

Wetlands and Subaqueous Lands Section Basic Application Form

Section 1: Applicant Identification

1. Applicant's Name: Brenda & Alan Erdman  
 Mailing Address: 15 Trout Lane  
Marysville PA 17053

(717) 991-6663  
 Telephone #: (717) 226-2340  
 Fax #:  
 E-mail: erdman15@ptd.com

2. Consultant's Name: Evelyn Maurmeyer  
 Mailing Address: PO Box 674  
Lewes, DE 19958

Company Name: CER, Inc.  
 Telephone #: (302) 645-9610  
 Fax #: (302) 645-4332  
 E-mail: maurmeye@udel.edu

3. Contractor's Name: Not yet selected  
 Mailing Address:

Company Name:  
 Telephone #:  
 Fax #:  
 E-mail:

Section 2: Project Description

4. Check those that apply:  
 New Project/addition to existing project?  Repair/Replace existing structure? (If checked, must answer #16)

5. Project Purpose (attach additional sheets as necessary):  
Applicants propose to construct a 135' long x 3' wide wetland  
walkway (elevated +3' above the marsh surface) and a 5' wide x 25' long  
dock.

6. Check each Appendix that is enclosed with this application:

|  |   |  |
|--|---|--|
| <input checked="" type="checkbox"/> A. Boat Docking Facilities | <input type="checkbox"/> G. Bulkheads                               | <input type="checkbox"/> N. Preliminary Marina Checklist |
| <input type="checkbox"/> B. Boat Ramps                         | <input type="checkbox"/> H. Fill                                    | <input type="checkbox"/> O. Marinas                      |
| <input type="checkbox"/> C. Road Crossings                     | <input type="checkbox"/> I. Rip-Rap Sills and Revetments            | <input type="checkbox"/> P. Stormwater Management        |
| <input type="checkbox"/> D. Channel Modifications/Dams         | <input checked="" type="checkbox"/> J. Vegetative Stabilization     | <input type="checkbox"/> Q. Ponds and Impoundments       |
| <input type="checkbox"/> E. Utility Crossings                  | <input type="checkbox"/> K. Jetties, Groins, Breakwaters            | <input type="checkbox"/> R. Maintenance Dredging         |
| <input type="checkbox"/> F. Intake or Outfall Structures       | <input checked="" type="checkbox"/> M. Activities in State Wetlands | <input type="checkbox"/> S. New Dredging                 |

Section 3: Project Location

7. Project Site Address:  
103 Adams Avenue  
Milton DE 19968

County:  N.C.  Kent  Sussex  
 Site owner name (if different from applicant): same  
 Address of site owner: "

8. Driving Directions: See Figures 1, 2, and 3 for maps and directions

(Attach a vicinity map identifying road names and the project location)

9. Tax Parcel ID Number: #235-41.7-p/o 102 Subdivision Name: Broadkill Beach

|                  |  |                             |                             |                             |                             |                             |                             |                             |                             |  |  |
|------------------|--|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|--|--|
| WSLS Use Only:   |  | Permit #s:                  |                             |                             |                             |                             |                             |                             |                             |  |  |
| Type             | SP <input type="checkbox"/>                                  | SL <input type="checkbox"/> | SU <input type="checkbox"/> | WE <input type="checkbox"/> | WQ <input type="checkbox"/> | LA <input type="checkbox"/> | SA <input type="checkbox"/> | MP <input type="checkbox"/> | WA <input type="checkbox"/> |  |  |
| Corps Permit:    | SPGP 18 <input type="checkbox"/> 20 <input type="checkbox"/> |                             | Nationwide Permit #:        |                             | Individual Permit #:        |                             |                             |                             |                             |  |  |
| Received Date:   |  |                             | Project Scientist:          |                             |                             |                             |                             |                             |                             |  |  |
| Fee Received?    | Yes <input type="checkbox"/>                                 | No <input type="checkbox"/> | Amt: \$                     | Receipt #:                  |                             |                             |                             |                             |                             |  |  |
| Public Notice #: | Public Notice Dates:   |                             | ON                          | OFF                         |                             |                             |                             |                             |                             |  |  |

**Section 3: Project Location (Continued)**

10. Name of waterbody at Project Location: Deep Hole Creek AKA Broadkill Sound waterbody is a tributary to: Broadkill River

11. Is the waterbody:  Tidal  Non-tidal Waterbody width at mean low or ordinary high water 40' ±

12. Is the project:  On public subaqueous lands?  On private subaqueous lands?\*  
 In State-regulated wetlands?  In Federally-regulated wetlands?

\*If the project is on private subaqueous lands, provide the name of the subaqueous lands owner:  
Applicants own to creek centerline (see deed).  
 (Written permission from the private subaqueous lands owner must be included with this application)

13. Present Zoning:  Agricultural  Residential  Commercial  Industrial  Other

**Section 4: Miscellaneous**

14. A. List the names and complete mailing addresses of the immediately adjoining property owners on all sides of the project (attach additional sheets as necessary):  
See attached sheets.

B. For wetlands and marina projects, list the names and complete mailing addresses of property owners within a 1,000 foot radius of the project (attach additional sheets as necessary):  
See attached sheets.

15. Provide the names of DNREC and/or Army Corps of Engineers representatives whom you have discussed the project with:  
Applicant (Brenda Erdman) has spoken with Matthew Jones, WWS, DNREC.

A. Have you had a State Jurisdictional Determination performed on the property?  Yes  No  
 B. Has the project been reviewed in a monthly Joint Permit Processing Meeting?  Yes  No  
 \*If yes, what was the date of the meeting? \_\_\_\_\_

16. Are there existing structures or fill at the project site in subaqueous lands?  Yes  No  
 \*If yes, provide the permit and/or lease number(s): \_\_\_\_\_

\*If no, were structures and/or fill in place prior to 1969?  Yes  No

17. Have you applied for or obtained a Federal permit from the Army Corps of Engineers?  
 No  Pending  Issued  Denied Date: \_\_\_\_\_

Type of Permit: SPGP-20 eligibility Federal Permit or ID #: \_\_\_\_\_

18. Have you applied for permits from other Sections within DNREC?  
 No  Pending  Issued  Denied Date: \_\_\_\_\_ Permit or ID #: \_\_\_\_\_

Type of permit (circle all that apply):  Septic  Well  NPDES  Storm Water

Other: \_\_\_\_\_

**Section 5: Signature Page**

**19. Agent Authorization:**

If you choose to complete this section, all future correspondence to the Department may be signed by the duly authorized agent. In addition, the agent will become the primary point of contact for all correspondence from the Department.

I do not wish to authorize an agent to act on my behalf

I wish to authorize an agent as indicated below

Alan Erdman & Brenda Erdman hereby designate and authorize Evelyn Maurmeyer, CER, Inc.  
 (Name of Applicant) (Name of Agent)

to act on my behalf in the processing of this application and to furnish any additional information requested by the Department.

Authorized Agent's Name: Evelyn Maurmeyer Telephone #: (302) 645-9610  
 Mailing Address: CER, Inc. Fax #: (302) 645-4332  
PO Box 674 E-mail: maurmeye@udel.edu  
Lewes DE 19958

**20. Agent's Signature:**

I hereby certify that the information on this form and on the attached plans are true and accurate to the best of my knowledge. I further understand that the Department may request information in addition to that set forth herein if deemed necessary to appropriately consider this application.

[Signature]  
 Agent's Signature

\_\_\_\_\_  
 Date

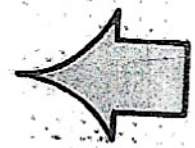
**21. Applicant's Signature:**

I hereby certify that the information on this form and on the attached plans are true and accurate to the best of my knowledge and that I am required to inform the Department of any changes or updates to the information provided in this application. I further understand that the Department may request information in addition to that set forth herein if deemed necessary to appropriately consider this application. I grant permission to authorized Department representatives to enter upon the premises for inspection purposes during working hours.

[Signature]  
 Applicant's Signature

9-11-2023  
 Date

ALAN Erdman Brenda L Erdman  
 Print Name



**SIGN  
& DATE**

**22. Contractor's Signature:**

I hereby certify that the information on this form and on the attached plans are true and accurate to the best of my knowledge, and that I am required to inform the Department of any changes or updates to the information provided in this application. I further understand that the Department may request information in addition to that set forth herein if deemed necessary to appropriately consider this application.

Not yet selected  
 Contractor's Name

\_\_\_\_\_  
 Date

\_\_\_\_\_  
 Print Name

**BOAT DOCKING FACILITIES**

Any boat docking facility for more than four (4) vessels is considered a marina facility (see definitions and explanations section) and requires the applicant to complete Appendices N and O, and make application to the U. S. Army Corps of Engineers for approval.

Please make sure answers to all of the questions in this appendix correspond with information on the application drawings.

- Briefly describe the project. (Attach additional sheets as necessary.)  
Applicants propose to construct a 5' wide x 25' long dock. (Access across marsh via 135' long x 3' wide walkway, see Appendix M).

2. Please provide numbers and dimensions as follows:

| Structure Type            | Number of Support Pilings | Dimensions (Channelward of MHW or OHW) |            | Dimensions (Channelward of MLW- n/a for non-tidal water) |            | New, repair or maintain |
|---------------------------|---------------------------|--|------------|--|------------|-------------------------|
|                           |                           | Width ft.                              | Length ft. | Width ft.  | Length ft. |                         |
| Dock, Pier, Lift, gangway |                           |  |            |  |            |                         |
| Dock                      | 10±                       | 5'                                     | 25'        | 1'±  | 25'        | new                     |
|                           |                           |  |            |  |            |                         |
|                           |                           |  |            |  |            |                         |
|                           |                           |  |            |  |            |                         |
|                           |                           |  |            |  |            |                         |
|                           |                           |  |            |  |            |                         |
| Freestanding Pilings      | Number                    |  |            |  |            |                         |
|                           | 0                         |  |            |  |            |                         |

Mooring Buoy: How many moorings will be installed? \_\_\_\_\_  
 What will be used for the anchor(s)? \_\_\_\_\_  
 Anchor/Mooring Block Weight \_\_\_\_\_  
 Anchor Line Scope (Length or Ratio) \_\_\_\_\_  
 Water Depth at Mooring Location \_\_\_\_\_

- Approximately how wide is the waterway at this project site? 40± ft. (measured from MLW to MLW)
- What will be the mean low water depth at the most channelward end of the mooring facility? 1.5 ft. ±
- What type of material(s) will be used for construction of the mooring facility (e.g. salt treated wood, aluminum, fiberglass floats, etc.) Use of creosote-treated wood is prohibited.  
Salt-treated wood, galvanized hardware
- Circle any of the following items that are proposed over subaqueous lands:  
Fish Cleaning Stations/Benches/Ladders/Water Lines/ Satellite/Electric Lines/ Handrails/Other (Describe)

If any of the items are circled above, include their dimensions and location on the application drawings.

7. What will be the distance from the most channelward end of the docking facility to the edge of any natural or man-made channel? 15' ft. to centerline
8. Describe the vessels that will be berthed at the docking facility. Please draw proposed vessel locations on plans and drawings. Applicants plan to use the dock for crabbing, and will also moor a small Jon boat at the dock.
- |                            |                    |                  |                     |
|----------------------------|--------------------|------------------|---------------------|
| Make/model <u>Jon boat</u> | length <u>12'±</u> | width <u>5'±</u> | draft <u>&lt;1'</u> |
| Make/model _____           | length _____       | width _____      | draft _____         |
| Make/model _____           | length _____       | width _____      | draft _____         |
| Make/model _____           | length _____       | width _____      | draft _____         |
9. Please provide a copy of the current state registration or Coast Guard Certificate of Documentation for each motorized vessel listed above.  
Not available
10. Give the number and type of each Marine Sanitation Device (e.g. MSD III, Portable toilet) that will be used on vessels to be docked at the facility.  
none
11. Is there currently a residence on the property?  Yes  No
12. Do you plan to reach the boat docking facility from your own upland property?  Yes  No If "No", explain your proposed means of access and provide documentation of easement or documentation authorizing access if you intend to cross someone else's property.  
\* via wetland walkway, see Appendix M.
13. Will any portion of the structure be located in privately owned underwater land (such as a pond or lagoon) owned by someone other than the applicant?  Yes  No.  
If yes, written permission of the underwater land owner must be provided with this application.
14. What is the width of the waterfront property frontage adjacent to subaqueous lands? 100± ft.  
Will any portion of the structure or any vessel be placed within 10 feet of your neighbor's property line?  
 Yes  No  
If yes, a letter of no objection from the adjacent property owner must be included with this application.

## ACTIVITIES IN STATE WETLANDS

Please make sure that all answers in this appendix correspond to information on the application drawings.

1. Project description and explanation of need.

Applicants propose to construct a 135' long x 3' wide walkway elevated +3' over the marsh surface to access a proposed 5' wide x 25' long dock (see Appendix A).

2. What is area of impact for each activity in state wetlands?

Wetlands Walkways/Other Structures:

Length 135' ft. Width 3' ft.

# Piles TBD by contractor Height +3 ft. over marsh

3. What is volume of fill or excavated material involved in this project?

Fill 0 cubic yards

Excavation 0 cubic yards

4. Map number of state wetland map where project is located: DNR # 110 (see Figure 5).

**ENVIRONMENTAL SUMMARY - PLEASE SUBMIT AN EVALUATION OF IMPACT OF THE PROPOSED ACTIVITY (ATTACH ADDITIONAL SHEETS AS NEEDED): SEE ATTACHED REPORT**

5. State reasons that structures cannot feasibly be located on lands other than wetlands.
6. Detail temporary and permanent changes which would be caused by the proposed project and the impact of these changes on the project area and adjacent areas.
7. Describe alternatives to the proposed action which would reduce or avoid environmental damage.
8. Describe all measures to be taken during and after the completion of the proposed project to reduce detrimental effects.
9. Describe all permanent environmental impacts which cannot be avoided.

10. Submit detailed evaluation of impact of the proposed project on the following:

a. Value of tidal ebb and flow

- i. Production Value: carrying organic matter to adjacent estuaries and coastal waters which serve as breeding areas for certain animal species (especially fish and shellfish).
- ii. Value as a natural protective system of absorption of storm wave energy, flood waters, and heavy rainfall, thereby decreasing flood and erosion damage.
- iii. The prevention of silting in certain harbors and inlets thereby reducing dredging.
- iv. Removal and recycling of inorganic nutrients.
- v. Effect on the estuarine waters.

b. Habitat Value

- i. Habitat for resident species of wildlife including furbearers, invertebrates, finfish.
- ii. Habitat for migratory wildlife species including waterfowl, wading birds, shorebirds, shorebirds, passerines, finfish, shrimp.
- iii. Rearing area, nesting area, breeding grounds for various species.
- iv. Habitat for rare or endangered plants.
- v. Presence of plants or animals known to be rare generally, or unique to the particular location.
- vi. Presence of plants or animals near the limits of their territorial range.
- vii. Presence of unique geological or wetland features.

c. Aesthetic Effect - Consideration of the aesthetic effect may include:

- i. Presence of plants or animals of a high visual quality.
- ii. The presence of an associated water body.
- iii. Wetland type or topographic diversity.

d. Impact of Supporting Facilities

The supporting facilities to be considered include any public or private construction, whether or not the construction occurs in the wetlands, which would be required for construction or operation of the proposed wetlands activity, such as roads, sewage disposal facilities, electric lines, water supply systems; and schools. Effects shall be separately determined for the lands neighboring such facilities.

## e. Effect on Neighboring Land Uses

- i. The effects of the proposed wetland activity on neighboring land use are to be considered whether or not the neighboring lands are wetlands.
- ii. The environmental, aesthetic and economic effects of the proposed wetlands activity on land uses neighboring the lands on which supporting facilities will be located may be considered.

## f. Federal, State, Regional, County and Municipal Comprehensive Plans.

Compliance of the proposed activities with the plans of the jurisdiction in which it is proposed to take place, and its impact on the plans of other affected jurisdictions.

## g. Economic Impact

Economic Impact shall include a short and long-term evaluation of the following factors to the extent the effect is directly attributable to the proposed activity:

- i. Jobs created or lost and the net income effect of jobs.
- ii. Increases in revenues to or increases in expenditure by State, County and local governments (e.g., increased taxes from an increased tax base and increased expenditure for maintaining supporting facilities).
- iii. Increases or decreases in the value attributable to the wetland as a source of nutrients to finfish, crustacea and shellfish and as habitats of such species or other flora or fauna of significant actual or potential economic value.
- iv. Increases or decreases in the value of the land as a recreational area.
- v. Increases or decreases in the cost of flood control or expected flood damage which might be caused by the effect of the activity on the natural capacity of the wetland to reduce flood damage.
- vi. Increases or decreases the costs of maintaining navigable harbors and waterways which would result from altering the capacity of the wetlands to absorb silt.
- vii. The net economic effect, both public and private, of any contemplated supporting facilities.
- viii. The net economic effect, both public and private, of the proposed activity on neighboring land uses.





**COASTAL & ESTUARINE RESEARCH, INC.**

Marine Studies Complex  
P.O. Box 674  
Lewes, Delaware 19958  
302-645-9610

September, 2023

**APPENDIX M:  
CONSTRUCTION IN STATE-REGULATED WETLANDS**

**Applicants**

Brenda and Alan Erdman  
15 Trout Lane  
Marysville, PA 17053  
(717) 991-6663; (717) 226-2340  
Erdman15ptd.com

**Site Location and Description**

The project site is 103 Adams Avenue, Broadkill Beach, Milton, Sussex County, Delaware (Tax Map Parcel #235-4.17-p/o 102.00). See Figures 1, 2, and 3 for location maps and directions to site. The site is depicted on USGS topographic map, Lewes, Delaware quadrangle (see Figure 4), and is adjacent to Deep Hole Creek (also known as Broadkill Sound), a tributary of the Broadkill River. The site is depicted on State of Delaware DNREC Wetland Map #110 (see Figure 5), and is mapped M (Marsh) and W (Water). See Figure 6 for aerial photograph, and Figure 7 for ground-level photographs. Wetland vegetation is dominated by smooth cordgrass (*Spartina alterniflora*).

**Proposed Project**

The applicants propose to construct an elevated walkway extending from uplands to the channelward edge of vegetation (top of bank at Deep Hole Creek), 135' in length x 3' in width, elevated 3' above the wetland surface. Purpose of the walkway is to provide access to a proposed 5' W x 25' L dock in Deep Hole Creek (see Appendix A), to be used for crabbing and to moor a small Jon boat. See Figure 6 for project depicted on aerial photograph (provided to applicants by Matthew Jones, DNREC Wetlands and Waterways Section), and Figure 8 for plan view and cross-section sketches of proposed project.

## ENVIRONMENTAL SUMMARY

5. The project cannot feasibly be located on lands other than wetlands because the purpose of the elevated walkway is to provide access from the applicants' upland property across wetlands to a proposed dock in Deep Hole Creek for crabbing and recreational boating (water-dependent activities). There are no uplands directly adjacent to the waterway on the applicants' property (see Figure 5 and site survey).
6. Temporary changes resulting from the project may include short-term impacts to wetlands during construction of the walkway. Although a contractor has not yet been selected, it is anticipated that work will be conducted starting at the uplands, and will continue in a channelward direction. Support pilings will be installed; stringers, walers and decking will be built by hand, will consist of salt-treated wood. Permanent changes to the area include the presence of a walkway in the wetland area. It should be noted that there is already a similar walkway (and dock) at the adjacent downstream property, and others in the vicinity (see aerial photograph, Figure 6).
7. The proposed project has been minimized to reduce environmental impacts to the greatest extent feasible. The distance of wetlands to be crossed is fairly uniform along the lot; the applicants have chosen to locate it near the center of the property to reduce visual effects on neighboring lots. The "footprint" of the 135' long x 3' wide structure will be 405 sq. ft., but since the walkway will be elevated 3' above the wetland surface, shading effects will be minimal. The only alternative to construction of a walkway is to walk across the wetlands, which is neither practical nor safe.
8. The proposed walkway has been designed to reduce environmental impacts to the greatest extent feasible by incorporating recommendations set forth in the WSLs Docking Facilities Guidance Document (July, 2005). These include the following:
  - Locating the walkway where the length of vegetated wetlands to be crossed is 135' (less than the WSLs limit of 150').
  - Keeping the width of the walkway at 3', to minimize shading effects.
  - Elevating the walkway 3' above the wetland surface, also to minimize shading effects.
9. Permanent environmental impacts which cannot be avoided include the "footprint" of the walkway (135' x 3' = 405 sq. ft.). However, since the structure will be elevated 3' above the marsh surface to minimize shading effects, it is anticipated that wetland vegetation will continue to grow beneath the structure, as is the case for most elevated walkways. The support posts will result in a permanent loss of a small area of vegetated wetlands (anticipated to be 12± sq. ft., depending on number and diameter of posts to be used, to be determined by contractor).

However, it should be noted that this is a very small fraction of the total wetland area on the applicant's property; therefore wetland functions (as described in the following sections) should continue undiminished.

10. Evaluation of the impacts of the proposed project on the following:

A. Value of tidal ebb and flow

1. The proposed project will have minimal effects on production value. The processes by which organic matter is carried to the adjacent waters (tidal ebb and flow) should not be impeded by the proposed project, as the height of the elevated structure will continue to allow tidal inundation of wetlands underlying the proposed walkway.
2. The presence of a tidal wetland buffer along Deep Hole Creek serves as a natural protective system for absorption of storm wave energy, flood waters, and heavy rainfall (thereby decreasing flood and erosion damage). Daiber and others (1976) state that the large size of wetlands enhances their value as storm surge buffers. The width of the wetland fringe along Deep Hole Creek in the vicinity of the project site will remain the same after completion of the structure, so that its function as a buffer will not be affected. The presence of intertidal wetlands dominated by smooth cordgrass (*Spartina alterniflora*) will continue to attenuate wave and flood waters at the project site upon completion of the project.
3. Although there may be minor scouring at the base of the pilings, it is not anticipated that this will lead to silting of the adjacent waterway and necessitate dredging. Based on studies of the Holland Glade marsh by Stumpf (1983), much of the entrained sediment in the wetlands area is expected to settle on the lower and upper marsh during flood tidal conditions and storm events, respectively, or become trapped by biological processes (adhesion onto stems and leaves of the vegetation; filtration by the ribbed mussel, *Geukensia demissa*). Thus, the proposed project is not likely to contribute to siltation in the waterway.
4. The proposed project will have a minimal effect on the removal and recycling of inorganic nutrients, since the elevated structure will permit natural wetlands processes (tidal ebb and flow) to continue.
5. The elevated walkway is not expected to have adverse impacts on estuarine waters. Construction materials will consist of materials approved for use in estuarine environments (salt-treated wood, galvanized hardware).

## **B. Habitat Value**

Wetland vegetation at the project site is dominated by smooth cordgrass (*Spartina alterniflora*). Estuarine tidal wetlands such as those at the project site serve as feeding and nesting habitats for shorebirds, wading birds, waterfowl, and small songbirds (Tiner, 1985), including sparrows, wrens, clapper rail, willet, yellowlegs, ibis, egrets, and herons (Perry, 1985). Black ducks and Green-winged teal eat roots and rhizomes of wetland grasses; leaves and stems are eaten by geese and muskrats. Stems are also used for muskrat lodges and nesting materials for rails and willets (Daiber and others, 1976). Invertebrate fauna found in tidal wetlands include crustaceans (fiddler crabs, marsh crabs) and mollusks (ribbed mussel, marsh snails, common periwinkle); reptiles (turtles, snakes) also utilize wetlands (Perry, 1985). Fish residing in Delaware's salt marshes include the mummichog, striped killifish, and sheepshead minnow (Mutz, 1995). Jones (1978) and Winkler (1981) documented the presence of several species of small mammals (including meadow vole, rice rat, and shrews) in Delaware's tidal wetlands. Predators (foxes and racoons) eat some of the small mammals found in this zone (Perry, 1985). Occasionally, upland species, such as rabbits, opossums, foxes, and deer utilize the marsh for food resources, cover, and/or migratory corridors (Daiber and others, 1976; Tiner, 1985). Mosquito production varies in this area; greenhead flies breed and develop in the wetter parts of the marshes (Daiber and others, 1976).

The giant reed (*Phragmites australis*) is also present on site, located at the upper edge of the tidal wetlands, adjacent to uplands. The tall reeds can serve as a deer refuge cover. Gallagher (1999) noted that small mammals, such as nutria and muskrats, as well as a variety of small birds, such as red wing blackbirds, grackles, sparrows, and finches utilize some stands of *P. australis*. However, Daiber (1986) refers to *P. australis* as an "ubiquitous weed". Bailey (1997) notes that there is an obvious decrease in plant diversity in *P. australis* stands because of its tall, dense growth which shades or physically excludes other species.

The elevated walkway should not adversely affect wetland habitats once the structure is in place, as most species should be able to continue to utilize the area after project completion. Banning and others (2006) examined how construction of long (>100') piers across vegetated tidal wetlands in Worcester County, Maryland influenced bird use of the marsh habitat, and found that herons, egrets, gulls, terns, grackles, fish crows, and red-winged blackbirds used pier sites more, slightly more, or equally as often as control sites (only obligate marsh birds used control sites more than pier sites). The walkway should not obstruct passage for small migratory mammals, as these animals will easily be able to pass beneath the 3' high elevated walkway. Larger mammals, such as deer (if present) will be able to leap over the 3' structure. There are no known rare or endangered plants or animals, nor any unique geologic or wetlands features in the project area.

**C. Aesthetic Effect**

There should be minimal adverse impacts to the aesthetics of the wetlands and estuarine area as a result of the proposed project, since there are similar walkways already present in the area, including the adjacent downstream property. To the applicants, the proposed walkway will add to the aesthetics of the area by allowing them and their family to utilize the structure to enjoy the beauty of their surroundings.

**D. Impact of Supporting Facilities**

The walkway is for private use by the applicants, their family, and friends. No other supporting facilities (roads, sewage disposal facilities, etc.) will be constructed in association with this project.

**E. Effects on Neighboring Land Uses**

The walkway should not have adverse effects on neighboring land uses. Similar structures are already present in the vicinity (see Figure 6).

**F. Federal, State, Regional, County, and Municipal Comprehensive Plans**

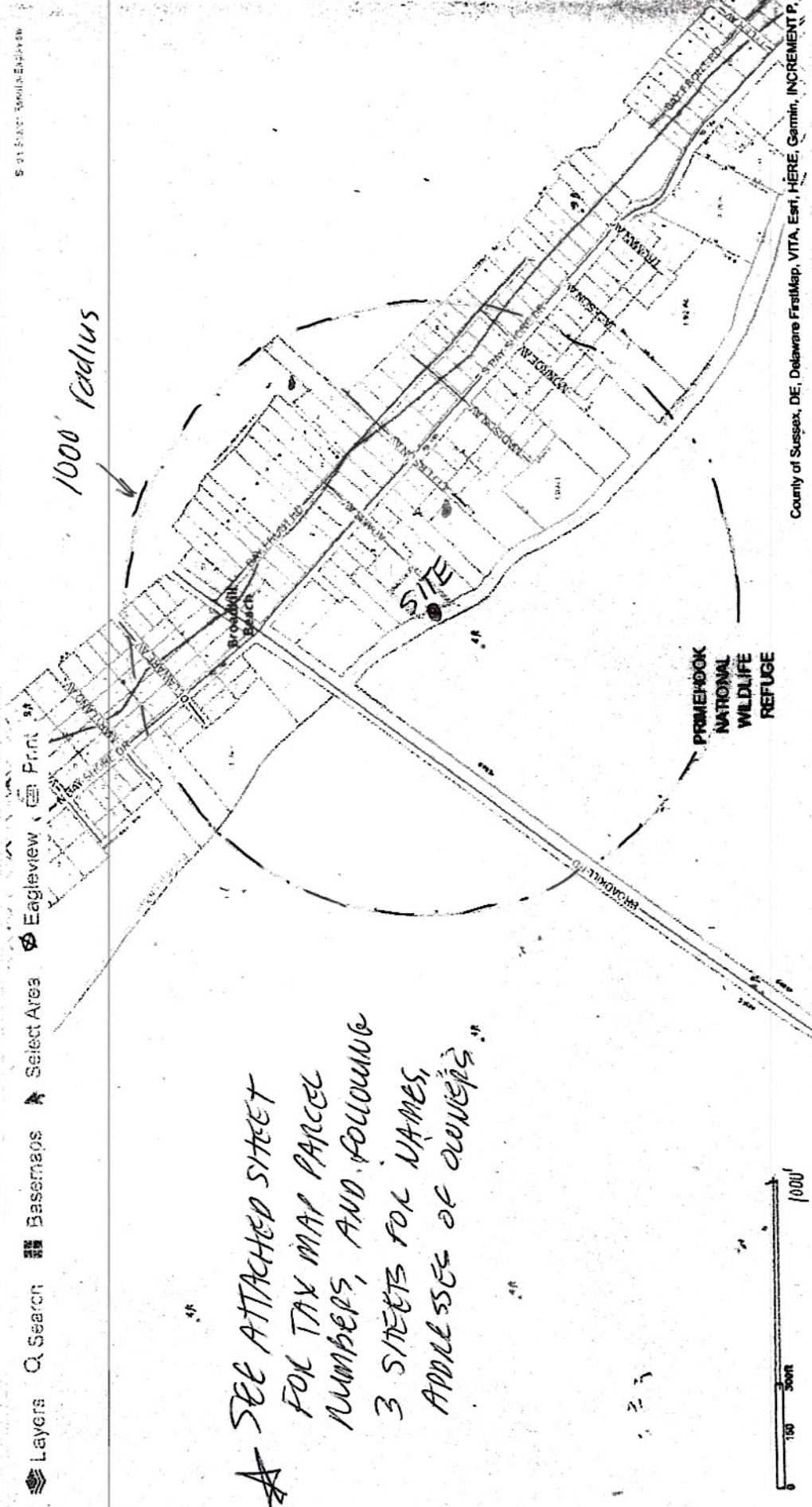
The project will be constructed in compliance with all federal, state, county, and local regulations.

**G. Economic Impact**

The proposed project will provide employment for the contracting firm (to be selected), and will contribute to product sales for suppliers of construction material. Once the structure is completed, it will allow the applicants access to navigable waters for crabbing, boating and other water-dependent activities, thereby increasing spending on boating supplies; recreational equipment (crabbing supplies); and other purchases, all of which will benefit the local economy.

**References Cited**

- Bailey, A. R., 1997. Detecting and Monitoring *Phragmites* Invasion of Coastal Wetlands: A Comparison of Remote Sensing Techniques. Master's thesis, College of Marine Studies, University of Delaware, Newark, DE, 112 p.
- Banning, A., J. Bowman, and B. Vasilas, 2006. The Effects of Long Piers on Birds Using Marsh Habitat in Worcester County, Maryland, in 2006 Delmarva Wetland Conference: Integrating Wetland Restoration and Protection onto the Landscape, Dover, DE, Oct. 11-12, 2006.
- Daiber, F. C., L. L. Thornton, K. A. Bolster, T. G. Campbell, O.W. Crichton, G. E. Esposito, D. R. Jones, and J. M. Tyrawski, 1976. An Atlas of Delaware's Wetlands and Estuarine Resources. Tech. Report Number 2, Delaware Coastal Management Program, Delaware State Planning Office, Dover, DE, 528 p.
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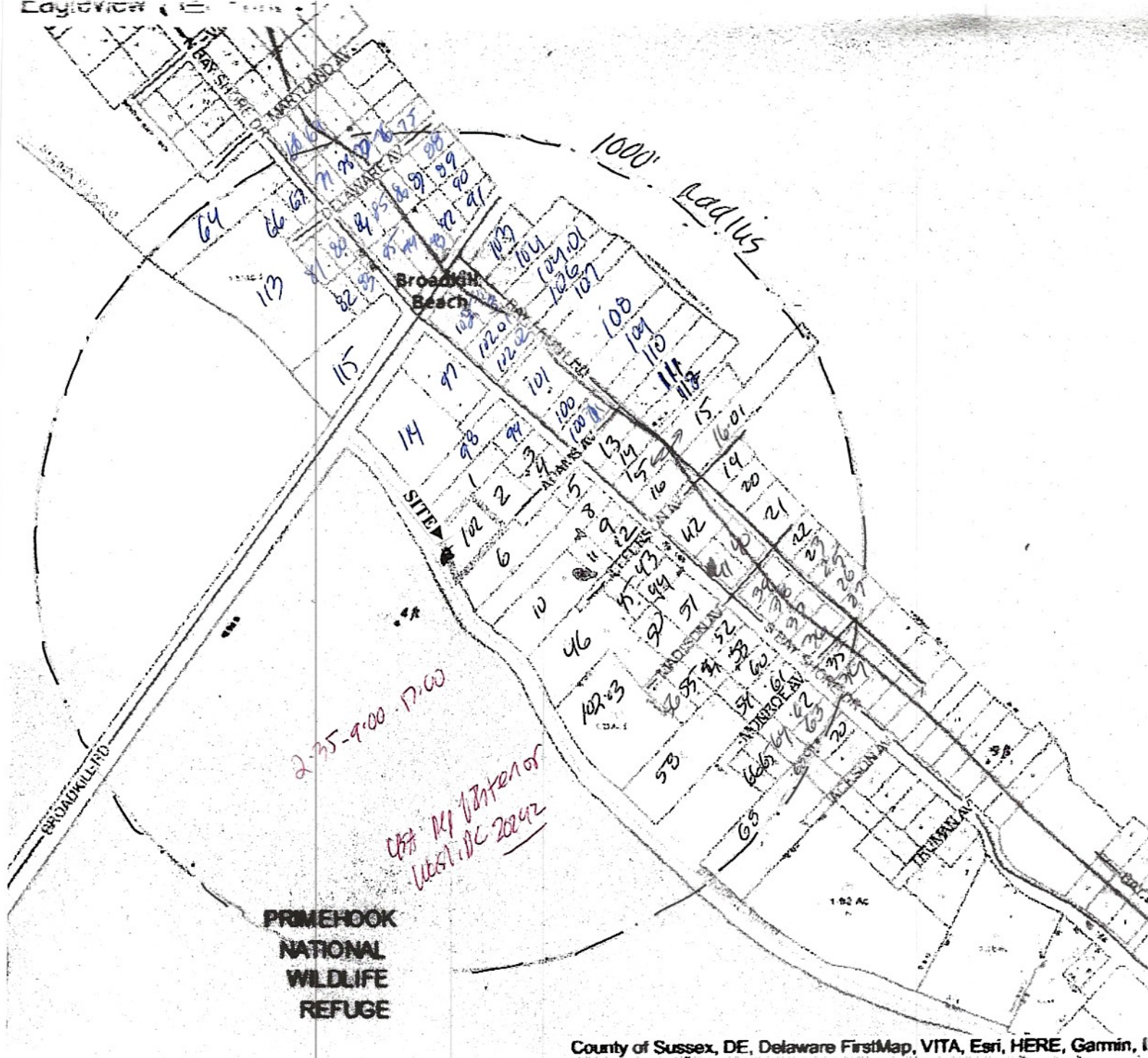


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1000' radius

★ SEE ATTACHED SITEET  
 FOR TAX MAP PARCEL  
 NUMBERS, AND FOLLOWING  
 3 STREETS FOR NAMES,  
 ADDRESSES OF OWNERS.





T.M.# 235-4-17

T.M.# 235-4-13



**PROPOSED 135' LONG x 3' WIDE WETLAND WALKWAY AND 5' WIDE x 25' LONG DOCK**  
**IN:** Deep Hole Creek (Broadkill Sound) Tributary of Broadkill River  
**AT:** 103 Adams Avenue, Broadkill Beach, Milton, Sussex County, DE 19968  
 Tax Map Parcel #235-4.17-p/o 102.00  
**APPLICANTS:** Brenda & Alan Erdman  
**DATE:** September 25, 2023

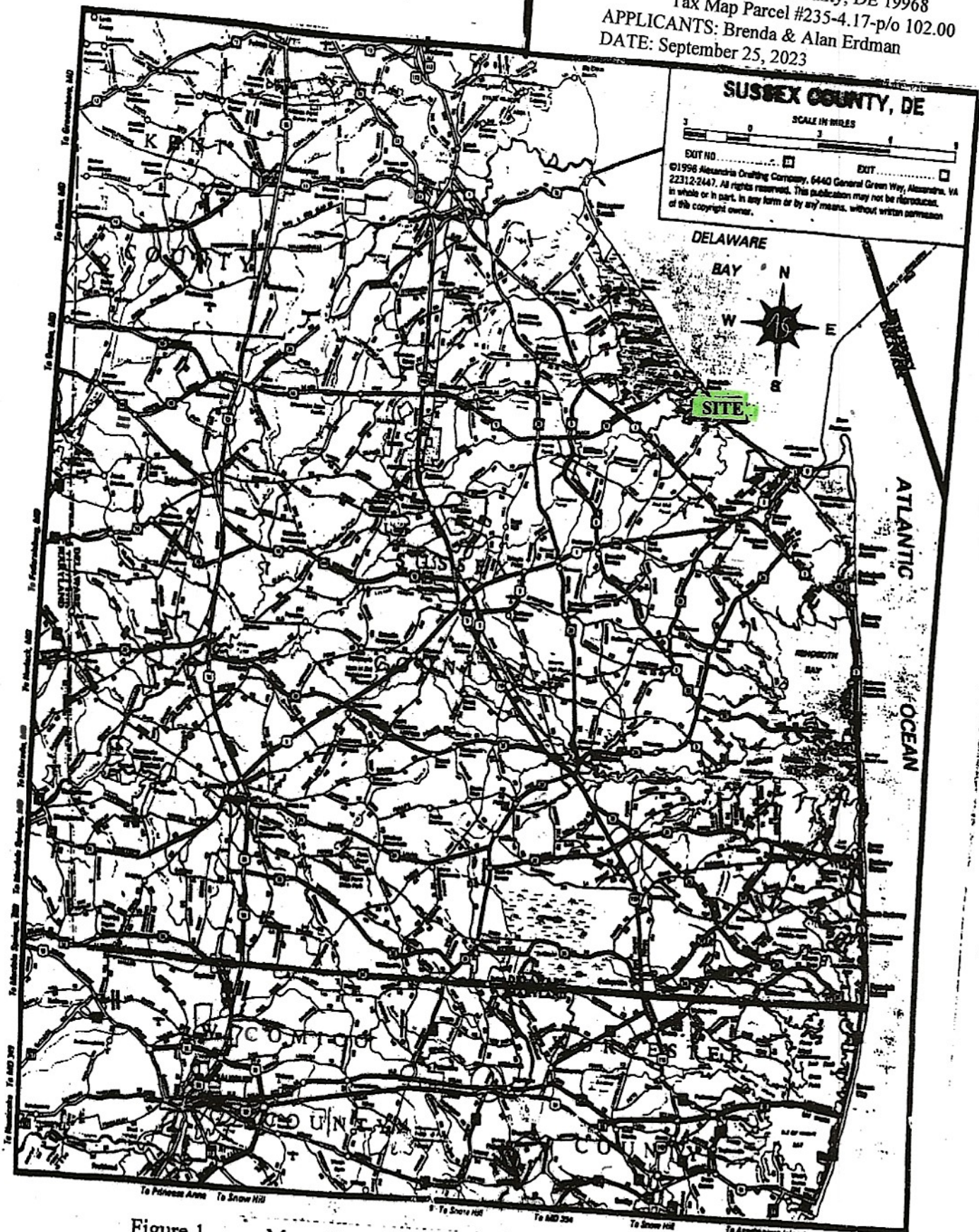


Figure 1. Map of Sussex County, Delaware showing site location, Broadkill Beach.

**PROPOSED 135' LONG x 3' WIDE WETLAND WALKWAY AND 5' WIDE x 25' LONG DOCK**  
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 Tributary of Broadkill River  
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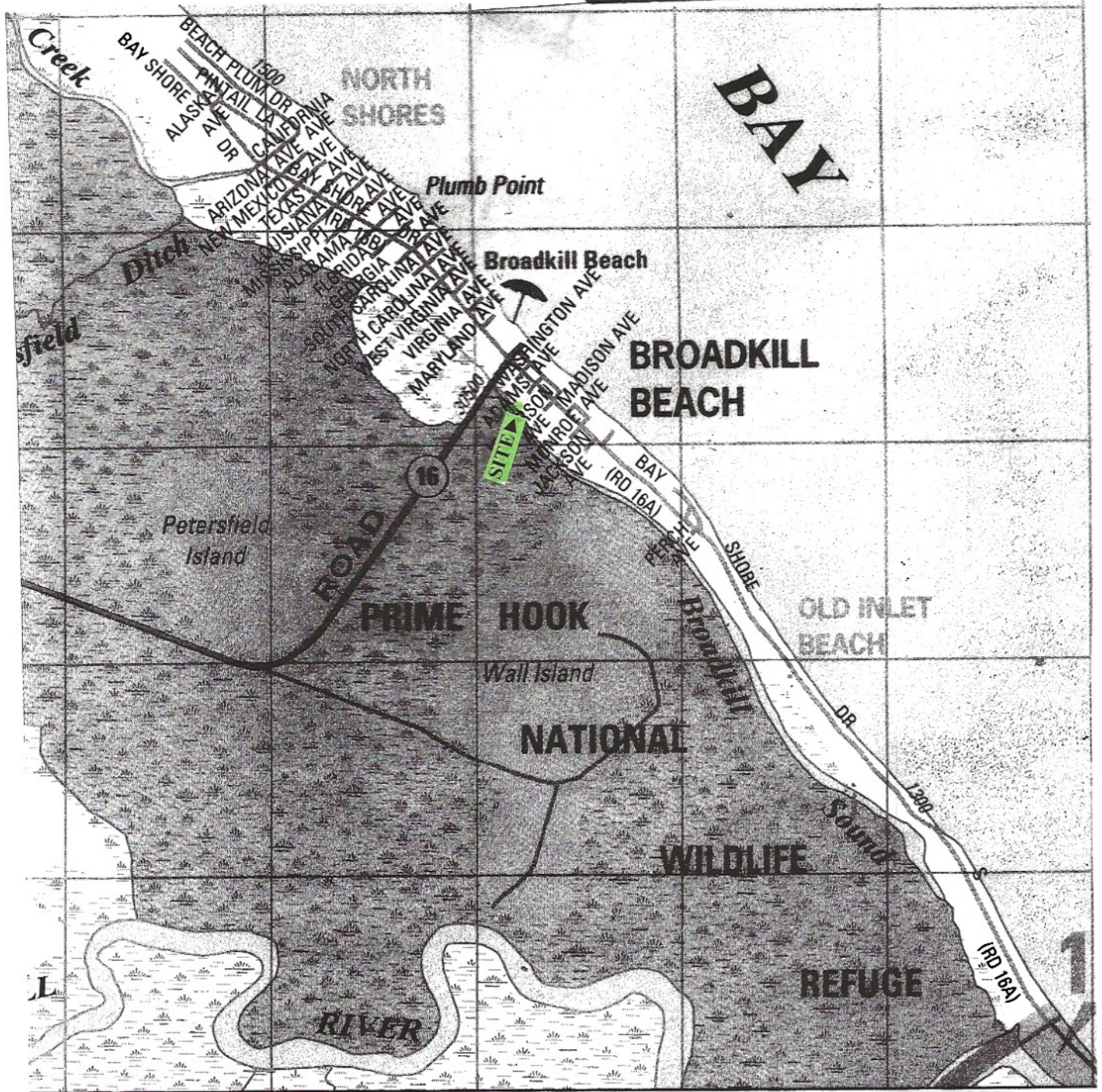


Figure 2. Map of Broadkill Beach, Sussex County, Delaware, showing site location, **103 Adams Avenue**. Directions to site (from Dover, DE): SR-1 southbound toward beaches; left at traffic light onto Route 16 (Broadkill Road); cross bridge over Broadkill Sound; turn right onto S. Bay Shore Drive; right onto Adams Avenue, site is last house on right, **103 Adams Avenue**. Also see Figure 3.

**PROPOSED 135' LONG x 3' WIDE WETLAND  
WALKWAY AND 5' WIDE x 25' LONG DOCK**

**IN:** Deep Hole Creek (Broadkill Sound)  
Tributary of Broadkill River

**AT:** 103 Adams Avenue, Broadkill Beach,  
Milton, Sussex County, DE 19968  
Tax Map Parcel #235-4.17-p/o 102.00

**APPLICANTS:** Brenda & Alan Erdman

**DATE:** September 25, 2023

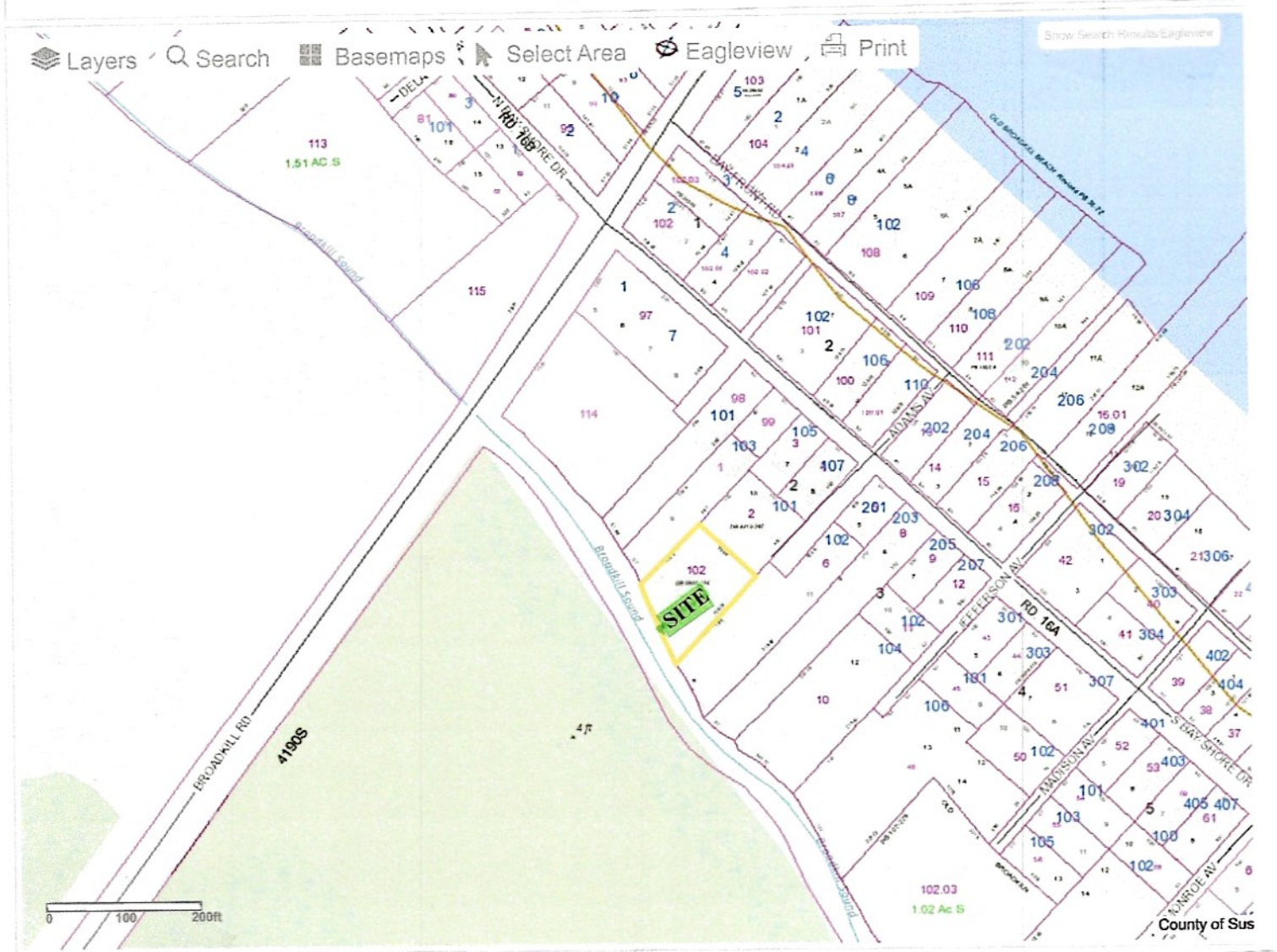


Figure 3. Site location, Tax Map Parcel #235-4.17-p/o 102.00 (103 Adams Avenue, Broadkill Beach Milton, Sussex County, Delaware).

**PROPOSED 135' LONG x 3' WIDE WETLAND WALKWAY AND 5' WIDE x 25' LONG DOCK**  
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 Tributary of Broadkill River  
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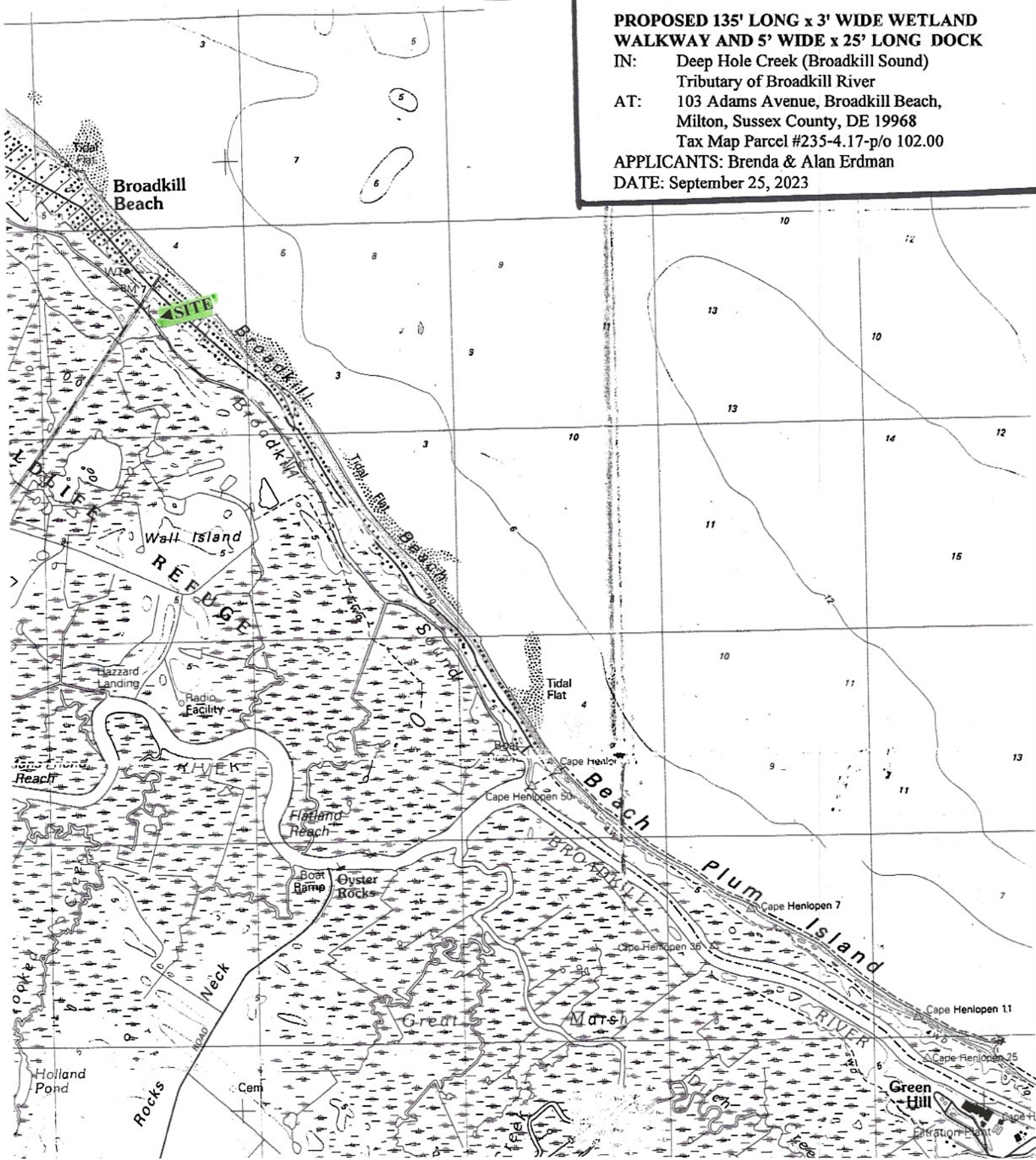


Figure 4.

Site location on U.S.G.S. topographic map, Lewes, Delaware quadrangle. Site is adjacent to Broadkill Sound (also known as Deep Hole Creek), a tributary of the Broadkill River.

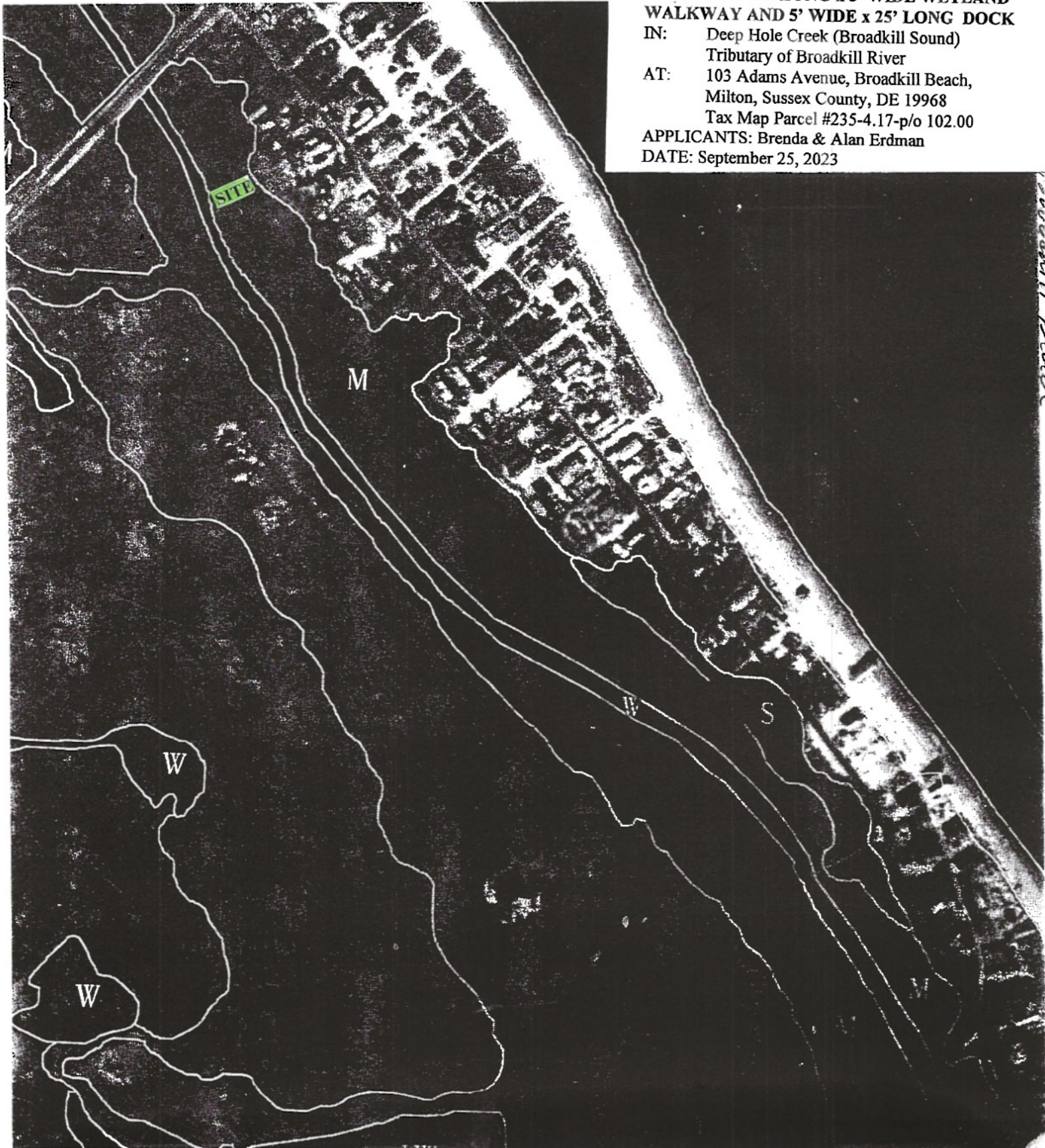
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Tax Map Parcel #235-4.17-p/o 102.00

**APPLICANTS:** Brenda & Alan Erdman

**DATE:** September 25, 2023



**Figure 5.** Site location on State of Delaware DNREC Wetlands Map #110 (1988 photobase). Project site is mapped M (marsh) and W (water). Scale: 1" = 300'.

**PROPOSED 135' LONG x 3' WIDE WETLAND  
WALKWAY AND 5' WIDE x 25' LONG DOCK**

IN: Deep Hole Creek (Broadkill Sound)  
Tributary of Broadkill River

AT: 103 Adams Avenue, Broadkill Beach,  
Milton, Sussex County, DE 19968  
Tax Map Parcel #235-4.17-p/o 102.00

APPLICANTS: Brenda & Alan Erdman  
DATE: September 25, 2023

Broadkill\_Erdman.pdf

Done



Figure 6.

Aerial photograph of site and vicinity, 103 Adams Avenue, Broadkill Beach Milton, Sussex County, Delaware (Tax Map Parcel #235-4.17-p/o 102.00), adjacent to Deep Hole Creek (Broadkill Sound). Aerial photograph provided to applicant by Matthew Jones, DNREC Wetlands and Waterways Section. MLW width of waterway = 40'±. Applicants propose to construct a 135' long x 3' wide wetland walkway (elevated +3' above marsh surface), and a 5' x 25' dock, as shown. See Figure 8 for plan view and cross-sections sketches.

**PROPOSED 135' LONG x 3' WIDE WETLAND  
WALKWAY AND 5' WIDE x 25' LONG DOCK**

IN: Deep Hole Creek (Broadkill Sound)

Tributary of Broadkill River

AT: 103 Adams Avenue, Broadkill Beach,  
Milton, Sussex County, DE 19968

Tax Map Parcel #235-4.17-p/o 102.00

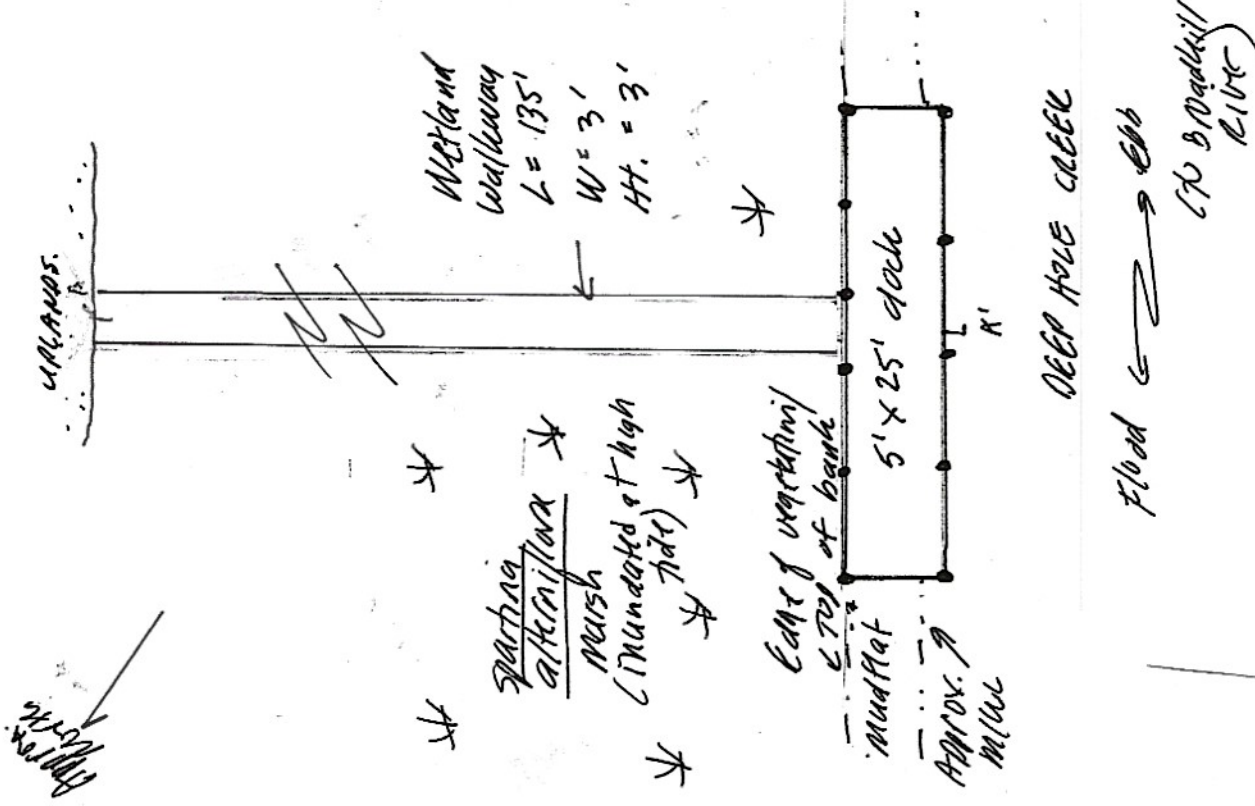
APPLICANTS: Brenda & Alan Erdman

DATE: September 25, 2023



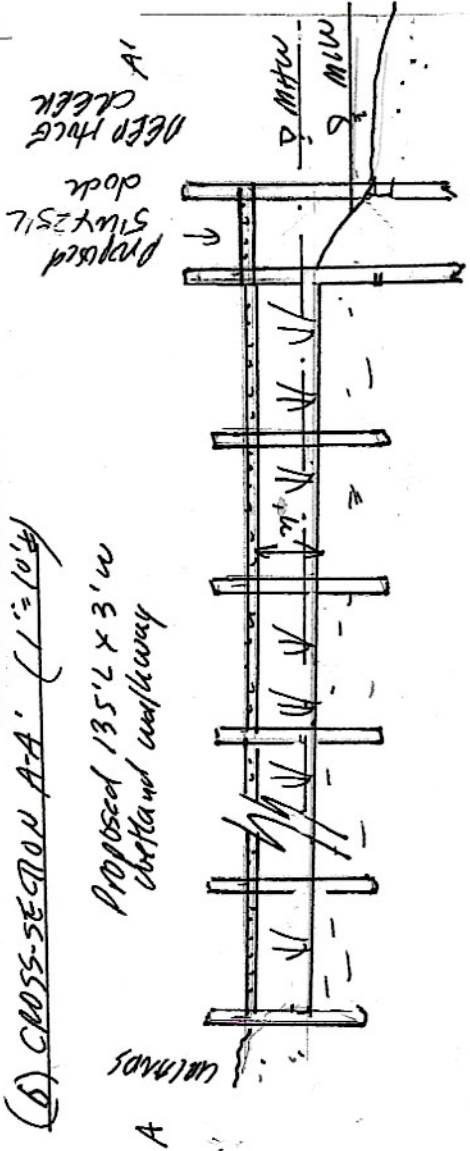
Figure 7. Ground-level photographs of site and vicinity, 103 Adams Avenue, Broadkill Beach Milton, Sussex County, Delaware (Tax Map Parcel #235-4.17-p/o 102.00), adjacent to Deep Hole Creek (Broadkill Sound). Applicants propose to construct a 135' long x 3' wide wetland walkway (elevated +3' above marsh surface), and a 5' x 25' dock. See Figure 8 for plan view and cross-sections sketches.

(A) PLAN VIEW SKETCH (1" = 10' ±)



PROPOSED 135' LONG x 3' WIDE WETLAND WALKWAY AND 5' WIDE x 25' LONG DOCK IN: Deep Hole Creek (Broadkill Sound) Tributary of Broadkill River AT: 103 Adams Avenue, Broadkill Beach, Milton, Sussex County, DE 19968 Tax Map Parcel #235-4.17-p/o 102.00 APPLICANTS: Brenda & Alan Erdman DATE: September 25, 2023

(B) CROSS-SECTION A-A' (1" = 10' ±)



(C) CROSS-SECTION B-B' (1" = 4' ±)

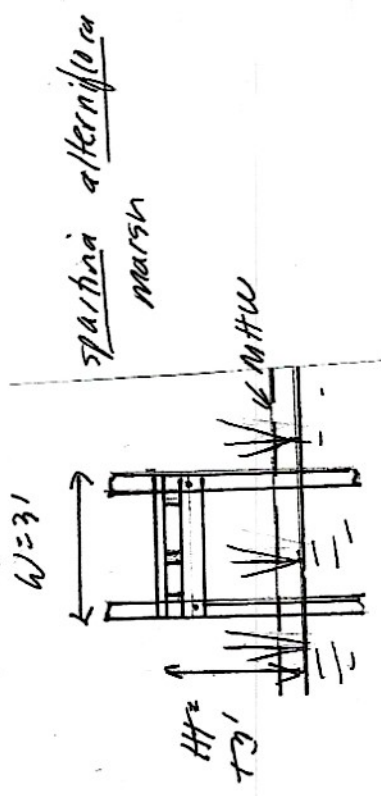


Figure 8. Plan view and cross-section sketches of proposed project. Sketches for permit application purposes only.



Parcel #235-4.17- p/o 102.00  
Prepared by:  
Fuqua, Willard & Schab, PA  
26 The Circle  
Georgetown, DE 19947  
File No. 190462

Return to:  
Brenda L. Erdman  
15 Trout Lane  
Marysville, PA 17053

THIS DEED is made this 4th day of APRIL, 2023,  
between:

Suzanne T. Watkins, of 1588 Lee Avenue, Tallahassee, FL 32303, and Laurence L. Burke, Trustee of the Patricia T. Burke Revocable Trust dated September 18, 2012, as amended and restated September 25, 2012, of 28245 Broadkill Road, Milton, DE 19968, parties of the first part,

and

Brenda L. Erdman and Alan R. Erdman, of 15 Trout Lane, Marysville, PA 17053, parties of the second part, as tenants by the entirety.

WITNESSETH: That the parties of the first part, for and in consideration of the sum of Twenty-Five Thousand and 00/100 Dollars (\$25,000.00), lawful money of the United States of America, the receipt whereof is hereby acknowledged, hereby grant and convey unto the parties of the second part, the following described lands, situate, lying and being in Sussex County, State of Delaware;

ALL THAT CERTAIN lot, piece or parcel of land situate, lying and being in Broadkill Hundred, Sussex County, State of Delaware, being more particularly described in that certain August 26, 2022, survey prepared by Merestone Consultants, Inc., (Plan No. 24713L-130026), as follows, to wit:

BEGINNING at a fence post set on the northeasterly side of Deep Hole Creek, marking a corner for this parcel and lands now or formerly of Thomas Bruce Penuel; thence running by and with the division line of lands now or formerly of Penuel, North 42 degrees 16 minutes 15 seconds East 105.90 feet to a pole found typically, marking a corner for this parcel and lands now or formerly of Brenda L. Erdman; thence turning by and with the division line of lands now or formerly of Erdman, South 46 degrees 28 minutes 07 seconds East 99.68 feet to a pole found typically just south of a capped rebar found, in the line of lands now or formerly of Frank I & Laura Taylor, marking a corner for this parcel and lands now or formerly of Brenda L. Erdman; thence turning by and with the division line of lands now or formerly of Taylor, South 42 degrees 07 minutes 25 seconds West 156.03 feet to a mag nail found in an encroaching dock, on the northeasterly side of Deep Hole Creek, marking a corner for this parcel and lands now or formerly of Frank I. & Laura Taylor; thence turning and running by and with the northeasterly side of Deep Hole Creek, North along the meanderings of Deep Hole Creek to a fence post set on the northeasterly side of Deep Hole Creek, marking a corner for this parcel and lands now or formerly of Thomas Bruce Penuel, being the point and place of beginning, said to contain 12,860.00 square feet of land, more or less, together with any and all improvements located thereon.

BEING a part of the same land conveyed unto Suzanne T. Watkins and Patricia T. Burke, by Deed of H.P. Layton Partnership, dated May 14, 2002, and recorded May 15, 2002, with the Recorder of Deeds, Georgetown, Delaware, in Deed Book 2706, Page 262.

Patricia T. Burke died on October 5, 2021, and her Last Will and Testament is filed with the Register of Wills, Georgetown, Delaware, as Case Number 6178. In Item IV of her Will, she devised the residue of her estate (which included her 50% interest in this property) to her trust. Thus, the present owners of the property are Suzanne T. Watkins, as to a 50% interest, and the Patricia Thompson Burke Trust dated September 18, 2012, as amended and restated September 25, 2012 (at to a 50% interest).

SUBJECT to any and all restrictions, reservations, conditions, easements and agreements of record in the Office of the Recorder of Deeds in and for Sussex County, Delaware.

NOTE: There is no public access to this property. The only land access to it is through other Erdman lands.

ALSO NOTE: The tax maps of Sussex County show the parcel number of this property as "p/o 102".

TOGETHER WITH -

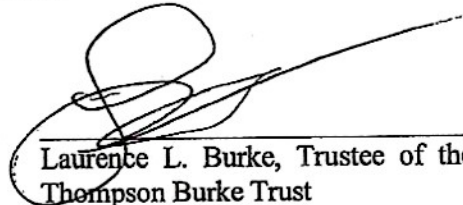
The grantors quit-claim to the grantees any and all interest they have in the following:

All that certain lot, piece or parcel of land situate, lying and being in Broadkill Hundred, Sussex County, State of Delaware, being more particularly described according to a survey prepared by Merestone Consultants, Inc., dated August 26, 2022, plan no. 24713L-130026, as follows to wit:

Beginning at a mail nail found in an encroaching dock on the northeasterly side of Deep Hole Creek, a/k/a Broadkill Sound; then, running with the division line of Lots 5, 9 & 11, South 42 degrees 07 minutes 25 seconds West 23.00 feet, more or less, to the approximate centerline of Deep Hole Creek; then, turning and running by and with the approximate centerline of Deep Hole Creek to a point; then, turning and running by and with the division line for Lot 9, Section II, North 42 degrees 16 minutes 15 seconds East 33 feet, more or less, to a fence post set; then, turning and running southeasterly along the meanderings of Deep Hole Creek to a mag nail found in an encroaching dock on the northeasterly side of Deep Hole Creek, a/k/a Broadkill Sound, being the point and place of beginning, be the contents what they may.

IN WITNESS WHEREOF, the parties of the first part have hereunto set their hands and seals the day and year written below.

Witness




(SEAL)

Laurence L. Burke, Trustee of the Patricia  
Thompson Burke Trust

State of Delaware :  
                              :         S.S.  
County of Sussex  :

BE IT REMEMBERED, that on this 4th day of APRIL, 2023,  
personally came before me, the Subscriber, a Notary Public for the State and County  
aforesaid, Laurence L. Burke, Trustee of the Patricia T. Burke Trust, party to this  
Indenture, known to me personally to be such, and acknowledged this Indenture to be his  
act and deed.

GIVEN under my Hand and Seal of Office the day and year aforesaid.

  
WILLIAM SCHAB, ESQ.  
NOTARIAL OFFICER Notary Public  
PURSUANT TO Printed Name: \_\_\_\_\_  
29 DEL CS4323(A)(3) My Commission Expires: \_\_\_\_\_

IN WITNESS WHEREOF, the parties of the first part have hereunto set their hands and seals the day and year written below.

[Signature]  
Witness Cason Todd

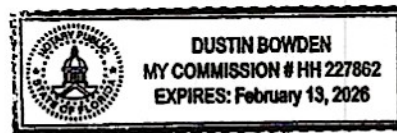
Suzanne T. Watkins (SEAL)  
Suzanne T. Watkins

State of Florida :  
County of Leon : S.S.

BE IT REMEMBERED, that on this 3rd day of November, 2022, personally came before me, the Subscriber, a Notary Public for the State and County aforesaid, Suzanne T. Watkins, party to this Indenture, known to me personally to be such, and acknowledged this Indenture to be her act and deed.

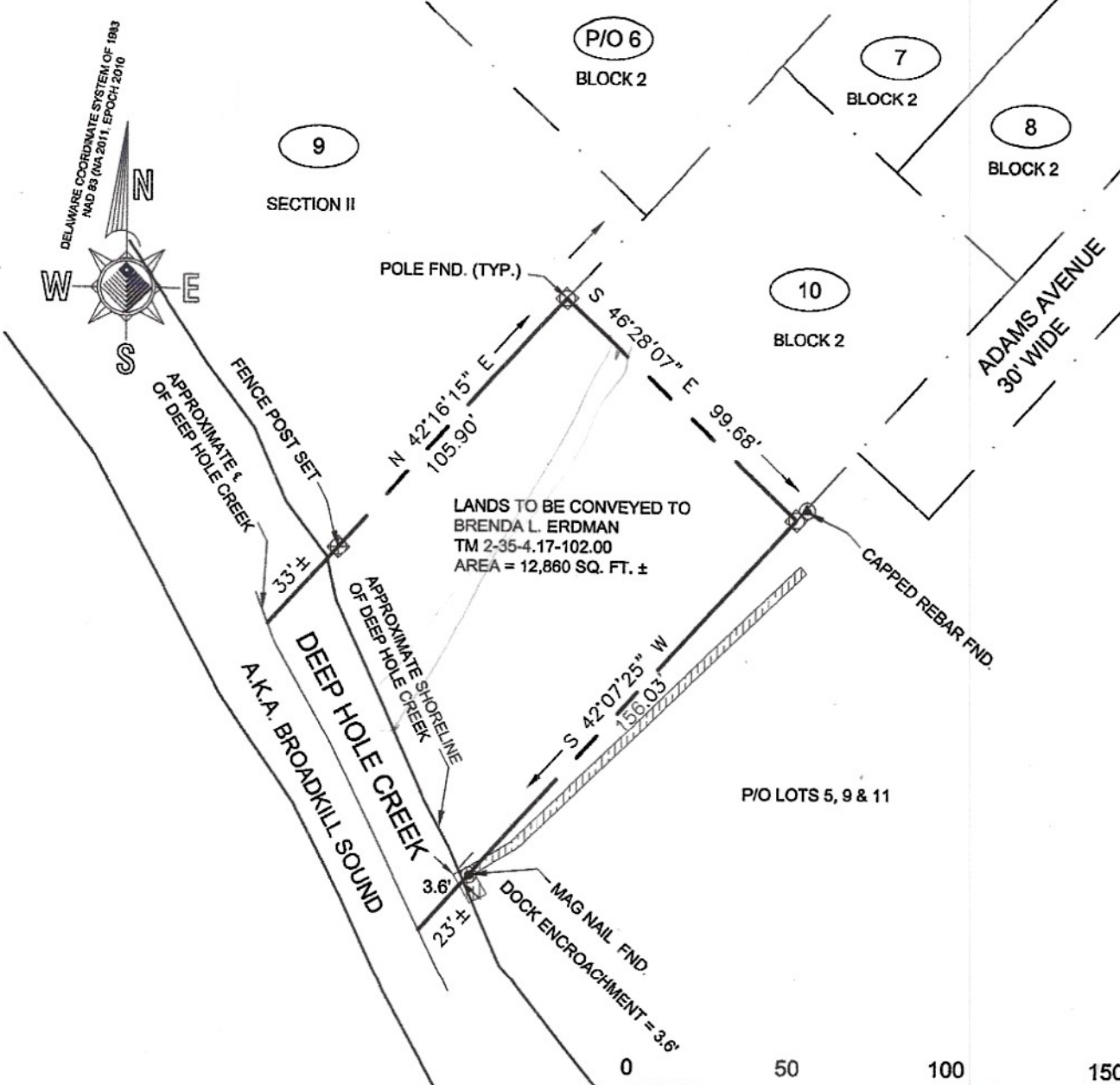
GIVEN under my Hand and Seal of Office the day and year aforesaid.

[Signature]  
Notary Public  
Printed Name: Dustin Bowden  
My Commission Expires: 2/13/26



PLAN #24713L-130026

|                                |                        |                     |
|--------------------------------|------------------------|---------------------|
| PARCEL NO.<br>2-35-4.17-102.00 | RECORD PLAN:<br>PB, PG | DEED REF:<br>DB, PG |
|--------------------------------|------------------------|---------------------|



### BOUNDARY LOCATION PLAN

PREPARED FOR:  
**BRENDA L. ERDMAN**  
 FOR PROPERTY TO BE CONVEYED TO:  
**BRENDA L. ERDMAN**  
 SITUATE IN:  
 BROADKILL HUNDRED \* SUSSEX COUNTY  
 STATE OF DELAWARE  
 SCALE: 1"=50'  
 DATE: 2 DECEMBER 2019  
 REVISED DATE: 26 AUGUST 2022

**NOTE:**  
 1. THIS PLAN IS VALID ONLY WHEN SIGNED IN RED INK AND EMBOSSED WITH A RAISED IMPRESSION SEAL AND WAS PREPARED IN ACCORDANCE WITH THE MINIMUM STANDARD OF ACCURACY FOR A SUBURBAN CLASSIFICATION.  
 2. BASIS OF BEARING: DELAWARE COORDINATE SYSTEM OF 1983 NAD 83 (NA 2011, EPOCH 2010)  
 3. NO EASEMENTS OTHER THAN SHOWN WERE PROVIDED.

*Robert W. Napp*  
 PROFESSIONAL LAND SURVEYOR  
 DATE: 8/29/22



**MERESTONE  
CONSULTANTS, INC.**

ENGINEERS - PLANNERS - SURVEYORS

|   |   |
|---|---|
| 5215 WEST WOODMILL DRIVE<br>WILMINGTON, DE 19808<br>PHONE: 302-992-7900 | 33516 CROSSING AVENUE, UNIT 1<br>LEWES, DE 19958<br>PHONE: 302-226-5880 |
|---|---|