Sediment E Drainage P dary Indicat Oxidized R: Water-Stair Local Soil S	n Upper 12 Inches Seposits Patterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data	uired):	
(excluding FAC-). 4/4= 1009 Remarks: Wetland adjacent to roadway. YDROLOGY Recorded Data (Describe in Stream, Lake, or Tide Can Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water:	Vegetation has Remarks): Gauge	as been mowed	Wetland H Primar	ry Indicators Inundated Saturated in Water Mark Drift Lines Sediment E Drainage P dary Indicat Oxidized R Water-Stair Local Soil S FAC-Neutra	n Upper 12 Inches Seposits Patterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data al Test	uired):	
(excluding FAC-). 4/4= 1009 Remarks: Wetland adjacent to roadway. YDROLOGY Recorded Data (Describe in Stream, Lake, or Tide Can Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water:	Vegetation has Remarks): Gauge	as been mowed _(in.) _(in.)	Wetland H Primar	ry Indicators Inundated Saturated in Water Mark Drift Lines Sediment E Drainage P dary Indicat Oxidized R Water-Stair Local Soil S FAC-Neutra	n Upper 12 Inches Seposits Patterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data	uired):	

Map Unit Name (Series and Phase):	Ly Loamy and (Drainage Class: Field Observations	Poorly drained
Taxonomy (Subgroup):				No
Profile Descriptions: Depth (inches) Horizon 0-5 5-9	Matrix Color (Munsell Moist) 10 YR 3/1 5 YR 5/4	Mottle Colors (Munsell Mo	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc, clay disturbed clay loam
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Remarks: Soils disturbed. Close to re			Concretions High Organic Content in Surface Lay Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks)	er in Sandy Soils
WETLAND DETERMINA	TION			
Hydrophytic Vegetation Prese Wetland Hydrology Present? Hydric Soils Present? Remarks:	ent? ⊠Yes □No ⊠Yes □No ⊠Yes □No	(Check)	Is this Sampling Point Within a Wetla	(Check) and? ⊠Yes ⊡No

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Project/Site: I-95 Section MD Transit		thority		Date:	11-0	
· · · <u> </u>	portation Au	шпопц		County:	Hari	
nvestigator: J. Reed , (State:	Mary	
Oo Normal Circumstances exist or		>0	⊠Yes □No	•	Weti	and 35A
s the site significantly disturbed (Atypical Situation)? s the area a potential Problem Area?		□Yes ⊠No				
		∐Yes ⊠No	Plot ID:	Wetland		
(If needed, explain on reverse.)						
GETATION						
Dominant Plant Species	Stratum	Indicator	Dominant P	lant Species	Stratum	Indicator
1.Liquidambar styarciflua		FAC				
2. Acer rubrum		FAC				
3. Viburnum dentatum		FAC				
4. Fraxninus pennsylvanica		FACW				
5. Lonicera japonica	H	FAC-				-
6. Sambucus canadensis	T	FACW-				
7						
8.		-				-
Percent of Dominant Species that (excluding FAC-). 5/6 = 83% Remarks:		W or FAC				
(excluding FAC-). $5/6 = 83\%$		W or FAC				
(excluding FAC-). 5/6 = 83% Remarks:		W or FAC				
(excluding FAC-). 5/6 = 83% Remarks: YDROLOGY Recorded Data (Describe in	Remarks):	W or FAC	Wetland Hydrolog			
(excluding FAC-). 5/6 = 83% Remarks: /DROLOGY Recorded Data (Describe in Stream, Lake, or Tide G	Remarks):	W or FAC	Wetland Hydrolog Primary Indica			
(excluding FAC-). 5/6 = 83% Remarks: YDROLOGY Recorded Data (Describe in Stream, Lake, or Tide G Aerial Photographs	Remarks):	W or FAC	Primary Indica	tors:		
(excluding FAC-). 5/6 = 83% Remarks:	Remarks): dauge	W or FAC	Primary Indica	itors:		
(excluding FAC-). 5/6 = 83% Remarks: /DROLOGY Recorded Data (Describe in Stream, Lake, or Tide G Aerial Photographs	Remarks): dauge	W or FAC	Primary Indica Inundat Saturate Water M	tors: ed ed in Upper 12 Inches Marks		
YDROLOGY Recorded Data (Describe in Stream, Lake, or Tide G Aerial Photographs Other	Remarks): dauge	W or FAC	Primary Indica	ottors: ed ed in Upper 12 Inches Marks nes		
YDROLOGY Recorded Data (Describe in Stream, Lake, or Tide G Aerial Photographs Other No Recorded Data Available	Remarks): dauge	W or FAC	Primary Indica Inundat Saturate Water M Drift Lin Sedime	etors: ed ed in Upper 12 Inches Marks es ent Deposits		
YDROLOGY Recorded Data (Describe in Stream, Lake, or Tide G Aerial Photographs Other	Remarks): dauge	W or FAC	Primary Indica Inundat Saturate Water M Drift Lin Sedime Drainag	itors: ed ed in Upper 12 Inches Marks es ent Deposits ge Patterns in Wetlands		
(excluding FAC-). 5/6 = 83% Remarks:	Remarks):		Primary Indica Inundat Saturate Water M Drift Lin Sedime Drainag Secondary Indica	otors: and in Upper 12 Inches Marks and Deposits ge Patterns in Wetlands dicators (2 or more requ	uired):	
YDROLOGY Recorded Data (Describe in Stream, Lake, or Tide G Aerial Photographs Other No Recorded Data Available Field Observations:	Remarks): dauge		Primary Indica Inundat Saturate Water M Drift Lin Sedime Drainag Secondary Ind	Intors: Interest in the sed in Upper 12 Inches Marks Interest in the ses Interest in Upper 12 Inches Interest in U	uired):	3
(excluding FAC-). 5/6 = 83% Remarks: TOROLOGY Recorded Data (Describe in Stream, Lake, or Tide G Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water:	Remarks): dauge	_(in.)	Primary Indica Inundat Saturate Water M Drift Lin Sedime Drainag Secondary Ind Water-S Water-S	Intors: Interest in the sed in Upper 12 Inches Marks Interest in Upper 12 Inches Interest in Upposits Interest in Wetlands Interest in Upposits in Up Interest in Up	uired):	5
YDROLOGY Recorded Data (Describe in Stream, Lake, or Tide G Aerial Photographs Other No Recorded Data Available Field Observations:	Remarks): dauge		Primary Indica Inundat Saturate Water M Drift Lin Sedime Drainag Secondary Ind Secondary Ind Water-S Local S	Intors: Interest in the properties of the proper	uired):	3
(excluding FAC-). 5/6 = 83% Remarks: YDROLOGY Recorded Data (Describe in Stream, Lake, or Tide G Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water:	Remarks): dauge	_(in.)	Primary Indica Inundat Saturate Water M Drift Lin Sedime Drainag Secondary Ind Water-S Uccal S FAC-Ne	Intors: Interest in the sed in Upper 12 Inches Marks Interest in Upper 12 Inches Interest in Upposits Interest in Wetlands Interest in Upposits in Up Interest in Up	uired):	

Map Unit Name (Series and Phase):	LyD Loamy and Clayey Land NA		Drainage Class:	Poorly drained
Taxonomy (Subgroup):			Field Observations Confirm Mapped	
Profile Descriptions: Depth (inches) Horizon 0-3 3-10 10-16	Matrix Color (Munsell Moist) 2.5 Y 3/2 2.5 Y 4/2 10 YR 5/1	Mottle Colors (Munsell Mois 10 YR 4 10 YR 5 2.5 YR 4	/6 Few /8 Many	Texture, Concretions, Structure, etc, Silt loam Clay Loam Clay Loam
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Conditions Remarks: High Clay content in soil	colors		Concretions High Organic Content in Surfa Organic Streaking in Sandy So Listed on Local Hydric Soils Li Listed on National Hydric Soils Other (Explain in Remarks)	oils ist
WETLAND DETERMINAT	ION			
Hydrophytic Vegetation Present Wetland Hydrology Present? Hydric Soils Present? Remarks:	nt? ⊠Yes □No ⊠Yes □No ⊠Yes □No	(Check)	s this Sampling Point Within a	(Check) a Wetland? ⊠Yes □No

LOS Conti	200				Date:		
	•					11-09	
		ithority			County:	Harfo	•
Investigator: J. Reed, (State:	Maryla	
Do Normal Circumstances exist or			⊠Yes	□No	Community ID:	Wetla	nd 36 A
Is the site significantly disturbed (A		on)?	□Yes	⊠No	Transect ID:		
Is the area a potential Problem Are			□Yes	⊠No	Plot ID:		tland
(If needed, explain on reverse.)						(Flags 1-9)	
VEGETATION							
Dominant Plant Species	Stratum	Indicator	Dom	ninant Plant	Species	Stratum	Indicator
1.Liquidambar styarciflua	H	FAC	9				
2. Acer rubrum	T	FAC					
3. Viburnum dentatum	S	FAC	11				
4. Toxicodendron radicans	H	FAC	12				
5. Quercus palustris	T	FACW	13				
6. Smillax rotundifolia	H	FAC					
7. Campsis radicans	H	FAC					
8							
Percent of Dominant Species that							
HYDROLOGY			ļ , , , , , ,				
Recorded Data (Describe in				ydrology Ind			
Stream, Lake, or Tide G	auge			y Indicators Inundated	5:		
Aerial Photographs Other					n Upper 12 Inches		
No Recorded Data Available				Water Mark			
NO Recolded Data Available	;		=	Drift Lines	(S		
			_ =	Sediment D	Denosits		
Field Observations:					atterns in Wetlands		
					tors (2 or more requ		
Depth of Surface Water:	-	_(in.)			oot Channels in Up	per 12 Inches	
				Water-Stair	ned Leaves		
Depth to Free Water in Pit: _	-	_(in.)			Survey Data		
	2		=	FAC-Neutra			
Depth to Saturated Soil:	0	_(in.)		Other (Expl	lain in Remarks)		
D							
Remarks:							

Map Unit Name (Series and Phase):		yD Clayey Land		Drainage Class:	Poorly	Poorly drained	
· -	Louiny and	Olayoy Lana		Field Observations	1 dony drained		
Taxonomy (Subgroup):	1	NA		Confirm Mapped Type?	⊠Yes	□No	
Profile Descriptions: Depth (inches) Horizon 0-2 2-7	Matrix Color Mottle Colors (Munsell Moist) (Munsell Moist) 10 YR 4/3 10 YR 5 2.5 Y 5/2 7.5 YR 5		st) 5/8	Mottle Abundance/ Size/Contrast common many	Texture, Concretions, Structure, etc, loam Clay loam		
7-14	2.5 Y 5/1	7.5 5		many		loam	
Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma (Colors		Organic S Listed on Listed on	nnic Content in Surface Lay streaking in Sandy Soils Local Hydric Soils List National Hydric Soils List plain in Remarks)	ver in Sandy Soil	S	
VETLAND DETERMINAT	ΓΙΟΝ						
Hydrophytic Vegetation Preservetland Hydrology Present?	nt? ⊠Yes □No	,			(C	heck)	
Hydric Soils Present?	⊠Yes □No)	Is this Sa	mpling Point Within a Wetla	and? ⊠Yes	s No	
Remarks: Depressed area,	close to stream char	nnel but isolate	d				

L DE Socti	200				D-11	44.00	
Project/Site: I-95 Secti		ر بداد م ساخر ر			Date:	11-09	
· · · · · · · · · · · · · · · · · · ·	sportation Au	utnority			County:	Harfo	
Investigator: J. Reed,					State:	Maryla	
Do Normal Circumstances exist o	on the site?		⊠Yes	□No	Community ID:	Wetla	nd 37 A
Is the site significantly disturbed (.on)?	□Yes	⊠No	Transect ID:		
Is the area a potential Problem Ar	the area a potential Problem Area?		□Yes ⊠No	Plot ID:	We	tland	
(If needed, explain on reverse.))						
VEGETATION							
Dominant Plant Species	Stratum	Indicator	Dom	ninant Plant	t Species	Stratum	Indicator
1. Echinochloa muricata	H	FACW+	_			Otratam	<u> </u>
2. Panicum virgatum	<u></u> -	FAC					
3. Lemna minor	<u></u> -	OBL					
4. Toxicodendron radicans		FAC					
	<u></u> -	FAC-					
5. Lonicera japonica							
6							-
7							
8			_ 16				
LIVEROL GOV							
HYDROLOGY Recorded Data (Describe in	Pemarks).		Wetland H	vdrology In	adicators:		
Stream, Lake, or Tide (1	y Indicators			
Aerial Photographs	Jaage		· ·	Inundated	J.		
Other					in Upper 12 Inches		
No Recorded Data Available	۵		_	Water Marl			
140 Noorded Data / Wallasia	5			Drift Lines	N3		
			_ =	Sediment [Deposits		
Field Observations:					Patterns in Wetlands	3	
					itors (2 or more requ		
Depth of Surface Water:	2.5	(in.)		Oxidized R	Root Channels in Up	per 12 Inches	
				Water-Stai	ined Leaves		
Depth to Free Water in Pit:		(in.)			Survey Data		
				FAC-Neutr			
Depth to Saturated Soil:		(in.)		Other (Exp	olain in Remarks)		
D - seadles					_		
Remarks:							
ı							
ı							

Map Unit Name (Series and Phase):	KpB Keyport silt loam		Drainage Class:	MWD
Taxonomy (Subgroup):	Aquic Ha	pludults	Field Observations Confirm Mapped Type	? ⊠Yes □ No
Profile Descriptions: Depth (inches) Horizon 0-2.5 2.5-3.5 3.5-5.0 5.0-7.0 7.0	Matrix Color (Munsell Moist) 10 YR 3/2 10 YR 3/2 Gravel layer 10 YR 5/3 mixed	Mottle Colors (Munsell Moist) 5 YR 4/6	Mottle Abundance/ Size/Contrast common	Texture, Concretions, Structure, etc, loam loam clay loam clay mixed
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma G		Hi OI Lis	oncretions igh Organic Content in Surface La irganic Streaking in Sandy Soils isted on Local Hydric Soils List isted on National Hydric Soils List ither (Explain in Remarks)	
WETLAND DETERMINAT	TION			
Hydrophytic Vegetation Preser Wetland Hydrology Present? Hydric Soils Present?	ent? ⊠Yes □No ⊠Yes □No ⊠Yes □No	(Check)	s this Sampling Point Within a We	(Check) tland? ⊠Yes ⊡No
Remarks: Mottles and oxidized roots	have formed.			

LOE Cont	1 - 000				<u> </u>		
Project/Site: I-95 Sect	Date:	11-9-	•				
	sportation Au	uthority			County:	Harford (
	C. Brudin				State:	Maryla	
Do Normal Circumstances exist of	on the site?		⊠Yes	□No	Community ID:	Wetlar	nd 38 A
Is the site significantly disturbed (Atypical Situation	on)?	□Yes	⊠No	Transect ID:		
Is the area a potential Problem A	s the area a potential Problem Area?		□Yes	⊠No	Plot ID:	We	tland
(If needed, explain on reverse.)						
VEGETATION							
Dominant Plant Species	Stratum	Indicator	Don	ninant Plant	Species	Stratum	Indicator
1. Typha latifolia	Н	OBL					
2. Eleocharis acicularis	Н	OBL					
3. Echinochloa muricata	Н	FACW+					
4 5							
6							
7 8.							
8		-	10				
Remarks: HYDROLOGY							
Recorded Data (Describe in	Remarks):		Wetland H	ydrology Ind	dicators:		
Stream, Lake, or Tide 0				y Indicators			
Aerial Photographs	J			Inundated			
Other				Saturated in	n Upper 12 Inches		
No Recorded Data Available	9			Water Mark			
				Drift Lines			
			7 =	Sediment D	Deposits		
Field Observations:					atterns in Wetlands	;	
			Secon	dary Indicat	tors (2 or more requ	ired):	
Depth of Surface Water:	1	_(in.)		Oxidized R	oot Channels in Up	per 12 Inches	
				Water-Stair	ned Leaves		
Depth to Free Water in Pit:		_(in.)			Survey Data		
				FAC-Neutra	al Test		
Depth to Saturated Soil:		_(in.)		Other (Expl	lain in Remarks)		
Remarks: Hydrology is perched by a hea	avy clay layer	located below (<u> </u>				

Map Unit Name (Series and Phase):	KpB Keyport silt loam Aquic Hapludults		Drainage Class:	MWD
Taxonomy (Subgroup):			Field Observations Confirm Mapped Type	e? ☐Yes ☒ No
Profile Descriptions: Depth (inches) Horizon 0-2 2-5 5-14	Matrix Color (Munsell Moist) 10 YR 3/2 2.5YR 5/2 Gley 1 G/N	Mottle Colors (Munsell Moist 7.5YR 2.5Y 5/6	many	Texture, Concretions, Structure, etc, silt loam clay loam clay
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Remarks: Hydrology is perched abo Soils are disturbed	a Colors	H	Concretions High Organic Content in Surface Li Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks)	
WETLAND DETERMINA	TION			
Hydrophytic Vegetation Press Wetland Hydrology Present? Hydric Soils Present?			Is this Sampling Point Within a We	(Check) etland? ⊠Yes □No
			I with restricted infiltration has ting upslope and downslope di	

	sportation Au				Date: County:	February Harf	
Investigator: H. Canfie	eld, C. Brudin	, J. Reed			State:	Mary	land
Do Normal Circumstances exist on the site?			⊠Yes	□No	Community ID:	Wet	land 1B
Is the site significantly disturbed	Is the site significantly disturbed (Atypical Situation)?			⊠No	Transect ID:		
Is the area a potential Problem A	Area?		□Yes	⊠No	Plot ID:	We	etland
(If needed, explain on reverse.)							
VEGETATION							
Dominant Plant Species	Stratum	Indicator	Don	ninant Plant	Species	Stratum	Indicator
1.Typha latifolia	H	OBL	9				
2							
3							
4							
5							
6							
7							
8							
Percent of Dominant Species the	at are OBL_FAC	W or FAC					
(excluding FAC 1/1= 100%	at are obe, 1710						
HYDROLOGY							
Recorded Data (Describe i	in Pemarke):		Wetland H	ydrology In	dicatore:		
Stream, Lake, or Tide				y Indicators			
Aerial Photographs	Gauge			Inundated	3.		
Other					in Upper 12 Inches		
No Recorded Data Availab	ole.			Water Marl			
No Recorded Data Availab	ле			Drift Lines	N3		
				Sediment [Deposits		
Field Observations:					Patterns in Wetlands	;	
			Secon		tors (2 or more requ		
Depth of Surface Water:	2-3 ft.	_(in.)	\boxtimes	Oxidized R	oot Channels in Up	per 12 Inches	
				Water-Stai	ned Leaves		
Depth to Free Water in Pit:	0	_(in.)		Local Soil	Survey Data		
				FAC-Neutr			
Depth to Saturated Soil:	0	_(in.)		Other (Exp	lain in Remarks)		
Remarks: WUS 1B and high	nwav drainage :	swale flow into	this area.				
g.	,						

Map Unit Name (Series and Phase):	· · · · · · · · · · · · · · · · · · ·		Drainage Class:	Poorly Drained
Taxonomy (Subgroup):	N/	<u>′</u> A	Field Observations Confirm Mapped Type?	No
Profile Description: Depth (inches) Horizon 0-1 1-12	Matrix Color (Munsell Moist) 10 YR 4/2 10 YR 5/1	Mottle Color (Munsell Moi 10 YR 5/	st) Size/Contrast	Texture, Concretions, Structure, etc, silt loam Clay loam
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma C	Colors		Concretions High Organic Content in Surface Lay Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks)	er in Sandy Soils
Soil sample saturated. Wat	er held back as part c	of SWM for drai	inage of highway runoff and WU	S 1B.
WETLAND DETERMINAT	TION			
Hydrophytic Vegetation Preser Wetland Hydrology Present? Hydric Soils Present?	nt? ⊠Yes □No ⊠Yes □No ⊠Yes □No	(Check)	ls this Sampling Point Within a Wetla	(Check) and? ⊠Yes ⊡No
Remarks: Cattail dominated water ret	ention area. Some rip	orap present, th	en continues into WUS 1-B.	

Approved by HQUSACE 3/92

Investigator: H. Canfie Do Normal Circumstances exist of Is the site significantly disturbed (Is the area a potential Problem An	sportation Au				Data	Cabruary (2 2006
Investigator: H. Canfie Do Normal Circumstances exist of Is the site significantly disturbed (Is the area a potential Problem An	spuriation Δc	ıthority			Date:	February 9	
Do Normal Circumstances exist of Is the site significantly disturbed (Is the area a potential Problem Ar					County:		
Is the site significantly disturbed (, J. Neeu	⊠Yes	□No	State:	Maryla	
Is the area a potential Problem Ai		22/2	⊠ res □Yes	⊠No	Community ID: Transect ID:	VVCua	IIU Z D
				⊠No	Plot ID:	\/\etla	nd DP
(If needed, explain on reverse.)			□Yes		FIOUID.	DP inside 2b-	
(II Heeded, explain on leveles.	<u>/</u>				<u> </u>	DI IIIOIGO ZE	<u> </u>
EGETATION							
Dominant Plant Species	Stratum	Indicator	Dom	ninant Plant	Species	Stratum	Indicator
1. Acer rubrum	Т	FAC	9				
2. Quercus phellos	T	FAC+					
3. Juncus effusus	H	FACW					
4. Smilax rotundifolia	H	FAC					
5. Liquidambar styraciflua	Т	FAC					
6. Sphagnum andersonianum	Н	Obl					
7. Fern spp.							
8							
			.			·	
YDDOLOOV							
YDROLOGY							
Recorded Data (Describe in				lydrology Ind			
Stream, Lake, or Tide (Зauge			ry Indicators	S:		
Aerial Photographs				Inundated			
☐ Other					n Upper 12 Inches		
No Recorded Data Available	э		=	Water Mark	KS		
			- =	Drift Lines			
				Sediment Drainage B	•	_	
E'dd Oberrytione					atterns in Wetland: tors (2 or more requ		
Field Observations:				-			
	2	(in)	I IXI		and Channels in Ur	•	
Field Observations: Depth of Surface Water:	2	(in.)			oot Channels in Up ned Leaves	oper 12 Inches	
Depth of Surface Water:		(in.) (in.)		Water-Stair	·	•	
				Water-Stair	ned Leaves Survey Data	•	
Depth of Surface Water:				Water-Stair Local Soil S FAC-Neutra	ned Leaves Survey Data	•	
Depth of Surface Water: Depth to Free Water in Pit:	6	(in.)		Water-Stair Local Soil S FAC-Neutra	ned Leaves Survey Data al Test	•	
Depth of Surface Water: Depth to Free Water in Pit:	6	(in.)		Water-Stair Local Soil S FAC-Neutra	ned Leaves Survey Data al Test	•	
Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil:	6	(in.)		Water-Stair Local Soil S FAC-Neutra	ned Leaves Survey Data al Test	•	
Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil:	6	(in.)		Water-Stair Local Soil S FAC-Neutra	ned Leaves Survey Data al Test	•	

Map Unit Name (Series and Phase):	KpB Keyport Silt Loam 2-5 %	Drainage Class: Field Observations	Mod. Well Drained
Taxonomy (Subgroup):	Aquic Hapludults	Confirm Mapped Type?	Yes ⊠ No
Profile Description: Depth (inches) Horizon 0-3 3-8 8-12	Matrix Color (Munsell Moist) (Munsell Moist) 10 YR 4/3 10 YR 4 10 YR 5/1 10 YR 6 10 YR 4/1	loist) Size/Contrast few	Texture, Concretions, Structure, etc, Clay loam Clay
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma C	Colors	Concretions High Organic Content in Surface Lay Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks)	er in Sandy Soils
Remarks: Oxidized root channels, Low ch	hroma soils, saturated and water level a	at ground surface	
Hydrophytic Vegetation Presen Wetland Hydrology Present? Hydric Soils Present?		Is this Sampling Point Within a Wetla	(Check) and? ⊠Yes ⊡No
Remarks:			

Approved by HQUSACE 3/92

Project/Site: I-95 Sect	Date:	February 9, 2006					
Applicant/Owner: MD Transportation Authority					County:	Harfo	rd
nvestigator: H. Canfiel	vestigator: H. Canfield, C. Brudin, D. Phillips				State:	Maryla	ınd
Oo Normal Circumstances exist on the site?			⊠Yes	□No	Community ID:	Wetla	nd 3 B
s the site significantly disturbed (Atypical Situation)?			□Yes	⊠No	Transect ID:		
s the area a potential Problem Area?		□Yes	⊠No	Plot ID:	Wetla	nd DP	
(If needed, explain on reverse.))					DF	inside flag
GETATION							
Dominant Plant Species	Stratum	Indicator	Dominant Plant Species			Stratum	Indicator
1. Acer rubrum	T	FAC	9				
2. Quercus phellos	T	FAC+					
3. Juncus effusus	H	FACW	11				
4. Smilax rotundifolia	Н	FAC	12				
5. Liquidambar styraciflua	T	FAC					
6. Sphagnum andersonianum	Н	Obl					
7. Fern spp.							
8							
	illside and wa	iter holding in th	nis low lying	area.			
Remarks: Vater seeps emerging from hi	illside and wa	iter holding in th	nis low lying	area.			
Remarks: Water seeps emerging from hi		iter holding in th			dicatoro:		
Remarks: Water seeps emerging from hi YDROLOGY Recorded Data (Describe in	Remarks):	iter holding in th	Wetland H	łydrology Inc			
Remarks: Water seeps emerging from hi YDROLOGY Recorded Data (Describe in Stream, Lake, or Tide G	Remarks):	iter holding in th	Wetland H Primai	lydrology Incry Indicators			
YDROLOGY Recorded Data (Describe in Aerial Photographs	Remarks):	iter holding in th	Wetland H Primal	dydrology Indicators	s:		
YDROLOGY Recorded Data (Describe in Aerial Photographs Other	Remarks): Gauge	iter holding in th	Wetland H Primai	dydrology Indicators Inundated Saturated i	s: n Upper 12 Inches		
YDROLOGY Recorded Data (Describe in Aerial Photographs	Remarks): Gauge	iter holding in th	Wetland H Primar	dydrology Inc ry Indicators Inundated Saturated in Water Mark	s: n Upper 12 Inches		
YDROLOGY Recorded Data (Describe in Aerial Photographs Other	Remarks): Gauge	iter holding in th	Wetland H Primai	dydrology Inc ry Indicators Inundated Saturated in Water Mark Drift Lines	s: n Upper 12 Inches ks		
YDROLOGY Recorded Data (Describe in Aerial Photographs Other	Remarks): Gauge	iter holding in th	Wetland H Primar	dydrology Inc ry Indicators Inundated Saturated in Water Mark Drift Lines Sediment E	n Upper 12 Inches ks Deposits	ì	
YDROLOGY Recorded Data (Describe in Stream, Lake, or Tide Gardel Photographs Other No Recorded Data Available	Remarks): Gauge	iter holding in th	Wetland H Primal	Hydrology Inc ry Indicators Inundated Saturated in Water Mark Drift Lines Sediment E Drainage P	s: n Upper 12 Inches ks		
YDROLOGY Recorded Data (Describe in Stream, Lake, or Tide Gardel Photographs Other No Recorded Data Available	Remarks): Gauge	ter holding in th	Wetland H Primal	dydrology Inc ry Indicators Inundated Saturated in Water Mark Drift Lines Sediment D Drainage P	n Upper 12 Inches ks Deposits Patterns in Wetlands	uired):	
YDROLOGY Recorded Data (Describe in Aerial Photographs Other No Recorded Data Available Field Observations:	Remarks): Gauge		Wetland H Primal	dydrology Indicators Inundated Saturated in Water Mark Drift Lines Sediment E Drainage P dary Indicat Oxidized R	s: n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ	uired):	
YDROLOGY Recorded Data (Describe in Aerial Photographs Other No Recorded Data Available Field Observations:	Remarks): Gauge		Wetland H Primal	dydrology Incry Indicators Inundated Saturated in Water Mark Drift Lines Sediment E Drainage P indary Indicat Oxidized R Water-Stain Local Soil S	n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data	uired):	
YDROLOGY Recorded Data (Describe in Stream, Lake, or Tide Gand Available) No Recorded Data Available Field Observations: Depth of Surface Water: Depth to Free Water in Pit:	Remarks): Gauge	_(in.) _(in.)	Wetland H Primal	Hydrology Incry Indicators Inundated Saturated in Water Mark Drift Lines Sediment Desirated Redary Indicate Oxidized Redary Indicated Water-Stain Local Soil Sed-Neutra	n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data al Test	uired):	
YDROLOGY Recorded Data (Describe in Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water:	Remarks): Gauge	_(in.)	Wetland H Primal	Hydrology Incry Indicators Inundated Saturated in Water Mark Drift Lines Sediment Desirated Redary Indicate Oxidized Redary Indicated Water-Stain Local Soil Sed-Neutra	n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data	uired):	
YDROLOGY Recorded Data (Describe in Stream, Lake, or Tide Gand Available) No Recorded Data Available Field Observations: Depth of Surface Water: Depth to Free Water in Pit:	Remarks): Gauge	_(in.) _(in.)	Wetland H Primal	Hydrology Incry Indicators Inundated Saturated in Water Mark Drift Lines Sediment Desirated Redary Indicate Oxidized Redary Indicated Water-Stain Local Soil Sed-Neutra	n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data al Test	uired):	

Taxonomy (Subgroup):		Silt Loam	Drainage Class:	Mod. Well Drained	
	Aquic Hapludults		Field Observations Confirm Mapped Type?	⊠Yes □ No	
Profile Description: Depth (inches) Horizon 0-3 3-8 8-12	Matrix Color (Munsell Moist) 10 YR 4/3 10 YR 5/1 10 YR 4/1	Mottle Colors (Munsell Moist) 10 YR 4/1 10 YR 6/6	Mottle Abundance/ Size/Contrast few Few, distinct	Texture, Concretions, Structure, etc, Clay loam Clay	
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Commandation		Organ Listed Listed Other	Organic Content in Surface Lay nic Streaking in Sandy Soils on Local Hydric Soils List on National Hydric Soils List (Explain in Remarks)	ver in Sandy Soils	
VETLAND DETERMINAT	ION				
Hydrophytic Vegetation Presen Wetland Hydrology Present?			s Sampling Point Within a Wetla	(Check) and? ⊠Yes ⊡No	
Hydric Soils Present?					

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1050							
Project/Site: I-95 Section 200					Date:	February 9	
· · ·	sportation Au	•			County:	Harfor	rd
Investigator: H. Canfie	eld, C. Brudin	ı, J. Reed			State:	Maryla	nd
Do Normal Circumstances exist	on the site?		⊠Yes	□No	Community ID:	Wetla	nd 4B
Is the site significantly disturbed	s the site significantly disturbed (Atypical Situation)?			⊠No	Transect ID:		
Is the area a potential Problem /	s the area a potential Problem Area?			⊠No	Plot ID:	Wetlar	nd DP
(If needed, explain on reverse	÷.)					DP @ flag 4b-4	4
							
VEGETATION							
Dominant Plant Species	Stratum	Indicator	Dor	ninant Plant	t Species	Stratum	Indicator
1. Acer rubrum	T	FAC	9				
2. Salix nigra	T	FACW					
3. Juncus effusus	H	FACW					
4. Smilax rotundifolia	H	FAC					
5. Liquidambar styraciflua	Т	FAC					
6. Quercus phellos	T	FACW					
7							
8.							
HYDROLOGY							
							
Recorded Data (Describe i				Hydrology Ind			
Stream, Lake, or Tide	Gauge			ry Indicators	3:		
Aerial Photographs				Inundated			
☐ Other					in Upper 12 Inches		
No Recorded Data Availab	le			Water Mark	KS		
			\dashv \dashv	Drift Lines Sediment D	Danasita		
Field Observations:					Deposits Patterns in Wetland:	ło	
Fleiu Observations.					itors (2 or more requ		
Depth of Surface Water:	0	(in.)		-	Root Channels in Up		
p	-	_(/			ined Leaves		
Depth to Free Water in Pit:	6	(in.)		Local Soil :	Survey Data		
·				FAC-Neutra			
Depth to Saturated Soil:	0	(in.)		Other (Exp	olain in Remarks)		
Remarks:							

Map Unit Name (Series and Phase):	Kp Keyport :		Drainage Class:	Mod. Well drained
Taxonomy (Subgroup):	Aquic Ha	apludults	Field Observations Confirm Mapped Type?	⊠Yes □ No
Profile Description: Depth (inches) Horizon 0-3 3-8	Matrix Color (Munsell Moist) 10 YR 4/3 10 YR 5/1	Mottle Cold (Munsell Mo 10 YR 4/ 10 YR 6/	ist) Size/Contrast few	Texture, Concretions, Structure, etc, Sandy loam Sandy clay
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Conditions Remarks: Oxidized root channels, Low			Concretions High Organic Content in Surface Lay Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks)	rer in Sandy Soils
WETLAND DETERMINAT	ION			
Hydrophytic Vegetation Present Wetland Hydrology Present? Hydric Soils Present?	at? ⊠Yes □No ⊠Yes □No ⊠Yes □No	(Check)	Is this Sampling Point Within a Wetl	(Check) and? ⊠Yes □No
Remarks: No emergent plants present channels in wetland.	t this time of year, Mo	ostly FAC tree	and shrub species, Obvious dra	nage patterns and

Drainat/Sita: I-95 Ser	ction 200				Doto	Echruan/	7 2006
	isportation Au	uthority			Date:	February 7 Harfo	
	eld, C. Brudin				County: State:	Maryla	
Do Normal Circumstances exist		i, u. ivecu	⊠Yes	□No			
		inn\2	⊠ res □Yes	⊠No	Community ID: Transect ID:	VVEua	11U O D
Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area?					Plot ID:	\Motla	
(If needed, explain on reverse.)		□Yes	⊠No	PIOT ID.	vveua	ind DP	
(If fieeded, explain on reverse) .)						
EGETATION							
Dominant Plant Species	Stratum	Indicator	Don	ninant Plant	Species	Stratum	Indicator
1. Typha latifolia	Н	OBL	9.				
2. Ludwigia alternifolia	Н	FACW+					
3. Juncus effusus		FACW+					
4.		-					
5							
6							
7							
8			_ 16				
(excluding FAC-). 3/3 = 100°	<u>%</u>						
Remarks:	%						
(excluding FAC-). 3/3 = 100° Remarks: YDROLOGY			Wotland H	udralogy In	diagtors:		
(excluding FAC-). 3/3 = 100° Remarks: YDROLOGY Recorded Data (Describe in the content of the c	in Remarks):			ydrology In			
(excluding FAC-). 3/3 = 100° Remarks: YDROLOGY Recorded Data (Describe i Stream, Lake, or Tide	in Remarks):		Primar	y Indicators			
(excluding FAC-). 3/3 = 100° Remarks: YDROLOGY Recorded Data (Describe i Stream, Lake, or Tide Aerial Photographs	in Remarks):		Primar	y Indicators Inundated	5 :		
YDROLOGY Recorded Data (Describe i Stream, Lake, or Tide Aerial Photographs Other	in Remarks): Gauge		Primar	ry Indicators Inundated Saturated i	s: n Upper 12 Inches		
(excluding FAC-). 3/3 = 100° Remarks: YDROLOGY Recorded Data (Describe i Stream, Lake, or Tide Aerial Photographs	in Remarks): Gauge		Primar	ry Indicators Inundated Saturated i Water Mark	s: n Upper 12 Inches		
YDROLOGY Recorded Data (Describe i Stream, Lake, or Tide Aerial Photographs Other	in Remarks): Gauge		Primar	ry Indicators Inundated Saturated i Water Mark Drift Lines	s: n Upper 12 Inches ks		
YDROLOGY Recorded Data (Describe i Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab	in Remarks): Gauge		Primar	ry Indicators Inundated Saturated i Water Mark Drift Lines Sediment [n Upper 12 Inches		
YDROLOGY Recorded Data (Describe i Stream, Lake, or Tide Aerial Photographs Other	in Remarks): Gauge		Primar	ry Indicators Inundated Saturated i Water Mark Drift Lines Sediment E Drainage P	n Upper 12 Inches ks Deposits Patterns in Wetlands		
YDROLOGY Recorded Data (Describe i Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations:	in Remarks): Gauge	(in)	Primar	y Indicators Inundated Saturated i Water Mark Drift Lines Sediment D Drainage P dary Indicat	n Upper 12 Inches ss Deposits Patterns in Wetlands tors (2 or more requ	uired):	
YDROLOGY Recorded Data (Describe i Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab	in Remarks): Gauge	(in.)	Primar	y Indicators Inundated Saturated i Water Mark Drift Lines Sediment I Drainage P dary Indicat Oxidized R	n Upper 12 Inches cs Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Up	uired):	
YDROLOGY Recorded Data (Describe i Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water:	in Remarks): Gauge		Primar	y Indicators Inundated Saturated i Water Mark Drift Lines Sediment I Drainage P dary Indicat Oxidized R Water-Stain	n Upper 12 Inches Seposits Patterns in Wetlands tors (2 or more required to the content of the	uired):	
YDROLOGY Recorded Data (Describe i Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations:	in Remarks): Gauge	(in.) (in.)	Primar	y Indicators Inundated Saturated i Water Mark Drift Lines Sediment I Drainage P dary Indicat Oxidized R Water-Stair Local Soil S	n Upper 12 Inches Seposits Patterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data	uired):	
(excluding FAC-). 3/3 = 100° Remarks: TOROLOGY Recorded Data (Describe i Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water:	in Remarks): Gauge		Primar	y Indicators Inundated Saturated i Water Mark Drift Lines Sediment I Drainage P dary Indicat Oxidized R Water-Stain Local Soil S FAC-Neutr	n Upper 12 Inches Seposits Patterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data	uired):	
YDROLOGY Recorded Data (Describe i Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water: Depth to Free Water in Pit:	in Remarks): Gauge O-1 N/A	(in.)	Primar	y Indicators Inundated Saturated i Water Mark Drift Lines Sediment I Drainage P dary Indicat Oxidized R Water-Stain Local Soil S FAC-Neutr	n Upper 12 Inches Seposits Patterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data al Test	uired):	
YDROLOGY Recorded Data (Describe i Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water: Depth to Free Water in Pit:	in Remarks): Gauge 0-1 : N/A	(in.) (in.)	Primar	y Indicators Inundated Saturated i Water Mark Drift Lines Sediment E Drainage P dary Indicat Oxidized R Water-Stain Local Soil S FAC-Neutro Other (Exp	n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data al Test lain in Remarks)	uired): per 12 Inches	: upper 12" du
YDROLOGY Recorded Data (Describe i Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil:	in Remarks): Gauge 0-1 : N/A	(in.) (in.)	Primar	y Indicators Inundated Saturated i Water Mark Drift Lines Sediment E Drainage P dary Indicat Oxidized R Water-Stain Local Soil S FAC-Neutro Other (Exp	n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data al Test lain in Remarks)	uired): per 12 Inches	upper 12" du

Map Unit Name (Series and Phase):	Av Alluvial land			nage Class:	SWP	to VP
Taxonomy (Subgroup):		N/A		d Observations ofirm Mapped Type?	□Yes	⊠ No
Profile Description: Depth (inches) Horizon 0-12 12-16	Matrix Color (Munsell Moist) 10YR4/1, 10YR 4/3 mixed	Mottle Cold (Munsell Mo	st) Size/C	Abundance/ ontrast common		loam ay
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma C			Organic Streakir Listed on Local I Listed on Nation Other (Explain in			
WETLAND DETERMINAT	TION					
Hydrophytic Vegetation Preser Wetland Hydrology Present? Hydric Soils Present?	nt? ⊠Yes □N ⊠Yes □N		ls this Sampling	ງ Point Within a Wetla	<u> </u>	heck) s
Remarks: Tire ruts observed	I. deep 3 ft. sink ho	ble in wet area.	Water seeping	g out of fill material	•	

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h					<u> </u>		
Project/Site: I-95 Section 200					Date:	February 7,	2006
Applicant/Owner: MD Tran	sportation Au	thority			County:	Harford	<u></u>
Investigator: H. Canfie	eld, C. Brudin	, J. Reed			State:	Marylan	nd
Do Normal Circumstances exist	⊠Yes	□No	Community ID:				
Is the site significantly disturbed (Atypical Situation)?			□Yes	⊠No	Transect ID:		
'				⊠No	Plot ID:	Wetlan	4 DB
Is the area a potential Problem Area? (If needed, explain on reverse.)			□Yes	MINO	FIOUID.	vveliari	u DF
(ii needed, explain on reverse	-)						
VEGETATION							
	Ctrotum	Indiantor.	Don	sinont Dlant	Chasina	Ctrotum	Indiantor
Dominant Plant Species	Stratum	Indicator			Species	Stratum	Indicator
1. Phragmites communis	H	FACW					
2. Juncus effusus		FACW+					
3							
4			12				
5			13				
6			14				
7			15.				
8.							
			.				
HYDROLOGY							
Recorded Data (Describe i	n Remarks):		Wetland H	ydrology In	dicators:		
Stream, Lake, or Tide				y Indicators			
Aerial Photographs	Gauge			Inundated).		
Other					n I Innor 12 Inches		
			☐ Saturated in Upper 12 Inches				
No Recorded Data Availab	le			Water Mark	KS		
			႕	Drift Lines	S		
F: 1101				Sediment D	•		
Field Observations:					atterns in Wetlands tors (2 or more requ		
Donth of Curfood Motor	0	(in)		-		*	
Depth of Surface Water:	2	_(in.)			oot Channels in Up ned Leaves	per 12 inches	
Donth to Free Water in Dit.	0	(in)					
Depth to Free Water in Pit:	0	_(in.)		FAC-Neutra	Survey Data		
Depth to Saturated Soil:	0	_(in.)			ai rest lain in Remarks)		
Remarks:							
ll .							

Map Unit Name (Series and Phase):	Av Alluvial land		Drainage Class:	SWP to VP
Taxonomy (Subgroup):	N/A	4	Field Observations Confirm Mapped Type?	No
Profile Description: Depth (inches) Horizon 0-7 7-15	Matrix Color (Munsell Moist) 2.5Y 4/3 10YR 4/1	Mottle Colors (Munsell Moist 7.5YR 5/8		Texture, Concretions, Structure, etc, clay loam clay loam
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Co		Hiç Or, Lis Lis Ott	oncretions gh Organic Content in Surface Lay ganic Streaking in Sandy Soils sted on Local Hydric Soils List sted on National Hydric Soils List her (Explain in Remarks)	er in Sandy Soils
WETLAND DETERMINATION	ON			
Hydrophytic Vegetation Present? Wetland Hydrology Present? Hydric Soils Present? Remarks:	? ⊠Yes □No ⊠Yes □No ⊠Yes □No		this Sampling Point Within a Wetl	(Check) and? ⊠Yes □No

1. Acer rubrum T FAC 9. 2. Liquidambar styraciflua T FAC 10. 3. Pinus taeda T FAC- 11. 4. Carex spp. H 12. 5.		Date: County: State: Community ID: Transect ID: Plot ID: Species	Wetla (7 flags) PFO	rd and and 7B nd DP
Investigator: H. Canfield, C. Brudin, J. Reed Do Normal Circumstances exist on the site?	⊠No ⊠No ninant Plant \$	State: Community ID: Transect ID: Plot ID: Species	Maryla Wetla Wetla (7 flags) PFO	and Ind 7B Ind DP
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.) VEGETATION	⊠No ⊠No ninant Plant \$	Community ID: Transect ID: Plot ID: Species	Wetla Wetla (7 flags) PFO Stratum	nd 7B
Is the site significantly disturbed (Atypical Situation)?	⊠No ⊠No ninant Plant \$	Transect ID: Plot ID: Species	Wetla (7 flags) PFO	nd DP
Is the area a potential Problem Area? (If needed, explain on reverse.) VEGETATION	⊠No	Plot ID: Species	(7 flags) PFO Stratum	
// Indicator Dominant Plant Species Stratum Indicator Dominant Plant Species T FAC 9. 2. Liquidambar styraciflua T FAC 10. 3. Pinus taeda T FAC 11. 4. Carex spp. H 12. 5. 13. 6. 7. 15. 15. 16. Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 3/3= 100% Remarks: Abruptly bordered by red oak, loblolly pine and American holly Abruptly bordered by red oak, loblolly pine and American holly Prima Aerial Photographs Metalographs Met	ninant Plant S	Species	(7 flags) PFO Stratum	
Dominant Plant Species Stratum Indicator Dominant Plant Species Stratum Indicator Dominant Plant Species T			Stratum	
Dominant Plant Species Stratum Indicator Dominant Plant Species T T FAC 9. 2. Liquidambar styraciflua T FAC 10. 3. Pinus taeda T FAC- 11. 4. Carex spp. H 12. 5.				Indicator
1. Acer rubrum T FAC 9				Indicator
2. Liquidambar styraciflua T FAC 10. 3. Pinus taeda T FAC- 11. 4. Carex spp. H 12. 5.				
2. Liquidambar styraciflua T FAC 10. 3. Pinus taeda T FAC- 11. 4. Carex spp. H 12. 5. 6. 7. 8. Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 3/3= 100% Remarks: ,Abruptly bordered by red oak, loblolly pine and American holly YDROLOGY Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations:				
3. Pinus taeda T FAC- 11. 4. Carex spp. H 12. 5. 13. 6. 14. 7. 15. 15. 16. 16. 16. 16. 16. 17. 16. 17. 18. 17. 18. 17. 18. 18. 18. 18. 18. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19				
4. Carex spp.				
5				
6				
7				
8				
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 3/3= 100% Remarks: "Abruptly bordered by red oak, loblolly pine and American holly PROLOGY Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations:				
(excluding FAC-). 3/3= 100% Remarks: ,Abruptly bordered by red oak, loblolly pine and American holly YDROLOGY Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations:				
Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Prima Aerial Photographs Other No Recorded Data Available Field Observations:				
Stream, Lake, or Tide Gauge Aerial Photographs Other No Recorded Data Available Field Observations:	vdrology Ind	licators:		
Aerial Photographs Other No Recorded Data Available Field Observations:	y Indicators:			
Other No Recorded Data Available Field Observations:	Inundated			
No Recorded Data Available		Upper 12 Inches		
Field Observations:	Water Marks			
Field Observations:	Drift Lines	5		
Field Observations:	Sediment De	anneite		
		eposits atterns in Wetlands	2	
	TITOING NO DO	ors (2 or more requ		
Depth of Surface Water: .5" (in.)		oot Channels in Up		
(,	dary Indicato	•	poooo	
Depth to Free Water in Pit: 0 (in.)	dary Indicato	Survev Data		
	dary Indicato Oxidized Ro Water-Stain	•		
Depth to Saturated Soil:0 (in.)	dary Indicato Oxidized Ro Water-Stain Local Soil S			
Remarks:	dary Indicato Oxidized Ro Water-Stain Local Soil S FAC-Neutra	ain in Remarks)		
nemans.	dary Indicato Oxidized Ro Water-Stain Local Soil S FAC-Neutra			
	dary Indicato Oxidized Ro Water-Stain Local Soil S FAC-Neutra			

(Series and Phase):	nit Name KpB and Phase): Keyport Silt Loam			Drainage Class: Field Observations	Mod. wel	l drained.
Taxonomy (Subgroup):	Aquic	Hapludults			□Yes	⊠ No
Profile Descriptions: Depth (inches) Horizon	Matrix Color (Munsell Moist)	Mottle Colors		Mottle Abundance/ Size/Contrast	Texture, Concr Structure, etc,	etions,
0-12	2.5 Y 4/2	5 YR		Many	-	loam
12+	2.5 Y 4/2	10 YR		Few distinct		loam
Hydric Soil Indicators: Histosol Histic Epipedon				s ic Content in Surface Lay	er in Sandy Soil:	c c
Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Remarks:			Listed on Lo Listed on Na	eaking in Sandy Soils ocal Hydric Soils List ational Hydric Soils List ain in Remarks)		
Aquic Moisture Regime Reducing Conditions			Listed on Lo Listed on Na	ocal Hydric Soils List ational Hydric Soils List		
Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Remarks:	a Colors		Listed on Lo Listed on Na	ocal Hydric Soils List ational Hydric Soils List		
Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Remarks: Soil somewhat disturbed ETLAND DETERMINAT Hydrophytic Vegetation Prese	riON ent? ⊠Yes □	No (Check)	Listed on Lo Listed on Na	ocal Hydric Soils List ational Hydric Soils List	(C	heck)
Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Remarks: Soil somewhat disturbed	riON ent? ⊠Yes □	No (Check)	Listed on Lo Listed on Na Other (Expla	ocal Hydric Soils List ational Hydric Soils List		

Approved by HQUSACE 3/92

Project/Site: I-95 Sec	100 200				Date:	February .	3, 2006
		-					
					County:	Harfo	
nvestigator: H. Canfield, C. Brudin, J. Reed				—.,	State:	Maryla	
Do Normal Circumstances exist of		_	⊠Yes	□No	Community ID:	Wetla	ınd 8 B
s the site significantly disturbed		n)?	□Yes	⊠No	Transect ID:		
	the area a potential Problem Area?		□Yes	⊠No	Plot ID:	Wetland DP	
(If needed, explain on reverse.	.)						
GETATION							
Dominant Plant Species	Stratum	Indicator	Don	ninant Plant	Species	Stratum	Indicator
1.Typha latifolia	Н	OBL					
2. Phragmites australis	Н	FACW					
3. Salix nigra	T	FACW					
4							
5 6.							
							-
7							
8			16				
(excluding FAC 3/3= 100% Remarks: Located outside of	f a large industr	rial parking lot.					
Remarks: Located outside of	f a large industr	rial parking lot.					
Remarks: Located outside of	-	rial parking lot.		udralogy In	diactors:		
Remarks: Located outside of	n Remarks):	rial parking lot.	Wetland H	lydrology In			
Control of the contro	n Remarks):	rial parking lot.	Wetland H Primar	y Indicators			
YDROLOGY Recorded Data (Describe in Stream, Lake, or Tide of Aerial Photographs	n Remarks):	rial parking lot.	Wetland H Primar ⊠	ry Indicators Inundated	s:		
YDROLOGY Recorded Data (Describe in Lake, or Tide of Aerial Photographs Other	n Remarks): Gauge	rial parking lot.	Wetland H Primar ⊠	ry Indicators Inundated Saturated i	s: n Upper 12 Inches		
YDROLOGY Recorded Data (Describe in Stream, Lake, or Tide of Aerial Photographs	n Remarks): Gauge	rial parking lot.	Wetland H Primar	ry Indicators Inundated Saturated i Water Mark	s: n Upper 12 Inches		
YDROLOGY Recorded Data (Describe in Lake, or Tide of Aerial Photographs Other	n Remarks): Gauge	rial parking lot.	Wetland H Primar 	y Indicators Inundated Saturated i Water Mark Drift Lines	s: n Upper 12 Inches ks		
YDROLOGY Recorded Data (Describe ir Stream, Lake, or Tide of Aerial Photographs Other No Recorded Data Available	n Remarks): Gauge	rial parking lot.	Wetland H Primar 	y Indicators Inundated Saturated i Water Mark Drift Lines Sediment I	n Upper 12 Inches ks Deposits		
YDROLOGY Recorded Data (Describe in Lake, or Tide of Aerial Photographs Other	n Remarks): Gauge	rial parking lot.	Wetland H Primar 	ry Indicators Inundated Saturated i Water Mark Drift Lines Sediment E Drainage P	s: n Upper 12 Inches ks Deposits Patterns in Wetlands		
YDROLOGY Recorded Data (Describe ir Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availabl Field Observations:	n Remarks): Gauge le		Wetland H Primar	y Indicators Inundated Saturated i Water Mark Drift Lines Sediment D Drainage P dary Indicat	n Upper 12 Inches ss Deposits Patterns in Wetlands tors (2 or more requ	iired):	
YDROLOGY Recorded Data (Describe ir Stream, Lake, or Tide of Aerial Photographs Other No Recorded Data Available	n Remarks): Gauge	rial parking lot.	Wetland H Primar	y Indicators Inundated Saturated i Water Mark Drift Lines Sediment E Drainage P dary Indicat Oxidized R	n Upper 12 Inches ss Deposits Patterns in Wetlands tors (2 or more requicot Channels in Up	iired):	
YDROLOGY Recorded Data (Describe in Stream, Lake, or Tide of Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water:	n Remarks): Gauge le	_(in.)	Wetland H Primar	y Indicators Inundated Saturated i Water Mark Drift Lines Sediment E Drainage P dary Indicat Oxidized R Water-Stain	n Upper 12 Inches ss Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Up	iired):	
YDROLOGY Recorded Data (Describe ir Stream, Lake, or Tide of Aerial Photographs Other No Recorded Data Available Field Observations:	n Remarks): Gauge le		Wetland H Primar	y Indicators Inundated Saturated i Water Mark Drift Lines Sediment E Drainage P dary Indicat Oxidized R Water-Stain	n Upper 12 Inches Seposits Patterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data	iired):	
YDROLOGY Recorded Data (Describe in Stream, Lake, or Tide of Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water:	n Remarks): Gauge le	_(in.)	Wetland H Primar	y Indicators Inundated Saturated i Water Mark Drift Lines Sediment I Drainage P dary Indicat Oxidized R Water-Stain Local Soil S FAC-Neutr	n Upper 12 Inches Seposits Patterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data	iired):	

Map Unit Name (Series and Phase):	Cv/Cu	Daring Olas	Mod Wall Drained
(Oches and Friase).	Codorus Silt Ioam/ Comus silt Io		Mod. Well Drained
Taxonomy (Subgroup):	Fluvaquentic Dystrochrep	Field Observations ts Confirm Mapped Type?	No
Profile Description: Depth (inches) Horizon 0-1 1-12	Matrix Color Mottle Co (Munsell Moist) (Munsell M 10 YR 2/2 10 YR 5/1		Texture, Concretions, Structure, etc, Clay loam Clay loam
Hydric Soil Indicators:			
Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma		Concretions High Organic Content in Surface Lay Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks)	ver in Sandy Soils
Remarks: Sulfur smell, inundated w	ith water, Close to sewer line.		
WETLAND DETERMINA	ATION		
Hydrophytic Vegetation Pres Wetland Hydrology Present?			(Check)
Hydric Soils Present?	⊠Yes □No	Is this Sampling Point Within a Wetle	and? ⊠Yes □No
Remarks: Cattail and p	ohragmities dominated wet area. Por	nded water. Left open-ended outs	side of 200 feet.

Approved by HQUSACE 3/92

Project/Site: I-95 Sec	ction 200				Date:	February	8, <u>2006</u>
Applicant/Owner: MD Transportation Authority					County:	Harfo	
					State:	Maryla	and
Oo Normal Circumstances exist on the site?			⊠Yes	□No	Community ID:		
s the site significantly disturbed		ion)?	□Yes	⊠No	Transect ID:		
s the area a potential Problem		,	□Yes	⊠No	Plot ID:	Wetland DP	
(If needed, explain on reverse.)			_	i—s			
(11.1100212, 1.11	2.,						
GETATION							
Dominant Plant Species	Stratum	Indicator	Don	ninant Plant	Species	Stratum	Indicator
1. Fraxinus pennsylvanica	T	FACW	9				
2. Juncus effusus	Н	FACW+					
3. Allium vineale	Н	FACU-					
4. Polygonum spp.	Н						
5. Acer rubrum	Т	FAC					
6. Toxicodendron radicans	H/V	FAC					
7	· · ·	-					
8							
<u></u>			.				
(excluding FAC-). 4/5 = 80% temarks:		ined channel ar	nd forms this	s wet area			
(excluding FAC-). 4/5 = 80% Remarks: ow lying area where a WUS		ined channel ar	nd forms this	s wet area			
(excluding FAC-). 4/5 = 80% Remarks: ow lying area where a WUS	S losses its defi	ined channel ar					
(excluding FAC-). 4/5 = 80% Remarks: ow lying area where a WUS	S losses its defi	ined channel ar	Wetland H	lydrology In	dicators:		
(excluding FAC-). 4/5 = 80% Remarks: ow lying area where a WUS /DROLOGY Recorded Data (Describe) Stream, Lake, or Tide	S losses its defi	ined channel ar	Wetland H Primal	lydrology In	dicators:		
(excluding FAC-). 4/5 = 80% Remarks: ow lying area where a WUS // DROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs	S losses its defi	ined channel ar	Wetland H Primal	lydrology In ry Indicators Inundated	dicators:		
Temarks: **DROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other	S losses its defi	ined channel ar	Wetland H Primai	lydrology In ry Indicators Inundated Saturated i	dicators: s: n Upper 12 Inches		
(excluding FAC-). 4/5 = 80% Remarks: ow lying area where a WUS	S losses its defi	ined channel ar	Wetland H Primai	lydrology In ry Indicators Inundated Saturated i Water Marl	dicators: s: n Upper 12 Inches		
(excluding FAC-). 4/5 = 80% Remarks: Ow lying area where a WUS /DROLOGY Recorded Data (Describe Aerial Photographs Other	S losses its defi	ined channel ar	Wetland H Primai	dydrology In ry Indicators Inundated Saturated i Water Marl Drift Lines	dicators: s: n Upper 12 Inches		
(excluding FAC-). 4/5 = 80% Remarks: .ow lying area where a WUS /DROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab	S losses its defi	ined channel ar	Wetland H Primar	dydrology In ry Indicators Inundated Saturated i Water Marl Drift Lines Sediment [dicators: s: n Upper 12 Inches ks		
(excluding FAC-). 4/5 = 80% Remarks: Ow lying area where a WUS /DROLOGY Recorded Data (Describe Aerial Photographs Other	S losses its defi	ined channel ar	Wetland H Primar	dydrology In ry Indicators Inundated Saturated i Water Marl Drift Lines Sediment I Drainage F	dicators: s: n Upper 12 Inches ks Deposits Patterns in Wetlands		
(excluding FAC-). 4/5 = 80% Remarks: .ow lying area where a WUS /DROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations:	in Remarks): Gauge		Wetland H Primar	lydrology In ry Indicators Inundated Saturated i Water Marl Drift Lines Sediment I Drainage F idary Indicat	dicators: s: n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ	ired):	
(excluding FAC-). 4/5 = 80% Remarks: .ow lying area where a WUS /DROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab	S losses its defi	ined channel ar	Wetland H Primal	lydrology In ry Indicators Inundated Saturated i Water Marl Drift Lines Sediment I Drainage F idary Indicar Oxidized R	dicators: s: n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Up	ired):	
(excluding FAC-). 4/5 = 80% Remarks: .ow lying area where a WUS // DROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water:	in Remarks): Gauge	(in.)	Wetland H Primal	lydrology In ry Indicators Inundated Saturated i Water Marl Drift Lines Sediment I Drainage F idary Indicat Oxidized R Water-Stai	dicators: s: n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Up	ired):	
(excluding FAC-). 4/5 = 80% Remarks: .ow lying area where a WUS //DROLOGY Recorded Data (Describe) Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations:	in Remarks): Gauge		Wetland H Primal	lydrology In ry Indicators Inundated Saturated i Water Marl Drift Lines Sediment I Drainage F idary Indicat Oxidized R Water-Stai	dicators: s: n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data	ired):	
(excluding FAC-). 4/5 = 80% Remarks: .ow lying area where a WUS // DROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water:	in Remarks): Gauge	(in.)	Wetland H Primal	lydrology In ry Indicators Inundated Saturated i Water Marl Drift Lines Sediment I Drainage F dary Indicar Oxidized R Water-Stail Local Soil S	dicators: s: n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data	ired):	
(excluding FAC-). 4/5 = 80% Remarks: .ow lying area where a WUS /DROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water: Depth to Free Water in Pits	in Remarks): Gauge N/A 10	(in.)	Wetland H Primal	lydrology In ry Indicators Inundated Saturated i Water Marl Drift Lines Sediment I Drainage F dary Indicar Oxidized R Water-Stail Local Soil S	dicators: s: n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data al Test	ired):	
(excluding FAC-). 4/5 = 80% Remarks: .ow lying area where a WUS //DROLOGY Recorded Data (Describe) Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water: Depth to Free Water in Pitt Depth to Saturated Soil:	in Remarks): Gauge N/A 10	(in.)	Wetland H Primal	lydrology In ry Indicators Inundated Saturated i Water Marl Drift Lines Sediment I Drainage F dary Indicar Oxidized R Water-Stail Local Soil S	dicators: s: n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data al Test	ired):	
(excluding FAC-). 4/5 = 80% Remarks: .ow lying area where a WUS /DROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water: Depth to Free Water in Pits	in Remarks): Gauge N/A 10	(in.)	Wetland H Primal	lydrology In ry Indicators Inundated Saturated i Water Marl Drift Lines Sediment I Drainage F dary Indicar Oxidized R Water-Stail Local Soil S	dicators: s: n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data al Test	ired):	

Map Unit Name (Series and Phase):	KrA Kinkora silt loam 0-3 % slopes			Deep Poorly Drained
Taxonomy (Subgroup):	Typic Oc	hraquults	Field Observations Confirm Mapped Type?	Yes □ No
Profile Description: Depth (inches) Horizon 0-3 3-5 5-16	Matrix Color (Munsell Moist) 2.5Y 4/3 10YR 5/1 2.5Y 4/4 & 2.5Y 4/2	Mottle Colo (Munsell Mo 7.5YR 5/ 5YR 5/8	Size/Contrast many many	Texture, Concretions, Structure, etc, silty clay silty clay
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Commander Remarks: Oxidized roots obs			Concretions High Organic Content in Surface Lay Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks)	yer in Sandy Soils
WETLAND DETERMINAT	ION			
Hydrophytic Vegetation Preser Wetland Hydrology Present? Hydric Soils Present?	at? ⊠Yes □No ⊠Yes □No ⊠Yes □No	(Check)	ls this Sampling Point Within a Wetl	(Check) land? ⊠Yes □No
Remarks: Previously delineated and highway runoff. We agreed			Inc. as WP 024. Fed from WL 0	004, Upslope drainage and

Approved by HQUSACE 3/92

Project/Site: I-95 Sec Applicant/Owner: MD Trar					Date:	February 7	7 2006
	County:	Harfo					
Investigator: H. Canfi	ield, C. Brudin				State:	Maryla	
	⊠Yes [□No	Community ID:				
to Normal Circumstances exist on the site?					Transect ID:	Wetland 10D	
- · · · · · · · · · · · · · · · · · · ·	the area a potential Problem Area?			⊠No ⊠No	Plot ID:	Wetland DP	
the area a potential Problem Area? (If needed, explain on reverse.)			□169 ☑	ZINO	רוטנ וט.	Wetland DP	
(Il fieeded, explain on reverse	e.)						
EGETATION							
Dominant Plant Species	Stratum	Indicator	Domina	ant Plant	Species	Stratum	Indicator
1. Cornus amomum	S	FACW					
2. Acer rubrum	Т	FAC					
3. Juncus effusus	Н	FACW+					
4. Rhus toxicodendron	WV	FAC					
5. Polygonum spp.	H						
6. Smilax rotundifolia	H	FAC					
7. Onoclea sensibilis		FACW					
8.		IAOW					
0		-	- 10				
YDROLOGY							
	in Remarks):		Wetland Hydr	ology In	dicators:		
Recorded Data (Describe			Wetland Hydr				
Recorded Data (Describe			Primary Ir	ndicators			
Recorded Data (Describe			Primary Ir	ndicators indated	s:		
Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other	e Gauge		Primary Ir Inu Sa	ndicators indated turated i	s: n Upper 12 Inches		
Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs	e Gauge		Primary Ir Inu Sa	ndicators indated	s: n Upper 12 Inches		
Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other	e Gauge		Primary Ir Inu Sar Wa	ndicators indated turated i ater Mark ft Lines	s: n Upper 12 Inches ks		
Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other	e Gauge		Primary Ir Inu Sar Wa Dri Se	ndicators indated turated i ater Mark ft Lines diment D	n Upper 12 Inches ks Deposits		
Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab	e Gauge		Primary Ir Inu Sa Wa Dri Se	ndicators indated turated i ater Mark ft Lines diment E ainage P	s: n Upper 12 Inches ks		
Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab	e Gauge	(in.)	Primary Ir Inu Sa' Wa Dri Secondar Secondar	ndicators Indated Iturated i Iter Mark It Lines Idiment E Iter Indicators	n Upper 12 Inches ss Deposits Patterns in Wetlands	ired):	
Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations:	e Gauge ble	_(in.)	Primary Ir Inu Sar Wa Dri Secondar Ox	ndicators Indated turated i ater Mark ft Lines diment D ainage P y Indicat idized R	n Upper 12 Inches cs Deposits Patterns in Wetlands tors (2 or more requ	ired):	
Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations:	e Gauge ble	(in.)	Primary Ir Inu Sa Wa Dri Secondar Secondar X X X X X X X X X X X X X X X X X X	ndicators indated turated i ater Mark ft Lines diment I ainage P y Indicat idized R ater-Stain cal Soil S	n Upper 12 Inches Seposits Patterns in Wetlands tors (2 or more requ oot Channels in Upped Leaves Survey Data	ired):	
Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water: Depth to Free Water in Pit	e Gauge ble 1" t: 0	(in.)	Primary Ir Inu Sar Wa Dri Secondar Secondar Ma Lor FA	ndicators indated turated i ater Mark ft Lines diment I ainage P y Indicat idized R ater-Stain cal Soil \$ C-Neutri	n Upper 12 Inches Seposits Patterns in Wetlands tors (2 or more requ oot Channels in Upped Leaves Survey Data al Test	ired):	
Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water:	e Gauge ble		Primary Ir Inu Sar Wa Dri Secondar Secondar Ma Lor FA	ndicators indated turated i ater Mark ft Lines diment I ainage P y Indicat idized R ater-Stain cal Soil \$ C-Neutri	n Upper 12 Inches Seposits Patterns in Wetlands tors (2 or more requ oot Channels in Upped Leaves Survey Data	ired):	

Map Unit Name	EsC	C2		
(Series and Phase):	Elsinboro loam	5-10 % slope		Deep well drained
Taxonomy (Subgroup):	Typic Ha	pludults	Field Observations Confirm Mapped Type?	Yes ⊠ No
Profile Description: Depth (inches) Horizon 0-6 6-12	Matrix Color (Munsell Moist) 10YR 6/2 10 YR 6/1	Mottle Colors (Munsell Mois 10 YR 5/6 10 YR 5/6	st) Size/Contrast Few distinct	Texture, Concretions, Structure, etc, Silt loam Silt clay
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma C		H O Li O	oncretions igh Organic Content in Surface Lay rganic Streaking in Sandy Soils sted on Local Hydric Soils List sted on National Hydric Soils List ther (Explain in Remarks)	er in Sandy Soils
WETLAND DETERMINAT	TON			
Hydrophytic Vegetation Preser		(Check)		(Check)
Wetland Hydrology Present? Hydric Soils Present?	⊠Yes □No ⊠Yes □No	Is	s this Sampling Point Within a Wetla	and? XYes No
Remarks: Shrubs/scrub wet	land which connects to	o WUS 16		

Project/Site: I-95 Sec	Date:	February					
	·				County:	Harfo	
Investigator: H. Canfie					State:	Maryl	and
Do Normal Circumstances exist	on the site?		⊠Yes	□No	Community ID:	Wetla	nd 11 B
Is the site significantly disturbed	` ',	on)?	□Yes ⊠No	Transect ID:			
Is the area a potential Problem A	he area a potential Problem Area?		□Yes	⊠No	Plot ID:	Wetland plot	
(If needed, explain on reverse	e.)						
EGETATION							
Dominant Plant Species	Stratum	Indicator	Dor	ninant Plant	t Species	Stratum	Indicator
1. Carex spp.	Н		_				
2. Typha latifolia	Н	OBL					
3. Ludwigia alternifolia	Н	FACW+					
4. Scirpus cyperinus	Н	FACW+					
5. Asclepias incarnata	Н	OBL				_	
6. Salix nigra	S	FACW+					
7. Fraxinus pennsylvanica	S	FACW					
8. Juncus effusus	Н	FACW+					
o. dunicus cirusus		TAOWI	_ 10				
HYDROLOGY							
Recorded Data (Describe i	in Remarke):		Wetland F	lydrology In	dicatore:		
Stream, Lake, or Tide				ry Indicators			
Aerial Photographs	Caago			Inundated	J.		
Other					in Upper 12 Inches		
No Recorded Data Availab	مام			Water Mari	• •		
Mo Recorded Bala Availab	ЛС			Drift Lines	NO.		
			7 F	Sediment [Deposits		
Field Observations:					Patterns in Wetlands	;	
			Secon		tors (2 or more requ		
Depth of Surface Water:	1-2	_(in.)		Oxidized R	toot Channels in Up	per 12 Inches	
				Water-Stai	ned Leaves		
Depth to Free Water in Pit:	na na	_(in.)			Survey Data		
				FAC-Neutr			
Depth to Saturated Soil:	0	(in.)		Other (Exp	lain in Remarks)		
- 0 1							
	المحمدة المحادمة		:		4 4	f	it - ui -
Remarks: Observed condition	ons indicated th	nat the area is	inundated fo	or sufficien	t duration to satis	fy wetland cr	iteria.
Remarks: Observed condition	ons indicated th	nat the area is	inundated fo	or sufficien	t duration to satis	fy wetland cr	iteria.
Remarks: Observed condition	ons indicated th	nat the area is	inundated fo	or sufficien	t duration to satis	fy wetland cr	iteria.

Map Unit Name	GcC	3		
(Series and Phase):	Glenelg loam 8	-15 % slopes	Drainage Class:	Well drained
			Field Observations	
Taxonomy (Subgroup):	Typic Hapludults		Confirm Mapped Type?	⊠Yes □ No
Profile Descriptions:				
Depth	Matrix Color	Mottle Colors	Mottle Abundance/	Texture, Concretions,
(inches) Horizon	(Munsell Moist)	(Munsell Moist)	Size/Contrast	Structure, etc,
0-7	2.5Y 5/3			clay loam
7-refusal	_			hard packed ground
	 -			
Hydric Soil Indicators:				
Histosol		☐ Cor	ncretions	
Histic Epipedon		☐ Hig	h Organic Content in Surface Lay	er in Sandy Soils
Sulfidic Odor		Org	ganic Streaking in Sandy Soils	
Aquic Moisture Regime		List	ted on Local Hydric Soils List	
Reducing Conditions		List	ted on National Hydric Soils List	
Gleyed or Low-Chroma Co	lors	Oth	ner (Explain in Remarks)	
Remarks: Oxidized roots throu	ughout profile. Soils	are wet but have	e not yet developed low chrom	na colors due to recently
	*		ydrology and FACW/OBL plar	
boothing wot. Wotana con	o aro accarrica bacci	a on long tomin	yarology and 17 OV/OBE plan	it community.
WETLAND DETERMINATION	ON			
WEILAND DETERMINATION	<u> </u>			
Lhudaanhutia Vanatatian Duarant	D MY MA	(Ch = als)		(Ch a ala)
Hydrophytic Vegetation Present		(Check)		(Check)
Wetland Hydrology Present?	⊠Yes □No			
Hydric Soils Present?	⊠Yes □No	ls t	this Sampling Point Within a Wetla	and? Xes No
Remarks:				
Isolated small catch basin for	r adjacent self storag	e facility. PEM/F	PSS wetland.	
		-		

roject/Site: I-95 Sec	ction 200				Date:	February 8	3. 2006
pplicant/Owner: MD Trar	County:	Harfo					
	restigator: H. Canfield, C. Brudin, J. Reed				State:	Maryla	
o Normal Circumstances exist on the site?			⊠Yes	□No	Community ID:	-	
	the site significantly disturbed (Atypical Situation)?		□Yes	⊠No	Transect ID:		
the area a potential Problem		,	□Yes	⊠No	Plot ID:	Wetland DP	
(If needed, explain on reverse.)				K—M -		-	
	/						
GETATION							
Dominant Plant Species	Stratum	Indicator			Species	Stratum	Indicator
I.Salix nigra	T	FACW+	9				
2. Phragmites australis	H	FACW					
3. Typha latifolia	H	OBL	11				
. Polygonum sagittatum	H	OBL					
·							
3.							
·							
ercent of Dominant Species th (excluding FAC-). 4/4 = 100 emarks:							
(excluding FAC-). 4/4 = 100 emarks:							
(excluding FAC-). 4/4 = 100 emarks:			haratand		P. adama.		
(excluding FAC-). 4/4 = 100 emarks: DROLOGY Recorded Data (Describe	in Remarks):			lydrology Inc			
(excluding FAC-). 4/4 = 100 emarks: **TDROLOGY** Recorded Data (Describe Stream, Lake, or Tide)	in Remarks):		Primai	ry Indicators			
(excluding FAC-). 4/4 = 100 emarks: DROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs	in Remarks):		Primai	ry Indicators Inundated	s:		
(excluding FAC-). 4/4 = 100 emarks: DROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other	in Remarks): e Gauge		Primai	ry Indicators Inundated Saturated i	s: n Upper 12 Inches		
(excluding FAC-). 4/4 = 100 emarks: DROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other	in Remarks): e Gauge		Primai	ry Indicators Inundated Saturated ii Water Mark	s: n Upper 12 Inches		
(excluding FAC-). 4/4 = 100 emarks: DROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other	in Remarks): e Gauge		Primai	ry Indicators Inundated Saturated in Water Mark Drift Lines	s: n Upper 12 Inches ks		
(excluding FAC-). 4/4 = 100 emarks: **Torong Process **Torong P	in Remarks): e Gauge		Primal	ry Indicators Inundated Saturated in Water Mark Drift Lines Sediment E	n Upper 12 Inches ks Deposits		
(excluding FAC-). 4/4 = 100 emarks: DROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other	in Remarks): e Gauge		Primal	ry Indicators Inundated Saturated ii Water Mark Drift Lines Sediment E Drainage P	n Upper 12 Inches ks Deposits Patterns in Wetlands		
emarks: DROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availat Field Observations:	in Remarks): e Gauge	(in.)	Primal	ry Indicators Inundated Saturated ii Water Mark Drift Lines Sediment D Drainage P idary Indicat	n Upper 12 Inches ks Deposits	ired):	
(excluding FAC-). 4/4 = 100 emarks: **Torong Process **Torong P	in Remarks): e Gauge ole	_(in.)	Primal	ry Indicators Inundated Saturated ii Water Mark Drift Lines Sediment D Drainage P idary Indicat	n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Up	ired):	
emarks: DROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water:	in Remarks): e Gauge ole	(in.)	Primai	ry Indicators Inundated Saturated ii Water Mark Drift Lines Sediment E Drainage P idary Indicat Oxidized R Water-Stain	n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Up	ired):	
emarks: DROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availat Field Observations:	in Remarks): e Gauge ole		Primai	ry Indicators Inundated Saturated ii Water Mark Drift Lines Sediment E Drainage P idary Indicat Oxidized R Water-Stain	n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Upped Leaves Survey Data	ired):	
emarks: DROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water:	in Remarks): e Gauge ole		Primai	ry Indicators Inundated Saturated in Water Mark Drift Lines Sediment D Drainage P Idary Indicat Oxidized R Water-Stain Local Soil S FAC-Neutra	n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Upped Leaves Survey Data	ired):	
emarks: DROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water: Depth to Free Water in Pit	in Remarks): e Gauge ole 2"	(in.)	Primai	ry Indicators Inundated Saturated in Water Mark Drift Lines Sediment D Drainage P Idary Indicat Oxidized R Water-Stain Local Soil S FAC-Neutra	n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Upped Leaves Survey Data al Test	ired):	
marks: DROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availat Field Observations: Depth of Surface Water: Depth to Free Water in Pit Depth to Saturated Soil:	in Remarks): e Gauge ole 2"	(in.)	Primai	ry Indicators Inundated Saturated in Water Mark Drift Lines Sediment D Drainage P Idary Indicat Oxidized R Water-Stain Local Soil S FAC-Neutra	n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Upped Leaves Survey Data al Test	ired):	
emarks: DROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water: Depth to Free Water in Pit	in Remarks): e Gauge ole 2"	(in.)	Primai	ry Indicators Inundated Saturated in Water Mark Drift Lines Sediment D Drainage P Idary Indicat Oxidized R Water-Stain Local Soil S FAC-Neutra	n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Upped Leaves Survey Data al Test	ired):	

Map Unit Name (Series and Phase):	KrA Kinkora Silt loam 0-3 % slo	opes	_ Drainage Class:	Deep, poorly drained
Taxonomy (Subgroup):	Typic Ochraquu	lts	Field Observations Confirm Mapped Type?	No
Profile Descriptions: Depth (inches) Horizon 0-3 3-10	(Munsell Moist) (Munsell Moist) 7.5	ttle Colors nsell Moist) 5YR 4/6 5YR 4/6	Mottle Abundance/ Size/Contrast common common	Texture, Concretions, Structure, etc, silt loam clay loam
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma		Organic Listed c	ions ganic Content in Surface Lay Streaking in Sandy Soils n Local Hydric Soils List n National Hydric Soils List Explain in Remarks)	er in Sandy Soils
WETLAND DETERMINA	ATION			
Hydrophytic Vegetation Pres Wetland Hydrology Present? Hydric Soils Present?	Yes □No □Yes □No	Is this S	Sampling Point Within a Wetla	
	fall from storm water managem eep swale has a rip-rap check	-	·	·-

Applicant/Owner: MD Transportation Authority Investigator: H. Canfield, C. Brudin, J. Reed Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.) County: Harford State: Maryland Community ID: Wetland 13 B Transect ID: Plot ID: Wetland plot	Project/Site: I-95 Sec	ction 200				Data	Eshruary	2 2006
Investigator: H. Canfield, C. Brudin, J. Reed			uthority			Date:		
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atpical Struation)? Is the area a potential Problem Area? (If needed, explain on reverse.) Ves No								
Is the site significantly disturbed (Atypical Situation)? Yes	<u> </u>	•	, J. Reeu					
Is the area a potential Problem Area? (If needed, explain on reverse.) Ves No Plot ID: Wetland plot					_		vvetiai	10 13 B
Common	• ,	, , , ,				,	10/-11-	
Dominant Plant Species Stratum Indicator Dominant Plant Species Stratum Indicator 1. Fraxinus pennsylvanica T FACW 9 9 9 9 9 9 9 9 9				∐Yes	⊠No	Plot ID:	VVetia	nd plot
Dominant Plant Species Stratum Indicator Dominant Plant Species Stratum Indicator	(If needed, explain on reverse	<i><u></u></i>)						
1. Fraxinus pennsylvanica	/EGETATION							
1. Fraxinus pennsylvanica	Dominant Plant Species	pecies Stratum Indicator		Dor	ninant Plan	t Species	Stratum	Indicator
2. Acer rubrum			FACW					
3. Salix nigra	0 1							
4. Platanus occidentalis			FACW+					
5. Toxicodendron radicans								
6.	-							
7. 8. 15. 16.								
8.								
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 5/5 = 100% Remarks: Low lying swale, floodplain and adjacent to Winters Run.								
Remarks: Low lying swale, floodplain and adjacent to Winters Run.	8			- 16				
☐ Recorded Data (Describe in Remarks): Wetland Hydrology Indicators: ☐ Stream, Lake, or Tide Gauge Primary Indicators: ☐ Aerial Photographs ☐ Inundated ☐ Other ☐ Saturated in Upper 12 Inches ☐ No Recorded Data Available ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12 Inches ☐ Water-Stained Leaves Depth to Free Water in Pit: 0 (in.) ☐ Depth to Saturated Soil: 0 (in.) Other (Explain in Remarks)	IVDROLOGY							
☐ Stream, Lake, or Tide Gauge Primary Indicators: ☐ Aerial Photographs ☐ Inundated ☐ Other ☐ Saturated in Upper 12 Inches ☑ No Recorded Data Available ☑ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12 Inches ☐ Water-Stained Leaves ☐ Depth to Free Water in Pit: ☐ (in.) ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (Explain in Remarks)		in Damarks).		\Metland I		adicators:		
□ Aerial Photographs □ Inundated □ Other □ Saturated in Upper 12 Inches □ Water Marks □ Drift Lines □ Sediment Deposits □ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): □ Depth of Surface Water: □ 0-1 (in.) □ Depth to Free Water in Pit: 0 (in.) □ Depth to Saturated Soil: 0 (in.) □ Other (Explain in Remarks)								
☐ Other ☐ Saturated in Upper 12 Inches ☑ No Recorded Data Available ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12 Inches ☐ Water-Stained Leaves ☐ Depth to Free Water in Pit: ☐ (in.) ☐ Depth to Saturated Soil: ☐ (in.) ☐ Other (Explain in Remarks)		Gauge			-			
No Recorded Data Available								
Drift Lines Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Upper 12 Inches Water-Stained Leaves Depth to Free Water in Pit:		مام						
Field Observations: Sediment Deposits Drainage Patterns in Wetlands Secondary Indicators (2 or more required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Upper 12 Inches Water-Stained Leaves Depth to Free Water in Pit:	No noordou bala	16						
Field Observations: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil: Depth of Surface Water: O-1 (in.) Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)				\dashv				
Depth of Surface Water: Depth of Surface Water: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil: Depth to Saturated Soil: Secondary Indicators (2 or more required): Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)	Field Observations:					•	S	
Depth to Free Water in Pit: Depth to Saturated Soil: UWater-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)					ndary Indica	ators (2 or more requ	uired):	
Depth to Free Water in Pit:0(in.)	Depth of Surface Water:	0-1	(in.)			•	per 12 Inches	
Depth to Saturated Soil: 0 (in.) FAC-Neutral Test Other (Explain in Remarks)								
Depth to Saturated Soil: 0 (in.) Other (Explain in Remarks)	Depth to Free Water in Pit:	. 0	(in.)			•		
Remarks:	Depth to Saturated Soil:	0	(in.)		Other (Exp	plain in Remarks)		
Tomano.	Remarks:							
	Nomano.							

Map Unit Name (Series and Phase):	Cu Codorus S		Drainage Class:	MWD to SWP
Taxonomy (Subgroup):	Fluvaquentic [Oystrochrepts	Field Observations Confirm Mapped Type?	No
Profile Descriptions: Depth (inches) Horizon 0-6 6-12 12-16	Matrix Color (Munsell Moist) 7.5YR 3/1 2.5Y 4/2 2.5Y 4/2	Mottle Colo (Munsell Mo 5YR 3/6 5YR 4/6		Texture, Concretions, Structure, etc, silt loam, oxidized roots silt loam sandy loam
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma C	olors		Concretions High Organic Content in Surface Lay Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks)	er in Sandy Soils
WETLAND DETERMINAT	ION			
Hydrophytic Vegetation Present Wetland Hydrology Present? Hydric Soils Present? Remarks: PFO wetland conn	⊠Yes □No ⊠Yes □No	(Check)	Is this Sampling Point Within a Wetla	(Check) and? ⊠Yes ⊡No

roject/Site: <u>I-95 Secti</u> oplicant/Owner: MD Trans	on 200		,		Date:	Ephruary '	2 2006
oplicani/owner: wid mans		ıthority				February 2 Harfo	
	H. Canfield, (County:		
vestigator: J. Reed. I o Normal Circumstances exist o		C. Diudiii			State:	Maryla	
		\0	⊠Yes	□No	Community ID:	vveliai	nd 14-B
the site significantly disturbed (on)?	□Yes	⊠No	Transect ID:	\\/atla	100
the area a potential Problem A			□Yes	⊠No	Plot ID:	VVetia	and DP
(If needed, explain on reverse.)	<u> </u>						
SETATION							
Dominant Plant Species	Stratum	Indicator	Dom	nin <u>ant Plan</u> t	t Species	Stratum	Indicator
. Liquidambar styraciflua	S	FAC					
. Liquidambar styraciflua	Т	FAC					
. Pinus virginiana	T	FACU					
Rhus radicans	WV	FAC					
. Unknown grass							•
. Lonicera japonica		FAC-					
. <u> </u>							•
·			. 10				
DROLOGY							
DROLOGY Recorded Data (Describe in	Pemarks).		Wetland H	vdrology In	dicatore.		
Recorded Data (Describe in							
Recorded Data (Describe in Stream, Lake, or Tide 0			Primar	y Indicators			
Recorded Data (Describe in			Primar	y Indicators Inundated	S:		
Recorded Data (Describe in Stream, Lake, or Tide (Aerial Photographs Other	Gauge		Primar	ry Indicators Inundated Saturated i	s: in Upper 12 Inches		
Recorded Data (Describe in Stream, Lake, or Tide (Aerial Photographs	Gauge		Primar	y Indicators Inundated	s: in Upper 12 Inches		
Recorded Data (Describe in Stream, Lake, or Tide (Aerial Photographs Other	Gauge		Primar	ry Indicators Inundated Saturated i Water Mari Drift Lines	s: in Upper 12 Inches ks		
Recorded Data (Describe in Stream, Lake, or Tide (Aerial Photographs Other	Gauge		Primar	ry Indicators Inundated Saturated i Water Mari Drift Lines Sediment I	s: in Upper 12 Inches ks Deposits		
Recorded Data (Describe in Stream, Lake, or Tide (Aerial Photographs Other No Recorded Data Available	Gauge		Primar	ry Indicators Inundated Saturated i Water Mar Drift Lines Sediment I Drainage F	s: in Upper 12 Inches ks Deposits Patterns in Wetlands		
Recorded Data (Describe in Stream, Lake, or Tide (Aerial Photographs Other No Recorded Data Available Field Observations:	Gauge	_(in.)	Primar	y Indicators Inundated Saturated i Water Mar Drift Lines Sediment I Drainage F dary Indica	s: in Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ	ired):	
Recorded Data (Describe in Stream, Lake, or Tide (Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water:	e -	_(in.)	Primar	y Indicators Inundated Saturated i Water Mari Drift Lines Sediment I Drainage F dary Indica Oxidized R	in Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ Root Channels in Up	ired):	
Recorded Data (Describe in Stream, Lake, or Tide (Aerial Photographs Other No Recorded Data Available Field Observations:	e -	_(in.)	Primar	y Indicators Inundated Saturated i Water Mari Drift Lines Sediment I Drainage F dary Indica Oxidized R Water-Stai Local Soil	in Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ toot Channels in Up ned Leaves Survey Data	ired):	
Recorded Data (Describe in Stream, Lake, or Tide (Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: Depth to Free Water in Pit:	Gauge - 0	(in.)	Primar	y Indicators Inundated Saturated i Water Mari Drift Lines Sediment I Drainage F dary Indica Oxidized R Water-Stai Local Soil FAC-Neutr	in Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ toot Channels in Up ned Leaves Survey Data ral Test	ired):	
Recorded Data (Describe in Stream, Lake, or Tide (Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water:	e -		Primar	y Indicators Inundated Saturated i Water Mari Drift Lines Sediment I Drainage F dary Indica Oxidized R Water-Stai Local Soil FAC-Neutr	in Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ toot Channels in Up ned Leaves Survey Data	ired):	
Recorded Data (Describe in Stream, Lake, or Tide (Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil:	Gauge - 0	(in.)	Primar	y Indicators Inundated Saturated i Water Mari Drift Lines Sediment I Drainage F dary Indica Oxidized R Water-Stai Local Soil FAC-Neutr	in Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ toot Channels in Up ned Leaves Survey Data ral Test	ired):	
Recorded Data (Describe in Stream, Lake, or Tide (Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: Depth to Free Water in Pit:	Gauge - 0	(in.)	Primar	y Indicators Inundated Saturated i Water Mari Drift Lines Sediment I Drainage F dary Indica Oxidized R Water-Stai Local Soil FAC-Neutr	in Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ toot Channels in Up ned Leaves Survey Data ral Test	ired):	
Recorded Data (Describe in Stream, Lake, or Tide (Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: Depth to Free Water in Pit:	Gauge - 0	(in.)	Primar	y Indica Inundat Saturat Water M Drift Lin Sedime Drainaç dary Ind Oxidize Water-S Local S FAC-Ne	ators ted Mar Mar nes ent I Ged R Stai Soil	ted and in Upper 12 Inches Marks hes ent Deposits ge Patterns in Wetlands dicators (2 or more requ and Root Channels in Up Stained Leaves soil Survey Data eutral Test	ators: ted ted ted in Upper 12 Inches Warks nes ent Deposits ge Patterns in Wetlands dicators (2 or more required): ted Root Channels in Upper 12 Inches Stained Leaves soil Survey Data teutral Test

Map Unit Name (Series and Ph		EI	Eı kon Si	n It Loam		Drainage Class:	M\	WD
Taxonomy (Sul	bgroup):	Aquic Hapludults			Field Observations Confirm Mapped Type?	⊠Yes	□No	
Profile Descript Depth (inches) 0-5 5-10 10-16	Horizon	Matrix Color (Munsell Moist) 10 YR 3/ 2.5 Y 5/-	′1 4	Mottle Colors (Munsell Moi: 5 YR 4 7.5 YR 10 YR	st) 4/6 5/8	Mottle Abundance/ Size/Contrast Common Many Many	clay	loam loam ay
Reducing Gleyed or	ipedon Odor oisture Regime g Conditions r Low-Chroma	Colors	s, Restr		Organic S Listed on Listed on Other (Ex	ns anic Content in Surface Lay Streaking in Sandy Soils Local Hydric Soils List National Hydric Soils List plain in Remarks) off from adjacent lawn.	er in Sandy Soil	s
WETLAND DE	TERMINAT	ION						
Hydrophytic Ve Wetland Hydro Hydric Soils Pro	logy Present?	ent? ⊠Yes ⊠Yes ⊠Yes	□No	(Check)	Is this Sa	ampling Point Within a Wetla		check)
Remarks:								

Approved by HQUSACE 3/92

- 1 1/2" LOE Cos	-t'an 200						- 2000
Project/Site: I-95 Sec		On a site ,			Date:	February 9	
	nsportation Au	•			County:	Harfo	-
	eld, C. Brudin	ı, J. Reed			State:	Maryla	
Do Normal Circumstances exist			⊠Yes	□No	Community ID:	Wetlar	nd 15 B
Is the site significantly disturbed (Atypical Situation)?			□Yes	⊠No	Transect ID:		
Is the area a potential Problem			□Yes	⊠No	Plot ID:	Wetla	and DP
(If needed, explain on reverse	э.)						
/EGETATION							
Dominant Plant Species	Stratum	Indicator	Don	ninant Plant	Species	Stratum	Indicator
1. Cornus amomum	T	FACW-					
2. Liquidambar styraciflua	Т	FAC					
3. Carex spp.	Н						
4. Unknown grass spp							
5. Lindera benzoin		FACW-					
6. Club Moss spp.							
7		-					
8							
o			- '				
HYDROLOGY							
Recorded Data (Describe	in Remarks):		Wetland H	lydrology Ind	dicators:		
Stream, Lake, or Tide				ry Indicators			
Aerial Photographs	-			Inundated			
Other				Saturated in	n Upper 12 Inches		
No Recorded Data Availab	ole			Water Mark			
				Drift Lines			
				Sediment D			
Field Observations:				Drainage P	Patterns in Wetlands	.	
					tors (2 or more requ		
Depth of Surface Water:	2"	(in.)			oot Channels in Up	per 12 Inches	
D. H. C. Free Meter to Dit				Water-Stair			
Depth to Free Water in Pit	:: 0	(in.)		Local Soil S FAC-Neutra	Survey Data		
Depth to Saturated Soil:	0	(in.)			ai Test lain in Remarks)		
Remarks: Permanently inundated. Flow	ving from sprin	g seeps and ur	ndersurface	stream flov	ws.		

Map Unit Name (Series and Phase):	Allu	Av vial Land	Drainage Class:	SWP to VP
Taxonomy (Subgroup):	N/A		Field Observations Confirm Mapped Ty	pe? Yes No
Profile Descriptions: Depth (inches) Horizon	Matrix Color Mottle Colors (Munsell Moist) (Munsell Mois			Texture, Concretions, Structure, etc,
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma	Colors		Concretions High Organic Content in Surface Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils Li Other (Explain in Remarks)	
Remarks: Wetland soil assumed due of uplands.	to permanent inunc	dated area from	water supplied by WUS 19 B	and surrounding steep banks
WETLAND DETERMINAT	ION			
Hydrophytic Vegetation Prese Wetland Hydrology Present? Hydric Soils Present?	ent? ⊠Yes □N ⊠Yes □N ⊠Yes □N		Is this Sampling Point Within a V	(Check) Vetland? ⊠Yes □No
Soils mucky, standing water Wetlands located in a forest		-	d, potential Bog turtle type of ulture/horse farms area.	habitat.

Designation I-05 Sec	200				Data		2 2006
Project/Site: I-95 Sec		ithority.			Date:	February 9	
	nsportation Au				County:	Harfo	
	ield, C. Brudin	i, J. Keea	<u> </u>		State:	Maryla	
Do Normal Circumstances exist			⊠Yes	□No	Community ID:	Wetian	id 16-B
Is the site significantly disturbed (Atypical Situation)?			□Yes	⊠No	Transect ID:		
Is the area a potential Problem			□Yes	⊠No	Plot ID:	Wetla	nd DP
(If needed, explain on reverse	ə.)						
/EGETATION							
Dominant Plant Species	Plant Species Stratum Indicator		Dor	ninant Plant	ant Species Stratum In		Indicator
1. Cornus amomum	T	FACW-	9.				
2. Liquidambar styraciflua		FAC					
3. Carex spp.	Н						
4. Unknown grass spp							·
5. Lindera benzoin	S	FACW-					
6							
7							
8							
0			10				
HYDROLOGY							
	· 5		145.115.41	·			
Recorded Data (Describe				lydrology In			
Stream, Lake, or Tide	e Gauge		Primai	ry Indicators	3:		
Aerial Photographs				Inundated	in I Innar 10 Inahaa		
☐ Other					in Upper 12 Inches		
No Recorded Data Availab	ole			Water Mark Drift Lines	ks		
			ᅴ 片	Sediment E	Donneite		
Field Observations:					Patterns in Wetlands	<u>.</u>	
I loid Observations.					tors (2 or more requ		
Depth of Surface Water:	2-4"	(in.)		-	Root Channels in Upp		
•					ned Leaves	r -	
Depth to Free Water in Pit	t: <u> </u>	(in.)		Local Soil S	Survey Data		
				FAC-Neutra	al Test		
Depth to Saturated Soil:	0	(in.)		Other (Exp	olain in Remarks)		
Remarks:							
Permanently inundated, Flow			-	ım. Conne	ects to WUS 19B	directly.	
			-	ım. Conne	ects to WUS 19B o	directly.	
Permanently inundated, Flow			-	ım. Conne	ects to WUS 19B	directly.	

00120				
Map Unit Name (Series and Phase):	A ^r Alluvia		Drainage Class:	SWP to VP
Taxonomy (Subgroup):	N/A		Field Observations Confirm Mapped Type?	No
Profile Descriptions: Depth (inches) Horizon 0-12	Matrix Color (Munsell Moist) 10 YR 1/1	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc, Mucky
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma		High Orga Liste	ncretions h Organic Content in Surface Layo anic Streaking in Sandy Soils ed on Local Hydric Soils List ed on National Hydric Soils List er (Explain in Remarks)	er in Sandy Soils
Remarks: Wetland soil assumed due Uplands.	to permanent shallow	inundated from w	water supplied by WUS 19 B a	and flowing seeps from.
WETLAND DETERMINAT	ION			
Hydrophytic Vegetation Prese Wetland Hydrology Present? Hydric Soils Present?	ent? ⊠Yes □No ⊠Yes □No ⊠Yes □No		his Sampling Point Within a Wetla	(Check) and? ⊠Yes ⊡No
Soils very mucky and standing Wetlands located in a forested	•	•	farms.	

Drainat/Sita: I-95 Sa	ction 200				Data	Echruary 1	v 2006
	nsportation Au	thority			Date:	February 1	
					County:	Harfo	-
•	eld, C. Brudin	I, J. Reeu			State:	Maryla	
Do Normal Circumstances exist			⊠Yes	□No	Community ID:	vvetiar	nd 17 B
s the site significantly disturbed (Atypical Situation)?			□Yes	⊠No	Transect ID:	\\\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.	
s the area a potential Problem			□Yes	⊠No	Plot ID:	Wetia	and DP
(If needed, explain on reverse	e.)						
GETATION							
Dominant Plant Species	Stratum	Indicator	Don	 ninant <u>Plant</u>	Species	Stratum	Indicator
1. Acer rubrum	T	FAC					
2. Liquidambar styraciflua		FAC					
3. Moss spp.							
4. Cornus amomum		FACW					
		-					
5							
6							
7							
8			_ 16				
Percent of Dominant Species th (excluding FAC-). 2/2 = 100 Remarks: Wetland bordered by white parts to the south of the	oine and Va. pir		-		gum dominate thr	oughout	
(excluding FAC-). 2/2 = 100 Remarks: Wetland bordered by white phe young forest. Just south	oine and Va. pir		-		gum dominate thr	roughout	
(excluding FAC-). 2/2 = 100 Remarks: Wetland bordered by white phe young forest. Just south	oine and Va. pir of Clayton Rd.		servation eas	sement		roughout	
(excluding FAC-). 2/2 = 100 Remarks: Vetland bordered by white point young forest. Just south **TOROLOGY** Recorded Data (Describe)	oine and Va. pir of Clayton Rd. in Remarks):		Wetland H	sement	dicators:	roughout	
(excluding FAC-). 2/2 = 100 Remarks: Vetland bordered by white phe young forest. Just south /DROLOGY Recorded Data (Describe Stream, Lake, or Tide	oine and Va. pir of Clayton Rd. in Remarks):		Wetland H	sement lydrology Incry Indicators	dicators:	roughout	
(excluding FAC-). 2/2 = 100 Remarks: Wetland bordered by white phe young forest. Just south YDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs	oine and Va. pir of Clayton Rd. in Remarks):		Wetland H	sement lydrology Indicators Inundated	dicators:	roughout	
(excluding FAC-). 2/2 = 100 Remarks: Wetland bordered by white phe young forest. Just south YDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other	oine and Va. pir of Clayton Rd. in Remarks):		Wetland H Primar	lydrology Incry Indicators Inundated Saturated in	dicators: s: n Upper 12 Inches	roughout	
(excluding FAC-). 2/2 = 100 Remarks: Wetland bordered by white phe young forest. Just south YDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs	oine and Va. pir of Clayton Rd. in Remarks):		Wetland H Primar	lydrology Inc ry Indicators Inundated Saturated in Water Mark	dicators: s: n Upper 12 Inches	roughout	
(excluding FAC-). 2/2 = 100 Remarks: Wetland bordered by white phe young forest. Just south YDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other	oine and Va. pir of Clayton Rd. in Remarks):		Wetland H Primar	lydrology Inc ry Indicators Inundated Saturated in Water Mark Drift Lines	dicators: s: n Upper 12 Inches	roughout	
(excluding FAC-). 2/2 = 100 Remarks: Wetland bordered by white phe young forest. Just south YDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab	oine and Va. pir of Clayton Rd. in Remarks):		Wetland H Primar	lydrology Indicators Inundated Saturated ii Water Mark Drift Lines Sediment E	dicators: s: n Upper 12 Inches ks		
(excluding FAC-). 2/2 = 100 Remarks: Wetland bordered by white phe young forest. Just south YDROLOGY Recorded Data (Describe Aerial Photographs Other	oine and Va. pir of Clayton Rd. in Remarks):		Wetland H Primar	lydrology Inc ry Indicators Inundated Saturated in Water Mark Drift Lines Sediment E Drainage P	dicators: s: n Upper 12 Inches		
(excluding FAC-). 2/2 = 100 Remarks: Wetland bordered by white phe young forest. Just south YDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab	oine and Va. pir of Clayton Rd. in Remarks):		Wetland H Primar	lydrology Indicators Inundated Saturated in Water Mark Drift Lines Sediment E Drainage P dary Indicat	dicators: s: n Upper 12 Inches ks Deposits Patterns in Wetlands	S suired):	
(excluding FAC-). 2/2 = 100 Remarks: Wetland bordered by white phe young forest. Just south YDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations:	oine and Va. pir of Clayton Rd. in Remarks): e Gauge	Area in a cons	Wetland H Primar	lydrology Indicators Inundated Saturated in Water Mark Drift Lines Sediment E Drainage P idary Indicat Oxidized R	dicators: s: n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ	S suired):	
(excluding FAC-). 2/2 = 100 Remarks: Wetland bordered by white phe young forest. Just south YDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations:	oine and Va. pir of Clayton Rd. in Remarks): Gauge	Area in a cons	Wetland H Primar	lydrology Incry Indicators Inundated Saturated ii Water Mark Drift Lines Sediment E Drainage P dary Indicat Oxidized R Water-Stair Local Soil S	dicators: s: n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data	S suired):	
(excluding FAC-). 2/2 = 100 Remarks: Wetland bordered by white phe young forest. Just south YDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water:	oine and Va. pir of Clayton Rd. in Remarks): Gauge	Area in a cons	Wetland H Primar	lydrology Incry Indicators Inundated Saturated ii Water Mark Drift Lines Sediment E Drainage P dary Indicat Oxidized R Water-Stain	dicators: s: n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data	S suired):	
(excluding FAC-). 2/2 = 100 Remarks: Wetland bordered by white phe young forest. Just south YDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water:	oine and Va. pir of Clayton Rd. in Remarks): Gauge	Area in a cons	Wetland H Primar	lydrology Incry Indicators Inundated Saturated in Water Mark Drift Lines Sediment E Drainage P Idary Indicat Oxidized R Water-Stain Local Soil S FAC-Neutra	dicators: s: n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data	S suired):	
(excluding FAC-). 2/2 = 100 Remarks: Wetland bordered by white phe young forest. Just south YDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: Depth to Free Water in Pit Depth to Saturated Soil:	in Remarks): Gauge 0 surface	(in.)(in.)	Wetland H Primar	lydrology Incry Indicators Inundated Saturated in Water Mark Drift Lines Sediment E Drainage P Idary Indicat Oxidized R Water-Stain Local Soil S FAC-Neutra	dicators: s: n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data al Test	S suired):	
(excluding FAC-). 2/2 = 100 Remarks: Wetland bordered by white phe young forest. Just south YDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water: Depth to Free Water in Pit	in Remarks): Gauge 0 surface	(in.)(in.)	Wetland H Primar	lydrology Incry Indicators Inundated Saturated in Water Mark Drift Lines Sediment E Drainage P Idary Indicat Oxidized R Water-Stain Local Soil S FAC-Neutra	dicators: s: n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data al Test	S suired):	
(excluding FAC-). 2/2 = 100 Remarks: Wetland bordered by white phe young forest. Just south YDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Available Field Observations: Depth of Surface Water: Depth to Free Water in Pit Depth to Saturated Soil:	in Remarks): Gauge 0 surface	(in.)(in.)	Wetland H Primar	lydrology Incry Indicators Inundated Saturated in Water Mark Drift Lines Sediment E Drainage P Idary Indicat Oxidized R Water-Stain Local Soil S FAC-Neutra	dicators: s: n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data al Test	S suired):	

SUILS				
Map Unit Name		KpB		
(Series and Phase):	Keyport silt loai	•	Drainage Class:	MWD
(30.100 a.10 1 11.000).	rteyport siit ioai	111 Z-3 /0 310pes		IVIVID
			Field Observations	
Taxonomy (Subgroup):	Aqu	ic Hapludults	Confirm Mapped Type?	⊠Yes □ No
Drofile Descriptions				
Profile Descriptions: Depth	Matrix Color	Mottle Cold	ors Mottle Abundance/	Texture, Concretions,
(inches) Horizon	(Munsell Moist			Structure, etc,
	•	(Widisell We	olze/contrast	
0-2	10 YR 4/1			sandy loam
<u>2-12</u>	10 YR 5/2	7.5 YR 5	/6 Many distinct	sandy loam
	-		 -	
Hydric Soil Indicators:				
Tryunc con malcators.				
Histosol		ᆜ	Concretions	
Histic Epipedon			High Organic Content in Surface Lay	er in Sandy Soils
Sulfidic Odor			Organic Streaking in Sandy Soils	
Aquic Moisture Regime		_	Listed on Local Hydric Soils List	
Reducing Conditions			Listed on National Hydric Soils List	
Gleyed or Low-Chroma	Coloro			
Gleyed of Low-Chiloffia	Colors		Other (Explain in Remarks)	
Remarks:				
Surface drainage runoff f	rom surrounding (uplands and water t	rapped from road bed, Mostly all	plants FAC species of red
_	-	-	• •	plants i / to opposite of rea
maple and sweet gum . W	reliand line follow	ed drainage pattern	s and flydric soils.	
WETLAND DETERMINA	TION			
Hydrophytic Vegetation Brook	ont? Myos	□No (Chook)		(Chook)
Hydrophytic Vegetation Pres		□No (Check)		(Check)
Wetland Hydrology Present?	⊠Yes	□No		
Hydric Soils Present?	⊠Yes	□No	Is this Sampling Point Within a Wetla	and? ⊠Yes □No
-				
Remarks:				
Water drains in	to a swale that dis	ssipates from surfac	ce flow but most likely flows sub s	surface into WUS

Project/Site: I-95 Sec	ction 200				Date:	February	10. 2006
	sportation Au	ıthority			County:	Harfe	
	eld, C. Brudin				State:	Maryl	
Do Normal Circumstances exist		,	⊠Yes	□No	Community ID:		
Is the site significantly disturbed		on)?	□Yes	⊠No	Transect ID:		110 10 2
Is the area a potential Problem Area?			□Yes	⊠No	Plot ID:	Wetl	and DP
(If needed, explain on reverse.)			□ 100	MILLO	1 100 15.	15 flags- PF	
(II flooded, explain on reverse	·. <i>)</i>				<u> </u>	To nago 1	
EGETATION							
Dominant Plant Species	Plant Species Stratum Indicator		Don	ninant Plant	t Species Stratum		Indicator
1. Quercus palustris	T	FACW					
Liquidambar styraciflua	T	FAC					
3. Acer rubrum	T	FAC					
4. Smilax rotundifolia	Н	FAC					
5		-					
6							
7							
0			- 10				
Percent of Dominant Species the (excluding FAC-). 4/4= 1009 Remarks:	at are OBL, FAC %		s from surro	unding upl	lands.		
Percent of Dominant Species the (excluding FAC-). 4/4= 100% Remarks: Low swale depression receives.	at are OBL, FAC %		s from surro	unding upl	lands.		
Percent of Dominant Species the (excluding FAC-). 4/4= 100° Remarks: Low swale depression receive the control of the control	at are OBL, FAC % ving highway ru						
Percent of Dominant Species the (excluding FAC-). 4/4= 1009 Remarks: Own swale depression receivable (PROLOGY)	at are OBL, FAC wing highway ru in Remarks):		Wetland H	ydrology In	dicators:		
Percent of Dominant Species the (excluding FAC-). 4/4= 1009 Remarks: Ow swale depression received Parameters (PDROLOGY) Recorded Data (Describe in Stream, Lake, or Tide)	at are OBL, FAC wing highway ru in Remarks):		Wetland H Primar	ydrology In	dicators:		
Percent of Dominant Species the (excluding FAC-). 4/4= 1009 Remarks: Own swale depression receivable (DROLOGY)	at are OBL, FAC wing highway ru in Remarks):		Wetland H Primar	ydrology In	dicators:		
Percent of Dominant Species the (excluding FAC-). 4/4= 1009 Remarks: Ow swale depression receive (DROLOGY) Recorded Data (Describe in Aerial Photographs Other	at are OBL, FAC wing highway ru in Remarks): Gauge		Wetland H Primar	ydrology In y Indicators Inundated	dicators:		
Percent of Dominant Species the (excluding FAC-). 4/4= 1009 Remarks: Ow swale depression receive PROLOGY Recorded Data (Describe in Stream, Lake, or Tide Aerial Photographs	at are OBL, FAC wing highway ru in Remarks): Gauge		Wetland H Primar \(\triangle \)	ydrology In- y Indicators Inundated Saturated i Water Mark	dicators: s: n Upper 12 Inches		
Percent of Dominant Species the (excluding FAC-). 4/4= 1009 Remarks: Ow swale depression receive the properties of the	at are OBL, FAC wing highway ru in Remarks): Gauge		Wetland H Primar 	ydrology In- ry Indicators Inundated Saturated i Water Mark Drift Lines	dicators: s: n Upper 12 Inches		
Percent of Dominant Species the (excluding FAC-). 4/4= 1009 Remarks: Low swale depression receives a swale depres	at are OBL, FAC wing highway ru in Remarks): Gauge		Wetland H Primar 	ydrology In- ry Indicators Inundated Saturated i Water Mark Drift Lines Sediment I	dicators: s: n Upper 12 Inches ss		
Percent of Dominant Species the (excluding FAC-). 4/4= 1009 Remarks: Ow swale depression receives the control of the control	at are OBL, FAC wing highway ru in Remarks): Gauge		Wetland H Primar	ydrology In- ry Indicators Inundated Saturated i Water Mark Drift Lines Sediment I Drainage P	dicators: s: n Upper 12 Inches ss Deposits Patterns in Wetlands		
Percent of Dominant Species the (excluding FAC-). 4/4= 1009 Remarks: Ow swale depression receives a swale depress	at are OBL, FAC ving highway ru in Remarks): Gauge	unoff and waters	Wetland H Primar	ydrology In y Indicators Inundated Saturated i Water Mark Drift Lines Sediment I Drainage P dary Indicat	dicators: s: n Upper 12 Inches ss Deposits Patterns in Wetlands tors (2 or more requ	uired):	
Percent of Dominant Species the (excluding FAC-). 4/4= 1009 Remarks: Ow swale depression received Parameters of the property	at are OBL, FAC wing highway ru in Remarks): Gauge		Wetland H Primar	lydrology In- y Indicators Inundated Saturated i Water Mark Drift Lines Sediment I Drainage P dary Indicat Oxidized R	dicators: s: n Upper 12 Inches cs Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Up	uired):	
Percent of Dominant Species the (excluding FAC-). 4/4= 1009 Remarks: .ow swale depression receive PROLOGY Recorded Data (Describe in Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water:	at are OBL, FAC wing highway ru in Remarks): Gauge	unoff and waters	Wetland H Primar	lydrology In- ry Indicators Inundated Saturated i Water Mark Drift Lines Sediment I Drainage P dary Indicat Oxidized R Water-Stai	dicators: s: n Upper 12 Inches ks Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves	uired):	
Percent of Dominant Species the (excluding FAC-). 4/4= 1009 Remarks: Low swale depression receives a swale depres	at are OBL, FAC wing highway ru in Remarks): Gauge	unoff and waters	Wetland H Primar	lydrology In- ry Indicators Inundated Saturated i Water Mark Drift Lines Sediment I Drainage P dary Indicat Oxidized R Water-Stait Local Soil S	dicators: s: n Upper 12 Inches ss Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data	uired):	
YDROLOGY Recorded Data (Describe in Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water:	at are OBL, FAC wing highway ru in Remarks): Gauge	unoff and waters	Wetland H Primar	ydrology In- y Indicators Inundated Saturated i Water Mark Drift Lines Sediment I Drainage P dary Indicat Oxidized R Water-Stain Local Soil S FAC-Neutr	dicators: s: n Upper 12 Inches ss Deposits Patterns in Wetlands tors (2 or more requ oot Channels in Up ned Leaves Survey Data	uired):	

Map Unit Name (Series and Phase):	Av Alluvial		Drainage Class:	SWP to VP
Taxonomy (Subgroup):	N/A		Field Observations Confirm Mapped Type?	No
Profile Description: Depth (inches) Horizon 0-2 2-6 6-12	Matrix Color (Munsell Moist) 10 YR 5/2 10YR 5/1 10 YR 5/1	Mottle Colors (Munsell Moist) 5YR 5/6 5YR 5/8	Mottle Abundance/ Size/Contrast few few	Texture, Concretions, Structure, etc, Clay loam silty clay
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Co	ain event, water still s	Organ Listed Listed Other	Organic Content in Surface Lay nic Streaking in Sandy Soils I on Local Hydric Soils List I on National Hydric Soils List (Explain in Remarks)	·
WETLAND DETERMINATI	ION			
Hydrophytic Vegetation Present Wetland Hydrology Present? Hydric Soils Present? Remarks:	t? ⊠Yes □No ⊠Yes □No ⊠Yes □No	(Check) Is this	s Sampling Point Within a Wetla	(Check) and? ⊠Yes ⊡No

Approved by HQUSACE 3/92

Project/Site: I-95 Sec	ction 200				Date:	February 2	4 2006
•	nsportation Au			County:	Harfo		
	eld, C. Brudin				State: Maryland		
Do Normal Circumstances exist		1, 0. 11000	⊠Yes	□No	Community ID:		
s the site significantly disturbed		on\2	⊠ res □Yes	⊠No	Transect ID:	VVCual	מפו מו
s the area a potential Problem	· ,,	011):	⊟Yes	⊠No	Plot ID:	\/\otla	and DP
s trie area a potential Problem in (If needed, explain on reverse			□169	MINO		P @ inside flag	
(II lieeueu, expiairi ori reverse	3.)				<u> </u>	r w maide nag	, 19
GETATION							
Dominant Plant Species	Stratum	Indicator	Don	ninant Plant	Species	Stratum	Indicator
1. Acer rubrum	T	FAC	9				
2. Acer rubrum	S	FAC					
3. Liquidambar styraciflua	T	FAC					
4. Lindera benzoin						·	
5							
6						-	
7 8							
8		-	- 10			•	
Percent of Dominant Species th (excluding FAC-). 3/3=100% Remarks:							
(excluding FAC-). 3/3=100% Remarks:							
(excluding FAC-). 3/3=100% Remarks:	/6		Wetland H	-dalogy In	d'actore.		
(excluding FAC-). 3/3=100% Remarks: **DROLOGY Recorded Data (Describe)	in Remarks):			lydrology Inc			
(excluding FAC-). 3/3=100% Remarks: /DROLOGY Recorded Data (Describe Stream, Lake, or Tide	in Remarks):		Primai	ry Indicators			
(excluding FAC-). 3/3=100% Remarks: TOROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs	in Remarks):		Primai	ry Indicators Inundated	s:		
(excluding FAC-). 3/3=100% Remarks: TOROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other	in Remarks): e Gauge		Primai	ry Indicators Inundated Saturated in	s: n Upper 12 Inches		
(excluding FAC-). 3/3=100% Remarks: TOROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs	in Remarks): e Gauge		Primai	ry Indicators Inundated Saturated ii Water Mark	s: n Upper 12 Inches		
(excluding FAC-). 3/3=100% Remarks: TOROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other	in Remarks): e Gauge		Primai	ry Indicators Inundated Saturated in Water Mark Drift Lines	s: n Upper 12 Inches ks		
(excluding FAC-). 3/3=100% Remarks:	in Remarks): e Gauge		Primal	ry Indicators Inundated Saturated in Water Mark Drift Lines Sediment D	n Upper 12 Inches ks Deposits		
(excluding FAC-). 3/3=100% Remarks: TOROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other	in Remarks): e Gauge		Primal	ry Indicators Inundated Saturated ii Water Mark Drift Lines Sediment D Drainage P	s: n Upper 12 Inches ks		
(excluding FAC-). 3/3=100% Remarks:	in Remarks): e Gauge	(in.)	Primal	ry Indicators Inundated Saturated ii Water Mark Drift Lines Sediment D Drainage P dary Indicat	n Upper 12 Inches ks Deposits Patterns in Wetlands	uired):	
(excluding FAC-). 3/3=100% Remarks:	in Remarks): e Gauge		Primal	ry Indicators Inundated Saturated ii Water Mark Drift Lines Sediment D Drainage P dary Indicat	n Upper 12 Inches ss Deposits Patterns in Wetlands fors (2 or more requioot Channels in Up	uired):	
(excluding FAC-). 3/3=100% Remarks:	in Remarks): e Gauge ole 3.0		Primal	ry Indicators Inundated Saturated in Water Mark Drift Lines Sediment D Drainage P dary Indicat Oxidized R: Water-Stain	n Upper 12 Inches ss Deposits Patterns in Wetlands fors (2 or more required to the control of t	uired):	
(excluding FAC-). 3/3=1009 Remarks: TOROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water:	in Remarks): e Gauge ole 3.0	(in.)	Primal	ry Indicators Inundated Saturated in Water Mark Drift Lines Sediment D Drainage P dary Indicat Oxidized R: Water-Stain	n Upper 12 Inches Seposits Patterns in Wetlands Fors (2 or more required Channels in Upped Leaves Survey Data	uired):	
(excluding FAC-). 3/3=1009 Remarks: TOROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water:	in Remarks): e Gauge ole 3.0	(in.)	Primal	ry Indicators Inundated Saturated in Water Mark Drift Lines Sediment D Drainage P dary Indicat Oxidized R Water-Stair Local Soil S FAC-Neutra	n Upper 12 Inches Seposits Patterns in Wetlands Fors (2 or more required Channels in Upped Leaves Survey Data	uired):	
(excluding FAC-). 3/3=100% Remarks: ORDED	in Remarks): e Gauge ole 3.0 : n/a	(in.) (in.)	Primal	ry Indicators Inundated Saturated in Water Mark Drift Lines Sediment D Drainage P dary Indicat Oxidized R Water-Stair Local Soil S FAC-Neutra	n Upper 12 Inches Seposits Patterns in Wetlands Fors (2 or more request Channels in Upped Leaves Survey Data al Test	uired):	
(excluding FAC-). 3/3=1009 Remarks:	in Remarks): e Gauge ole 3.0 : n/a	(in.) (in.)	Primal	ry Indicators Inundated Saturated in Water Mark Drift Lines Sediment D Drainage P dary Indicat Oxidized R Water-Stair Local Soil S FAC-Neutra	n Upper 12 Inches Seposits Patterns in Wetlands Fors (2 or more request Channels in Upped Leaves Survey Data al Test	uired):	
(excluding FAC-). 3/3=100% Remarks: ORDED	in Remarks): e Gauge ole 3.0 : n/a	(in.) (in.)	Primal	ry Indicators Inundated Saturated in Water Mark Drift Lines Sediment D Drainage P dary Indicat Oxidized R Water-Stair Local Soil S FAC-Neutra	n Upper 12 Inches Seposits Patterns in Wetlands Fors (2 or more request Channels in Upped Leaves Survey Data al Test	uired):	

Map Unit Name (Series and Phase):	Av Alluvial la	and	Drainage Class:	SWP to VP
Taxonomy (Subgroup):	N/A		Field Observations Confirm Mapped Type?	No
Profile Description: Depth (inches) Horizon 0-6 6-15	Matrix Color (Munsell Moist) 10 YR 4/3 2.5 Y 4/1	Mottle Colors (Munsell Moist) 10 YR 5/6 7.5 YR 5/6	Mottle Abundance/ Size/Contrast few many	Texture, Concretions, Structure, etc, Sandy loam Sandy loam
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Co	olors	Organic Listed c	tions rganic Content in Surface Laye c Streaking in Sandy Soils on Local Hydric Soils List on National Hydric Soils List Explain in Remarks)	er in Sandy Soils
Remarks: Saturated condition WETLAND DETERMINAT		ed.		
Hydrophytic Vegetation Present Wetland Hydrology Present? Hydric Soils Present?			Sampling Point Within a Wetla	(Check) and? ⊠Yes □No
Remarks: Palustrine Forested (PFO) entering WUS 23B.	. Connects hydraulically	y to WUS 23B. Re	eceives some waters from \	WUS 27B drainage before

Approved by HQUSACE 3/92 Forms version 1/02

	-1' 000				_		
Project/Site: I-95 Se			Date:	February 21, 2006			
pplicant/Owner: MD Transportation Authority H. Canfield, C. Brudin, J. Reed					County:	Harfo	ord
	•	, J. Reed			State:	Maryl	
Do Normal Circumstances exist	on the site?		⊠Yes	□No	Community ID:	Wetla	nd 20 B
Is the site significantly disturbed	· 31	on)?	□Yes	⊠No	Transect ID:		
Is the area a potential Problem			□Yes	⊠No	Plot ID:	wetla	
(If needed, explain on reverse	e.)				D	P @ inside fla	g 20
EGETATION							
Dominant Plant Species	Stratum	Indicator	Don	ninant Plant	Species	Stratum	Indicator
1. Magnolia virginiana	s	FACW+					
2. Symplocarpus foetidus	Н	OBL					
3. Acer rubrum		FAC					
4. Lindera benzoin	•	FACW-					
5. Liquidambar styraciflua		FAC					
6. Nyssa sylvatica							
7							
8			. 10				
Remarks: Water seeps from hillside. D Connects into WUS 23B tho		s throughout w	et area.				
Water seeps from hillside. D Connects into WUS 23B tho		s throughout w	et area.				
Water seeps from hillside. D Connects into WUS 23B tho	ugh WUS 27B	s throughout w		ludralo m. lo	dicators		
Water seeps from hillside. D Connects into WUS 23B tho IYDROLOGY Recorded Data (Describe	ugh WUS 27B	s throughout w	Wetland H	lydrology Inc			
Water seeps from hillside. D Connects into WUS 23B tho IYDROLOGY Recorded Data (Describe Stream, Lake, or Tide	ugh WUS 27B	s throughout w	Wetland H	ry Indicators			
Water seeps from hillside. D Connects into WUS 23B tho IYDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs	ugh WUS 27B	s throughout w	Wetland F	ry Indicators Inundated	s:		
Water seeps from hillside. D Connects into WUS 23B tho IYDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other	in Remarks):	s throughout w	Wetland H	ry Indicators Inundated Saturated in	s: n Upper 12 Inches		
Water seeps from hillside. D Connects into WUS 23B tho IYDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs	in Remarks):	s throughout w	Wetland F	ry Indicators Inundated Saturated ii Water Mark	s: n Upper 12 Inches		
Water seeps from hillside. D Connects into WUS 23B tho IYDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other	in Remarks):	s throughout w	Wetland F	ry Indicators Inundated Saturated in Water Mark Drift Lines	s: n Upper 12 Inches ks		
Water seeps from hillside. D Connects into WUS 23B tho IYDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availat	in Remarks):	s throughout w	Wetland F Prima 	ry Indicators Inundated Saturated in Water Mark Drift Lines Sediment E	s: n Upper 12 Inches ks Deposits		
Water seeps from hillside. D Connects into WUS 23B tho IYDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other	in Remarks):	s throughout w	Wetland F Prima 	ry Indicators Inundated Saturated ii Water Mark Drift Lines Sediment E Drainage P	n Upper 12 Inches ks Deposits Patterns in Wetlands		
Water seeps from hillside. D Connects into WUS 23B tho IYDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availat Field Observations:	in Remarks):		Wetland F Prima 	ry Indicators Inundated Saturated ii Water Mark Drift Lines Sediment D Drainage P dary Indicat	n Upper 12 Inches ss Deposits latterns in Wetlands fors (2 or more requ	uired):	
Water seeps from hillside. D Connects into WUS 23B tho IYDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availat	in Remarks): Gauge	s throughout w	Wetland Frima	ry Indicators Inundated Saturated ii Water Mark Drift Lines Sediment D Drainage P dary Indicat	n Upper 12 Inches ss Deposits Patterns in Wetlands fors (2 or more required to the control of t	uired):	
Water seeps from hillside. D Connects into WUS 23B tho IYDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availat Field Observations:	in Remarks): e Gauge		Wetland Frimal	ry Indicators Inundated Saturated ii Water Mark Drift Lines Sediment E Drainage P idary Indicat Oxidized R Water-Stain	n Upper 12 Inches ss Deposits Patterns in Wetlands fors (2 or more required to the control of t	uired):	
Water seeps from hillside. D Connects into WUS 23B tho HYDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availat Field Observations: Depth of Surface Water:	in Remarks): e Gauge	_(in.)	Wetland Frimal	ry Indicators Inundated Saturated ii Water Mark Drift Lines Sediment E Drainage P idary Indicat Oxidized R Water-Stain	n Upper 12 Inches Seposits Patterns in Wetlands Fors (2 or more required Channels in Upped Leaves Survey Data	uired):	
Water seeps from hillside. D Connects into WUS 23B tho HYDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availat Field Observations: Depth of Surface Water:	in Remarks): e Gauge	_(in.)	Wetland Frimal	ry Indicators Inundated Saturated ii Water Mark Drift Lines Sediment D Drainage P Idary Indicat Oxidized R Water-Stain Local Soil S FAC-Neutra	n Upper 12 Inches Seposits Patterns in Wetlands Fors (2 or more required Channels in Upped Leaves Survey Data	uired):	
Water seeps from hillside. D Connects into WUS 23B tho YDROLOGY	in Remarks): e Gauge 0.5	_(in.) _(in.)	Wetland Frimal	ry Indicators Inundated Saturated ii Water Mark Drift Lines Sediment D Drainage P Idary Indicat Oxidized R Water-Stain Local Soil S FAC-Neutra	n Upper 12 Inches Seposits Patterns in Wetlands Fors (2 or more request Channels in Upped Leaves Survey Data al Test	uired):	
Water seeps from hillside. D Connects into WUS 23B tho BYDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availat Field Observations: Depth of Surface Water: Depth to Free Water in Pit Depth to Saturated Soil:	in Remarks): e Gauge 0.5	_(in.) _(in.)	Wetland Frimal	ry Indicators Inundated Saturated ii Water Mark Drift Lines Sediment D Drainage P Idary Indicat Oxidized R Water-Stain Local Soil S FAC-Neutra	n Upper 12 Inches Seposits Patterns in Wetlands Fors (2 or more request Channels in Upped Leaves Survey Data al Test	uired):	
Water seeps from hillside. D Connects into WUS 23B tho BYDROLOGY Recorded Data (Describe Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availat Field Observations: Depth of Surface Water: Depth to Free Water in Pit Depth to Saturated Soil:	in Remarks): e Gauge 0.5	_(in.) _(in.)	Wetland Frimal	ry Indicators Inundated Saturated ii Water Mark Drift Lines Sediment D Drainage P Idary Indicat Oxidized R Water-Stain Local Soil S FAC-Neutra	n Upper 12 Inches Seposits Patterns in Wetlands Fors (2 or more request Channels in Upped Leaves Survey Data al Test	uired):	

Map Unit Name (Series and Phase):		Av Alluvial Land Drainage Class:		SWP to VP
Taxonomy (Subgroup):	N/	'A	Field Observations Confirm Mapped Type?	No
Profile Description: Depth (inches) Horizon 0-2 2-8 8-16	Matrix Color (Munsell Moist) 10 YR 3/2 10 YR 5/1 10 YR 2/2	Mottle Cold (Munsell Mo	ist) Size/Contrast	Texture, Concretions, Structure, etc, Sandy loam sandy Sandy loam
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma C			Concretions High Organic Content in Surface Lay Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks) n underneath layer of thick clay.	er in Sandy Soils
WETLAND DETERMINAT	ION			
Hydrophytic Vegetation Present Wetland Hydrology Present? Hydric Soils Present?	Yes □No ⊠Yes □No ⊠Yes □No	(Check)	Is this Sampling Point Within a Wetla	(Check) and? ⊠Yes ⊡No
Remarks:		1		

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Project/Site: I-95 Sec Applicant/Owner: MD Tran				Doto	Fobruary C	14 2006
Applicant/Owner. IVID ITAIT		ıthority		Date:	February 2 Harfo	
La Confic	eld, C. Brudin	•		County:		
Investigator: H. Canfie Do Normal Circumstances exist	•	i, J. Neeu	Myss DNs	State:	Maryla	
		om\2	⊠Yes □No	Community ID Transect ID:	vveiiai	nd 21-B
Is the site significantly disturbed		on)?	□Yes ⊠No		\\/atla	and DD
Is the area a potential Problem A			∐Yes ⊠No	Plot ID:		and DP
(If needed, explain on reverse	.)				DP @ inside flag	g 10
EGETATION						
Dominant Plant Species	Stratum	Indicator	Dominant Plant	Species	Stratum	Indicator
1. Magnolia virginiana	S	FACW+	9			
2.Ilex opaca	S	FACU+	10			
3. Fagus grandifolia	T	FACU	11			
4. Vaccinium corymbosum	S	FACU	12			
5			13.			
6.			14.			
7			15.			
8			16.			
INDBUI UCA						
	n Pamarks):		Wetland Hydrology In	dicatore:		
Recorded Data (Describe in			Wetland Hydrology In			
Recorded Data (Describe in Stream, Lake, or Tide			Primary Indicators			
Recorded Data (Describe in Stream, Lake, or Tide Aerial Photographs			Primary Indicators Inundated	S:	s	
Recorded Data (Describe in Stream, Lake, or Tide Aerial Photographs Other	Gauge		Primary Indicators Inundated Saturated	s: n Upper 12 Inche	s	
Recorded Data (Describe in Stream, Lake, or Tide Aerial Photographs	Gauge		Primary Indicators Inundated Saturated i Water Mar	s: n Upper 12 Inche	s	
Recorded Data (Describe in Stream, Lake, or Tide Aerial Photographs Other	Gauge		Primary Indicators Inundated Saturated i Water Mari	s: n Upper 12 Inche: ks	s	
Recorded Data (Describe in Stream, Lake, or Tide Aerial Photographs Other	Gauge		Primary Indicators Inundated Saturated i Water Mar Drift Lines Sediment I	s: n Upper 12 Inche ks Deposits		
Recorded Data (Describe in Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab	Gauge		Primary Indicators Inundated Saturated i Water Mar Drift Lines Sediment I	s: n Upper 12 Inche ks Deposits Patterns in Wetland	ds	
Recorded Data (Describe in Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab	Gauge	_(in.)	Primary Indicators Inundated Saturated i Water Mar Drift Lines Sediment I Drainage F Secondary Indica	s: n Upper 12 Inche ks Deposits Patterns in Wetland	ds quired):	
Recorded Data (Describe in Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water:	Gauge le <u>3 feet</u>	_(in.)	Primary Indicators Inundated Saturated i Water Mari Drift Lines Sediment I Drainage F Secondary Indica	n Upper 12 Inchesks Deposits Patterns in Wetlandors (2 or more red	ds quired):	
Recorded Data (Describe in Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab	Gauge le <u>3 feet</u>	_(in.) _(in.)	Primary Indicators Inundated Saturated i Water Mari Drift Lines Sediment I Drainage F Secondary Indica Water-Stai Local Soil	n Upper 12 Inchesks Deposits Patterns in Wetlandors (2 or more redoot Channels in Uned Leaves Survey Data	ds quired):	
Recorded Data (Describe in Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water: Depth to Free Water in Pit:	Gauge le <u>3 feet</u>	(in.)	Primary Indicators Inundated Saturated i Water Mari Drift Lines Sediment I Drainage F Secondary Indica Water-Stai Local Soil	n Upper 12 Inchesks Deposits Patterns in Wetlandtors (2 or more recoot Channels in Uned Leaves Survey Data al Test	ds quired):	
Recorded Data (Describe in Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water:	Gauge le <u>3 feet</u>		Primary Indicators Inundated Saturated i Water Mari Drift Lines Sediment I Drainage F Secondary Indica Water-Stai Local Soil	n Upper 12 Inchesks Deposits Patterns in Wetlandors (2 or more redoot Channels in Uned Leaves Survey Data	ds quired):	
Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil:	Gauge	(in.)	Primary Indicators Inundated Saturated i Water Mari Drift Lines Sediment I Drainage F Secondary Indica Water-Stai Local Soil	n Upper 12 Inchesks Deposits Patterns in Wetlandtors (2 or more recoot Channels in Uned Leaves Survey Data al Test	ds quired):	
Recorded Data (Describe in Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil: Remarks:	Gauge le 3 feet 0 0	(in.) (in.)	Primary Indicators Inundated Saturated in Water Mari Drift Lines Sediment In Drainage For Secondary Indicators Water-Stain Local Soil in FAC-Neutr Other (Exp.	n Upper 12 Incherks Deposits Patterns in Wetlandors (2 or more recoot Channels in Uned Leaves Survey Data al Test lain in Remarks)	ds quired): Jpper 12 Inches	23B
Recorded Data (Describe in Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil: Remarks:	Gauge le 3 feet 0 0	_(in.) _(in.) defined bounda	Primary Indicators Inundated Saturated in Saturated in Saturated in Saturated in Sediment In Sediment In Secondary Indication Secondary Indicators Indication Secondary Indicators Ind	n Upper 12 Incherks Deposits Patterns in Wetlandors (2 or more recoot Channels in Uned Leaves Survey Data al Test lain in Remarks)	ds quired): Jpper 12 Inches	23B,
Recorded Data (Describe in Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil: Remarks:	Gauge le 3 feet 0 0	_(in.) _(in.) defined bounda	Primary Indicators Inundated Saturated in Water Mari Drift Lines Sediment In Drainage For Secondary Indicators Water-Stain Local Soil in FAC-Neutr Other (Exp.	n Upper 12 Incherks Deposits Patterns in Wetlandors (2 or more recoot Channels in Uned Leaves Survey Data al Test lain in Remarks)	ds quired): Jpper 12 Inches	23B,

Map Unit Name (Series and Phase):	KpB Keyport Silt Loan		Drainage Class:	MW	/D
	royport ont Loan	10 2 /0 0.000	Field Observations	1717	
Taxonomy (Subgroup):	Aquic Hap	ludults	Confirm Mapped Type?	⊠Yes	□No
Profile Description: Depth (inches) Horizon 0-6 6-18 refusal	Matrix Color (Munsell Moist) 10 YR 2/2 10 YR 2/3 rock	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concre Structure, etc, San Sandy	ıdy
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Co		Organ Listed Listed Other	Organic Content in Surface Lay ic Streaking in Sandy Soils on Local Hydric Soils List on National Hydric Soils List (Explain in Remarks)	er in Sandy Soils	
WETLAND DETERMINAT	ION				
Hydrophytic Vegetation Present Wetland Hydrology Present? Hydric Soils Present?	t? ⊠Yes □No (⊠Yes □No ⊠Yes □No		s Sampling Point Within a Wetla		neck)
Remarks: Not positive on source of he pool for amphibian life.	hydrology. Deep impo	unded pool of wat	er (pothole) surrounding by	uplands. Pote	ntial vernal

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D-2:04/8:40: I-95 Sec	ction 200				Data	Fahruary 2	2006
· —	nsportation Au			Date:	February 2		
					County:	Harfor	
	ield, C. Brudin	i, J. Keeu			State:	Maryla	
Do Normal Circumstances exist			⊠Yes	□No	Community ID:	Wetian	d 22-B
Is the site significantly disturbed		on)?		☐Yes ☐No Transect ID:			
Is the area a potential Problem /			∐Yes ⊠No	Plot ID: Wetland plot			
(If needed, explain on reverse	3.)						
/EGETATION							
Dominant Plant Species	Stratum	Indicator	Dor	ninant Plant	t Species	Stratum	Indicator
1.Smilax rotundifolia	<u>——</u>	FAC					
2. Liquidambar styraciflua	s	FAC					
3. Ilex opaea	T	FACU+					
Vaccinium corymbosum		FACW-					
5							
6							
7							_
8			. 10			 -	
HYDROLOGY							
	'- Damando).		W-tland I	ما برمجاج میرام	d' - ataus.		
Recorded Data (Describe i				lydrology In			
Stream, Lake, or Tide	Gauge			ry Indicators	3:		
Aerial Photographs Other			. =	Inundated	:- Unnar 42 Inches		
					in Upper 12 Inches		
No Recorded Data Availab	ole			Water Mark	ks		
			\dashv \dashv	Drift Lines Sediment [Donocito		
Field Observations:					Deposits Patterns in Wetlands		
Fleiu Observations.					tors (2 or more requ		
Depth of Surface Water:	3	(in.)		-	Root Channels in Up		
		_(,			ned Leaves		
Depth to Free Water in Pit:	t: 0	(in.)			Survey Data		
•				FAC-Neutra	al Test		
Depth to Saturated Soil:				Other (Eyn	olain in Remarks)		
2 op to Sataratoa 3011.	0	(in.)		Other (Exp	nam m remarks)		
	0	(in.)					
Remarks:							
			d as a PSS.		, and the market		
Remarks:			d as a PSS.		nam in remains)		
Remarks:			d as a PSS.	Culci (Exp	nam in remains)		

Map Unit Name (Series and Phase):		KpB Keyport silt loam		MV	ND
Taxonomy (Subgroup):	Aquic Ha	apludults	Field Observations Confirm Mapped Type?	⊠Yes	□ No
Profile Description: Depth (inches) Horizon 0-5 5-14	Matrix Color (Munsell Moist) 7.5 YR 3/4 2.5 Y 5/3	Mottle Colors (Munsell Moist Black streaking sand	st) Size/Contrast	Texture, Concre Structure, etc, Sandy	y loam
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Conditions Remarks: Streaking in sand layer. The		Hiệ Or Lis Lis	oncretions igh Organic Content in Surface Lay rganic Streaking in Sandy Soils sted on Local Hydric Soils List sted on National Hydric Soils List ther (Explain in Remarks) nt of organic material.	er in Sandy Soils	3
WETLAND DETERMINAT	TION				
Hydrophytic Vegetation Present Wetland Hydrology Present? Hydric Soils Present?	nt? ⊠Yes □No ⊠Yes □No ⊠Yes □No		s this Sampling Point Within a Wetla		heck)
Remarks: This is a depression change in Elevation and plates Isolated wetland, Potential a	ant species compositi	ion.	nded water. No upland point red	orded due to a	abrupt

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D-2:224/0:42: I-95 Sec	ction 200				Data	Fobruary 2	2006
•	nsportation Au			Date:	February 2		
		•			County:	Harfo	
	eld, C. Brudin	i, D. Phillips			State:	Maryla	
Do Normal Circumstances exist			⊠Yes	□No	Community ID:	Vvetiar	1d 23-B
Is the site significantly disturbed		on)?	□Yes				
Is the area a potential Problem /			□Yes	⊠No	Plot ID:	Wetia	nd plot
(If needed, explain on reverse) .)						
VEGETATION							
Dominant Plant Species	Stratum	Indicator	Dor	ninant Plan	t Species	Stratum	Indicator
1. Quercus phellos	T	FAC+					
2. Acer rubrum	T	FAC					
3. Smilax rotundifolia	H	FAC					
4. Liquidambar styraciflua	T	FAC					
5. Magnolia virginiana	s	FACW					
6. Vaccinium corymbosum	s	FACW					
7							
8.							
			'				
HYDROLOGY							
	:- Damarka):		Wetland b	li idralagu la	!: sotoro:		
Recorded Data (Describe in Stream, Lake, or Tide				lydrology In ry Indicators			
Aerial Photographs	Gauge			ry indicators Inundated			
Other					in Upper 12 Inches		
No Recorded Data Availab	ala			Water Marl			
NO NGOOTGOG Data Avanas	ле			Drift Lines			
			⊢	Sediment [
Field Observations:					Patterns in Wetlands	3	
					ators (2 or more requ		
Depth of Surface Water:	N/A	(in.)		Oxidized R	Root Channels in Upp	per 12 Inches	
				Water-Stai	ined Leaves		
Depth to Free Water in Pit:	:6"	(in.)			Survey Data		
				FAC-Neutr			
Depth to Saturated Soil:	0	(in.)		Other (Exp	olain in Remarks)		
5							
Remarks: Soils saturated water in te	sat nit						
30113 Saturated water in te	st pit.						

Map Unit Name (Series and Phase):	Er Elkton Si		Drainage Class:	MV	VD
Taxonomy (Subgroup):	Aquic Ha	pludults	Field Observations Confirm Mapped Type?	⊠Yes	□No
Profile Description: Depth (inches) Horizon 0-4 4-8 8-16	Matrix Color (Munsell Moist) 10 YR 2/2 10 YR 3/1 10 YR 6/1	Mottle Cold (Munsell Mo	st) Size/Contrast	Texture, Concre Structure, etc, Sandy Sandy	/ clay / clay
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma C	olors		Concretions High Organic Content in Surface Layo Organic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks)	er in Sandy Soils	
WETLAND DETERMINAT	ION				
Hydrophytic Vegetation Present Wetland Hydrology Present? Hydric Soils Present?	t? ⊠Yes □No ⊠Yes □No ⊠Yes □No	(Check)	ls this Sampling Point Within a Wetla		neck)
Remarks:					

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Project/Site: I-95 Section 200 Applicant/Owner: MD Transportation Authority Investigator: C. Brudin, D. Phillips State: Maryland Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.) VEGETATION
Investigator: C. Brudiin, D. Phillips
Do Normal Circumstances exist on the site?
Is the site significantly disturbed (Atypical Situation)?
Is the area a potential Problem Area? Yes No Plot ID: Wetland DP (If needed, explain on reverse.)
Dominant Plant Species Stratum Indicator Dominant Plant Species Stratum Indicator Stratum Indicator Dominant Plant Species Stratum Indicator Indicator Stratum Indicator Indic
Dominant Plant Species Stratum Indicator Dominant Plant Species Stratum Indicator 1. Quercus phellos T FAC+ 9. 2. Acer rubrum T FAC 10. 3. Smilax rotundifolia H FAC 11. 4. Liquidambar styraciflua T FAC 12. 5. Magnolia virginiana S FACW 13. 6. Vaccinium corymbosum S FACW 14. 7. 8. 15. 8. 16. Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 6/6= 100% Remarks: Plants FAC, PFO wetland forms from upslope drainage then into WUS YDROLOGY Recorded Data (Describe in Remarks): Primary Indicators: Primary Indicators: Primary Indicators:
Dominant Plant Species Stratum Indicator Dominant Plant Species Stratum Indicator
1. Quercus phellos T FAC+ 9
2. Acer rubrum T FAC 10. 3. Smilax rotundifolia H FAC 11. 4. Liquidambar styraciflua T FAC 12. 5. Magnolia virginiana S FACW 13. 6. Vaccinium corymbosum S FACW 14. 7.
3. Smilax rotundifolia H FAC 11. 4. Liquidambar styraciflua T FAC 12. 5. Magnolia virginiana S FACW 13. 6. Vaccinium corymbosum S FACW 14. 7. 15. 8. 16. Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 6/6= 100% Remarks: Plants FAC, PFO wetland forms from upslope drainage then into WUS YDROLOGY Recorded Data (Describe in Remarks): Wetland Hydrology Indicators: Primary Indicators: Primary Indicators: Primary Indicators:
4. Liquidambar styraciflua T FAC 12. 5. Magnolia virginiana S FACW 13. 6. Vaccinium corymbosum S FACW 14. 7.
5. Magnolia virginiana S FACW 13. 6. Vaccinium corymbosum S FACW 14. 7.
6. Vaccinium corymbosum S FACW 14
6. Vaccinium corymbosum S FACW 14
7
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 6/6= 100% Remarks: Plants FAC, PFO wetland forms from upslope drainage then into WUS ORDINARY ORDINARY
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 6/6= 100% Remarks: Plants FAC, PFO wetland forms from upslope drainage then into WUS ORDINARY
Recorded Data (Describe in Remarks): Stream, Lake, or Tide Gauge Wetland Hydrology Indicators: Primary Indicators:
Stream, Lake, or Tide Gauge Primary Indicators:
☐ Aerial Photographs ☐ Inundated
☐ Aerial Photographs ☐ Inundated ☐ Other ☐ Other ☐ Saturated in Upper 12 Inches
No Recorded Data Available
No Recorded Data Available Water Marks Drift Lines
Sediment Deposits
Field Observations: Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
Depth of Surface Water: (in.) Surface Water: Oxidized Root Channels in Upper 12 Inches
· · · · · · · · · · · · · · · · · · ·
Water-Stained Leaves
Depth to Free Water in Pit: 6" (in.) Water-Stained Leaves
Water-Stained Leaves

Map Unit Name (Series and Phase):	Er Elkton Si		Drainage Class:	MV	VD
Taxonomy (Subgroup):	Aquic Ha	pludults	Field Observations Confirm Mapped Type?	⊠Yes	□ No
Profile Description: Depth (inches) Horizon 0-4 4-8 8-16	Matrix Color (Munsell Moist) 10 YR 2/2 10 YR 3/1 10 YR 6/1	Mottle Cold (Munsell Mo	ist) Size/Contrast	Texture, Concressive Structure, etc. Sandy Sandy Sandy	/ clay / clay
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Conditions Remarks:	olors		Concretions High Organic Content in Surface Layonganic Streaking in Sandy Soils Listed on Local Hydric Soils List Listed on National Hydric Soils List Other (Explain in Remarks)	er in Sandy Soils	
WETLAND DETERMINAT	ION				
Hydrophytic Vegetation Present Wetland Hydrology Present? Hydric Soils Present?	Yes □No □Yes □No □Yes □No	(Check)	Is this Sampling Point Within a Wetla		neck)
Remarks:					

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Designat/Sites I-95 Sect	tion 200				Data	11 0	O.F.
Project/Site: I-95 Section 200 Applicant/Owner: Maryland Transportation Authority					Date: County:	11-9- Harfo	
				□No	State: Community ID:	Maryla	
Is the site significantly disturbed		on/2	⊠Yes □Yes	⊠No	Transect ID:	WEliai	10 20 B
Is the area a potential Problem A	` ' ' '	On) :	⊟ Yes	⊠No	Plot ID:	\/\a	tland
(If needed, explain on reverse			□169		Flags 1-14		liariu
(II needed, explain on reverse	<u>·)</u>					Flays 1-17	
EGETATION							
Dominant Plant Species	Stratum	Indicator	Dom	ninant Plant	Species	Stratum	Indicator
Nyssa sylvatica	T	FAC	9				
Nyssa sylvatica	S	FAC					
3. Acer rubrum	T	FAC	11				
4. Ilex verticillata	S	FACW+					
5. llex opaca	S	FACU+	13				
6			14				
7							
8			16				
Percent of Dominant Species that							
(excluding FAC-). 3/4=75 % Remarks:							
(excluding FAC-). 3/4=75 %							
(excluding FAC-). 3/4=75 % Remarks:							
(excluding FAC-). 3/4=75 % Remarks:			Wetland H	lydrology Inc	dicators:		
(excluding FAC-). 3/4=75 % Remarks:	n Remarks):			lydrology In			
(excluding FAC-). 3/4=75 % Remarks: HYDROLOGY Recorded Data (Describe in	n Remarks):		Primar				
(excluding FAC-). 3/4=75 % Remarks: HYDROLOGY Recorded Data (Describe in Stream, Lake, or Tide Aerial Photographs Other	n Remarks): Gauge		Primar	ry Indicators Inundated			
Remarks: HYDROLOGY Recorded Data (Describe in Stream, Lake, or Tide Aerial Photographs	n Remarks): Gauge		Primar	ry Indicators Inundated Saturated i Water Mark	s: n Upper 12 Inches		
Remarks: IYDROLOGY Recorded Data (Describe in Aerial Photographs Other	n Remarks): Gauge		Primar	ry Indicators Inundated Saturated in Water Mark Drift Lines	s: n Upper 12 Inches ks		
Remarks: YDROLOGY Recorded Data (Describe in Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab	n Remarks): Gauge		Primar	ry Indicators Inundated Saturated i Water Mark Drift Lines Sediment E	n Upper 12 Inches ks Deposits		
Remarks: Stream, Lake, or Tide Aerial Photographs Other	n Remarks): Gauge		Primar	ry Indicators Inundated Saturated i Water Mark Drift Lines Sediment E Drainage P	n Upper 12 Inches ks Deposits Patterns in Wetlands		
Remarks: IYDROLOGY	n Remarks): Gauge lle	(in)	Primar	ry Indicators Inundated Saturated i Water Mark Drift Lines Sediment D Drainage P dary Indicat	n Upper 12 Inches ss Deposits latterns in Wetlands lors (2 or more requ	iired):	
Remarks: YDROLOGY Recorded Data (Describe in Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab	n Remarks): Gauge	_(in.)	Primar	ry Indicators Inundated Saturated i Water Mark Drift Lines Sediment D Drainage P dary Indicat	n Upper 12 Inches ss Deposits Patterns in Wetlands fors (2 or more required to the control of t	iired):	
Remarks: IYDROLOGY Recorded Data (Describe in Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water:	n Remarks): Gauge lle		Primar	ry Indicators Inundated Saturated i Water Mark Drift Lines Sediment E Drainage P dary Indicat Oxidized R Water-Stain	n Upper 12 Inches Seposits Patterns in Wetlands fors (2 or more requipot Channels in Upped Leaves	iired):	
Remarks: SYDROLOGY Recorded Data (Describe in Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations:	n Remarks): Gauge lle		Primar	ry Indicators Inundated Saturated i Water Mark Drift Lines Sediment E Drainage P dary Indicat Oxidized R Water-Stain	n Upper 12 Inches Seposits Patterns in Wetlands fors (2 or more requipont Channels in Upper Leaves Survey Data	iired):	
Remarks: HYDROLOGY Recorded Data (Describe in Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water:	n Remarks): Gauge lle		Primar	ry Indicators Inundated Saturated ii Water Mark Drift Lines Sediment I Drainage P dary Indicat Oxidized R Water-Stain Local Soil S FAC-Neutra	n Upper 12 Inches Seposits Patterns in Wetlands fors (2 or more requipont Channels in Upper Leaves Survey Data	iired):	
Remarks: HYDROLOGY Recorded Data (Describe in Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availab Field Observations: Depth of Surface Water: Depth to Free Water in Pit: Depth to Saturated Soil:	n Remarks): Gauge lle 4 	(in.)	Primar	ry Indicators Inundated Saturated ii Water Mark Drift Lines Sediment I Drainage P dary Indicat Oxidized R Water-Stain Local Soil S FAC-Neutra	n Upper 12 Inches Seposits Patterns in Wetlands Fors (2 or more requested to the content of the	iired):	
Remarks: A A A A A A A A A	n Remarks): Gauge lle 4 	(in.)	Primar	ry Indicators Inundated Saturated ii Water Mark Drift Lines Sediment I Drainage P dary Indicat Oxidized R Water-Stain Local Soil S FAC-Neutra	n Upper 12 Inches Seposits Patterns in Wetlands Fors (2 or more requested to the content of the	iired):	

•	Map Unit Name (Series and Phase):		sB2 oro loam		Drainage Class:	Deep well drained	
Taxonomy	(Subgroup):	Fine-loamy, mixed, mesic Typic Hapludults			Field Observations Confirm Mapped Type?	Yes ⊠ No	
Profile Descripeth (inches) 0-2 2-7 7-12	riptions: Horizon	Matrix Color (Munsell Moist) 10 YR 3/1 2.5 YR 5/1 2.5 Y 6/1	Mottle Colors (Munsell Moist) 7.5 YR 4/6		Mottle Abundance/ Size/Contrast many	Texture, Concretions, Structure, etc, Loam Clay Loam Clay Loam	
Sulfidic Aquic M Reducin Gleyed Remarks:	ol Epipedon c Odor Moisture Regime ing Conditions I or Low-Chroma			Concretic High Org Organic S Listed on Listed on	ons ganic Content in Surface Lay Streaking in Sandy Soils a Local Hydric Soils List n National Hydric Soils List xplain in Remarks)		
<u>VETLAND I</u>	DETERMINA	ATION		·			
	Vegetation Pres drology Present? Present?		o .	Is this S	ampling Point Within a Wetla	(Check) and? ⊠Yes ⊡No	
Remarks:							

Project/Site: I-95 Section 200					Date: 11-09-05		
Applicant/Owner: Maryland Transportation Authority (MdTA)					County:	ord	
Investigator: J. Reed,			State:	Maryla	and		
Do Normal Circumstances exist of	on the site?		⊠Yes	□No	Community ID:	Wetla	nd 26 B
Is the site significantly disturbed	(Atypical Situatio	n)?	□Yes	⊠No	Transect ID:		
Is the area a potential Problem A		,	_ □Yes	— ⊠No	Plot ID:	Wetla	and DP
(If needed, explain on reverse.				_	•	Flags 1-6	
(11.11.11.11.11.11.11.11.11.11.11.11.11.	<u>'/</u>						
VEGETATION							
Dominant Plant Species	Stratum	Indicator	Dor	minant Plant	t Species	Stratum	Indicator
Typha latifolia	H	OBL				•	
Typha angustifolia		OBL					
· · · · · · · · · · · · · · · · · · ·							
3 4.		-					
5							
6							
7							
8			_ 16				
Percent of Dominant Species tha							
HYDROLOGY							
Recorded Data (Describe in	n Remarks):		Wetland H	Hydrology Ind	dicators:		
Stream, Lake, or Tide	Gauge		Primary Indicators:				
Aerial Photographs			☐ Inundated				
Other			Saturated in Upper 12 Inches				
No Recorded Data Availabl	le		☐ Water Marks				
				Drift Lines			
 			_	Sediment D	Deposits		
Field Observations:					Patterns in Wetlands		
			Secon	-	tors (2 or more requ		
Depth of Surface Water:	1.0	_(in.)			toot Channels in Up	per 12 Inches	
					ned Leaves		
Depth to Free Water in Pit:		_(in.)			Survey Data		
				FAC-Neutra			
Depth to Saturated Soil:		_(in.)		Other (Exp	lain in Remarks)		
Remarks:							

Map Unit Name (Series and Phase):	LyD Loamy and Clayey Land Clayey, kaolinitic, mesic Arenic Paleudults			Drainage Class:	Poorly drained		
Taxonomy (Subgroup):			idults	Field Observations Confirm Mapped Type?	□Yes	□ No	
Profile Descriptions: Depth (inches) Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)		Mottle Abundance/ Size/Contrast	Texture, Concre Structure, etc,	etions,	
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma	Colors		Organic St Listed on I Listed on I	ns nic Content in Surface Lay treaking in Sandy Soils Local Hydric Soils List National Hydric Soils List Dlain in Remarks)	er in Sandy Soils		
Remarks: Hydric soils assumed due f	to inundation and	dominance of OBI	_ species				
WETLAND DETERMINATION							
Hydrophytic Vegetation Prese Wetland Hydrology Present? Hydric Soils Present?		□No (Check) □No □No	(Check) Is this Sampling Point Within a Wetland?				
Remarks: Cattails present within a man made drainage channel adjacent to a culvert pipe outlet, wetland is drained by a rip rap lined channel which connects to an intermittent stream							

Approved by HQUSACE 3/92

Forms version 1/02

Project/Site: I-95 (Section 200) Applicant/Owner: Maryland Transporta				Date:	11_00.	05
Applicant/Owner: Maryland Transporta				Date: 11-09-05		
Applicant/Owner. Ivial yland Transporta	Applicant/Owner: Maryland Transportation Authority					ord
Investigator: J. Reed, C. Brudin			State:	Maryla	and	
Do Normal Circumstances exist on the site?		⊠Yes	□No	Community ID:	Wetla	nd 27B
Is the site significantly disturbed (Atypical Situat				Transect ID:		
Is the area a potential Problem Area?		∐Yes □Yes	⊠No ⊠No	Plot ID:	\/\otla	ind DP
		□163	MINO	FIOUID.	vvena	IIIU DF
(If needed, explain on reverse.)						
VECETATION					A	djacent to WUS 5
VEGETATION						
Dominant Plant Species Stratum	Indicator		ninant Plant		Stratum	Indicator
1. Typha latifolia H	OBL	9				
Polygonum sagittatum H	OBL					
3. Mikania scandens H	FACW+	11				
4. Typha angustifolia H	OBL					
5						
						<u> </u>
6						
7						
8		16				
HYDROLOGY						
Recorded Data (Describe in Remarks):			lydrology Ind			
☐ Stream, Lake, or Tide Gauge			ry Indicators	:		
Aerial Photographs			Inundated			
U Other				1 Upper 12 Inches		
No Recorded Data Available			Water Mark	s		
		⊣	Drift Lines			
			Sediment D	•		
Field Observations:				atterns in Wetlands		
			-	ors (2 or more requ		
Depth of Surface Water:	(in.)			oot Channels in Up	per 12 Inches	
		Water-Stair				
Depth to Free Water in Pit:6		Local Soil S	-			
		FAC-Neutra				
Depth to Saturated Soil: 0		Other (Expl	ain in Remarks)			
Remarks:						

Map Unit Name LyD (Series and Phase): Loamy and Claye			Drainage Class:	Poorly drained
Taxonomy (Subgroup):	Clayey, kaolinitic, mesic	c Arenic Paleudults	Field Observations Confirm Mapped Type?	☐Yes ⊠ No
Profile Descriptions: Depth (inches) Horizon 0-4 4-6 6-7 7-15	(Munsell Moist) 10 YR 3/2	Mottle Colors (Munsell Moist) 5 YR 4/6	Mottle Abundance/ Size/Contrast common	Texture, Concretions, Structure, etc, loam loam sand sandy loam
Hydric Soil Indicators: Histosol Histic Epipedon Sulfidic Odor Aquic Moisture Regime Reducing Conditions Gleyed or Low-Chroma Remarks: Oxidized roots in second	Colors	Organic S Listed on Listed on Other (Ex	ons anic Content in Surface Laye Streaking in Sandy Soils Local Hydric Soils List National Hydric Soils List kplain in Remarks)	er in Sandy Soils
WETLAND DETERMINA	TION			
Hydrophytic Vegetation Prese Wetland Hydrology Present? Hydric Soils Present? Remarks:	ent? ⊠Yes □No (⊠Yes □No ⊠Yes □No	(Check) Is this Sa	ampling Point Within a Wetla	(Check) and? ⊠Yes ⊡No

Approved by HQUSACE 3/92

Forms version 1/02

APPENDIX B: SITE PHOTOGRAPHS



WUS-1B

Looking North



WUS-2B

Looking Southeast



WUS-3B

Looking West



WUS-4B

Looking Northwest



WUS-5B (N.B.)

Looking North



WUS-5B-f

Looking west



WUS-8B

Looking East



WUS-9B

Looking West



WUS-10B

Looking East



WUS-11B

Looking North



WUS-12B

Looking East



WUS-WL-030 Winters Run Looking East



WUS-WL 004/WUS-15B

Looking South



WUS-16B

Looking Southeast



WUS-18B/WL-005

Looking Southeast



WUS-19B

Looking East



WUS-20B

Looking South



WUS-21B

Looking West



WUS-22B (S.B.)

Looking East



WUS-23B

Looking West



WUS-24B

Looking North



WUS-25B

Looking West



WUS-27B

Looking North



WUS-1A

Looking Southeast



WUS-2A

Looking Northeast



WUS-3A

Looking Northwest



WUS -4A Looking North



WUS-6A (N.B.)

Gunpowder River Looking East at Rt. 7



WUS-41A (S.B.)

Gunpowder River Looking West Upstream



WUS-7A
Looking West



WUS-8A

Looking South
From WUS-9A



WUS-9A N.B. WUS-40/S.B.

Looking East from I-95



WUS-10A

Looking South from WUS-9A



WUS-11A

Looking West @ I-95 N.B.



WUS-12A

Looking East



WUS-13A

Looking East



WUS-14A

Looking East from N.B. I-95



WUS-14A Looking West from S.B. I-95



WUS-15A



WUS-16A Little Gunpowder Falls Looking West upstream at I-95



WUS-17A

Looking North



WUS-18A

Looking North



WUS-19A

Looking South



WUS-20A

Looking Northeast



WUS-21A
Looking East



WUS-22A

Looking North



WUS-23A

Looking Northeast



WUS-24A

Looking East



WUS-25A

Looking Northeast



WUS-26A

Looking North



WUS-27A



WUS-29A

Looking North



WUS-30A

Looking South along I-95 S.B.



WUS-31A

Looking South



WUS-32A

Looking West from I-95 S.B.



WUS-33A

Looking West from S.B. I-95



WUS-34A Little Gunpowder River Looking West upstream from I-95 S.B.



WUS-35A
Looking North



WUS-36A
Looking North



WUS-37A

Looking Northwest



WUS-38A

Looking East towards I-95



WUS-39A

Looking east



WUS-42A
Looking North



WUS-44A
Looking West



WUS-46A
Looking North



WET-1B



WET-2B

Looking Northeast



WET-3B

Looking Northeast



WET-4B

Looking West



WET-5B

Looking North



WET-6B

Looking West



WET-7B

Looking Northwest



WET-8B

Looking North



WET-WPO-24

Looking Southeast



WET-10B

Looking Northeast



WET-11B

Looking Northeast



WET-12B

Looking Southeast



WET-13B

Looking Northeast



WET-14B

Looking West



WET-15B

Looking West



WET-16B





WET-17B

Looking South



WET-18B

Looking East



WET-19B

Looking Southeast



WET-20B

Looking East



WET-21B

Looking East



WET-22B

Looking South



WET-23B

Looking Northwest



WET-24B

Looking East



WET-25B

Looking North



WET-26B
Looking South



WET-27B
Looking Southwest



WET-1A Looking North



WET-2A Looking South



WET-3A
Looking West



WET-4A
Looking Southwest



WET-5A
Looking West



WET-6A

Looking Northeast



WET-7A



WET-8A Looking Southwest



WET-9A Looking West through residential lots



WET-10A Looking North along East side of S.W.M.P.



WET-11A

Looking South from Old Joppa Rd.



WET-12A

Looking South



WET-13A

Looking West from R/O/W/ fence



WET-14A

Looking West



WET-15A

Looking West



WET-16A

Looking Northwest



WET-17A

Looking Northwest



WET-18A

Looking South



WET-20A



WET 21A

Looking North



WET-22A Looking South



WET-23A

Looking West



WET-24A

Looking South



WET-25A

Looking Northeast



WET-27A
Looking South



WET-28A
Looking North



WET-29A

Looking South



WET-30A

Looking North West



WET-31A

Looking west



WET-32A

Looking South



WET-33A
Looking West



WET-34A

Looking North



WET-35A

Looking North



WET-36A
Looking West



WET-37A
Looking West



WET-38A
Looking East



WET-40A

Looking West

APPENDIX C: MAPPING















