



COASTAL & ESTUARINE RESEARCH, INC.

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

August 7, 2018

Tyler Brown
Wetlands and Subaqueous Lands Section, DNREC
89 Kings Highway
Dover, DE 19901



Dear Tyler:

Enclosed are three copies of the DNREC Wetlands and Subaqueous Lands Section Basic Application Form and Appendix R (Maintenance Dredging), submitted on behalf of Sargio Corp. (c/o John Candeloro, applicant) to conduct 3,500 c.y. of mechanical maintenance dredging in the Bay Vista marina basin and access channel to depths of -4' MLW and -6' MLW, respectively, adjacent to the Lewes and Rehoboth Canal at Basin Street, Bay Vista, Rehoboth Beach, Sussex County, Delaware (Tax Map Parcel #3-34-19.16-23.03). Dredging will be conducted by land-based and barge-mounted excavators. Dredged material (predominantly mud) will be placed in an on-site upland disposal area adjacent to/north of the marina basin (Tax Map Parcel #3-34-19.16-23.02), also owned by the applicant. Dredging and disposal will be conducted by Apple Marine Construction, Inc.

Also enclosed are two checks payable to the State of Delaware, one for \$300.00 for the dredging application fee, and one for \$85.00 for the Public Notice fee.

Please feel free to contact me if you have any questions, or require additional information to issue the permit.

Sincerely,

Evelyn M. Maurmeyer, Ph. D.

Enclosures

cc: John Candeloro, Sargio Corp. (applicant)
George Apple, Apple Marine Construction, Inc. (contractor)

Section 1: Applicant Identification

1. Applicant's Name: Sargio Corp.
 Mailing Address: c/o John Candeloro
PO Box 1066
Newark DE

Telephone #: (302) 545-4655
 Fax #: (302) 453-0446
 E-mail: john@martahomes.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: George Apple
 Mailing Address: 11702 Bay Landing Dr.
Berlin MD 21811

Company Name: Apple Marine Construction
 Telephone #: (410) 213-7097
 Fax #: _____
 E-mail: georgerapple@comcast.net

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):
Applicant proposes 3,500 c.y. mechanical maintenance dredging to a
depths of -4' MLW (marina basin) and -6' MLW (access channel) in the
Bay Vista marina basin, with disposal at adjacent uplands. See
enclosed Project Description for details.

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

<input 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 type="checkbox"/> J. Vegetative Stabilization	<input checked="" 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 type="checkbox"/> M. Activities in State Wetlands	<input type="checkbox"/> S. New Dredging

Section 3: Project Location

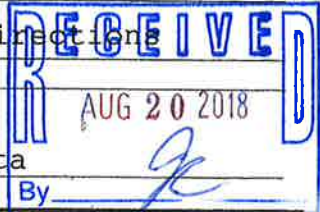
7. Project Site Address: Bay Vista marina,
Basin Street, Bay Vista
Rehoboth Beach DE 19971

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: #3-34-19.16-23.03 Subdivision Name: Bay Vista



WLSL Use Only: Permit #: 368/18

Type SP SL SU WE WQ LA SA MP WA

Corps Permit: SPGP 18 20 Nationwide Permit #: _____ Individual Permit #: _____

Received Date: 8/22/18 Project Scientist: _____

Fee Received? Yes No Amt: \$ 300 Receipt #: 677022

Public Notice #: _____ Public Notice Dates: ON _____ OFF _____

95" PN 677023

Wetlands and Subaqueous Lands Section Basic Application Form



Section 3: Project Location (Continued)

Bay Vista Marina,

10. Name of waterbody at Project Location: access chann waterbody is a tributary to: Lewes and Rehoboth Canal

11. Is the waterbody: Tidal Non-tidal Waterbody width at mean low or ordinary high water 245' ± (marina basin)

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:

Applicant owns marina basin

(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 sheet.

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):
n/a

15. Provide the names of DNREC and/or Army Corps of Engineers representatives whom you have discussed the project with:
Applicant's contractor met on site with Tyler Brown and Zack Messick, WSLs, 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? _____

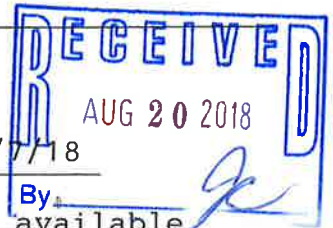
16. Are there existing structures or fill at the project site in subaqueous lands? Yes No

*If yes, provide the permit and/or lease number(s):

LA-0015/90; LA-033/02

*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: submitted 8/7/18



Type of Permit: IP Federal Permit or ID # not yet available

18. Have you applied for permits from other Sections within DNREC? No Pending Issued Denied Date: submitted 8/7/18 Permit or ID #: not yet available

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

Other: DCMP Coastal Consistency Certification

Layer Visibility

Addresses/Parcels

911 Addresses Id7

Tax Parcels Id7

Parcel Labels

Annotation

Zoning

County Districts

Schools/Libraries

Hydrology

Tax Index/Tax Ditch

Transportation

Statewide

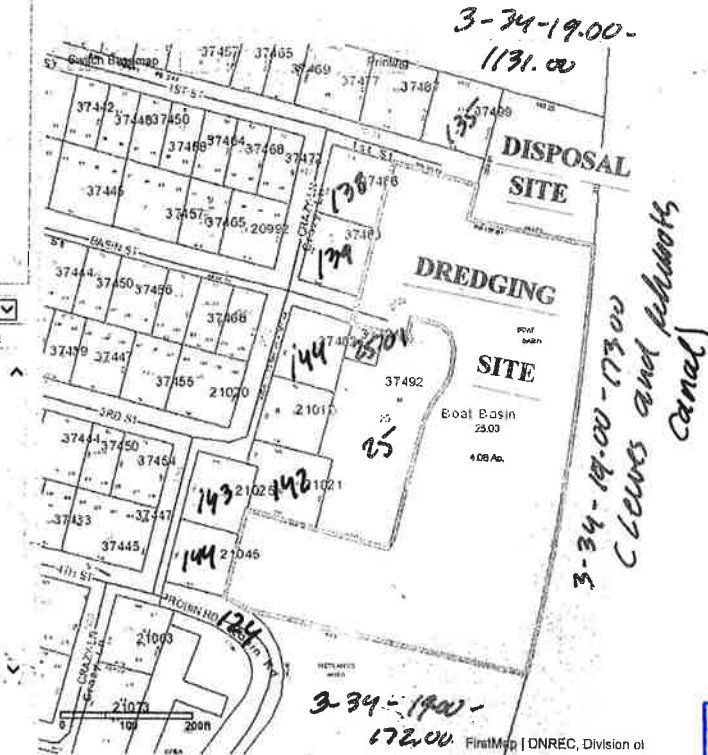
Search Par
Tax ID

Selected Features: Tax Parcels (1)

1) 334-19.16-25.03 Zoom

Book	D 2353 34
Owner Name	SARGIO, CORPORATION
Mailing Address	PO BOX 1066
City	NEWARK
State	DE
Description	BOAT BASIN
Description 2	BAY VISTA MARINA
Land Code	MA
School	8
BLDG Improvement	3600
LND Improvement	20400
PIN with Unit	334-19.16-25.03

Selected Features (1)



14A. List the name and complete mailing address of the immediately adjoining property owners on all sides of the project.

Dredging Site: Bay Vista Marina basin, Tax Map Parcel #3-34-19.16-23.03

Disposal Area: Adjacent cleared upland area (Tax Map Parcel #3-34-19.16-23.02)

Tax Map Parcel #

Name, address of owner

- #3-34-19.00-1131.00 → Susan Townley & Robert Wood, 37777 Bay Harbor Circle, Rehoboth Beach, DE 19971
- #3-34-19.16-135.00 → Henry & Phoebe Shaubach, 1004 Buck Road, Quarryville, PA 17566
- #3-34-19.16-138.00 → Janice Manley, 2606 Landon Dr., Wilmington, DE 19808
- #3-34-19.16-139.00 → Harvey & Darlene Janner, 202 Glennshane Pass, Bear, DE 19701
- #3-34-19.16-140.00 → Ashley & David Bickel, 37482 Basin Street, Rehoboth Beach, DE 19971
- #3-34-19.16-25.01 → Sussex County Pump Station #219, PO Box 589, Georgetown, DE 19947
- #3-34-19.16-25.00 → Candeloro Properties, LLC, 885 Marrows Road, Newark, DE 19713
- #3-34-19.16-142.00 → James & Bianca Hilt, 4 Hillspring Rd., Chadds Ford PA 19317
- #3-34-19.16-143.00 → Glenn Brown, Trustee, 71 McBry Dr., Dover, DE 19901,
- #3-34-19.16-144.00 → Glenn & Charity Vernon, 21045 Crazy Lane, Rehoboth Beach, DE 19971
- #3-34-19.16-124.00 → (Robin Road), Ronald T. Moore, 20408 Silver Lake Drive, Rehoboth Beach, DE 19971
- #3-34-19.00-172.00 → State of Delaware, Div. of Parks and Recreation, 89 Kings Highway, Dover, DE 19901
- #3-34-19.00-173.00 → Lewes and Rehoboth Canal, United States Govt., PO Box 2000, Georgetown, DE 19947

Public Hearing notes

Section 5: Signature Page**19. Agent Authorization:**

If you elect to complete this agent authorization 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.

I, John M. Candeloro, hereby designate and authorize Evelyn Maurmeyer
Name of Applicant Sargio Corp. Name of Agent

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

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

20. Agent Signature

I hereby certify that the information on this form and on the attached plans is 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

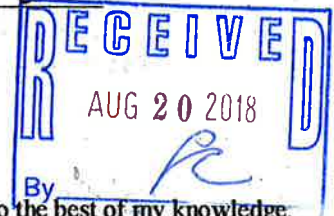
8/7/2018
Date

21. Applicant's Signature:

I hereby certify that the information on this form and on the attached plans is 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.

Sargio Corp. John M. Candeloro
Applicant's Signature
John M. Candeloro
Print Name

7-1-18
Date

**22. Contractor's Signature:**

I hereby certify that the information on this form and on the attached plans is 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.

Apple Marine Construction Inc.
Contractor Name
George Apple, Pres.

7-1-18
Date



COASTAL & ESTUARINE RESEARCH, INC.

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

August, 2018

**PROJECT DESCRIPTION:
MECHANICAL MAINTENANCE DREDGING,
BAY VISTA MARINA AND ACCESS CHANNEL
REHOBOTH BEACH, SUSSEX COUNTY, DELAWARE**

Applicant

Sargio Corp.
John M. Candeloro
PO Box 1066
Newark, DE
(302) 545-4655 (cell)
john@marthahomes.com

Contractor

Apple Marine Construction, Inc.
George Apple
11702 Bay Landing Drive
Berlin, MD 21811
(401) 213-7097; (443) 944-5191
Georgerapple1@comcast.net

Project Location

The dredging site is the Bay Vista Marina basin and access channel, located on Basin Street, Bay Vista, Rehoboth Beach, Sussex County, Delaware. See Figures 1 and 2 for location maps and directions to the site. The site is identified as Tax Map Parcel #3-34-19.16-23.03, Sargio Corp., owner (see Figure 3). The site is depicted on the U.S.G.S topographic map, Rehoboth Beach, Delaware quadrangle (Figure 4), and is an artificially-excavated basin adjacent to the Lewes and Rehoboth Canal. The marina provides slips for approximately 25 vessels; a boat launch ramp is also present. See Figure 5a for GoogleEarth 2017 aerial photograph. The artificially-excavated basin was present in 1968 (see Figure 5b for 1968 aerial photograph). The dredging site is depicted on the National Wetlands Inventory Map (Figure 6), and is mapped E1UBL (estuarine subtidal, unconsolidated bottom, subtidal). The dredging site is depicted on State of Delaware DNREC wetland map #036, 1988 photobase (Figure 7), and is mapped W (water). See Figure 8 for photographs of marina and access channel.

Existing Conditions

Existing MLW depths range from 0' to -1.7' in the slips; typically -1.8' in the center of the basin; and -1.1' to 1.2' in the access channel. See Figure 9 for plan view sketch showing existing MLW depths (as measured on site by Evelyn Maurmeyer, CER, Inc., August 5, 2018). These depths are too shallow for boaters to leave or enter their slips at lower stages of tide (boats rest on the substrate); boaters have to time their egress and ingress to coincide with high tide, resulting in limited boating opportunities. Water depth drops of to -6' MLW and greater in the Lewes and Rehoboth Canal. See Figure 10 for representative cross-section sketches showing existing and proposed depths. Bottom material consists predominantly of mud (see photographs, Figure 11).



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Project Description

The following activities are proposed:

- **Maintenance Dredging.** Accumulated sediment will be removed from the marina basin by mechanical dredging. A long-reach (50') excavator based on uplands will remove sediment from the slips, to a distance of about 40' from the bulkhead. The excavator will then swing around and place the material directly into the disposal area (see next section for detailed description of disposal area). Sectional barges will be transported to the site by trucks and will be assembled on site. A crane will lift the two barges into the water. An excavator will be placed on the larger of the two barges, and will conduct mechanical dredging from the water. Excavated material will be placed directly onto the second, smaller barge. When full, the smaller barge will be pushed toward shore, and the excavator will unload the dredged material directly into dump trucks, which will transport the material directly into the on-site disposal area. The marina basin area to be dredged is 245'± x 115'± (28,175 sq. ft./0.65 acre), to a depth of -4' MLW; the access channel dredging area is 95'± x 50'± (4,750 sq. ft./0.11 acre±), to a depth of -6' MLW (to tie into existing MLW depth in the adjacent waterway, Lewes and Rehoboth Canal); see Figure 12. Total volume to be dredged is 3,500 c.y.
- **Dredged Material Disposal.** Dredged material will be transported and deposited into a cleared upland area (also owned by the applicant), adjacent to/north of the marina basin, as described in the preceding section. See Figure 3 for location; Figure 5a for 2017 GoogleEarth aerial photograph; Figure 6 for site location on National Wetlands Inventory Map (site is mapped uplands); Figure 7 for site location on State of Delaware DNREC wetland map #036, 1988 photobase (site is mapped O, other, uplands or non-tidal wetlands less than 400 acres); and Figure 13 for photographs. The site is approximately 140' x 135' at its widest, and is 14,853 sq. ft. (0.35 acre) in size, and will accommodate up to 3,500 c.y. Site preparation will involve excavating a 2' to 3' deep cut, and using the excavated material to create a 3' to 4' high earthen berm around the site. See Figure 14 for plan view sketch of proposed disposal area (prepared by George Apple, Apple Marine Construction, Inc., dredging contractor).

Project Purpose

Purpose of proposed project is to restore navigable depths in the Bay Vista Marina slips, marina basin, and access channel to allow vessels ingress and egress at all stages of the tide.

MAINTENANCE DREDGING OR EXCAVATING

- If dredged material is to be placed in a disposal site, a separate map showing the location of the disposal site should be attached. This drawing must indicate the proposed retention levees, weirs, spillways, and/or devices for retaining the materials.
- Bottom samples to determine heavy metals or other toxic materials must be taken and analyzed if deemed necessary by the DNREC staff. The responsibility, as well as the expense incurred for obtaining and analyzing these samples, must be borne by the applicant.
- If maintenance dredging is to be done, evidence of previous dredging must be provided. Any previously issued permit with drawings which indicates the date the dredging occurred, the area involved and dredging depth constitutes acceptable proof.
Marina basin was excavated prior to 1968 (see Figure 5b).
- Please make sure answers to all of the questions in this appendix correspond to information on the application drawings.

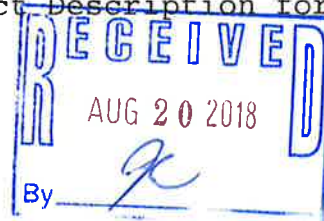
1. How many cubic yards of material will be MAINTENANCE DREDGED or excavated channelward of the:

- a. Tidal waters: mean high water line? 3,500 cu. yds.
mean low water line? 3,500 cu. yds.
- b. Non-tidal waters: ordinary high water line? n/a cu. yds.

Does this account for the total volume of proposed dredging for the project? Yes No

If there is new dredging associated with this project (dredging beyond previously authorized dimensions) please fill out appendix S for new dredging.

2. What will be the dimensions of the dredged or excavated area relative to mean low water (for tidal areas only) or ordinary water level (for non-tidal areas only)?
245' length -4' depth 115' base width 115' top width marina basin
95' " -6' " 50' " 50' " access channel
3. What are average existing depths in area of proposed dredging? 1-2'± ft. (mlw/ohw)
Include a survey of proposed and existing depths on application drawings. (see Figures 9 and 10)
Dredging will tie into existing depths.
4. What is the proposed dredging depth in relation to surrounding bathymetry? 4'; 6' ft. (mlw/ohw)
Indicate both proposed depths and surrounding depths on attached drawings.
See Figures 9 and 10 for plan view and cross-sections showing existing and proposed depths.
5. By what method(s) (hydraulic, clamshell or other) will the dredging be done? If other, explain:
Mechanical (long-reach excavator); see Project Description for details.



- 6. What is proximity of the dredging project to the nearest creek bank or banks? 3' ft. (bulkhead)
 What are existing land uses along this bank(s)? 10'+ (marsh)
 Land use is parking area (uplands), and open space (marsh).

Describe the existing shoreline along this bank (vegetation, rip-rap, bulkhead, etc.).

Bulkheading (and some stone rip-rap) along marina basin banks; wetland vegetation along access channel (see aerial photograph, Figure 5a and ground-level photographs, Figure 8).

- 7. Describe characteristics of the material to be disposed including:
 - a. Physical nature of material (i.e. sand, silt, clay, etc.). Give percentages of various fractions if available.
 Predominantly mud (see photograph, Figure 11).
 - b. Chemical composition of material - Many areas have sediments with high concentration of pollutants (chemicals, organics etc.) which may be re-suspended or reintroduced into the water. For heavily industrialized sites, a chemical analysis of this material should be provided (if applicable).
 Information not available.
 - c. What are the dewatering properties of material to be disposal of?
 Material anticipated to dewater within months of disposal.

- 8. How will the dredged or excavated material be transported to its disposal area?
 Directly from land-based long-reach excavator, and by trucks (see Project Description for details).

9. Land Disposal Areas. SEE ATTACHED SHEET

- a. Describe dimensions, characteristics and exact locations of the proposed dredged material disposal site (provide photographs, directions to, and complete plans of disposal site).
- b. Describe method of dredged material containment (embankment, behind bulkhead, etc.)
- c. What type of leachates will be produced by the spoil material and what is planned for the protection of groundwater?
- d. Disposal site coordinates _____ latitude _____ longitude
- e. What methods will be used to ensure that spoil water does not adversely affect water quality both during construction and after completion of the project?
- f. Describe present land use of the disposal site.



9. Land Disposal Areas

- a. The proposed dredged material disposal site is a vacant, cleared upland area adjacent to/north of the dredging site, identified as Tax Map Parcel #3-34-19.16-25.02 (Sargio Corp., owner). See Figure 3 for location map; Figure 5a for GoogleEarth 2017 aerial photograph; Figure 6 for site location on National Wetlands Inventory Map (site is mapped uplands); Figure 7 for site location on State of Delaware DNREC wetland map #036, 1988 photobase (site is mapped O, other, uplands or non-tidal wetlands less than 400 acres); Figure 13 for ground-level photographs; and Figure 14 for plan view sketch with dimensions and description of proposed site preparation.
- b. Dredged material will be contained by earthen berms and silt fencing. Contractor will excavate to a depth of -2' to -3', and will use the material to build up an earthen berm +3' to +4' in height.
- c. The Bay Vista community is served by city water. There are no drinking water wells in the vicinity that would be affected by possible leachates/salt water.
- d. Latitude: 38.699° North (approximate center of disposal site)
Longitude: 75.0946° West (approximate center of disposal site)
- e. Contractor will place excavated material directly into disposal site, or into trucks for transport to minimize adverse effects on water quality. Earthen berm and silt fencing will contain excavated material after completion of dredging.
- f. Present use of disposal area is open space. A portion of the site was previously used for disposal of excavated material from a nearby community.

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10. Water Disposal Areas/ Beneficial Use Projects Not applicable

Describe methods to be used for water disposal including volumes and site selection, and containment (if applicable). Include Fill or Wetland Appendix if applicable.

11. Describe the existing water characteristics at the site, including chemical analysis for water quality.

See attached sheet

12. Identify the dredging and disposal schedule to ensure that operations do not degrade water quality during times of anadromous fish migration.

Dredging/disposal will be conducted late fall/winter 2018/19.

13. Has an Erosion and Sediment Control Plan been approved by the designated plan approval agency for the project? An Erosion and Sediment Control Plan is required for any project disturbing more than 5,000 square feet of uplands. Final approved plans must be received by this office prior to permit issuance.

Yes No Not required E&S plan to be submitted to Sussex SCD.

Important time of year restriction information:

Please be advised that all dredging in the Inland Bays must be undertaken between September 1 and December 31 in order to protect summer and winter flounder and other aquatic species. Dredging in other Delaware waters may also be subject to certain time of year restrictions in order to protect fish and wildlife. Contact DNREC for more specific information regarding the restrictions that may apply within your project area.

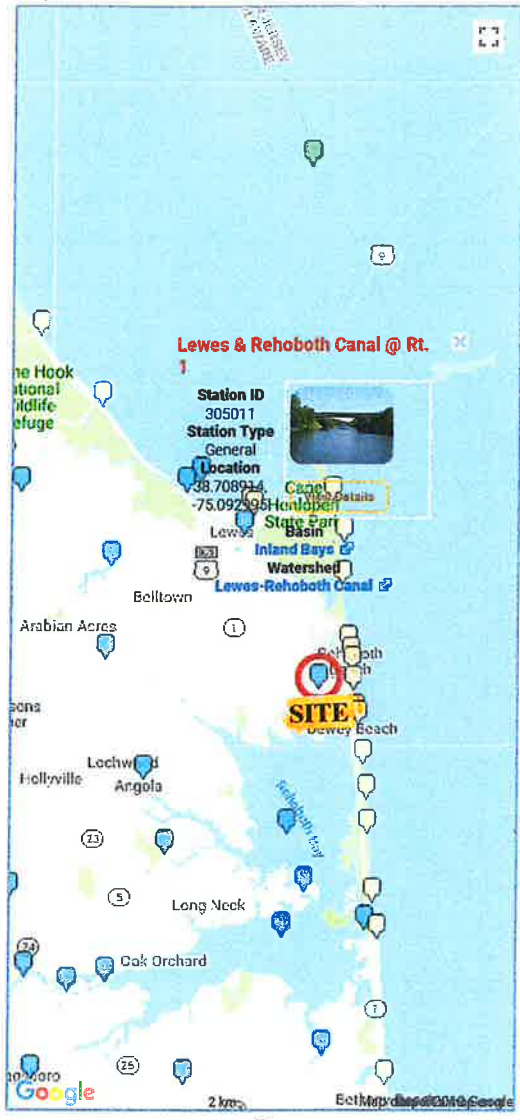


[Home](#) [About](#) [Contact](#)

Text Search

189 Items

Draw Watersheds Full State Zoom Search Data Bookmark Reset



- | | | |
|---------------------|--|------------------------------|
| Station Type | Select a Basin | Select a Watershed |
| 27 Beach | 30 Chesapeake Bay | 8 Appoquinimink River |
| 22 Boat Run | 93 Delaware Bay and Estuary Basin | 4 Army Creek |
| 140 General | 44 Inland Bays | 1 Assawoman |
| | 22 Piedmont | 3 Blackbird Creek |
| | | 3 Brandywine Creek |
| | | 6 Broad Creek |

Data Table 305011

Station Information

Station ID: 305011
Station Name: Lewes & Rehoboth Canal @ Rt. 1
Period of Record: Mar 09, 2000 - Aug 23, 2017
Basin: [Inland Bays](#)
Watershed: [Lewes-Rehoboth Canal](#)
[View Historical Station Data](#)
[Download Historical Station Data \(.csv\)](#)



[Zoom to this station](#)
[Highlight Location](#)

Latest Water Quality Samples

Parameter	Value	ResultType	Date
Water Temp	27.1 °C	Actual	Aug 22, 2017
pH	7.3	Actual	Aug 22, 2017
Salinity	24.18 ppt	Actual	Aug 22, 2017
Enterococcus	74.0 cfu/100 ml	Actual	Aug 22, 2017
Dissolved Oxygen	5.43 mg/l	Actual	Aug 22, 2017
Total Nitrogen	0.97 mg/l	Actual	Aug 22, 2017
Total Phosphorus	0.12 mg/l	Actual	Aug 22, 2017
Chlorophyll A	18.80 mg/l	Actual	Aug 22, 2017
Total Suspended Solids	35.1 mg/l	Actual	Aug 22, 2017

Beach Boat Run General



This site was developed by the Delaware Environmental Observing System and the Delaware Environmental Monitoring & Analysis Center in coordination with the DNREC Watershed Assessment Section. All data for this site were obtained from the National Water Quality Monitoring Council's National Water Quality Portal (www.waterqualitydata.us).



**PROPOSED 3,500 C.Y. MECHANICAL MAINTENANCE
DREDGING TO -4' MLW (BASIN)/-6' MLW (CHANNEL),
WITH DISPOSAL AT ADJACENT UPLAND DISPOSAL AREA**

IN: Bay Vista Marina basin and access channel

AT: Basin Street, Bay Vista,
Rehoboth Beach, Sussex County, DE
Tax Map Parcel #3-34-19.16-25.03

APPLICANT: Sargio Corp.

DATE: August 7, 2018

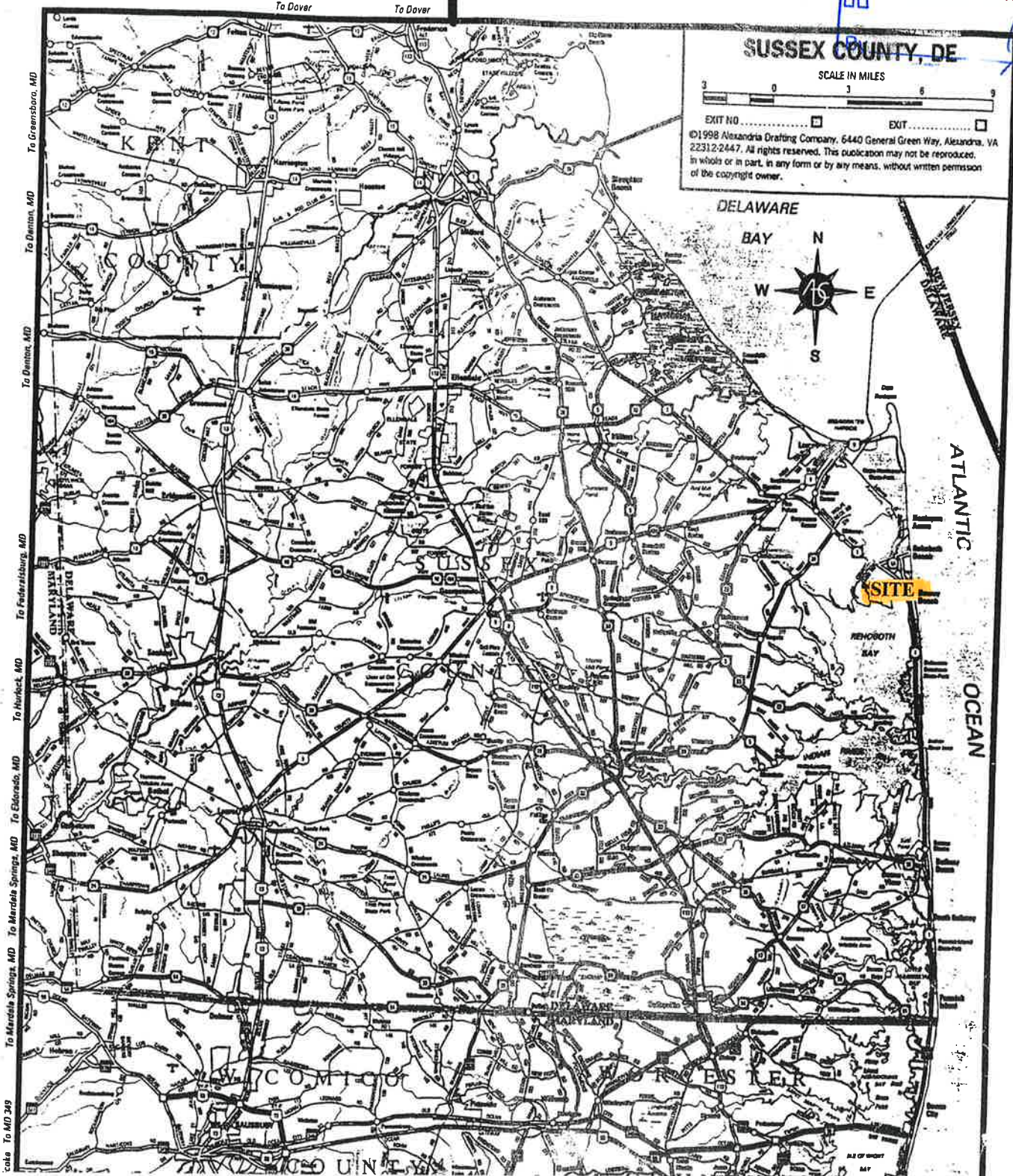


Figure 1. Map of Sussex County, Delaware showing project site, Bay Vista, Rehoboth Beach.

PROPOSED 3,500 C.Y. MECHANICAL MAINTENANCE DREDGING TO -4' MLW (BASIN)/-6' MLW (CHANNEL), WITH DISPOSAL AT ADJACENT UPLAND DISPOSAL AREA
 IN: Bay Vista Marina basin and access channel
 AT: Basin Street, Bay Vista, Rehoboth Beach, Sussex County, DE 19971
 Tax Map Parcel #3-34-19.16-25.03
 APPLICANT: Sargio Corp.
 DATE: August 7, 2018

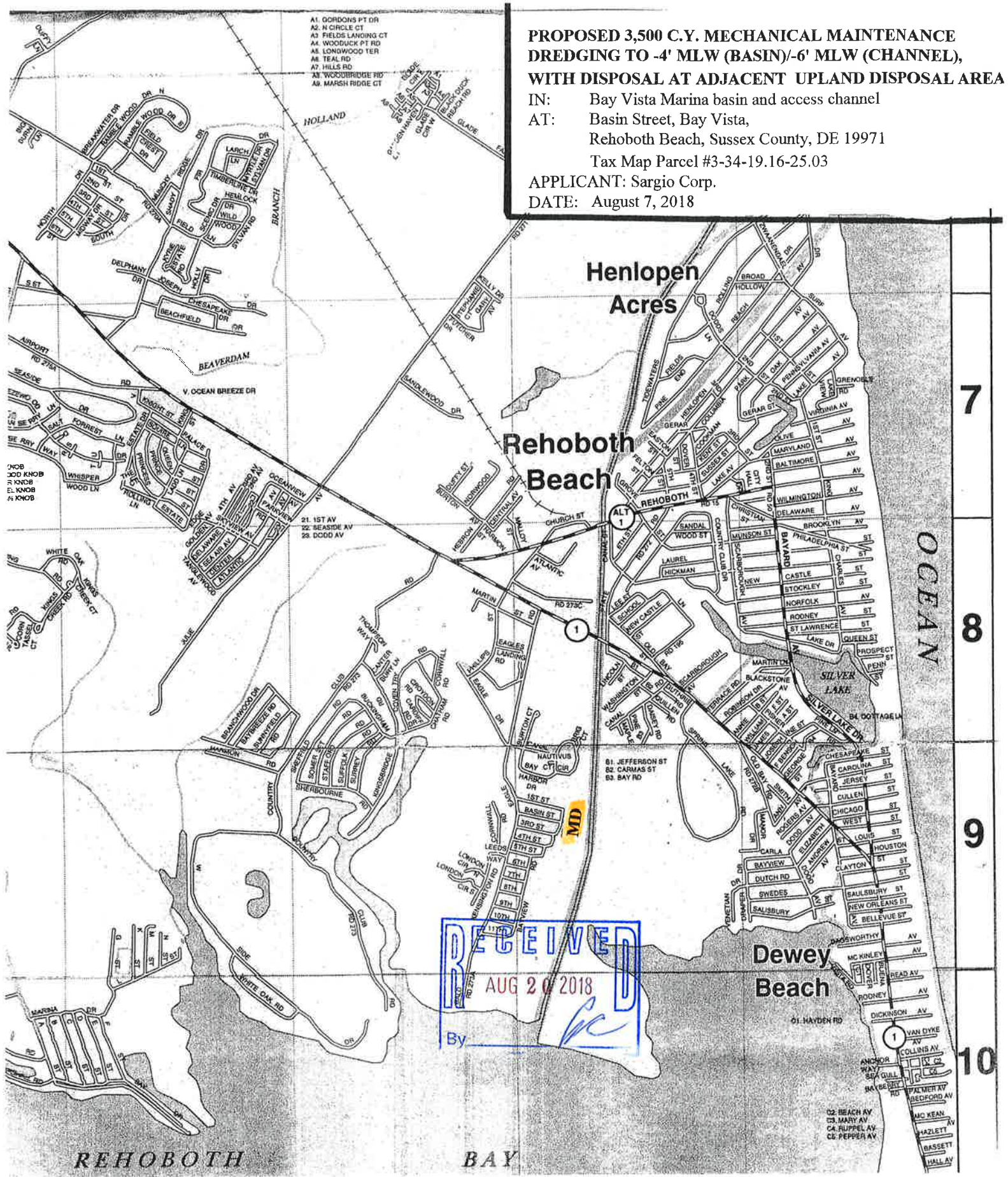


Figure 2. Map of Rehoboth Beach, Sussex County, Delaware showing maintenance dredging (MD) site, Bay Vista Marina. Directions to site (from Dover, DE): SR-1 southbound toward Rehoboth Beach; right onto Bay Vista Road; left onto Basin Road; marina is at end of road. Disposal site is cleared upland area adjacent to/north of basin. Also see Figure 3.

Sussex County Mapping

PROPOSED 3,500 C.Y. MECHANICAL MAINTENANCE DREDGING TO -4' MLW (BASIN)/-6' MLW (CHANNEL), WITH DISPOSAL AT ADJACENT UPLAND DISPOSAL AREA
 IN: Bay Vista Marina basin and access channel
 AT: Basin Street, Bay Vista, Rehoboth Beach, Sussex County, DE 19971
 Tax Map Parcel #3-34-19.16-25.03
 APPLICANT: Sargio Corp.
 DATE: August 7, 2018

Layer Visibility

- Addresses/Parcels
 - 911 Addresses Id?
 - Tax Parcels Id?
 - Parcel Labels
 - Annotation
- Zoning
- County Districts
- Schools/Libraries
- Hydrology
- Tax Index/Tax Ditch
- Transportation
- Statewide

Selected Features: Tax Parcels (1)

Book	D 2353 34
Owner Name	SARGIO, CORPORATION
Mailing Address	PO BOX 1066
City	NEWARK
State	DE
Description	BOAT BASIN
Description 2	BAY VISTA MARINA
Land Code	MA
School	6
BLDG Improvement	3600
LND Improvement	20400
PIN with Unit	334-19.16-25.03

Selected Features (1)

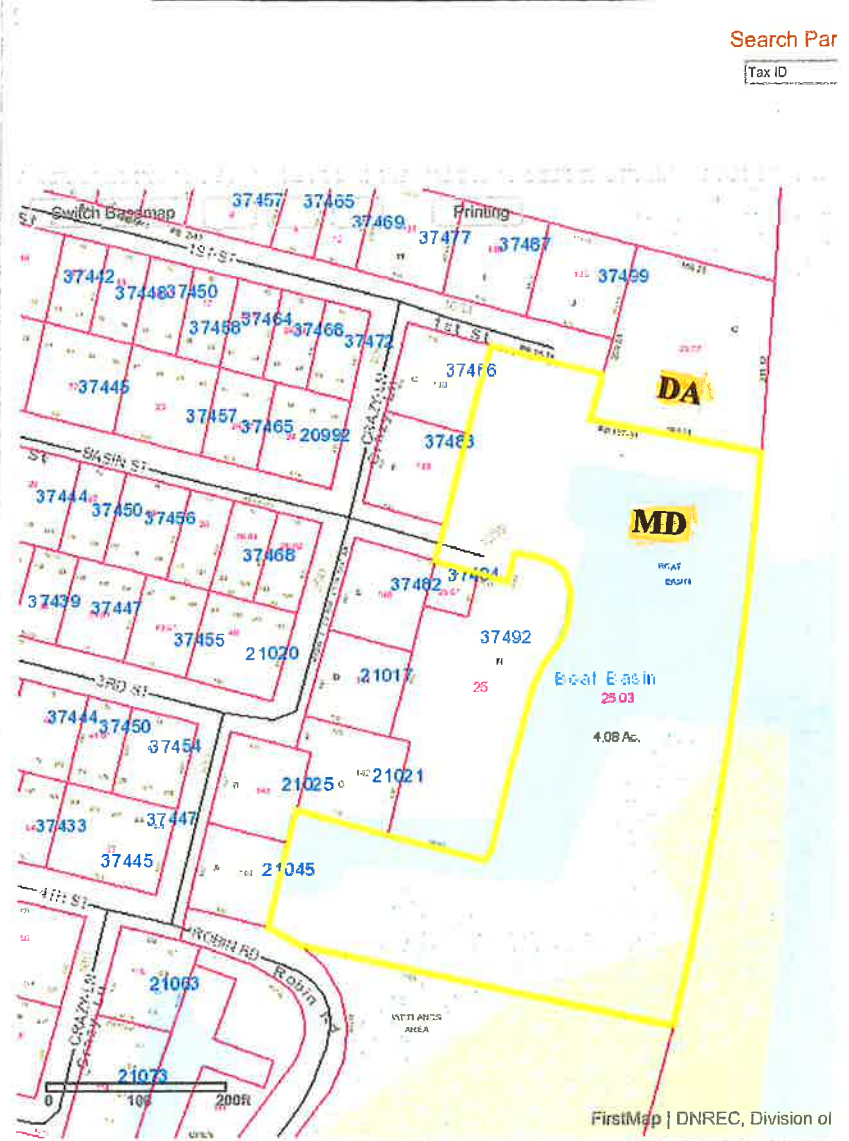


Figure 3. Maintenance dredging (MD) site location, Bay Vista Marina basin, Tax Map Parcel #3-34-19.16-25.03 (Basin Street, Bay Vista, Rehoboth Beach, Sussex County, Delaware). Disposal area (DA) is Tax Map Parcel #3-34-19.16-25.02, adjacent to/north of basin. Applicant owns marina and disposal area.



**PROPOSED 3,500 C.Y. MECHANICAL MAINTENANCE
DREDGING TO -4' MLW (BASIN)/-6' MLW (CHANNEL),
WITH DISPOSAL AT ADJACENT UPLAND DISPOSAL AREA**

IN: Bay Vista Marina basin and access channel
AT: Basin Street, Bay Vista,
Rehoboth Beach, Sussex County DE 19071
Tax Map Parcel #3-34-19.16-25.03
APPLICANT: Sargio Corp.
DATE: August 7, 2018



Figure 4. Site location on U.S.G.S. topographic map, Rehoboth Beach, Delaware quadrangle. Site is adjacent to Lewes and Rehoboth Canal. Scale: 1" = 2,000'.

**PROPOSED 3,500 C.Y. MECHANICAL MAINTENANCE
DREDGING TO -4' MLW (BASIN)/-6' MLW (CHANNEL),
WITH DISPOSAL AT ADJACENT UPLAND DISPOSAL AREA**

IN: Bay Vista Marina basin and access channel
AT: Basin Street, Bay Vista,
Rehoboth Beach, Sussex County, DE 19971
Tax Map Parcel #3-34-19.16-25.03

APPLICANT: Sargio Corp.
DATE: August 7, 2018

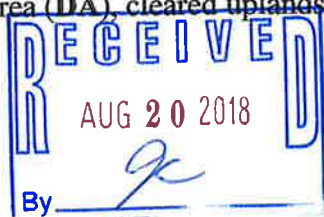


Google Earth Pro

feet 600
meters 100



Figure 5a. GoogleEarth 2017 aerial photograph showing maintenance dredging (MD) site, Bay Vista Marina basin and entrance channel, adjacent to Lewes and Rehoboth Canal; and disposal area (DA), cleared uplands adjacent to/north of basin.



**PROPOSED 3,500 C.Y. MECHANICAL MAINTENANCE
DREDGING TO -4' MLW (BASIN)/-6' MLW (CHANNEL),
WITH DISPOSAL AT ADJACENT UPLAND DISPOSAL AREA**

IN: Bay Vista Marina basin and access channel
AT: Basin Street, Bay Vista,
Rehoboth Beach, Sussex County, DE 19971

Tax Map Parcel #3-34-19.16-25.03

APPLICANT: Sargio Corp.

DATE: August 7, 2018

ArcGIS - Delaware 1968 Orthophotography

ArcGIS ▾ Delaware 1968 Orthophotography

Mo

Details | Basemap |

Print | Measure Find address or place

Contents

Delaware 1968
Orthophotography

Topographic



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Figure 5b. 1968 aerial photograph showing Bay Vista Marina basin and access channel.



PROPOSED 3,500 C.Y. MECHANICAL MAINTENANCE DREDGING TO -4' MLW (BASIN)/-6' MLW (CHANNEL), WITH DISPOSAL AT ADJACENT UPLAND DISPOSAL AREA

IN: Bay Vista Marina basin and access channel
 AT: Basin Street, Bay Vista, Rehoboth Beach, Sussex County, DE 19971
 Tax Map Parcel #3-34-19.16-25.03

APPLICANT: Sargio Corp.
 DATE: August 7, 2018

National Wetlands Inventory



Figure 6. National Wetlands Inventory Map showing maintenance dredging (MD) site, Bay Vista Marina basin and access channel, adjacent to Lewes and Rehoboth Canal. Site is mapped E1UBL (estuarine subtidal, unconsolidated bottom, subtidal). Disposal area (DA) mapped uplands.



**PROPOSED 3,500 C.Y. MECHANICAL MAINTENANCE
DREDGING TO -4' MLW (BASIN)/-6' MLW (CHANNEL),
WITH DISPOSAL AT ADJACENT UPLAND DISPOSAL AREA**

IN: Bay Vista Marina basin and access channel
AT: Basin Street, Bay Vista,
Rehoboth Beach, Sussex County, DE 19971
Tax Map Parcel #3-34-19.16-25.03

APPLICANT: Sargio Corp.
DATE: August 7, 2018



Figure 7. State of Delaware DNREC wetland map #036 (1988 photobase) showing maintenance dredging (MD) site, Bay Vista Marina basin and access channel, adjacent to Lewes and Rehoboth Canal. Site is mapped W (water). Disposal area (DA) mapped O (other uplands or non-tidal wetlands less than 400 acres). Scale: 1" = 300'.



**PROPOSED 3,500 C.Y. MECHANICAL MAINTENANCE
DREDGING TO -4' MLW (BASIN)/-6' MLW (CHANNEL),
WITH DISPOSAL AT ADJACENT UPLAND DISPOSAL AREA**

IN: Bay Vista Marina basin and access channel

AT: Basin Street, Bay Vista,
Rehoboth Beach, Sussex County, DE 19971

Tax Map Parcel #3-34-19.16-25.03

APPLICANT: Sargio Corp.

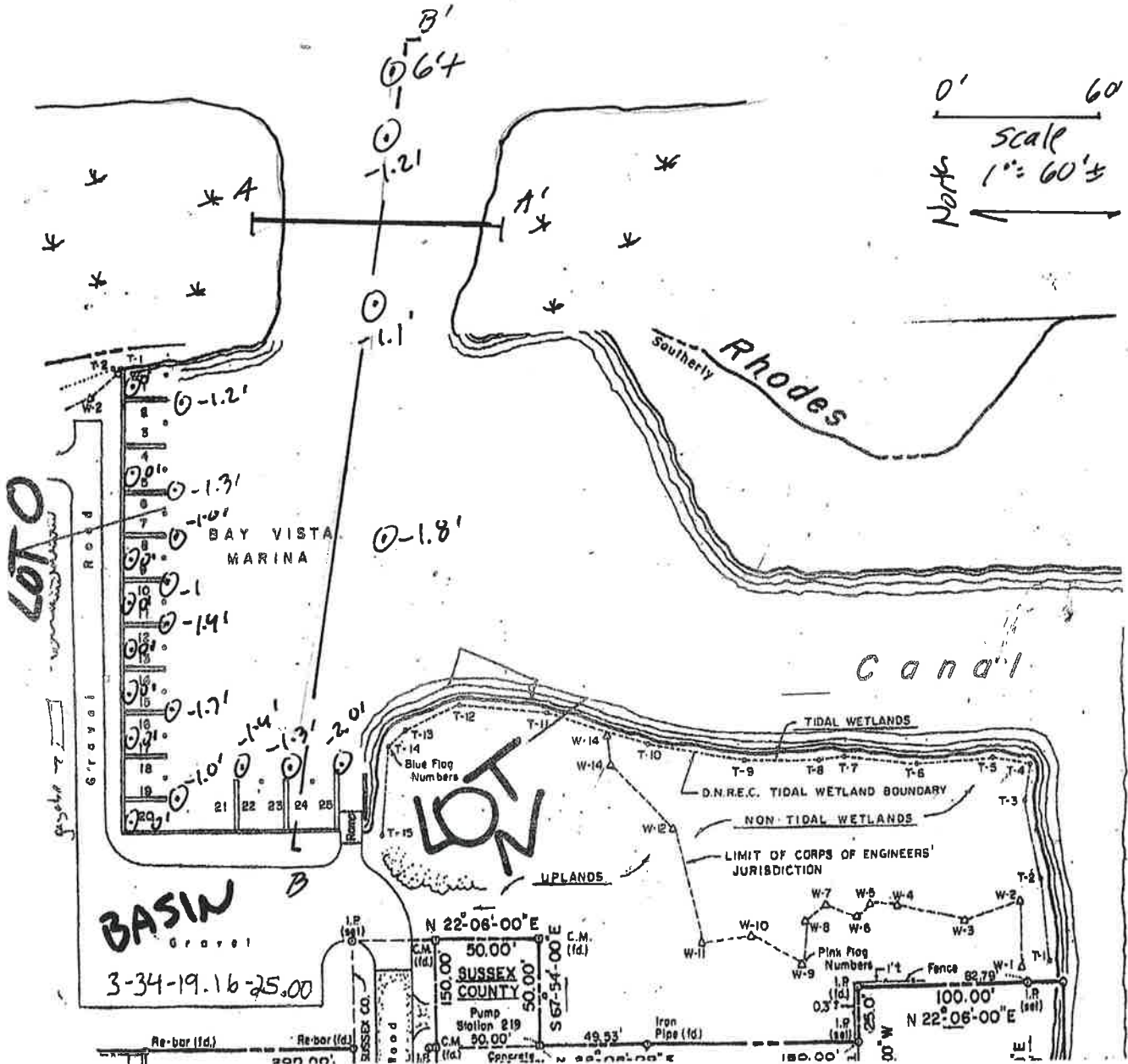
DATE: August 7, 2018



Figure 8. Photographs of maintenance dredging site, Bay Vista Marina basin (top) and access channel (bottom), adjacent to Lewes and Rehoboth Canal.

PROPOSED 3,500 C.Y. MECHANICAL MAINTENANCE DREDGING TO -4' MLW (BASIN)/-6' MLW (CHANNEL), WITH DISPOSAL AT ADJACENT UPLAND DISPOSAL AREA
 IN: Bay Vista Marina basin and access channel
 AT: Basin Street, Bay Vista, Rehoboth Beach, Sussex County, DE 19971
 Tax Map Parcel #3-34-19.16-25.03
 APPLICANT: Sargio Corp.
 DATE: August 7, 2018

LEWES AND REHOBOTH CANAL flood ← → Ebb



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Figure 9. Plan view sketch showing existing MLW depths, as measured on site by Evelyn Maurmeyer, CER, Inc., August 5, 2018.

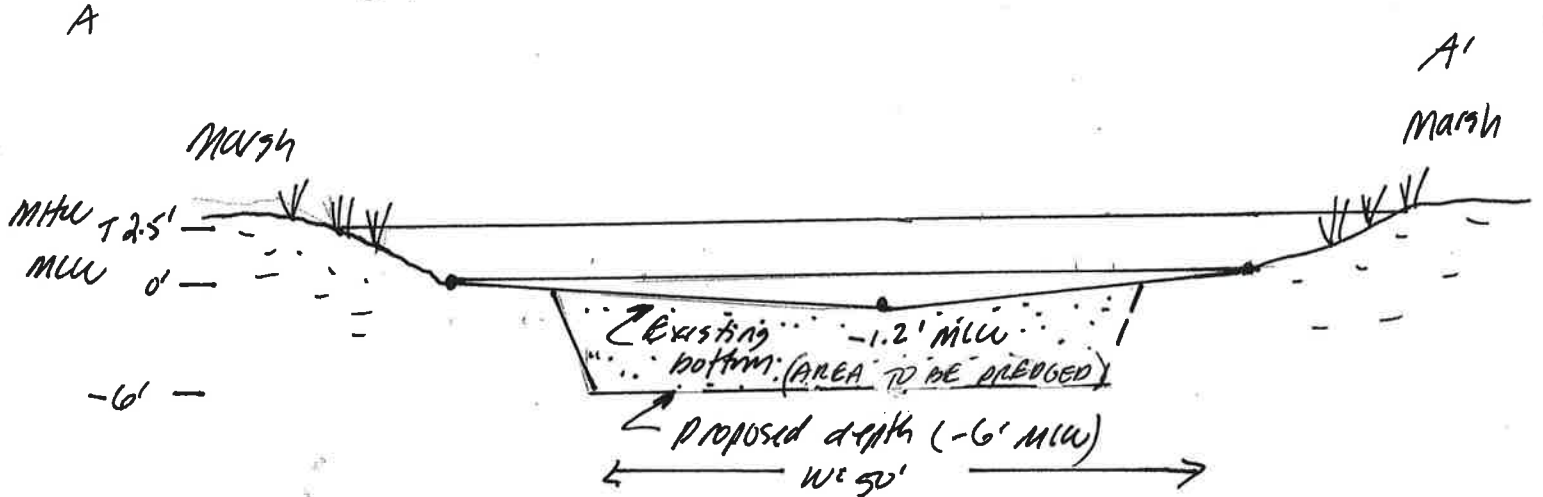
**PROPOSED 3,500 C.Y. MECHANICAL MAINTENANCE
DREDGING TO -4' MLW (BASIN)/-6' MLW (CHANNEL),
WITH DISPOSAL AT ADJACENT UPLAND DISPOSAL AREA**

IN: Bay Vista Marina basin and access channel
 AT: Basin Street, Bay Vista,
 Rehoboth Beach, Sussex County, DE 19971
 Tax Map Parcel #3-34-19.16-25.03

APPLICANT: Sargio Corp.
 DATE: August 7, 2018

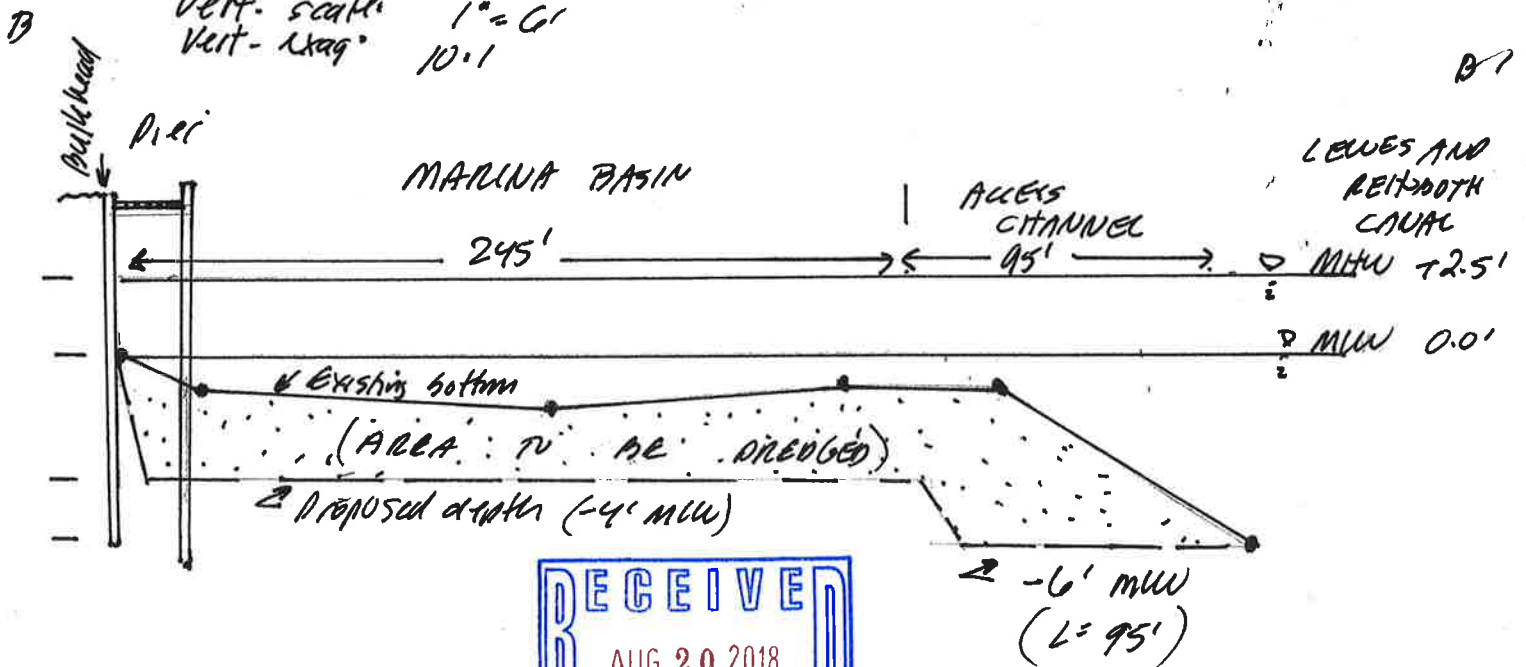
(1) CROSS-SECTION: ACCESS CHANNEL

Horiz. scale: 1" = 20' ±
 Vert. scale: 1" = 10' ±
 Vert. slope: 5:1



(2) CROSS-SECTION: MARINA BASIN

Horiz. scale: 1" = 60' ±
 Vert. scale: 1" = 6'
 Vert. slope: 10:1



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Figure 10. Representative cross-section sketches showing existing and proposed depths.

**PROPOSED 3,500 C.Y. MECHANICAL MAINTENANCE
DREDGING TO -4' MLW (BASIN)/-6' MLW (CHANNEL),
WITH DISPOSAL AT ADJACENT UPLAND DISPOSAL AREA**

IN: Bay Vista Marina basin and access channel

AT: Basin Street, Bay Vista,
Rehoboth Beach, Sussex County, DE 19971

Tax Map Parcel #3-34-19.16-25.03

APPLICANT: Sargio Corp.

DATE: August 7, 2018



Figure 11. Photographs of sediment core from Bay Vista Marina basin. Material consists predominantly of mud (silt + clay).

PROPOSED 3,500 C.Y. MECHANICAL MAINTENANCE
DREDGING TO -4' MLW (BASIN)/-6' MLW (CHANNEL),
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IN: Bay Vista Marina basin and access channel
AT: Basin Street, Bay Vista,
Rehoboth Beach, Sussex County, DE 19971
Tax Map Parcel #3-34-19.16-25.03

APPLICANT: Sargio Corp.
DATE: August 7, 2018

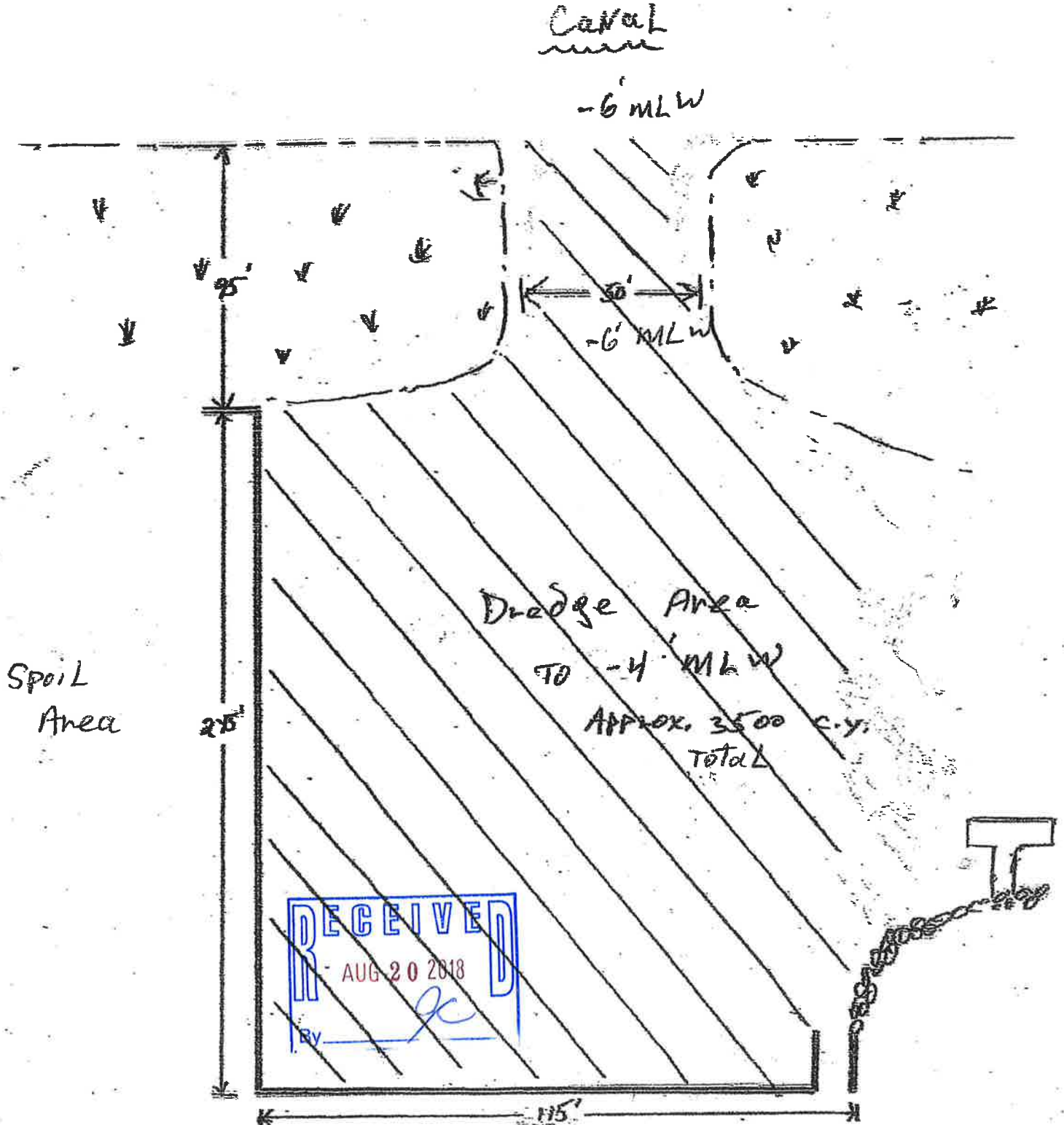


Figure 12. Plan view diagram (prepared by George Apple, Apple Marine Construction, Inc., dredging contractor) showing dimensions and extent of area to be dredged (cross-hatched).

**PROPOSED 3,500 C.Y. MECHANICAL MAINTENANCE
DREDGING TO -4' MLW (BASIN)/-6' MLW (CHANNEL),
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IN: Bay Vista Marina basin and access channel
AT: Basin Street, Bay Vista,
Rehoboth Beach, Sussex County, DE 19971
Tax Map Parcel #3-34-19.16-25.03

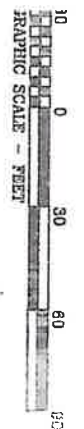
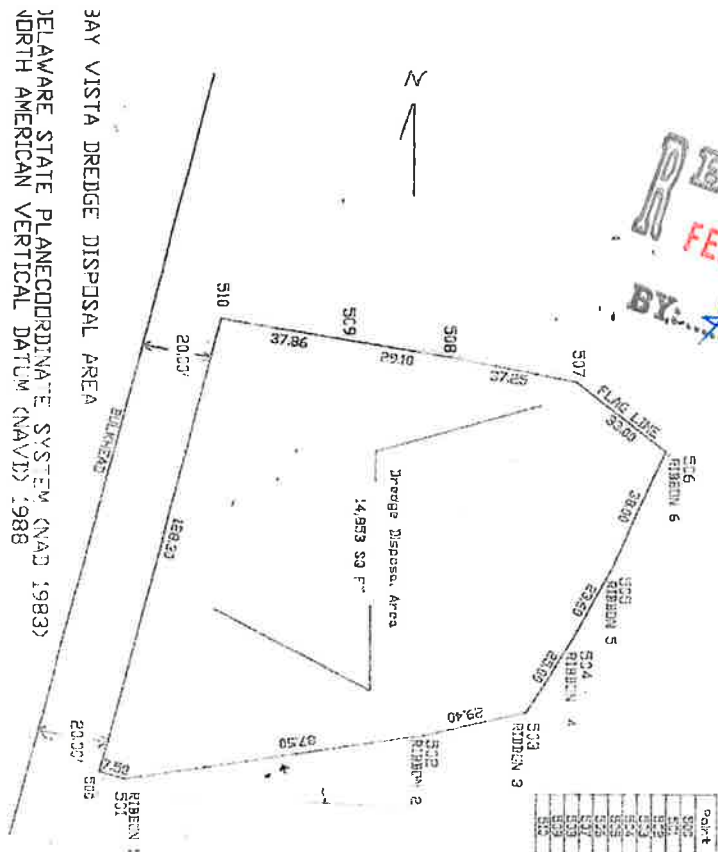
APPLICANT: Sargio Corp.

DATE: August 7, 2018



Figure 13. Photographs of disposal area, vacant upland area adjacent to marina basin.

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DATE: 12/05/18

Point	Northing	Easting
S01	674503.256	748184.179
S02	674503.160	748187.300
S03	674502.850	748173.960
S04	674502.844	748167.100
S05	674502.720	748145.990
S06	674502.921	748185.080
S07	674503.444	748200.519
S08	674503.060	748207.010
S09	674502.720	748195.410
S10	674503.220	748187.140
S01	674503.256	748184.179

Notes:

- any eastern berm will be installed around perimeter of proposed spoil area, with a 5' FT fence around the bermed area.
- a stability curtain will be installed at the marina entrance.
- after dredging is completed the disposal area will be stabilized by leveling and upland soils placed on top and seeded.

TRIANGLE SURVEYS, INC.
 PLEASE SEE US AT
 PERRY HALL, MD
 1400 Siding Rd
 Queen City, MD 21132
 Tel: 410-326-5022 Tel: 410-326-1088

PROPOSED 3,500 C.Y. MECHANICAL MAINTENANCE DREDGING TO 4' MLW (BASIN)/-6' MLW (CHANNEL), WITH DISPOSAL AT ADJACENT UPLAND DISPOSAL AREA

IN: Bay Vista Marina basin and access channel
 Basin Street, Bay Vista,
 Rehoboth Beach, Sussex County, DE 19971

Tax Map Parcel #3-34-19.16-25.03

APPLICANT: Sargio Corp.

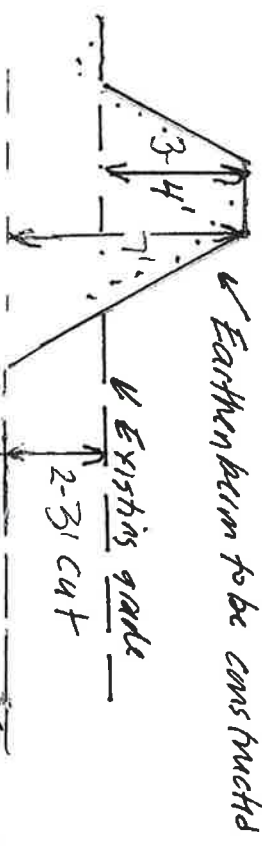
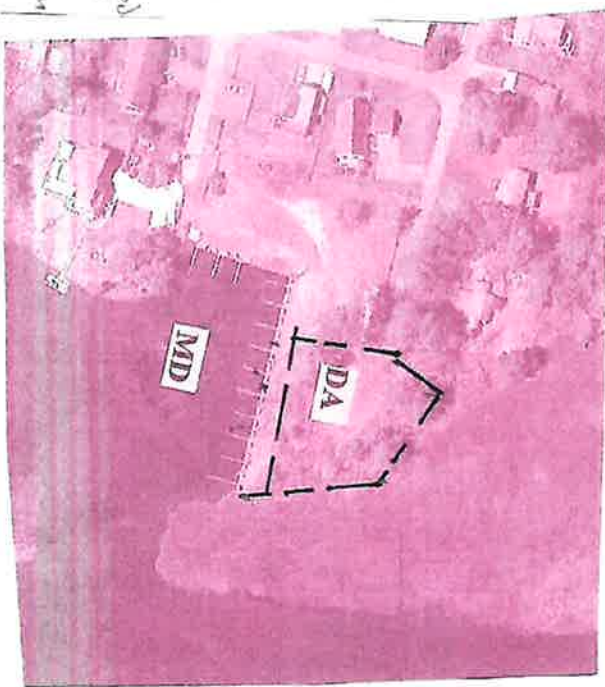
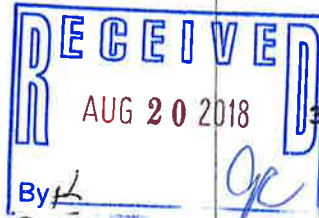


Figure 14. Plan view (survey) and cross-section of proposed disposal site.



THIS DEED, MADE this 8 day of January, in the year of our Lord one thousand nine hundred and ninety-nine (1999),

BETWEEN: BAY VISTA INC., A DELAWARE CORPORATION, 902 Bay View Road, Rehoboth Beach, Delaware 19971, party of the first part,

-AND-

SARGIO CORP., a Delaware corporation, D-6 885 Marrows Road, P.O. Box 1066, Newark, Delaware, 19713, party of the second part;

WITNESSETH, That the said party of the first part, for and in consideration of the sum of **ONE HUNDRED THOUSAND DOLLARS (\$100,000.00)** Current Lawful Money of the United States of America and other good and valuable considerations, the receipt whereof is hereby acknowledged, hereby grants and conveys unto the said party of the second part, its successors or assigns:

ALL that certain piece or parcel of land situate, lying and being in Lewes and Rehoboth Hundred, Sussex County, State of Delaware, being known and designated as "BAY VISTA MARINA AREA" as shown on a plot prepared by Coast Survey, Inc., Registered Surveyors, dated November 10, 1998, and being more particularly described as follows, to wit:

BEGINNING at an iron pipe located on the Southeasterly right of way line of Crazy Street, said pipe being located along the line of Lot H and being a corner for a Private Road; thence turning and running along the line of Lots H, I and J and running along said Private Road South 67 degrees 54 minutes 00 seconds East 235.00 feet to an iron pipe, said pipe being a corner for Lot J and said Private Road; thence turning and running along the line of Lot J, North 22 degrees 06 minutes 00 seconds East 118.13 feet to an iron pipe, said pipe being a corner for this land and Lot J and being located along the line of Bay Harbor Subdivision; thence turning and running along said Bay Harbor Subdivision, South 69 degrees 10 minutes 00 seconds East 155 feet +/- to an iron pipe, being a corner for this land; thence turning and running in a Southwesterly direction along the U.S. Government Canal Right of Way, running through the Lewes and Rehoboth Canal, a distance of 475 feet +/- to a point; thence turning and running in a southerly direction along Rhodes Creek 525 feet +/- to a point located along the line of the State of Delaware; thence turning North 67 degrees 54 minutes 00 seconds West 280 feet +/- to an iron pipe, said pipe being a corner for this land and Lot A; thence turning and running along the line of Lots A and B, North 22 degrees 06 minutes 00 seconds East 140.00 feet to an iron pipe, said pipe being located along the line of Lot B; thence turning and running along the line of Lot C, South 67 degrees 54 minutes 00 seconds East 100.00 feet to an iron pipe; thence turning and running along the line of Lot C, North 22 degrees 06 minutes 00 seconds East 100.00 feet to an iron pipe; thence turning North 67 degrees 54 minutes 00 seconds West 25.00 feet to an iron pipe, said pipe being located along the line of Lot C and being a corner for Lot D; thence turning and running along the line of Lots D and E, North 22 degrees 06 minutes 00 seconds

South 67 degrees 54 minutes 00 seconds East 100.00 feet to an iron pipe, said pipe being a corner for Lot F; thence turning and running along the line of Lots F and G, North 22 degrees 06 minutes 00 seconds East 200.00 feet to an iron pipe, said pipe being a corner for Lot G and being located along a Private Road; thence turning and running along said Private Road, North 67 degrees 54 minutes 00 seconds West 100.00 feet to an iron pipe, said pipe being a corner for Lot G and being located on the Southeasterly right of way line of Crazy Street; thence turning and running along Crazy Street, North 22 degrees 06 minutes 00 seconds East 40.00 feet to an iron pipe, said pipe being located along the line of Lot H, and being the point and place of beginning.

BEING a part of the same land conveyed Bay Vista, Inc. by a Deed of John H. Webb, dated January 8, 1953 and filed for record in the Office of the Recorder of Deeds, in and for Sussex County, at Georgetown, Delaware, in Deed Book 415, page 396.

SUBJECT to and together with the ingress and egress to Lots H, I and J in the aforementioned private road.



IN WITNESS WHEREOF, the said party of the first part has caused these presents to be signed by its proper officers and its corporate seal to be hereunto affixed the day and year aforesaid.

BAY VISTA, INC.

By: Lucy S. Guenveur
President

Attest: Bonney T. Baatholon
Secretary



STATE OF DELAWARE :
: ss.
COUNTY OF SUSSEX :

BE IT REMEMBERED, That on this 5th day of January A.D. 1999, personally came before me, The Subscriber, a Notary Public for the State and County aforesaid, LUCY S. GUENVEUR, President of BAY VISTA, INC., a corporation of the State of Delaware, party to this Indenture, known to me personally to be such, and acknowledged this Indenture to be her act and Deed, and the act and the Deed of the said corporation; that the signature of the President is in her own proper handwriting; that the seal affixed is the common and corporate seal of the said corporation duly affixed by its authority; and that the act of signing, sealing, acknowledging and delivering the said Indenture was first duly authorized by resolution of the Board of Directors of the said corporation.

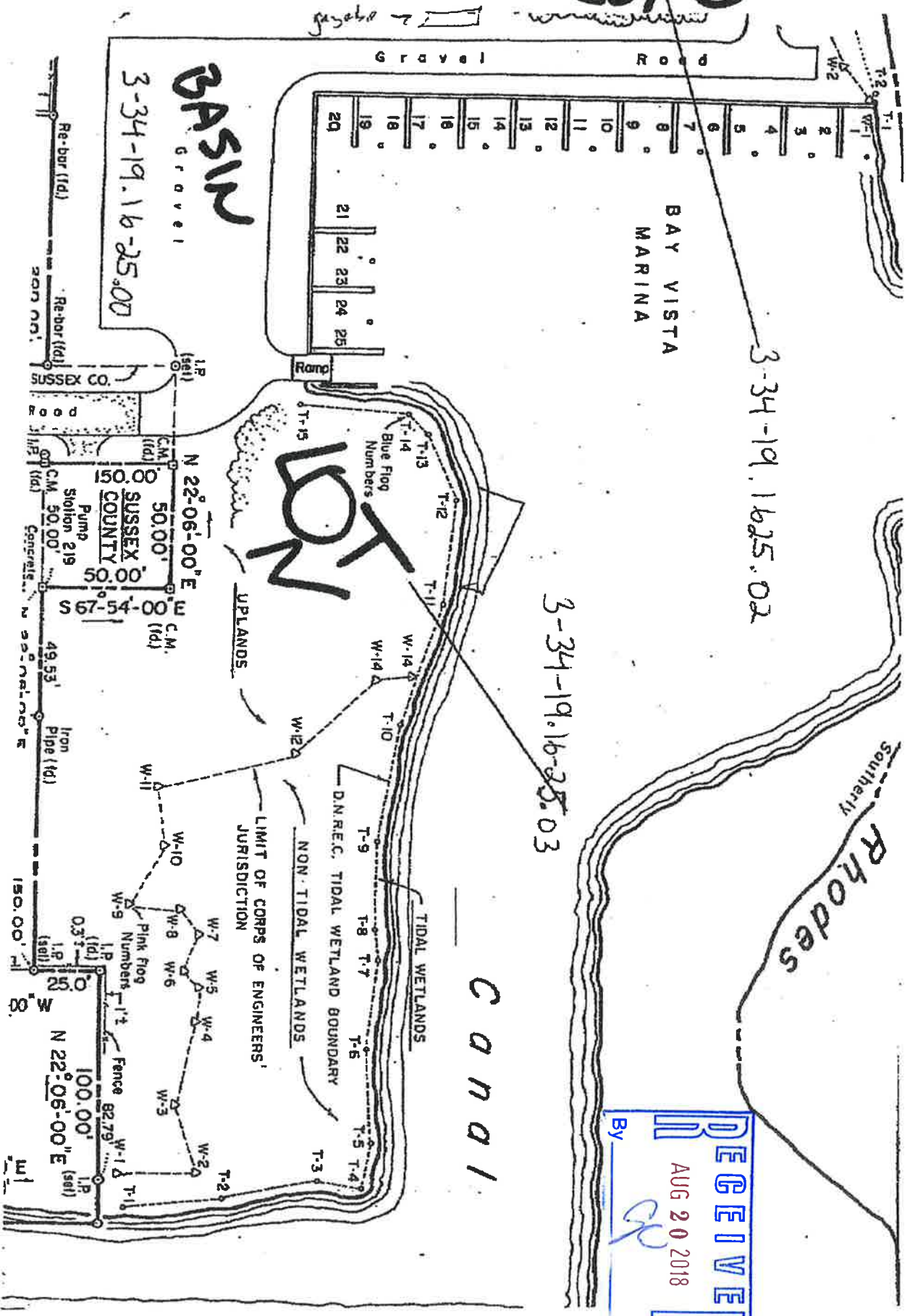
GIVEN under my Hand and Seal of Office, the day and year aforesaid.

Joan L. Tyndall
Notary Public

Joan L. Tyndall
Notary Public, Delaware
Comm. Exp 2/9/01

Print or Type Name _____
Commission Expires: _____

LOTO



BASIN
Gravel
3-34-19.16-25.00

**BAY VISTA
MARINA**

LOTO

3-34-19.16-25.03

3-34-19.16-25.02

Rhodes
Canal

CANAL

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Re-bar (ld) 200.00'
Re-bar (ld) 200.00'
SUSSEX CO. Road
SUSSEX COUNTY
Pump Station 219
Concrete
Iron Pipe (ld)
Fence 82.79'
I.P. (set)

N 22° 06' 00" E
50.00'
50.00'
50.00'
S 67° 54' 00" E
C.M. (ld)
49.53'
150.00'

UPLANDS
LIMIT OF CORPS OF ENGINEERS' JURISDICTION
NON-TIDAL WETLANDS
D.N.R.E.C. TIDAL WETLAND BOUNDARY
TIDAL WETLANDS

Gravel Road
Ramp
Blue Flag Numbers
T-1 through T-25
W-1 through W-14

T-1 through T-15
W-1 through W-14
T-16 through T-25
W-15 through W-14

Pink Flag Numbers
Fence 82.79'
I.P. (set)