



**US Army Corps  
of Engineers**  
Philadelphia District  
1650 Arch Street  
Philadelphia, PA 19103-2004  
Attn: CENAP-OPR

# Public Notice

**Comment Period Begins:** September 9, 2024  
**Comment Period Ends:** October 9, 2024  
**File Number:** NAP-2024-00546-95  
**File Name:** NJDOT-OMR - Berkeley State Channel Complex  
**Contact:** Robert Youhas  
**Email:** robert.youhas@usace.army.mil

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This District has received an application for a Department of the Army permit pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) and Section 404 of the Clean Water Act (33 U.S.C. 1344).

The purpose of this notice is to solicit comments and recommendations from the public concerning issuance of a Department of the Army permit for the work described below.

**APPLICANT:** New Jersey Department of Transportation  
Office of Maritime Resources  
Attn: Ms. Genevieve Clifton  
P.O. Box 600  
1035 Parkway Avenue  
Trenton, New Jersey 08625-0600

**AGENT:** WSP USA, Inc.  
Attn: Ms. Katie Axt  
250 W 34th Street, 4 FL  
New York, New York 10119

**LOCATION:** Berkeley Township in Ocean County, New Jersey; Approximate Center Coordinates: 39.869503, -74.136632

**PURPOSE:** The stated purpose of this project is to maintain safe navigational depths for transiting emergency, commercial, and recreational vessels.

## **PROJECT DESCRIPTION:**

The applicant, New Jersey Department of Transportation – Office of Maritime Resources (NJDOT-OMR), has requested Department of the Army (DA) authorization to perform ten (10)-year maintenance dredging of the Berkeley State Channel Complex which is comprised of the following twelve (12) State channels: Clamming Creek North State Channel #1 (#96), Clamming Creek South State Channel (#97), Whites State Channel (#98), Butler Boulevard Access State Channel (#99), Maple Creek State Channel (#100), Cedar Creek State Channel (#101), Cedar Creek Spur State Channel (#102), Laurel Harbor North State Channel (#103), Laurel Harbor South State Channel

(#104), Stouts Creek State Channel (#105), Sunrise Beach State Channel (#106), and Sunrise Beach Spur Channel (#107).

All of the dredging work would be accomplished via hydraulic cutterhead dredge. All resultant dredged material, estimated to total approximately 170,180.0-cubic yards of 50% sand and 50% silt and clay, would be transported via floating and submerged pipeline and hydraulically pumped to the Oyster Creek Confined Disposal Facility (CDF). The Oyster Creek CDF is owned by the State of New Jersey. Return water from the Oyster Creek CDF into Oyster Creek is proposed.

All twelve State navigation channels have been historically maintenance-dredged, most recently under DA Permit Number NAP-1987-02039. The subject maintenance dredging project is intended to restore the Berkeley State Channel Complex to authorized project dimensions. No lateral expansion or deepening is proposed.

For navigational safety, the hydraulic dredge pipeline will be marked in accordance with U.S. Coast Guard regulations. Additionally, the dredge pipeline would be submerged with the following exceptions: where it exits the dredge, where it enters and exits booster pumps, where it approaches the Oyster Creek CDF, and where submerged aquatic vegetation (SAV) is encountered. In these areas the dredge pipeline will be floated on the surface.

Each maintenance dredging event is anticipated to be approximately nine (9) to twelve (12) weeks in duration, including mobilization/demobilization, dredging, and placement activities. Two (2) or three (3) maintenance dredging events are anticipated to be conducted over the next ten (10)-years, with the initial dredging event proposed to be undertaken on or after 15 October 2024.

#### Clamming Creek North State Channel #1 (#96) (39.890261, -74.134103)

Maintenance dredging of 18,780.0-cubic yards of shoaled sediments from a 6,540.0-foot-long channel to -5.0-feet below the plane of Mean Low Water (MLW), plus 1.0-foot of allowable overdredge is proposed. The channel design width varies between 30.0- and 100.0-feet, with 3:1 side slopes. The total dredge footprint is approximately 11.4-acres.

#### Clamming Creek South State Channel (#97) (39.887461, -74.130205)

Maintenance dredging of 10,620.0-cubic yards of shoaled sediments from a 5,390.0-foot-long channel to -5.0-feet below the plane of MLW, plus 1.0-foot of allowable overdredge is proposed. The channel design width varies between 60.0- and 100.0-feet, with 3:1 side slopes. The total dredge footprint is approximately 12.2-acres.

Whites State Channel (#98) (39.885944, -74.139643)

Maintenance dredging of 7,610.0-cubic yards of shoaled sediments from a 1,480.0-foot-long channel to -5.0-feet below the plane of MLW, plus 1.0-foot of allowable overdredge is proposed. The channel design width varies between 40.0- and 50.0-feet, with 3:1 side slopes. The total dredge footprint is approximately 1.6-acres.

Butler Boulevard Access State Channel (#99) (39.882216, -74.131765)

Maintenance dredging of 2,370.0-cubic yards of shoaled sediments from a 5,740.0-foot-long channel to -5.0-feet below the plane of MLW, plus 1.0-foot of allowable overdredge is proposed. The channel design width varies between 50.0- and 100.0-feet, with 3:1 side slopes. The total dredge footprint is approximately 12.4-acres.

Maple Creek State Channel (#100) (39.880516, -74.141535)

Maintenance dredging of 2,320.0-cubic yards of shoaled sediments from a 2,960.0-foot-long channel to -5.0-feet below the plane of MLW, plus 1.0-foot of allowable overdredge is proposed. The channel design width varies between 30.0- and 100.0-feet, with 3:1 side slopes. The total dredge footprint is approximately 3.4-acres.

Cedar Creek State Channel (#101) (39.869508, -74.144374)

Maintenance dredging of 59,880.0-cubic yards of shoaled sediments from a 12,350.0-foot-long channel to -6.0-feet below the plane of MLW, plus 1.0-foot of allowable overdredge is proposed. The channel design width varies between 50.0- and 100.0-feet, with 3:1 side slopes. The total dredge footprint is approximately 25.5-acres.

Cedar Creek Spur State Channel (#102) (39.871417, -74.157303)

Maintenance dredging of 4,010.0-cubic yards of shoaled sediments from a 400.0-foot-long channel to -6.0-feet below the plane of MLW, plus 1.0-foot of allowable overdredge is proposed. The channel design width is 100.0-feet, with 3:1 side slopes. The total dredge footprint is approximately 0.8-acres.

Laurel Harbor North State Channel (#103) (39.862403, -74.128655)

Maintenance dredging of 31,000.0-cubic yards of shoaled sediments from a 4,040.0-foot-long channel to -6.0-feet below the plane of MLW, plus 1.0-foot of allowable overdredge is proposed. The channel design width varies between 50.0- and 100.0-feet, with 3:1 side slopes. The total dredge footprint is approximately 9.1-acres.

Laurel Harbor South State Channel (#104) (39.852466, -74.133896)

Maintenance dredging of 21,110.0-cubic yards of shoaled sediments from a 5,100.0-foot-long channel to -6.0-feet below the plane of MLW, plus 1.0-foot of allowable

overdredge is proposed. The channel design width varies between 40.0- and 100.0-feet, with 3:1 side slopes. The total dredge footprint is approximately 8.9-acres.

Stouts Creek State Channel (#105) (39.845729, -74.144952)

Maintenance dredging of 17,170.0-cubic yards of shoaled sediments from a 5,000.0-foot-long channel to -6.0-feet below the plane of MLW, plus 1.0-foot of allowable overdredge is proposed. The channel design width varies between 50.0- and 100.0-feet, with 3:1 side slopes. The total dredge footprint is approximately 10.1-acres.

Sunrise Beach State Channel (#106) (39.841683, -74.138347)

Maintenance dredging of 1,720.0-cubic yards of shoaled sediments from a 3,490.0-foot-long channel to -5.0-feet below the plane of MLW, plus 1.0-foot of allowable overdredge is proposed. The channel design width varies between 20.0- and 100.0-feet, with 3:1 side slopes. The total dredge footprint is approximately 7.7-acres.

Sunrise Beach Spur Channel (#107) (39.841064, -74.145734)

Maintenance dredging of 1,200.0-cubic yards of shoaled sediments from a 420.0-foot-long channel to -5.0-feet below the plane of MLW, plus 1.0-foot of allowable overdredge is proposed. The channel design width varies between 50.0- and 100.0-feet, with 3:1 side slopes. The total dredge footprint is approximately 0.8-acres.

Dredged Material Disposal

All resultant dredged material will be hydraulically pumped via pipeline into uplands at the Oyster Creek CDF. Return water from the Oyster Creek CDF into Oyster Creek is proposed. The Oyster Creek CDF is owned and maintained by the State of New Jersey.

For additional project details, see the attached plans identified as: Project Plan Sheets 1 through 38.

**MITIGATION**

The applicant has stated that the proposed project has been designed to avoid and minimize adverse effects on the aquatic environment to the maximum extent practicable. Information provided in the application and on the plans indicates that compensatory mitigation is neither practicable nor feasible for the amount of dredged or fill material to be discharged into waters of the United States.

The only proposed discharge into Waters of the U.S. for the subject project entails return water from the Oyster Creek CDF into Oyster Creek during dredged material placement activities.



## **CORPS EVALUATION FACTORS**

The decision whether to issue a permit will be based on an evaluation of the activity's probable impact including its cumulative impacts on the public interest. The decision will reflect the national concern for both protection and utilization of important resources. The benefits which reasonably may be expected to accrue from the work must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the work will be considered including the cumulative effects thereof. Among these factors are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs and welfare of the people.

The evaluation of the impact of this project will also include application of the Clean Water Act Section 404(b)(1) Guidelines promulgated by the Administrator, U.S. Environmental Protection Agency if the project includes a discharge of dredge or fill material pursuant to Section 404 of the Clean Water Act.

Evaluation of the impact of the activity on the public interest will include application of the guidelines promulgated by the Administrator, EPA, (40 CFR part 230) or of the criteria established under authority of section 102(a) of the Marine Protection, Research and Sanctuaries Act of 1972.

In cases involving construction of artificial islands, installation and other devices on the outer continental shelf lands, the decision as to whether a permit will be issued will be based on evaluation of the impact of the proposed work on navigation and national security.

## **ENDANGERED SPECIES**

A preliminary review of this application indicates that aquatic-based species and/or their critical habitat pursuant to Section 7 of the Endangered Species Act (ESA) may be present in the action area. This office will forward this Public Notice to the National Marine Fisheries Service (NMFS) with a request for technical assistance on whether any ESA-listed species or their critical habitat may be present in the area which would be affected by the proposed activity. This office will evaluate the potential effects of the proposed actions on ESA-listed species or their critical habitat and will consult with the NMFS, as appropriate. ESA Section 7 consultation would be concluded prior to the final decision on this permit application.

A preliminary review of this application indicates that the proposed work would not affect listed land-based species or their critical habitat pursuant to Section 7 of the Endangered Species Act (ESA). As a result, consultation with the U.S. Fish and Wildlife Service (USFWS) pursuant to Section 7 of the ESA is not necessary. As the evaluation

of this application continues, additional information may become available which could modify this preliminary determination.

## **CULTURAL RESOURCES AND TRIBAL TRUST**

The District's Cultural Resource Specialist and Tribal Liaison is currently reviewing the proposed permit action for potential impacts to Historic Properties eligible for or listed on the National Register of Historic Places and for potential issues concerning the Tribes. A determination of effects will be coordinated with the State Historic Preservation Office, the Tribes and other consulting parties as necessary.

## **ESSENTIAL FISH HABITAT**

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) requires all federal agencies to consult with the NMFS for all actions, or proposed actions, permitted, funded, or undertaken by the agency that may adversely affect Essential Fish Habitat (EFH). A preliminary review of this application indicates that EFH is present within the project area. This office will evaluate the potential effects of the proposed actions on EFH and will consult with NMFS, as appropriate. Consultation would be concluded prior to the final decision on this permit application.

## **WATER QUALITY CERTIFICATE**

In accordance with Section 401 of the Clean Water Act, a Water Quality Certificate (WQC) is required from the State government in which the work is located. Any comments concerning the work described above which relate to Water Quality considerations should be sent to this office with a copy to the State.

## **COASTAL ZONE MANAGEMENT ACT**

In accordance with Section 307(c) of the Coastal Zone Management Act of 1972, applicants for Federal Licenses or Permits to conduct an activity affecting land or water uses in a State's coastal zone must provide certification that the activity complies with the State's Coastal Zone Management (CZM) Program. The applicant has stated that the proposed activity complies with and will be conducted in a manner that is consistent with the approved State CZM Program. No permit will be issued until the State has concurred with the applicant's certification or has waived its right to do so. Comments concerning the impact on the State's coastal zone should be sent to this office with a copy to the State's CZM office.

## **SUBMISSION OF COMMENTS AND PUBLIC HEARING REQUEST**

Any comments received will be considered by this office to determine whether to issue, modify, condition, or deny a permit for this proposed project. To make this decision, comments are used to assess the probable impact on the public interest.

Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Comments on the proposed work must be submitted, in writing, within the comment period indicated in the header above. Any person may request, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for a public hearing must be in writing and state the reasons for holding a public hearing.

Please provide any comments, request for a public hearing, or requests for additional information to the Regulatory Project Manager indicated above. All Public Notices are posted on our website at:

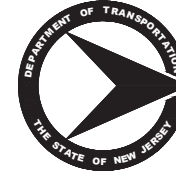
<https://www.nap.usace.army.mil/Missions/Regulatory/Public-Notices/>

FOR: Todd A. Schaible  
Chief, Regulatory Branch

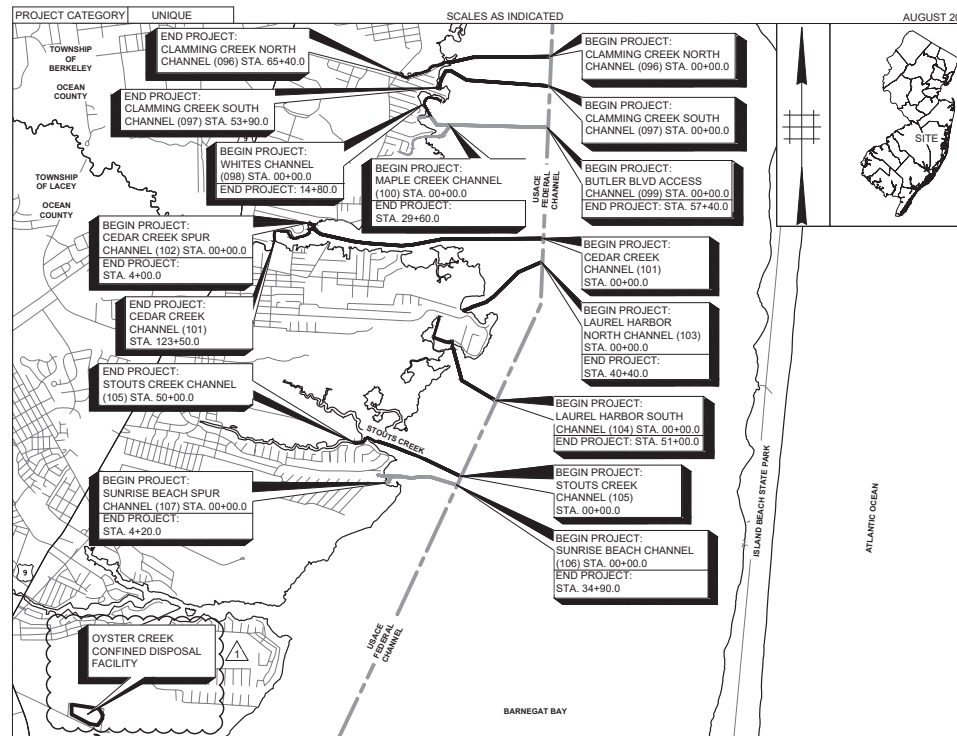
State of New Jersey  
Department of Transportation  
PLANS OF

MAINTENANCE DREDGING AND CHANNEL  
IMPROVEMENTS FOR THE BERKELEY CHANNEL  
COMPLEX, CHANNEL NOS. 096-107

TOWNSHIP OF LACEY AND TOWNSHIP OF BERKELEY,  
COUNTY OF OCEAN, NEW JERSEY



| INDEX OF SHEETS |   |
|-----------------|---|
| SHEET NO.       | DESCRIPTION   |
| 1               | KEY SHEET   |
| 2               | BERKELEY CHANNEL COMPLEX - GEOMETRY PLAN SHEET OVERVIEW                   |
| 3 - 12          | BERKELEY CHANNEL COMPLEX - CHANNEL ARRANGEMENT & GEOMETRY PLAN            |
| 13              | BERKELEY CHANNEL COMPLEX - CHANNEL GEOMETRY TEMPLATES AND VERTICAL DATUMS |
| 14-15           | BERKELEY CHANNEL COMPLEX - CHANNEL GEOMETRY & SAMPLING COORDINATE TABLES  |
| 16              | BERKELEY CHANNEL COMPLEX - BATHYMETRY PLAN SHEET OVERVIEW                 |
| 17-19           | CLAMMING CREEK NORTH - CHANNEL BATHYMETRY PLAN                            |
| 20-22           | CLAMMING CREEK SOUTH - CHANNEL BATHYMETRY PLAN                            |
| 23              | WHITES CHANNEL - CHANNEL BATHYMETRY PLAN                                  |
| 24-29           | CEDAR CREEK - CHANNEL BATHYMETRY PLAN                                     |
| 30              | CEDAR CREEK SPUR - CHANNEL BATHYMETRY PLAN                                |
| 31-32           | LAUREL HARBOR NORTH - CHANNEL BATHYMETRY PLAN                             |
| 33-34           | LAUREL HARBOR SOUTH - CHANNEL BATHYMETRY PLAN                             |
| 35-37           | STOUTS CREEK - CHANNEL BATHYMETRY PLAN                                    |
| 38              | PIPELINE ROUTE PLAN   |
| 39              | PLACEMENT PLAN - OYSTER CREEK CONFINED DISPOSAL FACILITY                  |



STANDARD ROADWAY CONSTRUCTION/TRAFFIC  
CONTROL BRIDGE CONSTRUCTION DETAILS BOOKLET,  
2016 AND STANDARD ELECTRICAL DETAILS BOOKLET,  
2016 ARE APPLICABLE TO THIS PROJECT EXCEPT FOR  
THOSE DETAILS CONTAINED HEREIN.

MID-POINT OF PROJECT  
NORTHING: 371,865.92  
EASTING: 589,477.126

**PERMITS PLANS  
NOT FOR  
CONSTRUCTION**

**REVISION 1 - ALL SHEETS**  
DREDGED MATERIAL PLACEMENT IS NOT CURRENTLY PROPOSED AT THE  
STOUTS CREEK BENEFICIAL USE MARSH RESTORATION SITE. THE SITE HAS  
BEEN REMOVED FROM THESE PERMIT PLANS. MAINTENANCE DREDGING  
MATERIAL FROM THE BERKELEY CHANNEL COMPLEX WILL BE PLACED AT  
THE OYSTER CREEK CONFINED DISPOSAL FACILITY IN LIEU.

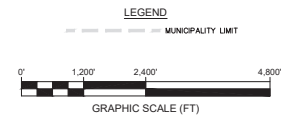
\*CHANGES MADE TO THESE PLANS SINCE SIGNATURE BY  
THE CONSULTANT MAY BE DETERMINED BY COMPARISON  
OF THE PLANS FILED AT THE DEPARTMENT WITH THOSE  
FILED AT THE OFFICE OF THE CONSULTANT.\*  
Michael J. Marano  
WSP USA INC.  
CERTIFICATE OF AUTHORIZATION NO. 24GA28029800  
MICHAEL J. MARANO  
NEW JERSEY PROFESSIONAL ENGINEER NO. 24GED4087500

SCALE IN FEET  
2,640 1,320 0 2,640 5,280

**KEY MAP**

TOTAL LENGTH OF PROJECT = ±52,910 LIN. FT. OR 10.021 MILES  
2019 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION TO GOVERN

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STATE OF NEW JERSEY  
NJDOT OFFICE OF MARITIME RESOURCES

TITLE: BERKELEY CHANNEL COMPLEX  
GEOMETRY PLAN SHEET OVERVIEW

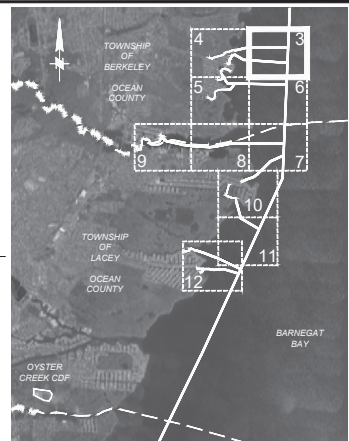
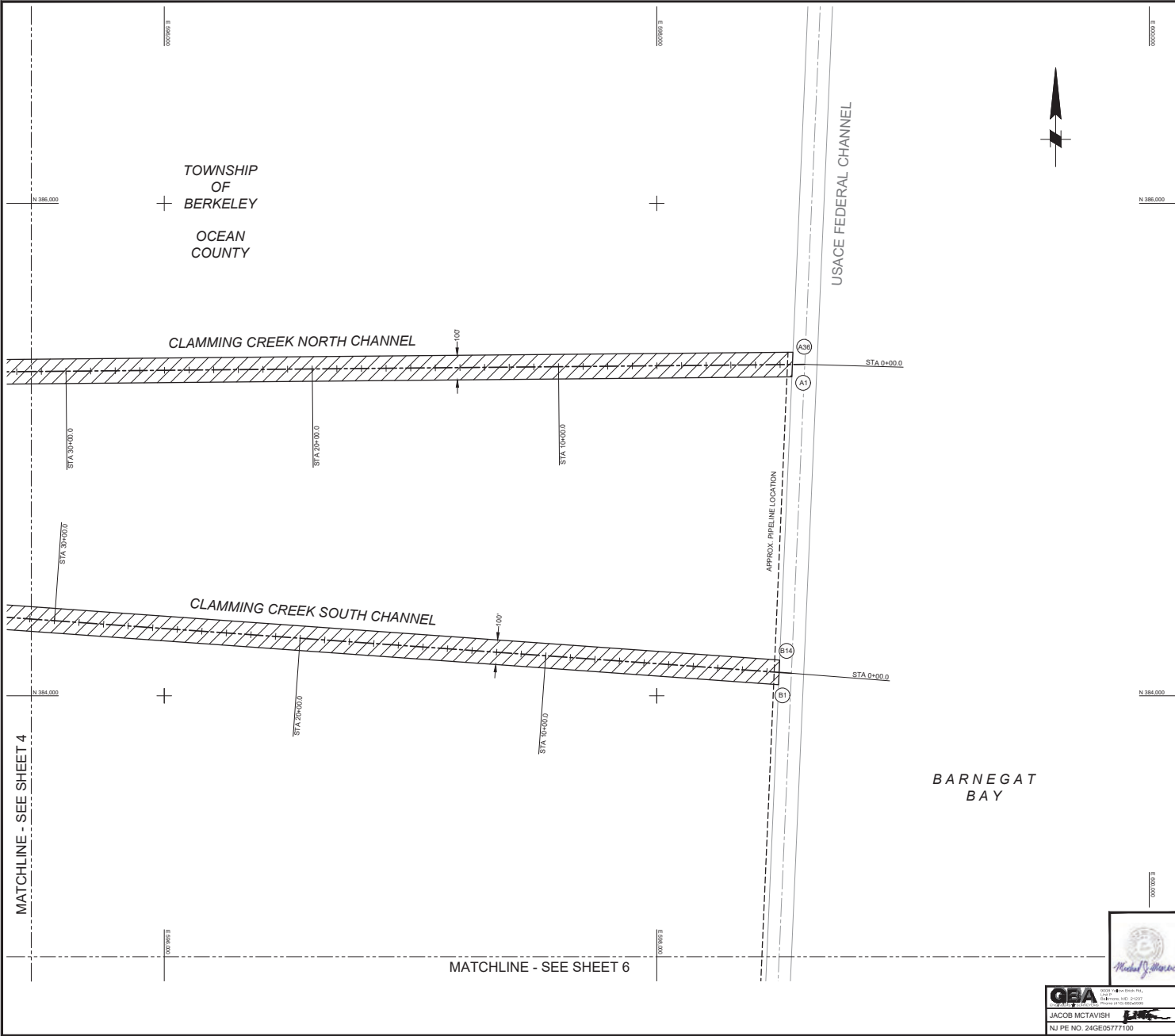
PROJECT: MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS FOR THE BERKELEY  
CHANNEL COMPLEX, CHANNEL NOS. 096-107.

TOWNSHIP OF LACEY, TOWNSHIP OF BERKELEY, OCEAN COUNTY, NEW JERSEY

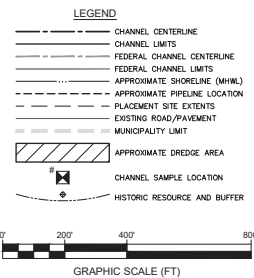
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| CHECKED BY: JMM  | CERTIFICATION OF AUTHORIZATION<br>NO. 24GA28028600    | SHEET 2 OF 39        |
| SCALE: AS SHOWN  | MICHAEL J. MARANO<br>NEW JERSEY PROFESSIONAL ENGINEER | DWG. NO. PERMIT - 01 |
| DATE: APRIL 2024 | NO. 24GE04087500                                      |                      |

GBA  
NJ PE NO. 24GE0577100

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- NOTES:
1. CHANNEL WIDTH AND GEOMETRY VARIES FOR EACH CHANNEL. TYPICAL SECTIONS AND COORDINATE GEOMETRY ARE SHOWN ON SHEETS 13-15.
  2. COORDINATES ARE EXPRESSED IN FEET AND REFER TO THE NEW JERSEY STATE PLANE GRID COORDINATE SYSTEM NORTH AMERICAN DATUM OF 1983 (NAD83).
  3. EXISTING SHORELINE (MHW) & DOCK LOCATIONS ARE BASED ON AERIAL IMAGERY AND SHOULD BE CONSIDERED APPROXIMATE.
  4. AERIAL IMAGERY IS FROM GOOGLE MAPS DATED APRIL, 2021.
  5. THE VERTICAL DATUM IS IN REFERENCE TO MEAN LOW WATER (MLW). MLW IS BELOW THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAV88) AND THE CONVERSION VARIES BY CHANNEL. INFORMATION OBTAINED FROM NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION (NOAA) VDATUM DATUM TRANSFORMATION PROGRAM, VERSIONS 4.3, 4.4.2 AND 4.5.1. RANGE OF TIDE AND REFERENCE TO NAV88 IS INCLUDED ON SHEET 13.



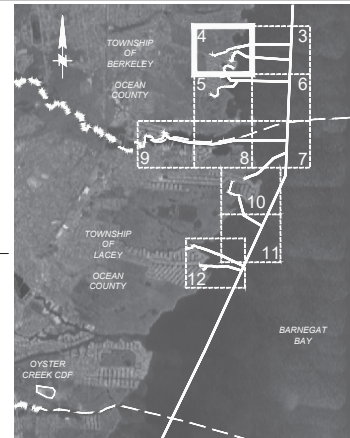
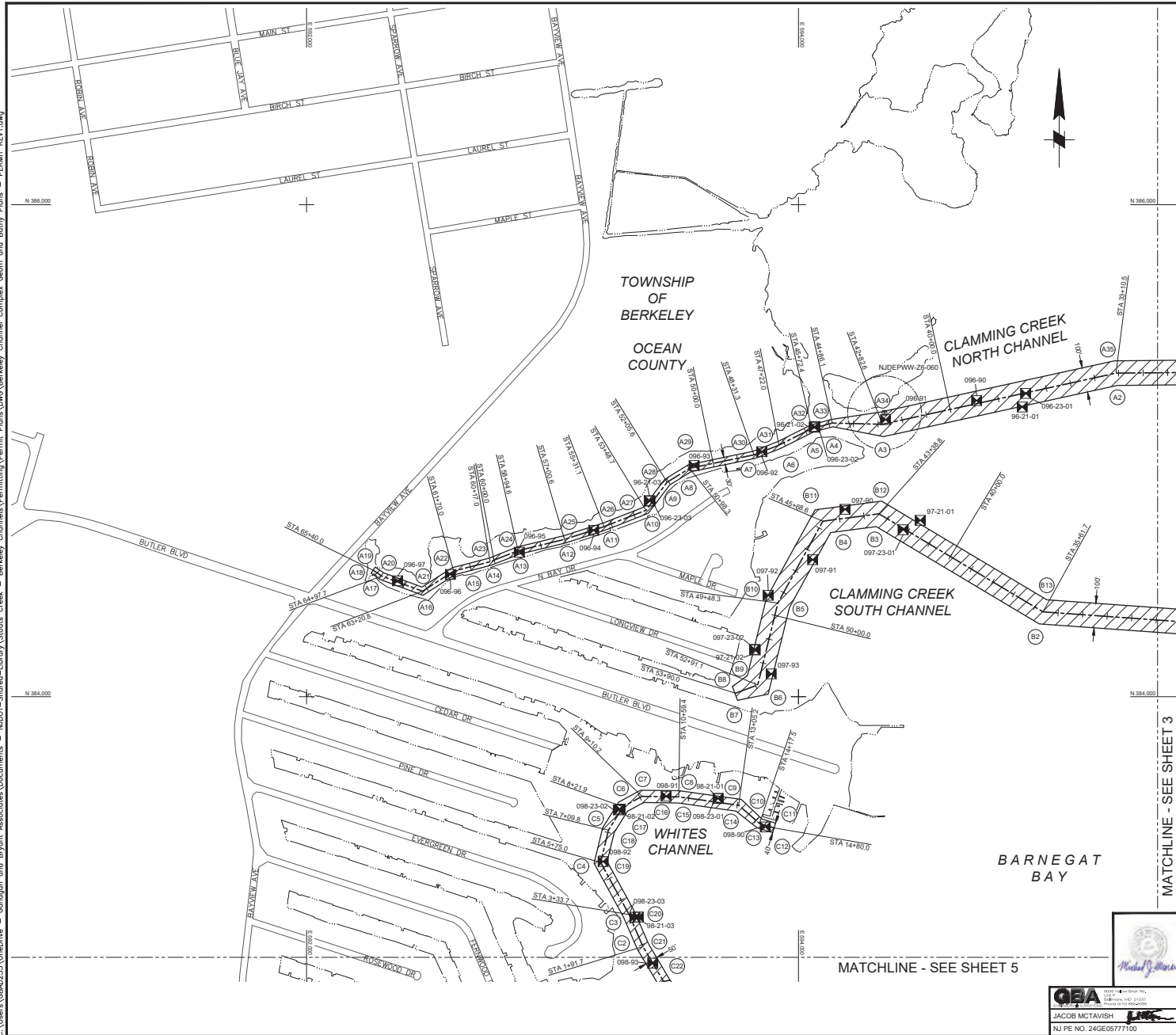
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| STATE OF NEW JERSEY<br>NJDOT OFFICE OF MARITIME RESOURCES   |                      |
| TITLE: BERKELEY CHANNEL COMPLEX<br>CHANNEL ARRANGEMENT & GEOMETRY PLAN  |                      |
| PROJECT: MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS FOR THE BERKELEY<br>CHANNEL COMPLEX, CHANNEL NOS. 096-107. |                      |
| TOWNSHIP OF LACEY, TOWNSHIP OF BERKELEY, OCEAN COUNTY, NEW JERSEY   |                      |
| DRAWN BY: PR  | PROJECT NO.          |
| CHECKED BY: JAM   | SHEET 3 OF 39        |
| SCALE: AS SHOWN   | DWG. NO. PERMIT - 02 |
| DATE: APRIL 2024  |                      |

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JACOB MCTAVISH  
NJ PE NO. 24GE05777100

WSP USA Inc.  
CERTIFICATION OF AUTHORIZATION  
NO. 24GA28028600  
MICHAEL J. MARANO  
NEW JERSEY PROFESSIONAL ENGINEER  
NO. 24GE04087500

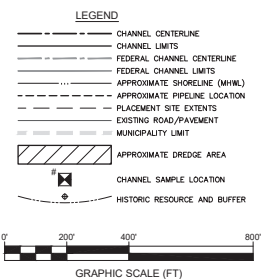


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PROJECT LOCATION MAP  
SCALE: 1" = 500'

- NOTES:
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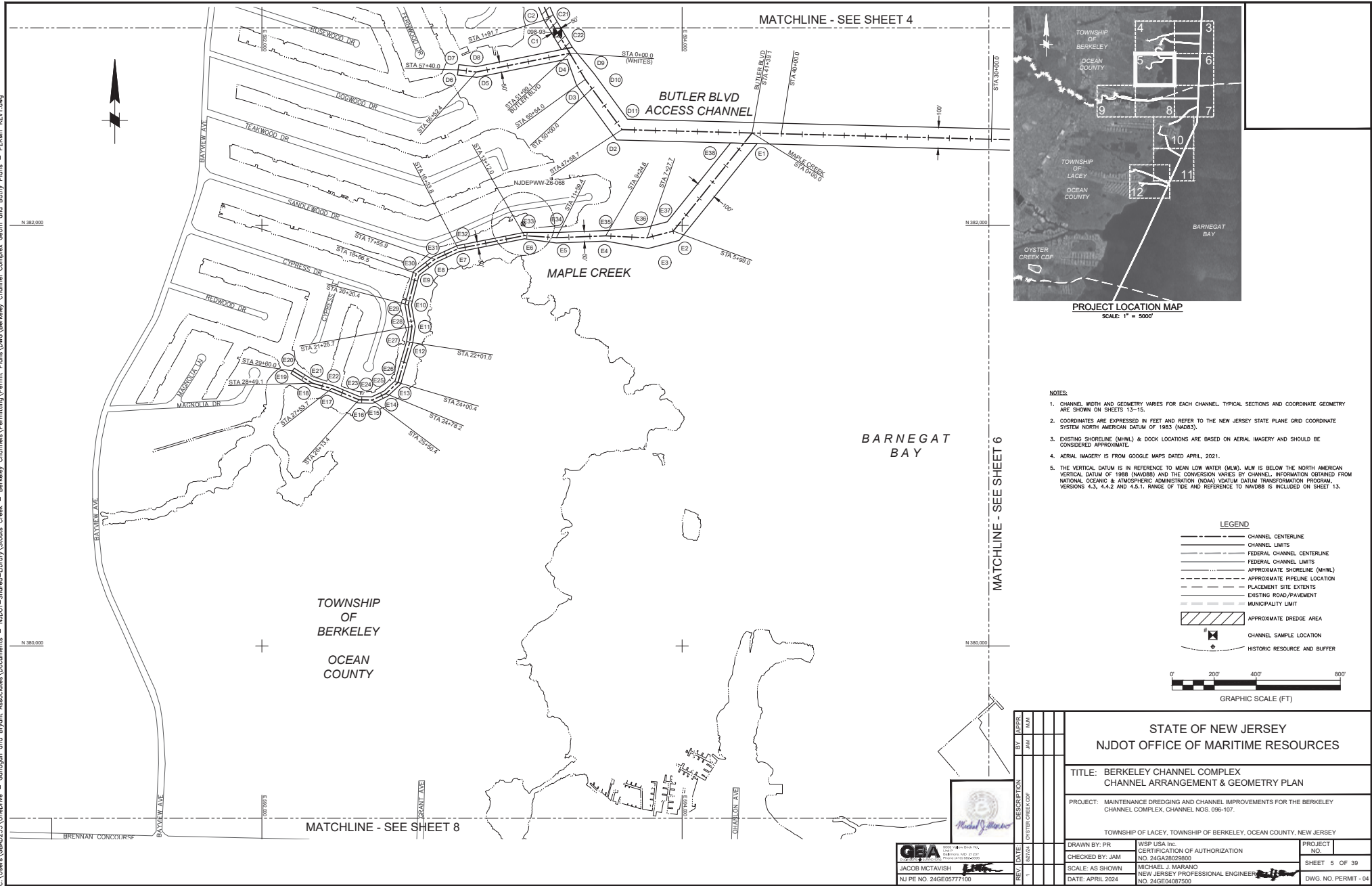
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|---|---|
| STATE OF NEW JERSEY<br>NJDOT OFFICE OF MARITIME RESOURCES   |   |
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| TOWNSHIP OF LACEY, TOWNSHIP OF BERKELEY, OCEAN COUNTY, NEW JERSEY   |   |
| DRAWN BY: PR  | WSP USA INC.  |
| CHECKED BY: JAM   | CERTIFICATION OF AUTHORIZATION<br>NO. 24GA28028600    |
| SCALE: AS SHOWN   | MICHAEL J. MARANO<br>NEW JERSEY PROFESSIONAL ENGINEER |
| DATE: APRIL 2024  | NO. 24GE04087500                                      |
| PROJECT NO.   | SHEET 4 OF 39   |
| DWG. NO. PERMIT - 03  |   |



MATCHLINE - SEE SHEET 5

MATCHLINE - SEE SHEET 3

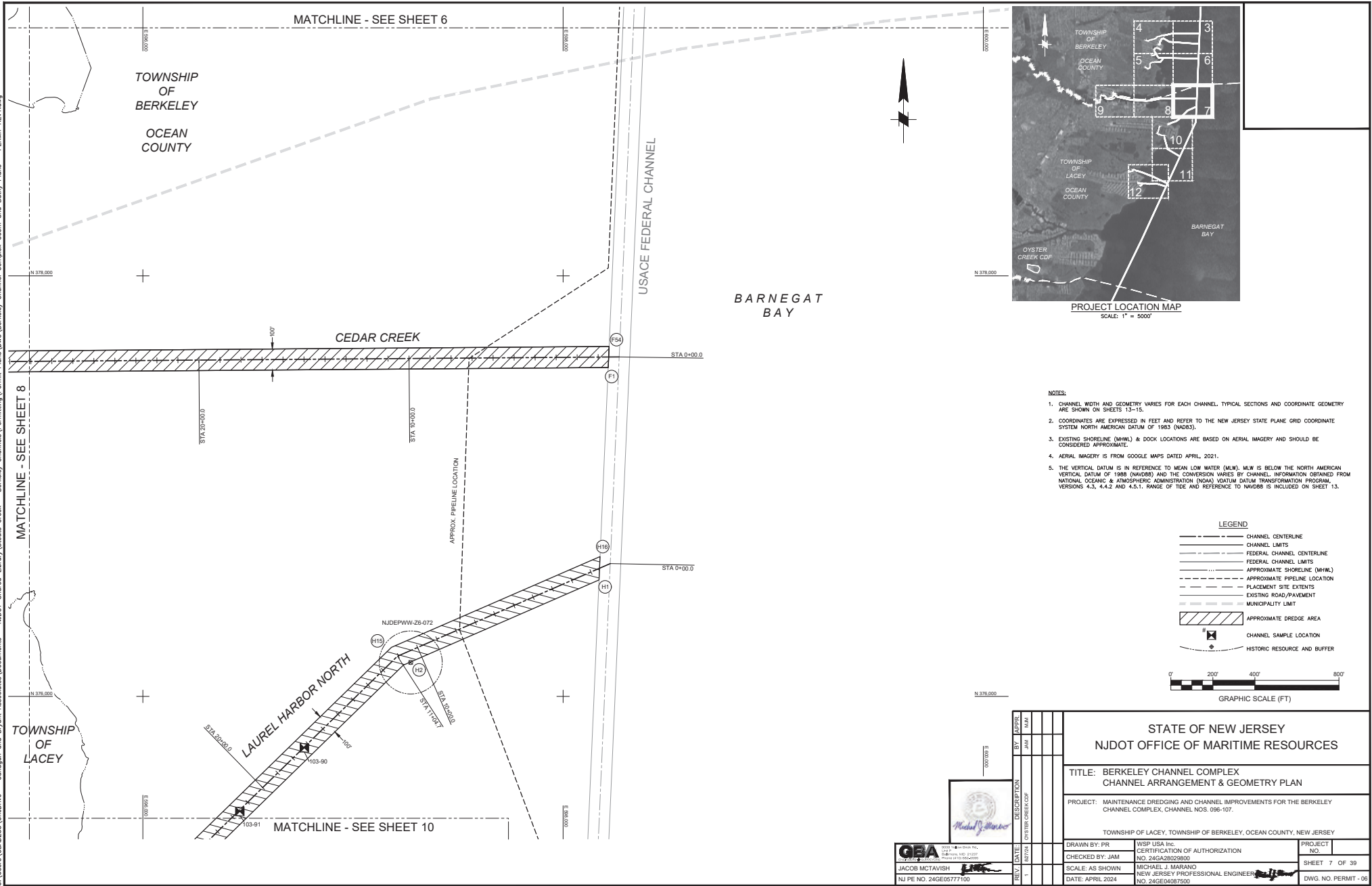
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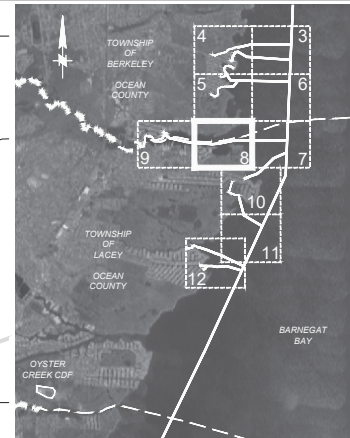
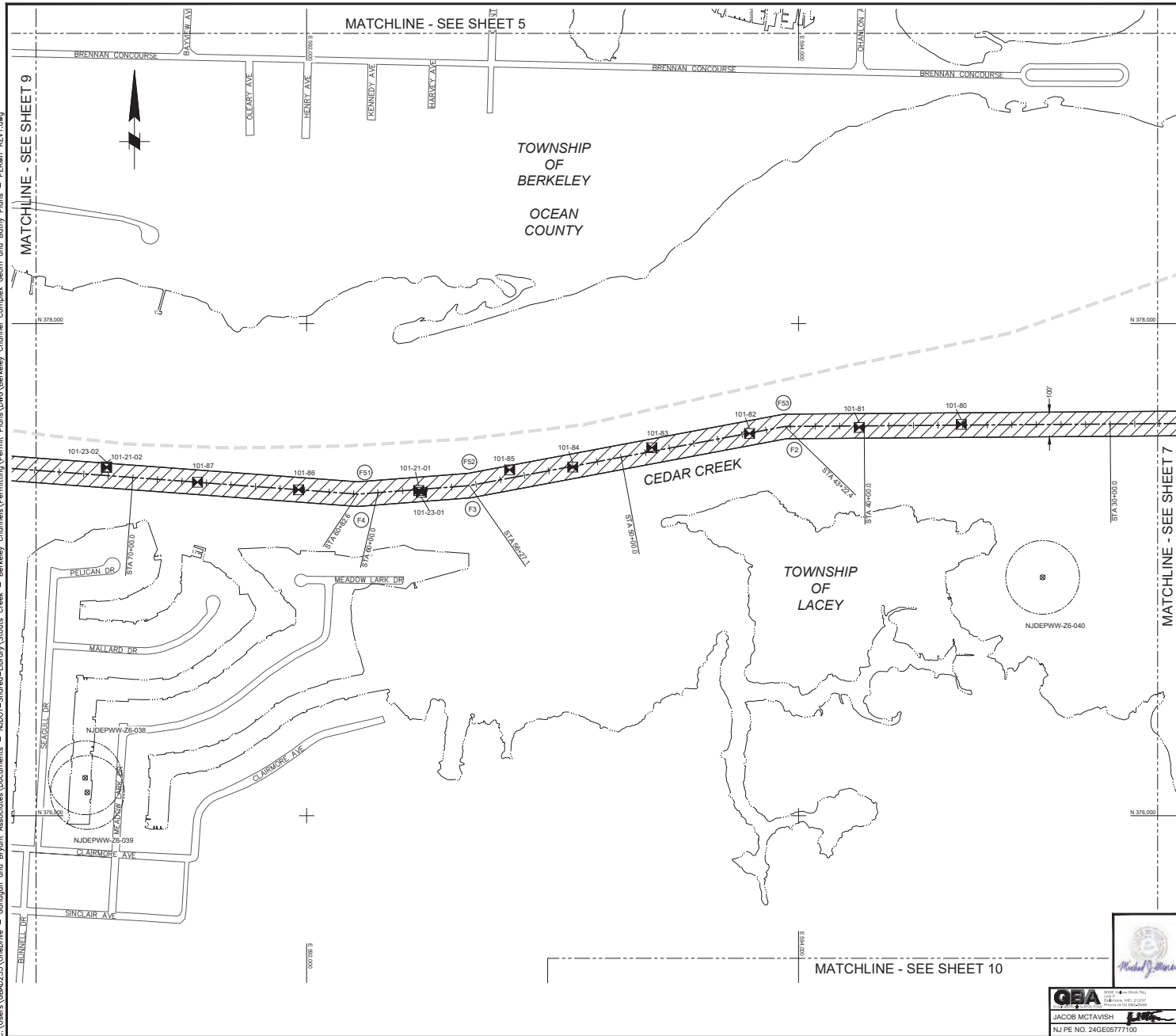




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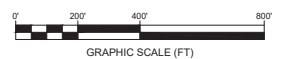


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2. COORDINATES ARE EXPRESSED IN FEET AND REFER TO THE NEW JERSEY STATE PLANE GRID COORDINATE SYSTEM NORTH AMERICAN DATUM OF 1983 (NAD83).
3. EXISTING SHORELINE (MHW) & DOCK LOCATIONS ARE BASED ON AERIAL IMAGERY AND SHOULD BE CONSIDERED APPROXIMATE.
4. AERIAL IMAGERY IS FROM GOOGLE MAPS DATED APRIL, 2021.
5. THE VERTICAL DATUM IS IN REFERENCE TO MEAN LOW WATER (MLW). MLW IS BELOW THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAV88) AND THE CONVERSION WARES BY CHANNEL. INFORMATION OBTAINED FROM NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION (NOAA) VERTICAL DATUM TRANSFORMATION PROGRAM, VERSIONS 4.3, 4.4.2 AND 4.5.1. RANGE OF TIDE AND REFERENCE TO NAV88 IS INCLUDED ON SHEET 13.

#### LEGEND

- CHANNEL CENTERLINE
- CHANNEL LIMITS
- FEDERAL CHANNEL CENTERLINE
- FEDERAL CHANNEL LIMITS
- APPROXIMATE SHORELINE (MHW)
- APPROXIMATE PIPELINE LOCATION
- PLACEMENT SITE EXTENTS
- EXISTING ROAD/PAVEMENT
- MUNICIPALITY LIMIT
- APPROXIMATE DREDGE AREA
- CHANNEL SAMPLE LOCATION
- HISTORIC RESOURCE AND BUFFER

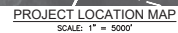





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|-----|--|--------|------|
| BY  |  | DATE   | NAME |
| JAM |  | APR 10 | JAM  |

|                  |         |      |
|------------------|---------|------|
| DESCRIPTION      | DATE    | NAME |
| OYSTER CREEK CDP | 4/10/24 | JAM  |

|   |  |                      |
|---|--|----------------------|
| STATE OF NEW JERSEY<br>NJDOT OFFICE OF MARITIME RESOURCES   |  |                      |
| TITLE: BERKELEY CHANNEL COMPLEX<br>CHANNEL ARRANGEMENT & GEOMETRY PLAN  |  |                      |
| PROJECT: MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS FOR THE BERKELEY<br>CHANNEL COMPLEX, CHANNEL NOS. 096-107. |  |                      |
| TOWNSHIP OF LACEY, TOWNSHIP OF BERKELEY, OCEAN COUNTY, NEW JERSEY   |  |                      |
| DRAWN BY: JR  | WSP USA Inc.<br>CERTIFICATION OF AUTHORIZATION<br>NO. 24GA28028600         | PROJECT<br>NO.       |
| CHECKED BY: JAM   | MICHAEL J. MARRANO<br>NEW JERSEY PROFESSIONAL ENGINEER<br>NO. 24GE04087500 | SHEET 8 OF 39        |
| SCALE: AS SHOWN   | DATE: APRIL 2024   | DWG. NO. PERMIT - 07 |

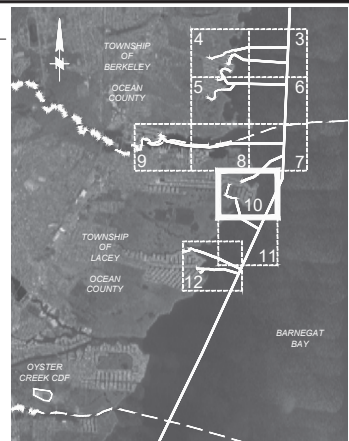
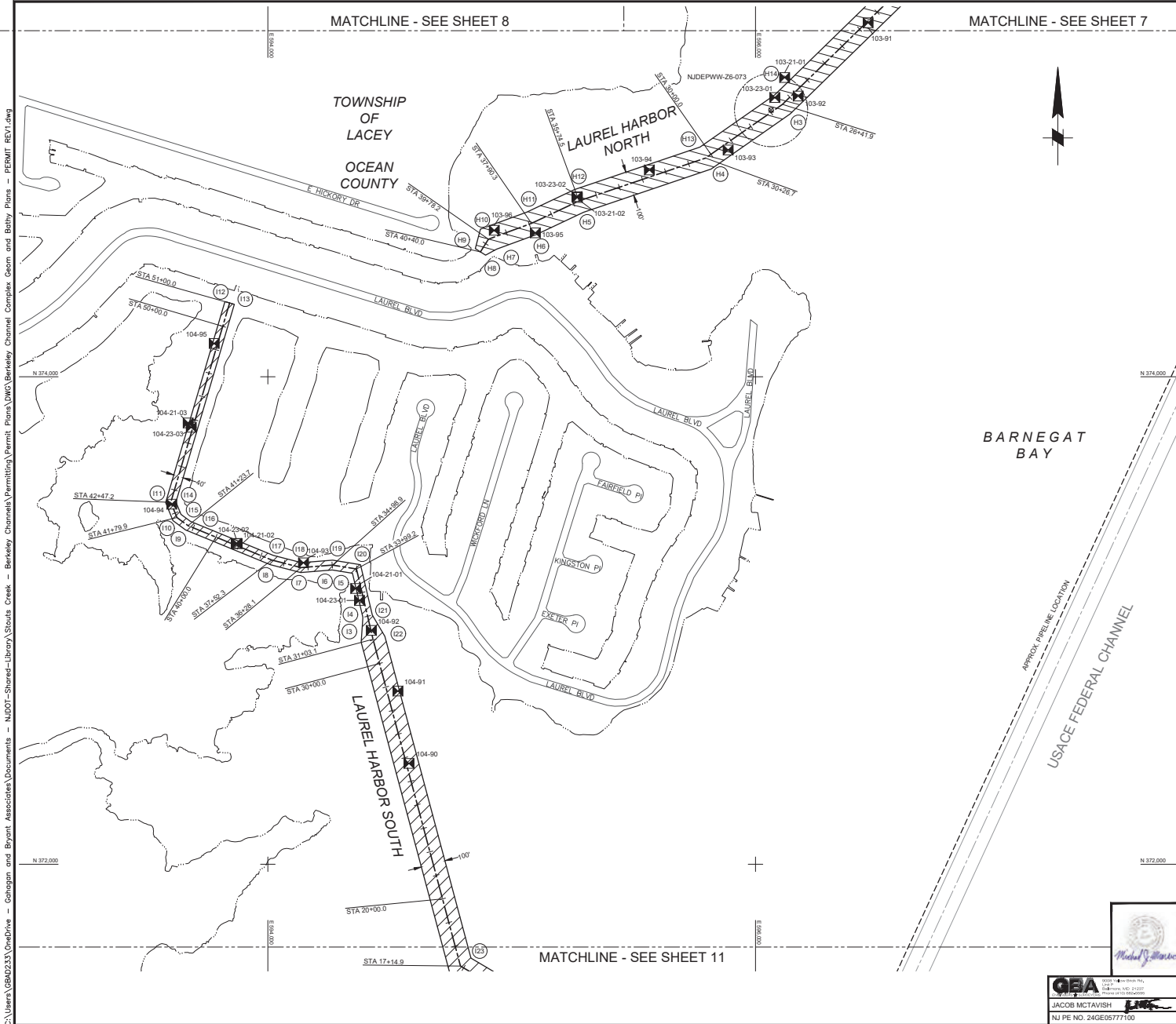




- LEGEND**
- CHANNEL CENTERLINE
  - CHANNEL LIMITS
  - FEDERAL CHANNEL CENTERLINE
  - FEDERAL CHANNEL LIMITS
  - ..... APPROXIMATE SHORELINE (MHWL)
  - - - - - APPROXIMATE PIPELINE LOCATION
  - PLACEMENT SITE EXTENTS
  - EXISTING ROAD/PAVEMENT
  - MUNICIPALITY LIMIT
  -  APPROXIMATE DREDGE AREA
  -  CHANNEL SAMPLE LOCATION
  -  HISTORIC RESOURCE AND BUFFER
- 0 200' 400'
- GRAPHIC SCALE (FT)**

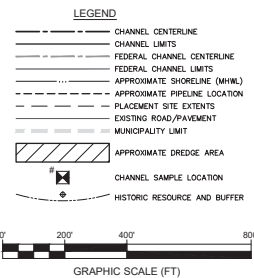
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PROJECT LOCATION MAP  
SCALE: 1" = 500'

- NOTES:
1. CHANNEL WIDTH AND GEOMETRY VARIES FOR EACH CHANNEL. TYPICAL SECTIONS AND COORDINATE GEOMETRY ARE SHOWN ON SHEETS 13-15.
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**GBA**  
Geotechnical & Biological Associates, Inc.  
1000 N. 10th Street, Suite 200  
Asbury Park, NJ 07721  
Tel: 732.944.2000  
Fax: 732.944.2001  
www.gba-nj.com

|     |       |      |     |
|-----|-------|------|-----|
| BY  | APPRO | DATE | NO. |
| JAM |       |      |     |

|                          |         |     |
|--------------------------|---------|-----|
| DESCRIPTION              | DATE    | NO. |
| BERKELEY CHANNEL COMPLEX | 4/20/24 |     |

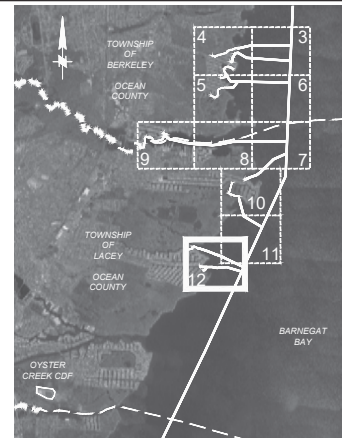
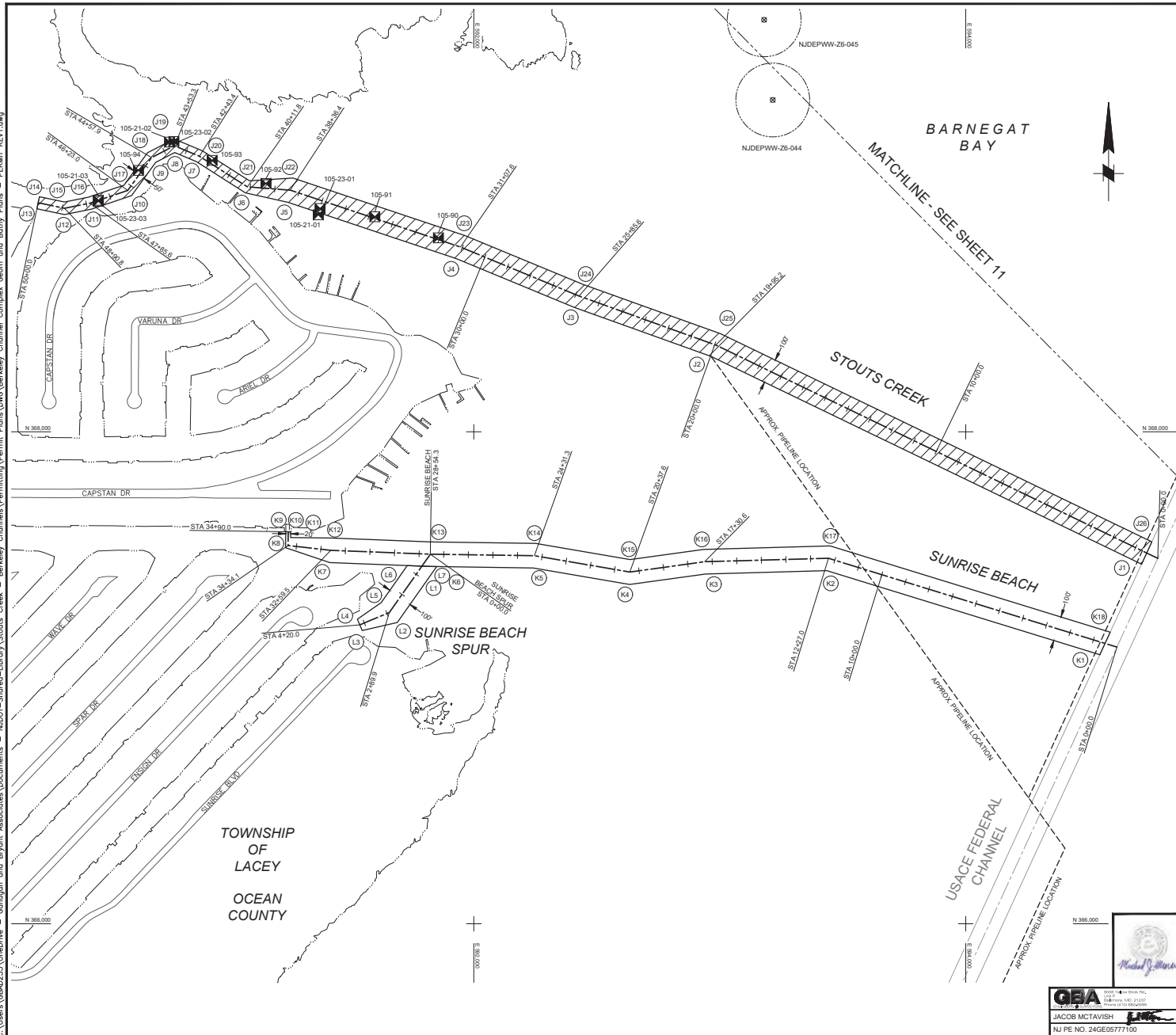
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| REVIEW | DATE    | NO. |
| 1      | 4/20/24 |     |

|   |   |
|---|---|
| STATE OF NEW JERSEY<br>NJDOT OFFICE OF MARITIME RESOURCES   |   |
| TITLE: BERKELEY CHANNEL COMPLEX<br>CHANNEL ARRANGEMENT & GEOMETRY PLAN  |   |
| PROJECT: MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS FOR THE BERKELEY<br>CHANNEL COMPLEX, CHANNEL NOS. 096-107. |   |
| TOWNSHIP OF LACEY, TOWNSHIP OF BERKELEY, OCEAN COUNTY, NEW JERSEY   |   |
| DRAWN BY: PR  | WSP USA Inc.<br>CERTIFICATION OF AUTHORIZATION<br>NO. 24GA28028600        |
| CHECKED BY: JAM   | MICHAEL J. MARANO<br>NEW JERSEY PROFESSIONAL ENGINEER<br>NO. 24GE04087500 |
| SCALE: AS SHOWN   |   |
| DATE: APRIL 2024  |   |
| PROJECT NO.   | SHEET 10 OF 39  |
| DWG. NO. PERMIT - 09  |   |





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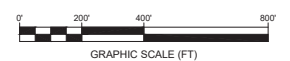
PROJECT LOCATION MAP  
SCALE: 1" = 500'

NOTES:

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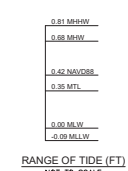
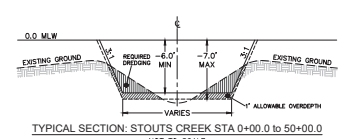
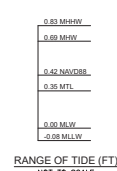
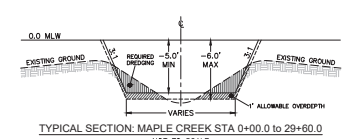
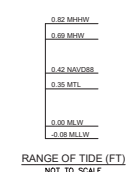
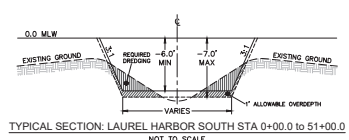
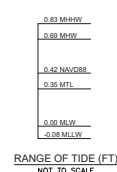
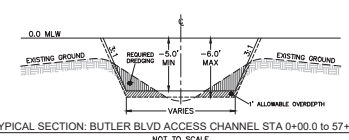
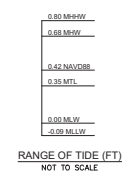
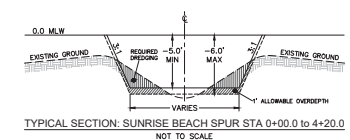
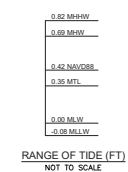
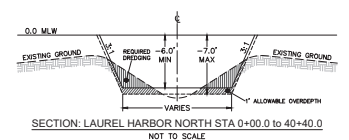
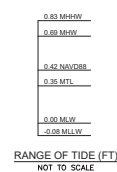
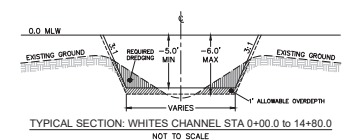
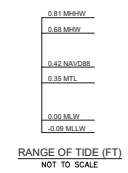
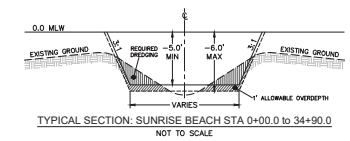
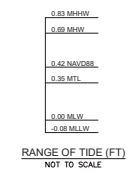
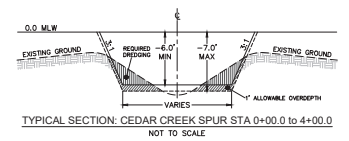
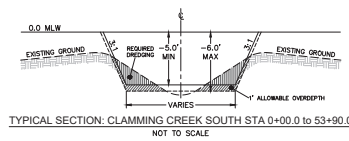
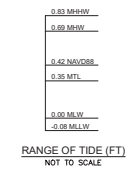
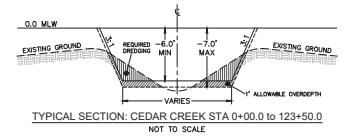
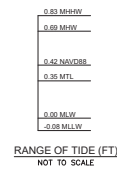
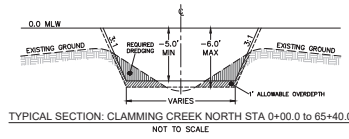
LEGEND

- CHANNEL CENTERLINE
- CHANNEL LIMITS
- FEDERAL CHANNEL CENTERLINE
- FEDERAL CHANNEL LIMITS
- APPROXIMATE SHORELINE (MHW)
- APPROXIMATE PIPELINE LOCATION
- PLACEMENT SITE EXTENTS
- EXISTING ROAD/PAVEMENT
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- APPROXIMATE DREDGE AREA
- CHANNEL SAMPLE LOCATION
- HISTORIC RESOURCE AND BUFFER




|  |     |         |                  |   |  |
|--|-----|---------|------------------|---|--|
| BY   |     | DATE    | DESCRIPTION      | PROJECT   |  |
| JAM  | JAM | 4/10/24 | OYSTER CREEK CDP | STATE OF NEW JERSEY<br>NJDOT OFFICE OF MARITIME RESOURCES   |  |
| TITLE: BERKELEY CHANNEL COMPLEX<br>CHANNEL ARRANGEMENT & GEOMETRY PLAN |     |         |                  | PROJECT: MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS FOR THE BERKELEY<br>CHANNEL COMPLEX, CHANNEL NOS. 098-107. |  |
| TOWNSHIP OF LACEY, TOWNSHIP OF BERKELEY, OCEAN COUNTY, NEW JERSEY      |     |         |                  | PROJECT NO. 24GE04087500  |  |
| DRAWN BY: JR   |     |         |                  | CHECKED BY: JAM   |  |
| DATE: 4/10/24  |     |         |                  | DATE: APRIL 2024  |  |
| SCALE: AS SHOWN  |     |         |                  | SCALE: 1" = 500'  |  |
| JACOB MCTAVISH   |     |         |                  | MICHAEL J. MARANO   |  |
| NJ PE NO. 24GE05777100   |     |         |                  | NO. 24GE04087500  |  |
| SHEET 12 OF 39   |     |         |                  | DWG. NO. PERMIT-11  |  |

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NOTES:  
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DATE

BY

APPROVED

1

JAM

DESCRIPTION

CLAMMING CREEK

DATE

BY

APPROVED

1

JAM

DESCRIPTION

CLAMMING CREEK

DATE

BY

APPROVED

1

JAM

DESCRIPTION

CLAMMING CREEK

STATE OF NEW JERSEY

NJDOT OFFICE OF MARITIME RESOURCES

TITLE: BERKELEY CHANNEL COMPLEX  
CHANNEL GEOMETRY TEMPLATES AND VERTICAL DATUMS

PROJECT: MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS FOR THE BERKELEY CHANNEL COMPLEX, CHANNEL NOS. 096-107.

TOWNSHIP OF LACEY, TOWNSHIP OF BERKELEY, OCEAN COUNTY, NEW JERSEY

DRAWN BY: PR

CHECKED BY: JAM

SCALE: AS SHOWN

DATE: APRIL 2024

WSP USA INC.

CERTIFICATION OF AUTHORIZATION

NO. 24GA28028600

MICHAEL J. MARANO

NEW JERSEY PROFESSIONAL ENGINEER

NO. 24GE04087500

PROJECT NO.

SHEET 13 OF 39

DWG. NO. PERMIT - 12



| 095 CLAMMING CREEK NORTH CHANNEL CENTERLINE COORDINATES |           |           |
|---|-----------|-----------|
| STATION   | NORTHING  | EASTING   |
| 0+00.0  | 385.345.8 | 599.550.9 |
| 30+10.0   | 385.315.3 | 595.280.1 |
| 42+02.0   | 385.107.4 | 594.341.0 |
| 44+06.1   | 385.112.3 | 594.137.6 |
| 45+12.4   | 385.089.8 | 594.054.2 |
| 47+12.0   | 385.022.6 | 593.920.6 |
| 48+31.3   | 384.963.0 | 593.818.7 |
| 50+06.3   | 384.928.5 | 593.657.3 |
| 52+05.6   | 384.871.9 | 593.466.1 |
| 53+48.7   | 384.757.8 | 593.379.9 |
| 55+31.1   | 384.691.4 | 593.210.0 |
| 57+00.6   | 384.639.4 | 593.048.6 |
| 58+94.6   | 384.593.7 | 592.860.1 |
| 60+17.0   | 384.548.7 | 592.746.3 |
| 61+70.0   | 384.510.2 | 592.598.2 |
| 63+20.8   | 384.428.6 | 592.471.4 |
| 64+07.7   | 384.400.4 | 592.305.7 |
| 65+40.0   | 384.514.4 | 592.270.8 |

| 096 CLAMMING CREEK NORTH CHANNEL COORDINATES |           |           |
|--|-----------|-----------|
| POINT  | NORTHING  | EASTING   |
| A1   | 385.295.8 | 598.946.7 |
| A2   | 385.284.4 | 598.796.2 |
| A3   | 385.097.3 | 594.345.8 |
| A4   | 385.097.3 | 594.138.4 |
| A5   | 385.075.7 | 594.059.6 |
| A6   | 385.008.9 | 593.920.7 |
| A7   | 384.988.6 | 593.823.0 |
| A8   | 384.914.3 | 593.663.0 |
| A9   | 384.860.7 | 593.476.3 |
| A10  | 384.745.3 | 593.389.3 |
| A11  | 384.677.2 | 593.210.0 |
| A12  | 384.624.9 | 593.052.7 |
| A13  | 384.579.4 | 592.864.7 |
| A14  | 384.534.4 | 592.750.9 |
| A15  | 384.496.3 | 592.604.3 |
| A16  | 384.411.0 | 592.473.1 |
| A17  | 384.477.0 | 592.298.7 |
| A18  | 384.502.1 | 592.262.3 |
| A19  | 384.526.8 | 592.279.4 |
| A20  | 384.503.8 | 592.312.6 |
| A21  | 384.445.3 | 592.469.6 |
| A22  | 384.524.1 | 592.592.1 |
| A23  | 384.562.9 | 592.741.6 |
| A24  | 384.608.0 | 592.855.6 |
| A25  | 384.653.8 | 593.044.6 |
| A26  | 384.705.5 | 593.205.0 |
| A27  | 384.770.2 | 593.370.5 |
| A28  | 384.863.2 | 593.455.8 |
| A29  | 384.942.6 | 593.551.7 |
| A30  | 384.997.5 | 593.614.4 |
| A31  | 385.036.3 | 593.914.5 |
| A32  | 385.103.9 | 594.048.8 |
| A33  | 385.127.4 | 594.135.8 |
| A34  | 385.157.5 | 594.236.2 |
| A35  | 385.365.3 | 595.288.9 |
| A36  | 385.395.3 | 595.553.0 |

| 097 CLAMMING CREEK SOUTH CHANNEL CENTERLINE COORDINATES |           |           |
|---|-----------|-----------|
| STATION   | NORTHING  | EASTING   |
| 0+00.0  | 384.091.3 | 596.546.7 |
| 35+01.7   | 384.344.8 | 594.984.1 |
| 43+38.8   | 384.743.3 | 594.326.9 |
| 45+08.6   | 384.713.4 | 594.099.1 |
| 48+48.3   | 384.380.8 | 593.916.1 |
| 14+17.5   | 384.047.7 | 593.834.4 |
| 53+00.0   | 384.013.3 | 593.741.7 |

| 097 CLAMMING CREEK SOUTH CHANNEL COORDINATES |           |           |
|--|-----------|-----------|
| POINT  | NORTHING  | EASTING   |
| B1   | 384.044.9 | 596.404.7 |
| B2   | 384.296.8 | 594.978.6 |
| B3   | 384.691.5 | 594.318.2 |
| B4   | 384.687.2 | 594.130.7 |
| B5   | 384.382.4 | 593.963.1 |
| B6   | 384.010.1 | 593.876.7 |
| B7   | 383.985.2 | 593.752.2 |
| B8   | 384.041.4 | 593.731.3 |
| B9   | 384.085.4 | 593.782.2 |
| B10  | 384.399.1 | 593.889.1 |
| B11  | 384.759.7 | 594.087.5 |
| B12  | 384.795.1 | 594.337.6 |
| B13  | 384.393.8 | 595.009.5 |
| B14  | 384.144.9 | 595.499.0 |

| 098 WHITES CHANNEL CENTERLINE COORDINATES |           |           |
|---|-----------|-----------|
| STATION                                   | NORTHING  | EASTING   |
| 0+00.0                                    | 382.819.1 | 593.466.3 |
| 1+91.7                                    | 382.084.0 | 593.067.6 |
| 3+33.7                                    | 383.114.3 | 593.011.2 |
| 5+75.0                                    | 383.322.2 | 593.195.6 |
| 7+09.8                                    | 383.467.2 | 593.027.4 |
| 8+21.9                                    | 383.552.4 | 593.088.6 |
| 9+10.2                                    | 383.594.7 | 593.064.1 |
| 10+59.4                                   | 383.592.6 | 593.013.3 |
| 13+05.2                                   | 383.558.5 | 593.057.7 |
| 14+17.5                                   | 383.484.8 | 593.041.4 |
| 14+80.0                                   | 383.484.4 | 593.012.2 |

| 098 WHITES CHANNEL COORDINATES |           |           |
|--------------------------------|-----------|-----------|
| POINT                          | NORTHING  | EASTING   |
| C1                             | 382.836.7 | 593.425.8 |
| C2                             | 382.972.6 | 593.345.2 |
| C3                             | 383.103.4 | 593.288.7 |
| C4                             | 383.322.2 | 593.169.1 |
| C5                             | 383.467.0 | 593.204.1 |
| C6                             | 383.571.2 | 593.268.9 |
| C7                             | 383.619.7 | 593.357.9 |
| C8                             | 383.617.6 | 593.515.2 |
| C9                             | 383.582.2 | 593.787.5 |
| C10                            | 383.502.6 | 593.897.4 |
| C11                            | 383.485.9 | 593.907.1 |
| C12                            | 383.447.3 | 593.896.3 |
| C13                            | 383.468.9 | 593.813.5 |
| C14                            | 383.534.7 | 593.745.9 |
| C15                            | 383.567.8 | 593.511.4 |
| C16                            | 383.569.6 | 593.370.3 |
| C17                            | 383.533.6 | 593.304.4 |
| C18                            | 383.447.4 | 593.250.8 |
| C19                            | 383.329.7 | 593.232.2 |
| C20                            | 383.125.3 | 593.333.6 |
| C21                            | 382.995.3 | 593.389.9 |
| C22                            | 382.847.1 | 593.477.8 |

| 096 CLAMMING CREEK NORTH CHANNEL SAMPLE LOCATION COORDINATES |           |           |
|--|-----------|-----------|
| BORING   | NORTHING  | EASTING   |
| 96-21-01   | 594.905.5 | 385.177.5 |
| 96-21-02   | 594.956.2 | 385.095.3 |
| 96-21-03   | 593.393.8 | 384.797.1 |
| 96-23-01   | 594.923.7 | 385.233.1 |
| 96-23-02   | 594.066.3 | 385.098.5 |
| 96-23-03   | 593.396.0 | 384.795.1 |
| 96-40  | 594.734.4 | 385.204.0 |
| 96-61  | 594.354.2 | 385.126.3 |
| 96-62  | 593.851.1 | 384.955.9 |
| 96-63  | 593.575.7 | 384.939.9 |
| 96-64  | 593.167.2 | 384.676.3 |
| 96-65  | 592.865.0 | 384.587.0 |
| 96-66  | 592.558.8 | 384.487.0 |
| 96-67  | 592.370.2 | 384.470.8 |

| 100 MAPLE CREEK CHANNEL CENTERLINE COORDINATES |           |           |
|--|-----------|-----------|
| STATION  | NORTHING  | EASTING   |
| 0+00.0   | 382.439.7 | 594.333.0 |
| 5+99.0   | 381.973.1 | 593.957.5 |
| 7+27.7   | 381.940.8 | 593.832.9 |
| 9+24.6   | 381.950.7 | 593.836.3 |
| 11+59.4  | 381.941.6 | 593.401.6 |
| 13+12.0  | 381.951.8 | 593.249.4 |
| 16+33.8  | 381.889.6 | 592.933.6 |
| 17+55.9  | 381.838.6 | 592.822.7 |
| 18+66.5  | 381.771.7 | 592.734.6 |
| 20+20.4  | 381.622.6 | 592.696.4 |
| 21+25.7  | 381.518.9 | 592.714.6 |
| 22+01.0  | 381.444.5 | 592.703.4 |
| 24+00.4  | 381.253.1 | 592.647.2 |
| 24+78.2  | 381.200.1 | 592.590.3 |
| 25+50.4  | 381.189.4 | 592.524.9 |
| 26+13.4  | 381.170.9 | 592.481.9 |
| 27+03.7  | 381.224.5 | 592.332.3 |
| 28+49.1  | 381.249.5 | 592.240.3 |
| 29+40.0  | 381.308.1 | 592.146.1 |

| 097 CLAMMING CREEK SOUTH CHANNEL SAMPLE LOCATION COORDINATES |           |           |
|--|-----------|-----------|
| BORING   | NORTHING  | EASTING   |
| 97-21-01   | 594.495.3 | 384.717.0 |
| 97-21-02   | 593.823.9 | 384.190.0 |
| 97-23-01   | 594.425.6 | 384.678.7 |
| 97-23-02   | 593.821.2 | 384.192.1 |
| 97-50  | 594.189.5 | 384.761.5 |
| 97-61  | 594.057.7 | 384.556.9 |
| 97-92  | 593.876.9 | 384.412.0 |
| 97-93  | 593.888.8 | 384.082.6 |

| 099 BUTLER BLVD ACCESS CHANNEL CENTERLINE COORDINATES |           |           |
|---|-----------|-----------|
| STATION   | NORTHING  | EASTING   |
| 0+00.0  | 382.371.5 | 598.470.7 |
| 47+08.7   | 382.456.0 | 593.713.6 |
| 50+54.0   | 382.594.3 | 593.539.3 |
| 51+99.1   | 382.519.1 | 593.453.5 |
| 56+52.0   | 382.729.8 | 593.020.8 |
| 57+40.0   | 382.740.4 | 592.933.9 |

| 100 MAPLE CREEK CHANNEL COORDINATES |           |           |
|-------------------------------------|-----------|-----------|
| POINT                               | NORTHING  | EASTING   |
| E1                                  | 382.389.1 | 594.356.5 |
| E2                                  | 381.928.8 | 593.986.1 |
| E3                                  | 381.890.5 | 593.838.0 |
| E4                                  | 381.925.6 | 593.636.2 |
| E5                                  | 381.916.5 | 593.401.3 |
| E6                                  | 381.936.7 | 593.250.3 |
| E7                                  | 381.875.2 | 592.938.3 |
| E8                                  | 381.825.7 | 592.830.5 |
| E9                                  | 381.762.9 | 592.747.8 |
| E10                                 | 381.622.0 | 592.711.7 |
| E11                                 | 381.519.1 | 592.729.8 |
| E12                                 | 381.441.3 | 592.718.1 |
| E13                                 | 381.245.0 | 592.660.4 |
| E14                                 | 381.187.5 | 592.598.8 |
| E15                                 | 381.154.3 | 592.528.1 |
| E16                                 | 381.155.9 | 592.458.8 |
| E17                                 | 381.210.3 | 592.327.5 |
| E18                                 | 381.235.6 | 592.234.2 |
| E19                                 | 381.255.3 | 592.138.1 |
| E20                                 | 381.320.8 | 592.154.0 |
| E21                                 | 381.263.4 | 592.246.3 |
| E22                                 | 381.226.7 | 592.337.2 |
| E23                                 | 381.185.9 | 592.465.1 |
| E24                                 | 381.164.5 | 592.521.9 |
| E25                                 | 381.212.7 | 592.581.8 |
| E26                                 | 381.261.3 | 592.633.9 |
| E27                                 | 381.447.7 | 592.688.7 |
| E28                                 | 381.518.8 | 592.699.4 |
| E29                                 | 381.623.2 | 592.681.0 |
| E30                                 | 381.780.5 | 592.721.4 |
| E31                                 | 381.851.5 | 592.815.0 |
| E32                                 | 381.904.0 | 592.920.0 |
| E33                                 | 381.966.9 | 593.248.4 |
| E34                                 | 381.966.6 | 593.402.0 |
| E35                                 | 381.975.7 | 593.636.4 |
| E36                                 | 381.991.1 | 593.827.8 |
| E37                                 | 382.017.3 | 593.928.9 |
| E38                                 | 382.392.4 | 594.230.7 |

| 101 CEDAR CREEK CHANNEL CENTERLINE COORDINATES |           |           |
|--|-----------|-----------|
| STATION  | NORTHING  | EASTING   |
| 0+00.0   | 377.814.6 | 598.288.8 |
| 43+22.4  | 377.592.1 | 593.944.6 |
| 58+27.1  | 377.341.6 | 592.952.2 |
| 60+82.6  | 377.307.0 | 592.559.0 |
| 76+00.6  | 377.119.1 | 590.594.2 |
| 81+79.4  | 377.500.7 | 590.121.1 |
| 95+45.2  | 377.800.3 | 598.788.6 |
| 99+22.6  | 378.026.0 | 598.486.1 |
| 100+07.9                                       | 378.009.9 | 598.341.8 |
| 102+22.5                                       | 377.859.1 | 598.303.4 |
| 102+05.3                                       | 377.822.7 | 598.281.2 |
| 103+25.7                                       | 377.786.2 | 598.233.0 |
| 105+32.0                                       | 377.707.3 | 598.042.3 |
| 107+22.2                                       | 377.667.9 | 587.896.3 |
| 108+02.0                                       | 377.611.0 | 587.707.0 |
| 109+07.0                                       | 377.613.7 | 587.632.1 |
| 110+05.0                                       | 377.652.7 | 587.542.1 |
| 113+02.4                                       | 377.600.2 | 587.377.3 |
| 114+30.8                                       | 377.528.3 | 587.304.0 |
| 116+02.8                                       | 377.528.9 | 587.282.1 |
| 117+30.9                                       | 377.565.4 | 587.013.0 |
| 117+49.8                                       | 377.568.9 | 586.974.3 |
| 118+05.4                                       | 377.548.9 | 586.891.1 |
| 119+07.2                                       | 377.512.4 | 586.854.4 |
| 120+02.6                                       | 377.524.2 | 586.817.9 |
| 123+01.6                                       | 377.525.3 | 586.826.4 |
| 123+00.0                                       | 377.481.0 | 586.807.0 |

| 101 CEDAR CREEK CHANNEL<br>COORDINATES |           |           |
|--|-----------|-----------|
| POINT                                  | NORTHING  | EASTING   |
| F1                                     | 377.584.2 | 598.214.6 |
| F2                                     | 377.532.2 | 593.949.4 |
| F3                                     | 377.292.0 | 592.669.7 |
| F4                                     | 377.256.9 | 592.208.1 |
| F5                                     | 377.369.4 | 590.688.8 |
| F6                                     | 377.451.5 | 590.112.1 |
| F7                                     | 377.753.9 | 588.787.2 |
| F8                                     | 377.974.0 | 588.472.2 |
| F9                                     | 377.986.1 | 588.381.8 |
| F10                                    | 377.849.3 | 588.326.7 |
| F11                                    | 377.856.6 | 588.300.1 |
| F12                                    | 377.764.3 | 588.245.6 |
| F13                                    | 377.683.3 | 588.049.8 |
| F14                                    | 377.643.8 | 587.883.4 |
| F15                                    | 377.585.8 | 587.711.1 |
| F16                                    | 377.588.9 | 587.626.4 |
| F17                                    | 377.632.7 | 587.525.4 |
| F18                                    | 377.679.7 | 587.360.9 |
| F19                                    | 377.903.3 | 587.299.4 |
| F20                                    | 377.903.9 | 587.075.8 |
| F21                                    | 377.941.0 | 587.005.8 |
| F22                                    | 377.943.6 | 586.976.1 |
| F23                                    | 377.926.3 | 586.903.7 |
| F24                                    | 377.898.2 | 586.875.6 |
| F25                                    | 377.819.6 | 586.843.0 |
| F26                                    | 377.520.4 | 586.851.5 |
| F27                                    | 377.471.0 | 586.820.9 |
| F28                                    | 377.491.0 | 586.784.1 |
| F29                                    | 377.530.2 | 586.891.2 |
| F30                                    | 377.828.9 | 586.792.8 |
| F31                                    | 377.926.6 | 586.833.2 |
| F32                                    | 377.971.6 | 586.876.4 |
| F33                                    | 377.994.1 | 586.972.4 |
| F34                                    | 377.999.9 | 587.026.3 |
| F35                                    | 377.953.9 | 587.086.3 |
| F36                                    | 377.953.3 | 587.308.7 |
| F37                                    | 377.920.7 | 587.393.7 |
| F38                                    | 377.672.7 | 587.555.9 |
| F39                                    | 377.636.5 | 587.637.7 |
| F40                                    | 377.636.1 | 587.703.8 |
| F41                                    | 377.691.9 | 587.849.2 |
| F42                                    | 377.731.3 | 588.034.9 |
| F43                                    | 377.808.1 | 588.220.5 |
| F44                                    | 377.839.7 | 588.262.3 |
| F45                                    | 377.889.0 | 588.280.2 |
| F46                                    | 378.031.7 | 588.321.9 |
| F47                                    | 378.078.0 | 588.500.1 |
| F48                                    | 377.848.8 | 588.810.9 |
| F49                                    | 377.549.9 | 590.130.2 |
| F50                                    | 377.468.9 | 590.699.6 |
| F51                                    | 377.357.2 | 592.207.9 |
| F52                                    | 377.391.3 | 592.657.5 |
| F53                                    | 377.632.1 | 593.939.8 |
| F54                                    | 377.664.3 | 595.218.9 |

| STATION | NORTHING  | EASTING   |
|---------|-----------|-----------|
| 0+00.0  | 378,026.0 | 588,486.1 |
| 1+49.3  | 378,171.7 | 588,518.5 |
| 2+92.9  | 378,220.4 | 588,383.3 |
| 4+00.0  | 378,280.2 | 588,294.5 |

| POINT | NORTHING  | EASTING   |
|-------|-----------|-----------|
| G1    | 378.063.2 | 588.443.2 |
| G2    | 378.139.6 | 588.400.1 |
| G3    | 378.175.4 | 588.360.5 |
| G4    | 378.238.7 | 588.266.5 |
| G5    | 378.321.6 | 588.322.4 |
| G6    | 378.265.3 | 588.406.0 |
| G7    | 378.203.9 | 588.576.8 |
| G8    | 378.046.7 | 588.541.9 |
| G9    | 378.078.0 | 588.500.1 |

| 102 CEDAR CREEK SPUR CHANNEL<br>SAMPLE LOCATION COORDINATES |           |           |
|---|-----------|-----------|
| BORING  | NORTHING  | EASTING   |
| 102-21-01   | 588,454.2 | 378,197.9 |
| 102-90  | 588,543.3 | 378,122.1 |
| 102-91  | 588,451.9 | 378,193.3 |

| 105 STOUTS CREEK CHANNEL<br>CENTERLINE COORDINATES |           |           |
|--|-----------|-----------|
| STATION  | NORTHING  | EASTING   |
| +0+00.0  | 367,485.6 | 594,780.8 |
| 19+95.2  | 368,352.8 | 592,983.9 |
| 25+85.6  | 368,552.1 | 592,428.1 |
| 31+07.6  | 368,751.3 | 591,945.7 |
| 38+36.4  | 368,982.4 | 591,254.5 |
| 40+11.8  | 368,996.1 | 591,079.6 |
| 42+43.4  | 369,120.6 | 590,884.3 |
| 43+53.3  | 369,183.1 | 590,782.8 |
| 44+57.9  | 369,115.1 | 590,690.1 |
| 46+23.0  | 368,981.4 | 590,593.1 |
| 47+65.5  | 368,909.6 | 590,439.0 |
| 48+90.8  | 368,928.9 | 590,335.9 |
| 50+00.0  | 368,931.4 | 590,229.9 |

| 105 STOUTS CREEK CHANNEL COORDINATES |           |           |  |
|--------------------------------------|-----------|-----------|--|
| POINT                                | NORTHING  | EASTING   |  |
| .J1                                  | 367.461.9 | 594.714.8 |  |
| .J2                                  | 368.306.6 | 592.964.6 |  |
| .J3                                  | 368.505.4 | 592.440.0 |  |
| .J4                                  | 368.704.4 | 591.928.2 |  |
| .J5                                  | 368.931.3 | 591.244.5 |  |
| .J6                                  | 368.971.6 | 591.071.4 |  |
| .J7                                  | 369.098.3 | 590.872.7 |  |
| .J8                                  | 369.135.5 | 590.784.0 |  |
| .J9                                  | 369.095.6 | 590.706.8 |  |
| .J10                                 | 368.960.3 | 590.608.6 |  |
| .J11                                 | 368.905.4 | 590.445.5 |  |
| .J12                                 | 368.883.4 | 590.336.8 |  |
| .J13                                 | 368.856.9 | 590.273.9 |  |
| .J14                                 | 368.865.9 | 590.234.1 |  |
| .J15                                 | 368.824.5 | 590.328.0 |  |
| .J16                                 | 368.953.8 | 590.432.6 |  |
| .J17                                 | 369.002.6 | 590.577.5 |  |
| .J18                                 | 369.134.6 | 590.873.3 |  |
| .J19                                 | 369.190.7 | 590.781.8 |  |
| .J20                                 | 369.142.8 | 590.886.0 |  |
| .J21                                 | 369.020.5 | 591.087.7 |  |
| .J22                                 | 369.031.8 | 591.264.5 |  |
| .J23                                 | 368.798.2 | 591.963.2 |  |
| .J24                                 | 368.598.7 | 592.446.1 |  |
| .J25                                 | 368.399.0 | 593.003.3 |  |
| .J26                                 | 367.952.7 | 594.756.6 |  |

| 105 STOUTS CREEK CHANNEL<br>SAMPLE LOCATION COORDINATES |           |           |
|---|-----------|-----------|
| BORING  | NORTHING  | EASTING   |
| 105-21-01   | 591,367.9 | 368,882.0 |
| 105-21-02   | 590,763.0 | 369,178.2 |
| 105-21-03   | 590,474.0 | 368,941.3 |
| 105-23-01   | 591,375.0 | 368,908.0 |
| 105-23-02   | 590,780.5 | 369,180.5 |
| 105-23-03   | 590,473.7 | 368,937.4 |
| 105-90  | 591,856.0 | 368,788.6 |
| 105-91  | 591,597.9 | 368,874.4 |
| 105-92  | 591,155.1 | 369,009.8 |
| 105-93  | 590,936.0 | 369,103.5 |
| 105-94  | 590,636.5 | 369,062.9 |

| BERKELEY CHANNEL COMPLEX<br>HISTORIC RESOURCE COORDINATES |           |           |               |
|---|-----------|-----------|---------------|
| POINT   | NORTHING  | EASTING   | SUFFER RADIUS |
| NDEPPWW-02-038  | 376,154.0 | 501,209.7 | 150'          |
| NDEPPWW-02-039  | 376,094.3 | 501,108.4 | 150'          |
| NDEPPWW-02-040  | 376,968.8 | 506,992.3 | 150'          |
| NDEPPWW-02-044  | 369,349.2 | 503,215.4 | 150'          |
| NDEPPWW-02-045  | 369,675.0 | 503,180.4 | 150'          |
| NDEPPWW-02-046  | 369,518.3 | 506,176.8 | 150'          |
| NDEPPWW-02-048  | 369,274.8 | 507,037.0 | 150'          |
| NDEPPWW-02-049  | 370,436.3 | 503,811.9 | 150'          |
| NDEPPWW-02-050  | 385,153.8 | 504,349.9 | 150'          |
| NDEPPWW-02-068  | 382,007.3 | 503,243.0 | 150'          |
| NDEPPWW-02-072  | 376,161.3 | 507,274.8 | 150'          |
| NDEPPWW-02-073  | 373,004.1 | 506,063.9 | 150'          |

| 103 LAUREL HARBOR NORTH CHANNEL<br>CENTERLINE COORDINATES |           |           |
|---|-----------|-----------|
| STATION   | NORTHING  | EASTING   |
| 0+00.0  | 376.631.6 | 598.224.4 |
| 11+04.7   | 376.190.9 | 597.217.4 |
| 26+41.9   | 375.117.9 | 598.110.6 |
| 30+26.7   | 374.897.5 | 595.795.2 |
| 35+74.5   | 374.721.7 | 595.276.4 |
| 37+00.3   | 374.629.5 | 595.081.3 |
| 39+78.2   | 374.564.7 | 594.904.9 |
| 40+40.0   | 374.512.5 | 594.871.8 |

| 103 LAUREL HARBOR NORTH CHANNEL<br>COORDINATES |           |           |
|--|-----------|-----------|
| POINT  | NORTHING  | EASTING   |
| H1   | 598.553.9 | 598.171.1 |
| H2   | 596.148.7 | 597.239.8 |
| H3   | 595.079.2 | 596.142.6 |
| H4   | 594.852.4 | 595.818.0 |
| H5   | 594.675.2 | 595.295.1 |
| H6   | 594.583.3 | 595.100.6 |
| H7   | 594.523.6 | 594.938.0 |
| H8   | 594.499.1 | 594.893.0 |
| H9   | 594.525.8 | 594.850.7 |
| H10  | 594.805.8 | 594.871.7 |
| H11  | 594.675.6 | 595.061.9 |
| H12  | 594.768.1 | 595.257.6 |
| H13  | 594.942.5 | 595.772.4 |
| H14  | 595.155.5 | 596.078.6 |
| H15  | 596.233.1 | 597.183.1 |
| H16  | 596.665.0 | 598.175.8 |

| 103 LAUREL HARBOR NORTH CHANNEL<br>SAMPLE LOCATION COORDINATES |           |           |
|--|-----------|-----------|
| BORING   | NORTHING  | EASTING   |
| 103-21-01  | 596,119.5 | 375,227.9 |
| 103-21-02  | 595,269.4 | 374,735.6 |
| 103-23-01  | 596,079.1 | 375,145.8 |
| 103-23-02  | 595,267.5 | 374,739.4 |
| 103-90   | 596,768.5 | 375,756.1 |
| 103-91   | 596,461.5 | 375,452.7 |
| 103-92   | 596,174.7 | 375,151.9 |
| 103-93   | 595,887.6 | 374,930.7 |
| 103-94   | 595,565.1 | 374,848.5 |
| 103-95   | 595,097.1 | 374,590.6 |
| 103-96   | 594,928.5 | 374,607.0 |

| 106 SUNRISE BEACH CHANNEL<br>CENTERLINE COORDINATES |           |           |
|---|-----------|-----------|
| STATION   | NORTHING  | EASTING   |
| 0+00.0  | 367,124.8 | 594,614.6 |
| 12+27.0   | 367,485.9 | 593,441.9 |
| 17+30.6   | 367,471.9 | 592,938.5 |
| 20+37.6   | 367,429.9 | 592,634.4 |
| 24+31.3   | 367,496.4 | 592,246.3 |
| 28+54.3   | 367,502.5 | 591,823.4 |
| 32+59.5   | 367,518.2 | 591,418.4 |
| 34+34.1   | 367,537.7 | 591,245.0 |
| 34+90.0   | 367,593.6 | 591,245.5 |

| 106 SUNRISE BEACH CHANNEL COORDINATES |           |           |
|---------------------------------------|-----------|-----------|
| POINT                                 | NORTHING  | EASTING   |
| K1                                    | 367,093.8 | 594,546.3 |
| K2                                    | 367,436.7 | 593,435.0 |
| K3                                    | 367,422.0 | 592,942.6 |
| K4                                    | 367,379.4 | 592,633.5 |
| K5                                    | 367,446.4 | 592,341.7 |
| K6                                    | 367,452.5 | 591,822.1 |
| K7                                    | 367,468.3 | 591,414.7 |
| K8                                    | 367,526.9 | 591,234.9 |
| K9                                    | 367,593.7 | 591,235.5 |
| K10                                   | 367,593.5 | 591,255.5 |
| K11                                   | 367,570.0 | 591,255.3 |
| K12                                   | 367,568.1 | 591,422.2 |
| K13                                   | 367,552.5 | 591,824.7 |
| K14                                   | 367,546.3 | 592,250.0 |
| K15                                   | 367,480.5 | 592,635.2 |
| K16                                   | 367,521.8 | 592,934.4 |
| K17                                   | 367,536.1 | 593,448.7 |
| K18                                   | 367,185.4 | 594,987.5 |

| STATION | NORTHING  | EASTING   |
|---------|-----------|-----------|
| 0+00.0  | 370.704.7 | 596.263.5 |
| 17+14.9 | 371.582.1 | 594.790.1 |
| 31+03.1 | 372.923.1 | 594.431.4 |
| 33+99.2 | 373.211.4 | 594.363.6 |
| 34+98.9 | 373.227.4 | 594.265.1 |
| 36+28.1 | 373.217.1 | 594.136.4 |
| 37+52.3 | 373.248.2 | 594.016.1 |
| 41+23.7 | 373.389.3 | 593.672.6 |
| 41+79.9 | 373.422.6 | 593.627.3 |
| 42+47.2 | 373.485.0 | 593.602.0 |
| 51+00.0 | 374.302.9 | 593.843.3 |

| 104 LAUREL HARBOR SOUTH CHANNEL COORDINATES |          |         |
|---|----------|---------|
| POINT                                       | NORTHING | EASTING |
| 11  | 370.684  | 596.193 |
| 12  | 371.549  | 594.747 |
| 13  | 372.911  | 594.382 |
| 14  | 373.019  | 594.389 |
| 15  | 373.028  | 594.347 |
| 16  | 376.207  | 594.264 |
| 17  | 373.196  | 594.134 |
| 18  | 373.292  | 594.009 |
| 19  | 373.317  | 593.662 |
| 20  | 373.409  | 593.610 |
| 110   | 373.403  | 593.569 |
| 111   | 376.308  | 593.624 |
| 112   | 376.297  | 593.662 |
| 113   | 374.480  | 593.623 |
| 114   | 375.436  | 593.643 |
| 115   | 376.408  | 593.662 |
| 116   | 377.267  | 594.024 |
| 117   | 373.237  | 594.138 |
| 119   | 374.245  | 594.265 |
| 120   | 373.229  | 594.380 |
| 121   | 372.022  | 594.428 |
| 122   | 372.935  | 594.479 |
| 123   | 371.617  | 594.833 |
| 124   | 376.776  | 596.241 |

| 104 LAUREL HARBOR SOUTH CHANNEL<br>SAMPLE LOCATION COORDINATES |           |           |
|--|-----------|-----------|
| BORING   | NORTHING  | EASTING   |
| 104-21-01  | 594.360.6 | 373.131.5 |
| 104-21-02  | 593.874.6 | 373.315.5 |
| 104-21-03  | 593.673.2 | 373.810.5 |
| 104-23-01  | 594.375.7 | 373.082.3 |
| 104-23-02  | 593.870.1 | 373.316.4 |
| 104-23-03  | 593.685.8 | 373.792.9 |
| 104-91   | 594.578.8 | 372.413.6 |
| 104-94   | 594.533.2 | 372.710.5 |
| 104-92   | 594.424.7 | 372.959.5 |
| 104-93   | 594.146.1 | 373.236.6 |
| 104-94   | 593.605.8 | 373.477.4 |
| 104-95   | 593.779.9 | 374.136.8 |

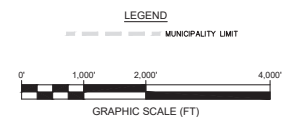
| 107 SUNRISE BEACH SPUR CHANNEL<br>CENTERLINE COORDINATES |           |           |
|--|-----------|-----------|
| STATION  | NORTHING  | EASTING   |
| 0+00.0   | 367,502.5 | 591,823.4 |
| 2+89.9   | 367,265.4 | 591,656.5 |
| 4+20.0   | 367,215.1 | 591,536.5 |

| 107 SUNRISE BEACH SPUR CHANNEL<br>COORDINATES |           |           |
|---|-----------|-----------|
| POINT   | NORTHING  | EASTING   |
| L1  | 367,452.1 | 591,849.1 |
| L2  | 367,224.9 | 591,689.1 |
| L3  | 367,192.0 | 591,546.2 |
| L4  | 367,238.1 | 591,526.9 |
| L5  | 367,306.0 | 591,623.9 |
| L6  | 367,456.1 | 591,729.6 |
| L7  | 367,452.5 | 591,822.1 |



|                          |                          |  |   |   |
|--------------------------|--------------------------|--|---|---|
| BY: <b>ADPR</b>          | DATE: <b>JAN 11 2011</b> | DESCRIPTION: <b>OPEN CHANNEL C&amp;P</b> | STATE OF NEW JERSEY<br>NJDOT OFFICE OF MARITIME RESOURCES   |   |
|                          |                          |  | TITLE: <b>BERKELEY CHANNEL COMPLEX<br/>CHANNEL GEOMETRY &amp; SAMPLING COORDINATE TABLES</b>                          |   |
|                          |                          |  | PROJECT: <b>MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS FOR THE BERKELEY CHANNEL COMPLEX, CHANNEL NOS. 096-107.</b> |   |
|                          |                          |  | TOWNSHIP OF LACEY, TOWNSHIP OF BERKELEY, OCEAN COUNTY, NEW JERSEY   |   |
| DATE: <b>JAN 11 2011</b> | REV: <b>1</b>            | DESCRIPTION: <b>OPEN CHANNEL C&amp;P</b> | DRAWN BY: <b>PR</b><br>CHECKED BY: <b>JAM</b><br>SCALE: <b>AS SHOWN</b><br>DATE: <b>APRIL 2004</b>                    | WSP USA Inc.<br>CERTIFICATE OF AUTHORIZATION<br>NO. 26A280202800<br>MICHAEL J. MARANO<br>NEW JERSEY PROFESSIONAL ENGINEER<br>NO. 26A060087500 |
|                          |                          |  | PROJECT NO.   | SHEET 15 OF 39  |
|                          |                          |  | DWG. NO. PERMIT - 14  |   |

C:\Users\GBAD233\OneDrive - Galogon and Brant Associates\Documents - NJDOT\Shared-Library\Stouls Creek - Berkeley Channel Permitting\Permit Plans\DWG\Berkeley Channel Complex Geom and Bathy Plans - PERMIT REV1.dwg



JACOB MCTAVISH  
NJ PE NO. 24GE05777100

|      |         |               |             |
|------|---------|---------------|-------------|
| BY   | DATE    | DESCRIPTION   | PROJECT NO. |
| JAM  | 4/24/24 | 097-107 CREEK |             |
| DATE | 4/24/24 |               |             |
| REV  | 1       |               |             |

|                  |  |                                  |             |
|------------------|--|----------------------------------|-------------|
| DRAWN BY: PR     |  | WSP USA Inc.                     | PROJECT NO. |
| CHECKED BY: JAM  |  | CERTIFICATION OF AUTHORIZATION   |             |
| SCALE: AS SHOWN  |  | NO. 24GA28028600                 |             |
| DATE: APRIL 2024 |  | MICHAEL J. MARANO                |             |
|                  |  | NEW JERSEY PROFESSIONAL ENGINEER |             |
|                  |  | NO. 24GE04087500                 |             |

|                     |  |
|---------------------|--|
| SHEET 16 OF 39      |  |
| DWG. NO. PERMIT -15 |  |

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MATCHLINE - SEE SHEET 18

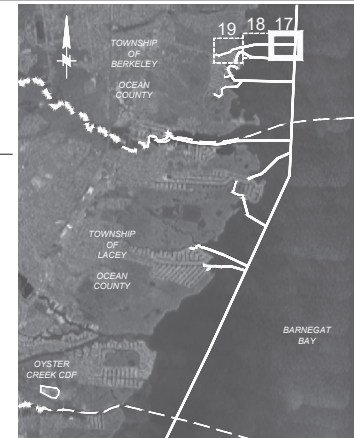
TOWNSHIP  
OF  
BERKELEY  
  
OCEAN  
COUNTY

CLAMMING CREEK NORTH CHANNEL

BARNEGAT  
BAY

APPROX. PIPELINE LOCATION

USACE FEDERAL CHANNEL



PROJECT LOCATION MAP

SCALE: 1" = 5000'

| CLAMMING CREEK NORTH |        |
|----------------------|--------|
| 0+00.0 to 65+40.0    |        |
| TEMPLATE (+5 MLW)    | 15.715 |
| OVERDEPTH (+5 MLW)   | 8.910  |
| TOTAL (+5)           | 18.185 |

NOTES:

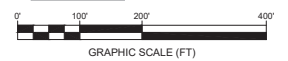
1. VERTICAL DATUM IS IN REFERENCE TO MEAN LOW WATER (MLW). MLW IS 0.42 FEET BELOW THE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88). INFORMATION OBTAINED FROM NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION (NOAA) DATUM TRANSFORMATION PROGRAM, VERSION 4.6.1.
2. COORDINATES ARE EXPRESSED IN FEET AND REFER TO THE NEW JERSEY STATE PLANE GRID COORDINATE SYSTEM NORTH AMERICAN DATUM OF 1983 (NAD83).
3. CONDITIONAL (CND) SOUNDING DATA SHOWN WAS COLLECTED ON AUGUST 02, 2023 BY GAHAGAN & BRYANT ASSOCIATES (GBA) AND INDICATES DEPTH BELOW MLW.
4. THE INFORMATION DEPICTED ON THIS PLAN REPRESENTS THE RESULTS OF SURVEYS CONDUCTED ON THE ABOVE DATES AND SHOULD BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
5. EXISTING SHORELINE, DOCK, & PILING LOCATIONS BASED ON GOOGLE MAPS AERIAL IMAGERY DATED APRIL, 2021 AND SHOULD BE CONSIDERED APPROXIMATE.

LEGEND

- CHANNEL CENTERLINE
- CHANNEL LIMITS
- FEDERAL CHANNEL CENTERLINE
- FEDERAL CHANNEL LIMITS
- APPROXIMATE SHORELINE (MHWL)
- APPROXIMATE PIPELINE LOCATION
- EXISTING ROAD/PAVEMENT
- MUNICIPALITY LIMIT
- CHANNEL SAMPLE LOCATION
- HISTORIC RESOURCE AND BUFFER

|             |
|-------------|
| 0.83 MGDW   |
| 0.69 MHW    |
| 0.42 NAVD88 |
| 0.35 MTL    |
| 0.00 MLW    |
| -0.08 MLW   |

RANGE OF TIDE (FT)  
NOT TO SCALE



STATE OF NEW JERSEY  
NJDOT OFFICE OF MARITIME RESOURCES

TITLE: CLAMMING CREEK NORTH  
CHANNEL BATHYMETRY PLAN

PROJECT: MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS FOR THE BERKELEY  
CHANNEL COMPLEX, CHANNEL NOS. 096-107.

TOWNSHIP OF LACEY, TOWNSHIP OF BERKELEY, OCEAN COUNTY, NEW JERSEY



GBA  
Gahagan & Bryant Associates, Inc.  
240 Morris Ave., Suite 200  
Fairfield, NJ 07004  
(908) 231-9800

JACOB MCTAVISH  
NJ PE NO. 24GE05777100

|  |                      |
|--|----------------------|
| DRAWN BY: PR   | PROJECT NO.          |
| WSP USA, Inc.<br>CERTIFICATION OF AUTHORIZATION<br>NO. 24GA28028600        | SHEET 17 OF 39       |
| CHECKED BY: JAM  | DWG. NO. PERMIT - 16 |
| SCALE: AS SHOWN  |                      |
| DATE: APRIL 2024   |                      |
| MICHAEL J. MARRANO<br>NEW JERSEY PROFESSIONAL ENGINEER<br>NO. 24GE04087500 |                      |



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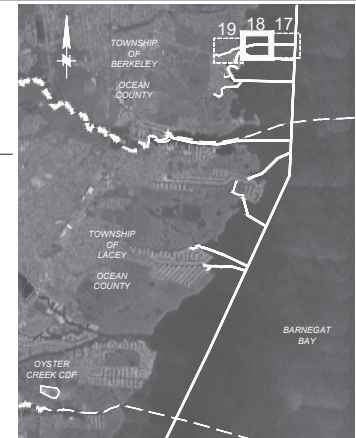
MATCHLINE - SEE SHEET 19

TOWNSHIP  
OF  
BERKELEY  
  
OCEAN  
COUNTY

CLAMMING CREEK NORTH CHANNEL

BARNEGAT  
BAY

CLAMMING CREEK SOUTH CHANNEL



PROJECT LOCATION MAP

SCALE: 1" = 5000'

| CLAMMING CREEK NORTH |        |
|----------------------|--------|
| 0+00.0 to 65+40.0    |        |
| TEMPLATE (± MLW)     | 15.75  |
| OVERDEPTH (± MLW)    | 8.910  |
| TOTAL (±)            | 18.180 |

NOTES:

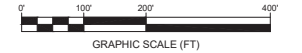
1. VERTICAL DATUM IS IN REFERENCE TO MEAN LOW WATER (MLW). MLW IS 0.42 FEET BELOW THE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88). INFORMATION OBTAINED FROM NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION (NOAA) DATUM TRANSFORMATION PROGRAM, VERSION 4.6.1.
2. COORDINATES ARE EXPRESSED IN FEET AND REFER TO THE NEW JERSEY STATE PLANE GRID COORDINATE SYSTEM NORTH AMERICAN DATUM OF 1983 (NAD83).
3. CONDITIONAL (CND) SOUNDING DATA SHOWN WAS COLLECTED ON AUGUST 02, 2023 BY GAHAGAN & BRYANT ASSOCIATES (GBA) AND INDICATES DEPTH BELOW MLW.
4. THE INFORMATION DEPICTED ON THIS PLAN REPRESENTS THE RESULTS OF SURVEYS CONDUCTED ON THE ABOVE DATES AND SHOULD BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
5. EXISTING SHORELINE, DOCK & PILING LOCATIONS BASED ON GOOGLE MAPS AERIAL IMAGERY DATED APRIL, 2021 AND SHOULD BE CONSIDERED APPROXIMATE.

LEGEND

- CHANNEL CENTERLINE
- CHANNEL LIMITS
- FEDERAL CHANNEL CENTERLINE
- FEDERAL CHANNEL LIMITS
- APPROXIMATE SHORELINE (MHWL)
- APPROXIMATE PIPELINE LOCATION
- EXISTING ROAD/PAVEMENT
- MUNICIPALITY LIMIT
- CHANNEL SAMPLE LOCATION
- HISTORIC RESOURCE AND BUFFER
- AREA PRESENTLY ABOVE TEMPLATE (ABOVE ELEV. -5 MLW)
- AREA PRESENTLY ABOVE OVERDEPTH (BETWEEN ELEV. -6 & -5 MLW)

RANGE OF TIDE (FT)  
NOT TO SCALE

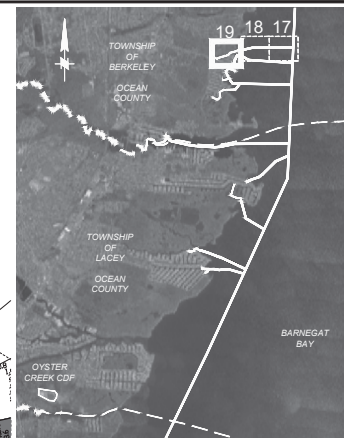
0.83 MLDOW  
0.69 MHW  
0.42 NAVD88  
0.35 MTL  
0.00 MLW  
-0.08 MLW



|  |  |   |  |                                  |  |
|--|--|---|--|----------------------------------|--|
| BY   |  | APPR  |  |                                  |  |
| JAM  |  | JAM   |  |                                  |  |
| DESCRIPTION                                  |  | DATE  |  | PROJECT                          |  |
| CLAMMING CREEK NORTH CHANNEL BATHYMETRY PLAN |  | 4/10/24   |  | NO. 24GA28028600                 |  |
| PROJECT:                                     |  | TOWNSHIP OF LACEY, TOWNSHIP OF BERKELEY, OCEAN COUNTY, NEW JERSEY |  | SHEET 18 OF 39                   |  |
| TITLE:                                       |  | STATE OF NEW JERSEY<br>NJDOT OFFICE OF MARITIME RESOURCES         |  | DWG. NO. PERMIT - 17             |  |
| DRAWN BY:                                    |  | WSP USA INC.  |  | PROJECT NO.                      |  |
| CHECKED BY:                                  |  | CERTIFICATION OF AUTHORIZATION                                    |  | NO. 24GA28028600                 |  |
| SCALE:                                       |  | AS SHOWN  |  | NEW JERSEY PROFESSIONAL ENGINEER |  |
| DATE:  |  | APRIL 2024  |  | NO. 24GE04087500                 |  |



JACOB MCTAVISH  
NJ PE NO. 24GE0577100









**PROJECT LOCATION MAP**  
SCALE: 1" = 5000'

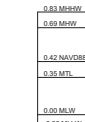
| CLAMMING CREEK NORTH<br>0+00.0 to 65+40.0 |        |
|---|--------|
| TEMPLATE (-5 MLW)                         | 10,770 |
| OVERDEPTH (-6 MLW)                        | 8,010  |
| TOTAL (CY)                                | 18,780 |

**NOTES:**

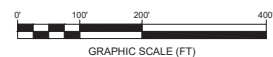
1. VERTICAL DATUM IS IN REFERENCE TO MEAN LOW WATER (MLW). MLW IS 0.42 FEET BELOW THE NORTH AMERICAN VERTICAL DATUM 1983 (NAVD83). INFORMATION OBTAINED FROM NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION (NOAA) VERTICAL DATUM TRANSFORMATION PROGRAM, VERSION 4.6.1.
2. COORDINATES ARE EXPRESSED IN FEET AND REFER TO THE NEW JERSEY STATE PLANE GRID COORDINATE SYSTEM NORTH AMERICAN DATUM OF 1983 (NAD83).
3. CONDITIONAL (CND) SOUNDING DATA SHOWN WAS COLLECTED ON AUGUST 02, 2023 BY GAHAGAN & BRYANT ASSOCIATES (GBA) AND INDICATES DEPTH BELOW MLW.
4. THE INFORMATION PROVIDED ON THIS PLAN REPRESENTS THE RESULTS OF SURVEYS CONDUCTED ON THE ABOVE DATES AND SHOULD BE USED IN CONJUNCTION WITH THE GENERAL CONDITIONS EXISTING AT THAT TIME.
5. EXISTING SURVEILLANCE, DOCK, & PILING LOCATIONS BASED ON GOOGLE MAPS AERIAL IMAGERY DATED APRIL, 2023, AND UNRECORDED APPROVED FOR CONSTRUCTION PERMITS.

LEGEND

-  CHANNEL CENTERLINE  
 CHANNEL LIMITS  
 FEDERAL CHANNEL CENTERLINE  
 FEDERAL CHANNEL LIMITS  
 APPROXIMATE SHORELINE (NAD 83)  
 APPROXIMATE PIPELINE LOCATION  
 EXISTING ROAD/PAVEMENT  
 MUNICIPALITY LIMIT  
 CHANNEL SAMPLE LOCATION



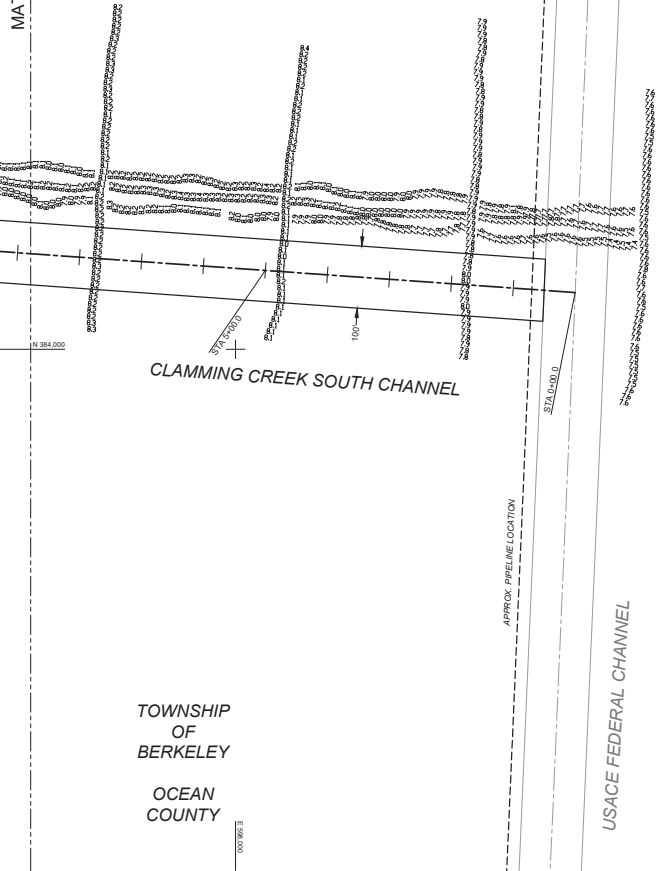
RANGE OF TIDE (FT)  
NOT TO SCALE



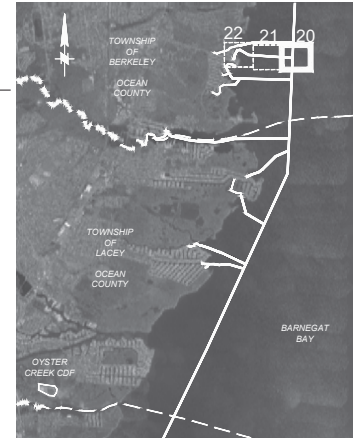
|                     |         |                                  |  |
|---------------------|---------|----------------------------------|--|
| BY                  | APPRO   |                                  |  |
| JAM                 | JAM     |                                  |  |
| DESCRIPTION         |         |                                  |  |
| OYSTER CREEK CDP    |         |                                  |  |
| REV.                | DATE    |                                  |  |
| 1                   | 8/27/24 |                                  |  |
| DRAWN BY: PR        |         | WSP USA Inc.                     |  |
| CHECKED BY: JAM     |         | CERTIFICATION OF AUTHORIZATION   |  |
| SCALE: AS SHOWN     |         | NO. 24GA28C028600                |  |
| DATE: APRIL 2, 2024 |         | MICHAEL J. MARANO                |  |
|                     |         | NEW JERSEY PROFESSIONAL ENGINEER |  |
|                     |         | NO. 24G000075000                 |  |
|                     |         | PROJECT NO.                      |  |
|                     |         | SHEET 19 OF 39                   |  |
|                     |         | DWG. NO. PERMIT -                |  |

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MATCHLINE - SEE SHEET 21



BARNEGAT  
BAY

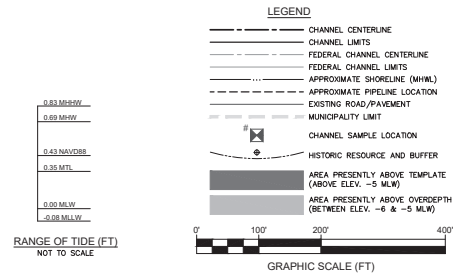


PROJECT LOCATION MAP  
SCALE: 1" = 5000'

| CLAMMING CREEK SOUTH<br>0+00.0 to 53+90.0 |       |
|---|-------|
| TEMPLATE (± MLW)                          | 4.75  |
| OVERDEPTH (± MLW)                         | 0.890 |
| TOTAL (±)                                 | 5.640 |

NOTES:

1. VERTICAL DATUM IS IN REFERENCE TO MEAN LOW WATER (MLW). MLW IS 0.43 FEET BELOW THE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88). INFORMATION OBTAINED FROM NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION (NOAA) DATUM TRANSFORMATION PROGRAM, VERSION 4.6.1.
2. COORDINATES ARE EXPRESSED IN FEET AND REFER TO THE NEW JERSEY STATE PLANE GRID COORDINATE SYSTEM NORTH AMERICAN DATUM OF 1983 (NAD83).
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4. THE INFORMATION DEPICTED ON THIS PLAN REPRESENTS THE RESULTS OF SURVEYS CONDUCTED ON THE ABOVE DATES AND SHOULD BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
5. EXISTING SHORELINE, DOCK, & PILING LOCATIONS BASED ON GOOGLE MAPS AERIAL IMAGERY DATED APRIL, 2021 AND SHOULD BE CONSIDERED APPROXIMATE.



RANGE OF TIDE (FT)  
NOT TO SCALE

GRAPHIC SCALE (FT)

|   |                      |
|---|----------------------|
| STATE OF NEW JERSEY<br>NJDOT OFFICE OF MARITIME RESOURCES   |                      |
| TITLE: CLAMMING CREEK SOUTH<br>CHANNEL BATHYMETRY PLAN  |                      |
| PROJECT: MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS FOR THE BERKELEY<br>CHANNEL COMPLEX, CHANNEL NOS. 096-107. |                      |
| TOWNSHIP OF LACEY, TOWNSHIP OF BERKELEY, OCEAN COUNTY, NEW JERSEY   |                      |
| DRAWN BY: PR  | PROJECT NO.          |
| CHECKED BY: JAM   | SHEET 20 OF 39       |
| SCALE: AS SHOWN   | DWG. NO. PERMIT - 19 |
| DATE: APRIL 2024  |                      |

|     |         |              |
|-----|---------|--------------|
| REV | DATE    | DESCRIPTION  |
| 1   | 8/07/24 | OVERBANK CDP |

|     |         |         |
|-----|---------|---------|
| BY  | DATE    | DATE    |
| JAM | 8/07/24 | 8/07/24 |

|                        |                                |
|------------------------|--------------------------------|
| GBA                    | WSP USA Inc.                   |
| JACOB MCTAVISH         | CERTIFICATION OF AUTHORIZATION |
| NJ PE NO. 24GE05777100 | NO. 24GA28028600               |
|                        | SCALE: AS SHOWN                |
|                        | DATE: APRIL 2024               |
|                        | NO. 24GE04087500               |

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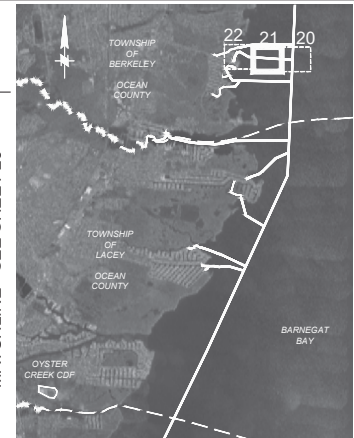
MATCHLINE - SEE SHEET 22

TOWNSHIP  
OF  
BERKELEY  
  
OCEAN  
COUNTY

CLAMMING CREEK SOUTH CHANNEL

BARNEGAT  
BAY

MATCHLINE - SEE SHEET 20



PROJECT LOCATION MAP  
SCALE: 1" = 5000'

| CLAMMING CREEK SOUTH<br>0+00.0 to 53+90.0 |      |
|---|------|
| TEMPLATE (+5 MLW)                         | 1.75 |
| OVERDEPTH (+5 MLW)                        | 0.80 |
| TOTAL (FT)                                | 2.55 |

NOTES:

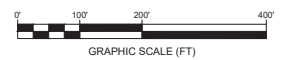
1. VERTICAL DATUM IS IN REFERENCE TO MEAN LOW WATER (MLW). MLW IS 0.43 FEET BELOW THE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88). INFORMATION OBTAINED FROM NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION (NOAA) DATUM TRANSFORMATION PROGRAM, VERSION 4.6.1.
2. COORDINATES ARE EXPRESSED IN FEET AND REFER TO THE NEW JERSEY STATE PLANE GRID COORDINATE SYSTEM NORTH AMERICAN DATUM OF 1983 (NAD83).
3. CONDITIONAL (CND) SOUNDING DATA SHOWN WAS COLLECTED ON AUGUST 02, 2023 BY GAHAGAN & BRYANT ASSOCIATES (GBA) AND INDICATES DEPTH BELOW MLW.
4. THE INFORMATION DEPICTED ON THIS PLAN REPRESENTS THE RESULTS OF SURVEYS CONDUCTED ON THE ABOVE DATES AND SHOULD BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
5. EXISTING SHORELINE, DOCK & PILING LOCATIONS BASED ON GOOGLE MAPS AERIAL IMAGERY DATED APRIL, 2021 AND SHOULD BE CONSIDERED APPROXIMATE.

LEGEND

- CHANNEL CENTERLINE
- CHANNEL LIMITS
- FEDERAL CHANNEL CENTERLINE
- FEDERAL CHANNEL LIMITS
- APPROXIMATE SHORELINE (MHWL)
- APPROXIMATE PIPELINE LOCATION
- EXISTING ROAD/PAVEMENT
- MUNICIPALITY LIMIT
- CHANNEL SAMPLE LOCATION
- HISTORIC RESOURCE AND BUFFER
- AREA PRESENTLY ABOVE TEMPLATE (ABOVE ELEV. -5 MLW)
- AREA PRESENTLY ABOVE OVERDEPTH (BETWEEN ELEV. -4 & -5 MLW)

|             |
|-------------|
| 0.83 MHWL   |
| 0.69 MHWL   |
| 0.43 NAVD88 |
| 0.35 MTL    |
| 0.00 MLW    |
| -0.08 MLW   |

RANGE OF TIDE (FT)  
NOT TO SCALE



| REV | DATE    | DESCRIPTION        | BY  | APPROVED |
|-----|---------|--------------------|-----|----------|
| 1   | 8/07/24 | OVERBANK CREEK CDP | JAM | NAM      |



JACOB MCTAVISH  
NJ PE NO. 24GE05777100

|   |                      |
|---|----------------------|
| STATE OF NEW JERSEY<br>NJDOT OFFICE OF MARITIME RESOURCES   |                      |
| TITLE: CLAMMING CREEK SOUTH<br>CHANNEL BATHYMETRY PLAN  |                      |
| PROJECT: MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS FOR THE BERKELEY<br>CHANNEL COMPLEX, CHANNEL NOS. 096-107. |                      |
| TOWNSHIP OF LACEY, TOWNSHIP OF BERKELEY, OCEAN COUNTY, NEW JERSEY   |                      |
| DRAWN BY: PR  | PROJECT NO.          |
| CHECKED BY: JAM   | SHEET 21 OF 39       |
| SCALE: AS SHOWN   | DWG. NO. PERMIT - 20 |
| DATE: APRIL 2024  |                      |





**NOTES:**

1. VERTICAL DATUM IS IN REFERENCE TO MEAN LOW WATER (MLW). MLW IS 0.43 FEET BELOW THE NORTH AMERICAN VERTICAL DATUM 1983 (NAVD83). INFORMATION OBTAINED FROM NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION (NOAA) VERTICAL DATUM TRANSFORMATION PROGRAM, VERSION 4.6.1.
2. COORDINATES ARE EXPRESSED IN FEET AND REFER TO THE NEW JERSEY STATE PLANE GRID COORDINATE SYSTEM NORTH AMERICAN DATUM OF 1983 (NAD83).
3. CONDITIONAL (CND) SOUNDING DATA SHOWN WAS COLLECTED ON AUGUST 02, 2023 BY GAHAGAN & BRYANT ASSOCIATES (GBA) AND INDICATES DEPTH BELOW MLW.
4. THE INFORMATION PROVIDED ON THIS PLAN REPRESENTS THE RESULTS OF SURVEYS CONDUCTED ON THE ABOVE DATES AND SHOULD BE USED IN CONJUNCTION WITH THE GENERAL CONDITIONS EXISTING AT THAT TIME.
5. EXISTING SHORELINE, DOCK, & PILING LOCATIONS BASED ON GOOGLE MAPS AERIAL IMAGERY DATED APRIL, 2023, AND UNRECORDED APPROVED FOR CONSTRUCTION PERMITS.

MATCHLINE - SEE SHEET 21

|             |
|-------------|
| 0.83 MHW    |
| 0.69 MHW    |
| 0.43 NAVD88 |
| 0.35 MTL    |
| 0.00 MLW    |
| -0.08 MLW   |

RANGE OF TIDE (FT)  
NOT TO SCALE

LEGEND

- 
- CHANNEL CENTERLINE  
 CHANNEL LIMITS  
 FEDERAL CHANNEL CENTERLINE  
 FEDERAL CHANNEL LIMITS  
 APPROXIMATE SHOULDER (MHW)  
 APPROXIMATE PIPELINE LOCATION  
 EXISTING ROAD/PAVEMENT  
 MUNICIPALITY LIMIT  
 CHANNEL SAMPLE LOCATION  
 HISTORIC RESOURCE AND BUFFER  
 AREA PRESENTLY ABOVE TEMPLATE  
 (ABOVE ELEV. -5 MLW)  
 AREA PRESENTLY ABOVE OVERDEPTH  
 (BETWEEN ELEV. -6 & -5 MLW)
- GRAPHIC SCALE (FT)

STATE OF NEW JERSEY  
NJDOT OFFICE OF MARITIME RESOURCES

TITLE: CLAMMING CREEK SOUTH  
CHANNEL BATHYMETRY PLAN

PROJECT: MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS FOR THE BERKELEY CHANNEL COMPLEX, CHANNEL NOS. 096-107.

TOWNSHIP OF LACEY, TOWNSHIP OF BERKELEY, OCEAN COUNTY, NEW JERSEY

|                  |   |
|------------------|---|
| DRAWN BY: PR     | WSP USA Inc.  |
| CHECKED BY: JAM  | CERTIFICATION OF AUTHORIZATION<br>NO. 24GA28029800    |
| SCALE: AS SHOWN  | MICHAEL J. MARANO<br>NEW JERSEY PROFESSIONAL ENGINEER |
| DATE: APRIL 2024 | NO. 24GE04087500                                      |

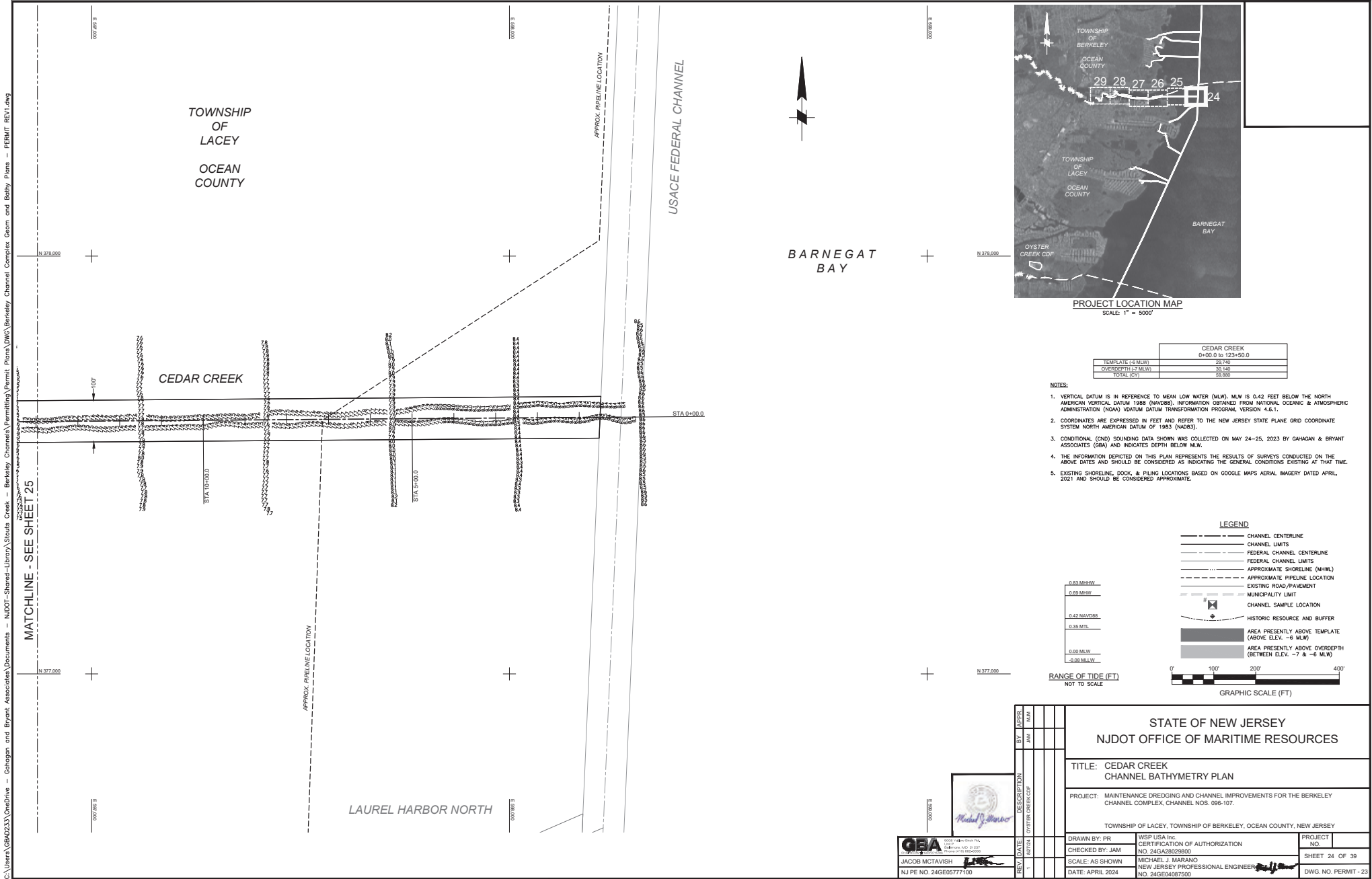
SHEET 22 OF 39

DWG. NO. PERMIT

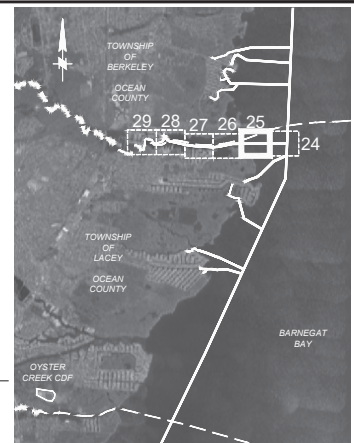
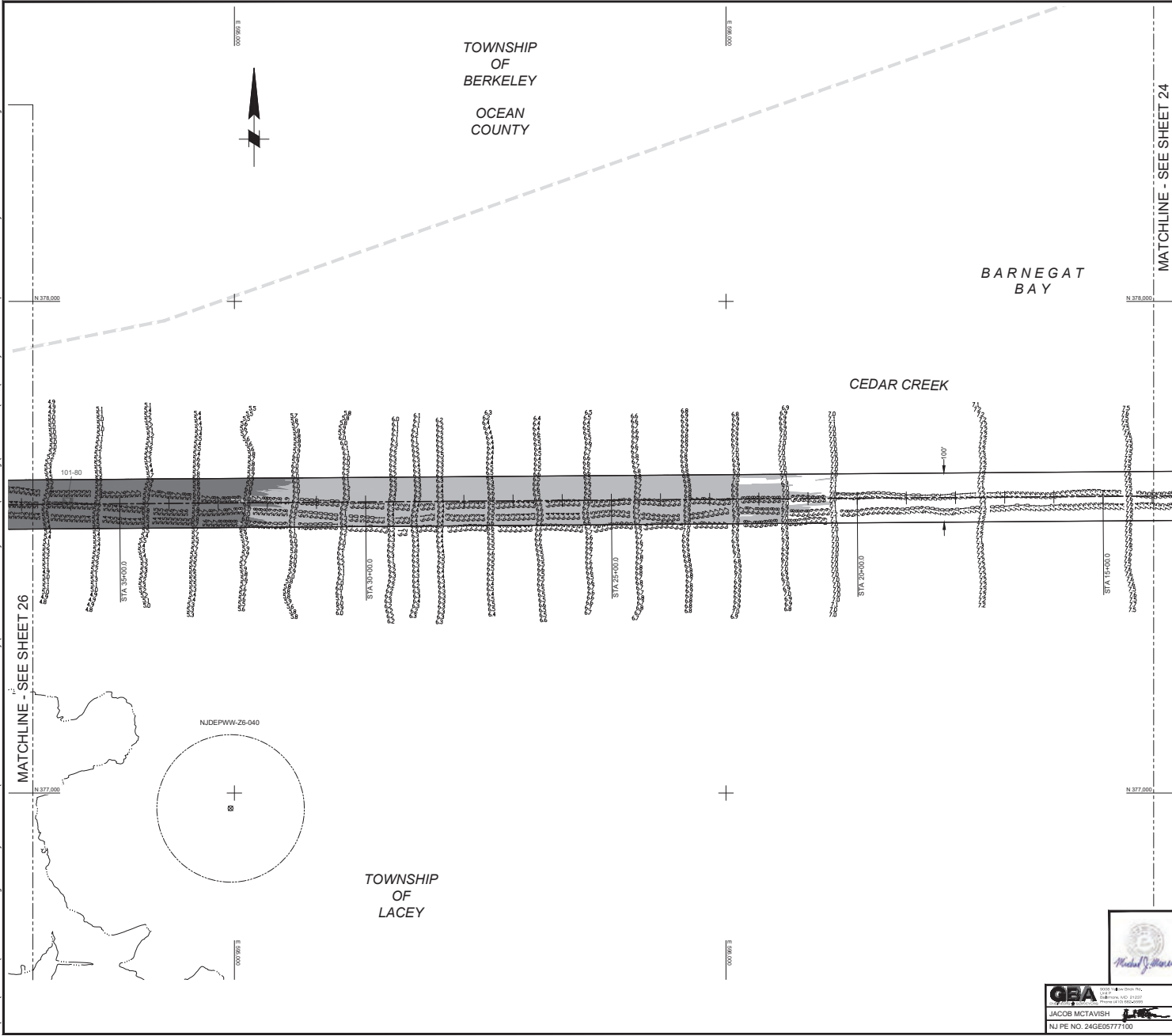
|                  |  |                      |
|------------------|--|----------------------|
| DATE: APRIL 2024 | NEW JERSEY PROFESSIONAL ENGINEER<br>NO. 24GE04087500 | DWG. NO. PERMIT - 21 |
|------------------|--|----------------------|



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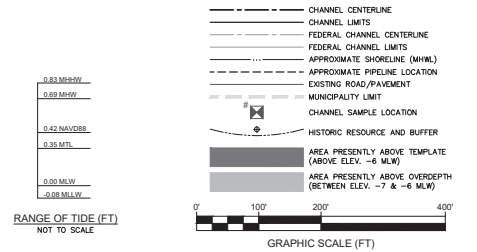
PROJECT LOCATION MAP  
SCALE: 1" = 5000'

| CEDAR CREEK<br>0+00.0 to 123+50.0 |        |
|-----------------------------------|--------|
| TEMPLATE (+6 MLW)                 | 37.15  |
| OVERDEPTH (+7 MLW)                | 30.149 |
| TOTAL (57)                        | 67.299 |

NOTES:

1. VERTICAL DATUM IS IN REFERENCE TO MEAN LOW WATER (MLW). MLW IS 0.42 FEET BELOW THE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88). INFORMATION OBTAINED FROM NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION (NOAA) DATUM TRANSFORMATION PROGRAM, VERSION 4.6.1.
2. COORDINATES ARE EXPRESSED IN FEET AND REFER TO THE NEW JERSEY STATE PLANE GRID COORDINATE SYSTEM NORTH AMERICAN DATUM OF 1983 (NAD83).
3. CONDITIONAL (CND) SOUNDING DATA SHOWN WAS COLLECTED ON MAY 24-25, 2023 BY CHAGAN & BRYANT ASSOCIATES (GBA) AND INDICATES DEPTH BELOW MLW.
4. THE INFORMATION DEPICTED ON THIS PLAN REPRESENTS THE RESULTS OF SURVEYS CONDUCTED ON THE ABOVE DATES AND SHOULD BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
5. EXISTING SHORELINE, DOCK, & PILING LOCATIONS BASED ON GOOGLE MAPS AERIAL IMAGERY DATED APRIL, 2021 AND SHOULD BE CONSIDERED APPROXIMATE.

LEGEND



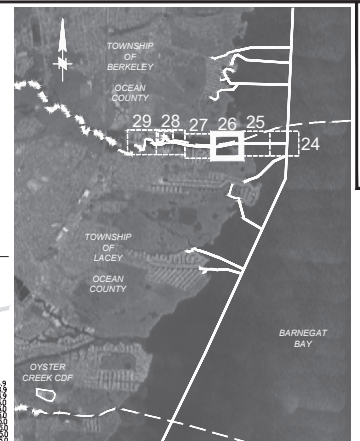
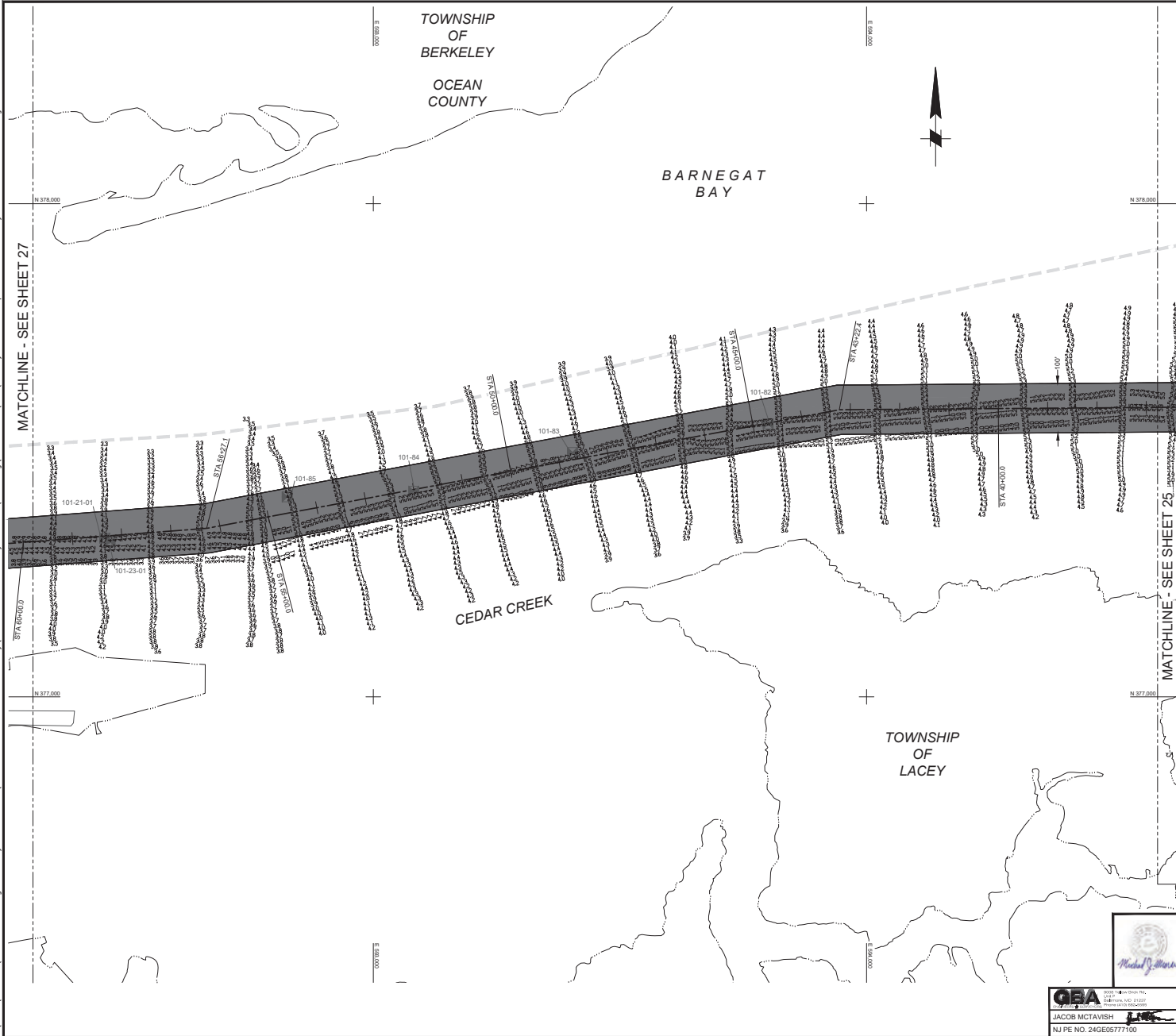
|   |                      |
|---|----------------------|
| STATE OF NEW JERSEY<br>NJDOT OFFICE OF MARITIME RESOURCES   |                      |
| TITLE: CEDAR CREEK<br>CHANNEL BATHYMETRY PLAN   |                      |
| PROJECT: MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS FOR THE BERKELEY<br>CHANNEL COMPLEX, CHANNEL NOS. 096-107. |                      |
| TOWNSHIP OF LACEY, TOWNSHIP OF BERKELEY, OCEAN COUNTY, NEW JERSEY   |                      |
| DRAWN BY: PR  | PROJECT NO.          |
| CHECKED BY: JAM   | SHEET 25 OF 39       |
| SCALE: AS SHOWN   | DWG. NO. PERMIT - 24 |
| DATE: APRIL 2024  |                      |

|  |                      |
|--|----------------------|
| WSP USA Inc.<br>CERTIFICATION OF AUTHORIZATION<br>NO. 24GA28028600 | PROJECT NO.          |
| MICHAEL J. MARRANO<br>NEW JERSEY PROFESSIONAL ENGINEER             | SHEET 25 OF 39       |
| NO. 24GE04087500   | DWG. NO. PERMIT - 24 |

GBA  
Geotechnical & Bathymetry Associates, Inc.  
1000 New York Ave., Suite 200  
New York, NY 10002  
(212) 694-0000  
JACOB MCTAVISH  
NJ PE NO. 24GE05777100



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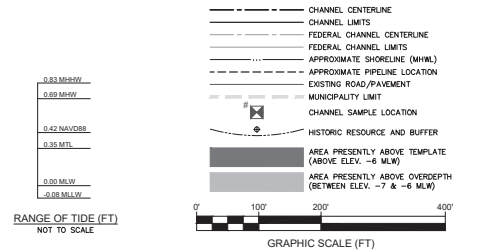
PROJECT LOCATION MAP  
SCALE: 1" = 5000'

| CEDAR CREEK        |        |
|--------------------|--------|
| 0+00.0 to 123+50.0 |        |
| TEMPLATE (+6 MLW)  | 37.15  |
| OVERDEPTH (+7 MLW) | 30.149 |
| TOTAL (CY)         | 38.689 |

NOTES:

1. VERTICAL DATUM IS IN REFERENCE TO MEAN LOW WATER (MLW). MLW IS 0.42 FEET BELOW THE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88). INFORMATION OBTAINED FROM NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION (NOAA) DATUM TRANSFORMATION PROGRAM, VERSION 4.6.1.
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5. EXISTING SHORELINE, DOCK, & PILING LOCATIONS BASED ON GOOGLE MAPS AERIAL IMAGERY DATED APRIL, 2021 AND SHOULD BE CONSIDERED APPROXIMATE.

LEGEND



RANGE OF TIDE (FT)  
NOT TO SCALE

STATE OF NEW JERSEY  
NJDOT OFFICE OF MARITIME RESOURCES

TITLE: CEDAR CREEK  
CHANNEL BATHYMETRY PLAN

PROJECT: MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS FOR THE BERKELEY  
CHANNEL COMPLEX, CHANNEL NOS. 096-107.

TOWNSHIP OF LACEY, TOWNSHIP OF BERKELEY, OCEAN COUNTY, NEW JERSEY

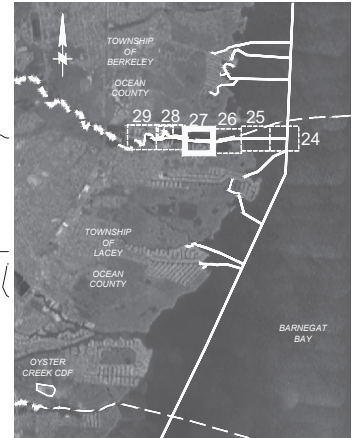
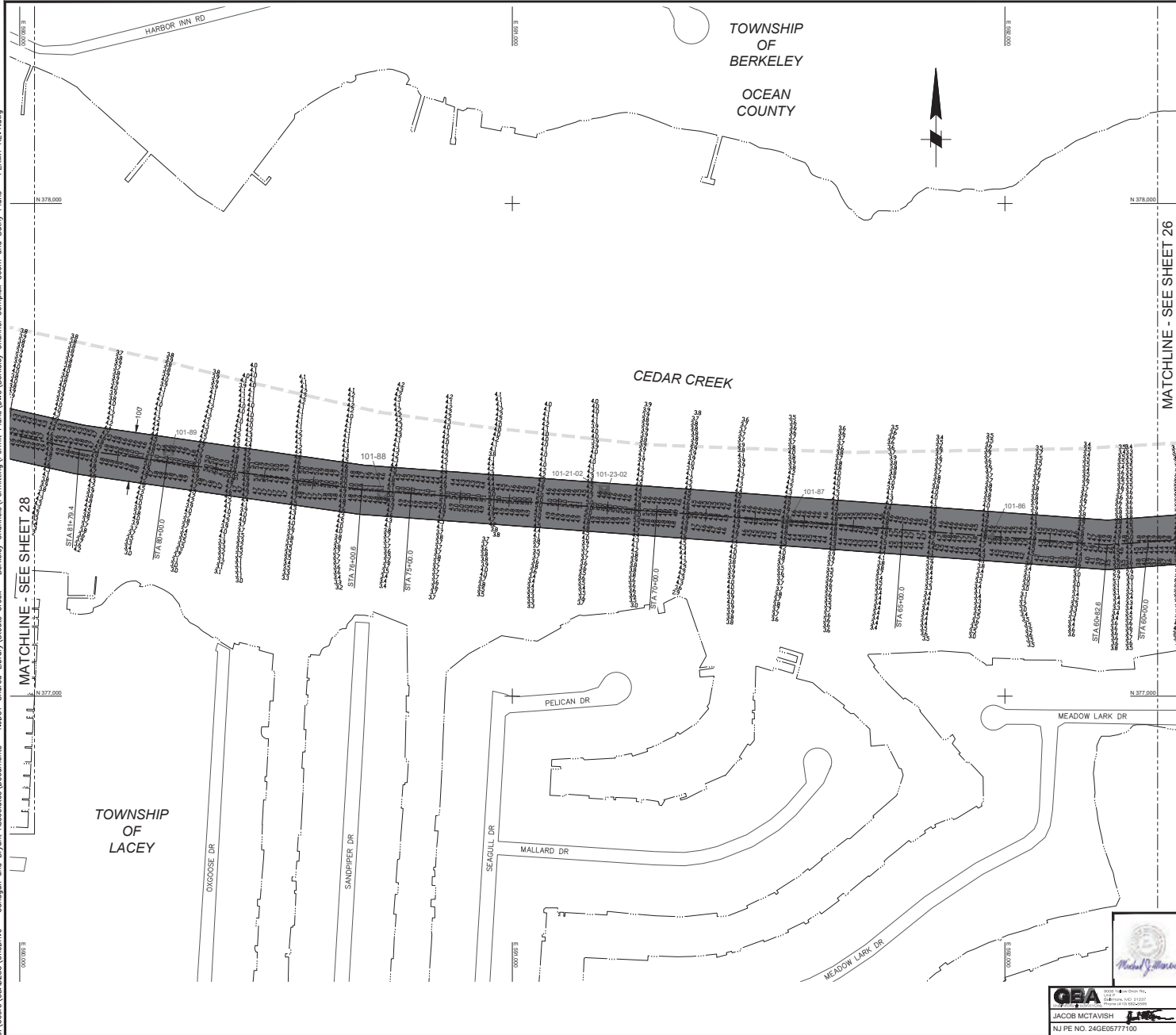


JACOB MCTAVISH  
NJ PE NO. 24GE05777100

DRAWN BY: PR  
WSP USA Inc.  
CERTIFICATION OF AUTHORIZATION  
NO. 24GA28028600  
CHECKED BY: JAM  
MICHAEL J. MARRANO  
SCALE: AS SHOWN  
NEW JERSEY PROFESSIONAL ENGINEER  
DATE: APRIL 2024  
NO. 24GE04087500

PROJECT  
NO.  
SHEET 26 OF 39  
DWG. NO. PERMIT - 25

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PROJECT LOCATION MAP  
SCALE: 1" = 500'

| CEDAR CREEK        |        |
|--------------------|--------|
| TEMPLATE (+6 MLW)  | 37.15  |
| OVERDEPTH (+7 MLW) | 30.149 |
| TOTAL (CY)         | 38.689 |

NOTES:

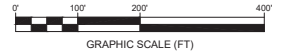
1. VERTICAL DATUM IS IN REFERENCE TO MEAN LOW WATER (MLW). MLW IS 0.42 FEET BELOW THE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88). INFORMATION OBTAINED FROM NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION (NOAA) DATUM TRANSFORMATION PROGRAM, VERSION 4.6.1.
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4. THE INFORMATION DEPICTED ON THIS PLAN REPRESENTS THE RESULTS OF SURVEYS CONDUCTED ON THE ABOVE DATES AND SHOULD BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
5. EXISTING SHORELINE, DOCK, & PILING LOCATIONS BASED ON GOOGLE MAPS AERIAL IMAGERY DATED APRIL, 2021 AND SHOULD BE CONSIDERED APPROXIMATE.

LEGEND

- CHANNEL CENTERLINE
- CHANNEL LIMITS
- FEDERAL CHANNEL CENTERLINE
- FEDERAL CHANNEL LIMITS
- APPROXIMATE SHORELINE (NAD83)
- APPROXIMATE PIPELINE LOCATION
- EXISTING ROAD/PAVEMENT
- MUNICIPALITY LIMIT
- CHANNEL SAMPLE LOCATION
- HISTORIC RESOURCE AND BUFFER
- AREA PRESENTLY ABOVE TEMPLATE (ABOVE ELEV. -6 MLW)
- AREA PRESENTLY ABOVE OVERDEPTH (BETWEEN ELEV. -7 & -6 MLW)

|             |
|-------------|
| 0.83 MGDW   |
| 0.69 MGDW   |
| 0.42 NAVD88 |
| 0.35 MFL    |
| 0.00 MLW    |
| -0.08 MLW   |

RANGE OF TIDE (FT)  
NOT TO SCALE



|  |                      |
|--|----------------------|
| STATE OF NEW JERSEY<br>NJDOT OFFICE OF MARITIME RESOURCES  |                      |
| TITLE: CEDAR CREEK<br>CHANNEL BATHYMETRY PLAN  |                      |
| PROJECT: MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS FOR THE BERKELEY CHANNEL COMPLEX, CHANNEL NOS. 098-107. |                      |
| TOWNSHIP OF LACEY, TOWNSHIP OF BERKELEY, OCEAN COUNTY, NEW JERSEY  |                      |
| DRAWN BY: PR   | PROJECT NO.          |
| CHECKED BY: JAM  | SHEET 27 OF 39       |
| SCALE: AS SHOWN  | DWG. NO. PERMIT - 26 |
| DATE: APRIL 2024   |                      |

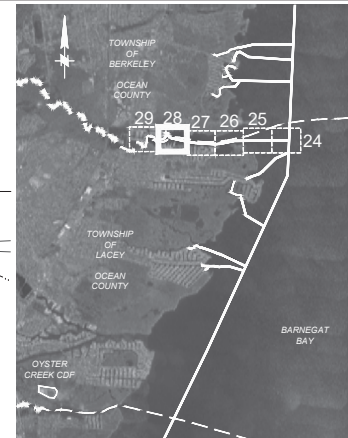
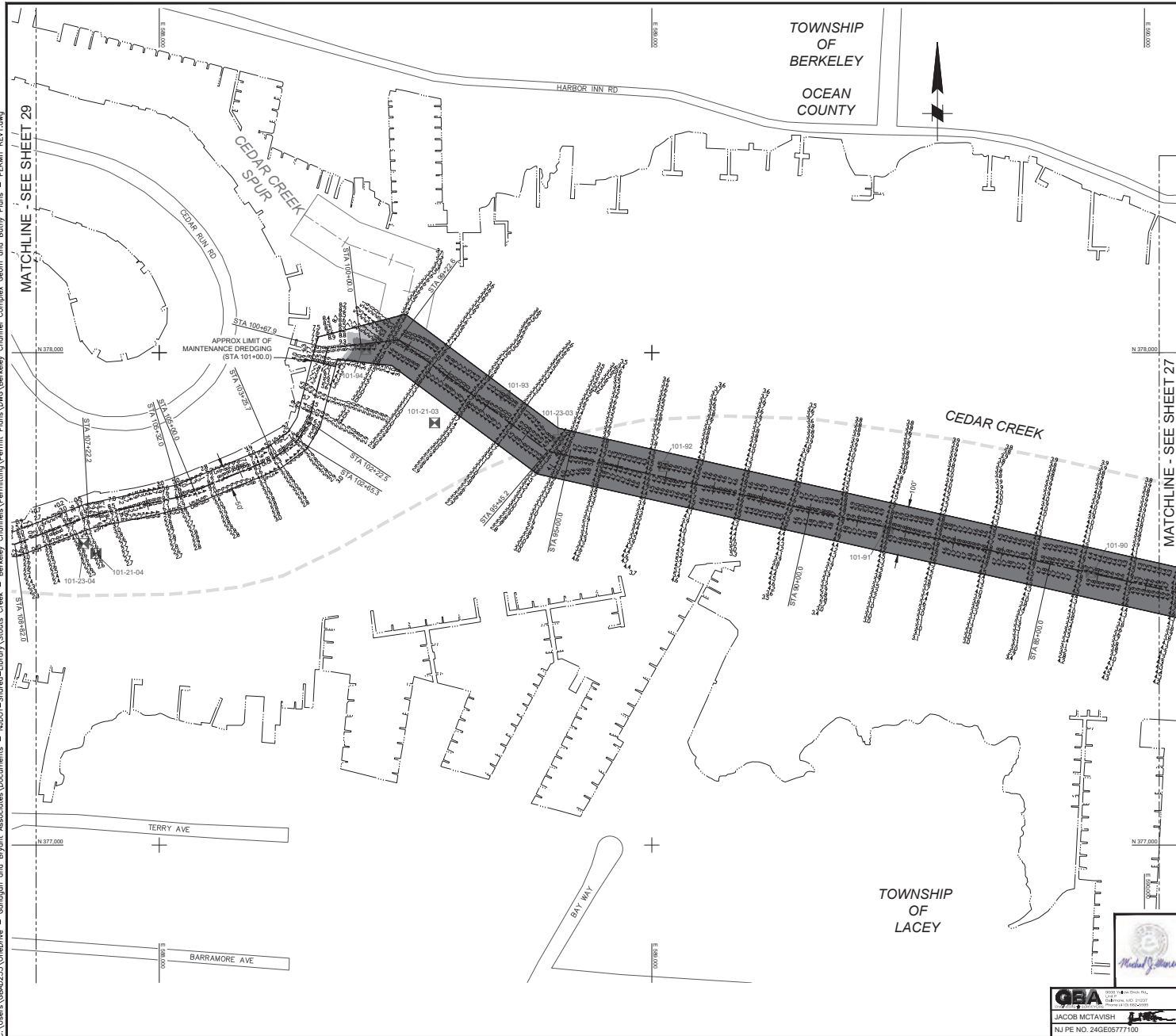
|     |         |               |
|-----|---------|---------------|
| BY  | DATE    | DESCRIPTION   |
| JAM | 4/24/24 | OVERBANK/DOCK |
| PR  | 4/24/24 | OVERBANK/DOCK |

|     |         |               |
|-----|---------|---------------|
| REV | DATE    | DESCRIPTION   |
| 1   | 4/24/24 | OVERBANK/DOCK |

|                 |                  |
|-----------------|------------------|
| NO.             | NO.              |
| 24GA28028600    | 24GA28028600     |
| NO. 24GE0577100 | NO. 24GE04087500 |

|                 |                  |
|-----------------|------------------|
| NO.             | NO.              |
| 24GA28028600    | 24GA28028600     |
| NO. 24GE0577100 | NO. 24GE04087500 |

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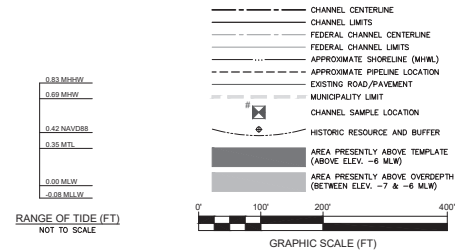
PROJECT LOCATION MAP  
SCALE: 1" = 500'

|                    | CEDAR CREEK<br>0+00.0 to 123+50.0 |
|--------------------|-----------------------------------|
| TEMPLATE (+6 MLW)  | 33.145                            |
| OVERDEPTH (+7 MLW) | 30.145                            |
| TOTAL (+5)         | 33.685                            |

NOTES:

- VERTICAL DATUM IS IN REFERENCE TO MEAN LOW WATER (MLW). MLW IS 0.42 FEET BELOW THE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88). INFORMATION OBTAINED FROM NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION (NOAA) DATUM TRANSFORMATION PROGRAM, VERSION 4.6.1.
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- EXISTING SHORELINE, DOCK, & PILING LOCATIONS BASED ON GOOGLE MAPS AERIAL IMAGERY DATED APRIL, 2021 AND SHOULD BE CONSIDERED APPROXIMATE.

LEGEND



STATE OF NEW JERSEY  
NJDOT OFFICE OF MARITIME RESOURCES

TITLE: CEDAR CREEK  
CHANNEL BATHYMETRY PLAN

PROJECT: MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS FOR THE BERKELEY CHANNEL COMPLEX, CHANNEL NOS. 096-107.

TOWNSHIP OF LACEY, TOWNSHIP OF BERKELEY, OCEAN COUNTY, NEW JERSEY

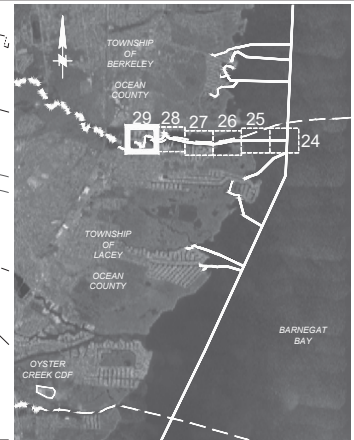
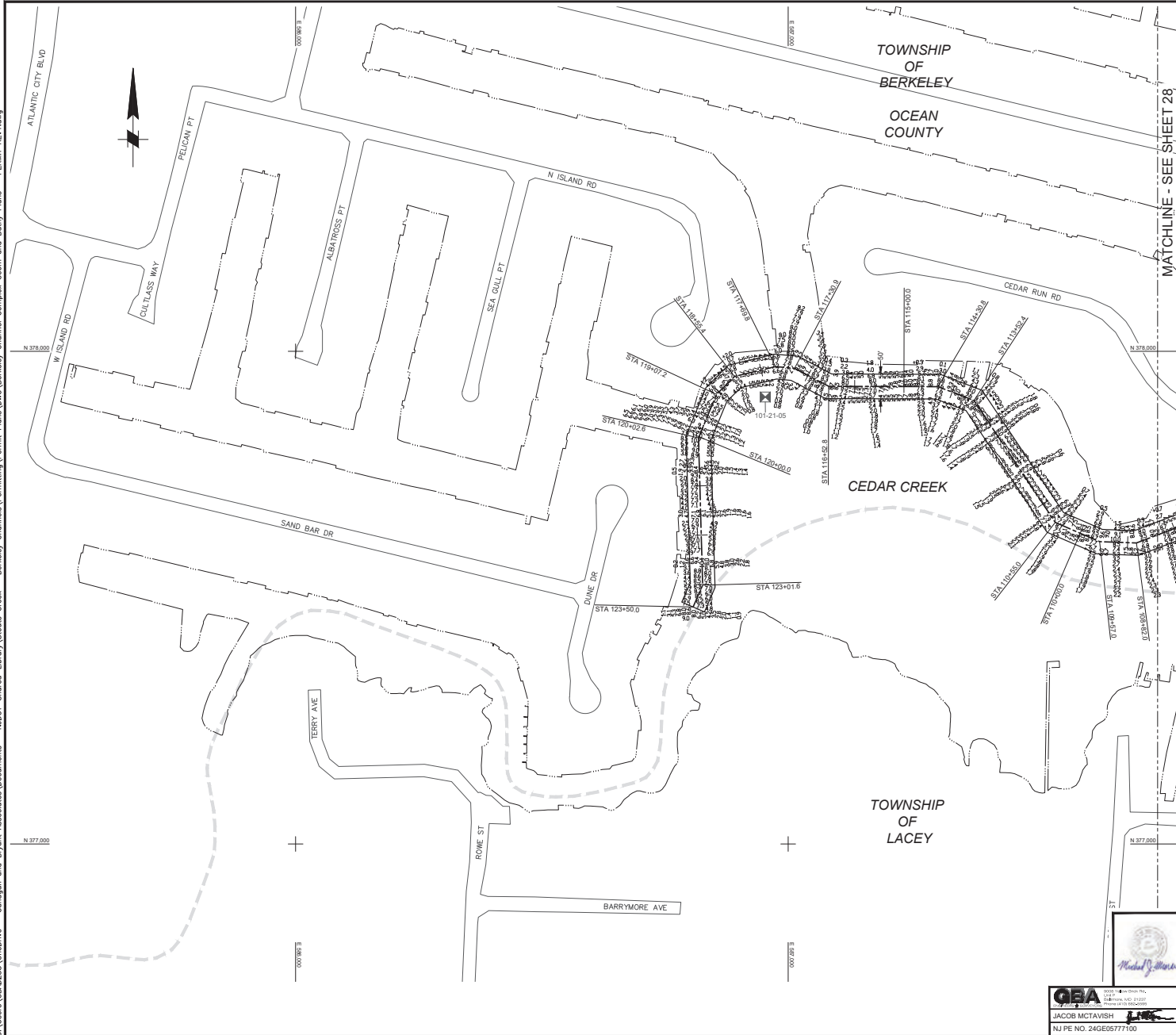


JACOB MCTAVISH  
NJ PE NO. 24GE05777100

| REV | DATE   | DESCRIPTION   | BY  | APPROV | DATE |
|-----|--------|---------------|-----|--------|------|
| 1   | 4/8/24 | OVERBANK CROP | JAM | JAM    |      |

|                  |                      |
|------------------|----------------------|
| DRAWN BY: PR     | PROJECT NO.          |
| CHECKED BY: JAM  | NO. 24GA28028600     |
| SCALE: AS SHOWN  | SHEET 28 OF 39       |
| DATE: APRIL 2024 | DWG. NO. PERMIT - 27 |

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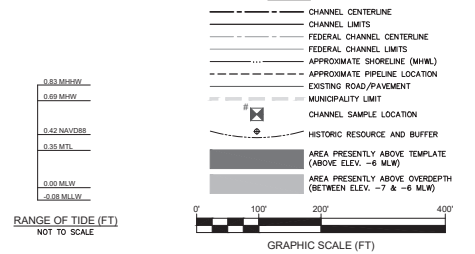
PROJECT LOCATION MAP  
SCALE: 1" = 5000'

| CEDAR CREEK        |        |
|--------------------|--------|
| 0+00.0 to 123+50.0 |        |
| TEMPLATE (+6 MLW)  | 37.16  |
| OVERDEPTH (+7 MLW) | 30.149 |
| TOTAL (CST)        | 67.309 |

NOTES:

- VERTICAL DATUM IS IN REFERENCE TO MEAN LOW WATER (MLW). MLW IS 0.42 FEET BELOW THE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88). INFORMATION OBTAINED FROM NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION (NOAA) DATUM TRANSFORMATION PROGRAM, VERSION 4.6.1.
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LEGEND



STATE OF NEW JERSEY  
NJDOT OFFICE OF MARITIME RESOURCES

TITLE: CEDAR CREEK  
CHANNEL BATHYMETRY PLAN

PROJECT: MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS FOR THE BERKELEY  
CHANNEL COMPLEX, CHANNEL NOS. 096-107.

TOWNSHIP OF LACEY, TOWNSHIP OF BERKELEY, OCEAN COUNTY, NEW JERSEY

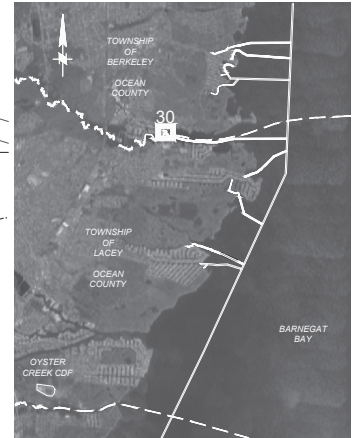
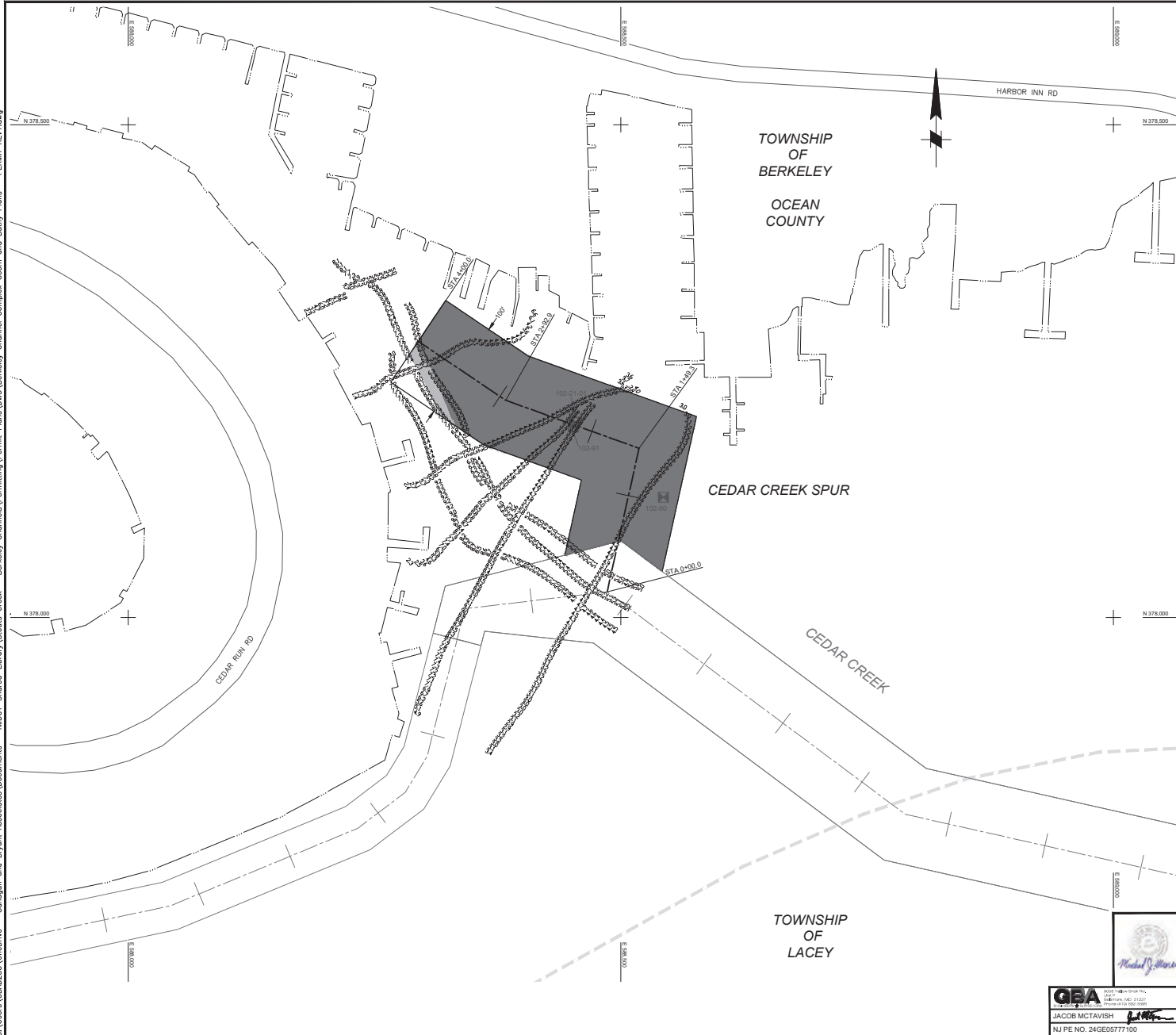


|                  |   |                      |
|------------------|---|----------------------|
| DRAWN BY: PR     | WSP USA Inc.  | PROJECT NO.          |
| CHECKED BY: JAM  | CERTIFICATION OF AUTHORIZATION<br>NO. 24GA28028600    | SHEET 29 OF 39       |
| SCALE: AS SHOWN  | MICHAEL J. MARANO<br>NEW JERSEY PROFESSIONAL ENGINEER | DWG. NO. PERMIT - 28 |
| DATE: APRIL 2024 | NO. 24GE04087500                                      |                      |

JACOB MCTAVISH  
NJ PE NO. 24GE05777100



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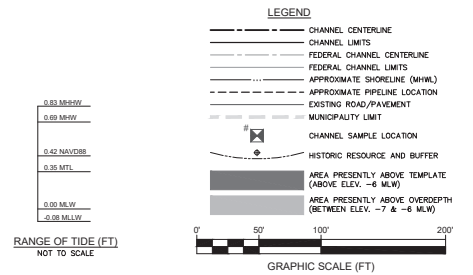


PROJECT LOCATION MAP  
SCALE: 1" = 5000'

| CEDAR CREEK SPUR<br>0+00.0 to 4+00.0 |       |
|--------------------------------------|-------|
| TEMPLATE (+6 MLW)                    | 1.000 |
| OVERDEPTH (+7 MLW)                   | 1.480 |
| TOTAL (CY)                           | 4.075 |

NOTES:

- VERTICAL DATUM IS IN REFERENCE TO MEAN LOW WATER (MLW). MLW IS 0.42 FEET BELOW THE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88). INFORMATION OBTAINED FROM NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION (NOAA) DATUM TRANSFORMATION PROGRAM, VERSION 4.6.1.
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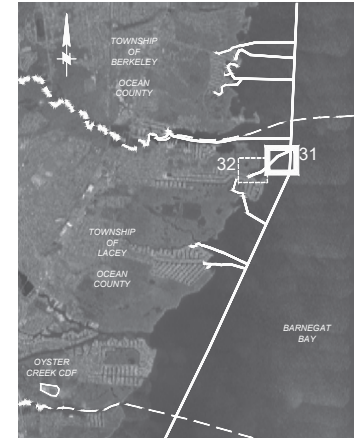
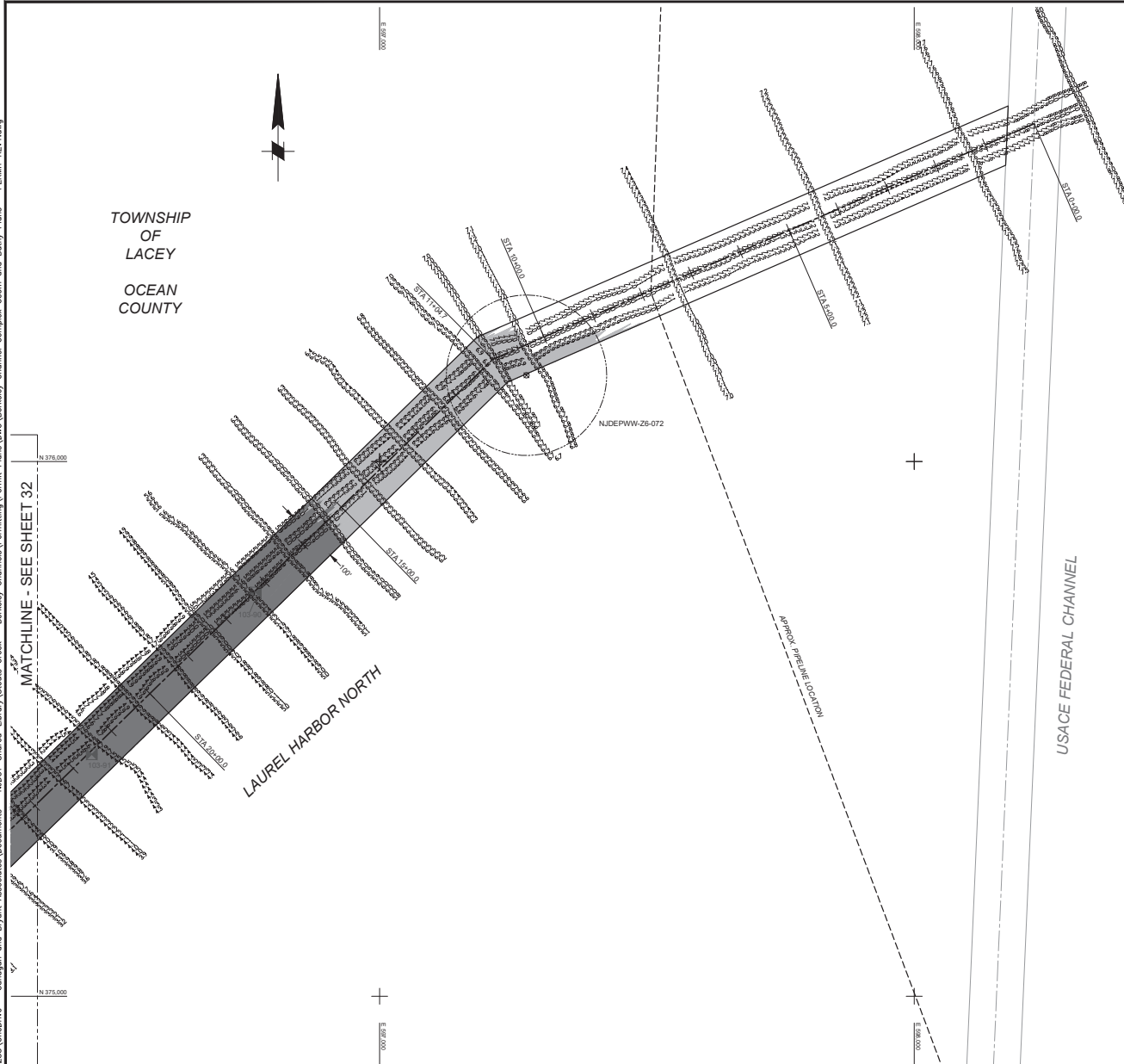


|                      |         |                  |  |  |  |
|----------------------|---------|------------------|--|--|--|
| BY                   |         | APPR             |  |  |  |
| JAM                  |         |                  |  |  |  |
| DESCRIPTION          |         | OYSTER CREEK CDP |  |  |  |
| DATE                 | 8/27/24 |                  |  |  |  |
| REV                  | 1       |                  |  |  |  |
| DRAWN BY: PR         |         | PROJECT NO.      |  |  |  |
| CHECKED BY: JAM      |         | NO. 24GA28028800 |  |  |  |
| SCALE: AS SHOWN      |         | SHEET 30 OF 39   |  |  |  |
| DATE: APRIL 2024     |         | NO. 24GE04087500 |  |  |  |
| DWG. NO. PERMIT - 29 |         |                  |  |  |  |

**GBA**  
WSP USA, Inc.  
CERTIFICATION OF AUTHORIZATION  
NO. 24GA28028800  
MICHAEL J. MARANO  
NEW JERSEY PROFESSIONAL ENGINEER  
NO. 24GE04087500



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PROJECT LOCATION MAP  
SCALE: 1" = 5000'

BARNEGAT  
BAY

| LAUREL HARBOR NORTH |        |
|---------------------|--------|
| 0+00.0 to 40+00.0   |        |
| TEMPLATE (+6 MLW)   | 13.265 |
| OVERDEPTH (+7 MLW)  | 11.749 |
| TOTAL (57)          | 31.009 |

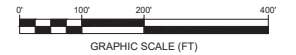
NOTES:

1. VERTICAL DATUM IS IN REFERENCE TO MEAN LOW WATER (MLW). MLW IS 0.42 FEET BELOW THE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88). INFORMATION OBTAINED FROM NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION (NOAA) DATUM TRANSFORMATION PROGRAM, VERSION 4.6.1.
2. COORDINATES ARE EXPRESSED IN FEET AND REFER TO THE NEW JERSEY STATE PLANE GRID COORDINATE SYSTEM NORTH AMERICAN DATUM OF 1983 (NAD83).
3. CONDITIONAL (CND) SOUNDING DATA SHOWN WAS COLLECTED ON AUGUST 05, 2023 BY GAHAGAN & BRYANT ASSOCIATES (GBA) AND INDICATES DEPTH BELOW MLW.
4. THE INFORMATION DEPICTED ON THIS PLAN REPRESENTS THE RESULTS OF SURVEYS CONDUCTED ON THE ABOVE DATES AND SHOULD BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
5. EXISTING SHORELINE, DOCK, & PILING LOCATIONS BASED ON GOOGLE MAPS AERIAL IMAGERY DATED APRIL, 2021 AND SHOULD BE CONSIDERED APPROXIMATE.

LEGEND

- CHANNEL CENTERLINE
- CHANNEL LIMITS
- FEDERAL CHANNEL CENTERLINE
- FEDERAL CHANNEL LIMITS
- APPROXIMATE SHORELINE (MHWL)
- APPROXIMATE PIPELINE LOCATION
- EXISTING ROAD/PAVEMENT
- MUNICIPALITY LIMIT
- CHANNEL SAMPLE LOCATION
- HISTORIC RESOURCE AND BUFFER
- AREA PRESENTLY ABOVE TEMPLATE (ABOVE ELEV. -6 MLW)
- AREA PRESENTLY ABOVE OVERDEPTH (BETWEEN ELEV. -7 & -6 MLW)

RANGE OF TIDE (FT)  
NOT TO SCALE



|   |                      |
|---|----------------------|
| STATE OF NEW JERSEY<br>NJDOT OFFICE OF MARITIME RESOURCES   |                      |
| TITLE: LAUREL HARBOR NORTH<br>CHANNEL BATHYMETRY PLAN   |                      |
| PROJECT: MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS FOR THE BERKELEY<br>CHANNEL COMPLEX, CHANNEL NOS. 096-107. |                      |
| TOWNSHIP OF LACEY, TOWNSHIP OF BERKELEY, OCEAN COUNTY, NEW JERSEY   |                      |
| DRAWN BY: PR  | PROJECT NO.          |
| CHECKED BY: JAM   | NO. 24GA28028600     |
| SCALE: AS SHOWN   | SHEET 31 OF 39       |
| DATE: APRIL 2024  | DWG. NO. PERMIT - 30 |

|     |         |                 |
|-----|---------|-----------------|
| REV | DATE    | DESCRIPTION     |
| 1   | 8/07/24 | OVERBURNED COPY |

|     |      |      |
|-----|------|------|
| BY  | DATE | NAME |
| JAM |      |      |

JACOB MCTAVISH  
NJ PE NO. 24GE05777100

WSP USA Inc.  
CERTIFICATION OF AUTHORIZATION  
NO. 24GA28028600  
MICHAEL J. MARRANO  
NEW JERSEY PROFESSIONAL ENGINEER  
NO. 24GE04087500



NOTES:

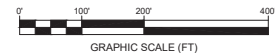
1. VERTICAL DATUM IS IN REFERENCE TO MEAN LOW WATER (MLW). MLW IS 0.42 FEET BELOW THE NORTH AMERICAN VERTICAL DATUM 1983 (NAVD83). INFORMATION FROM NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION (NOAA) VERTICAL DATUM TRANSFORMATION PROGRAM, VERSION 4.6.1.
2. COORDINATES ARE EXPRESSED IN FEET AND REFER TO THE NEW JERSEY STATE PLAIN GRID COORDINATE SYSTEM NORTH AMERICAN DATUM 1983 (NAD83).
3. CONDITIONAL (CND) SOUNDING DATA SHOWN WAS COLLECTED ON AUGUST 05, 2023 BY GAHAGAN & BRYANT ASSOCIATES (GBA) AND INDICATES DEPTH BELOW MLW.
4. THE INFORMATION PROVIDED ON THIS PLAN REPRESENTS THE RESULTS OF SURVEYS CONDUCTED ON THE ABOVE DATES AND SHOULD BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
5. EXISTING SHORELINE, DOCK, & PILING LOCATIONS BASED ON GOOGLE MAPS AERIAL IMAGERY DATED APRIL, 2023. SHORELINE AND PILING LOCATIONS ARE NOT TO BE CONSIDERED AS A GUARANTEE OF LOCATION.

LEGEND

--- CHANNEL CENTERLINE  
 --- CHANNEL LIMITS  
 --- FEDERAL CHANNEL CENTERLINE  
 --- FEDERAL CHANNEL LIMITS  
 --- APPROXIMATE SHORELINE (MHWL)  
 --- APPROXIMATE PIPELINE LOCATION  
 --- EXISTING ROAD/PAVEMENT  
 --- MUNICIPALITY LIMIT  
 [Symbol: Square with an 'X'] CHANNEL SAMPLE LOCATION  
 [Symbol: Circle with a dot] HISTORIC RESOURCE AND BUFFER  
 [Symbol: Dark gray rectangle] AREA PRESENTLY ABOVE TEMPLATE (ABOVE ELEV. -6 M/LW)  
 [Symbol: Light gray rectangle] AREA PRESENTLY ABOVE OVERDEPTH (BETWEEN ELEV. -7 & -6 M/LW)



RANGE OF TIDE (FT)  
NOT TO SCALE

[illegible]

| LAUREL HARBOR SOUTH<br>0+00.0 to 51+00.0 |        |
|--|--------|
| TEMPLATE (-6 MLW)                        | 10,310 |
| OVERDEPTH (-7 MLW)                       | 10,800 |
| TOTAL (CY)                               | 21,110 |

NOTES:

1. VERTICAL DATUM IS IN REFERENCE TO MEAN LOW WATER (MLW). MLW IS 0.42 FEET BELOW NATIONAL AVERAGE VERTICAL DATUM 1988 (NAVD88). INFORMATION OBTAINED FROM NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION (NOAA) VDATUM DATUM TRANSFORMATION PROGRAM, VERSION 4.6.1.
2. COORDINATES ARE EXPRESSED IN FEET AND REFER TO THE NEW JERSEY STATE GRID COORDINATE SYSTEM NORTH AMERICAN DATUM OF 1983 (NAD83).
3. CONDITIONAL (CHO) SOUNDING DATA SHEET WAS COLLECTED ON AUGUST 01, 2023 BY GAHAGAN & BRYANT ASSOCIATES (BA) AND INDICATES DEPTH BELOW MLW.
4. THE INFORMATION DEPICTED ON THIS DRAWING REPRESENTS THE RESULTS OF SURVEYS CONDUCTED ON THE ABOVE LAND AND SHOULD BE CONSIDERED AS SUCH. THE SEVERAL CONDITIONS EXISTING AT THE TIME.
5. EXISTING SHORELINE, DOCK, & PILING LOCATIONS BASED ON GOOGLE MAPS AERIAL IMAGERY DATED APRIL, 2021 AND SHOULD BE CONSIDERED APPROXIMATE.

**LEGEND**

- 
- CHANNEL CENTERLINE  
 CHANNEL LIMITS  
 FEDERAL CHANNEL CENTERLINE  
 FEDERAL CHANNEL LIMITS  
 APPROXIMATE SHORELINE (MHWL)  
 APPROXIMATE PIPELINE LOCATION  
 EXISTING ROAD/PAVEMENT  
 MUNICIPALITY LIMIT  
 CHANNEL SAMPLE LOCATION  
 HISTORIC RESOURCE AND BUFFER  
 AREA PRESENTLY ABOVE TEMPLATE  
 (ABOVE ELEV. -6 MWL)  
 AREA PRESENTLY ABOVE OVERDEPTH  
 (BETWEEN ELEV. -7 & -6 MWL)

RANGE OF TIDE (FT)  
NOT TO SCALE

GRAPHIC SCALE (FT)

STATE OF NEW JERSEY  
NJDOT OFFICE OF MARITIME RESOURCES

TITLE: LAUREL HARBOR SOUTH  
CHANNEL BATHYMETRY PLAN

PROJECT: MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS FOR THE BERKELEY CHANNEL COMPLEX, CHANNEL NOS. 096-107.

TOWNSHIP OF LACEY, TOWNSHIP OF BERKELEY, OCEAN COUNTY, NEW JERSEY

DRAWN BY: PR

|  |
|--|
| WSP USA Inc.<br>CERTIFICATION OF AUTHORIZATION<br>NO. 24GA28029800 |
|--|

SCALE: AS SHOWN

MICHAEL J. MARANO  
NEW JERSEY PROFESSIONAL ENGINEER  
NO. 24GE04087500

SHEET 33 OF 39

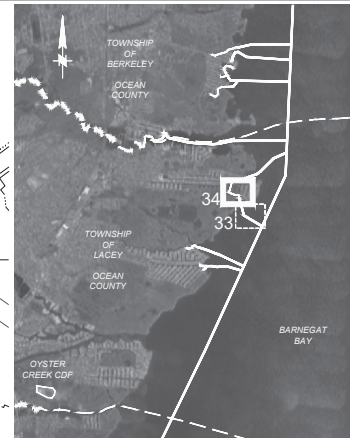
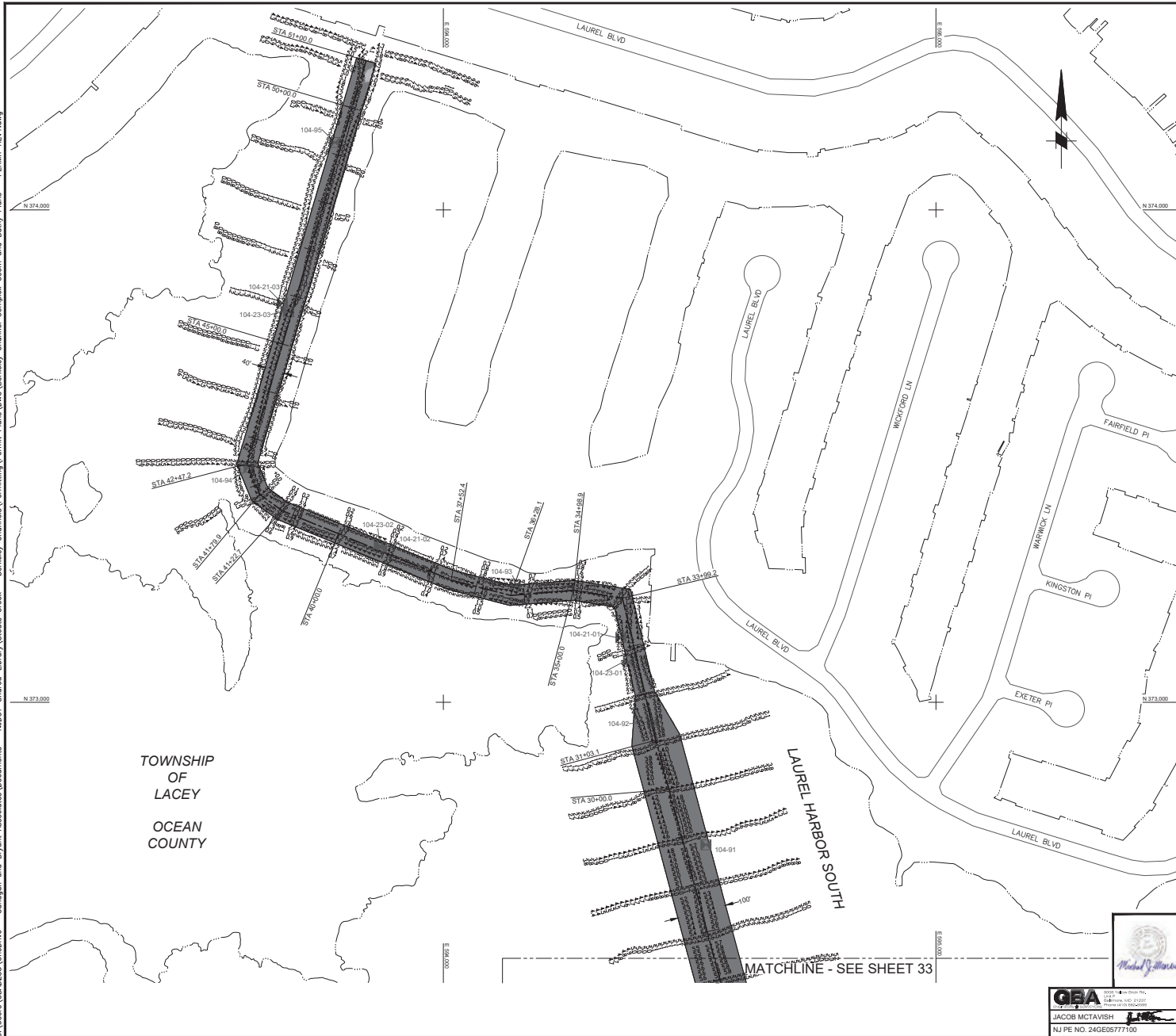
DWG. NO. PERMIT - 32

DATE: APRIL 2024

NEW JERSEY PROFESSIONAL ENGINEER  
NO. 24GE04087500



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PROJECT LOCATION MAP  
SCALE: 1" = 5000'

| LAUREL HARBOR SOUTH<br>0+00.0 to 51+00.0 |       |
|--|-------|
| TEMPLATE (+6 MLW)                        | 13.15 |
| OVERDEPTH (+7 MLW)                       | 10.80 |
| TOTAL (57)                               | 23.95 |

NOTES:

1. VERTICAL DATUM IS IN REFERENCE TO MEAN LOW WATER (MLW). MLW IS 0.42 FEET BELOW THE NORTH AMERICAN DATUM 1988 (NAVD88). INFORMATION OBTAINED FROM NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION (NOAA) DATUM TRANSFORMATION PROGRAM, VERSION 4.6.1.
2. COORDINATES ARE EXPRESSED IN FEET AND REFER TO THE NEW JERSEY STATE PLANE GRID COORDINATE SYSTEM NORTH AMERICAN DATUM OF 1983 (NAD83).
3. CONDITIONAL (CND) SOUNDING DATA SHOWN WAS COLLECTED ON AUGUST 01, 2023 BY GAHAGAN & BRYANT ASSOCIATES (GBA) AND INDICATES DEPTH BELOW MLW.
4. THE INFORMATION DEPICTED ON THIS PLAN REPRESENTS THE RESULTS OF SURVEYS CONDUCTED ON THE ABOVE DATES AND SHOULD BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
5. EXISTING SHORELINE, DOCK, & PILING LOCATIONS BASED ON GOOGLE MAPS AERIAL IMAGERY DATED APRIL, 2021 AND SHOULD BE CONSIDERED APPROXIMATE.

LEGEND

0.82 MGDW  
0.69 MHDW  
0.42 NAVD88  
0.35 MTL  
0.00 MLW  
-0.08 MLW

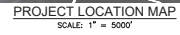
RANGE OF TIDE (FT)  
NOT TO SCALE

GRAPHIC SCALE (FT)  
0 100 200 400

CHANNEL CENTERLINE  
CHANNEL LIMITS  
FEDERAL CHANNEL LIMITS  
APPROXIMATE SHORELINE (MHWL)  
APPROXIMATE PIPELINE LOCATION  
EXISTING ROAD/PAVEMENT  
MUNICIPALITY LIMIT  
CHANNEL SAMPLE LOCATION  
HISTORIC RESOURCE AND BUFFER  
AREA PRESENTLY ABOVE TEMPLATE  
(ABOVE ELEV. -6 MLW)  
AREA PRESENTLY ABOVE OVERDEPTH  
(BETWEEN ELEV. -7 & -6 MLW)

|   |  |   |         |                      |
|---|--|---|---------|----------------------|
| BY  |  | APPROV  | DATE    |                      |
| JAM   |  | JAM   | 4/24/24 |                      |
| DESCRIPTION   |  | PROJECT   |         | PROJECT NO.          |
| OYSTER CREEK CDP  |  | STATE OF NEW JERSEY<br>NJDOT OFFICE OF MARITIME RESOURCES   |         | PROJECT NO.          |
| TITLE: LAUREL HARBOR SOUTH<br>CHANNEL BATHYMETRY PLAN             |  | PROJECT: MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS FOR THE BERKELEY<br>CHANNEL COMPLEX, CHANNEL NOS. 096-107. |         | SHEET 34 OF 39       |
| TOWNSHIP OF LACEY, TOWNSHIP OF BERKELEY, OCEAN COUNTY, NEW JERSEY |  | DRAWN BY: PR  |         | DWG. NO. PERMIT - 33 |
| GEOGRAPHIC INFORMATION SYSTEMS DIVISION                           |  | WSP USA INC.<br>CERTIFICATION OF AUTHORIZATION<br>NO. 24GA28028600  |         |                      |
| JACOB MCTAVISH  |  | CHECKED BY: JAM   |         |                      |
| NJ PE NO. 24GE05777100  |  | SCALE: AS SHOWN   |         |                      |
|   |  | DATE: APRIL 2024  |         |                      |
|   |  | MICHAEL J. MARRANO<br>NEW JERSEY PROFESSIONAL ENGINEER<br>NO. 24GE04087500  |         |                      |

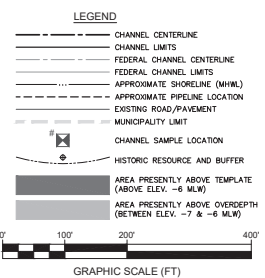




NOTES:

1. VERTICAL DATUM IS IN REFERENCE TO MEAN LOW WATER (MLW). MLW IS 0.42 FEET BELOW THE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88). INFORMATION OBTAINED FROM NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION (NOAA) VERTICAL DATUM TRANSFORMATION PROGRAM, VERSION 4.6.1.
2. COORDINATES ARE EXPRESSED IN FEET AND REFER TO THE NEW JERSEY STATE PLANE GRID COORDINATE SYSTEM NORTH AMERICAN DATUM OF 1983 (NAD83).
3. CONDITIONAL (CND) SOUNDING DATA SHOWN WAS COLLECTED ON AUGUST 01, 2023 BY GHAGHAN & BRYANT ASSOCIATES (GBA) AND INDICATES DEPTHS IN FEET.
4. THE INFORMATION REPORTED ON THIS PLAN REPRESENTS THE RESULTS OF SURVEYS CONDUCTED ON THE ABOVE DATAS AND SHOULD BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
5. EXISTING SHOULDER, DOCK, & PILING LOCATIONS BASED ON GOOGLE MAPS AERIAL IMAGERY DATED APRIL, 2021 AND SHOULD BE CONSIDERED APPROXIMATE.

RANGE OF TIDE (FT)  
NOT TO SCALE



| REV | DATE    | DESCRIPTION      | BY  | APPR. |
|-----|---------|------------------|-----|-------|
| 1   | 8/27/24 | OYSTER CREEK CDF | JAM | JAM   |
|     |         |                  |     |       |
|     |         |                  |     |       |
|     |         |                  |     |       |

STATE OF NEW JERSEY  
NJDOT OFFICE OF MARITIME RESOURCES

TITLE: STOUTS CREEK  
CHANNEL BATHYMETRY PLAN

|  |
|--|
| PROJECT: MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS FOR THE BERKELEY CHANNEL COMPLEX, CHANNEL NOS. 096-107. |
|--|

TOWNSHIP OF LACEY, TOWNSHIP OF BERKELEY, OCEAN COUNTY, NEW JERSEY

DRAWN BY: PR

|  |
|--|
| WSP USA Inc.<br>CERTIFICATION OF AUTHORIZATION<br>NO. 24GA28029800 |
|--|

SCALE: AS SHOWN

|                                  |
|----------------------------------|
| NO. 24GA20025000                 |
| MICHAEL J. MARANO                |
| NEW JERSEY PROFESSIONAL ENGINEER |
| NO. 24GE04087500                 |

SHEET 35 OF 39

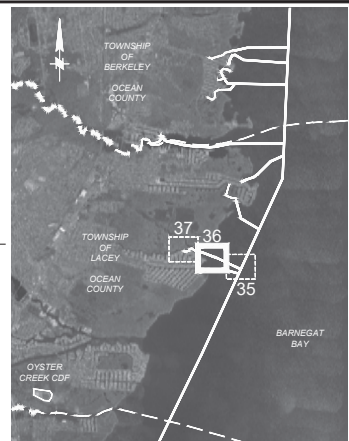
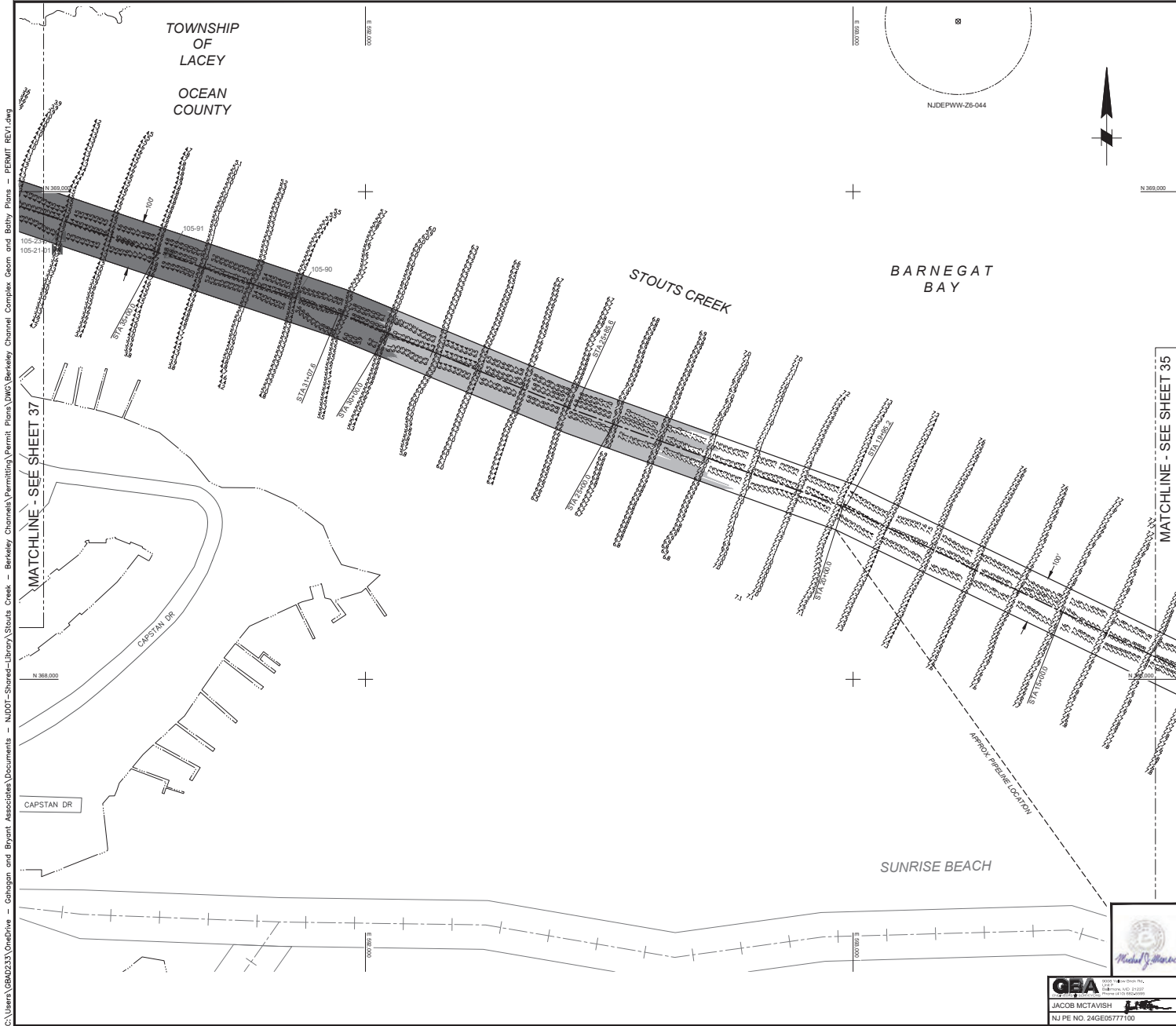
DWG. NO. PERMIT - 34

**QEA** 9008 Yellow D  
Unit P  
Baltimore, MD 21  
Phone (410) 652

**JACOB MCTAVISH**

**NJ PE NO. 24GE05777100**

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PROJECT LOCATION MAP  
SCALE: 1" = 500'

| STOUTS CREEK       |       |
|--------------------|-------|
| 0+00.0 to 50+00.0  | 1.00  |
| TEMPLATE (+6 MLW)  | 7.80  |
| OVERDEPTH (+7 MLW) | 17.10 |
| TOTAL (CY)         |       |

- NOTES:
- VERTICAL DATUM IS IN REFERENCE TO MEAN LOW WATER (MLW). MLW IS 0.42 FEET BELOW THE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88). INFORMATION OBTAINED FROM NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION (NOAA) DATUM TRANSFORMATION PROGRAM, VERSION 4.6.1.
  - COORDINATES ARE EXPRESSED IN FEET AND REFER TO THE NEW JERSEY STATE PLANE GRID COORDINATE SYSTEM NORTH AMERICAN DATUM OF 1983 (NAD83).
  - CONDITIONAL (CND) SOUNDING DATA SHOWN WAS COLLECTED ON AUGUST 01, 2023 BY GAHAGAN & BRYANT ASSOCIATES (GBA) AND INDICATES DEPTH BELOW MLW.
  - THE INFORMATION DEPICTED ON THIS PLAN REPRESENTS THE RESULTS OF SURVEYS CONDUCTED ON THE ABOVE DATES AND SHOULD BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
  - EXISTING SHORELINE, DOCK, & PILING LOCATIONS BASED ON GOOGLE MAPS AERIAL IMAGERY DATED APRIL, 2021 AND SHOULD BE CONSIDERED APPROXIMATE.

**LEGEND**

- CHANNEL CENTERLINE
- CHANNEL LIMITS
- FEDERAL CHANNEL CENTERLINE
- FEDERAL CHANNEL LIMITS
- APPROXIMATE SHORELINE (MHWL)
- APPROXIMATE PIPELINE LOCATION
- EXISTING ROAD/PAVEMENT
- MUNICIPALITY LIMIT
- CHANNEL SAMPLE LOCATION
- HISTORIC RESOURCE AND BUFFER
- AREA PRESENTLY ABOVE TEMPLATE (ABOVE ELEV. -6 MLW)
- AREA PRESENTLY ABOVE OVERDEPTH (BETWEEN ELEV. -7 & -6 MLW)

**RANGE OF TIDE (FT)**

- 0.81 MGDW
- 0.68 MHW
- 0.42 NAVD88
- 0.35 MTL
- 0.00 MLW
- 0.08 MLW

**GRAPHIC SCALE (FT)**

0 100 200 400

|                        |  |   |  |
|------------------------|--|---|--|
| BY: JAM                |  | DATE: APR 2024                                |  |
| DESCRIPTION: OVERDEPTH |  | PROJECT: STOUTS CREEK CHANNEL BATHYMETRY PLAN |  |
| DRAWN BY: PR           |  | PROJECT NO. 24GA2822800                       |  |
| CHECKED BY: JAM        |  | SHEET 36 OF 39                                |  |
| SCALE: AS SHOWN        |  | DWG. NO. PERMIT - 35                          |  |
| DATE: APRIL 2024       |  | NO. 24GE04087500                              |  |

STATE OF NEW JERSEY  
NJDOT OFFICE OF MARITIME RESOURCES

TITLE: STOUTS CREEK  
CHANNEL BATHYMETRY PLAN

PROJECT: MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS FOR THE BERKELEY CHANNEL COMPLEX, CHANNEL NOS. 096-107.

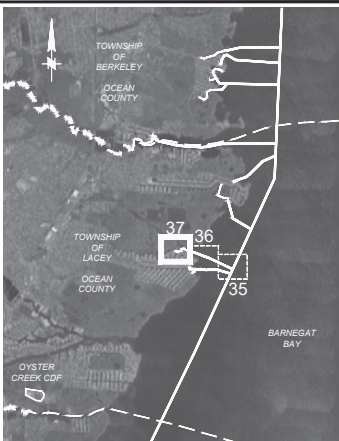
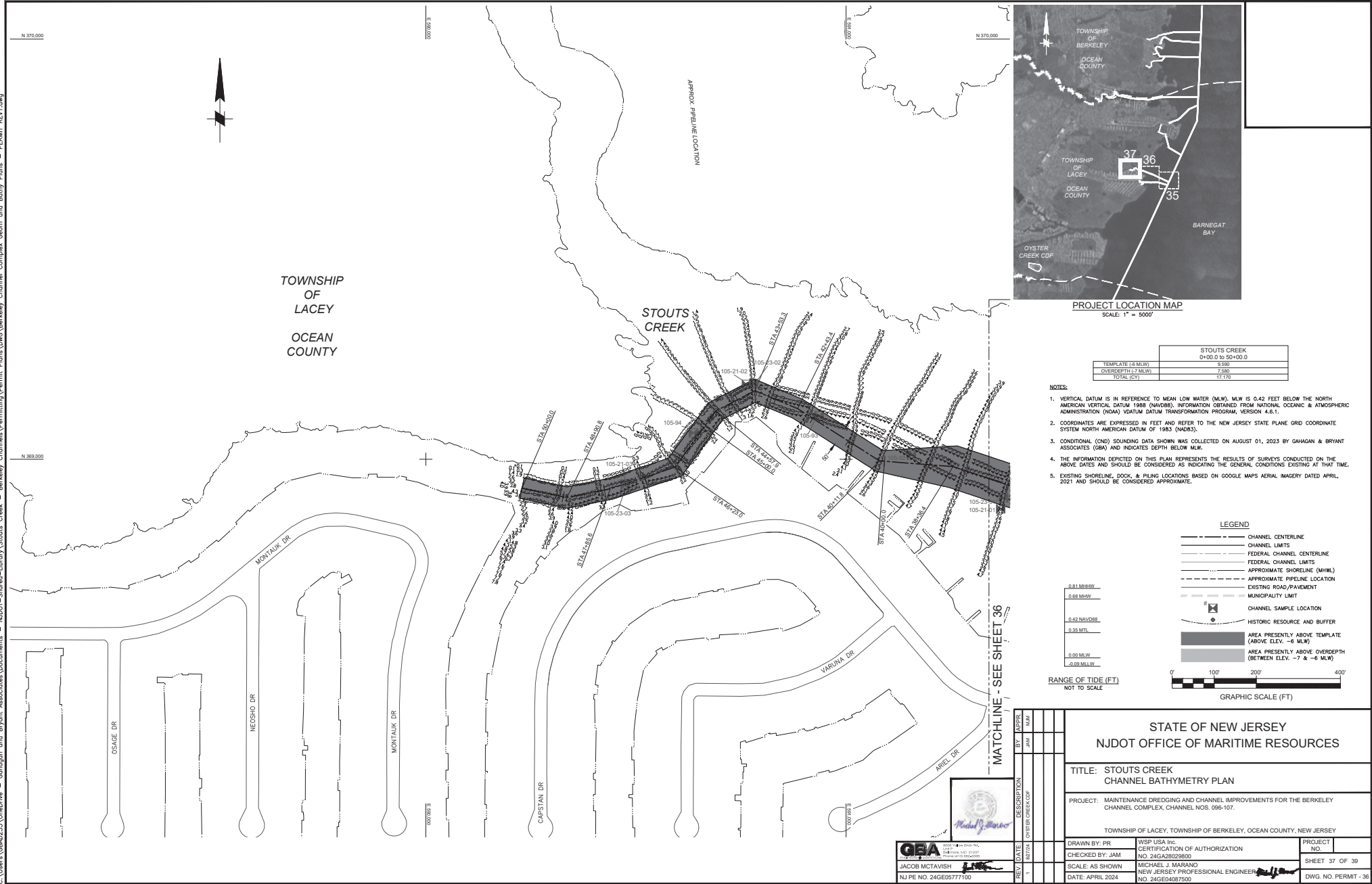
TOWNSHIP OF LACEY, TOWNSHIP OF BERKELEY, OCEAN COUNTY, NEW JERSEY

DRAWN BY: PR  
WSP USA Inc.  
CERTIFICATION OF AUTHORIZATION  
NO. 24GA2822800

CHECKED BY: JAM  
MICHAEL J. MARANO  
NEW JERSEY PROFESSIONAL ENGINEER  
NO. 24GE04087500

NO. 24GE05777100

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PROJECT LOCATION MAP  
SCALE: 1" = 5000'

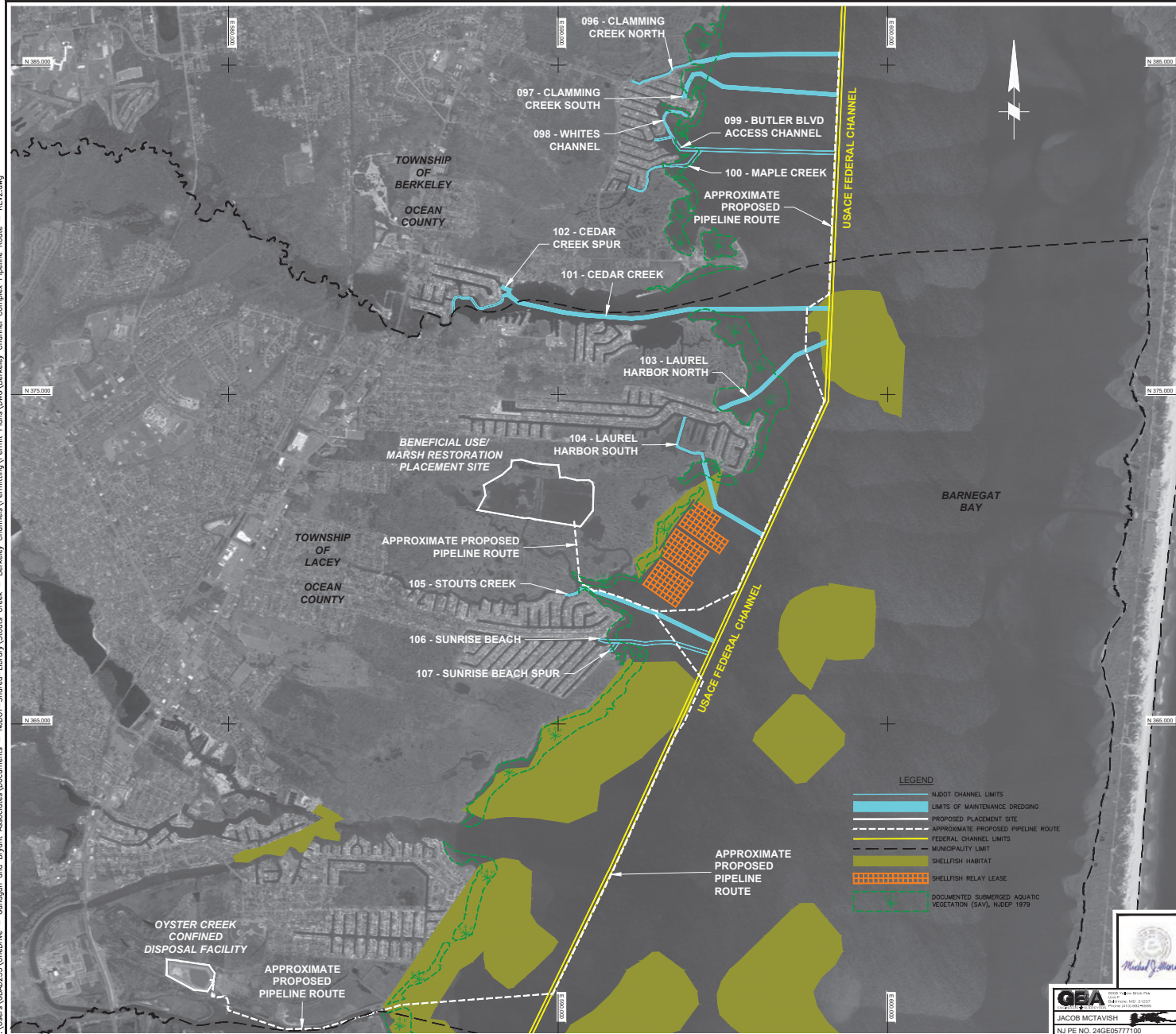
| STOUTS CREEK       |       |
|--------------------|-------|
| TEMPLATE (+6 MLW)  | 1.95  |
| OVERDEPTH (+7 MLW) | 7.85  |
| TOTAL (CST)        | 17.15 |

|  |  |
|--|--|
| STATE OF NEW JERSEY<br>NJDOT OFFICE OF MARITIME RESOURCES  |  |
| TITLE: STOUTS CREEK<br>CHANNEL BATHYMETRY PLAN   |  |
| PROJECT: MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS FOR THE BERKELEY CHANNEL COMPLEX, CHANNEL NOS. 095-107. |  |
| TOWNSHIP OF LACEY, TOWNSHIP OF BERKELEY, OCEAN COUNTY, NEW JERSEY  |  |
| DRAWN BY: PR   | WSP USA INC.<br>CERTIFICATION OF AUTHORIZATION<br>NO. 24GA28028600         |
| CHECKED BY: JAM  | MICHAEL J. MARRANO<br>NEW JERSEY PROFESSIONAL ENGINEER<br>NO. 24GE04087500 |
| DATE: APRIL 2024   | NO. 24GE04087500   |
| PROJECT NO.  | SHEET 37 OF 39   |
| DWG. NO. PERMIT - 36   |  |

GBA  
JACOB MCTAVISH  
NJ PE NO. 24GE05777100

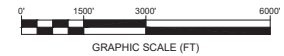


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NOTES:

- COORDINATES ARE EXPRESSED IN FEET AND REFER TO THE NEW JERSEY STATE PLANE GRID COORDINATE SYSTEM NORTH AMERICAN DATUM OF 1983 (NAD83).
- AERIAL IMAGERY IS FROM GOOGLE MAPS, DATED APRIL 2021.
- SAV OCCURRENCE SHOWN FROM THE STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF LAND USE REGULATION, FORKED RIVER (1979, MAP\_038) AND TOWNS RIVER (1979, MAP\_051). SAV MAY BE PRESENT OUTSIDE OF THE LOCATIONS SHOWN ON THIS PLAN AND SHOULD BE AVOIDED IF ENCOUNTERED.
- SHELLFISH DISTRIBUTION SHOWN FROM HARD CLAM DISTRIBUTION FOR CENTRAL BARNEGAT BAY (2012, MAP\_056) AND DISTRIBUTION AND ABUNDANCE OF HARD CLAM AND SOFT CLAM BEDS ALONG ISLAND BEACH (1986, MAP\_016).
- SHELLFISH LEASES SHOWN FROM STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF LAND USE REGULATION, SHELLFISH LEASES OF NEW JERSEY (2023).



STATE OF NEW JERSEY  
NJDOT OFFICE OF MARITIME RESOURCES

TITLE: BERKELEY CHANNEL COMPLEX  
PIPELINE ROUTE PLAN

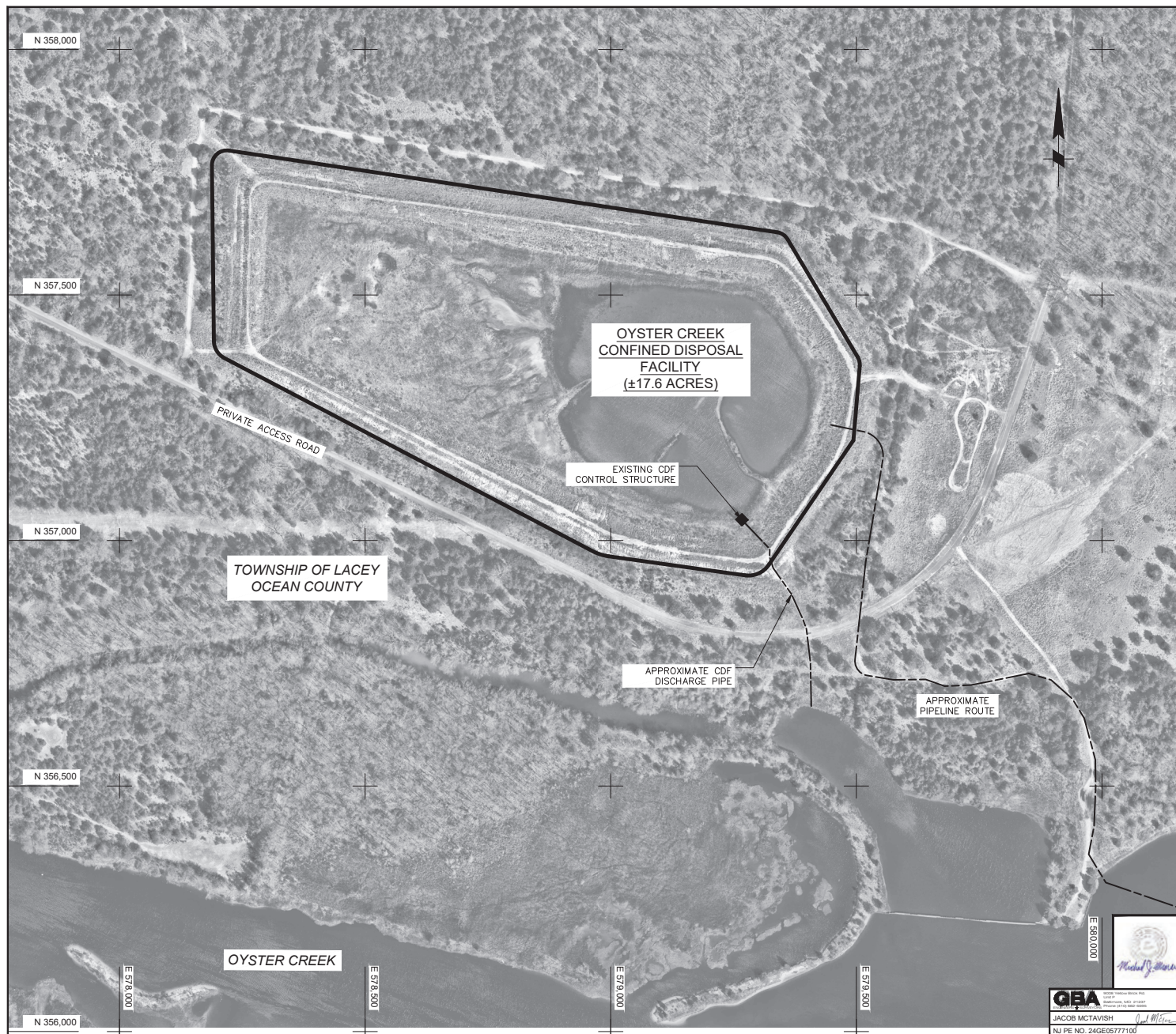
PROJECT: MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS FOR THE BERKELEY  
CHANNEL COMPLEX, CHANNEL NOS. 096-107.

TOWNSHIP OF LACEY, TOWNSHIP OF BERKELEY, OCEAN COUNTY, NEW JERSEY

|                 |  |                      |
|-----------------|--|----------------------|
| DRAWN BY: PR    | WSP USA Inc.   | PROJECT NO.          |
| CHECKED BY: JAM | CERTIFICATION OF AUTHORIZATION<br>NO. 24GA28228600     | SHEET 38 OF 39       |
| SCALE: AS SHOWN | MICHAEL J. MARRANO<br>NEW JERSEY PROFESSIONAL ENGINEER | DWG. NO. PERMIT - 37 |
| DATE: JULY 2024 | NO. 24GE0487500  |                      |

GEA  
JACOB MCTAVISH  
NJ PE NO. 24GE05777100





NOTES:

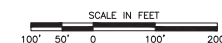
1. VERTICAL DATUM IS IN REFERENCE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). NAVD88 IS 0.43 FEET ABOVE MEAN LOW WATER. INFORMATION OBTAINED FROM NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION (NOAA) DATUM TRANSFORMATION PROGRAM, VERSION 4.7.0.
2. COORDINATES ARE EXPRESSED IN FEET AND REFER TO THE NEW JERSEY STATE PLANE GRID COORDINATE SYSTEM NORTH AMERICAN DATUM OF 1983 (NAD83).
3. AERIAL IMAGERY FROM NEARMAP, DATED FEBRUARY 2024.

|             |
|-------------|
| 0.41 MHHW   |
| 0.28 MHW    |
| 0.00 NAVD88 |
| -0.05 MTL   |
| -0.43 MLW   |
| -0.50 MLW   |

LEGEND

- APPROXIMATE PIPELINE ROUTE
- APPROXIMATE CDF DISCHARGE PIPE
- PLACEMENT SITE EXTENTS

RANGE OF TIDE (FT)  
NOT TO SCALE



STATE OF NEW JERSEY  
NJDOT OFFICE OF MARITIME RESOURCES

TITLE: PLACEMENT PLAN  
OYSTER CREEK CONFINED DISPOSAL FACILITY

PROJECT: MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS FOR THE BERKELEY CHANNEL  
COMPLEX, CHANNEL NOS. 096 - 107

TOWNSHIP OF LACEY & TOWNSHIP OF BERKELEY, COUNTY OF OCEAN, NEW JERSEY

GBA  
JACOB MCTAVISH  
NJ PE NO. 24GE05777100

DRAWN BY: JF  
CHECKED BY: MUM  
SCALE: AS SHOWN  
DATE: AUG. 2024

WSP USA Inc.  
CERTIFICATION OF AUTHORIZATION NO.  
24GA28029800  
MICHAEL J. MARANO  
NEW JERSEY PROFESSIONAL ENGINEER  
NO. 24GE04087500

PROJECT  
NO.  
SHEET 39 OF 39  
DWG. NO. PR - 01