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**Sent Via Email Only**

November 6, 2025

Erin McMachen  
**Stonefield Engineering**  
555 S. Old Woodward  
Suite 12L  
Birmingham, MI 48009

*RE: Wetland Delineation and Jurisdictional Assessment with GPS Survey  
9731 Chilson Commons Circle, Pinckney  
Parcel IDs 15-22-400-023 & -402-900 (partial)  
Hamburg Township, Livingston County, Michigan  
ASTI File No. A25-1834.00*

Erin McMachen:

On October 24, 2025, ASTI Environmental (ASTI) conducted a site investigation to delineate wetland boundaries on approximately 1.37 acres of land referenced above and located in Hamburg Township, Livingston County, Michigan (Project Area). No wetlands were found within the Project Area (Figure 1 – *Wetland Map*). Data Points, as depicted on Figure 1, were located using a professional grade, hand-held Global Positioning System unit (GPS).

#### **SUPPORTING DATA AND MAPPING**

The USDA Web Soil Survey (WSS), the National Wetland Inventory Map (NWI), EGLE Wetlands Map Viewer web site, and digital aerial photographs were all used to support the wetland delineation and subsequent regulatory status determination. The EGLE map viewer indicated the presence of wetland in the southwestern portion of the Project Area.

In addition, the WSS indicated the Project Area is composed of the soils Boyer-Oshtemo loamy sands (0-2%, 6-12%, and 12-18% slopes) and Gilford sandy loam (0-2% slopes). The soil complex of Gilford sandy loam is listed as hydric by the WSS.

## **FINDINGS**

ASTI investigated the Project Area for the presence of any lakes, ponds, wetlands, and watercourses. This work is based on *MCL 324 Part 301 (Inland Lakes and Streams)* and *Part 303 (Wetland Protection)*. In some circumstances the US Army Corps of Engineers (USACE) may also have jurisdiction of wetlands or watercourses; this is not the case with your site.

The delineation protocol used by ASTI for this delineation is based on the US Army Corps of Engineers' *Wetland Delineation Manual*, 1987, the *Regional Supplement to the Corps of Engineer Wetland Delineation Manual: Midwest Region*, and related guidance/documents, as appropriate. Wetland vegetation, hydrology, and soils were used to locate the wetland boundaries.

No wetlands were found within the Project Area. Data recorded for each of the upland data points designated as UP1 through UP3 are summarized below and the GPS-surveyed locations are shown on Figure 1.

### UP1 and UP3

These data points were taken within a depression located in the center of the property, which includes a drainage feature lined with riprap. It is assumed that the nearby developments direct stormwater into this area via the culvert located in the southeastern portion of the Project Area. Vegetation is dominated by black cherry (*Prunus serotina*), black oak (*Quercus velutina*), red maple (*Acer rubrum*), Kentucky bluegrass (*Poa pratensis*), common reed (*Phragmites australis*), tall goldenrod (*Solidago altissima*), glossy buckthorn (*Frangula alnus*), tussock sedge (*Carex stricta*), wild strawberry (*Fragaria virginiana*), and yellow sweet clover (*Melilotus officinalis*). Soils were sandy and loamy, and no evidence of wetland hydrology was observed. It is ASTI's opinion that this area is upland.

### UP2

This area is located on a slope in the northern portion of the Project Area. Vegetation is dominated by black oak, black cherry, cottonwood (*Populus deltoides*), red maple, white willow (*Salix alba*), Kentucky bluegrass, crab grass (*Digitaria ischaemum*), tall goldenrod, and wild strawberry. Soils were sandy, and no evidence of wetland hydrology was observed. It is ASTI's opinion that this area is upland.

## **SUMMARY**

Based upon the data, criteria, and evidence noted above, it is ASTI's professional opinion that the Project Area contains no wetlands, lakes, or streams. However, please note that EGLE has the final authority on the extent of regulated wetlands, lakes, and streams in the State of Michigan.



Attached are Figure 1 and the completed US Army Corps of Engineers (USACE) Wetland Data Forms. Please note that the data sheet numbers match the data collection sampling points shown on Figure 1.

Thank you for the opportunity to assist you with this project. Please let us know if we can be of any further assistance in moving your project forward.  
Sincerely yours,

ASTI ENVIRONMENTAL

A handwritten signature in blue ink that reads 'Shane P. Jennings'.

Shane Jennings  
Project Manager  
Wetland Professional in Training

A handwritten signature in blue ink that reads 'Dianne C. Martin'.

Dianne C. Martin  
Director of Ecological Services  
Professional Wetland Scientist #1313

Attachments: Figure 1 – *Wetland Delineation Map*  
Completed USACE Wetland Data Forms



**Legend**

- Data Point
- ✕ Culvert
- Approximate Project Area

\* It is ASTI's opinion that wetlands do not occur within the project area.  
 Wetland Delineation Completed: October 24, 2025

Parcel IDs 15-22-400-023 &  
 -402-900 (Partial)

9731 Chilson Commons Circle,  
 Hamburg Township, Livingston Co., MI



Client: Stonefield Engineering  
 Created by: RMH, October 29, 2025, ASTI Project A 25-1834.00  
 Imagery: Michigan Best Available

Figure 1 - Wetland Map

Project/Site: 9731 Chilson Commons Circle, Pinckney City/County: Hamburg Twp, Livingston Co Sampling Date: 10/24/2025  
 Applicant/Owner: Stonefield Engineering State: MI Sampling Point: UP1  
 Investigator(s): ASTI - S.Jennings Section, Township, Range: Sec. 22, T01N, R05E  
 Landform (hillside, terrace, etc.): Slope Local relief (concave, convex, none): Concave  
 Slope (%): 0-1 Lat: 42.462971 Long: -83.831357 Datum: NAD 83  
 Soil Map Unit Name: Gilford sandy loam NWI classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No      (If no, explain in Remarks.)  
 Are Vegetation     , Soil     , or Hydrology      significantly disturbed? Are "Normal Circumstances" present? Yes X No       
 Are Vegetation     , Soil     , or Hydrology      naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <u>    </u> No <u>X</u> Hydric Soil Present? Yes <u>    </u> No <u>X</u> Wetland Hydrology Present? Yes <u>    </u> No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>    </u> No <u>X</u>
Remarks: Upland located in the southeastern portion of the property.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum	(Plot size: <u>30ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Prunus serotina</u>		<u>20</u>	Yes	FACU	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B)																
2. <u>Quercus velutina</u>		<u>10</u>	Yes	UPL																	
3. <u>Acer rubrum</u>		<u>10</u>	Yes	FAC																	
4. <u>Malus pumila</u>		<u>5</u>	No	UPL																	
5. <u>    </u>																					
		<u>45</u>	=Total Cover		<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">Total % Cover of:</td> <td style="text-align: center;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>25</u></td> <td>x 2 = <u>50</u></td> </tr> <tr> <td>FAC species <u>40</u></td> <td>x 3 = <u>120</u></td> </tr> <tr> <td>FACU species <u>40</u></td> <td>x 4 = <u>160</u></td> </tr> <tr> <td>UPL species <u>15</u></td> <td>x 5 = <u>75</u></td> </tr> <tr> <td>Column Totals: <u>120</u> (A)</td> <td><u>405</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.38</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>25</u>	x 2 = <u>50</u>	FAC species <u>40</u>	x 3 = <u>120</u>	FACU species <u>40</u>	x 4 = <u>160</u>	UPL species <u>15</u>	x 5 = <u>75</u>	Column Totals: <u>120</u> (A)	<u>405</u> (B)	Prevalence Index = B/A = <u>3.38</u>	
Total % Cover of:	Multiply by:																				
OBL species <u>0</u>	x 1 = <u>0</u>																				
FACW species <u>25</u>	x 2 = <u>50</u>																				
FAC species <u>40</u>	x 3 = <u>120</u>																				
FACU species <u>40</u>	x 4 = <u>160</u>																				
UPL species <u>15</u>	x 5 = <u>75</u>																				
Column Totals: <u>120</u> (A)	<u>405</u> (B)																				
Prevalence Index = B/A = <u>3.38</u>																					
Sapling/Shrub Stratum (Plot size: <u>15ft</u> )																					
1. <u>None</u>																					
2. <u>    </u>																					
3. <u>    </u>																					
4. <u>    </u>																					
5. <u>    </u>																					
			=Total Cover																		
Herb Stratum (Plot size: <u>5ft</u> )					<b>Hydrophytic Vegetation Indicators:</b> <u>    </u> 1 - Rapid Test for Hydrophytic Vegetation <u>    </u> 2 - Dominance Test is >50% <u>    </u> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <u>    </u> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <u>    </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u>Poa pratensis</u>		<u>30</u>	Yes	FAC																	
2. <u>Phragmites australis</u>		<u>20</u>	Yes	FACW																	
3. <u>Solidago altissima</u>		<u>15</u>	Yes	FACU																	
4. <u>Rubus strigosus</u>		<u>5</u>	No	FACU																	
5. <u>Frangula alnus</u>		<u>5</u>	No	FACW																	
6. <u>    </u>																					
7. <u>    </u>																					
8. <u>    </u>																					
9. <u>    </u>																					
10. <u>    </u>																					
		<u>75</u>	=Total Cover																		
Woody Vine Stratum (Plot size: <u>30ft</u> )					<b>Hydrophytic Vegetation Present?</b> Yes <u>    </u> No <u>X</u>																
1. <u>None</u>																					
2. <u>    </u>																					
			=Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.)																					

**SOIL**

Sampling Point: UP1

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10YR 3/4	100					Sandy	
6-10	10YR 6/4	100					Sandy	
10-18	10YR 3/2	95	5YR 3/4	5	C	PL/M	Sandy	Prominent redox concentrations

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

<b>Hydric Soil Indicators:</b> <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)		<input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Dark Surface (S7) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8)		<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b> <input type="checkbox"/> Coast Prairie Redox (A16) <input type="checkbox"/> Iron-Manganese Masses (F12) <input type="checkbox"/> Red Parent Material (F21) <input type="checkbox"/> Very Shallow Dark Surface (F22) <input type="checkbox"/> Other (Explain in Remarks)	
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<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
---	---

Remarks:

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?        Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: 9731 Chilson Commons Circle, Pinckney City/County: Hamburg Twp, Livingston Co Sampling Date: 10/24/2025  
 Applicant/Owner: Stonefield Engineering State: MI Sampling Point: UP2  
 Investigator(s): ASTI - S.Jennings Section, Township, Range: Sec. 22, T01N, R05E  
 Landform (hillside, terrace, etc.): Slope Local relief (concave, convex, none): Slope  
 Slope (%): 5-6 Lat: 42.463128 Long: -83.83182 Datum: NAD 83  
 Soil Map Unit Name: Boyer-Oshemo loamy sands NWI classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No      (If no, explain in Remarks.)  
 Are Vegetation     , Soil     , or Hydrology      significantly disturbed? Are "Normal Circumstances" present? Yes X No       
 Are Vegetation     , Soil     , or Hydrology      naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <u>    </u> No <u>X</u> Hydric Soil Present? Yes <u>    </u> No <u>X</u> Wetland Hydrology Present? Yes <u>    </u> No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>    </u> No <u>X</u>
Remarks: Upland located in the northwestern portion of the property.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: <u>30ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Quercus velutina</u>	<u>20</u>	Yes	UPL	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>9</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>44.4%</u> (A/B)																
2. <u>Prunus serotina</u>	<u>10</u>	Yes	FACU																	
3. <u>Populus deltoides</u>	<u>10</u>	Yes	FAC																	
4. <u>Acer rubrum</u>	<u>10</u>	Yes	FAC																	
5. <u>Salix alba</u>	<u>10</u>	Yes	FACW																	
	<u>60</u>	=Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15ft</u> )																				
1. <u>None</u>				<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">Total % Cover of:</td> <td style="text-align: center;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>10</u></td> <td>x 2 = <u>20</u></td> </tr> <tr> <td>FAC species <u>40</u></td> <td>x 3 = <u>120</u></td> </tr> <tr> <td>FACU species <u>40</u></td> <td>x 4 = <u>160</u></td> </tr> <tr> <td>UPL species <u>20</u></td> <td>x 5 = <u>100</u></td> </tr> <tr> <td>Column Totals: <u>110</u> (A)</td> <td><u>400</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.64</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>10</u>	x 2 = <u>20</u>	FAC species <u>40</u>	x 3 = <u>120</u>	FACU species <u>40</u>	x 4 = <u>160</u>	UPL species <u>20</u>	x 5 = <u>100</u>	Column Totals: <u>110</u> (A)	<u>400</u> (B)	Prevalence Index = B/A = <u>3.64</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>10</u>	x 2 = <u>20</u>																			
FAC species <u>40</u>	x 3 = <u>120</u>																			
FACU species <u>40</u>	x 4 = <u>160</u>																			
UPL species <u>20</u>	x 5 = <u>100</u>																			
Column Totals: <u>110</u> (A)	<u>400</u> (B)																			
Prevalence Index = B/A = <u>3.64</u>																				
2. <u>    </u>																				
3. <u>    </u>																				
4. <u>    </u>																				
5. <u>    </u>																				
		=Total Cover																		
Herb Stratum (Plot size: <u>5ft</u> )																				
1. <u>Poa pratensis</u>	<u>20</u>	Yes	FAC	<b>Hydrophytic Vegetation Indicators:</b> <u>    </u> 1 - Rapid Test for Hydrophytic Vegetation <u>    </u> 2 - Dominance Test is >50% <u>    </u> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <u>    </u> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <u>    </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Digitaria ischaemum</u>	<u>10</u>	Yes	FACU																	
3. <u>Solidago altissima</u>	<u>10</u>	Yes	FACU																	
4. <u>Fragaria virginiana</u>	<u>10</u>	Yes	FACU																	
5. <u>    </u>																				
6. <u>    </u>																				
7. <u>    </u>																				
8. <u>    </u>																				
9. <u>    </u>																				
10. <u>    </u>																				
	<u>50</u>	=Total Cover																		
Woody Vine Stratum (Plot size: <u>30ft</u> )																				
1. <u>None</u>				<b>Hydrophytic Vegetation Present?</b> Yes <u>    </u> No <u>X</u>																
2. <u>    </u>																				
		=Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.)																				

**SOIL**

Sampling Point: UP2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	10YR 3/3	100					Sandy	
8-18	10YR 4/4	100					Sandy	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
---	---

Remarks:

**HYDROLOGY**

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Fauna (B13)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> True Aquatic Plants (B14)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Gauge or Well Data (D9)
	<input type="checkbox"/> Other (Explain in Remarks)

<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?        Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Project/Site: 9731 Chilson Commons Circle, Pinckney City/County: Hamburg Twp, Livingston Co Sampling Date: 10/24/2025  
 Applicant/Owner: Stonefield Engineering State: MI Sampling Point: UP3  
 Investigator(s): ASTI - S.Jennings Section, Township, Range: Sec. 22, T01N, R05E  
 Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave  
 Slope (%): 1-2 Lat: 42.462992 Long: -83.831757 Datum: NAD 83  
 Soil Map Unit Name: Gilford sandy loam NWI classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No      (If no, explain in Remarks.)  
 Are Vegetation     , Soil     , or Hydrology      significantly disturbed? Are "Normal Circumstances" present? Yes X No       
 Are Vegetation     , Soil     , or Hydrology      naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <u>    </u> No <u>X</u> Hydric Soil Present? Yes <u>    </u> No <u>X</u> Wetland Hydrology Present? Yes <u>    </u> No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>    </u> No <u>X</u>
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Remarks:  
 Upland located within drainage feature in the center of the property. This drainage feature consisted of riprap within a narrow depression.

**VEGETATION – Use scientific names of plants.**

Tree Stratum	(Plot size: <u>30ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>None</u>					<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B)																
2. <u>    </u>																					
3. <u>    </u>																					
4. <u>    </u>																					
5. <u>    </u>																					
=Total Cover																					
<b>Sapling/Shrub Stratum (Plot size: <u>15ft</u>)</b>																					
1. <u>None</u>					<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">Total % Cover of:</td> <td style="text-align: center;">Multiply by:</td> </tr> <tr> <td>OBL species <u>10</u></td> <td>x 1 = <u>10</u></td> </tr> <tr> <td>FACW species <u>30</u></td> <td>x 2 = <u>60</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>35</u></td> <td>x 4 = <u>140</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>75</u> (A)</td> <td><u>210</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>2.80</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>10</u>	x 1 = <u>10</u>	FACW species <u>30</u>	x 2 = <u>60</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>35</u>	x 4 = <u>140</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>75</u> (A)	<u>210</u> (B)	Prevalence Index = B/A = <u>2.80</u>	
Total % Cover of:	Multiply by:																				
OBL species <u>10</u>	x 1 = <u>10</u>																				
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Prevalence Index = B/A = <u>2.80</u>																					
2. <u>    </u>																					
3. <u>    </u>																					
4. <u>    </u>																					
5. <u>    </u>																					
=Total Cover																					
<b>Herb Stratum (Plot size: <u>5ft</u>)</b>																					
1. <u><i>Phragmites australis</i></u>		<u>15</u>	<u>Yes</u>	<u>FACW</u>	<b>Hydrophytic Vegetation Indicators:</b> <u>    </u> 1 - Rapid Test for Hydrophytic Vegetation <u>    </u> 2 - Dominance Test is >50% <u>    </u> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <u>    </u> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <u>    </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u><i>Frangula alnus</i></u>		<u>10</u>	<u>Yes</u>	<u>FACW</u>																	
3. <u><i>Solidago altissima</i></u>		<u>10</u>	<u>Yes</u>	<u>FACU</u>																	
4. <u><i>Fragaria virginiana</i></u>		<u>10</u>	<u>Yes</u>	<u>FACU</u>																	
5. <u><i>Melilotus officinalis</i></u>		<u>10</u>	<u>Yes</u>	<u>FACU</u>																	
6. <u><i>Carex stricta</i></u>		<u>10</u>	<u>Yes</u>	<u>OBL</u>																	
7. <u><i>Cornus amomum</i></u>		<u>5</u>	<u>No</u>	<u>FACW</u>																	
8. <u><i>Juniperus virginiana</i></u>		<u>5</u>	<u>No</u>	<u>FACU</u>																	
9. <u>    </u>																					
10. <u>    </u>																					
=Total Cover																					
<b>Woody Vine Stratum (Plot size: <u>30ft</u>)</b>																					
1. <u>None</u>					<b>Hydrophytic Vegetation Present?</b> Yes <u>    </u> No <u>X</u>																
2. <u>    </u>																					
=Total Cover																					
Remarks: (Include photo numbers here or on a separate sheet.)																					

**SOIL**

Sampling Point: UP3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-24	10YR 3/1	100					Loamy/Clayey	sandy loam

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Remarks:

**HYDROLOGY**

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Fauna (B13)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> True Aquatic Plants (B14)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
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<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?        Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: