

U.S. Army Corps of Engineers (USACE)  
**NATIONWIDE PERMIT PRE-CONSTRUCTION NOTIFICATION (PCN)**

For use of this form, see 33 CFR 330; the proponent agency is CECW-CO-R.

**Form Approved -**  
**OMB No. 0710-0003**  
**Expires: 08-31-2023**

**DATA REQUIRED BY THE PRIVACY ACT OF 1974**

**Authority** Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Regulatory Program of the Corps of Engineers (Corps); Final Rule 33 CFR 320-332.

**Principal Purpose** Information provided on this form will be used in evaluating the nationwide permit pre-construction notification.

**Routine Uses** This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of the agency coordination process.

**Disclosure** Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued.

The public reporting burden for this collection of information, 0710-0003, is estimated to average 11 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at [whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil](mailto:whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

**PLEASE DO NOT RETURN YOUR RESPONSE TO THE ABOVE EMAIL.**

One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see *sample drawings and/or instructions*) and be submitted to the district engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

**(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)**

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETE
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**(ITEMS BELOW TO BE FILLED BY APPLICANT)**

<b>5. APPLICANT'S NAME</b> First - Eric                      Middle -                      Last - Schwab Company - Schwab VIII, LLC Company Title - President E-mail Address - <a href="mailto:eschwab@remedia.global">eschwab@remedia.global</a>	<b>8. AUTHORIZED AGENT'S NAME AND TITLE (<i>agent is not required</i>)</b> First - Robert                      Middle - Clayton                      Last - Greer Company - Ten Bears Environmental Associates Co. E-mail Address - <a href="mailto:clay@tenbears.us">clay@tenbears.us</a>
<b>6. APPLICANT'S ADDRESS</b> Address- 503 Capitol Trail City - Newark                      State - DE                      Zip - 19719                      Country - USA	<b>9. AGENT'S ADDRESS</b> Address- 1080 South Chapel Street City - Newark                      State - DE                      Zip - 19702                      Country - USA
<b>7. APPLICANT'S PHONE NOs. with AREA CODE</b> a. Residence                      b. Business                      c. Fax                      d. Mobile (302) 690-3911	<b>10. AGENT'S PHONE NOs. with AREA CODE</b> a. Residence                      b. Business                      c. Fax                      d. Mobile (302) 684-5080                      (302) 684-5081

**STATEMENT OF AUTHORIZATION**

11. I hereby authorize, Ten Bears Environmental Associates to act in my behalf as my agent in the processing of this nationwide permit pre-construction notification and to furnish, upon request, supplemental information in support of this nationwide permit pre-construction notification.

  
SIGNATURE OF APPLICANT

May 7, 2025  
DATE

**NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY**

12. PROJECT NAME or TITLE (*see instructions*)  
NWP 46 - Culvert Extension at 509 Capitol Trail

**NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY**

13. NAME OF WATERBODY, IF KNOWN <i>(if applicable)</i> Unnamed ditch acting as tributary to White Clay Creek	14. PROPOSED ACTIVITY STREET ADDRESS <i>(if applicable)</i> 509 Capitol Trail						
15. LOCATION OF PROPOSED ACTIVITY <i>(see instructions)</i> Latitude                      °N                      Longitude                      °W 39.41'29.80"                      75.43'42.2"	City:                      State:      Zip: Newark                      DE      19711						
16. OTHER LOCATION DESCRIPTIONS, IF KNOWN <i>(see instructions)</i> <div style="display: flex; justify-content: space-between;"> <div>           State Tax Parcel ID  <b>1801000002</b> </div> <div>           Municipality  <b>Newark</b> </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div>Section</div> <div>Township</div> <div>Range</div> </div>							
17. DIRECTIONS TO THE SITE From USACE Dover Office: Right on McKee Road / Scarborough Road, take ramp onto DE-1 N, continue on DE-1 N for approx.40 miles into Newark, take exit 165A onto Delaware Turnpike / I-95 S, immediately take exit 3 onto Christiana Road / DE-273 W, follow DE-273 W for approx. 1.5 miles and turn right on Bala Road, then take an immediate left onto Red Mill Road, follow Red Mill Road for approx. 1.5 miles and turn left onto Capitol Trail / DE-2, subject property is on your right in approx. 1.1 miles.							
18. IDENTIFY THE SPECIFIC NATIONWIDE PERMIT(S) YOU PROPOSE TO USE NWP 46							
19. DESCRIPTION OF PROPOSED NATIONWIDE PERMIT ACTIVITY <i>(see instructions)</i> A man-made drainage ditch originating with a roadway culvert, which eventually discharges to White Clay Creek off site to the north, currently begins near the center of the subject parcel. As part of proposed redevelopment of the property into an apartment complex, the applicant proposes filling in an approximately 0.06 acre (±2,700 square-foot) portion of the beginning of the drainage ditch and re-routing the current culvert system to the 100-year flood plain boundary located near the eastern boundary of the subject parcel.							
20. DESCRIPTION OF PROPOSED MITIGATION MEASURES <i>(see instructions)</i> Extending the culvert system will not affect more than a ±0.06-acre portion of the drainage ditch once permitted. Any other areas of interest will remain untouched and precautions will be taken to limit impact of the proposed construction activities. Re-routing the culvert will lengthen and meander the flow path and reduce the slope, and therefore flow velocity. Applicant will add energy-dissipating rip-rap at the discharge location. The above will serve to mitigate scour and associated erosion currently occurring, including subsidence above / surrounding the buried portions of the piping.							
21. PURPOSE OF NATIONWIDE PERMIT ACTIVITY <i>(Describe the reason or purpose of the project, see instructions)</i> Redevelopment of the property as an apartment complex is anticipated and an extension of the current culvert system is proposed as part of the redevelopment plan. As part of this process, the applicant proposes filling in an approximately 0.06 acre portion of the drainage ditch up to the 100-year flood plain boundary. The purpose is to move the existing culvert outlet and associated beginning of the man-made ditch north towards the flood plain boundary to facilitate construction in the area, as well as re-route, lengthen, and meander the roadway culvert to reduce flow velocity and mitigate ongoing erosion.							
22. QUANTITY OF WETLANDS, STREAMS, OR OTHER TYPES OF WATERS DIRECTLY AFFECTED BY PROPOSED NATIONWIDE PERMIT ACTIVITY <i>(see instructions)</i> <table style="width:100%; border: none;"> <tr> <td style="width:33%;">Acres</td> <td style="width:33%;">Linear Feet</td> <td style="width:33%;">Cubic Yards Dredged or Discharged</td> </tr> <tr> <td><b>0.06</b></td> <td></td> <td><b>400</b></td> </tr> </table>		Acres	Linear Feet	Cubic Yards Dredged or Discharged	<b>0.06</b>		<b>400</b>
Acres	Linear Feet	Cubic Yards Dredged or Discharged					
<b>0.06</b>		<b>400</b>					
<p align="center"><b>Each PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site.</b></p>							
23. List any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. <i>(see instructions)</i> N/A							
24. If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and requires pre-construction notification, explain how the compensatory mitigation requirement in paragraph (c) of general condition 23 will be satisfied, or explain why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required for the proposed activity. N/A							



25. Is any portion of the nationwide permit activity already complete? ☐ Yes ☒ No If Yes, describe the completed work:

26. List the name(s) of any species listed as endangered or threatened under the Endangered Species Act that might be affected by the proposed NWP activity or utilize the designated critical habitat that might be affected by the proposed NWP activity. (*see instructions*)  
According to USFWS's IPaC, potential endangered species include the tri-colored bat (*Perimyotis subflavus*) and monarch butterfly (*Danaus plexippus*). However, no critical habitats were found at the project location. Additionally, State of Delaware Division of Fish & Wildlife (DFW) and USFWS were contacted and provided additional information (see attached). Since the project is in the vicinity of the White Clay Creek National Wild and Scenic Rivers system, DFW suggested contacting the National Park Services to determine whether they need to be involved, their response is attached.

27. List any historic properties that have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic property or properties. (*see instructions*)  
According to Delaware Historical & Cultural Affairs - Cultural and Historical Resources Information System (CHRIS), there are no documented historic resources that would be affected by the proposed activity. The Delaware Historical & Cultural Affairs office was contacted on April 29, 2025 and again on May 22, 2025 and has not responded (see attached). This documentation will be provided as soon as we are sent the results.

28. For a proposed NWP activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, identify the Wild and Scenic River or the "study river":

N/A

29. If the proposed NWP activity also requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, have you submitted a written request for section 408 permission from the Corps district having jurisdiction over that project? ☐ Yes ☐ No N/A

If "yes", please provide the date your request was submitted to the Corps district:

30. If the terms of the NWP(s) you want to use require additional information to be included in the PCN, please include that information in this space or provide it on an additional sheet of paper marked Block 30. (*see instructions*)

N/A

31. Pre-construction notification is hereby made for one or more nationwide permit(s) to authorize the work described in this notification. I certify that the information in this pre-construction notification is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

  
SIGNATURE OF APPLICANT

May 7, 2025  
DATE

  
SIGNATURE OF AGENT

5-8-2025  
DATE

The pre-construction notification must be signed by the person who desires to undertake the proposed activity (applicant) and, if the statement in Block 11 has been filled out and signed, the authorized agent.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than \$10,000 or imprisoned not more than five years or both.

**Instructions for Preparing a  
Department of the Army  
Nationwide Permit (NWP) Pre-Construction Notification (PCN)**

**Blocks 1 through 4.** To be completed by the Corps of Engineers.

**Block 5. Applicant's Name.** Enter the name and the e - mail address of the responsible party or parties. If the responsible party is an agency, company, corporation, or other organization, indicate the name of the organization and responsible officer and title. If more than one party is associated with the preconstruction notification, please attach a sheet of paper with the necessary information marked Block 5.

**Block 6. Address of Applicant.** Please provide the full address of the party or parties responsible for the PCN. If more space is needed, attach an extra sheet of paper marked Block 6.

**Block 7. Applicant's Telephone Number(s).** Please provide the telephone number where you can usually be reached during normal business hours.

**Blocks 8 through 11.** To be completed, if you choose to have an agent.

**Block 8. Authorized Agent's Name and Title.** Indicate name of individual or agency, designated by you, to represent you in this process. An agent can be an attorney, builder, contractor, engineer, consultant, or any other person or organization. Note: An agent is not required.

**Blocks 9 and 10. Agent's Address and Telephone Number.** Please provide the complete mailing address of the agent, along with the telephone number where he / she can be reached during normal business hours.

**Block 11. Statement of Authorization.** To be completed by the applicant, if an agent is to be employed.

**Block 12. Proposed Nationwide Permit Activity Name or Title.** Please provide a name identifying the proposed NWP activity, e.g., Windward Marina, Rolling Hills Subdivision, or Smith Commercial Center.

**Block 13. Name of Waterbody.** Please provide the name (if it has a name) of any stream, lake, marsh, or other waterway to be directly impacted by the NWP activity. If it is a minor (no name) stream, identify the waterbody the minor stream enters.

**Block 14. Proposed Activity Street Address.** If the proposed NWP activity is located at a site having a street address (not a box number), please enter it in Block 14.

**Block 15. Location of Proposed Activity.** Enter the latitude and longitude of where the proposed NWP activity is located. Indicate whether the project location provided is the center of the project or whether the project location is provided as the latitude and longitude for each of the "corners" of the project area requiring evaluation. If there are multiple sites, please list the latitude and longitude of each site (center or corners) on a separate sheet of paper and mark as Block 15.

**Block 16. Other Location Descriptions.** If available, provide the Tax Parcel Identification number of the site, Section, Township, and Range of the site (if known), and / or local Municipality where the site is located.

**Block 17. Directions to the Site.** Provide directions to the site from a known location or landmark. Include highway and street numbers as well as names. Also provide distances from known locations and any other information that would assist in locating the site. You may also provide a description of the location of the proposed NWP activity, such as lot numbers, tract numbers, or you may choose to locate the proposed NWP activity site from a known point (such as the right descending bank of Smith Creek, one mile downstream from the Highway 14 bridge). If a large river or stream, include the river mile of the proposed NWP activity site if known. If there are multiple locations, please indicate directions to each location on a separate sheet of paper and mark as Block 17.

**Block 18. Identify the Specific Nationwide Permit(s) You Propose to Use.** List the number(s) of the Nationwide Permit(s) you want to use to authorize the proposed activity (e.g., NWP 29).

**Block 19. Description of the Proposed Nationwide Permit Activity.** Describe the proposed NWP activity, including the direct and indirect adverse environmental effects the activity would cause. The description of the proposed activity should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal. Identify the materials to be used in construction, as well as the methods by which the work is to be done.

Provide sketches when necessary to show that the proposed NWP activity complies with the terms of the applicable NWP(s). Sketches usually clarify the activity and result in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed NWP activity (e.g., a conceptual plan), but do not need to be detailed engineering plans.

The written descriptions and illustrations are an important part of the application. Please describe, in detail, what you wish to do. If more space is needed, attach an extra sheet of paper marked Block 19.

**Block 20. Description of Proposed Mitigation Measures.** Describe any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed NWP activity. The description of any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or additional mitigation measures.

**Block 21. Purpose of Nationwide Permit Activity.** Describe the purpose and need for the proposed NWP activity. What will it be used for and why? Also include a brief description of any related activities associated with the proposed project. Provide the approximate dates you plan to begin and complete all work.

**Block 22. Quantity of Wetlands, Streams, or Other Types of Waters Directly Affected by the Proposed Nationwide Permit Activity.** For discharges of dredged or fill material into waters of the United States, provide the amount of wetlands, streams, or other types of waters filled, flooded, excavated, or drained by the proposed NWP activity. For structures or work in navigable waters of the United States subject to Section 10 of the Rivers and Harbors Act of 1899, provide the amount of navigable waters filled, dredged, or occupied by one or more structures (e.g., aids to navigation, mooring buoys) by the proposed NWP activity.

For multiple NWPs, or for separate and distant crossings of waters of the United States authorized by NWPs 12 or 14, attach an extra sheet of paper marked Block 21 to provide the quantities of wetlands, streams, or other types of waters filled, flooded, excavated, or drained (or dredged or occupied by structures, if in waters subject to Section 10 of the Rivers and Harbors Act of 1899) for each NWP. For NWPs 12 and 14, include the amount of wetlands, streams, or other types of waters filled, flooded, excavated, or drained for each separate and distant crossing of waters or wetlands. If more space is needed, attach an extra sheet of paper marked Block 22.

**Block 23. Identify Any Other Nationwide Permit(s), Regional General Permit(s), or Individual Permit(s) Used to Authorize Any Part of Proposed Activity or Any Related Activity.** List any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. For linear projects, list other separate and distant crossings of waters and wetlands authorized by NWPs 12 or 14 that do not require PCNs. If more space is needed, attach an extra sheet of paper marked Block 23.

**Block 24. Compensatory Mitigation Statement for Losses of Greater Than 1/10-Acre of Wetlands When Pre-Construction Notification is Required.** Paragraph (c) of NWP general condition 23 requires compensatory mitigation at a minimum one - for - one replacement ratio will be required for all wetland losses that exceed 1/10 - acre and require pre - construction notification, unless the district engineer determines in writing that either some other form of mitigation is more environmentally appropriate or the adverse environmental effects of the proposed NWP activity are no more than minimal without compensatory mitigation, and provides an activity - specific waiver of this requirement. Describe the proposed compensatory mitigation for wetland losses greater than 1/10 acre, or provide an explanation of why the district engineer should not require wetland compensatory mitigation for the proposed NWP activity. If more space is needed, attach an extra sheet of paper marked Block 24.

**Block 25. Is Any Portion of the Nationwide Permit Activity Already Complete?** Describe any work that has already been completed for the NWP activity.

**Block 26. List the Name(s) of Any Species Listed As Endangered or Threatened under the Endangered Species Act that Might be Affected by the Nationwide Permit Activity.** If you are not a federal agency, and if any listed species or designated critical habitat might be affected or is in the vicinity of the proposed NWP activity, or if the proposed NWP activity is located in designated critical habitat, list the name(s) of those endangered or threatened species that might be affected by the proposed NWP activity or utilize the designated critical habitat that might be affected by the proposed NWP activity. If you are a Federal agency, and the proposed NWP activity requires a PCN, you must provide documentation demonstrating compliance with Section 7 of the Endangered Species Act.

**Block 27. List Any Historic Properties that Have the Potential to be Affected by the Nationwide Permit Activity.** If you are not a Federal agency, and if any historic properties have the potential to be affected by the proposed NWP activity, list the name(s) of those historic properties that have the potential to be affected by the proposed NWP activity. If you are a Federal agency, and the proposed NWP activity requires a PCN, you must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

**Block 28. List the Wild and Scenic River or Congressionally Designated Study River if the Nationwide Permit Activity Would Occur in such a River.** If the proposed NWP activity will occur in a river in the National Wild and Scenic River System or in a river officially designated by Congress as a "study river" under the Wild and Scenic Rivers Act, provide the name of the river. For a list of Wild and Scenic Rivers and study rivers, please visit <http://www.rivers.gov/>.

**Block 29. Nationwide Permit Activities that also Require Permission from the Corps Under 33 U.S.C. 408.** If the proposed NWP activity also requires permission from the Corps under 33 U.S.C. 408 because it will temporarily or permanently alter, occupy, or use a Corps federal authorized civil works project, indicate whether you have submitted a written request for section 408 permission from the Corps district having jurisdiction over that project.

**Block 30. Other Information Required For Nationwide Permit Pre-Construction Notifications.** The terms of some of the Nationwide Permits include additional information requirements for preconstruction notifications:

- \* NWP 3, Maintenance –information regarding the original design capacities and configurations of the outfalls, intakes, small impoundments, and canals.
- \* NWP 31, Maintenance of Existing Flood Control Facilities –a description of the maintenance baseline and the dredged material disposal site.
- \* NWP 33, Temporary Construction, Access, and Dewatering –a restoration plan showing how all temporary fills and structures will be removed and the area restored to pre - project conditions.
- \* NWP 44, Mining Activities –if reclamation is required by other statutes, then a copy of the final reclamation plan must be submitted with the pre - construction notification.
- \* NWP 45, Repair of Uplands Damaged by Discrete Events –documentation, such as a recent topographic survey or photographs, to justify the extent of the proposed restoration.
- \* NWP 48, Commercial Shellfish Aquaculture Activities –(1) a map showing the boundaries of the project area, with latitude and longitude coordinates for each corner of the project area; (2) the name(s) of the species that will be cultivated during the period this NWP is in effect; (3) whether canopy predator nets will be used; (4) whether suspended cultivation techniques will be used; and (5) general water depths in the project area (a detailed survey is not required).
- \* NWP 49, Coal Remining Activities –a document describing how the overall mining plan will result in a net increase in aquatic resource functions must be submitted to the district engineer and receive written authorization prior to commencing the activity.
- \* NWP 50, Underground Coal Mining Activities –if reclamation is required by other statutes, then a copy of the reclamation plan must be submitted with the pre - construction notification.

If more space is needed, attach an extra sheet of paper marked Block 30.

**Block 31. Signature of Applicant or Agent.** The PCN must be signed by the person proposing to undertake the NWP activity, and if applicable, the authorized party (agent) that prepared the PCN. The signature of the person proposing to undertake the NWP activity shall be an affirmation that the party submitting the PCN possesses the requisite property rights to undertake the NWP activity (including compliance with special conditions, mitigation, etc.).

#### **DELINEATION OF WETLANDS, OTHER SPECIAL AQUATIC SITES, AND OTHER WATERS**

Each PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current wetland delineation manual and regional supplement published by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. The 45 day PCN review period will not start until the delineation is submitted or has been completed by the Corps.

#### **DRAWINGS AND ILLUSTRATIONS**

##### **General Information.**

Three types of illustrations are needed to properly depict the work to be undertaken. These illustrations or drawings are identified as a Vicinity Map, a Plan View or a Typical Cross - Section Map. Identify each illustration with a figure or attachment number. For linear projects (e.g. roads, subsurface utility lines, etc.) gradient drawings should also be included. Please submit one original, or good quality copy, of all drawings on 8½x11 inch plain white paper (electronic media may be substituted). Use the fewest number of sheets necessary for your drawings or illustrations. Each illustration should identify the project, the applicant, and the type of illustration (vicinity map, plan view, or cross - section). While illustrations need not be professional (many small, private project illustrations are prepared by hand), they should be clear, accurate, and contain all necessary information.

#### **ADDITIONAL INFORMATION AND REQUIREMENTS**

For proposed NWP activities that involve discharges into waters of the United States, water quality certification from the State, Tribe, or EPA must be obtained or waived (see NWP general condition 25). Some States, Tribes, or EPA have issued water quality certification for one or more NWPs. Please check the appropriate Corps district web site to see if water quality certification has already been issued for the NWP(s) you wish to use. For proposed NWP activities in coastal states, state Coastal Zone Management Act consistency concurrence must be obtained, or a presumption of concurrence must occur (see NWP general condition 26). Some States have issued Coastal Zone Management Act consistency concurrences for one or more NWPs. Please check the appropriate Corps district web site to see if Coastal Zone Management Act consistency concurrence has already been issued for the NWP(s) you wish to use.

# **Wetland Delineation Report**

## WETLAND DELINEATION

**509 & 515 CAPITOL TRAIL  
NEWARK, NEW CASTLE COUNTY,  
DELAWARE**



Prepared for:

Schwab VIII, LLC  
ATTN: Mr. Eric Schwab  
503 Capitol Trail  
Newark, Delaware 19719

Prepared by:

Ten Bears Environmental Associates Co.  
1080 S. Chapel St. Suite 200  
Newark, Delaware 19702

April 3, 2025  
TBE Project No. 25-2582.A

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## FIGURES

Figure 1	Site Location Sketch
Figure 2	U.S. Fish and Wildlife Service Mapped Wetlands
Figure 3	Wetland Flagging Sketch

## APPENDICES

Appendix A	Flood Zone Mapping
Appendix B	Historical Aerial Photographs
Appendix C	Site Photographs
Appendix D	Data Point Sheet



## I. INTRODUCTION

Ten Bears Environmental Associates Co. (TBE) has completed a Wetland Delineation of the Property (referred to herein as “Property” or “Site”) located at 509 and 515 Capitol Trail, Newark, Delaware. TBE completed the delineation on behalf of Schwab VIII, LLC. The purpose was to estimate the boundaries of regulated wetlands on the Property. The assessment was performed in general accordance with the 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (Version 2.0), and associated guidance letters. The delineation included cataloguing plant species, identifying hydric soils, evaluating site hydrology, and reviewing environmental regulatory and geographic information pertaining to the Property and nearby lands.

This report documents the findings of the delineation. The following sections summarize the general site characteristics, wetland delineation methods, delineation results, and our conclusions and recommendations.

## II. GENERAL SITE CHARACTERISTICS

TBE reviewed selected mapping and visually reviewed the Property for general characteristics that may be pertinent to a wetlands evaluation. The following summarizes our findings regarding observed site conditions, surface topography and site drainage, flooding potential, soils, and mapped wetlands.

### A. SITE DESCRIPTION

The approximately 4.8-acre Site (New Castle County, Delaware tax parcel nos. 1801000002, 1801000003, 1801000004, and 1801000005) is located at 509 and 515 Capitol Trail, Newark, Delaware. **Figure 1** depicts the approximate site location on an applicable New Castle County topographic map. The Site is largely comprised of woodlands with two buildings located in the south of the Site.

The Property is also improved with a drainage ditch originating with a roadway culvert located on parcel No. 1801000002, which discharges to White Clay Creek off site to the north. The ditch banks are steep and narrow with little to no meander, suggesting it was excavated to receive the culverted roadway drainage. Also, the approximately 36-inch pipe discharges at approximately 3 feet below grade to the approximately 6-foot-deep ditch, indicating original construction with a shallower dry ditch, with subsequent scour erosion to the current condition.

### B. SURFACE TOPOGRAPHY AND SITE DRAINAGE

Based on a review of the U.S. Geological Survey (USGS) topographic map<sup>(1)</sup> and New Castle County parcel view internet site, estimated surface elevations within the Property are between 54 and 78 feet. The ground surface generally slopes to the north towards White Clay Creek (**Figure 2**). Based on the largely undeveloped condition of the Site, the majority of stormwater likely absorbs into the ground. Surface topography indicates that excess stormwater runoff on the



Site would flow north to northeast towards White Clay Creek. Groundwater flow typically follows topographic trends, absent man-made influences, indicating flow to the north to northeast towards White Clay Creek. A small portion of the Site near the center drains to the ditch, which suggests the original condition would not have supported a natural stream.

#### C. FLOOD ZONES

TBE reviewed mapping information available from the Federal Emergency Management Agency's (FEMA's) Internet site on March 3, 2025 (FEMA Map Panel 10003C0130L, January 22, 2020) which indicated that 1-percent and 0.2-percent annual chance (100-year and 500-year) flood zones along White Clay Creek extend onto the northern portions of the property. **Appendix A** includes the map.

#### D. SOILS

Ten Bears reviewed the online U.S. Department of Agriculture (USDA) Natural Resources Conservation Service Web Soil Survey for general soil conditions at the Property. Soils at the Property are described as 61.4 percent Delanco Codorus-Hatboro complex, 0 to 8 percent slopes (DcB) and 38.6 percent Elsinboro Delanco-Urban land complex, 0 to 8 percent slopes (ErB). DcB and ErB soils are non-hydric soils typically found on stream terraces and are described as moderately well drained and well drained respectively, unlikely to support wetlands.

#### E. WETLANDS

TBE reviewed the U.S. Fish & Wildlife Service's Wetlands Mapper and the State of Delaware, Department of Natural Resources and Environmental Control's (DNREC's) "Environmental Navigator" on March 12, 2025 to evaluate the presence of mapped wetland areas at the Site. Mapped riverine wetlands are depicted offsite along White Clay Creek, but do not extend onto the Subject Site (**Figure 3**).

#### F. HISTORICAL AERIAL PHOTOGRAPHS

TBE reviewed historical aerial photographs provided by Envirosite Corporation (**Appendix B**) to further evaluate the character of the apparent man-made drainage ditch. The earliest photograph from 1937 shows a somewhat vague erosional feature in the agricultural field at the site apparently associated with piping under Capitol Trail. A similar feature extends south across Capitol Trail near the current location of Elm Avenue. On the 1951 aerial, this feature is not visible immediately north of Capitol Trail, appears to originate near the current ditch location at the approximate limit of the 100-year floodplain and extends in a relatively distinct straight line to the north. The Property appears as open meadow throughout these photos (1937 to 1952). Though blurry, the 1954 aerial shows disturbance near the road on the south side of the property. The site appears to gradually overgrow over subsequent years, obscuring the location of the ditch.

Based on our review, the current ditch appears to originate as an erosion feature associated with culverted drainage under Old Capitol Trail. The culvert is then extended northward into

the property to the current location between 1937 and 1951. Based on the more distinct and linear appearance, the ditch likely was excavated between the 1937 and 1951 aerials.

### III. WETLAND DELINEATION METHODS

A “Routine Level” wetland delineation was performed for the Site on March 13<sup>th</sup> and March 18, 2025. The purpose of the delineation was to identify wetlands potentially subject to regulation by Section 404 of the Clean Water Act (CWA). The delineation was performed in general accordance with the “Three Parameter” approach outlined in the 1987 Army Corps of Engineers Wetland Delineation Manual, the 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (Version 2.0), and associated guidance letters.

The United States Army Corps of Engineers (USACE) criteria for identification of wetlands requires the presence of each of the following three wetland indicators for a “positive” wetland delineation: hydric soils, hydrology, and dominant hydrophytic vegetation. TBE personnel evaluated these indicators at selected locations, identified as “Data Points,” by performing a hand-augered boring to review soil conditions and hydrology, and visually reviewing surrounding vegetation.

Vegetation communities were characterized through a five-strata approach, considering trees, saplings, shrubs, woody vines, and herbaceous species. Visual estimates of the number of species for each stratum were obtained within a radius of 30 feet. The wetland indicator status of each species was obtained from the 1988 National List of Plant Species that Occur in Wetlands: Northeast (Region 1).

The soil parameter was evaluated by performing a soil boring at each Data Point location. A representative soil profile of at least approximately 24 inches was taken from the soil boring to characterize and identify the presence or absence of hydric soil indicators, as described in the 2010 Field Indicators of Hydric Soils in the United States (Version 7.0), published by The United States Department of Agriculture and the Natural Resources Conservation Service.

Each sampling point was evaluated for the presence of primary characteristics of hydrology by visual observation of inundation, saturation to within 12 inches of the surface, and drainage patterns. Evaluated secondary indicators included, but were not necessarily limited to, oxidized rhizospheres in the upper 12 inches of the soil profile and visible drainage patterns.

The wetland boundary was estimated and marked with consecutively numbered pink flagging bearing the words “Wetland Delineation.”

### IV. DELINEATION RESULTS

The results of the delineation did not identify regulated wetlands at the Site. As a conservative measure, TBE flagged the apparent non-jurisdictional constructed ditch along the mean high-water line as potential ‘Waters of the United States’ (WOTUS), pending review. **Figure 3** depicts the approximate field delineated extent of the bank of the ditch and the Data Point locations. Photographs taken during the delineation are provided in **Appendix C**. See **Appendix D** for Data Forms documenting observed conditions at the Data Point locations. No datapoint was taken within the presumed wetland area due to lack of vegetation and rocky soil in the ditch bottom.

Waters of the United States (WOTUS) are defined as bodies of water subject to federal regulation by the U.S. Environmental Protection Agency (EPA) and the U.S. Army Corps Engineers. This includes traditional navigable waters, interstate waters, territorial seas, impoundments, tributaries, adjacent wetlands, and other waters with a significant nexus to regulated waters.

## A. UPLANDS

Data Point 1 (DP-1) and Data Point 2 (DP-2) were performed in apparent upland areas adjacent to the drainage swale. These points did not meet the criteria to be considered wetlands. The following describes conditions represented by the Data Points. Due to the absence of one or more of the three wetland parameters evaluated, these areas are considered uplands / non-wetlands.

### 1. VEGETATION

Other than lawn grass, species observed at the DP-1 and DP-2 locations consisted of but were not necessarily limited to: White Oak (*Quercus alba*), Eastern White Pine (*Pinus strobus*), Sycamore (*Platanus occidentalis*), Tulip Tree (*Liriodendron tulipifera*), Sugar Maple (*Acer saccharinum*), Willow Oak (*Quercus phellos*), St. Andrew's Cross (*Hypericum hypericoides*), Lesser celandine (*Ficaria verna*), Multiflora Rose (*Rosa multiflora*), Ivy (*Hedera helix*).

Dominant vegetation at the DP-1 and DP-2 locations are not considered hydrophytic, based on prevalence indices of 3.8 and 3.5, respectively.

### 2. HYDROLOGY

No indications of groundwater or saturated soils within 12 inches of the ground surface were observed at DP-1 and DP-2. Drainage patterns associated with the constructed ditch were observed in the general area of the Datapoint locations.

### 3. NON-HYDRIC SOILS

Soils at the DP-1 and DP-2 locations were relatively consistent. They were characterized as a brown (Munsell Colors 10YR 4/3) loam from 0 to 12 – 15 inches below the ground surface (bgs), underlain by a brown (10YR 4/4) loam from 12-15 to the termination depth of approximately 25 inches bgs. These soils are not considered hydric.

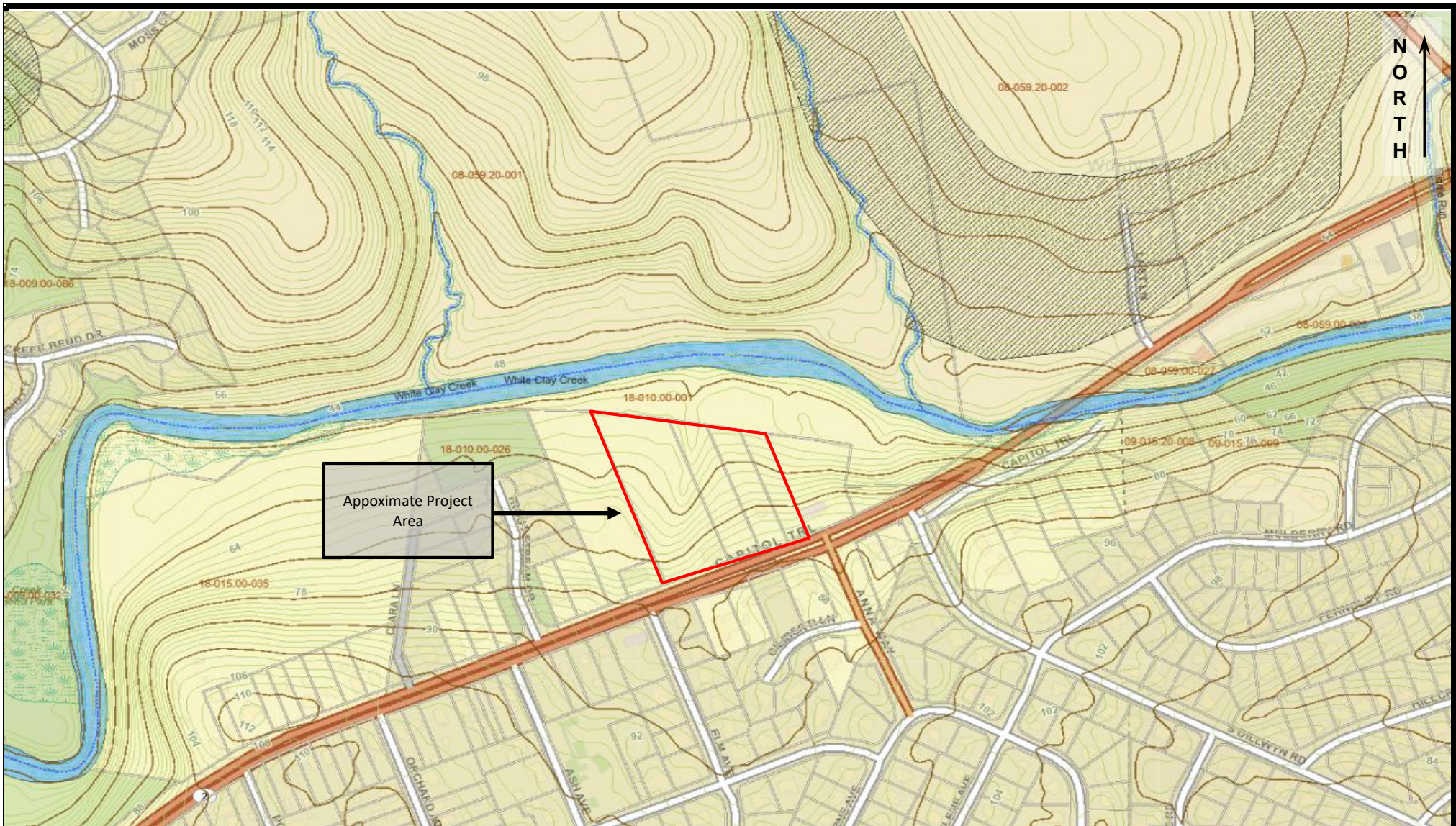
## **V. CONCLUSIONS AND RECOMMENDATIONS**

TBE completed a Wetland Delineation of 509 and 515 Capitol Trail, Newark, New Castle County, Delaware. The results of the field investigation identified no apparent regulated wetlands at the Site. No mapped wetlands or hydric soils were identified and the drainage area associated with the ditch does not appear sufficient to support a stream. As such, drainage ditch is an apparent man-made feature in uplands. However, as a conservative measure, TBE flagged potential Waters of the United States (WOTUS) in the areas below the mean-high water line of the ditch. Prior to future site development activities, TBE recommends engaging a surveyor to field locate the flags for inclusion on plan submissions to regulatory agencies. Although in our opinion the existing feature likely is unregulated, should future development plans involve encroaching on or within 100 feet of the identified areas, TBE recommends submitting a Jurisdictional Determination or permit application with the United States Army Corps of Engineers – Philadelphia District, prior to beginning land disturbing activities near the identified resources.

This report is based on Ten Bears Environmental Associates Co.'s professional opinion regarding wetland / non-wetland conditions observed during the field investigation at the Site and our interpretation of the observed site conditions, maps, and regulatory information. The observations, conclusions, and recommendations presented in this report are based solely on conditions encountered at the time of the investigation effort. Final authority as to the accuracy of this delineation and jurisdictional status of waters of the United States rests with the Philadelphia District, U.S. Army Corps of Engineers (USACE) and / or the State of Delaware Department of Natural Resources and Environmental Control, Division of Water Resources, Wetlands and Waterways Section. It may be prudent to request a jurisdictional determination from the USACE prior to encroaching on wetlands identified herein or those mapped on the national wetland inventory map.

## FIGURES





Notes: Notes: This drawing was adapted from an aerial photograph obtained from New Castle County Web App Viewer



Ten Bears Environmental Associates, Co.  
1080 S. Chapel St., Suite 200  
Newark, Delaware 19702  
Phone: (302) 731-8633

## FIGURE 1 - LOCATION SKETCH

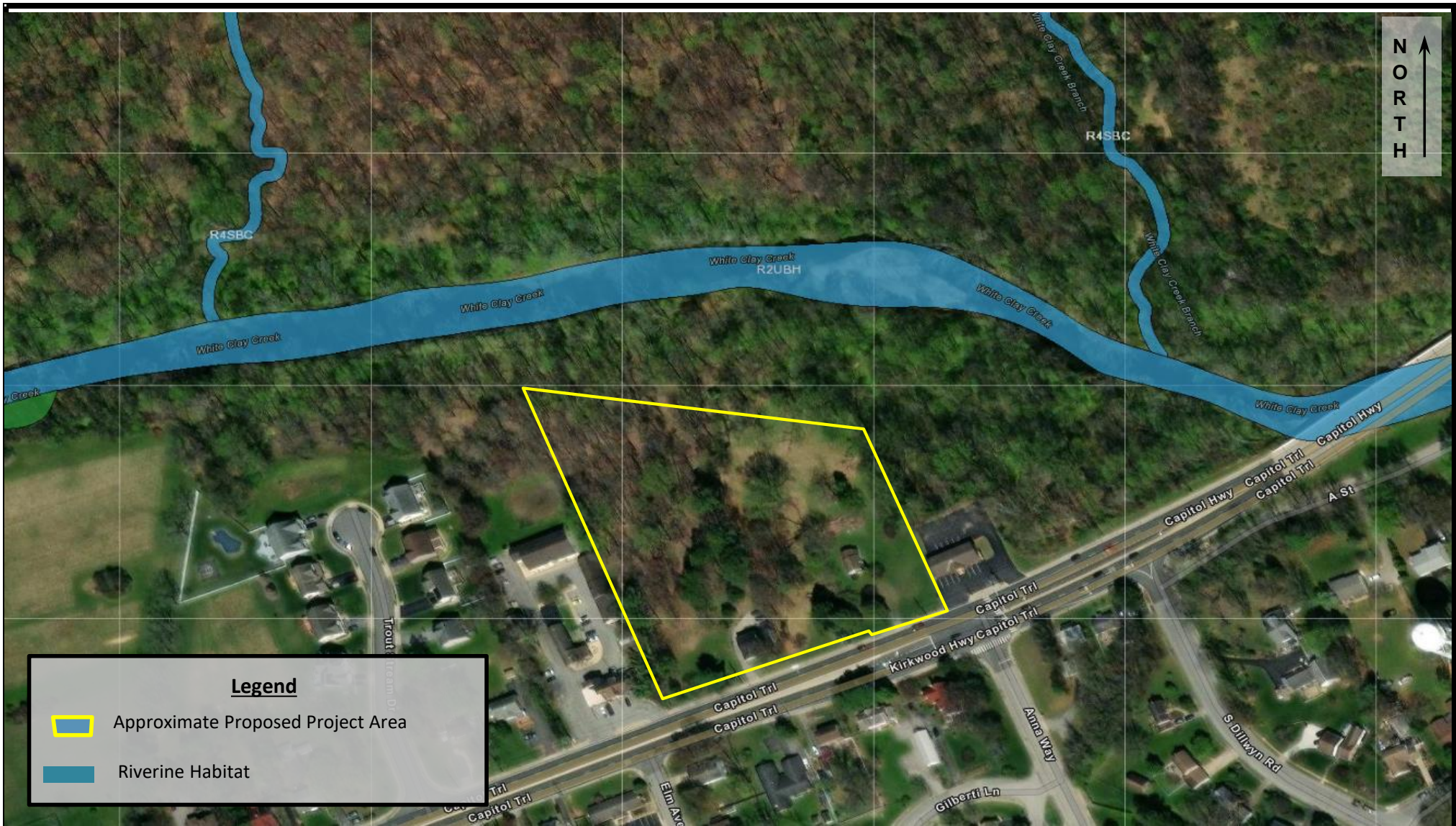
### CAPITOL TRAIL

509 & 515 CAPITOL TRAIL

NEWARK, NEW CASTLE COUNTY, DELAWARE

DATE:	3/18/2025	JOB NUMBER:	24-2582.A
DRAWN BY:	RJJ	SCALE:	NTS
CHECKED BY:	RCG	FIGURE NO:	2
FILE NO:	24-2582.A.FIGS	SHEET	1 OF 1





Notes: This drawing was adapted from an aerial photograph obtained from the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory Mapper. The depicted wetlands and riverine habitat are as mapped by the USFWS NWI Mapper.



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1080 S. Chapel St., Suite 200  
Newark, Delaware 19702  
Phone: (302) 731-8633

## FIGURE 2 - USFWS MAPPED WETLANDS

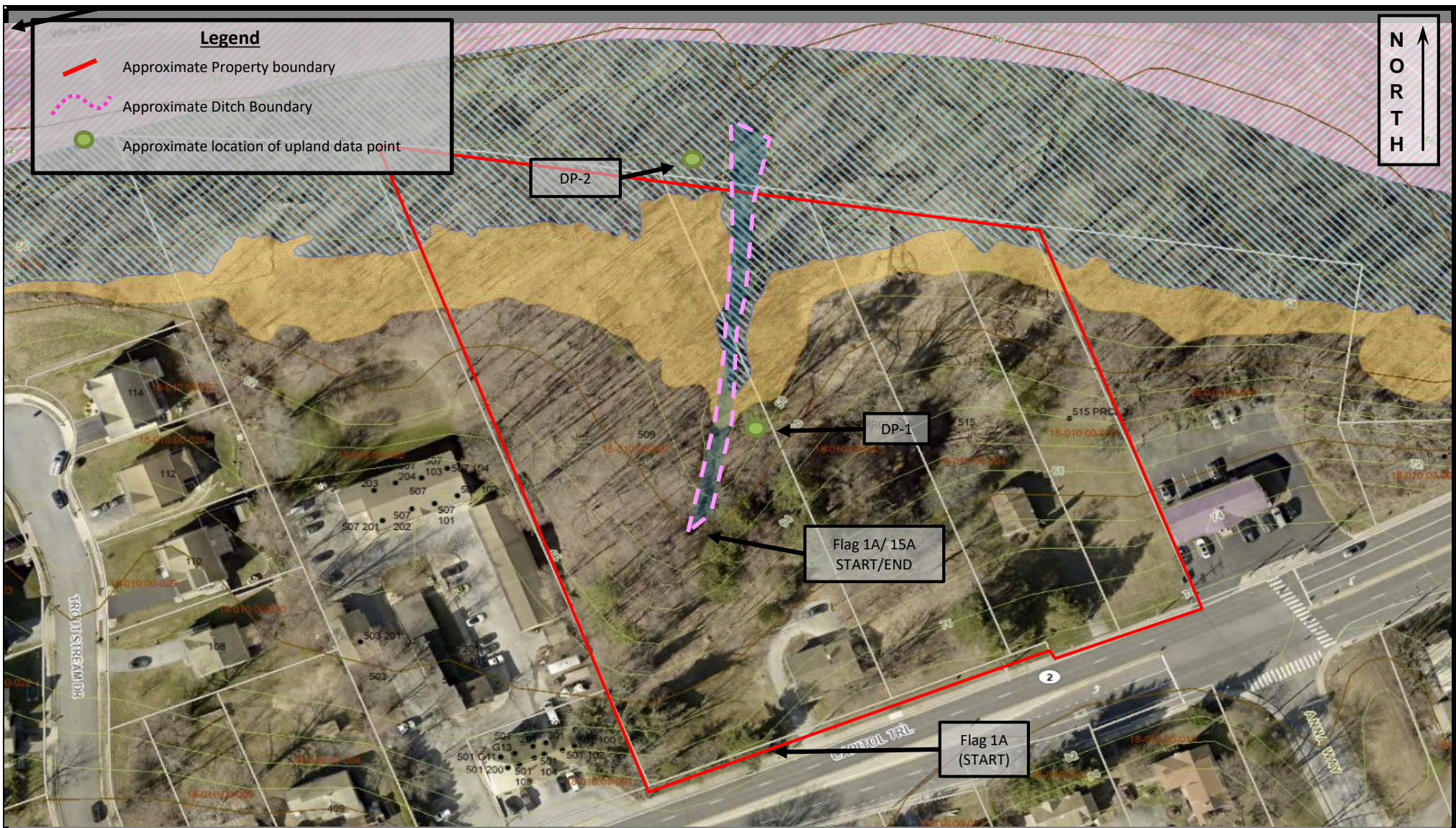
### CAPITOL TRAIL

509 & 515 CAPITOL TRAIL

NEWARK, NEW CASTLE COUNTY, DELAWARE

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DRAWN BY:	RJJ	SCALE:	NTS
CHECKED BY:	RCG	FIGURE NO:	2
FILE NO:	24-2582.A.FIGS	SHEET	1 OF 1





Notes: This drawing was adapted from an aerial photograph obtained from New Castle County Web App Viewer  
 The wetland boundary and data point locations are approximate and not based on a professional land survey. The boundary is based on the findings of TBE's March 19, 2025 field delineation.



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 Newark, Delaware 19702  
 Phone: (302) 731-8633

## FIGURE 3 - WETLAND FLAGGING SKETCH

CAPITOL TRAIL

509 & 515 CAPITOL TRAIL

NEWARK, NEW CASTLE COUNTY, DELAWARE

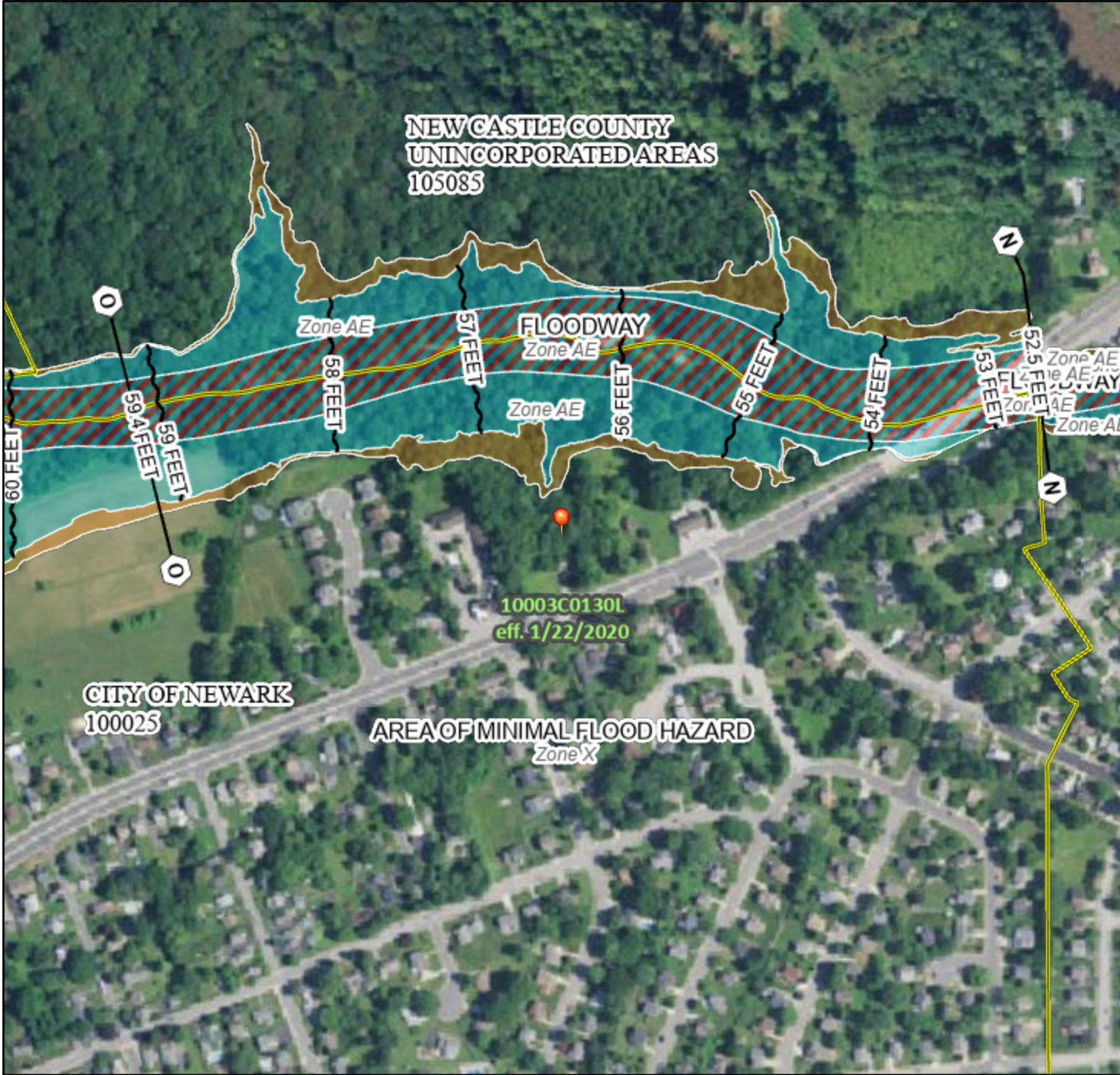
DATE:	3/18/2025	JOB NUMBER:	25-2582.A
DRAWN BY:	RJJ	SCALE:	NTS
CHECKED BY:	RCG	FIGURE NO:	1
FILE NO:	25-2582.A	SHEET	1 OF 1



# National Flood Hazard Layer FIRMMette



75°44'W 39°41'43"N



Basemap Imagery Source: USGS National Map 2023

## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
GENERAL STRUCTURES		Area of Undetermined Flood Hazard Zone D
		Channel, Culvert, or Storm Sewer
OTHER FEATURES		Levee, Dike, or Floodwall
		Cross Sections with 1% Annual Chance Water Surface Elevation
MAP PANELS		Digital Data Available
		No Digital Data Available
MAP PANELS		Unmapped
		The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 3/26/2025 at 3:59 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

## **APPENDIX B**

### **HISTORICAL AERIAL PHOTOGRAPHS**



# Historical Aerial Photo Report | 2025

Order Number: 106584

Report Generated: 03/26/2025

Project Name: 509 & 515 Capitol Trail

Project Number: 25-2582.A

Capitol Trail  
509 Capitol Trl  
Newark, DE, 19711

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Contact us at:  
(866) 211-2028  
[envirositecorp.com](http://envirositecorp.com)

Envirosite's Historical Aerial Photo Report is designed to assist in evaluating a subject property resulting from past activities. EnviroSite's Historical Aerial Photo Report includes a search of available historical aerial photographs, dating back to the 1930s, or earliest available photographs.

## **ENVIROSITE SEARCHED SOURCES**

### **SUBJECT PROPERTY:**

Capitol Trail  
509 Capitol Trl  
Newark, DE, 19711

<b><u>YEAR:</u></b>	<b><u>SCALE:</u></b>	<b><u>SOURCE:</u></b>
1937	1" = 500'	USDA
1951	1" = 500'	USGS
1952	1" = 500'	USGS
1954	1" = 500'	USDA
1959	1" = 1,000'	USGS
1961	1" = 500'	USDA
1968	1" = 500'	USDA
1970	1" = 500'	USGS
1972	1" = 500'	USGS
1973	1" = 1,000'	USGS
1975	1" = 1,000'	USGS
1976	1" = 1,000'	USGS
1982	1" = 1,000'	NHAP
1983	1" = 1,000'	NHAP
1987	1" = 1,000'	USGS
1989	1" = 500'	USGS
1992	1" = 500'	DOQ
1997	1" = 500'	USDA
1998	1" = 1,000'	NAPP
2002	1" = 500'	USDA
2004	1" = 500'	NAIP
2006	1" = 500'	NAIP
2007	1" = 500'	USDA
2009	1" = 500'	NAIP
2011	1" = 500'	NAIP
2013	1" = 500'	NAIP
2015	1" = 500'	NAIP
2017	1" = 500'	NAIP
2018	1" = 500'	NAIP
2021	1" = 500'	NAIP
2023	1" = 500'	NAIP

### ***Disclaimer - Copyright and Trademark Notice***

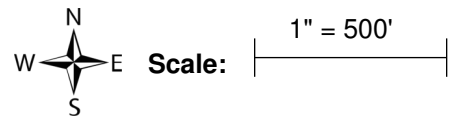
All information contained in this report are based on data available from various public, government and other sources and are based upon the best data available from those sources. The information available in this report may be available from other sources and is not exclusive or the exclusive property of EnviroSite Corporation.

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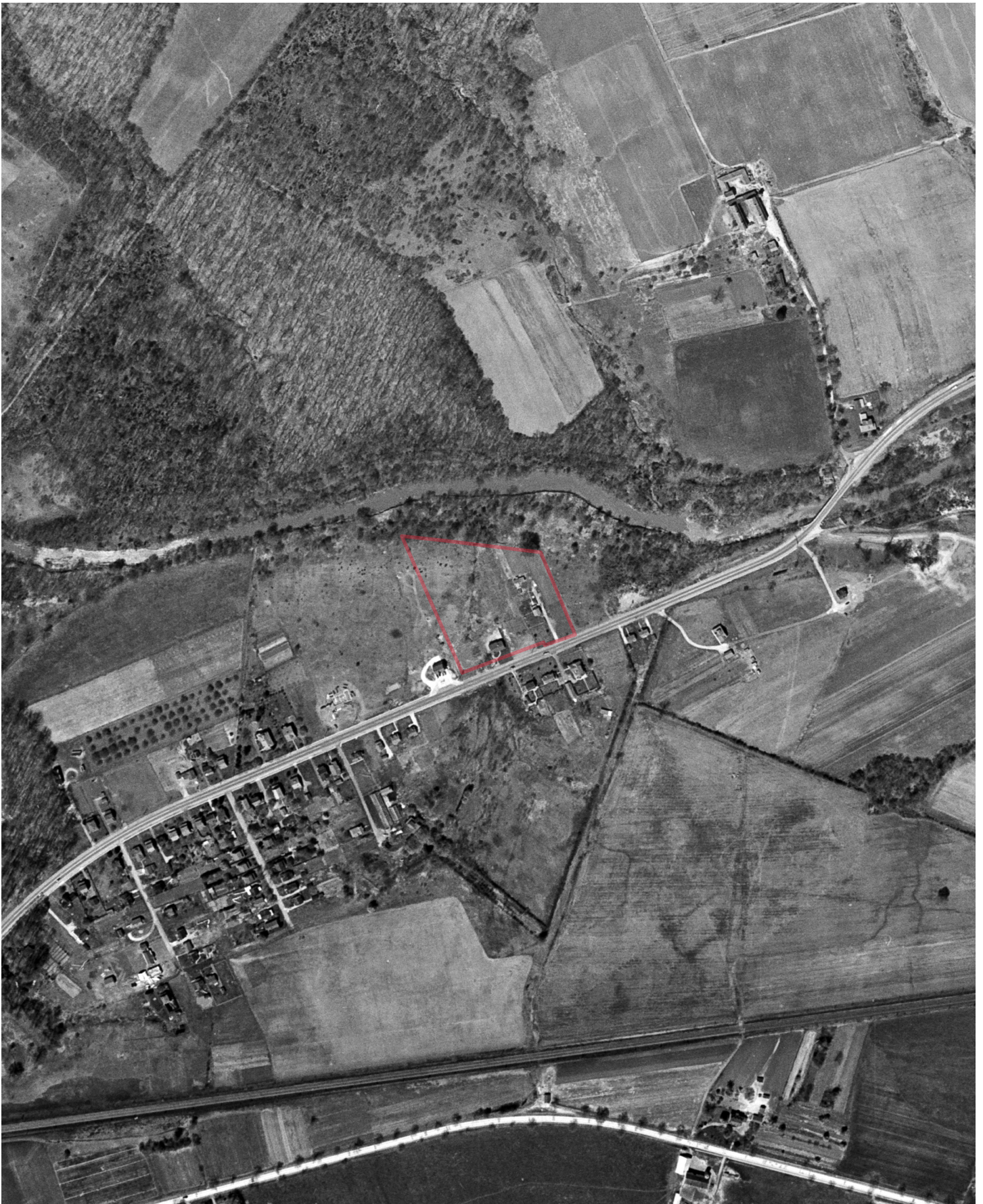
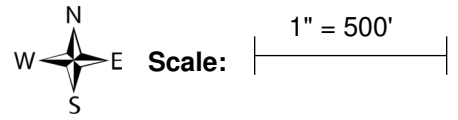


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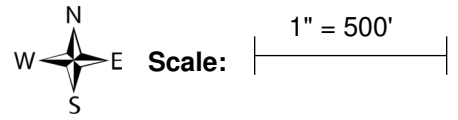


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1951



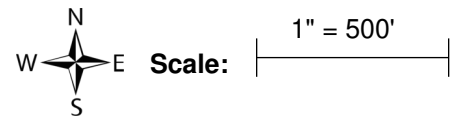


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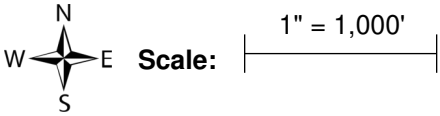


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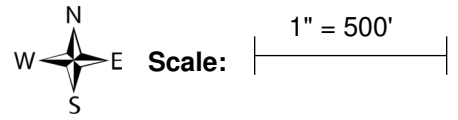


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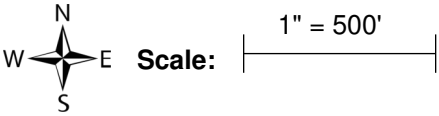




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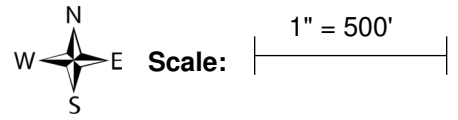


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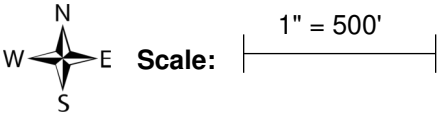


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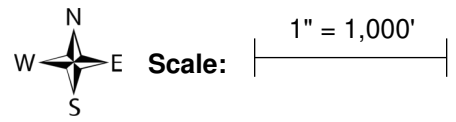


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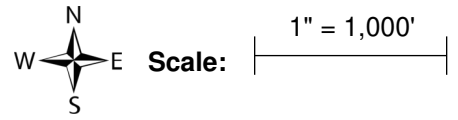


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1973





**FLIGHT YEAR:**  
1975





**FLIGHT YEAR:**  
1976

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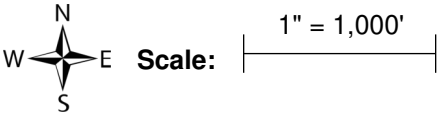


**Scale:** 1" = 1,000'





**FLIGHT YEAR:**  
1982





**FLIGHT YEAR:**  
1983

**Best Quality Available**

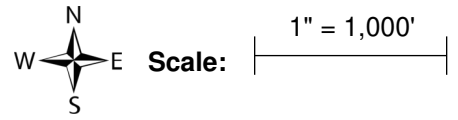


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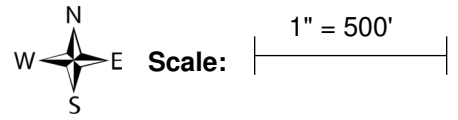


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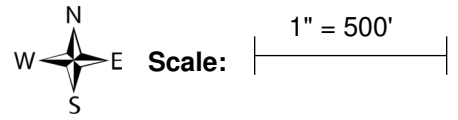


**FLIGHT YEAR:**  
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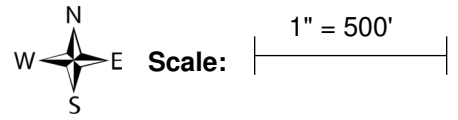


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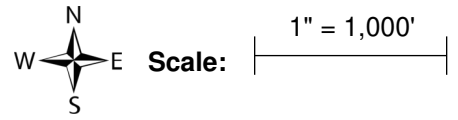


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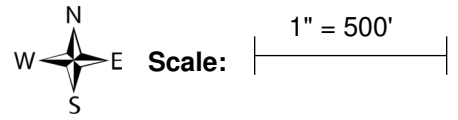


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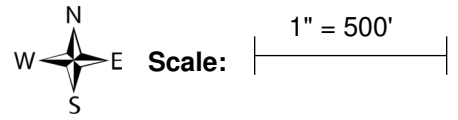


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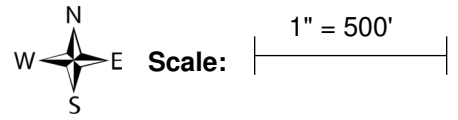


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2004



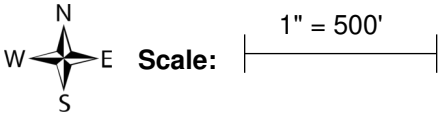


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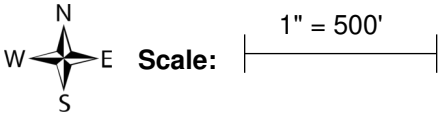


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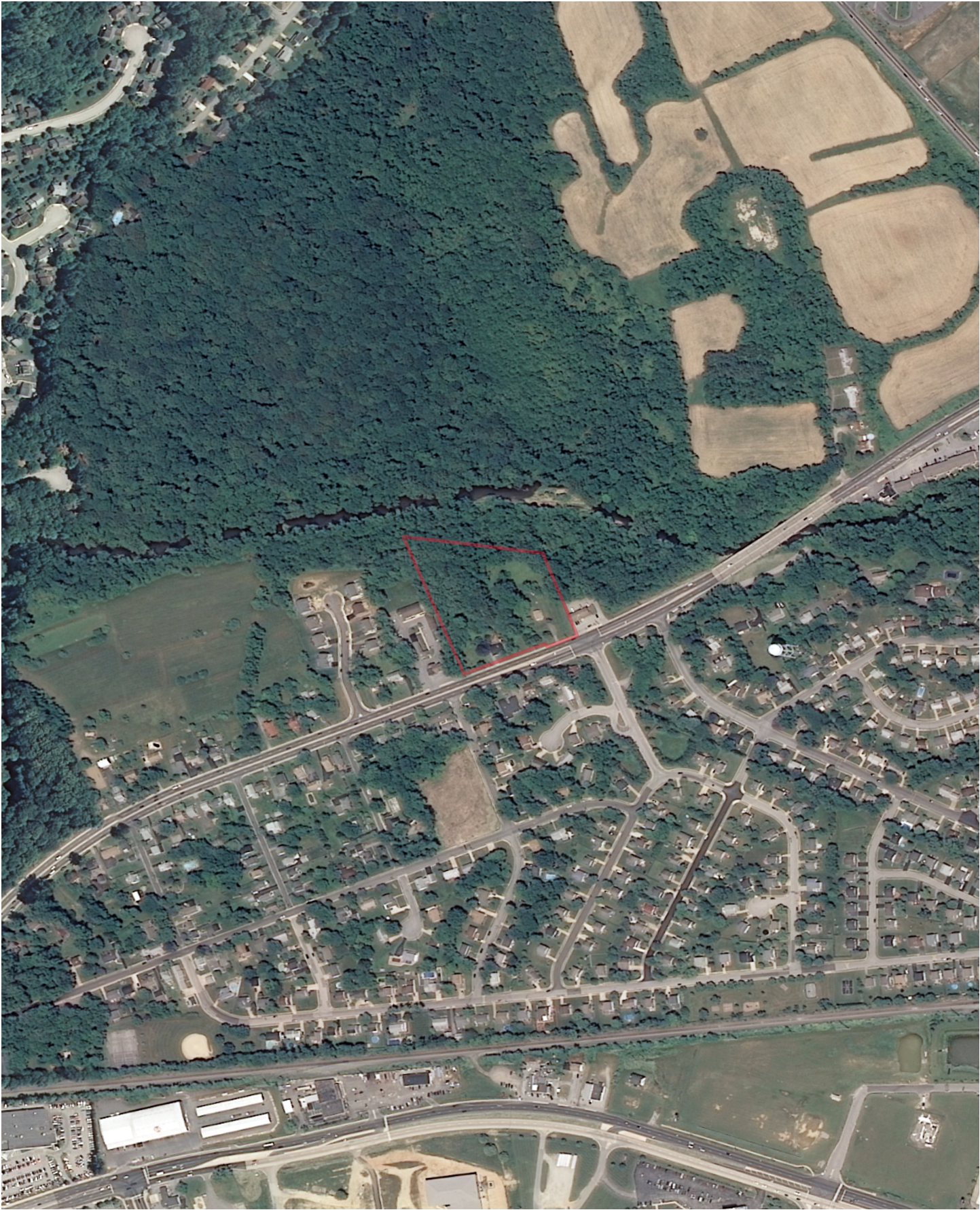
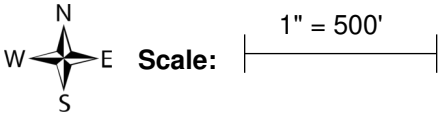


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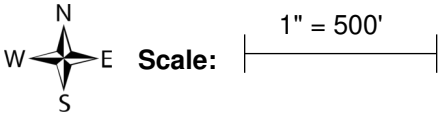


**FLIGHT YEAR:**  
2011



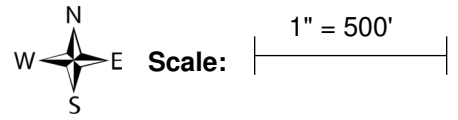


**FLIGHT YEAR:**  
2013



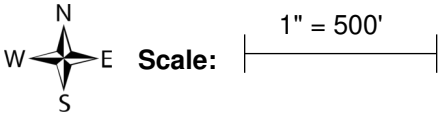


**FLIGHT YEAR:**  
2015



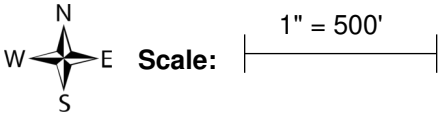


**FLIGHT YEAR:**  
2017



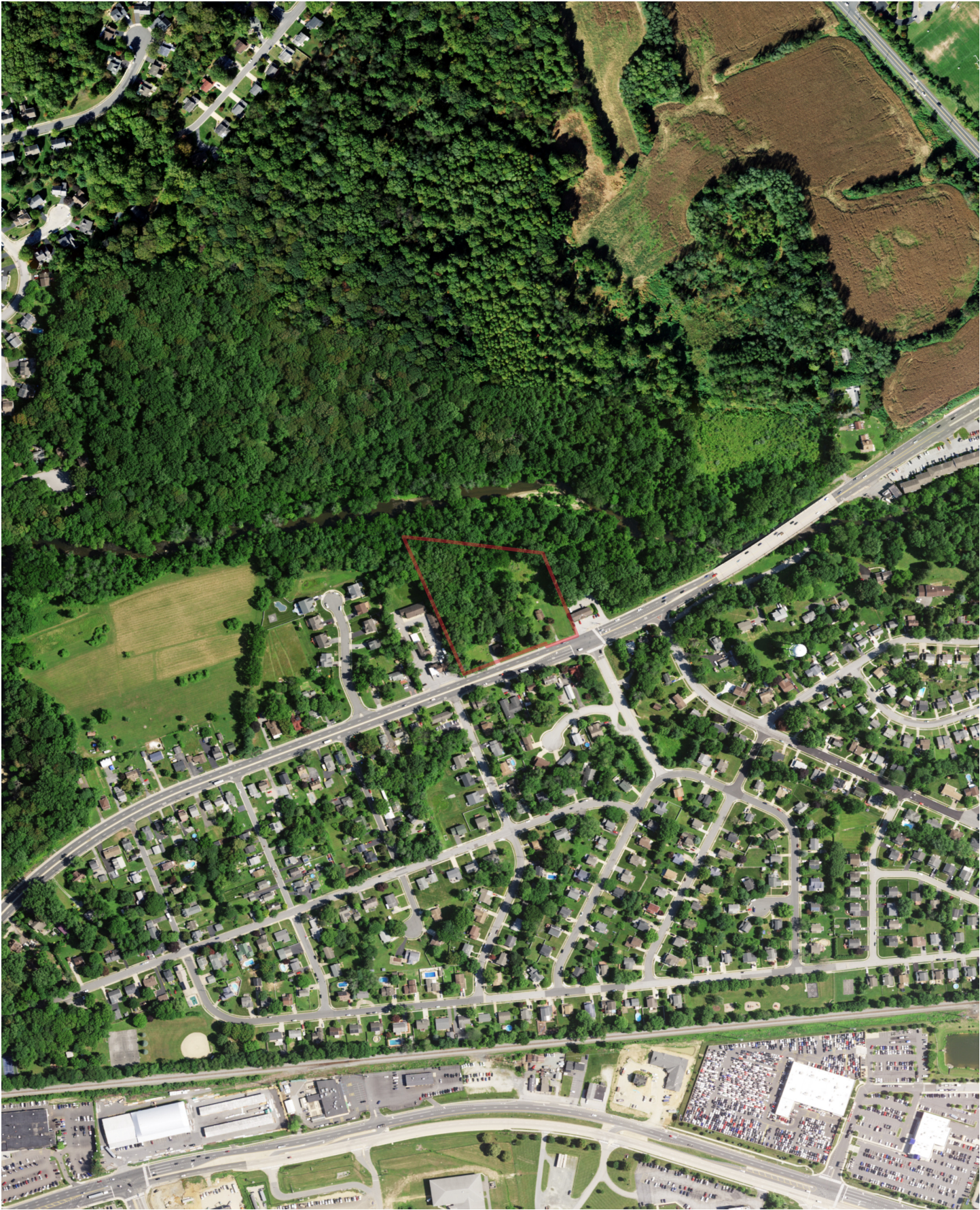
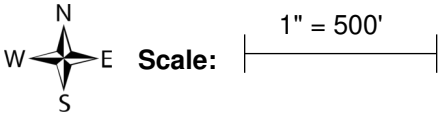


**FLIGHT YEAR:**  
2018



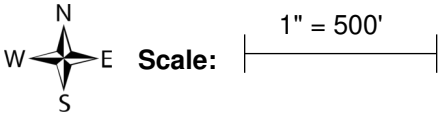


**FLIGHT YEAR:**  
2021





**FLIGHT YEAR:**  
2023





# **APPENDIX C**

## **SITE PHOTOGRAPHS**





**Photograph 1** – General view Data Point 1 facing North



**Photograph 2** – General View of DP-2, facing Northeast





**Photograph 3** – Bank of White Clay Creek. Off Site



**Photograph 4** – General view Site, facing southwest towards Capitol Trail





**Photograph 5 – 36-inch Culvert**



**Photograph 5 – Close-up of Culvert**



# **APPENDIX D**

## **DATA POINT SHEETS**



<div>U.S. Army Corps of Engineers</div> <div>WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region</div> <div>See ERDC/EL TR-12-9; the proponent agency is CECW-CO-R</div>	<div>OMB Control #: 0710-0024, Exp: 9/30/2027</div> <div>Requirement Control Symbol EXEMPT:</div> <div>(Authority: AR 335-15, paragraph 5-2a)</div>
---	---

Project/Site:	509 Capitol Trail	City/County:	Newark	Sampling Date:	3/18/2025
Applicant/Owner:	Schwab VIII, LLC	State:	DE	Sampling Point:	DP1
Investigator(s):	R. Josefowski	Section, Township, Range:			
Landform (hillside, terrace, etc.):		Local relief (concave, convex, none):		Slope (%):	
Subregion (LRR or MLRA):	LRR S	Lat:	39°41'31.0"N	Long:	75°43'41.7"W
		Datum:	NAVD88		
Soil Map Unit Name:	DcB	NWI classification:	n/a		
Are climatic / hydrologic conditions on the site typical for this time of year?      Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> significantly disturbed?      Are "Normal Circumstances" present?      Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> 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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Remarks: DP-1 taken adjacent to drainage drainage swale on property within a mapped floodplain area.					

HYDROLOGY

<b>Wetland Hydrology Indicators:</b>			<b>Secondary Indicators (minimum of two required)</b>		
<u>Primary Indicators (minimum of one is required; check all that apply)</u>					
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> True Aquatic Plants (B14)		<input type="checkbox"/> Surface Soil Cracks (B6)		
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)		<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)		<input checked="" type="checkbox"/> Drainage Patterns (B10)		
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Presence of Reduced Iron (C4)		<input type="checkbox"/> Moss Trim Lines (B16)		
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)		<input type="checkbox"/> Dry-Season Water Table (C2)		
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Thin Muck Surface (C7)		<input type="checkbox"/> Crayfish Burrows (C8)		
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Other (Explain in Remarks)		<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)		
<input type="checkbox"/> Iron Deposits (B5)			<input type="checkbox"/> Stunted or Stressed Plants (D1)		
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			<input type="checkbox"/> Geomorphic Position (D2)		
<input type="checkbox"/> Water-Stained Leaves (B9)			<input type="checkbox"/> Shallow Aquitard (D3)		
<input type="checkbox"/> Aquatic Fauna (B13)			<input type="checkbox"/> Microtopographic Relief (D4)		
			<input type="checkbox"/> FAC-Neutral Test (D5)		
<b>Field Observations:</b>			<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <input type="text"/>			
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <input type="text"/>			
Saturation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <input type="text"/>			
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks: Drainage pattern					



**VEGETATION (Four Strata) – Use scientific names of plants.**

 Sampling Point: DP1

Tree Stratum (Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>6</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)																
2. <u>Quercus alba</u>	<u>30</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Pinus strobus</u>	<u>40</u>	<u>Yes</u>	<u>FACU</u>																	
4. <u>Platanus occidentalis</u>	<u>10</u>	<u>No</u>	<u>FACW</u>																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
80 = Total Cover				<b>Prevalence Index worksheet:</b>  <table style="width: 100%;"> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>10</u></td> <td>x 2 = <u>20</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>135</u></td> <td>x 4 = <u>540</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>145</u> (A)</td> <td><u>560</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.86</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>10</u>	x 2 = <u>20</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>135</u>	x 4 = <u>540</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>145</u> (A)	<u>560</u> (B)	Prevalence Index = B/A = <u>3.86</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>10</u>	x 2 = <u>20</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>135</u>	x 4 = <u>540</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>145</u> (A)	<u>560</u> (B)																			
Prevalence Index = B/A = <u>3.86</u>																				
50% of total cover: <u>40</u> 20% of total cover: <u>16</u>																				
<b>Sapling/Shrub Stratum (Plot size: <u>30</u> )</b>																				
1. <u>Acer saccharinum</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>	<b>Hydrophytic Vegetation Indicators:</b> <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>  </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
15 = Total Cover																				
50% of total cover: <u>8</u> 20% of total cover: <u>3</u>																				
<b>Herb Stratum (Plot size: <u>30</u> )</b>																				
1. <u>Hypericum hypericoides</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  <b>Definitions of Four Vegetation Strata:</b>  <b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/Shrub</b> – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody Vine</b> – All woody vines greater than 3.28 ft in height.																
2. <u>Rosa multiflora</u>	<u>25</u>	<u>Yes</u>	<u>FACU</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
40 = Total Cover																				
50% of total cover: <u>20</u> 20% of total cover: <u>8</u>																				
<b>Woody Vine Stratum (Plot size: <u>30</u> )</b>																				
1. <u>Hedera helix</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>	<b>Hydrophytic Vegetation Present?</b> Yes <u>  </u> No <u>X</u>																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
10 = Total Cover																				
50% of total cover: <u>5</u> 20% of total cover: <u>2</u>																				
Remarks: (Include photo numbers here or on a separate sheet.)																				



## SOIL

Sampling Point: DP1

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	10YR 4/3	100					Loamy/Clayey	
12-25	10YR 4/4	100					Loamy/Clayey	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.<sup>2</sup>Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators:**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) ( <b>MLRA 147, 148</b> )
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) ( <b>MLRA 147, 148</b> )
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) ( <b>MLRA 136</b> )
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR N</b> )	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> Iron Monosulfide (A18)	<input type="checkbox"/> Iron-Manganese Masses (F12) ( <b>LRR N, MLRA 136</b> )
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Umbric Surface (F13) ( <b>MLRA 122, 136</b> )
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) ( <b>MLRA 148</b> )
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Red Parent Material (F21) ( <b>MLRA 127, 147, 148</b> )
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

<input type="checkbox"/> 2 cm Muck (A10) ( <b>MLRA 147</b> )
<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> ( <b>MLRA 147, 148</b> )
<input type="checkbox"/> Piedmont Floodplain Soils (F19)
<input type="checkbox"/> ( <b>MLRA 136, 147</b> )
<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> ( <b>outside MLRA 127, 147, 148</b> )
<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Other (Explain in Remarks)

<sup>3</sup>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 X

Remarks:



<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region</b> See ERDC/EL TR-12-9; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp: 9/30/2027</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: 509 Capitol Trail City/County: Newark Sampling Date: 3/18/2025  
Applicant/Owner: Schwab VIII, LLC State: DE Sampling Point: DP2  
Investigator(s): R. Josefowski Section, Township, Range: \_\_\_\_\_  
Landform (hillside, terrace, etc.): \_\_\_\_\_ Local relief (concave, convex, none): \_\_\_\_\_ Slope (%): \_\_\_\_\_  
Subregion (LRR or MLRA): LRR S Lat: 39°41'32.6"N Long: 75°43'42.7"W Datum: NAVD88  
Soil Map Unit Name: DcB NWI classification: n/a  
Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No \_\_\_\_\_ (If no, explain in Remarks.)  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes x No \_\_\_\_\_  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes _____ No <u>X</u> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u>
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Remarks:  
DP-1 taken adjacent to drainage drainage swale directly north of property within a mapped floodplain area.

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> ____ Surface Water (A1)      ____ True Aquatic Plants (B14) ____ High Water Table (A2)      ____ Hydrogen Sulfide Odor (C1) ____ Saturation (A3)      ____ Oxidized Rhizospheres on Living Roots (C3) ____ Water Marks (B1)      ____ Presence of Reduced Iron (C4) ____ Sediment Deposits (B2)      ____ Recent Iron Reduction in Tilled Soils (C6) ____ Drift Deposits (B3)      ____ Thin Muck Surface (C7) ____ Algal Mat or Crust (B4)      ____ Other (Explain in Remarks) ____ Iron Deposits (B5) ____ Inundation Visible on Aerial Imagery (B7) ____ Water-Stained Leaves (B9) ____ Aquatic Fauna (B13)	<u>Secondary Indicators (minimum of two required)</u> ____ Surface Soil Cracks (B6) ____ Sparsely Vegetated Concave Surface (B8) <u>x</u> ____ 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)
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<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>x</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>x</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>x</u> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes _____ No <u>X</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
Drainage pattern



**VEGETATION (Four Strata) – Use scientific names of plants.**

 Sampling Point: DP2

Tree Stratum (Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. <u>Quercus alba</u>	<u>30</u>	<u>Yes</u>	<u>FACU</u>
3. <u>Liriodendron tulipifera</u>	<u>50</u>	<u>Yes</u>	<u>FACU</u>
4. <u>Platanus occidentalis</u>	<u>10</u>	<u>No</u>	<u>FACW</u>
5. <u>Quercus phellos</u>	<u>15</u>	<u>No</u>	<u>FAC</u>
6. _____	_____	_____	_____
7. _____	_____	_____	_____
_____ =Total Cover			
50% of total cover: <u>53</u>		20% of total cover: <u>21</u>	

Sapling/Shrub Stratum (Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Ilex opaca</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
_____ =Total Cover			
50% of total cover: <u>5</u>		20% of total cover: <u>2</u>	

Herb Stratum (Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Ficaria verna</u>	<u>60</u>	<u>Yes</u>	<u>FAC</u>
2. <u>Rosa multiflora</u>	<u>40</u>	<u>Yes</u>	<u>FACU</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
_____ =Total Cover			
50% of total cover: <u>50</u>		20% of total cover: <u>20</u>	

Woody Vine Stratum (Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Hedera helix</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
_____ =Total Cover			
50% of total cover: <u>3</u>		20% of total cover: <u>1</u>	

**Dominance Test worksheet:**

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

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>10</u>	x 2 = <u>20</u>
FAC species <u>85</u>	x 3 = <u>255</u>
FACU species <u>125</u>	x 4 = <u>500</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>220</u> (A)	<u>775</u> (B)
Prevalence Index = B/A = <u>3.52</u>	

**Hydrophytic Vegetation Indicators:**

   1 - Rapid Test for Hydrophytic Vegetation

   2 - Dominance Test is >50%

   3 - Prevalence Index is  $\leq 3.0$ <sup>1</sup>

   4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)

   Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Four Vegetation Strata:**

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

**Sapling/Shrub** – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 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 X

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



## SOIL

Sampling Point: DP2**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-15	10YR 4/3	100					Loamy/Clayey	
15-25	10YR 4/4	100					Loamy/Clayey	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.<sup>2</sup>Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators:**

☐ Histosol (A1)  
☐ Histic Epipedon (A2)  
☐ Black Histic (A3)  
☐ Hydrogen Sulfide (A4)  
☐ Stratified Layers (A5)  
☐ 2 cm Muck (A10) (**LRR N**)  
☐ Depleted Below Dark Surface (A11)  
☐ Thick Dark Surface (A12)  
☐ Iron Monosulfide (A18)  
☐ Sandy Mucky Mineral (S1)  
☐ Sandy Gleyed Matrix (S4)  
☐ Sandy Redox (S5)  
☐ Stripped Matrix (S6)  
☐ Dark Surface (S7)

☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)  
☐ Thin Dark Surface (S9) (**MLRA 147, 148**)  
☐ Loamy Mucky Mineral (F1) (**MLRA 136**)  
☐ Loamy Gleyed Matrix (F2)  
☐ Depleted Matrix (F3)  
☐ Redox Dark Surface (F6)  
☐ Depleted Dark Surface (F7)  
☐ Redox Depressions (F8)  
☐ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)  
☐ Umbric Surface (F13) (**MLRA 122, 136**)  
☐ Piedmont Floodplain Soils (F19) (**MLRA 148**)  
☐ Red Parent Material (F21) (**MLRA 127, 147, 148**)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

☐ 2 cm Muck (A10) (**MLRA 147**)  
☐ Coast Prairie Redox (A16) (**MLRA 147, 148**)  
☐ Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)  
☐ Red Parent Material (F21) (**outside MLRA 127, 147, 148**)  
☐ Very Shallow Dark Surface (F22)  
☐ Other (Explain in Remarks)

<sup>3</sup>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 X

Remarks:

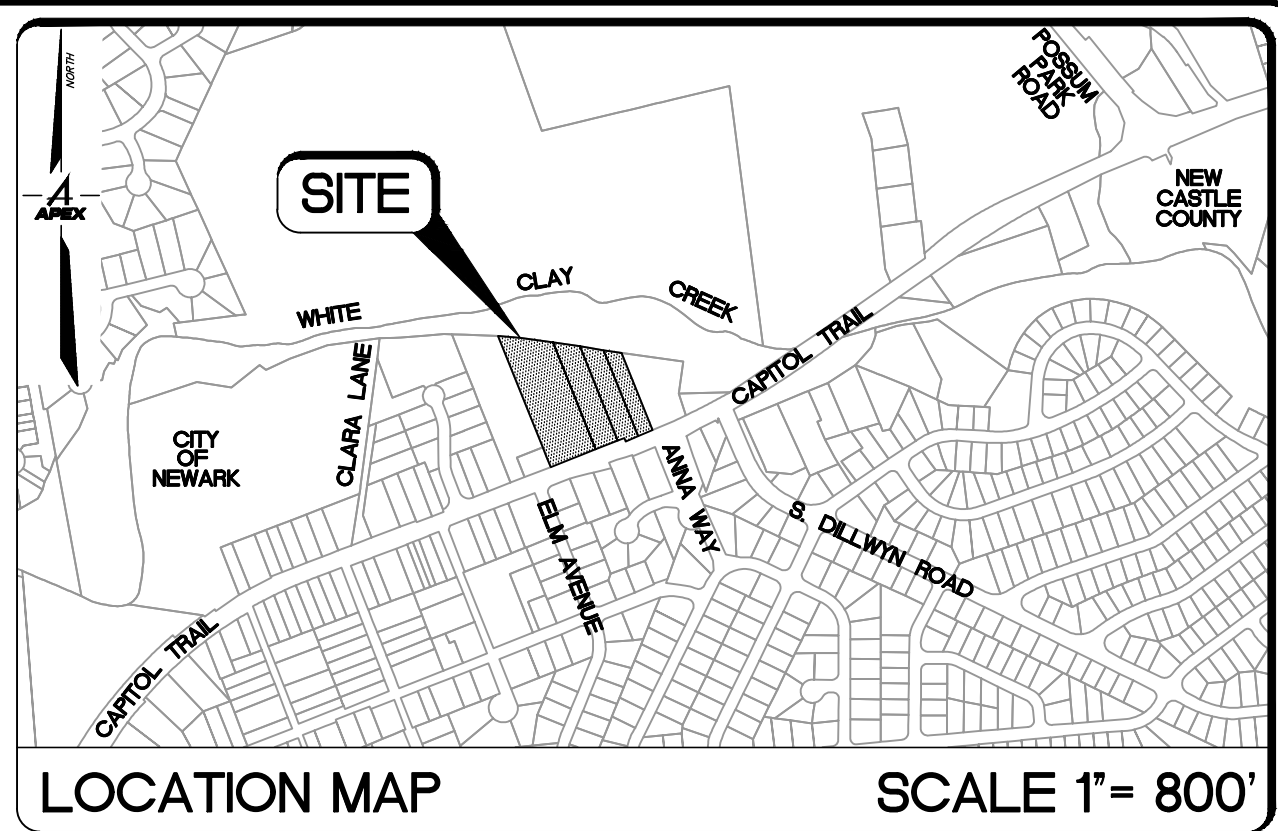
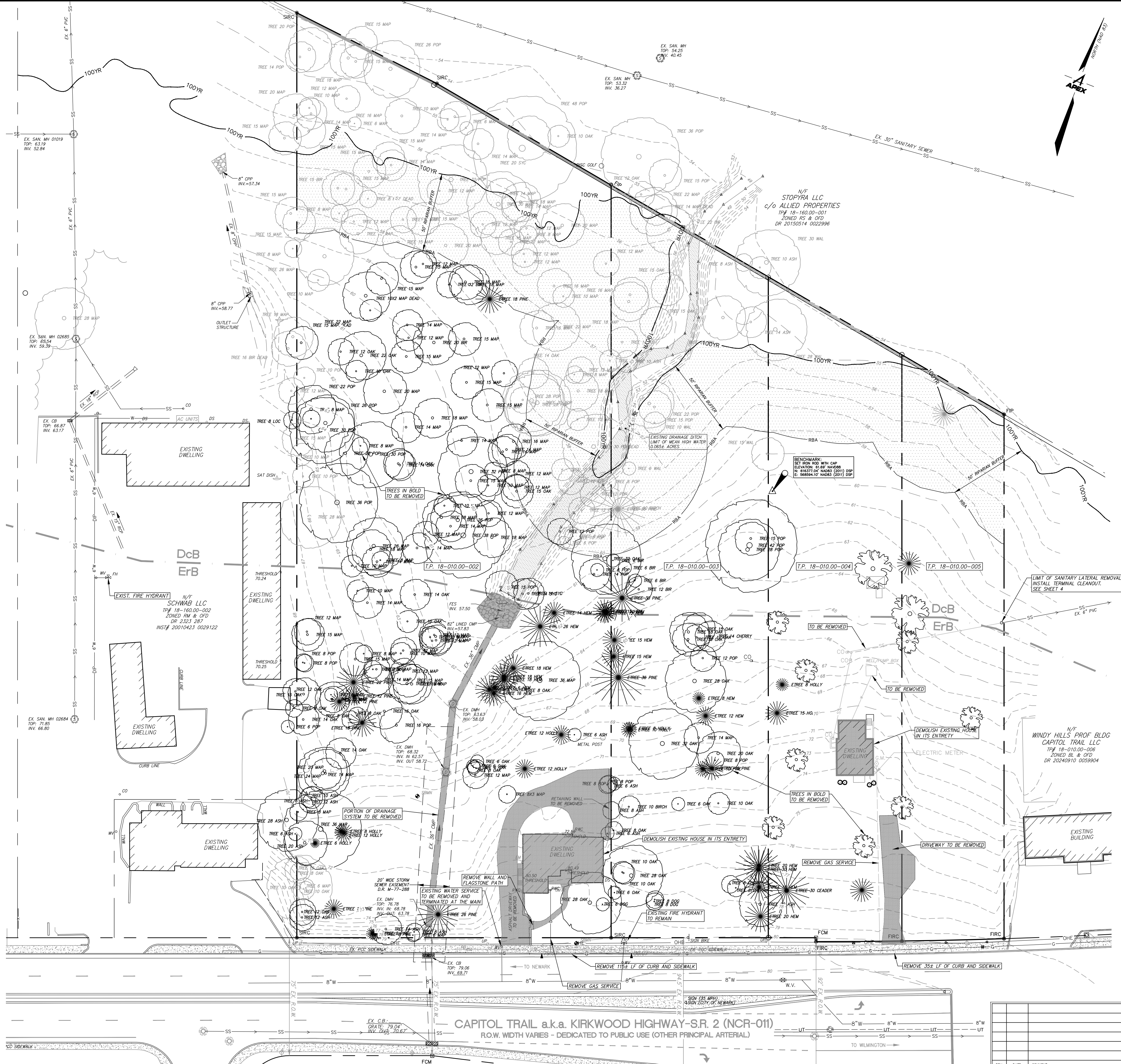


# **Site Plan Drawing**



# LEGEND

---	PROPERTY LINE
---	CENTERLINE
○ IPS	IRON PIPE
○ IPF	IRON PIPE
□ CMF	CONCRETE MONUMENT
○ DMF	DRILL HOLE FOUND
× NF	SURVEY NAIL FOUND
WL	WETLANDS
100YR	100-YEAR FLOOD LINE
-5.3-	CONTOUR
+50.00	SPOT ELEVATION
○	COMBINATION
○	STORM/SANITARY SEWER
○	MANHOLE
SS	SANITARY SEWER
○ CO	CLEAN-OUT
18" DP	DRAINAGE PIPE W/ SIZE & TYPE
○	CATCH BASIN
○ DS	DRAINAGE MANHOLE
○ DS	DOWNSPOUT
○ FH	FIRE HYDRANT
○ WV	WATER VALVE
○ WM	WATER METER
○ FDC	FIRE DEPARTMENT CONNECTION
6"W	WATER LINE W/ SIZE
OHE	ELECTRIC LINE (OVERHEAD)
UE	ELECTRIC LINE (UNDERGROUND)
COM	COMMUNICATIONS LINE (CABLE, FIBER OPTIC, OTHER)
UNK	UNKNOWN (UNDERGROUND)
○	UTILITY POLE W/ GUY WIRE
○ EB	ELECTRIC BOX
○ EM	ELECTRIC METER
○ LP	LIGHT POLE
○	ELECTRIC MANHOLE
○	TELEPHONE BOX
○	COMMUNICATIONS MANHOLE
○	GAS METER
○	GAS SERVICE
○	GAS VALVE
○	GAS VENT
○	GAS LINE
○	GAS MANHOLE
○	FENCE
○	EVERGREEN TREE
○	W/ SIZE
○	DECIDUOUS TREE
○	W/ SIZE
○	DECIDUOUS TREE
○	MULTIPLE TRUNKS
○	W/ SIZE
○	WOODS LINE
○	STREAM
○	CURB & GUTTER
○	CONCRETE SIDEWALK
○	SLAB PAVEMENT
○	IMPERVIOUS PAVEMENT
○	STONE PAVERS
○	TRUNCATED DOMES
○	RIPRAP
○	STRUCTURE/BUILDING
○	SOIL BORING
○	TEST PIT
○	MONITORING WELL
○	SIGN
○	TRAFFIC SIGNAL
○	BUILDING COLUMNS
○	PARKING STALL COUNT
○	SOIL BOUNDARY AND TYPE



## SITE DATA

- TAX PARCEL NUMBERS: 18-010.00-002, 18-010.00-003, 18-010.00-004 AND 18-010.00-005
- PROPERTY OWNERS:  
SCHWAB VIII LLC  
501 CAPITOL TRAIL, SUITE G11  
NEWARK, DE 19711  
(TP 18-010.00-002 AND -003)  
ALL PURPOSE LLC-CAPITOL TRAIL SERIES  
913 BRANCH ROAD  
NEWARK, DE 19711  
(TP 18-010.00-004 AND -005)
- PROPERTY ADDRESSES: 509 AND 515 CAPITOL TRAIL NEWARK, DE 19711
- SITE AREA: EXISTING 4.79± ACRES  
2.48± ACRES (TP 18-010.00-002)  
1.03± ACRES (TP 18-010.00-003)  
0.77± ACRES (TP 18-010.00-004)  
0.53± ACRES (TP 18-010.00-005)
- SOURCES OF TITLE: 20220225 0023538 AND 20170814 0041054
- ZONING/USE: 'RS' AND 'OFD'
- WATER SUPPLY: CITY OF NEWARK - WATER SUPPLY IS SUBJECT TO THE APPROVAL OF THE DELAWARE STATE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL AND THE DELAWARE STATE DIVISION OF PUBLIC HEALTH.
- SEWER: CITY OF NEWARK SANITARY SEWER - SEWERAGE IS SUBJECT TO THE APPROVAL OF THE CITY OF NEWARK DEPARTMENT OF PUBLIC WORKS AND THE DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL.
- DATUM / BENCHMARK: NAVD 88 - RV17 (VERTICAL)  
NAD 83 (2011) DSP-CORS (HORIZONTAL)
- DATE OF SURVEY: 2021 BY BECKER MORGAN GROUP  
UPDATED 2/8/2024 BY APEX ENGINEERING INCORPORATED
- CRITICAL NATURAL AREA: NO PORTION OF THIS SITE IS WITHIN A CRITICAL NATURAL AREA.
- FLOODPLAIN: A PORTION OF THIS SITE IS WITHIN THE 100-YEAR FLOODPLAIN ACCORDING TO FEMA FLOOD INSURANCE RATE MAP #1000300130L DATED 1/22/2020.
- WETLANDS: A WETLAND INVESTIGATION WAS CONDUCTED FOR THIS SITE AND NO WETLANDS WERE FOUND TO EXIST ON THIS SITE. SEE WETLAND DELINEATION REPORT PREPARED BY TEN BEARS ENVIRONMENTAL ASSOCIATES, CO. DATED MARCH 26, 2025.

## EXISTING CONDITIONS AND DEMOLITION PLAN RALPH'S HAUS

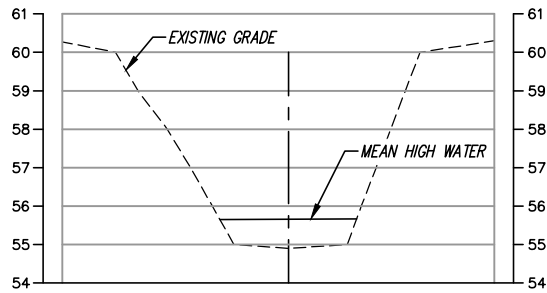
CITY OF NEWARK NEW CASTLE COUNTY DELAWARE

**APEX ENGINEERING INCORPORATED**  
27 W. MARKET STREET NEWPORT, DELAWARE 19804  
(302) 994-1900 (302) 994-9089 FAX

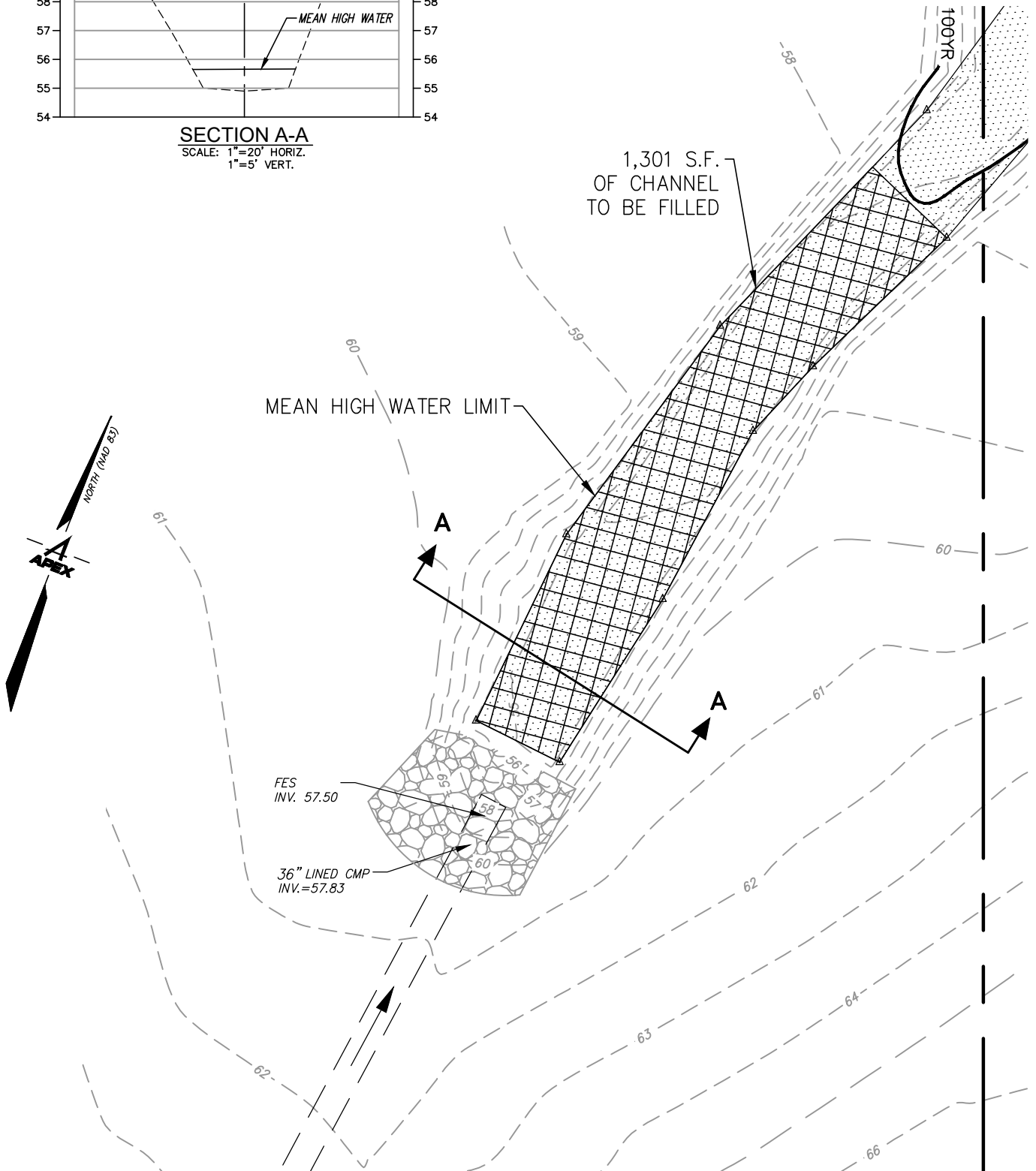
SCALE: 1" = 30'	DATE: 5/21/2025	SHEET NO. 3
SURVEYED BY: JS/KP	DRAWN BY: FEL/JV	OF 9
MICROFILM NO.	CHECKED BY: SGD	REVISION
PROJECT / FILE NUMBER 21209000PLOT-RECORD		

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**SECTION A-A**  
 SCALE: 1"=20' HORIZ.  
 1"=5' VERT.



**APEX** ENGINEERING  
 INCORPORATED  
 27 W. MARKET STREET NEWPORT, DELAWARE 19804  
 (302) 994-1900 (302) 994-9099 FAX

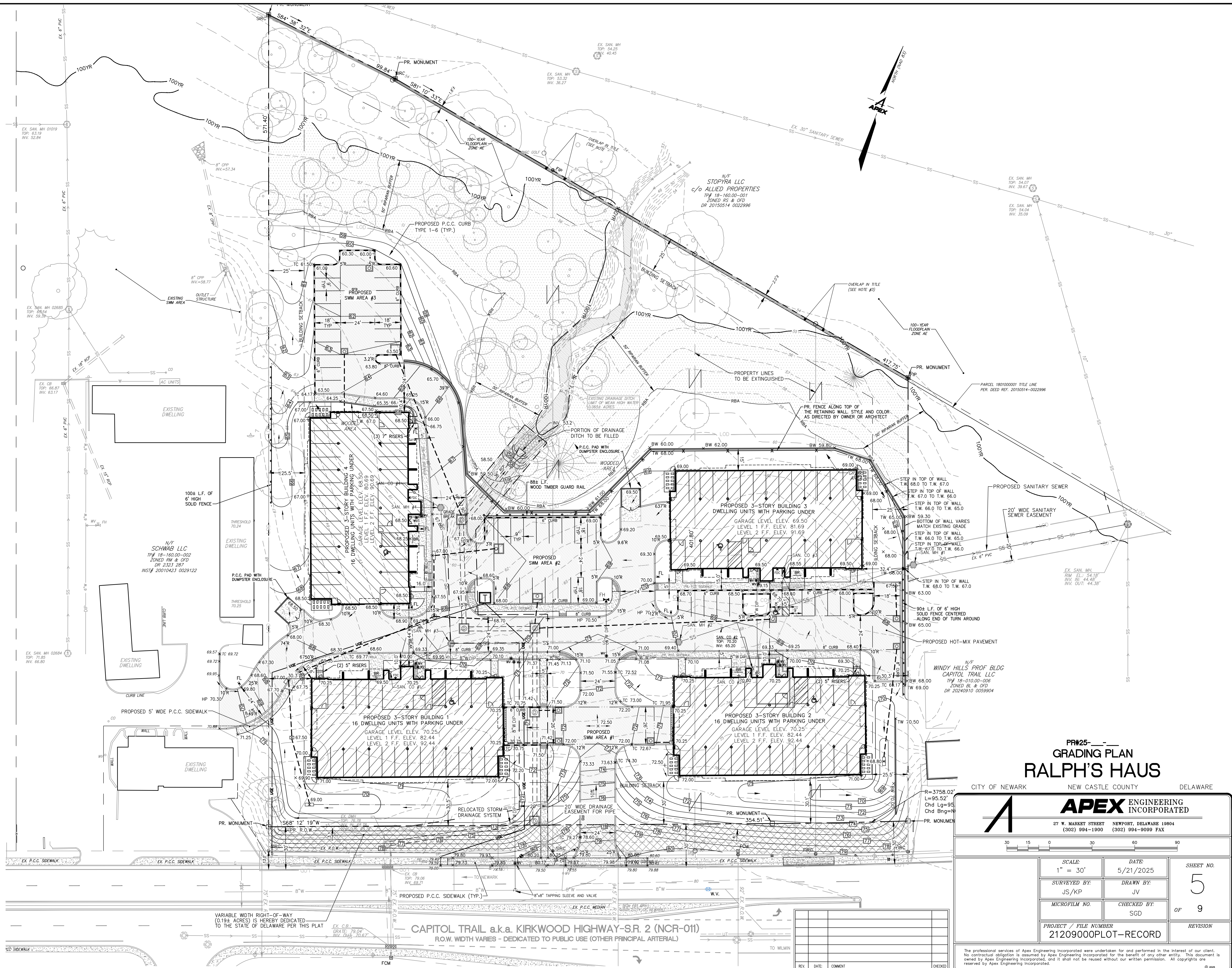
**EXISTING CHANNEL SECTION  
 OF PROPOSED FILL AREA  
 FOR  
 509 CAPITOL TRAIL**

CITY OF NEWARK NEW CASTLE COUNTY DELAWARE

SCALE: 1"= 20'	DATE: 5/22/2025	SHEET NO. <b>1</b>
SURVEYED BY:	DRAWN BY: JV	OF <b>1</b>
	CHECKED BY: SGD	
PROJECT / FILE NUMBER 21209000XBASE		REVISION



EXISTING	PROPOSED
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---	---
○ IPS	○ IPS
○ IPF	○ PF
□ CMF	□ CMS
○ DNF	○ DMS
✕ NF	✕ NS
— WL	N/A
— 100YR	N/A
N/A	— LOD
— RBA	N/A
x50.00	— 50.0
— SS	— SS
— CO	— CO
— 15" ROP	— P-T
— DRAINAGE PIPE w/ SIZE & TYPE	— CB#1
— CATCH BASIN	— BS
— DRAINAGE MANHOLE	— DS
— D/S	— FH
— DWH	— WV
— WM	— WM
— W/M	— W/M
— WDC	— WDC
— FIRE DEPARTMENT CONNECTION	— 6" W
— 6" W	— 6" W
— OHE	— OHE
— UE	— UE
— UP	— UP
— EB	— EB
— EM	— EM
— LP	— LP
— TB	— TB
— COM	— COM
— GM	— GM
— GV	— GV
— GVENT	— GVENT
— G	— G
— X	— X
— EVERGREEN TREE	— SEE LANDSCAPE PLAN IF APPLICABLE
— DECIDUOUS TREE	— SEE LANDSCAPE PLAN IF APPLICABLE
— WOODS LINE	N/A
— STREAM	N/A
— CURB & GUTTER	N/A
— CONCRETE SIDEWALK	N/A
— SIDE PAVEMENT	N/A
— IMPERVIOUS PAVEMENT (MILL AND OVERLAY)	N/A
— IMPERVIOUS PAVEMENT (FULL DEPTH)	N/A
— STRUCTURE/BUILDING	N/A
— SOIL BORING	N/A
— TEST PIT	N/A
— SIGN	N/A
— PARKING STALL COUNT	N/A
— TRUNCATED DOWNS	N/A



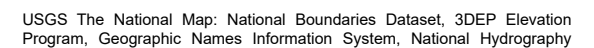


**Delaware Historical & Cultural Affairs  
Desktop Review (CHRIS) & Email Correspondence**



DE\_Boundaries - Municipalities

State Parcels





## Alex Moore

---

**From:** Alex Moore  
**Sent:** Thursday, May 22, 2025 12:16 PM  
**To:** Carr, Sarah (DOS)  
**Subject:** RE: 509 Capitol Trail, Newark, DE  
**Attachments:** DHCA request letter.pdf

Hi Sarah,

The U.S. Army Corps of Engineers Philadelphia District has requested your response as part of the permitting process described in my last email. Please confirm receipt of this email and let me know when I can expect your response.

Thank you,

Alex V. Moore  
Geoscientist / Senior Environmental Scientist

Ten Bears Environmental Associates Co.  
606 Federal Street, Milton, DE 19968  
Office: (302) 684-5080



---

**From:** Alex Moore  
**Sent:** Tuesday, April 29, 2025 3:19 PM  
**To:** Carr, Sarah (DOS) <Sarah.Carr@delaware.gov>  
**Cc:** Clay Greer <clay@tenbears.us>  
**Subject:** 509 Capitol Trail, Newark, DE

Good Afternoon,

We are requesting documentation indicating whether the redevelopment project proposed at 509 Capitol Trail in Newark, Delaware is located on a parcel listed or eligible for listing on the National Register of Historic Places, see attached. This request was required by USACE, as part of a NWP request.

Please confirm receipt of this email and let us know when we can expect the requested documentation.

Thank you,

Alex V. Moore



Geoscientist / Senior Environmental Scientist

Ten Bears Environmental Associates Co.  
606 Federal Street, Milton, DE 19968  
Office: (302) 684-5080





**State Natural Heritage Site**  
**OR**  
**National Estuarine Research Reserve**





STATE OF DELAWARE  
**DEPARTMENT OF NATURAL RESOURCES AND  
ENVIRONMENTAL CONTROL**

DIVISION OF FISH & WILDLIFE  
RICHARDSON & ROBBINS BUILDING  
89 KINGS HIGHWAY  
DOVER, DELAWARE 19901

**DIRECTOR'S  
OFFICE**

PHONE  
(302) 739-9910

May 15, 2025

Alex Moore  
Ten Bears Environmental  
606 Federal Street  
Milton, DE 19968

*Re: TBE 2025 Culvert Extension at 509 Capitol Trail Center Tax Parcel #1801000002*

Dear Alex:

Thank you for contacting the Division of Fish and Wildlife (DFW) Species Conservation and Research Program about information on rare, threatened and endangered species, unique natural communities, and other significant natural resources as they relate to the above referenced project.

*State Natural Heritage Site*

A review of our database indicates that there are currently no records of state-rare or federally-listed plants, animals or natural communities at this project site. As a result, at present, this project does not lie within a State Natural Heritage Site, nor does it lie within a Delaware National Estuarine Research Reserve which are two criteria used to identify "Designated Critical Resource Waters" in the U.S. Army Corps of Engineers (USACE) Nationwide Permit General Condition No. 22. A copy of this letter shall be included in any permit application or pre-construction notification submitted to the USACE for activities on this property.

*Delaware Ecological Network*

Habitat on this parcel has been identified as ecologically important by the Delaware Ecological Network (DEN) and is classified as a corridor. The DEN, although non-regulatory, is a statewide conservation network developed using GIS and field collected datasets that help to identify and prioritize ecologically important areas for natural resource protection. The DEN includes ecologically important areas such as forests, wetlands, streams, habitat that supports rare species and areas of especially high quality. The DEN includes the following key elements: 1) Core areas – which contain relatively intact natural ecosystems, and provide high-quality habitat for native plants and animals, 2) Hubs – which are slightly fragmented aggregations of core areas with contiguous natural cover and 3) Corridors – which link core areas together, allowing wildlife movement and seed and pollen transfer between them. The DEN can be accessed



through First Map: [Delaware Ecological Network 2.0 | Delaware Ecological Network 2.0 | State of Delaware \(arcgis.com\)](#). We recommend that this DEN designated area be protected to the fullest extent possible.

#### *White Clay Creek Wild and Scenic River*

This project is within or near the area designated as the White Clay Creek National Wild and Scenic River as administered by the National Park Service (NPS). The Wild and Scenic Rivers Act states that designated rivers possess outstandingly remarkable natural, cultural, and other values; that they are to be preserved in free-flowing condition; and that they and their immediate environments are to be protected. The White Clay Creek watershed was designated into the National Wild & Scenic Rivers system because of its exceptional hydro-geologic, botanic, fish and wildlife, and historical resources. The watershed is one of only a few relatively intact and ecologically functioning river systems remaining in the highly congested and developed corridor linking Philadelphia, Pennsylvania with Newark, Delaware. Please contact Sarah Bursky (617-981-0466 or [Sarah\\_Bursky@nps.gov](mailto:Sarah_Bursky@nps.gov)), Natural Resource Specialist/Rivers Manager at NPS, to determine whether or not your project needs to be reviewed by the NPS.

#### *Fisheries*

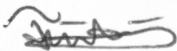
After reviewing the project description, it does not appear that any waterways will be impacted; therefore, there are no fisheries concerns at present.

The DFW does not have fish community data for the project location. However, it is unlikely that habitat occurs in the project site that would support anadromous fish species. No time of year restrictions or other measures are requested for these species or for resident gamefish species.

We are continually updating our records on Delaware's rare, threatened and endangered species, unique natural communities and other significant natural resources. If the start of the project is delayed more than a year past the date of this letter, please contact us again for the latest information.

Please feel free to contact me with any questions or if you require additional information.

Sincerely,



Faith Garcia  
*Environmental Review Coordinator*  
Phone: (302) 735-8665  
Cell: (302) 443-3812  
Email: [christinefaith.garcia@delaware.gov](mailto:christinefaith.garcia@delaware.gov)  
89 Kings Highway  
Dover, DE 19901

(See invoice on next page)



**INVOICE - PAYMENT DUE**

It is our policy to charge a fee for this environmental review service. This letter constitutes an invoice for \$35.00 (\$35.00/hour for a minimum of one hour). Please make your check payable to "Delaware Division of Fish and Wildlife" and submit to:

DE Division of Fish and Wildlife  
97 Commerce Way, Suite 106  
Dover, DE 19904  
ATTN: DFW Fiscal

**In order for us to properly process your payment, you must reference  
"TBE 2025 Culvert Extension at 509 Capitol Trail" on your check.**

cc: DFW Fiscal; Code to 72900



## Alex Moore

---

**From:** Bursky, Sarah M <Sarah\_Bursky@nps.gov>  
**Sent:** Monday, May 19, 2025 3:09 PM  
**To:** Alex Moore  
**Subject:** Re: [EXTERNAL] Culvert Extension at 509 Capitol Trail

Thank you, Alex. NPS does not need to review or comment further as part of your process.

Sarah

Sarah Bursky  
Natural Resource Specialist, Rivers Manager  
Wild and Scenic Rivers Program, Interior Region 1  
1234 Market St, Philadelphia PA 19107  
Lenapehokink, homelands of the Lenape  
cell (617) 981-0466



**PARTNERSHIP  
WILD & SCENIC RIVERS**

[www.nps.gov/pwsr](http://www.nps.gov/pwsr)

---

**From:** Alex Moore <alex@tenbears.us>  
**Sent:** Friday, May 16, 2025 4:15 PM  
**To:** Bursky, Sarah M <Sarah\_Bursky@nps.gov>  
**Subject:** RE: [EXTERNAL] Culvert Extension at 509 Capitol Trail

Hi Sarah,

The roadway culvert outlet is currently near the center of the subject parcel and that is where the referenced drainage ditch begins. This ditch heads in a northern direction all the way to White Clay Creek several hundred feet offsite to the north. The proposed plan is to re-route the underground culvert piping coming from Capitol Trail to slow down the water flow for erosion issues, as well as move the new culvert outlet up to the 100-year flood plain boundary . The water flow will go right back into the referenced ditch, just farther north (see red rectangle below).





Alex V. Moore  
Geoscientist / Senior Environmental Scientist

Ten Bears Environmental Associates Co.  
606 Federal Street, Milton, DE 19968  
Office: (302) 684-5080



---

**From:** Bursky, Sarah M <Sarah\_Bursky@nps.gov>  
**Sent:** Friday, May 16, 2025 2:03 PM



**To:** Alex Moore <[alex@tenbears.us](mailto:alex@tenbears.us)>

**Subject:** Re: [EXTERNAL] Culvert Extension at 509 Capitol Trail

Alex,

Thank you for the consultation.

So am I understanding that you're rerouting the drainage from the culvert to empty across the floodplain? What is at the boundary of the 100-year floodplain to disperse the water? I want to be make sure I'm clear on water flow... where it is being redirected. We'd be more focused on that as part of the project than filling the ditch itself. If it's going into a wetland, we would rely on state permissions/permits for that. If it's going into a tributary, that would include us under Wild and Scenic Rivers.

Any photos would help. Can you also send me coordinates for the ditch, to take a look?

Thanks,  
Sarah

Sarah Bursky  
Natural Resource Specialist, Rivers Manager  
Wild and Scenic Rivers Program, Interior Region 1  
1234 Market St, Philadelphia PA 19107  
Lenapehokink, homelands of the Lenape  
cell (617) 981-0466



**PARTNERSHIP  
WILD & SCENIC RIVERS**

[www.nps.gov/pwsr](http://www.nps.gov/pwsr)

---

**From:** Alex Moore <[alex@tenbears.us](mailto:alex@tenbears.us)>

**Sent:** Thursday, May 15, 2025 8:48 AM

**To:** Bursky, Sarah M <[Sarah\\_Bursky@nps.gov](mailto:Sarah_Bursky@nps.gov)>

**Subject:** [EXTERNAL] Culvert Extension at 509 Capitol Trail

**This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.**

Hi Sarah,

After speaking with Delaware Fish and Wildlife they suggested contacting you to determine whether or not this project needs to be reviewed by NPS. The proposed redevelopment at 509 Capitol Trail in Newark, Delaware (New Castle County, Delaware tax parcel no. 1801000002) will include filling in a small portion of a man-made drainage ditch associated with the current roadway culvert, and extending / rerouting the culvert system to the 100-year flood plain boundary in an effort to reduce existing ditch



erosion. The drainage ditch eventually drains to White Clay Creek approximately 350 to 400 feet north of the property, but the proposed project is not actually in the vicinity of White Clay Creek (see attached).

Looking forward to hearing from you.

Alex V. Moore  
Geoscientist / Senior Environmental Scientist

Ten Bears Environmental Associates Co.  
606 Federal Street, Milton, DE 19968  
Office: (302) 684-5080





# **USFWS Endangered Species Act**



## Alex Moore

---

**From:** CBFO Project Review, FW5 <cbfoprojectreview@fws.gov>  
**Sent:** Tuesday, May 6, 2025 3:56 PM  
**To:** Alex Moore  
**Cc:** Clay Greer  
**Subject:** Re: [EXTERNAL] Project Review Request - 509 Capitol Trail, Newark, DE

Hi Alex-

Thank you for sending this project for review. For your official species list, two proposed species were on the list, tricolored bat (proposed as endangered) and monarch butterfly (proposed as threatened with a 4d rule).

The U.S. Fish and Wildlife Service has reviewed your project submittal form dated April 29, 2025. The ESA does not require conferencing on species proposed to be listed unless the action is likely to jeopardize the continued existence of the species. Our assessment is that the proposed action is not likely to jeopardize the proposed endangered tricolored bat (*Perimyotis subflavus*) or the proposed threatened monarch butterfly (*Danaus plexippus*).

If possible, as a voluntary conservation measure for the tricolored bat, we recommend avoiding tree clearing from May 15 to July 31. No further consultation is required at this time. However, if either of these species are listed under the ESA before this project is completed, please contact the USFWS to reinitiate consultation for this project.

Thank you,

Kathleen

---

**From:** Alex Moore <alex@tenbears.us>  
**Sent:** Tuesday, April 29, 2025 3:23 PM  
**To:** CBFO Project Review, FW5 <cbfoprojectreview@fws.gov>  
**Cc:** Clay Greer <clay@tenbears.us>  
**Subject:** [EXTERNAL] Project Review Request - 509 Capitol Trail, Newark, DE

**This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.**

Good Afternoon,

The attached letter describes the proposed project at 509 Capitol Trail in Newark, Delaware. We are looking to verify compliance with NWP general condition 18, as our client is requesting a NWP from USACE.

Please confirm receipt of this email and let us know when we can expect the requested information.

Thank you,

Alex V. Moore  
Geoscientist / Senior Environmental Scientist

Ten Bears Environmental Associates Co.  
606 Federal Street, Milton, DE 19968  
Office: (302) 684-5080

