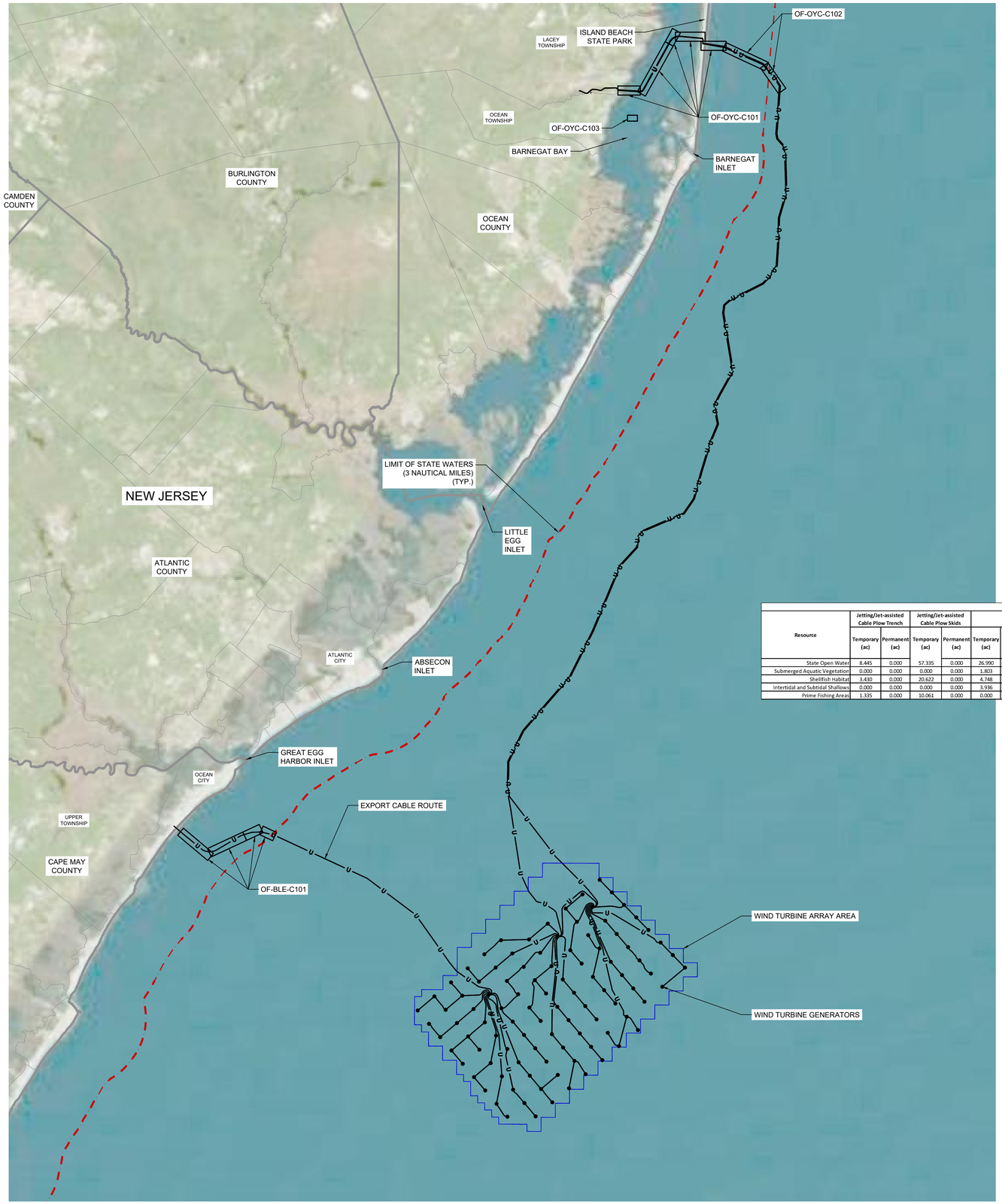


Millimeters

Inches

Scale For Microfilming

DRAWING INDEX:

TEMPORARY/PERMANENT IMPACTS

Resource	Jetting/Jet-assisted Cable Plow Trench		Jetting/Jet-assisted Cable Plow Skids		Dredging				Anchoring/Mooring		Fill within WOTUS		TOTAL			
	Temporary (ac)	Permanent (ac)	Temporary (ac)	Permanent (ac)	Temporary (ac)	Temporary Volume Removed (cy)	Permanent Volume Removed (cy)	Permanent (ac)	Temporary (ac)	Permanent (ac)	Temporary (ac)	Permanent (ac)	Temporary (ac)	Temporary Volume Removed (cy)	Permanent Volume Removed (cy)	Permanent (ac)
State Open Water	8.445	0.000	57.335	0.000	26.990	125,041	18,030	3.645	1.909	0.000	0.000	0.083	75.432	125,041	18,030	3.728
Submerged Aquatic Vegetation	0.000	0.000	0.000	0.000	1.803	8,120	4,507	0.911	0.020	0.000	0.000	0.083	1.823	8,120	4,507	0.994
Shellfish Habitat	3.430	0.000	20.622	0.000	4.748	21,386	18,030	3.645	0.695	0.000	0.000	0.000	29.495	21,386	18,030	3.645
Intertidal and Subtidal Shallows	0.000	0.000	0.000	0.000	3.936	13,093	0	0.000	0.025	0.000	0.000	0.083	3.961	13,093	0	0.083
Prime Fishing Areas	1.335	0.000	10.061	0.000	0.000	0	0	0.000	0.094	0.000	0.000	0.000	11.490	0	0	0.000

NJ CERTIFICATE OF AUTHORIZATION 24GE05780300

STATE OF NEW JERSEY JOSEPH P. DENNIS No. GE57803 LICENSED PROFESSIONAL ENGINEER

JOSEPH P. DENNIS
NJ PROFESSIONAL ENGINEER
No. 24GE05780300

no.	date	by	ckd	description
A	07/29/22	JD	RS	ISSUED FOR PERMIT

NOTES:

1. HORIZONTAL DATUM: NAD83 NEW JERSEY STATE PLANE, U.S. FOOT
2. VERTICAL DATA CONVERSION OYSTER CREEK: NGVD29 = NAVD88 + 1.335 FT

   VERTICAL DATA CONVERSION BL ENGLAND: NGVD29 = NAVD88 + 1.263 FT
3. ALL DIMENSIONS ARE IN FEET (FT) UNLESS NOTED OTHERWISE.
4. ALL BATHYMETRIC CONTOURS ARE DEPICTED IN RELATION TO MEAN LOWER LOW WATER (MLLW).
5. SEE HDD SERIES SHEETS FOR DETAILED PLAN AND PROFILE OF CABLE ROUTE.
6. FOR DETAILS ON WETLAND IMPACTS PLEASE SEE ONSHORE PLAN SET.
7. THESE DRAWINGS ARE FOR DESIGN AND PERMITTING PURPOSES ONLY AND NOT INTENDED FOR CONSTRUCTION. FINAL LOCATION OF PROPOSED IMPROVEMENTS WILL BE COORDINATED WITH ENGINEER UPON AWARD OF CONTRACT.
8. AREAS OF IMPACTS TO REGULATED AREAS WILL BE PROVIDED UPON FINAL DESIGN OF THE CABLE ROUTES AND RELATED IMPROVEMENTS.
9. THESE DRAWINGS SHOW THE APPROXIMATE LOCATION OF CABLE ROUTE. FINAL CABLE ROUTE TO BE PROVIDED BY THE CONTRACTOR.

FOR PERMITTING APPROVAL

Ocean Wind
An Ørsted & PSEG project

HDR ENGINEERING, INC.
1 INTERNATIONAL BOULEVARD, SUITE 1000
MAHWAH, NJ 07495

date	detailed
07/29/2022	J. WYNOHRADNYK
designed	checked
J. DENNIS	R. SCHOO

KEY PLAN

OCEAN WIND OFFSHORE WIND PROJECT
OFFSHORE CABLE ROUTES

project	RDS-PP CODE
112083	

drawing G001 – rev. A

sheet 1 of 14 sheets

file G001.dwg

GENERAL NOTES:

1. PROPOSED ONSHORE INFRASTRUCTURE RELATED TO THE OCEAN WIND 1 PROJECT SHOWN HEREON TAKEN FROM PLAN PREPARED BY E2PM GROUP, DATED JANUARY 2022.
2. THE CONTRACTOR SHALL DESIGNATE AN INDIVIDUAL RESPONSIBLE FOR CONSTRUCTION SITE SAFETY DURING THE COURSE OF SITE IMPROVEMENTS PURSUANT TO N.JA.C. 5:23-2.21 (E) OF THE NJ UNIFORM CONSTRUCTION CODE AND CFR 1926.32 (F) (OSHA COMPETENT PERSON).
3. ANY VARIATION FROM THE PLANS MUST BE AUTHORIZED BY THE DESIGN ENGINEER AND APPROVED BY THE AUTHORITIES HAVING JURISDICTION (AHJ).
4. THIS SET OF PLANS SHALL NOT BE UTILIZED AS CONSTRUCTION DOCUMENTS UNTIL EACH PLAN HAS BEEN REVISED TO INDICATE "ISSUED FOR CONSTRUCTION".
5. CONSTRUCTION DETAILS/SHOP DRAWINGS UTILIZED BY THE CONTRACTOR SHALL BE REVIEWED AND APPROVED BY THE DESIGN ENGINEER.
6. THIS SET OF DRAWINGS AND ALL INFORMATION CONTAINED HEREIN IS AUTHORIZED FOR THE USE ONLY BY THE PARTY FOR WHOM THE WORK IS CONTRACTED OR TO WHOM IT IS CERTIFIED. THIS SET OF DRAWINGS MAY NOT BE COPIED, REUSED, DISCLOSED, DISTRIBUTED, OR RELIED UPON FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN CONSENT OF HDR ENGINEERING INC. AND ORSTED.
7. REFER TO THE COMPLETE SET OF PLANS FOR ADDITIONAL INFORMATION.
8. ANY DEMOLITION MATERIAL SHALL BE PROPERLY DISPOSED OF AND NO ON-SITE BURIAL OR BURNING IS PERMITTED.
9. THE APPLICANT SHALL NOTIFY THE AHJ A MINIMUM OF 48 HOURS PRIOR TO THE START OF ANY CONSTRUCTION.
10. IF DURING THE COURSE OF SUBMARINE CABLE INSTALLATION ACTIVITIES OR OTHER WORK, A REPORTABLE SPILL (I.E. DEPENDING ON SIZE AND LOCATION OF SPILL) DOES OCCUR, WORK MUST BE STOPPED AND THE ON-SITE ENVIRONMENTAL HEALTH AND SAFETY MANAGER(S)/ OFFICER(S) WILL NOTIFY THE PROPER AUTHORITIES.

CONTRACTOR/OWNER RESPONSIBILITY NOTES:

1. THE CONTRACTOR/OWNER SHALL DESIGNATE A PERSON THAT IS KNOWLEDGEABLE OF CONSTRUCTION SAFETY STANDARDS AND IS EXPECTED TO BE AT THE CONSTRUCTION SITE ON A REGULAR BASIS, THIS PERSON SHALL BE RESPONSIBLE FOR THE IMPLEMENTATION, DISCHARGE, AND MONITORING OF SAFETY STANDARDS AND PRACTICES AT THE SITE. THE CONTRACTOR/OWNER SHALL PROVIDE DESIGN ENGINEER WITH NAME, ADDRESS AND TELEPHONE NUMBER OF DESIGNEE. IN LIEU OF THIS INFORMATION, THE REPRESENTATIVE PERSON FROM THE CONTRACTOR'S ORGANIZATION WHO SIGNED THE CONTRACT SHALL HEREBY BE RESPONSIBLE FOR THIS FUNCTION.
2. THE CONTRACTOR SHALL CONDUCT ALL CONSTRUCTION TO BE IN ACCORDANCE WITH CURRENT O.S.H.A. STANDARDS.
3. THE SITE CONTRACTOR SHALL VERIFY WITH DESIGN ENGINEER WHAT PERMITS AND APPROVALS ARE PENDING OR HAVE BEEN APPROVED PRIOR TO CONSTRUCTION.
4. THE SITE CONTRACTOR SHALL VERIFY AND MATCH HORIZONTAL LOCATIONS AND VERTICAL ELEVATIONS.
5. THE SITE CONTRACTOR SHALL PERFORM ALL WORK IN A WORKMANLIKE MANNER AND IN ACCORDANCE WITH ALL APPLICABLE CODES, ORDINANCES, AND MANUFACTURERS' RECOMMENDATIONS AND STANDARDS.
6. ALL DIMENSIONS AND EXISTING CONDITIONS MUST BE VERIFIED BY CONTRACTOR AND THE OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK.
7. ALL UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE AND ARE TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR AT THE TIME OF CONSTRUCTION.
8. THE CONTRACTOR SHALL VERIFY FIELD CONDITIONS AS SHOWN ON THE PLANS AND SHALL BE RESPONSIBLE FOR FIELD MEASUREMENTS FOR ALL NEW CONSTRUCTION.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SHORING, UNDERPINNING AND STRUCTURAL STABILITY DURING CONSTRUCTION.
10. THE CONTRACTOR SHALL CALL 1-800-272-1000 FOR FIELD MARKOUT/LOCATIONS OF UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.
11. IN THE EVENT CONDITIONS AT THE SITE ARE NOTICEABLY DIFFERENT (AT THE TIME OF CONSTRUCTION) FROM THE DOCUMENTS PROVIDED, THE CONTRACTOR AND/OR OWNER SHALL PROMPTLY NOTIFY THE DESIGN ENGINEER.
12. THE PROPOSED SITE GRADING DEPICTED IN THESE PLANS IS INTENDED TO PROVIDE A GENERAL GUIDE FOR GRADING. THE CONTRACTOR, CONSTRUCTION MANAGER OR OWNER SHALL INSTRUCT THE CONCRETE CONTRACTOR TO TAKE CARE IN SETTING FORMS FOR PEDESTRIAN AREAS TO ENSURE THAT THEY CONFORM TO THE NEW JERSEY BARRIER FREE SUBCODE.
13. THE CONTRACTOR SHALL COMPLY WITH ALL CONDITIONS OF APPROVAL IMPOSED BY ALL REGULATORY AGENCIES HAVING JURISDICTION AS IT RELATES TO THE CONSTRUCTION AND MAINTENANCE OF THE IMPROVEMENTS.
14. CONTRACTOR DAMAGE TO ANY EXISTING FEATURE SUCH AS, BUT NOT LIMITED TO, CONCRETE CURBS, CONCRETE WALKS, PAVING, LIGHTS, PLANTERS, SIGNS, UTILITIES OR BUILDINGS NOT SCHEDULED FOR REMOVAL SHALL BE RESTORED TO ORIGINAL CONDITION BY THE CONTRACTOR.

STAGING/CONSTRUCTION NOTES:

1. CONSTRUCTION ACTIVITIES, INCLUDING EQUIPMENT ACCESS, STAGING OF EQUIPMENT AND MATERIALS, AND/OR SOIL DISTURBANCES, MAY TAKE PLACE ANYWHERE WITHIN THE TEMPORARY WORKSPACE EASEMENT AREA AND PERMANENT EASEMENT AREA DEPICTED ON THIS PLAN.
2. DISTURBED AREAS IN COASTAL WETLANDS SHALL BE RESTORED TO MATCH PRE-CONSTRUCTION ELEVATIONS AND REVEGETATED IN ACCORDANCE WITH THE APPROVED COASTAL WETLANDS RESTORATION MITIGATION PLAN.
3. ANY TEMPORARY EXCAVATION SUPPORTS SHALL REMAIN IN PLACE FOR LESS THAN SIX MONTHS.
4. CONTRACTOR SHALL MINIMIZE STAGING AND MOORING IN SAV AREAS AND SHELLFISH AREAS.

WATER QUALITY MONITORING NOTES:

1. NO IN-WATER WORK SHALL COMMENCE UNTIL ALL PRE-CONSTRUCTION CONDITIONS RELATING TO SUCH WORK CONTAINED IN THE NJDEP DIVISION OF LAND RESOURCES PROTECTION AND U.S. ARMY CORPS OF ENGINEERS PHILADELPHIA DISTRICT PERMITS HAVE BEEN MET.
2. DURING THE TRENCHING AND INSTALLATION OF CABLES, THE CONTRACTOR SHALL IMPLEMENT THE SUSPENDED SEDIMENT/WATER QUALITY MONITORING PLAN PER THE NJDEP PERMIT AND SECTION 401 WATER QUALITY CERTIFICATION CONDITIONS.
3. ALL LABORATORY ANALYSES OF WATER QUALITY AND SEDIMENTS REQUIRED IN THE PERMIT CONDITION MUST BE CONDUCTED BY A LABORATORY CERTIFIED BY THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION.

COASTAL ZONE MANAGEMENT NOTES:

1. THE PURPOSE OF THESE PLANS IS TO SECURE USACE SECTION 404/10 PERMITS FOR THE PROPOSED CONSTRUCTION OF THE OCEAN WIND OFFSHORE WIND FARM PROJECT.
2. THE APPLICANT/OWNER SHALL SECURE ALL PROPOSED PERMANENT AND TEMPORARY EASEMENTS AND RIGHTS OF ACCESS SHOWN ON THE PLAN PRIOR TO CONSTRUCTION. THE OWNER/CONTRACTOR SHALL ALSO SECURE NECESSARY EASEMENTS OR RIGHTS OF ACCESS BEYOND THE LIMITS SHOWN, AS DEEMED NECESSARY.
3. SHOULD SITE CONDITIONS PREVENT THE USE OF AN ENVIRONMENTAL CLAMSHELL BUCKET, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE DREDGE BUCKET OR DREDGING METHOD FOR REVIEW AND APPROVAL BY NJDEP AND USACE.
4. CABLE INSTALLATION WILL BE TO CABLE BURIAL DEPTHS PER PERMIT PLANS.
5. MOORING AND STAGING ASSOCIATED WITH CABLE INSTALLATION OR DREDGING WILL BE LIMITED BY THE CONTRACTOR TO THE EXTENT PRACTICABLE SO AS TO MINIMIZE IMPACTS TO SUBMERGED AQUATIC VEGETATION, SHELLFISH HABITAT, AND INTERTIDAL AND SUBTIDAL SHALLOWS AREAS.

REFERENCE NOTES:

1. NJDEP SPECIAL AREAS DEPICTED HEREIN INCLUDE SHELLFISH HABITAT, SUBMERGED AQUATIC VEGETATION, PRIME FISHING GROUNDS, 1970 MAPPED COASTAL WETLANDS, ARTIFICIAL REEFS, BEACHES AND DUNES, AND TIDELANDS CLAIM AREAS. REFERENCE CITATIONS ARE PROVIDED BELOW.
2. SUBMERGED AQUATIC VEGETATION DEPICTED HEREIN IS BASED ON NJDEP MAPPING AVAILABLE THROUGH THE NJDEP LAND RESOURCE PROTECTION WEBSITE. SOURCES INCLUDE NEW JERSEY SUBMERGED AQUATIC VEGETATION DISTRIBUTION ATLAS (FINAL REPORT), FEBRUARY, 1980, CONDUCTED BY EARTH SATELLITE CORPORATION AND ALSO ON "EELGRASS INVENTORY" AND "LANDSCAPE SCALE APPROACHES TO COASTAL HABITAT CONSERVATION - BARNEGAT BAY". DIGITIZED IN GIS BY CENTER FOR REMOTE SENSING AND SPATIAL ANALYSIS, RUTGERS UNIVERSITY.
3. SHELLFISH HABITAT DEPICTED HEREIN IS BASED UPON NJDEP MAPPING OF MODERATE AND HIGH DENSITY/COMMERCIAL VALUE AREAS OF BARNEGAT BAY AVAILABLE THROUGH THE NJDEP LAND RESOURCES PROTECTION WEBSITE. SOURCES INCLUDE DISTRIBUTION OF SHELLFISH RESOURCES IN RELATION TO THE NEW JERSEY INTRACOASTAL WATERWAY (U.S. DEPARTMENT OF THE INTERIOR, 1963) AND/OR "INVENTORY OF NEW JERSEY'S ESTUARINE SHELLFISH RESOURCES" (DIVISION OF FISH, GAME AND WILDLIFE, BUREAU OF SHELLFISHERIES, 1983-PRESENT). DATA DIGITIZED IN GIS BY HDR, 2019.
4. PRIME FISHING GROUNDS DEPICTED ON THESE PLANS WERE MAPPED BY THE NJDEP FOR THE ATLANTIC OCEAN FOR PURPOSES OF ENVIRONMENTAL REVIEWS AS WELL AS COMMERCIAL AND RECREATIONAL FISHING GROUNDS IDENTIFICATION. SOURCE OBTAINED BY HDR NOVEMBER 2021 FROM NJDEP BUREAU OF GIS.
5. ARTIFICIAL REEFS DEPICTED ON THESE PLANS WERE MAPPED BY THE NJDEP FOR THE ATLANTIC OCEAN. SOURCE OBTAINED BY HDR IN NOVEMBER 2021 FROM NJDEP BUREAU OF GIS.
6. BEACHES AND DUNES DEPICTED HEREIN ARE SOURCED FROM THE NJDEP LAND USE/LAND COVER 2015 DATASET PUBLISHED IN 2019 AND DOWNLOADED BY HDR IN NOVEMBER 2021 FROM THE NJDEP BUREAU OF GIS.
7. INTRACOASTAL WATERWAY WAS DOWNLOADED BY HDR DECEMBER 2021 FROM THE U.S. ARMY CORPS OF ENGINEERS PHILADELPHIA DISTRICT WEBSITE. ADDITIONAL SOURCING FOR LOCATION VERIFIED VIA NOAA NAVIGATION CHART 12324.
8. TIDAL DATUMS HEREIN ARE BASED ON NOAA TIDAL VDATUM MODEL AND CONFIRMED BY HEIGHT DIFFERENCE METHOD DOCUMENTED IN NJDOT MEAN HIGH WATER MANUAL PREPARED BY TECHNICAL SURVEY UNIT (2008).
9. BATHYMETRIC SURVEY DATA PROVIDED BY ORSTED 2021 AND BASED ON SITE INVESTIGATION HIGH RESOLUTION GEOPHYSICAL FIELD STUDIES CONDUCTED FROM 2019 THROUGH 2021. SUPPLEMENTAL BATHYMETRY FOR BARNEGAT BAY PROVIDED BY NOAA 2014 POST SANDY TOPOBATHY LIDAR.

WATER QUALITY/BEST MANAGEMENT PRACTICES NOTES:

1. TIMING RESTRICTIONS FOR IN-WATER WORK WILL BE IMPLEMENTED AS SPECIFIED BY PERMIT CONDITIONS AND/OR IN COORDINATION WITH STATE AND FEDERAL AGENCIES.
2. DREDGING SHALL BE PERFORMED USING A CLOSED CLAMSHELL "ENVIRONMENTAL" BUCKET DREDGE.
3. DREDGING SHALL BE LIMITED TO AUTHORIZED PROJECT DEPTH(S) AND VOLUME PER PERMIT PLANS.
4. THE DREDGE SHALL BE OPERATED SO AS TO CONTROL THE RATE OF DESCENT OF THE BUCKET SO AS TO MAXIMIZE THE VERTICAL CUT OF THE CLAMSHELL BUCKET WHILE NOT PENETRATING THE SEDIMENT BEYOND THE VERTICAL DIMENSION OF THE OPEN BUCKET (I.E. OVERFILLING THE BUCKET). THIS WILL REDUCE THE AMOUNT OF FREE WATER IN THE DREDGED MATERIAL, WILL AVOID OVERFILLING THE BUCKET, AND MINIMIZE THE NUMBER OF DREDGE BUCKET CYCLES NEEDED TO COMPLETE THE DREDGING.
5. DREDGE BUCKETS WILL BE LIFTED IN A CONTINUOUS MOTION THROUGH THE WATER COLUMN AND INTO THE BARGE TO MINIMIZE LOSS OF DREDGED MATERIAL FROM THE BUCKET.
6. DECANT WATER SHALL BE HELD A MINIMUM OF 24 HOURS AFTER THE LAST ADDITION OF DREDGED MATERIAL TO THE DECANT HOLDING SCOW PRIOR TO DISCHARGE.
7. DREDGED MATERIAL SHALL BE PLACED DELIBERATELY IN THE BARGE IN ORDER TO PREVENT SPILLAGE OF MATERIAL OVERBOARD.
8. THE PERMITTEE SHALL MAINTAIN A "NO BARGE OVERFLOW" DURING THE ENTIRE DREDGING OPERATION.
9. A PROTECTED SPECIES OBSERVER (PSO) WILL MONITOR DREDGING ACTIVITIES.
10. THE GUNWALES OF THE DREDGE SCOWS SHALL NOT BE RINSED OR HOSED EXCEPT TO THE EXTENT NECESSARY TO ENSURE THE SAFETY OF WORKERS MANEUVERING ON THE DREDGE SCOW.
11. DURING DISCHARGE OF THE DECANT WATER FROM THE HOLDING SCOW, CARE SHALL BE TAKEN TO AVOID RESUSPENDING OR DISCHARGING SEDIMENT WHICH HAS SETTLED IN THE DECANT HOLDING SCOW.

NAVIGATION AND VESSEL TRAFFIC NOTES:

1. OCEAN WIND SHALL POST APPROPRIATE WARNING SIGNS DURING CONSTRUCTION AS REQUIRED BY THE US COAST GUARD (USCG). OCEAN WIND SHALL NOTIFY THE USCG 30 DAYS PRIOR TO THE START OF IN-WATER STAGING OR CONSTRUCTION.
2. AT LEAST 24 HOURS PRIOR TO THE COMMENCEMENT OF IN-WATER WORK, OCEAN WIND WILL NOTIFY THE USCG OF THE START OF WORK, THE EXPECTED COMPLETION DATE, THE HOURS OF THE DAY THE WORK WILL BE PERFORMED, THE NAMES OF THE VESSELS ON SCENE, THE VHF RADIO CHANNELS THE VESSELS WILL MONITOR AND THE PROJECT'S 24/7 POINT OF CONTACT.
3. NO LESS THAN 24 HOURS PRIOR TO COMMENCEMENT OF IN-WATER WORK OCEAN WIND WILL INFORM THE LOCAL WATERWAY USERS OF THE START OF THE WORK USING THE "LOCAL NOTICE TO MARINERS".
4. THIS WORK WILL BE CONDUCTED IN A MANNER THAT THE FREE NAVIGATION OF THE WATERWAY IS NOT UNREASONABLY INTERFERED WITH AND THE PRESENT NAVIGATIONAL DEPTHS ARE NOT IMPAIRED. TIMELY NOTICE OF ANY AND ALL EVENTS THAT MAY AFFECT NAVIGATION SHALL BE GIVEN TO THE DISTRICT COMMANDER DURING THE PERFORMANCE OF THE WORK.
5. WITHIN 30 DAYS AFTER THE COMPLETION OF CONSTRUCTION, OCEAN WIND SHALL POST WARNING SIGNS AT LANDFALLS AS IDENTIFIED IN PERMIT PLANS AND SHALL NOTIFY THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION AS TO THE CABLE(S) LOCATION(S) FOR PROPER NOAA CHART IDENTIFICATION.

ABBREVIATIONS:

AHJ	AUTHORITIES HAVING JURISDICTION
CLV	CABLE LAYING VESSEL
DP	DYNAMIC POSITIONING
HDD	HORIZONTAL DIRECTIONAL DRILL
IBSP	ISLAND BEACH STATE PARK
SAV	SUBMERGED AQUATIC VEGETATION

LEGEND

- EXISTING TOPOGRAPHY/BATHYMETRY
- EXISTING SUBSEA CABLE
- PROPOSED CABLE
- HORIZONTAL DIRECTIONAL DRILL LINE
- TEMPORARY CONSTRUCTION EASEMENT LINE
- SHELLFISH (NJDEP MAPPING 1963, 1986, 2012)
- SUBMERGED AQUATIC VEGETATION (1979, 1986)
- STATE NAVIGATION CHANNEL
- FEDERAL NAVIGATION CHANNEL (INTRACOASTAL WATERWAY)
- DREDGING LIMIT
- DREDGING SECONDARY OPTION
- GEOPHYSICAL SURVEY CORRIDOR/LIMITS OF ACCESS AND MOORING
- AQUACULTURE LEASE AREA
- PERMANENT UTILITY EASEMENT
- PRIME FISHING AREA
- LIMIT OF STATE WATERS (3 NAUTICAL MILES)
- ARTIFICIAL REEFS
- WRECKS AND OBSTRUCTIONS
- HDD PIT
- BEACH
- DUNE
- OPEN-CUT SHORELINE CABLE INSTALLATION AREA

Tidal Datums (NAVD88 ft elevation)	Barnegat Bay Holtec Farm Landing	Barnegat Bay IBSP Shoreline	Barnegat Bay Atlantic Shoreline	BL England Atlantic Shoreline
MHHW	0.40	0.42	2.17	1.96
MHW	0.27	0.27	1.84	1.56
MTL	-0.05	-0.07	-0.19	-0.37
MLW	-0.42	-0.45	-2.01	-2.32
MLLW	-0.50	-0.51	-2.15	-2.47

NJ CERTIFICATE OF AUTHORIZATION 24GE05780300

STATE OF NEW JERSEY · JOSEPH P. DENNIS · No. GE057803 · LICENSED PROFESSIONAL ENGINEER

JOSEPH P. DENNIS
NJ PROFESSIONAL ENGINEER
No. 24GE05780300

no.	date	by	ckd	description
A	07/29/22	JD	RS	ISSUED FOR PERMIT

NOTES:

1. HORIZONTAL DATUM: NAD83 NEW JERSEY STATE PLANE, U.S. FOOT
2. VERTICAL DATA CONVERSION OYSTER CREEK: NGVD29 = NAVD88 + 1.335 FT
   VERTICAL DATA CONVERSION BL ENGLAND: NGVD29 = NAVD88 + 1.263 FT
3. ALL DIMENSIONS ARE IN FEET (FT) UNLESS NOTED OTHERWISE.
4. ALL BATHYMETRIC CONTOURS ARE DEPICTED IN RELATION TO MEAN LOWER LOW WATER (MLLW).
5. SEE HDD SERIES SHEETS FOR DETAILED PLAN AND PROFILE OF CABLE ROUTE.
6. FOR DETAILS ON WETLAND IMPACTS PLEASE SEE ONSHORE PLAN SET.
7. THESE DRAWINGS ARE FOR DESIGN AND PERMITTING PURPOSES ONLY AND NOT INTENDED FOR CONSTRUCTION. FINAL LOCATION OF PROPOSED IMPROVEMENTS WILL BE COORDINATED WITH ENGINEER UPON AWARD OF CONTRACT.
8. AREAS OF IMPACTS TO REGULATED AREAS WILL BE PROVIDED UPON FINAL DESIGN OF THE CABLE ROUTES AND RELATED IMPROVEMENTS.
9. THESE DRAWINGS SHOW THE APPROXIMATE LOCATION OF CABLE ROUTE. FINAL CABLE ROUTE TO BE PROVIDED BY THE CONTRACTOR.

FOR PERMITTING APPROVAL

Ocean Wind
An Ørsted & PSEG project

HDR ENGINEERING, INC.
1 INTERNATIONAL BOULEVARD, SUITE 1000
MAHWAH, NJ 07495

date	detailed
07/29/2022	J. WYNOHRADNYK
designed	checked
J. DENNIS	R. SCHOO

GENERAL NOTES AND LEGEND

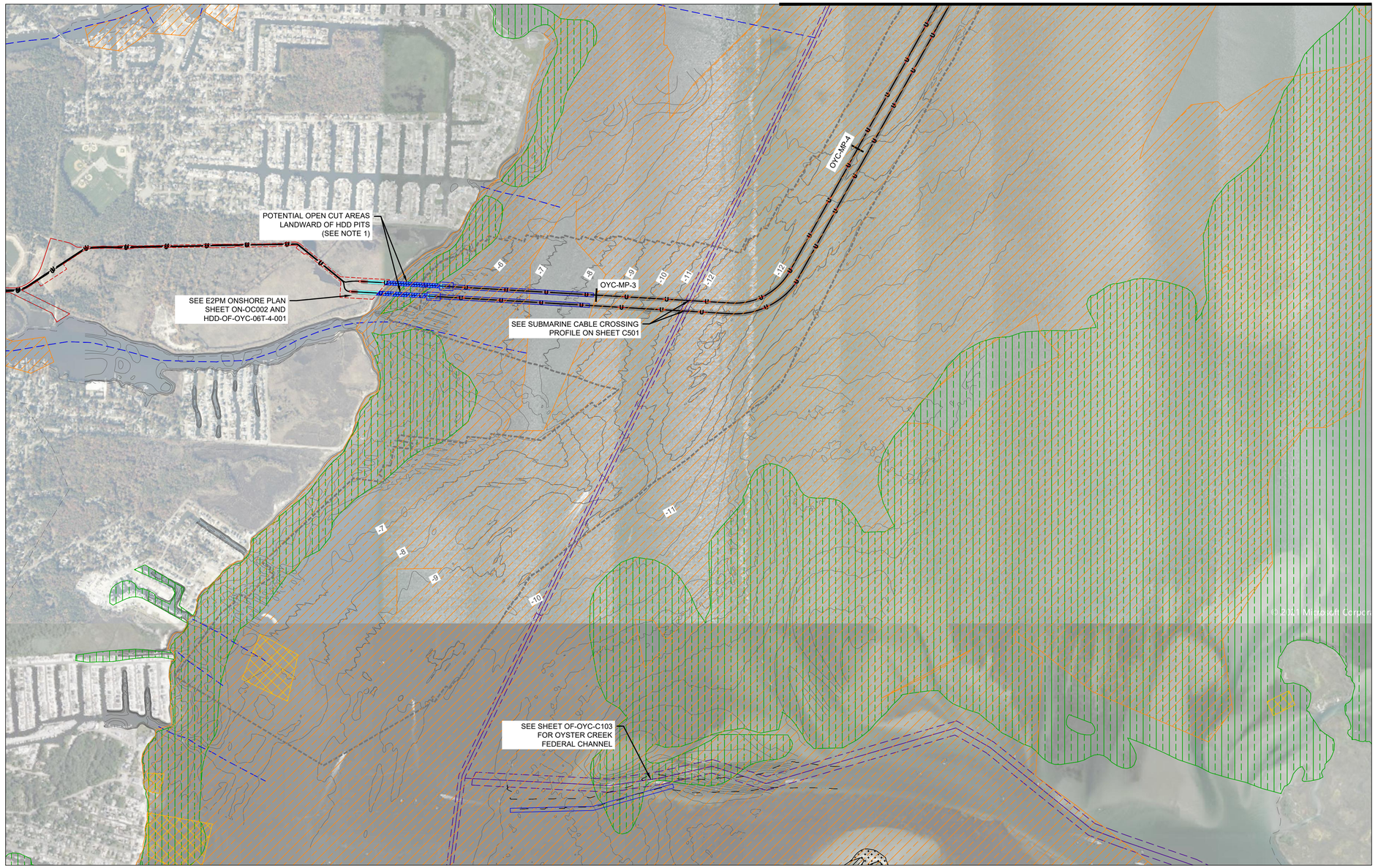
OCEAN WIND OFFSHORE WIND PROJECT
OFFSHORE CABLE ROUTES

project	RDS-PP CODE
112083	
drawing	rev.
G002	A

sheet 2 of 14 sheets
file G002.dwg

Scale For Microfilming
Millimeters
Inches

MATCHLINE: SEE DRAWING OF-OYC-C002

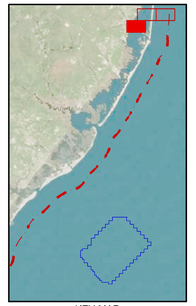


LEGEND

- EXISTING TOPOGRAPHY/BATHYMETRY (-10)
- EXISTING SUBSEA CABLE
- PROPOSED CABLE
- HORIZONTAL DIRECTIONAL DRILL LINE
- TEMPORARY CONSTRUCTION EASEMENT LINE
- SHELLFISH (NJDEP MAPPING 1963, 1986, 2012)
- SUBMERGED AQUATIC VEGETATION (1979, 1986)
- STATE NAVIGATION CHANNEL
- FEDERAL NAVIGATION CHANNEL (INTRACOASTAL WATERWAY)
- DREDGING LIMIT
- DREDGING SECONDARY OPTION
- GEOPHYSICAL SURVEY CORRIDOR/LIMITS OF ACCESS AND MOORING
- AQUACULTURE LEASE AREA
- PERMANENT UTILITY EASEMENT
- PRIME FISHING AREA
- LIMIT OF STATE WATERS (3 NAUTICAL MILES)
- ARTIFICIAL REEFS
- WRECKS AND OBSTRUCTIONS
- HDD PIT
- BEACH
- DUNE
- OPEN-CUT SHORELINE CABLE INSTALLATION AREA

NOTES:

1. THE OPEN CUT DEPICTED HEREON IS A SECONDARY OPTION TO THE HDD METHOD AND WILL ONLY BE USED SHOULD SOILS OR OTHER CONDITIONS RENDER HDD IMPRACTICAL FROM AN INADVERTENT RETURNS RISK STANDPOINT.



KEY MAP

0 800' 1600'
HORIZONTAL SCALE IN FEET

NJ CERTIFICATE OF AUTHORIZATION 24GE05780300

JOSEPH P. DENNIS
NJ PROFESSIONAL ENGINEER
No. 24GE05780300

no.	date	by	ckd	description
A	07/29/22	JD	RS	ISSUED FOR PERMIT

NOTES:

1. HORIZONTAL DATUM: NAD83 NEW JERSEY STATE PLANE, U.S. FOOT
2. VERTICAL DATA CONVERSION OYSTER CREEK: NGVD29 = NAVD88 + 1.335 FT
   VERTICAL DATA CONVERSION BL ENGLAND: NGVD29 = NAVD88 + 1.263 FT
3. ALL DIMENSIONS ARE IN FEET (FT) UNLESS NOTED OTHERWISE.
4. ALL BATHYMETRIC CONTOURS ARE DEPICTED IN RELATION TO MEAN LOWER LOW WATER (MLLW).
5. SEE HDD SERIES SHEETS FOR DETAILED PLAN AND PROFILE OF CABLE ROUTE.
6. FOR DETAILS ON WETLAND IMPACTS PLEASE SEE ONSHORE PLAN SET.
7. THESE DRAWINGS ARE FOR DESIGN AND PERMITTING PURPOSES ONLY AND NOT INTENDED FOR CONSTRUCTION. FINAL LOCATION OF PROPOSED IMPROVEMENTS WILL BE COORDINATED WITH ENGINEER UPON AWARD OF CONTRACT.
8. AREAS OF IMPACTS TO REGULATED AREAS WILL BE PROVIDED UPON FINAL DESIGN OF THE CABLE ROUTES AND RELATED IMPROVEMENTS.
9. THESE DRAWINGS SHOW THE APPROXIMATE LOCATION OF CABLE ROUTE. FINAL CABLE ROUTE TO BE PROVIDED BY THE CONTRACTOR.

FOR PERMITTING APPROVAL

Ocean Wind
An Ørsted & PSEG project

HDR ENGINEERING, INC.
1 INTERNATIONAL BOULEVARD, SUITE 1000
MAHWAH, NJ 07495

date	detailed
07/29/2022	J. WYNOHRADNYK
designed	checked
J. DENNIS	R. SCHOO

OYSTER CREEK ENLARGED PLAN (1 OF 3)

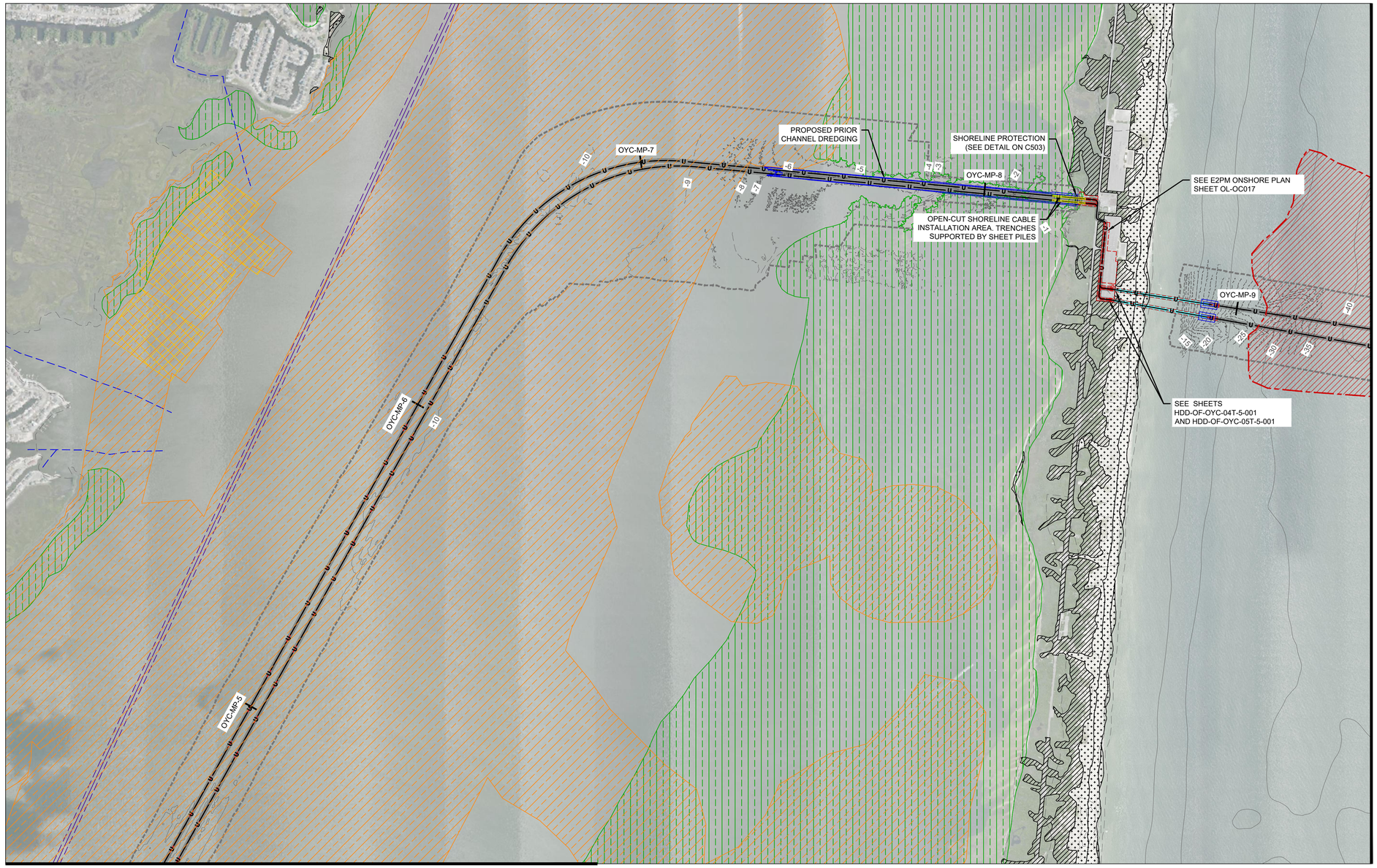
OCEAN WIND OFFSHORE WIND PROJECT
OFFSHORE CABLE ROUTES

project	RDS-PP CODE
112083	

drawing OF-OYC-C001 — rev. A

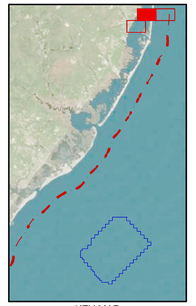
sheet 3 of 14 sheets
file C001.dwg

Scale For Microfilming
Millimeters
Inches



LEGEND

- EXISTING TOPOGRAPHY/BATHYMETRY
- EXISTING SUBSEA CABLE
- PROPOSED CABLE
- HORIZONTAL DIRECTIONAL DRILL LINE
- TEMPORARY CONSTRUCTION EASEMENT LINE
- SHELLFISH (NJDEP MAPPING 1963, 1986, 2012)
- SUBMERGED AQUATIC VEGETATION (1979, 1986)
- STATE NAVIGATION CHANNEL
- FEDERAL NAVIGATION CHANNEL (INTRACOASTAL WATERWAY)
- DREDGING LIMIT
- DREDGING SECONDARY OPTION
- GEOPHYSICAL SURVEY CORRIDOR/LIMITS OF ACCESS AND MOORING
- AQUACULTURE LEASE AREA
- PERMANENT UTILITY EASEMENT
- PRIME FISHING AREA
- LIMIT OF STATE WATERS (3 NAUTICAL MILES)
- ARTIFICIAL REEFS
- WRECKS AND OBSTRUCTIONS
- HDD PIT
- BEACH
- DUNE
- OPEN-CUT SHORELINE CABLE INSTALLATION AREA



KEY MAP

0 800' 1600'
HORIZONTAL SCALE IN FEET

NJ CERTIFICATE OF AUTHORIZATION 24GE05780300

JOSEPH P. DENNIS
NJ PROFESSIONAL ENGINEER
No. 24GE05780300

Scale For Microfilming
Millimeters
Inches

no.	date	by	ckd	description
A	07/29/22	JD	RS	ISSUED FOR PERMIT

NOTES:

1. HORIZONTAL DATUM: NAD83 NEW JERSEY STATE PLANE, U.S. FOOT
2. VERTICAL DATA CONVERSION OYSTER CREEK: NGVD29 = NAVD88 + 1.335 FT

   VERTICAL DATA CONVERSION BL ENGLAND: NGVD29 = NAVD88 + 1.263 FT
3. ALL DIMENSIONS ARE IN FEET (FT) UNLESS NOTED OTHERWISE.
4. ALL BATHYMETRIC CONTOURS ARE DEPICTED IN RELATION TO MEAN LOWER LOW WATER (MLLW).
5. SEE HDD SERIES SHEETS FOR DETAILED PLAN AND PROFILE OF CABLE ROUTE.
6. FOR DETAILS ON WETLAND IMPACTS PLEASE SEE ONSHORE PLAN SET.
7. THESE DRAWINGS ARE FOR DESIGN AND PERMITTING PURPOSES ONLY AND NOT INTENDED FOR CONSTRUCTION. FINAL LOCATION OF PROPOSED IMPROVEMENTS WILL BE COORDINATED WITH ENGINEER UPON AWARD OF CONTRACT.
8. AREAS OF IMPACTS TO REGULATED AREAS WILL BE PROVIDED UPON FINAL DESIGN OF THE CABLE ROUTES AND RELATED IMPROVEMENTS.
9. THESE DRAWINGS SHOW THE APPROXIMATE LOCATION OF CABLE ROUTE. FINAL CABLE ROUTE TO BE PROVIDED BY THE CONTRACTOR.

FOR PERMITTING APPROVAL

Ocean Wind
An Ørsted & PSEG project

HDR ENGINEERING, INC.
1 INTERNATIONAL BOULEVARD, SUITE 1000
MAHWAH, NJ 07495

date	detailed
07/29/2022	J. WYNOHRADNYK
designed	checked
J. DENNIS	R. SCHOO

OYSTER CREEK ENLARGED PLAN (2 OF 3)

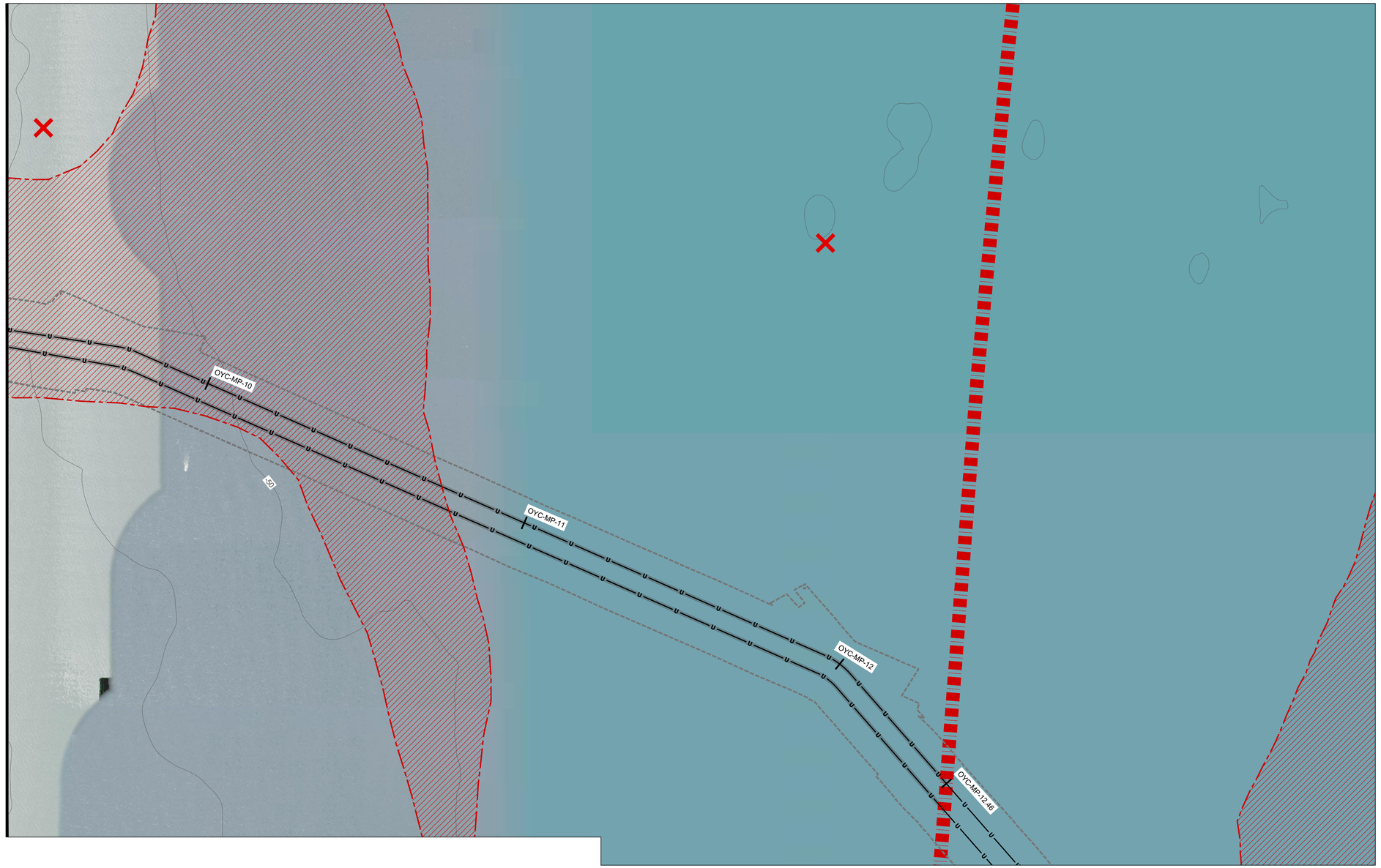
OCEAN WIND OFFSHORE WIND PROJECT
OFFSHORE CABLE ROUTES

project	RDS-PP CODE
112083	

drawing **OF-OYC-C002** rev. **A**

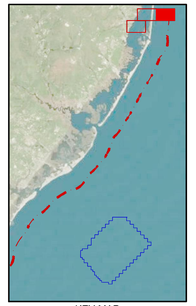
sheet 4 of 14 sheets

file C001.dwg



LEGEND

- EXISTING TOPOGRAPHY/BATHYMETRY
- EXISTING SUBSEA CABLE
- PROPOSED CABLE
- HORIZONTAL DIRECTIONAL DRILL LINE
- TEMPORARY CONSTRUCTION EASEMENT LINE
- SHELLFISH (NJDEP MAPPING 1963, 1986, 2012)
- SUBMERGED AQUATIC VEGETATION (1979, 1986)
- STATE NAVIGATION CHANNEL
- FEDERAL NAVIGATION CHANNEL (INTRACOASTAL WATERWAY)
- DREDGING LIMIT
- DREDGING SECONDARY OPTION
- GEOPHYSICAL SURVEY CORRIDOR/LIMITS OF ACCESS AND MOORING
- AQUACULTURE LEASE AREA
- PERMANENT UTILITY EASEMENT
- PRIME FISHING AREA
- LIMIT OF STATE WATERS (3 NAUTICAL MILES)
- ARTIFICIAL REEFS
- WRECKS AND OBSTRUCTIONS
- HDD PIT
- BEACH
- DUNE
- OPEN-CUT SHORELINE CABLE INSTALLATION AREA



KEY MAP

0 800' 1600'
HORIZONTAL SCALE IN FEET

no.	date	by	ckd	description
A	07/29/22	JD	RS	ISSUED FOR PERMIT

NOTES:

1. HORIZONTAL DATUM: NAD83 NEW JERSEY STATE PLANE, U.S. FOOT
2. VERTICAL DATA CONVERSION OYSTER CREEK: NGVD29 = NAVD88 + 1.335 FT

   VERTICAL DATA CONVERSION BL ENGLAND: NGVD29 = NAVD88 + 1.263 FT
3. ALL DIMENSIONS ARE IN FEET (FT) UNLESS NOTED OTHERWISE.
4. ALL BATHYMETRIC CONTOURS ARE DEPICTED IN RELATION TO MEAN LOWER LOW WATER (MLLW).
5. SEE HDD SERIES SHEETS FOR DETAILED PLAN AND PROFILE OF CABLE ROUTE.
6. FOR DETAILS ON WETLAND IMPACTS PLEASE SEE ONSHORE PLAN SET.
7. THESE DRAWINGS ARE FOR DESIGN AND PERMITTING PURPOSES ONLY AND NOT INTENDED FOR CONSTRUCTION. FINAL LOCATION OF PROPOSED IMPROVEMENTS WILL BE COORDINATED WITH ENGINEER UPON AWARD OF CONTRACT.
8. AREAS OF IMPACTS TO REGULATED AREAS WILL BE PROVIDED UPON FINAL DESIGN OF THE CABLE ROUTES AND RELATED IMPROVEMENTS.
9. THESE DRAWINGS SHOW THE APPROXIMATE LOCATION OF CABLE ROUTE. FINAL CABLE ROUTE TO BE PROVIDED BY THE CONTRACTOR.

FOR PERMITTING APPROVAL

Ocean Wind
An Ørsted & PSEG project

HDR ENGINEERING, INC.
1 INTERNATIONAL BOULEVARD, SUITE 1000
MAHWAH, NJ 07495

date	detailed
07/29/2022	J. WYNOHRADNYK
designed	checked
J. DENNIS	R. SCHOO

OYSTER CREEK ENLARGED PLAN (3 OF 3)

OCEAN WIND OFFSHORE WIND PROJECT
OFFSHORE CABLE ROUTES

NJ CERTIFICATE OF AUTHORIZATION 24GE05780300

JOSEPH P. DENNIS
NJ PROFESSIONAL ENGINEER
No. 24GE05780300

project	RDS-PP CODE
112083	

drawing OF-OYC-C003 — rev. A

sheet 5 of 14 sheets

file C001.dwg

Scale For Microfilming
Millimeters
Inches

CHART 1A

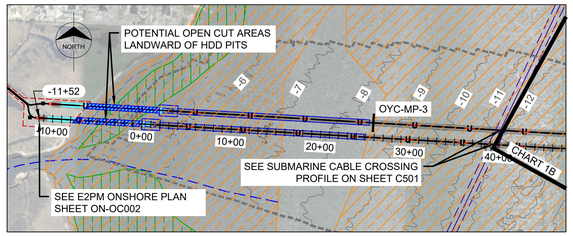
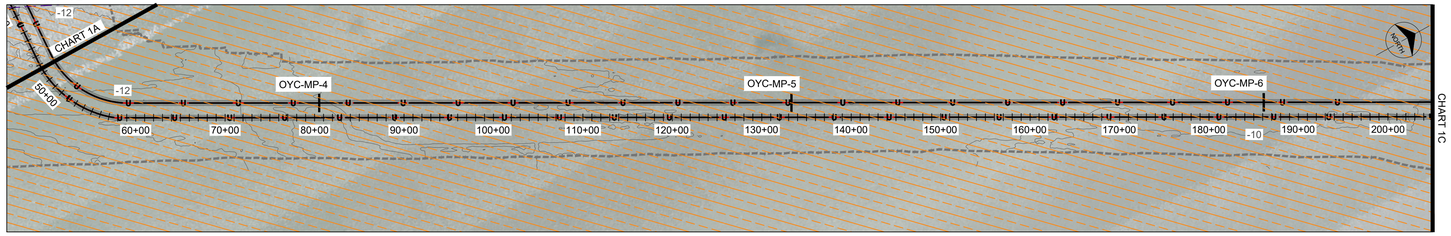


CHART 1B



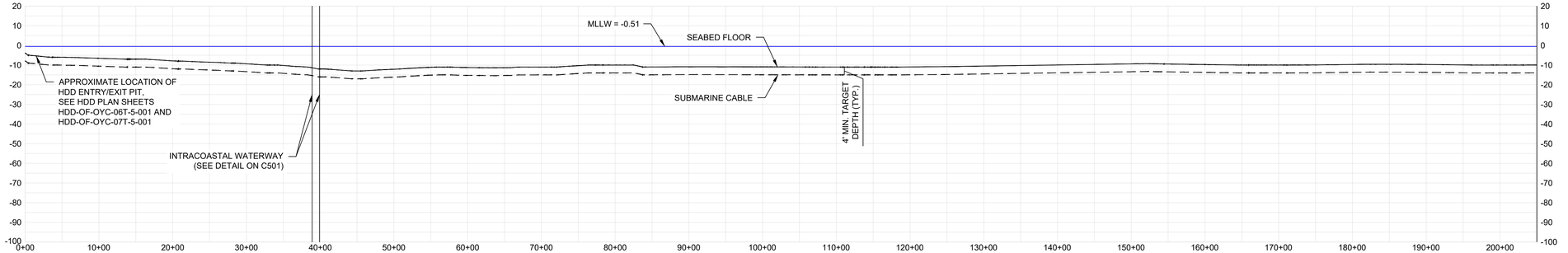


CHART 1C

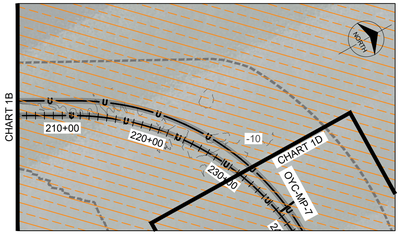


CHART 1D

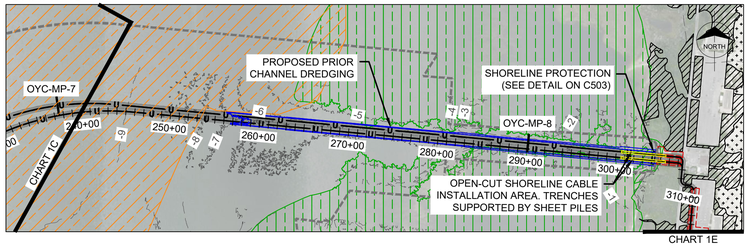
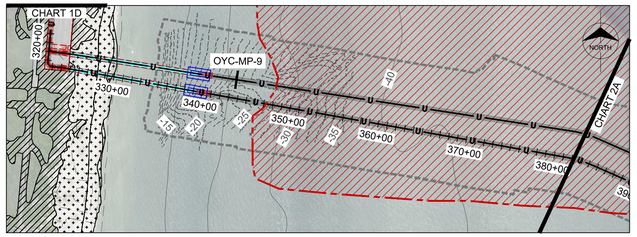
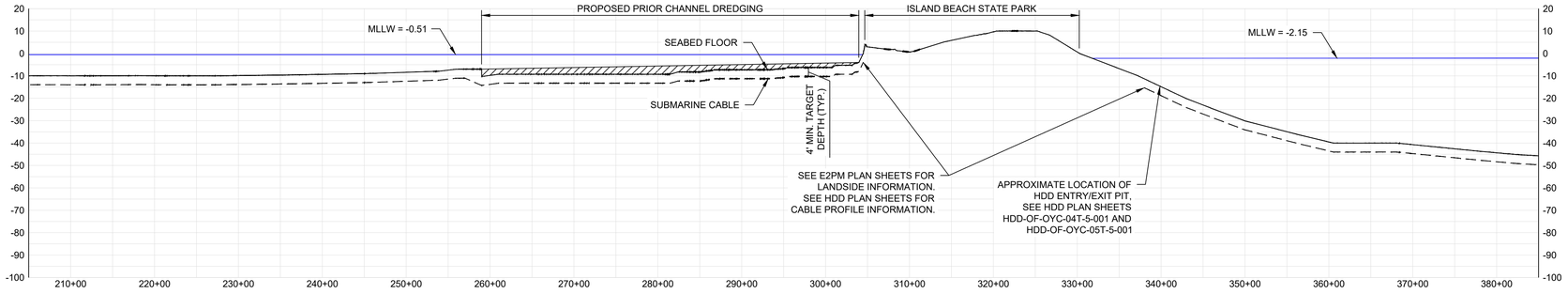


CHART 1E





LEGEND

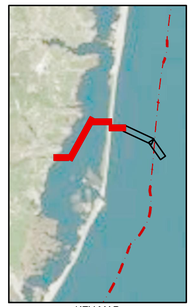
- EXISTING TOPOGRAPHY/BATHYMETRY
- EXISTING SUBSEA CABLE
- PROPOSED CABLE
- HORIZONTAL DIRECTIONAL DRILL LINE
- TEMPORARY CONSTRUCTION EASEMENT LINE
- SHELLFISH (NJDEP MAPPING 1963, 1986, 2012)
- SUBMERGED AQUATIC VEGETATION (1979, 1986)
- STATE NAVIGATION CHANNEL
- FEDERAL NAVIGATION CHANNEL (INTRACOASTAL WATERWAY)
- DREDGING LIMIT
- DREDGING SECONDARY OPTION
- GEOPHYSICAL SURVEY CORRIDOR/LIMITS OF ACCESS AND MOORING
- AQUACULTURE LEASE AREA
- PERMANENT UTILITY EASEMENT
- PRIME FISHING AREA
- LIMIT OF STATE WATERS (3 NAUTICAL MILES)
- ARTIFICIAL REEFS
- WRECKS AND OBSTRUCTIONS
- HDD PIT
- BEACH
- DUNE
- OPEN-CUT SHORELINE CABLE INSTALLATION AREA

TIDAL DATUMS ACROSS PROJECT AREA

Tidal Datums (NAVD88 ft elevation)	Barnegat Bay Holtec Farm Landing	Barnegat Bay IBSP Shoreline	Barnegat Bay Atlantic Shoreline	BL England Atlantic Shoreline
MHHW	0.40	0.42	2.17	1.96
MHW	0.27	0.27	1.84	1.56
MTL	-0.05	-0.07	-0.19	-0.37
MLW	-0.42	-0.45	-2.01	-2.32
MLLW	-0.50	-0.51	-2.15	-2.47

TEMPORARY/PERMANENT IMPACTS

Resource	Jetting/Jet-assisted Cable Plow Trench		Jetting/Jet-assisted Cable Plow Skids		Dredging			Anchoring/Mooring		Fill within WOTUS		TOTAL			
	Temporary (ac)	Permanent (ac)	Temporary (ac)	Permanent (ac)	Temporary (ac)	Temporary Volume Removed (cy)	Permanent Volume Removed (cy)	Permanent (ac)	Temporary (ac)	Permanent (ac)	Temporary (ac)	Permanent (ac)	Temporary (ac)	Temporary Volume Removed (cy)	Permanent Volume Removed (cy)	Permanent (ac)
State Open Water	4.138	0.000	24.881	0.000	26.279	118,359	0	0.000	0.942	0.000	0.000	0.083	56.240	118,359	0	0.083
Submerged Aquatic Vegetation	0.000	0.000	0.000	0.000	1.803	8,120	0	0.000	0.020	0.000	0.000	0.083	1.823	8,120	0	0.083
Shellfish Habitat	3.430	0.000	20.622	0.000	4.748	21,386	0	0.000	0.695	0.000	0.000	0.000	29.495	21,386	0	0.000
Intertidal and Subtidal Shallows	0.000	0.000	0.000	0.000	3.936	13,093	0	0.000	0.025	0.000	0.000	0.083	3.961	13,093	0	0.083
Prime Fishing Areas	0.527	0.000	3.968	0.000	0.000	0	0	0.000	0.037	0.000	0.000	0.000	4.532	0	0	0.000



KEY MAP

0 800' 1600'
HORIZONTAL SCALE IN FEET

0 30' 60'
VERTICAL SCALE IN FEET

no.	date	by	ckd	description
A	07/29/22	JD	RS	ISSUED FOR PERMIT

NOTES:

1. HORIZONTAL DATUM: NAD83 NEW JERSEY STATE PLANE, U.S. FOOT
2. VERTICAL DATA CONVERSION OYSTER CREEK: NGVD29 = NAVD88 + 1.335 FT
   VERTICAL DATA CONVERSION BL ENGLAND: NGVD29 = NAVD88 + 1.263 FT
3. ALL DIMENSIONS ARE IN FEET (FT) UNLESS NOTED OTHERWISE.
4. ALL BATHYMETRIC CONTOURS ARE DEPICTED IN RELATION TO MEAN LOWER LOW WATER (MLLW).
5. SEE HDD SERIES SHEETS FOR DETAILED PLAN AND PROFILE OF CABLE ROUTE.
6. FOR DETAILS ON WETLAND IMPACTS PLEASE SEE ONSHORE PLAN SET.
7. THESE DRAWINGS ARE FOR DESIGN AND PERMITTING PURPOSES ONLY AND NOT INTENDED FOR CONSTRUCTION. FINAL LOCATION OF PROPOSED IMPROVEMENTS WILL BE COORDINATED WITH ENGINEER UPON AWARD OF CONTRACT.
8. AREAS OF IMPACTS TO REGULATED AREAS WILL BE PROVIDED UPON FINAL DESIGN OF THE CABLE ROUTES AND RELATED IMPROVEMENTS.
9. THESE DRAWINGS SHOW THE APPROXIMATE LOCATION OF CABLE ROUTE. FINAL CABLE ROUTE TO BE PROVIDED BY THE CONTRACTOR.

FOR PERMITTING APPROVAL

Ocean Wind
An Ørsted & PSEG project

HDR ENGINEERING, INC.
1 INTERNATIONAL BOULEVARD, SUITE 1000
MAHWAH, NJ 07495

date	detailed
07/29/2022	J. WYNOHRADNYK
designed	checked
J. DENNIS	R. SCHOO

OYSTER CREEK PLAN AND PROFILE (1 OF 2)

OCEAN WIND OFFSHORE WIND PROJECT
OFFSHORE CABLE ROUTES

NJ CERTIFICATE OF AUTHORIZATION 24GE05780300

JOSEPH P. DENNIS
NJ PROFESSIONAL ENGINEER
No. 24GE05780300

project	RDS-PP CODE
112083	

drawing OF-OYC-C101 — rev. A

sheet 6 of 14 sheets

file C101.dwg

Millimeters
Scale For Microfilming
Inches

CHART 2A

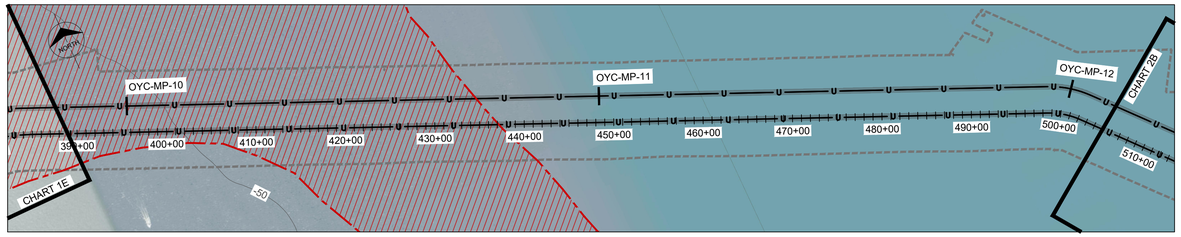
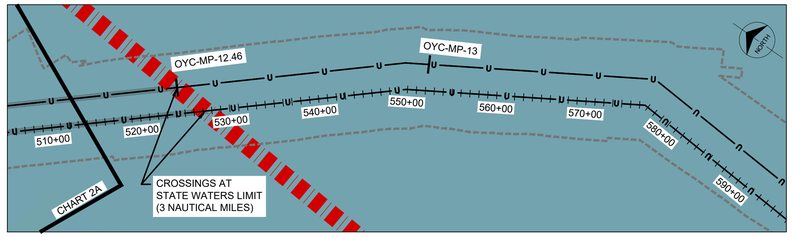
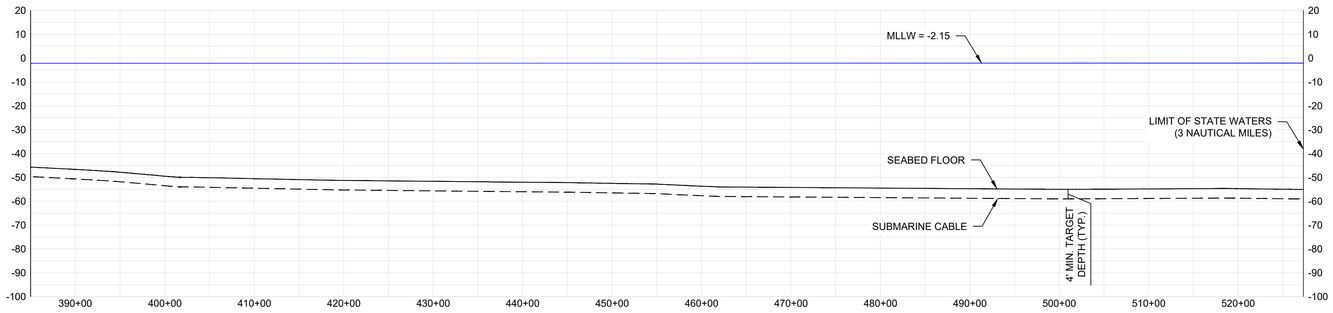


CHART 2B





no.	date	by	ckd	description
A	07/29/22	JD	RS	ISSUED FOR PERMIT

NOTES:

1. HORIZONTAL DATUM: NAD83 NEW JERSEY STATE PLANE, U.S. FOOT
2. VERTICAL DATA CONVERSION OYSTER CREEK:
   NGVD29 = NAVD88 + 1.335 FT

   VERTICAL DATA CONVERSION BL ENGLAND:
   NGVD29 = NAVD88 + 1.263 FT
3. ALL DIMENSIONS ARE IN FEET (FT) UNLESS NOTED OTHERWISE.
4. ALL BATHYMETRIC CONTOURS ARE DEPICTED IN RELATION TO MEAN LOWER LOW WATER (MLLW).
5. SEE HDD SERIES SHEETS FOR DETAILED PLAN AND PROFILE OF CABLE ROUTE.
6. FOR DETAILS ON WETLAND IMPACTS PLEASE SEE ONSHORE PLAN SET.
7. THESE DRAWINGS ARE FOR DESIGN AND PERMITTING PURPOSES ONLY AND NOT INTENDED FOR CONSTRUCTION. FINAL LOCATION OF PROPOSED IMPROVEMENTS WILL BE COORDINATED WITH ENGINEER UPON AWARD OF CONTRACT.
8. AREAS OF IMPACTS TO REGULATED AREAS WILL BE PROVIDED UPON FINAL DESIGN OF THE CABLE ROUTES AND RELATED IMPROVEMENTS.
9. THESE DRAWINGS SHOW THE APPROXIMATE LOCATION OF CABLE ROUTE. FINAL CABLE ROUTE TO BE PROVIDED BY THE CONTRACTOR.

FOR PERMITTING APPROVAL

Ocean Wind
An Ørsted & PSEG project

HDR ENGINEERING, INC.
1 INTERNATIONAL BOULEVARD, SUITE 1000
MAHWAH, NJ 07495

date	detailed
07/29/2022	J. WYNOHRADNYK
designed	checked
J. DENNIS	R. SCHOO

OYSTER CREEK PLAN AND PROFILE (2 OF 2)

OCEAN WIND OFFSHORE WIND PROJECT
OFFSHORE CABLE ROUTES

project	RDS-PP CODE
112083	

drawing OF-OYC-C102 — rev. A

sheet 7 of 14 sheets

file C101.dwg

LEGEND

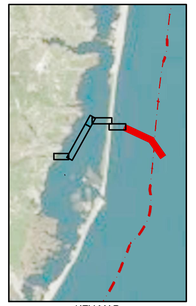
- EXISTING TOPOGRAPHY/BATHYMETRY (-10)
- EXISTING SUBSEA CABLE
- PROPOSED CABLE (U)
- HORIZONTAL DIRECTIONAL DRILL LINE
- TEMPORARY CONSTRUCTION EASEMENT LINE
- SHELLFISH (NJDEP MAPPING 1963, 1986, 2012)
- SUBMERGED AQUATIC VEGETATION (1979, 1986)
- STATE NAVIGATION CHANNEL
- FEDERAL NAVIGATION CHANNEL (INTRACOASTAL WATERWAY)
- DREDGING LIMIT
- DREDGING SECONDARY OPTION
- GEOPHYSICAL SURVEY CORRIDOR/LIMITS OF ACCESS AND MOORING
- AQUACULTURE LEASE AREA
- PERMANENT UTILITY EASEMENT
- PRIME FISHING AREA
- LIMIT OF STATE WATERS (3 NAUTICAL MILES)
- ARTIFICIAL REEFS
- WRECKS AND OBSTRUCTIONS
- HDD PIT
- BEACH
- DUNE
- OPEN-CUT SHORELINE CABLE INSTALLATION AREA

TIDAL DATUMS ACROSS PROJECT AREA

Tidal Datums (NAVD88 ft elevation)	Barnegat Bay Holtec Farm Landing	Barnegat Bay IBSP Shoreline	Barnegat Bay Atlantic Shoreline	BL England Atlantic Shoreline
MHHW	0.40	0.42	2.17	1.96
MHW	0.27	0.27	1.84	1.56
MTL	-0.05	-0.07	-0.19	-0.37
MLW	-0.42	-0.45	-2.01	-2.32
MLLW	-0.50	-0.51	-2.15	-2.47

TEMPORARY/PERMANENT IMPACTS

Resource	Jetting/Jet-assisted Cable Plow Trench		Jetting/Jet-assisted Cable Plow Skids		Dredging				Anchoring/Mooring		Fill within WOTUS		TOTAL			
	Temporary (ac)	Permanent (ac)	Temporary (ac)	Permanent (ac)	Temporary (ac)	Temporary Volume Removed (cy)	Permanent Volume Removed (cy)	Permanent (ac)	Temporary (ac)	Permanent (ac)	Temporary (ac)	Permanent (ac)	Temporary (ac)	Temporary Volume Removed (cy)	Permanent Volume Removed (cy)	Permanent (ac)
State Open Water	2.172	0.000	16.372	0.000	0.000	0	0	0.000	0.702	0.000	0.000	0.000	19.247	0	0	0.000
Prime Fishing Areas	0.808	0.000	6.093	0.000	0.000	0	0	0.000	0.057	0.000	0.000	0.000	6.958	0	0	0.000



KEY MAP

0 800' 1600'
HORIZONTAL SCALE IN FEET

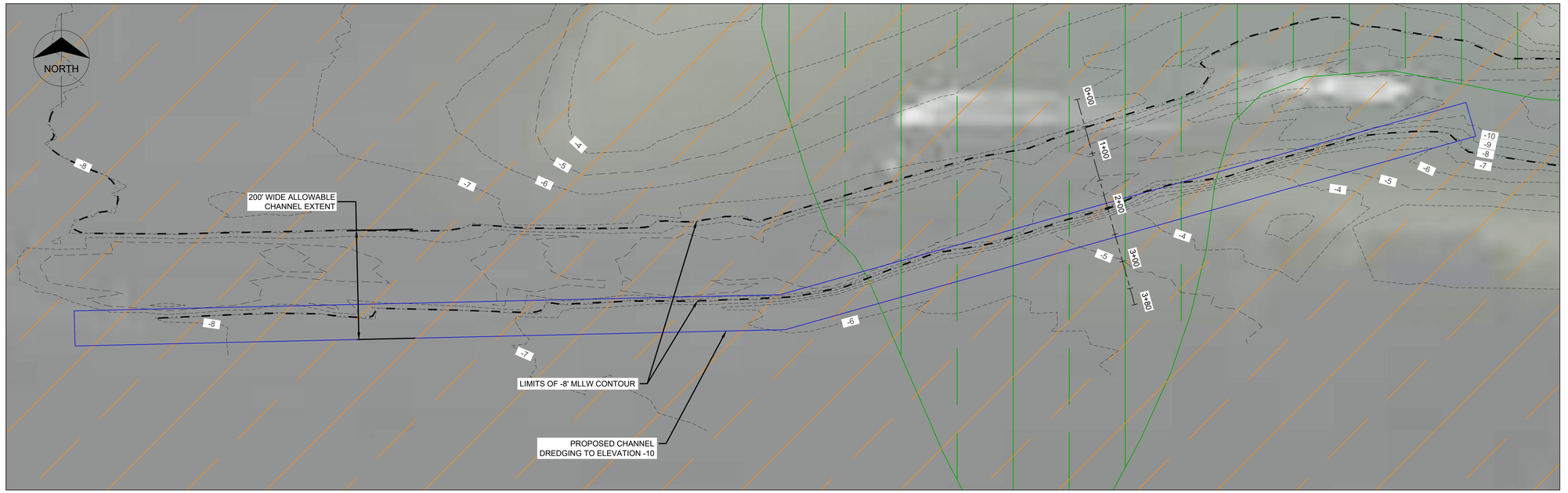
0 30' 60'
VERTICAL SCALE IN FEET

NJ CERTIFICATE OF AUTHORIZATION 24GE05780300

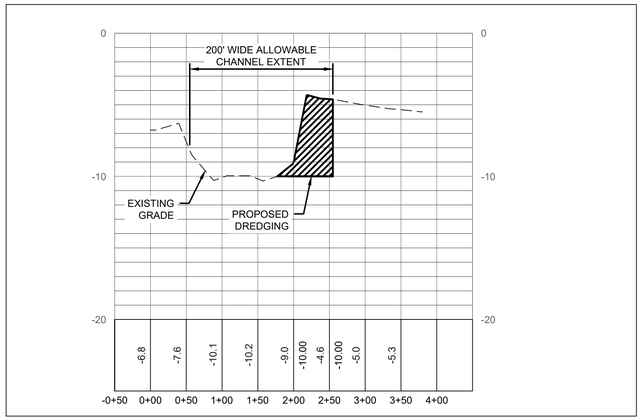
STATE OF NEW JERSEY — JOSEPH P. DENNIS — LICENSE NO. GE57803 — PROFESSIONAL ENGINEER

JOSEPH P. DENNIS
NJ PROFESSIONAL ENGINEER
No. 24GE05780300

Scale For Microfilming
Millimeters
Inches



PLAN VIEW



SECTION VIEW

NOTES:

1. AREA OF DREDGING IS INTENDED TO MIRROR MAINTENANCE DREDGING PROPOSED BY USACE PHILADELPHIA DISTRICT AS PART OF OYSTER CREEK FEDERAL CHANNEL MAINTENANCE DREDGING. REFER TO SOLICITATION NO. IFB W912BU-22-B-0004. USACE INTENDS TO COMPLETE FALL 2022 AND 2023.
2. OCEAN WIND WILL ASSESS CHANNEL CONDITIONS PRIOR TO CONSTRUCTION AND MAY REQUIRE SUBSEQUENT MAINTENANCE DREDGING FOR CONSTRUCTION VESSEL ACCESS.
3. MAINTENANCE DREDGING WILL BE WITHIN THE AUTHORIZED LIMITS OF THE OYSTER CREEK FEDERAL CHANNEL AS COORDINATED WITH USACE AND USCG. PER N.J.A.C. 7:7-9.6(B) MAINTENANCE DREDGING IN AREAS MAPPED AS SUBMERGED VEGETATION HABITAT IS ALLOWABLE IN PREVIOUSLY AUTHORIZED, EXISTING NAVIGATION CHANNELS MAINTAINED BY THE STATE OR FEDERAL GOVERNMENT PROVIDED THAT THERE IS NO PRACTICABLE OR FEASIBLE ALTERNATIVE TO AVOID THE VEGETATION AND THAT IMPACTS TO THE HABITAT AREA ARE MINIMIZED TO THE MAXIMUM EXTENT PRACTICABLE.

LEGEND

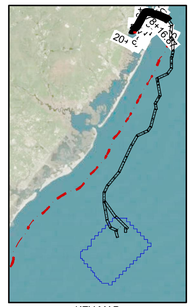
- EXISTING TOPOGRAPHY/BATHYMETRY
- EXISTING SUBSEA CABLE
- PROPOSED CABLE
- HORIZONTAL DIRECTIONAL DRILL LINE
- TEMPORARY CONSTRUCTION EASEMENT LINE
- SHELLFISH (NJDEP MAPPING 1963, 1986, 2012)
- SUBMERGED AQUATIC VEGETATION (1979, 1986)
- STATE NAVIGATION CHANNEL
- FEDERAL NAVIGATION CHANNEL (INTRACOASTAL WATERWAY)
- DREDGING LIMIT
- DREDGING SECONDARY OPTION
- GEOPHYSICAL SURVEY CORRIDOR/LIMITS OF ACCESS AND MOORING
- AQUACULTURE LEASE AREA
- PERMANENT UTILITY EASEMENT
- PRIME FISHING AREA
- LIMIT OF STATE WATERS (3 NAUTICAL MILES)
- ARTIFICIAL REEFS
- WRECKS AND OBSTRUCTIONS
- HDD PIT
- BEACH
- DUNE
- OPEN-CUT SHORELINE CABLE INSTALLATION AREA

TIDAL DATUMS ACROSS PROJECT AREA

Tidal Datums (NAVD88 ft elevation)	Barnegat Bay Holtec Farm Landing	Barnegat Bay IBSP Shoreline	Barnegat Bay Atlantic Shoreline	BL England Atlantic Shoreline
MHHW	0.40	0.42	2.17	1.96
MHW	0.27	0.27	1.84	1.56
MTL	-0.05	-0.07	-0.19	-0.37
MLW	-0.42	-0.45	-2.01	-2.32
MLLW	-0.50	-0.51	-2.15	-2.47

TEMPORARY/PERMANENT IMPACTS

Resource	Jetting/Jet-assisted Cable Plow Trench		Jetting/Jet-assisted Cable Plow Skids		Dredging				Anchoring/Mooring		Fill within WOTUS		TOTAL			
	Temporary (ac)	Permanent (ac)	Temporary (ac)	Permanent (ac)	Temporary (ac)	Permanent Volume Removed (cy)	Temporary Volume Removed (cy)	Permanent (ac)	Temporary (ac)	Permanent (ac)	Temporary (ac)	Permanent (ac)	Temporary (ac)	Temporary Volume Removed (cy)	Permanent Volume Removed (cy)	Permanent (ac)
State Open Water	0.000	0.000	0.000	0.000	0.000	0	18,030	3.645	0.000	0.000	0.000	0.000	0.000	0	18,030	3.645
Submerged Aquatic Vegetation	0.000	0.000	0.000	0.000	0.000	0	4,507	0.911	0.000	0.000	0.000	0.000	0.000	0	4,507	0.911
Shellfish Habitat	0.000	0.000	0.000	0.000	0.000	0	18,030	3.645	0.000	0.000	0.000	0.000	0.000	0	18,030	3.645



KEY MAP

0 100' 200'
HORIZONTAL SCALE IN FEET

0 5' 10'
VERTICAL SCALE IN FEET

NJ CERTIFICATE OF AUTHORIZATION 24GE05780300

JOSEPH P. DENNIS
NJ PROFESSIONAL ENGINEER
No. 24GE05780300

no.	date	by	ckd	description
A	07/29/22	JD	RS	ISSUED FOR PERMIT

NOTES:

1. HORIZONTAL DATUM: NAD83 NEW JERSEY STATE PLANE, U.S. FOOT
2. VERTICAL DATA CONVERSION OYSTER CREEK: NGVD29 = NAVD88 + 1.335 FT

   VERTICAL DATA CONVERSION BL ENGLAND: NGVD29 = NAVD88 + 1.263 FT
3. ALL DIMENSIONS ARE IN FEET (FT) UNLESS NOTED OTHERWISE.
4. ALL BATHYMETRIC CONTOURS ARE DEPICTED IN RELATION TO MEAN LOWER LOW WATER (MLLW).
5. SEE HDD SERIES SHEETS FOR DETAILED PLAN AND PROFILE OF CABLE ROUTE.
6. FOR DETAILS ON WETLAND IMPACTS PLEASE SEE ONSHORE PLAN SET.
7. THESE DRAWINGS ARE FOR DESIGN AND PERMITTING PURPOSES ONLY AND NOT INTENDED FOR CONSTRUCTION. FINAL LOCATION OF PROPOSED IMPROVEMENTS WILL BE COORDINATED WITH ENGINEER UPON AWARD OF CONTRACT.
8. AREAS OF IMPACTS TO REGULATED AREAS WILL BE PROVIDED UPON FINAL DESIGN OF THE CABLE ROUTES AND RELATED IMPROVEMENTS.
9. THESE DRAWINGS SHOW THE APPROXIMATE LOCATION OF CABLE ROUTE. FINAL CABLE ROUTE TO BE PROVIDED BY THE CONTRACTOR.

FOR PERMITTING APPROVAL

Ocean Wind
An Ørsted & PSEG project

HDR ENGINEERING, INC.
1 INTERNATIONAL BOULEVARD, SUITE 1000
MAHWAH, NJ 07495

date	detailed
07/29/2022	J. WYNOHRADNYK
designed	checked
J. DENNIS	R. SCHOO

OYSTER CREEK FEDERAL CHANNEL (1 OF 1)

OCEAN WIND OFFSHORE WIND PROJECT
OFFSHORE CABLE ROUTES

project	RDS-PP CODE
112083	

drawing OF-OYC-C103 — rev. A

sheet 8 of 14 sheets

file C103.dwg

Millimeters
Scale For Microfilming
Inches

NORTH

MATCHLINE: SEE DRAWING OF-BLE-C002

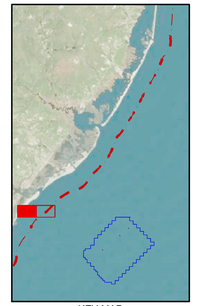
Millimeters

Scale For Microfilming

Inches

LEGEND

- EXISTING TOPOGRAPHY/BATHYMETRY
- EXISTING SUBSEA CABLE
- PROPOSED CABLE
- HORIZONTAL DIRECTIONAL DRILL LINE
- TEMPORARY CONSTRUCTION EASEMENT LINE
- SHELLFISH (NJDEP MAPPING 1963, 1986, 2012)
- SUBMERGED AQUATIC VEGETATION (1979, 1986)
- STATE NAVIGATION CHANNEL
- FEDERAL NAVIGATION CHANNEL (INTRACOASTAL WATERWAY)
- DREDGING LIMIT
- DREDGING SECONDARY OPTION
- GEOPHYSICAL SURVEY CORRIDOR/LIMITS OF ACCESS AND MOORING
- AQUACULTURE LEASE AREA
- PERMANENT UTILITY EASEMENT
- PRIME FISHING AREA
- LIMIT OF STATE WATERS (3 NAUTICAL MILES)
- ARTIFICIAL REEFS
- WRECKS AND OBSTRUCTIONS
- HDD PIT
- BEACH
- DUNE
- OPEN-CUT SHORELINE CABLE INSTALLATION AREA



KEY MAP

0 800' 1600'
HORIZONTAL SCALE IN FEET

no.	date	by	ckd	description
A	07/29/22	JD	RS	ISSUED FOR PERMIT

NOTES:

1. HORIZONTAL DATUM: NAD83 NEW JERSEY STATE PLANE, U.S. FOOT
2. VERTICAL DATA CONVERSION OYSTER CREEK: NGVD29 = NAVD88 + 1.335 FT

   VERTICAL DATA CONVERSION BL ENGLAND: NGVD29 = NAVD88 + 1.263 FT
3. ALL DIMENSIONS ARE IN FEET (FT) UNLESS NOTED OTHERWISE.
4. ALL BATHYMETRIC CONTOURS ARE DEPICTED IN RELATION TO MEAN LOWER LOW WATER (MLLW).
5. SEE HDD SERIES SHEETS FOR DETAILED PLAN AND PROFILE OF CABLE ROUTE.
6. FOR DETAILS ON WETLAND IMPACTS PLEASE SEE ONSHORE PLAN SET.
7. THESE DRAWINGS ARE FOR DESIGN AND PERMITTING PURPOSES ONLY AND NOT INTENDED FOR CONSTRUCTION. FINAL LOCATION OF PROPOSED IMPROVEMENTS WILL BE COORDINATED WITH ENGINEER UPON AWARD OF CONTRACT.
8. AREAS OF IMPACTS TO REGULATED AREAS WILL BE PROVIDED UPON FINAL DESIGN OF THE CABLE ROUTES AND RELATED IMPROVEMENTS.
9. THESE DRAWINGS SHOW THE APPROXIMATE LOCATION OF CABLE ROUTE. FINAL CABLE ROUTE TO BE PROVIDED BY THE CONTRACTOR.

FOR PERMITTING APPROVAL

Ocean Wind
An Ørsted & PSEG project

HDR ENGINEERING, INC.
1 INTERNATIONAL BOULEVARD, SUITE 1000
MAHWAH, NJ 07495

date	detailed
07/29/2022	J. WYNOHRADNYK
designed	checked
J. DENNIS	R. SCHOO

BL ENGLAND ENLARGED PLAN (1 OF 2)

OCEAN WIND OFFSHORE WIND PROJECT
OFFSHORE CABLE ROUTES

NJ CERTIFICATE OF AUTHORIZATION 24GE05780300

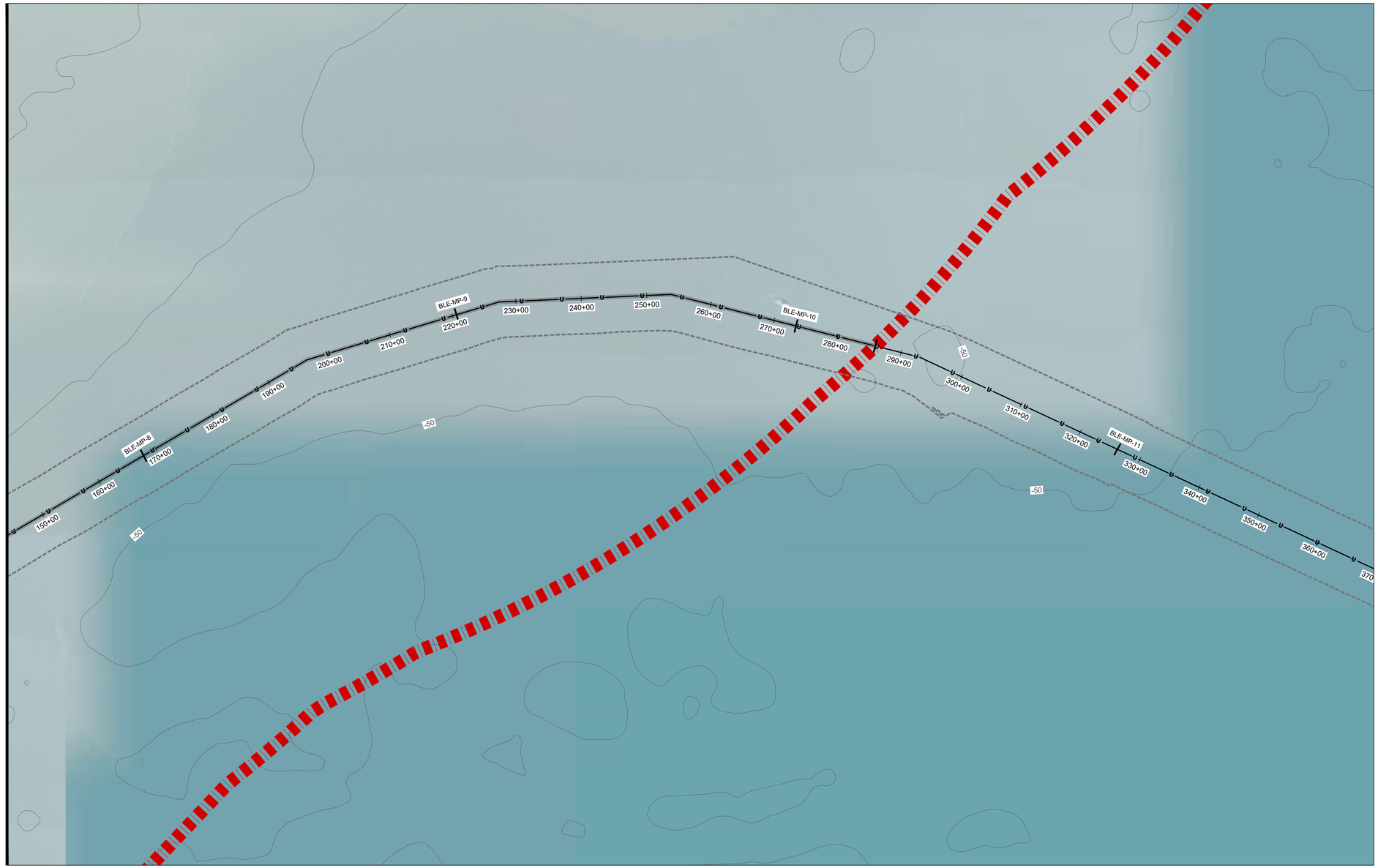
JOSEPH P. DENNIS
NJ PROFESSIONAL ENGINEER
No. 24GE05780300

project	RDS-PP CODE
112083	

drawing **OF-BLE-C001 –** rev. **A**

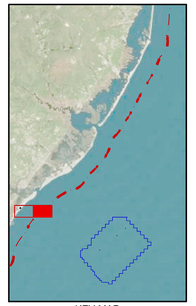
sheet 9 of 14 sheets

file C001.dwg



LEGEND

- EXISTING TOPOGRAPHY/BATHYMETRY
- EXISTING SUBSEA CABLE
- PROPOSED CABLE
- HORIZONTAL DIRECTIONAL DRILL LINE
- TEMPORARY CONSTRUCTION EASEMENT LINE
- SHELLFISH (NJDEP MAPPING 1963, 1986, 2012)
- SUBMERGED AQUATIC VEGETATION (1979, 1986)
- STATE NAVIGATION CHANNEL
- FEDERAL NAVIGATION CHANNEL (INTRACOASTAL WATERWAY)
- DREDGING LIMIT
- DREDGING SECONDARY OPTION
- GEOPHYSICAL SURVEY CORRIDOR/LIMITS OF ACCESS AND MOORING
- AQUACULTURE LEASE AREA
- PERMANENT UTILITY EASEMENT
- PRIME FISHING AREA
- LIMIT OF STATE WATERS (3 NAUTICAL MILES)
- ARTIFICIAL REEFS
- WRECKS AND OBSTRUCTIONS
- HDD PIT
- BEACH
- DUNE
- OPEN-CUT SHORELINE CABLE INSTALLATION AREA



KEY MAP

0 800' 1600'
HORIZONTAL SCALE IN FEET

NJ CERTIFICATE OF AUTHORIZATION 24GE05780300

JOSEPH P. DENNIS
NJ PROFESSIONAL ENGINEER
No. 24GE05780300

no.	date	by	ckd	description
A	07/29/22	JD	RS	ISSUED FOR PERMIT

NOTES:

1. HORIZONTAL DATUM: NAD83 NEW JERSEY STATE PLANE, U.S. FOOT
2. VERTICAL DATA CONVERSION OYSTER CREEK: NGVD29 = NAVD88 + 1.335 FT

   VERTICAL DATA CONVERSION BL ENGLAND: NGVD29 = NAVD88 + 1.263 FT
3. ALL DIMENSIONS ARE IN FEET (FT) UNLESS NOTED OTHERWISE.
4. ALL BATHYMETRIC CONTOURS ARE DEPICTED IN RELATION TO MEAN LOWER LOW WATER (MLLW).
5. SEE HDD SERIES SHEETS FOR DETAILED PLAN AND PROFILE OF CABLE ROUTE.
6. FOR DETAILS ON WETLAND IMPACTS PLEASE SEE ONSHORE PLAN SET.
7. THESE DRAWINGS ARE FOR DESIGN AND PERMITTING PURPOSES ONLY AND NOT INTENDED FOR CONSTRUCTION. FINAL LOCATION OF PROPOSED IMPROVEMENTS WILL BE COORDINATED WITH ENGINEER UPON AWARD OF CONTRACT.
8. AREAS OF IMPACTS TO REGULATED AREAS WILL BE PROVIDED UPON FINAL DESIGN OF THE CABLE ROUTES AND RELATED IMPROVEMENTS.
9. THESE DRAWINGS SHOW THE APPROXIMATE LOCATION OF CABLE ROUTE. FINAL CABLE ROUTE TO BE PROVIDED BY THE CONTRACTOR.

FOR PERMITTING APPROVAL

Ocean Wind
An Ørsted & PSEG project

HDR ENGINEERING, INC.
1 INTERNATIONAL BOULEVARD, SUITE 1000
MAHWAH, NJ 07495

date	detailed
07/29/2022	J. WYNOHRADNYK
designed	checked
J. DENNIS	R. SCHOO

BL ENGLAND ENLARGED PLAN (2 OF 2)

OCEAN WIND OFFSHORE WIND PROJECT
OFFSHORE CABLE ROUTES

project	RDS-PP CODE
112083	

drawing **OF-BLE-C002** rev. **A**

sheet 10 of 14 sheets

file C001.dwg

Scale For Microfilming
Millimeters
Inches

CHART 1A

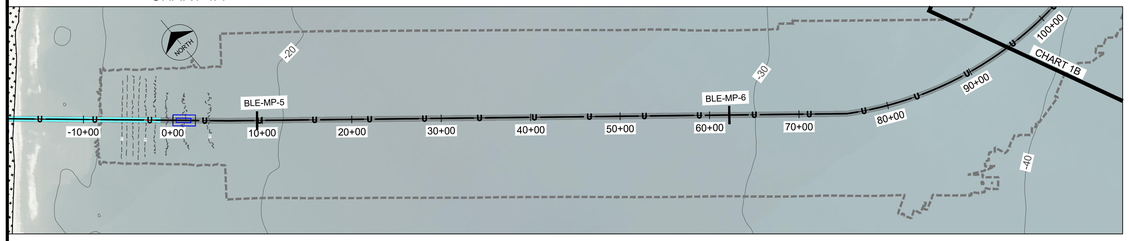
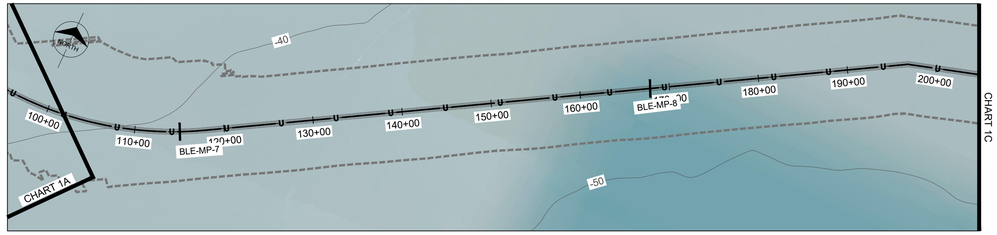


CHART 1B



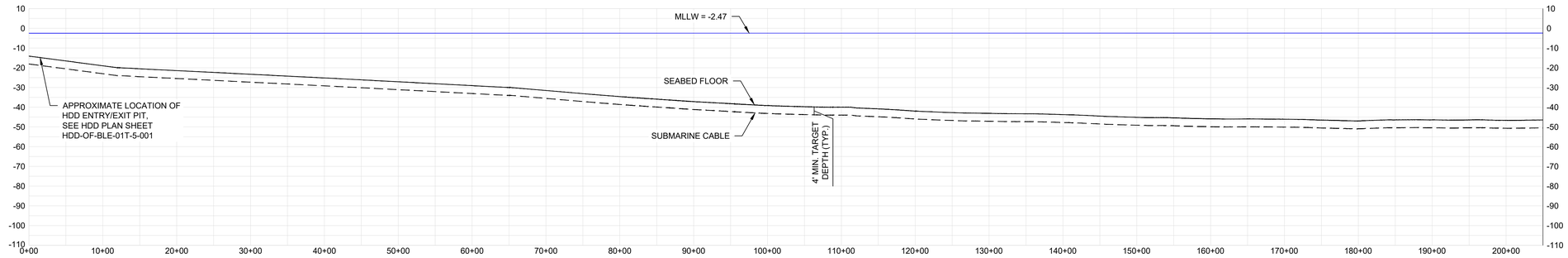
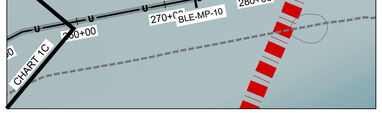
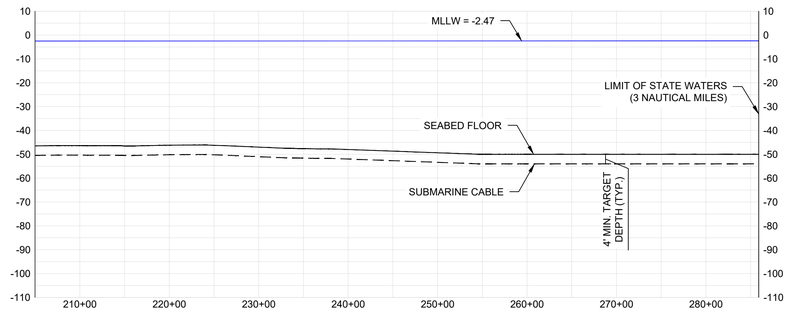


CHART 1C

CHART 1D





LEGEND

- EXISTING TOPOGRAPHY/BATHYMETRY
- EXISTING SUBSEA CABLE
- PROPOSED CABLE
- HORIZONTAL DIRECTIONAL DRILL LINE
- TEMPORARY CONSTRUCTION EASEMENT LINE
- SHELLFISH (NJDEP MAPPING 1963, 1986, 2012)
- SUBMERGED AQUATIC VEGETATION (1979, 1986)
- STATE NAVIGATION CHANNEL
- FEDERAL NAVIGATION CHANNEL (INTRACOASTAL WATERWAY)
- DREDGING LIMIT
- DREDGING SECONDARY OPTION
- GEOPHYSICAL SURVEY CORRIDOR/LIMITS OF ACCESS AND MOORING
- AQUACULTURE LEASE AREA
- PERMANENT UTILITY EASEMENT
- PRIME FISHING AREA
- LIMIT OF STATE WATERS (3 NAUTICAL MILES)
- ARTIFICIAL REEFS
- WRECKS AND OBSTRUCTIONS
- HDD PIT
- BEACH
- DUNE
- OPEN-CUT SHORELINE CABLE INSTALLATION AREA

TIDAL DATUMS ACROSS PROJECT AREA

Tidal Datums (NAVD88 ft elevation)	Barnegat Bay Holtec Farm Landing	Barnegat Bay IBSP Shoreline	Barnegat Bay Atlantic Shoreline	BL England Atlantic Shoreline
MHHW	0.40	0.42	2.17	1.96
MHW	0.27	0.27	1.84	1.56
MTL	-0.05	-0.07	-0.19	-0.37
MLW	-0.42	-0.45	-2.01	-2.32
MLLW	-0.50	-0.51	-2.15	-2.47

TEMPORARY/PERMANENT IMPACTS

Resource	Jetting/Jet-assisted Cable Plow Trench		Jetting/Jet-assisted Cable Plow Skids		Dredging				Anchoring/Mooring		Fill within WOTUS		TOTAL			
	Temporary (ac)	Permanent (ac)	Temporary (ac)	Permanent (ac)	Temporary (ac)	Permanent Volume Removed (cy)	Permanent Volume Removed (cy)	Permanent (ac)	Temporary (ac)	Permanent (ac)	Temporary (ac)	Permanent (ac)	Temporary (ac)	Temporary Volume Removed (cy)	Permanent Volume Removed (cy)	Permanent (ac)
State Open Water	2.134	0.000	16.082	0.000	0.711	6,682	0	0.000	0.265	0.000	0.000	0.000	19.192	6,682	0	0.000

KEY MAP

0 800' 1600'
HORIZONTAL SCALE IN FEET

0 30' 60'
VERTICAL SCALE IN FEET

no.	date	by	ckd	description
A	07/29/22	JD	RS	ISSUED FOR PERMIT

NOTES:

1. HORIZONTAL DATUM: NAD83 NEW JERSEY STATE PLANE, U.S. FOOT
2. VERTICAL DATA CONVERSION OYSTER CREEK: NGVD29 = NAVD88 + 1.335 FT
   VERTICAL DATA CONVERSION BL ENGLAND: NGVD29 = NAVD88 + 1.263 FT
3. ALL DIMENSIONS ARE IN FEET (FT) UNLESS NOTED OTHERWISE.
4. ALL BATHYMETRIC CONTOURS ARE DEPICTED IN RELATION TO MEAN LOWER LOW WATER (MLLW).
5. SEE HDD SERIES SHEETS FOR DETAILED PLAN AND PROFILE OF CABLE ROUTE.
6. FOR DETAILS ON WETLAND IMPACTS PLEASE SEE ONSHORE PLAN SET.
7. THESE DRAWINGS ARE FOR DESIGN AND PERMITTING PURPOSES ONLY AND NOT INTENDED FOR CONSTRUCTION. FINAL LOCATION OF PROPOSED IMPROVEMENTS WILL BE COORDINATED WITH ENGINEER UPON AWARD OF CONTRACT.
8. AREAS OF IMPACTS TO REGULATED AREAS WILL BE PROVIDED UPON FINAL DESIGN OF THE CABLE ROUTES AND RELATED IMPROVEMENTS.
9. THESE DRAWINGS SHOW THE APPROXIMATE LOCATION OF CABLE ROUTE. FINAL CABLE ROUTE TO BE PROVIDED BY THE CONTRACTOR.

FOR PERMITTING APPROVAL

Ocean Wind
An Ørsted & PSEG project

HDR ENGINEERING, INC.
1 INTERNATIONAL BOULEVARD, SUITE 1000
MAHWAH, NJ 07495

date	detailed
07/29/2022	J. WYNOHRADNYK
designed	checked
J. DENNIS	R. SCHOO

NJ CERTIFICATE OF AUTHORIZATION 24GE05780300

JOSEPH P. DENNIS
NJ PROFESSIONAL ENGINEER
No. 24GE05780300

BL ENGLAND PLAN AND PROFILE (1 OF 1)

OCEAN WIND OFFSHORE WIND PROJECT
OFFSHORE CABLE ROUTES

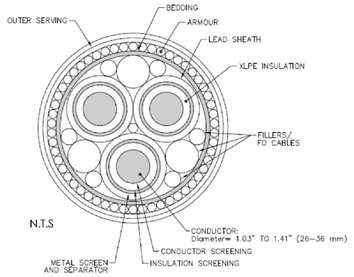
project	RDS-PP CODE
112083	

drawing OF-BLE-C101 — rev. A

sheet 11 of 14 sheets

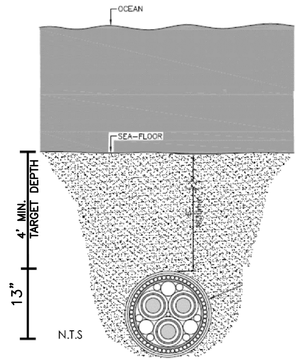
file C101.dwg

Millimeters
Scale For Microfilming
Inches

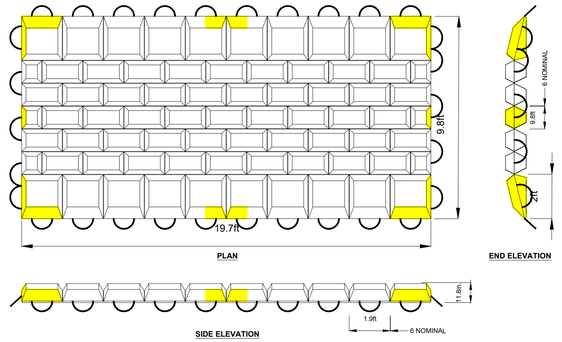


1. 275 kV cable.
2. Diameter is approximately 13 inches

1 CABLE CROSS-SECTION
- NOT TO SCALE



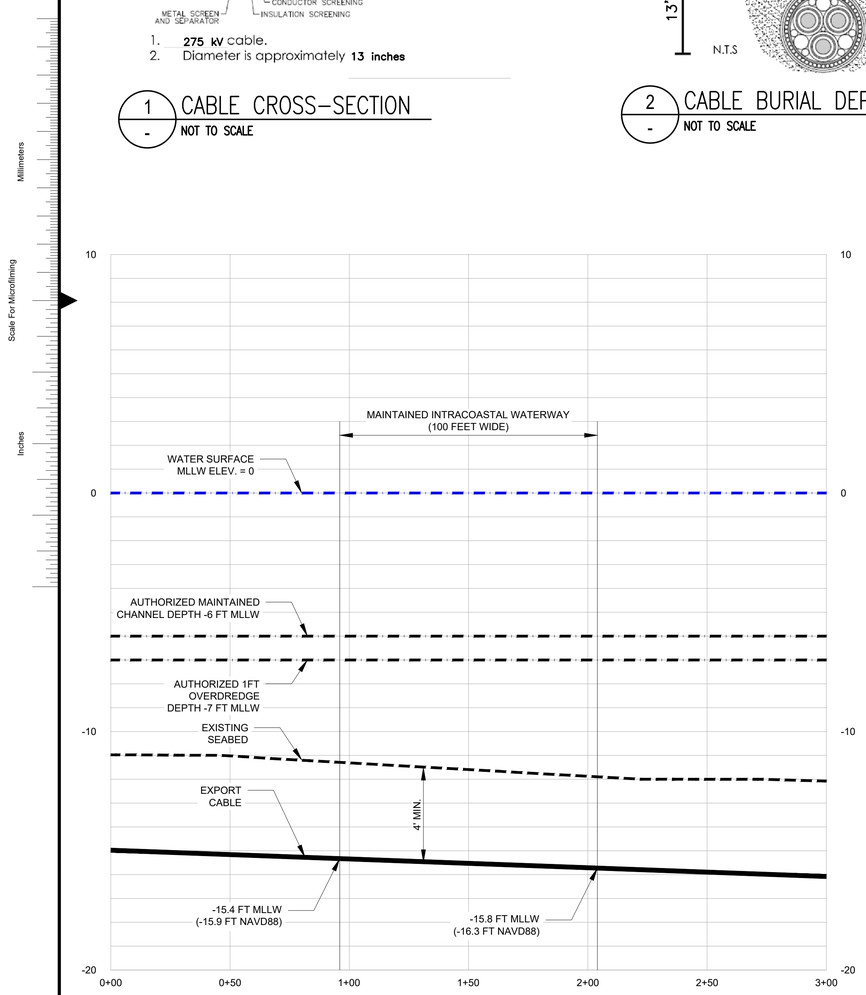
2 CABLE BURIAL DEPTH
- NOT TO SCALE



TYPICAL CABLE PROTECTION NOTES:

1. ROPE TO BE 8.5 inch Ø POLYPROPYLENE COMPLYING WITH EN.ISO.1346:2012, AND UV STABILIZED AGAINST SOLAR DEGRADATION, MBL 9700lbs.
2. MATTRESS LIFT SAFETY RATIO = 8.7 : 1 (LIFTING ON 19.7ft SIDES USING 8No. LIFT POINTS PER SIDE).
3. CONCRETE IAW BS 8500-1-2015 & BS 8500-2-2015
4. CONCRETE DENSITY TO BE NORMAL WEIGHT – 150lbs / ft³ APPROXIMATELY.
5. MATTRESS WEIGHT IN AIR = 17902lbs APPROXIMATELY.
6. MATTRESS WEIGHT IN WATER = 10252lbs APPROXIMATELY.
7. CORNER BLOCKS AND CENTER LINE END BLOCKS TO BE PAINTED YELLOW.

3 CABLE PROTECTION
- NOT TO SCALE



NOTE:
1. SUBMARINE CABLE CROSSING OCCURS BETWEEN MILE POST OYC-MP-3.26 AND OYC-MP-3.28 (SHEET OF-OYC-C101)

4 SUBMARINE CABLE CROSSING PROFILE – INTRACOASTAL WATERWAY
- HORIZONTAL SCALE: 1"=30' VERTICAL SCALE: 1"=3'

no.	date	by	ckd	description
A	07/29/22	JD	RS	ISSUED FOR PERMIT

NOTES:

1. HORIZONTAL DATUM: NAD83 NEW JERSEY STATE PLANE, U.S. FOOT
2. VERTICAL DATA CONVERSION OYSTER CREEK: NGVD29 = NAVD88 + 1.335 FT
   VERTICAL DATA CONVERSION BL ENGLAND: NGVD29 = NAVD88 + 1.263 FT
3. ALL DIMENSIONS ARE IN FEET (FT) UNLESS NOTED OTHERWISE.
4. ALL BATHYMETRIC CONTOURS ARE DEPICTED IN RELATION TO MEAN LOWER LOW WATER (MLLW).
5. SEE HDD SERIES SHEETS FOR DETAILED PLAN AND PROFILE OF CABLE ROUTE.
6. FOR DETAILS ON WETLAND IMPACTS PLEASE SEE ONSHORE PLAN SET.
7. THESE DRAWINGS ARE FOR DESIGN AND PERMITTING PURPOSES ONLY AND NOT INTENDED FOR CONSTRUCTION. FINAL LOCATION OF PROPOSED IMPROVEMENTS WILL BE COORDINATED WITH ENGINEER UPON AWARD OF CONTRACT.
8. AREAS OF IMPACTS TO REGULATED AREAS WILL BE PROVIDED UPON FINAL DESIGN OF THE CABLE ROUTES AND RELATED IMPROVEMENTS.
9. THESE DRAWINGS SHOW THE APPROXIMATE LOCATION OF CABLE ROUTE. FINAL CABLE ROUTE TO BE PROVIDED BY THE CONTRACTOR.

FOR PERMITTING APPROVAL

Ocean Wind
An Ørsted & PSEG project

HDR ENGINEERING, INC.
1 INTERNATIONAL BOULEVARD, SUITE 1000
MAHWAH, NJ 07495

date	detailed
07/29/2022	J. WYNOHRADNYK
designed	checked
J. DENNIS	R. SCHOO

NJ CERTIFICATE OF AUTHORIZATION 24GE05780300

JOSEPH P. DENNIS
NJ PROFESSIONAL ENGINEER
No. 24GE05780300

SITE DETAILS (1 OF 3)

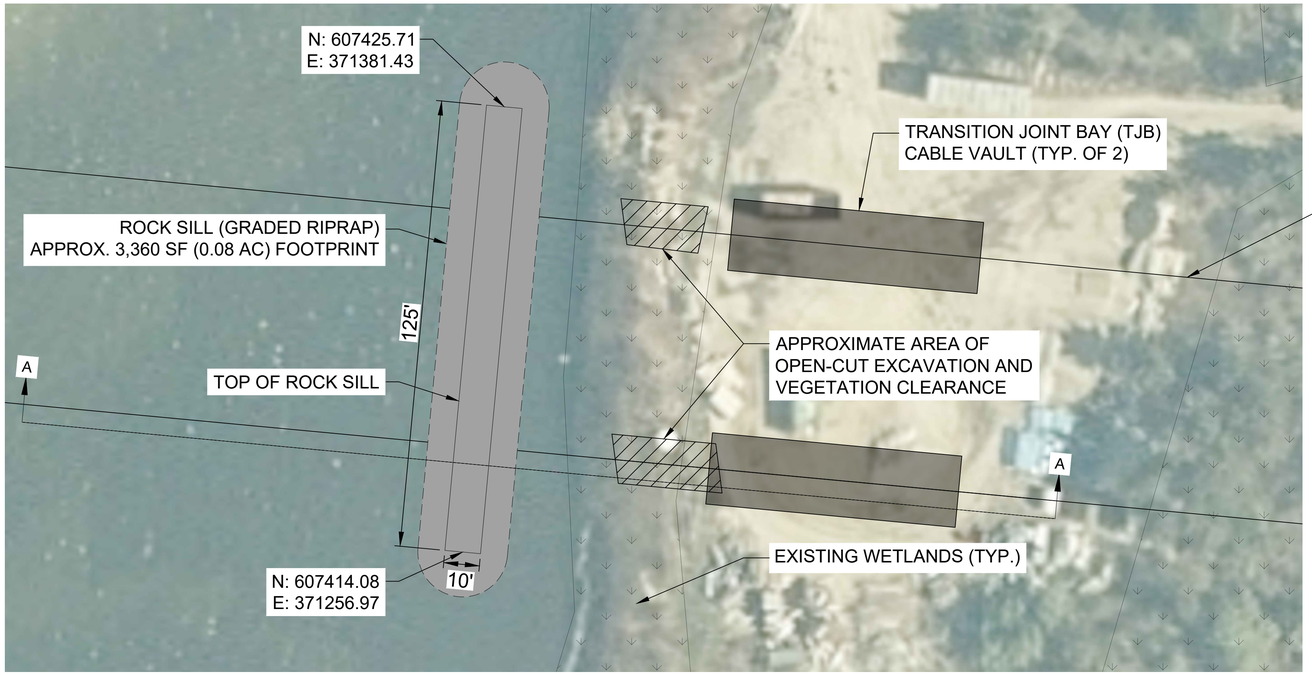
OCEAN WIND OFFSHORE WIND PROJECT
OFFSHORE CABLE ROUTES

project	RDS-PP CODE
112083	

drawing **C501** rev. **A**

sheet 12 of 14 sheets
file C501.dwg

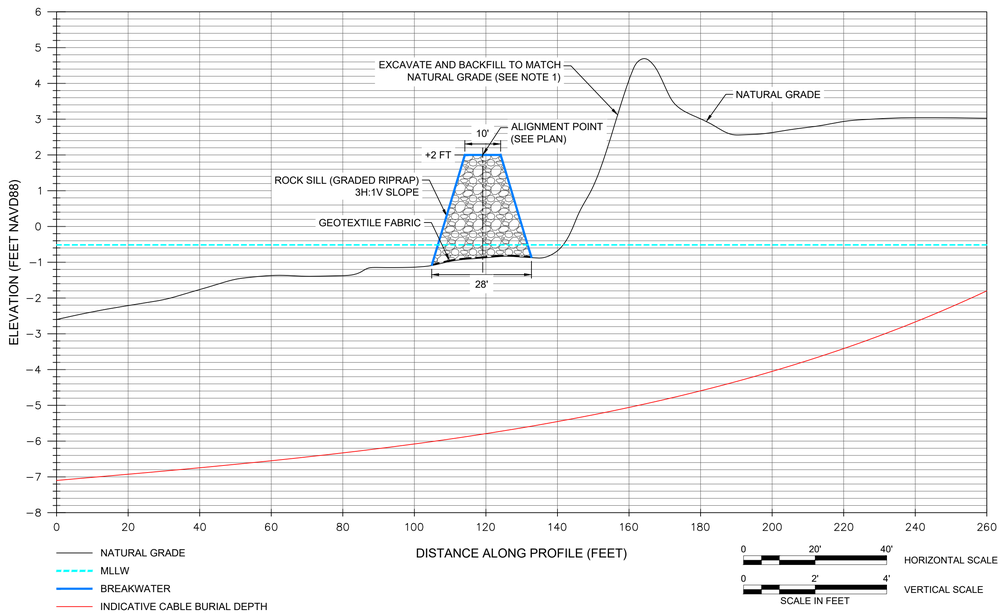
Millimeters
Inches
Scale For Microfilming



PLAN - SHORELINE PROTECTION (ROCK SILL)

0 20' 40'
SCALE IN FEET

KEY MAP



TYPICAL SECTION A-A - ROCK SILL

Tidal Datums (NAVD88 ft elevation)	Barnegat Bay IBSP Shoreline
MHHW	0.42
MHW	0.27
MTL	-0.07
MLW	-0.45
MLLW	-0.51

NOTES:

1. DURING EXCAVATION OF EXISTING BANK, VEGETATION AND TOPSOIL WILL BE STRIPPED AND STOCKPILED IN A SEGREGATED LOCATION. DURING BACKFILLING, NATURAL GRADE WILL BE RESTORED WITH TOPSOIL AND VEGETATION PLACED ON FINISHED SURFACE.
2. SHORELINE PROTECTION WILL CONSIST OF ROCK SILL CONSTRUCTION AS SHOWN IN SECTION A-A. ROCK SILL SHALL REMAIN IN PLACE UNTIL NATURAL VEGETATION HAS RE-ESTABLISHED ON BACKFILL.
3. GRADED RIPRAP FOR ROCK SILL WILL CONSIST OF A DURABLE NATURAL STONE HAVING A MINIMUM UNIT WEIGHT OF APPROXIMATELY 155 PCF AND SHALL BE IN CONFORMANCE WITH ASTM 6092 SIZE DESIGNATION R-60.
4. THE GREATEST DIMENSION OF EACH STONE WILL NOT BE MORE THAN THREE TIMES ITS LEAST DIMENSION. THE FACES OF INDIVIDUAL STONES WILL BE ROUGHLY ANGULAR IN SHAPE.
5. GRADED RIPRAP WILL BE REASONABLY WELL GRADED AND HAVE A MEDIAN WEIGHT OF APPROXIMATELY 50 TO 100 LB (A MEDIAN DIAMETER OF APPROXIMATELY 8 TO 10 INCHES).

NJ CERTIFICATE OF AUTHORIZATION 24GE05780300

JOSEPH P. DENNIS
NJ PROFESSIONAL ENGINEER
No. 24GE05780300

no.	date	by	ckd	description
A	07/29/22	JD	RS	ISSUED FOR PERMIT

NOTES:

1. HORIZONTAL DATUM: NAD83 NEW JERSEY STATE PLANE, U.S. FOOT
2. VERTICAL DATA CONVERSION OYSTER CREEK: NGVD29 = NAVD88 + 1.335 FT
   VERTICAL DATA CONVERSION BL ENGLAND: NGVD29 = NAVD88 + 1.263 FT
3. ALL DIMENSIONS ARE IN FEET (FT) UNLESS NOTED OTHERWISE.
4. ALL BATHYMETRIC CONTOURS ARE DEPICTED IN RELATION TO MEAN LOWER LOW WATER (MLLW).
5. SEE HDD SERIES SHEETS FOR DETAILED PLAN AND PROFILE OF CABLE ROUTE.
6. FOR DETAILS ON WETLAND IMPACTS PLEASE SEE ONSHORE PLAN SET.
7. THESE DRAWINGS ARE FOR DESIGN AND PERMITTING PURPOSES ONLY AND NOT INTENDED FOR CONSTRUCTION. FINAL LOCATION OF PROPOSED IMPROVEMENTS WILL BE COORDINATED WITH ENGINEER UPON AWARD OF CONTRACT.
8. AREAS OF IMPACTS TO REGULATED AREAS WILL BE PROVIDED UPON FINAL DESIGN OF THE CABLE ROUTES AND RELATED IMPROVEMENTS.
9. THESE DRAWINGS SHOW THE APPROXIMATE LOCATION OF CABLE ROUTE. FINAL CABLE ROUTE TO BE PROVIDED BY THE CONTRACTOR.

FOR PERMITTING APPROVAL

Ocean Wind
An Ørsted & PSEG project

HDR ENGINEERING, INC.
1 INTERNATIONAL BOULEVARD, SUITE 1000
MAHWAH, NJ 07495

date	detailed
07/29/2022	J. WYNOHRADNYK
designed	checked
J. DENNIS	R. SCHOO

SITE DETAILS (2 OF 3)

OCEAN WIND OFFSHORE WIND PROJECT
OFFSHORE CABLE ROUTES

project	RDS-PP CODE
112083	

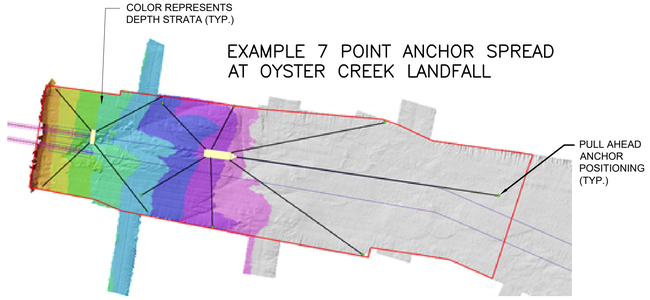
drawing **OF-OYC-C502—** rev. **A**

sheet 13 of 14 sheets
file C501.dwg

Scale For Microfilming
Millimeters
Inches

NOTES:

1. CABLE LAYING VESSEL COULD SIT ON DYNAMIC POSITIONING AT 10M WATER DEPTH, HOWEVER:
   - CONTRACTORS MAY WISH TO UTILISE A FULL 7 POINT ANCHOR SPREAD IN THE SHALLOW WATER PULL–IN AREA, IN ORDER TO GET CLOSER TO THE HDD DUCT. THIS WOULD REDUCE REQUIREMENTS FOR INTERIM TENSIONERS
2. AN EXAMPLE 7 POINT SPREAD IS SHOWN RIGHT.
3. PULL–AHEAD ANCHOR OPERATIONS WILL CONTINUE FOR ENTIRE LENGTH OF THE EXPORT ROUTES.
4. ASSUMES MARINE SPREAD WILL BE UTILIZING 7T DANFORTH ANCHORS WITH 110–INCH SWING DIAMETER.
5. ADDITIONAL SUPPORT VESSEL (LIFT BOAT) WITH UP TO 4 SPUDS MAY BE UTILIZED.

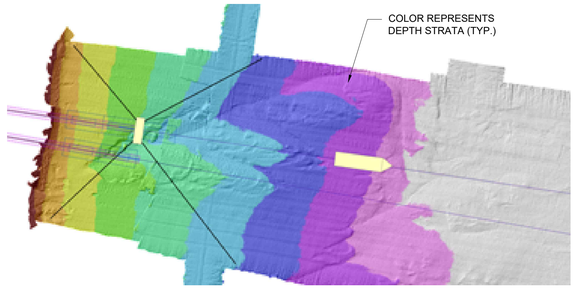


1 – OFFSHORE LANDFALL CABLE PULL–IN, CABLE PULL – MOORING SPREAD OPTION

NOT TO SCALE

NOTES:

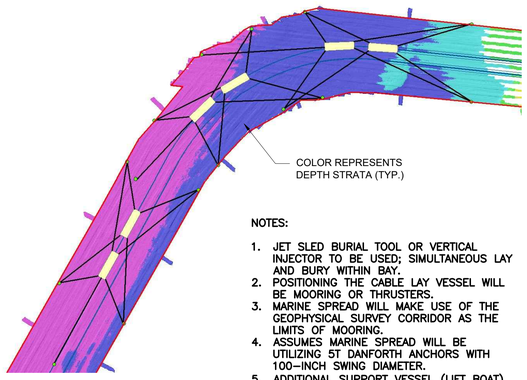
1. THE CABLE LAYING VESSEL WILL BE POSITIONED OFFSHORE OF THE HDD DUCT END, DUE TO WATER DEPTH LIMITATIONS.
2. AS A BASE CASE, THE CABLE LAYING VESSEL WILL REMAIN ON DYNAMIC POSITIONING, IN APPROX. 10M TO 12M WATER DEPTH.
3. THE CABLE IS FLOATED OUT TO THE HDD SUPPORT BARGE, THROUGH A TENSIONER, AND PULLED THROUGH THE HDD TO THE ONSHORE TJB.
4. ON COMPLETION OF PULL–IN, THE HDD IS LOWERED TO THE SEABED, THEN THE FLOATS ARE REMOVED FROM THE CABLE, ALLOWING IT TO SINK TO THE SEABED.
5. CABLE LAY CONTINUES FROM THIS POINT.
6. ASSUMES MARINE SPREAD WILL BE UTILIZING 7T DANFORTH ANCHORS WITH 110–INCH SWING DIAMETER.



CLV POSITIONING AND CABLE FLOAT TO HDD

3 – LANDFALL CABLE PULL–IN OYSTER CREEK, CABLE PULL

NOT TO SCALE



NOTES:

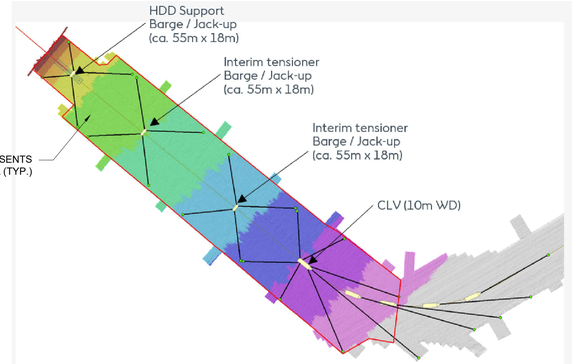
1. JET SLED BURIAL TOOL OR VERTICAL INJECTOR TO BE USED; SIMULTANEOUS LAY AND BURY WITHIN BAY.
2. POSITIONING THE CABLE LAY VESSEL WILL BE MOORING OR THRUSTERS.
3. MARINE SPREAD WILL MAKE USE OF THE GEOPHYSICAL SURVEY CORRIDOR AS THE LIMITS OF MOORING.
4. ASSUMES MARINE SPREAD WILL BE UTILIZING 5T DANFORTH ANCHORS WITH 100–INCH SWING DIAMETER.
5. ADDITIONAL SUPPORT VESSEL (LIFT BOAT) WITH UP TO 4 SPUDS MAY BE UTILIZED.

5 – BARNEGAT BAY CABLE INSTALLATION

NOT TO SCALE

NOTES:

1. AN HDD SUPPORT VESSEL WILL BE POSITIONED AT THE OFFSHORE DUCT END, EITHER A JACK–UP OR A BARGE ON ANCHORS.
2. IF AN ANCHORED BARGE, ASSUME A 4 POINT MOORING SPREAD AND UTILIZE THE FULL WIDTH OF THE SURVEY CORRIDOR.
3. IF A JACK–UP, ASSUME 4 SPUD LEGS INTERFACE TO THE SEABED.
4. DUE TO LONGER PULL LENGTH, INTERIM TENSIONER BARGES MAY BE REQUIRED, DEPENDING HOW CLOSE THE CABLE LAYING VESSEL CAN GET TO THE HDD DUCT END.
5. AS PREVIOUS, IN THE POSITION SHOWN RIGHT, CABLE LAYING VESSEL SHOULD BE ABLE TO SIT ON DYNAMIC POSITIONING. HOWEVER ANCHOR SPREAD SHOWN IN THE EVENT THEY WANT TO USE THIS.
6. ASSUMES MARINE SPREAD WILL BE UTILIZING 7T DANFORTH ANCHORS WITH 110–INCH SWING DIAMETER.



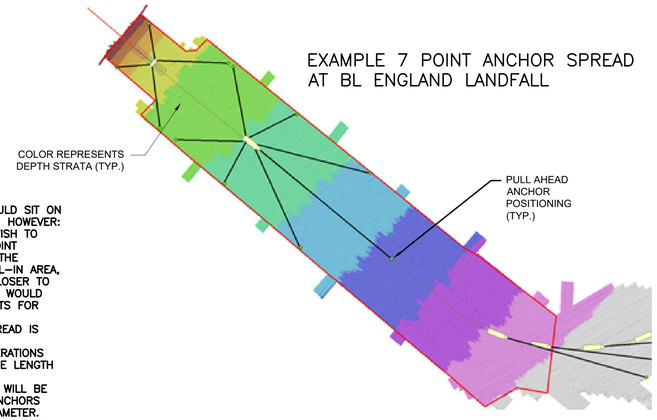
HDD Support / Interim tensioners at BLE

2 – LANDFALL CABLE PULL–IN (BL ENGLAND, HDD SUPPORT & INTERIM TENSIONERS)

NOT TO SCALE

NOTES:

1. CABLE LAYING VESSEL COULD SIT ON DP AT 10M WATER DEPTH, HOWEVER:
   - CONTRACTORS MAY WISH TO UTILIZE A FULL 7 POINT ANCHOR SPREAD IN THE SHALLOW WATER PULL–IN AREA, IN ORDER TO GET CLOSER TO THE HDD DUCT. THIS WOULD REDUCE REQUIREMENTS FOR INTERIM TENSIONERS
2. AN EXAMPLE 7 POINT SPREAD IS SHOWN RIGHT.
3. PULL–AHEAD ANCHOR OPERATIONS WILL CONTINUE FOR ENTIRE LENGTH OF THE EXPORT ROUTES.
4. ASSUMES MARINE SPREAD WILL BE UTILIZING 7T DANFORTH ANCHORS WITH 110–INCH SWING DIAMETER.
5. ADDITIONAL SUPPORT VESSEL (LIFT BOAT) WITH UP TO 4 SPUDS MAY BE UTILIZED.



4 – OFFSHORE LANDFALL CABLE PULL–IN, CABLE PULL – MOORING SPREAD OPTION

NOT TO SCALE

no.	date	by	ckd	description
A	07/29/22	JD	RS	ISSUED FOR PERMIT

NOTES:

1. HORIZONTAL DATUM: NAD83 NEW JERSEY STATE PLANE, U.S. FOOT
2. VERTICAL DATA CONVERSION OYSTER CREEK: NGVD29 = NAVD88 + 1.335 FT

   VERTICAL DATA CONVERSION BL ENGLAND: NGVD29 = NAVD88 + 1.263 FT
3. ALL DIMENSIONS ARE IN FEET (FT) UNLESS NOTED OTHERWISE.
4. ALL BATHYMETRIC CONTOURS ARE DEPICTED IN RELATION TO MEAN LOWER LOW WATER (MLLW).
5. SEE HDD SERIES SHEETS FOR DETAILED PLAN AND PROFILE OF CABLE ROUTE.
6. FOR DETAILS ON WETLAND IMPACTS PLEASE SEE ONSHORE PLAN SET.
7. THESE DRAWINGS ARE FOR DESIGN AND PERMITTING PURPOSES ONLY AND NOT INTENDED FOR CONSTRUCTION. FINAL LOCATION OF PROPOSED IMPROVEMENTS WILL BE COORDINATED WITH ENGINEER UPON AWARD OF CONTRACT.
8. AREAS OF IMPACTS TO REGULATED AREAS WILL BE PROVIDED UPON FINAL DESIGN OF THE CABLE ROUTES AND RELATED IMPROVEMENTS.
9. THESE DRAWINGS SHOW THE APPROXIMATE LOCATION OF CABLE ROUTE. FINAL CABLE ROUTE TO BE PROVIDED BY THE CONTRACTOR.

FOR PERMITTING APPROVAL

Ocean Wind
An Ørsted & PSEG project

HDR ENGINEERING, INC.
1 INTERNATIONAL BOULEVARD, SUITE 1000
MAHWAH, NJ 07495

date	detailed
07/29/2022	J. WYNOHRADNYK
designed	checked
J. DENNIS	R. SCHOO

SITE DETAILS (3 OF 3)

OCEAN WIND OFFSHORE WIND PROJECT
OFFSHORE CABLE ROUTES

project	RDS-PP CODE
112083	

drawing **C503** – rev. **A**

sheet 14 of 14 sheets

file C501.dwg

NJ CERTIFICATE OF AUTHORIZATION 24GE05780300

STATE OF NEW JERSEY — JOSEPH P. DENNIS — No. GE057803 — PROFESSIONAL ENGINEER

JOSEPH P. DENNIS
NJ PROFESSIONAL ENGINEER
No. 24GE05780300

Scale For Microfilming
Millimeters
Inches