



February 15, 2024

Ms. Jennifer Holmes  
Department of Natural Resources and Environmental Control  
Delaware Coastal Programs  
100 W. Water St. Suite 7B  
Dover, DE 19904

**Subject: Wetlands and Subaqueous Lands Application  
Construction Seaward of the DNREC Building Line Permit Application  
Water Quality Certification Request  
Maryland Offshore Wind Project**

Dear Ms. Holmes,

US Wind, Inc. (US Wind) submits this Delaware Department of Natural Resources and Environmental Control (DNREC) Wetlands and Subaqueous Land Section Permit Application, Construction Seaward of the DNREC Building Line Permit Application, and Water Quality Certification Request for the Maryland Offshore Wind Project (the Project).

In communication between US Wind and the DNREC, it was agreed upon that all applications would be submitted concurrently and the attached document serves as a narrative that responds to the information requested in both permit application forms and relevant appendices. In support of this application, we respectfully submit the following narratives and attachments pursuant to the DNREC Wetlands and Subaqueous Lands Application, Construction Seaward of the DNREC Building Line Permit Application, and Water Quality Certification Request provided herein.

The following Project components have been considered to be relevant to the above stated permits and are included in the application narrative:

- The Project includes offshore and onshore export cables. Portions of the proposed export cables are located under wetlands and within subaqueous lands in the Atlantic Ocean within Delaware state waters and Indian River Bay.
- The Project includes a landfall at 3 R's Beach, the installation of cable ducts, and the construction of a transition vault in the parking lot. Portions of the proposed cable ducts and transition vault on 3 R's Beach are located in subaqueous land, under wetlands, near the DNREC Building Line, and near potential dune environments.
- The Project includes construction of new US Wind substations and expansion of the existing Indian River Bay Substation. Portions of the proposed substation construction and expansion are located near or within buffer zones of wetlands.
- The following referenced appendices to the US Wind Construction and Operations Plan (COP) have been submitted to the Bureau of Ocean Energy Management (BOEM) but are confidential. These references are highlighted in the document and can be provided by request with the caveat that the reports contain confidential business information.
  - Appendix I-A: Oil Spill Response Plan, 2022

- Appendix II-A1: Integrated Site Characterization Report – Federal Waters,
- Appendix II-A2: Integrated Site Characterization Report – State Waters
- The following referenced appendices to the US Wind COP have been submitted to BOEM and are available on BOEM’s website: <https://www.boem.gov/renewable-energy/state-activities/maryland-offshore-wind-construction-and-operations-plan>
  - Appendix I-G: Waste Discharges and Releases, 2021
  - Appendix II-A4: CB&I MEA G&G Report, May 2014
  - Appendix II-A5: Alpine G&G Report 1751, June-Jul 2015
  - Appendix II-A6: Alpine Export Cable Report 1783, Aug-Nov 2016
  - Appendix II-A7: Delaware Waters Field Evaluation Report, March 2019
  - Appendix II-B1: Indian River Bay Sediment Transport Memo, 2020
  - Appendix II-B2: Offshore Sediment Transport Modeling, 2022
  - Appendix II-B3: Indian River Bay Sediment Transport Modeling, 2023
  - Appendix II-D1: Indian River Bay Benthic Report, 2017
  - Appendix II-D2: Offshore Benthic Report, 2016
  - Appendix II-D4: Lease Area and Offshore Export Cable Corridors Benthic Report 2021
  - Appendix II-D5: Indian River Bay Benthic Report 2022
  - Appendix II-E1: Information to Support Essential Fish Habitat Assessment, 2023
  - Appendix II-G1: Wetlands Delineations, 2021
  - Appendix II-H1: Underwater Acoustic Assessment Report, 2023
  - Appendix II-K7: Cable Burial Risk Assessment - Export Cable Corridor, 2023
- Dredging for access for cable installation barges is anticipated and US Wind proposes beneficial reuse projects for the dredged materials. Updated sediment characterization is complete and included in the application.

#### Application Form Components

- Application narrative
- Appendix A: Wetlands and Subaqueous Lands Section Permit Application Form
  - Appendix E. Utility Crossing
  - Appendix H. Fill
  - Appendix J. Vegetative Stabilization
  - Appendix M. Activities in State Wetlands
  - Appendix S. New Dredging Projects
  - Vicinity Map
  - Property Deeds
  - Abutters List of Adjoining Properties
- Appendix B: Permit Application for Construction Seaward of the DNREC Building Line
  - Property Deeds (same as above)
  - Profile and Plan View, locating DNREC Established Beach Preservation Building Line
  - Dune Encroachment Reduction Worksheet
  - Abutters List of Adjoining Properties (same as above)
- Appendix C: Preliminary Project Design Plans
  - C1: Preliminary Maryland Offshore Wind Project Export Cable Plans
    - Scaled Plan View
    - Scaled Cross-Section Plans
  - C2: Preliminary Maryland Offshore Wind Project Substation Plans

- Scaled Plan View
- Scaled Cross-Section Plans
- Appendix D: Request for a Water Quality Certification Pre-Filing Meeting
- Appendix E: October 2017 Sediment Sample Results
- Appendix F: Indian River and Indian River Bay Surface Water and Sediment Assessment – January 2024

The appropriate appendices of the Wetlands and Subaqueous Lands Permit Application Form are included in this submittal. Table 1 provides an overview of appendix applicability.

**Table 1. Summary of Appendices Applicability**

<b>Appendix Name</b>	<b>Applicability Determination</b>	<b>Applicability Explanation</b>
Appendix A: Boat Docking Facilities	Not Applicable	No boat docking facilities are proposed.
Appendix B: Boat Ramps	Not Applicable	No boat ramps are proposed.
Appendix C: Road Crossings	Not Applicable	No road crossings are proposed.
Appendix D: Channel Modifications or Impoundment Structures (Dams)	Not Applicable	No channel modifications or impoundment structures are proposed.
<b>Appendix E: Utility Crossings</b>	<b>Applicable</b>	<b>The utility cables proposed will cross subaqueous lands.</b>
Appendix F: Intake or Outfall Structures	Not Applicable	No intake or outfall structures are proposed.
Appendix G: Bulkheads	Not Applicable	No bulkheads are proposed.
<b>Appendix H: Fill</b>	<b>Applicable</b>	<b>Fill will be placed on marsh restoration sites.</b>
Appendix I: Rip-Rap Sills and Revetments	Not Applicable	No rip-rap sills and revetments are proposed.
<b>Appendix J: Vegetative Stabilization</b>	<b>Applicable</b>	<b>Vegetation will be used as a retainment measure.</b>
Appendix K: Jetties, Groins, or Breakwaters	Not Applicable	No jetties, groins, or breakwaters are proposed.
<b>Appendix M: Activities in State Wetlands</b>	<b>Applicable</b>	<b>State wetlands will be positively impacted through restoration.</b>
Appendix N: Preliminary Marina Screening Checklist	Not Applicable	Marinas are not proposed.
Appendix O: Marinas	Not Applicable	Marinas are not proposed.
Appendix P: Stormwater Management	Not Applicable	No stormwater management for waterways is proposed.
Appendix Q: Ponds and Impoundments	Not Applicable	No impacts to ponds or impoundments are proposed.
Appendix R: Maintenance Dredging or Excavating	Not Applicable	No maintenance dredging or excavating is proposed.
<b>Appendix S: New Dredging Projects</b>	<b>Applicable</b>	<b>The proposed project will utilize dredging during construction.</b>

## Narrative Contents

- Introduction
- Project Infrastructure, Fabrication, and Installation
- Alternatives Analysis
- Existing Conditions, Potential Impacts, Avoidance, and Minimization
  - Geology and Physical Conditions
  - Water Quality
  - Wetlands and Waterbodies
  - Benthic Resources
  - Finfish and Essential Fish Habitat
  - Marine Mammals
  - Sea Turtles
  - Upland Habitats
  - Bats
  - Terrestrial Species
  - Avifauna
  - Threatened and Endangered Species
  - Navigation and Military Activities
  - Socioeconomics
  - Commercial and Recreational Fisheries
  - Other Uses
- Conclusion
- References

Pursuant to 40 CFR 121.5, the project proponent hereby certifies that all information contained herein is true, accurate, and complete to the best of my knowledge and belief. The project proponent hereby requests that the certifying authority review and take action on this CWA 401 certification request within the applicable reasonable period of time.

Should you have any questions related to this application, please contact me by telephone at 410-340-9428 or via email at [l.jodziewicz@uswindinc.com](mailto:l.jodziewicz@uswindinc.com).

Sincerely,



Laurie Jodziewicz  
Senior Director of Environmental Affairs  
US Wind, Inc.

cc: Michael Feinblatt, TRC Environmental, Inc.  
Todd Sumner, US Wind



STATE OF DELAWARE  
**DEPARTMENT OF NATURAL RESOURCES AND  
ENVIRONMENTAL CONTROL**  
DIVISION OF PARKS & RECREATION  
RICHARDSON & ROBBINS BUILDING  
89 KINGS HIGHWAY  
DOVER, DELAWARE 19901

**DIRECTOR'S  
OFFICE**

PHONE  
(302) 739-9200

January 31, 2024

Gener G. Gotiangco  
US Wind  
401 East Pratt Street  
Suite 1810  
Baltimore, MD 21202

Dear Gener,

The Department of Natural Resources and Environmental Control Division of Parks and Recreation ("Parks"), as landowner of 3R's Beach located in Delaware Seashore State Park, consents to and authorizes US Wind's submission of a permit application for activities to be conducted on the property.

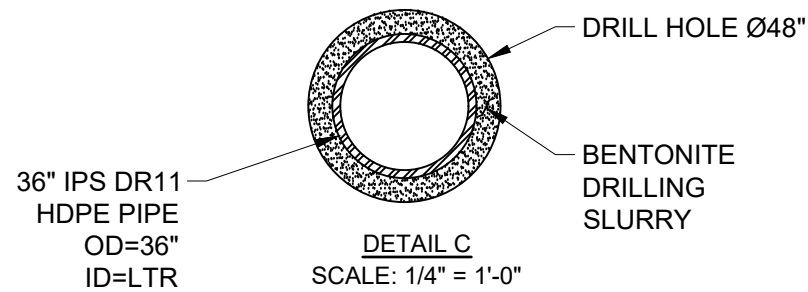
Sincerely,

A handwritten signature in blue ink, appearing to read "R. E. Bivens".

Raymond E. Bivens  
Director



# **Horizontal Directional Drill Cross Section**



								0	02/09/24	ISSUED FOR PERMITTING	SLH	DJ	RW		
								NO	DATE	REVISIONS AND RECORD OF ISSUE	DRN	DES	CHK	PDE	APP

	<b>US WIND</b> INDIAN RIVER BAY - EXPORT CABLES				PROJECT	DRAWING NUMBER		REV
					410735 - 022		0	
DESIGNER	DRAWN		HDD SECTION				CODE	
DJ	SLH						AREA	
CHECKED	DATE							
RW	10/13/23							



## **Transition Vault Details**

**-3 R's Parking Lot Submarine Cable to  
Submarine Cable Splices**

**-West Landing Submarine Cable to Land  
Cable Splices**



INWESCO 12G69  $\phi$ 1/2" THREADED GROUND INSERT (TYP 2 PLCS) (SEE DETAIL A, NOTE 12)

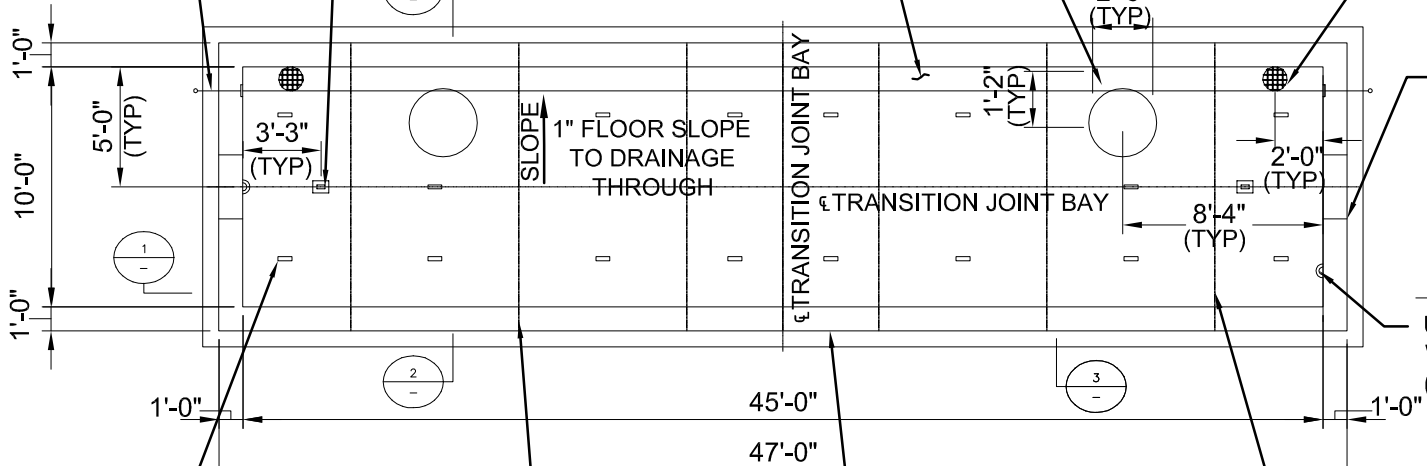
POCKET PULLING IRON IN FLOOR (TYP 2 PLCS)

TRANSITION JOINT BAY ENTRANCE (TYP 2 PLCS)

DRAINAGE TROUGH 12" x 1 1/2"

M.A. INDUSTRIES  $\phi$ 12"x4" PLASTIC SUMP WITH COVER (TYP 2 PLCS)

DUCT ENTRY FROM HDD, APPROXIMATELY 36" DIAMETER



U-BOLT PULLING IRON WITH BACKING PLATE ON TOP OF REMOVEABLE ROOF SECTIONS (TYP 20 PLCS)

7'-0" REMOVEABLE ROOF SECTION (TYP 5 PLCS)

PLAN VIEW  
SCALE: 1/8"=1'-0"

ANTI-FLOTATION COLLAR

5'-6" REMOVEABLE ROOF SECTION (TYP 2 PLCS)

U-BOLT PULLING IRON WITH BACKING PLATE (TYP 2 PLCS) (SEE NOTE 4)

**NOT TO BE USED FOR CONSTRUCTION**

0	02/09/24	ISSUED FOR PERMITTING	SLH	DJ	RW		
NO	DATE	REVISIONS AND RECORD OF ISSUE	DRN	DES	CHK	PDE	APP



**US WIND**  
INDIAN RIVER BAY - EXPORT CABLES

PROJECT	DRAWING NUMBER	REV
410735 - 026		0

DESIGNER	DRAWN
DJ	SLH
CHECKED	DATE
RW	10/13/23

TRANSITION VAULT DETAILS -PLAN VIEW

CODE	
AREA	

36" DIA TRANSITION JOINT BAY LID  
AND FRAME WITH IBSP LOGO  
(TYP 2 PLCS) (SEE NOTE 13)

5'-6" REMOVEABLE  
ROOF SECTION  
(TYP 2 PLCS)

PAVEMENT

GRADE RINGS  
(SEE NOTE 1) (TYP)

COMPACTED  
ROAD  
BASE

7'-0" REMOVEABLE  
ROOF SECTION  
(TYP 7 PLCS)

GRADE

U-BOLT PULLING IRON  
WITH BACKING PLATE  
(TYP 2 PLCS) (SEE NOTE 4)

9"  
(MIN)

11'-0"

9'-0"

U-BOLT PULLING IRON  
WITH BACKING PLATE  
(TYP 2 PLCS) (SEE NOTE 4)

ANTI-FLOTATION COLLAR

M.A. INDUSTRIES Ø12"x4"  
PLASTIC SUMP WITH COVER  
(TYP 2 PLCS)

1'-0"

3'-3"

2'-0"

GEOTEXTILE

CRUSHED STONE

POCKET  
PULLING IRON  
(TYP 2 PLCS)

SECTION 1  
SCALE: 1/8"=1'-0"

**NOT TO BE USED  
FOR CONSTRUCTION**

0

02/09/24

ISSUED FOR PERMITTING

SLH

DJ

RW

NO

DATE

REVISIONS AND RECORD OF ISSUE

DRN

DES

CHK

PDE

APP



**BLACK & VEATCH**  
Building a world of difference®

**US WIND**

INDIAN RIVER BAY - EXPORT CABLES

PROJECT

DRAWING NUMBER

REV

410735 - 027

0

DESIGNER  
DJ

DRAWN  
SLH

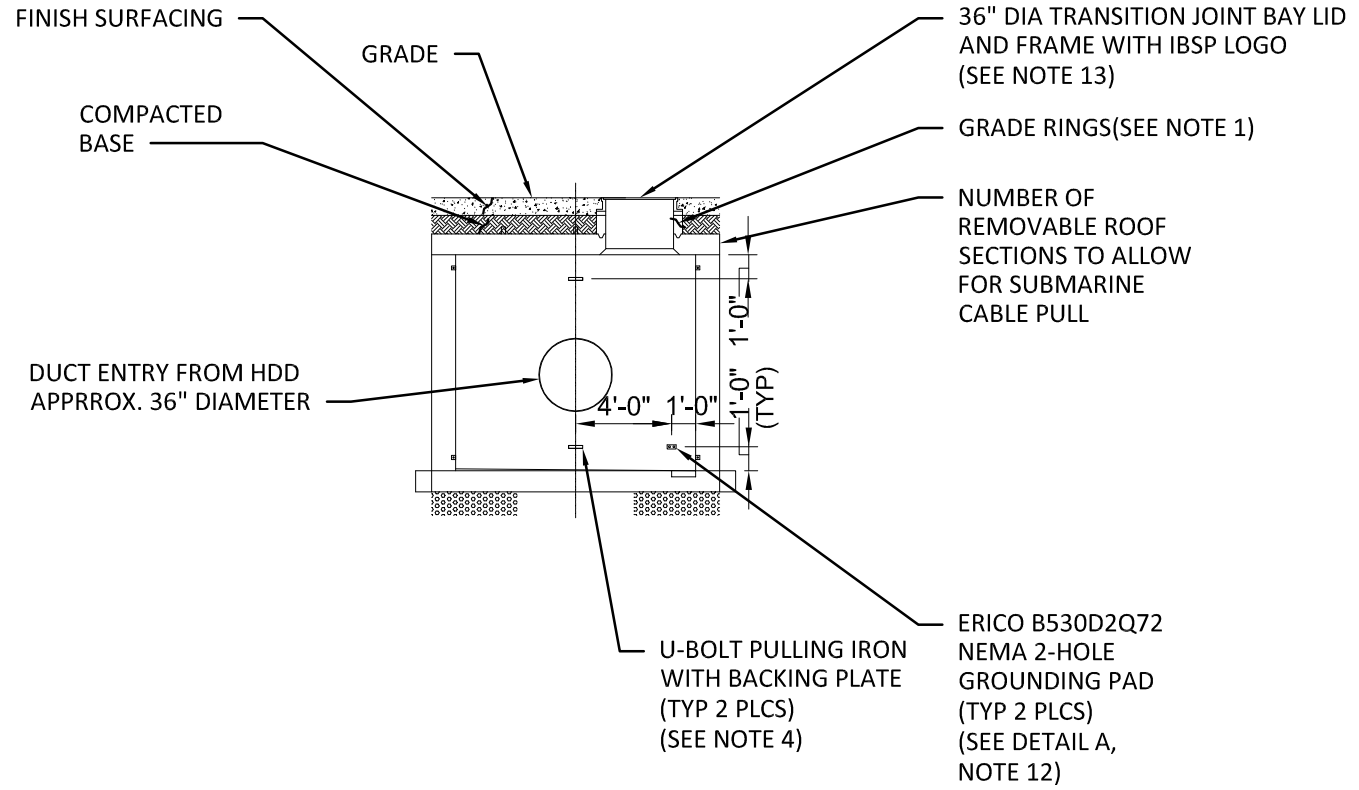
CHECKED  
RW

DATE  
10/13/23

TRANSITION VAULT DETAILS -SECTION VIEW

CODE

AREA



SECTION 2  
SCALE: 1/8"=1'-0"

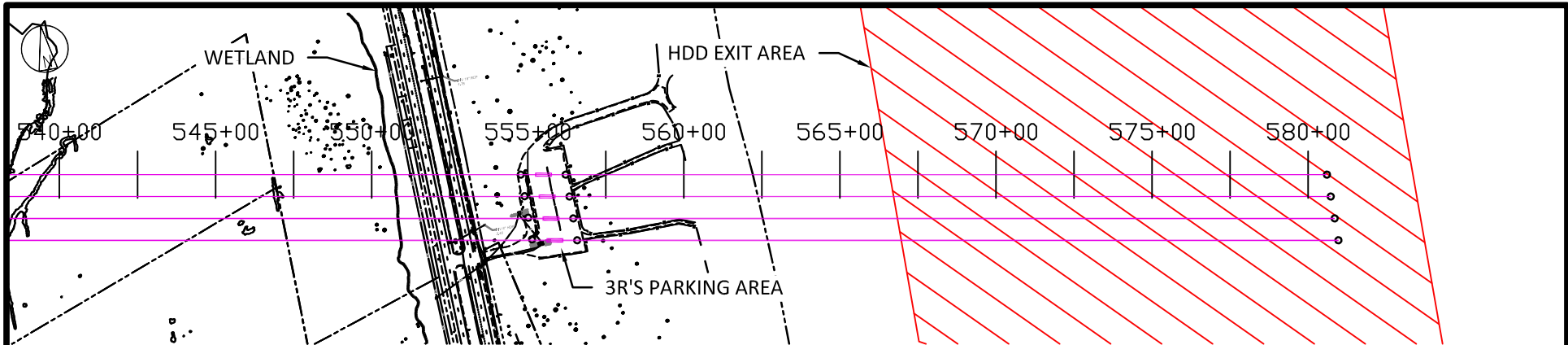
**NOT TO BE USED FOR CONSTRUCTION**

								0	02/09/24	ISSUED FOR PERMITTING	SLH	DJ	RW		
								NO	DATE	REVISIONS AND RECORD OF ISSUE	DRN	DES	CHK	PDE	APP

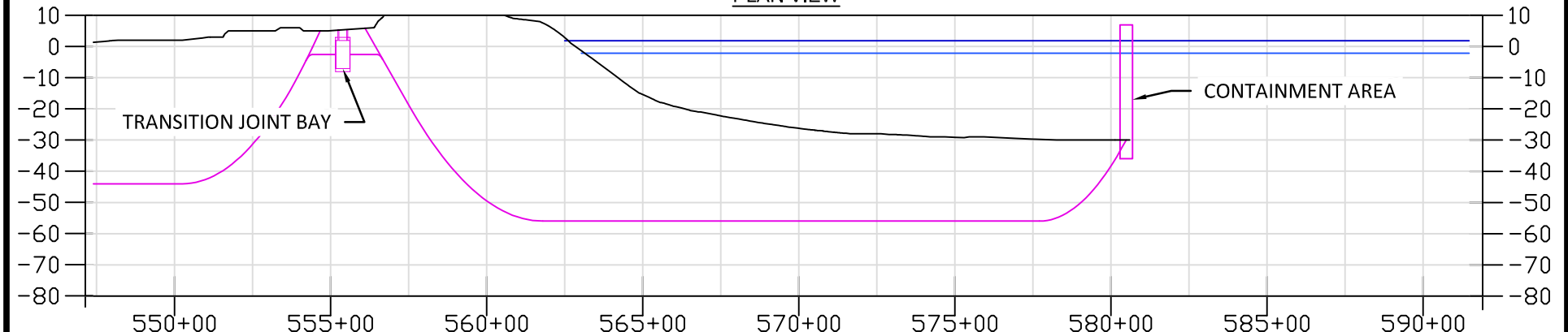
 <b>BLACK &amp; VEATCH</b> Building a world of difference®	<b>US WIND</b> INDIAN RIVER BAY - EXPORT CABLES		PROJECT	DRAWING NUMBER	REV
			410735	- 028	0
DESIGNER	DRAWN	TRANSITION VAULT DETAILS -SECTION 2 VIEW			CODE
CHECKED	DATE				AREA
DJ	SLH				
RW	10/13/23				



# **Horizontal Directional Drill Plan and Profiles**



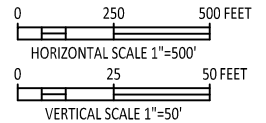
PLAN VIEW



PROFILE VIEW

**LEGEND:**

- EXPORT CABLE
- BARGE ACCESS DREDGE LINE  
(DOES NOT INCLUDE SIDE SLOPES)
- TEMPORARY WORK AREA
- MHHW
- MLLW
- 250' NAV CHANNEL OFFSET



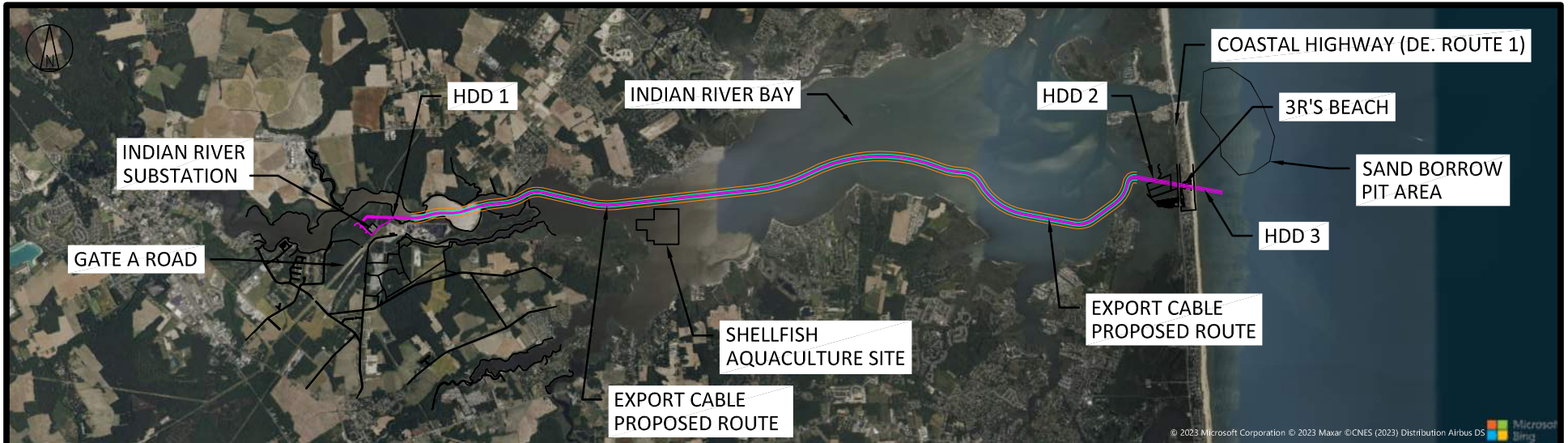
**NOT TO BE USED FOR CONSTRUCTION**

								0	02/09/24	ISSUED FOR PERMITTING	SLH	DJ	RW		
								NO	DATE	REVISIONS AND RECORD OF ISSUE	DRN	DES	CHK	PDE	APP

	<b>US WIND</b> INDIAN RIVER BAY - EXPORT CABLES DREDGING PLANS		PROJECT 410735 - 032	DRAWING NUMBER 032	REV 0
	DESIGNER DJ	DRAWN SLH	HDD 3 PLAN & PROFILE EAST LANDING - ATLANTIC		CODE
CHECKED RW	DATE 10/13/23			AREA	



**Project Route Overview  
and  
General Notes**

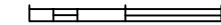


PLAN VIEW

**GENERAL NOTES:**

1. Coordinates are in US Survey Feet, NAD 83, Delaware State Plane (SPCS 700)
2. Elevations are in US Survey Feet NAVD 88.
3. Route is not final. Minor adjustments in routing may be required as additional information is collected.
4. Disturbance area in water is based on the proposed installation methods.
5. Barge access dredge line is bottom of trench. Extents shown do not include side slopes. Side slope widths may vary.

0 5000 10000 FEET



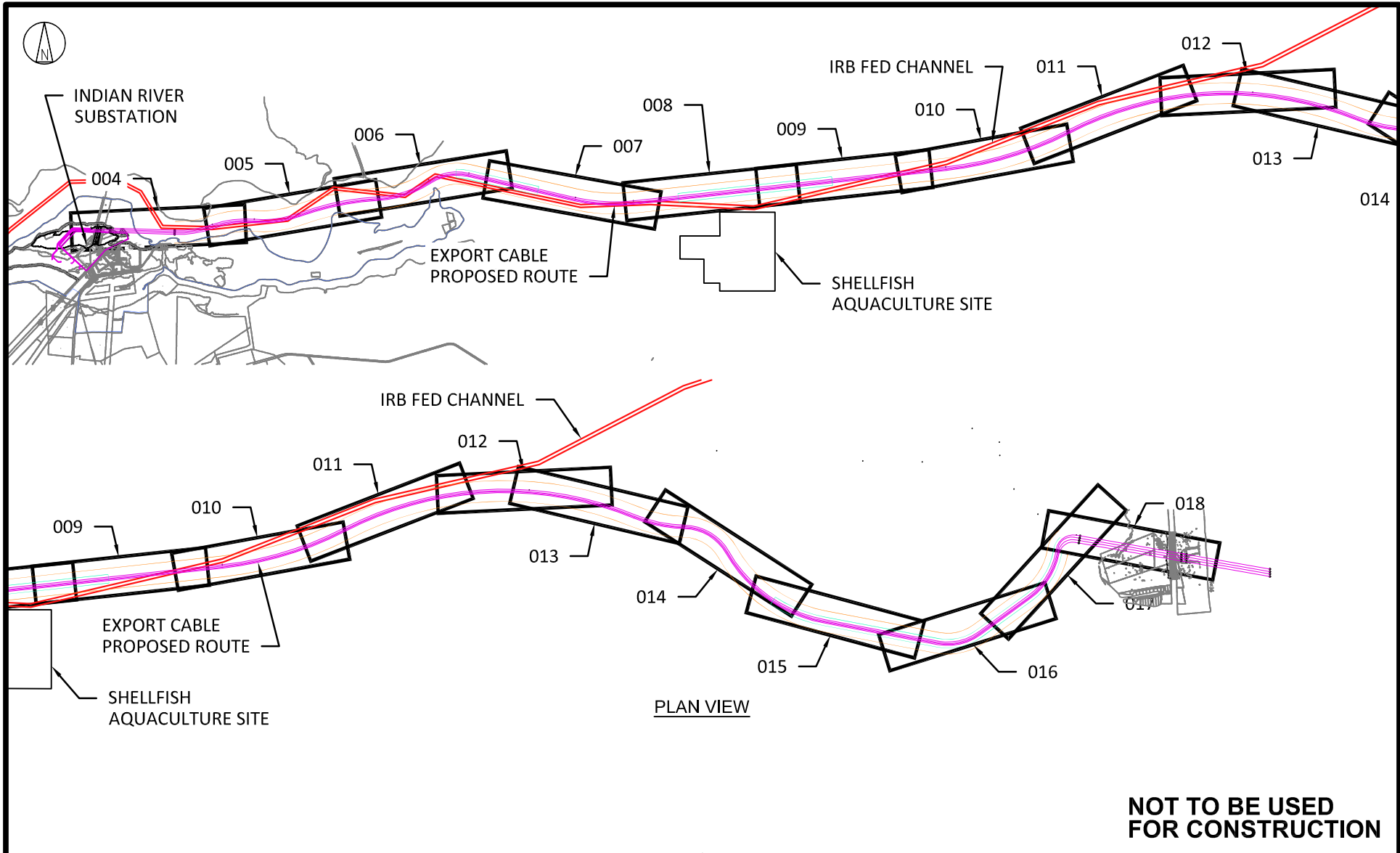
SCALE 1"=10000'

**NOT TO BE USED FOR CONSTRUCTION**

								0	02/09/24	ISSUED FOR PERMITTING	SLH	DJ	RW		
								NO	DATE	REVISIONS AND RECORD OF ISSUE	DRN	DES	CHK	PDE	APP

	<b>US WIND</b> INDIAN RIVER BAY - EXPORT CABLES DREDGING PLANS		PROJECT	DRAWING NUMBER	REV
			410735	- 002	0
DESIGNER	DRAWN	VICINITY MAP & GENERAL NOTES			CODE
DJ	SLH				AREA
CHECKED	DATE				
RW	10/13/23				

# **Plan and Profile Drawing Sheet Key Map**



									0	02/09/24	ISSUED FOR PERMITTING	SLH	DJ	RW		
									NO	DATE	REVISIONS AND RECORD OF ISSUE	DRN	DES	CHK	PDE	APP
<b>BLACK &amp; VEATCH</b> Building a world of difference®		<b>US WIND</b> INDIAN RIVER BAY - EXPORT CABLES DREDGING PLANS								PROJECT 410735 - 003 DRAWING NUMBER 410735 - 003				REV 0		
DESIGNER DJ DRAWN SLH		KEY MAP								CODE						
CHECKED RW DATE 10/13/23										AREA						



36" DIA TRANSITION JOINT BAY LID  
AND FRAME WITH IBSP LOGO  
(TYP 2 PLCS) (SEE NOTE 13)

5'-6" REMOVEABLE  
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ROAD  
BASE

7'-0" REMOVEABLE  
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9"  
(MIN)

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9'-0"

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PLASTIC SUMP WITH COVER  
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1'-0"

3'-3"

2'-0"

GEOTEXTILE

CRUSHED STONE

POCKET  
PULLING IRON  
(TYP 2 PLCS)

SECTION 1  
SCALE: 1/8"=1'-0"

**NOT TO BE USED  
FOR CONSTRUCTION**

									0	02/09/24	ISSUED FOR PERMITTING	SLH	DJ	RW		
									NO	DATE	REVISIONS AND RECORD OF ISSUE	DRN	DES	CHK	PDE	APP



**US WIND**  
INDIAN RIVER BAY - EXPORT CABLES

PROJECT	DRAWING NUMBER	REV
410735 - 027		0

DESIGNER	DRAWN
DJ	SLH
CHECKED	DATE
RW	10/13/23

TRANSITION VAULT DETAILS -SECTION VIEW

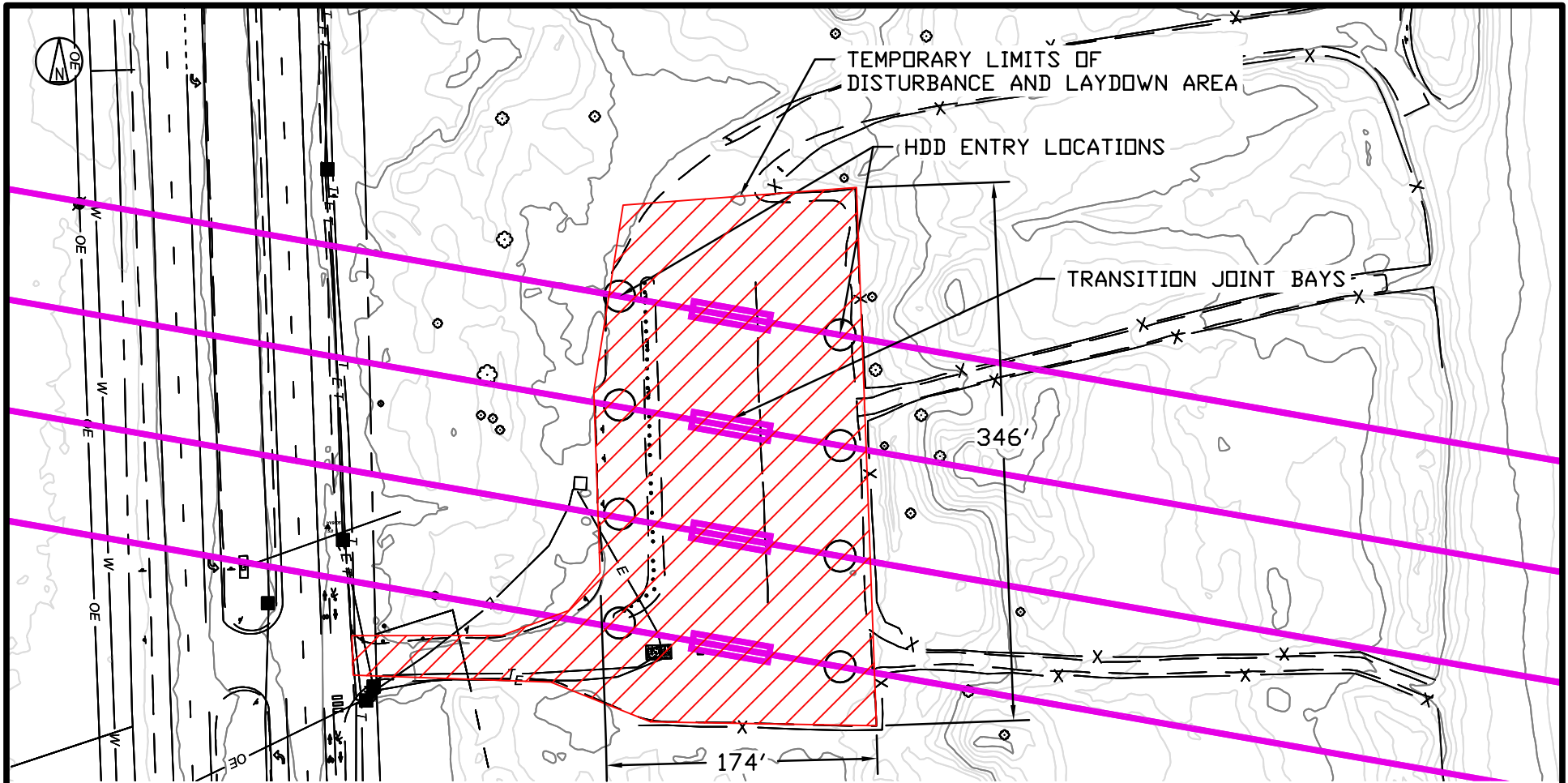
CODE	
AREA	

**East Landing – 3 R's Parking Lot  
Permanent Disturbance  
(Manhole Lids Only)**





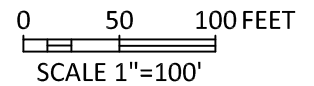
**East Landing – 3 R's Parking Lot**  
**Temporary Disturbance During Installation**



PLAN VIEW

**NOTE:**

- 1. Temporary disturbance within limits of parking area (no additional surface disturbance).



**NOT TO BE USED FOR CONSTRUCTION**

0	02/09/24	ISSUED FOR PERMITTING	SLH	DJ	RW		
NO	DATE	REVISIONS AND RECORD OF ISSUE	DRN	DES	CHK	PDE	APP



**US WIND**  
INDIAN RIVER BAY - EXPORT CABLES

PROJECT	DRAWING NUMBER	REV
410735 - 034		0

DESIGNER	DRAWN
DJ	SLH
CHECKED	DATE
RW	10/13/23

**3R'S PARKING LOT**  
**TEMPORARY DISTURBANCE AREA**

CODE	
AREA	