

Wetland Delineation
Hibler Road Property
Tax Map 31, PIN #077365320

Loudoun County, Virginia
March 7, 2006

Prepared for:

QDP, LLC
3043 Jeannie Anna Court
Oak Hill, VA 20171

Prepared by:

Bowman
CONSULTING

Bowman Consulting Group, Ltd.
14020 Thunderbolt Place, Suite 300
Chantilly, Virginia 20151
Phone: 703.464.1000
Fax: 703.481.9720

Table of Contents

Executive Summary 1
 Property Description..... 1
 Methodology 1
 Soils: 1
 Vegetation: 2
 Hydrology:..... 3
 Results 3

List of Tables

Table 1. Soils Summary..... 2
 Table 2. Plant Indicator Status..... 3
 Table 3. Data Point Summary..... 6
 Table 4. Stream and Wetlands Summary 6

Appendices

Appendix A..... Vicinity Map
 Appendix B..... Aerial Map
 Appendix C..... Wetland Delineation Map
 Appendix D Wetland Delineation Data Points
 Appendix E..... Photographs
 Appendix F USACE Summary Sheet for Jurisdictional Determination

Executive Summary

In February and March 2006, a wetland delineation was conducted by Bowman Consulting Group (BCG) on a 149.7-acre portion of the Hibler Road Property. The limits of investigation for this project were provided by Christopher Consultants. The waters of the U.S., including wetlands, identified during this investigation were delineated according to the *Corps of Engineers' Wetlands Delineation Manual* (1987), and represent those areas that are most likely within the regulatory purview of the U.S. Army Corps of Engineers (USACE). Based on this wetland field investigation, there are approximately 1.25 acres of palustrine open water (POW), 0.42 acres of palustrine emergent wetland (PEM), 2,213 linear feet of perennial streams and 1,593 linear feet of intermittent streams within the limits of investigation.

Property Description

The study area totals 149.7 acres and is identified by Loudoun County Tax Map 31, PIN #077365320. The property is located within the USGS Poolsville, Virginia quadrangle map at approximately 39°11'32"N latitude and 77°29'14"W longitude (see Appendix A for the USGS Quadrangle Map). More specifically, it is located north of Hibler Road, in Loudoun County, Virginia. The site is predominately cow pasture fields with a few areas of trees mostly along the streams (see Appendix B for the Aerial Photograph). The site is characterized by moderate to steep sloping topography along the streams and gently sloping uplands. The site drains south by an unnamed tributary to the Potomac River, which is within Hydrologic Unit Code (HUC) 02070008 (Middle Potomac-Catocin).

Methodology

The USACE Delineation Manual (1987) guidelines follow a three-parameter approach to identifying wetlands: hydrophytic vegetation, hydric soils, and hydrologic indicators. All three parameters must be present for an area to be considered a jurisdictional wetland in accordance with Section 404 of the Clean Water Act.

A preliminary evaluation of the three parameters was performed prior to the field investigation by examination of the Loudoun County Soil Survey and topographic maps. The reference information was verified by an on-site inspection to characterize soils, vegetation, and hydrology, and to define the boundaries of any wetland areas that may be present on the property.

The wetlands were classified according to the Cowardin System, as described in Classification of Wetlands and Deepwater Habitats of the United States (1979). This is a hierarchical system, which aids resource managers and others by providing uniformity of concepts and terms used to define wetlands according to hydrologic, geomorphologic, chemical, and biological factors.

Soils:

A hydric soil is defined as "a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part" (Federal Register, July 13, 1994). According to the USACE Wetland Delineation Manual (1987), common hydric soil indicators include a low chroma (chroma less than 2, value greater than 4) matrix, concretions, or listing on local or national hydric soils lists. The National Hydric Soils List, published

by the USDA Soil Conservation Service, the list of Hydric Soils of Virginia, and the Loudoun County Hydric Soils List were reviewed to determine if the mapped soils are classified as hydric (Table 1).

The NRCS Soil Survey of Loudoun County (1951) maps the following soil types on the property:

- **Manassas silt loam (14B), 1 to 8 percent slopes.** These soils have very deep, well to moderately well drained soils and occur on the uplands.
- **Nestoria gravelly silt loam severely eroded (77D3, 77E3), 15 to 25 and 25 to 45 percent slopes.** These soils are shallow with well to excessively drained soil, occurring on steep slopes.
- **Dulles silt loam (78A), 0 to 3 percent slopes.** This soil type has deep, moderately well to somewhat poorly drained soil and occurs on nearly level landscapes.
- **Brentsville loam (80B, 80C), 3 to 8 and 8 to 15 percent slopes.** These soils are moderately deep, well drained and occur on side slopes.

Table 1. Soils Summary

Map Unit Symbol	Map Unit Name	National Hydric Soils List	Loudoun Hydric Soils List
14B	Manassas silt loam 1 to 8% slopes	No	No
77D3	Nestoria gravelly silt loam severely eroded, 15 to 25% slopes	No	No
77E3	Nestoria gravelly silt loam severely eroded, 25 to 45% slopes	No	No
78A	Dulles silt loam, 0 to 3% slopes	No	No
80B	Brentsville loam, 3 to 8% slopes	No	No
80C	Brentsville loam, 8 to 15% slopes	No	No

During the field investigation, soil cores were taken to a depth of greater than 12 inches to describe soil morphological characteristics. Soil characteristics including texture, color (hue, chroma, and value), and odor were inspected for each sample. Munsell Soil Color Charts were used for verification of soil color.

Vegetation:

Plant species observed on the property were identified and the wetland indicator status for each species was determined from the National List of Plant Species That Occur in Wetlands: National Summary (1988). The indicator status of a species indicates the probability that the species will occur in a wetland of the northeast region of the United States (Table 2).

Table 2. Plant Indicator Status

Indicator Category	Indicator Symbol	Definition
Obligate Wetland Plants	OBL	Occur almost always (estimated probability >99%) under natural conditions in wetlands
Facultative Wetland Plants	FACW	Usually occur in wetlands (estimated probability 67%-99%), but occasionally found in non-wetlands
Facultative Plants	FAC	Equally likely to occur in wetlands and non-wetlands (estimated probability 34%-66%)
Facultative Upland Plants	FACU	Usually occur in non-wetlands (estimated probability 67%-99%) but occasionally found in wetlands (estimated probability 1%-33%)
Obligate Upland Plants	UPL	Occur in wetlands in another region, but occur almost always (estimated probability >99%) under natural conditions in non-wetlands in the region specified.

During the field investigation, the dominate FAC or wetter species observed within the data points were marsh seedbox (*Ludwigia palustris*), soft rush (*Juncus effusus*) and umbrella flatsedge (*Cyperus diandrus*). Dominant species observed in the pasture areas included tall fescue (*Festuca elatior*), rough cockle-bur (*Xanthium strumarium*) and timothy grass (*Phleum pratense*). Upland plants that were observed along the stream banks included American sycamore (*Platanus occidentalis*), black locust (*Robinia pseudoacacia*), red maple (*Acer rubrum*), silver maple (*Acer saccharinum*), hackberry (*Caltis occidentalis*), and green ash (*Fraxinus pennsylvanica*).

Hydrology:

The USACE wetland delineation manual states that wetland hydrology encompasses all hydrologic characteristics of areas that are periodically inundated or have soils that are saturated to the surface at some time during the growing season. Hydrologic indicators include, but are not limited to, sediment deposits, visual inundation, drift lines, water stained leaves, and hummocking. Evidence of these indicators is present even during dry periods, and therefore are useful indicators of a wetland. The dominant hydrologic indicators observed during the field investigation were inundation and drainage patterns in wetlands.

Results

In February and March 2006, a wetland delineation was completed by Bowman Consulting Group (BCG), Ltd. on a 149.7-acre portion of the Hibler Road Property. Based on the investigation, approximately 1.25 acres of palustrine open water (POW), 0.42 acres of palustrine emergent wetland (PEM), 2,213 linear feet of perennial streams (R3) and 1,593 linear feet of intermittent streams (R4) exist within the limits of investigation. The location and extent of the streams and wetlands have been drafted on a large-scale Wetland Delineation Map (Scale: 1"=200') (Appendix C). Datasheets for each data point are included as Appendix D. Appendix F contains a summary of information required by the USACE for inclusion in a jurisdictional determination.

The majority of the property is drained by an unnamed perennial stream, labeled A1 to A196, which is tributary to the Potomac River. The headwaters of this stream are located onsite near the northeastern corner of the property. Three linear PEMs run into a central channel and flow southeast. Two additional PEMs, flagged AF and AG, enter the main channel along the northern side. An R4 stream flagged AH, which begins at a linear PEM, flows south and enters Stream A. System A then flows south until it reaches a farm road where it flows southwest crossing the road (Photograph 1). System A then flows south again eventually flowing offsite under Hibler Road. System A and its wetlands contain approximately 0.14 acres of PEM, 2,213 linear feet of R3 and 1,219 linear feet of R4 within the limits of investigation. Dominant vegetation within the PEMs associated with System A and its tributaries include soft rush (FACW+), rice cutgrass (OBL), marsh seedbox (OBL) and bushy seedbox (FACW+). The dominant hydrologic indicators are inundation and drainage patterns in wetlands. The soils in these wetlands were characterized by a range of chroma colors from 5YR4/2 to 5YR4/4 with few to many, distinct redoximorphic features ranging in color from 5YR4/2 to 5YR4/6 (Appendix D).

Along the eastern side of the System A are the wetlands flagged B and C. System C is labeled C2 to C16 and is located in a depressed area and contains approximately 0.03 acres of PEM. Dominant vegetation within this wetland includes soft rush (FACW+) and umbrella flatsedge (FACW). The dominant hydrologic indicators are saturation within the upper 12 inches and drainage patterns in the wetlands. The soils in these wetlands were characterized by a low chroma color 5YR3/2, with few, distinct 5YR4/6 redoximorphic features (Appendix D). System B begins at a PEM flagged BA1 to BA22 and drains into a POW, flagged BP1 to BP17 (Photograph 2), the outfall of that POW flows northwest into a linear PEM flowing west to System A. System B and its wetlands contain approximately 0.61 acres of POW, 0.13 acres of PEM and 91 linear feet of R4. Dominant vegetation within the PEMs associated with system B include soft rush (FACW+), marsh seedbox (OBL), one-row water-cress (OBL) and straw-color flatsedge (FACW). The dominant hydrologic indicators are inundation, saturation within the upper 12 inches and drainage patterns in the wetlands. The soils in these wetlands were characterized by a low chroma color 5YR3/2, with a sulfidic odor, but contained no redoximorphic features (Appendix D).

The PEM labeled E3 to E18 contains approximately 0.04 acres; it begins at a seep and flows linearly (Photograph 3) east to System A where it widens and includes part of the floodplain of Stream A. This PEM contains very little vegetation and has been heavily disturbed from cattle activity.

The system labeled F1 to F14 is a linear PEM containing approximately 0.03 acres. It begins at a seep by a rock outcrop and flows southeast then south to Stream A. This PEM contained very little vegetation and has been heavily disturbed from cattle activity (Photograph 4).

The PEM labeled G1 to G19 contains approximately 0.03 acres. The hydrology for this PEM originates at two seeps near flags G18 and G19, the system becomes very narrow before entering Stream A (Photograph 5).

Along the eastern side of Stream A is an area with strong topographic indication of a natural drainageway. However, BCG investigated this area and found it to be non-jurisdictional. This topographic feature had a defined bed and bank, but contained no flow. The area has also been significantly disturbed by cattle (Photograph 6).

Systems H and J begin at an approximately 0.64-acre POW labeled J1 to J17. System H begins below the pond and consists of approximately 224 linear feet of R4 and 0.02 acres of PEM. The outfall pipe of the pond appears to be blocked (Photograph 7) so the origin of hydrology for this system is seepage at the toe of the pond's embankment. Dominant vegetation within the PEM includes umbrella flatsedge (FACW), fox sedge (OBL) and Virginia knotweed (FAC). The dominant hydrologic indicators are inundation and drainage patterns in the wetlands. The soils in these wetlands were characterized by a chroma color of 7.5YR3/3, with few, distinct 7.5YR4/6 redoximorphic features (Appendix D).

A second tributary begins onsite along the western boundary of the property, labeled L1 to L11. The onsite portion of the stream channel contains approximately 32 linear feet and exhibited weak base flow and is poorly defined (Photograph 8). There are no vegetated wetlands associated with this system.

Along the southwestern corner of the property, the topographic mapping indicates another possible drainageway. BCG investigated this area and found no jurisdictional areas within the area (Photograph 9).

The last area investigated is located south of the POW labeled J along Hibler Road. There was no defined channel and/or jurisdictional wetlands observed in this area (Photograph 10). The vegetation within the area was dominated by great ragweed (FAC). The soils in this area exhibited 5YR3/3 matrix color with no redoximorphic features present (Appendix D).

This space intentionally left blank. Section continues on next page.

The following table summarizes the data points taken during the wetland delineation.

Table 3. Data Point Summary

Data Point	Mapped Soil Unit	Hydrophytic Vegetation	Wetland Hydrology	Hydric Soils	Community ID.
A1	14B	No	No	No	Upland
A2	14B	No	Yes	No	Upland
A3	14B	Yes	Yes	Yes	PEM
A4	14B	Yes	Yes	Yes	PEM
A5	14B	Yes	Yes	Yes	PEM
A6	14B	No	No	No	Upland
A7	14B	Yes	Yes	Yes	Floodplain PEM
B1	14B	Yes	Yes	Yes	PEM
B2	14B	No	No	No	Upland
B3	80C	No	No	No	Upland
C1	14B	Yes	Yes	Yes	PEM
C2	14B	No	Yes	No	Upland
C3	14B	Yes	Yes	No	Upland
D1	14B	No	Yes	Yes	Upland
E1	14B	No	No	No	Upland
H1	77D3	Yes	Yes	Yes	PEM
H2	80C	Yes	Yes	No	Upland
L1	14B	No	Yes	No	R4
L2	14B	Yes	No	No	Upland
M1	78A	Yes	No	No	Upland

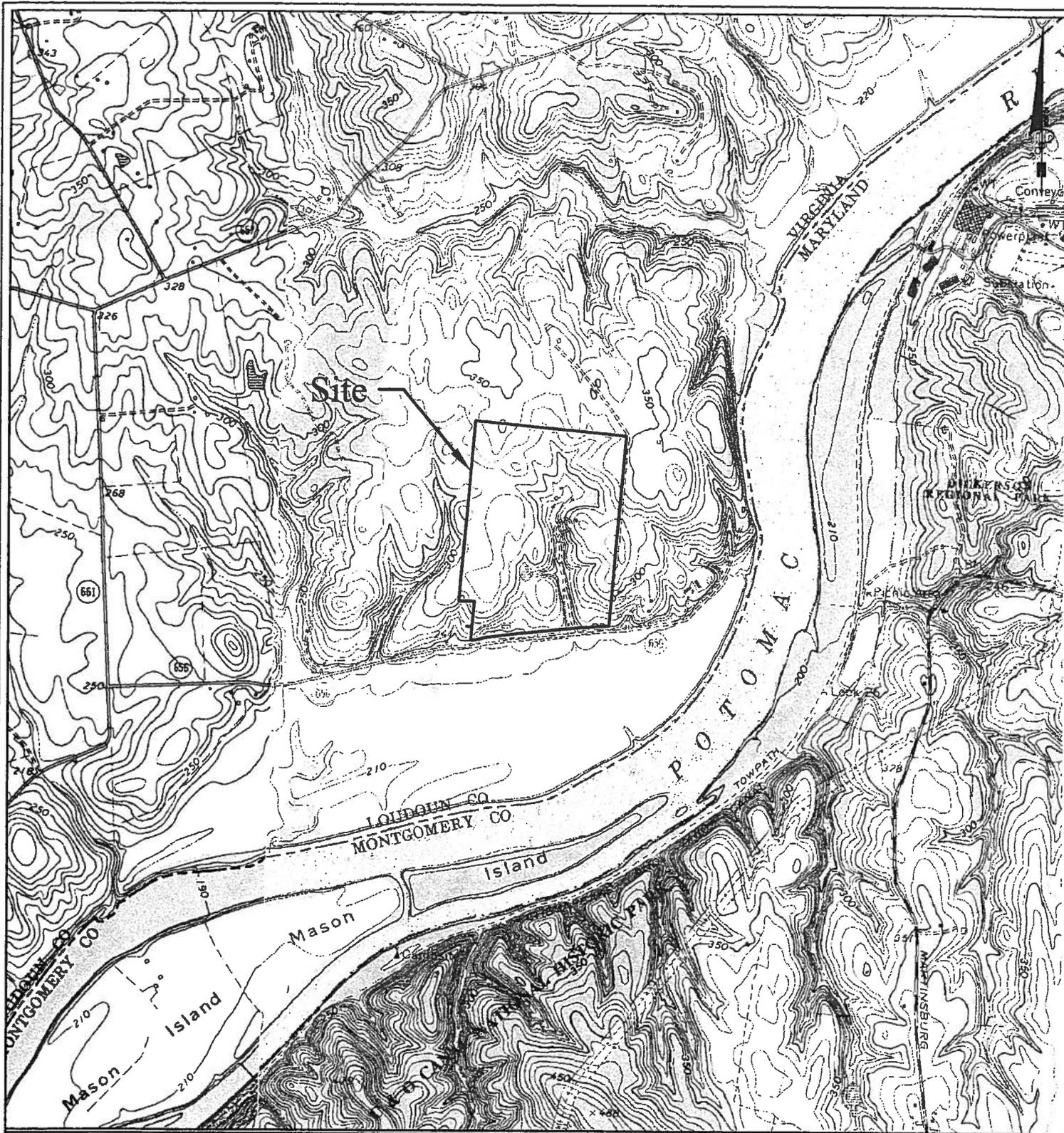
The following table is a summary of the streams and wetlands existing on the portion of the Hibler Road Property that was investigated.

Table 4. Stream and Wetlands Summary

Classification	Length (LF)	Area (SF)	Area (Ac)
Perennial Stream (R3)	2,213	N/A	N/A
Intermittent Stream (R4)	1,593	N/A	N/A
Palustrine Emergent Wetlands (PEM)	N/A	18,405	0.42
Palustrine Open Water (POW)	N/A	54,258	1.25
Total Wetlands and Streams	3,806	72,663	1.67

The Wetland Delineation Map, included as Appendix C, reflects the flagged wetland boundaries that were delineated and surveyed using a differential GPS unit capable of sub meter accuracy by BCG in February and March 2006. These boundaries are not suitable for use in final planning and/or engineering design work until they have been approved by the Corps of Engineers during a Jurisdictional Determination (JD) (see Appendix F for a summary of information for the JD).

Appendix A
Vicinity Map



Scale: 1"=2000'

Date: March 2006

Bowman
CONSULTING

Bowman Consulting Group, Ltd.
14020 Thunderbolt Place Suite 300
Chantilly, Virginia 20151

Phone: (703) 464-1000
Fax: (703) 481-9720
www.bowmanconsulting.com

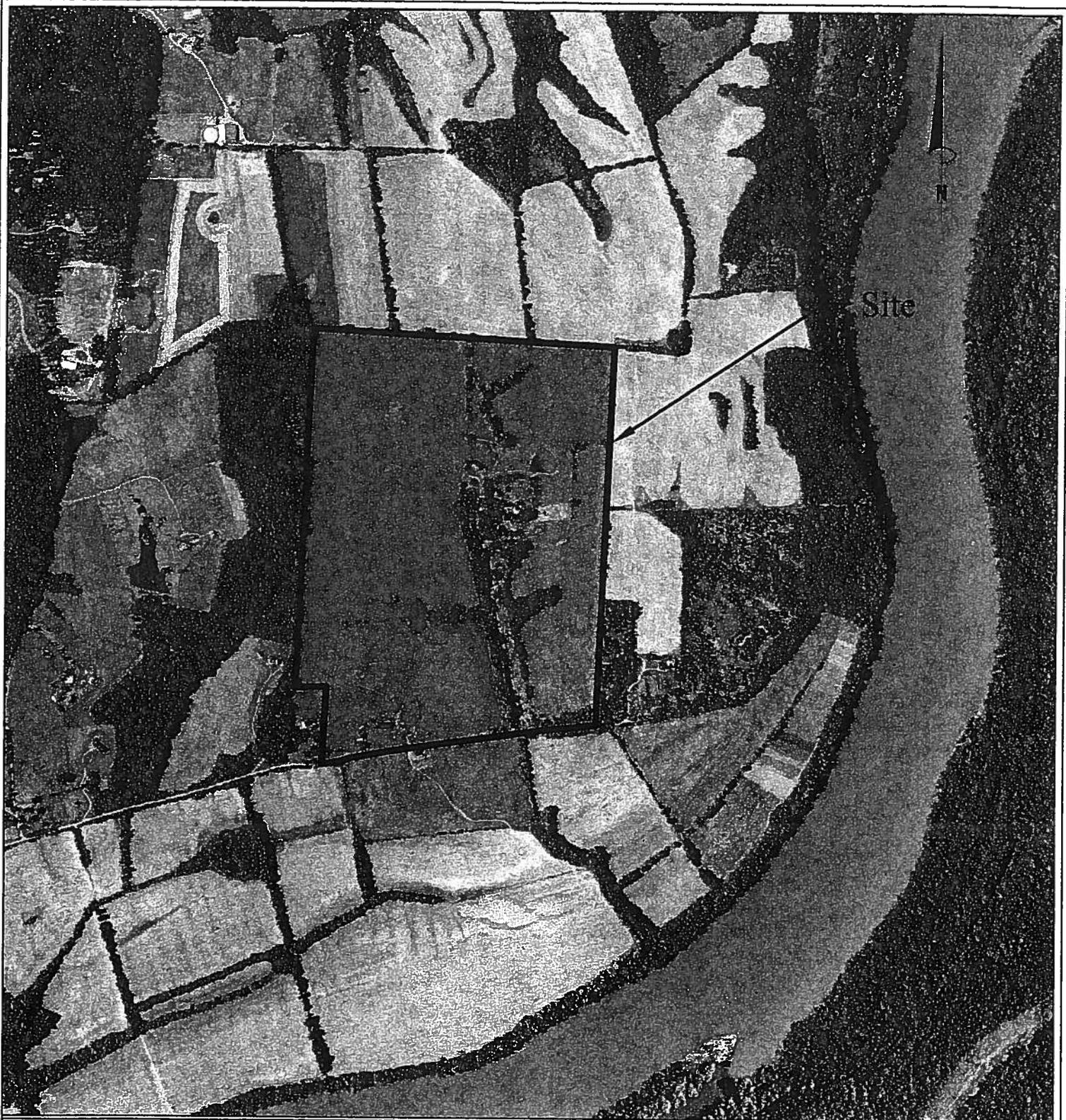
© Bowman Consulting Group, Ltd.

Vicinity Map
Hibler Road Project
39°11'32"N, 77°29'14"W Poolesville USGS Quad Map
HUC 02070008 - Middle Potomac - Catoctin
Loudoun County, Virginia

QDP, LLC
3043 Jeannie Anna Court
Oak Hill, VA 20171

Appendix B

Aerial Map



Scale: 1"=1000'

Date: March 2006

Bowman
CONSULTING

Bowman Consulting Group, Ltd.
14020 Thunderbolt Place Suite 300
Chantilly, Virginia 20151

Phone: (703) 464-1000
Fax: (703) 481-9720
www.bowmanconsulting.com

© Bowman Consulting Group, Ltd.

Aerial Map
Hibler Road Project
39°11'32"N, 77°29'14"W Poolsville USGS Quad Map
HUC 02070008 - Middle Potomac - Catoctin
Loudoun County, Virginia

QDP, LLC
3043 Jeannie Anna Court
Oak Hill, VA 20171

Appendix C
Wetland Delineation Map



Appendix D
Wetland Delineation Data Sheets

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Hibler Road</u> Applicant/Owner: <u>QDP, LLC</u> Investigator: <u>BE, AS</u>	Date: <u>2/23/2006</u> Co./City: <u>Loudoun</u> State: <u>VA</u>				
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)	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; border-bottom: 1px solid black;">YES/NO</td> </tr> <tr> <td style="text-align: center; border-bottom: 1px solid black;">No</td> </tr> <tr> <td style="text-align: center; border-bottom: 1px solid black;">Yes</td> </tr> <tr> <td style="text-align: center; border-bottom: 1px solid black;">No</td> </tr> </table>	YES/NO	No	Yes	No
YES/NO					
No					
Yes					
No					
Community ID: <u>Upland</u> Transect ID: _____ Plot ID: <u>DP-A1</u>					

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
<i>Phleum pratense</i>					
1 TIMOTHY	Herb	FACU	9		
<i>Xanthium strumarium</i>					
2 COCKLE-BUR,ROUGH	Herb	FAC	10		
<i>Cirsium vulgare</i>					
3 THISTLE,BULL	Herb	FACU-	11		
4			12		
5			13		
6			14		
7			15		
8			16		

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC): 33.33%
 FAC_Neutral: 0.00%

Remarks:

HYDROLOGY

<table style="width: 100%;"> <tr> <td style="width: 10%;"><input type="checkbox"/></td> <td>Recorded Data (Describe in Remarks):</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Stream, Lake, or Tide Gauge</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Aerial Photographs</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Other (Explain in Remarks)</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>No Recorded Data Available</td> </tr> </table>	<input type="checkbox"/>	Recorded Data (Describe in Remarks):	<input type="checkbox"/>	Stream, Lake, or Tide Gauge	<input type="checkbox"/>	Aerial Photographs	<input type="checkbox"/>	Other (Explain in Remarks)	<input checked="" type="checkbox"/>	No Recorded Data Available	<p style="text-align: center;">Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p><input type="checkbox"/> Inundated</p> <p><input type="checkbox"/> Saturated in Upper 12 inches</p> <p><input type="checkbox"/> Water Marks</p> <p><input type="checkbox"/> Drift Lines</p> <p><input type="checkbox"/> Sediment Deposits</p> <p><input type="checkbox"/> Drainage Patterns in Wetlands</p> <p>Secondary Indicators(2 or more required)</p> <p><input type="checkbox"/> Oxidized Root Channels in upper 12 inches</p> <p><input type="checkbox"/> Water-Stained Leaf Litter</p> <p><input type="checkbox"/> Local Soil Survey Data</p> <p><input type="checkbox"/> FAC-Neutral Test</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>
<input type="checkbox"/>	Recorded Data (Describe in Remarks):										
<input type="checkbox"/>	Stream, Lake, or Tide Gauge										
<input type="checkbox"/>	Aerial Photographs										
<input type="checkbox"/>	Other (Explain in Remarks)										
<input checked="" type="checkbox"/>	No Recorded Data Available										
<p>Field Observations:</p> <p>Depth of Surface Water: _____ (in.)</p> <p>Depth to Standing Water in Pit: _____ (in.)</p> <p>Depth to Saturated Soil: _____ (in.)</p>											

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hibler Road

Date: 2/23/2006

Plot ID: DP-A1

SOILS

Map Symbol	<u>14B</u>	Drainage Class: <u>well - moderate</u>
Map Unit Name		
(Series and Phase) :	<u>Manassas Silt Loam</u>	Field Observations Yes/No
Taxonomy (Subgroup) :	<u>Ultic Hapludalfs</u>	Confirmed Map Type? No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color/ Abund./ Contrast/ Size	Texture, Concretions Structures, etc..
0-4	AB	5YR3/4	5YR4/2 / Few / /	Silt loam
4-18	B	5YR4/4	/ / /	Silt loam

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions
<input type="checkbox"/> Gleyed or Low-Chrome Colors | <input type="checkbox"/> Concretions
<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils
<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Other (Explain in Remarks) |
|---|--|

Remarks: AB Horizon are depletions.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes/ No <u>No</u>	Is this Sampling Point Within a Wetland? Yes/ No <u>No</u>
Wetland Hydrology Present? Yes/ No <u>No</u>	
Hydric Soils Present? Yes/ No <u>No</u>	

Remarks: Cow pasture - site trampled

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Hibler Road</u> Applicant/Owner: <u>QDP, LLC</u> Investigator: <u>BE, AS</u>	Date: <u>2/23/2006</u> Co./City: <u>Loudoun</u> State: <u>VA</u>
Do Normal Circumstances exist on the site? YES/NO Is the site significantly disturbed (Atypical Situation) No Is the area a potential Problem Area? Yes (If needed, explain on reverse) No	Community ID: <u>Upland</u> Transect ID: _____ Plot ID: <u>DP-A2</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
<i>Phleum pratense</i>					
1 TIMOTHY	Herb	FACU	9		
<i>Xanthium strumarium</i>					
2 COCKLE-BUR,ROUGH	Herb	FAC	10		
<i>Cirsium vulgare</i>					
3 THISTLE,BULL	Herb	FACU-	11		
4			12		
5			13		
6			14		
7			15		
8			16		

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC): 33.33%
 FAC_Neutral: 0.00%

Remarks:

HYDROLOGY

<p>_____ Recorded Data (Describe in Remarks): _____ Stream, Lake, or Tide Gauge _____ Aerial Photographs _____ Other (Explain in Remarks)</p> <p><input checked="" type="checkbox"/> No Recorded Data Available</p>	<p style="text-align: center;">Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p>_____ Inundated _____ Saturated in Upper 12 inches _____ Water Marks _____ Drift Lines _____ Sediment Deposits <input checked="" type="checkbox"/> Drainage Patterns in Wetlands</p> <p>Secondary Indicators(2 or more required)</p> <p>_____ Oxidized Root Channels in upper 12 inches _____ Water-Stained Leaf Litter _____ Local Soil Survey Data _____ FAC-Neutral Test _____ Other (Explain in Remarks)</p>
<p>Field Observations:</p> <p>Depth of Surface Water: _____ (in.)</p> <p>Depth to Standing Water in Pit: _____ (in.)</p> <p>Depth to Saturated Soil: _____ (in.)</p>	

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hibler Road

Date: 2/23/2006

Plot ID: DP-A2

SOILS

Map Symbol	<u>14B</u>	Drainage Class: <u>well - moderate</u>
Map Unit Name		
(Series and Phase):	<u>Manassas Silt Loam</u>	Field Observations Yes/No
Taxonomy (Subgroup):	<u>Ultic Hapludalfs</u>	Confirmed Map Type? No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color/ Abund./ Contrast/ Size	Texture, Concretions Structures, etc..
0-4	AB	5YR3/4	5YR4/2 / Few / /	Silt loam
4-18	B	5YR4/4	/ / /	Silt loam

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions
<input type="checkbox"/> Gleyed or Low-Chrome Colors | <input type="checkbox"/> Concretions
<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils
<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Other (Explain in Remarks) |
|---|--|

Remarks: AB Horizon mottles are depletions.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes/ No <div style="text-align: center;"><u>No</u></div>	Wetland Hydrology Present? Yes <div style="text-align: center;"><u>Yes</u></div>	Hydric Soils Present? No <div style="text-align: center;"><u>No</u></div>	Is this Sampling Point Within a Wetland? Yes/ No <div style="text-align: center;"><u>No</u></div>
--	--	---	---

Remarks: Cow pasture - site trampled

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Hibler Road</u> Applicant/Owner: <u>QDP, LLC</u> Investigator: <u>BE, AS</u>	Date: <u>2/23/2006</u> Co./City: <u>Loudoun</u> State: <u>VA</u>
Do Normal Circumstances exist on the site? <u> No </u> Is the site significantly disturbed (Atypical Situation) <u> Yes </u> Is the area a potential Problem Area? <u> No </u> (If needed, explain on reverse)	Community ID: <u>PEM</u> Transect ID: <u> </u> Plot ID: <u>DP-A3</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
<i>Ludwigia palustris</i>					
1 SEEDBOX, MARSH	Herb	OBL	9		
<i>Ludwigia alternifolia</i>					
2 SEEDBOX, BUSHY	Herb	FACW+	10		
<i>Juncus effusus</i>					
3 RUSH, SOFT	Herb	FACW+	11		
<i>Cyperus strigosus</i>					
4 FLATSEGE, STRAW-COLOR	Herb	FACW	12		
<i>Arthraxon hispidus</i>					
5 ARTHRAXON, JOINT-HEAD	Herb	NI	13		
6			14		
7			15		
8			16		

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC): 100.00%
FAC_Neutral: 100.00%

Remarks: Algae growth

HYDROLOGY

<u> </u> Recorded Data (Describe in Remarks): <u> </u> Stream, Lake, or Tide Gauge <u> </u> Aerial Photographs <u> </u> Other (Explain in Remarks) <u> X </u> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <u> </u> Inundated <u> X </u> Saturated in Upper 12 inches <u> </u> Water Marks <u> </u> Drift Lines <u> </u> Sediment Deposits <u> X </u> Drainage Patterns in Wetlands Secondary Indicators (2 or more required) <u> </u> Oxidized Root Channels in upper 12 inches <u> </u> Water-Stained Leaf Litter <u> </u> Local Soil Survey Data <u> X </u> FAC-Neutral Test <u> </u> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u> 1 </u> (in.) Depth to Standing Water in Pit: <u> </u> (in.) Depth to Saturated Soil: <u> </u> (in.)	

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hibler Road

Date: 2/23/2006

Plot ID: DP-A3

SOILS

Map Symbol	<u>14B</u>	Drainage Class: <u>well - moderate</u>
Map Unit Name		
(Series and Phase) :	<u>Manassas Silt Loam</u>	Field Observations Yes/No
Taxonomy (Subgroup) :	<u>Ultic Hapludalfs</u>	Confirmed Map Type? No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color/ Abund./ Contrast/ Size	Texture, Concretions Structures, etc..
0-18	B	5YR4/4	5YR4/2 / Few / / Coarse	Silt loam

Hydric Soil Indicators:

- | | |
|--|--|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input checked="" type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions
<input type="checkbox"/> Gleyed or Low-Chrome Colors | <input type="checkbox"/> Concretions
<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils
<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Other (Explain in Remarks) |
|--|--|

Remarks: Gley chart 2 4/5 PB
Depletions

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes/ No <u>Yes</u>	Is this Sampling Point Within a Wetland? Yes/ No <u>Yes</u>
Wetland Hydrology Present? Yes/ No <u>Yes</u>	
Hydric Soils Present? Yes/ No <u>Yes</u>	

Remarks: Cow pasture - site trampled

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Hibler Road</u> Applicant/Owner: <u>QDP, LLC</u> Investigator: <u>BE, AS</u>	Date: <u>2/23/2006</u> Co./City: <u>Loudoun</u> State: <u>VA</u>
Do Normal Circumstances exist on the site? YES/NO Is the site significantly disturbed (Atypical Situation) No Is the area a potential Problem Area? Yes (If needed, explain on reverse) No	Community ID: <u>PEM</u> Transect ID: _____ Plot ID: <u>DP-A4</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator		Dominant Plant Species	Stratum	Indicator
<i>Leersia oryzoides</i>						
1 CUTGRASS,RICE	Herb	OBL		9		
<i>Polygonum hydropiperoides</i>						
2 SMARTWEED,SWAMP	Herb	OBL		10		
<i>Polygonum virginianum</i>						
3 KNOTWEED,VIRGINIA	Herb	FAC		11		
<i>Poa _ spp.</i>						
4 BLUEGRASS	Herb	N/A		12		
<i>Arthraxon hispidus</i>						
5 ARTHRAXON,JOINT-HEAD	Herb	NI		13		
<i>Phleum pratense</i>						
6 TIMOTHY	Herb	FACU		14		
<i>Ludwigia palustris</i>						
7 SEEDBOX,MARSH	Herb	OBL		15		
8				16		

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC): 80.00%
FAC_Neutral: 75.00%

Remarks:

HYDROLOGY

<p>_____ Recorded Data (Describe in Remarks): _____ Stream, Lake, or Tide Gauge _____ Aerial Photographs _____ Other (Explain in Remarks)</p> <p>X _____ No Recorded Data Available</p>	<p style="text-align: center;">Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p>_____ Inundated _____ Saturated in Upper 12 inches _____ Water Marks _____ Drift Lines _____ Sediment Deposits X _____ Drainage Patterns in Wetlands</p> <p>Secondary Indicators(2 or more required)</p> <p>X _____ Oxidized Root Channels in upper 12 inches _____ Water-Stained Leaf Litter _____ Local Soil Survey Data X _____ FAC-Neutral Test _____ Other (Explain in Remarks)</p>
<p>Field Observations:</p> Depth of Surface Water: _____ (in.) Depth to Standing Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hibler Road

Date: 2/23/2006

Plot ID: DP-A4

SOILS

Map Symbol	<u>14B</u>	Drainage Class: <u>well - moderate</u>
Map Unit Name		
(Series and Phase) :	<u>Manassas Silt Loam</u>	Field Observations Yes/No
Taxonomy (Subgroup) :	<u>Ultic Hapludalfs</u>	Confirmed Map Type? <u>No</u>

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color/ Abund./ Contrast/ Size	Texture, Concretions Structures, etc..
<u>0-6</u>	<u>B</u>	<u>5YR4/2</u>	<u>5YR4/4 / Many / Distinct / Fine</u>	<u>Silt loam</u>
<u>6+</u>	<u>B</u>	<u>5YR4/2</u>	<u>5YR4/4 / Many / Distinct / Medium</u>	<u>Silt loam</u>

Hydric Soil Indicators:

- | | |
|--|--|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions
<input checked="" type="checkbox"/> Gleyed or Low-Chrome Colors | <input type="checkbox"/> Concretions
<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils
<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Other (Explain in Remarks) |
|--|--|

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes/ No <u>Yes</u>	Is this Sampling Point Within a Wetland? Yes/ No <u>Yes</u>
Wetland Hydrology Present? Yes/ No <u>Yes</u>	
Hydric Soils Present? Yes/ No <u>Yes</u>	

Remarks: Cow pasture - site trampled

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Hibler Road</u> Applicant/Owner: <u>QDP, LLC</u> Investigator: <u>BE, AS</u>	Date: <u>2/23/2006</u> Co./City: <u>Loudoun</u> State: <u>VA</u>
Do Normal Circumstances exist on the site? YES/NO Is the site significantly disturbed (Atypical Situation) No Is the area a potential Problem Area? Yes No (If needed, explain on reverse)	Community ID: <u>PEM</u> Transect ID: _____ Plot ID: <u>DP-A5</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	
<i>Ludwigia palustris</i>			
1 SEEDBOX, MARSH	Herb	OBL	9
<i>Arthraxon hispidus</i>			
2 ARTHRAXON, JOINT-HEAD	Herb	NI	10
<i>Phleum pratense</i>			
3 TIMOTHY	Herb	FACU	11
4			12
5			13
6			14
7			15
8			16

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC): 50.00%
FAC_Neutral: 50.00%

Remarks:

HYDROLOGY

<p>Recorded Data (Describe in Remarks):</p> <p>_____ Stream, Lake, or Tide Gauge</p> <p>_____ Aerial Photographs</p> <p>_____ Other (Explain in Remarks)</p> <p><u> X </u> No Recorded Data Available</p>	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p>_____ Inundated</p> <p>_____ Saturated in Upper 12 inches</p> <p>_____ Water Marks</p> <p>_____ Drift Lines</p> <p>_____ Sediment Deposits</p> <p><u> X </u> Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required)</p> <p><u> X </u> Oxidized Root Channels in upper 12 inches</p> <p>_____ Water-Stained Leaf Litter</p> <p>_____ Local Soil Survey Data</p> <p>_____ FAC-Neutral Test</p> <p>_____ Other (Explain in Remarks)</p>
<p>Field Observations:</p> <p>Depth of Surface Water: _____ (in.)</p> <p>Depth to Standing Water in Pit: _____ (in.)</p> <p>Depth to Saturated Soil: _____ (in.)</p>	

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hibler Road

Date: 2/23/2006

Plot ID: DP-A5

SOILS

Map Symbol	<u>14B</u>	Drainage Class: <u>well - moderate</u>
Map Unit Name		
(Series and Phase) :	<u>Manassas Silt Loam</u>	Field Observations Yes/No
Taxonomy (Subgroup) :	<u>Ultic Hapludalfs</u>	Confirmed Map Type? <u>No</u>

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color/ Abund./ Contrast/ Size	Texture, Concretions Structures, etc..
0-6	B	5YR4/2	5YR4/6 / Common / Distinct /	Silt loam

Hydric Soil Indicators:

- | | |
|--|--|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions
<input checked="" type="checkbox"/> Gleyed or Low-Chrome Colors | <input type="checkbox"/> Concretions
<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils
<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Other (Explain in Remarks) |
|--|--|

Remarks: Cannot go further impenetrable substance in hole

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes/ No <u>Yes</u>	Is this Sampling Point Within a Wetland? Yes/ No <u>Yes</u>
Wetland Hydrology Present? Yes/ No <u>Yes</u>	
Hydric Soils Present? Yes/ No <u>Yes</u>	

Remarks: Cow pasture - site trampled

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Hibler Road</u> Applicant/Owner: <u>QDP, LLC</u> Investigator: <u>BE, AS</u>	Date: <u>2/23/2006</u> Co./City: <u>Loudoun</u> State: <u>VA</u>			
Do Normal Circumstances exist on the site? YES/NO Is the site significantly disturbed (Atypical Situation) Is the area a potential Problem Area? (If needed, explain on reverse)	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; width: 50px;"><u>No</u></td> </tr> <tr> <td style="text-align: center;"><u>Yes</u></td> </tr> <tr> <td style="text-align: center;"><u>No</u></td> </tr> </table>	<u>No</u>	<u>Yes</u>	<u>No</u>
<u>No</u>				
<u>Yes</u>				
<u>No</u>				
Community ID: <u>Upland</u> Transect ID: _____ Plot ID: <u>DP-A6</u>				

VEGETATION

Dominant Plant Species	Stratum	Indicator	
<i>Festuca elatior</i>			
1 Tall Fescue	Herb	FACU	9
<i>Poa</i> spp.			
2 BLUEGRASS	Herb	N/A	10
<i>Setaria faberi</i>			
3 GRASS, JAPANESE BRISTLE	Herb	UPL	11
<i>Xanthium strumarium</i>			
4 COCKLE-BUR, ROUGH	Herb	FAC	12
5			13
6			14
7			15
8			16

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC): 33.33%
 FAC_Neutral: 0.00%

Remarks:

HYDROLOGY

<p>_____ Recorded Data (Describe in Remarks): _____ Stream, Lake, or Tide Gauge _____ Aerial Photographs _____ Other (Explain in Remarks)</p> <p>X _____ No Recorded Data Available</p>	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p>_____ Inundated _____ Saturated in Upper 12 inches _____ Water Marks _____ Drift Lines _____ Sediment Deposits _____ Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required)</p> <p>_____ Oxidized Root Channels in upper 12 inches _____ Water-Stained Leaf Litter _____ Local Soil Survey Data _____ FAC-Neutral Test _____ Other (Explain in Remarks)</p>
<p>Field Observations:</p> <p>Depth of Surface Water: _____ (in.)</p> <p>Depth to Standing Water in Pit: _____ (in.)</p> <p>Depth to Saturated Soil: _____ (in.)</p>	

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hibler Road

Date: 2/23/2006

Plot ID: DP-A6

SOILS

Map Symbol	<u>14B</u>	Drainage Class: <u>well - moderate</u>
Map Unit Name		
(Series and Phase):	<u>Manassas Silt Loam</u>	Field Observations Yes/No
Taxonomy (Subgroup):	<u>Ultic Hapludalfs</u>	Confirmed Map Type? No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color/ Abund./ Contrast/ Size	Texture, Concretions Structures, etc..
0-18	B	5YR4/4	/ / /	Silt loam

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions
<input type="checkbox"/> Gleyed or Low-Chrome Colors | <input type="checkbox"/> Concretions
<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils
<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Other (Explain in Remarks) |
|---|--|

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes/ No <div style="text-align: center;"><u>No</u></div>	Wetland Hydrology Present? Yes/ No <div style="text-align: center;"><u>No</u></div>	Hydric Soils Present? Yes/ No <div style="text-align: center;"><u>No</u></div>	Is this Sampling Point Within a Wetland? Yes/ No <div style="text-align: center;"><u>No</u></div>
--	---	--	---

Remarks: Cow pasture - site trampled

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hibler Road

Date: 3/2/2006

Plot ID: DP-A7

SOILS

Map Symbol	<u>14B</u>	Drainage Class: <u>well - moderately</u>
Map Unit Name		
(Series and Phase) :	<u>Manassas Silt Loam</u>	Field Observations Yes/No
Taxonomy (Subgroup) :	<u>Ultic Hapludalfs</u>	Confirmed Map Type? No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color/ Abund./ Contrast/ Size	Texture, Concretions Structures, etc..
0-12	B	5YR4/3	5YR4/6 / Many / Distinct /	Silt loam

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions
<input type="checkbox"/> Gleyed or Low-Chrome Colors | <input type="checkbox"/> Concretions
<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils
<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Other (Explain in Remarks) |
|---|--|

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes/ No <div style="text-align: center;"><u>Yes</u></div>	Wetland Hydrology Present? Yes/ No <div style="text-align: center;"><u>Yes</u></div>	Hydric Soils Present? Yes/ No <div style="text-align: center;"><u>Yes</u></div>	Is this Sampling Point Within a Wetland? Yes/ No <div style="text-align: center;"><u>Yes</u></div>
---	--	---	--

Remarks: Cow pasture - site trampled

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Hibler Road</u> Applicant/Owner: <u>QDP, LLC</u> Investigator: <u>BE, AS</u>	Date: <u>2/23/2006</u> Co./City: <u>Loudoun</u> State: <u>VA</u>
Do Normal Circumstances exist on the site? YES/NO Is the site significantly disturbed (Atypical Situation) No Is the area a potential Problem Area? Yes (If needed, explain on reverse) No	Community ID: <u>PEM</u> Transect ID: _____ Plot ID: <u>DP-B1</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
<i>Juncus effusus</i>					
1 RUSH,SOFT	Herb	FACW+	9		
<i>Ludwigia palustris</i>					
2 SEEDBOX,MARSH	Herb	OBL	10		
<i>Nasturtium microphyllum</i>					
3 WATER-CRESS,ONE-ROW	Herb	OBL	11		
<i>Cyperus strigosus</i>					
4 FLATSEDGE,STRAW-COLOR	Herb	FACW	12		
<i>Scirpus atrovirens</i>					
5 BULRUSH,GREEN	Herb	OBL	13		
<i>Arthraxon hispidus</i>					
6 ARTHRAXON,JOINT-HEAD	Herb	NI	14		
7 _____	_____	_____	15		
8 _____	_____	_____	16		

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC): 100.00%
 FAC_Neutral: 100.00%

Remarks:

HYDROLOGY

<p>_____ Recorded Data (Describe in Remarks): _____ Stream, Lake, or Tide Gauge _____ Aerial Photographs _____ Other (Explain in Remarks)</p> <p><u> X </u> No Recorded Data Available</p>	<p style="text-align: center;">Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p><u> X </u> Inundated <u> X </u> Saturated in Upper 12 inches _____ Water Marks _____ Drift Lines _____ Sediment Deposits <u> X </u> Drainage Patterns in Wetlands</p> <p>Secondary Indicators(2 or more required)</p> <p>_____ Oxidized Root Channels in upper 12 inches _____ Water-Stained Leaf Litter _____ Local Soil Survey Data <u> X </u> FAC-Neutral Test _____ Other (Explain in Remarks)</p>
<p>Field Observations:</p> <p>Depth of Surface Water: _____ (in.)</p> <p>Depth to Standing Water in Pit: _____ (in.)</p> <p>Depth to Saturated Soil: _____ (in.)</p>	

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hibler Road

Date: 2/23/2006

Plot ID: DP-B1

SOILS

Map Symbol	<u>14B</u>	Drainage Class: <u>well - moderate</u>
Map Unit Name		
(Series and Phase) :	<u>Manassas Silt Loam</u>	Field Observations Yes/No
Taxonomy (Subgroup) :	<u>Ultic Hapludalfs</u>	Confirmed Map Type? <u>No</u>

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color/ Abund./ Contrast/ Size	Texture, Concretions Structures, etc..
0-6	B	5YR3/2	///	

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input checked="" type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions
<input checked="" type="checkbox"/> Gleyed or Low-Chrome Colors | <input type="checkbox"/> Concretions
<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils
<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Other (Explain in Remarks) |
|---|--|

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes/ No <u>Yes</u>	Wetland Hydrology Present? Yes/ No <u>Yes</u>	Hydric Soils Present? Yes/ No <u>Yes</u>	Is this Sampling Point Within a Wetland? Yes/ No <u>Yes</u>
---	--	---	--

Remarks: Cow pasture - site trampled

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Hibler Road</u> Applicant/Owner: <u>QDP, LLC</u> Investigator: <u>BE, AS</u>	Date: <u>2/23/2006</u> Co./City: <u>Loudoun</u> State: <u>VA</u>				
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)	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; border-bottom: 1px solid black;">YES/NO</td> </tr> <tr> <td style="text-align: center; border-bottom: 1px solid black;">No</td> </tr> <tr> <td style="text-align: center; border-bottom: 1px solid black;">Yes</td> </tr> <tr> <td style="text-align: center; border-bottom: 1px solid black;">No</td> </tr> </table>	YES/NO	No	Yes	No
YES/NO					
No					
Yes					
No					
Community ID: <u>Upland</u> Transect ID: _____ Plot ID: <u>DP-B2</u>					

VEGETATION

Dominant Plant Species	Stratum	Indicator	
<i>Setaria faberi</i>			
1 GRASS, JAPANESE BRISTLE	Herb	UPL	9
<i>Festuca elatior</i>			
2 Tall Fescue	Herb	FACU	10
<i>Andropogon virginicus</i>			
3 BROOM-SEDGE	Herb	FACU	11
<i>Xanthium strumarium</i>			
4 COCKLE-BUR, ROUGH	Herb	FAC	12
5			13
6			14
7			15
8			16

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC): 25.00%
FAC_Neutral: 0.00%

Remarks:

HYDROLOGY

<p>_____ Recorded Data (Describe in Remarks): _____ Stream, Lake, or Tide Gauge _____ Aerial Photographs _____ Other (Explain in Remarks)</p> <p>X _____ No Recorded Data Available</p>	<p style="text-align: center;">Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p>_____ Inundated _____ Saturated in Upper 12 inches _____ Water Marks _____ Drift Lines _____ Sediment Deposits _____ Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required)</p> <p>_____ Oxidized Root Channels in upper 12 inches _____ Water-Stained Leaf Litter _____ Local Soil Survey Data _____ FAC-Neutral Test _____ Other (Explain in Remarks)</p>
<p>Field Observations:</p> <p>Depth of Surface Water: _____ (in.)</p> <p>Depth to Standing Water in Pit: _____ (in.)</p> <p>Depth to Saturated Soil: _____ (in.)</p>	

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hibler Road

Date: 2/23/2006

Plot ID: DP-B2

SOILS

Map Symbol	<u>14B</u>	Drainage Class: <u>well - moderate</u>
Map Unit Name		
(Series and Phase) :	<u>Manassas Silt Loam</u>	Field Observations Yes/No
Taxonomy (Subgroup) :	<u>Ultic Hapludalfs</u>	Confirmed Map Type? <u>No</u>

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color/ Abund./ Contrast/ Size	Texture, Concretions Structures, etc..
0-18	B	5YR4/4	/ / /	Silt loam

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions
<input type="checkbox"/> Gleyed or Low-Chrome Colors | <input type="checkbox"/> Concretions
<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils
<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Other (Explain in Remarks) |
|---|--|

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes/ No <div style="text-align: center;"><u>No</u></div>	Wetland Hydrology Present? Yes/ No <div style="text-align: center;"><u>No</u></div>	Hydric Soils Present? Yes/ No <div style="text-align: center;"><u>No</u></div>	Is this Sampling Point Within a Wetland? Yes/ No <div style="text-align: center;"><u>No</u></div>
--	---	--	---

Remarks: Cow pasture - site trampled

**DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)**

Project/Site: <u>Hibler Road</u> Applicant/Owner: <u>QDP, LLC</u> Investigator: <u>BE, AS</u>	Date: <u>2/23/2006</u> Co./City: <u>Loudoun</u> State: <u>VA</u>
Do Normal Circumstances exist on the site? YES/NO Is the site significantly disturbed (Atypical Situation) No Is the area a potential Problem Area? Yes (If needed, explain on reverse) No	Community ID: <u>Upland</u> Transect ID: _____ Plot ID: <u>DP-B3</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
<i>Collinsonia canadensis</i>					
1 HORSE-BALM, CANADA	Herb	FAC+	9		
<i>Festuca elatior</i>					
2 Tall Fescue	Herb	FACU	10		
<i>Robinia pseudoacacia</i>					
3 LOCUST, BLACK	Tree	FACU-	11		
<i>Apocynum androsaemifolium</i>					
4 DOGBANE, SPREADING	Herb	NI	12		
5			13		
6			14		
7			15		
8			16		

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC): 33.33%
 FAC_Neutral: 0.00%

Remarks: _____

HYDROLOGY

<p>_____ Recorded Data (Describe in Remarks): _____ Stream, Lake, or Tide Gauge _____ Aerial Photographs _____ Other (Explain in Remarks)</p> <p>X _____ No Recorded Data Available</p>	<p style="text-align: center;">Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p>_____ Inundated _____ Saturated in Upper 12 inches _____ Water Marks _____ Drift Lines _____ Sediment Deposits _____ Drainage Patterns in Wetlands</p> <p>Secondary Indicators(2 or more required)</p> <p>_____ Oxidized Root Channels in upper 12 inches _____ Water-Stained Leaf Litter _____ Local Soil Survey Data _____ FAC-Neutral Test _____ Other (Explain in Remarks)</p>
<p>Field Observations:</p> <p>Depth of Surface Water: _____ (in.)</p> <p>Depth to Standing Water in Pit: _____ (in.)</p> <p>Depth to Saturated Soil: _____ (in.)</p>	

Remarks: _____

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hibler Road

Date: 2/23/2006

Plot ID: DP-B3

SOILS

Map Symbol	<u>80C</u>	Drainage Class: <u>well drained</u>
Map Unit Name		
(Series and Phase) :	<u>Brentsville Loam</u>	Field Observations Yes/No
Taxonomy (Subgroup) :	<u>Typic Hapludults</u>	Confirmed Map Type? <u>No</u>

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color/ Abund./ Contrast/ Size	Texture, Concretions Structures, etc..
0-18	B	5YR4/4	///	

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions
<input type="checkbox"/> Gleyed or Low-Chrome Colors | <input type="checkbox"/> Concretions
<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils
<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Other (Explain in Remarks) |
|---|--|

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes/ No <div style="text-align: center;"><u>No</u></div>	Wetland Hydrology Present? Yes/ No <div style="text-align: center;"><u>No</u></div>	Hydric Soils Present? Yes/ No <div style="text-align: center;"><u>No</u></div>	Is this Sampling Point Within a Wetland? Yes/ No <div style="text-align: center;"><u>No</u></div>
--	---	--	---

Remarks: Cow pasture - site trampled

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hibler Road

Date: 2/23/2006

Plot ID: DP-C1

SOILS

Map Symbol	<u>14B</u>	Drainage Class: <u>well - moderate</u>
Map Unit Name		
(Series and Phase):	<u>Manassas Silt Loam</u>	Field Observations Yes/No
Taxonomy (Subgroup):	<u>Ultic Hapludalfs</u>	Confirmed Map Type? No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color/ Abund./ Contrast/ Size	Texture, Concretions Structures, etc..
0-6	B1	5YR3/2	5YR4/6 / Many / Distinct /	Silt loam
6-18	B2	5YR3/2	5YR4/6 / Few / Distinct /	Silt loam

Hydric Soil Indicators:

- | | |
|--|--|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions
<input checked="" type="checkbox"/> Gleyed or Low-Chrome Colors | <input type="checkbox"/> Concretions
<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils
<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Other (Explain in Remarks) |
|--|--|

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes/ No <u>Yes</u>	Is this Sampling Point Within a Wetland? <u>Yes</u>
Wetland Hydrology Present?	<u>Yes</u>	
Hydric Soils Present?	<u>Yes</u>	

Remarks: Cow pasture - site trampled

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Hibler Road</u> Applicant/Owner: <u>QDP, LLC</u> Investigator: <u>BE, AS</u>	Date: <u>2/23/2006</u> Co./City: <u>Loudoun</u> State: <u>VA</u>				
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)	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; border-bottom: 1px solid black;">YES/NO</td> </tr> <tr> <td style="text-align: center; border-bottom: 1px solid black;">No</td> </tr> <tr> <td style="text-align: center; border-bottom: 1px solid black;">Yes</td> </tr> <tr> <td style="text-align: center; border-bottom: 1px solid black;">No</td> </tr> </table>	YES/NO	No	Yes	No
YES/NO					
No					
Yes					
No					
Community ID: <u>Upland</u> Transect ID: _____ Plot ID: <u>DP-C2</u>					

VEGETATION

Dominant Plant Species	Stratum	Indicator	
<i>Xanthium strumarium</i>			
1 COCKLE-BUR,ROUGH	Herb	FAC	9
<i>Festuca elatior</i>			
2 Tall Fescue	Herb	FACU	10
<i>Lactuca canadensis</i>			
3 LETTUCE,TALL YELLOW	Herb	FACU-	11
<i>Cyperus diandrus</i>			
4 FLATSEGE,UMBRELLA	Herb	FACW	12
5 _____	_____	_____	13
6 _____	_____	_____	14
7 _____	_____	_____	15
8 _____	_____	_____	16

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC): 50.00%
 FAC_Neutral: 33.33%

Remarks:

HYDROLOGY

<table style="width: 100%;"> <tr> <td style="width: 10%;"><input type="checkbox"/></td> <td>Recorded Data (Describe in Remarks):</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Stream, Lake, or Tide Gauge</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Aerial Photographs</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Other (Explain in Remarks)</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>No Recorded Data Available</td> </tr> </table>	<input type="checkbox"/>	Recorded Data (Describe in Remarks):	<input type="checkbox"/>	Stream, Lake, or Tide Gauge	<input type="checkbox"/>	Aerial Photographs	<input type="checkbox"/>	Other (Explain in Remarks)	<input checked="" type="checkbox"/>	No Recorded Data Available	<p style="text-align: center;">Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p><input checked="" type="checkbox"/> Inundated</p> <p><input checked="" type="checkbox"/> Saturated in Upper 12 inches</p> <p><input type="checkbox"/> Water Marks</p> <p><input type="checkbox"/> Drift Lines</p> <p><input type="checkbox"/> Sediment Deposits</p> <p><input type="checkbox"/> Drainage Patterns in Wetlands</p> <p>Secondary Indicators(2 or more required)</p> <p><input type="checkbox"/> Oxidized Root Channels in upper 12 inches</p> <p><input type="checkbox"/> Water-Stained Leaf Litter</p> <p><input type="checkbox"/> Local Soil Survey Data</p> <p><input type="checkbox"/> FAC-Neutral Test</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>
<input type="checkbox"/>	Recorded Data (Describe in Remarks):										
<input type="checkbox"/>	Stream, Lake, or Tide Gauge										
<input type="checkbox"/>	Aerial Photographs										
<input type="checkbox"/>	Other (Explain in Remarks)										
<input checked="" type="checkbox"/>	No Recorded Data Available										
<p>Field Observations:</p> <p>Depth of Surface Water: _____ (in.)</p> <p>Depth to Standing Water in Pit: _____ (in.)</p> <p>Depth to Saturated Soil: _____ (in.)</p>											

Remarks:

**DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)**

Project/Site: Hibler Road

Date: 2/23/2006

Plot ID: DP-C2

SOILS

Map Symbol	<u>14B</u>	Drainage Class: <u>well - moderate</u>
Map Unit Name		
(Series and Phase) :	<u>Manassas Silt Loam</u>	Field Observations Yes/No
Taxonomy (Subgroup) :	<u>Ultic Hapludalfs</u>	Confirmed Map Type? No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color/ Abund./ Contrast/ Size	Texture, Concretions Structures, etc..
0-18	B	5YR4/3	///	
		5YR4/4	///	

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions
<input type="checkbox"/> Gleyed or Low-Chrome Colors | <input type="checkbox"/> Concretions
<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils
<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Other (Explain in Remarks) |
|---|--|

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes/ No <u>No</u>		
Wetland Hydrology Present? Yes <u>Yes</u>		Is this Sampling Point Within a Wetland? Yes/ No <u>No</u>
Hydric Soils Present? No <u>No</u>		

Remarks: Cow pasture - site trampled

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Hibler Road</u> Applicant/Owner: <u>QDP, LLC</u> Investigator: <u>BE, AS, PO</u>	Date: <u>3/2/2006</u> Co./City: <u>Loudoun</u> State: <u>VA</u>				
Do Normal Circumstances exist on the site? <u> </u> Is the site significantly disturbed (Atypical Situation) <u> </u> Is the area a potential Problem Area? <u> </u> (If needed, explain on reverse)	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; border-bottom: 1px solid black;">YES/NO</td> </tr> <tr> <td style="text-align: center; border-bottom: 1px solid black;">No</td> </tr> <tr> <td style="text-align: center; border-bottom: 1px solid black;">Yes</td> </tr> <tr> <td style="text-align: center; border-bottom: 1px solid black;">No</td> </tr> </table>	YES/NO	No	Yes	No
YES/NO					
No					
Yes					
No					
Community ID: <u>Upland</u> Transect ID: <u> </u> Plot ID: <u>DP-C3</u>					

VEGETATION

Dominant Plant Species	Stratum	Indicator	
<i>Juncus effusus</i>			
1 RUSH,SOFT	Herb	FACW+	9
<i>Cyperus diandrus</i>			
2 FLATSEGE,UMBRELLA	Herb	FACW	10
<i>Ludwigia alternifolia</i>			
3 SEEDBOX,BUSHY	Herb	FACW+	11
<i>Polygonum virginianum</i>			
4 KNOTWEED,VIRGINIA	Herb	FAC	12
5			13
6			14
7			15
8			16

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC): 100.00%
 FAC_Neutral: 100.00%

Remarks:

HYDROLOGY

<table style="width: 100%;"> <tr> <td style="width: 10%;"><u> </u></td> <td>Recorded Data (Describe in Remarks):</td> </tr> <tr> <td><u> </u></td> <td>Stream, Lake, or Tide Gauge</td> </tr> <tr> <td><u> </u></td> <td>Aerial Photographs</td> </tr> <tr> <td><u> </u></td> <td>Other (Explain in Remarks)</td> </tr> <tr> <td><u> X </u></td> <td>No Recorded Data Available</td> </tr> </table>	<u> </u>	Recorded Data (Describe in Remarks):	<u> </u>	Stream, Lake, or Tide Gauge	<u> </u>	Aerial Photographs	<u> </u>	Other (Explain in Remarks)	<u> X </u>	No Recorded Data Available	<p style="text-align: center;">Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p><u> X </u> Inundated</p> <p><u> </u> Saturated in Upper 12 inches</p> <p><u> </u> Water Marks</p> <p><u> </u> Drift Lines</p> <p><u> </u> Sediment Deposits</p> <p><u> X </u> Drainage Patterns in Wetlands</p> <p>Secondary Indicators(2 or more required)</p> <p><u> </u> Oxidized Root Channels in upper 12 inches</p> <p><u> </u> Water-Stained Leaf Litter</p> <p><u> </u> Local Soil Survey Data</p> <p><u> X </u> FAC-Neutral Test</p> <p><u> </u> Other (Explain in Remarks)</p>
<u> </u>	Recorded Data (Describe in Remarks):										
<u> </u>	Stream, Lake, or Tide Gauge										
<u> </u>	Aerial Photographs										
<u> </u>	Other (Explain in Remarks)										
<u> X </u>	No Recorded Data Available										
<p>Field Observations:</p> <p>Depth of Surface Water: <u> </u> (in.)</p> <p>Depth to Standing Water in Pit: <u> </u> (in.)</p> <p>Depth to Saturated Soil: <u> </u> (in.)</p>											

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hibler Road

Date: 3/2/2006

Plot ID: DP-C3

SOILS

Map Symbol	<u>14B</u>	Drainage Class: <u>well - moderate</u>
Map Unit Name		
(Series and Phase) :	<u>Manassas Silt Loam</u>	Field Observations Yes/No
Taxonomy (Subgroup) :	<u>Ultic Hapludalfs</u>	Confirmed Map Type? No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color/ Abund./ Contrast/ Size	Texture, Concretions Structures, etc..
0-12	B	5YR4/4	/ / /	Silt loam

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions
<input type="checkbox"/> Gleyed or Low-Chrome Colors | <input type="checkbox"/> Concretions
<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils
<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Other (Explain in Remarks) |
|---|--|

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes/ No <u>Yes</u>	Is this Sampling Point Within a Wetland? Yes/ No <u>No</u>
Wetland Hydrology Present? Yes/ No <u>Yes</u>	
Hydric Soils Present? Yes/ No <u>No</u>	

Remarks: Cow pasture - site trampled

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Hibler Road</u> Applicant/Owner: <u>QDP, LLC</u> Investigator: <u>BE, AS, PO</u>	Date: <u>3/2/2006</u> Co./City: <u>Loudoun</u> State: <u>VA</u>
Do Normal Circumstances exist on the site? YES/NO Is the site significantly disturbed (Atypical Situation) Is the area a potential Problem Area? (If needed, explain on reverse)	<div style="text-align: center;"> <u>No</u> <u>Yes</u> <u>No</u> </div>
Community ID: <u>Upland</u> Transect ID: _____ Plot ID: <u>DP-D1</u>	

VEGETATION

Dominant Plant Species	Stratum	Indicator	
<i>Phleum pratense</i>			
1 TIMOTHY	Herb	FACU	9
<i>Festuca elatior</i>			
2 Tall Fescue	Herb	FACU	10
<i>Digitaria sanguinalis</i>			
3 CRABGRASS, HAIRY	Herb	FACU-	11
<i>Xanthium strumarium</i>			
4 COCKLE-BUR, ROUGH	Herb	FAC	12
<i>Cyperus diandrus</i>			
5 FLATSEGE, UMBRELLA	Herb	FACW	13
6			14
7			15
8			16

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC): 40.00%
FAC_Neutral: 25.00%

Remarks:

HYDROLOGY

<p>_____ Recorded Data (Describe in Remarks): _____ Stream, Lake, or Tide Gauge _____ Aerial Photographs _____ Other (Explain in Remarks)</p> <p><u>X</u> No Recorded Data Available</p>	<p style="text-align: center;">Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p><u>X</u> Inundated _____ Saturated in Upper 12 inches _____ Water Marks _____ Drift Lines _____ Sediment Deposits <u>X</u> Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required)</p> <p>_____ Oxidized Root Channels in upper 12 inches _____ Water-Stained Leaf Litter _____ Local Soil Survey Data _____ FAC-Neutral Test _____ Other (Explain in Remarks)</p>
<p>Field Observations:</p> Depth of Surface Water: _____ (in.) Depth to Standing Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	

Remarks:

**DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)**

Project/Site: Hibler Road

Date: 3/2/2006

Plot ID: DP-D1

SOILS

Map Symbol	<u>14B</u>	Drainage Class: <u>well - moderate</u>
Map Unit Name		
(Series and Phase):	<u>Manassas Silt Loam</u>	Field Observations Yes/No
Taxonomy (Subgroup):	<u>Ultic Hapludalfs</u>	Confirmed Map Type? <u>No</u>

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color/ Abund./ Contrast/ Size	Texture, Concretions Structures, etc..
0-12	B	5YR4/4	5YR4/6 / Few / Faint /	Silt loam

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions
<input type="checkbox"/> Gleyed or Low-Chrome Colors | <input type="checkbox"/> Concretions
<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils
<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Other (Explain in Remarks) |
|---|--|

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes/ No <u>No</u>	Is this Sampling Point Within a Wetland? Yes/ No <u>No</u>
Wetland Hydrology Present?	Yes <u>Yes</u>	
Hydric Soils Present?	Yes <u>Yes</u>	

Remarks: Cow pasture - site trampled

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hibler Road

Date: 3/2/2006

Plot ID: DP-E1

SOILS

Map Symbol	<u>14B</u>	Drainage Class: <u>well - moderate</u>
Map Unit Name		
(Series and Phase) :	<u>Manassas Silt Loam</u>	Field Observations Yes/No
Taxonomy (Subgroup) :	<u>Ultic Hapludalfs</u>	Confirmed Map Type? <u>No</u>

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color/ Abund./ Contrast/ Size	Texture, Concretions Structures, etc..
0-18	B	7.5YR4/4	/ / /	

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions
<input type="checkbox"/> Gleyed or Low-Chrome Colors | <input type="checkbox"/> Concretions
<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils
<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Other (Explain in Remarks) |
|---|--|

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes/ No <div style="text-align: center;"><u>No</u></div>	Wetland Hydrology Present? Yes/ No <div style="text-align: center;"><u>No</u></div>	Hydric Soils Present? Yes/ No <div style="text-align: center;"><u>No</u></div>	Is this Sampling Point Within a Wetland? Yes/ No <div style="text-align: center;"><u>No</u></div>
--	---	--	---

Remarks: Cow pasture - site trampled

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Hibler Road</u> Applicant/Owner: <u>QDP, LLC</u> Investigator: <u>BE, AS, PO</u>	Date: <u>3/2/2006</u> Co./City: <u>Loudoun</u> State: <u>VA</u>
Do Normal Circumstances exist on the site? YES/NO Is the site significantly disturbed (Atypical Situation) No Is the area a potential Problem Area? Yes (If needed, explain on reverse) No	Community ID: <u>PEM</u> Transect ID: _____ Plot ID: <u>DP-H1</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	
<i>Cyperus diandrus</i>			
1 FLATSEGE, UMBRELLA	Herb	FACW	9
<i>Carex vulpinoidea</i>			
2 SEDGE, FOX	Herb	OBL	10
<i>Polygonum virginianum</i>			
3 KNOTWEED, VIRGINIA	Herb	FAC	11
<i>Polygonum persicaria</i>			
4 THUMB, LADY'S	Herb	FACW	12
5			13
6			14
7			15
8			16

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC): 100.00%
FAC_Neutral: 100.00%

Remarks:

HYDROLOGY

<p>_____ Recorded Data (Describe in Remarks): _____ Stream, Lake, or Tide Gauge _____ Aerial Photographs _____ Other (Explain in Remarks)</p> <p><u> X </u> No Recorded Data Available</p>	<p style="text-align: center;">Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p><u> X </u> Inundated _____ Saturated in Upper 12 inches _____ Water Marks _____ Drift Lines _____ Sediment Deposits <u> X </u> Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required)</p> <p><u> X </u> Oxidized Root Channels in upper 12 inches _____ Water-Stained Leaf Litter _____ Local Soil Survey Data <u> X </u> FAC-Neutral Test _____ Other (Explain in Remarks)</p>
<p>Field Observations:</p> Depth of Surface Water: _____ (in.) Depth to Standing Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hibler Road

Date: 3/2/2006

Plot ID: DP-H1

SOILS

Map Symbol	<u>77D3</u>	Drainage Class: <u>well - excessive</u>
Map Unit Name		
(Series and Phase) :	<u>Nestoria Grvy Slt Lm Svrlly Erd</u>	Field Observations Yes/No
Taxonomy (Subgroup) :	<u>Ochreptic Hapludults</u>	Confirmed Map Type? <u>No</u>

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color/ Abund./ Contrast/ Size	Texture, Concretions Structures, etc..
0-6	B	7.5YR3/3	7.5YR4/6 / Common / Distinct /	Silt loam
6+	B	7.5YR3/3	7.5YR4/6 / Few / Distinct /	Silt loam

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions
<input type="checkbox"/> Gleyed or Low-Chrome Colors | <input type="checkbox"/> Concretions
<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils
<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Other (Explain in Remarks) |
|---|--|

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes/ No <u>Yes</u>	Wetland Hydrology Present? Yes/ No <u>Yes</u>	Hydric Soils Present? Yes/ No <u>Yes</u>	Is this Sampling Point Within a Wetland? Yes/ No <u>Yes</u>
---	--	---	--

Remarks: Cow pasture - site trampled

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hibler Road

Date: 3/2/2006

Plot ID: DP-H2

SOILS

Map Symbol	<u>80C</u>	Drainage Class: <u>well drained</u>
Map Unit Name		
(Series and Phase) :	<u>Brentsville Loam</u>	Field Observations Yes/No
Taxonomy (Subgroup) :	<u>Typic Hapludults</u>	Confirmed Map Type? No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color/ Abund./ Contrast/ Size	Texture, Concretions Structures, etc..
0-10	B	7.5YR3/3	/ / /	

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions
<input type="checkbox"/> Gleyed or Low-Chrome Colors | <input type="checkbox"/> Concretions
<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils
<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Other (Explain in Remarks) |
|---|--|

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes/ No <u>Yes</u>	Is this Sampling Point Within a Wetland? Yes/ No <u>No</u>
Wetland Hydrology Present? Yes/ No <u>Yes</u>	
Hydric Soils Present? Yes/ No <u>No</u>	

Remarks: Cow pasture - site trampled

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Hibler Road</u> Applicant/Owner: <u>QDP, LLC</u> Investigator: <u>BE, AS, PO</u>	Date: <u>3/2/2006</u> Co./City: <u>Loudoun</u> State: <u>VA</u>
Do Normal Circumstances exist on the site? YES/NO Is the site significantly disturbed (Atypical Situation) <u>No</u> Is the area a potential Problem Area? <u>Yes</u> (If needed, explain on reverse) <u>No</u>	Community ID: <u>R4</u> Transect ID: _____ Plot ID: <u>DP-L1</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 _____	_____	_____	9 _____	_____	_____
2 _____	_____	_____	10 _____	_____	_____
3 _____	_____	_____	11 _____	_____	_____
4 _____	_____	_____	12 _____	_____	_____
5 _____	_____	_____	13 _____	_____	_____
6 _____	_____	_____	14 _____	_____	_____
7 _____	_____	_____	15 _____	_____	_____
8 _____	_____	_____	16 _____	_____	_____

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC): 0.00%
FAC_Neutral: 0.00%

Remarks:

HYDROLOGY

<p>_____ Recorded Data (Describe in Remarks): _____ Stream, Lake, or Tide Gauge _____ Aerial Photographs _____ Other (Explain in Remarks)</p> <p>X _____ No Recorded Data Available</p>	<p style="text-align: center;">Wetland Hydrology Indicators:</p> <p>Primary Indicators: _____ Inundated _____ Saturated in Upper 12 inches _____ Water Marks _____ Drift Lines _____ Sediment Deposits X _____ Drainage Patterns in Wetlands</p> <p>Secondary Indicators(2 or more required) _____ Oxidized Root Channels in upper 12 inches _____ Water-Stained Leaf Litter _____ Local Soil Survey Data _____ FAC-Neutral Test _____ Other (Explain in Remarks)</p>
<p>Field Observations:</p> Depth of Surface Water: _____ (in.) Depth to Standing Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hibler Road

Date: 3/2/2006

Plot ID: DP-L1

SOILS

Map Symbol	<u>14B</u>	Drainage Class: <u>well - moderate</u>
Map Unit Name		
(Series and Phase) :	<u>Manassas Silt Loam</u>	Field Observations Yes/No
Taxonomy (Subgroup) :	<u>Ultic Hapludalfs</u>	Confirmed Map Type? <u>No</u>

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color/ Abund./ Contrast/ Size	Texture, Concretions Structures, etc..
0-16	B	5YR5/8	5YR6/4 / Many / /	Silty clay loam

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions
<input type="checkbox"/> Gleyed or Low-Chrome Colors | <input type="checkbox"/> Concretions
<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils
<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Other (Explain in Remarks) |
|---|--|

Remarks: Depletions

WETLAND DETERMINATION

	Yes/ No		Yes/ No
Hydrophytic Vegetation Present?	<u>No</u>	Is this Sampling Point Within a Wetland?	<u>No</u>
Wetland Hydrology Present?	<u>Yes</u>		
Hydric Soils Present?	<u>No</u>		

Remarks: Cow pasture - site trampled

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hibler Road

Date: 3/2/2006

Plot ID: DP-L2

SOILS

Map Symbol	<u>14B</u>	Drainage Class: <u>well - moderate</u>
Map Unit Name		
(Series and Phase) :	<u>Manassas Silt Loam</u>	Field Observations Yes/No
Taxonomy (Subgroup) :	<u>Ultic Hapludalfs</u>	Confirmed Map Type? <u>No</u>

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color/ Abund./ Contrast/ Size	Texture, Concretions Structures, etc..
0-2	A	5YR4/3	/ / /	Silt loam
2-13	B	5YR4/4	/ / /	Silt loam

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions
<input type="checkbox"/> Gleyed or Low-Chrome Colors | <input type="checkbox"/> Concretions
<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils
<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Other (Explain in Remarks) |
|---|--|

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes/ No <u>Yes</u>	Wetland Hydrology Present? Yes/ No <u>No</u>	Hydric Soils Present? Yes/ No <u>No</u>	Is this Sampling Point Within a Wetland? Yes/ No <u>No</u>
--	--	---	--

Remarks: Cow pasture - site trampled

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Hibler Road</u> Applicant/Owner: <u>QDP, LLC</u> Investigator: <u>BE, AS, PO</u>	Date: <u>3/2/2006</u> Co./City: <u>Loudoun</u> State: <u>VA</u>
Do Normal Circumstances exist on the site? YES/NO Is the site significantly disturbed (Atypical Situation) No Is the area a potential Problem Area? Yes (If needed, explain on reverse) No	Community ID: <u>Upland</u> Transect ID: _____ Plot ID: <u>DP-M1</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
<i>Ambrosia trifida</i>					
1 RAGWEED, GREAT	Herb	FAC	9		
2			10		
3			11		
4			12		
5			13		
6			14		
7			15		
8			16		

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC): 100.00%
FAC_Neutral: 0.00%

Remarks:

HYDROLOGY

<p>_____ Recorded Data (Describe in Remarks): _____ Stream, Lake, or Tide Gauge _____ Aerial Photographs _____ Other (Explain in Remarks)</p> <p><u> X </u> No Recorded Data Available</p>	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p>_____ Inundated _____ Saturated in Upper 12 inches _____ Water Marks _____ Drift Lines _____ Sediment Deposits _____ Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required)</p> <p>_____ Oxidized Root Channels in upper 12 inches _____ Water-Stained Leaf Litter _____ Local Soil Survey Data <u> X </u> FAC-Neutral Test _____ Other (Explain in Remarks)</p>
<p>Field Observations:</p> <p>Depth of Surface Water: _____ (in.) Depth to Standing Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)</p>	

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hibler Road

Date: 3/2/2006

Plot ID: DP-M1

SOILS

Map Symbol	<u>78A</u>	Drainage Class: <u>mod well - smw</u>
Map Unit Name		
(Series and Phase) :	<u>Dulles Silt Loam</u>	Field Observations Yes/No
Taxonomy (Subgroup) :	<u>Aquultic Hapludalfs</u>	Confirmed Map Type? <u>No</u>

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color/ Abund./ Contrast/ Size	Texture, Concretions Structures, etc..
0-16	B	5YR3/3	///	Silt loam

Hydric Soil Indicators:

<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chrome Colors	<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)
---	--

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes/ No <div style="text-align: center;"><u>Yes</u></div>	Wetland Hydrology Present? Yes/ No <div style="text-align: center;"><u>No</u></div>	Hydric Soils Present? Yes/ No <div style="text-align: center;"><u>No</u></div>	Is this Sampling Point Within a Wetland? Yes/ No <div style="text-align: center;"><u>No</u></div>
---	---	--	---

Remarks: Cow pasture - site trampled

Appendix E
Photographs



Date: March 2, 2006

Direction: Southwest

Photo #1: Showing Stream A flowing over farm road.



Date: March 2, 2006

Direction: West

Photo #2: System B, showing POW labeled BP1 to BP17 and PEM labeled BA1 to BA22.



Date: March 2, 2006

Direction: Southeast

Photo #3: System E, labeled E3 to E18, showing linear PEM.



Date: March 2, 2006

Direction: Southeast

Photo #4: System F, labeled F1 to F14, showing linear flow through the wetland; a highly disturbed system.



Date: March 2, 2006

Direction: North

Photo #5: System G, labeled G1 to G19, showing narrow flow before reaching System A.



Date: March 2, 2006

Direction: west

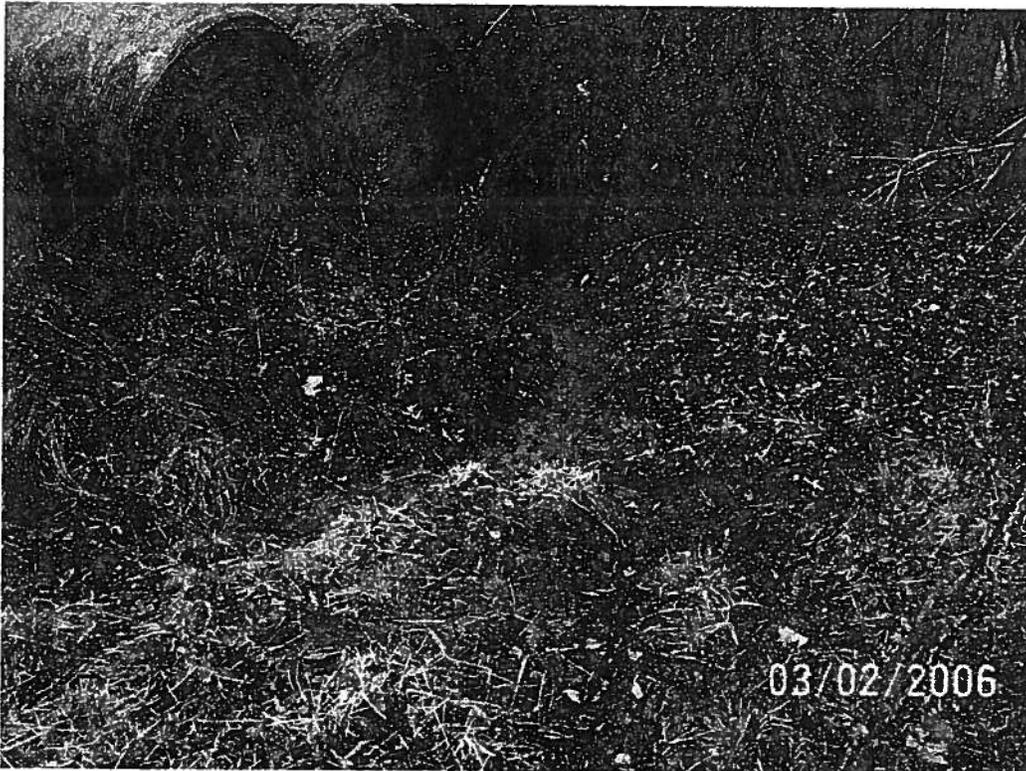
Photo #6: Highly disturbed non-jurisdictional ditch east of System H.



Date: March 2, 2006

Direction: West

Photo #7: Showing blocked overflow pipe from the POW, labeled J1 to J17, into the headwater region of system H. Hydrology for System H originates at a seep along the toe of the pond's embankment.



Date: March 2, 2006

Direction: Southwest

Photo #8: System L, labeled L1 to L11, showing weak flow and a weakly defined channel.



Date: March 2, 2006

Direction: North

Photo #9: No defined channel and no flow in topographic valley along the southwestern portion of the property.



Date: March 2, 2006

Direction: South

Photo #10: No wetlands or streams in the vicinity of DP-M1.

Appendix F

Summary of Requested Information by
USACE for JD Process

INFORMATION FOR JURISDICTIONAL DETERMINATION

Property Name: Hibler Road Project

Location: 39°11'32"N latitude, 77°29'14"W longitude

USGS Quadrangle: Poolesville

HUC Code 02070008 (Middle Potomac-Catoctin)

Tributary: Potomac River

Agent:

Bowman Consulting Group, Ltd.
14020 Thunderbolt Place, Suite 300
Chantilly, Virginia 20151
(703) 464-1000

Attn: Ben Eib

Applicant:

QDP, LLC
3043 Jeannie Anna Court
Oak Hill, VA 20171

Attn: Ms. Barbara Clougherty

Inventory of jurisdictional areas on the property:

Classification	Length (LF)	Area (SF)	Area (Ac)
Perennial Stream (R3)	2,213	N/A	N/A
Intermittent Stream (R4)	1,593	N/A	N/A
Palustrine Emergent Wetlands (PEM)	N/A	18,405	0.42
Palustrine Open Water (POW)	N/A	54,258	1.25
Total Wetlands and Streams	3,806	72,663	1.67