JOINT APPLICATION FOR PENNSYLVANIA CHAPTER 105 WATER OBSTRUCTION AND ENCROACHMENT PERMIT AND U.S. ARMY CORPS OF ENGINEERS SECTION 404 PERMIT

PROJECT GRAVITY

Archbald Borough,
Lackawanna County, Pennsylvania

Submitted to:

Department of Environmental Protection
Northeast Regional Office
2 Public Square
Wilkes-Barre, PA 18071-1915

Prepared for:

Archbald 25 Developer, LLC
80 Broad Street, 18th Floor
New York, NY 10004

Prepared by:

ARM Group
Engineers and Scientists
1129 W Governor Road
Hershey, PA 17033
ARM Project 24012215

October 2025

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REQUIREMENTS

REQUIREMENT A

General Information Form &
Joint Permit Application

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
CENTER FOR ENVIRONMENTAL EXCELLENCE

GENERAL INFORMATION FORM – AUTHORIZATION APPLICATION

Before completing this General Information Form (GIF), read the step-by-step instructions provided in this application package. This form is used by the Department of Environmental Protection (DEP) to inform our programs regarding what other DEP permits or authorizations may be needed for the proposed project or activity. This version of the General Information Form (GIF) must be completed and returned with any program-specific application being submitted to the DEP.

Related ID#s (If Known)				DEP USE ONLY
Client ID#		**APS ID#**		Date Received & General Notes
Site ID#		**Auth ID#**		
Facility ID#				

CLIENT INFORMATION

DEP Client ID#	Client Type/Code	Dun & Bradstreet ID#
	LLC	

Legal Organization Name or Registered Fictitious Name	Employer ID# (EIN)	Is the EIN a SSN?
Archbald 25 Developer, LLC	33-1417736	☐ Yes ☐ No

State of Incorporation or Registration of Fictious Name

☐ Corporation ☑ LLC ☐ Partnership ☐ LLP ☐ LP
☐ Sole Proprietorship ☐ Association/Organization
☐ Estate/Trust ☐ Other

Individual Last Name	First Name	MI	Suffix

Additional Individual Last Name	First Name	MI	Suffix

Mailing Address Line 1	Mailing Address Line 2
80 Broad Street	18th Floor

Address Last Line – City	State	ZIP+4	Country
New York	NY	10004	USA

Client Contact Last Name	First Name	MI	Suffix
Kassin	Abie		

Client Contact Title	Phone	Ext	Cell Phone

Email Address	FAX
ak@westernhp.com	

SITE INFORMATION

DEP Site ID#	Site Name
	Project Gravity

EPA ID#	Estimated Number of Employees to be Present at Site

Description of Site
Data center

Tax Parcel ID(s): 073.03-010-002

County Name(s)	Municipality(ies)	City	Boro	Twp	State
Lackawanna	Archbald	☐	☒	☐	PA
		☐	☐	☐	
		☐	☐	☐	

☐	☐	☐	

Site Location Line 1
Pts S Dilly P Dilly G Ryd

Site Location Line 2

Site Location Last Line – City
Archbald

State PA **ZIP+4** 18403

Detailed Written Directions to Site
From Jessup, PA, starting on Church St, turn right on Grassy Island Ave. Turn left onto Hill St after one-quarter mile. Continue NW on Hill St for 0.8-miles and turn right to stay on Hill St. Turn right / northeast onto S. Main Steet and continue for 1.1 miles. Turn left on Kennedy Drive and head west for 1.1. miles. Turn right onto Eynon Jermyn Rd and continue north for 1.7 miles. Site entrance is on left.

Site Contact Last Name **First Name** **MI** **Suffix**

Site Contact Title

Site Contact Firm

Mailing Address Line 1

Mailing Address Line 2

Mailing Address Last Line – City

State **ZIP+4**

Phone **Ext** **FAX**

Email Address

NAICS Codes (Two- & Three-Digit Codes – List All That Apply)
518

6-Digit Code (Optional)
518210

Client to Site Relationship

FACILITY INFORMATION

Modification of Existing Facility	**Yes**	**No**
1. Will this project modify an existing facility, system, or activity?	☐	☒
2. Will this project involve an addition to an existing facility, system, or activity?	☐	☒

If "Yes", check all relevant facility types and provide DEP facility identification numbers below.

	Facility Type	DEP Fac ID#		Facility Type	DEP Fac ID#
☐	Air Emission Plant		☐	Industrial Minerals Mining Operation	
☐	Beneficial Use (water)		☐	Laboratory Location	
☐	Blasting Operation		☐	Land Recycling Cleanup Location	
☐	Captive Hazardous Waste Operation		☐	Mine Drainage Treatment / Land Recycling Project Location	
☐	Coal Ash Beneficial Use Operation		☐	Municipal Waste Operation	
☐	Coal Mining Operation		☐	Oil & Gas Encroachment Location	
☐	Coal Pillar Location		☐	Oil & Gas Location	
☐	Commercial Hazardous Waste Operation		☐	Oil & Gas Water Poll Control Facility	
☐	Dam Location		☐	Public Water Supply System	
☐	Deep Mine Safety Operation -Anthracite		☐	Radiation Facility	
☐	Deep Mine Safety Operation -Bituminous		☐	Residual Waste Operation	
☐	Deep Mine Safety Operation -Ind Minerals		☐	Storage Tank Location	
☐	Encroachment Location (water, wetland)		☐	Water Pollution Control Facility	
☐	Erosion & Sediment Control Facility		☐	Water Resource	
☐	Explosive Storage Location		☐	Other:	

Latitude/Longitude Point of Origin	Latitude			Longitude		
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
	41	31	16	-75	33	29

Horizontal Accuracy Measure	Feet		--or--	Meters
Horizontal Reference Datum Code	☐	North American Datum of 1927		
	☒	North American Datum of 1983		
	☐	World Geodetic System of 1984		
Horizontal Collection Method Code				
Reference Point Code				
Altitude	Feet		--or--	Meters
Altitude Datum Name	☐	The National Geodetic Vertical Datum of 1929		
	☐	The North American Vertical Datum of 1988 (NAVD88)		
Altitude (Vertical) Location Datum Collection Method Code				
Geometric Type Code				
Data Collection Date				
Source Map Scale Number		Inch(es)	=	Feet
--or--		Centimeter(s)	=	Meters

PROJECT INFORMATION

Project Name

Project Description

The proposed data center project area consists of constructing 7 buildings, associated parking area, a substation and two access roads emanating from SR 6006 and SR1023.

Project Consultant Last Name	First Name	MI	Suffix
Antolick	Tessa		

Project Consultant Title	Consulting Firm
Senior Engineer	ARM Group LLC

Mailing Address Line 1	Mailing Address Line 2
2548 Park Center Boulevard	

Address Last Line – City	State	ZIP+4
State College	PA	16801

Phone	Ext	FAX	Email Address
814-996-4420			tantolick@armgroup.net

Time Schedules	Project Milestone (Optional)
ASAP	Upon agency approval

1. Is the project located in or within a 0.5-**mile radius of an Environmental Justice community as defined by DEP?** ☐ Yes ☒ No

   To determine if the project is located in or within a 0.5-mile radius of an environmental justice community, please use the online PennEnviroScreen tool. To see specific EJ areas, select the appropriate year of your submittal from the themes box on the right.

2. Have you informed the surrounding community prior to submitting the application to the Department? ☒ Yes ☐ No

   Method of notification: Certified mailing

3. **Have you addressed community concerns that were identified?** ☐ Yes ☐ No ☒ N/A

   If no, please briefly describe the community concerns that have been expressed and not addressed.

4. **Is your project funded by state or federal grants?** ☐ Yes ☒ No

   Note: If "Yes", specify what aspect of the project is related to the grant and provide the grant source, contact person and grant expiration date.

   Aspect of Project Related to Grant

   Grant Source: _____

   Grant Contact Person: _____

   Grant Expiration Date: _____

5. **Is this application for an authorization on Appendix A of the Land Use Policy? (For referenced list, see Appendix A of the Land Use Policy attached to GIF instructions)** ☐ Yes ☒ No

   Note: If "No" to Question 5, the application is not subject to the Land Use Policy.

   If "Yes" to Question 5, the application is subject to this policy and the Applicant should answer the additional questions in the **Land Use Information** section.

LAND USE INFORMATION

Note: Applicants should submit copies of local land use approvals or other evidence of compliance with local comprehensive plans and zoning ordinances.

1. **Is there an adopted county or multi-county comprehensive plan?** ☐ Yes ☐ No
2. **Is there a county stormwater management plan?** ☐ Yes ☐ No
3. **Is there an adopted municipal or multi-municipal comprehensive plan?** ☐ Yes ☐ No
4. **Is there an adopted county-wide zoning ordinance, municipal zoning ordinance or joint municipal zoning ordinance?** ☐ Yes ☐ No

   Note: If the Applicant answers "No" to either Questions 1, 3 or 4, the provisions of the PA MPC are not applicable and the Applicant does not need to respond to questions 5 and 6 below.

   If the Applicant answers "Yes" to questions 1, 3 and 4, the Applicant should respond to questions 5 and 6 below.

5. **Does the proposed project meet the provisions of the zoning ordinance or does the proposed project have zoning approval?** If zoning approval has been received, attach documentation. ☐ Yes ☐ No
6. **Have you attached Municipal and County Land Use Letters for the project?** ☐ Yes ☐ No

COORDINATION INFORMATION

Note: The PA Historical and Museum Commission must be notified of proposed projects in accordance with DEP Technical Guidance Document 012-0700-001 at PHMC's online portal, PA-SHARE.

If the activity will be a mining project (i.e., mining of coal or industrial minerals, coal refuse disposal and/or the operation of a coal or industrial minerals preparation/processing facility), respond to questions 1.0 through 2.5 below.

If the activity will not be a mining project, skip questions 1.0 through 2.5 and begin with question 3.0.

1.0	**Is this a coal mining project?** If "Yes", respond to 1.1-1.6. If "No", skip to Question 2.0.	☐	Yes	☒	No
1.1	**Will this coal mining project involve coal preparation/ processing activities in which the total amount of coal prepared/processed will be equal to or greater than 200 tons/day?**	☐	Yes	☐	No
1.2	**Will this coal mining project involve coal preparation/ processing activities in which the total amount of coal prepared/processed will be greater than 50,000 tons/year?**	☐	Yes	☐	No
1.3	**Will this coal mining project involve coal preparation/ processing activities in which thermal coal dryers or pneumatic coal cleaners will be used?**	☐	Yes	☐	No
1.4	**For this coal mining project, will sewage treatment facilities be constructed and treated waste water discharged to surface waters?**	☐	Yes	☐	No
1.5	**Will this coal mining project involve the construction of a permanent impoundment meeting one or more of the following criteria: (1) a contributory drainage area exceeding 100 acres; (2) a depth of water measured by the upstream toe of the dam at maximum storage elevation exceeding 15 feet; (3) an impounding capacity at maximum storage elevation exceeding 50 acre-feet?**	☐	Yes	☐	No
1.6	**Will this coal mining project involve underground coal mining to be conducted within 500 feet of an oil or gas well?**	☐	Yes	☐	No
2.0	**Is this a non-coal (industrial minerals) mining project?** If "Yes", respond to 2.1-2.6. If "No", skip to Question 3.0.	☐	Yes	☒	No
2.1	**Will this non-coal (industrial minerals) mining project involve the crushing and screening of non-coal minerals other than sand and gravel?**	☐	Yes	☐	No
2.2	**Will this non-coal (industrial minerals) mining project involve the crushing and/or screening of sand and gravel with the exception of wet sand and gravel operations (screening only) and dry sand and gravel operations with a capacity of less than 150 tons/hour of unconsolidated materials?**	☐	Yes	☐	No
2.3	**Will this non-coal (industrial minerals) mining project involve the construction, operation and/or modification of a portable non-metallic (i.e., non-coal) minerals processing plant under the authority of the General Permit for Portable Non-metallic Mineral Processing Plants (i.e., BAQ-PGPA/GP-3)?**	☐	Yes	☐	No
2.4	**For this non-coal (industrial minerals) mining project, will sewage treatment facilities be constructed and treated waste water discharged to surface waters?**	☐	Yes	☐	No

2.5	**Will this non-coal (industrial minerals) mining project involve the construction of a permanent impoundment meeting one or more of the following criteria: (1) a contributory drainage area exceeding 100 acres; (2) a depth of water measured by the upstream toe of the dam at maximum storage elevation exceeding 15 feet; (3) an impounding capacity at maximum storage elevation exceeding 50 acre-feet?**	☐ Yes	☐ No
3.0	**Will your project, activity, or authorization have anything to do with a well related to oil or gas production, have construction within 200 feet of, affect an oil or gas well, involve the waste from such a well, or string power lines above an oil or gas well?** If "Yes", respond to 3.1-3.3. If "No", skip to Question 4.0.	☐ Yes	☒ No
3.1	**Does the oil- or gas-related project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a watercourse, floodway or body of water (including wetlands)?**	☐ Yes	☐ No
3.2	**Will the oil- or gas-related project involve discharge of industrial wastewater or stormwater to a dry swale, surface water, ground water or an existing sanitary sewer system or storm water system?** If "Yes", discuss in *Project Description*.	☐ Yes	☐ No
3.3	**Will the oil- or gas-related project involve the construction and operation of industrial waste treatment facilities?**	☐ Yes	☐ No
4.0	**Will the project involve a construction activity that results in earth disturbance?** If "Yes", specify the total disturbed acreage.	☒ Yes	☐ No
4.0.1	**Total Disturbed Acreage**		
4.0.2	**Will the project discharge or drain to a special protection water (EV or HQ) or an EV wetland?**	☒ Yes	☐ No
4.0.3	**Will the project involve a construction activity that results in earth disturbance in the area of the earth disturbance that are contaminated at levels exceeding residential or non-residential medium-specific concentrations (MSCs) in 25 Pa. Code Chapter 250 at residential or non-residential construction sites, respectively?**	☐ Yes	☒ No
5.0	**Does the project involve any of the following: water obstruction and/or encroachment, wetland impacts, or floodplain project by the Commonwealth/political subdivision or public utility?** If "Yes", respond to 5.1-5.7. If "No", skip to Question 6.0.	☒ Yes	☐ No
5.1	**Water Obstruction and Encroachment Projects – Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a watercourse, floodway or body of water?**	☒ Yes	☐ No
5.2	**Wetland Impacts – Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a wetland?**	☒ Yes	☐ No

5.3	**Floodplain Projects by the Commonwealth, a Political Subdivision of the Commonwealth or a Public Utility – Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a floodplain?**	☐	Yes	☒	No
5.4	**Is your project an interstate transmission natural gas pipeline?**	☐	Yes	☒	No
5.5	**Does your project consist of linear construction activities which result in earth disturbance in two or more DEP regions AND three or more counties?**	☐	Yes	☒	No
5.6	**Does your project utilize Floodplain Restoration as a best management practice for Post Construction Stormwater Management?**	☐	Yes	☒	No
5.7	**Does your project utilize Class V Gravity / Injection Wells as a best management practice for Post Construction Stormwater Management?**	☐	Yes	☒	No
6.0	**Will the project involve discharge of construction related stormwater to a dry swale, surface water, ground water or separate storm water system?**	☒	Yes	☐	No
6.1	**Will the project involve discharge of industrial waste stormwater or wastewater from an industrial activity or sewage to a dry swale, surface water, ground water or an existing sanitary sewer system or separate storm water system?**	☐	Yes	☒	No
7.0	**Will the project involve the construction and operation of industrial waste treatment facilities?**	☐	Yes	☒	No
8.0	**Will the project involve construction of sewage treatment facilities, sanitary sewers, or sewage pumping stations?** If "Yes", indicate estimated proposed flow (gal/day). Also, discuss the sanitary sewer pipe sizes and the number of pumping stations/treatment facilities/name of downstream sewage facilities in the *Project Description*, where applicable. **8.0.1 Estimated Proposed Flow (gal/day)**	☐	Yes	☑	No
9.0	**Will the project involve the subdivision of land, or the generation of 800 gpd or more of sewage on an existing parcel of land or the generation of an additional 400 gpd of sewage on an already-developed parcel, or the generation of 800 gpd or more of industrial wastewater that would be discharged to an existing sanitary sewer system?**	☐	Yes	☑	No
	9.0.1 Was Act 537 sewage facilities planning submitted and approved by DEP? If "Yes" attach the approval letter. Approval required prior to 105/NPDES approval.	☐	Yes	☐	No
10.0	**Is this project for the beneficial use of biosolids for land application within Pennsylvania?** If "Yes" indicate how much (i.e. gallons or dry tons per year). **10.0.1 Gallons Per Year (residential septage)** **10.0.2 Dry Tons Per Year (biosolids)**	☐	Yes	☑	No

11.0	**Does the project involve construction, modification or removal of a dam?** If "Yes", identify the dam.	☐ Yes	☑ No
	11.0.1 Dam Name		
12.0	**Will the project interfere with the flow from, or otherwise impact, a dam?** If "Yes", identify the dam.	☐ Yes	☑ No
	12.0.1 Dam Name		
13.0	**Will the project involve operations (excluding during the construction period) that produce air emissions (i.e., NOX, VOC, etc.)?**	☒ Yes	☐ No
	13.0.1 If "Yes", is the operation subject to the agricultural exemption in 35 P.S. § 4004.1?	☐ Yes	☒ No
	13.0.2 If the answer to 13.0.1 is "No", identify each type of emission followed by the estimated amount of that emission.		
	Enter all types & amounts of emissions; separate each set with semicolons.		
14.0	**Does the project include the construction or modification of a drinking water supply to serve 15 or more connections or 25 or more people, at least 60 days out of the year?** If "Yes," check all proposed sub-facilities.	☐ Yes	☒ No
	14.0.1 Number of Persons Served		
	14.0.2 Number of Employee/Guests		
	14.0.3 Number of Connections		
	14.0.4 Sub-Fac: Distribution System	☐ Yes	☐ No
	14.0.5 Sub-Fac: Water Treatment Plant	☐ Yes	☐ No
	14.0.6 Sub-Fac: Source	☐ Yes	☐ No
	14.0.7 Sub-Fac: Pump Station	☐ Yes	☐ No
	14.0.8 Sub-Fac: Transmission Main	☐ Yes	☐ No
	14.0.9 Sub-Fac: Storage Facility	☐ Yes	☐ No
15.0	**Will your project include infiltration of storm water or waste water to ground water within one-half mile of a public water supply well, spring or infiltration gallery?**	☐ Yes	☒ No
16.0	**Is your project to be served by an existing public water supply?** If "Yes", indicate name of supplier and attach letter from supplier stating that it will serve the project.	☐ Yes	☒ No
	16.0.1 Supplier's Name		
	16.0.2 Letter of Approval from Supplier is Attached	☐ Yes	☐ No
17.0	**Will this project be served by on-lot drinking water wells?**	☐ Yes	☐ No
18.0	**Will this project involve a new or increased drinking water withdrawal from a river, stream, spring, lake, well or other water bod(ies)?** If "Yes," reference Safe Drinking Water Program.	☐ Yes	☒ No
	18.0.1 Source Name		

19.0	**Will the construction or operation of this project involve treatment, storage, reuse, or disposal of waste?** If "Yes," indicate what type (i.e., hazardous, municipal (including infectious & chemotherapeutic), residual) and the amount to be treated, stored, re-used or disposed. **19.0.1 Type & Amount**	☐	Yes	☒	No
20.0	**Will your project involve the removal of coal, minerals, contaminated media, or solid waste as part of any earth disturbance activities?**	☐	Yes	☒	No
21.0	**Does your project involve installation of a field constructed underground storage tank?** If "Yes," list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit. **21.0.1 Enter all substances & capacity of each; separate each set with semicolons.**	☐	Yes	☒	No
22.0	**Does your project involve installation of an aboveground storage tank greater than 21,000 gallons capacity at an existing facility?** If "Yes," list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit. **22.0.1 Enter all substances & capacity of each; separate each set with semicolons.**	☐	Yes	☒	No
23.0	**Does your project involve installation of a tank greater than 1,100 gallons which will contain a highly hazardous substance as defined in DEP's Regulated Substances List, 2570-BK-DEP2724?** If "Yes," list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit. **23.0.1 Enter all substances & capacity of each; separate each set with semicolons.**	☐	Yes	☒	No
24.0	**Does your project involve installation of a storage tank at a new facility with a total AST capacity greater than 21,000 gallons?** If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit. **24.0.1 Enter all substances & capacity of each; separate each set with semicolons.**	☐	Yes	☒	No
	NOTE: If the project includes the installation of a regulated storage tank system, including diesel emergency generator systems, the project may require the use of a Department Certified Tank Handler. For a full list of regulated storage tanks and substances, please go to www.dep.pa.gov search term storage tanks				
25.0	**Will the intended activity involve the use of a radiation source?**	☐	Yes	☒	No

CERTIFICATION

I certify that I have the authority to submit this application on behalf of the applicant named herein and that the information provided in this application is true and correct to the best of my knowledge and information.

For applicants supplying an EIN number: I am applying for a permit or authorization from the Pennsylvania Department of Environmental Protection (DEP). As part of this application, I will provide DEP with an accurate EIN number for the applicant entity. By filing this application with DEP, I hereby authorize DEP to confirm the accuracy of the EIN number provided with the Pennsylvania Department of Revenue. As applicant, I further consent to the Department of Revenue discussing the same with DEP prior to issuance of the Commonwealth permit or authorization.

Type or Print Name Harry Bram

Signed by: Harry Bram D73CD0CD3607466...	Mgr Member	9/18/2025
Signature	**Title**	**Date**

Joint Permit Application

A R M G r o u p L L C

3150-PM-BWEW0036A Rev. 3/2022

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
and
DEPARTMENT OF ARMY CORPS OF ENGINEERS
(Pittsburgh, Baltimore, Philadelphia and Districts)

JOINT APPLICATION FOR PENNSYLVANIA CHAPTER 105 WATER OBSTRUCTION AND ENCROACHMENT PERMIT AND U.S. ARMY CORPS OF ENGINEERS SECTION 404 PERMIT

Before completing this form, please read the step-by-step instructions and Section F Application Completeness Checklist provided with this Joint Permit package.

AGENCY USE ONLY

Application ID# (Assigned by DEP) _____ RECEIVED DATE _____ CHECK NO. _____

Program Application No. _____ REQUIRED APP. FEE _____ AMOUNT $_____

SECTION A. APPLICATION TYPE

STANDARD ☒ SMALL PROJECTS ☐

SECTION B. APPLICANT IDENTIFIER

Applicant Name: Archbald 25 Developer, LLC
Employer ID# (EIN): 33-1417736

Consulting Firm: ARM Group LLC
Employer ID# (EIN): 84-3909305

SECTION C. PROJECT LOCATION DATA AND STATUS

Name of stream and/or body of water and Chapter 93 designation.
UNT 1, UNT 2 (Designation: NA)

Corps District where project will occur.

☐ Pittsburgh (Ohio River Basin) ☒ Baltimore (Susquehanna River Basin) ☐ Philadelphia (Delaware River Basin)

Name of the U.S.G.S. 7 1/2 Minute Quadrangle Map where project is located: Carbondale, PA

Indicate location of project: Latitude 41.519469° ; Longitude -75.554106°

Project type, purpose and need: Project involves constructing a data center consisting of 7 buildings, associated parking area, a substation and two access roads emanating from State Route 6006 and State Route 1023. The project is being developed on a former mining site.

HAS ANY PORTION OF PROPOSED PROJECT BEEN AUTHORIZED? ☐ yes ☒ no _____ date authorized

If yes, attach description of those portions of the project that have been authorized and identify dates of authorization.

SECTION D. AQUATIC RESOURCE IMPACT TABLE

HAS ALL INFORMATION INCLUDED ON THE IMPACT TABLE BEEN PROVIDED? ☒ yes ☐ no

If NO, indicate the information not included and the reason. Also attach a completed AQUATIC RESOURCES IMPACT TABLE (3150-PM-BWEW0557) worksheet or equivalent.

- Project Information: _____
- Corps / 404: _____
- DEP / 105: _____

SECTION E. COMPLIANCE REVIEW

Place an "X" in either the YES or NO block for each section below to indicate if applicant (owner and/or operator) are currently in violation pertaining to each question.

Yes **No**

☐ ☒ Is the applicant (owner and / or operator) currently in violation of any permit, authorization or approval issued by the Department?

If YES – complete the necessary information for questions 1 - 3.

1. Permit Number: _____
2. Nature of the violation(s) (if any): _____

   _____
3. Status of violation(s) (i.e., schedule for compliance, etc.): _____

   _____

Yes **No**

☐ ☒ Is the applicant in violation of the, the Dam Safety and Encroachments Act, Chapter 105 Dam Safety and Waterway Management regulations or other laws administered by the Department, PA Fish and Boat Commission or a river basin commission such as the Susquehanna River Basin Commission (SRBC), the Delaware River Basin Commission (DRBC) or the Ohio River Valley Water Sanitation Commission (ORSANCO)?. This includes a violation of an adjudication and order, agreement, consent order or decree, whether or not the applicant's violation resulted in an order or civil penalty assessment.

If YES – complete the necessary information for questions 1 – 2.

Use additional sheets of paper, if required, and attach to application

1. Nature of the violation(s) (if any): _____
2. Status of violation(s) (i.e. schedule for compliance, etc.): _____

SECTION F. APPLICATION COMPLETENESS CHECKLIST

Applicant must place an entry - Y = Yes, N = No, N/A = Not Applicable - in each left side column space. See Section 105.13 for additional details. If you are applying under the Small Projects Application format, place an entry in only those comments prefixed by an asterisk (*).

REQUIREMENT	Applicant Entry	DEP Use Only
a. GIF and permit application properly signed, sealed and witnessed	*Y	
b. Application Fee & Worksheet enclosed (see Section G.)	*Y	
c. Copies and proof of receipt - Act 14 notification - Acts 67/68/127	*Y	
d. Cultural Resource Notice (Notice, return receipt and PHMC review letter, as appropriate)	*Y	
e. Pennsylvania Natural Diversity Inventory (signed PNDI Receipt showing Avoidance Measures or Potential Impacts and proof of delivery to the appropriate jurisdictional agency(ies) where further coordination is required, as appropriate)	*Y	
f. Plans (site plan including cross sections and profiles for Subsections 151, 191, 231, 261)	*Y	
g. Location map	Y	
h. Project description narrative including PNDI avoidance measures (if applicable) AND Aquatic Resource Impact Table	*Y *Y	
i. Color photographs with map showing location taken	*Y	
j. Environmental Assessment form	*Y	
k. Erosion and Sediment Control Plan and approval letter	Y	
l. Hydrologic and hydraulic analysis	N/A	
m. Stormwater Management Analysis with consistency letter	N/A	
n. Floodplain Management Analysis with consistency letter	N/A	
o. Risk Assessment	N/A	
p. Professional engineer’s seal and certification	Y	

SECTION G. DETERMINATION OF APPLICATION FEES (DEP FEES ONLY)

The fee required for a project authorized under this permit shall be consistent with 25 PA Code §105.13 (relating to regulated activities – information and fees). To determine the application fee, please complete the Chapter 105 Fee(s) Calculation Worksheet (3150-PM-BWEW0553). Please provide the completed worksheet and a check for the applicable fee(s) made payable to the "Commonwealth of Pennsylvania Clean Water Fund."

SECTION H. ADJOINING PROPERTY OWNERS

Please list the name and address of all property owners whose land adjoins the project property.

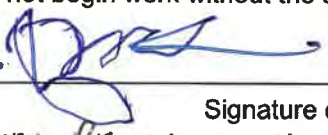
NAME	ADDRESS
Refer to attached sheet	

SECTION I. CERTIFICATION AND SIGNATURE (see Instructions for clarification of signature requirements)

I certify under penalty of law that the information provided in this permit registration is true and correct to the best of my knowledge and information and that I possess the authority to undertake the proposed action. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. (If any of the information and/or plans is found to be in error, falsified, and/or incomplete, this authorization/verification may be subject to modification, suspension, or revocation in accordance with applicable regulations.)

I certify that the project proposed in this application complies with and will be conducted in a manner that is consistent with the approved Coastal Zone Management program of the Commonwealth of Pennsylvania. (Only portions of Erie, Bucks, Philadelphia and Delaware Counties are in the Coastal Zone).

I grant permission to the agencies responsible for authorization of this work, or their duly authorized representative, to enter the project site for inspection purposes during working hours. I will abide by the conditions of the permit or license if issued and will not begin work without the appropriate authorization.



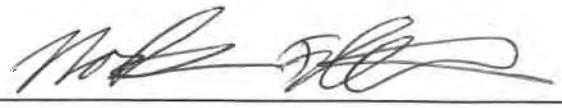
Signature of Applicant/Owner

9/18/2025

Date

Harry Bram - Mgr. Member

Typed / Printed Name & Title of Applicant/Owner



Signature of Witness

SEAL

Noah Fleeter - Associate

Typed / Printed Name & Title of Witness

REQUIREMENT A
Section H

Adjoining Property Owners

Archbald 25 Developer, LLC
Project Gravity
Joint Permit Application

1 BRIAN VENSON	INSTR.# 2016 14417	073.04-040-001.13	USE: RESIDENTIAL
2 FREDERICK & JUDY R. LIDLE	INSTR.# 2011 17985	073.04-040-001.12	USE: RESIDENTIAL
3 DANIEL & OLIVIA SOKOLOSKI	INSTR.# 2017 16756	073.04-040-001.11	USE: RESIDENTIAL
4 ANTHONY & KELLEY ROMA	INSTR.# 2015 11957	073.04-040-001.10	USE: RESIDENTIAL
5 ROBERT & DEBORAH BARDAR	INSTR.# 2012 19214	073.04-040-001.09	USE: RESIDENTIAL
6 MICHAEL C & HELENE TEEPLE	RB 687 PG 720	073.16-010-001.08	USE: RESIDENTIAL
7 NICHOLAS TERPAK	INSTR.#2010 22202	073.04-050-001.35	USE: RESIDENTIAL
8 KENNETH POWELL	RB 735 PG 796	073.04-050-001	USE: RESIDENTIAL
9 ROBERT & LAURA HARRINGTON	INSTR.#2010 09123	073.04-050-001.39	USE: RESIDENTIAL
10 NICHOLAS & TRICIA AUGUSTA	INSTR.#2011 09042	073.04-050-001.40	USE: RESIDENTIAL
11 TIMOTHY M. & AIMEE E. BACHAK	INSTR.#2009 13481	073.04-050-001.41	USE: RESIDENTIAL
12 GERALD M. & MARIE D. CHOPKO	INSTR.# 2008 10125	073.04-050-001.42	USE: RESIDENTIAL
13 MARK J. & DEBORAH A. CORNELL	INSTR.#2008 14860	073.04-050-001.43	USE: RESIDENTIAL
14 MICHAEL W. SOWDEN	INSTR.#2020 16314	073.04-010-002	USE: RESIDENTIAL
15 JAMES M. LEE	INSTR.# 2007 33522	073.04-010-006	USE: RESIDENTIAL
16 DAVID W. MATICHAK	INSTR.# 2011 18112	084.02-010-009	USE: RESIDENTIAL
17 DANIEL P. & IRENE BASALYGA	DB 710 PG 333	084.02-010-011	USE: RESIDENTIAL
18 CHRISTOPHER PETRUCCI	INSTR.# 2007 32385	084.02-010-012	USE: RESIDENTIAL

REQUIREMENT B

Application Fee Worksheet

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATERWAYS ENGINEERING AND WETLANDS

CHAPTER 105 FEE(S) CALCULATION WORKSHEET

Additional information can be found at 25 PA Code §105.13 (relating to regulated activities – information and fees), the General Permit Registration (3150-PM-BWEW0500), the Joint Permit Application (3150-PM-BWEW0036) and the Dam Permit Application (3140-PM-BWEW0001)

Federal, State, county or municipal agencies or municipal authorities: ☐ **EXEMPT from fees**

These entities are exempt from these fees. If the applicant falls into one of these categories, please check the box above and provide only the first page of this worksheet with the project application or registration.

ALL OTHERS:

1. Please place an "X" in the box next to all authorizations that apply to the project and complete the fee information below those authorization(s). Projects may require multiple authorizations and fees, further clarification and examples are included below and at the end of this document.
2. Total each authorization, Section, and Part. Part One is for Water Obstructions and Encroachment authorizations, Part Two is for Dam Safety authorizations.
3. Please provide this completed worksheet (page 1 and page 2 and/or page 3, as is appropriate to the project) and a check for the applicable fee(s) with the project application or registration. The check should be made payable to the "**Commonwealth of Pennsylvania Clean Water Fund**" OR "**_____ Conservation District Clean Water Fund**", whichever is the reviewing entity.

NOTES:

Per *25 PA Code §105.13(c)(2)(iii)* Disturbance review fees are calculated by individually adding all of the permanent and temporary impacts to waterways, floodways, floodplains and bodies of water including wetlands to the next highest tenth acre and multiplying the permanent and temporary impacts by the respective fees and then these amounts are added to the other applicable fees.

Entities proposing structures or activities to occupy a Submerged Lands of the Commonwealth must obtain a Submerged Lands License Agreement (SLLA) and pay the appropriate annual charge. The applicant will be contacted if this charge applies to the project.

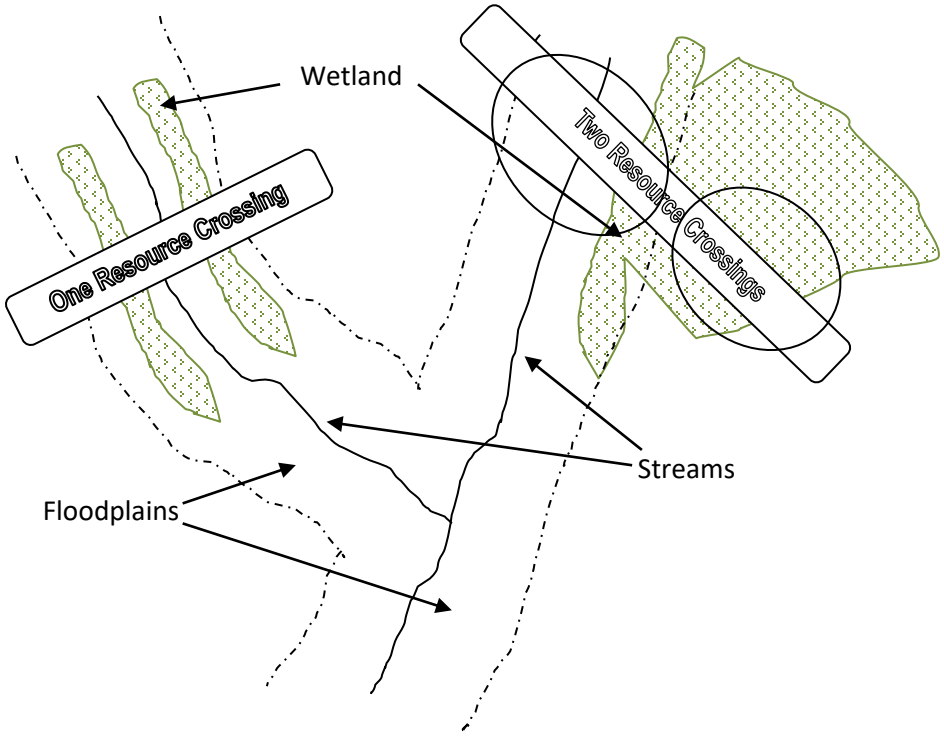
Floodway – The channel of the watercourse and portions of the adjoining floodplains which are reasonably required to carry and discharge the 100-year frequency flood. Unless otherwise specified, the boundary of the floodway is as indicated on maps and flood insurance studies provided by FEMA. In an area where no FEMA maps or studies have defined the boundary of the 100-year frequency floodway, it is assumed, absent evidence to the contrary, that the floodway extends from the stream to 50 feet from the top of the bank of the stream.

Wetland and Stream Clarification:

[1] In many instances, wetlands are located within the floodplain of a stream. These resources for the purposes of calculating disturbance fees are considered co-located or overlapping and the area of disturbance would only be used once.

[2] In the case of GP-5, GP-7 and GP-8 fees are charged per structure per resource crossing and the following also applies to the disturbance fees:

- A crossing of the stream and the floodplain with wetlands present within the floodplain is considered one resource crossing.
- When the crossing traverses a stream and the floodplain and a wetland that is located outside of the floodplain or a wetland that extends out beyond the floodplain, it is considered two resource crossings.



PART ONE: WATER OBSTRUCTIONS AND ENCROACHMENTS

SECTION A. APPLICATION FEES

☒ **WATER OBSTRUCTION AND ENCROACHMENT PERMIT** (Joint Permit Application)

Some activities or structures within a project may also qualify for an accumulation of General Permit fees, please mark the box above indicating an Individual Water Obstruction and Encroachment Permit AND the corresponding fee(s) in the General Permit section below those. Activities or structures not qualifying for a General Permit fee must include a disturbance fee.

☒ Administrative Filing Fee[1]			$ 1,750	+
☐ Temporary Disturbance ($400/0.1ac)	____ acres x $4,000 =		$ ____	+
☒ Permanent Disturbance ($800/0.1ac)	2.3 acres x $8,000 =		$ 18,400	= $ 20,150
		WO&E FEE subtotal (a)		$ 20,150

☐ **GENERAL PERMIT(S)** (select activity/structure(s) below, see page 4 for "#" explanation)

Some activities or structures within a project requiring an Individual Water Obstruction and Encroachment Permit may qualify for an accumulation of General Permit fees, please mark the corresponding fee(s) below but not the box above indicating a General Permit.

☐ GP-1 Fish Habitat Enhancement Structures			$ 50	= $ ____
☐ GP-2 Small Docks and Boat Launching Ramps	____ (#) x		$ 175	= $ ____
☐ GP-3 Bank Rehabilitation, Bank Protection and Gravel Bar Removal	____ (#) x		$ 250	= $ ____
☐ GP-4 Intake and Outfall Structures	____ (#) x		$ 200	= $ ____
☐ GP-5 Utility Line Stream Crossings[2]	____ (#) x ____ (#) x		$ 250	= $ ____
☐ GP-6 Agricultural Crossings and Ramps	____ (#) x		$ 50	= $ ____
☐ GP-7 Minor Road Crossings[2]	____ (#) x		$ 350	= $ ____
☐ GP-8 Temporary Road Crossings[2]	____ (#) x		$ 175	= $ ____
☐ GP-9 Agricultural Activities			$ 50	= $ ____
☐ GP-10 Abandoned Mine Reclamation			$ 500	= $ ____
☐ GP-11 Maintenance, Testing, Repair, Rehabilitation, or Replacement of Water Obstructions and Encroachments[1]			$ 750	+
☐ Temporary Disturbance ($400/0.1ac)	____ acres x $4,000 =		$ ____	+
☐ Permanent Disturbance ($800/0.1ac)	____ acres x $8,000 =		$ ____	= $ ____
☐ GP-15 Private Residential Construction in Wetlands[1]			$ 750	+
☐ Temporary Disturbance ($400/0.1ac)	____ acres x $4,000 =		$ ____	+
☐ Permanent Disturbance ($800/0.1ac)	____ acres x $8,000 =		$ ____	= $ ____
		GP(s) FEE subtotal (b)		$ 0

PART ONE: SECTION A. APPLICATION FEE(S) subtotal (a+b=c) $ 20,150

SECTION B. OTHER FEES

☐ Environmental Assessment for Waived Activities (§105.13(c)(2)(iv))			$ 500	$ ____
☐ Amendment to Water Obstruction and Encroachment Permit				
☐ Major Amendment[1]			$ 500	+
☐ Temporary Disturbance	____ acres x $4,000 =		$ ____	+ $ ____
☐ Permanent Disturbance	____ acres x $8,000 =		$ ____	= $ ____
☐ Minor Amendment			$ 250	$ ____

Transfer of Water Obstruction and Encroachment Permit *does not require submission of this form;* *see Application for Transfer of Permit / Submerged Lands License Agreement (3150-PM-BWEW-0016)*

PART ONE: SECTION B. OTHER FEE(S) subtotal (d) $ 0

PART ONE: FEE(S) TOTAL (c+d=e) $ 20,150

DEP USE ONLY			
FEE TOTAL:		Permit / Authorization Number (s):	
Correct Amount:		Check #:	
Check Amount:		Payable to:	

PART TWO: DAM SAFETY (USE ONE FEE SHEET PER DAM)

SECTION A. APPLICATION FEES

☐ **DAM PERMIT APPLICATION – NEW DAM**

☐ Size A	☐ Hazard 1 $26,500	☐ Hazard 2 $26,500	☐ Hazard 3 $25,500	☐ Hazard 4 $23,500	$ ____
☐ Size B	☐ Hazard 1 $19,000	☐ Hazard 2 $19,000	☐ Hazard 3 $18,500	☐ Hazard 4 $17,000	$ ____
☐ Size C	☐ Hazard 1 $10,500	☐ Hazard 2 $10,500	☐ Hazard 3 $10,000	☐ Hazard 4 $ 8,000	$ ____

☐ **STAGED CONSTRUCTION**

NO. OF STAGES BEYOND INITIAL STAGE _____ X APPLICATION FEE _____ X 0.90 (90%) $ ____

☐ **DAM PERMIT APPLICATION – MODIFICATION OF DAM**

☐ Size A	☐ Hazard 1 $18,500	☐ Hazard 2 $18,500	☐ Hazard 3 $18,500	☐ Hazard 4 $18,000	$ ____
☐ Size B	☐ Hazard 1 $12,000	☐ Hazard 2 $12,000	☐ Hazard 3 $12,000	☐ Hazard 4 $11,500	$ ____
☐ Size C	☐ Hazard 1 $ 7,500	☐ Hazard 2 $ 7,500	☐ Hazard 3 $ 7,500	☐ Hazard 4 $ 7,500	$ ____

☐ **STAGED CONSTRUCTION**

NO. OF STAGES BEYOND INITIAL STAGE _____ X APPLICATION FEE _____ X 0.85 (85%) $ ____

☐ **DAM PERMIT APPLICATION – OPERATION & MAINTANANCE OF EXISTING DAM**

☐ Size A	☐ Hazard 1 $12,500	☐ Hazard 2 $12,500	☐ Hazard 3 $12,000	☐ Hazard 4 $10,000	$ ____
☐ Size B	☐ Hazard 1 $10,000	☐ Hazard 2 $10,000	☐ Hazard 3 $ 9,500	☐ Hazard 4 $ 8,500	$ ____
☐ Size C	☐ Hazard 1 $ 7,000	☐ Hazard 2 $ 7,000	☐ Hazard 3 $ 6,500	☐ Hazard 4 $ 6,000	$ ____

PART TWO: SECTION A. APPLICATION FEE(S) subtotal (a) $ ____

SECTION B. OTHER FEES

☐ Letter of Amendment or Authorization

☐ Major (≥$250,000)

☐ Size A $14,700 ☐ Size B $ 8,700 ☐ Size C $ 4,400 $ ____

☐ Minor (<$250,000)

☐ Size A $ 1,300 ☐ Size B $ 1,000 ☐ Size C $ 650 $ ____

☐ Major Dam Design Revision

☐ Size A $ 4,700 ☐ Size B $ 3,200 ☐ Size C $ 1,700 $ ____

☐ Environmental Assessment

☐ Environmental Assessment for Dam Removal (§105.12(a)(16)) $ 500 $ ____

☐ Non-Jurisdictional Dams $ 900 $ ____

☐ Letter of Amendment or Authorization

☐ Size A $ 1,400 ☐ Size B $ 1,000 ☐ Size C $ 900 $ ____

☐ Transfer of Dam Permit

☐ No Proof of Financial Responsibility $ 550 ☐ Proof of Financial Responsibility $300 $ ____

☐ Annual Registration

☐ Hazard 1 $ 1,500 ☐ Hazard 2 $ 1,500 ☐ Hazard 3 $ 800 $ ____

PART TWO: SECTION B. OTHER FEE(S) subtotal (b) $ ____

PART TWO: FEE(S) TOTAL (a+b=c) $ ____

DEP USE ONLY			
FEE TOTAL:		Permit / Authorization Number (s):	
Correct Amount:		Check #:	
Check amount:		Payable to:	

GP Fee Explanation (#):

GP #	Description	Fee	Fee Explanation (#)
GP-1	Fish Habitat Enhancement Structures	$ 50	Fee is assessed per project not per individual structure.
GP-2	Small Docks and Boat Launching Ramps	$175	Fee is assessed per individual dock or boat ramp. The fee is the **number of docks and ramps** totaled times the fee.
GP-3	Bank Rehabilitation, Bank Protection and Gravel Bar Removal	$250	Fee is assessed per project and not individual bank or gravel bar removal locations. Only one single and complete project along a continuous stream reach not exceeding 500 feet measured down centerline of stream. Additional projects or areas must be separately registered and the fee would apply to each registration.
GP-4	Intake and Outfall Structures	$200	Fee is assessed per individual intake or outfall structure. The fee is the total **number of structures** times the fee.
GP-5[2]	Utility Line Stream Crossings[2]	$250	Fee is assessed per individual utility line or conduit crossing (a wetland and stream crossing may be separate crossings even if adjacent). The fee is the total **number of utility lines** times the ***number of resource crossings*** times the fee.
GP-6	Agricultural Crossings and Ramps	$ 50	Fee is assessed per individual crossing or ramp structure. The fee is the total **number of crossings and ramps** times the fee.
GP-7[2]	Minor Road Crossings[2]	$350	Fee is assessed per individual minor road crossing (a wetland and stream crossing may be separate crossings even if adjacent). The fee is the total **number of road crossings** times the fee.
GP-8[2]	Temporary Road Crossings[2]	$175	Fee is assessed per individual temporary road crossing (a wetland and stream crossing may be separate crossings even if adjacent). The fee is the total **number of temporary road crossings** times the fee.
GP-9	Agricultural Activities	$ 50	Fee is assessed per project not per individual structure or activity. Multiple projects can be registered under a single registration and as such the fee is applied to each project and then totaled.
GP-10	Abandoned Mine Reclamation	$500	Fee is assessed per project not per individual activity. Multiple projects can be registered under a single registration and as such the fee is applied to each project and then totaled.
GP-11[1]	Maintenance, Testing, Repair, Rehabilitation, or Replacement of Water Obstructions and Encroachments[1]	$750	Fee is assessed for each registration package (can include multiple activities or structures) **and is added to the permanent and temporary disturbance review fees** calculated for each registration package respectively.
GP-15[1]	Private Residential Construction in Wetlands[1]	$750	Fee is assessed for each registration package (can include multiple activities or structures) **and is added to the permanent and temporary disturbance review fees** calculated for each registration package respectively.

Water Obstruction and Encroachment Examples:

1. **GP-7 Minor Road Crossing:** Minor road crossing of a stream that qualifies for BDWM GP-07.

☒ **GENERAL PERMIT(S)** (select activity/structure(s) below)
Some activities or structures within a project requiring an Individual Water Obstruction and Encroachment Permit may qualify for an accumulation of General Permit fees, please mark the corresponding fee(s) below but not the box above indicating a General Permit.

☒ GP-7 Minor Road Crossings ..... 1 (#) x $ 350 = $ 350

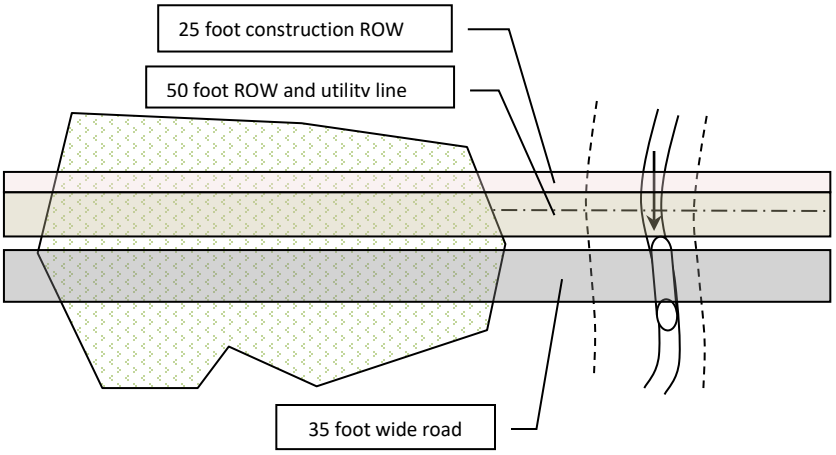
GP(s) FEE subtotal (b) $ 350

2. **Joint Permit Application for Individual Water Obstruction Encroachment Permit:** The project proposes to construct an access road requiring the placement of fill in 0.27 acres of wetlands as part of a residential subdivision.

☒ Administrative Filing Fee ..... $ 1,750 +
☐ Temporary Disturbance ($400/0.1ac)..... 0.0 acres x $4,000 = $ 0 +
☒ Permanent Disturbance ($800/0.1ac)..... 0.3 acres x $8,000 = $ 2,400 = $ 4,150

WO&E FEE subtotal (a) $ 4,150

3. Joint Permit Application for Individual Water Obstruction Encroachment Permit: The project proposes to construct an access road and utility line through a wetland and stream. The road will require placement of fill in 0.28 acres of wetlands, placement of a 45 foot long x 36 inch CMP in the stream and placement of fill in the floodway for road approaches to the culvert (east approach 35 feet wide x 4 feet deep x 50 feet long and west approach 35 feet wide x 2 feet deep x 15 feet). The utility line is 30 inch diameter steel pipe carrying petroleum products. The utility line will be open trenched through the wetland with a permanent right of way of 50 feet x 350 feet and an additional construction right of way 25 feet x 350 feet. The utility line will be open trenched traversing through the entire floodway and stream with a permanent right of way totaling 50 feet x 68 feet (east floodway 50 feet x 50 feet, stream 50 feet x 3 feet and west floodway 50 feet x 15 feet) and an additional construction right of way 25 feet x 68 feet.



Impact Calculations and Summary

Resource/Impact Type	Permanent	Temporary
Wetland		
Road	0.28	0
Utility Const. ROW	0	0.2
Utility Perm. ROW	0.4	0
Floodway/Stream		
Road	0.05	0
Utility Const. ROW	0	0.04
Utility Perm. ROW	0.08	0
Totals:	**0.81**	**0.24**
Rounded Totals:	**0.9**	**0.3**

☒ Administrative Filing Fee ..... $ 1,750 +
☒ Temporary Disturbance ($400/0.1ac).....0.3 acres x $4,000 = $ 1,200 +
☒ Permanent Disturbance ($800/0.1ac).....0.9 acres x $8,000 = $ 7,200 = $10,150

WO&E FEE subtotal (a) $10,150

4. Joint Permit Application for Individual Water Obstruction Encroachment Permit: The project proposes to construct a building, two minor road crossings that qualify for BDWM GP-07 and place three separate utility lines through a wetland and a separate stream that qualify for BDWM GP-05. The building will require placement of fill in 0.17 acres of wetlands.

☒ Administrative Filing Fee ..... $ 1,750 +
☐ Temporary Disturbance ($400/0.1ac).....0.0 acres x $4,000 = $ 0 +
☒ Permanent Disturbance ($800/0.1ac).....0.2 acres x $8,000 = $ 1,600 = $ 3,350

WO&E FEE subtotal (a) $ 3,350

☐ **GENERAL PERMIT(S)** (select activity/structure(s) below)

Some activities or structures within a project requiring an Individual Water Obstruction and Encroachment Permit may qualify for an accumulation of General Permit fees, please mark the corresponding fee(s) below but not the box above indicating a General Permit.

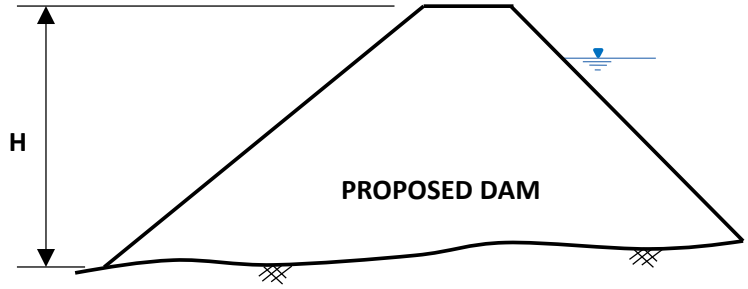
☒ GP-5 Utility Line Stream Crossings..... 6 (#) x $ 250 = $ 1,500
☒ GP-7 Minor Road Crossings..... 2 (#) x $ 350 = $ 700

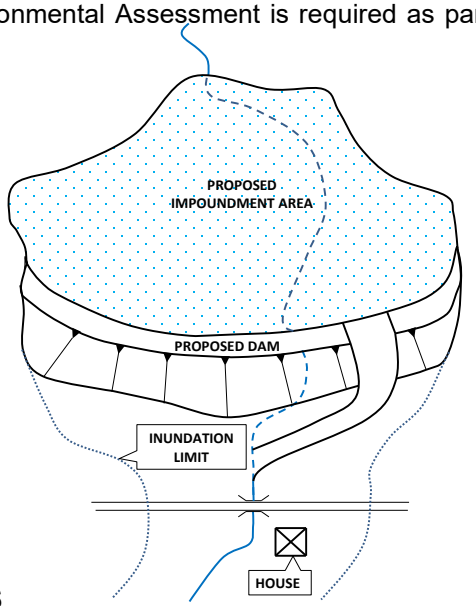
GP(s) FEE subtotal (b) $ 2,200

PART ONE: SECTION A. APPLICATION FEE(S) subtotal (a+b=c) $ 5,550

Dam Safety Examples:

5. **New Dam Permit Application:** This project proposes to construct a 25-foot high dam that has a maximum storage of 500 acre-feet of water. This dam would be classified as a size category "C" dam per §105.91. There is one home and one roadway within the inundation area downstream of the dam. This dam would have a hazard classification of "2". All stream and wetland impacts are covered under the Dam Permit Application. An Environmental Assessment is required as part of the Dam Permit Application, but a separate fee is not required.





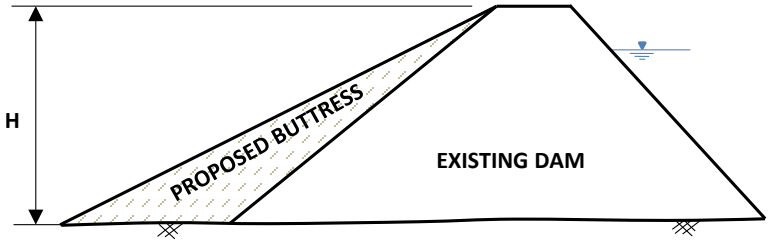
DAM SAFETY APPLICATION FEES
(TO BE FILED WITH DAM SAFETY WITH THE DAM PERMIT APPLICATION)

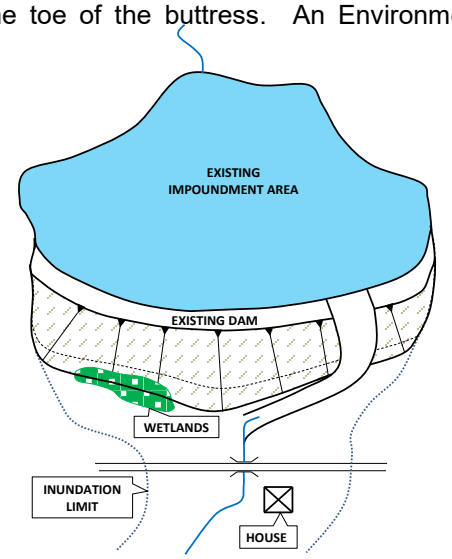
☒ **DAM PERMIT APPLICATION – NEW DAM**

☒ Size C ☐ Hazard 1 $10,500 ☒ Hazard 2 $10,500 ☐ Hazard 3 $10,000 ☐ Hazard 4 $8,000 $ 10,500

DAM SAFETY FEE total **$ 10,050**

6. **Letter of Authorization with Environmental Assessment:** This project proposes to modify a 25-foot high dam that has a maximum storage of 500 acre-feet of water. This dam would be classified as a size category "C" dam per §105.91. The proposed modification involves buttressing the downstream slope of the dam with soil to improve the stability. The total project cost will be $100,000. A small wetland area will be impacted near the toe of the buttress. An Environmental Assessment will be required to assess the impacts to the wetland.





DAM SAFETY FEES

☒ Letter of Amendment or Authorization

☒ Minor (<$250,000)

☐ Size A $ 1,300 ☐ Size B $ 1,000 ☒ Size C $ 650 $ 650

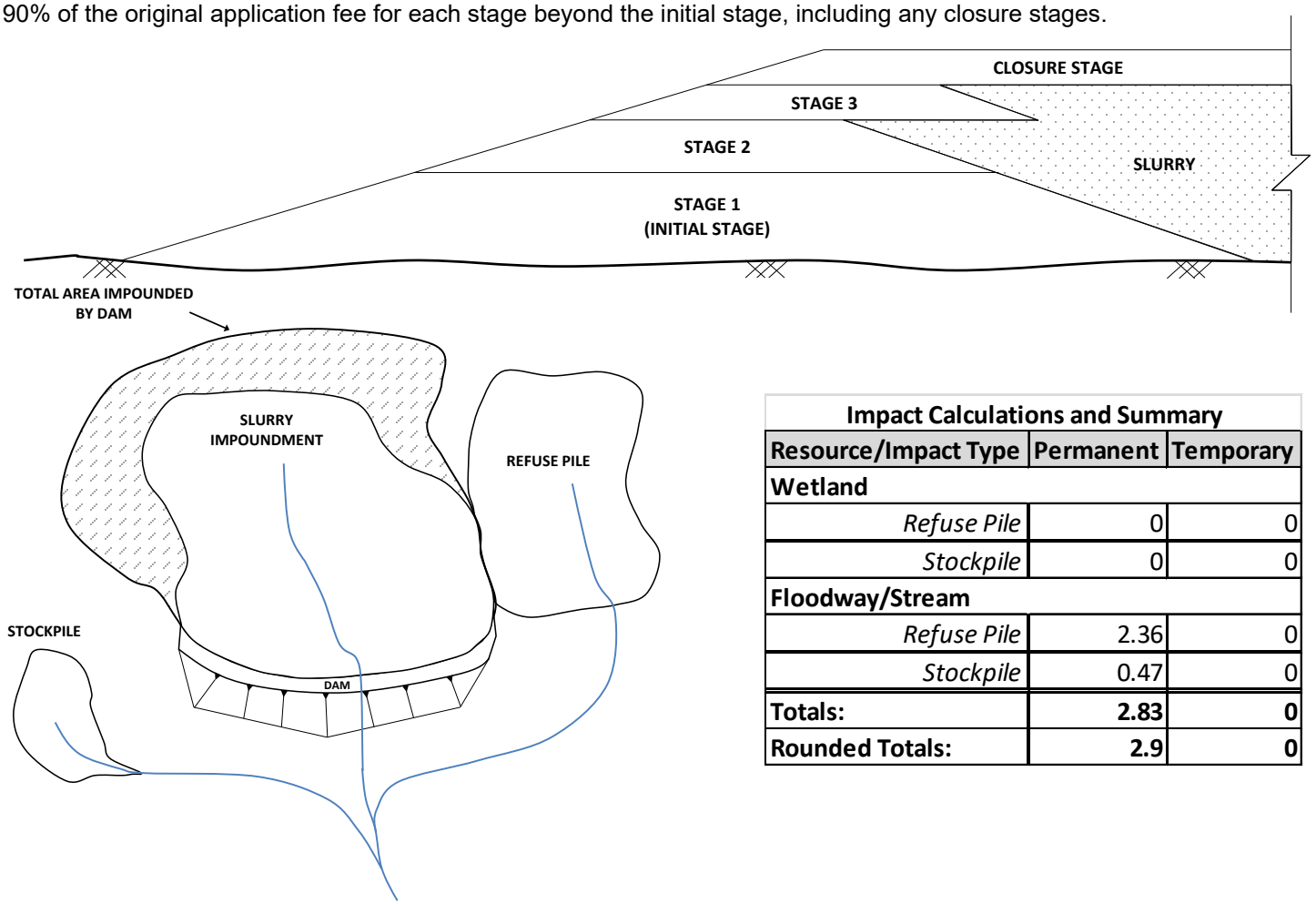
☒ Environmental Assessment

☒ Letter of Amendment or Authorization

☐ Size A $ 1,400 ☐ Size B $ 1,000 ☒ Size C $ 900 $ 900

DAM SAFETY FEE total **$ 1,550**

7. **New Dam Permit Application with Staged Construction and Disturbance Review Fees:** The project proposes to construct a staged construction, high hazard dam, to be utilized for containing a slurry impoundment. There will also be a refuse pile constructed adjacent to the slurry impoundment impacting 1000 linear feet of stream, causing a permanent disturbance to the 3-foot wide stream and 50 feet of floodway on either side of the stream [1000 x (50+3+50)]. A refuse stockpile will also impact 200 linear feet of stream, causing a permanent disturbance to the 3-foot wide stream and 50 feet of floodway on either side of the stream [200 x (50+3+50)]. The Dam Safety Application Fee will include the application fee for the applicable size and hazard classification of the dam. The Dam Safety Application Fee will also include a fee equal to 90% of the original application fee for each stage beyond the initial stage, including any closure stages.



Impact Calculations and Summary

Resource/Impact Type	Permanent	Temporary
Wetland		
Refuse Pile	0	0
Stockpile	0	0
Floodway/Stream		
Refuse Pile	2.36	0
Stockpile	0.47	0
Totals:	**2.83**	**0**
Rounded Totals:	**2.9**	**0**

WATER OBSTRUCTION AND ENCROACHMENT FEES
(TO BE FILED WITH DEP REGIONAL OFFICE, COUNTY CONSERVATION OFFICE, OR DISTRICT MINING)

☒ Administrative Filing Fee $1,750

☐ Temporary Disturbance ($400/0.1ac) 0.0 acres x $4,000 =

☒ Permanent Disturbance ($800/0.1ac) 2.9 acres x $8,000 = $23,200

WO&E FEE total **$24,950**

DAM SAFETY APPLICATION FEES
(TO BE FILED WITH DAM SAFETY WITH THE DAM PERMIT APPLICATION)

☒ **DAM PERMIT APPLICATION – NEW DAM**

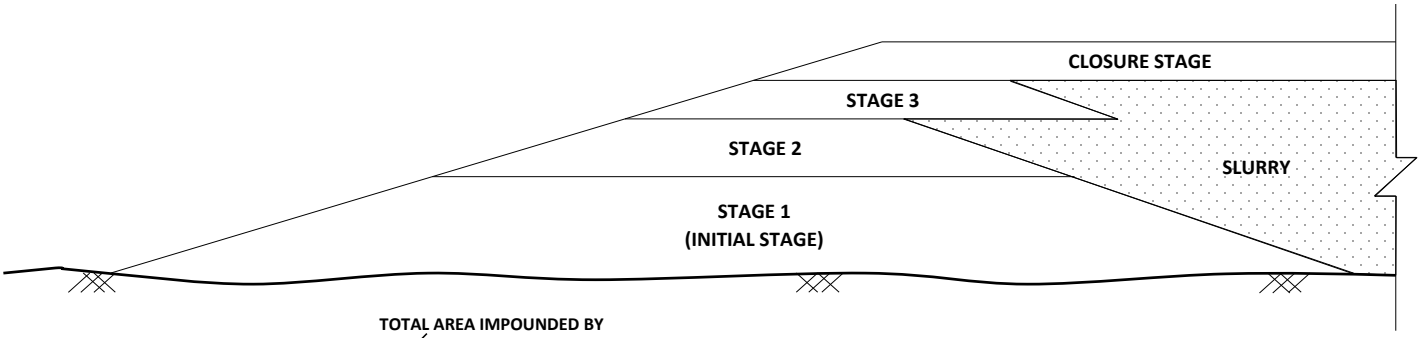
☒ Size A ☒ Hazard 1 $26,500 ☐ Hazard 2 $26,500 ☐ Hazard 3 $25,500 ☐ Hazard 4 $23,500 $ 26,500

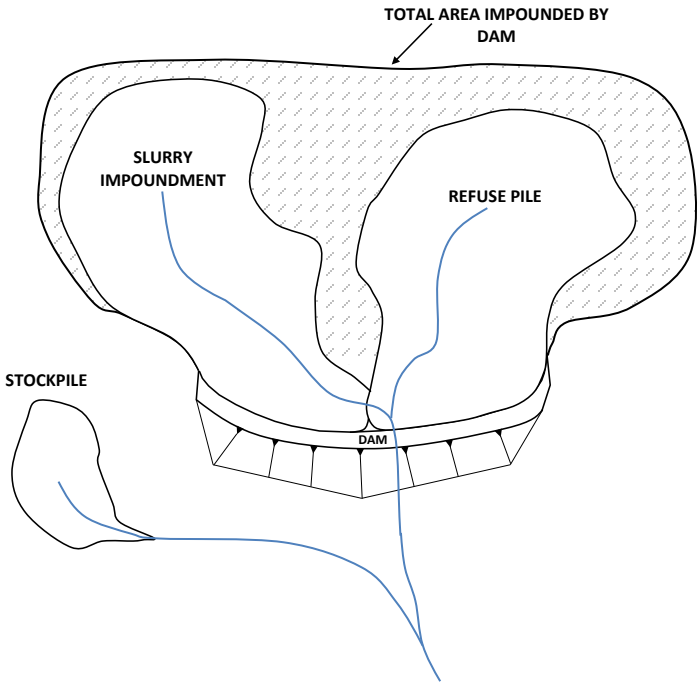
☒ **STAGED CONSTRUCTION**

No. OF STAGES BEYOND INITIAL STAGE 3 X APPLICATION FEE $26,500 X 0.90 (90%) $ 71,550

DAM SAFETY FEE total **$ 98,050**

8. **New Dam Permit Application with Staged Construction:** The project proposes to construct a staged construction, high hazard dam, to be utilized for containing a slurry impoundment and refuse pile. A refuse stockpile will also impact 200 linear feet of stream, causing a permanent disturbance to the 3-foot wide stream and 50 feet of floodway on either side of the stream [200 x (50+3+50)]. The Dam Safety Application Fee will include the application fee for the applicable size and hazard classification of the dam. The Dam Safety Application Fee will also include a fee equal to 90% of the original application fee for each stage beyond the initial stage, including any closure stages.





Impact Calculations and Summary

Resource/Impact Type	Permanent	Temporary
Wetland		
Refuse Pile	0	0
Stockpile	0	0
Floodway/Stream		
Refuse Pile	0	0
Stockpile	0.47	0
Totals:	**0.47**	**0**
Rounded Totals:	**0.5**	**0**

WATER OBSTRUCTION AND ENCROACHMENT FEES
(TO BE FILED WITH DEP REGIONAL OFFICE, COUNTY CONSERVATION OFFICE, OR DISTRICT MINING)

☒ Administrative Filing Fee $1,750

☐ Temporary Disturbance ($400/0.1ac) 0.0 acres x $4,000 =

☒ Permanent Disturbance ($800/0.1ac) 0.5 acres x $8,000 = $4,000

WO&E FEE total **$5,750**

DAM SAFETY APPLICATION FEES
(TO BE FILED WITH DAM SAFETY WITH THE DAM PERMIT APPLICATION)

☒ **DAM PERMIT APPLICATION – NEW DAM**

☒ Size A ☒ Hazard 1 $26,500 ☐ Hazard 2 $26,500 ☐ Hazard 3 $25,500 ☐ Hazard 4 $23,500 $ 26,500

☒ **STAGED CONSTRUCTION**

No. OF STAGES BEYOND INITIAL STAGE 3 X APPLICATION FEE $26,500 X 0.90 (90%) $ 71,550

DAM SAFETY FEE total **$ 98,050**

REQUIREMENT C

Act 14, 67, 68, and 127 - Municipal and County Notifications and Proof of Receipt

ARM Group LLC
Engineers and Scientists

August 27, 2025

UPS TRACKING NO: 1Z 73R 78Y 01 9347 0367

Borough of Archbald Planning Commission
Borough Municipal Building
400 Church Street
Archbald, PA 18403

Re: Act 14 Notification
Joint Permit Application
Project Gravity
Archbald 25 Developer, LLC
Archbald Borough,
Lackawanna County, PA
ARM Project 24012215

Dear Planning Commission:

This county notification, under the requirements of Act 14, is to inform you that ARM Group LLC (ARM), acting on behalf of Archbald 25 Developer, is applying for coverage under the "Joint Application for Pennsylvania Chapter 105 Water Obstruction and Encroachment Permit and US Army Corps of Engineers Section 404 Permit" for the Project Gravity site from the Pennsylvania Department of Environmental Protection (PADEP) Northeast Regional Office.

Applicant Name: Archbald 25 Developer, LLC

Project Location: Refer to attached Figure 1.

Project Description: The site consists of approximately 181-acres of land in the Borough of Archbald, Lackawanna County, Pennsylvania. The dominant land use at the site is forest growing on mine spoil. The proposed data center project area consists of constructing 7 buildings, associated parking area, a substation and two access roads emanating from State Route 6006 and State Route 1023. A permit application for Joint Permit coverage to complete this work will be submitted to the PADEP for approval.

Consultant Contact: Tessa Antolick, P.E.
Senior Engineer
ARM Group LLC
2548 Park Center Boulevard
State College, PA 16801
(814) 996-4420

The Joint Permit Application will be submitted through PADEP's Public Upload System. Therefore, a hard copy of the application package is not included with this notification. Electronic copies of the Joint Permit Application, including site drawings are available for viewing online and can be provided to you upon request to the Consultant.

Pursuant to Act 14, P.L. 384, and Acts 67, 68 and 127, notice is hereby given that the applicant is submitting the above referenced applications. Acts 67, 68 and 127, which amended the Municipalities Planning Code (MPC), direct state agencies to consider comprehensive plans and zoning ordinances when reviewing applications for permitting of facilities or infrastructure, and specify that state agencies may rely upon comprehensive plans and zoning ordinances under certain conditions as described in Sections 619.2 and 1105 of the Municipalities Planning Code.

Please submit any comments concerning this project within 30 days from date of receipt of this letter to the PADEP Northeast Regional Office at:

Pennsylvania Department of Environmental Protection
Northeast Regional Office
2 Public Square
Wilkes-Barre, PA 18701

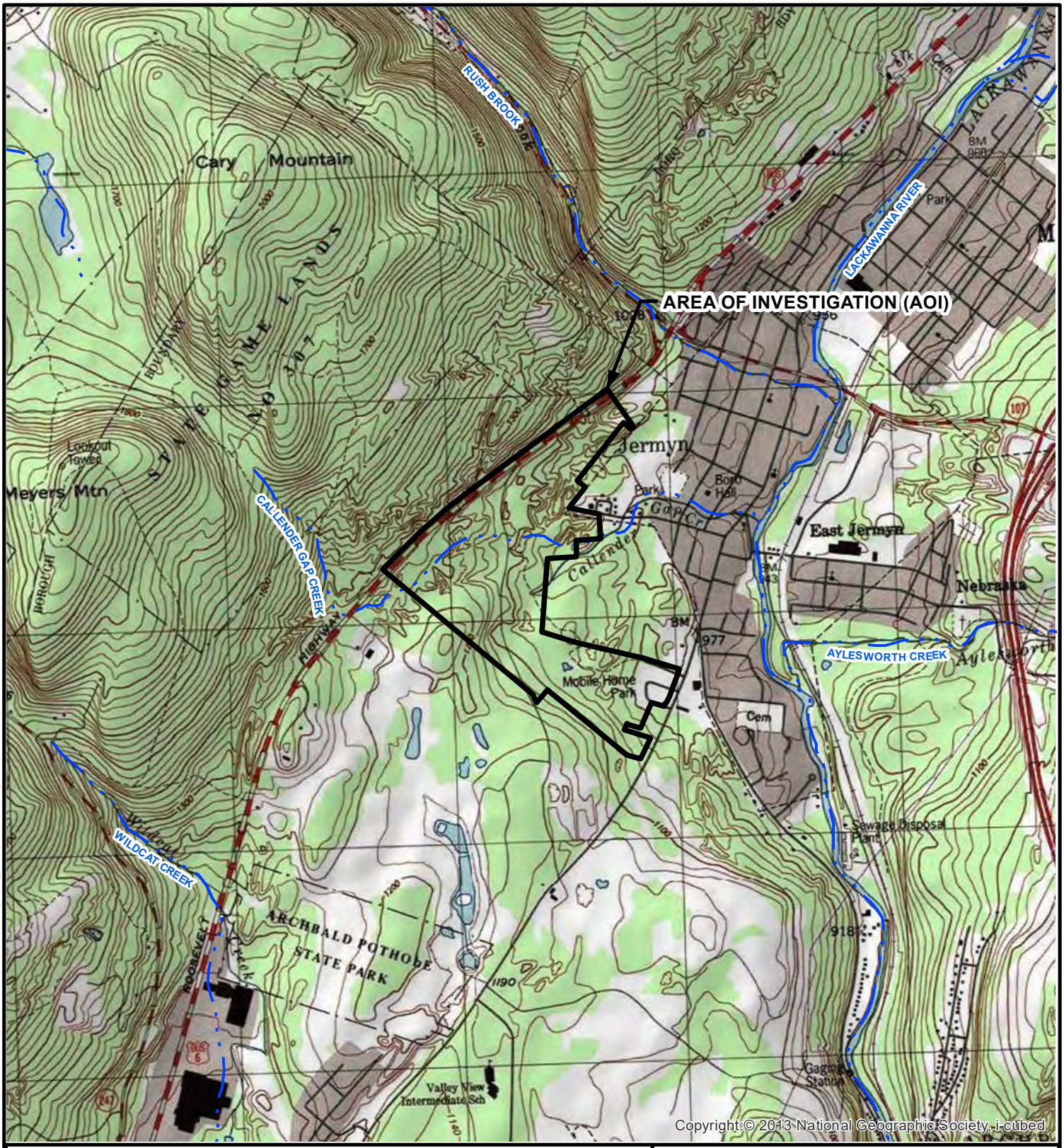
Respectfully submitted,
ARM Group LLC

Tessa M. Antolick

Tessa Antolick, P.E.
Senior Engineer

Attachments:

- Figure 1 – Site Location Map



REF: Base map from ESRI USA Topo Maps. Refer to USGS 7.5 minute Carbondale, PA.

LEGEND

AREA OF INVESTIGATION

STREAM

0 2,000 4,000 6,000

SCALE IN FEET

Site Location Map

Project Gravity
Archbald 25 Developer, LLC
Archbald Borough
Lackawanna County, PA

June, 2025	Scale: 1" = 2,000'	24012215

ARM Group LLC
Engineers and Scientists

Figure 1

P:\Western Hospitality Group\Projects\24012215 - Task 3, Due Diligence Investigation -Jermyn PA\GIS\Figure 1_Site Location Map.mxd

From: UPS
To: Tessa Antolick
Subject: UPS Delivery Notification, Tracking Number 1Z73R78Y0193470367
Date: Thursday, August 28, 2025 10:26:03 AM

Hello, your package has been delivered.

Delivery Date: Thursday, 08/28/2025
Delivery Time: 10:23 AM

ARM GROUP-STATE COLLEGE

Tracking Number:	1Z73R78Y0193470367
Ship To:	ARCHBALD BOROUGH MUNICIPAL BUILDING 400 CHURCH STREET ARCHBALD, PA 18403 US
Number of Packages:	1
UPS Service:	UPS Next Day Air®
Package Weight:	2.0 LBS
Reference Number:	24012215-8
Reference Number:	STATE COLLEGE

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ARM Group LLC
Engineers and Scientists

August 27, 2025

UPS TRACKING NO: 1Z 73R 78Y 01 9215 0151

Lackawanna County Commissioners
123 Wyoming Avenue
Scranton, PA 18503

Re: Act 14 Notification
Joint Permit Application
Project Gravity
Archbald 25 Developer, LLC
Archbald Borough,
Lackawanna County, PA
ARM Project 24012215

Dear Commissioners:

This county notification, under the requirements of Act 14, is to inform you that ARM Group LLC (ARM), acting on behalf of Archbald 25 Developer, is applying for coverage under the "Joint Application for Pennsylvania Chapter 105 Water Obstruction and Encroachment Permit and US Army Corps of Engineers Section 404 Permit" for the Project Gravity site from the Pennsylvania Department of Environmental Protection (PADEP) Northeast Regional Office.

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Consultant Contact: Tessa Antolick, P.E.
Senior Engineer
ARM Group LLC
2548 Park Center Boulevard
State College, PA 16801
(814) 996-4420

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Please submit any comments concerning this project within 30 days from date of receipt of this letter to the PADEP Northeast Regional Office at:

Pennsylvania Department of Environmental Protection
Northeast Regional Office
2 Public Square
Wilkes-Barre, PA 18701

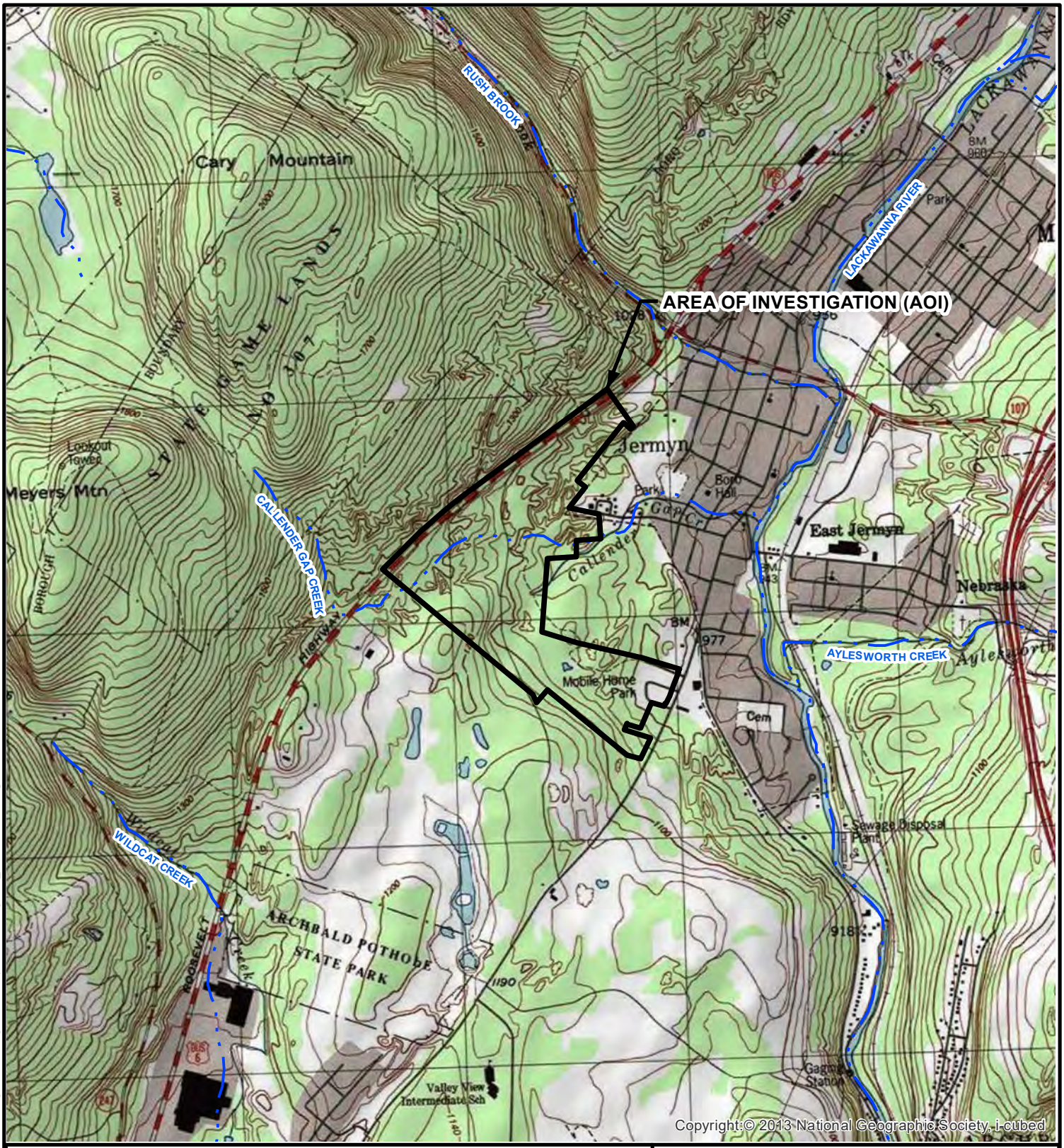
Respectfully submitted,
ARM Group LLC

Tessa M. Antolick

Tessa Antolick, P.E.
Senior Engineer

Attachments:

- Figure 1 – Site Location Map



REF: Base map from ESRI USA Topo Maps. Refer to USGS 7.5 minute Carbondale, PA.

LEGEND

AREA OF INVESTIGATION

STREAM

0 2,000 4,000 6,000

SCALE IN FEET

Site Location Map

Project Gravity
Archbald 25 Developer, LLC
Archbald Borough
Lackawanna County, PA

June, 2025	Scale: 1" = 2,000'	24012215

ARM Group LLC
Engineers and Scientists

Figure 1

P:\Western Hospitality Group\Projects\24012215 - Task 3, Due Diligence Investigation -Jermyn PA\GIS\Figure 1_Site Location Map.mxd

From: UPS
To: Tessa Antolick
Subject: UPS Delivery Notification, Tracking Number 1Z73R78Y0192150151
Date: Thursday, August 28, 2025 9:59:28 AM

Hello, your package has been delivered.

Delivery Date: Thursday, 08/28/2025
Delivery Time: 9:56 AM
Signed by: NEALON

ARM GROUP-STATE COLLEGE

Tracking Number:	1Z73R78Y0192150151
Ship To:	LACKAWANNA COUNTY GOVERNMENT CENTER 6TH FLOOR 123 WYOMING AVENUE SCRANTON, PA 18503 US
Number of Packages:	1
UPS Service:	UPS Next Day Air®
Package Weight:	2.0 LBS
Reference Number:	24012215-8
Reference Number:	STATE COLLEGE

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REQUIREMENT D

Cultural Resource Notice Documentation

Pennsylvania State Historic Preservation Office
PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION

June 6, 2025

Sent Via PA-SHARE

RE: ER Project # 2025PR01608.002, Gibson Street Project, Department of Environmental Protection, Archbald Borough, Lackawanna County

Dear Submitter,

Thank you for submitting information concerning the above referenced project. The Pennsylvania State Historic Preservation Office (PA SHPO) reviews projects in accordance with state and federal laws. Section 106 of the National Historic Preservation Act of 1966, and the implementing regulations (36 CFR Part 800) of the Advisory Council on Historic Preservation, is the primary federal legislation. The Environmental Rights amendment, Article 1, Section 27 of the Pennsylvania Constitution and the Pennsylvania History Code, 37 Pa. Cons. Stat. Section 500 et seq. (1988) is the primary state legislation. These laws include consideration of the project's potential effects on both historic and archaeological resources.

Above Ground Resources
No Above Ground Concerns - Environmental Review - No Effect - Historic Properties Present - Above Ground

The following historic properties, listed in or eligible for the National Register of Historic Places, are located in the project area of potential effect: Jermyn Borough Historic District (Resource # 1992RE00478). Based on the information received and available in our files, in our opinion, the proposed project will have No Effect on these historic properties. Should the scope of the project change and/or should you be made aware of historic property concerns, you will need to reinitiate consultation with our office using PA-SHARE.

For questions concerning above ground resources, please contact Blair Horton at blahorton@pa.gov.

Archaeological Resources
No Archaeological Concerns - Environmental Review - No Effect - Archaeological

Based on the information received and available in our files, in our opinion, the proposed project should have No Effect on archaeological resources. Should the scope of the project be amended to include additional ground-disturbing activity and/or should you be made aware of historic property concerns regarding archaeological resources, you will need to reinitiate consultation with our office using PA-SHARE.

For questions concerning archaeological resources, please contact Blair Horton at blahorton@pa.gov.

Sincerely,

Barbara Frederick
Environmental Review Division Manager

REQUIREMENT E

Pennsylvania Natural Diversity Inventory (PNDI) Receipt and Documentation

1. PROJECT INFORMATION

Project Name: **Project Gravity**
Date of Review: **7/29/2025 01:57:31 PM**
Project Category: **Development, New commercial/industrial development (store, gas station, factory)**
Project Area: **187.22 acres**
County(s): **Lackawanna**
Township/Municipality(s): **Archbald Borough; Jermyn Borough**
ZIP Code:
Quadrangle Name(s): **CARBONDALE**
Watersheds HUC 8: **Upper Susquehanna-Lackawanna**
Watersheds HUC 12: **Rush Brook-Lackawanna River**
Decimal Degrees: **41.525041, -75.559123**
Degrees Minutes Seconds: **41° 31' 30.1488" N, 75° 33' 32.8430" W**

2. SEARCH RESULTS

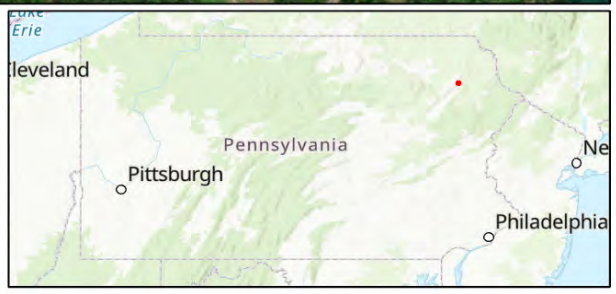
Agency	Results	Response
PA Game Commission	**Conservation Measure**	**No Further Review Required, See Agency Comments**
PA Department of Conservation and Natural Resources	No Known Impact	No Further Review Required
PA Fish and Boat Commission	No Known Impact	No Further Review Required
U.S. Fish and Wildlife Service	**Potential Impact**	**MORE INFORMATION REQUIRED, See Agency Response**

As summarized above, Pennsylvania Natural Diversity Inventory (PNDI) records indicate there may be potential impacts to threatened and endangered and/or special concern species and resources within the project area. If the response above indicates "No Further Review Required" no additional communication with the respective agency is required. If the response is "Further Review Required" or "See Agency Response," refer to the appropriate agency comments below. Please see the DEP Information Section of this receipt if a PA Department of Environmental Protection Permit is required.

Project Gravity

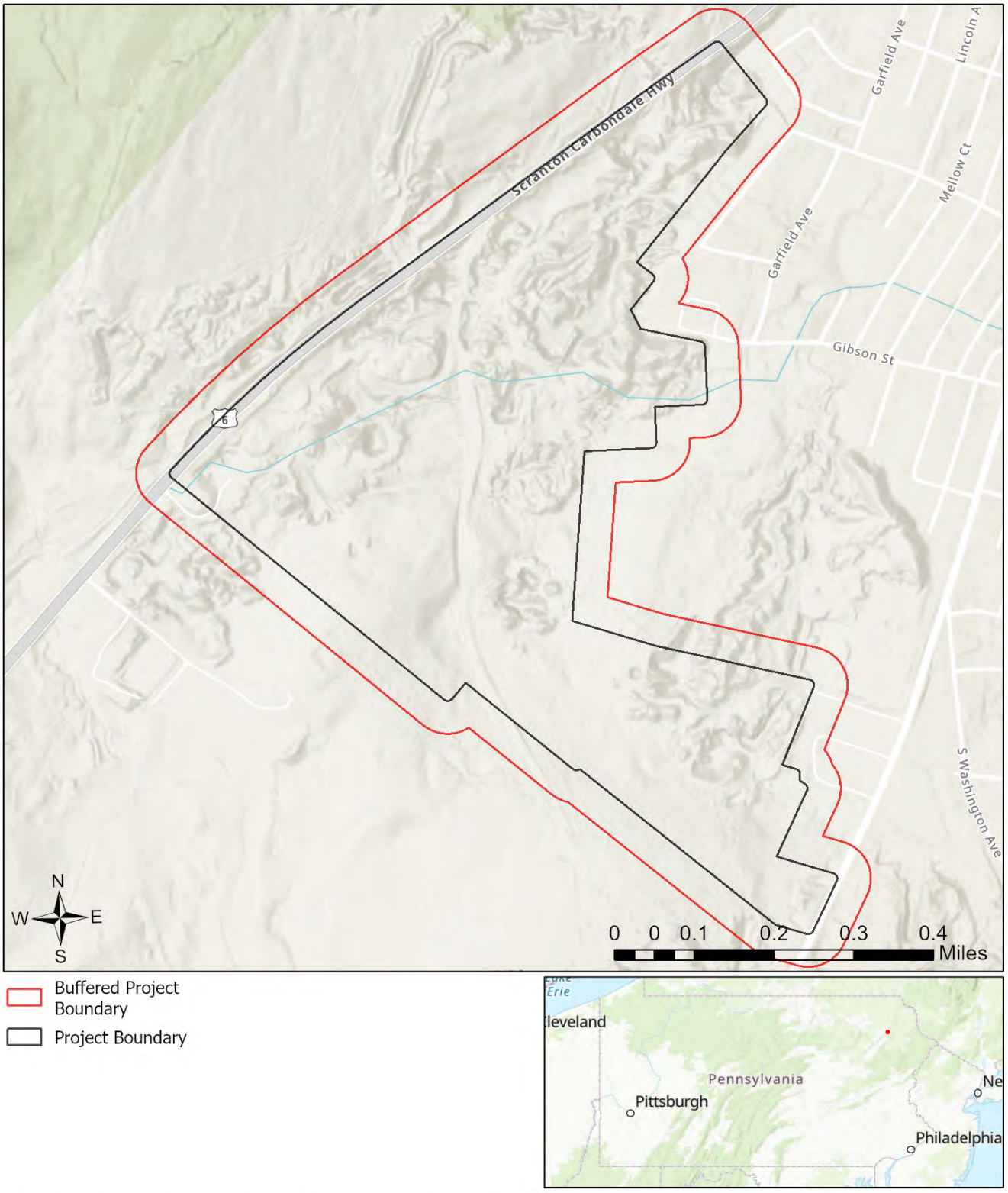
Buffered Project Boundary

Project Boundary



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community
Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Project Gravity



Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community
Sources: Esri, Maxar, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA,

RESPONSE TO QUESTION(S) ASKED

Q1: Will the action include disturbance to trees such as tree cutting (or other means of knocking down, or bringing down trees, tree topping. or tree trimming), pesticide/herbicide application or prescribed fire?
Your answer is: Yes

Q2: Does the action area contain any caves (or associated sinkholes, fissures, or other karst features), mines, rocky outcroppings, culverts, or tunnels that could provide habitat for hibernating bats?
Your answer is: No

3. AGENCY COMMENTS

Regardless of whether a DEP permit is necessary for this proposed project, any potential impacts to threatened and endangered species and/or special concern species and resources must be resolved with the appropriate jurisdictional agency. In some cases, a permit or authorization from the jurisdictional agency may be needed if adverse impacts to these species and habitats cannot be avoided.

These agency determinations and responses are **valid for two years** (from the date of the review), and are based on the project information that was provided, including the exact project location; the project type, description, and features; and any responses to questions that were generated during this search. If any of the following change: 1) project location, 2) project size or configuration, 3) project type, or 4) responses to the questions that were asked during the online review, the results of this review are not valid, and the review must be searched again via the PNDI Environmental Review Tool and resubmitted to the jurisdictional agencies. The PNDI tool is a primary screening tool, and a desktop review may reveal more or fewer impacts than what is listed on this PNDI receipt. The jursidictional agencies **strongly advise against** conducting surveys for the species listed on the receipt prior to consultation with the agencies.

PA Game Commission
RESPONSE:

Conservation Measure: Potential impacts to state and federally listed species which are under the jurisdiction of both the Pennsylvania Game Commission (PGC) and the U.S. Fish and Wildlife Service may occur as a result of this project. As a result, the PGC defers comments on potential impacts to federally listed species to the U.S. Fish and Wildlife Service. No further coordination with the Pennsylvania Game Commission is required at this time.

PA Department of Conservation and Natural Resources
RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Fish and Boat Commission
RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

U.S. Fish and Wildlife Service
RESPONSE:

Information Request: Your project is within the range of the federally listed northern long-eared bat. Enter project information into IPaC (http://ecos.fws.gov/ipac/). Follow the step-by-step process to review this project's potential effect on federally listed species. For step-by-step instructions, please see our Project Review Page (https://www.fws.gov/office/pennsylvania-ecological-services/project-revi...)

WHAT TO SEND TO JURISDICTIONAL AGENCIES

If project information was requested by one or more of the agencies above, upload* or email the following information to the agency(s) (see AGENCY CONTACT INFORMATION). Instructions for uploading project materials can be found here. This option provides the applicant with the convenience of sending project materials to a single location accessible to all three state agencies (but not USFWS).
*If information was requested by USFWS, applicants must submit their project using IPaC, following the USFWS Project Submission Instructions. USFWS will not accept or review project materials uploaded via the Conservation Explorer.

Check-list of Minimum Materials to be submitted:
____Project narrative with a description of the overall project, the work to be performed, current physical characteristics of the site and acreage to be impacted.
____A map with the project boundary and/or a basic site plan(particularly showing the relationship of the project to the physical features such as wetlands, streams, ponds, rock outcrops, etc.)
In addition to the materials listed above, USFWS REQUIRES the following
____**SIGNED** copy of a Final Project Environmental Review Receipt

The inclusion of the following information may expedite the review process.
____Color photos keyed to the basic site plan (i.e. showing on the site plan where and in what direction each photo was taken and the date of the photos)
____Information about the presence and location of wetlands in the project area, and how this was determined (e.g., by a qualified wetlands biologist), if wetlands are present in the project area, provide project plans showing the location of all project features, as well as wetlands and streams.

4. DEP INFORMATION

The Pa Department of Environmental Protection (DEP) requires that a signed copy of this receipt, along with any required documentation from jurisdictional agencies concerning resolution of potential impacts, be submitted with applications for permits requiring PNDI review. Two review options are available to permit applicants for handling PNDI coordination in conjunction with DEP's permit review process involving either T&E Species or species of special concern. Under sequential review, the permit applicant performs a PNDI screening and completes all coordination with the appropriate jurisdictional agencies prior to submitting the permit application. The applicant will include with its application, both a PNDI receipt and/or a clearance letter from the jurisdictional agency if the PNDI Receipt shows a Potential Impact to a species or the applicant chooses to obtain letters directly from the jurisdictional agencies. Under concurrent review, DEP, where feasible, will allow technical review of the permit to occur concurrently with the T&E species consultation with the jurisdictional agency. The applicant must still supply a copy of the PNDI Receipt with its permit application. The PNDI Receipt should also be submitted to the appropriate agency according to directions on the PNDI Receipt. The applicant and the jurisdictional agency will work together to resolve the potential impact(s). See the DEP PNDI policy at https://conservationexplorer.dcnr.pa.gov/content/resources.

5. ADDITIONAL INFORMATION

The PNDI environmental review website is a preliminary screening tool. There are often delays in updating species status classifications. Because the proposed status represents the best available information regarding the conservation status of the species, state jurisdictional agency staff give the proposed statuses at least the same consideration as the current legal status. If surveys or further information reveal that a threatened and endangered and/or special concern species and resources exist in your project area, contact the appropriate jurisdictional agency/agencies immediately to identify and resolve any impacts.

For a list of species known to occur in the county where your project is located, please see the species lists by county found on the PA Natural Heritage Program (PNHP) home page (www.naturalheritage.state.pa.us). Also note that the PNDI Environmental Review Tool only contains information about species occurrences that have actually been reported to the PNHP.

6. AGENCY CONTACT INFORMATION

PA Department of Conservation and Natural Resources
Bureau of Forestry, Ecological Services Section
400 Market Street, PO Box 8552
Harrisburg, PA 17105-8552
Email: RA-HeritageReview@pa.gov

U.S. Fish and Wildlife Service
Pennsylvania Field Office
Endangered Species Section
110 Radnor Rd; Suite 101
State College, PA 16801
Email: IR1_ESPenn@fws.gov
NO Faxes Please

PA Fish and Boat Commission
Division of Environmental Services
595 E. Rolling Ridge Dr., Bellefonte, PA 16823
Email: RA-FBPACENOTIFY@pa.gov

PA Game Commission
Bureau of Wildlife Management
Division of Environmental Review
2001 Elmerton Avenue, Harrisburg, PA 17110-9797
Email: RA-PGC_PNDI@pa.gov
NO Faxes Please

7. PROJECT CONTACT INFORMATION

Name:_____
Company/Business Name:_____
Address:_____
City, State, Zip:_____
Phone:(_____)_____Fax:(_____)
Email:_____

ARM Group LLC
Engineers and Scientists
Scott L. Martin, Senior Scientist
Professional Wetland Scientist, Bog Turtle Surveyor
USFWS Qualified/Approved Botanist
phone: (717) 508-0575
cell: (717) 439-2775
email: smartin@armgroup.net
1129 West Governor Road, P.O. Box 797
Hershey, PA 17033-0797
https://www.armgroup.net

8. CERTIFICATION

I certify that ALL of the project information contained in this receipt (including project location, project size/configuration, project type, answers to questions) is true, accurate and complete. In addition, if the project type, location, size or configuration changes, or if the answers to any questions that were asked during this online review change, I agree to re-do the online environmental review.

_____ July 29, 2025

applicant/project proponent signature | date

REQUIREMENT F

Site Plans

MATCH LINE – SEE MAP 1B

AOI (195.1 ACRES)

UDP 0311251105

UDP 0311250834

OPEN BODY OF WATER 31 (0.12 ACRE WITHIN AOI)

UDP 0311251110

OPEN BODY OF WATER 27 (0.01 ACRE WITHIN AOI)

UNT 1 (0.02 ACRE WITHIN AOI)

OPEN BODY OF WATER 8 (0.01 ACRE WITHIN AOI)

WETLAND 0311251226 (0.01 ACRE WITHIN AOI)

OPEN BODY OF WATER 9 (0.01 ACRE WITHIN AOI)

UDP 0311251214

UDP 0311250833

OPEN BODY OF WATER 7 (0.02 ACRE WITHIN AOI)

WETLAND 0311250854 (0.44 ACRE WITHIN AOI)

OPEN BODY OF WATER 10 (0.01 ACRE WITHIN AOI)

WDP 0311251226

WDP 0311250854

WETLAND 0311250835 (0.01 ACRE WITHIN AOI)

OPEN BODY OF WATER 11 (0.01 ACRE WITHIN AOI)

UDP 0308250808

UDP 0311250850

OPEN BODY OF WATER 12 (<0.01 ACRE WITHIN AOI)

OPEN BODY OF WATER 6 (0.01 ACRE WITHIN AOI)

WDP 0311250835

UDP 0311251304

WETLAND 0311251254 (0.12 ACRE WITHIN AOI)

OPEN BODY OF WATER 1 (0.01 ACRE WITHIN AOI)

UDP 0311250933

WDP 0311251254

OPEN BODY OF WATER 25 (0.01 ACRE WITHIN AOI)

UDP 0308250738

OPEN BODY OF WATER 2 (0.01 ACRE WITHIN AOI)

WDP 0311251010

WETLAND 0311251010 (0.76 ACRE WITHIN AOI)

OPEN BODY OF WATER 3 (<0.01 ACRE WITHIN AOI)

UNT 2 (0.02 ACRE WITHIN AOI)

UDP 0611251612

OPEN BODY OF WATER 4 (<0.01 ACRE WITHIN AOI)

UDP 0311251109

WDP 0311251144

OPEN BODY OF WATER 5 (0.06 ACRE WITHIN AOI)

WDP 0311251110

UDP 0311251323

OPEN BODY OF WATER 29 (<0.01 ACRE WITHIN AOI)

WETLAND 0311251144 (0.13 ACRE WITHIN AOI)

OPEN BODY OF WATER 30 (0.01 ACRE WITHIN AOI)

WETLAND 0311251110 (0.05 ACRE WITHIN AOI)

UDP 0311251250

OPEN BODY OF WATER 13 (0.02 ACRE WITHIN AOI)

OPEN BODY OF WATER 14 (<0.01 ACRE WITHIN AOI)

UDP 0311251220

OPEN BODY OF WATER 15 (0.01 ACRE WITHIN AOI)

OPEN BODY OF WATER 16 (0.01 ACRE WITHIN AOI)

OPEN BODY OF WATER 17 (0.01 ACRE WITHIN AOI)

UDP 0611251646

OPEN BODY OF WATER 18 (0.01 ACRE WITHIN AOI)

OPEN BODY OF WATER 24 (0.03 ACRE WITHIN AOI)

OPEN BODY OF WATER 19 (0.01 ACRE WITHIN AOI)

UDP 0311251329

OPEN BODY OF WATER 20 (0.01 ACRE WITHIN AOI)

OPEN BODY OF WATER 21 (<0.01 ACRE WITHIN AOI)

OPEN BODY OF WATER 23 (0.09 ACRE WITHIN AOI)

OPEN BODY OF WATER 22 (0.04 ACRE WITHIN AOI)

US HWY 6 BUS

DAMIANO DR

ETNOLERMYN RD

OLD CARBONDALE TPKE

SOILS IN PROPERTY
HYDRIC COMPONENT:
MORRIS CHANNERY LOAM (MxB)
NORRIS AND CHIPPEWA CHANNERY LOAMS (NxB)
VOLUSIA CHANNERY SILT LOAM (VxB)
WURTSBORO EXTREMELY STONY LOAM (WxB, WxD)
UPLAND SOILS:
DUMPS, MINE (Da)
LORDSTOWN CHANNERY SILT LOAM (LxD)
UDORTHENTS, STRIP MINE (UA)
URBAN LAND (Ur)
WELLSBORO CHANNERY LOAM (WcC, WgB, WgD)

LEGEND

- Proposed Buildings
- Proposed Gravel Areas
- Proposed Fence Line
- Proposed Pavement
- Proposed Grading
- PHOTO LOCATION/DIRECTION
- WETLAND DATA POINT (WDP)
- UPLAND DATA POINT (UDP)
- DRAINAGE FEATURE
- STREAM (NOT PRESENT WITHIN AOI OR VICINITY)
- STREAM FEATURE IDENTIFIED IN FIELD INVESTIGATION
- SOIL TYPE (WxD)
- AREA OF INVESTIGATION (AOI)
- 100 YEAR FEMA FLOODPLAIN (NOT PRESENT WITHIN AOI OR VICINITY)
- DELINEATED WETLAND
- OPEN BODY OF WATER
- EXISTING CONTOUR: 2 FOOT

NOTES:

1. THE BASE MAP HAS BEEN CREATED USING AVAILABLE AERIAL PHOTOGRAPHY PROVIDED BY PEMA, DATED 2018. EXISTING TOPOGRAPHY HAS BEEN PROVIDED BY PAMAP. NWI PALUSTRINE WETLANDS PROVIDED BY US FISH AND WILDLIFE SERVICE, DATED 2022. STREAM DATA FROM USGS, DATED 2017.

2. THIS PLAN IS IN THE PENNSYLVANIA STATE PLANE NORTH, NORTH AMERICAN DATUM 1983 (NAD 83) COORDINATE SYSTEM.

ARM Group LLC
Engineers and Scientists

No.	Revision	Date	By

scale: 1" = 150'
date: 10/09/2025
project no.: 24012215

designed	drawn	checked
ARM	MAB	JRG

SCALE IN FEET: 0 100 200 300

drawing title: AQUATIC RESOURCE INVESTIGATION MAP

project title: PROJECT GRAVITY
ARCHBALD 25 DEVELOPER, LLC

JERMYN TOWNSHIP
LACKAWANNA COUNTY, PA

Sheet 1a

P:\Wetsite\Eligibility Group\Projects\24012215 - Task 1 Due Diligence Investigation - Jermyn PA\GIS\ARCMAP\Sheet_1_Aquatic_Resource_Investigation_Map_Tile1_100113.mxd

AOI (195.1 ACRES)

UDP 0311250928

UDP 0311250948

UDP 0311251026

UDP 0311250725

UDP 0311250804

UDP 0311251105

OPEN BODY OF WATER 26 (0.01 ACRE WITHIN AOI)

OPEN BODY OF WATER 28 (0.01 ACRE WITHIN AOI)

US HWY 6 BUS

HENRY DR

CALLENDER GAP CREEK

MATCH LINE – SEE MAP 1A

SOILS IN PROPERTY
HYDRIC COMPONENT:
DYSTROCHREPTS AND ROCK OUTCROP (DYD)
VOLUSIA CHANNERY SILT LOAM (VxB)
WURTSBORO EXTREMELY STONY LOAM (WxB, WxD)
UPLAND SOILS:
ARNOT-ROCK OUTCROP COMPLEX (AsD)
DUMPS, MINE (Da)
LORDSTOWN CHANNERY SILT LOAM (LxD)
OQUAGA AND LORDSTOWN EXTREMELY STONY LOAMS (OYE)
UDORTHENTS, STRIP MINE (UA)
URBAN LAND (Ur)
WELLSBORO CHANNERY LOAM (WgD)

LEGEND

- Proposed Buildings
- Proposed Gravel Areas
- Proposed Fence Line
- Proposed Pavement
- Proposed Grading
- PHOTO LOCATION/DIRECTION
- UPLAND DATA POINT (UDP)
- DELINEATED WETLAND (NOT PRESENT WITHIN AOI OR VICINITY)
- OPEN BODY OF WATER
- STREAM
- SOIL TYPE (WxD)
- AREA OF INVESTIGATION (AOI)
- 100 YEAR FEMA FLOODPLAIN (NOT PRESENT WITHIN AOI OR VICINITY)
- EXISTING CONTOUR: 2 FOOT

NOTES:

1. THE BASE MAP HAS BEEN CREATED USING AVAILABLE AERIAL PHOTOGRAPHY PROVIDED BY PEMA, DATED 2018. EXISTING TOPOGRAPHY HAS BEEN PROVIDED BY PAMAP. NWI PALUSTRINE WETLANDS PROVIDED BY US FISH AND WILDLIFE SERVICE, DATED 2022. STREAM DATA FROM USGS, DATED 2017.

2. THIS PLAN IS IN THE PENNSYLVANIA STATE PLANE NORTH, NORTH AMERICAN DATUM 1983 (NAD 83) COORDINATE SYSTEM.

ARM Group LLC
Engineers and Scientists

No.	Revision	Date	By

scale	1" = 150'
date	10/09/2025
project no.	24012215
designed	ARM
drafted	MAB
checked	JRG

SCALE IN FEET: 0, 100, 200, 300

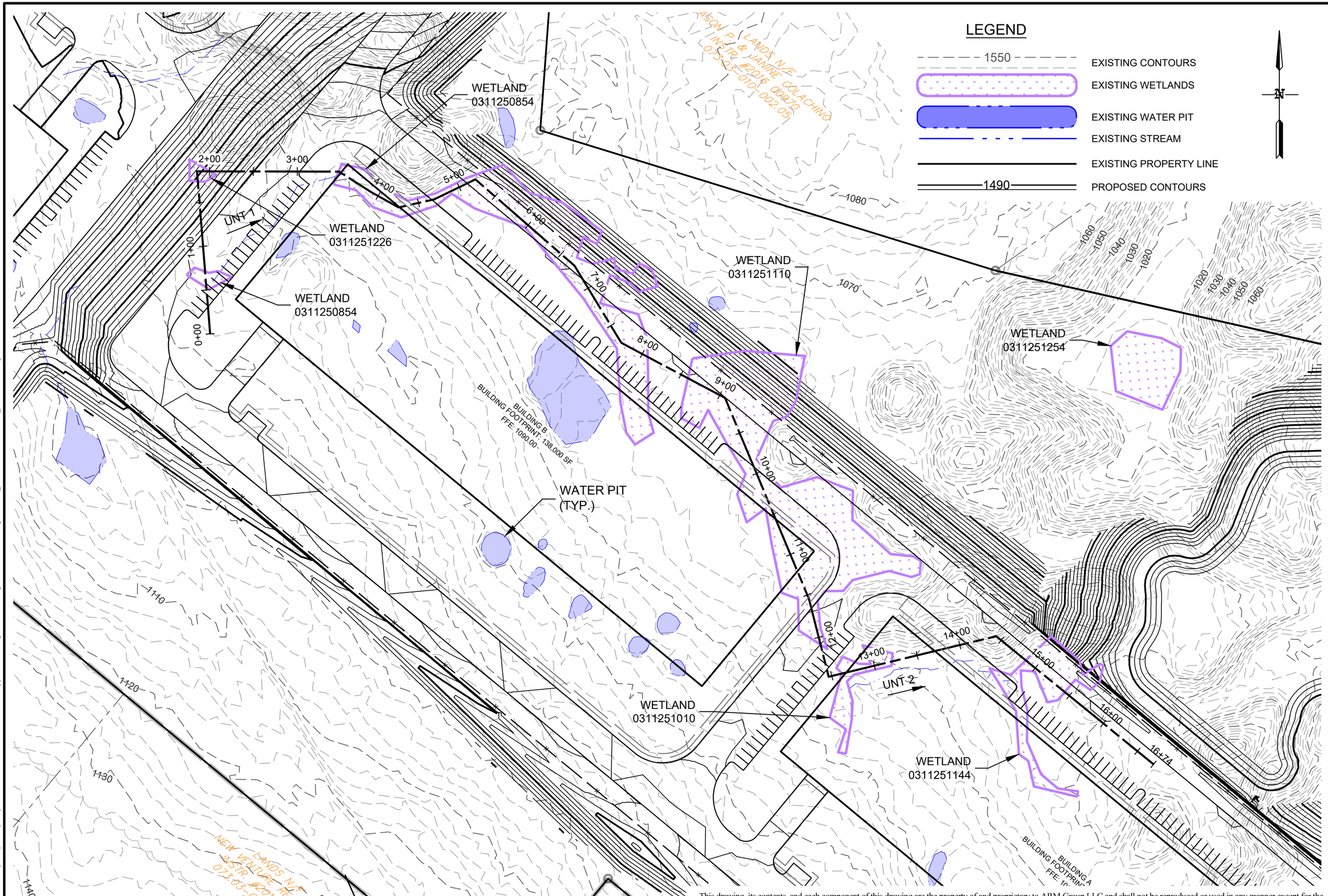
AQUATIC RESOURCE INVESTIGATION MAP

JERMYN TOWNSHIP
LACKAWANNA COUNTY, PA

PROJECT GRAVITY
ARCHBALD 25 DEVELOPER, LLC

Sheet 1b

P:\Marcus Hospitality Group Projects\24012215 - Task 3 Due Diligence\arcmap templates_Jermyn PA\GIS\APRX\Sheet_1B_Aquatic_Resource_Investigation_2July_Task3_20012215.aprx, Sheet_1B_Aquatic_Resource_Investigation_2July_Task3_20012215.pdf, 10/9/2025 3:38:21 PM, mbarnes



ARM Group LLC
Engineers and Scientists
www.armgroup.net

designed	TMA
checked	TMA
drawn	TMR
scale	1" = 100'
date	09/03/2025
project no.	24012215-8

0 100 200
SCALE IN FEET

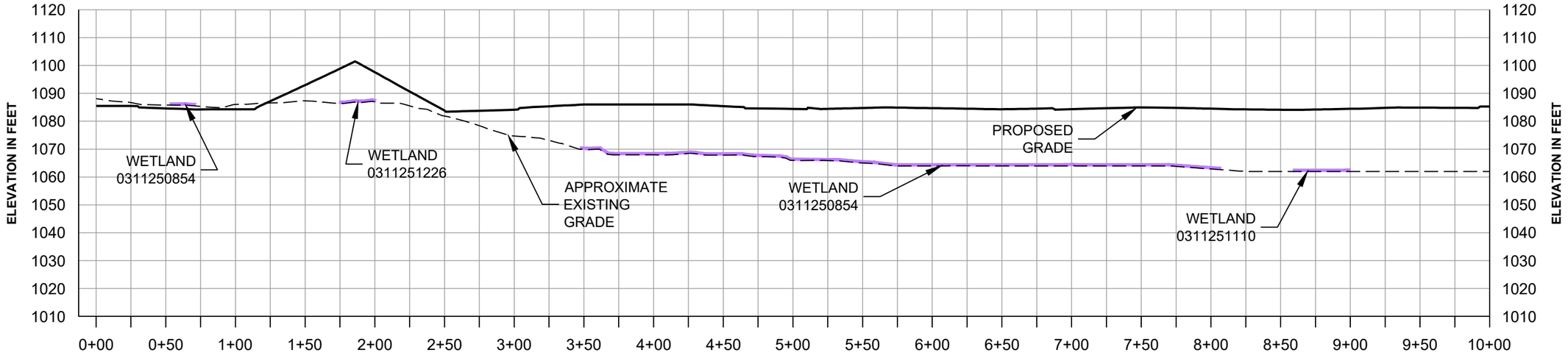
drawing title
SITE PLAN

Figure 1

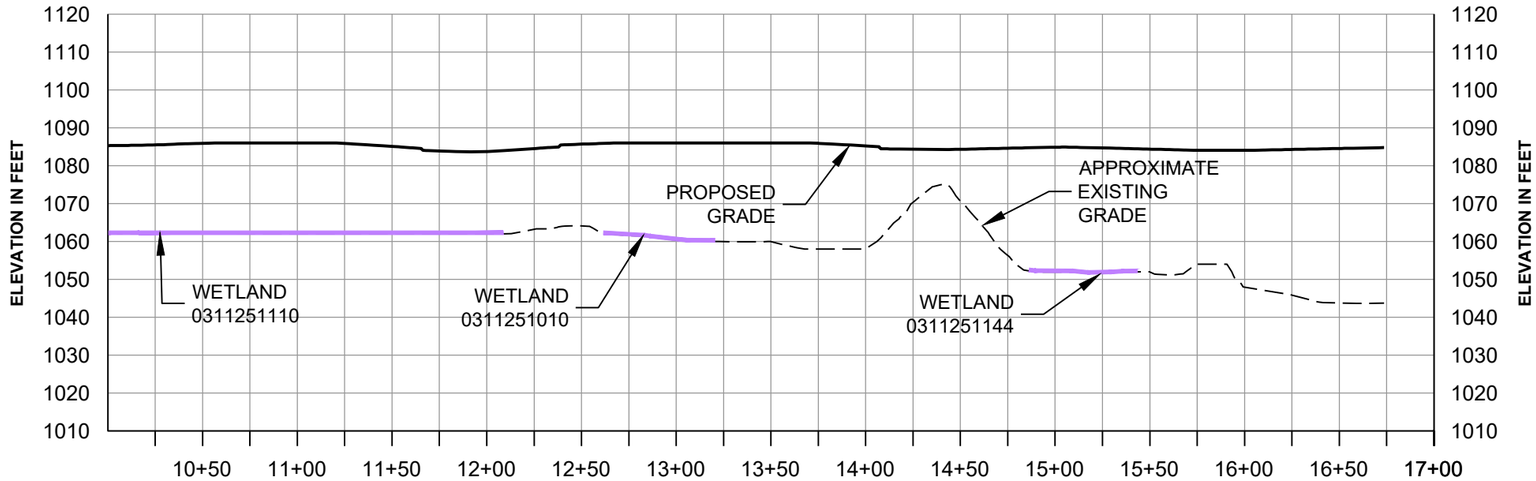
project title
PROJECT GRAVITY
ARCHBALD 25 DEVELOPER, LLC

ARCHBALD BOROUGH
LACKAWANNA COUNTY,
PENNSYLVANIA

P:\Western Hospitality Group\Projects\24012215 - Task 8, Joint Permit Application\Dwg\Production\Figures\24012215-8-Figure 1 & 2_Wetland Cross Sections_2025-10-08.dwg Plotted: October 10, 2025



WETLAND CROSS SECTIONS (STA 0+00 TO STA 10+00)



WETLAND CROSS SECTIONS (STA 10+00 TO STA 17+00)

ARM Group LLC
Engineers and Scientists
www.armgroup.net

designed TMA
checked TMA
drawn TMR
scale AS NOTED
date 09/03/2025
project no. 24012215-8

drawing title: WETLAND CROSS SECTIONS

project title: PROJECT GRAVITY
ARCHBALD 25 DEVELOPER, LLC

ARCHBALD BOROUGH
LACKAWANNA COUNTY,
PENNSYLVANIA

Figure 2

WATER PIT (TYP.)

WATER PIT (TYP.)

WETLAND 0311250854

WETLAND 0311251226

WETLAND 0311250854

WETLAND 0311251110

WETLAND 0311251254

LANDS N/F NEW VENTURE REALTY INC INSTR #2019-20961 013-03-010-002.10

LANDS N/F JASON R. & CHANNE COLACHINO INSTR #2016-00920 013-03-010-002.05

LANDS N/F JAMES W. LEE INSTR #2007-33542 013-04-010-005

LANDS N/F JASON R. & CHANNE COLACHINO INSTR #2016-00920 013-03-010-002.05

BUILDING A FOOTPRINT: 138,000 SF FFE: 1129.00

BUILDING B FOOTPRINT: 138,000 SF FFE: 1129.00

BUILDING C FOOTPRINT: 138,000 SF FFE: 1129.00

BUILDING D FOOTPRINT: 138,000 SF FFE: 1129.00

BUILDING E FOOTPRINT: 138,000 SF FFE: 1129.00

BUILDING F FOOTPRINT: 138,000 SF FFE: 1129.00

BUILDING G FOOTPRINT: 138,000 SF FFE: 1129.00

BUILDING H FOOTPRINT: 138,000 SF FFE: 1129.00

BUILDING I FOOTPRINT: 138,000 SF FFE: 1129.00

BUILDING J FOOTPRINT: 138,000 SF FFE: 1129.00

BUILDING K FOOTPRINT: 138,000 SF FFE: 1129.00

BUILDING L FOOTPRINT: 138,000 SF FFE: 1129.00

BUILDING M FOOTPRINT: 138,000 SF FFE: 1129.00

BUILDING N FOOTPRINT: 138,000 SF FFE: 1129.00

BUILDING O FOOTPRINT: 138,000 SF FFE: 1129.00

BUILDING P FOOTPRINT: 138,000 SF FFE: 1129.00

BUILDING Q FOOTPRINT: 138,000 SF FFE: 1129.00

BUILDING R FOOTPRINT: 138,000 SF FFE: 1129.00

BUILDING S FOOTPRINT: 138,000 SF FFE: 1129.00

BUILDING T FOOTPRINT: 138,000 SF FFE: 1129.00

BUILDING U FOOTPRINT: 138,000 SF FFE: 1129.00

BUILDING V FOOTPRINT: 138,000 SF FFE: 1129.00

BUILDING W FOOTPRINT: 138,000 SF FFE: 1129.00

BUILDING X FOOTPRINT: 138,000 SF FFE: 1129.00

BUILDING Y FOOTPRINT: 138,000 SF FFE: 1129.00

BUILDING Z FOOTPRINT: 138,000 SF FFE: 1129.00

UNIT

2+00 3+00 4+00 5+00 6+00 7+00 8+00 9+00 10+00

1070 1080 1090 1040 1030 1020 1010 1000 1050 1060

LEGEND

- 1550 — EXISTING CONTOURS
- EXISTING WETLANDS
- EXISTING WATER PIT
- EXISTING STREAM
- EXISTING PROPERTY LINE
- 1490 — PROPOSED CONTOURS

N

0 200 400 SCALE IN FEET

ARM Group LLC
Engineers and Scientists
www.armgroup.net

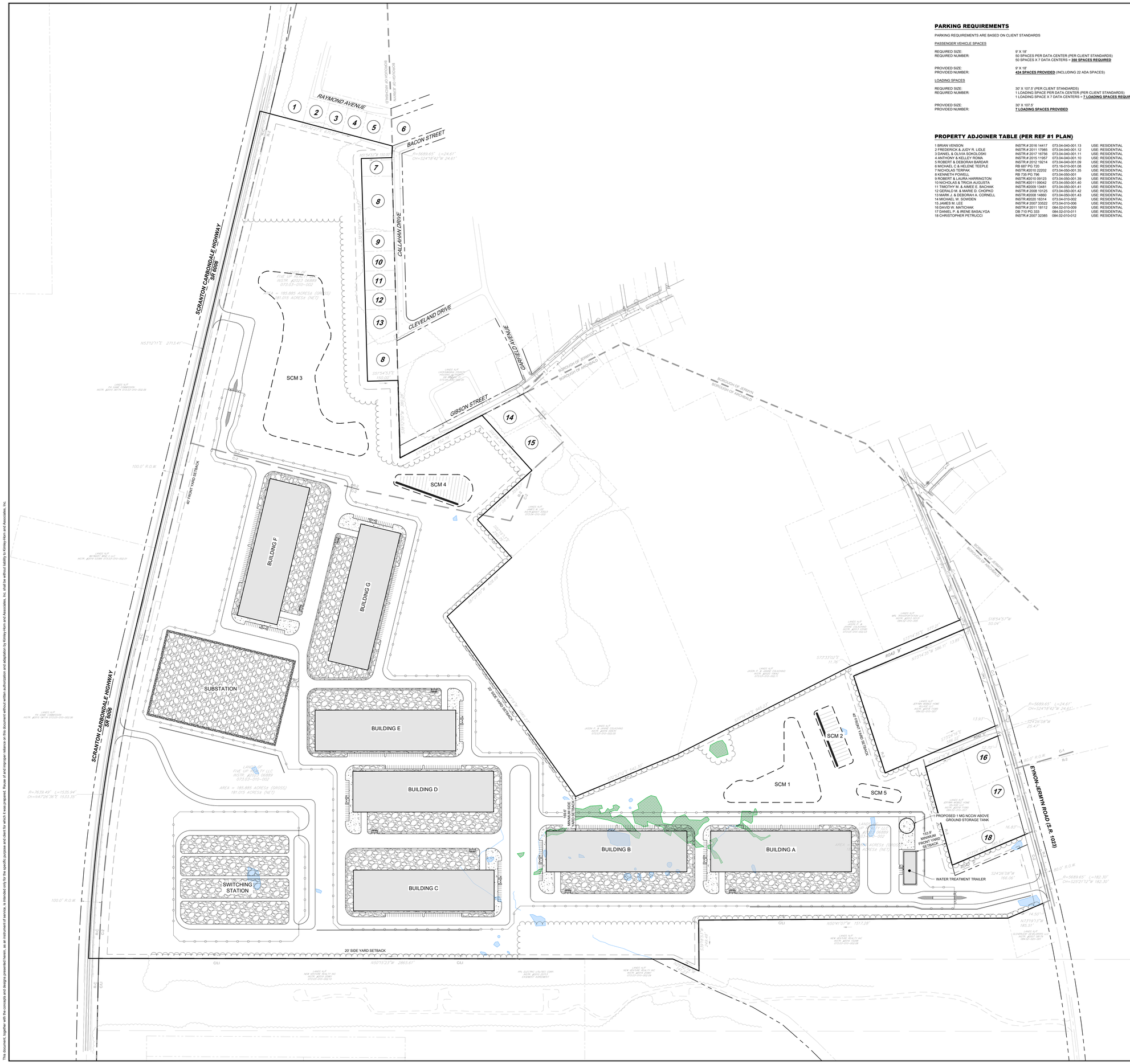
designed	TMA
checked	TMA
drawn	TMR
scale	1" = 200'
date	09/03/2025
project no.	24012215-8

Figure 3

drawing title: SITE PLAN

project title: PROJECT GRAVITY
ARCHBALD 25 DEVELOPER, LLC

ARCHBALD BOROUGH
LACKAWANNA COUNTY,
PENNSYLVANIA



PARKING REQUIREMENTS

PARKING REQUIREMENTS ARE BASED ON CLIENT STANDARDS

PASSENGER VEHICLE SPACES

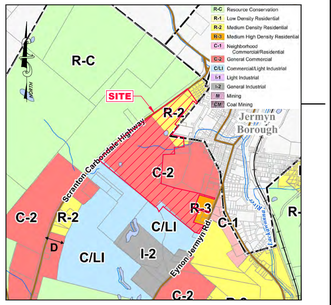
REQUIRED SIZE:	9' X 18'
REQUIRED NUMBER:	50 SPACES PER DATA CENTER (PER CLIENT STANDARDS) 50 SPACES X 7 DATA CENTERS = **350 SPACES REQUIRED**
PROVIDED SIZE:	9' X 18'
PROVIDED NUMBER:	**424 SPACES PROVIDED** (INCLUDING 22 ADA SPACES)

LOADING SPACES

REQUIRED SIZE:	30' X 107.5' (PER CLIENT STANDARDS)
REQUIRED NUMBER:	1 LOADING SPACE PER DATA CENTER (PER CLIENT STANDARDS) 1 LOADING SPACE X 7 DATA CENTERS = **7 LOADING SPACES REQUIRED**
PROVIDED SIZE:	30' X 107.5'
PROVIDED NUMBER:	**7 LOADING SPACES PROVIDED**

PROPERTY ADJOINER TABLE (PER REF #1 PLAN)

1 BRIAN VENSON	INSTR.# 2016 14417	073.04-040-001.13	USE: RESIDENTIAL
2 FREDERICK & JUDY R. LIDLE	INSTR.# 2011 17985	073.04-040-001.12	USE: RESIDENTIAL
3 DANIEL & OLIVIA SOKOLOSKI	INSTR.# 2017 16756	073.04-040-001.11	USE: RESIDENTIAL
4 ANTHONY & KELLEY ROMA	INSTR.# 2015 11957	073.04-040-001.10	USE: RESIDENTIAL
5 ROBERT & DEBORAH BARDAR	INSTR.# 2012 19214	073.04-040-001.09	USE: RESIDENTIAL
6 MICHAEL C & HELENE TEEPLE	RB 687 PG 720	073.16-010-001.08	USE: RESIDENTIAL
7 NICHOLAS TERPAK	INSTR.#2010 22202	073.04-050-001.35	USE: RESIDENTIAL
8 KENNETH POWELL	RB 735 PG 796	073.04-050-001	USE: RESIDENTIAL
9 ROBERT & LAURA HARRINGTON	INSTR.#2010 09123	073.04-050-001.39	USE: RESIDENTIAL
10 NICHOLAS & TRICIA AUGUSTA	INSTR.#2011 09042	073.04-050-001.40	USE: RESIDENTIAL
11 TIMOTHY M. & AIMEE E. BACHAK	INSTR.#2009 13481	073.04-050-001.41	USE: RESIDENTIAL
12 GERALD M. & MARIE D. CHOPKO	INSTR.# 2008 10125	073.04-050-001.42	USE: RESIDENTIAL
13 MARK J. & DEBORAH A. CORNELL	INSTR.#2008 14860	073.04-050-001.43	USE: RESIDENTIAL
14 MICHAEL W. SOWDEN	INSTR.#2020 16314	073.04-010-002	USE: RESIDENTIAL
15 JAMES M. LEE	INSTR.# 2007 33522	073.04-010-006	USE: RESIDENTIAL
16 DAVID W. MATICHAK	INSTR.# 2011 18112	084.02-010-009	USE: RESIDENTIAL
17 DANIEL P. & IRENE BASALYGA	DB 710 PG 333	084.02-010-011	USE: RESIDENTIAL
18 CHRISTOPHER PETRUCCI	INSTR.# 2007 32385	084.02-010-012	USE: RESIDENTIAL



ZONING MAP OF ARCHBALD BOROUGH
(LACKAWANNA COUNTY, PENNSYLVANIA)
SCALE: 1" = 2,000'

LEGEND

- EXISTING PROPERTY LINE
- EXISTING MUNICIPAL BOUNDARY
- EXISTING ADJOINING PROPERTY LINE
- EXISTING LEGAL RIGHT-OF-WAY
- EXISTING ZONING DISTRICT BOUNDARY
- EXISTING EASEMENT
- EXISTING CURB
- EXISTING OVERHEAD ELECTRIC LINE (WITH UTILITY POLE)
- EXISTING TREELINE
- EXISTING WETLANDS FIELD DELINEATED
- EXISTING SURFACE WATER
- PROPOSED SETBACK LINE
- PROPOSED CURB
- PROPOSED FLUSH/DEPRESSED CURB
- PROPOSED SAWCUT LINE
- PROPOSED FENCE
- PROPOSED CONCRETE SIDEWALK (IMPERVIOUS)
- PROPOSED GRAVEL (IMPERVIOUS)
- PROPOSED ASPHALT PAVEMENT (IMPERVIOUS)
- PROPOSED TREELINE
- PROPOSED RETAINING WALL
- PROPOSED BUILDING (IMPERVIOUS)
- PROPOSED SWM FACILITY (PERVIOUS)

SITE PLAN NOTES

1. ALL CONSTRUCTION SHALL CONFORM WITH APPLICABLE STATE AND LOCAL CONSTRUCTION STANDARDS AS IDENTIFIED IN THESE PLANS. THE CONTRACTOR SHALL MAINTAIN A CURRENT RELEASE OF THE STATE AND LOCAL LAND DEVELOPMENT STANDARDS MANUAL ON THE PROJECT SITE FOR REFERENCE DURING CONSTRUCTION OF THE PROJECT.
2. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED. ALL CURB RADII GIVEN TO THE FACE OF CURB AND ALL RADII ARE ASSUMED TO BE 5' UNLESS NOTED OTHERWISE.
3. ALL PAINT STRIPING, PAVEMENT MARKINGS, AND SIGNAGE SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" OR AS OTHERWISE SPECIFIED. ALL REFERENCED SIGN STANDARDS ARE TAKEN FROM THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES". ALL NEW SIGNS SHALL BE MOUNTED ON GALVANIZED POSTS AND IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS.
4. THE CONTRACTOR SHALL VERIFY DIMENSIONS AT JOBSITE.
5. CONTRACTOR SHALL INSTALL ACCESSIBLE RAMPS PER PENNDOT AND ADA STANDARDS AT ALL DRIVE AND BUILDING LOCATIONS AS REQUIRED.
6. ALL WORK IN THE RIGHT-OF-WAY REQUIRES A HIGHWAY OCCUPANCY PERMIT FROM PENNDOT. CONTRACTOR SHALL SECURE ALL REQUIRED CONSTRUCTION PERMITS.

GENERAL PLAN INFORMATION

PROJECT ADDRESS:	S SCRANTON CARBONDALE HWY - SR 6 & N EYON JERMYN RD, ARCHBALD, PA 18403
PARCEL ID:	073.03-010-002
APPLICANT/ EQUITABLE OWNER:	ARCHBALD 25 DEVELOPER, LLC * 80 BROAD STREET, 18TH FLOOR, NEW YORK, NY 10004

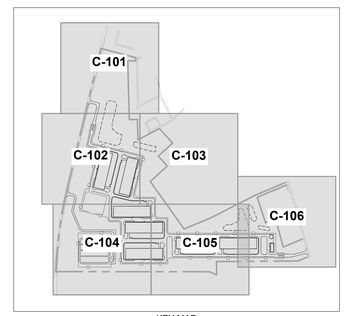
* ***RESPONSIBLE PARTY FOR OPERATION & MAINTENANCE OF STORMWATER BMP'S***

SITE AREA:	GROSS AREA:	185.885 AC. (8,097,150 SQ. FT.)
	LEGAL R.O.W.:	4.870 AC.(212,137 SQ. FT.)
	NET AREA:	181.015 AC. (7,885,013 SQ. FT.)

BOROUGH OF ARCHBALD DIMENSIONAL STANDARDS					
ZONING DATA REFERENCE PER THE BOROUGH OF ARCHBALD ZONING ORDINANCE NO. 2023-1 ADOPTED MARCH 15, 2023					
ZONING DISTRICT: GENERAL COMMERCIAL (C-2) MEDIUM DENSITY RESIDENTIAL (R-2)					
EXISTING USE: FORMER MINING SITE PROPOSED USE: DATA CENTER					
BULK REQUIREMENTS	REQUIRED (C-2)	REQUIRED (R-2)	EXISTING	PROPOSED	COMPLIANT (YES/NO)
MINIMUM LOT AREA:	1.00 AC (43,560 SF)	0.28 AC (12,000 SF)	8,097,160 SF (185.885 Ac)	8,097,160 SF (185.885 Ac)	YES
MINIMUM LOT WIDTH AT MINIMUM SETBACK LINE:	150 FT	80 FT	348.50 FT	348.50 FT	YES
MINIMUM BUILDING SETBACKS					
FRONT YARD:	25 FT / 40 FT*	25	11.5 FT	161.7 FT	YES
REAR YARD:	30 FT / 40 FT**	25	N/A	N/A	N/A
SIDE YARD:	20 FT / 40 FT**	12	41.8 FT	169.6 FT	YES
COVERAGE REQUIREMENTS					
MAXIMUM STRUCTURE HEIGHT:	5 STORY / 70 FT	3 STORY / 40 FT	<5 STORY / 70 FT	≤5 STORY / 70 FT	YES
MAXIMUM BUILDING COVERAGE:	50%	45%	0%	12.4% (975,600 SF / 7,885,013 SF)	YES
MAXIMUM IMPERVIOUS COVERAGE:	75%	60%	<0.1%	39.0% 3,077,027 SF / 7,885,013 SF)	YES
MAXIMUM PERMISSIBLE NOISE LEVEL	55 dB (A) - AM 45 dB (A) - PM	55 dB (A) - AM 45 dB (A) - PM	UNMITIGATED 65 dB (A) - AM 53 dB (A) - PM	MITIGATED 55 dB (A) - AM 43 dB (A) - PM	YES

* IF PARKING SPACES ARE PROVIDED BETWEEN THE BUILDING AND THE STREET CURBLINE.

** 40 FEET SIDE AND 40 FEET REAR FOR A PRINCIPAL BUSINESS FROM A LOT IN A RESIDENTIAL DISTRICT THAT IS OCCUPIED BY A PRINCIPAL DWELLING THAT IS NOT IN COMMON OWNERSHIP.



KEY MAP
SCALE 1" = 1,000'

NORTH

GRAPHIC SCALE IN FEET
0 75 150 300
1 INCH = 150 FEET

CALL BEFORE YOU DIG!
PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION, EXCAVATION OR BLASTING. DIG'S IN DESIGN STAGE - STOP CALL
PA 1 One Call System, Inc.
1-800-242-1776
SERIAL NUMBER: 20251241183

No.	REVISIONS	DATE	BY
1	PER ARCHBALD BOROUGH COMPLETENESS REVIEW, DATED 05/14/2025	05/16/25	KMC
2	PER ARCHBALD BOROUGH ZONING & PLANNING, DATED 06/12/25 AND COUNTY PLANNING REVIEW, DATED 06/30/25	07/22/25	KMC
3	ENLARGED SWITCHYARD PER PPRL COORDINATION	08/29/25	KMC

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
620 W GERMANTOWN PIKE, SUITE 200
PLYMOUTH MEETING, PA 19462
PHONE: 267-687-0150
WWW.KIMLEY-HORN.COM

KHA PROJECT 122125001
DATE 04/25/2025
SCALE: AS SHOWN
DESIGNED BY: SLC
DRAWN BY: KMC
CHECKED BY: JW

PRELIMINARY LAND DEVELOPMENT PLANS

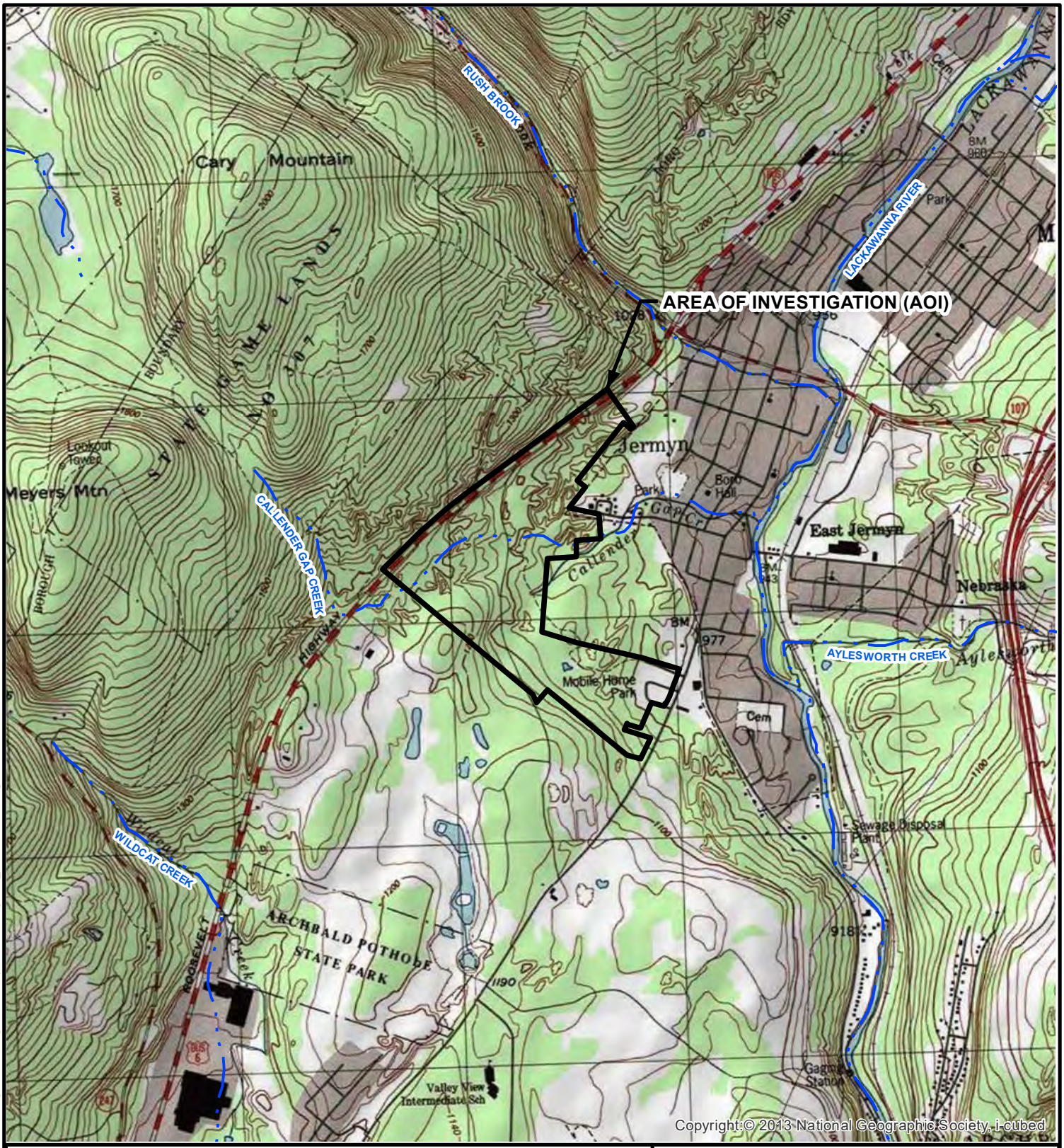
PROJECT FOR
GRAVITY
ARCHBALD BOROUGH, LACKAWANNA COUNTY, PENNSYLVANIA
PREPARED FOR
ARCHBALD 25 DEVELOPER, LLC
80 BROAD STREET, 18TH FLOOR, NEW YORK, NY 10004

OVERALL SITE PLAN

SHEET NUMBER
C-100
12 OF 44

REQUIREMENT G

Site Location Map



REF: Base map from ESRI USA Topo Maps. Refer to USGS 7.5 minute Carbondale, PA.

LEGEND

AREA OF INVESTIGATION

STREAM

0 2,000 4,000 6,000

SCALE IN FEET

Site Location Map

Gibson Street Project
Western Hospitality Group
Archbald Borough
Lackawanna County, PA

June, 2025	Scale: 1" = 2,000'	24012215

ARM Group LLC
Engineers and Scientists

Figure 1

P:\Western Hospitality Group\Projects\24012215 - Task 3, Due Diligence Investigation -Jermyn PA\GIS\Figure 1_Site Location Map.mxd

REQUIREMENT H

Project Narrative and
Aquatic Resource Impact Table

PROJECT DESCRIPTION

Applicant Name: Archbald 25 Developer, LLC
Project Name: Project Gravity
Latitude and Longitude of Project Site: 41.524244°, -75.561365°

Introduction

The Applicant is seeking to construct a data center consisting of seven buildings, associated parking areas, a substation and access roads emanating from two adjoining State Routes. A significant portion of the project area has been strip mined with forested regrowth. Deep mining has also occurred at the site.

The project area consists of approximately 180 acres of disturbed land that will equitably owned and operated by the Applicant for the proposed activities in Archbald Borough, Lackawanna County, PA.

Background Review

Callender Gap Creek is mapped within the AOI based on review of the USGS 7.5-minute quadrangle mapping. The AOI drains to Callender Gap Creek, which empties into the Lackawanna River. The project is mainly within the Upper Susquehanna-Lackawanna basin however a small portion in the northwest corner is mapped within the Upper Susquehanna-Tunkhannock basin (Hydrologic Unit Code, HUC 2050107 and 2050106, United States Environmental Protection Agency).

According to Pennsylvania Code Title 25 Chapter 93 Water Quality Standards, the watershed of Callender Gap Creek has a designation of Cold Water Fishes/Migratory Fishes (CWF/MF). Callender Gap Creek has been designated as having impaired aquatic life due to acid mine drainage - siltation (eMapPA, September 2025). According to the Pennsylvania Department of Environmental Protection (PADEP)'s Statewide *Existing Use Classifications* list (revised on July 21, 2025), Callender Gap Creek does not have an Existing Use classification.

According to Pennsylvania Code Title 25 Chapter 93 Water Quality Standards, the watershed of the Lackawanna River has a designation of Cold Water Fishes, High Quality/Migratory Fishes (CWF-HQ/MF). The Lackawanna River has been designated as having impaired aquatic life due to acid mine drainage – metals and acid mine drainage – pH (eMapPA, September 2025). According to the PADEP's Statewide *Existing Use Classifications* list (revised on July 21, 2025), the Lackawanna River does not have an Existing Use classification. According to the Pennsylvania Fish and Boat Commission (PFBC), the Lackawanna River is designated as supporting Natural Reproduction of Trout and is designated as a Class A Trout Stream (September 2025).

Proposed Impacts to Waters and Wetlands

The project involves disturbance within two (2) stream channels and associated work within the designated floodway, six (6) wetlands and thirty-one (31) open bodies of water as depicted on the site plans.

The following supporting documentation is also included as part of the application:

- Site Location Map;
- Site Plans;
- Aquatic Resource Investigation Memorandum;
- Signed receipt for the Pennsylvania Natural Diversity Inventory (PNDI) search indicating "Conservation Measure" with PA Game Commission and a "Potential Impact" with the US Fish and Wildlife Service;
- Copies of the municipal and county government notifications; and
- Aquatic Resource Impact Tables.

Aquatic Resource Impact Table

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATERWAYS ENGINEERING AND WETLANDS

Applicant's Name / Client Archbald 25 Developer, LLC

AQUATIC RESOURCE IMPACT TABLE
FOR PENNSYLVANIA CHAPTER 105 WATER OBSTRUCTION AND ENCROACHMENT APPLICATION

Please begin to complete the Aquatic Resource Impact Table by including the Applicant's Name / Client (upper right of the page) for each page. Also, complete the Project / Site Name (upper left of the table) and the date of application package submission (upper right of the table, under Applicant's Name / Client). Then complete one row of data for each regulated (PA DEP Chapter 105) structure or activity and type of impact for the proposed project based on the instructions for each column below; add additional worksheets if needed. Provide completed Aquatic Resource Impact Table with **Chapter 105 Water Obstruction and Encroachment application;** DO NOT submit instructions or example (page 1 or 2) for this table.

	DEP Permit Number:	leave blank, it will be completed by DEP upon permit issuance.
	Project Information	*provide the appropriate information based on the details on each impact for the project*
	Structure / Activity Identifier:	provide a unique identifier for each regulated structure and/or activity being proposed, typically a name and number; this same unique identifier should be used in all aspect of the permit application package.
	Aquatic Resource Type	*provide the type of aquatic resource (based on watercourse, floodway or wetland) being impacted;*
	Watercourse:	provide the type of watercourse being impacted: perennial or intermittent stream
	Floodway:	provide the type of floodway being impacted: crossing or paralleling to the stream
	Wetland:	provide the type of wetland being impacted: HGM Preferred, or the Palustrine Community Classification Group
	Latitude (nad83):	provide the latitude of the aquatic resource impact in decimal degrees (most online mapping tools provide this by clicking or right clicking).
	Longitude (nad83):	provide the longitude of the aquatic resource impact in decimal degrees (most online mapping tools provide this by clicking or right clicking).
	Waters Name:	provide the name of the stream or other body of water (if available). eMapPA can assist in locating names.
	PA Code Chapter 93 Designation:	provide the Chapter 93 designation for the aquatic resource (i.e. HQ-CWF, WWF, EV, MF and for wetlands EV or Other) to Identify Chapter 93: Use eMapPA, or designation in Chapter 93, and identify Existing Use if more protective.
	PA DEP Chapter 105 Impacts	*provide the appropriate information based on the details on each impact for the project*
	Work Proposed:	provide the type of work proposed to impact the resource; aerial utility line, horizontal drill/boring, trench excavation or placement of fill
	PADEP Impact Type:	provide the type of aquatic resource impact; temporary or permanent.
	ACOE Impact Type:	provide the type of aquatic resource impact under section 404; temporary or permanent
	Watercourse Impact:	provide the length and width in feet of impact, indicate "n/a" if impact is to a wetland.
	Floodway Impact:	provide the length and width in feet of direct and indirect/secondary 100-year floodway impact, indicate "n/a" if impact is to a wetland.
	Wetland Impact:	provide the length and width in feet of impact to wetlands; indicate "n/a" if impact is to a watercourse.
	Army Corps Impacts: Entered only if Different from DEP Impacts	
	Watercourse Impact:	provide the length and width in feet of impact, indicate "n/a" if impact is to a wetland. If no impact to 404 Jurisdictional areas (ACOE Impacts) but there are DEP impacts, enter 0
	Wetland Impact:	provide the length and width in feet of impact to wetlands; indicate "n/a" if impact is to a watercourse. If no impact to 404 Jurisdictional areas (ACOE Impacts) but there are DEP impacts, enter 0

PADEP Impact Type: temporary or permanent.

Permanent Impacts are those areas affected by a water obstruction or encroachment that consist of both direct and indirect impacts that result from the placement or construction of a water obstruction or encroachment and include areas necessary for the operation and maintenance of the water obstruction or encroachment located in, along or across, or projecting into a watercourse, floodway or body of water.

Temporary Impacts are those areas affected during the construction of a water obstruction or encroachment that consists of both direct and indirect impacts located in, along or across, or projecting into a watercourse, floodway or body of water that are restored upon completion of construction. This does not include areas that will be maintained as a result of the operation and maintenance of the water obstruction or encroachment located in, along or across, or projecting into a watercourse, floodway or body of water (these are considered permanent impacts).

NOTE: Form 3150-PM-BWEW0557 or equivalent must be submitted for a Joint Permit Application. Applicants may choose to submit their own version of this table, as long as the minimum information is included, with additional columns placed to the right in a spreadsheet format. Many applicants choose to provide additional information or data to help DEP reviewers understand the type of aquatic resource, its condition, the nature of the impact, or simply to cross-reference the impact locations to maps, plans, or other application materials. Additional information often allows for a more efficient DEP review, and cross references to corresponding supplemental information is helpful and leads to less questions.

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BUREAU OF WATERWAYS ENGINEERING AND WETLANDS

Applicant's Name / Client Archbald 25 Developer, LLC

AQUATIC RESOURCE IMPACT TABLE
FOR PENNSYLVANIA CHAPTER 105 WATER OBSTRUCTION AND ENCROACHMENT APPLICATION

Project / Site Name: Project Gravity Date: August 2025

DEP USE ONLY	Project Information						PA DEP / 105						Enter Only If Different from DEP Impacts Army Corps Impacts:	
PADEP Permit Number	Structure / Activity unique identifier	Aquatic Resource Type	Latitude dd nad83	Longitude dd nad83	Waters Name	PA Code Chapter 93 Designation	Work Proposed	DEP Impact Type temp / perm	ACOE Impact Type temp / perm	Watercourse Impact *Top of Bank to Top of Bank* Length and Width in feet	Floodway Impact *Top of Bank Landward* Length and Width in feet	Wetland Impact Dimensions Length and Width in feet	Watercourse Impact Length and Width in feet	Wetland Impact Length and Width in feet
	UNT 1	Stream R4SB3/5	41.520989	-75.556843	UNT 1	NA	Fill	Perm	Perm	207 - 4	207 - 100	N/A	-	-
	Wetland 0311250835	PEM1 Wetland	41.522232	-75.559762	Wetland 0311250835	Other	Fill	Perm	Perm	N/A	N/A	52 – 8.4	-	-
	Wetland 0311250854	PEM1 Wetland	41.522537	-75.558317	Wetland 0311250854	Other	Fill	Perm	Perm	N/A	N/A	555 – 34.5	-	-
	Wetland 0311251010	POW (60%), PSS1 (30%) and PEM1 (10%) Wetland	41.521524	-75.557492	Wetland 0311251010	Other	Fill	Perm	Perm	N/A	N/A	382 - 87	-	-
	Wetland 0311251226	PEM1 Wetland	41.522566	-75.559790	Wetland 0311251226	Other	Fill	Perm	Perm	N/A	N/A	31 - 14	-	-
	UNT 2	Stream R4SB3/5	41.522441	-75.559489	UNT 2	NA	Fill	Perm	Perm	252 - 4	252 – 100	N/A	-	-
	Wetland 0311251110	PSS1 Wetland	41.520962	-75.557141	Wetland 0311251110	Other	Fill	Perm	Perm	N/A	N/A	150 – 14.5	-	-
	Wetland 0311251144	PSS1 (70%) and PFO1 (30%) Wetland	41.520966	-75.556303	Wetland 0311251144	Other	Fill	Perm	Perm	N/A	N/A	305 – 18.5	-	-
	OBW 001 – OBW 031	Open Bodies of Water	See Map	See Map	OBW 001 – OBW 031	Other	Fill	Perm	Perm	0.78 ac (340 – 100 (avg.))	N/A	N/A	-	-
										-	-	-	-	-
										-	-	-	-	-
										-	-	-	-	-

Supplemental Impact Summary Chart

Structure / Activity unique identifier	Aquatic Resource	Latitude	Longitude	Waters Name	PA Code Chapter 93	Work Proposed	DEP Impact Type temp / perm	ACOE Impact Type temp / perm	Permanent		JPA Application Fee	
									Direct in square foot	Indirect in square foot	Permanent in acres	Temporary in acres
UNT 1	Stream R4SB3/5	41.520989	-75.556843	UNT 1	NA	Fill	Perm	Perm	828		0.019	-
Wetland 0311250835	PEM1 Wetland	41.522232	-75.559762	Wetland 0311250835	Other	Fill	Perm	Perm	436.8		0.010	-
Wetland 0311250854	PEM1 Wetland	41.522537	-75.558317	Wetland 0311250854	Other	Fill	Perm	Perm	19147.5		0.440	-
Wetland 0311251010	POW (60%), PSS1 (30%) and PEM1 (10%) Wetland	41.521524	-75.557492	Wetland 0311251010	Other	Fill	Perm	Perm	33234		0.763	-
Wetland 0311251226	PEM1 Wetland	41.522566	-75.55979	Wetland 0311251226	Other	Fill	Perm	Perm	434		0.010	-
UNT 2	Stream R4SB3/5	41.522441	-75.559489	UNT 2	NA	Fill	Perm	Perm	1008		0.023	-
Wetland 0311251110	PSS1 Wetland	41.520962	-75.557141	Wetland 0311251110	Other	Fill	Perm	Perm	2175		0.050	-
Wetland 0311251144	PSS1 (70%) and PFO1 (30%) Wetland	41.520966	-75.556303	Wetland 0311251144	Other	Fill	Perm	Perm	5642.5		0.130	-
OBW 001 through OBW 031	Open Bodies of Water	Refer to Attachment F		OBW 001 - OBW 031	Other	Fill	Perm	Perm	33977		0.780	-
											2.22	

Requirement I

Color Photographs with Map

SOILS IN PROPERTY
HYDRIC:
ATHERTON LOAM (At)
HOLLY SILT LOAM (Hm)
HYDRIC COMPONENT:
DYSTROCHREPTS AND ROCK OUTCROP (DYD)
MORRIS CHANNERY LOAM (MxB)
NORRIS AND CHIPPEWA CHANNERY LOAMS (NxB)
POPE SOILS (Po)
VOLUSIA CHANNERY SILT LOAM (VxB)
WURTSBORO EXTREMELY STONY LOAM (WxB, WxD)
UPLAND SOILS:
ARNOT-ROCK OUTCROP COMPLEX (AsD)
DUMPS, MINE (Da)
DYSTROCHREPTS AND ROCK OUTCROP (DYE)
LORDSTOWN CHANNERY SILT LOAM (LxD)
OQUAGA AND LORDSTOWN EXTREMELY STONY LOAMS (OYE)
UDORTHENTS, STRIP MINE (UA)
URBAN LAND (Ur)
WELLSBORO CHANNERY LOAM (WcC, WgB, WgD)
WYOMING GRAVELLY SANDY LOAM (WYB, WYC, WYD)
OTHER:
WATER (W)

LEGEND

- PHOTO LOCATION/DIRECTION
- WETLAND DATA POINT (WDP)
- UPLAND DATA POINT (UDP)
- DRAINAGE FEATURE
- STREAM
- STREAM FEATURE IDENTIFIED IN FIELD INVESTIGATION
- SOIL TYPE (WxD)
- AREA OF INVESTIGATION (AOI)
- 100 YEAR FEMA FLOODPLAIN
- DELINEATED WETLAND
- OPEN BODY OF WATER
- EXISTING CONTOUR: 2 FOOT

NOTES:

1. THE BASE MAP HAS BEEN CREATED USING AVAILABLE AERIAL PHOTOGRAPHY PROVIDED BY PEMA, DATED 2018. EXISTING TOPOGRAPHY HAS BEEN PROVIDED BY PAMAP. NWI PALUSTRINE WETLANDS PROVIDED BY US FISH AND WILDLIFE SERVICE, DATED 2022. STREAM DATA FROM USGS, DATED 2017.

2. THIS PLAN IS IN THE PENNSYLVANIA STATE PLANE NORTH, NORTH AMERICAN DATUM 1983 (NAD 83) COORDINATE SYSTEM.

ARM Group LLC
Engineers and Scientists

No.	Revision	Date	By

field	ARM	scale	1" = 275'
checked	MAB	date	06/16/2025
plans	KSG	project no.	24012215

0 100 200 300 SCALE IN FEET

AQUATIC RESOURCE INVESTIGATION MAP

ARCHBALD BOROUGH
LACKAWANNA COUNTY, PA

project title
PROJECT GRAVITY
ARCHBALD 25 DEVELOPER LLC

drawing title
Sheet 1

P:\Master Hospitality Group\Projects\2012215 - Task 3, Due Diligence Investigation Army PA (GS-Other) | Aquatic Resource Investigation Map_Task3.mxd

PHOTOGRAPH LOG
Project Gravity

Photograph 1 illustrates an overview of Wetland 0311250835 near an old logging road which drains to UNT 1. The view is facing west-northwest.

Photograph 2 illustrates an overview of Wetland 0311250854. The view is facing north-northwest.

Photograph 3 illustrates an overview of Wetland 0311251010. The view is facing southwest.

Photograph 4 illustrates the conditions within Wetland 0311251110. The view is facing southwest.

Photograph 5 illustrates an overview of the conditions within Wetland 0311251145. The view is facing southwest.

Photograph 6 illustrates Wetland 0311251226 which appeared to be on a former access road disturbance. The view is facing northwest.

Photograph 7 illustrates the conditions of Wetland 0311251254 located at the bottom of a large topographical depression. The view is facing north-northeast.

Photograph 8 illustrates the isolated UNT 1. The view is facing east.

Photograph 9 illustrates the isolated UNT 1. The view is facing east.

Photograph 10 illustrates a typical view of one of the excavated Open Bodies of Water. The view is facing southwest.

Photograph 11 illustrates another typical view of an excavated Open Body of Water. This is in the bottom of a strip mine pit. The view is facing southeast.

Photograph 12 illustrates a typical view of an isolated drainage feature draining into a strip mine pit. The view is facing northeast.

Photograph 13 illustrates a typical view of the uplands in the strip-mined portion of the AOI. The view is facing southeast.

Photograph 14 illustrates a collapsed deep mine entrance. The view is facing southeast.

Photograph 15 illustrates a typical view of the uplands in the forested, southeastern portion of the AOI. The view is facing north/northeast.

Photograph 16 illustrates a view of the existing mobile home community in the eastern portion of the AOI. The view is facing southeast.

REQUIREMENT J

Environmental Assessment Form

A R M G r o u p L L C

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CHAPTER 105 ENVIRONMENTAL ASSESSMENT FORM

			Item Included	Item Location
Note: The Department may waive a specific information requirement in writing, at the request of the Applicant, during the pre-application review process if the Department determines the information is not necessary to complete the review.				
Module S1: Project Summary				
This module is intended to organize information in order to present an overall summary of the project scope, certain key information requirements and when applicable, a comprehensive view of the overall project and related projects.				
A. Provide an overall project description and If the answer to the question below is **YES**, address CEA requirements; otherwise proceed to **S1.B** Comprehensive Environmental Assessment (CEA) when applicable. Answer the following question:			☒	REQs H and J
Does the "overall" project require more than one Ch. 105 permit in more than one county or will the project be completed in more than one phase?	☐ Yes	☒ No		
B. Provide information related to the project purpose, need, water dependency and summarize the amount and type of resources present and the temporary and permanent impacts proposed to those resources.			☒	REQs H and J
Module S2: Resource Identification and Characterization				
This module is intended to organize information related to the identification of the resources present on the project site and to characterize those resources that may be affected by the proposed project.				
A. Provide the standard resource identification information, location map, wetland determination or delineation reports; watercourse reports; identification and qualifications of preparers; location map, and answer the related questions.			☒	REQs G and J
Is the site located within or adjacent to any of the following; or within 100 feet of items vii or viii?				
i. National, state or local park, forest or recreation area	☐ Yes	☒ No		NA
ii. National natural landmark	☐ Yes	☒ No		NA
iii. National wildlife refuge, or Federal, state, local or private wildlife or plant sanctuaries	☐ Yes	☒ No		NA
iv. State Game Lands	☒ Yes	☐ No		NA
v. Areas identified as prime farmland	☐ Yes	☒ No		NA
vi. Source for a public water supply	☐ Yes	☒ No		NA
vii. A National Wild or Scenic River or the Commonwealth's Scenic Rivers System	☐ Yes	☒ No		NA
viii. Designated Federal wilderness area	☐ Yes	☒ No		NA
B. Identify all aquatic resources present on the project site and provide an identifier, the resource type; size of the resource(s); fishery designations, Ch. 93 uses and special protection status; and Exceptional Value (EV) wetland analysis.			☒	REQ J
C. Provide the following information related to habitat for Federal threatened and endangered (T&E) plant and animal species or State T&E species or species of special concern - copies of search forms or search receipts; identification of avoidance and minimization efforts taken to resolve identified conflicts.			☒	REQ E
Did the PNDI search or agency coordination identify any potential conflicts?	☒ Yes	☐ No		REQ E
If the above is answered **YES**; answer the following two questions related to PNDI Coordination:				
a. ***Is the applicant utilizing a sequential review of the PNDI coordination?***	☐ Yes	☒ No		
b. ***Is the applicant utilizing a concurrent review of the PNDI coordination?***	☒ Yes	☐ No		
D. Characterize the aquatic resources: riverine, wetland and lacustrine present on the project site that are proposed to be directly or indirectly affected by the project. Including but not limited to the following, resource classification information, Level 2 rapid condition assessment results, discussion of resource functions, characterization of riparian properties and any other relevant information or studies conducted.			☒	REQ J
Module S3: Identification and Description of Potential Project Impacts				
*This module is intended to organize and present information concerning the potential impacts or effects of the proposed project **in this** application. Impacts related to the "over all" project that are proposed under related but separate application(s) should be addressed as part of the CEA Policy response under **S1.A**.*				
A. Provide a summary table of the proposed temporary and permanent direct and indirect impacts for each effected resource category (e.g. riverine, wetlands and lacustrine resources).			☒	REQs H and J
B. If any questions from **S2.A** Standard Information Response questions were answered YES, discuss in detail any potential impacts to those resource(s).			☐	NA
IMPORTANT NOTE: If either item vii or viii from S2.A is answered YES, the project is not eligible as a "Small Project Application" type. Complete all applicable sections of the EA form for the standard application				

	Included	Item Location
C. Provide a table(s) of all proposed water obstruction(s), encroachment activities and dams (e.g. subfacility codes) and provide an identifier, the subfacility code and description, resource identifier from **S2.B**, latitude and longitude, the proposed temporary and permanent direct and indirect impacts and subfacility details.	☒	Table 6
D. Provide a discussion of how the proposed subfacility(ies) individually and in combination directly and/or indirectly impact the identified resource(s) and the effects on the applicable resource functions: hydrologic, biogeochemical, habitat, recreation, any other environmental impacts and the effects on the property or riparian rights of owners upstream, downstream or adjacent to the project.	☒	REQ J
E. **Antidegradation Analysis** - The applicant should demonstrate consistency with State antidegradation requirements as described in the Water Quality Antidegradation Implementation Guidance Policy Document Number 391-0300-002. Project application information provided below in **S3.F, G and H** may be cross-referenced.	☒	REQs J and K
F. **Alternatives Analysis** - The scope and extent of this analysis should be commensurate with the size and scope of the proposed project impacts *in this* application, information provided in **S4.A** below, related to avoidance and minimization efforts, may be cross-referenced.	☒	REQ J
G. **Potential Secondary Impact Evaluation** - Identify and describe environmental impacts on adjacent land and water resources associated with but not that direct result of the project.	☒	REQ J
H. Identify and evaluate the potential cumulative environmental impacts of this project and other potential or existing projects like it, and the impacts that may result through numerous piecemeal changes to the wetland resource.	☒	REQ J
Module S4: Mitigation Plan		
*This module is intended to organize and present information concerning actions undertaken in accordance with the definition of **Mitigation** in Title 25 Pa. Code Chapter 105 - §105.1, 105.16, 105.18a(a)(3), 105.18a(b)(7), 105.20a, and 105.21 as related to the potential impacts or effects of the proposed project **in this** application.*		
A. Identify and discuss any measures taken that resulted in avoiding or minimizing unavoidable resource impacts, provide detailed responses for individual proposed impact area(s) **and** the project as a whole.	☒	Module S.4
B. Identify and discuss any repair, rehabilitation or restorative actions taken to rectify an impacted resource, provide detailed responses for individual proposed impact area(s) and the project as a whole. Identify and discuss any proposed preservation and maintenance operations that will be taken to reduce or eliminate an impact during the life of the project.	☒	REQ J
C. Provide the results from application of the Pennsylvania Function-Based Aquatic Resource Compensation Protocol. Identify and discuss any actions undertaken to provide compensatory mitigation , a detailed discussion of the proposed compensation actions and how they will offset the lost resource functions, include a comparison of the results from Section 6.0 of the Pennsylvania Function-Based Aquatic Resource Compensation Protocol with the results from Section 5.0. When applicable provide detailed plans including performance standards and success criteria.	☐	NA
Answer the following question. If the answer to the question is **YES**, provide the information regarding the mitigation credit provider; otherwise provide a detailed mitigation plan. If the application proposes to utilize both mitigation bank or in lieu fee credits **and** conduct permittee responsible mitigation; both the credit provider and mitigation plan information shall be submitted.	☒	
Does the applicant propose to utilize an approved mitigation bank or PA's in lieu fee program to provide all or a portion of the compensation? ☐ Yes ☒ No		
D. When applicable, provide a plan to monitor the identified actions proposed in **S4.B** and/or **S4.C** compensatory mitigation area. Applicants should utilize the Department's Design Criteria and the USACE's RGL 08-03 -(http://www.usace.army.mil/Portals/2/docs/civilworks/RGLS/rgl08_03.pdf) to develop monitoring plans for compensatory mitigation proposals. The plan should include performance standards/success criteria, duration and timeframes of monitoring, monitoring report template, and template remedial action or adaptive management plan.	☐	NA
Note: All or portions of this Module likely apply to "Small Project" type applications and waiver of this section should be discussed during any pre-application meetings or prior to application submittal.		
CERTIFICATION		
I certify that the above statements, attachments including those labeled and identified as Enclosures, and all conclusions are true, correct, and based upon current environmental principles and science, to the best of my knowledge and belief.		
Signature: [signature] Date: 8/29/25		

Chapter 105
Environmental Assessment Form
Project Gravity
October 3, 2025

1. PROJECT SUMMARY

A. Archbald 25 Developer LLC (Archbald 25) is proposing to develop a data center in Archbald Borough, Lackawanna County, Pennsylvania (PA). The subject property is situated along the east side of Scranton Carbondale Highway (Business Route 6) south of Gibson Street and west of Eynon Jermyn Road. The site is approximately 195 acres in size and is currently undeveloped. Archbald is proposing seven (7) data center buildings, each being two stories with a 138,000 square foot (SF) footprint and a total square footage of 276,000 SF with accompanying loading docks and parking. The proposed site improvements will also include a water treatment facility, a substation, a switching station, additional parking areas, sidewalks, curb ramps, site fencing, utilities, landscaping, and stormwater management controls necessary to support the project.

B. Callender Gap Creek is mapped within the project area of investigation (AOI) based on review of the USGS 7.5-minute quadrangle mapping. However, a field investigation determined that Callender Gap Creek is not present within the AOI. The AOI drains to Callender Gap Creek, which empties into the Lackawanna River. The project is mainly within the Upper Susquehanna-Lackawanna basin however a small portion in the northwest corner is mapped within the Upper Susquehanna-Tunkhannock basin (Hydrologic Unit Code [HUC] 2050107 and 2050106, United States Environmental Protection Agency).

According to Pennsylvania Code Title 25 Chapter 93 Water Quality Standards, the watershed of Callender Gap Creek has a designation of Cold Water Fishes/Migratory Fishes (CWF/MF). Callender Gap Creek has been designated as having impaired aquatic life due to acid mine drainage - siltation (eMapPA, September 2025). According to the Pennsylvania Department of Environmental Protection (PADEP)'s Statewide *Existing Use Classifications* list (revised on July 21, 2025), Callender Gap Creek does not have an Existing Use classification.

According to Pennsylvania Code Title 25 Chapter 93 Water Quality Standards, the watershed of the Lackawanna River has a designation of Cold Water Fishes, High Quality/Migratory Fishes (CWF-HQ/MF). The Lackawanna River has been designated as having impaired aquatic life due to acid mine drainage – metals and acid mine drainage – pH (eMapPA, September 2025). According to the PADEP's Statewide *Existing Use Classifications* list (revised on July 21, 2025), the Lackawanna River does not have an Existing Use

classification. According to the Pennsylvania Fish and Boat Commission (PFBC), the Lackawanna River is designated as supporting Natural Reproduction of Trout and is designated as a Class A Trout Stream (September 2025).

The AOI was examined for wetlands and other surface waters by ARM wetland scientists on March 11, 2025, May 21, 2025, and June 11, 2025. A professional wetland scientist (PWS) was onsite during all three field investigations. The AOI contains seven wetlands, two streams, and 31 open bodies of water. Both streams within the AOI are isolated, intermittent features. There were no streams identified that flow off the site. The wetlands and streams are described in the Aquatic Resource Memorandum, dated April 1, 2025, Revised May 30, 2025, and June 17, 2025) and contained in **Appendix A**.

During a pre-application meeting held on July 3, 2025, it was determined that the PADEP has jurisdiction over all the aquatic resources. An Approved Jurisdictional Determination (AJD), received from the United States Army Corps of Engineers (USACE) on August 18, 2025, and included in **Appendix B**, concluded that the USACE does not have jurisdiction over any of the resources identified onsite. The total wetland area within the AOI is approximately 2.25 acres. None of the wetlands were determined to be Exceptional Value (EV) according to Pennsylvania Code Title 25 Chapter 105 §105.17.

The purpose of the project is to construct a data center, which will provide a secure, resilient, and scalable environment for housing critical computing infrastructure, ensuring uninterrupted availability of data, applications, and digital services. The proposed project involves the construction of seven (7) data center buildings. Refer to the Alternatives Analysis for additional information. Additional project background can be found in the Project Narrative, contained in Requirement H of the JPA.

The project will result in unavoidable permanent impacts to six palustrine wetlands and 31 jurisdictional open bodies of water described below and generally described in the Aquatic Resource Impact Table (Requirement H of the JPA). The 31 open bodies of water appear to be man-made features resulting from the past mining in the area. Some are in the bottom of strip mine pits while others appear to be smaller excavations such as test pits and the remaining appear to be subsidence features, potentially related to past deep mining at the site. Additional wetland information can be found on Table 1, in Module S2.B.

Wetland 0311251226	(0.01-acre permanent impact)
Wetland 0311250835	(0.01-acre permanent impact)
Wetland 0311250854	(0.44-acre permanent impact)
Wetland 0311251010	(0.76-acre permanent impact)
Wetland 0311251110	(0.05-acre permanent impact)
Wetland 0311251144	(0.13-acre permanent impact)
Open Body of Water 1	(0.01-acre permanent impact)
Open Body of Water 2	(0.01-acre permanent impact)
Open Body of Water 3	(<0.01-acre permanent impact)
Open Body of Water 4	(<0.01-acre permanent impact)
Open Body of Water 5	(0.06-acre permanent impact)
Open Body of Water 6	(0.01-acre permanent impact)

Open Body of Water 7	(0.02-acre permanent impact)
Open Body of Water 8	(0.01-acre permanent impact)
Open Body of Water 9	(0.01-acre permanent impact)
Open Body of Water 10	(0.17-acre permanent impact)
Open Body of Water 11	(0.01-acre permanent impact)
Open Body of Water 12	(<0.01-acre permanent impact)
Open Body of Water 13	(0.02-acre permanent impact)
Open Body of Water 14	(<0.01-acre permanent impact)
Open Body of Water 15	(0.01-acre permanent impact)
Open Body of Water 16	(0.01-acre permanent impact)
Open Body of Water 17	(0.01-acre permanent impact)
Open Body of Water 18	(0.01-acre permanent impact)
Open Body of Water 19	(0.01-acre permanent impact)
Open Body of Water 20	(0.01-acre permanent impact)
Open Body of Water 21	(<0.01-acre permanent impact)
Open Body of Water 22	(0.04-acre permanent impact)
Open Body of Water 23	(0.09-acre permanent impact)
Open Body of Water 24	(0.03-acre permanent impact)
Open Body of Water 25	(0.01-acre permanent impact)
Open Body of Water 26	(0.01-acre permanent impact)
Open Body of Water 27	(0.01-acre permanent impact)
Open Body of Water 28	(0.01-acre permanent impact)
Open Body of Water 29	(<0.01-acre permanent impact)
Open Body of Water 30	(0.01-acre permanent impact)
Open Body of Water 31	(0.12-acre permanent impact)

The six wetlands and 31 open bodies of water are isolated features, having a perched hydrology (runoff and direct precipitation), which developed on clayey soils on unreclaimed strip mine land.

Two streams will be impacted by the project. Stream impacts are described below and generally described in the Aquatic Resource Impact Table (Requirement H of the JPA). The two streams are isolated segments having ephemeral and intermittent flow regimes which do not drain from the site but into unreclaimed strip mine pits.

- UNT 1 (207-linear feet permanent impact)
- UNT 2 (252-linear feet permanent impact)

The streams, wetlands, and open bodies of water are not connected to the Lackawanna River. The project was designed to ensure no temporary impacts to aquatic resources will occur because of the project. Additional information regarding protection of wetlands and streams adjacent to the permanent impacts can be found in the Erosion and Sediment Control Plan, Requirement Q of the JPA.

2. RESOURCE IDENTIFICATION AND CHARACTERIZATION

A. The Aquatic Resource Investigation Memorandum (ARM April 1, 2025, Revised May 30, 2025, and June 17, 2025) outlining the findings of an investigation of the project is included as **Appendix A**. The memorandum includes a location map, information describing the streams and wetlands within the AOI, and qualifications of the preparers.

(i) National, State, or Local Park, Forest, or Recreation Area – The closest park to the project is the Ed Staback Memorial Park, which is located approximately 0.7 mile to the southwest. The Archbald Borough park includes hiking trails, basketball courts, baseball fields, soccer fields, tennis courts, and a parking lot. The closest state park is Archbald Pothole State Park, which is located approximately 0.75 miles southwest of the site.

(ii) National Natural Landmark – The closest National Natural Landmark is Nay Aug Park Gorge and Waterfall, located approximately nine miles southwest of the proposed project.

(iii) National Wildlife Refuge (NWR), or Federal, State, Local or Private Plant or Wildlife Sanctuaries – The Nature Conservancy's Dick and Nancy Eales Preserve is located approximately 4.5 miles south of the project limit of disturbance (LOD). The closest National Wildlife Refuge is the Cherry Valley National Wildlife Refuge, which is located approximately 42 miles south of the project LOD.

(iv) State Game Lands – The closest Pennsylvania State Game Land (SGL) to the project is SGL 307, which is located adjacent to the proposed project, across Scranton Carbondale Highway (Business Route 6).

(v) Areas Identified as Prime Farmland – No prime farmland soils are mapped within the LOD.

(vi) Source for a Public Water Supply – The closest known public water supply to the project is the surface water withdrawal at Lake Scranton. The water source is located approximately nine miles southwest of the proposed project.

(vii) A National Wild or Scenic River or the Commonwealth's Scenic Rivers System – The Lehigh River, approximately 30 miles southwest of the project site, is the closest Pennsylvania Scenic River.

(viii) Designated Federal Wilderness Area – The closest Federal Wilderness Areas to the project is the Hickory Creek Wilderness, approximately 191 miles west of the project.

B. **Table 1 and Table 2** below provide information on the aquatic resources (wetlands and streams) present within the AOI for Project Gravity. The AOI contains seven wetlands, two streams, and 31 open bodies of water. As noted earlier, none of the wetlands were determined to be Exceptional Value (EV) according to Pennsylvania Code Title 25 Chapter 105 §105.17.

Table 1: Wetland Summary				
Wetland Name	**Cowardin Classification/ Exceptional Value**	**Size (ac) Within the AOI**	**Isolated Wetland**	**Open-Ended Wetland**
Wetland 0311251226	PEM1 / NA	0.01	Yes	No
Wetland 0311250835	PEM1 / NA	0.01	Yes	No
Wetland 0311250854	PEM1 / NA	0.44	Yes	No
Wetland 0311251010	POW (60%), PSS1 (30%), and PEM1	0.76	Yes	No
Wetland 0311251110	PSS1 / NA	0.05	Yes	No
Wetland 0311251144	PSS1 (70%), PFO1 (30%) / NA	0.13	Yes	No
Wetland 0311251254	PSS1 / NA	0.12	Yes	No
Open Body of Water 1	POW / NA	0.01	Yes	No
Open Body of Water 2	POW / NA	0.01	Yes	No
Open Body of Water 3	POW / NA	<0.01	Yes	No
Open Body of Water 4	POW / NA	<0.01	Yes	No
Open Body of Water 5	POW / NA	0.06	Yes	No
Open Body of Water 6	POW / NA	0.01	Yes	No
Open Body of Water 7	POW / NA	0.02	Yes	No
Open Body of Water 8	POW / NA	0.01	Yes	No
Open Body of Water 9	POW / NA	0.01	Yes	No
Open Body of Water 10	POW / NA	0.17	Yes	No
Open Body of Water 11	POW / NA	0.01	Yes	No
Open Body of Water 12	POW / NA	<0.01	Yes	No
Open Body of Water 13	POW / NA	0.02	Yes	No
Open Body of Water 14	POW / NA	<0.01	Yes	No
Open Body of Water 15	POW / NA	0.01	Yes	No
Open Body of Water 16	POW / NA	0.01	Yes	No
Open Body of Water 17	POW / NA	0.01	Yes	No
Open Body of Water 18	POW / NA	0.01	Yes	No

Table 1: Wetland Summary				
Wetland Name	**Cowardin Classification/ Exceptional Value**	**Size (ac) Within the AOI**	**Isolated Wetland**	**Open-Ended Wetland**
Open Body of Water 19	POW / NA	0.01	Yes	No
Open Body of Water 20	POW / NA	0.01	Yes	No
Open Body of Water 21	POW / NA	<0.01	Yes	No
Open Body of Water 22	POW / NA	0.04	Yes	No
Open Body of Water 23	POW / NA	0.09	Yes	No
Open Body of Water 24	POW / NA	0.03	Yes	No
Open Body of Water 25	POW / NA	0.01	Yes	No
Open Body of Water 26	POW / NA	0.01	Yes	No
Open Body of Water 27	POW / NA	0.01	Yes	No
Open Body of Water 28	POW / NA	0.01	Yes	No
Open Body of Water 29	POW / NA	<0.01	Yes	No
Open Body of Water 30	POW / NA	0.01	Yes	No
Open Body of Water 31	POW / NA	0.12	Yes	No

Note: PEM1 - palustrine, emergent, persistent
PSS1 - palustrine, scrub-shrub, broad-leaved deciduous
PFO1 - palustrine, forested, broad-leaved deciduous
POW - palustrine, open water

Table 2: Stream Summary				
Stream Name	**Chapter 93 Classification / PFBC Designation / Navigable Status**	**Cowardin Classification**	**Stream Type**	**FEMA 100-year Floodplain**
UNT 1	NA / NA / NA	R4SB3/5	Intermittent	No
UNT 2	NA / NA / NA	R4SB3/5	Intermittent	No

Notes: R-riverine, 4-Intermittent, SB-streambed, 3-cobbel-gravel, 5-mud
Navigation Status includes state and federal status
Stream Type based upon Classification of Wetlands and Deepwater Habitats of the United States (Federal Geographic Data Committee, 2013) and field observations

A total of 2.25 acres of palustrine wetlands occur within the AOI. None of the wetlands were determined to be Exceptional Value (EV) according to Pennsylvania Code Title 25 Chapter 105 §105.17.

In the southern portion of the AOI, several drainage features were observed. The drainage features are primarily located along access roads through the site. The drainage features are man-made, excavated features (refer to mapping in the Aquatic Resource Memorandum, dated April 1, 2025, Revised May 30, 2025, and June 17, 2025and contained in Module S2 (**Appendix A**).

C. Potential conflicts upon state and federal threatened and endangered species because of the project were determined using the Pennsylvania Natural Heritage Program's Environmental Review Tool to access the Pennsylvania Natural Diversity Inventory (PNDI). A PNDI review of the project determined no potential impacts to species under the jurisdiction of the Pennsylvania Department of Conservation of Natural Resources (PADCNR) or the PFBC. The review did identify potential impacts to species under the jurisdiction of the Unites States Fish and Wildlife Service (USFWS) and the Pennsylvania Game Commission (PGC). A copy of the signed PNDI receipt is included as **Appendix C**. The PGC commented through the PNDI that the project could impact species under the jurisdiction of both the PGC and the USFWS, and the PGC defers comments to the USFWS. No further coordination with the PGC was required. The PNDI identified the northern long-eared bat (*Myotis septentrionalis*), a federally endangered species, as the species under the jurisdiction of the USFWS. The project was further reviewed through the USFWS's Information for Planning and Consultation (IPaC) online tool. The IPaC review determined the project is also in the vicinity of populations of the Tricolored Bat (*Perimyotis subflavus*), a proposed federal endangered species, the Monarch Butterfly (*Danaus plexippus*), a federally proposed threatened species, and the Northeastern Bulrush (*Scirpus ancistrochaetus*), a federally endangered species. An onsite investigation of the site by a qualified botanist determined that Northeastern Bulrush was not present within the AOI. During the onsite investigation two potential bat hibernacula were observed within the AOI. The first potential hibernaculum was a potential collapsed former mine portal. The second potential hibernaculum was a rock outcropping containing cracks and hollows. The USFWS was notified of the features and requested a hibernaculum assessment of the identified features. A Pennsylvania state and federally permitted bat biologist with BioSurvey Group was contracted to perform the assessment. The assessment determined that the features are not suitable hibernacula and that the development of the site would not negatively impact potential winter bat habitat. The results of the survey were submitted to the USFWS. Additionally, the applicant has agreed to the seasonal restriction on tree cutting, thereby only cutting trees between November 15 and March 31. A bat conservation plan was submitted to the USFWS on August 28, 2025. The applicant is awaiting formal response from the USWFS and the response will be forwarded to the PADEP when received.

D. The proposed project will result in impacts to six wetlands, two streams, and 31 state-jurisdictional open bodies of water. The wetlands and open bodies of water are surface water systems, fed by runoff from the surrounding landscape that collects within the features. Most of the wetlands have been the result of past disturbances related to previous mining at the site.

A Level 2 Rapid Assessment of the wetlands, streams, and open bodies of water to be impacted was completed. The open bodies of water all displayed the same characteristics of being small, isolated, unvegetated, open water features that are likely the result of past mining activities at the site. These features were all aggregated for the assessment. The two streams are both intermittent, isolated stream segments that displayed similar characteristics. Therefore, the streams were aggregated for the assessment. As a result of the assessment, the wetlands have an Overall Condition Index ranging from 0.80 to 0.86 and the streams had an Overall Condition Index of 0.76. **Table 3** below illustrates the Rapid Assessment scores of the wetlands, open bodies of water, and streams. The wetland assessment worksheets are included in **Appendix D** and the stream assessment worksheet is included in **Appendix E**.

Table 3: Level 2 Rapid Assessment Summary

Aquatic Resource	Score
Wetland 0311251226	0.81
Wetland 0311250835	0.80
Wetland 0311250854	0.80
Wetland 0311251010	0.81
Wetland 0311251110	0.86
Wetland 0311251144	0.85
Open Bodies of Water	0.85
UNT 1 and UNT 2	0.76

The rapid assessment scores for the wetlands reflect conditions that are indicative of wetlands in an area of mature forest but with a significant presence of non-native herbaceous vegetation and land uses that consist of past disturbances, such as mining. All the aquatic resources are located either within or adjacent to past mining activities. Minimal sediment or water quality stressors are present. Significant stressors include access road presence adjacent to the wetlands and invasive species presence within the wetlands. The wetland rapid assessment scores range between 0.80 and 0.86.

The Level 2 Rapid Assessment summary score for the streams is reflective of streams within mature forest, but with very limited instream habitat due to the small size of the streams and primarily mud substrate.

3. IDENTIFICATION AND DESCRIPTION OF POTENTIAL PROJECT IMPACTS

A. Six wetlands, two streams, and 31 PADEP-jurisdictional open bodies of water will be directly impacted by the proposed data center project. The proposed site plan is included in **Appendix F**. Unavoidable direct impacts to the resources will occur, as noted in **Table 4**

and **Table 5**, below. Additional wetland impact information is contained in the Aquatic Resources Table and Water Impact Table (Requirement H).

Table 4: Wetland Impact Summary				
Wetland Name	**Cowardin Classification**	**Wetland Size (acre)**	**Permanent (Direct) Impact Size (acre)**	**Permanent (Indirect) Impact Size (acre)**
Wetland 0311251226	PEM1	0.01	0.01	0.00
Wetland 0311250835	PEM1	0.01	0.01	0.00
Wetland 0311250854	PEM1	0.44	0.44	0.00
Wetland 0311251010	POW (60%), PSS1 (30%), and PEM1 (10%)	0.76	0.76	0.00
Wetland 0311251110	PSS1	0.05	0.05	0.00
Wetland 0311251144	PSS1 (70%), PFO1 (30%	0.13	0.13	0.00
Open Body of Water 1	PSS1	0.12	0.12	0.00
Open Body of Water 2	POW	0.01	0.01	0.00
Open Body of Water 3	POW	0.01	0.01	0.00
Open Body of Water 4	POW	<0.01	<0.01	0.00
Open Body of Water 5	POW	<0.01	<0.01	0.00
Open Body of Water 6	POW	0.06	0.06	0.00
Open Body of Water 7	POW	0.01	0.01	0.00
Open Body of Water 8	POW	0.02	0.02	0.00
Open Body of Water 9	POW	0.01	0.01	0.00
Open Body of Water 10	POW	0.01	0.01	0.00
Open Body of Water 11	POW	0.17	0.17	0.00
Open Body of Water 12	POW	0.01	0.01	0.00
Open Body of Water 13	POW	<0.01	<0.01	0.00
Open Body of Water 14	POW	0.02	0.02	0.00
Open Body of Water 15	POW	<0.01	<0.01	0.00

Table 4: Wetland Impact Summary				
Wetland Name	**Cowardin Classification**	**Wetland Size (acre)**	**Permanent (Direct) Impact Size (acre)**	**Permanent (Indirect) Impact Size (acre)**
Open Body of Water 16	POW	0.01	0.01	0.00
Open Body of Water 17	POW	0.01	0.01	0.00
Open Body of Water 18	POW	0.01	0.01	0.00
Open Body of Water 19	POW	0.01	0.01	0.00
Open Body of Water 20	POW	0.01	0.01	0.00
Open Body of Water 21	POW	0.01	0.01	0.00
Open Body of Water 22	POW	<0.01	<0.01	0.00
Open Body of Water 23	POW	0.04	0.04	0.00
Open Body of Water 24	POW	0.09	0.09	0.00
Open Body of Water 25	POW	0.03	0.03	0.00
Open Body of Water 26	POW	0.01	0.01	0.00
Open Body of Water 27	POW	0.01	0.01	0.00
Open Body of Water 28	POW	0.01	0.01	0.00
Open Body of Water 29	POW	0.01	0.01	0.00
Open Body of Water 30	POW	<0.01	<0.01	0.00
Open Body of Water 31	POW	0.01	0.01	0.00
TOTAL		**2.18**	**2.18**	**0.00**

Table 5: Stream Impact Summary			
Stream Name*	**Cowardin Classification**	**Permanent (Direct) Impact Size (acre)**	**Permanent (Indirect) Impact Size (acre)**
UNT 1	R4SB3/5	0.019	0.0
UNT 2	R4SB3/5	0.023	0.0
TOTAL		**0.042**	**0.0**

B. One resource listed in **S2.A**, SGL 307, is located adjacent to the proposed project. However, SGL 307 is located across Scranton Carbondale Highway (Business Route 6) from the project. Therefore, no impacts upon SGL 307 are anticipated. No other resources were identified within the project LOD or within 100 feet of the LOD.

C. **Table 6** below provides information on all proposed impact activities related to the project.

Table 6: Subfacility Details

Resource	Subfacility Identifier	Subfacility Code	Location			Permanent, Direct Impacts (acre)
			Latitude NAD 83	Longitude NAD 83	Municipality, County	
Wetland 0311251226	W1	WTDIM	41.522564	-75.559789	Archbald Borough, Lackawanna County	0.01
Wetland 0311250835	W2	WTDIM	41.522239	-75.559768	Archbald Borough, Lackawanna County	0.01
Wetland 0311250854	W3	WTDIM	41.522372	-75.558325	Archbald Borough, Lackawanna County	0.44
Wetland 0311251010	W4	WTDIM	41.521516	-75.557474	Archbald Borough, Lackawanna County	0.76
Wetland 0311251110	W5	WTDIM	41.520936	-75.557168	Archbald Borough, Lackawanna County	0.05
Wetland 0311251144	W6	WTDIM	41.520907	-75.556440	Archbald Borough, Lackawanna County	0.13
Open Body of Water 1	W8	WTDIM	41.521896	-75.561460	Archbald Borough, Lackawanna County	0.12
Open Body of Water 2	W9	WTDIM	41.521874	-75.561162	Archbald Borough, Lackawanna County	0.01
Open Body of Water 3	W10	WTDIM	41.526691	-75.561115	Archbald Borough, Lackawanna County	0.01
Open Body of Water 4	W11	WTDIM	41.521938	-75.561126	Archbald Borough, Lackawanna County	<0.01
Open Body of Water 5	W12	WTDIM	41.521757	-75.560316	Archbald Borough, Lackawanna County	<0.01
Open Body of Water 6	W13	WTDIM	41.522317	-75.560615	Archbald Borough, Lackawanna County	0.06
Open Body of Water 7	W14	WTDIM	41.522792	-75.560275	Archbald Borough, Lackawanna County	0.01
Open Body of Water 8	W15	WTDIM	41.522377	-75.559452	Archbald Borough, Lackawanna County	0.02
Open Body of Water 9	W16	WTDIM	41.522693	-75.558520	Archbald Borough, Lackawanna County	0.01
Open Body of Water 10	W17	WTDIM	41.521872	-75.558287	Archbald Borough, Lackawanna County	0.01

Table 6: Subfacility Details						
Resource	Subfacility Identifier	Subfacility Code	Location			Permanent, Direct Impacts (acre)
			Latitude NAD 83	Longitude NAD 83	Municipality, County	
Open Body of Water 11	W18	WTDIM	41.522145	-75.557669	Archbald Borough, Lackawanna County	0.17
Open Body of Water 12	W19	WTDIM	41.522079	-75.557767	Archbald Borough, Lackawanna County	0.01
Open Body of Water 13	W20	WTDIM	41.521410	-75.558605	Archbald Borough, Lackawanna County	<0.01
Open Body of Water 14	W21	WTDIM	41.521414	-75.558414	Archbald Borough, Lackawanna County	0.02
Open Body of Water 15	W22	WTDIM	41.521299	-75.558471	Archbald Borough, Lackawanna County	<0.01
Open Body of Water 16	W23	WTDIM	41.521220	-75.558262	Archbald Borough, Lackawanna County	0.01
Open Body of Water 17	W24	WTDIM	41.521084	-75.558027	Archbald Borough, Lackawanna County	0.01
Open Body of Water 18	W25	WTDIM	41.521150	-75.557905	Archbald Borough, Lackawanna County	0.01
Open Body of Water 19	W26	WTDIM	41.521013	-75.557868	Archbald Borough, Lackawanna County	0.01
Open Body of Water 20	W27	WTDIM	41.520374	-75.566804	Archbald Borough, Lackawanna County	0.01
Open Body of Water 21	W28	WTDIM	41.519637	-75.555048	Archbald Borough, Lackawanna County	0.01
Open Body of Water 22	W29	WTDIM	41.519742	-75.554734	Archbald Borough, Lackawanna County	<0.01
Open Body of Water 23	W30	WTDIM	41.517859	-75.553416	Archbald Borough, Lackawanna County	0.04
Open Body of Water 24	W31	WTDIM	41.518268	-75.552959	Archbald Borough, Lackawanna County	0.09
Open Body of Water 25	W32	WTDIM	41.520968	-75.553977	Archbald Borough, Lackawanna County	0.03
Open Body of Water 26	W33	WTDIM	41.526561	-75.556721	Archbald Borough, Lackawanna County	0.01
Open Body of Water 27	W34	WTDIM	41.523991	-75.562961	Archbald Borough, Lackawanna County	0.01
Open Body of Water 28	W35	WTDIM	41.525783	-75.562396	Archbald Borough, Lackawanna County	0.01
Open Body of Water 29	W36	WTDIM	41.522106	-75.559175	Archbald Borough, Lackawanna County	0.01
Open Body of Water 30	W37	WTDIM	41.522035	-75.559003	Archbald Borough, Lackawanna County	<0.01

Table 6: Subfacility Details						
Resource	Subfacility Identifier	Subfacility Code	Location			Permanent, Direct Impacts (acre)
			Latitude NAD 83	Longitude NAD 83	Municipality, County	
Open Body of Water 31	W38	WTDIM	41.424703	-75.563690	Archbald Borough, Lackawanna County	0.01
UNT 1	S1	FILSC	41.522432	-75.559502	Archbald Borough, Lackawanna County	0.019
UNT 2	S2	FILSC	41.520986	-75.556796	Archbald Borough, Lackawanna County	0.023

WTDIM: Wetland Direct Impact
FILSC: Fill Stream Channel
For additional wetland impact information, refer to the Aquatic Resources Table in Requirements H of this application.

D. Resource Functions Effects

Six wetlands, two streams, and 31 open bodies of water will be directly impacted by the construction of the proposed landfill expansion project. As noted earlier, none of the wetlands were determined to be Exceptional Value (EV) according to Pennsylvania Code Title 25 Chapter 105 §105.17.

The two streams within the AOI are isolated, low flow and intermittent features. The project area does not have a known history of flooding. Callender Gap Creek is listed as impaired due to siltation. The streams within the LOD are not listed as impaired due to nutrients or siltation. However, the isolated streams within the project LOD did not appear to be heavily impacted by siltation. The Lackawanna River adjacent to the AOI has been designated as having impaired aquatic life due to acid mine drainage – metals and acid mine drainage. However, as noted previously, the streams within the AOI are isolated features with no surface hydrologic connection to downstream waters. While the wetlands to be impacted have potential for production export and wildlife habitat, these functions are limited due to past disturbances in the area and the isolated nature of the wetlands.

The impacts will occur within a site that has experienced past disturbances related to surface and deep mining. A Post-Construction Stormwater Management (PCSM) / Site Restoration (SR) Plan and an accompanying Erosion and Sediment Control Plan (ESCP) were developed to manage stormwater from the project area and will result in no impacts to natural drainage patterns downstream of the project area.

Potential conflicts upon state and federal threatened and endangered species because of the project were determined using the Pennsylvania Natural Heritage Program's Environmental Review Tool to access the PNDI. A PNDI review of the project determined no potential impacts to species under the jurisdiction of the PADCNR or the PFBC. The review did identify potential impacts to species under the jurisdiction of the USFWS and the PGC. A copy of the signed PNDI receipt is included as **Appendix B**. The PGC commented through the PNDI that the project could impact species under the jurisdiction of both the PGC and the USFWS, and the

PGC defers comments to the USFWS. No further coordination with the PGC was required. The PNDI identified the northern long-eared bat (*Myotis septentrionalis*), a federally endangered species, as the species under the jurisdiction of the USFWS.

The project was further reviewed through the USFWS's IPaC online tool. The IPaC review determined the project is also in the vicinity of populations of the Tricolored Bat (*Perimyotis subflavus*), a proposed federal endangered species, the Monarch Butterfly (*Danaus plexippus*), a federally proposed threatened species, and the Northeastern Bulrush (*Scirpus ancistrochaetus*), a federally endangered species. An onsite investigation of the site by a qualified botanist determined that Northeastern Bulrush was not present within the AOI. During the onsite investigation two potential bat hibernacula were observed within the project LOD. The first potential hibernaculum was a potential collapsed former mine portal. The second potential hibernaculum was a rock outcropping containing cracks and hollows. The USFWS was notified of the features and requested a hibernaculum assessment of the identified features. A Pennsylvania state and federally permitted bat biologist with BioSurvey Group was contracted to perform the assessment. The assessment determined that the features are not suitable hibernacula and that the development of the site would not negatively impact potential winter bat habitat. The results of the survey were submitted to the USFWS. Additionally, the applicant has agreed to the seasonal restriction on tree cutting, thereby only cutting trees between November 15 and March 31. A bat conservation plan was submitted to the USFWS on August 28, 2025.

E. Antidegradation Analysis

The project is mainly within the Upper Susquehanna-Lackawanna basin however a small portion in the northwest corner is mapped within the Upper Susquehanna-Tunkhannock basin (HUC 2050107 and 2050106, United States Environmental Protection Agency). The LOD drains to Callender Gap Creek, which empties into the Lackawanna River. According to the PADEP's Statewide *Existing Use Classifications* list (revised on July 21, 2025), the Lackawanna River does not have an Existing Use classification. According to Pennsylvania Code Title 25 Chapter 93 Water Quality Standards, the watershed of Callender Gap Creek has a designation of Cold Water Fishes/Migratory Fishes (CWF/MF). The Lackawanna River has been designated as having impaired aquatic life due to acid mine drainage – metals and acid mine drainage – pH (eMapPA, September 2025).

Six wetlands, two streams, and 31 jurisdictional open bodies of water will be directly impacted by the construction of the proposed data center project. A PADEP approved Post PCSM / SR Plan and an accompanying ESCP will be implemented. The ESCP (Requirement K) and the PCSM Plan also contain additional details related to water quality protection. This data center project was designed to limit the amount of disturbed area by minimizing the LOD to the extent practical for safe and efficient construction. The project aims to minimize the disturbed area at any given time by sequencing the construction of the data center.

The proposed erosion and sediment (E&S) controls were designed to manage surface runoff such that discharges from the site will not degrade the physical, chemical, biological, or thermal characteristics of the surface waters. The unimpacted wetland within the project boundary and adjacent will be protected from erosion and sedimentation pollution through implementation of

approved best management practices (BMPs). The BMPs will be used to ensure that no net change in stormwater volume, rate and quality occurs at the site.

The proposed post-construction stormwater management design mitigates potential physical, chemical, biological and thermal impacts to surface waters through the use of dry extended detention basins and lined MRC SCMs. MRC SCMs are being proposed due to shallow depths to rock resulting from previous mining activities that have occurred on the project site, and the potential contribution of infiltrated stormwater to the mine pool resulting in acid mine drainage is being avoided by lining the MRC SCMs.

The site has been located to minimize disturbance, tree clearing, and minimize impacts to, and therefore protect, sensitive and special value features such as floodplains, wetlands, riparian areas, drainageways, etc. BMPs were designed to decrease the volume and rate of surface runoff through infiltration, detention, and evapotranspiration to therefore avoid potential physical, chemical, biological and thermal impacts to surface waters and the surrounding watershed. During construction, the E&S Plan will employ ABACT BMPs such as sediment basins with skimmers (top dewatering and 4-7 day dewatering times), vegetated swales, compost filter socks, 100-foot long rock construction entrances, and immediate stabilization, to mitigate potential physical, chemical, biological and thermal impacts to surface waters to the extent possible.

F. Alternatives Analysis

The following section describes the proposed action and the advantages and disadvantages of the site location selection as well as the design alternatives considered by Archbald 25. Archbald 25 is looking to develop a data center in the vicinity of the City of Scranton, Lackawanna County, PA.

Location Alternatives

Archbald 25 is consistently evaluating sites across the region for potential data center locations. They have reviewed parcels in proximity to the Scranton area to determine if sites that meet or exceed their project needs are present. A review of the Multiple Listing Service (MLS) for land in Lackawanna County determined that the largest property currently listed for sale through the service is 58.05 acres, which is much smaller than the 170-acre LOD of the proposed Project Gravity. Expansion of the review area to include the adjacent counties of Wyoming, Susquehanna, Wayne, Pike, Monroe, and Luzerne determined that the largest property currently listed in any of those counties is a 116.84-acre property in Susquehanna County. This property is also significantly smaller than the LOD of the proposed Project Gravity.

A review of the Landwatch.com website did not identify any similar properties for sale in Lackawanna County. The website did identify a 175-acre property for sale in neighboring Wayne County. The property is located at 48 Jericho Road, Newfoundland. A flyer for the site is included in **Appendix G**. However, the site is currently an active farm with a house, outbuildings, and pasture already present on the site. The property also includes an electrical transmission right-of-way, which would significantly reduce the amount of available acreage. Additionally, Butternut Creek, a PFBC-designated Naturally Reproducing Trout Stream, flows

through the property and a review of the PADEP's modeled wetland data identified six potential mapped wetlands within the property. Any wetlands with a hydrologic connection to Butternut Creek will be considered Exceptional Value wetlands by the PADEP.

The Landwatch.com website also identified a property at 0 Pleasant Mount Drive in Forest City, Wayne County. A flyer for the site is included in **Appendix G**. The 173-acre property is an irregularly shaped property with narrow linear portions of the property that would make development of the property infeasible. A review of the PADEP's modeled wetland data identified three potential mapped wetlands within the property. A review of aerial imagery of the site identified streams and wetlands within the property. The southern boundary of the property is Brace Brook, a PFBC-Naturally Reproducing Trout Stream. Therefore, all wetlands hydrologically connected to the stream would be EV wetlands.

A third site available on the Landwatch.com website is a 161.2-acre property located on Twisted Lane in Tunkhannock, Wyoming County. A flyer for the site is included in **Appendix G**. The western boundary of the property is formed by an unnamed tributary to Bowman Creek, which is a Naturally Reproducing Trout Stream, therefore any wetlands with a hydrologic connection to the stream will be considered EV wetlands. A review of aerial imagery identified the potential presence of wetlands within the property boundary. The property contains an elevation change of over 1,200 feet from the southern parcel boundary to the northern parcel boundary, with a maximum slope of 53 percent. The elevation changes and slopes associated with the parcel would make construction of a data center on the site infeasible.

Through the alternatives analysis no other properties were identified for sale in Lackawanna, Wyoming, Susquehanna, Wayne, Pike, Monroe, or Luzerne Counties with an acreage between 150 and 205 acres.

Design Alternatives

The Preferred Site for the project was identified in Archbald Borough, Lackawanna County, PA. The site is forested and an un-reclaimed mine land that has experienced both surface and deep mining.

The majority of the LOD has experienced historic surface and/or deep mining. The property is bordered by Business Route 6 and forest to the north/northwest, residential development and forest to the east, an electrical transmission line and forest to the southwest.

An aquatic resources investigation of the site was completed by ARM Group LLC in March, May, and June 2025. The aquatic resources investigation report is included in **Appendix A**. The delineation identified seven wetlands, two streams, and 31 PADEP-jurisdictional open bodies of water on the site. The total delineated wetland acreage is 2.36 acres. The wetlands appear to have developed because of past surface and deep mining at the site. The wetlands in the AOI do not meet the criteria for Exceptional Value as defined by Pennsylvania Code Title 25 Chapter 105 §105.17. As discussed previously, the USACE completed an AJD of the site. The AJD confirmed the wetland boundaries and determined that they are all isolated features. Therefore, the USACE confirmed they have no jurisdiction over the wetland features.

The Archbald Borough site has a unique combination of features that makes it a practical data center location. The site was available, has access to major transportation corridors, has access to utilities (including public water and sewer), is adjacent to an electrical transmission line, has a relatively level topography, and the site is previously disturbed land. The site conditions satisfied Archbald 25's goals for a data center development in the Scranton area.

Selected Design Alternative

The project will consist of seven (7) data center buildings with accompanying loading docks and parking. The proposed site improvements will also include a water treatment facility, a substation, a switching station, additional parking areas, sidewalks, curb ramps, site fencing, utilities, landscaping, and stormwater management controls necessary to support the project. The Selected Design Alternative (**Overall Site Plan, Appendix F**) minimizes impacts on natural, undisturbed land. The LOD for the proposed project is approximately 170 acres. The proposed project will result in permanent, direct impacts to 2.24 acres wetlands and 459 linear feet of isolated stream channels. The Selected Design Alternative results in the avoidance of 0.12 acre of wetlands. As noted previously, the wetlands within the AOI are not EV because none of the protected characteristics, according to Pennsylvania Code Title 25 Chapter 105 §105.17 were met. No temporary or indirect impacts are associated with this project.

As discussed previously, PNDI review of the project determined no potential impacts to species under the jurisdiction of the PADCNR or the PFBC. The review did identify potential impacts to species under the jurisdiction of the USFWS and the PGC. The Pennsylvania Historical and Museum Commission (PHMC) was contacted to determine potential conflicts with historic and archaeological resources. The PHMC determined that the project would have no conflicts with above ground or archaeological resources. The clearance letter is included in **Appendix H**. The proposed development of the site will provide temporary and permanent local job increases and an increase to the township and county tax base.

Design Alternatives

The site was examined to consider various alternatives for site development. A review of the site determined that most of the site was extensively surface mined historically. The final design for the site focused on maximizing the site plan footprint within areas that were not historically surface mined. A figure illustrating the historic surface mining areas in relation to the proposed project buildings is included as **Appendix I**. A second primary factor to project siting was local noise ordinances. To comply with municipal noise ordinances, the data center buildings must be constructed 300-feet to 500-feet away from adjacent residences. This design consideration resulted in the buildings being sited toward the interior portion of the property, which coincides with the location of the identified wetlands and streams.

No Action Alternative

A No Action Alternative would involve no change in land use from the existing un-reclaimed mined land. The area would remain inhabited by a variety of invasive species through the forested area. There would be no re-use of the mined land and no new economic benefit to the

area through increased tax base and jobs. Additionally, the No Action Alternative would result in no additional data center space. There is a demand for additional data center space within the Scranton – Wilkes Barre area and limited viable options. This project would partially address this identified need.

G. Potential Secondary Impact Evaluation

No secondary impacts are anticipated because of the proposed project. The proposed data center is located with land that has experienced disturbances, specifically surface and deep mining.

Stormwater from the project area will be treated following a PADEP approved PCSM / SR Plan and an accompanying ESCP and therefore will result in no impacts downstream of the project area. The land use adjacent to the LOD consists of forest, residential development, transportation corridors, industrial development, and an electrical transmission corridor.

H. No additional phases of this project are planned.

4. MITIGATION PLAN

A. Measures were taken throughout project development to avoid and minimize impacts upon wetlands and streams. The project is located on un-reclaimed mine land that has experienced both surface and deep mining. One wetland, Wetland 0311251254 will be avoided by final design of the site.

Unavoidable impacts will occur because of the proposed project. For additional information on avoidance and minimization of aquatic resources, please refer to the Alternatives Analysis.

B. Six wetlands, two streams, and 31 open bodies of water will be impacted by the project. Permanents direct impacts will occur. As all impacts are permanent, no repair, rehabilitation, or restorative actions will be taken.

C. Revegetation, where feasible, will occur as soon as weather conditions permit. Temporary and permanent seeding within disturbance areas will not contain invasive or noxious species. Soil stabilization will be achieved with seeding of native species and the native seed bank. The proposed E&S controls were designed to manage surface runoff such that discharges from the site will not degrade the physical, chemical, biological, or thermal characteristics of the surface waters.

The data center impacts upon wetland resources are located within the Upper Central Susquehanna River Subbasin watersheds (Pennsylvania State Water Plan Watershed Subbasin 5). Resource Environmental Solutions, LLC (RES) has available functional credit units for wetlands at the Pine Creek Mitigation Bank, which is within Subbasin 5. The applicant intends to purchase credits from the Pine Creek Mitigation Bank to mitigate for wetland impacts associated with the project. During the July 3, 2025, Pre-Application

meeting, the PADEP determined that mitigation is not required for impacts to the isolated stream segments.

Impacts to palustrine, emergent (PEM), palustrine scrub-shrub (PSS) and palustrine, forested (PFO) wetlands will be mitigated at a ratio of 1:1. **Table 7,** below outlines the project mitigation requirements.

Table 7: Project Mitigation Requirements

Wetland Name	Cowardin Classification	Size (ac) Within the AOI	Mitigation Requirement (acres/credits)
Wetland 0311251226	PEM1	0.01	0.01
Wetland 0311250835	PEM1	0.01	0.01
Wetland 0311250854	PEM1	0.44	0.44
Wetland 0311251010	POW (60%), PSS1 (30%), and PEM1 (10%)	0.76	0.31
Wetland 0311251110	PSS1	0.05	0.05
Wetland 0311251144	PSS1 (70%), PFO1 (30%)	0.13	0.13
TOTAL			0.95

The Mitigation Credit Supply Agreement from RES is attached (**Appendix J**). The agreement contains information about RES and expected credit availability.

D. Mitigation Plan

A monitoring plan is not proposed. Wetland and stream compensation will be provided at the Pine Creek Mitigation Bank.

APPENDIX A

Aquatic Resources Memorandum

ARM Group LLC
Engineers and Scientists

To: **Mr. Abie Kassin, Managing Partner**
Archbald 25 Developer, LLC

CC: **P. Richard Scheller, P.E., Principal Engineer**

From: **Matthew Bixler, PWS, Service Group Leader – Natural Resources**
Scott Martin, PWS, Senior Scientist
Thomas Skic, Senior Project Scientist
Jeffrey Gleason, WPIT, Project Scientist 1
Joseph Atzert, Project Scientist 1

Subject: **Aquatic Resource Investigation**
Project Gravity
Borough of Archbald, Lackawanna County, Pennsylvania (PA)
ARM Project 24012215

QA Reviewed by: Matthew Bixler, Service Group Leader – Natural Resources

Date: **April 1, 2025, Revised May 30, 2025 and June 17, 2025**

INTRODUCTION

The purpose of this memorandum is to describe the findings of an aquatic resource (i.e. streams and wetlands) investigation, conducted by ARM Group LLC's wetland scientists, for the Project Gravity site, located in the Borough of Archbald, Lackawanna County, PA. The investigation is necessary because streams and wetlands are protected by regulations at the state and federal levels and unavoidable impacts upon these aquatic resources may require a permit. This memorandum will serve as technical documentation during the permit process for the project. The memorandum contains supporting documentation such as project mapping, qualifications (resumes) of individuals conducting the aquatic resource investigation, photographs, and data forms.

The project is approximately 0.5 miles southwest of Jermyn, PA (**Site Location Map, Figure 1, Attachment A**). The center of the approximate 195.1-acre area of investigation (AOI) is Latitude 41.524244°, and Longitude -75.561365° (North American Datum [NAD] 83). The aquatic resources are illustrated on the **Aquatic Resource Identification Map** (**Sheet 1, Attachment A**) and represent those resources identified within the AOI during the investigation.

METHODOLOGY

The AOI was examined for wetlands and other surface waters by ARM's, Matthew Bixler, Professional Wetland Scientist (PWS), Scott Martin, PWS, Thomas Skic, Jeffrey Gleason, Wetland Professional in Training (WPIT), and Joseph Atzert on March 11, 2025, by Scott Martin, PWS, on May 21, 2025, and by Matt Bixler, PWS, on June 11, 2025 (**Qualifications**, **Attachment B**). Precipitation was 39 percent of normal in January, 100 to 103 percent of normal in February, 75 to 90 percent in March, 90 to 110 percent in April, and 200 to 300 percent in May. Approximately 0.76 inches of rain fell in the week leading up to the March field investigation, approximately 2 to 3 inches of rain fell in the week leading up to the May field investigation, and approximately 2 to 3 inches of rain fell in the week leading up to the June field investigation. Conditions during the March investigation were mostly sunny and temperatures between 32 and 65 degrees Fahrenheit. During the May field investigation, the temperature was approximately 50 degrees and was partly sunny, and during the June field investigation the temperature was approximately 75 degrees and was partly sunny.

The wetland investigation entailed a combination of reviewing existing information and conducting on-site investigations. An aerial imagery-based geographic information system (GIS)-generated map was created to illustrate the topographic contours and natural resource features for the AOI to facilitate the review of existing information. Existing information was obtained from various sources of data including, but not limited, to historical aerial photographs, hydric soil lists, National Wetland Inventory (NWI) wetlands, mapped streams, Pennsylvania Department of Environmental Protection (PADEP) modeled wetland data, 100-year Federal Emergency Management Agency (FEMA) floodplains, United States Geological Survey (USGS) mapping, watershed mapping, eMapPA for impaired streams, Pennsylvania designated and/or existing aquatic life use(s) for receiving waters, and Pennsylvania Fish and Boat Commission (PFBC) trout management designations. This map was used as the foundation of the Aquatic Resource Identification Map (**Sheet 1, Attachment A**) and facilitated the on-site investigations.

Wetland habitats were identified in accordance with the United States Army Corps of Engineers (USACOE) *Corps of Engineers Wetlands Delineation Manual* (1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region* (January 2012). Vegetation, soil, and hydrology data were recorded for the wetland and upland habitats at representative data points throughout the AOI. Each data point was identified as an Upland Data Point (UDP) or a Wetland Data Point (WDP) and information was recorded on Wetland Determination Data Forms. Wetlands must have all three parameters (dominant hydrophytic vegetation, hydric soils, and evidence of wetland hydrology) to be considered wetlands.

The boundaries of aquatic resources within the AOI were delineated with pink WETLAND DELINEATION flagging for wetlands and blue flagging for streams and were immediately surveyed using a Trimble TDC 650 handheld global positioning system (GPS) device. The locations of representative data points were surveyed with the same device. Delineated aquatic resources and representative UDPs and WDPs were assigned a numeric code for identification purposes and incorporated onto the Aquatic Resource Identification Map (**Sheet 1, Attachment A**), which also shows the location and orientation of representative photographs taken to

document site conditions within the AOI. UDPs illustrated on Aquatic Resource Identification Map (**Sheet 1, Attachment A**), represent conditions of the final AOI.

The wetland indicator status of each plant species was assigned according to the United States Army Corps of Engineers' 2022 *National Wetland Plant List, Version 3.6*. Under normal conditions, hydrophytic vegetation was determined to be present where more than 50 percent of the dominant species in all vegetation stratums were classified as facultative, FAC (equally likely to occur in wetlands as they are in non-wetlands and are adapted for moderate exposure to either condition); facultative wetland, FACW (most often occur in wetlands conditions, but sometimes occur in uplands); or obligate, OBL (almost always occur in wetlands). Wetland and waters were classified according to the *Classification of Wetlands and Deepwater Habitats of the United States* (Federal Geographic Data Committee, 2013) and the Pennsylvania Code Title 25 Chapter 105.17(1) *Exceptional Value Wetlands*.

RESULTS

Background Review

Callender Gap Creek is mapped within the AOI based on review of the USGS 7.5-minute quadrangle mapping. The AOI drains to Callender Gap Creek, which empties into the Lackawanna River. The project is mainly within the Upper Susquehanna-Lackawanna basin however a small portion in the northwest corner is mapped within the Upper Susquehanna-Tunkhannock basin (Hydrologic Unit Code, HUC 2050107 and 2050106, United States Environmental Protection Agency).

According to Pennsylvania Code Title 25 Chapter 93 Water Quality Standards, the watershed of Callender Gap Creek has a designation of Cold Water Fishes (CWF). Callender Gap Creek has been designated as having impaired aquatic life due to acid mine drainage - siltation (eMapPA, March 2025). According to the PADEP's Statewide *Existing Use Classifications* list (revised on February 6, 2025), Callender Gap Creek does not have an Existing Use classification.

According to Pennsylvania Code Title 25 Chapter 93 Water Quality Standards, the watershed of the Lackawanna River has a designation of Cold Water Fishes, High Quality (CWF-HQ). The Lackawanna River has been designated as having impaired aquatic life due to acid mine drainage – metals and acid mine drainage – pH (eMapPA, March 2025). According to the PADEP's Statewide *Existing Use Classifications* list (revised on March 18, 2025), the Lackawanna River does not have an Existing Use classification. According to the PFBC, the Lackawanna River is designated as supporting Natural Reproduction of Trout and is designated as a Class A Trout Stream (March 2025).

Other potential indicators of wetlands include floodplains, NWI mapped areas, and hydric soils or soils containing hydric inclusions. No FEMA 100-year floodplains are mapped within the AOI. Two NWI wetlands, palustrine, unconsolidated bottom, permanently flooded, excavated (PUBHx) features are mapped within the AOI. Mapped NWI features are illustrated on **Figure 2, Attachment A**. Review of the background information revealed two hydric soil types, Holly

Silt loam (Hm) and Atherton Loam (At), in the vicinity of the AOI. Dystrochepts and rock Outcrop (DyD), Morris Channery Loam (MxB), Norris and Chippewa Channery Loams (NxB), Pope Soils (Po), Volusia Channery Loams (VxB), and Wurtsboro Extremely Stoney Loam (WxB, WxD) which may contain hydric inclusions, are mapped within the AOI or vicinity. The soil types within the AOI are illustrated on **Sheet 1, Attachment A**.

On-site Investigation

The AOI is primarily forested, with a small mobile home community in the eastern portion of the AOI. A significant portion of the AOI has been strip mined with forested regrowth. Deep mining has also occurred at the site. Photographs documenting site conditions are contained in **Attachment C** and on the data forms in **Attachment D**. Vegetation, soils, and hydrology data collected are recorded on the data forms (**Attachment D**). The photograph locations for streams and locations of the data points (WDP and UDP) are shown on **Sheet 1, Attachment A**.

Wetlands and Streams

Seven wetlands, two streams, and 31 open bodies of water were identified within the AOI during the field investigation. Wetlands within the AOI with hydrologic connection to the Lackawanna River would be Exceptional Value, according to Title 25 Chapter 105 §105.17 (connection to a Wild Trout Stream). The two streams delineated within the AOI are isolated features with no connection to downstream waters. The open bodies of water are likely related to past mining activities. The aquatic resources are illustrated on **Sheet 1, Attachment A**. The wetlands are summarized in terms of classification, exceptional value status, size, and connectivity in **Table 1**. The stream information is summarized in **Table 2** with respect to water quality designation, PFBC trout classification, stream classification, navigability, and type.

Table 1 Wetland Summary

Wetland Name	Cowardin Classification / Exceptional Value (EV)	Size (ac) Within the AOI	Isolated Wetland	Open-Ended Wetland
Wetland 0311251226	PEM1 / NA	0.01	Yes	No
Wetland 0311250835	PEM1 / NA	0.01	Yes	No
Wetland 0311250854	PEM1 / NA	0.44	Yes	No
Wetland 0311251010	POW (60%), PSS1 (30%), and PEM1 (10%) / NA	0.76	Yes	No
Wetland 0311251110	PSS1 / NA	0.05	Yes	No
Wetland 0311251144	PSS1 (70%), PFO1 (30%) / NA	0.13	Yes	No
Wetland 0311251254	PSS1 / NA	0.12	Yes	No

Note: PEM1-palustrine, emergent, persistent, PSS1-palustrine, scrub-shrub, broad-leaved deciduous,PFO1-palustrine, forested, broad-leaved deciduous

Table 2 Stream Summary			
Stream Name	**Chapter 93 Classification / PFBC Designation / Navigable Status**	**Stream Type***	**FEMA 100-year Floodplain**
UNT 1	NA / NA / NA	R4SB3/5	No
UNT 2	NA / NA / NA	R4SB3/5	No

Notes: Title 25 Chapter 93 Water Quality designation: CWF – Cold Water Fishes, MF – Migratory Fishes
R-riverine, 4-Intermittent, SB-streambed, 3-cobbel-gravel, 5-mud
Navigation Status includes state and federal status.
* Stream Type based upon *Classification of Wetlands and Deepwater Habitats of the United States* (Federal Geographic Data Committee, 2013) and field observations.

OTHER FEATURES

Open Body of Water

Thirty-one open bodies of water were observed within the AOI. These features appear to be man-made features resulting from the past mining in the area. Some are in the bottom of strip mined areas while others appear to be smaller excavations such as test pits and the remaining appear to be subsidence features, potentially related to past deep mining at the site.

Uplands

The AOI is predominantly forested with smaller sparce areas where soil was removed from strip mining. The forested portion of the AOI is dominated by red oak (*Quercus rubra*, facultative upland, FACU), white oak (*Quercus alba*, FACU); red maple (*Acer rubrum,* FAC); black cherry (*Prunus serotina*, FACU); sweet birch (*Betula lenta*, FACU) and gray birch (*Betula populifolia,* FAC).

To characterize the existing conditions, upland data points were taken within AOI. Evidence of all three wetland parameters were absent in the upland areas.

SUMMARY

This memorandum documents the findings of a field investigation conducted on March 11, May 21, and June 11, 2025, for the Project Gravity site. Seven wetlands, two isolated streams, and 31 open water features were identified within the AOI during the field investigation. Any change to the proposed project that may exceed the limits of the AOI as depicted on the Aquatic Resource Identification Map (**Sheet 1, Attachment A**) will require additional review.

REFERENCES

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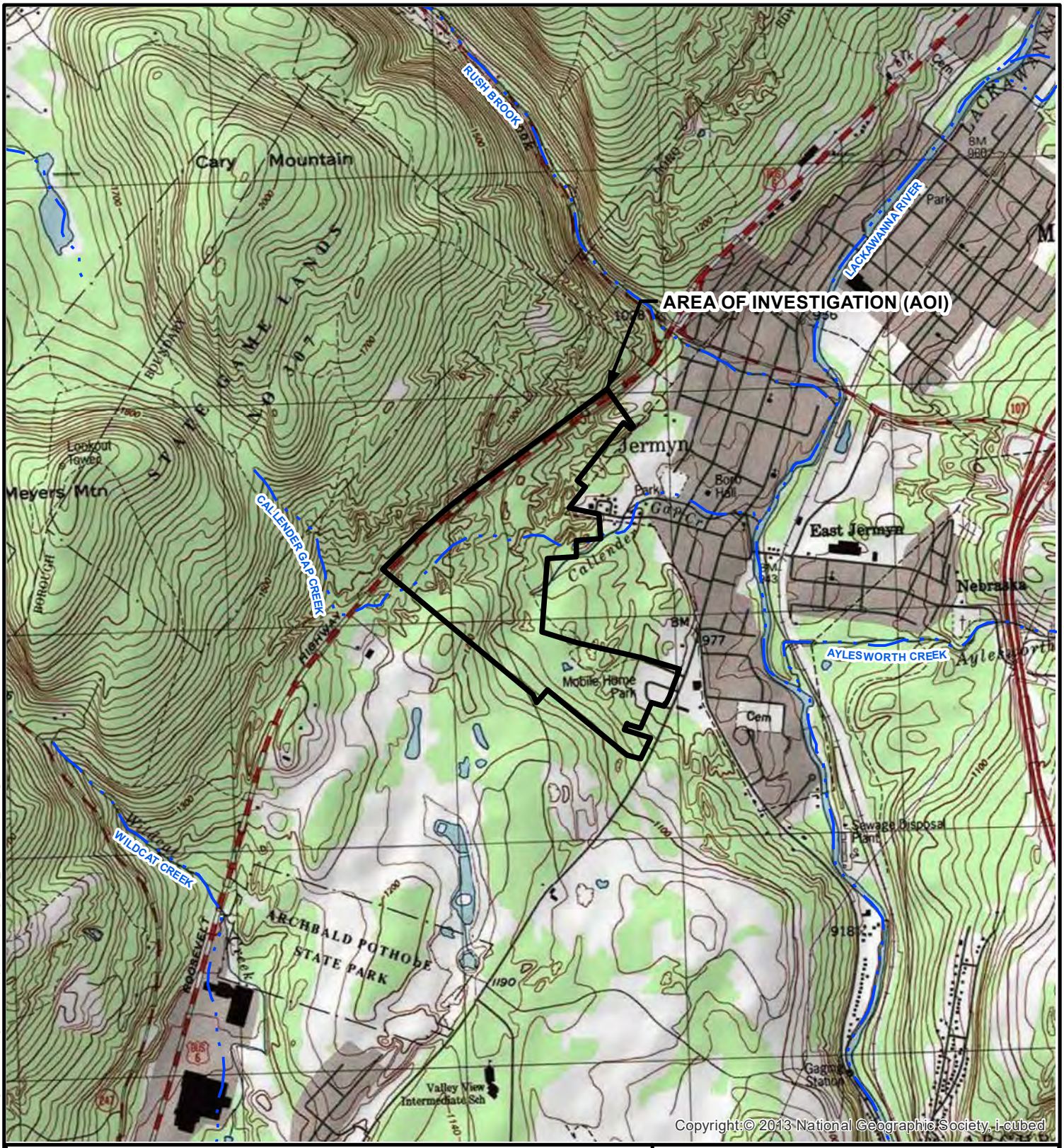
USDA, Natural Resource Conservation Service [NRCS] Web Soil Survey. https://websoilsurvey.nrcs.usda.gov/app/HomePage.htm

United States Fish and Wildlife Service (USFWS), National Wetlands Inventory, Geospatial Wetlands Digital Data, Wetlands Mapper. https://www.fws.gov/wetlands/data/Mapper.html

United States Geological Survey (USGS), 7.5-minute quadrangle Carbondale, PA.

ATTACHMENT A

Figures and Sheet



REF: Base map from ESRI USA Topo Maps. Refer to USGS 7.5 minute Carbondale, PA.

LEGEND

AREA OF INVESTIGATION

STREAM

0 2,000 4,000 6,000

SCALE IN FEET

Site Location Map

Project Gravity
Archbald 25 Developer, LLC
Archbald Borough
Lackawanna County, PA

June, 2025	Scale: 1" = 2,000'	24012215

ARM Group LLC
Engineers and Scientists

Figure 1

P:\Western Hospitality Group\Projects\24012215 - Task 3, Due Diligence Investigation -Jermyn PA\GIS\Figure 1_Site Location Map.mxd

REF: Base map from ESRI USA Topo Maps. Refer to USGS 7.5 minute Carbondale, PA.

LEGEND

- NWI PALUSTRINE WETLAND
- AREA OF INVESTIGATION
- STREAM

0 725 1,450 2,175

SCALE IN FEET

NWI Map

Project Gravity
Archbald 25 Developer, LLC
Archbald Borough
Lackawanna County, PA

June, 2025	Scale: 1" = 725'	24012215

ARM Group LLC
Engineers and Scientists

Figure 2

P:\Western Hospitality Group\Projects\24012215 - Task 3. Due Diligence Investigation -Jermyn PA\GIS\Figure 2_NWI Map.mxd

SOILS IN PROPERTY
HYDRIC:
ATHERTON LOAM (At)
HOLLY SILT LOAM (Hm)
HYDRIC COMPONENT:
DYSTROCHREPTS AND ROCK OUTCROP (DYD)
MORRIS CHANNERY LOAM (MxB)
NORRIS AND CHIPPEWA CHANNERY LOAMS (NxB)
POPE SOILS (Po)
VOLUSIA CHANNERY SILT LOAM (VxB)
WURTSBORO EXTREMELY STONY LOAM (WxB, WxD)
UPLAND SOILS:
ARNOT-ROCK OUTCROP COMPLEX (AsD)
DUMPS, MINE (Da)
DYSTROCHREPTS AND ROCK OUTCROP (DYE)
LORDSTOWN CHANNERY SILT LOAM (LxD)
OQUAGA AND LORDSTOWN EXTREMELY STONY LOAMS (OYE)
UDORTHENTS, STRIP MINE (UA)
URBAN LAND (Ur)
WELLSBORO CHANNERY LOAM (WcC, WgB, WgD)
WYOMING GRAVELLY SANDY LOAM (WYB, WYC, WYD)
OTHER:
WATER (W)

LEGEND

- PHOTO LOCATION/DIRECTION
- WETLAND DATA POINT (WDP)
- UPLAND DATA POINT (UDP)
- DRAINAGE FEATURE
- STREAM
- STREAM FEATURE IDENTIFIED IN FIELD INVESTIGATION
- SOIL TYPE (WxD)
- AREA OF INVESTIGATION (AOI)
- 100 YEAR FEMA FLOODPLAIN
- DELINEATED WETLAND
- OPEN BODY OF WATER
- EXISTING CONTOUR: 2 FOOT

NOTES:

1. THE BASE MAP HAS BEEN CREATED USING AVAILABLE AERIAL PHOTOGRAPHY PROVIDED BY PEMA, DATED 2018. EXISTING TOPOGRAPHY HAS BEEN PROVIDED BY PAMAP. NWI PALUSTRINE WETLANDS PROVIDED BY US FISH AND WILDLIFE SERVICE, DATED 2022. STREAM DATA FROM USGS, DATED 2017.

2. THIS PLAN IS IN THE PENNSYLVANIA STATE PLANE NORTH, NORTH AMERICAN DATUM 1983 (NAD 83) COORDINATE SYSTEM.

ARM Group LLC
Engineers and Scientists

No.	Revision	Date	By

designed	ARM	plot	1" = 275'
checked	MAB	date	06/16/2025
plans	KSG	project no.	24012215
graphics scale			0 100 200 300 SCALE IN FEET

AQUATIC RESOURCE INVESTIGATION MAP

ARCHIBALD BOROUGH
LACKAWANNA COUNTY, PA

project title
PROJECT GRAVITY
ARCHIBALD 25 DEVELOPER, LLC

drawing title

Sheet 1

P:\Active Hourly\Gravity Group\Project-24012215 - Tier 3, Due Diligence Investigation - Armys PA (45-Other) 1 Aquatic Resource Investigation Map 11x17.mxd

ATTACHMENT B

Qualifications

ARM Group
Engineers and Scientists

Joseph Atzert

PROJECT SCIENTIST

SUMMARY OF QUALIFICATIONS

Mr. Atzert has four years of experience as a project scientist and a certified wetland delineator. He has extensive knowledge of geosciences and natural resource sciences that enables him to perform a variety of environmental site assessments.

PROFESSIONAL EXPERIENCE

Forest Stand Delineations- Cecil, Wicomico, Montgomery, Howard, and Prince George's Counties, MD. Investigated a variety of sites ranging in size from 10 acres to 130 acres for renewable energy development companies involving both simplified and full forest stand delineations to support avoidance and to accurately document onsite forests to assist in constructability and conservation plan efforts.

Forest Stand Delineation- Blacks Mill Road Solar 1, Frederick County, MD. Investigated 87 acres for a renewable energy development company. Performed a simplified forest stand delineation and GPS surveyed specimen trees to support avoidance and minimization and constructability efforts.

EMPLOYEE HIGHLIGHTS

EDUCATION

Bachelor of Science in Geology
Stockton University

Certificate of Wetland Delineation
Rutgers University

Forest Conservation Qualified Professional
Carroll Community College

Aquatic Resource Investigation- Perry Route 104 Solar Project, Perry County, PA. Investigated 50 acres for a renewable energy development company. Aquatic resources were delineated and GPS surveyed to support avoidance and minimization and constructability efforts.

Project Scientist, Lancaster PA. Mr. Atzert worked as a project scientist and gained extensive experience in environmental site investigation, encompassing activities such as soil investigations, monitoring well installations, groundwater investigations, wetland delineations, air quality sampling, and stormwater sampling. Notably, he conducted wetland delineations for PennDOT in 2021 to support bridge repairs post-Hurricane Ida. Additionally, Mr. Atzert played a crucial role in developing and executing site remediation plans for leaking underground storage tanks, from initial soil boring investigations to groundwater monitoring. His responsibilities also included organizing and reporting groundwater sampling events to regulatory bodies like the Pennsylvania Department of Environmental Protection.

Endangered Species Technician, Cambridge, MD. Mr. Atzert conducted habitat and population assessment surveys for the Frosted Elfin in collaboration with the United States Fish and Wildlife Service throughout the Northeast Region. He developed a standard operating procedure for identifying and surveying the Bethany Beach Firefly, an endemic species in Delaware, for potential emergency listing under the Endangered Species Act. Additionally, he participated in forest management activities, including girdling sweet gum and red maple trees to alleviate overcrowding and facilitate the propagation of oak species.

ARM Group
Engineers and Scientists

Matt A. Bixler, PWS

SERVICE GROUP LEADER – NATURAL RESOURCES

SUMMARY OF QUALIFICATIONS

Mr. Bixler has more than 23 years of experience in the natural resources field and currently leads ARM's Natural Resources service area. Mr. Bixler is responsible for the administration, management, and technical studies for government and private projects as well as ensuring the quality of products and services for the practice. Mr. Bixler has experience conducting natural resource technical investigations and reporting for resources such as streams, wetlands and threatened and endangered species in Pennsylvania and surrounding states. Mr. Bixler possesses strong communication skills related to consultation with state and federal resource agency representatives and clients. Mr. Bixler has experience in conducting environmental assessments and preparing appropriate documentation in accordance with National Environmental Policy Act (NEPA) requirements.

PROJECT EXPERIENCE

WETLAND INVESTIGATIONS, DELINEATIONS, AND ASSESSMENTS

Wetland Identification and Delineation, Sterling Road Subdivision Project, Dauphin County, PA. Identification and delineation of aquatic resources (wetlands and streams) within an approximate 13-acre investigation area. Investigation area included both a forested stream valley and active agricultural fields. Wetlands and streams were identified and surveyed to determine permitting and site construction restraints.

Wetland Investigations, Multiple Well Pad Sites, EM Energy Ohio, LLC, Washington County, OH. Conducted wetland investigations and delineations for potential natural gas well pad sites in Washington County, OH. Wetlands and streams were identified and surveyed to determine permitting and site construction restraints that could inhibit future development of natural gas projects within the site. Potential avoidance and minimization strategies were evaluated on-site with input from the engineer and property owner constraints.

Wetland Investigation – Dry Ridge Solar Site, New Leaf Energy, Allegany County, MD. Led the natural resources effort to conduct on-site investigation of a 88 acre site to be used for the construction of a new solar array field. Upon completion of the field investigation and report development, the wetland and stream findings were reviewed by the Maryland Department of the Environment (MDE). The onsite review resulted in concurrence of the findings by the MDE. Project work also included coordination with the Maryland Department of Natural Resources for threatened and endangered species clearance and the Maryland Historical Trust for cultural resources clearances.

EMPLOYEE HIGHLIGHTS

EDUCATION

Bachelor of Arts in Environmental Studies, Minor in Biology,
Washington College

Master of Science in Energy and Environmental Policy,
University of Delaware

CERTIFICATIONS/TRAINING

PAFBC Scientific Collectors' Permit #529

PADEP, Division of Water Quality Standards, Benthic Macroinvertebrate Field Sampling Quality Assurance Audit, November 7, 2017

Wetland Delineation Course in accordance with US Army Corps of Engineers 1978 Wetlands Delineation Manual, Richard Chinn Environmental Training, Inc.

Ohio Rapid Assessment Method (ORAM) for Wetland v. 5.0, Ohio Environmental Protection Agency, 2013

Bog Turtle Habitat and Surveying Training

STREAM ASSESSMENTS AND MONITORING

Stream Monitoring and Benthic Macroinvertebrate Sampling, Advanced Disposal, Cumberland County Landfill, Cumberland County, PA. Lead biologist in managing and conducting an on-going annual stream assessment to evaluate water quality within tributaries of Conodoguinet Creek both down- and upstream from the Cumberland County Landfill in compliance with landfill permit conditions. The assessment involves a benthic macroinvertebrate community survey in accordance with the Pennsylvania Department of Environmental Protection's protocols outlined in An Index of biotic Integrity of Benthic Macroinvertebrate Communities in Pennsylvania's Wadeable, Freestrone, Riffle-Run Streams (2015). As part of the assessment, in-situ water chemistry data and qualitative habitat assessment data is collected and recorded for seven sites. The assessment is also conducted in accordance with the PFBC's Scientific Collectors permit. The technical findings are submitted for review to the Pennsylvania Department of Environmental Protection and macroinvertebrate data is uploaded to the PFBC's database.

WATER QUALITY SAMPLING

Pre-Drill Baseline Survey and Sampling, Southwestern Energy, Susquehanna County, PA. Responsible for the management of the baseline sampling program for private potable water sources, including drilled wells, dug wells, springs/seeps, and ponds within a designated radius from natural gas well pad and water impoundment locations. The sampling requires close communication with the client due to the sensitive nature of the resource. Tasks include project coordination, landowner, laboratory and client scheduling and management of results. Emergency sampling is required in addition to baseline sampling. Emergency sampling tasks require prompt responsiveness to the client and expedited turnaround times. Sample collection and reporting are completed in compliance with regulatory requirements.

EMPLOYEE HIGHLIGHTS

CERTIFICATIONS/TRAINING CONT.

Interagency Consultation for Endangered Species (U.S. Fish and Wildlife Service, National Conservation Training Center)

Permit-Required Confined Space Entry Training

MSHA 24-Hour Mine Safety Training

SafeLandUSA Safety Training

First Aid/AED/CPR Certified

PUBLICATIONS AND PRESENTATIONS

"Mutual Benefits: Linking Source Water Protection and TMDLs." Presentation for the 61st Annual Conference of the American Water Works Association – Pennsylvania Section (May 2009)

"Achieving Watershed Improvement through Source Water Protection" Presentation for Delaware Estuary Science & Environmental Summit (Feb 2011)

ENVIRONMENTAL DUE DILIGENCE

Environmental Due Diligence Report, EM Energy Ohio, LLC, Various parcels, Monroe County, OH. – Conducted desktop studies and regulatory review to document potential environmental and engineering constraints that may limit or prohibit natural gas development of identified parcels. Assessments included the following: locations of existing wells; coal mining features; wetland identification; cultural resource evaluation; threatened and endangered species; groundwater contamination complaints; FEMA floodplain mapping; navigable waterways, mapped streams, and use designations; and public lands. The final report summarized potential constraints to assist the client in their investment decision.

THREATENED AND ENDANGERED SPECIES ASSESSMENTS

Phase I Bog Turtle (*Glyptemys muhlenbergii*) Investigations, Christman Dam, Monroe County, PA. Completed a Phase I bog turtle survey prior to the remediation of the Christman Dam in Monroe County, PA using the guidelines presented in the USFWS's *Guidelines for Bog Turtle Surveys* (April 2006). Completed a report documented the findings of the surveys for submittal to the United States Fish and Wildlife Service (USFWS). Findings of the survey were confirmed by the USFWS.

ARM Group
Engineers and Scientists

Jeffrey Gleason

PROJECT SCIENTIST 1

SUMMARY OF QUALIFICATIONS

Mr. Gleason is a Project Scientist with six years of experience in aquatic resource investigations, stream restoration, and knowledgeable in GIS and drafting programs such as AutoCAD with Carlson Survey, Esri ArcMap and ArcGIS Pro, as well as use of GPS and survey equipment to gather and plot data. He also has experience with construction oversight and multiple aspects of surveying.

PROJECT EXPERIENCE

Aquatic Resource Investigation – Dry Ridge Road Solar 1 Project, Allegheny County, MD. Investigated 88 acres for a renewable energy development company. Aquatic resources were delineated and GPS surveyed to support avoidance, minimization and constructability efforts.

Aquatic Resource Investigation – Rayias to Diaz Family to Geiger to Lewis Temporary Waterline, Susquehanna County, PA. Investigated a 13 mile long, 50-foot wide, 130 acre proposed pipeline right-of-way for a temporary waterline. Thirty-one palustrine wetlands were identified within the AOI and many additional identified and avoided.

Wetland Restoration Construction Oversight. Provided construction oversight and coordination with USACE and PA DEP on a 4-acre EV peat bog restoration project in Lackawanna County, PA. Work included determining unimpacted site conditions, attaining subgrade and final elevations, mineral soil placement, placement of peat, and installation and monitoring of erosion & sedimentation controls.

Habitat Specialist | Habitat Forever (U.S. Fish and Wildlife Service partner) | State College, PA | Summer 2018, Spring 2020 – Fall 2022: Responsibilities included utilization of the RTK unit and Total Station to survey streams for construction of habitat and erosion control structures. Mr. Gleason created longitudinal profiles and cross sections of stream reaches using RiverMorph program. He provided construction oversight for U.S. Fish and Wildlife Service and EPA and conducted various ecological assessments including DEP RAPID assessments.

Survey Office Technician | Balzer and Associates | Midlothian, VA | 2019: Mr. Gleason drafted building permit plats, subdivision plats, and other plans as needed as well as parcel boundaries which were exported for use by field crews on their total stations. He also performed calc checks and reviewed subdivision plats before recordation and prepared submissions to local government.

Research Assistant | Penn State University Dept. of Plant Science | University Park, PA | Summer 2016 - Spring 2018: Experience included working on the Northeast Sustainable Agriculture Research and Education (NESARE) project establishing and collecting data from field research plots. Mr. Gleason supervised and trained new employees in 2017 and learned practical skills related to nutrient management, farm operation, soil sampling, and lab practices.

EMPLOYEE HIGHLIGHTS

EDUCATION

Bachelor of Science in Environmental Resource Management with a minor in Geographic Information Systems.
The Pennsylvania State University, University Park, PA

CERTIFICATIONS/TRAINING

Wetland Professional In Training – Society of Wetland Scientists

36-Hour Wetland Delineation Training – Gailey Environmental

Applied Fluvial Geomorphology – Wildland Hydrology

River Morphology and Applications – Wildland Hydrology

Grasses, Sedges, and Rushes – Environmental Concern

ARM Group
Engineers and Scientists

Scott L. Martin, PWS

SENIOR SCIENTIST

Professional Wetland Scientist

SUMMARY OF QUALIFICATIONS

Mr. Martin has over 21 years of experience in natural resource consulting and 12 years of project administration, client coordination, cost management and staff supervision. He is experienced in freshwater macroinvertebrate, wetland delineations, wetland mitigation, construction and post-construction wetland monitoring, global positioning system (GPS) survey, and assessments for rare, threatened and endangered species. He possesses strong communication skills related to consultation with state and federal resource agency representatives and clients. He has experience conducting investigations in Alabama, Connecticut, Delaware, Illinois, Maryland, Massachusetts, Missouri, New York, North Carolina, New Jersey, Ohio, Pennsylvania, Puerto Rico, and West Virginia.

PROJECT EXPERIENCE

Aquatic Resource Investigations – Peterson to Mellish Pipeline Project, Armstrong County, PA. Investigated 3.6 miles of pipeline alignments (50 acres) for a natural gas development company. Proposed alignment changes and developed final routes to improve constructability and avoid protected resources for the pipelines. Work included GPS surveying of engineering constraints (existing infrastructure). The selected alignments minimized impacts to forest (Indiana Bat habitat USFWS avoidance measure), wetland impacts (Eastern Massasauga habitat avoidance), and streams to enable the use of general permits. Aquatic resources were immediately delineated, and GPS surveyed to support avoidance and minimization and constructability efforts.

Aquatic Resource Investigation, Dunkard Creek Intake, Monongalia County, WV. Evaluated a proposed freshwater pipeline and water intake on Dunkard Creek. Aquatic resources were immediately delineated, and GPS surveyed. Work included coordination with engineers and the client; discussions with the USFWS and WVDNR to avoid impacts to the federally listed Snuffbox mussel; and coordinated the mussel survey within the project impact area.

Youghiogheny River Crossing, Aquatic Resource Investigation and *Aconitum uncinatum* (blue monkshood) PA Threatened Species Botanical Survey and a Special Concern Resource, Westmoreland County, PA. Completed aquatic resource investigations for a 1.2-mile pipeline/river bore including 1.8 miles of access roads. A botanical survey for the blue monkshood confirmed an extensive population of this PA Threatened species along the west side of the River. DCNR concurred that the proposed project would not have an adverse impact on this species of concern nor the Tufa geologic feature due to the use of a directional bore under the waterway, adjacent riparian habitat, and groundwater fed geologic feature.

Indiana Bat (*Myotis sodalis*) Conservation Plan (IBCP), Walley Natural Gas Pipeline, Butler County, PA. Evaluated a 2.5-mile pipeline corridor (27-acres), prepared an Indiana Bat Conservation Plan (IBCP) documenting the commitments to avoid, minimize and compensate for potential impacts upon the federally listed endangered Indiana bat. The IBCP was required to avoid an incidental take in a swarming area of Priority 4 hibernacula. The USFWS concurred that the project's effects would be insignificant or discountable upon the Indiana bat.

EMPLOYEE HIGHLIGHTS

EDUCATION

Bachelor of Science in Environmental Biology,
Millersville University

PROFESSIONAL LICENSING AND CERTIFICATIONS

Professional Wetland Scientist No. 2820

USFWS, PA Field Office and Pennsylvania Fish & Boat Commission Bog Turtle Qualified Surveyor

Maryland Department of Natural Resources Recognized Qualified Bog Turtle Surveyor

Delaware DNREC Division of Fish and Wildlife Qualified Bog Turtle Surveyor

USFWS, Ohio Field Office, Approved Surveyor List for: Running Buffalo Clover

USFWS, West Virginia Field Office, Qualified Small Whorled Pogonia, Running Buffalo Clover, Northeastern Bulrush, Harperella, and Virginia Spirea Surveyor

USFWS, PA Field Office, Qualified Northeastern Bulrush Surveyor

USFWS, Virginia Field Office, Approved Surveyors in Virginia for: Northeastern Bulrush, Harperella, Virginia Spiraea, and Swamp Pink

USFWS, Chesapeake Bay Field Office, Qualified Surveyor for Northeastern bulrush, Swamp Pink, and Harperella

Wild Plant Management Permit 24-062

Timber Rattlesnake (*Crotalus horridus*) Habitat Investigations, Multi-year Denning/Gestation/Birthing Research, Radio-tracking Studies, and Constructed Basking Habitat Monitoring. Mr. Martin has acquired more than 480 hours of Timber Rattlesnake experience in the following 20 Pennsylvania counties: Adams, Berks, Cameron, Carbon, Centre, Clearfield, Clinton, Cumberland, Dauphin, Elk, Fayette, Franklin, Huntington, Juniata, Luzerne, Lycoming, Mifflin, Monroe, Schuylkill, and Wyoming.

Allegheny Woodrat (*Neotoma magister*) Live Trapping Investigation, Centre County, PA. Identified several locations of old Woodrat sign in the vicinity of a proposed natural gas gathering pipeline. Identified the best alignment to minimize disturbance to rock habitat, wetlands, and undisturbed forest. Field viewed the proposed alignment with the Pennsylvania Game Commission to gain alignment concurrence. To assure Allegheny Woodrat were not active in the vicinity, 49 live traps were placed and observed over two consecutive nights. The live Woodrat trapping effort confirmed that no active Woodrat utilize the suitable habitat in the vicinity.

Mid-Atlantic Center for Herpetology and Conservation (MACHAC) Volunteer Bog Turtle Population Surveyor, Berks, Chester, Cumberland, Lancaster, and York Counties, PA. Assisted in the timed survey known bog turtle sites in several southeastern counties for a long-term population study funded by the USFWS and supported by the PAFBC in 2014, 2015, 2016, 2017, and 2019.

Invasive Plant Management and Control, Clearfield and Elk Counties, PA. Inventoried and documented the pre-construction invasive plants within the proposed 4-mile natural gas pipeline corridor within Moshannon State Forest. Prepared a DCNR-approved management and control plan to implement during and following construction and prepared a post-construction monitoring plan. Conducted three years of monitoring and documented that the invasive species were found to occur at lower levels than pre-construction, enabling early release from monitoring.

Botanical Survey for the 43-mile Fort Beeler Pipeline Project, Washington County, PA. Conducted a botanical survey of the 31.3-mile Pennsylvania portion (1,692 acres) of the project for seven plant species. A team of two botanists searched the 300-foot-wide corridor and approximately thirty-eight access road corridors. All potentially suitable habitats were investigated, and detailed data collected, and the findings were submitted to the DCNR. *P. lutea* (yellow passionflower) were documented in Washington County – a first for this County.

Bog Turtle Phase 1 and Phase 2 Survey Services, SR 41 Basin/Dam Project, Sadsbury Township, Lancaster County, PA. Phase 1 habitat assessment area included approximately two acres of wetland and a 9-acre buffer around the wetland. The habitat assessment identified 0.43 acres of "designated survey areas" that were potentially suitable for Bog Turtles that would be assessed in a Phase 2 survey. The four Phase 2 surveys were negative for Bog Turtles and the USFWS concurred with the findings.

EMPLOYEE HIGHLIGHTS

PROFESSIONAL LICENSING AND CERTIFICATIONS (Cont'd)

PA Fish & Boat Commission Approved Timber Rattlesnake Monitor Venomous Snake Handling Certification

Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (9 hrs)

Federal Manual for Identifying and Delineating Wetlands

Society of Wetland Scientists, Member

PADEP, Division of Water Quality Standards, Benthic Macroinvertebrate Field Sampling QA Audit-Verified

Standard First Aid and Adult CPR/AED

MSHA 24-Hour Mine Safety Training

SafelandUSA Trained

PA Fish & Boat Commission, Boating Safety Education Certified No. W0085680

Carnegie Museum of Natural History, Pennsylvania Botanist List

Pennsylvania Amphibian and Reptile Survey Atlas Project (PARS), Lancaster County Coordinator

The Biota of North America Program (BONAP), North American Vascular Flora, Field Botanist and Photographic Contributor

The James C. Parks Herbarium (MVSC), Millersville University, Pennsylvania Herbarium Associate

PA Certified Commercial Pesticide Applicator No. 615137

ARM Group
Engineers and Scientists

Thomas Skic

SENIOR PROJECT SCIENTIST

SUMMARY OF QUALIFICATIONS

Mr. Skic is a Senior Project Scientist with over 13 years of experience in environmental investigations, land surveying, AutoCAD, Global Positioning System (GPS) and weather consulting. Mr. Skics roles have provided him with invaluable tools for project management and clear and timely communication with clients.

PROFESSIONAL EXPERIENCE

Senior Project Scientist | Mt. Zion Solar | Pivot Energy | Garrett County, MD: Aquatic resource investigation of an approx. 80-acre site for renewable energy development. This included stream assessment and wetland delineation. Prepared report detailing site investigation results. All resources were surveyed by GPS.

Project Manager | Apex Wetlands | Apex Tree & Earth | Luzerne County, PA: Managed and performed detailed wetland investigation on an approx. 10-acre site. Coordinated with property owner and PA DEP for permitting and mitigation of wetland impacts. The determination of wetlands to be exceptional value due to hydrologic connection to a wild trout stream required the use of a joint permit to permit the proposed project.

Creator/Manager of Environmental Division | Columbia, PA: Mr. Skic developed and managed the environmental division of a land surveying firm. Brought in many new clients for wetland investigation work. Completed all phases of projects: marketing, proposals, field work, reporting, client relationships, through the final product.

AutoCAD Technician | Malvern, PA: Working with the program AutoCAD Civil 3D to draw up highly detailed engineering and survey plans for a considerable variety of clients. Detailed reading and drawing of utilities, property boundaries, physical features as well as surface topography.

Land Surveyor Assistant | Flemington, NJ: Mr. Skic provided support in the field and office for a land surveying firm including instrument operation, boundary and construction stake out, AutoCAD drawings, land preservation and flood elevation certificates.

Consulting Meteorologist | Hackettstown, NJ: Mr. Skic provided crucial weather forecasts and alerts for a wide range of clients during severe weather which included Hurricane Sandy, thunderstorms over Metlife stadium and snow events for the DOT. Critical communication skills and accuracy provided important information for the client to make safe weather decisions.

EMPLOYEE HIGHLIGHTS

EDUCATION

Bachelor of Science in Earth Science
Kean University

PROFESSIONAL CERTIFICATIONS

USACOE Wetland Delineation and Regional Supplement Training Certificate

NSPS Certified Survey Technician level 1

ATTACHMENT C

Photograph Log

PHOTOGRAPH LOG
PROJECT GRAVITY

Photograph 1 illustrates an overview of Wetland 0311250835 near an old logging road which drains to UNT 1. The view is facing west-northwest.

Photograph 2 illustrates an overview of Wetland 0311250854. The view is facing north-northwest.

Photograph 3 illustrates an overview of Wetland 0311251010. The view is facing southwest.

Photograph 4 illustrates the conditions within Wetland 0311251110. The view is facing southwest.

Photograph 5 illustrates an overview of the conditions within Wetland 0311251145. The view is facing southwest.

Photograph 6 illustrates Wetland 0311251226 which appeared to be on a former access road disturbance. The view is facing northwest.

Photograph 7 illustrates the conditions of Wetland 0311251254 located at the bottom of a large topographical depression. The view is facing north-northeast.

Photograph 8 illustrates the isolated UNT 1. The view is facing east.

Photograph 9 illustrates the isolated UNT 1. The view is facing east.

Photograph 10 illustrates a typical view of one of the excavated Open Bodies of Water. The view is facing southwest.

Photograph 11 illustrates another typical view of an excavated Open Body of Water. This is in the bottom of a strip mine pit. The view is facing southeast.

Photograph 12 illustrates a typical view of an isolated drainage feature draining into a strip mine pit. The view is facing northeast.

Photograph 13 illustrates a typical view of the uplands in the strip-mined portion of the AOI. The view is facing southeast.

Photograph 14 illustrates a collapsed deep mine entrance. The view is facing southeast.

Photograph 15 illustrates a typical view of the uplands in the forested, southeastern portion of the AOI. The view is facing north/northeast.

Photograph 16 illustrates a view of the existing mobile home community in the eastern portion of the AOI. The view is facing southeast.

ATTACHMENT D

Data Forms

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Project Gravity City/County: Lackawanna County Sampling Date: 3/11/25
Applicant/Owner: Archbald 25 Developer, State: PA Sampling Point: WDP 0311250835
LLC Investigator(s): S. Martin, M. Bixler, J. Section, Township, Range: Borough of Archbald
Atzert Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): concave
Subregion (LRR or MLRA): LRR K Lat: 41.522267 Long: -75.559739 Datum: NAD 83
Soil Map Unit Name: WgD: Wellsboro channery loam, 8-25% slopes, rubbly NWI classification: NA
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☑ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances present? Yes ☑ 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 ☑	No ☐	**Is the Sampled Area within a Wetland?** **Yes** ☑ **No** ☐
Hydric Soil Present?	Yes ☑	No ☐	If yes, optional Wetland Site ID:
Wetland Hydrology Present?	Yes ☑	No ☐	

Remarks:
Classification: PEM1. Wetland 0311250835 is located upgradient UNT 1 and drains to the stream. WDP 0311250835 characterizes the conditions found within the wetland. Adjacent upland habitat was characterized by UDP 0311250833. All three wetland parameters were present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

- ☑ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ☑	No ☐	Depth (inches): 1
Water Table Present?	Yes ☐	No ☑	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ☑	No ☐	Depth (inches): surface

Wetland Hydrology Present? **Yes** ☑ **No** ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Wetland hydrology indicators A1 (Surface Water) and A3 (Saturation) were observed. Wetland hydrology is provided by a groundwater seep and from surface water runoff directed to the area. Precipitation was 39 percent of normal in January, 100 to 103 percent of normal in February, and 0.76 inches of rain fell in the week leading up to the field investigation.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot Size: 30-foot radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot Size: 15-foot radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Herb Stratum (Plot Size: 5-foot radius)			
1. Microstegium vimineum	60	Y	FAC
2. Carex sp.*	45	Y	FACW
3. Rubus hispidus	20	N	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	125 =Total Cover		
Woody Vine Stratum (Plot Size: 30-foot radius)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species that Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:

OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☑ 2 – Dominance Test is >50%
- ☐ 3 – Prevalence Index is ≤3.0[1]
- ☐ 4 – Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ☑ **No** ☐

Remarks: (Include photo numbers here or on a separate sheet.)

Vegetation meets the Dominance Test for hydrophytic vegetation.

*Carex species could not be identified to species level and was assigned an indicator status of FACW based on professional judgement.

SOIL

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5								coal spoils
5-10	10YR 3/1	70	5YR 5/8	30	C	M	silt loam	
10								rock

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR R, MLRA**
- ☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ☐ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ☐ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ☐ Dark Surface (S7) **(LRR K, L)**
- ☐ Polyvalue Below Surface (S8) **(LRR K, L)**
- ☐ Thin Dark Surface (S9) **(LRR K, L)**
- ☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ☐ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: rock refusal

Depth (inches): 10

Hydric Soil Present? **Yes** ☑ **No** ☐

Remarks:

Hydric Soil indicator Depleted Matrix (F3) observed.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Project Gravity City/County: Lackawanna County Sampling Date: 3/11/25
Applicant/Owner: Archbald 25 Developer, LLC State: PA Sampling Point: WDP 0311251010
Investigator(s): S. Martin, M. Bixler, J. Atzert Section, Township, Range: Borough of Archbald
Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave
Subregion (LRR or MLRA): LRR K Lat: 41.521913 Long: -75.557614 Datum: NAD 83
Soil Map Unit Name: Da: Dumps, mine NWI classification: NA
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☑ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances present? Yes ☑ 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 ☑	No ☐	**Is the Sampled Area within a Wetland?** **Yes** ☑ **No** ☐
Hydric Soil Present?	Yes ☑	No ☐	If yes, optional Wetland Site ID:
Wetland Hydrology Present?	Yes ☑	No ☐	

Remarks:

Classification: POW (60%), PSS1 (30%), and PEM1 (10%). Wetland 0311251010 is located in a topographically low area bordered by a soil/rock refuse stockpile impoundment. The data point is representative of the wetland vegetation found within the wetland that was not POW. All three wetland parameters were met. Adjacent upland habitat was characterized by UDP 0311251112.

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

- ☑ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☑ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☑ No ☐ Depth (inches): 1
Water Table Present? Yes ☐ No ☑ Depth (inches):
Saturation Present? Yes ☑ No ☐ Depth (inches): surface
(includes capillary fringe)

Wetland Hydrology Present? **Yes** ☑ **No** ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland hydrology indicators A1 (Surface Water), A3 (Saturation), and B9 (Water-Stained Leaves) were observed. Wetland hydrology is provided by surface water runoff directed to the area. Wetland hydrology is provided by surface water runoff directed to the area. Precipitation was 39 percent of normal in January, 100 to 103 percent of normal in February, and 0.76 inches of rain fell in the week leading up to the field investigation.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot Size: 30-foot radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot Size: 15-foot radius)			
1. Spiraea tomentosa	20	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	20 =Total Cover		
Herb Stratum (Plot Size: 5-foot radius)			
1. Carex stricta	45	Y	OBL
2. Phalaris arundinacea	20	Y	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	65 =Total Cover		
Woody Vine Stratum (Plot Size: 30-foot radius)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species that Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:

OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- [x] 1 – Rapid Test for Hydrophytic Vegetation
- [ ] 2 – Dominance Test is >50%
- [ ] 3 – Prevalence Index is ≤3.0[1]
- [ ] 4 – Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** [x] **No** [ ]

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation meets the Rapid Test for hydrophytic vegetation.

SOIL

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2							silt loam	coal spoils/ staining
2-7	10YR 4/1	90	10YR 5/8	20	c	m	silt loam	
7								rock

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR R, MLRA**
- ☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ☐ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ☐ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ☐ Dark Surface (S7) **(LRR K, L)**
- ☐ Polyvalue Below Surface (S8) **(LRR K, L)**
- ☐ Thin Dark Surface (S9) **(LRR K, L)**
- ☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ☐ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: rock refusal

Depth (inches): 7

Hydric Soil Present? **Yes** ☑ **No** ☐

Remarks:

Hydric Soil indicator Depleted Matrix (F3) observed.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Project Gravity City/County: Lackawanna County Sampling Date: 3/11/25
Applicant/Owner: Archbald 25 Developer, LLC State: PA Sampling Point: WDP 0311251110
Investigator(s): S. Martin, M. Bixler, J. Atzert Section, Township, Range: Borough of Archbald
Landform (hillslope, terrace, etc.): level Local relief (concave, convex, none): concave
Subregion (LRR or MLRA): LRR K Lat: 41.520858 Long: -75.557178 Datum: NAD 83
Soil Map Unit Name: WgD: Wellsboro channery loam, 8 to 25 percent slopes, rubbly NWI classification: NA
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☑ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances present? Yes ☑ 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 ☑	No ☐	**Is the Sampled Area within a Wetland?** **Yes** ☑ **No** ☐
Hydric Soil Present?	Yes ☑	No ☐	If yes, optional Wetland Site ID:
Wetland Hydrology Present?	Yes ☑	No ☐	

Remarks:
Classification: PSS1. Wetland 0311251110 is located within a small excavated low area and receives stormwater runoff from the surrounding landscape as well as groundwater from a seep. All three wetland parameters were met. Adjacent upland habitat was characterized by UDP 0311251112.

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

- ☑ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☑ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☑ No ☐ Depth (inches): 1
Water Table Present? Yes ☐ No ☑ Depth (inches):
Saturation Present? Yes ☑ No ☐ Depth (inches): surface
(includes capillary fringe)

Wetland Hydrology Present? **Yes** ☑ **No** ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Wetland hydrology indicators A1 (Surface Water), A3 (Saturation), B8 (Sparsely Vegetated Concave Surface, and D2 (Geomorphic Position) were observed. Wetland hydrology is provided by surface water runoff directed to the area and a groundwater seep that supports the wetland. Precipitation was 39 percent of normal in January, 100 to 103 percent of normal in February, and 0.76 inches of rain fell in the week leading up to the field investigation.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot Size: 30-foot radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot Size: 15-foot radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Herb Stratum (Plot Size: 5-foot radius)			
1. Osmundastrum cinnamomeum	35	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	35 =Total Cover		
Woody Vine Stratum (Plot Size: 30-foot radius)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species that Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:

OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- [x] 1 – Rapid Test for Hydrophytic Vegetation
- [ ] 2 – Dominance Test is >50%
- [ ] 3 – Prevalence Index is ≤3.0[1]
- [ ] 4 – Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** [x] **No** [ ]

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation meets the Rapid Test for hydrophytic vegetation.

SOIL

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 4/1	90	10YR 5/8	10	C	M	silt loam	
6								rock

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR R, MLRA**
- ☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ☐ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ☐ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ☐ Dark Surface (S7) **(LRR K, L)**
- ☐ Polyvalue Below Surface (S8) **(LRR K, L)**
- ☐ Thin Dark Surface (S9) **(LRR K, L)**
- ☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ☐ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: rock refusal

Depth (inches): 6

Hydric Soil Present? **Yes** ☑ **No** ☐

Remarks:

Hydric Soil indicator Depleted Matrix (F3) observed.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Project Gravity City/County: Lackawanna County Sampling Date: 3/11/25
Applicant/Owner: Archbald 25 Developer, LLC State: PA Sampling Point: WDP 0311251144
Investigator(s): S. Martin, M. Bixler, J. Atzert Section, Township, Range: Borough of Archbald
Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): concave
Subregion (LRR or MLRA): LRR K Lat: 41.520961 Long: -75.556298 Datum: NAD 83
Soil Map Unit Name: UA: Udorthents, strip mine NWI classification: NA
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☑ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances present? Yes ☑ 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 ☑ No ☐
Hydric Soil Present? Yes ☑ No ☐
Wetland Hydrology Present? Yes ☑ No ☐

Is the Sampled Area within a Wetland? **Yes** ☑ **No** ☐
If yes, optional Wetland Site ID:

Remarks:

Classification: PSS1 (70%) and PFO1 (30%). Wetland 0311251144 is located adjacent to a soil stockpile and receives surface water runoff as well as groundwater from an upgradient seep. All three wetland parameters were met. Adjacent upland habitat was characterized by UDP 0311251112.

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

- ☑ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☑ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☑ No ☐ Depth (inches): 1
Water Table Present? Yes ☐ No ☑ Depth (inches):
Saturation Present? Yes ☑ No ☐ Depth (inches): surface
(includes capillary fringe)

Wetland Hydrology Present? **Yes** ☑ **No** ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland hydrology indicators A1 (Surface Water), A3 (Saturation), B8 (Sparsely Vegetated Concave Surface) and D2 (Geomorphic Position) were observed. Wetland hydrology is provided by surface water runoff directed to the area and by a freshwater spring. Precipitation was 39 percent of normal in January, 100 to 103 percent of normal in February, and 0.76 inches of rain fell in the week leading up to the field investigation.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot Size: 30-foot radius)			
1. Acer rubrum	20	Y	FAC
2. Acer saccharinum	15	Y	FACW
3.			
4.			
5.			
6.			
7.			
	35	=Total Cover	
Sapling/Shrub Stratum (Plot Size: 15-foot radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		=Total Cover	
Herb Stratum (Plot Size: 5-foot radius)			
1. Carex sp*	45	Y	OBL
2. Lycopus virginicus	25	Y	OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	70	=Total Cover	
Woody Vine Stratum (Plot Size: 30-foot radius)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species that Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:

OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☑ 2 – Dominance Test is >50%
- ☐ 3 – Prevalence Index is ≤3.0[1]
- ☐ 4 – Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ☑ **No** ☐

Remarks: (Include photo numbers here or on a separate sheet.)

Vegetation meets the Dominance Test for hydrophytic vegetation.

*Carex species could not be identified to species level and was assigned an indicator status of OBL based on professional judgement.

SOIL

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 4/1	80	10YR 5/8	20	c	m	silt loam	
10								rock

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR R, MLRA**
- ☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ☐ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ☐ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ☐ Dark Surface (S7) **(LRR K, L)**
- ☐ Polyvalue Below Surface (S8) **(LRR K, L)**
- ☐ Thin Dark Surface (S9) **(LRR K, L)**
- ☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ☐ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: rock

Depth (inches): 10

Hydric Soil Present? **Yes** ☑ **No** ☐

Remarks:

Hydric Soil indicator Depleted Matrix (F3) observed.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Project Gravity City/County: Lackawanna County Sampling Date: 3/11/25
Applicant/Owner: Archbald 25 Developer, LLC State: PA Sampling Point: WDP 0311251254
Investigator(s): S. Martin, M. Bixler, J. Atzert Section, Township, Range: Borough of Archbald
Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): none
Subregion (LRR or MLRA): LRR K Lat: 41.521847 Long: -75.555908 Datum: NAD 83
Soil Map Unit Name: UA: Udorthents, strip mine NWI classification: NA
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☑ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances present? Yes ☑ 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 ☑	No ☐	**Is the Sampled Area within a Wetland?** **Yes** ☑ **No** ☐
Hydric Soil Present?	Yes ☑	No ☐	If yes, optional Wetland Site ID:
Wetland Hydrology Present?	Yes ☑	No ☐	

Remarks:

Classification: PSS1. Wetland 0311251254 is located within a topographically low area in a concave excavated area. The data point is representative of the vegetation within the wetland. All three wetland parameters were met. Adjacent upland habitat was characterized by UDP 0311251304.

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☑ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☑ Depth (inches): _____
Water Table Present? Yes ☐ No ☑ Depth (inches): _____
Saturation Present? Yes ☑ No ☐ Depth (inches): 3
(includes capillary fringe)

Wetland Hydrology Present? **Yes** ☑ **No** ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland hydrology indicators A3 (Saturation), B9 (Water-Stained Leaves) and D2 (Geomorphic Position) were observed. Wetland hydrology is provided by surface water runoff directed to the area. Wetland hydrology is provided by surface water runoff directed to the area. Precipitation was 39 percent of normal in January, 100 to 103 percent of normal in February, and 0.76 inches of rain fell in the week leading up to the field investigation.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot Size: 30-foot radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot Size: 15-foot radius)			
1. Filipendula ulmaria	70	Y	FAC
2. Populus deltoides	15	N	FAC
3. Vaccinium corymbosum	10	N	FACW
4.			
5.			
6.			
7.			
	95 =Total Cover		
Herb Stratum (Plot Size: 5-foot radius)			
1. Carex sp*	30	Y	FACW
2. Onoclea sensibilis	15	Y	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	45 =Total Cover		
Woody Vine Stratum (Plot Size: 30-foot radius)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species that Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:

OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☑ 2 – Dominance Test is >50%
- ☐ 3 – Prevalence Index is ≤3.0[1]
- ☐ 4 – Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ☑ **No** ☐

Remarks: (Include photo numbers here or on a separate sheet.)

Vegetation meets the Dominance Test for hydrophytic vegetation.

*Carex species could not be identified to species level and was assigned an indicator status of FACW based on professional judgement.

SOIL

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	7.5YR 4/1	80	7.5YR 4/3	20	c	m	clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR R, MLRA**
- ☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ☐ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ☐ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ☐ Dark Surface (S7) **(LRR K, L)**
- ☐ Polyvalue Below Surface (S8) **(LRR K, L)**
- ☐ Thin Dark Surface (S9) **(LRR K, L)**
- ☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ☐ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ☑ **No** ☐

Remarks:

Hydric Soil indicator Depleted Matrix (F3) observed.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Project Gravity City/County: Lackawanna County Sampling Date: 3/11/25
Applicant/Owner: Archbald 25 Developer, LLC State: PA Sampling Point: WDP 0311251226
Investigator(s): J. Gleason, T. Skic Section, Township, Range: Borough of Archbald
Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none):
Subregion (LRR or MLRA): LRR R Lat: 41.522571 Long: -75.559795 Datum: NAD 83
Soil Map Unit Name: WgD: Wellsboro channery loam, 8 to 25 percent slopes, rubbly NWI classification: NA
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☑ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances present? Yes ☑ 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 ☑	No ☐	**Is the Sampled Area within a Wetland?** **Yes** ☑ **No** ☐
Hydric Soil Present?	Yes ☑	No ☐	If yes, optional Wetland Site ID:
Wetland Hydrology Present?	Yes ☑	No ☐	

Remarks:
Classification: PEM1. Wetland 0311251226 is located on a former access road. All three wetland parameters were met. Adjacent upland habitat was characterized by UDP 0308250808.

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☑ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☑ Depth (inches):
Water Table Present? Yes ☐ No ☑ Depth (inches):
Saturation Present? Yes ☑ No ☐ Depth (inches): surface
(includes capillary fringe)

Wetland Hydrology Present? **Yes** ☑ **No** ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Wetland hydrology indicators A3 (Saturation) and C3 (Oxidized Rhizospheres on Living Roots) were observed. Wetland hydrology is provided by surface water runoff directed to the area. Precipitation was 39 percent of normal in January, 100 to 103 percent of normal in February, and 0.76 inches of rain fell in the week leading up to the field investigation.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot Size: 30-foot radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot Size: 15-foot radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Herb Stratum (Plot Size: 5-foot radius)			
1. Microstegium vimineum	70	Y	FAC
2. Carex sp.	20	Y	FACW
3. Juncus effusus	10	N	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100 =Total Cover		
Woody Vine Stratum (Plot Size: 30-foot radius)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species that Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:

OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☑ 2 – Dominance Test is >50%
- ☐ 3 – Prevalence Index is ≤3.0[1]
- ☐ 4 – Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ☑ **No** ☐

Remarks: (Include photo numbers here or on a separate sheet.)

Vegetation meets the Dominance Test for hydrophytic vegetation.

*Carex species could not be identified to species level and was assigned an indicator status of FACW based on professional judgement.

SOIL

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR3/2	90	10YR4/6	10			silt loam	
8								rock

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR R, MLRA**
- ☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ☐ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ☐ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ☐ Dark Surface (S7) **(LRR K, L)**
- ☐ Polyvalue Below Surface (S8) **(LRR K, L)**
- ☐ Thin Dark Surface (S9) **(LRR K, L)**
- ☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ☐ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: rock

Depth (inches): 8

Hydric Soil Present? **Yes** ☑ **No** ☐

Remarks:

Hydric Soil indicator Depleted Matrix (F3) observed.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Project Gravity City/County: Lackawanna County Sampling Date: 3/11/25
Applicant/Owner: Archabald 25 Developer, LLC State: PA Sampling Point: WDP 0311250854
Investigator(s): M. Bixler Section, Township, Range: Borough of Archbald
Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave
Subregion (LRR or MLRA): LRR R Lat: 41.522534 Long: -75.559131 Datum: NAD 83
Soil Map Unit Name: WgD: Wellsboro channery loam, 8 to 25 percent slopes, rubbly NWI classification: NA
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☑ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances present? Yes ☑ 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 ☑	No ☐	**Is the Sampled Area within a Wetland?** **Yes** ☑ **No** ☐
Hydric Soil Present?	Yes ☑	No ☐	If yes, optional Wetland Site ID:
Wetland Hydrology Present?	Yes ☑	No ☐	

Remarks:

Classification: PEM1. Wetland 0311250854 is located adjacent to mine spoil pile and receives surface water from UNT 1. All three wetland parameters were met. Adjacent upland habitat was characterized by UDP 0311250933.

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

- ☑ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☑ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☑ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☑ Depth (inches): _____
Water Table Present? Yes ☐ No ☑ Depth (inches): _____
Saturation Present? Yes ☑ No ☐ Depth (inches): surface
(includes capillary fringe)

Wetland Hydrology Present? **Yes** ☑ **No** ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland hydrology indicators A1 (Surface Water), A3 (Saturation), B9 (Water-stained Leaves), and B10 (Drainage Patterns) were observed. Wetland hydrology is provided by surface water runoff directed to the area. Precipitation was 39 percent of normal in January, 100 to 103 percent of normal in February, and 0.76 inches of rain fell in the week leading up to the field investigation.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot Size: 30-foot radius)			
1. Carpinus caroliniana	10	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	10	=Total Cover	
Sapling/Shrub Stratum (Plot Size: 15-foot radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		=Total Cover	
Herb Stratum (Plot Size: 5-foot radius)			
1. Microstegium vimineum	50	Y	FAC
2. Rubus hispidus	10	N	FACW
3. Rubus idaeus	10	N	FACU
4. Carex sp. *	10	N	FACW
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	80	=Total Cover	
Woody Vine Stratum (Plot Size: 30-foot radius)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species that Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:

OBL species	0 x 1 =	0
FACW species	20 x 2 =	40
FAC species	60 x 3 =	180
FACU species	10 x 4 =	40
UPL species	0 x 5 =	0
Column Totals:	90 (A)	260 (B)

Prevalence Index = B/A = 2.9

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☐ 2 – Dominance Test is >50%
- ☑ 3 – Prevalence Index is ≤3.0[1]
- ☐ 4 – Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ☑ **No** ☐

Remarks: (Include photo numbers here or on a separate sheet.)

Vegetation prevalence index is 2.9 indicating the presence of hydrophytic vegetation.

*Carex species could not be identified to species level and was assigned an indicator status of FACW based on professional judgement.

SOIL

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 2/2	90	10YR 3/4	10			silt loam	
10								rock

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR R, MLRA**
- ☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ☐ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ☐ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ☐ Dark Surface (S7) **(LRR K, L)**
- ☐ Polyvalue Below Surface (S8) **(LRR K, L)**
- ☐ Thin Dark Surface (S9) **(LRR K, L)**
- ☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ☐ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: rock

Depth (inches): 10

Hydric Soil Present? **Yes** ☑ **No** ☐

Remarks:

Hydric Soil indicator Depleted Matrix (F3) observed.

Past strip mining has disturbed the soil.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Project Gravity City/County: Lackawanna County Sampling Date: 3/11/25
Applicant/Owner: Archbald 25 Developer, LLC State: PA Sampling Point: UDP 0311250725
Investigator(s): J. Gleason, T. Skic Section, Township, Range: Borough of Archbald
Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): Concave
Subregion (LRR or MLRA): LRR R Lat: 41.525399 Long: -75.565966 Datum: NAD 83
Soil Map Unit Name: UA: Udorthents, strip mine NWI classification: NA
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☑ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances present? Yes ☑ 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 ☐	No ☑	**Is the Sampled Area within a Wetland?** Yes ☐ No ☑
Hydric Soil Present?	Yes ☐	No ☑	If yes, optional Wetland Site ID:
Wetland Hydrology Present?	Yes ☐	No ☑	

Remarks:
UDP 0311250725 is located on a forested hillslope and characterizes uplands within the western corner of the AOI. All three wetland parameters were not met.

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☑ Depth (inches): _____
Water Table Present? Yes ☐ No ☑ Depth (inches): _____
Saturation Present? Yes ☐ No ☑ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☑

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No wetland hydrology indicators were observed at the data point.
Precipitation was 39 percent of normal in January, 100 to 103 percent of normal in February, and 0.76 inches of rain fell in the week leading up to the field investigation.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot Size: 30-foot radius)			
1. Betula lenta	30	Y	FACU
2. Acer rubrum	30	Y	FAC
3. Quercus rubra	20	Y	FACU
4. Betula papyrifera	20	Y	FACU
5.			
6.			
7.			
	100	=Total Cover	
Sapling/Shrub Stratum (Plot Size: 15-foot radius)			
1. Betula lenta	20	Y	FACU
2. Quercus rubra	10	Y	FACU
3.			
4.			
5.			
6.			
7.			
	30	=Total Cover	
Herb Stratum (Plot Size: 5-foot radius)			
1. Dennstaedtia punctilobula	40	Y	UPL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	40	=Total Cover	
Woody Vine Stratum (Plot Size: 30-foot radius)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species that Are OBL, FACW, or FAC: 14% (A/B)

Prevalence Index worksheet:

Total % Cover of:

OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☐ 2 – Dominance Test is >50%
- ☐ 3 – Prevalence Index is ≤3.0[1]
- ☐ 4 – Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ☐ **No** ☑

Remarks: (Include photo numbers here or on a separate sheet.)

No indicators of dominant hydrophytic vegetation.

SOIL

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 2/1	100					clay loam	Black color is from coal dust
6								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR R, MLRA**
- ☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ☐ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ☐ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ☐ Dark Surface (S7) **(LRR K, L)**
- ☐ Polyvalue Below Surface (S8) **(LRR K, L)**
- ☐ Thin Dark Surface (S9) **(LRR K, L)**
- ☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ☐ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: rock

Depth (inches): 6

Hydric Soil Present? **Yes** ☐ **No** ☑

Remarks:

No hydric soil indicators were observed.

Past strip mining has disturbed the soil.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Project Gravity City/County: Lackawanna County Sampling Date: 3/11/25
Applicant/Owner: Archbald 25 Developer, LLC State: PA Sampling Point: UDP 0311250804
Investigator(s): J. Gleason, T. Skic Section, Township, Range: Borough of Archbald
Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): convex
Subregion (LRR or MLRA): LRR R Lat: 41.525443 Long: -75.562533 Datum: NAD 83
Soil Map Unit Name: WgD: Wellsboro channery loam, 8 to 25 percent slopes, rubbly NWI classification: NA
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☑ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances present? Yes ☑ 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 ☐	No ☑	**Is the Sampled Area within a Wetland?** Yes ☐ No ☑
Hydric Soil Present?	Yes ☐	No ☑	If yes, optional Wetland Site ID:
Wetland Hydrology Present?	Yes ☐	No ☑	

Remarks:
UDP 0311250804 represents the uplands between several of the water filled strip mine pits in the northwest corner of the AOI. All three wetland parameters were not met.

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ☐	No ☑	Depth (inches):
Water Table Present?	Yes ☐	No ☑	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ☐	No ☑	Depth (inches):

Wetland Hydrology Present? Yes ☐ No ☑

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No wetland hydrology indicators were observed at the data point.
Precipitation was 39 percent of normal in January, 100 to 103 percent of normal in February, and 0.76 inches of rain fell in the week leading up to the field investigation.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot Size: 30-foot radius)			
1. Populus grandidentata	40	Y	FACU
2. Betula lenta	20	Y	FACU
3. Acer rubrum	20	Y	FAC
4. Carya ovata	10	N	FACU
5.			
6.			
7.			
	90	=Total Cover	
Sapling/Shrub Stratum (Plot Size: 15-foot radius)			
1. Rubus allegheniensis	40	Y	FACU
2. Lonicera morrowii	10	N	FACU
3. Elaeagnus umbellata*	10	N	FACU
4. Rosa multiflora	10	N	FACU
5.			
6.			
7.			
	70	=Total Cover	
Herb Stratum (Plot Size: 5-foot radius)			
1. Solidago canadensis	40	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	40	=Total Cover	
Woody Vine Stratum (Plot Size: 30-foot radius)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species that Are OBL, FACW, or FAC: 20% (A/B)

Prevalence Index worksheet:

Total % Cover of:

OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☐ 2 – Dominance Test is >50%
- ☐ 3 – Prevalence Index is ≤3.0[1]
- ☐ 4 – Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ☐ **No** ☑

Remarks: (Include photo numbers here or on a separate sheet.)

No indicators of dominant hydrophytic vegetation.

*Elaeagnus umbellata does not appear on the National Wetland Plant List. It was assigned an indicator status of FACU based on professional judgment.

SOIL

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 2/1	100					silt loam	Black color is from coal dust
6								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR R, MLRA**
- ☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ☐ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ☐ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ☐ Dark Surface (S7) **(LRR K, L)**
- ☐ Polyvalue Below Surface (S8) **(LRR K, L)**
- ☐ Thin Dark Surface (S9) **(LRR K, L)**
- ☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ☐ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: rock

Depth (inches): 6

Hydric Soil Present? **Yes** ☐ **No** ☑

Remarks:

No hydric soil indicators were observed.

Past strip mining has disturbed the soil.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Project Gravity City/County: Lackawanna County Sampling Date: 3/11/25
Applicant/Owner: Archbald 25 Developer, LLC State: PA Sampling Point: UDP 031125
Investigator(s): J. Gleason, T. Skic Section, Township, Range: Borough of Archbald
Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none):
Subregion (LRR or MLRA): LRR R Lat: 41.531107 Long: -75.554317 Datum: NAD 83
Soil Map Unit Name: UA: Udorthents, strip mine NWI classification: NA
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☑ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances present? Yes ☑ 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 ☐	No ☑	**Is the Sampled Area within a Wetland?** Yes ☐ No ☑
Hydric Soil Present?	Yes ☐	No ☑	If yes, optional Wetland Site ID:
Wetland Hydrology Present?	Yes ☐	No ☑	

Remarks:
UDP 0311250928 is located along a forested hillslope and characterizes the typical uplands in the northeast corner of the AOI. All three wetland parameters were not met.

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☑ Depth (inches): _____
Water Table Present? Yes ☐ No ☑ Depth (inches): _____
Saturation Present? Yes ☐ No ☑ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☑

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No wetland hydrology indicators were observed at the data point.
Precipitation was 39 percent of normal in January, 100 to 103 percent of normal in February, and 0.76 inches of rain fell in the week leading up to the field investigation.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot Size: 30-foot radius)			
1. Betula populifolia	40	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	40	=Total Cover	
Sapling/Shrub Stratum (Plot Size: 15-foot radius)			
1. Rhus typhina*	30	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	30	=Total Cover	
Herb Stratum (Plot Size: 5-foot radius)			
1. Reynoutria japonica	70	Y	FACU
2. Alliaria petiolata	20	Y	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	90	=Total Cover	
Woody Vine Stratum (Plot Size: 30-foot radius)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species that Are OBL, FACW, or FAC: 25% (A/B)

Prevalence Index worksheet:

Total % Cover of:

OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☐ 2 – Dominance Test is >50%
- ☐ 3 – Prevalence Index is ≤3.0[1]
- ☐ 4 – Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ☐ **No** ☑

Remarks: (Include photo numbers here or on a separate sheet.)

No indicators of dominant hydrophytic vegetation.

*Rhus typhina does not appear on the National Wetland Plant List. It was assigned an indicator status of UPL based on professional judgment.

SOIL

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 2/1	100					gravely loam	Black color is from coal dust
3								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR R, MLRA**
- ☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ☐ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ☐ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ☐ Dark Surface (S7) **(LRR K, L)**
- ☐ Polyvalue Below Surface (S8) **(LRR K, L)**
- ☐ Thin Dark Surface (S9) **(LRR K, L)**
- ☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ☐ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: rock

Depth (inches): 3

Hydric Soil Present? **Yes** ☐ **No** ☑

Remarks:

No hydric soil indicators were observed.

Past strip mining has disturbed the soil.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Project Gravity City/County: Lackawanna County Sampling Date: 3/11/25
Applicant/Owner: Archbald 25 Developer, LLC State: PA Sampling Point: UDP 0311251105
Investigator(s): J. Gleason, T. Skic Section, Township, Range: Borough of Archbald
Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave
Subregion (LRR or MLRA): LRR R Lat: 41.525167 Long: -75.560095 Datum: NAD 83
Soil Map Unit Name: WgD: Wellsboro channery loam, 8 to 25 percent slopes, rubbly NWI classification: NA
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☑ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances present? Yes ☑ 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 ☐	No ☑	**Is the Sampled Area within a Wetland?** Yes ☐ No ☑
Hydric Soil Present?	Yes ☐	No ☑	If yes, optional Wetland Site ID:
Wetland Hydrology Present?	Yes ☐	No ☑	

Remarks:
UDP 0311251105 is located on a forested hillslope and characterizes the typical uplands in the center of the AOI. All three wetland parameters were not met.

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☑ Depth (inches): _____
Water Table Present? Yes ☐ No ☑ Depth (inches): _____
Saturation Present? Yes ☐ No ☑ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☑

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No wetland hydrology indicators were observed at the data point.
Precipitation was 39 percent of normal in January, 100 to 103 percent of normal in February, and 0.76 inches of rain fell in the week leading up to the field investigation.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot Size: 30-foot radius)			
1. Acer rubrum	60	Y	FAC
2. Quercus rubra	20	Y	FACU
3. Betula lenta	20	Y	FACU
4.			
5.			
6.			
7.			
	100	=Total Cover	
Sapling/Shrub Stratum (Plot Size: 15-foot radius)			
1. Acer rubrum	40	Y	FAC
2. Kalmia latifolia	10	Y	FACU
3.			
4.			
5.			
6.			
7.			
	50	=Total Cover	
Herb Stratum (Plot Size: 5-foot radius)			
1. Microstegium vimineum	10	Y	FAC
2. Potentilla simplex	5	Y	FACU
3. Gaultheria procumbens	5	Y	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	20	=Total Cover	
Woody Vine Stratum (Plot Size: 30-foot radius)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species that Are OBL, FACW, or FAC: 38% (A/B)

Prevalence Index worksheet:

Total % Cover of:

OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☐ 2 – Dominance Test is >50%
- ☐ 3 – Prevalence Index is ≤3.0[1]
- ☐ 4 – Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ☐ **No** ☑

Remarks: (Include photo numbers here or on a separate sheet.)
No indicators of dominant hydrophytic vegetation.

SOIL

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 2/1	100					sand	sand sized coal dust
3-9	10YR 2/1	100					loamy sand	Black color is from coal dust
9								rock

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR R, MLRA**
- ☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ☐ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ☐ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ☐ Dark Surface (S7) **(LRR K, L)**
- ☐ Polyvalue Below Surface (S8) **(LRR K, L)**
- ☐ Thin Dark Surface (S9) **(LRR K, L)**
- ☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ☐ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: rock

Depth (inches): 9

Hydric Soil Present? **Yes** ☐ **No** ☑

Remarks:

No hydric soil indicators were observed.

Past strip mining has disturbed the soil.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Project Gravity City/County: Lackawanna County Sampling Date: 3/11/25
Applicant/Owner: Archbald 25 Developer, LLC State: PA Sampling Point: UDP 0311251220
Investigator(s): M. Bixler Section, Township, Range: Borough of Archbald
Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): none
Subregion (LRR or MLRA): LRR R Lat: 41.519693 Long: -75.555250 Datum: NAD 83
Soil Map Unit Name: WgD: Wellsboro channery loam, 8 to 25 percent slopes, rubbly NWI classification: NA
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☑ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances present? Yes ☑ 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 ☐	No ☑	**Is the Sampled Area within a Wetland?** Yes ☐ No ☑
Hydric Soil Present?	Yes ☐	No ☑	If yes, optional Wetland Site ID:
Wetland Hydrology Present?	Yes ☐	No ☑	

Remarks:
UDP 0311251220 represents the uplands within a forested area adjacent to an existing access road and two open bodies of water. All three wetland parameters were not met.

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☑ Depth (inches): _____
Water Table Present? Yes ☐ No ☑ Depth (inches): _____
Saturation Present? Yes ☐ No ☑ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☑

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No wetland hydrology indicators were observed at the data point.
Precipitation was 39 percent of normal in January, 100 to 103 percent of normal in February, and 0.76 inches of rain fell in the week leading up to the field investigation.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot Size: 30-foot radius)			
1. Betula lenta	60	Y	FACU
2. Quercus alba	25	Y	FACU
3.			
4.			
5.			
6.			
7.			
	85	=Total Cover	
Sapling/Shrub Stratum (Plot Size: 15-foot radius)			
1. Kalmia latifolia	30	Y	FACU
2. Fagus grandifolia	15	Y	FACU
3. Betula lenta	10	N	FACU
4.			
5.			
6.			
7.			
	55	=Total Cover	
Herb Stratum (Plot Size: 5-foot radius)			
1. Parathelypteris noveboracensis	20	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	20	=Total Cover	
Woody Vine Stratum (Plot Size: 30-foot radius)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species that Are OBL, FACW, or FAC: 20% (A/B)

Prevalence Index worksheet:

Total % Cover of:

OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☐ 2 – Dominance Test is >50%
- ☐ 3 – Prevalence Index is ≤3.0[1]
- ☐ 4 – Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ☐ **No** ☑

Remarks: (Include photo numbers here or on a separate sheet.)
No indicators of dominant hydrophytic vegetation.

SOIL

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 3/3	70	10YR 5/3	30	C	M	silt loam	
5-10	10YR 4/3	100					silt loam	
10								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR R, MLRA**
- ☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ☐ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ☐ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ☐ Dark Surface (S7) **(LRR K, L)**
- ☐ Polyvalue Below Surface (S8) **(LRR K, L)**
- ☐ Thin Dark Surface (S9) **(LRR K, L)**
- ☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ☐ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: rock

Depth (inches): 10

Hydric Soil Present? **Yes** ☐ **No** ☑

Remarks:

No hydric soil indicators were observed.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Project Gravity City/County: Lackawanna County Sampling Date: 3/11/25
Applicant/Owner: Archbald 25 Developer, LLC State: PA Sampling Point: UDP 0311251250
Investigator(s): M. Bixler Section, Township, Range: Borough of Archbald
Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave
Subregion (LRR or MLRA): LRR R Lat: 41.520221 Long: -75.554270 Datum: NAD 83
Soil Map Unit Name: Da: Dumps, mine NWI classification: NA
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☑ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances present? Yes ☑ 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 ☐	No ☑	**Is the Sampled Area within a Wetland?** Yes ☐ No ☑
Hydric Soil Present?	Yes ☐	No ☑	If yes, optional Wetland Site ID:
Wetland Hydrology Present?	Yes ☐	No ☑	

Remarks:
UDP 0311251250 represents a concave, depressional area within the forested area. All three wetland parameters were not met.

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☑ Depth (inches): _____
Water Table Present? Yes ☐ No ☑ Depth (inches): _____
Saturation Present? Yes ☐ No ☑ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☑

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No wetland hydrology indicators were observed at the data point.
Precipitation was 39 percent of normal in January, 100 to 103 percent of normal in February, and 0.76 inches of rain fell in the week leading up to the field investigation.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot Size: 30-foot radius)			
1. Acer saccharum	50	Y	FACU
2. Populus grandidentata	20	Y	FACU
3. Acer pensylvanicum	10	N	FACU
4.			
5.			
6.			
7.			
	80	=Total Cover	
Sapling/Shrub Stratum (Plot Size: 15-foot radius)			
1. Smilax rotundifolia	10	Y	FAC
2. Rubus allegheniensis	5	Y	FACU
3.			
4.			
5.			
6.			
7.			
	15	=Total Cover	
Herb Stratum (Plot Size: 5-foot radius)			
1. Parathelypteris noveboracensis	10	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	10	=Total Cover	
Woody Vine Stratum (Plot Size: 30-foot radius)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species that Are OBL, FACW, or FAC: 40% (A/B)

Prevalence Index worksheet:

Total % Cover of:

OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☐ 2 – Dominance Test is >50%
- ☐ 3 – Prevalence Index is ≤3.0[1]
- ☐ 4 – Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ☐ **No** ☑

Remarks: (Include photo numbers here or on a separate sheet.)
No indicators of dominant hydrophytic vegetation.

SOIL

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	7.5YR 3/2	100					loam	
12-18	7.5YR 4/2						loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR R, MLRA**
- ☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ☐ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ☐ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ☐ Dark Surface (S7) **(LRR K, L)**
- ☐ Polyvalue Below Surface (S8) **(LRR K, L)**
- ☐ Thin Dark Surface (S9) **(LRR K, L)**
- ☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ☐ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ☐ **No** ☑

Remarks:

No hydric soil indicators were observed.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Project Gravity City/County: Lackawanna County Sampling Date: 3/11/25
Applicant/Owner: Archbald 25 Developer, LLC State: PA Sampling Point: UDP 0311251329
Investigator(s): M. Bixler Section, Township, Range: Borough of Archbald
Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none):
Subregion (LRR or MLRA): LRR R Lat: 41.517810 Long: -75.553153 Datum: NAD 83
Soil Map Unit Name: UA: Udorthents, strip mine NWI classification: NA
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☑ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances present? Yes ☑ 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 ☐	No ☑	**Is the Sampled Area within a Wetland?** Yes ☐ No ☑
Hydric Soil Present?	Yes ☐	No ☑	If yes, optional Wetland Site ID:
Wetland Hydrology Present?	Yes ☐	No ☑	

Remarks:
UDP 0311251329 represents the forest along the southern edge of the AOI adjacent to Eynon Jermyn Rd, between two open bodies of water. All three wetland parameters were not met.

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ☐	No ☑	Depth (inches):
Water Table Present?	Yes ☐	No ☑	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ☐	No ☑	Depth (inches):

Wetland Hydrology Present? Yes ☐ No ☑

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No wetland hydrology indicators were observed at the data point.
Precipitation was 39 percent of normal in January, 100 to 103 percent of normal in February, and 0.76 inches of rain fell in the week leading up to the field investigation.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot Size: 30-foot radius)			
1. Quercus rubra	40	Y	FACU
2. Quercus alba	40	Y	FACU
3.			
4.			
5.			
6.			
7.			
	80	=Total Cover	
Sapling/Shrub Stratum (Plot Size: 15-foot radius)			
1. Kalmia latifolia	25	Y	FACU
2. Gaultheria procumbens	15	Y	FACU
3. Kalmia angustifolia	10	N	FAC
4. Fagus grandifolia	10	N	FACU
5.			
6.			
7.			
	60	=Total Cover	
Herb Stratum (Plot Size: 5-foot radius)			
1. dendrolycopodium dendroideum	30	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	30	=Total Cover	
Woody Vine Stratum (Plot Size: 30-foot radius)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species that Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:

OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☐ 2 – Dominance Test is >50%
- ☐ 3 – Prevalence Index is ≤3.0[1]
- ☐ 4 – Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ☐ **No** ☑

Remarks: (Include photo numbers here or on a separate sheet.)
No indicators of dominant hydrophytic vegetation.

SOIL

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 2/1	100					silt loam	
4-18	10YR 4/4	100					silt loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR R, MLRA**
- ☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ☐ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ☐ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ☐ Dark Surface (S7) **(LRR K, L)**
- ☐ Polyvalue Below Surface (S8) **(LRR K, L)**
- ☐ Thin Dark Surface (S9) **(LRR K, L)**
- ☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ☐ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ☐ **No** ☑

Remarks:

No hydric soil indicators were observed.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Project Gravity City/County: Lackawanna County Sampling Date: 3/11/25
Applicant/Owner: Archbald 25 Developer, LLC State: PA Sampling Point: UDP 0311250738
Investigator(s): S. Martin, M. Bixler, J. Atzert Section, Township, Range: Borough of Archbald
Landform (hillslope, terrace, etc.): level Local relief (concave, convex, none): none
Subregion (LRR or MLRA): LRR R Lat: 41.521898 Long: -75.561352 Datum: NAD 83
Soil Map Unit Name: WgD: Wellsboro channery loam, 8-25% slopes, rubbly NWI classification: NA
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☑ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances present? Yes ☑ 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 ☐	No ☑	**Is the Sampled Area within a Wetland?** Yes ☐ No ☑
Hydric Soil Present?	Yes ☐	No ☑	If yes, optional Wetland Site ID:
Wetland Hydrology Present?	Yes ☐	No ☑	

Remarks:
UDP 0311250738 represents the upland conditions adjacent to Open Bodies of Water 1 through 4. The data point is representative of the upland conditions found within the surrounding strip mined land. All three wetland parameters were not met.

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☑ Depth (inches): _____
Water Table Present? Yes ☐ No ☑ Depth (inches): _____
Saturation Present? Yes ☐ No ☑ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☑

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No wetland hydrology indicators were observed at the data point.
Precipitation was 39 percent of normal in January, 100 to 103 percent of normal in February, and 0.76 inches of rain fell in the week leading up to the field investigation.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot Size: 30-foot radius)			
1. Acer rubrum	55	Y	FAC
2. Betula alleghaniensis	35	Y	FAC
3. Fagus grandifolia	15	N	FACU
4.			
5.			
6.			
7.			
	105	=Total Cover	
Sapling/Shrub Stratum (Plot Size: 15-foot radius)			
1. Fagus grandifolia	30	Y	FACU
2. Kalmia latifolia	15	Y	FACU
3.			
4.			
5.			
6.			
7.			
	45	=Total Cover	
Herb Stratum (Plot Size: 5-foot radius)			
1. Dryopteris marginalis	20	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	20	=Total Cover	
Woody Vine Stratum (Plot Size: 30-foot radius)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species that Are OBL, FACW, or FAC: 40% (A/B)

Prevalence Index worksheet:

Total % Cover of:

OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☐ 2 – Dominance Test is >50%
- ☐ 3 – Prevalence Index is ≤3.0[1]
- ☐ 4 – Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ☐ **No** ☑

Remarks: (Include photo numbers here or on a separate sheet.)
No indicators of dominant hydrophytic vegetation.

SOIL

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-1								organic duff
1-5	10YR 5/6	100					silt loam	
5								rock

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR R, MLRA**
- ☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ☐ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ☐ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ☐ Dark Surface (S7) **(LRR K, L)**
- ☐ Polyvalue Below Surface (S8) **(LRR K, L)**
- ☐ Thin Dark Surface (S9) **(LRR K, L)**
- ☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ☐ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: rock refusal

Depth (inches): 5

Hydric Soil Present? **Yes** ☐ **No** ☑

Remarks:

No hydric soil indicators were observed.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Project Gravity City/County: Lackawanna County Sampling Date: 3/11/25
Applicant/Owner: Archbald 25 Developer, LLC State: PA Sampling Point: UDP 0311250808
Investigator(s): S. Martin, M. Bixler, J. Atzert Section, Township, Range: Borough of Archbald
Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): none
Subregion (LRR or MLRA): LRR K Lat: 41.522377 Long: -75.560186 Datum: NAD 83
Soil Map Unit Name: WgD: Wellsboro channery loam, 8-25% slopes, rubbly NWI classification: NA
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☑ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances present? Yes ☑ 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 ☐	No ☑	**Is the Sampled Area within a Wetland?** Yes ☐ No ☑
Hydric Soil Present?	Yes ☐	No ☑	If yes, optional Wetland Site ID:
Wetland Hydrology Present?	Yes ☐	No ☑	

Remarks:
UDP 0311250808 represents the conditions within an area which showed evidence of sediment deposits and drainage channels. The data represents the upland conditions representative of the forested area nearby the old logging road. All three wetland parameters were not met.

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☑ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☑ Depth (inches): _____
Water Table Present? Yes ☐ No ☑ Depth (inches): _____
Saturation Present? Yes ☐ No ☑ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☑

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Wetland hydrology indicator B10 (Drainage Patterns) was observed. Only one secondary indicator was observed therefore wetland hydrology criteria is not met.
Precipitation was 39 percent of normal in January, 100 to 103 percent of normal in February, and 0.76 inches of rain fell in the week leading up to the field investigation.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot Size: 30-foot radius)			
1. Betula allghanesis	40	(Y)	NA
2. Quercus rubra	20	Y	FACU
3.			
4.			
5.			
6.			
7.			
	60	=Total Cover	
Sapling/Shrub Stratum (Plot Size: 15-foot radius)			
1. Fagus grandifolia	25	Y	FACU
2. Hamamelis virginiana	20	Y	FACU
3. Carpinus caroliniana	15	Y	FAC
4.			
5.			
6.			
7.			
	60	=Total Cover	
Herb Stratum (Plot Size: 5-foot radius)			
1. Microstegium vimineum	60	Y	FAC
2. Carex sp*	20	Y	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	80	=Total Cover	
Woody Vine Stratum (Plot Size: 30-foot radius)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species that Are OBL, FACW, or FAC: 33% (A/B)

Prevalence Index worksheet:

Total % Cover of:

OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☐ 2 – Dominance Test is >50%
- ☐ 3 – Prevalence Index is ≤3.0[1]
- ☐ 4 – Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ☐ **No** ☑

Remarks: (Include photo numbers here or on a separate sheet.)

No indicators of dominant hydrophytic vegetation.

*Carex sp. could not be identified to the species. It was assigned an indicator status of FACU based on professional judgment.

SOIL

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5							Silt loam	Coal spoils/ stained
5-7	10YR 3/4	100					Silt loam	
7								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR R, MLRA**
- ☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ☐ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ☐ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ☐ Dark Surface (S7) **(LRR K, L)**
- ☐ Polyvalue Below Surface (S8) **(LRR K, L)**
- ☐ Thin Dark Surface (S9) **(LRR K, L)**
- ☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ☐ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: rock refusal

Depth (inches): 7

Hydric Soil Present? **Yes** ☐ **No** ☑

Remarks:

No hydric soil indicators were observed. Top few inches of soil was stained from coal spoils.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Project Gravity City/County: Lackawanna County Sampling Date: 3/11/25
Applicant/Owner: Archbald 25 Developer, LLC State: PA Sampling Point: UDP 0311250833
Investigator(s): S. Martin, M. Bixler, J. Atzert Section, Township, Range: Borough of Archbald
Landform (hillslope, terrace, etc.): level Local relief (concave, convex, none): none
Subregion (LRR or MLRA): LRR R Lat: 41.522990° Long: -75.558998° Datum: NAD 83
Soil Map Unit Name: UA: Udorthents, strip mine NWI classification: NA
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☑ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances present? Yes ☑ 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 ☐ No ☑
Hydric Soil Present? Yes ☐ No ☑
Wetland Hydrology Present? Yes ☐ No ☑

Is the Sampled Area within a Wetland? **Yes** ☐ **No** ☑
If yes, optional Wetland Site ID:

Remarks:

UDP 0311250833 represents the upland conditions within a low point within an unreclaimed strip mine pit. The data point represents the upland conditions within the mined area. All three wetland parameters were not met.

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☑ Depth (inches): _____
Water Table Present? Yes ☐ No ☑ Depth (inches): _____
Saturation Present? Yes ☐ No ☑ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? **Yes** ☐ **No** ☑

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology indicators were observed at the data point.
Precipitation was 39 percent of normal in January, 100 to 103 percent of normal in February, and 0.76 inches of rain fell in the week leading up to the field investigation.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot Size: 30-foot radius)			
1. Betula lenta	75	Y	FACU
2. Acer rubrum	25	Y	FAC
3. Betula alleghaniensis	10	N	FAC
4. Populus grandidentata	5	N	FACU
5.			
6.			
7.			
	115	=Total Cover	
Sapling/Shrub Stratum (Plot Size: 15-foot radius)			
1. Fagus grandifolia	5	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	5	=Total Cover	
Herb Stratum (Plot Size: 5-foot radius)			
1. Dryopteris marginalis	60	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	60	=Total Cover	
Woody Vine Stratum (Plot Size: 30-foot radius)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species that Are OBL, FACW, or FAC: 25% (A/B)

Prevalence Index worksheet:

Total % Cover of:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column Totals: _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☐ 2 – Dominance Test is >50%
- ☐ 3 – Prevalence Index is ≤3.0[1]
- ☐ 4 – Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ☐ **No** ☑

Remarks: (Include photo numbers here or on a separate sheet.)

No indicators of dominant hydrophytic vegetation.

SOIL

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-14	10YR4/1	60					fine silt	deep within unreclaimed strip mine
	10YR4/2	40						pit

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR R, MLRA**
- ☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ☐ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ☐ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ☐ Dark Surface (S7) **(LRR K, L)**
- ☐ Polyvalue Below Surface (S8) **(LRR K, L)**
- ☐ Thin Dark Surface (S9) **(LRR K, L)**
- ☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ☐ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ☐ **No** ☑

Remarks:

The apparent hydric soil indicators are likely due to soils encountered/moved during strip mining and do not indicate hydric soil conditions.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Project Gravity City/County: Lackawanna County Sampling Date: 3/11/25
Applicant/Owner: Archbald 25 Developer, LLC State: PA Sampling Point: UDP 0311250850
Investigator(s): S. Martin, M. Bixler, J. Atzert Section, Township, Range: Borough of Archbald
Landform (hillslope, terrace, etc.): Slight hillslope Local relief (concave, convex, none):
Subregion (LRR or MLRA): LRR K Lat: 41.522322 Long: -75.559571 Datum: NAD 83
Soil Map Unit Name: WgD: Wellsboro channery loam, 8-25% slopes, rubbly NWI classification: NA
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☑ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances present? Yes ☑ 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 ☐	No ☑	**Is the Sampled Area within a Wetland?** Yes ☐ No ☑
Hydric Soil Present?	Yes ☐	No ☑	If yes, optional Wetland Site ID:
Wetland Hydrology Present?	Yes ☐	No ☑	

Remarks:
UDP 0311250850 represents the upland forest conditions adjacent to Wetland 0311250835, Open Body of Water 8 and UNT 1. The point characterizes the upland forest conditions within the area. All three wetland parameters were not met.

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☑ Depth (inches): _____
Water Table Present? Yes ☐ No ☑ Depth (inches): _____
Saturation Present? Yes ☐ No ☑ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☑

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No wetland hydrology indicators were observed at the data point.
Precipitation was 39 percent of normal in January, 100 to 103 percent of normal in February, and 0.76 inches of rain fell in the week leading up to the field investigation.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot Size: 30-foot radius)			
1. Betula alleghaniensis	45	Y	FAC
2. Quercus rubra	25	Y	FACU
3.			
4.			
5.			
6.			
7.			
	70	=Total Cover	
Sapling/Shrub Stratum (Plot Size: 15-foot radius)			
1. Hamamelis virginiana	20	Y	FACU
2. Lindera benzoin	15	Y	FACW
3.			
4.			
5.			
6.			
7.			
	35	=Total Cover	
Herb Stratum (Plot Size: 5-foot radius)			
1. Gaultheria procumbens	15	Y	FACU
2. Dendrolycopodium obscurum	10	Y	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	25	=Total Cover	
Woody Vine Stratum (Plot Size: 30-foot radius)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species that Are OBL, FACW, or FAC: 33% (A/B)

Prevalence Index worksheet:

Total % Cover of:

OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☐ 2 – Dominance Test is >50%
- ☐ 3 – Prevalence Index is ≤3.0[1]
- ☐ 4 – Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ☐ **No** ☑

Remarks: (Include photo numbers here or on a separate sheet.)

No indicators of dominant hydrophytic vegetation.

SOIL

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 3/4	100					silt loam	
2								rock

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR R, MLRA**
- ☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ☐ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ☐ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ☐ Dark Surface (S7) **(LRR K, L)**
- ☐ Polyvalue Below Surface (S8) **(LRR K, L)**
- ☐ Thin Dark Surface (S9) **(LRR K, L)**
- ☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ☐ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: rock refusal

Depth (inches): 2

Hydric Soil Present? **Yes** ☐ **No** ☑

Remarks:

No hydric soil indicators were observed.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Project Gravity City/County: Lackawanna County Sampling Date: 3/11/25
Applicant/Owner: Archbald 25 Developer, LLC State: PA Sampling Point: UDP 0311250933
Investigator(s): S. Martin, M. Bixler, J. Atzert Section, Township, Range: Borough of Archbald
Landform (hillslope, terrace, etc.): slight hillslope Local relief (concave, convex, none): none
Subregion (LRR or MLRA): LRR K Lat: 41.522044 Long: -75.558386 Datum: NAD 83
Soil Map Unit Name: WgD: Wellsboro channery loam, 8-25% slopes, rubbly NWI classification: NA
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☑ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances present? Yes ☑ 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 ☐	No ☑	**Is the Sampled Area within a Wetland?** Yes ☐ No ☑
Hydric Soil Present?	Yes ☐	No ☑	If yes, optional Wetland Site ID:
Wetland Hydrology Present?	Yes ☐	No ☑	

Remarks:
UDP 0311250933 represents the upland forested conditions in between an Open Body of Water and Wetland 0311250854. The data point was located within an old access road and is representative of the uplands outside of the wetland. All three wetland parameters were not met.

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☑ Depth (inches): _____
Water Table Present? Yes ☐ No ☑ Depth (inches): _____
Saturation Present? Yes ☐ No ☑ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☑

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No wetland hydrology indicators were observed at the data point.
Precipitation was 39 percent of normal in January, 100 to 103 percent of normal in February, and 0.76 inches of rain fell in the week leading up to the field investigation.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot Size: 30-foot radius)			
1. Betula alleghaniensis	60	Y	FAC
2. Quercus alba	20	Y	FACU
3. Ostrya virginiana	10	N	FACU
4.			
5.			
6.			
7.			
	90	=Total Cover	
Sapling/Shrub Stratum (Plot Size: 15-foot radius)			
1. Fagus grandifolia	20	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	20	=Total Cover	
Herb Stratum (Plot Size: 5-foot radius)			
1. Carex sp.*	10	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	10	=Total Cover	
Woody Vine Stratum (Plot Size: 30-foot radius)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species that Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:

OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☐ 2 – Dominance Test is >50%
- ☐ 3 – Prevalence Index is ≤3.0[1]
- ☐ 4 – Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ☐ **No** ☑

Remarks: (Include photo numbers here or on a separate sheet.)

No indicators of dominant hydrophytic vegetation.

*Carex sp. could not be identified in the field and was assigned an indicator status of UPL based on professional judgment.

SOIL

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 2/1	100					silt loam	coal stained
4-9	10YR 5/2	95	10YR 5/8	5	C	M	silt loam	
9								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR R, MLRA**
- ☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ☐ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ☐ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ☐ Dark Surface (S7) **(LRR K, L)**
- ☐ Polyvalue Below Surface (S8) **(LRR K, L)**
- ☐ Thin Dark Surface (S9) **(LRR K, L)**
- ☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ☐ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: rock refusal

Depth (inches): 9

Hydric Soil Present? **Yes** ☐ **No** ☑

Remarks:

No hydric soil indicators were observed. Coal staining present from past strip mining activity.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Project Gravity City/County: Lackawanna County Sampling Date: 3/11/25
Applicant/Owner: Archbald 25 Developer, LLC State: PA Sampling Point: UDP 0311251109
Investigator(s): S. Martin, M. Bixler, J. Atzert Section, Township, Range: Borough of Archbald
Landform (hillslope, terrace, etc.): level Local relief (concave, convex, none): concave
Subregion (LRR or MLRA): LRR K Lat: 41.521034 Long: -75.557596 Datum: NAD 83
Soil Map Unit Name: WgD: Wellsboro channery loam, 8-25% slopes, rubbly NWI classification: NA
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☑ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances present? Yes ☑ 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 ☐	No ☑	**Is the Sampled Area within a Wetland?** Yes ☐ No ☑
Hydric Soil Present?	Yes ☐	No ☑	If yes, optional Wetland Site ID:
Wetland Hydrology Present?	Yes ☐	No ☑	

Remarks:
UDP 0311251109 represents the upland conditions nearby an Open Body of Water, Wetland 0311251010 and Wetland 0311251110. The data point is representative of the upland forested conditions surrounding the aquatic resources. All three wetland parameters were not met.

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☑ Depth (inches): _____
Water Table Present? Yes ☐ No ☑ Depth (inches): _____
Saturation Present? (includes capillary fringe) Yes ☐ No ☑ Depth (inches): _____

Wetland Hydrology Present? Yes ☐ No ☑

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No wetland hydrology indicators were observed at the data point.
Precipitation was 39 percent of normal in January, 100 to 103 percent of normal in February, and 0.76 inches of rain fell in the week leading up to the field investigation.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot Size: 30-foot radius)			
1. Ostrya virginiana	55	Y	FACU
2. Betula alleghaniensis	50	Y	FAC
3. Quercus rubra	30	Y	FACU
4.			
5.			
6.			
7.			
	135	=Total Cover	
Sapling/Shrub Stratum (Plot Size: 15-foot radius)			
1. Kalmia latifolia	25	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	25	=Total Cover	
Herb Stratum (Plot Size: 5-foot radius)			
1. Dryopteris marginalis	15	Y	FACU
2. Dendrolycopodium obscurum	15	Y	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	30	=Total Cover	
Woody Vine Stratum (Plot Size: 30-foot radius)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species that Are OBL, FACW, or FAC: 17% (A/B)

Prevalence Index worksheet:

Total % Cover of:

OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☐ 2 – Dominance Test is >50%
- ☐ 3 – Prevalence Index is ≤3.0[1]
- ☐ 4 – Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ☐ **No** ☑

Remarks: (Include photo numbers here or on a separate sheet.)

No indicators of dominant hydrophytic vegetation.

SOIL

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 2/1	100					silt loam	coal spoils/ staining
3-8	7.5YR 5/3	100					silt loam	
8								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR R, MLRA**
- ☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ☐ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ☐ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ☐ Dark Surface (S7) **(LRR K, L)**
- ☐ Polyvalue Below Surface (S8) **(LRR K, L)**
- ☐ Thin Dark Surface (S9) **(LRR K, L)**
- ☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ☐ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: rock refusal

Depth (inches): 8

Hydric Soil Present? **Yes** ☐ **No** ☑

Remarks:

No hydric soil indicators were observed. Soils stained from past coal strip mining activity.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Project Gravity City/County: Lackawanna County Sampling Date: 3/11/25
Applicant/Owner: Archbald 25 Developer, LLC State: PA Sampling Point: UDP 0311251304
Investigator(s): S. Martin, M. Bixler, J. Atzert Section, Township, Range: Borough of Archbald
Landform (hillslope, terrace, etc.): level Local relief (concave, convex, none): convex
Subregion (LRR or MLRA): LRR K Lat: 41.522039 Long: -75.555914 Datum: NAD 83
Soil Map Unit Name: UA: Udorthents, strip mine NWI classification: NA
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☑ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances present? Yes ☑ 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 ☐	No ☑	**Is the Sampled Area within a Wetland?** Yes ☐ No ☑
Hydric Soil Present?	Yes ☐	No ☑	If yes, optional Wetland Site ID:
Wetland Hydrology Present?	Yes ☐	No ☑	

Remarks:
UDP 0311251304 represents the upland conditions within a large mined out convex topographical feature adjacent to Wetland 0311251254. The data point characterizes the upland forested and scrub/shrub outside of the wetland. All three wetland parameters were not met.

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☑ Depth (inches): _____
Water Table Present? Yes ☐ No ☑ Depth (inches): _____
Saturation Present? Yes ☐ No ☑ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☑

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No wetland hydrology indicators were observed at the data point.
Precipitation was 39 percent of normal in January, 100 to 103 percent of normal in February, and 0.76 inches of rain fell in the week leading up to the field investigation.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot Size: 30-foot radius)			
1. Betula alleghaniensis	30	Y	FAC
2. Quercus rubra	25	Y	FACU
3.			
4.			
5.			
6.			
7.			
	55	=Total Cover	
Sapling/Shrub Stratum (Plot Size: 15-foot radius)			
1. Kalmia latifolia	40	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	40	=Total Cover	
Herb Stratum (Plot Size: 5-foot radius)			
1. Lonicera japonica	20	Y	FACU
2. Gaultheria procumbens	15	Y	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	35	=Total Cover	
Woody Vine Stratum (Plot Size: 30-foot radius)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species that Are OBL, FACW, or FAC: 20% (A/B)

Prevalence Index worksheet:

Total % Cover of:

OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☐ 2 – Dominance Test is >50%
- ☐ 3 – Prevalence Index is ≤3.0[1]
- ☐ 4 – Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ☐ **No** ☑

Remarks: (Include photo numbers here or on a separate sheet.)

No indicators of dominant hydrophytic vegetation.

SOIL

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	7.5YR 5/3	100					silt loam	sandy

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR R, MLRA**
- ☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ☐ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ☐ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ☐ Dark Surface (S7) **(LRR K, L)**
- ☐ Polyvalue Below Surface (S8) **(LRR K, L)**
- ☐ Thin Dark Surface (S9) **(LRR K, L)**
- ☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ☐ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ☐ **No** ☑

Remarks:

No hydric soil indicators were observed.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Project Gravity City/County: Lackawanna County Sampling Date: 3/11/25
Applicant/Owner: Archbald 25 Developer, LLC State: PA Sampling Point: UDP 0311251323
Investigator(s): S. Martin, M. Bixler, J. Atzert Section, Township, Range: Borough of Archbald
Landform (hillslope, terrace, etc.): level Local relief (concave, convex, none): none
Subregion (LRR or MLRA): LRR K Lat: 41.520836 Long: -75.554073 Datum: NAD 83
Soil Map Unit Name: Da: Dumps, mine NWI classification: NA
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☑ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances present? Yes ☑ 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 ☐	No ☑	**Is the Sampled Area within a Wetland?** Yes ☐ No ☑
Hydric Soil Present?	Yes ☐	No ☑	If yes, optional Wetland Site ID:
Wetland Hydrology Present?	Yes ☐	No ☑	

Remarks:
UDP 0311251323 represents the upland conditions within a mined out area within the southern extent of the AOI adjacent to Open Body of Water 26. The data point represents the upland conditions within the mined out topographically low area. All three wetland parameters were not met.

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☑ Depth (inches): _____
Water Table Present? Yes ☐ No ☑ Depth (inches): _____
Saturation Present? Yes ☐ No ☑ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☑

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No wetland hydrology indicators were observed at the data point.
Precipitation was 39 percent of normal in January, 100 to 103 percent of normal in February, and 0.76 inches of rain fell in the week leading up to the field investigation.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot Size: 30-foot radius)			
1. Carya glabra	35	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	35	=Total Cover	
Sapling/Shrub Stratum (Plot Size: 15-foot radius)			
1. Hamamelis virginiana	35	Y	FACU
2. Quercus alba	15	Y	FACU
3.			
4.			
5.			
6.			
7.			
	50	=Total Cover	
Herb Stratum (Plot Size: 5-foot radius)			
1. Plantago major	15	Y	FACU
2. Potentilla indica	15	Y	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	30	=Total Cover	
Woody Vine Stratum (Plot Size: 30-foot radius)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species that Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:

OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☐ 2 – Dominance Test is >50%
- ☐ 3 – Prevalence Index is ≤3.0[1]
- ☐ 4 – Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ☐ **No** ☑

Remarks: (Include photo numbers here or on a separate sheet.)
No indicators of dominant hydrophytic vegetation.

SOIL

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3								coal spoils/refusal
3								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR R, MLRA**
- ☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ☐ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ☐ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ☐ Dark Surface (S7) **(LRR K, L)**
- ☐ Polyvalue Below Surface (S8) **(LRR K, L)**
- ☐ Thin Dark Surface (S9) **(LRR K, L)**
- ☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ☐ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: rock refusal

Depth (inches): 3

Hydric Soil Present? **Yes** ☐ **No** ☑

Remarks:

No hydric soil indicators were observed. Little to no original soils present all coal spoils and refusal.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Project Gravity City/County: Lackawanna County Sampling Date: 3/11/25
Applicant/Owner: Archbald 25 Developer, LLC State: PA Sampling Point: UDP 0311250834
Investigator(s): J. Gleason, T. Skic Section, Township, Range: Borough of Archbald
Landform (hillslope, terrace, etc.): level Local relief (concave, convex, none): concave
Subregion (LRR or MLRA): LRR R Lat: 41.524940 Long: -75.563813 Datum: NAD 83
Soil Map Unit Name: VxB: Volusia channery silt loam, 0 to 8 percent slopes NWI classification: NA
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☑ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances present? Yes ☑ 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 ☐	No ☑	**Is the Sampled Area within a Wetland?** Yes ☐ No ☑
Hydric Soil Present?	Yes ☐	No ☑	If yes, optional Wetland Site ID:
Wetland Hydrology Present?	Yes ☐	No ☑	

Remarks:
UDP 0311250834 represents the typical uplands in the northwestern portion of the AOI in a depressional area likely related to past strip mining and deep mining at the site. All three wetland parameters were not met.

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☑ Depth (inches): _____
Water Table Present? Yes ☐ No ☑ Depth (inches): _____
Saturation Present? Yes ☐ No ☑ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☑

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
D2 (Geomorphic position) were observed at the data point.
Precipitation was 39 percent of normal in January, 100 to 103 percent of normal in February, and 0.76 inches of rain fell in the week leading up to the field investigation.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot Size: 30-foot radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot Size: 15-foot radius)			
1. Betula lenta	50	Y	FACU
2. Fagus grandifolia	10	N	FACU
3. Quercus rubra	5	N	FACU
4. Quercus alba	5	N	FACU
5.			
6.			
7.			
	70 =Total Cover		
Herb Stratum (Plot Size: 5-foot radius)			
1. Rubus idaeus	10	Y	FACU
2. Potentilla simplex	5	Y	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	15 =Total Cover		
Woody Vine Stratum (Plot Size: 30-foot radius)			
1. Vitis aestivalis	10	Y	FACU
2.			
3.			
4.			
	10 =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species that Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:

OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☐ 2 – Dominance Test is >50%
- ☐ 3 – Prevalence Index is ≤3.0[1]
- ☐ 4 – Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ☐ **No** ☑

Remarks: (Include photo numbers here or on a separate sheet.)

No indicators of dominant hydrophytic vegetation.

SOIL

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 2/1	100					loamy/grave	
6								refusal

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR R, MLRA**
- ☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ☐ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ☐ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ☐ Dark Surface (S7) **(LRR K, L)**
- ☐ Polyvalue Below Surface (S8) **(LRR K, L)**
- ☐ Thin Dark Surface (S9) **(LRR K, L)**
- ☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ☐ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 6

Hydric Soil Present? **Yes** ☐ **No** ☑

Remarks:

No hydric soil indicators were observed.

Past strip mining has disturbed the soil.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Project Gravity City/County: Lackawanna County Sampling Date: 3/11/25
Applicant/Owner: Archbald 25 Developer, LLC State: PA Sampling Point: UDP 0311250948
Investigator(s): J. Gleason, T. Skic Section, Township, Range: Borough of Archbald
Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): none
Subregion (LRR or MLRA): LRR R Lat: 41.527761 Long: -75.557516 Datum: NAD 83
Soil Map Unit Name: Dumps, Mine (Da) NWI classification: PUBHx
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☑ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances present? Yes ☑ 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 ☐	No ☑	**Is the Sampled Area within a Wetland?** Yes ☐ No ☑
Hydric Soil Present?	Yes ☐	No ☑	If yes, optional Wetland Site ID:
Wetland Hydrology Present?	Yes ☐	No ☑	

Remarks:
UDP 0311250948 represents the upland areas of site lacking soil and located on bedrock in the northern portion of the AOI. All three wetland parameters were not met.

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☑ Depth (inches): _____
Water Table Present? Yes ☐ No ☑ Depth (inches): _____
Saturation Present? Yes ☐ No ☑ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☑

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No wetland hydrology indicators were observed at the data point.
Precipitation was 39 percent of normal in January, 100 to 103 percent of normal in February, and 0.76 inches of rain fell in the week leading up to the field investigation.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot Size: 30-foot radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot Size: 15-foot radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Herb Stratum (Plot Size: 5-foot radius)			
1. Rubus idaeus	40	Y	FACU
2. Potentilla simplex	30	Y	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	70 =Total Cover		
Woody Vine Stratum (Plot Size: 30-foot radius)			
1. Vitis aestivalis			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species that Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:

OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☐ 2 – Dominance Test is >50%
- ☐ 3 – Prevalence Index is ≤3.0[1]
- ☐ 4 – Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ☐ **No** ☑

Remarks: (Include photo numbers here or on a separate sheet.)
No indicators of dominant hydrophytic vegetation.

SOIL

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0								Solid bed rock, no soil

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR R, MLRA**
- ☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ☐ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ☐ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ☐ Dark Surface (S7) **(LRR K, L)**
- ☐ Polyvalue Below Surface (S8) **(LRR K, L)**
- ☐ Thin Dark Surface (S9) **(LRR K, L)**
- ☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ☐ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 0

Hydric Soil Present? **Yes** ☐ **No** ☑

Remarks:

No soil was present

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Project Gravity City/County: Lackawanna County Sampling Date: 3/11/25
Applicant/Owner: Archbald 25 Developer, LLC State: PA Sampling Point: UDP 0311251026
Investigator(s): J. Gleason, T. Skic Section, Township, Range: Borough of Archbald
Landform (hillslope, terrace, etc.): flat Local relief (concave, convex, none): concave
Subregion (LRR or MLRA): LRR R Lat: 41.526556 Long: -75.555152 Datum: NAD 83
Soil Map Unit Name: WxB: Wurtsboro extremely stony loam, 3 to 8 percent slopes NWI classification: NA
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☑ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances present? Yes ☑ 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 ☐	No ☑	**Is the Sampled Area within a Wetland?** Yes ☐ No ☑
Hydric Soil Present?	Yes ☐	No ☑	If yes, optional Wetland Site ID:
Wetland Hydrology Present?	Yes ☐	No ☑	

Remarks:
UDP 0311251026 represents the typical uplands in the eastern portion of the AOI in a relic stream channel. All three wetland parameters were not met.

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☑ Depth (inches): _____
Water Table Present? Yes ☐ No ☑ Depth (inches): _____
Saturation Present? Yes ☐ No ☑ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☑

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Hydrology indicators A3 (Saturation) and D2 (Geomorphic position) were observed at the data point.
Precipitation was 39 percent of normal in January, 100 to 103 percent of normal in February, and 0.76 inches of rain fell in the week leading up to the field investigation.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot Size: 30-foot radius)			
1. Fagus grandifolia	50	Y	FACU
2. Populus tremuloides	30	Y	FACU
3. Acer rubrum	10	N	FAC
4. Quercus rubra	10	N	FACU
5.			
6.			
7.			
	100	=Total Cover	
Sapling/Shrub Stratum (Plot Size: 15-foot radius)			
1. Fagus grandifolia	40	Y	FACU
2. Hamamelis virginiana	20	Y	FACU
3. Ostrya virginiana	10	N	FACU
4.			
5.			
6.			
7.			
	70	=Total Cover	
Herb Stratum (Plot Size: 5-foot radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
		=Total Cover	
Woody Vine Stratum (Plot Size: 30-foot radius)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species that Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:

OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☐ 2 – Dominance Test is >50%
- ☐ 3 – Prevalence Index is ≤3.0[1]
- ☐ 4 – Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ☐ **No** ☑

Remarks: (Include photo numbers here or on a separate sheet.)
No indicators of dominant hydrophytic vegetation.

SOIL

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 2/1	100					loam/sand	
4								refusal

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR R, MLRA**
- ☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ☐ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ☐ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ☐ Dark Surface (S7) **(LRR K, L)**
- ☐ Polyvalue Below Surface (S8) **(LRR K, L)**
- ☐ Thin Dark Surface (S9) **(LRR K, L)**
- ☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ☐ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 4

Hydric Soil Present? **Yes** ☐ **No** ☑

Remarks:

No hydric soil indicators were observed.

Past strip mining has disturbed the soil.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Project Gravity Applicant/ City/County: Lackawanna County Sampling Date: 3/11/25
Owner: Archbald 25 Developer,LLC Investigator(s): State: PA Sampling Point: UDP 0311251110
J. Gleason, T. Skic Landform (hillslope, Section, Township, Range: Borough of Archbald
terrace, etc.): flat Local relief (concave, convex, none): concave
Subregion (LRR or MLRA): LRR R Lat: 41.524219 Long: -75.558814 Datum: NAD 83
Soil Map Unit Name: Da: Dumps, mine NWI classification: NA
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☑ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances present? Yes ☑ 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 ☐	No ☑	**Is the Sampled Area within a Wetland?** Yes ☐ No ☑
Hydric Soil Present?	Yes ☐	No ☑	If yes, optional Wetland Site ID:
Wetland Hydrology Present?	Yes ☐	No ☑	

Remarks:
UDP 0311251110 represents the typical uplands in the central portion of the AOI located within a forested level area. All three wetland parameters were not met.

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☑ Depth (inches): _____
Water Table Present? Yes ☐ No ☑ Depth (inches): _____
Saturation Present? Yes ☐ No ☑ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☑

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
D2 (Geomorphic position) were observed at the data point.
Precipitation was 39 percent of normal in January, 100 to 103 percent of normal in February, and 0.76 inches of rain fell in the week leading up to the field investigation.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot Size: 30-foot radius)			
1. Quercus rubra	40	Y	FACU
2. Quercus alba	20	Y	FACU
3. Prunus serotina	20	Y	FACU
4. Acer rubrum	10	N	FAC
5. Betula lenta	5	N	FACU
6.			
7.			
	95	=Total Cover	
Sapling/Shrub Stratum (Plot Size: 15-foot radius)			
1. Hamamelis virginiana	30	Y	FACU
2. Fagus grandifolia	10	Y	FACU
3.			
4.			
5.			
6.			
7.			
	40	=Total Cover	
Herb Stratum (Plot Size: 5-foot radius)			
1. Dennstaedtia punctilobula	15	Y	UPL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	15	=Total Cover	
Woody Vine Stratum (Plot Size: 30-foot radius)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species that Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:

OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☐ 2 – Dominance Test is >50%
- ☐ 3 – Prevalence Index is ≤3.0[1]
- ☐ 4 – Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ☐ **No** ☑

Remarks: (Include photo numbers here or on a separate sheet.)
No indicators of dominant hydrophytic vegetation.

SOIL

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 2/1	100					loam/silt/cla	
3-12	10YR 5/4	100					loam/silt/cla	
12								refusal

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR R, MLRA**
- ☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ☐ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ☐ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ☐ Dark Surface (S7) **(LRR K, L)**
- ☐ Polyvalue Below Surface (S8) **(LRR K, L)**
- ☐ Thin Dark Surface (S9) **(LRR K, L)**
- ☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ☐ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 12

Hydric Soil Present? **Yes** ☐ **No** ☑

Remarks:

No hydric soil indicators were observed.

Past strip mining has disturbed the soil.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Project Gravity City/County: Lackawanna County Sampling Date: 3/11/25
Applicant/Owner: Archbald 25 Developer, State: PA Sampling Point: UDP 0311251214
LLC Investigator(s): J. Gleason, T. Skic Section, Township, Range: Borough of Archbald
Landform (hillslope, terrace, etc.): flat Local relief (concave, convex, none): concave
Subregion (LRR or MLRA): LRR R Lat: 41.523046 Long: -75.559575 Datum: NAD 83
Soil Map Unit Name: Da: Dumps, mine NWI classification: NA
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☑ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances present? Yes ☑ 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 ☐	No ☑	**Is the Sampled Area within a Wetland?** Yes ☐ No ☑
Hydric Soil Present?	Yes ☐	No ☑	If yes, optional Wetland Site ID:
Wetland Hydrology Present?	Yes ☐	No ☑	

Remarks:
UDP 0311251214 represents the typical uplands in the central portion of the AOI in a depressional area likely related to past mining on the site. All three wetland parameters were not met.

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☑ Depth (inches): _____
Water Table Present? Yes ☐ No ☑ Depth (inches): _____
Saturation Present? Yes ☐ No ☑ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☑

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
D2 (Geomorphic position) were observed at the data point.
Precipitation was 39 percent of normal in January, 100 to 103 percent of normal in February, and 0.76 inches of rain fell in the week leading up to the field investigation.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot Size: 30-foot radius)			
1. Betula Lenta	50	Y	FACU
2. Populus tremuloides	10	N	FACU
3. Acer rubrum	5	N	FAC
4.			
5.			
6.			
7.			
	65	=Total Cover	
Sapling/Shrub Stratum (Plot Size: 15-foot radius)			
1. Betula Lenta	20	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	20	=Total Cover	
Herb Stratum (Plot Size: 5-foot radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
		=Total Cover	
Woody Vine Stratum (Plot Size: 30-foot radius)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species that Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:

OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☐ 2 – Dominance Test is >50%
- ☐ 3 – Prevalence Index is ≤3.0[1]
- ☐ 4 – Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ☐ **No** ☑

Remarks: (Include photo numbers here or on a separate sheet.)
No indicators of dominant hydrophytic vegetation.

SOIL

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 2/1	100					sandy/loam	sand sized coal/coal dust

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR R, MLRA**
- ☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ☐ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ☐ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ☐ Dark Surface (S7) **(LRR K, L)**
- ☐ Polyvalue Below Surface (S8) **(LRR K, L)**
- ☐ Thin Dark Surface (S9) **(LRR K, L)**
- ☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ☐ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ☐ **No** ☑

Remarks:

No hydric soil indicators were observed.

Past strip mining has disturbed the soil.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Project Gravity City/County: Lackawanna County Sampling Date: 6/11/25
Applicant/Owner: Archbald 25 Developer LLC State: PA Sampling Point: UDP 0611251612
Investigator(s): M. Bixler, PWS Section, Township, Range: Archbald Township
Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): none
Subregion (LRR or MLRA): LRR R Lat: 41.521178 Long: -75.553349 Datum: NAD 83
Soil Map Unit Name: Dumps, mine (Da) NWI classification: NA
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☐ No ☑ (If no, explain in Remarks.)
Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances present? Yes ☑ 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 ☐	No ☑	**Is the Sampled Area within a Wetland?** Yes ☐ No ☑
Hydric Soil Present?	Yes ☐	No ☑	If yes, optional Wetland Site ID:
Wetland Hydrology Present?	Yes ☐	No ☑	

Remarks:
UDP 0611251612 is located in a low forested area, adjacent to a mobile home community. The data point characterizes the forested upland habitat within this portion of the AOI. All three wetland parameters were not met.

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ☐	No ☑	Depth (inches):
Water Table Present?	Yes ☐	No ☑	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ☐	No ☑	Depth (inches):

Wetland Hydrology Present? Yes ☐ No ☑

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No wetland hydrology indicators were observed at the data point.
Precipitation was 200 to 300 percent of normal in May, and approximately 2 to 3 inches of rain fell in the week leading up to the June field investigation.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot Size: 30-foot radius)			
1. Betula lenta	50	Y	FACU
2. Quercus rubra	20	Y	FACU
3.			
4.			
5.			
6.			
7.			
	70	=Total Cover	
Sapling/Shrub Stratum (Plot Size: 15-foot radius)			
1. Fraxinus americana	15	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	15	=Total Cover	
Herb Stratum (Plot Size: 5-foot radius)			
1. Parthenocissus quinquefolia	20	Y	FACU
2. Alliaria petiolata	10	Y	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	30	=Total Cover	
Woody Vine Stratum (Plot Size: 30-foot radius)			
1. *Vitis sp.	15	Y	FACU
2.			
3.			
4.			
	15	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species that Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:

OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☐ 2 – Dominance Test is >50%
- ☐ 3 – Prevalence Index is ≤3.0[1]
- ☐ 4 – Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ☐ **No** ☑

Remarks: (Include photo numbers here or on a separate sheet.)

No indicators of dominant hydrophytic vegetation.

*Vitis sp. could not be identified to the species. It was assigned an indicator status of FACU based on professional judgment.

SOIL

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR4/3	100					loam	gravely
7								refusal

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR R, MLRA**
- ☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ☐ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ☐ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ☐ Dark Surface (S7) **(LRR K, L)**
- ☐ Polyvalue Below Surface (S8) **(LRR K, L)**
- ☐ Thin Dark Surface (S9) **(LRR K, L)**
- ☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ☐ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 7

Hydric Soil Present? **Yes** ☐ **No** ☑

Remarks:

No hydric soil indicators were observed.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Project Gravity City/County: Lackawanna County Sampling Date: 6/11/25
Applicant/Owner: Archbald 25 Developer LLC State: PA Sampling Point: UDP 0611251646
Investigator(s): M. Bixler, PWS Section, Township, Range: Archbald Borough
Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none):
Subregion (LRR or MLRA): LRR R Lat: 41.518800 Long: -75.553549 Datum: NAD 83
Soil Map Unit Name: Wellsboro channery loam, 8 to 25 percent slopes, rubbly (WgD) NWI classification: NA
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☐ No ☑ (If no, explain in Remarks.)
Are Vegetation ☐ , Soil ☑ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances present? Yes ☑ 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 ☐	No ☑	**Is the Sampled Area within a Wetland?** Yes ☐ No ☑
Hydric Soil Present?	Yes ☐	No ☑	If yes, optional Wetland Site ID:
Wetland Hydrology Present?	Yes ☐	No ☑	

Remarks:
UDP 0611251646 is located in a low forested area, south of the existing mobile home community. The data point characterizes the forested upland habitat within this portion of the AOI. All three wetland parameters were not met.

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ☐	No ☑	Depth (inches):
Water Table Present?	Yes ☐	No ☑	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ☐	No ☑	Depth (inches):

Wetland Hydrology Present? Yes ☐ No ☑

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No wetland hydrology indicators were observed at the data point.
Precipitation was 200 to 300 percent of normal in May, and approximately 2 to 3 inches of rain fell in the week leading up to the June field investigation.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot Size: 30-foot radius)			
1. Quercus rubra	60	Y	FACU
2. Betula lenta	25	Y	FACU
3.			
4.			
5.			
6.			
7.			
	85	=Total Cover	
Sapling/Shrub Stratum (Plot Size: 15-foot radius)			
1. Hamamelis virginiana	40	Y	FACU
2. Viburnum acerifolium	25	Y	UPL
3.			
4.			
5.			
6.			
7.			
	65	=Total Cover	
Herb Stratum (Plot Size: 5-foot radius)			
1. Dennstaedtia punctilobula	20	Y	UPL
2. Maianthemum canadense	15	Y	FACU
3. Lycopodium obscurum	15	Y	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	50	=Total Cover	
Woody Vine Stratum (Plot Size: 30-foot radius)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species that Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:

OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☐ 2 – Dominance Test is >50%
- ☐ 3 – Prevalence Index is ≤3.0[1]
- ☐ 4 – Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ☐ **No** ☑

Remarks: (Include photo numbers here or on a separate sheet.)

No indicators of dominant hydrophytic vegetation.

SOIL

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR2/1	100					organic	
2-6	10YR2/2	100					loam	organic
6								refused

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR R, MLRA**
- ☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ☐ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils [3]:

- ☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ☐ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ☐ Dark Surface (S7) **(LRR K, L)**
- ☐ Polyvalue Below Surface (S8) **(LRR K, L)**
- ☐ Thin Dark Surface (S9) **(LRR K, L)**
- ☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ☐ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 6

Hydric Soil Present? **Yes** ☐ **No** ☑

Remarks:

No hydric soil indicators were observed.

APPENDIX B

Approved Jurisdictional Determination

DEPARTMENT OF THE ARMY
U. S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
STATE COLLEGE FIELD OFFICE
1631 SOUTH ATHERTON STREET, SUITE 101
STATE COLLEGE, PENNSYLVANIA 16801-6260

August 18, 2025

Operations Division

ARM Group Limited Liability Corporation
Mr. Scott Martin
1129 West Governor Road
P.O. Box 797
Hershey, PA 17033

Dear Mr. Martin:

This is in response to your request, dated April 14, 2025, sent on behalf of the ARM Group LLC, requesting an approved jurisdictional determination and verification of the delineation of waters of the United States, including jurisdictional wetlands, on a 186.2-acre parcel in Archbald Borough, Lackawanna County, Pennsylvania. Your project has been assigned the file name, NAB-2025-00234-P33 (Gibson Street Project Site AJD).

Mr. Joshua Everett, of this office, inspected the subject site on May 21, 2025, with you. Based on a review of the information submitted as part of the approved jurisdictional determination request and the site inspection by this office, it has been determined that the plans prepared by your office, ARM Group LLC, entitled: “Aquatic Resources Investigation, Gibson Street Project,” dated April 1, 2025 for the Area of Review (AOR) identified in the map entitled ‘Site Location Map, Gibson Street Project, WHP, Jermyn Township, Lackawanna County, PA” dated March 2025 (Enclosure 1) accurately depict waterbodies and wetlands within the area of review. It was also determined that the wetlands and streams within the 186.2-acre area of review do not have a continuous surface connection to a jurisdictional water. As a result, three (3) emergent wetlands (0.01-acre, 0.01-acre,and 0.44-acre); two scrub shrub wetlands (0.05-acre and 0.12 acre); a wetland comprised of open water, scrub shrub and emergent wetlands (0.66 acre); a wetland comprised of scrub shrub and forested wetlands (0.13-acre); two intermittent stream channels; and, 31 open water depressional areas do not meet the definition of adjacent wetlands and watercourses having a continuous surface connection to a jurisdictional water and therefore are not subject to United States Army Corps of Engineers (Corps) regulatory jurisdiction. In addition, there are 31 open water areas likely resulting from excavation or subsidence related to past mining activities on the site. The listed waters on the entire area of review and the jurisdictional status are summarized in enclosure 2. Be advised that these wetlands and waterbodies may be regulated as waters of the Commonwealth by the Pennsylvania Department of Environmental Protection.

The delineation included herein has been conducted to identify the location and extent of the aquatic resources for purposes of the Clean Water Act for the particular site identified in this request. This delineation may not be valid for the Wetland Conservation Provisions of the Food Security Act of 1985, as amended. If you or your tenant are United States Department of Agriculture (USDA) program participants, or anticipate participation in USDA programs, you should discuss the applicability of an NRCS Certified Wetland Determination with the local USDA service center, prior to starting work.

This letter contains an approved jurisdictional determination for your subject site. This approved jurisdictional determination is valid for five years from the date of this letter unless new information warrants revision of the determination before the expiration date, or a District Engineer has identified, after public notice and comment, that specific geographic areas with rapidly changing environmental conditions merit reverification on a more frequent basis. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process fact sheet and Request for Appeal (RFA) form (Enclosure 3). If you request to appeal this determination you must submit a completed RFA form by mail to:

Mr. Andrew Dangler
Regulatory Appeals Review Officer
United States Army Corps of Engineers
North Atlantic Division-Fort Hamilton
301 John Warren Avenue-First Floor
Brooklyn, New York 11252-6700

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR part 331.5, and that it has been received by the Division Office within 60 days of the date of the Notification of Appeal Process. Should you decide to submit an RFA form, it must be received at the above address by March 8, 2024. It is not necessary to submit an RFA form to the Division office if you do not object to the determination in this letter.

In future correspondence and permit applications regarding this parcel, please include the file number located in the first paragraph of this letter.

A copy of this letter is being furnished to the Northeast Pennsylvania Department of Environmental Protection for informational purposes.

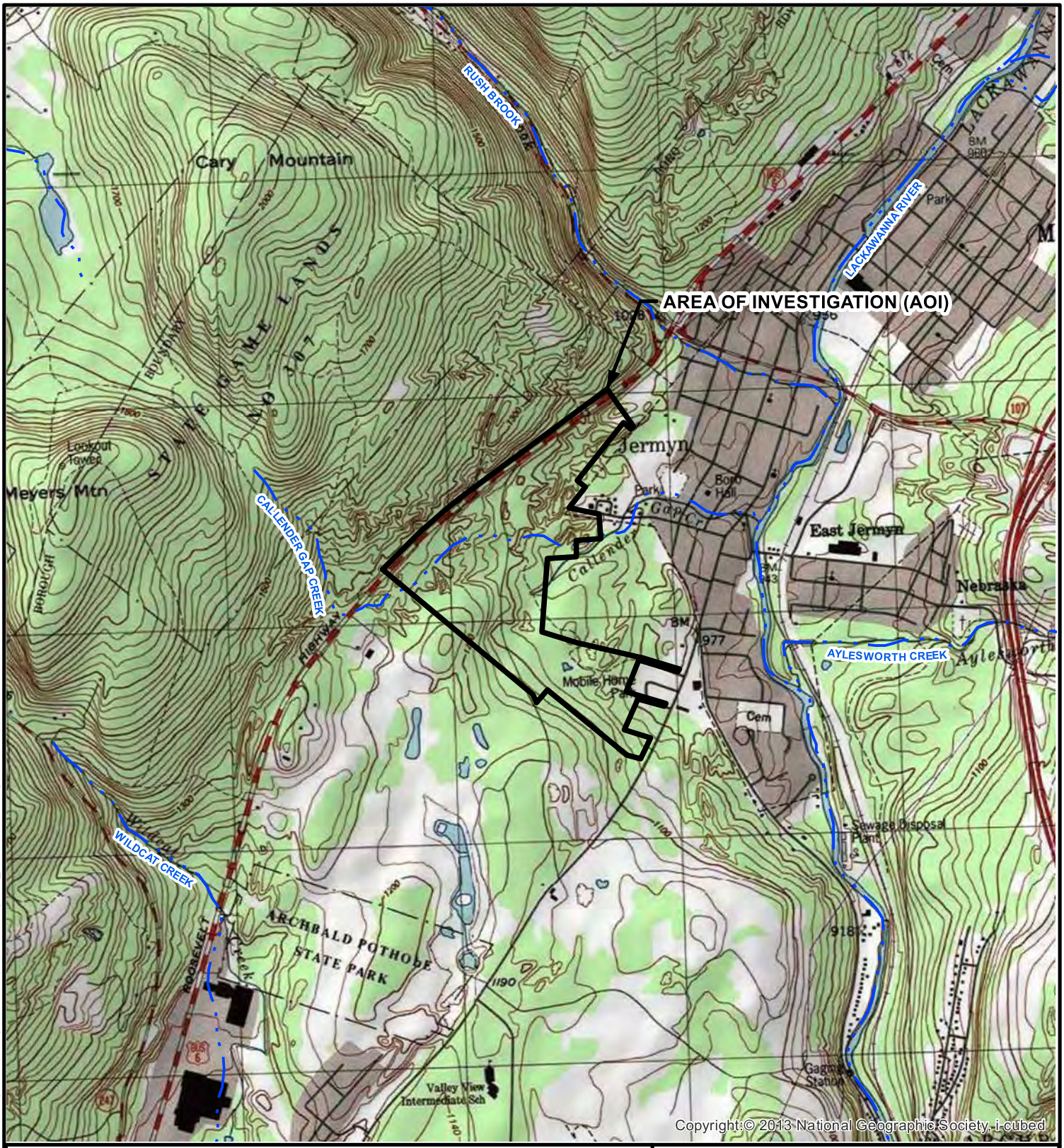
If you have any questions concerning this matter, please contact Mr. Matthew Gall, of this office, at (814) 235-1762 or at matt.gall@usace.army.mil.

Sincerely,

Matthew T. Gall
Chief, Pennsylvania Section
Regulatory Branch

Enclosures

To identify how we can better serve you, we need your help. Please take the time to fill out our new customer service survey at:
https://regulatory.ops.usace.army.mil/customer-service-survey/



REF: Base map from ESRI USA Topo Maps. Refer to USGS 7.5 minute Carbondale, PA.

LEGEND

AREA OF INVESTIGATION

STREAM

0 2,000 4,000 6,000

SCALE IN FEET

Site Location Map

Gibson Street Project
WHP
Jermyn Township
Lackawanna County, PA

March, 2025	Scale: 1" = 2,000'	24012215

ARM Group LLC
Engineers and Scientists

Figure 1

P:\Western Hospitality Group\Projects\24012215 - Task 3, Due Diligence Investigation -Jermyn PA\GIS\Figure 1_Site Location Map.mxd

Enclosure 1

DEPARTMENT OF THE ARMY
U. S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
STATE COLLEGE FIELD OFFICE
1631 SOUTH ATHERTON STREET, SUITE 101
STATE COLLEGE, PENNSYLVANIA 16801-6260

CENAB-OPR-P 18 August 2025

MEMORANDUM FOR RECORD

SUBJECT: US Army Corps of Engineers (Corps) Approved Jurisdictional Determination in accordance with the "Revised Definition of 'Waters of the United States'"; (88 FR 3004 (January 18, 2023) as amended by the "Revised Definition of 'Waters of the United States'; Conforming" (8 September 2023) ,[1] NAB-2025-00234-P33 (Gibson Street Project Site AJD).[2]

BACKGROUND. An Approved Jurisdictional Determination (AJD) is a Corps document stating the presence or absence of waters of the United States on a parcel or a written statement and map identifying the limits of waters of the United States on a parcel. AJDs are clearly designated appealable actions and will include a basis of JD with the document.[3] AJDs are case-specific and are typically made in response to a request. AJDs are valid for a period of five years unless new information warrants revision of the determination before the expiration date or a District Engineer has identified, after public notice and comment, that specific geographic areas with rapidly changing environmental conditions merit re-verification on a more frequent basis.[4]

On January 18, 2023, the Environmental Protection Agency (EPA) and the Department of the Army ("the agencies") published the "Revised Definition of 'Waters of the United States,'" 88 FR 3004 (January 18, 2023) ("2023 Rule"). On September 8, 2023, the agencies published the "Revised Definition of 'Waters of the United States'; Conforming", which amended the 2023 Rule to conform to the 2023 Supreme Court decision in *Sackett v. EPA*, 598 U.S., 143 S. Ct. 1322 (2023) ("*Sackett*").

This Memorandum for Record (MFR) constitutes the basis of jurisdiction for a Corps AJD as defined in 33 CFR §331.2. For the purposes of this AJD, we have relied on Section 10 of the Rivers and Harbors Act of 1899 (RHA),[5] the 2023 Rule as amended, as well as other applicable guidance, relevant case law, and longstanding practice in evaluating jurisdiction.

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[1] While the Revised Definition of "Waters of the United States"; Conforming had no effect on some categories of waters covered under the CWA, and no effect on any waters covered under RHA, all categories are included in this Memorandum for Record for efficiency.
[2] When documenting aquatic resources within the review area that are jurisdictional under the Clean Water Act (CWA), use an additional MFR and group the aquatic resources on each MFR based on the TNW, the territorial seas, or interstate water that they are connected to. Be sure to provide an identifier to indicate when there are multiple MFRs associated with a single AJD request (i.e., number them 1, 2, 3, etc.).
[3] 33 CFR 331.2.
[4] Regulatory Guidance Letter 05-02.
[5] USACE has authority under both Section 9 and Section 10 of the Rivers and Harbors Act of 1899 but for convenience, in this MFR, jurisdiction under RHA will be referred to as Section 10.

The subject of this approved jurisdictional determination is a 186.2-acre site located in Archbald Borough, Lackawanna County, Pennsylvania (41.524244 N, -75.561365 W). The predominant land use of the area of review (AOR) is an abandoned strip mine that is primarily forested. The AOR drains north and east to the Lackawanna River which then flows south into the Susquehanna River (Figure 1).

The Corps received a request for a Department of the Army (DA) approved jurisdictional determination on 14 April 2025, for the subject site located in Archbald Borough, Lackawanna County, Pennsylvania. The information provided in the request package, supplied by the consultant, included a USDA Natural Resources Conservation Service Soil Survey map, USGS topographic map, aerial imagery, USFWS National Wetland Inventory Map, USGS National Hydrography Dataset, a site map, and wetland data sheets. On 21 May 2025, the Corps conducted a site visit and walked the entire 186.2-acre area of review as identified on the enclosed aerial image dated March 2025. The Corps' area of review (AOR) encompasses upland forests with depressional areas in the area that was strip mined. The project area has been heavily manipulated with prior evidence of mining. Although the USGS topographic map provided with the request package shows that Callender Gap Creek flows through the AOR from west to east, eventually flowing into the Lackawanna River, the site manipulation that occurred because of past strip mining has altered the channel to the extent that it no longer has a surface connection within the AOR to the Lackawanna River. The soils on the site are mapped as Holly Silt Loam (Hm), Atherton Loam (At), Dystrochepts and Rock Outcrop (DyD), Morris Channery Loam (MxB), Norris and Chippewa Channery Loams (NxB), Pope Soils (Po), Volusia Channery Loam (VxB), and (Wurtsboro Extremely Stoney Silt Loam Loam (WxB, WxD) (NRCS Web Soil Survey, 2024). With the exception of the Holly Silt Loam and Atherton Loam, which are hydric soil types, the remainder and their minor components are classified as non-hydric but may contain hydric inclusions. Based on field observations, supplemental information reviewed by the Corps, and in accordance with the protocol contained within the (1) Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Regional Supplement Version 2.0, and (2) 1987 Corps Delineation Manual, the Corps determined that hydrophytic vegetation, hydric soils, and wetland hydrology indicators within the above-mentioned area of review. The Corps area of review (Figure 1) includes three (3) emergent wetlands (0.01-acre, 0.01-acre,and 0.44-acre); two scrub shrub wetlands (0.05-acre and 0.12 acre); a wetland comprised of open water, scrub shrub and emergent wetlands (0.66 acre); a wetland comprised of scrub shrub and forested wetlands (0.13-acre); two intermittent stream channels; and, 31 open water depressional areas. None of these features meet the definition of adjacent wetlands or watercourses having a continuous surface connection to a jurisdictional water and therefore, are not subject to United States Army Corps of Engineers (Corps) regulatory jurisdiction. The Corps determined that all the referenced aquatic resources do not have a surface connection to jurisdictional waters. Many of these features resulted from impacts of historic mining activity (Figures 2, 3. 4 and 5).

Figure 1-Project Area; area of review is a 186.2-acre area delineated in black.

Figure 2-Wetland 0311251254 (0.12-acre) depressional area with no continuous surface connection to a jurisdictional water

Figure 3-Wetland 0031251226 (0.01-acre) appears to be a former access road with no continuous surface connection to a jurisdictional water

Figure 4- UNT 1 - channel has no continuous surface connection to a jurisdictional water

Figure 5- - Typical open water depressional area from previous strip-mining activities has no continuous surface connection to a jurisdictional water

1. SUMMARY OF CONCLUSIONS.

   a. Wetland 0311251226 (0.01-acre) – non-Jurisdictional

   b. Wetland 0311250835 (0.01-acre) – non-Jurisdictional

   c. Wetland 0311250854 (0.44-acre)- non-Jurisdictional

d. Wetland 0311251010 (0.66-acre)- non-Jurisdictional

e. Wetland 0311251110 (0.05-acre)- non-Jurisdictional

f. Wetland 0311251144 (0.13-acre)- non-Jurisdictional

g. Wetland 0311251254 (0.12-acre) – non-Jurisdictional

h. UNT 1 – non-Jurisdictional

i. UNT 2 - non-Jurisdictional

j. 31 Open water excavation pits distributed throughout AOR - non-Jurisdictional

2. REFERENCES.

a. "Revised Definition of 'Waters of the United States,'" 88 FR 3004 (January 18, 2023) ("2023 Rule")

b. "Revised Definition of 'Waters of the United States'; Conforming" 88 FR 61964 (September 8, 2023)

c. *Sackett v. EPA*, 598 U.S., 143 S. Ct. 1322 (2023)

3. REVIEW AREA. The area of review (AOR) (Figure 1) is comprised of approximately 186.2-acres, located in Archbald Borough, Lackawanna County, Pennsylvania (41.524244 N, -75.561365). The majority of the AOR is a former strip mine. There is no flow path from any delineated wetlands or waters on the site to any interstate water, TNW or the territorial seas, or interstate water.

4. NEAREST TRADITIONAL NAVIGABLE WATER (TNW), THE TERRITORIAL SEAS, OR INTERSTATE WATER TO WHICH THE AQUATIC RESOURCE IS CONNECTED. There is no flow path from any delineated wetlands or waters on the site to any interstate water, TNW or the territorial seas, or interstate water.

5. FLOWPATH FROM THE SUBJECT AQUATIC RESOURCES TO A TNW, THE TERRITORIAL SEAS, OR INTERSTATE WATER. None of the aquatic resources identified within the Area of Review have a flow path to interstate waters. There was no evidence of flow out of any of the existing aquatic resources.

6. SECTION 10 JURISDICTIONAL WATERS[6]: Describe aquatic resources or other features within the review area determined to be jurisdictional in accordance with Section 10 of the Rivers and Harbors Act of 1899. Include the size of each aquatic resource or other feature within the review area and how it was determined to be jurisdictional in accordance with Section 10.[7] N/A

7. SECTION 404 JURISDICTIONAL WATERS: Describe the aquatic resources within the review area that were found to meet the definition of waters of the United States in accordance with the 2023 Rule as amended, consistent with the Supreme Court's decision in *Sackett*. List each aquatic resource separately, by name, consistent with the naming convention used in section 1, above. Include a rationale for each aquatic resource, supporting that the aquatic resource meets the relevant category of "waters of the United States" in the 2023 Rule as amended. The rationale should also include a written description of, or reference to a map in the administrative record that shows, the lateral limits of jurisdiction for each aquatic resource, including how that limit was determined, and incorporate relevant references used. Include the size of each aquatic resource in acres or linear feet and attach and reference related figures as needed.

Traditional Navigable Waters (TNWs) (a)(1)(i): N/A

a. The Territorial Seas (a)(1)(ii): N/A

b. Interstate Waters (a)(1)(iii): N/A

c. Impoundments (a)(2): N/A

d. Tributaries (a)(3): N/A

e. Adjacent Wetlands (a)(4): N/A

f. Additional Waters (a)(5): N/A

8. NON-JURISDICTIONAL AQUATIC RESOURCES AND FEATURES

a. Describe aquatic resources and other features within the review area identified in the 2023 Rule as amended as not "waters of the United States" even where they otherwise meet the terms of paragraphs (a)(2) through (5). Include the type of excluded aquatic resource or feature, the size of the aquatic resource or feature within the review

[6] 33 CFR 329.9(a) A waterbody which was navigable in its natural or improved state, or which was susceptible of reasonable improvement (as discussed in § 329.8(b) of this part) retains its character as "navigable in law" even though it is not presently used for commerce or is presently incapable of such use because of changed conditions or the presence of obstructions.
[7] This MFR is not to be used to make a report of findings to support a determination that the water is a navigable water of the United States. The district must follow the procedures outlined in 33 CFR part 329.14 to make a determination that water is a navigable water of the United States subject to Section 10 of the RHA.

area and describe how it was determined to meet one of the exclusions listed in 33 CFR 328.3(b).[8] N/A

b. Describe aquatic resources and features within the review area that were determined to be non-jurisdictional because they do not meet one or more categories of waters of the United States under the 2023 Rule as amended (e.g., tributaries that are non-relatively permanent waters; non-tidal wetlands that do not have a continuous surface connection to a jurisdictional water). The Corps determined the following aquatic resources within the AOR do not have a continuous surface connection to a jurisdictional water and therefore are not jurisdictional. The aquatic resources have developed because of strip mining activity.

i. Wetland 0311251226 (0.01-acre) – non-Jurisdictional

ii. Wetland 0311250835 (0.01-acre) – non-Jurisdictional

iii. Wetland 0311250854 (0.44-acre) – non-Jurisdictional

iv. Wetland 0311251010 (0.66-acre)- non-Jurisdictional

v. Wetland 0311251110 (0.05-acre)- non-Jurisdictional

vi. Wetland 0311251144 (0.13-acre)- non-Jurisdictional

vii. Wetland 0311251254 (0.12-acre) – non-Jurisdictional

viii. UNT 1 – non-Jurisdictional

ix. UNT 2 - non-Jurisdictional

x. 31 Open water excavation pits distributed throughout AOR - non-Jurisdictional

DATA SOURCES. List sources of data/information used in making determination. Include titles and dates of sources used and ensure that information referenced is available in the administrative record.

a. The Corps conducted a site visit on 21 May 2025, with a representative from ARM Group, LLC.

b. USGS Topographic Map, provided by requestor, AJD request package.

c. Aerial Image of Site, provided by requestor, AJD request package.

[8] 88 FR 3004 (January 18, 2023)

d. USFWS NWI Map, provided by requestor, AJD request package.

9. OTHER SUPPORTING INFORMATION. N/A

10. NOTE: The structure and format of this MFR were developed in coordination with the EPA and Department of the Army. The MFR's structure and format may be subject to future modification or may be rescinded as needed to implement additional guidance from the agencies; however, the approved jurisdictional determination described herein is a final agency action.

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: ARM Group LLC	File Number: NAB-2025-00234-P33	Date: 8/18/2025

Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
	PERMIT DENIAL WITHOUT PREJUDICE	C
	PERMIT DENIAL WITH PREJUDICE	D
X	APPROVED JURISDICTIONAL DETERMINATION	E
	PRELIMINARY JURISDICTIONAL DETERMINATION	F

SECTION I

The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/appeals/ or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C. PERMIT DENIAL WITHOUT PREJUDICE: Not appealable
You received a permit denial without prejudice because a required Federal, state, and/or local authorization and/or certification has been denied for activities which also require a Department of the Army permit before final action has been taken on the Army permit application. The permit denial without prejudice is not appealable. There is no prejudice to the right of the applicant to reinstate processing of the Army permit application if subsequent approval is received from the appropriate Federal, state, and/or local agency on a previously denied authorization and/or certification.

D: PERMIT DENIAL WITH PREJUDICE: You may appeal the permit denial
You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information for reconsideration

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice means that you accept the approved JD in its entirety and waive all rights to appeal the approved JD.

- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

- RECONSIDERATION: You may request that the district engineer reconsider the approved JD by submitting new information or data to the district engineer within 60 days of the date of this notice. The district will determine whether the information submitted qualifies as new information or data that justifies reconsideration of the approved JD. A reconsideration request does not initiate the appeal process. You may submit a request for appeal to the division engineer to preserve your appeal rights while the district is determining whether the submitted information qualifies for a reconsideration.

F: PRELIMINARY JURISDICTIONAL DETERMINATION: Not appealable
You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also, you may provide new information for further consideration by the Corps to reevaluate the JD.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision you may contact: Mr. Frank Plewa, Appeals Coordinator Telephone: (717) 249-2522 U.S. Army Corps of Engineers Regulatory Branch, Baltimore District 2 Hopkins Plaza Baltimore, Maryland 21201 General Number: 410-962-3670 Email: nab-regulatory@usace.army.mil	If you have questions regarding the appeal process, or to submit your request for appeal, you may contact: Mr. Andrew Dangler Regulatory Appeals Review Officer U.S. Army Corps of Engineers North Atlantic Division – Fort Hamilton 301 John Warren Avenue – First Floor Brooklyn, New York 11252-6700 Mobile: (518) 487-0215

SECTION II – REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. Use additional pages as necessary. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15-day notice of any site investigation and will have the opportunity to participate in all site investigations.

_____ Signature of appellant or agent.	Date:
Email address of appellant and/or agent:	Telephone number:

APPENDIX C

PNDI Receipt

1. PROJECT INFORMATION

Project Name: **Project Gravity**
Date of Review: **7/29/2025 01:57:31 PM**
Project Category: **Development, New commercial/industrial development (store, gas station, factory)**
Project Area: **187.22 acres**
County(s): **Lackawanna**
Township/Municipality(s): **Archbald Borough; Jermyn Borough**
ZIP Code:
Quadrangle Name(s): **CARBONDALE**
Watersheds HUC 8: **Upper Susquehanna-Lackawanna**
Watersheds HUC 12: **Rush Brook-Lackawanna River**
Decimal Degrees: **41.525041, -75.559123**
Degrees Minutes Seconds: **41° 31' 30.1488" N, 75° 33' 32.8430" W**

2. SEARCH RESULTS

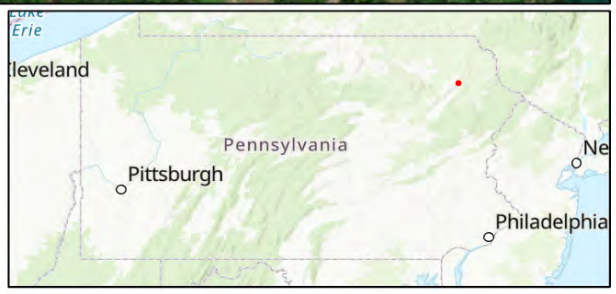
Agency	Results	Response
PA Game Commission	**Conservation Measure**	**No Further Review Required, See Agency Comments**
PA Department of Conservation and Natural Resources	No Known Impact	No Further Review Required
PA Fish and Boat Commission	No Known Impact	No Further Review Required
U.S. Fish and Wildlife Service	**Potential Impact**	**MORE INFORMATION REQUIRED, See Agency Response**

As summarized above, Pennsylvania Natural Diversity Inventory (PNDI) records indicate there may be potential impacts to threatened and endangered and/or special concern species and resources within the project area. If the response above indicates "No Further Review Required" no additional communication with the respective agency is required. If the response is "Further Review Required" or "See Agency Response," refer to the appropriate agency comments below. Please see the DEP Information Section of this receipt if a PA Department of Environmental Protection Permit is required.

Project Gravity

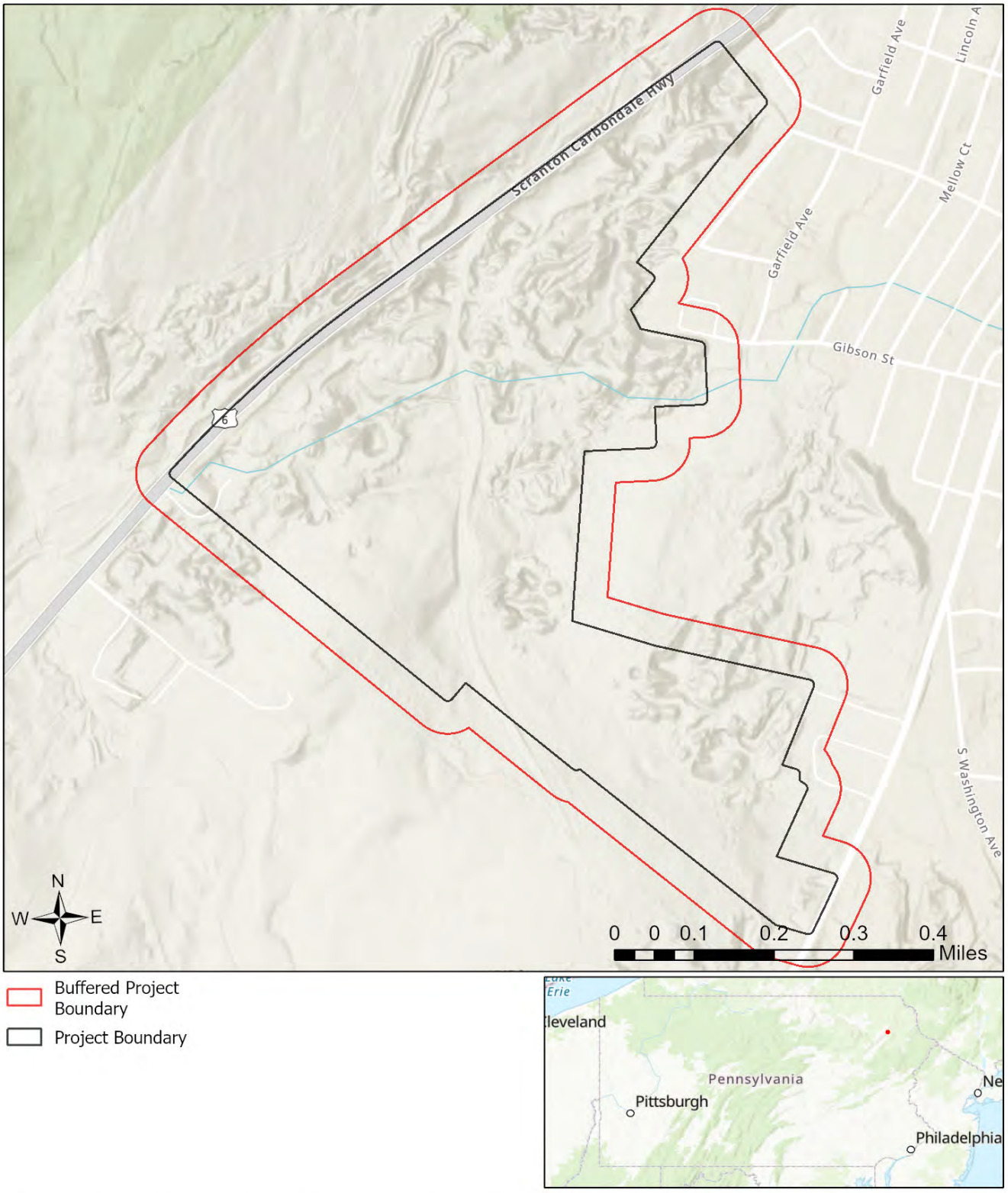
Buffered Project Boundary

Project Boundary



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community
Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Project Gravity



Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community
Sources: Esri, Maxar, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA,

RESPONSE TO QUESTION(S) ASKED

Q1: Will the action include disturbance to trees such as tree cutting (or other means of knocking down, or bringing down trees, tree topping. or tree trimming), pesticide/herbicide application or prescribed fire?
Your answer is: Yes

Q2: Does the action area contain any caves (or associated sinkholes, fissures, or other karst features), mines, rocky outcroppings, culverts, or tunnels that could provide habitat for hibernating bats?
Your answer is: No

3. AGENCY COMMENTS

Regardless of whether a DEP permit is necessary for this proposed project, any potential impacts to threatened and endangered species and/or special concern species and resources must be resolved with the appropriate jurisdictional agency. In some cases, a permit or authorization from the jurisdictional agency may be needed if adverse impacts to these species and habitats cannot be avoided.

These agency determinations and responses are **valid for two years** (from the date of the review), and are based on the project information that was provided, including the exact project location; the project type, description, and features; and any responses to questions that were generated during this search. If any of the following change: 1) project location, 2) project size or configuration, 3) project type, or 4) responses to the questions that were asked during the online review, the results of this review are not valid, and the review must be searched again via the PNDI Environmental Review Tool and resubmitted to the jurisdictional agencies. The PNDI tool is a primary screening tool, and a desktop review may reveal more or fewer impacts than what is listed on this PNDI receipt. The jursidictional agencies **strongly advise against** conducting surveys for the species listed on the receipt prior to consultation with the agencies.

PA Game Commission
RESPONSE:

Conservation Measure: Potential impacts to state and federally listed species which are under the jurisdiction of both the Pennsylvania Game Commission (PGC) and the U.S. Fish and Wildlife Service may occur as a result of this project. As a result, the PGC defers comments on potential impacts to federally listed species to the U.S. Fish and Wildlife Service. No further coordination with the Pennsylvania Game Commission is required at this time.

PA Department of Conservation and Natural Resources
RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Fish and Boat Commission
RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

U.S. Fish and Wildlife Service
RESPONSE:

Information Request: Your project is within the range of the federally listed northern long-eared bat. Enter project information into IPaC (http://ecos.fws.gov/ipac/). Follow the step-by-step process to review this project's potential effect on federally listed species. For step-by-step instructions, please see our Project Review Page (https://www.fws.gov/office/pennsylvania-ecological-services/project-revi...)

WHAT TO SEND TO JURISDICTIONAL AGENCIES

If project information was requested by one or more of the agencies above, upload* or email the following information to the agency(s) (see AGENCY CONTACT INFORMATION). Instructions for uploading project materials can be found here. This option provides the applicant with the convenience of sending project materials to a single location accessible to all three state agencies (but not USFWS).
*If information was requested by USFWS, applicants must submit their project using IPaC, following the USFWS Project Submission Instructions. USFWS will not accept or review project materials uploaded via the Conservation Explorer.

Check-list of Minimum Materials to be submitted:
____Project narrative with a description of the overall project, the work to be performed, current physical characteristics of the site and acreage to be impacted.
____A map with the project boundary and/or a basic site plan(particularly showing the relationship of the project to the physical features such as wetlands, streams, ponds, rock outcrops, etc.)
In addition to the materials listed above, USFWS REQUIRES the following
____**SIGNED** copy of a Final Project Environmental Review Receipt

The inclusion of the following information may expedite the review process.
____Color photos keyed to the basic site plan (i.e. showing on the site plan where and in what direction each photo was taken and the date of the photos)
____Information about the presence and location of wetlands in the project area, and how this was determined (e.g., by a qualified wetlands biologist), if wetlands are present in the project area, provide project plans showing the location of all project features, as well as wetlands and streams.

4. DEP INFORMATION

The Pa Department of Environmental Protection (DEP) requires that a signed copy of this receipt, along with any required documentation from jurisdictional agencies concerning resolution of potential impacts, be submitted with applications for permits requiring PNDI review. Two review options are available to permit applicants for handling PNDI coordination in conjunction with DEP's permit review process involving either T&E Species or species of special concern. Under sequential review, the permit applicant performs a PNDI screening and completes all coordination with the appropriate jurisdictional agencies prior to submitting the permit application. The applicant will include with its application, both a PNDI receipt and/or a clearance letter from the jurisdictional agency if the PNDI Receipt shows a Potential Impact to a species or the applicant chooses to obtain letters directly from the jurisdictional agencies. Under concurrent review, DEP, where feasible, will allow technical review of the permit to occur concurrently with the T&E species consultation with the jurisdictional agency. The applicant must still supply a copy of the PNDI Receipt with its permit application. The PNDI Receipt should also be submitted to the appropriate agency according to directions on the PNDI Receipt. The applicant and the jurisdictional agency will work together to resolve the potential impact(s). See the DEP PNDI policy at https://conservationexplorer.dcnr.pa.gov/content/resources.

5. ADDITIONAL INFORMATION

The PNDI environmental review website is a preliminary screening tool. There are often delays in updating species status classifications. Because the proposed status represents the best available information regarding the conservation status of the species, state jurisdictional agency staff give the proposed statuses at least the same consideration as the current legal status. If surveys or further information reveal that a threatened and endangered and/or special concern species and resources exist in your project area, contact the appropriate jurisdictional agency/agencies immediately to identify and resolve any impacts.

For a list of species known to occur in the county where your project is located, please see the species lists by county found on the PA Natural Heritage Program (PNHP) home page (www.naturalheritage.state.pa.us). Also note that the PNDI Environmental Review Tool only contains information about species occurrences that have actually been reported to the PNHP.

6. AGENCY CONTACT INFORMATION

PA Department of Conservation and Natural Resources
Bureau of Forestry, Ecological Services Section
400 Market Street, PO Box 8552
Harrisburg, PA 17105-8552
Email: RA-HeritageReview@pa.gov

U.S. Fish and Wildlife Service
Pennsylvania Field Office
Endangered Species Section
110 Radnor Rd; Suite 101
State College, PA 16801
Email: IR1_ESPenn@fws.gov
NO Faxes Please

PA Fish and Boat Commission
Division of Environmental Services
595 E. Rolling Ridge Dr., Bellefonte, PA 16823
Email: RA-FBPACENOTIFY@pa.gov

PA Game Commission
Bureau of Wildlife Management
Division of Environmental Review
2001 Elmerton Avenue, Harrisburg, PA 17110-9797
Email: RA-PGC_PNDI@pa.gov
NO Faxes Please

7. PROJECT CONTACT INFORMATION

Name:_____
Company/Business Name:_____
Address:_____
City, State, Zip:_____
Phone:(_____)_____Fax:(_____)
Email:_____

ARM Group LLC
Engineers and Scientists
Scott L. Martin, Senior Scientist
Professional Wetland Scientist, Bog Turtle Surveyor
USFWS Qualified/Approved Botanist
phone: (717) 508-0575
cell: (717) 439-2775
email: smartin@armgroup.net
1129 West Governor Road, P.O. Box 797
Hershey, PA 17033-0797
https://www.armgroup.net

8. CERTIFICATION

I certify that ALL of the project information contained in this receipt (including project location, project size/configuration, project type, answers to questions) is true, accurate and complete. In addition, if the project type, location, size or configuration changes, or if the answers to any questions that were asked during this online review change, I agree to re-do the online environmental review.

_____ July 29, 2025

applicant/project proponent signature | date

APPENDIX D

Wetland Condition Level 2 Rapid Assessment Worksheets

Wetland Condition Assessment Form

Pennsylvania Wetland Condition Level 2 Rapid Assessment (Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

For use in all wetland classifications found within Pennsylvania except those found within the banks of a watercourse.

Project #	Project Name	Date	Proposed Impact Size (acres)	AA #	AA Size (acres)	
24012215	Project Gravity	8/26/2025	0.01	2	0.01	

Name(s) of Evaluator(s)	Lat (dd)	Long (dd)	Notes:
Matt Bixler, PWS	41.522267	-75.559739	Wetland 0311250835

General Comments: Wetland 0311250835 is a PEM feature located in an unreclaimed strip mine, upgradient UNT 1 and draining to the stream.

1. Wetland Zone of Influence Condition Index

	Condition Category				
	Optimal	Suboptimal	Marginal	Poor	
Wetland Zone of Influence (300 foot area around AA perimeter)	ZOI area vegetation consists of a tree stratum present (diameter at breast height (dbh) > 3 inches) with greater than or equal to 60% tree canopy cover. Areas comprised of stream channels, wetlands (regardless of classification or condition) and lacustrine resources ≥ 10 acres are scored as optimal.	**High Suboptimal:** ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory. **Low Suboptimal:** ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover with a maintained understory.	**High Marginal:** ZOI area vegetation consists of non-maintained, dense herbaceous vegetation with either a shrub layer or a tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover. **Low Marginal:** ZOI area vegetation consists of non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, areas of hay production, and ponds or open water areas (< 10 acres). If trees are present, tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover with maintained understory.	**High Poor:** ZOI area vegetation consists of lawns, mowed, and maintained areas, nurseries; no-till cropland; actively grazed pasture, sparsely vegetated non-maintained area, pervious trails, recently seeded and stabilized, or other comparable condition. **Low Poor:** ZOI area vegetation consists of impervious surfaces; mine spoil lands, denuded surfaces, row crops, active feed lots, impervious trails, or other comparable conditions.	CI = Total Score/20
SCORE	20 19 **(18)** 17 16	15 14 13 12 11	10 9 8 **(7)** 6	5 **(4)** 3 2 1	

1. Identify all applicable Condition Category areas within the wetland zone of influence using the descriptors above.
2. Estimate the % area within each condition category. Calculators are provided for you below.
3. Enter the % ZOI Area in decimal form (0.00) and Score for each category in the blocks below.

Total Score = SUM(%Areas*Scores)

	Condition Category:							
Scoring:	% ZOI Area:	85%	8%	7%	**0%**	**0%**	**0%**	**Total Score:**
	Score:	18	7	4	**0**	**0**	**0**	
	Total Sub-score:	15.30	0.56	0.28	0.00	0.00	0.00	**16.14**

0.81

Comments: ZOI consists of forest (>25 years old), a dirt access road, six open water features, and three drainage features.

2. Roadbed Presence Index

	Condition Categories				
	Optimal	Suboptimal	Marginal	Poor	
a. Roadbed Presence (within 0 - 100 foot Wetland ZOI distance)	**High Optimal:** No roadbeds present within 100 feet of the AA boundary **Low Optimal:** Roadbed presence score within 0-100 feet of the AA boundary equal to or less than 2.	**High Suboptimal:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than to 2 but equal to or less than 4. **Low Suboptimal:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than to 4 but less than or equal to 6.	**High Marginal:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than to 6 but less than or equal to 8. **Low Marginal:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than to 8 but less than or equal to 10.	**High Poor:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 10 but less than or equal to 12. **Low Poor:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 12.	
SCORE	20 19 **(18)** 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1	

Comments:

	Condition Categories				
	Optimal	Suboptimal	Marginal	Poor	
b. Roadbed Presence (within 100 - 300 foot Wetland ZOI distance)	**High Optimal:** No roadbeds present within 100 - 300 feet of the AA boundary **Low Optimal:** Roadbed presence score within 100 - 300 feet of the AA boundary equal to or less than 2.	**High Suboptimal:** Roadbed presence score within 100 - 300 feet of the AA boundary is greater than to 2 but equal to or less than 4. **Low Suboptimal:** Roadbed presence score within 100 - 300 feet AA boundary is greater than to 4 but less than or equal to 6.	**High Marginal:** Roadbed presence score within 100 - 300 feet of the AA boundary is greater than to 6 but less than or equal to 8. **Low Marginal:** Roadbed presence score within 100 - 300 feet of the AA boundary is greater than to 8 but less than or equal to 10.	**High Poor:** Roadbed presence score within 100 - 300 feet of the AA boundary is greater than to 10 but less than or equal to 12. **Low Poor:** Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 12.	CI = Total Score/20
SCORE	20 19 18 17 **(16)**	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1	

	Condition Score	Weighting	Sub-Scores
a. Roadbed 0-100:	18	* (0.67)	12
b. Roadbed 100-300:	16	* (0.33)	5
		Total Score:	17

0.87

Comments: The ZOI includes a dirt access road.

Wetland Condition Assessment Form

Pennsylvania Wetland Condition Level 2 Rapid Assessment (Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

For use in all wetland classifications found within Pennsyvlania except those found within the banks of a watercourse.

3. Vegetation Condition Index

	Condition Category																				
a. Invasive Species Presence	**Optimal**					**Suboptimal**					**Marginal**					**Poor**					
	High Optimal: No invasives present.		**Low Optimal:** <5% of the total AA contains invasive species.			**High Suboptimal:** >5% but less than 10% of the total AA contains invasive species.		**Low Suboptimal:** >10% but less than 20% of the total AA contains invasive species.			**High Marginal:** >20% but less than 30% of the total AA contains invasive species.		**Low Marginal:** >30% but less than 50% of the total AA contains invasive species.			> 50% of the total AA contains invasive species.					
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	**4**	3	2	1	

Comments: **Microstegium vimineum dominant in the wetland.**

	Condition Category																				
b. Vegetation Stressor Presence	**Optimal**					**Suboptimal**					**Marginal**					**Poor**					**CI = Total Score/40**
	High Optimal: No vegetation stressors present within the AA boundary.		**Low Optimal:** One vegetation stressor present within the AA boundary.			**High Suboptimal:** Two vegetation stressors present within the AA boundary.		**Low Suboptimal:** Three vegetation stressors present within the AA boundary.			**High Marginal:** Four vegetation stressors present within the AA boundary.		**Low Marginal:** Five vegetation stressors present within the AA boundary.			Greater than five vegetation stressors present within the AA boundary.					
SCORE	20	19	**18**	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Comments:

a. Invasive Sub-Score:	4	**Total Score**	**0.55**
b. Vegetation Sub-Score:	18	**22**	

4. Hydrologic Modification Index

	Condition Category																				
Hydrologic Modification Stressor Presence	**Optimal**					**Suboptimal**					**Marginal**					**Poor**					**CI = Total Score/20**
	High Optimal: No hydrologic stressors present within the AA boundary.		**Low Optimal:** One hydrologic stressor present within the AA boundary.			**High Suboptimal:** Two hydrologic stressors present within the AA boundary.		**Low Suboptimal:** Three hydrologic stressors present within the AA boundary.			**High Marginal:** Four hydrologic stressors present within the AA boundary.		**Low Marginal:** Five hydrologic stressors present within the AA boundary.			Greater than five hydrologic stressors present within the AA boundary.					
SCORE	20	19	18	17	**16**	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	**0.80**

Comments: **Hydrology of the wetland has been altered by past mining activity**

Score:	**16**

5. Sediment Stressor Index

	Condition Category																				
Sediment Stressor Presence	**Optimal**					**Suboptimal**					**Marginal**					**Poor**					**CI = Total Score/20**
	High Optimal: No sediment stressors present within the AA boundary.		**Low Optimal:** One sediment stressor present within the AA boundary.			**High Suboptimal:** Two sediment stressors present within the AA boundary.		**Low Suboptimal:** Three sediment stressors present within the AA boundary.			**High Marginal:** Four sediment stressors present within the AA boundary.		**Low Marginal:** Five sediment stressors present within the AA boundary.			Greater than five sediment stressors present within the AA boundary.					
SCORE	20	19	**18**	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	**0.90**

Comments:

Score:	**18**

6. Water Quality Stressor Index

	Condition Category																				
a. Eutro-phication Stressor Presence	**Optimal**					**Suboptimal**					**Marginal**					**Poor**					
	No eutrophication stressors present within the AA boundary.					One eutrophication stressors present within the AA boundary.					Two eutrophication stressors present within the AA boundary.					Three eutrophication stressors present within the AA boundary.					
SCORE	20	19	**18**	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Comments:

	Condition Category																				
b. Contaminant / Toxicity Stressor Presence	**Optimal**					**Suboptimal**					**Marginal**					**Poor**					**CI = Total Score/40**
	No contaminant / toxicity stressors present within the AA boundary.					One contaminant / toxicitystressors present within the AA boundary.					Two contaminant / toxicity stressors present within the AA boundary.					Three contaminant / toxicity stressors present within the AA boundary.					
SCORE	20	19	**18**	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Comments:

a. Eutrophication Score	18	**Total Score:**	**0.90**
b. Contaminant Score	18	**36**	

Overall Wetland Level 2 Condition Score: Sum all six of the Condition Indexes and divide by 6 to calculate the overall condition score.	**Overall Condition Index:**	**0.80**

Pennsylvania Wetland Condition Level 2 Rapid Assessment

(Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

Roadbed Worksheet

Project Name / Identifier			Date	Name(s) of Evaluator(s)
Resource Identifier	**AA #**	**Lat (dd)**	**Long (dd)**	**Notes:**

Roadbeds: Record the number of occurrences by roadbed type and distance category. Multiply the number of occurrences by the weighting factors for each roadbed type and distance category then sum the total score for each distance category. The total scores for each distance category are then compared to the condition category descriptions.

Roadbed Type	Distance	Occurrences	Weighting Factor	Score	Distance	Occurrences	Weighting Factor	Score
≥ 4 Lane Paved	0-100 ft.		4	0	100-300 ft.		4	0
2 Lane Paved	0-100 ft.		2	0	100-300 ft.		2	0
1 Lane Paved	0-100 ft.		1	0	100-300 ft.		1	0
Gravel Road	0-100 ft.		1	0	100-300 ft.		1	0
Dirt Road	0-100 ft.	1	2	2	100-300 ft.	2	2	4
Railroad	0-100 ft.		2	0	100-300 ft.		2	0
Other Roadbeds	0-100 ft.		1, 2 or 4		100-300 ft.		1, 2 or 4	
Total Scores:	0-100 ft.	2			100-300 ft.	4		

Road Comments:

Pennsylvania Wetland Condition Level 2 Rapid Assessment

(Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

STRESSOR WORKSHEET

2/4/2017

Occurrence in AA

	Y	#'s	N
Vegetation Alteration			
Mowing			x
Moderate livestock grazing (within one year)			x
Crops (annual row crops, within one year)			x
Selective tree harvesting/cutting (>50% removal, within 5 years)			x
Right-of-way clearing (mechanical or chemical)			x
Clear cutting or Brush cutting (mechanized removal of shrubs and saplings)			x
Removal of woody debris			x
Aquatic weed control (mechanical or herbicide)			x
Excessive herbivory (deer, muskrat, nutria, carp, insects, etc.)			x
Plantation (conversion from typical natural tree species, including orchards)			x
Other:			x
Total Number:	**0**		
Hydrologic Modification			
Ditching, tile draining, or other dewatering methods			x
Dike/weir/dam			x
Filling/grading			x
Dredging/excavation			x
Stormwater inputs (culvert or similar concentrated urban runoff)			x
Microtopographic alterations (e.g., plowing, forestry bedding, skidder/ATV tracks)			x
Dead or dying trees (trunks still standing) *			x
Stream alteration (channelization or incision)			x
Other:	x		
Total Number:	**1**		
Sedimentation			
Sediment deposits/plumes			x
Eroding banks/slopes			x
Active construction (earth disturbance for development)			x
Active plowing (plowing for crop planting in past year)			x
Intensive livestock grazing (in one year, ground is >50% bare)			x
Active selective forestry harvesting (within one year)			x
Active forest harvesting (within two years, includes roads, borrow areas, pads, etc.)			x
Turbidity (moderate concentration of suspended solids in the water column, obvious sediment discharges)			x
Other:			
Total Number:	**0**		
Eutrophication			
Direct discharges from agricultural feedlots, manure pits, etc.			x
Direct discharges from septic or sewage treatment plants, fish hatcheries, etc.			x
Heavy or moderately heavy formation of algal mats			x
Other:			
Total Number:	**0**		
Contaminant/Toxicity			
Severe vegetation stress (source unknown or suspected)			x
Obvious spills, discharges, plumes, odors, etc.			x
Acidic drainages (mined sites, quarries, road cuts)			x
Point discharges from adjacent industrial facilities, landfills, railroad yards, or comparable sites			x
Chemical defoliation (majority of herbaceous and woody plants affected, within one year)			x
Fish or wildlife kills or obvious disease or abnormalities observed			x
Excessive garbage/dumping			x
Other:			x
Total Number:	**0**		

**** Dead or dying trees attributed to beaver activity or emerald ash borer (or other identifiable insect infestation) should not be recorded as a stressor present. The assessor is responsible for recording observations in the comment section concerning presence of these conditions.***

Pennsylvania Wetland Condition Level 2 Rapid Assessment
(Document No. 310-2137-002)
Pennsylvania Department of Environmental Protection

Invasive Species Presence Worksheet

Are invasive species (from list) present at the site in any layer? YES NO

If listed species present, enter the percent areal coverage for each species below:

Species Code	<5%	≥ 5-20%	≥ 20 - 50%	≥ 50%	*Species Code*	<5%	≥ 5-20%	≥ 20 - 50%	≥ 50%
mivi				x					

Total % relative cover of all invasives, collectively on site: 60 %

Comments:

Common Invasives/Aggressives List

Code	Common Name	*Scientific*	Status	Code	Common Name	*Scientific*	Status
aggi2	Redtop	*Agrostis gigantea*	FACW	luhe	Water primrose	*Ludwigia hexapetala*	OBLW
algl2	European Alder	*Alnus glutinosa*	FACW	lyvu	Garden loosestrife	*Lysimachia vulgaris*	OBLW
arhi3	Carpetgrass	*Arthraxon hispidus*	FAC-	lysa2	Purple loosestrife	*Lythrum salicaria*	FACW
beth	Japanese barberry	*Berberis thunbergii*	FACW	maqu	European waterclover	*Marsilea quadrifolia*	OBLW
bevu	European barberry	*Berberis vulgaris*	FACW	mivi	Japanese stiltgrass	*Microstegium vimineum*	FAC
butom	Flowering Rush	*Butomus umbellatus*	OBLW	nami2	Water cress	*Nasturtium officinale*	OBLW
calli6	Pond water-starwort	*Callitriche stagnalis*	OBLW	pelo	Low smartweed	*Persicaria longiseta*	FACW
egde	Brazilian waterweed	*Egeria densa*	OBLW	phar	Reed canary grass	*Phalaris arundinacea*	FACW
elan	Russian olive	*Elaeagnus angustifolia*	FACU	phau7	Common Reed	*Phragmites australis*	OBLW
elum	Autumn olive	*Elaeagnus umbellata*	FACU	potr	Rough bluegrass	*Poa trivialis*	FACW
ephi	Hairy willow-herb	*Epilobium hirsutum*	FACW	pocu6	Japanese knotweed	*Polygonum (Faloia) cuspidatum*	FAC-
eppa5	Willow-herb	*Epilobium parviflorum*	FACW	pgpf	Mile-a-minute	*Polygonum perfoliatum*	FAC-
fasa	Giant knotweed	*Fallopia sachalinensis*	OBLW	puera	Kudzu-vine	*Pueraria lobata*	FAC-
gldi	Mudmats	*Glossostigma diandrum*	OBLW	pysp1	Apple/crabapple/pear	*Pyrus sp.*	FAC?
hola	Velvetgrass	*Holcus lanatus*	FAC	rhfr	Glossy Buckthorn	*Rhamnus frangula*	FAC-
huja	Japanese Hops	*Humulus japonicus*	FACU	romu	Multiflora rose	*Rosa multiflora*	FACU
loja	Japanese honeysuckle	*Lonicera japonica*	FAC-	tyan	Cattail (hybrid)	*Typha angustifolia*	OBLW
lomo	Morrow's honeysuckle	*Lonicera morrowii*	NI	tygl	Hybrid cattail	*Typha x glauca*	OBLW
lota	Tartarian honeysuckle	*Lonicera tatarica*					

Wetland Condition Assessment Form

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Pennsylvania Department of Environmental Protection

For use in all wetland classifications found within Pennsylvania except those found within the banks of a watercourse.

Project #	Project Name	Date	Proposed Impact Size (acres)	AA #	AA Size (acres)	
24012215	Project Gravity	8/26/2025	0.44	3	0.44	

Name(s) of Evaluator(s)	Lat (dd)	Long (dd)	Notes:
Matt Bixler, PWS	41.522534	-75.559131	Wetland 0311250854

General Comments: Wetland 0311250854 is a PEM feature located within an unreclaimed strip mine, adjacent to mine spoil pile and receives surface water from UNT 1.

1. Wetland Zone of Influence Condition Index

	Condition Category				
	Optimal	Suboptimal	Marginal	Poor	
Wetland Zone of Influence (300 foot area around AA perimeter)	ZOI area vegetation consists of a tree stratum present (diameter at breast height (dbh) > 3 inches) with greater than or equal to 60% tree canopy cover. Areas comprised of stream channels, wetlands (regardless of classification or condition) and lacustrine resources ≥ 10 acres are scored as optimal.	**High Suboptimal:** ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory. **Low Suboptimal:** ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover with a maintained understory.	**High Marginal:** ZOI area vegetation consists of non-maintained, dense herbaceous vegetation with either a shrub layer or a tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover. **Low Marginal:** ZOI area vegetation consists of non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, areas of hay production, and ponds or open water areas (< 10 acres). If trees are present, tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover with maintained understory.	**High Poor:** ZOI area vegetation consists of lawns, mowed, and maintained areas, nurseries; no-till cropland; actively grazed pasture, sparsely vegetated non-maintained area, pervious trails, recently seeded and stabilized, or other comparable condition. **Low Poor:** ZOI area vegetation consists of impervious surfaces; mine spoil lands, denuded surfaces, row crops, active feed lots, impervious trails, or other comparable conditions.	CI = Total Score/20
SCORE	20 19 **(18)** 17 16	15 14 13 12 11	10 9 8 7 6	5 **(4)** 3 2 1	

1. Identify all applicable Condition Category areas within the wetland zone of influence using the descriptors above.
2. Estimate the % area within each condition category. Calculators are provided for you below.
3. Enter the % ZOI Area in decimal form (0.00) and Score for each category in the blocks below.

Total Score = SUM(%Areas*Scores)

	Condition Category:							
Scoring:	% ZOI Area:	80%	15%	5%	**0%**	**0%**	**0%**	**Total Score:**
	Score:	18	7	4	**0**	**0**	**0**	
	Total Sub-score:	14.40	1.05	0.20	0.00	0.00	0.00	**15.65**

0.78

Comments: ZOI consists of forest (>25 years old), two dirt access roads, 14 open water mining features, one open water wetland, and a maintained area that may be a food plot.

2. Roadbed Presence Index

	Condition Categories				
	Optimal	Suboptimal	Marginal	Poor	
a. Roadbed Presence (within 0 - 100 foot Wetland ZOI distance)	**High Optimal:** No roadbeds present within 100 feet of the AA boundary **Low Optimal:** Roadbed presence score within 0-100 feet of the AA boundary equal to or less than 2.	**High Suboptimal:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than to 2 but equal to or less than 4. **Low Suboptimal:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than to 4 but less than or equal to 6.	**High Marginal:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than to 6 but less than or equal to 8. **Low Marginal:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than to 8 but less than or equal to 10.	**High Poor:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 10 but less than or equal to 12. **Low Poor:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 12.	
SCORE	20 **(19)** 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1	

Comments: No roads are present within the 0-100' ZOI.

	Condition Categories				
	Optimal	Suboptimal	Marginal	Poor	
b. Roadbed Presence (within 100 - 300 foot Wetland ZOI distance)	**High Optimal:** No roadbeds present within 100 - 300 feet of the AA boundary **Low Optimal:** Roadbed presence score within 100 - 300 feet of the AA boundary equal to or less than 2.	**High Suboptimal:** Roadbed presence score within 100 - 300 feet of the AA boundary is greater than to 2 but equal to or less than 4. **Low Suboptimal:** Roadbed presence score within 100 - 300 feet AA boundary is greater than to 4 but less than or equal to 6.	**High Marginal:** Roadbed presence score within 100 - 300 feet of the AA boundary is greater than to 6 but less than or equal to 8. **Low Marginal:** Roadbed presence score within 100 - 300 feet of the AA boundary is greater than to 8 but less than or equal to 10.	**High Poor:** Roadbed presence score within 100 - 300 feet of the AA boundary is greater than to 10 but less than or equal to 12. **Low Poor:** Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 12.	CI = Total Score/20
SCORE	20 19 18 17 16	15 14 **(13)** 12 11	10 9 8 7 6	5 4 3 2 1	

	Condition Score	Weighting	Sub-Scores
a. Roadbed 0-100:	19	* (0.67)	13
b. Roadbed 100-300:	13	* (0.33)	4
		Total Score:	17

0.85

Comments: The ZOI includes two dirt access roads.

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Pennsylvania Department of Environmental Protection

For use in all wetland classifications found within Pennsyvlania except those found within the banks of a watercourse.

3. Vegetation Condition Index

	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor					
a. Invasive Species Presence	**High Optimal:** No invasives present.		**Low Optimal:** <5% of the total AA contains invasive species.			**High Suboptimal:** >5% but less than 10% of the total AA contains invasive species.		**Low Suboptimal:** >10% but less than 20% of the total AA contains invasive species.			**High Marginal:** >20% but less than 30% of the total AA contains invasive species.		**Low Marginal:** >30% but less than 50% of the total AA contains invasive species.			> 50% of the total AA contains invasive species.					
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	(5)	4	3	2	1	

Comments: **Microstegium vimineum dominant in the wetland.**

	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor					
b. Vegetation Stressor Presence	**High Optimal:** No vegetation stressors present within the AA boundary.		**Low Optimal:** One vegetation stressor present within the AA boundary.			**High Suboptimal:** Two vegetation stressors present within the AA boundary.		**Low Suboptimal:** Three vegetation stressors present within the AA boundary.			**High Marginal:** Four vegetation stressors present within the AA boundary.		**Low Marginal:** Five vegetation stressors present within the AA boundary.			Greater than five vegetation stressors present within the AA boundary.					**CI = Total Score/40**
SCORE	20	19	(18)	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Comments:

a. Invasive Sub-Score:	5	**Total Score**	**0.58**
b. Vegetation Sub-Score:	18	**23**	

4. Hydrologic Modification Index

	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor					
Hydrologic Modification Stressor Presence	**High Optimal:** No hydrologic stressors present within the AA boundary.		**Low Optimal:** One hydrologic stressor present within the AA boundary.			**High Suboptimal:** Two hydrologic stressors present within the AA boundary.		**Low Suboptimal:** Three hydrologic stressors present within the AA boundary.			**High Marginal:** Four hydrologic stressors present within the AA boundary.		**Low Marginal:** Five hydrologic stressors present within the AA boundary.			Greater than five hydrologic stressors present within the AA boundary.					**CI = Total Score/20**
SCORE	20	19	18	17	(16)	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	**0.80**

Comments: **Hydrology of the wetland has been altered by past mining activity**

Score:	**16**

5. Sediment Stressor Index

	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor					
Sediment Stressor Presence	**High Optimal:** No sediment stressors present within the AA boundary.		**Low Optimal:** One sediment stressor present within the AA boundary.			**High Suboptimal:** Two sediment stressors present within the AA boundary.		**Low Suboptimal:** Three sediment stressors present within the AA boundary.			**High Marginal:** Four sediment stressors present within the AA boundary.		**Low Marginal:** Five sediment stressors present within the AA boundary.			Greater than five sediment stressors present within the AA boundary.					**CI = Total Score/20**
SCORE	20	19	(18)	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	**0.90**

Comments:

Score:	**18**

6. Water Quality Stressor Index

	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor					
a. Eutro-phication Stressor Presence	No eutrophication stressors present within the AA boundary.					One eutrophication stressors present within the AA boundary.					Two eutrophication stressors present within the AA boundary.					Three eutrophication stressors present within the AA boundary.					
SCORE	20	19	(18)	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Comments:

	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor					
b. Contaminant / Toxicity Stressor Presence	No contaminant / toxicity stressors present within the AA boundary.					One contaminant / toxicitystressors present within the AA boundary.					Two contaminant / toxicity stressors present within the AA boundary.					Three contaminant / toxicity stressors present within the AA boundary.					**CI = Total Score/40**
SCORE	20	19	(18)	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Comments:

a. Eutrophication Score	18	**Total Score:**	**0.90**
b. Contaminant Score	18	**36**	

Overall Wetland Level 2 Condition Score: Sum all six of the Condition Indexes and divide by 6 to calculate the overall condition score.	**Overall Condition Index:**	**0.80**

Pennsylvania Wetland Condition Level 2 Rapid Assessment

(Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

Roadbed Worksheet

Project Name / Identifier			Date	Name(s) of Evaluator(s)
Resource Identifier	**AA #**	**Lat (dd)**	**Long (dd)**	**Notes:**

Roadbeds: Record the number of occurrences by roadbed type and distance category. Multiply the number of occurrences by the weighting factors for each roadbed type and distance category then sum the total score for each distance category. The total scores for each distance category are then compared to the condition category descriptions.

Roadbed Type	Distance	Occurrences	Weighting Factor	Score	Distance	Occurrences	Weighting Factor	Score
≥ 4 Lane Paved	0-100 ft.		4	0	100-300 ft.		4	0
2 Lane Paved	0-100 ft.		2	0	100-300 ft.		2	0
1 Lane Paved	0-100 ft.		1	0	100-300 ft.		1	0
Gravel Road	0-100 ft.		1	0	100-300 ft.		1	0
Dirt Road	0-100 ft.		2	0	100-300 ft.	2	2	4
Railroad	0-100 ft.		2	0	100-300 ft.		2	0
Other Roadbeds	0-100 ft.		1, 2 or 4		100-300 ft.		1, 2 or 4	
Total Scores:	0-100 ft.	0			100-300 ft.	4		

Road Comments:

Pennsylvania Wetland Condition Level 2 Rapid Assessment

(Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

STRESSOR WORKSHEET

2/4/2017

	Occurrence in AA		
	Y	#'s	N
Vegetation Alteration			
Mowing			x
Moderate livestock grazing (within one year)			x
Crops (annual row crops, within one year)			x
Selective tree harvesting/cutting (>50% removal, within 5 years)			x
Right-of-way clearing (mechanical or chemical)			x
Clear cutting or Brush cutting (mechanized removal of shrubs and saplings)			x
Removal of woody debris			x
Aquatic weed control (mechanical or herbicide)			x
Excessive herbivory (deer, muskrat, nutria, carp, insects, etc.)			x
Plantation (conversion from typical natural tree species, including orchards)			x
Other:			x
Total Number:			
Hydrologic Modification			
Ditching, tile draining, or other dewatering methods			x
Dike/weir/dam			x
Filling/grading			x
Dredging/excavation			x
Stormwater inputs (culvert or similar concentrated urban runoff)			x
Microtopographic alterations (e.g., plowing, forestry bedding, skidder/ATV tracks)			x
Dead or dying trees (trunks still standing) *			x
Stream alteration (channelization or incision)			x
Other:	x		
Total Number:		**1**	
Sedimentation			
Sediment deposits/plumes			x
Eroding banks/slopes			x
Active construction (earth disturbance for development)			x
Active plowing (plowing for crop planting in past year)			x
Intensive livestock grazing (in one year, ground is >50% bare)			x
Active selective forestry harvesting (within one year)			x
Active forest harvesting (within two years, includes roads, borrow areas, pads, etc.)			x
Turbidity (moderate concentration of suspended solids in the water column, obvious sediment discharges)			x
Other:			
Total Number:		**0**	
Eutrophication			
Direct discharges from agricultural feedlots, manure pits, etc.			x
Direct discharges from septic or sewage treatment plants, fish hatcheries, etc.			x
Heavy or moderately heavy formation of algal mats			x
Other:			
Total Number:		**0**	
Contaminant/Toxicity			
Severe vegetation stress (source unknown or suspected)			x
Obvious spills, discharges, plumes, odors, etc.			x
Acidic drainages (mined sites, quarries, road cuts)			x
Point discharges from adjacent industrial facilities, landfills, railroad yards, or comparable sites			x
Chemical defoliation (majority of herbaceous and woody plants affected, within one year)			x
Fish or wildlife kills or obvious disease or abnormalities observed			x
Excessive garbage/dumping			x
Other:			x
Total Number:		**0**	

**** Dead or dying trees attributed to beaver activity or emerald ash borer (or other identifiable insect infestation) should not be recorded as a stressor present. The assessor is responsible for recording observations in the comment section concerning presence of these conditions.***

Pennsylvania Wetland Condition Level 2 Rapid Assessment
(Document No. 310-2137-002)
Pennsylvania Department of Environmental Protection

Invasive Species Presence Worksheet

Are invasive species (from list) present at the site in any layer? YES NO

If listed species present, enter the percent areal coverage for each species below:

Species Code	<5%	≥ 5-20%	≥ 20 - 50%	≥ 50%	*Species Code*	<5%	≥ 5-20%	≥ 20 - 50%	≥ 50%
mivi			x						

Total % relative cover of all invasives, collectively on site: 50 %

Comments:

Common Invasives/Aggressives List

Code	Common Name	*Scientific*	Status	Code	Common Name	*Scientific*	Status
aggi2	Redtop	*Agrostis gigantea*	FACW	luhe	Water primrose	*Ludwigia hexapetala*	OBLW
algl2	European Alder	*Alnus glutinosa*	FACW	lyvu	Garden loosestrife	*Lysimachia vulgaris*	OBLW
arhi3	Carpetgrass	*Arthraxon hispidus*	FAC-	lysa2	Purple loosestrife	*Lythrum salicaria*	FACW
beth	Japanese barberry	*Berberis thunbergii*	FACW	maqu	European waterclover	*Marsilea quadrifolia*	OBLW
bevu	European barberry	*Berberis vulgaris*	FACW	mivi	Japanese stiltgrass	*Microstegium vimineum*	FAC
butom	Flowering Rush	*Butomus umbellatus*	OBLW	nami2	Water cress	*Nasturtium officinale*	OBLW
calli6	Pond water-starwort	*Callitriche stagnalis*	OBLW	pelo	Low smartweed	*Persicaria longiseta*	FACW
egde	Brazilian waterweed	*Egeria densa*	OBLW	phar	Reed canary grass	*Phalaris arundinacea*	FACW
elan	Russian olive	*Elaeagnus angustifolia*	FACU	phau7	Common Reed	*Phragmites australis*	OBLW
elum	Autumn olive	*Elaeagnus umbellata*	FACU	potr	Rough bluegrass	*Poa trivialis*	FACW
ephi	Hairy willow-herb	*Epilobium hirsutum*	FACW	pocu6	Japanese knotweed	*Polygonum (Faloia) cuspidatum*	FAC-
eppa5	Willow-herb	*Epilobium parviflorum*	FACW	pgpf	Mile-a-minute	*Polygonum perfoliatum*	FAC-
fasa	Giant knotweed	*Fallopia sachalinensis*	OBLW	puera	Kudzu-vine	*Pueraria lobata*	FAC-
gldi	Mudmats	*Glossostigma diandrum*	OBLW	pysp1	Apple/crabapple/pear	*Pyrus sp.*	FAC?
hola	Velvetgrass	*Holcus lanatus*	FAC	rhfr	Glossy Buckthorn	*Rhamnus frangula*	FAC-
huja	Japanese Hops	*Humulus japonicus*	FACU	romu	Multiflora rose	*Rosa multiflora*	FACU
loja	Japanese honeysuckle	*Lonicera japonica*	FAC-	tyan	Cattail (hybrid)	*Typha angustifolia*	OBLW
lomo	Morrow's honeysuckle	*Lonicera morrowii*	NI	tygl	Hybrid cattail	*Typha x glauca*	OBLW
lota	Tartarian honeysuckle	*Lonicera tatarica*					

Wetland Condition Assessment Form

Pennsylvania Wetland Condition Level 2 Rapid Assessment (Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

For use in all wetland classifications found within Pennsylvania except those found within the banks of a watercourse.

Project #	Project Name	Date	Proposed Impact Size (acres)	AA #	AA Size (acres)	
24012215	Project Gravity	8/26/2025	0.76	4	0376	

Name(s) of Evaluator(s)	Lat (dd)	Long (dd)	Notes:
Matt Bixler, PWS	41.521913	-75.557614	Wetland 0311251010

General Comments: Wetland 0311251010 is a POW/PSS/PEM feature located in a topographically low area bordered by a soil/rock refuse stockpile impoundment within an unreclaimed strip mine.

1. Wetland Zone of Influence Condition Index

	Condition Category			
	Optimal	Suboptimal	Marginal	Poor
Wetland Zone of Influence (300 foot area around AA perimeter)	ZOI area vegetation consists of a tree stratum present (diameter at breast height (dbh) > 3 inches) with greater than or equal to 60% tree canopy cover. Areas comprised of stream channels, wetlands (regardless of classification or condition) and lacustrine resources ≥ 10 acres are scored as optimal.	**High Suboptimal:** ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory. **Low Suboptimal:** ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover with a maintained understory.	**High Marginal:** ZOI area vegetation consists of non-maintained, dense herbaceous vegetation with either a shrub layer or a tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover. **Low Marginal:** ZOI area vegetation consists of non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, areas of hay production, and ponds or open water areas (< 10 acres). If trees are present, tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover with maintained understory.	**High Poor:** ZOI area vegetation consists of lawns, mowed, and maintained areas, nurseries; no-till cropland; actively grazed pasture, sparsely vegetated non-maintained area, pervious trails, recently seeded and stabilized, or other comparable condition. **Low Poor:** ZOI area vegetation consists of impervious surfaces; mine spoil lands, denuded surfaces, row crops, active feed lots, impervious trails, or other comparable conditions.
SCORE	20 19 **(18)** 17 16	15 14 13 12 11	10 9 8 **(7)** 6	5 **(4)** 3 2 1

CI = Total Score/20

1. Identify all applicable Condition Category areas within the wetland zone of influence using the descriptors above.
2. Estimate the % area within each condition category. Calculators are provided for you below.
3. Enter the % ZOI Area in decimal form (0.00) and Score for each category in the blocks below.

Total Score = SUM(%Areas*Scores)

	Condition Category:							
Scoring:	% ZOI Area:	91%	5%	4%	0%	0%	0%	Total Score:
	Score:	18	4	7	0	0	0	
	Total Sub-score:	16.38	0.20	0.28	0.00	0.00	0.00	16.86

0.84

Comments: ZOI consists of forest (<25 years old), two dirt access roads, and and four open water features related to past mining activitiy.

2. Roadbed Presence Index

	Condition Categories			
	Optimal	Suboptimal	Marginal	Poor
a. Roadbed Presence (within 0 - 100 foot Wetland ZOI distance)	**High Optimal:** No roadbeds present within 100 feet of the AA boundary **Low Optimal:** Roadbed presence score within 0-100 feet of the AA boundary equal to or less than 2.	**High Suboptimal:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than to 2 but equal to or less than 4. **Low Suboptimal:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than to 4 but less than or equal to 6.	**High Marginal:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than to 6 but less than or equal to 8. **Low Marginal:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than to 8 but less than or equal to 10.	**High Poor:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 10 but less than or equal to 12. **Low Poor:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 12.
SCORE	20 19 18 17 16	15 14 **(13)** 12 11	10 9 8 7 6	5 4 3 2 1

Comments: Two dirt access roads are present within the 0-110' ZOI.

	Condition Categories			
	Optimal	Suboptimal	Marginal	Poor
b. Roadbed Presence (within 100 - 300 foot Wetland ZOI distance)	**High Optimal:** No roadbeds present within 100 - 300 feet of the AA boundary **Low Optimal:** Roadbed presence score within 100 - 300 feet of the AA boundary equal to or less than 2.	**High Suboptimal:** Roadbed presence score within 100 - 300 feet of the AA boundary is greater than to 2 but equal to or less than 4. **Low Suboptimal:** Roadbed presence score within 100 - 300 feet AA boundary is greater than to 4 but less than or equal to 6.	**High Marginal:** Roadbed presence score within 100 - 300 feet of the AA boundary is greater than to 6 but less than or equal to 8. **Low Marginal:** Roadbed presence score within 100 - 300 feet of the AA boundary is greater than to 8 but less than or equal to 10.	**High Poor:** Roadbed presence score within 100 - 300 feet of the AA boundary is greater than to 10 but less than or equal to 12. **Low Poor:** Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 12.
SCORE	20 19 18 17 16	15 14 **(13)** 12 11	10 9 8 7 6	5 4 3 2 1

CI = Total Score/20

	Condition Score	Weighting	Sub-Scores
a. Roadbed 0-100:	13	* (0.67)	9
b. Roadbed 100-300:	13	* (0.33)	4
		Total Score:	13

0.65

Comments: Two dirt access roads are present within the 0-110' ZOI.

Wetland Condition Assessment Form

Pennsylvania Wetland Condition Level 2 Rapid Assessment (Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

For use in all wetland classifications found within Pennsyvlania except those found within the banks of a watercourse.

3. Vegetation Condition Index

	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor					
a. Invasive Species Presence	**High Optimal:** No invasives present.		**Low Optimal:** <5% of the total AA contains invasive species.			**High Suboptimal:** >5% but less than 10% of the total AA contains invasive species.		**Low Suboptimal:** >10% but less than 20% of the total AA contains invasive species.			**High Marginal:** >20% but less than 30% of the total AA contains invasive species.		**Low Marginal:** >30% but less than 50% of the total AA contains invasive species.			> 50% of the total AA contains invasive species.				
SCORE	20	19	18	17	16	15	14	13	12	11	10	**9**	8	7	6	5	4	3	2	1	

Comments: **Phalaris arundinacea is dominant in the wetland.**

	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor					
b. Vegetation Stressor Presence	**High Optimal:** No vegetation stressors present within the AA boundary.		**Low Optimal:** One vegetation stressor present within the AA boundary.			**High Suboptimal:** Two vegetation stressors present within the AA boundary.		**Low Suboptimal:** Three vegetation stressors present within the AA boundary.			**High Marginal:** Four vegetation stressors present within the AA boundary.		**Low Marginal:** Five vegetation stressors present within the AA boundary.			Greater than five vegetation stressors present within the AA boundary.				
SCORE	20	**19**	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Comments:

a. Invasive Sub-Score:	9	**Total Score**
b. Vegetation Sub-Score:	19	**28**

CI = Total Score/40: **0.70**

4. Hydrologic Modification Index

	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor					
Hydrologic Modification Stressor Presence	**High Optimal:** No hydrologic stressors present within the AA boundary.		**Low Optimal:** One hydrologic stressor present within the AA boundary.			**High Suboptimal:** Two hydrologic stressors present within the AA boundary.		**Low Suboptimal:** Three hydrologic stressors present within the AA boundary.			**High Marginal:** Four hydrologic stressors present within the AA boundary.		**Low Marginal:** Five hydrologic stressors present within the AA boundary.			Greater than five hydrologic stressors present within the AA boundary.				
SCORE	20	19	18	17	**16**	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Comments: **Hydrology of the wetland has been altered by past mining activity**

Score:	**16**

CI = Total Score/20: **0.80**

5. Sediment Stressor Index

	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor					
Sediment Stressor Presence	**High Optimal:** No sediment stressors present within the AA boundary.		**Low Optimal:** One sediment stressor present within the AA boundary.			**High Suboptimal:** Two sediment stressors present within the AA boundary.		**Low Suboptimal:** Three sediment stressors present within the AA boundary.			**High Marginal:** Four sediment stressors present within the AA boundary.		**Low Marginal:** Five sediment stressors present within the AA boundary.			Greater than five sediment stressors present within the AA boundary.				
SCORE	20	**19**	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Comments:

Score:	**19**

CI = Total Score/20: **0.95**

6. Water Quality Stressor Index

	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor					
a. Eutro-phication Stressor Presence	No eutrophication stressors present within the AA boundary.					One eutrophication stressors present within the AA boundary.					Two eutrophication stressors present within the AA boundary.					Three eutrophication stressors present within the AA boundary.					
SCORE	20	19	**18**	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Comments:

	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor					
b. Contaminant / Toxicity Stressor Presence	No contaminant / toxicity stressors present within the AA boundary.					One contaminant / toxicitystressors present within the AA boundary.					Two contaminant / toxicity stressors present within the AA boundary.					Three contaminant / toxicity stressors present within the AA boundary.					
SCORE	20	19	**18**	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Comments:

a. Eutrophication Score	18	**Total Score:**
b. Contaminant Score	18	**36**

CI = Total Score/40: **0.90**

Overall Wetland Level 2 Condition Score: Sum all six of the Condition Indexes and divide by 6 to calculate the overall condition score.

Overall Condition Index: **0.81**

Pennsylvania Wetland Condition Level 2 Rapid Assessment

(Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

Roadbed Worksheet

Project Name / Identifier			Date	Name(s) of Evaluator(s)
Resource Identifier	**AA #**	**Lat (dd)**	**Long (dd)**	**Notes:**

Roadbeds: Record the number of occurrences by roadbed type and distance category. Multiply the number of occurrences by the weighting factors for each roadbed type and distance category then sum the total score for each distance category. The total scores for each distance category are then compared to the condition category descriptions.

Roadbed Type	Distance	Occurrences	Weighting Factor	Score	Distance	Occurrences	Weighting Factor	Score
≥ 4 Lane Paved	0-100 ft.		4	0	100-300 ft.		4	0
2 Lane Paved	0-100 ft.		2	0	100-300 ft.		2	0
1 Lane Paved	0-100 ft.		1	0	100-300 ft.		1	0
Gravel Road	0-100 ft.		1	0	100-300 ft.		1	0
Dirt Road	0-100 ft.	2	2	4	100-300 ft.	2	2	4
Railroad	0-100 ft.		2	0	100-300 ft.		2	0
Other Roadbeds	0-100 ft.		1, 2 or 4		100-300 ft.		1, 2 or 4	
Total Scores:	0-100 ft.	4			100-300 ft.	4		

Road Comments:

Pennsylvania Wetland Condition Level 2 Rapid Assessment

(Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

STRESSOR WORKSHEET

2/4/2017

	Occurrence in AA		
	Y	#'s	N
Vegetation Alteration			
Mowing			x
Moderate livestock grazing (within one year)			x
Crops (annual row crops, within one year)			x
Selective tree harvesting/cutting (>50% removal, within 5 years)			x
Right-of-way clearing (mechanical or chemical)			x
Clear cutting or Brush cutting (mechanized removal of shrubs and saplings)			x
Removal of woody debris			x
Aquatic weed control (mechanical or herbicide)			x
Excessive herbivory (deer, muskrat, nutria, carp, insects, etc.)			x
Plantation (conversion from typical natural tree species, including orchards)			x
Other:			
Total Number:	**0**		
Hydrologic Modification			
Ditching, tile draining, or other dewatering methods			x
Dike/weir/dam			x
Filling/grading			x
Dredging/excavation			x
Stormwater inputs (culvert or similar concentrated urban runoff)			x
Microtopographic alterations (e.g., plowing, forestry bedding, skidder/ATV tracks)			x
Dead or dying trees (trunks still standing) *			x
Stream alteration (channelization or incision)			x
Other:	x		
Total Number:	**1**		
Sedimentation			
Sediment deposits/plumes			x
Eroding banks/slopes			x
Active construction (earth disturbance for development)			x
Active plowing (plowing for crop planting in past year)			x
Intensive livestock grazing (in one year, ground is >50% bare)			x
Active selective forestry harvesting (within one year)			x
Active forest harvesting (within two years, includes roads, borrow areas, pads, etc.)			x
Turbidity (moderate concentration of suspended solids in the water column, obvious sediment discharges)			x
Other:			
Total Number:	**0**		
Eutrophication			
Direct discharges from agricultural feedlots, manure pits, etc.			x
Direct discharges from septic or sewage treatment plants, fish hatcheries, etc.			x
Heavy or moderately heavy formation of algal mats			x
Other:			
Total Number:	**0**		
Contaminant/Toxicity			
Severe vegetation stress (source unknown or suspected)			x
Obvious spills, discharges, plumes, odors, etc.			x
Acidic drainages (mined sites, quarries, road cuts)			x
Point discharges from adjacent industrial facilities, landfills, railroad yards, or comparable sites			x
Chemical defoliation (majority of herbaceous and woody plants affected, within one year)			x
Fish or wildlife kills or obvious disease or abnormalities observed			x
Excessive garbage/dumping			x
Other:			
Total Number:	**0**		

**** Dead or dying trees attributed to beaver activity or emerald ash borer (or other identifiable insect infestation) should not be recorded as a stressor present. The assessor is responsible for recording observations in the comment section concerning presence of these conditions.***

Pennsylvania Wetland Condition Level 2 Rapid Assessment
(Document No. 310-2137-002)
Pennsylvania Department of Environmental Protection

Invasive Species Presence Worksheet

Are invasive species (from list) present at the site in any layer? YES NO

If listed species present, enter the percent areal coverage for each species below:

Species Code	<5%	≥ 5-20%	≥ 20 - 50%	≥ 50%	*Species Code*	<5%	≥ 5-20%	≥ 20 - 50%	≥ 50%
phar			x						

Total % relative cover of all invasives, collectively on site: 25 %

Comments:

Common Invasives/Aggressives List

Code	Common Name	*Scientific*	Status	Code	Common Name	*Scientific*	Status
aggi2	Redtop	*Agrostis gigantea*	FACW	luhe	Water primrose	*Ludwigia hexapetala*	OBLW
algl2	European Alder	*Alnus glutinosa*	FACW	lyvu	Garden loosestrife	*Lysimachia vulgaris*	OBLW
arhi3	Carpetgrass	*Arthraxon hispidus*	FAC-	lysa2	Purple loosestrife	*Lythrum salicaria*	FACW
beth	Japanese barberry	*Berberis thunbergii*	FACW	maqu	European waterclover	*Marsilea quadrifolia*	OBLW
bevu	European barberry	*Berberis vulgaris*	FACW	mivi	Japanese stiltgrass	*Microstegium vimineum*	FAC
butom	Flowering Rush	*Butomus umbellatus*	OBLW	nami2	Water cress	*Nasturtium officinale*	OBLW
calli6	Pond water-starwort	*Callitriche stagnalis*	OBLW	pelo	Low smartweed	*Persicaria longiseta*	FACW
egde	Brazilian waterweed	*Egeria densa*	OBLW	phar	Reed canary grass	*Phalaris arundinacea*	FACW
elan	Russian olive	*Elaeagnus angustifolia*	FACU	phau7	Common Reed	*Phragmites australis*	OBLW
elum	Autumn olive	*Elaeagnus umbellata*	FACU	potr	Rough bluegrass	*Poa trivialis*	FACW
ephi	Hairy willow-herb	*Epilobium hirsutum*	FACW	pocu6	Japanese knotweed	*Polygonum (Faloia) cuspidatum*	FAC-
eppa5	Willow-herb	*Epilobium parviflorum*	FACW	pgpf	Mile-a-minute	*Polygonum perfoliatum*	FAC-
fasa	Giant knotweed	*Fallopia sachalinensis*	OBLW	puera	Kudzu-vine	*Pueraria lobata*	FAC-
gldi	Mudmats	*Glossostigma diandrum*	OBLW	pysp1	Apple/crabapple/pear	*Pyrus sp.*	FAC?
hola	Velvetgrass	*Holcus lanatus*	FAC	rhfr	Glossy Buckthorn	*Rhamnus frangula*	FAC-
huja	Japanese Hops	*Humulus japonicus*	FACU	romu	Multiflora rose	*Rosa multiflora*	FACU
loja	Japanese honeysuckle	*Lonicera japonica*	FAC-	tyan	Cattail (hybrid)	*Typha angustifolia*	OBLW
lomo	Morrow's honeysuckle	*Lonicera morrowii*	NI	tygl	Hybrid cattail	*Typha x glauca*	OBLW
lota	Tartarian honeysuckle	*Lonicera tatarica*					

Wetland Condition Assessment Form

Pennsylvania Wetland Condition Level 2 Rapid Assessment (Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

For use in all wetland classifications found within Pennsylvania except those found within the banks of a watercourse.

Project #	Project Name	Date	Proposed Impact Size (acres)	AA #	AA Size (acres)	
24012215	Project Gravity	8/26/2025	0.05	5	0.05	

Name(s) of Evaluator(s)	Lat (dd)	Long (dd)	Notes:
Matt Bixler, PWS	41.520858	-75.557178	Wetland 0311251110

General Comments: Wetland 0311251110 is a PSS feature, located within a small excavated low area in an unreclaimed strip mine. The wetland receives stormwater runoff from the surrounding landscape as well as groundwater from a seep.

1. Wetland Zone of Influence Condition Index

	Condition Category				
	Optimal	Suboptimal	Marginal	Poor	
Wetland Zone of Influence (300 foot area around AA perimeter)	ZOI area vegetation consists of a tree stratum present (diameter at breast height (dbh) > 3 inches) with greater than or equal to 60% tree canopy cover. Areas comprised of stream channels, wetlands (regardless of classification or condition) and lacustrine resources ≥ 10 acres are scored as optimal.	**High Suboptimal:** ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory. **Low Suboptimal:** ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover with a maintained understory.	**High Marginal:** ZOI area vegetation consists of non-maintained, dense herbaceous vegetation with either a shrub layer or a tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover. **Low Marginal:** ZOI area vegetation consists of non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, areas of hay production, and ponds or open water areas (< 10 acres). If trees are present, tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover with maintained understory.	**High Poor:** ZOI area vegetation consists of lawns, mowed, and maintained areas, nurseries; no-till cropland; actively grazed pasture, sparsely vegetated non-maintained area, pervious trails, recently seeded and stabilized, or other comparable condition. **Low Poor:** ZOI area vegetation consists of impervious surfaces; mine spoil lands, denuded surfaces, row crops, active feed lots, impervious trails, or other comparable conditions.	CI = Total Score/20
SCORE	20 19 **(18)** 17 16	15 14 13 12 11	10 9 8 **(7)** 6	5 **(4)** 3 2 1	

1. Identify all applicable Condition Category areas within the wetland zone of influence using the descriptors above.
2. Estimate the % area within each condition category. Calculators are provided for you below.
3. Enter the % ZOI Area in decimal form (0.00) and Score for each category in the blocks below.

Total Score = SUM(%Areas*Scores)

	Condition Category:							
Scoring:	% ZOI Area:	85%	10%	5%	0%	0%	0%	Total Score:
	Score:	18	7	4	0	0	0	
	Total Sub-score:	15.30	0.70	0.20	0.00	0.00	0.00	16.20

0.81

Comments: ZOI consists of forest (>25 years old), two dirt access roads, five open water mining features, and one open water wetland.

2. Roadbed Presence Index

	Condition Categories				
	Optimal	Suboptimal	Marginal	Poor	
a. Roadbed Presence (within 0 - 100 foot Wetland ZOI distance)	**High Optimal:** No roadbeds present within 100 feet of the AA boundary **Low Optimal:** Roadbed presence score within 0-100 feet of the AA boundary equal to or less than 2.	**High Suboptimal:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than to 2 but equal to or less than 4. **Low Suboptimal:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than to 4 but less than or equal to 6.	**High Marginal:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than to 6 but less than or equal to 8. **Low Marginal:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than to 8 but less than or equal to 10.	**High Poor:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 10 but less than or equal to 12. **Low Poor:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 12.	
SCORE	20 19 18 **(17)** 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1	

Comments: There is one access road located within the 0-100' ZOI

	Condition Categories				
	Optimal	Suboptimal	Marginal	Poor	
b. Roadbed Presence (within 100 - 300 foot Wetland ZOI distance)	**High Optimal:** No roadbeds present within 100 - 300 feet of the AA boundary **Low Optimal:** Roadbed presence score within 100 - 300 feet of the AA boundary equal to or less than 2.	**High Suboptimal:** Roadbed presence score within 100 - 300 feet of the AA boundary is greater than to 2 but equal to or less than 4. **Low Suboptimal:** Roadbed presence score within 100 - 300 feet AA boundary is greater than to 4 but less than or equal to 6.	**High Marginal:** Roadbed presence score within 100 - 300 feet of the AA boundary is greater than to 6 but less than or equal to 8. **Low Marginal:** Roadbed presence score within 100 - 300 feet of the AA boundary is greater than to 8 but less than or equal to 10.	**High Poor:** Roadbed presence score within 100 - 300 feet of the AA boundary is greater than to 10 but less than or equal to 12. **Low Poor:** Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 12.	CI = Total Score/20
SCORE	20 19 18 17 16	15 14 **(13)** 12 11	10 9 8 7 6	5 4 3 2 1	

	Condition Score	Weighting	Sub-Scores
a. Roadbed 0-100:	17	* (0.67)	11
b. Roadbed 100-300:	13	* (0.33)	4
		Total Score:	16

0.78

Comments: The 100'-300' ZOI includes two dirt access roads.

Wetland Condition Assessment Form

Pennsylvania Wetland Condition Level 2 Rapid Assessment (Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

For use in all wetland classifications found within Pennsyvlania except those found within the banks of a watercourse.

3. Vegetation Condition Index

	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor					
a. Invasive Species Presence	**High Optimal:** No invasives present.		**Low Optimal:** <5% of the total AA contains invasive species.			**High Suboptimal:** >5% but less than 10% of the total AA contains invasive species.		**Low Suboptimal:** >10% but less than 20% of the total AA contains invasive species.			**High Marginal:** >20% but less than 30% of the total AA contains invasive species.		**Low Marginal:** >30% but less than 50% of the total AA contains invasive species.			> 50% of the total AA contains invasive species.					
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Comments: **Microstegium vimineum is present in the wetland.**

	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor					
b. Vegetation Stressor Presence	**High Optimal:** No vegetation stressors present within the AA boundary.		**Low Optimal:** One vegetation stressor present within the AA boundary.			**High Suboptimal:** Two vegetation stressors present within the AA boundary.		**Low Suboptimal:** Three vegetation stressors present within the AA boundary.			**High Marginal:** Four vegetation stressors present within the AA boundary.		**Low Marginal:** Five vegetation stressors present within the AA boundary.			Greater than five vegetation stressors present within the AA boundary.					**CI = Total Score/40**
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Comments: **An access road through the wetland limits vegetation growth.**

a. Invasive Sub-Score:	15	**Total Score**
b. Vegetation Sub-Score:	19	**34**

0.85

4. Hydrologic Modification Index

	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor					
Hydrologic Modification Stressor Presence	**High Optimal:** No hydrologic stressors present within the AA boundary.		**Low Optimal:** One hydrologic stressor present within the AA boundary.			**High Suboptimal:** Two hydrologic stressors present within the AA boundary.		**Low Suboptimal:** Three hydrologic stressors present within the AA boundary.			**High Marginal:** Four hydrologic stressors present within the AA boundary.		**Low Marginal:** Five hydrologic stressors present within the AA boundary.			Greater than five hydrologic stressors present within the AA boundary.					**CI = Total Score/20**
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Comments: **Hydrology of the wetland has been altered by past mining activity**

Score:	**17**

0.85

5. Sediment Stressor Index

	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor					
Sediment Stressor Presence	**High Optimal:** No sediment stressors present within the AA boundary.		**Low Optimal:** One sediment stressor present within the AA boundary.			**High Suboptimal:** Two sediment stressors present within the AA boundary.		**Low Suboptimal:** Three sediment stressors present within the AA boundary.			**High Marginal:** Four sediment stressors present within the AA boundary.		**Low Marginal:** Five sediment stressors present within the AA boundary.			Greater than five sediment stressors present within the AA boundary.					**CI = Total Score/20**
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Comments:

Score:	**19**

0.95

6. Water Quality Stressor Index

	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor					
a. Eutro-phication Stressor Presence	No eutrophication stressors present within the AA boundary.					One eutrophication stressors present within the AA boundary.					Two eutrophication stressors present within the AA boundary.					Three eutrophication stressors present within the AA boundary.					
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Comments:

	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor					
b. Contaminant / Toxicity Stressor Presence	No contaminant / toxicity stressors present within the AA boundary.					One contaminant / toxicitystressors present within the AA boundary.					Two contaminant / toxicity stressors present within the AA boundary.					Three contaminant / toxicity stressors present within the AA boundary.					**CI = Total Score/40**
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Comments:

a. Eutrophication Score	18	**Total Score:**
b. Contaminant Score	18	**36**

0.90

Overall Wetland Level 2 Condition Score: Sum all six of the Condition Indexes and divide by 6 to calculate the overall condition score.

Overall Condition Index: **0.86**

Pennsylvania Wetland Condition Level 2 Rapid Assessment

(Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

Roadbed Worksheet

Project Name / Identifier			Date	Name(s) of Evaluator(s)
Resource Identifier	**AA #**	**Lat (dd)**	**Long (dd)**	**Notes:**

Roadbeds: Record the number of occurrences by roadbed type and distance category. Multiply the number of occurrences by the weighting factors for each roadbed type and distance category then sum the total score for each distance category. The total scores for each distance category are then compared to the condition category descriptions.

Roadbed Type	Distance	Occurrences	Weighting Factor	Score	Distance	Occurrences	Weighting Factor	Score
≥ 4 Lane Paved	0-100 ft.		4	0	100-300 ft.		4	0
2 Lane Paved	0-100 ft.		2	0	100-300 ft.		2	0
1 Lane Paved	0-100 ft.		1	0	100-300 ft.		1	0
Gravel Road	0-100 ft.		1	0	100-300 ft.		1	0
Dirt Road	0-100 ft.	1	2	2	100-300 ft.	1	2	2
Railroad	0-100 ft.		2	0	100-300 ft.		2	0
Other Roadbeds	0-100 ft.		1, 2 or 4		100-300 ft.		1, 2 or 4	
Total Scores:	0-100 ft.	2			100-300 ft.	2		

Road Comments:

Pennsylvania Wetland Condition Level 2 Rapid Assessment

(Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

STRESSOR WORKSHEET

2/4/2017

Occurrence in AA

	Y	#'s	N
Vegetation Alteration			
Mowing			x
Moderate livestock grazing (within one year)			x
Crops (annual row crops, within one year)			x
Selective tree harvesting/cutting (>50% removal, within 5 years)			x
Right-of-way clearing (mechanical or chemical)			x
Clear cutting or Brush cutting (mechanized removal of shrubs and saplings)			x
Removal of woody debris			x
Aquatic weed control (mechanical or herbicide)			x
Excessive herbivory (deer, muskrat, nutria, carp, insects, etc.)			x
Plantation (conversion from typical natural tree species, including orchards)			x
Other:			x
Total Number:	**0**		
Hydrologic Modification			
Ditching, tile draining, or other dewatering methods			x
Dike/weir/dam			x
Filling/grading			x
Dredging/excavation			x
Stormwater inputs (culvert or similar concentrated urban runoff)			x
Microtopographic alterations (e.g., plowing, forestry bedding, skidder/ATV tracks)			x
Dead or dying trees (trunks still standing) *			x
Stream alteration (channelization or incision)			x
Other:	x		
Total Number:	**1**		
Sedimentation			
Sediment deposits/plumes			x
Eroding banks/slopes			x
Active construction (earth disturbance for development)			x
Active plowing (plowing for crop planting in past year)			x
Intensive livestock grazing (in one year, ground is >50% bare)			x
Active selective forestry harvesting (within one year)			x
Active forest harvesting (within two years, includes roads, borrow areas, pads, etc.)			x
Turbidity (moderate concentration of suspended solids in the water column, obvious sediment discharges)			x
Other:			
Total Number:	**0**		
Eutrophication			
Direct discharges from agricultural feedlots, manure pits, etc.			x
Direct discharges from septic or sewage treatment plants, fish hatcheries, etc.			x
Heavy or moderately heavy formation of algal mats			x
Other:			
Total Number:	**0**		
Contaminant/Toxicity			
Severe vegetation stress (source unknown or suspected)			x
Obvious spills, discharges, plumes, odors, etc.			x
Acidic drainages (mined sites, quarries, road cuts)			x
Point discharges from adjacent industrial facilities, landfills, railroad yards, or comparable sites			x
Chemical defoliation (majority of herbaceous and woody plants affected, within one year)			x
Fish or wildlife kills or obvious disease or abnormalities observed			x
Excessive garbage/dumping			x
Other:			x
Total Number:	**0**		

**** Dead or dying trees attributed to beaver activity or emerald ash borer (or other identifiable insect infestation) should not be recorded as a stressor present. The assessor is responsible for recording observations in the comment section concerning presence of these conditions.***

Pennsylvania Wetland Condition Level 2 Rapid Assessment
(Document No. 310-2137-002)
Pennsylvania Department of Environmental Protection

Invasive Species Presence Worksheet

Are invasive species (from list) present at the site in any layer? YES NO

If listed species present, enter the percent areal coverage for each species below:

Species Code	<5%	≥ 5-20%	≥ 20 - 50%	≥ 50%	*Species Code*	<5%	≥ 5-20%	≥ 20 - 50%	≥ 50%
mivi		x							

Total % relative cover of all invasives, collectively on site: 5 %

Comments:

Common Invasives/Aggressives List

Code	Common Name	*Scientific*	Status	Code	Common Name	*Scientific*	Status
aggi2	Redtop	*Agrostis gigantea*	FACW	luhe	Water primrose	*Ludwigia hexapetala*	OBLW
algl2	European Alder	*Alnus glutinosa*	FACW	lyvu	Garden loosestrife	*Lysimachia vulgaris*	OBLW
arhi3	Carpetgrass	*Arthraxon hispidus*	FAC-	lysa2	Purple loosestrife	*Lythrum salicaria*	FACW
beth	Japanese barberry	*Berberis thunbergii*	FACW	maqu	European waterclover	*Marsilea quadrifolia*	OBLW
bevu	European barberry	*Berberis vulgaris*	FACW	mivi	Japanese stiltgrass	*Microstegium vimineum*	FAC
butom	Flowering Rush	*Butomus umbellatus*	OBLW	nami2	Water cress	*Nasturtium officinale*	OBLW
calli6	Pond water-starwort	*Callitriche stagnalis*	OBLW	pelo	Low smartweed	*Persicaria longiseta*	FACW
egde	Brazilian waterweed	*Egeria densa*	OBLW	phar	Reed canary grass	*Phalaris arundinacea*	FACW
elan	Russian olive	*Elaeagnus angustifolia*	FACU	phau7	Common Reed	*Phragmites australis*	OBLW
elum	Autumn olive	*Elaeagnus umbellata*	FACU	potr	Rough bluegrass	*Poa trivialis*	FACW
ephi	Hairy willow-herb	*Epilobium hirsutum*	FACW	pocu6	Japanese knotweed	*Polygonum (Faloia) cuspidatum*	FAC-
eppa5	Willow-herb	*Epilobium parviflorum*	FACW	pgpf	Mile-a-minute	*Polygonum perfoliatum*	FAC-
fasa	Giant knotweed	*Fallopia sachalinensis*	OBLW	puera	Kudzu-vine	*Pueraria lobata*	FAC-
gldi	Mudmats	*Glossostigma diandrum*	OBLW	pysp1	Apple/crabapple/pear	*Pyrus sp.*	FAC?
hola	Velvetgrass	*Holcus lanatus*	FAC	rhfr	Glossy Buckthorn	*Rhamnus frangula*	FAC-
huja	Japanese Hops	*Humulus japonicus*	FACU	romu	Multiflora rose	*Rosa multiflora*	FACU
loja	Japanese honeysuckle	*Lonicera japonica*	FAC-	tyan	Cattail (hybrid)	*Typha angustifolia*	OBLW
lomo	Morrow's honeysuckle	*Lonicera morrowii*	NI	tygl	Hybrid cattail	*Typha x glauca*	OBLW
lota	Tartarian honeysuckle	*Lonicera tatarica*					

Wetland Condition Assessment Form

Pennsylvania Wetland Condition Level 2 Rapid Assessment (Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

For use in all wetland classifications found within Pennsylvania except those found within the banks of a watercourse.

Project #	Project Name	Date	Proposed Impact Size (acres)	AA #	AA Size (acres)	
24012215	Project Gravity	8/26/2025	0.13	6	0.13	

Name(s) of Evaluator(s)	Lat (dd)	Long (dd)	Notes:
Matt Bixler, PWS	41.520961	-75.556298	Wetland 0311251144

General Comments: Wetland 0311251144 is a PSS/PFO feature located within an unreclaimed strip mine, adjacent to a soil stockpile and receives surface water runoff as well as groundwater from an upgradient seep.

1. Wetland Zone of Influence Condition Index

	Condition Category				
	Optimal	Suboptimal	Marginal	Poor	
Wetland Zone of Influence (300 foot area around AA perimeter)	ZOI area vegetation consists of a tree stratum present (diameter at breast height (dbh) > 3 inches) with greater than or equal to 60% tree canopy cover. Areas comprised of stream channels, wetlands (regardless of classification or condition) and lacustrine resources ≥ 10 acres are scored as optimal.	**High Suboptimal:** ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory. **Low Suboptimal:** ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover with a maintained understory.	**High Marginal:** ZOI area vegetation consists of non-maintained, dense herbaceous vegetation with either a shrub layer or a tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover. **Low Marginal:** ZOI area vegetation consists of non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, areas of hay production, and ponds or open water areas (< 10 acres). If trees are present, tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover with maintained understory.	**High Poor:** ZOI area vegetation consists of lawns, mowed, and maintained areas, nurseries; no-till cropland; actively grazed pasture, sparsely vegetated non-maintained area, pervious trails, recently seeded and stabilized, or other comparable condition. **Low Poor:** ZOI area vegetation consists of impervious surfaces; mine spoil lands, denuded surfaces, row crops, active feed lots, impervious trails, or other comparable conditions.	CI = Total Score/20
SCORE	20 19 **(18)** 17 16	15 14 13 12 11	10 9 8 **(7)** 6	5 **(4)** 3 2 1	

1. Identify all applicable Condition Category areas within the wetland zone of influence using the descriptors above.
2. Estimate the % area within each condition category. Calculators are provided for you below.
3. Enter the % ZOI Area in decimal form (0.00) and Score for each category in the blocks below.

Total Score = SUM(%Areas*Scores)

	Condition Category:							
Scoring:	% ZOI Area:	88%	10%	2%	**0%**	**0%**	**0%**	**Total Score:**
	Score:	18	4	7	**0**	**0**	**0**	
	Total Sub-score:	15.84	0.40	0.14	0.00	0.00	0.00	**16.38**

0.82

Comments: ZOI consists of forest (>25 years old), two dirt access roads, and an open water feature related to past mining activitiy.

2. Roadbed Presence Index

	Condition Categories				
	Optimal	Suboptimal	Marginal	Poor	
a. Roadbed Presence (within 0 - 100 foot Wetland ZOI distance)	**High Optimal:** No roadbeds present within 100 feet of the AA boundary **Low Optimal:** Roadbed presence score within 0-100 feet of the AA boundary equal to or less than 2.	**High Suboptimal:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than to 2 but equal to or less than 4. **Low Suboptimal:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than to 4 but less than or equal to 6.	**High Marginal:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than to 6 but less than or equal to 8. **Low Marginal:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than to 8 but less than or equal to 10.	**High Poor:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 10 but less than or equal to 12. **Low Poor:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 12.	
SCORE	20 19 18 **(17)** 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1	

Comments: One access road is present within the 0-100' ZOI

	Condition Categories				
	Optimal	Suboptimal	Marginal	Poor	
b. Roadbed Presence (within 100 - 300 foot Wetland ZOI distance)	**High Optimal:** No roadbeds present within 100 - 300 feet of the AA boundary **Low Optimal:** Roadbed presence score within 100 - 300 feet of the AA boundary equal to or less than 2.	**High Suboptimal:** Roadbed presence score within 100 - 300 feet of the AA boundary is greater than to 2 but equal to or less than 4. **Low Suboptimal:** Roadbed presence score within 100 - 300 feet AA boundary is greater than to 4 but less than or equal to 6.	**High Marginal:** Roadbed presence score within 100 - 300 feet of the AA boundary is greater than to 6 but less than or equal to 8. **Low Marginal:** Roadbed presence score within 100 - 300 feet of the AA boundary is greater than to 8 but less than or equal to 10.	**High Poor:** Roadbed presence score within 100 - 300 feet of the AA boundary is greater than to 10 but less than or equal to 12. **Low Poor:** Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 12.	CI = Total Score/20
SCORE	20 19 18 17 16	15 14 **(13)** 12 11	10 9 8 7 6	5 4 3 2 1	

	Condition Score	Weighting	Sub-Scores
a. Roadbed 0-100:	17	* (0.67)	11
b. Roadbed 100-300:	13	* (0.33)	4
		Total Score:	16

0.78

Comments: The 100'-300' ZOI includes two access roads.

Wetland Condition Assessment Form

Pennsylvania Wetland Condition Level 2 Rapid Assessment (Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

For use in all wetland classifications found within Pennsylvania except those found within the banks of a watercourse.

3. Vegetation Condition Index

	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor					
a. Invasive Species Presence	**High Optimal:** No invasives present.		**Low Optimal:** <5% of the total AA contains invasive species.			**High Suboptimal:** >5% but less than 10% of the total AA contains invasive species.		**Low Suboptimal:** >10% but less than 20% of the total AA contains invasive species.			**High Marginal:** >20% but less than 30% of the total AA contains invasive species.		**Low Marginal:** >30% but less than 50% of the total AA contains invasive species.			> 50% of the total AA contains invasive species.					
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Comments: **Microstegium vimineum is present in the wetland.**

	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor					
b. Vegetation Stressor Presence	**High Optimal:** No vegetation stressors present within the AA boundary.		**Low Optimal:** One vegetation stressor present within the AA boundary.			**High Suboptimal:** Two vegetation stressors present within the AA boundary.		**Low Suboptimal:** Three vegetation stressors present within the AA boundary.			**High Marginal:** Four vegetation stressors present within the AA boundary.		**Low Marginal:** Five vegetation stressors present within the AA boundary.			Greater than five vegetation stressors present within the AA boundary.					**CI = Total Score/40**
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Comments:

a. Invasive Sub-Score:	15	**Total Score**	**0.83**
b. Vegetation Sub-Score:	18	**33**	

4. Hydrologic Modification Index

	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor					
Hydrologic Modification Stressor Presence	**High Optimal:** No hydrologic stressors present within the AA boundary.		**Low Optimal:** One hydrologic stressor present within the AA boundary.			**High Suboptimal:** Two hydrologic stressors present within the AA boundary.		**Low Suboptimal:** Three hydrologic stressors present within the AA boundary.			**High Marginal:** Four hydrologic stressors present within the AA boundary.		**Low Marginal:** Five hydrologic stressors present within the AA boundary.			Greater than five hydrologic stressors present within the AA boundary.					**CI = Total Score/20**
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Comments: **Hydrology of the wetland has been altered by past mining activity**

Score:	**17**	**0.85**

5. Sediment Stressor Index

	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor					
Sediment Stressor Presence	**High Optimal:** No sediment stressors present within the AA boundary.		**Low Optimal:** One sediment stressor present within the AA boundary.			**High Suboptimal:** Two sediment stressors present within the AA boundary.		**Low Suboptimal:** Three sediment stressors present within the AA boundary.			**High Marginal:** Four sediment stressors present within the AA boundary.		**Low Marginal:** Five sediment stressors present within the AA boundary.			Greater than five sediment stressors present within the AA boundary.					**CI = Total Score/20**
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Comments: **Runoff from the adjacent parking area deposits sediment within the wetland.**

Score:	**19**	**0.95**

6. Water Quality Stressor Index

	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor					
a. Eutro-phication Stressor Presence	No eutrophication stressors present within the AA boundary.					One eutrophication stressors present within the AA boundary.					Two eutrophication stressors present within the AA boundary.					Three eutrophication stressors present within the AA boundary.					
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Comments:

	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor					
b. Contaminant / Toxicity Stressor Presence	No contaminant / toxicity stressors present within the AA boundary.					One contaminant / toxicitystressors present within the AA boundary.					Two contaminant / toxicity stressors present within the AA boundary.					Three contaminant / toxicity stressors present within the AA boundary.					**CI = Total Score/40**
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Comments:

a. Eutrophication Score	18	**Total Score:**	**0.90**
b. Contaminant Score	18	**36**	

Overall Wetland Level 2 Condition Score: Sum all six of the Condition Indexes and divide by 6 to calculate the overall condition score.	**Overall Condition Index:**	**0.85**

Pennsylvania Wetland Condition Level 2 Rapid Assessment

(Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

Roadbed Worksheet

Project Name / Identifier			Date	Name(s) of Evaluator(s)
Resource Identifier	**AA #**	**Lat (dd)**	**Long (dd)**	**Notes:**

Roadbeds: Record the number of occurrences by roadbed type and distance category. Multiply the number of occurrences by the weighting factors for each roadbed type and distance category then sum the total score for each distance category. The total scores for each distance category are then compared to the condition category descriptions.

Roadbed Type	Distance	Occurrences	Weighting Factor	Score	Distance	Occurrences	Weighting Factor	Score
≥ 4 Lane Paved	0-100 ft.		4	0	100-300 ft.		4	0
2 Lane Paved	0-100 ft.		2	0	100-300 ft.		2	0
1 Lane Paved	0-100 ft.		1	0	100-300 ft.		1	0
Gravel Road	0-100 ft.		1	0	100-300 ft.		1	0
Dirt Road	0-100 ft.	1	2	2	100-300 ft.	1	2	2
Railroad	0-100 ft.		2	0	100-300 ft.		2	0
Other Roadbeds	0-100 ft.		1, 2 or 4		100-300 ft.		1, 2 or 4	
Total Scores:	0-100 ft.	2			100-300 ft.	2		

Road Comments:

Pennsylvania Wetland Condition Level 2 Rapid Assessment

(Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

STRESSOR WORKSHEET

2/4/2017

	Occurrence in AA		
	Y	#'s	N
Vegetation Alteration			
Mowing			x
Moderate livestock grazing (within one year)			x
Crops (annual row crops, within one year)			x
Selective tree harvesting/cutting (>50% removal, within 5 years)			x
Right-of-way clearing (mechanical or chemical)			x
Clear cutting or Brush cutting (mechanized removal of shrubs and saplings)			x
Removal of woody debris			x
Aquatic weed control (mechanical or herbicide)			x
Excessive herbivory (deer, muskrat, nutria, carp, insects, etc.)			x
Plantation (conversion from typical natural tree species, including orchards)			x
Other:	x		
Total Number:	**1**		
Hydrologic Modification			
Ditching, tile draining, or other dewatering methods			x
Dike/weir/dam			x
Filling/grading			x
Dredging/excavation			x
Stormwater inputs (culvert or similar concentrated urban runoff)			x
Microtopographic alterations (e.g., plowing, forestry bedding, skidder/ATV tracks)			x
Dead or dying trees (trunks still standing) *			x
Stream alteration (channelization or incision)			x
Other:	x		
Total Number:	**1**		
Sedimentation			
Sediment deposits/plumes	x		
Eroding banks/slopes			x
Active construction (earth disturbance for development)			x
Active plowing (plowing for crop planting in past year)			x
Intensive livestock grazing (in one year, ground is >50% bare)			x
Active selective forestry harvesting (within one year)			x
Active forest harvesting (within two years, includes roads, borrow areas, pads, etc.)			x
Turbidity (moderate concentration of suspended solids in the water column, obvious sediment discharges)			x
Other:			
Total Number:	**1**		
Eutrophication			
Direct discharges from agricultural feedlots, manure pits, etc.			x
Direct discharges from septic or sewage treatment plants, fish hatcheries, etc.			x
Heavy or moderately heavy formation of algal mats			x
Other:			
Total Number:	**0**		
Contaminant/Toxicity			
Severe vegetation stress (source unknown or suspected)			x
Obvious spills, discharges, plumes, odors, etc.			x
Acidic drainages (mined sites, quarries, road cuts)			x
Point discharges from adjacent industrial facilities, landfills, railroad yards, or comparable sites			x
Chemical defoliation (majority of herbaceous and woody plants affected, within one year)			x
Fish or wildlife kills or obvious disease or abnormalities observed			x
Excessive garbage/dumping			x
Other:	x		
Total Number:	**1**		

**** Dead or dying trees attributed to beaver activity or emerald ash borer (or other identifiable insect infestation) should not be recorded as a stressor present. The assessor is responsible for recording observations in the comment section concerning presence of these conditions.***

Pennsylvania Wetland Condition Level 2 Rapid Assessment
(Document No. 310-2137-002)
Pennsylvania Department of Environmental Protection

Invasive Species Presence Worksheet

Are invasive species (from list) present at the site in any layer? YES NO

If listed species present, enter the percent areal coverage for each species below:

Species Code	<5%	≥ 5-20%	≥ 20 - 50%	≥ 50%	*Species Code*	<5%	≥ 5-20%	≥ 20 - 50%	≥ 50%
lysa2 mivi		x							

Total % relative cover of all invasives, collectively on site: 5 %

Comments:

Common Invasives/Aggressives List

Code	Common Name	*Scientific*	Status	Code	Common Name	*Scientific*	Status
aggi2	Redtop	*Agrostis gigantea*	FACW	luhe	Water primrose	*Ludwigia hexapetala*	OBLW
algl2	European Alder	*Alnus glutinosa*	FACW	lyvu	Garden loosestrife	*Lysimachia vulgaris*	OBLW
arhi3	Carpetgrass	*Arthraxon hispidus*	FAC-	lysa2	Purple loosestrife	*Lythrum salicaria*	FACW
beth	Japanese barberry	*Berberis thunbergii*	FACW	maqu	European waterclover	*Marsilea quadrifolia*	OBLW
bevu	European barberry	*Berberis vulgaris*	FACW	mivi	Japanese stiltgrass	*Microstegium vimineum*	FAC
butom	Flowering Rush	*Butomus umbellatus*	OBLW	nami2	Water cress	*Nasturtium officinale*	OBLW
calli6	Pond water-starwort	*Callitriche stagnalis*	OBLW	pelo	Low smartweed	*Persicaria longiseta*	FACW
egde	Brazilian waterweed	*Egeria densa*	OBLW	phar	Reed canary grass	*Phalaris arundinacea*	FACW
elan	Russian olive	*Elaeagnus angustifolia*	FACU	phau7	Common Reed	*Phragmites australis*	OBLW
elum	Autumn olive	*Elaeagnus umbellata*	FACU	potr	Rough bluegrass	*Poa trivialis*	FACW
ephi	Hairy willow-herb	*Epilobium hirsutum*	FACW	pocu6	Japanese knotweed	*Polygonum (Faloia) cuspidatum*	FAC-
eppa5	Willow-herb	*Epilobium parviflorum*	FACW	pgpf	Mile-a-minute	*Polygonum perfoliatum*	FAC-
fasa	Giant knotweed	*Fallopia sachalinensis*	OBLW	puera	Kudzu-vine	*Pueraria lobata*	FAC-
gldi	Mudmats	*Glossostigma diandrum*	OBLW	pysp1	Apple/crabapple/pear	*Pyrus sp.*	FAC?
hola	Velvetgrass	*Holcus lanatus*	FAC	rhfr	Glossy Buckthorn	*Rhamnus frangula*	FAC-
huja	Japanese Hops	*Humulus japonicus*	FACU	romu	Multiflora rose	*Rosa multiflora*	FACU
loja	Japanese honeysuckle	*Lonicera japonica*	FAC-	tyan	Cattail (hybrid)	*Typha angustifolia*	OBLW
lomo	Morrow's honeysuckle	*Lonicera morrowii*	NI	tygl	Hybrid cattail	*Typha x glauca*	OBLW
lota	Tartarian honeysuckle	*Lonicera tatarica*					

Wetland Condition Assessment Form

Pennsylvania Wetland Condition Level 2 Rapid Assessment (Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

For use in all wetland classifications found within Pennsylvania except those found within the banks of a watercourse.

Project #	Project Name	Date	Proposed Impact Size (acres)	AA #	AA Size (acres)	
24012215	Project Gravity	8/26/2025	0.01	1	0.01	

Name(s) of Evaluator(s)	Lat (dd)	Long (dd)	Notes:
Matt Bixler, PWS	41.522571	-75.559795	Wetland 0311251226

General Comments: Wetland 0311251226 is a PEM feature that is located on a former access road through an unreclaimed strip mine.

1. Wetland Zone of Influence Condition Index

	Condition Category					
	Optimal	Suboptimal		Marginal		Poor	
Wetland Zone of Influence (300 foot area around AA perimeter)	ZOI area vegetation consists of a tree stratum present (diameter at breast height (dbh) > 3 inches) with greater than or equal to 60% tree canopy cover. Areas comprised of stream channels, wetlands (regardless of classification or condition) and lacustrine resources ≥ 10 acres are scored as optimal.	**High Suboptimal:** ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory.	**Low Suboptimal:** ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover with a maintained understory.	**High Marginal:** ZOI area vegetation consists of non-maintained, dense herbaceous vegetation with either a shrub layer or a tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover.	**Low Marginal:** ZOI area vegetation consists of non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, areas of hay production, and ponds or open water areas (< 10 acres). If trees are present, tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover with maintained understory.	**High Poor:** ZOI area vegetation consists of lawns, mowed, and maintained areas, nurseries; no-till cropland; actively grazed pasture, sparsely vegetated non-maintained area, pervious trails, recently seeded and stabilized, or other comparable condition.	**Low Poor:** ZOI area vegetation consists of impervious surfaces; mine spoil lands, denuded surfaces, row crops, active feed lots, impervious trails, or other comparable conditions.	CI = Total Score/20
SCORE	20 19 18 **(17)** 16	15 14	13 12 11	10 9	8 7 6	5 **(4)**	3 2 1	

1. Identify all applicable Condition Category areas within the wetland zone of influence using the descriptors above.
2. Estimate the % area within each condition category. Calculators are provided for you below.
3. Enter the % ZOI Area in decimal form (0.00) and Score for each category in the blocks below.

Total Score = SUM(%Areas*Scores)

	Condition Category:							
Scoring:	% ZOI Area:	90%	5%	5%	**0%**	**0%**	**0%**	**Total Score:**
	Score:	17	7	4	**0**	**0**	**0**	
	Total Sub-score:	15.30	0.35	0.20	0.00	0.00	0.00	**15.85**

0.79

Comments: ZOI consists of forest (>20 years old), a dirt access road, and five open water features.

2. Roadbed Presence Index

	Condition Categories					
	Optimal	Suboptimal		Marginal		Poor	
a. Roadbed Presence (within 0 - 100 foot Wetland ZOI distance)	**High Optimal:** No roadbeds present within 100 feet of the AA boundary	**Low Optimal:** Roadbed presence score within 0-100 feet of the AA boundary equal to or less than 2.	**High Suboptimal:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than to 2 but equal to or less than 4.	**Low Suboptimal:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than to 4 but less than or equal to 6.	**High Marginal:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than to 6 but less than or equal to 8.	**Low Marginal:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than to 8 but less than or equal to 10.	**High Poor:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 10 but less than or equal to 12.	**Low Poor:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 12.
SCORE	20 **(19)** 18 17 16	15 14	13 12 11	10 9	8 7 6	5 4	3 2 1	

Comments: No roads are present within the 0-110' ZOI.

	Condition Categories					
	Optimal	Suboptimal		Marginal		Poor	
b. Roadbed Presence (within 100 - 300 foot Wetland ZOI distance)	**High Optimal:** No roadbeds present within 100 - 300 feet of the AA boundary	**Low Optimal:** Roadbed presence score within 100 - 300 feet of the AA boundary equal to or less than 2.	**High Suboptimal:** Roadbed presence score within 100 - 300 feet of the AA boundary is greater than to 2 but equal to or less than 4.	**Low Suboptimal:** Roadbed presence score within 100 - 300 feet AA boundary is greater than to 4 but less than or equal to 6.	**High Marginal:** Roadbed presence score within 100 - 300 feet of the AA boundary is greater than to 6 but less than or equal to 8.	**Low Marginal:** Roadbed presence score within 100 - 300 feet of the AA boundary is greater than to 8 but less than or equal to 10.	**High Poor:** Roadbed presence score within 100 - 300 feet of the AA boundary is greater than to 10 but less than or equal to 12.	**Low Poor:** Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 12.
SCORE	20 19 18 **(17)** 16	15 14	13 12 11	10 9	8 7 6	5 4	3 2 1	

	Condition Score	Weighting	Sub-Scores
a. Roadbed 0-100:	19	* (0.67)	13
b. Roadbed 100-300:	17	* (0.33)	6
		Total Score:	18

CI = Total Score/20: **0.92**

Comments: The 100'-300' ZOI includes a dirt access road.

Wetland Condition Assessment Form

Pennsylvania Wetland Condition Level 2 Rapid Assessment (Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

For use in all wetland classifications found within Pennsylvania except those found within the banks of a watercourse.

3. Vegetation Condition Index

	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor					
a. Invasive Species Presence	**High Optimal:** No invasives present.		**Low Optimal:** <5% of the total AA contains invasive species.			**High Suboptimal:** >5% but less than 10% of the total AA contains invasive species.		**Low Suboptimal:** >10% but less than 20% of the total AA contains invasive species.			**High Marginal:** >20% but less than 30% of the total AA contains invasive species.		**Low Marginal:** >30% but less than 50% of the total AA contains invasive species.			> 50% of the total AA contains invasive species.					
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	**3**	2	1	

Comments: **Microstegium vimineum is dominant in the wetland.**

	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor					
b. Vegetation Stressor Presence	**High Optimal:** No vegetation stressors present within the AA boundary.		**Low Optimal:** One vegetation stressor present within the AA boundary.			**High Suboptimal:** Two vegetation stressors present within the AA boundary.		**Low Suboptimal:** Three vegetation stressors present within the AA boundary.			**High Marginal:** Four vegetation stressors present within the AA boundary.		**Low Marginal:** Five vegetation stressors present within the AA boundary.			Greater than five vegetation stressors present within the AA boundary.					**CI = Total Score/40**
SCORE	20	**19**	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Comments:

a. Invasive Sub-Score:	3	**Total Score**
b. Vegetation Sub-Score:	19	**22**

CI = Total Score/40: **0.55**

4. Hydrologic Modification Index

	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor					
Hydrologic Modification Stressor Presence	**High Optimal:** No hydrologic stressors present within the AA boundary.		**Low Optimal:** One hydrologic stressor present within the AA boundary.			**High Suboptimal:** Two hydrologic stressors present within the AA boundary.		**Low Suboptimal:** Three hydrologic stressors present within the AA boundary.			**High Marginal:** Four hydrologic stressors present within the AA boundary.		**Low Marginal:** Five hydrologic stressors present within the AA boundary.			Greater than five hydrologic stressors present within the AA boundary.					**CI = Total Score/20**
SCORE	20	19	18	17	**16**	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Comments: **Hydrology of the wetland has been altered by past mining activity**

Score:	**16**

0.80

5. Sediment Stressor Index

	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor					
Sediment Stressor Presence	**High Optimal:** No sediment stressors present within the AA boundary.		**Low Optimal:** One sediment stressor present within the AA boundary.			**High Suboptimal:** Two sediment stressors present within the AA boundary.		**Low Suboptimal:** Three sediment stressors present within the AA boundary.			**High Marginal:** Four sediment stressors present within the AA boundary.		**Low Marginal:** Five sediment stressors present within the AA boundary.			Greater than five sediment stressors present within the AA boundary.					**CI = Total Score/20**
SCORE	20	19	**18**	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Comments:

Score:	**18**

0.90

6. Water Quality Stressor Index

	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor					
a. Eutro-phication Stressor Presence	No eutrophication stressors present within the AA boundary.					One eutrophication stressors present within the AA boundary.					Two eutrophication stressors present within the AA boundary.					Three eutrophication stressors present within the AA boundary.					
SCORE	20	19	**18**	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Comments:

	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor					
b. Contaminant / Toxicity Stressor Presence	No contaminant / toxicity stressors present within the AA boundary.					One contaminant / toxicitystressors present within the AA boundary.					Two contaminant / toxicity stressors present within the AA boundary.					Three contaminant / toxicity stressors present within the AA boundary.					**CI = Total Score/40**
SCORE	20	19	**18**	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Comments:

a. Eutrophication Score	18	**Total Score:**
b. Contaminant Score	18	**36**

0.90

Overall Wetland Level 2 Condition Score: Sum all six of the Condition Indexes and divide by 6 to calculate the overall condition score.

Overall Condition Index: **0.81**

Pennsylvania Wetland Condition Level 2 Rapid Assessment

(Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

Roadbed Worksheet

Project Name / Identifier			Date	Name(s) of Evaluator(s)
Resource Identifier	**AA #**	**Lat (dd)**	**Long (dd)**	**Notes:**

Roadbeds: Record the number of occurrences by roadbed type and distance category. Multiply the number of occurrences by the weighting factors for each roadbed type and distance category then sum the total score for each distance category. The total scores for each distance category are then compared to the condition category descriptions.

Roadbed Type	Distance	Occurrences	Weighting Factor	Score	Distance	Occurrences	Weighting Factor	Score
≥ 4 Lane Paved	0-100 ft.		4	0	100-300 ft.		4	0
2 Lane Paved	0-100 ft.		2	0	100-300 ft.		2	0
1 Lane Paved	0-100 ft.		1	0	100-300 ft.		1	0
Gravel Road	0-100 ft.		1	0	100-300 ft.		1	0
Dirt Road	0-100 ft.		2	0	100-300 ft.	1	2	2
Railroad	0-100 ft.		2	0	100-300 ft.		2	0
Other Roadbeds	0-100 ft.		1, 2 or 4		100-300 ft.		1, 2 or 4	
Total Scores:	0-100 ft.	0			100-300 ft.	2		

Road Comments:

Pennsylvania Wetland Condition Level 2 Rapid Assessment

(Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

STRESSOR WORKSHEET

2/4/2017

	Occurrence in AA		
	Y	#'s	N
Vegetation Alteration			
Mowing			x
Moderate livestock grazing (within one year)			x
Crops (annual row crops, within one year)			x
Selective tree harvesting/cutting (>50% removal, within 5 years)			x
Right-of-way clearing (mechanical or chemical)			x
Clear cutting or Brush cutting (mechanized removal of shrubs and saplings)			x
Removal of woody debris			x
Aquatic weed control (mechanical or herbicide)			x
Excessive herbivory (deer, muskrat, nutria, carp, insects, etc.)			x
Plantation (conversion from typical natural tree species, including orchards)			x
Other:			x
Total Number:	**0**		
Hydrologic Modification			
Ditching, tile draining, or other dewatering methods			x
Dike/weir/dam			x
Filling/grading			x
Dredging/excavation			x
Stormwater inputs (culvert or similar concentrated urban runoff)			x
Microtopographic alterations (e.g., plowing, forestry bedding, skidder/ATV tracks)			x
Dead or dying trees (trunks still standing) *			x
Stream alteration (channelization or incision)			x
Other:	x		
Total Number:	**1**		
Sedimentation			
Sediment deposits/plumes			x
Eroding banks/slopes			x
Active construction (earth disturbance for development)			x
Active plowing (plowing for crop planting in past year)			x
Intensive livestock grazing (in one year, ground is >50% bare)			x
Active selective forestry harvesting (within one year)			x
Active forest harvesting (within two years, includes roads, borrow areas, pads, etc.)			x
Turbidity (moderate concentration of suspended solids in the water column, obvious sediment discharges)			x
Other:			
Total Number:	**0**		
Eutrophication			
Direct discharges from agricultural feedlots, manure pits, etc.			x
Direct discharges from septic or sewage treatment plants, fish hatcheries, etc.			x
Heavy or moderately heavy formation of algal mats			x
Other:			
Total Number:	**0**		
Contaminant/Toxicity			
Severe vegetation stress (source unknown or suspected)			x
Obvious spills, discharges, plumes, odors, etc.			x
Acidic drainages (mined sites, quarries, road cuts)			x
Point discharges from adjacent industrial facilities, landfills, railroad yards, or comparable sites			x
Chemical defoliation (majority of herbaceous and woody plants affected, within one year)			x
Fish or wildlife kills or obvious disease or abnormalities observed			x
Excessive garbage/dumping			x
Other:			
Total Number:	**0**		

**** Dead or dying trees attributed to beaver activity or emerald ash borer (or other identifiable insect infestation) should not be recorded as a stressor present. The assessor is responsible for recording observations in the comment section concerning presence of these conditions.***

Pennsylvania Wetland Condition Level 2 Rapid Assessment
(Document No. 310-2137-002)
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Invasive Species Presence Worksheet

Are invasive species (from list) present at the site in any layer? YES NO

If listed species present, enter the percent areal coverage for each species below:

Species Code	<5%	≥ 5-20%	≥ 20 - 50%	≥ 50%	*Species Code*	<5%	≥ 5-20%	≥ 20 - 50%	≥ 50%
mivi				x					

Total % relative cover of all invasives, collectively on site: 70 %

Comments:

Common Invasives/Aggressives List

Code	Common Name	*Scientific*	Status	Code	Common Name	*Scientific*	Status
aggi2	Redtop	*Agrostis gigantea*	FACW	luhe	Water primrose	*Ludwigia hexapetala*	OBLW
algl2	European Alder	*Alnus glutinosa*	FACW	lyvu	Garden loosestrife	*Lysimachia vulgaris*	OBLW
arhi3	Carpetgrass	*Arthraxon hispidus*	FAC-	lysa2	Purple loosestrife	*Lythrum salicaria*	FACW
beth	Japanese barberry	*Berberis thunbergii*	FACW	maqu	European waterclover	*Marsilea quadrifolia*	OBLW
bevu	European barberry	*Berberis vulgaris*	FACW	mivi	Japanese stiltgrass	*Microstegium vimineum*	FAC
butom	Flowering Rush	*Butomus umbellatus*	OBLW	nami2	Water cress	*Nasturtium officinale*	OBLW
calli6	Pond water-starwort	*Callitriche stagnalis*	OBLW	pelo	Low smartweed	*Persicaria longiseta*	FACW
egde	Brazilian waterweed	*Egeria densa*	OBLW	phar	Reed canary grass	*Phalaris arundinacea*	FACW
elan	Russian olive	*Elaeagnus angustifolia*	FACU	phau7	Common Reed	*Phragmites australis*	OBLW
elum	Autumn olive	*Elaeagnus umbellata*	FACU	potr	Rough bluegrass	*Poa trivialis*	FACW
ephi	Hairy willow-herb	*Epilobium hirsutum*	FACW	pocu6	Japanese knotweed	*Polygonum (Faloia) cuspidatum*	FAC-
eppa5	Willow-herb	*Epilobium parviflorum*	FACW	pgpf	Mile-a-minute	*Polygonum perfoliatum*	FAC-
fasa	Giant knotweed	*Fallopia sachalinensis*	OBLW	puera	Kudzu-vine	*Pueraria lobata*	FAC-
gldi	Mudmats	*Glossostigma diandrum*	OBLW	pysp1	Apple/crabapple/pear	*Pyrus sp.*	FAC?
hola	Velvetgrass	*Holcus lanatus*	FAC	rhfr	Glossy Buckthorn	*Rhamnus frangula*	FAC-
huja	Japanese Hops	*Humulus japonicus*	FACU	romu	Multiflora rose	*Rosa multiflora*	FACU
loja	Japanese honeysuckle	*Lonicera japonica*	FAC-	tyan	Cattail (hybrid)	*Typha angustifolia*	OBLW
lomo	Morrow's honeysuckle	*Lonicera morrowii*	NI	tygl	Hybrid cattail	*Typha x glauca*	OBLW
lota	Tartarian honeysuckle	*Lonicera tatarica*					

Wetland Condition Assessment Form

Pennsylvania Wetland Condition Level 2 Rapid Assessment (Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

For use in all wetland classifications found within Pennsylvania except those found within the banks of a watercourse.

Project #	Project Name	Date	Proposed Impact Size (acres)	AA #	AA Size (acres)	
24012215	Project Gravity	8/26/2025	0.73	7	0.73	

Name(s) of Evaluator(s)	Lat (dd)	Long (dd)	Notes:
Matt Bixler, PWS			Open Bodies of Water 1-31

General Comments: 31 Open Bodies of Water were delineated throughout the project area of investigation. The features appear to be man-made features resulting from the past mining in the area. Some are in the bottom of strip mined pits while others appear to be smaller excavations such as test pits and the remaining appear to be subsidence features, potentially related to past deep mining at the site.

1. Wetland Zone of Influence Condition Index

	Condition Category				
	Optimal	Suboptimal	Marginal	Poor	
Wetland Zone of Influence (300 foot area around AA perimeter)	ZOI area vegetation consists of a tree stratum present (diameter at breast height (dbh) > 3 inches) with greater than or equal to 60% tree canopy cover. Areas comprised of stream channels, wetlands (regardless of classification or condition) and lacustrine resources ≥ 10 acres are scored as optimal.	**High Suboptimal:** ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory. **Low Suboptimal:** ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover with a maintained understory.	**High Marginal:** ZOI area vegetation consists of non-maintained, dense herbaceous vegetation with either a shrub layer or a tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover. **Low Marginal:** ZOI area vegetation consists of non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, areas of hay production, and ponds or open water areas (< 10 acres). If trees are present, tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover with maintained understory.	**High Poor:** ZOI area vegetation consists of lawns, mowed, and maintained areas, nurseries; no-till cropland; actively grazed pasture, sparsely vegetated non-maintained area, pervious trails, recently seeded and stabilized, or other comparable condition. **Low Poor:** ZOI area vegetation consists of impervious surfaces; mine spoil lands, denuded surfaces, row crops, active feed lots, impervious trails, or other comparable conditions.	CI = Total Score/20
SCORE	20 19 **18** 17 16	15 14 13 12 11	10 9 8 7 6	5 **4** 3 **2** 1	

1. Identify all applicable Condition Category areas within the wetland zone of influence using the descriptors above.
2. Estimate the % area within each condition category. Calculators are provided for you below.
3. Enter the % ZOI Area in decimal form (0.00) and Score for each category in the blocks below.

Total Score = SUM(%Areas*Scores)

	Condition Category:							
Scoring:	% ZOI Area:	85%	10%	5%	**0%**	**0%**	**0%**	**Total Score:**
	Score:	18	4	2	**0**	**0**	**0**	
	Total Sub-score:	15.30	0.40	0.10	0.00	0.00	0.00	**15.80**

0.79

Comments: The majority of the ZOI consists of forest (>25 years old). Two of the features are within 300' of Eynon Jermyn Road and one is within 300' of a mobile home community. Several dirt acc

2. Roadbed Presence Index

	Condition Categories				
	Optimal	Suboptimal	Marginal	Poor	
a. Roadbed Presence (within 0 - 100 foot Wetland ZOI distance)	**High Optimal:** No roadbeds present within 100 feet of the AA boundary **Low Optimal:** Roadbed presence score within 0-100 feet of the AA boundary equal to or less than 2.	**High Suboptimal:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than to 2 but equal to or less than 4. **Low Suboptimal:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than to 4 but less than or equal to 6.	**High Marginal:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than to 6 but less than or equal to 8. **Low Marginal:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than to 8 but less than or equal to 10.	**High Poor:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 10 but less than or equal to 12. **Low Poor:** Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 12.	
SCORE	20 19 18 **17** 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1	

Comments: The majority of the features have one access road within the 0-100' ZOI

	Condition Categories				
	Optimal	Suboptimal	Marginal	Poor	
b. Roadbed Presence (within 100 - 300 foot Wetland ZOI distance)	**High Optimal:** No roadbeds present within 100 - 300 feet of the AA boundary **Low Optimal:** Roadbed presence score within 100 - 300 feet of the AA boundary equal to or less than 2.	**High Suboptimal:** Roadbed presence score within 100 - 300 feet of the AA boundary is greater than to 2 but equal to or less than 4. **Low Suboptimal:** Roadbed presence score within 100 - 300 feet AA boundary is greater than to 4 but less than or equal to 6.	**High Marginal:** Roadbed presence score within 100 - 300 feet of the AA boundary is greater than to 6 but less than or equal to 8. **Low Marginal:** Roadbed presence score within 100 - 300 feet of the AA boundary is greater than to 8 but less than or equal to 10.	**High Poor:** Roadbed presence score within 100 - 300 feet of the AA boundary is greater than to 10 but less than or equal to 12. **Low Poor:** Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 12.	CI = Total Score/20
SCORE	20 19 18 17 16	15 14 **13** 12 11	10 9 8 7 6	5 4 3 2 1	

	Condition Score	Weighting	Sub-Scores
a. Roadbed 0-100:	17	* (0.67)	11
b. Roadbed 100-300:	13	* (0.33)	4
		Total Score:	16

0.78

Comments: The majority of the features have two access roads within the 100'-300' ZOI

Wetland Condition Assessment Form

Pennsylvania Wetland Condition Level 2 Rapid Assessment (Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

For use in all wetland classifications found within Pennsyvlania except those found within the banks of a watercourse.

3. Vegetation Condition Index

	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor				
a. Invasive Species Presence	**High Optimal:** No invasives present.		**Low Optimal:** <5% of the total AA contains invasive species.			**High Suboptimal:** >5% but less than 10% of the total AA contains invasive species.		**Low Suboptimal:** >10% but less than 20% of the total AA contains invasive species.			**High Marginal:** >20% but less than 30% of the total AA contains invasive species.		**Low Marginal:** >30% but less than 50% of the total AA contains invasive species.			> 50% of the total AA contains invasive species.				
SCORE	20	19	**18**	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Comments: The features are unvegetated open water features

	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor				
b. Vegetation Stressor Presence	**High Optimal:** No vegetation stressors present within the AA boundary.		**Low Optimal:** One vegetation stressor present within the AA boundary.			**High Suboptimal:** Two vegetation stressors present within the AA boundary.		**Low Suboptimal:** Three vegetation stressors present within the AA boundary.			**High Marginal:** Four vegetation stressors present within the AA boundary.		**Low Marginal:** Five vegetation stressors present within the AA boundary.			Greater than five vegetation stressors present within the AA boundary.				
SCORE	20	19	18	17	**16**	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Comments: The features are open water features that are related to past mining activies. No veg

a. Invasive Sub-Score:	18	**Total Score**
b. Vegetation Sub-Score:	16	**34**

CI = Total Score/40: **0.85**

4. Hydrologic Modification Index

	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor				
Hydrologic Modification Stressor Presence	**High Optimal:** No hydrologic stressors present within the AA boundary.		**Low Optimal:** One hydrologic stressor present within the AA boundary.			**High Suboptimal:** Two hydrologic stressors present within the AA boundary.		**Low Suboptimal:** Three hydrologic stressors present within the AA boundary.			**High Marginal:** Four hydrologic stressors present within the AA boundary.		**Low Marginal:** Five hydrologic stressors present within the AA boundary.			Greater than five hydrologic stressors present within the AA boundary.				
SCORE	20	19	18	**17**	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Comments: Hydrology of the wetland has been altered by past mining activity

Score:	**17**

CI = Total Score/20: **0.85**

5. Sediment Stressor Index

	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor				
Sediment Stressor Presence	**High Optimal:** No sediment stressors present within the AA boundary.		**Low Optimal:** One sediment stressor present within the AA boundary.			**High Suboptimal:** Two sediment stressors present within the AA boundary.		**Low Suboptimal:** Three sediment stressors present within the AA boundary.			**High Marginal:** Four sediment stressors present within the AA boundary.		**Low Marginal:** Five sediment stressors present within the AA boundary.			Greater than five sediment stressors present within the AA boundary.				
SCORE	20	19	**18**	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Comments:

Score:	**18**

CI = Total Score/20: **0.90**

6. Water Quality Stressor Index

	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor				
a. Eutro-phication Stressor Presence	No eutrophication stressors present within the AA boundary.					One eutrophication stressors present within the AA boundary.					Two eutrophication stressors present within the AA boundary.					Three eutrophication stressors present within the AA boundary.				
SCORE	20	19	**18**	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Comments:

	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor				
b. Contaminant / Toxicity Stressor Presence	No contaminant / toxicity stressors present within the AA boundary.					One contaminant / toxicitystressors present within the AA boundary.					Two contaminant / toxicity stressors present within the AA boundary.					Three contaminant / toxicity stressors present within the AA boundary.				
SCORE	20	19	**18**	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Comments:

a. Eutrophication Score	18	**Total Score:**
b. Contaminant Score	18	**36**

CI = Total Score/40: **0.90**

Overall Wetland Level 2 Condition Score: Sum all six of the Condition Indexes and divide by 6 to calculate the overall condition score.	**Overall Condition Index:** **0.85**

Pennsylvania Wetland Condition Level 2 Rapid Assessment

(Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

Roadbed Worksheet

Project Name / Identifier			Date	Name(s) of Evaluator(s)
Resource Identifier	**AA #**	**Lat (dd)**	**Long (dd)**	**Notes:**

Roadbeds: Record the number of occurrences by roadbed type and distance category. Multiply the number of occurrences by the weighting factors for each roadbed type and distance category then sum the total score for each distance category. The total scores for each distance category are then compared to the condition category descriptions.

Roadbed Type	Distance	Occurrences	Weighting Factor	Score	Distance	Occurrences	Weighting Factor	Score
≥ 4 Lane Paved	0-100 ft.		4	0	100-300 ft.		4	0
2 Lane Paved	0-100 ft.		2	0	100-300 ft.		2	0
1 Lane Paved	0-100 ft.		1	0	100-300 ft.		1	0
Gravel Road	0-100 ft.		1	0	100-300 ft.		1	0
Dirt Road	0-100 ft.	1	2	2	100-300 ft.	1	2	2
Railroad	0-100 ft.		2	0	100-300 ft.		2	0
Other Roadbeds	0-100 ft.		1, 2 or 4		100-300 ft.		1, 2 or 4	
Total Scores:	0-100 ft.	2			100-300 ft.	2		

Road Comments:

Pennsylvania Wetland Condition Level 2 Rapid Assessment

(Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

STRESSOR WORKSHEET

2/4/2017

Occurrence in AA

	Y	#'s	N
Vegetation Alteration			
Mowing			x
Moderate livestock grazing (within one year)			x
Crops (annual row crops, within one year)			x
Selective tree harvesting/cutting (>50% removal, within 5 years)			x
Right-of-way clearing (mechanical or chemical)			x
Clear cutting or Brush cutting (mechanized removal of shrubs and saplings)			x
Removal of woody debris			x
Aquatic weed control (mechanical or herbicide)			x
Excessive herbivory (deer, muskrat, nutria, carp, insects, etc.)			x
Plantation (conversion from typical natural tree species, including orchards)			x
Other:	x		
Total Number:	**1**		
Hydrologic Modification			
Ditching, tile draining, or other dewatering methods			x
Dike/weir/dam			x
Filling/grading			x
Dredging/excavation			x
Stormwater inputs (culvert or similar concentrated urban runoff)			x
Microtopographic alterations (e.g., plowing, forestry bedding, skidder/ATV tracks)			x
Dead or dying trees (trunks still standing) *			x
Stream alteration (channelization or incision)			x
Other:	x		
Total Number:	**1**		
Sedimentation			
Sediment deposits/plumes			x
Eroding banks/slopes			x
Active construction (earth disturbance for development)			x
Active plowing (plowing for crop planting in past year)			x
Intensive livestock grazing (in one year, ground is >50% bare)			x
Active selective forestry harvesting (within one year)			x
Active forest harvesting (within two years, includes roads, borrow areas, pads, etc.)			x
Turbidity (moderate concentration of suspended solids in the water column, obvious sediment discharges)			x
Other:			x
Total Number:	**0**		
Eutrophication			
Direct discharges from agricultural feedlots, manure pits, etc.			x
Direct discharges from septic or sewage treatment plants, fish hatcheries, etc.			x
Heavy or moderately heavy formation of algal mats			x
Other:			
Total Number:	**0**		
Contaminant/Toxicity			
Severe vegetation stress (source unknown or suspected)			x
Obvious spills, discharges, plumes, odors, etc.			x
Acidic drainages (mined sites, quarries, road cuts)			x
Point discharges from adjacent industrial facilities, landfills, railroad yards, or comparable sites			x
Chemical defoliation (majority of herbaceous and woody plants affected, within one year)			x
Fish or wildlife kills or obvious disease or abnormalities observed			x
Excessive garbage/dumping			x
Other:			x
Total Number:	**0**		

**** Dead or dying trees attributed to beaver activity or emerald ash borer (or other identifiable insect infestation) should not be recorded as a stressor present. The assessor is responsible for recording observations in the comment section concerning presence of these conditions.***

Pennsylvania Wetland Condition Level 2 Rapid Assessment
(Document No. 310-2137-002)
Pennsylvania Department of Environmental Protection

Invasive Species Presence Worksheet

Are invasive species (from list) present at the site in any layer? YES NO

If listed species present, enter the percent areal coverage for each species below:

Species Code	<5%	≥ 5-20%	≥ 20 - 50%	≥ 50%	*Species Code*	<5%	≥ 5-20%	≥ 20 - 50%	≥ 50%

Total % relative cover of all invasives, collectively on site: 0 %

Comments:

Common Invasives/Aggressives List

Code	Common Name	*Scientific*	Status	Code	Common Name	*Scientific*	Status
aggi2	Redtop	*Agrostis gigantea*	FACW	luhe	Water primrose	*Ludwigia hexapetala*	OBLW
algl2	European Alder	*Alnus glutinosa*	FACW	lyvu	Garden loosestrife	*Lysimachia vulgaris*	OBLW
arhi3	Carpetgrass	*Arthraxon hispidus*	FAC-	lysa2	Purple loosestrife	*Lythrum salicaria*	FACW
beth	Japanese barberry	*Berberis thunbergii*	FACW	maqu	European waterclover	*Marsilea quadrifolia*	OBLW
bevu	European barberry	*Berberis vulgaris*	FACW	mivi	Japanese stiltgrass	*Microstegium vimineum*	FAC
butom	Flowering Rush	*Butomus umbellatus*	OBLW	nami2	Water cress	*Nasturtium officinale*	OBLW
calli6	Pond water-starwort	*Callitriche stagnalis*	OBLW	pelo	Low smartweed	*Persicaria longiseta*	FACW
egde	Brazilian waterweed	*Egeria densa*	OBLW	phar	Reed canary grass	*Phalaris arundinacea*	FACW
elan	Russian olive	*Elaeagnus angustifolia*	FACU	phau7	Common Reed	*Phragmites australis*	OBLW
elum	Autumn olive	*Elaeagnus umbellata*	FACU	potr	Rough bluegrass	*Poa trivialis*	FACW
ephi	Hairy willow-herb	*Epilobium hirsutum*	FACW	pocu6	Japanese knotweed	*Polygonum (Faloia) cuspidatum*	FAC-
eppa5	Willow-herb	*Epilobium parviflorum*	FACW	pgpf	Mile-a-minute	*Polygonum perfoliatum*	FAC-
fasa	Giant knotweed	*Fallopia sachalinensis*	OBLW	puera	Kudzu-vine	*Pueraria lobata*	FAC-
gldi	Mudmats	*Glossostigma diandrum*	OBLW	pysp1	Apple/crabapple/pear	*Pyrus sp.*	FAC?
hola	Velvetgrass	*Holcus lanatus*	FAC	rhfr	Glossy Buckthorn	*Rhamnus frangula*	FAC-
huja	Japanese Hops	*Humulus japonicus*	FACU	romu	Multiflora rose	*Rosa multiflora*	FACU
loja	Japanese honeysuckle	*Lonicera japonica*	FAC-	tyan	Cattail (hybrid)	*Typha angustifolia*	OBLW
lomo	Morrow's honeysuckle	*Lonicera morrowii*	NI	tygl	Hybrid cattail	*Typha x glauca*	OBLW
lota	Tartarian honeysuckle	*Lonicera tatarica*					

APPENDIX E

Riverine Condition Level 2 Rapid Assessment Worksheets

Riverine Assessment Form 1

Pennsylvania Riverine Condition Level 2 Rapid Assessment Protocol (Document No. 310-2137-003)

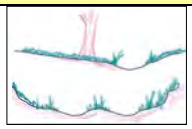
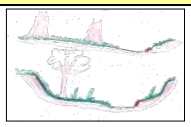
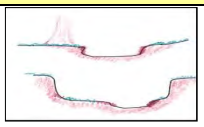
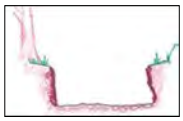
Pennsylvania Department of Environmental Protection

For use in intermittent or perennial watercourses with drainage areas ≤ 2,000 square mile drainage areas.

Project #	Project Name		Locality	Date	Ch 93 Classification		AA Id	Length
24012215	Project Gravity		Archbald Borough	8/28/25	Designated: CWF	Existing: NA	7	459
Latitude	41.521004	Longitude	-75.556729	FGM Level 1 Channel Classification				

Evaluator(s)	Stream Name and Information	Notes: Two isolated, intermittent stream segments that are not connecte
Matt Bixler, PWS	UNT 1 and UNT 2	

1. CHANNEL/FLOODPLAIN: Assess the cross-section of the stream and prevailing conditions along the AA.

	Condition Category				
	Optimal	**Suboptimal**	**Marginal**	**Poor**	**Severe**
Channel / Floodplain	 **Channel Geometry:** These channels show very little incision or widening and little or no evidence of active erosion. Anastomosing channels may be present. **Channel Stability:** Visual indicators include: 1) the banks are not eroding along greater than 5% of the reach; 2) natural vegetative or rock stability features are present along greater than 80% of the banks; 2) stable point bars and bankfull benches may be present; 3) mid-channel bars and transverse bars are rare and if transient channel sediment deposition is present, it covers less than or equal to 10% of the stream bottom; 4) baseflow is connected to the rooting depths of vegetation in the active floodplain. **Active Floodplain Connection:** The bankfull stream flows have frequent access to the active floodplain and fully developed point bars or bankfull benches that are accessed at most flows greater than baseflow.	 **Channel Geometry:** These channels are slightly incised or overwidened and contain a few areas of active erosion. **Channel Stability:** Visual indicators include: 1) the banks are actively eroding along less than 25% of the reach; 2) depositional features such as point bars and bankfull benches are present and stable during high flows and occur along greater than 50% of the reach; 3) natural bank protection like vegetation or rock is providing stability along greater than 50% of the reach; 4) baseflow is connected to vegetated point bars and bankfull benches. **Active Floodplain Connection:** The bankfull stream flows frequently access bankfull benches, or point bars along portions of the reach and may frequently inundate the active floodplain.	 **Channel Geometry:** These channels are over-widened or incised, but to a lesser degree than the Severe and Poor channel conditions. **Channel Stability:** Visual indicators include: 1) the banks are eroding or severely undercut along greater than 25% and less than or equal to 50% of the reach; 2) depositional features like point bars or bankfull benches occur along greater than 25% and less than or equal to 50% of the reach; 3) the stream banks may consist of some vertical or undercut banks or nick points associated with head cuts; **Active Floodplain Connection:** The bankfull stream flows have infrequent connection to the active floodplain.	 **Channel Geometry:** These channels are over-widened or incised and eroding vertically and/or laterally. **Channel Stability:** Visual indicators include: 1) the banks are eroding or severely undercut along greater than 50% of the reach; 2) active or recent bank sloughing is present along greater than 50% of the reach; 3) natural bank protection like vegetation is not preventing bank erosion along the reach; 4) depositional features, such as point bars and bank full benches, are absent from the reach or newly developing along less than 25% of the reach; 5) bank full benches and point bars frequently scour during high flows; 6) baseflow is disconnected from plant rooting depths and the active floodplain. **Active Floodplain Connection:** The bankfull stream flows are not connected to the active floodplain.	 **Channel Geometry:** These channels are deeply incised and actively eroding vertically and/or laterally. Over widened channels may contain sections of unstable braided channels from aggradation. **Channel Stability:** Visual indicators include: 1) the banks are actively eroding or being undercut along greater than 80% of the reach; 2) active or recent bank sloughing is occurring along greater than 80% of the reach; 3) natural bank protection like vegetation is not preventing bank erosion or sloughing; 4) depositional features such as point bars and bankfull benches are absent; 5) flood flows are disconnected from the active floodplain. **Active Floodplain Connection:** The bankfull stream flows are never connected to the active floodplain.
SCORE	20 19 18 **(17)**	16 15 14 13	12 11 10 9	8 7 6 5	4 3 2 1

Comments: The stream channel is relatively stable, with a few areas of minor erosion.

CI = (Score)/20	CI
SCORE	0.80

2. RIPARIAN VEGETATION: Assess the floodplain along the entire AA (Visual estimates of areal coverage from aerial photos with field verification acceptable).

	Condition Category					
	Optimal	**Suboptimal**		**Marginal**		**Poor**
Riparian Vegetation (Floodplain)	Riparian area vegetation consists of a tree stratum present (diameter at breast height (dbh) > 3 inches) with greater than or equal to 60% tree canopy cover. Areas comprised of stream channels, wetlands (regardless of classification or condition) and lacustrine resources ≥ 10 acres are scored as optimal.	**High Suboptimal:** Riparian area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory.	**Low Suboptimal:** Riparian area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover with a maintained understory.	**High Marginal:** Riparian area vegetation consists of non-maintained, dense herbaceous vegetation with either a shrub layer or a tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover.	**Low Marginal:** Riparian area vegetation consists of non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, areas of hay production, and ponds or open water areas (< 10 acres). If trees are present, tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover with maintained	**High Poor:** Riparian area vegetation consists of lawns, mowed, and maintained areas, nurseries; no-till cropland; actively grazed pasture, sparsely vegetated non-maintained area, pervious trails, recently seeded and stabilized, or other comparable condition.	**Low Poor:** Riparian area consists of impervious surfaces; mine spoil lands, denuded surfaces, row crops, active feed lots, impervious trails, or other comparable conditions.
		High	Low	High	Low	High	Low
SCORE	20 19 18 **(17)** 16	15 14 13 12 11		10 9 8 **(7)** 6		5 4 3 **(2)** 1	

Comments: Riparian vegetation consists primarily of mature forest. A small amount omine spoil lands and an open water mining pit are also present.

1. Identify Condition Category areas along the floodplain using the descriptors above.
2. Estimate the % area within each condition category.
3. Enter the % Riparian Area in in decimal form (0.00) and Score for each category in the blocks below. Ensure the sum of the % Riparian Area Blocks equal 100

								Side Sub-Index	
	Condition Category								
Right Side	% Riparian Area:	93%	5%	2%	0%	0%	0%	**0.80**	**Side Sub-Index = SUM(%Areas*Scores)/20**
	Score:	17	2	7	0	0	0		
	Total Sub-score:	**15.81**	**0.10**	**0.14**	**0.00**	**0.00**	**0.00**		
	Condition Category								
Left Side	% Riparian Area:	95%	5%	0%	0%	0%	0%	**0.81**	**CI = (Left Side CI + Right Side CI)/2**
	Score:	17	2	0	0	0	0		
	Total Sub-score:	**16.15**	**0.10**	**0.00**	**0.00**	**0.00**	**0.00**		

CI
0.81

Riverine Assessment Form 1 - Page 2

2/4/2017

3. RIPARIAN ZONE OF INFLUENCE: Assess land cover along both sides, 100 feet from edge of floodplain into the upland along the entire AA. (rough measurements of length & width may be acceptable)

	Condition Category						Comments: ZOI is dominated by mature forest. Open water mining pits and access roads are also present.
	Optimal	**Suboptimal**		**Marginal**		**Poor**	
Riparian ZOI	Riparian ZOI area vegetation consists of a tree stratum present (diameter at breast height (dbh) > 3 inches) with greater than or equal to 60% tree canopy cover. Areas comprised of stream channels, wetlands (regardless of classification or condition) and lacustrine resources ≥ 10 acres are scored as optimal.	**High Suboptimal:** Riparian ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory.	**Low Suboptimal:** Riparian ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover with a maintained understory.	**High Marginal:** Riparian ZOI area vegetation consists of non-maintained, dense herbaceous vegetation with either a shrub layer or a tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover.	**Low Marginal:** Riparian ZOI area vegetation consists of non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, areas of hay production, and ponds or open water areas (< 10 acres). If trees are present, tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover with	**High Poor:** Riparian ZOI area vegetation consists of lawns, mowed, and maintained areas, nurseries; no-till cropland; actively grazed pasture, sparsely vegetated non-maintained area, pervious trails, recently seeded and stabilized, or other comparable condition.	**Low Poor:** Riparian ZOI area consists of impervious surfaces; mine spoil lands, denuded surfaces, row crops, active feed lots, impervious trails, or other comparable conditions.
		High	**Low**	**High**	**Low**	**High**	**Low**
SCORE	20 19 **(18)** 17 16	15 14 13 12 11		10 9 8 **(7)** 6		5 **(4)** 3 2 1	

1. Identify Condition Category areas along the floodplain using the descriptors above.
2. Estimate the % area within each condition category.
3. Enter the % Riparian Area in decimal form (0.00) and Score for each category in the blocks below. Ensure the sums of % Riparian ZOI Blocks equal 100

								Side Sub-Index	
	Condition Category								
Right Side	% Riparian Area:	90%	5%	5%	0%	0%	0%	**0.84**	**Side Sub-Index = SUM(%Areas*Scores)/20**
	Score:	18	7	4	0	0	0		
	Total Sub-score:	**16.20**	**0.35**	**0.20**	**0.00**	**0.00**	**0.00**		
	Condition Category								
Left Side	% Riparian Area:	95%	5%	0%	0%	0%	0%	**0.87**	**CI = (Left Side CI + Right Side CI)/2** — **CI: 0.86**
	Score:	18	7	0	0	0	0		
	Total Sub-score:	**17.10**	**0.35**	**0.00**	**0.00**	**0.00**	**0.00**		

4. INSTREAM HABITAT: Varied substrate sizes, water velocity and depths, woody and leafy debris, stable substrate, low embeddedness, shade, undercut banks, root mats, SAV, macrophytes, emergent vegetation, riffle-pool complexes, stable features.

	Condition Category				Comments: Intermittent streams with mud substrate. Limited gravel present within the strea,
	Optimal	**Suboptimal**	**Marginal**	**Poor**	
Instream Habitat/ Available Cover	Physical Elements that enhance a stream's ability to support aquatic organisms are present in greater than or equal to 50% of the reach. Substrate is favorable for colonization by a diverse and abundant epifaunal community, and there are many suitable areas for epifaunal colonization and/or fish cover.	Physical Elements that enhance a stream's ability to support aquatic organisms are present in greater than or equal to 30% and less than 50% of the reach. Conditions are mostly desirable and are generally suitable for full colonization by a moderately diverse and abundant epifaunal community.	Physical Elements that enhance a stream's ability to support aquatic organisms are present in greater than or equal to 10% and less than 30% of the reach. Conditions are generally suitable for partial colonization by epifaunal and/or fish communities.	Physical Elements that enhance a stream's ability to support aquatic organisms are present in less than 10% of the reach. Conditions are generally unsuitable for colonization by epifaunal and/or fish communities. The reach.	**CI = (Score)/20** — **CI**
SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	**(5)** 4 3 2 1	**SCORE 11** — **CI: 0.55**

5. CHANNEL ALTERATION: Stream crossings, riprap, concrete, gabions, or concrete blocks, straightening of channel/channelization, embankments, spoil piles, constrictions, etc.

	Condition Category					Comments:
	Negligible	**Minor**		**Moderate**	**Severe**	
Channel Alteration	Channel alterations listed above are absent in the SAR. The stream has unaltered pattern or has normalized.	**Minor High:** Less than or equal to 20% of the stream reach is disrupted by any of the channel alterations listed above. Alteration or channelization present, usually adjacent to structures, (such as bridge abutments or culverts); evidence of past alteration, (i.e., channelization) may be present, but stream pattern and stability have recovered; recent alteration is not present	**Minor Low:** Greater than 20% and less than or equal to 40% of the stream reach is disrupted by any of the channel alterations listed above. Alteration or channelization present, usually adjacent to structures, (such as bridge abutments or culverts); evidence of past alteration, (i.e., channelization) may be present, but stream pattern and stability have recovered; recent alteration is not	**Moderate High:** Greater than 40% and less than or equal to 60% of reach is disrupted by any of the channel alterations listed above. If the stream has been channelized, normal stable stream meander pattern has not recovered.	**Moderate Low:** Greater than 60% and less than or equal to 80% of reach is disrupted by any of the channel alterations listed in the parameter guidelines. If the stream has been channelized, normal stable stream meander pattern has not recovered.	Greater than 80% of reach is disrupted by any of the channel alterations listed above. Greater than 80% of banks shored with gabion, riprap, or concrete.	
		High	**Low**	**High**	**Low**		**CI = (Score)/20** — **CI**
SCORE	20 19 18 17 **(16)**	15 14 13 12 11		10 9 8 7 6		5 4 3 2 1	**SCORE 16** — **CI: 0.80**

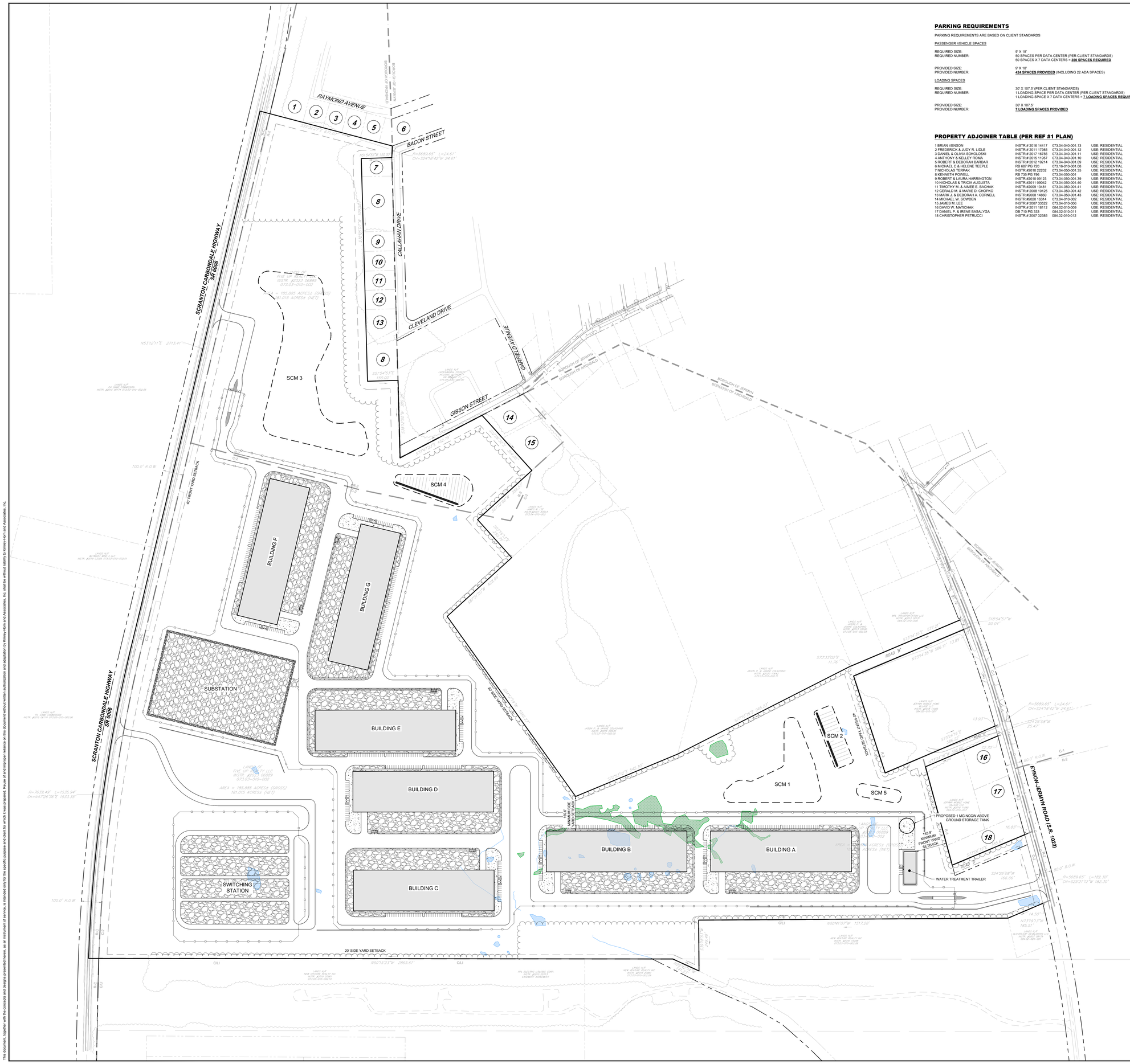
RIVERINE CONDITION INDEX (RCI)		**RCI**
NOTE: **The CIs and RCI should be rounded to 2 decimal places.**	**RCI = (Sum of all CI's)/5**	**0.76**

If a CI is not applicable (e.g. due to use on intermittent watercourse or >100 sq. mile drainage area) in order to utilize the auto calculator feature the user will need to modify the RCI formula or enter the maximum score for that CI to achieve a CI of 1.0 which will offset the divisor difference.

General Comments:

APPENDIX F

Project Site Plan



PARKING REQUIREMENTS

PARKING REQUIREMENTS ARE BASED ON CLIENT STANDARDS

PASSENGER VEHICLE SPACES

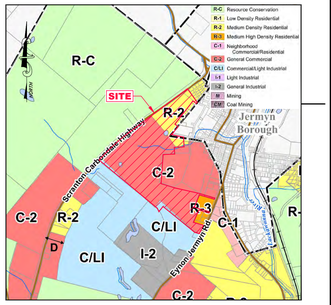
REQUIRED SIZE:	9' X 18'
REQUIRED NUMBER:	50 SPACES PER DATA CENTER (PER CLIENT STANDARDS) 50 SPACES X 7 DATA CENTERS = **350 SPACES REQUIRED**
PROVIDED SIZE:	9' X 18'
PROVIDED NUMBER:	**424 SPACES PROVIDED** (INCLUDING 22 ADA SPACES)

LOADING SPACES

REQUIRED SIZE:	30' X 107.5' (PER CLIENT STANDARDS)
REQUIRED NUMBER:	1 LOADING SPACE PER DATA CENTER (PER CLIENT STANDARDS) 1 LOADING SPACE X 7 DATA CENTERS = **7 LOADING SPACES REQUIRED**
PROVIDED SIZE:	30' X 107.5'
PROVIDED NUMBER:	**7 LOADING SPACES PROVIDED**

PROPERTY ADJOINER TABLE (PER REF #1 PLAN)

1 BRIAN VENSON	INSTR.# 2016 14417	073.04-040-001.13	USE: RESIDENTIAL
2 FREDERICK & JUDY R. LIDLE	INSTR.# 2011 17985	073.04-040-001.12	USE: RESIDENTIAL
3 DANIEL & OLIVIA SOKOLOSKI	INSTR.# 2017 16756	073.04-040-001.11	USE: RESIDENTIAL
4 ANTHONY & KELLEY ROMA	INSTR.# 2015 11957	073.04-040-001.10	USE: RESIDENTIAL
5 ROBERT & DEBORAH BARDAR	INSTR.# 2012 19214	073.04-040-001.09	USE: RESIDENTIAL
6 MICHAEL C & HELENE TEEPLE	RB 687 PG 720	073.16-010-001.08	USE: RESIDENTIAL
7 NICHOLAS TERPAK	INSTR.#2010 22202	073.04-050-001.35	USE: RESIDENTIAL
8 KENNETH POWELL	RB 735 PG 796	073.04-050-001	USE: RESIDENTIAL
9 ROBERT & LAURA HARRINGTON	INSTR.#2010 09123	073.04-050-001.39	USE: RESIDENTIAL
10 NICHOLAS & TRICIA AUGUSTA	INSTR.#2011 09042	073.04-050-001.40	USE: RESIDENTIAL
11 TIMOTHY M. & AIMEE E. BACHAK	INSTR.#2009 13481	073.04-050-001.41	USE: RESIDENTIAL
12 GERALD M. & MARIE D. CHOPKO	INSTR.# 2008 10125	073.04-050-001.42	USE: RESIDENTIAL
13 MARK J. & DEBORAH A. CORNELL	INSTR.#2008 14860	073.04-050-001.43	USE: RESIDENTIAL
14 MICHAEL W. SOWDEN	INSTR.#2020 16314	073.04-010-002	USE: RESIDENTIAL
15 JAMES M. LEE	INSTR.# 2007 33522	073.04-010-006	USE: RESIDENTIAL
16 DAVID W. MATICHAK	INSTR.# 2011 18112	084.02-010-009	USE: RESIDENTIAL
17 DANIEL P. & IRENE BASALYGA	DB 710 PG 333	084.02-010-011	USE: RESIDENTIAL
18 CHRISTOPHER PETRUCCI	INSTR.# 2007 32385	084.02-010-012	USE: RESIDENTIAL



ZONING MAP OF ARCHBALD BOROUGH
(LACKAWANNA COUNTY, PENNSYLVANIA)
SCALE: 1" = 2,000'

LEGEND

- EXISTING PROPERTY LINE
- EXISTING MUNICIPAL BOUNDARY
- EXISTING ADJOINING PROPERTY LINE
- EXISTING LEGAL RIGHT-OF-WAY
- EXISTING ZONING DISTRICT BOUNDARY
- EXISTING EASEMENT
- EXISTING CURB
- EXISTING OVERHEAD ELECTRIC LINE (WITH UTILITY POLE)
- EXISTING TREELINE
- EXISTING WETLANDS FIELD DELINEATED
- EXISTING SURFACE WATER
- PROPOSED SETBACK LINE
- PROPOSED CURB
- PROPOSED FLUSH/DEPRESSED CURB
- PROPOSED SAWCUT LINE
- PROPOSED FENCE
- PROPOSED CONCRETE SIDEWALK (IMPERVIOUS)
- PROPOSED GRAVEL (IMPERVIOUS)
- PROPOSED ASPHALT PAVEMENT (IMPERVIOUS)
- PROPOSED TREELINE
- PROPOSED RETAINING WALL
- PROPOSED BUILDING (IMPERVIOUS)
- PROPOSED SWM FACILITY (PERVIOUS)

SITE PLAN NOTES

1. ALL CONSTRUCTION SHALL CONFORM WITH APPLICABLE STATE AND LOCAL CONSTRUCTION STANDARDS AS IDENTIFIED IN THESE PLANS. THE CONTRACTOR SHALL MAINTAIN A CURRENT RELEASE OF THE STATE AND LOCAL LAND DEVELOPMENT STANDARDS MANUAL ON THE PROJECT SITE FOR REFERENCE DURING CONSTRUCTION OF THE PROJECT.
2. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED. ALL CURB RADII GIVEN TO THE FACE OF CURB AND ALL RADII ARE ASSUMED TO BE 5' UNLESS NOTED OTHERWISE.
3. ALL PAINT STRIPING, PAVEMENT MARKINGS, AND SIGNAGE SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" OR AS OTHERWISE SPECIFIED. ALL REFERENCED SIGN STANDARDS ARE TAKEN FROM THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES". ALL NEW SIGNS SHALL BE MOUNTED ON GALVANIZED POSTS AND IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS.
4. THE CONTRACTOR SHALL VERIFY DIMENSIONS AT JOBSITE.
5. CONTRACTOR SHALL INSTALL ACCESSIBLE RAMPS PER PENNDOT AND ADA STANDARDS AT ALL DRIVE AND BUILDING LOCATIONS AS REQUIRED.
6. ALL WORK IN THE RIGHT-OF-WAY REQUIRES A HIGHWAY OCCUPANCY PERMIT FROM PENNDOT. CONTRACTOR SHALL SECURE ALL REQUIRED CONSTRUCTION PERMITS.

GENERAL PLAN INFORMATION

PROJECT ADDRESS:	S SCRANTON CARBONDALE HWY - SR 6 & N EYON JERMYN RD, ARCHBALD, PA 18403
PARCEL ID:	073.03-010-002
APPLICANT/ EQUITABLE OWNER:	ARCHBALD 25 DEVELOPER, LLC * 80 BROAD STREET, 18TH FLOOR, NEW YORK, NY 10004

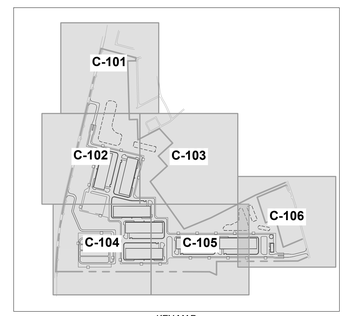
* ***RESPONSIBLE PARTY FOR OPERATION & MAINTENANCE OF STORMWATER BMP'S***

SITE AREA:	GROSS AREA:	185.885 AC. (8,097,150 SQ. FT.)
	LEGAL R.O.W.:	4.870 AC.(212,137 SQ. FT.)
	NET AREA:	181.015 AC. (7,885,013 SQ. FT.)

BOROUGH OF ARCHBALD DIMENSIONAL STANDARDS					
ZONING DATA REFERENCE PER THE BOROUGH OF ARCHBALD ZONING ORDINANCE NO. 2023-1 ADOPTED MARCH 15, 2023					
ZONING DISTRICT: GENERAL COMMERCIAL (C-2) MEDIUM DENSITY RESIDENTIAL (R-2)					
EXISTING USE: FORMER MINING SITE PROPOSED USE: DATA CENTER					
BULK REQUIREMENTS	REQUIRED (C-2)	REQUIRED (R-2)	EXISTING	PROPOSED	COMPLIANT (YES/NO)
MINIMUM LOT AREA:	1.00 AC (43,560 SF)	0.28 AC (12,000 SF)	8,097,160 SF (185.885 Ac)	8,097,160 SF (185.885 Ac)	YES
MINIMUM LOT WIDTH AT MINIMUM SETBACK LINE:	150 FT	80 FT	348.50 FT	348.50 FT	YES
MINIMUM BUILDING SETBACKS					
FRONT YARD:	25 FT / 40 FT*	25	11.5 FT	161.7 FT	YES
REAR YARD:	30 FT / 40 FT**	25	N/A	N/A	N/A
SIDE YARD:	20 FT / 40 FT**	12	41.8 FT	169.6 FT	YES
COVERAGE REQUIREMENTS					
MAXIMUM STRUCTURE HEIGHT:	5 STORY / 70 FT	3 STORY / 40 FT	<5 STORY / 70 FT	≤5 STORY / 70 FT	YES
MAXIMUM BUILDING COVERAGE:	50%	45%	0%	12.4% (975,600 SF / 7,885,013 SF)	YES
MAXIMUM IMPERVIOUS COVERAGE:	75%	60%	<0.1%	39.0% 3,077,027 SF / 7,885,013 SF)	YES
MAXIMUM PERMISSIBLE NOISE LEVEL	55 dB (A) - AM 45 dB (A) - PM	55 dB (A) - AM 45 dB (A) - PM	UNMITIGATED 65 dB (A) - AM 53 dB (A) - PM	MITIGATED 55 dB (A) - AM 43 dB (A) - PM	YES

* IF PARKING SPACES ARE PROVIDED BETWEEN THE BUILDING AND THE STREET CURBLINE.

** 40 FEET SIDE AND 40 FEET REAR FOR A PRINCIPAL BUSINESS FROM A LOT IN A RESIDENTIAL DISTRICT THAT IS OCCUPIED BY A PRINCIPAL DWELLING THAT IS NOT IN COMMON OWNERSHIP.



KEY MAP
SCALE 1" = 1,000'

NORTH

GRAPHIC SCALE IN FEET
0 75 150 300
1 INCH = 150 FEET

CALL BEFORE YOU DIG!
PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION, EXCAVATION OR BLASTING. DIG'S IN DESIGN STAGE - STOP CALL
PA 1 One Call System, Inc.
1-800-242-1776
SERIAL NUMBER: 20251241183

No.	REVISIONS	DATE	BY
1	PER ARCHBALD BOROUGH COMPLETENESS REVIEW, DATED 05/14/2025	05/16/25	KMC
2	PER ARCHBALD BOROUGH ZONING & PLANNING, DATED 06/12/25 AND COUNTY PLANNING REVIEW, DATED 06/30/25	07/22/25	KMC
3	ENLARGED SWITCHYARD PER PPRL COORDINATION	08/29/25	KMC

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
620 W GERMANTOWN PIKE, SUITE 200
PLYMOUTH MEETING, PA 19462
PHONE: 267-687-0150
WWW.KIMLEY-HORN.COM

KHA PROJECT 122125001
DATE 04/25/2025
SCALE: AS SHOWN
DESIGNED BY: SLC
DRAWN BY: KMC
CHECKED BY: JW

PRELIMINARY LAND DEVELOPMENT PLANS

PROJECT FOR
GRAVITY
ARCHBALD BOROUGH, LACKAWANNA COUNTY, PENNSYLVANIA
PREPARED FOR
ARCHBALD 25 DEVELOPER, LLC
80 BROAD STREET, 18TH FLOOR, NEW YORK, NY 10004

OVERALL SITE PLAN

SHEET NUMBER
C-100
12 OF 44

APPENDIX G

Offsite Alternative Locations

$2,100,000
48 Jericho Road , Newfoundland, PA 18445

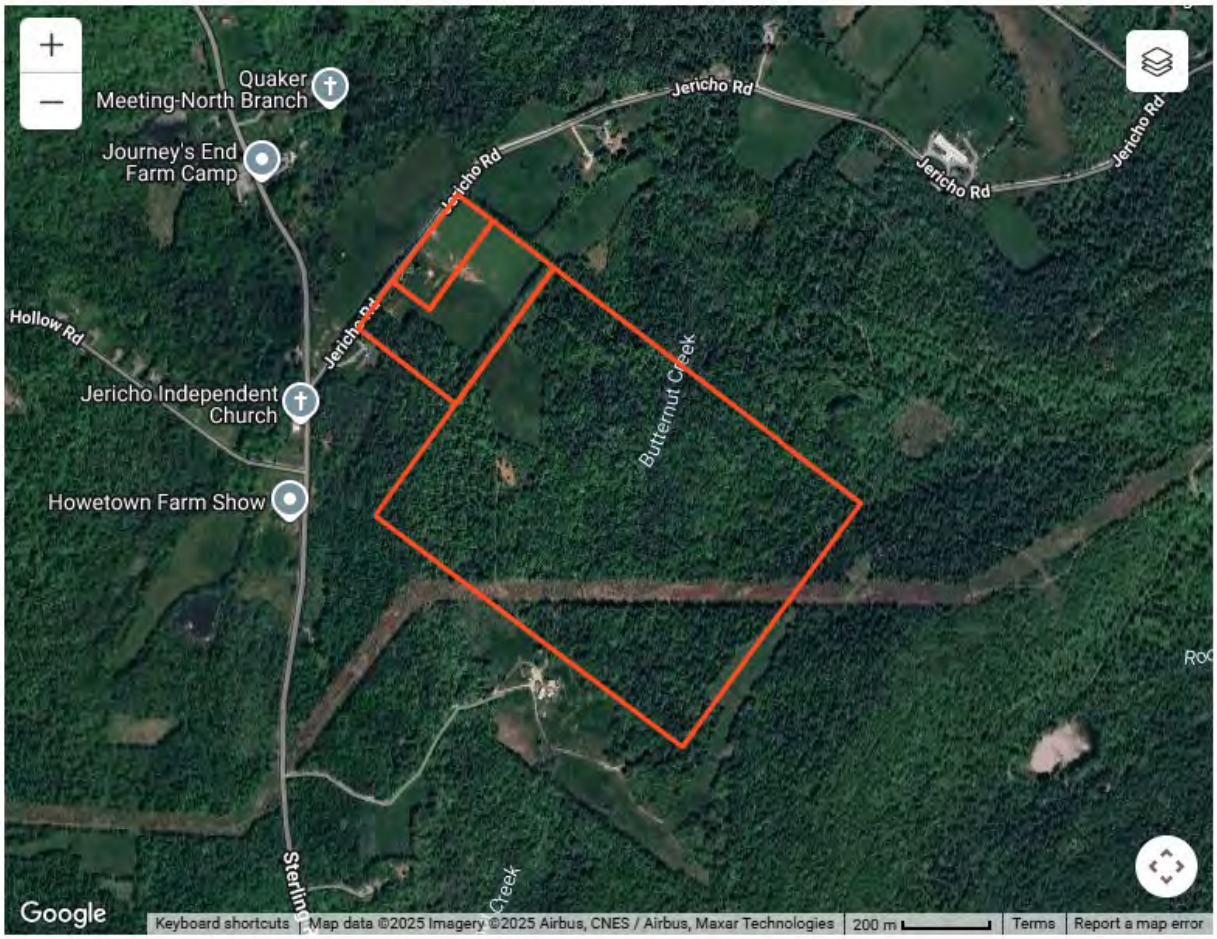
175 Acres
Farms and Ranches, Horse Property, House

Show More Features

From elevation to risk assessment

Search for detailed parcel information including; Elevation & Vegetation Maps, Ownership Information, Detailed Parcel Information, Crop History Map, Soil Survey Productivity Data, and more.

Research Parcel Information



$749,000

0 Pleasant Mount Drive , Forest City, PA 18421

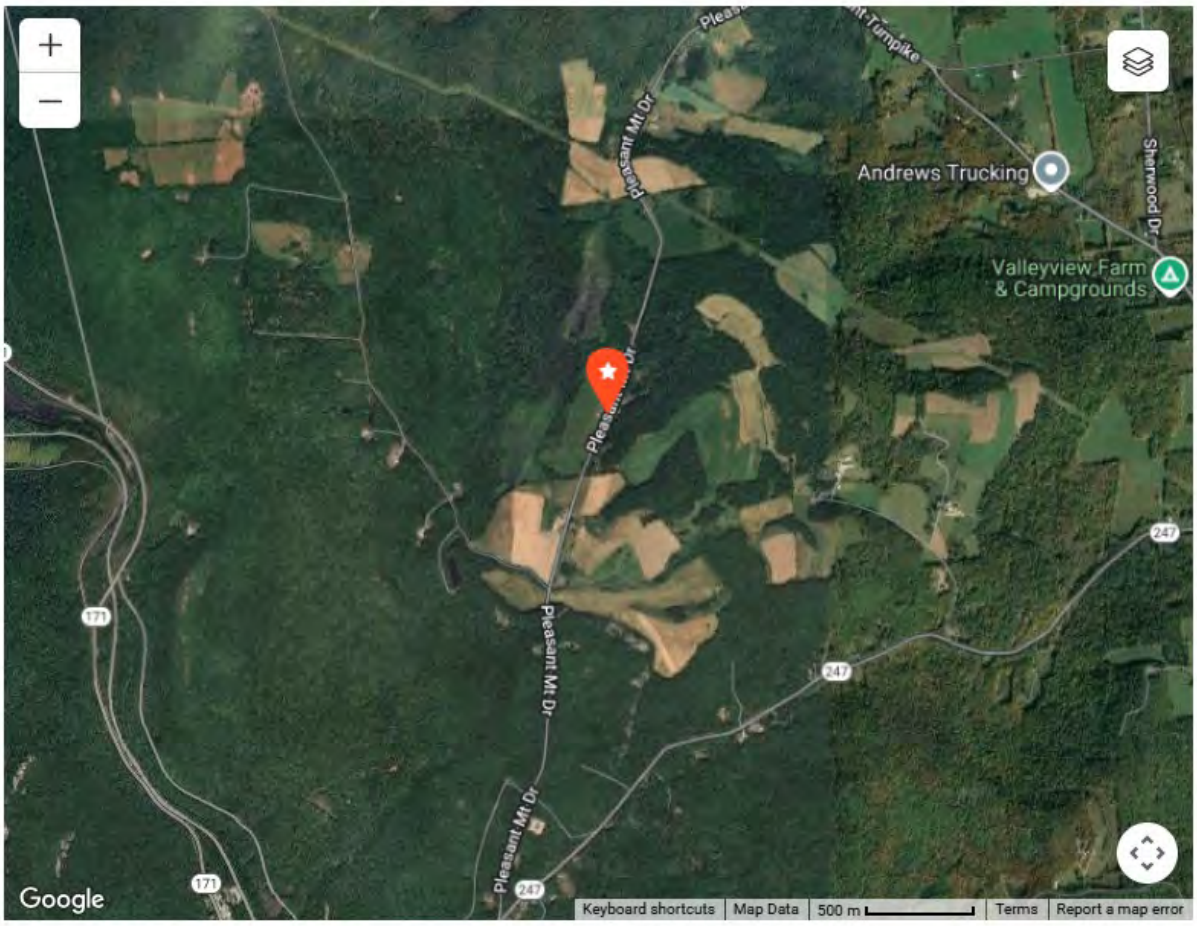
173.38 Acres

House

From elevation to risk assessment

Search for detailed parcel information including; Elevation & Vegetation Maps, Ownership Information, Detailed Parcel Information, Crop History Map, Soil Survey Productivity Data, and more.

Research Parcel Information



$440,000
Twisted Lane, Lot#WP001 , Tunkhannock, PA 18657

161.2 Acres
Recreational Property, Timberland Property, Ur

From elevation to risk assessment

Search for detailed parcel information including; Elevation & Vegetation Maps, Ownership Information, Detailed Parcel Information, Crop History Map, Soil Survey Productivity Data, and more.

Research Parcel Information

Show Google Map

APPENDIX H

PHMC Clearance Letter

Pennsylvania State Historic Preservation Office
PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION

June 6, 2025

Sent Via PA-SHARE

RE: ER Project # 2025PR01608.002, Gibson Street Project, Department of Environmental Protection, Archbald Borough, Lackawanna County

Dear Submitter,

Thank you for submitting information concerning the above referenced project. The Pennsylvania State Historic Preservation Office (PA SHPO) reviews projects in accordance with state and federal laws. Section 106 of the National Historic Preservation Act of 1966, and the implementing regulations (36 CFR Part 800) of the Advisory Council on Historic Preservation, is the primary federal legislation. The Environmental Rights amendment, Article 1, Section 27 of the Pennsylvania Constitution and the Pennsylvania History Code, 37 Pa. Cons. Stat. Section 500 et seq. (1988) is the primary state legislation. These laws include consideration of the project's potential effects on both historic and archaeological resources.

Above Ground Resources
No Above Ground Concerns - Environmental Review - No Effect - Historic Properties Present - Above Ground

The following historic properties, listed in or eligible for the National Register of Historic Places, are located in the project area of potential effect: Jermyn Borough Historic District (Resource # 1992RE00478). Based on the information received and available in our files, in our opinion, the proposed project will have No Effect on these historic properties. Should the scope of the project change and/or should you be made aware of historic property concerns, you will need to reinitiate consultation with our office using PA-SHARE.

For questions concerning above ground resources, please contact Blair Horton at blahorton@pa.gov.

Archaeological Resources
No Archaeological Concerns - Environmental Review - No Effect - Archaeological

Based on the information received and available in our files, in our opinion, the proposed project should have No Effect on archaeological resources. Should the scope of the project be amended to include additional ground-disturbing activity and/or should you be made aware of historic property concerns regarding archaeological resources, you will need to reinitiate consultation with our office using PA-SHARE.

For questions concerning archaeological resources, please contact Blair Horton at blahorton@pa.gov.

Sincerely,

Barbara Frederick
Environmental Review Division Manager

APPENDIX I

Wetland Mitigation Credit Commitment Letter

Compensatory Mitigation Approach

Compensatory mitigation is required as a result of unavoidable direct impacts to jurisdictional wetland resources associated with the Archbald 25 Developer, LLC (Applicant) Project Gravity (Project) located in Archbald Borough, Lackawanna County, Pennsylvania. The Project is located within the Upper Central Susquehanna River Subbasin watershed (Pennsylvania State Water Plan Watershed Subbasin 5). A summary of the proposed impacts and anticipated mitigation needs is provided below in Table 1.

Table 1: Anticipated Mitigation Required for Wetland Impacts

Resource	Type of Impact	Wetland Impact Square Feet	Wetland Impact Acres	Wetland Mitigation Ratio*	Mitigation Bank Credits Needed
Wetlands	Fill	N/A	0.95	1:1	0.95
Totals		**N/A**	**0.95**		**0.95**

Note: Final ratio for bank credit impact acreage subject to review and approval by PADEP and USACE permit reviewer(s).

First Pennsylvania Resource, L.L.C. (FPR), a wholly-owned subsidiary of Resource Environmental Solutions, L.L.C. (RES), will facilitate compensatory wetland mitigation for the Project. RES anticipates that the proposed permanent impacts (Table 1) associated with the Project will require 0.95 wetland bank credits as compensatory mitigation.

Consistent with the *Compensatory Mitigation Final Rule* (33 CFR § 332.3(b)(2) 2008), which establishes mitigation bank credits as the preferred method of compensatory mitigation for impacts to waters of the U.S., the Applicant, in coordination with RES, first sought to purchase mitigation credits from an approved mitigation bank within the Upper Central Susquehanna River Subbasin (Subbasin 5). The RES-sponsored Pine Creek Mitigation Bank (PCMB) is a pending mitigation bank that is currently in the latter stages of review with the Pennsylvania Interagency Regulatory Team (PA IRT) and will soon offer stream and wetland credits within Subbasin 5.

Using mitigation bank credits is the most efficient approach to compensatory mitigation because a.) mitigation banks maximize ecological uplift on a watershed-scale and b.) the restoration at the PCMB took place years in advance of the Project impacts, thereby eliminating lag time, or "temporal loss", between the occurrence of the resource impact/loss and its replaced functions and values. The PCMB will be approved as an addendum to RES's UMBI in accordance with 33 CFR 332.8(d)(2).

As a component of the Joint Permit Application technical review, a request will be submitted to the PADEP and/or USACE permit reviewers to confirm the number of wetland and stream bank credits necessary for the Project. The confirmation of mitigation bank credits is memorialized in the Credit Commitment Letter attached (Exhibit 1).

Ecological Uplift at the Pine Creek Mitigation Bank

Pre-restoration, the streams and wetlands present within the PCMB had been degraded by years of agricultural practices. The PCMB will employ a floodplain restoration approach (also referred to as the integrated valley and wetland restoration approach) which is a holistic methodology employed to maximize ecological uplift. This method reinstates pre-European settlement valley bottom stream channel and floodplain ecosystems at or near historic elevations; floodplains and stream channels are reconstructed to reestablish the surface and subsurface processes that are believed to have occurred prior to human-imposed changes to hillslopes, valleys, and stream channels. They have the capacity to adjust to changes in the watershed and can maintain a

diverse and stable habitat, without being constrained to a fixed form that would be necessitated by structures commonly installed to direct flow through a channel. The approach is based on design of valley topography to produce a high frequency, high duration, and large extent of surface water and groundwater exchange between the channel and floodplain and to promote retention of organic matter, sediment, nutrients and water within the channel and floodplain. Under this approach, the channels, which are highly varied in dimensions and planform, and the floodplain surface, are designed to evolve with vegetative succession. The channels and floodplains develop into stream-and-wetland complexes.

Restoration efforts will convert non-wetland areas into wetland areas, while also providing for improved or rehabilitated functionality to existing wetlands. Additional restoration efforts will include improving vegetative cover through native plantings and invasive species control in the adjacent uplands. This combination of restoration techniques and intensities serves to improve a full suite of wetland functions and values.

Specific improvements to aquatic resource functions and values (F/V), which are detailed further in the Mitigation Site Plan for the PCMB are summarized below by resource type.

Stream F/V Improvements:

- Biogeochemical - Increase in biogeochemical processes through integration with vegetated floodplain wetlands, improved temperature regulation with consistent groundwater interaction, and improved nutrient organic matter cycling.
- Habitat - Net increase in linear footage of stream through improved sinuosity and increase in the amount and retention of large and small woody debris, part of the base habitat for the macroinvertebrate and finfish communities. RES's floodplain restoration projects typically produce a 5-10% increase in stream channel linear footage over pre-restoration conditions.
- Hydrologic - Increase in floodplain storage capacity, energy dissipation, and geomorphic channel stability.

Wetland F/V Improvements:

- Biogeochemical - Improvements to inorganic nutrient and particulate retention, and export of dissolved and particulate organic carbon through connectivity to stream channels and groundwater.
- Habitat - Increase in wetland acreage through re-establishment of floodplain wetlands, increasing native plant community diversity, structure, and biomass, and increase in plant, macroinvertebrate, avian, and mammal species composition.
- Hydrologic - Improvements to short- and long-term surface water interaction within floodplain wetlands, designed for more consistent groundwater recharge and stormwater detention.

The PCMB's approved performance standards will require that the PCMB meet specific quantitative goals to demonstrate that the implemented restoration activities have produced sufficient ecological uplift to warrant the incremental release of credits.

Exhibit 1

Credit Commitment Letter

MITIGATION CREDIT COMMITMENT LETTER

PENNSYLVANIA STATEWIDE UMBRELLA MITIGATION BANKING INSTRUMENT

Pine Creek Mitigation Bank

TO: PENNSYLVANIA INTERAGENCY REVIEW TEAM
PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
U.S. ARMY CORPS OF ENGINEERS

Credit Provider: First Pennsylvania Resource, L.L.C. (FPR or Sponsor)
State and Federal Umbrella Operation Permits:

Pennsylvania Statewide Umbrella Mitigation Banking Instrument (PSUMBI)

- WO&E Compensation Operations Permit Number: MB9915-0001
- USACE Permit Number: NAB-OP-RPA-2012-00567-PO2

Bank Providing Credits

Pine Creek Mitigation Bank (PCMB)

- PA DEP Permit Number: TBD
- USACE Permit Number: NAB-2012-00567-P31

FPR is in compliance with all requirements of their WO&E Compensation Operations Permit (PA DEP Permit Number: MB9915-0001), and hereby accepts responsibility for the mitigation obligations of Archbald 25 Developer, LLC (Applicant) for unavoidable wetland impacts associated with the Project Gravity (Project), as specified below:

1. The Project requires wetland mitigation for unavoidable impacts to wetlands. An approved mitigation bank (PCMB) will be utilized for 0.95 wetland credits as compensatory mitigation. This bank is currently in the final stages of review with the Pennsylvania Interagency Regulatory Team (PA IRT) and will soon offer stream and wetland credits within PA State Water Plan Subbasin #5.

2. The Applicant has committed monies with the Sponsor sufficient to acquire 0.95 wetland credits from the PCMB for use on the Project (PA DEP File Number: TBD and USACE Permit Number: TBD).

3. PCMB is located within the Upper Central Susquehanna River Subbasin (PA State Water Plan Subbasin #5). The Project is located within the same Subbasin.

4. The Sponsor has committed 0.95 wetland credits from the PCMB credit ledger. This credit commitment does not have an expiration timeframe.

Attached is an updated credit ledger showing the credits as committed. Contact information for the bank sponsor is presented below. A Credit Transfer Letter will be provided to the agencies upon permit authorization.

First Pennsylvania Resource, L.L.C.

By: _____

Shawyn Yeamans,
Resource Environmental Solutions, L.L.C.
317 East Carson Street, Suite 242
Pittsburgh, PA 15219

Date: 08/26/2025

Copies:
PA Department of Environmental Protection, Northeast Regional Office
U.S. Army Corps of Engineers, Baltimore District
Noah Fleeter, Archbald 25 Developer, LLC
Matt Bixler, ARM Group
Jon Kasitz, RES Client Solutions Manager

Attachments

Attachment 1: PCMB Credit Ledger

Attachment 1: PCMB Credit Ledger

Pine Creek Mitigation Bank Credit Ledger

Date Updated: 8/26/2025

Credit Summary	Wetland	Stream
Credits Released	-	-
Credits Withdrawn	-	-
Credits Remaining	-	-
Credits Committed	0.95	-
Credits Available Conside	(0.95)	-

Sponsor: First Pennsylvania Resource, L.L.C.
Address: 33 Terminal Way, Suite 445A
Pittsburgh, PA 15219

USACE Permit Number: PN-22-03 NAB-2021-00291-P02
PADEP Permit Number: TBD
DEP Bank Approval: TBD
IRT Bank Approval: TBD

WETLAND CREDITS

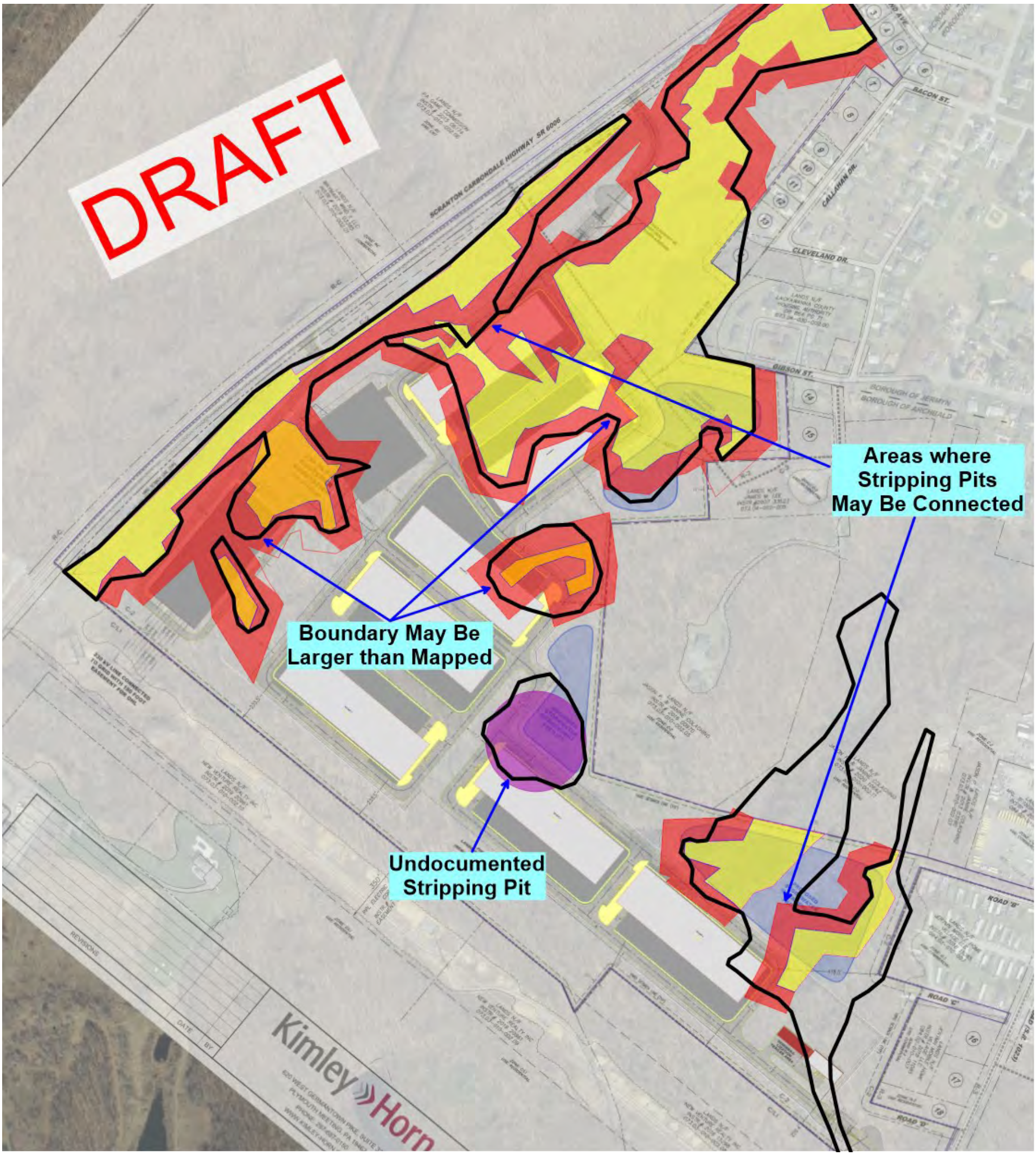
Transaction Type	Date Wdr/Rel	Credits	Permittee	Release Description/Project Name	PADEP Permit No.	USACE Permit No.	Impact Subbasin
Planned Release	Q4 2025	2.22		Release 1			
Committed		**(0.95)**	**Archbald 25 Developer, LLC**	**Project Gravity**	**TBD**	**TBD**	**Subbasin 5**
Planned Release	Q2 2026	2.22		Release 2			
Planned Release	Q3 2027	3.70		Release 3			
Planned Release	Q4 2029	3.70		Release 4			
Planned Release	Q4 2031	2.94		Release 5			

STREAM CREDITS

Transaction Type	Date Wdr/Rel	Credits	Permittee	Release Description/Project Name	PADEP Permit No.	USACE Permit No.	Impact Subbasin
Planned Release	Q4 2025	1,360.03		Release 1			
Planned Release	Q2 2026	1,360.03		Release 2			
Planned Release	Q3 2027	3,173.14		Release 3			
Planned Release	Q4 2029	2,266.72		Release 4			
Planned Release	Q4 2031	906.69		Release 5			

APPENDIX J

Historic Mining Figure


DRAFT
Areas where Stripping Pits May Be Connected
Boundary May Be Larger than Mapped
Undocumented Stripping Pit
SCRANTON CARBONDALE HIGHWAY SR 6006
BACON ST.
CALLAHAN DR.
CLEVELAND DR.
GIBSON ST.
BOROUGH OF JERMYN
BOROUGH OF ARCHBALD
ROAD 'B'
ROAD 'C'
ROAD 'D'
REVISIONS
DATE
BY
Kimley»Horn

REQUIREMENT K

Erosion and Sediment (E&S) Control Plan and Approval

(to be submitted immediately upon receipt of approval)

REQUIREMENT P

Professional Engineer's Seal and Certification

All Plans, Specifications, and Reports

REQUIREMENT P
PROFESSIONAL ENGINEER'S SEAL AND CERTIFICATION

I, Tessa M. Antolick, P.E., do hereby certify pursuant to the penalties of 18 Pa. C.S.A., Section 4904 to the best of my knowledge, information and belief, that the information contained in the accompanying plans, specifications and reports has been prepared in accordance with accepted engineering practice, is true and correct, and is in conformance with Chapter 105 of the rules and regulations of the Department of Environmental Protection.

Seal:

Tessa M. Antolick

Printed Name of Registered Professional Engineer

Tessa M. Antolick

Signature of Registered Professional Engineer

Date: 10/8/2025

Registration No.: PE077667

State: PA