

Attachment F3

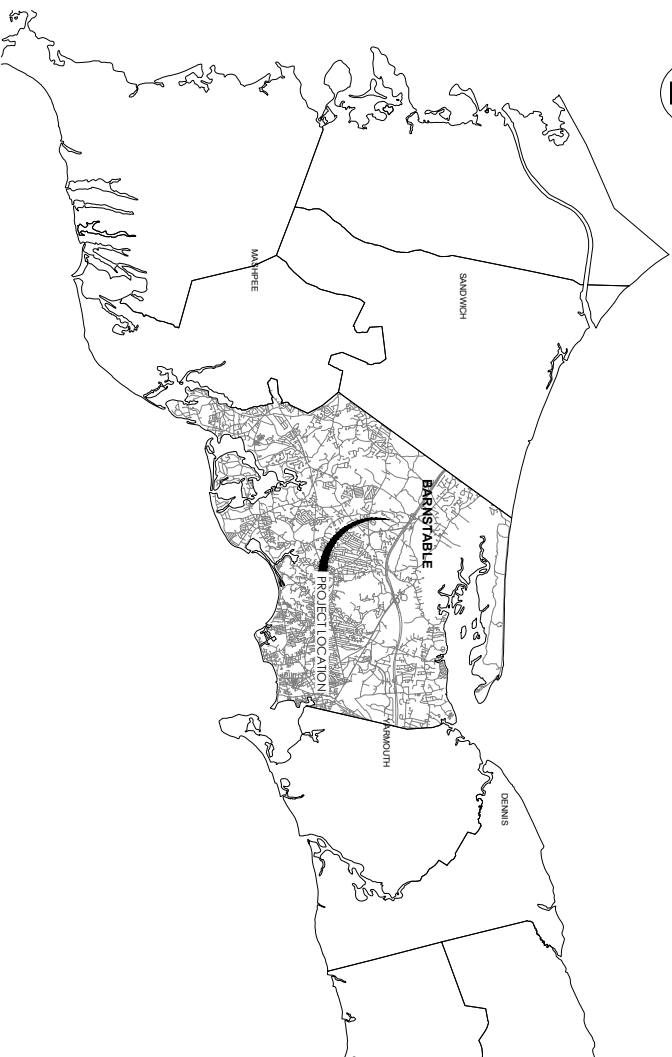
Onshore 275-kV Transmission Route 6 Crossing



NEW ENGLAND WIND 2 CONNECTOR ONSHORE 275 KV TRANSMISSION ROUTE 6 CROSSING

INDEX OF SHEETS

SHEET NO.	TITLE
1	COVER SHEET
2	GENERAL NOTES & DETAILS
3	ROUTE 6 CROSSING TUNNEL ALIGNMENT 1 - PLAN AND PROFILE
4	ROUTE 6 CROSSING TUNNEL ALIGNMENT 2 - PLAN AND PROFILE
5	ROUTE 6 CROSSING TUNNEL ALIGNMENT 1 - CONSTRUCTION STAGING
6	ROUTE 6 CROSSING TUNNEL ALIGNMENT 2 - CONSTRUCTION STAGING



ALL UNITS SHOWN ARE ENGLISH UNITS (FEET AND INCHES)

THIS PLAN SET IS PRELIMINARY AND HAS BEEN ISSUED FOR PERMITTING PURPOSES ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES.

NO.	DATE	DESCRIPTION	BY	CHKD
1	2022-09-21	ISSUED FOR STATE PERMITTING	RY	MD
2	2022-09-21	ISSUED FOR STATE PERMITTING	RY	MD
3	2022-09-21	ISSUED FOR STATE PERMITTING	RY	MD
4	2022-09-21	ISSUED FOR STATE PERMITTING	RY	MD
5	2022-09-21	ISSUED FOR STATE PERMITTING	RY	MD
6	2022-09-21	ISSUED FOR STATE PERMITTING	RY	MD

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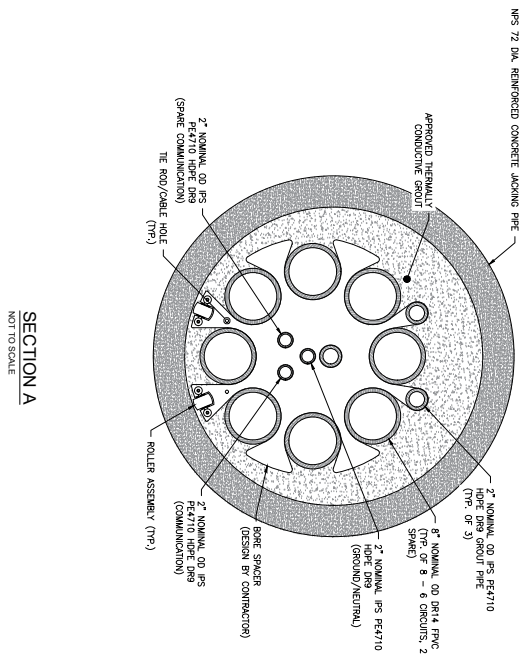
1000 Main Street
 Barnstable, MA 02530

PROJECT	NEW ENGLAND WIND 2 CONNECTOR
TITLE	ROUTE 6 CROSSING
SHEET NO.	COVER PAGE
DATE	CW-W-00-P-STC-DW-0006
SCALE	AS SHOWN
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REV.	C

GENERAL NOTES

1. UNLESS OTHERWISE NOTED:
- 1.1. DIMENSIONS ARE IN FEET.
- 1.2. CHANGES ARE MEASURED ALONG A LEVEL PLAIN OF TUNNEL PATH.
- 1.3. DATUM FOR ALL LAND BASED ELEVATIONS IS NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88).
- 1.4. THE HORIZONTAL REFERENCE DATUM IS NORTH AMERICAN DATUM OF 1983 (NAD83).
- 1.5. EXISTING TOPOGRAPHY IS TAKEN FROM 2016 USGS COSTAL NATIONAL ELEVATION DATABASE (CONE) LIDAR DATA. TOPOGRAPHY TO BE CONFORMED WITH A FIELD SURVEY.
2. UNLESS OTHERWISE NOTED, THE DESIGN CONFORMS TO THE LATEST VERSION OF REFERENCED CODES AND STANDARDS IN EFFECT AT THE TIME OF DESIGN (AUGUST 24, 2022).
3. CONSTRUCTION TO COMPLY WITH THE PROJECT'S APPLICABLE TRENCHLESS INSTALLATION SPECIFICATIONS, CROSSING AGREEMENTS, PROJECT CONSTRUCTION SPECIFICATIONS, AND FEDERAL, STATE AND MUNICIPAL REGULATIONS. REQUIREMENTS THAT THE CONTRACTOR CONSIDERS TO BE CONFLICTING SHALL BE REVIEWED BY THE PROJECT'S AUTHORIZED REPRESENTATIVE. HARD COPIES OF CROSSING AGREEMENT AND CONTRACT DOCUMENTS SHALL BE ON SITE DURING CONSTRUCTION.
4. BEFORE INITIATING CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL OBTAIN DISSEAL AT 811 AND ALSO VERIFY THE FIELD SURVEY DATA, TOPOGRAPHY AND LOCATION OF ALL EXISTING UTILITIES.
5. CONSTRUCTION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND TRENCHLESS TECHNOLOGY EXECUTION PLAN.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING DAMAGE TO ADJACENT STRUCTURES OR FACILITIES (ABOVE OR BELOW GROUND) DUE TO TRENCHLESS TECHNOLOGY OPERATIONS.
7. THE TUNNEL SHALL FOLLOW THE PATH SHOWN ON THE DRAWINGS WITH THE FOLLOWING REQUIREMENTS AND TOLERANCES IN ORDER OF PRECEDENCE:
 - 7.1. THE FINAL INSTALLATION SHALL BE ENTIRELY WITHIN THE APPROVED RIGHT-OF-WAY.
 - 7.2. UNDERGROUND FACILITIES ARE PROTECTED AT ALL STAGES OF INSTALLATION, AND THE FINAL INSTALLATION IS WITHIN THE PERMISSIBLE DRILL ZONE AS DETERMINED BY THE GEOTECHNICAL SUB-SURFACE INVESTIGATIONS.
 - 7.3. THE MAXIMUM HORIZONTAL VARIANCE IN POSITION OF THE INSTALLED DRILL PATH SHALL BE 3.0 FEET FROM THE PLANNED DRILL PATH SHOWN PROVIDED THE DRILL PATH REMAINS A MINIMUM OF 5 FEET DEEPER FROM THE EDGE OF THE DESIGNATED RIGHT-OR-WAY. THE MAXIMUM VERTICAL DEVIATION SHALL BE 0.0 FT SHALLOWER TO 3 FEET DEEPER FROM THE PLANNED DRILL PATH. TO A MAXIMUM 25 FEET OF COVER OVER THE DESIGN FIELD. ANY DEVIATIONS BEYOND THESE LIMITS SHALL BE IMMEDIATELY CORRECTED OR SUBMITTED TO THE OWNER FOR APPROVAL.
8. THIS CROSSING IS TO BE INSTALLED USING THE PIPE JACKING/SURVEY MICROTUNNELLING METHOD/OR DIRECT PIPE.
9. THE POSITION OF THE PRELIME (AS-BUILT) SHALL BE MEASURED AND CALCULATED AT A MINIMUM AFTER EACH PIPE SEGMENT DRILLED.
10. THE FOLLOWING DATA SHALL BE TABULATED FOR EACH AS-BUILT SURVEY POINT RELATIVE TO THE PLANNED TUNNEL PATH:
 - 10.1. HORIZONTAL DISTANCE FROM THE ENTRY POINT
 - 10.2. LATERAL POSITION FROM CENTRE LINE
 - 10.3. TRUE VERTICAL DEPTH FROM ENTRY POINT
 - 10.4. INCINATION ANGLE
 - 10.5. AZIMUTH ANGLE
 - 10.6. DISTANCE ALONG DRILLED PATH
11. THE CONTRACTOR SHALL CONDUCT A SURFICENT NUMBER OF CONTROL SURVEYS TO MAINTAIN THE REQUIRED POSITIONAL TOLERANCES.
12. DRILLING FLUID AND SURFACE RUNOFF FROM THE WORKSPACE SHALL BE CONTAINED TO PREVENT ITS MIGRATION FROM THE WORKSPACE.
13. THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN MAXIMUM AND MINIMUM SLURRY AND LUBRICATION FLUID PRESSURE LIMITS TO AVOID FLUID RELEASE AND OVER-EXCAVATION.
14. DRILLING FLUID AND CUTTINGS SHALL BE MANAGED AND DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.
15. ENGINEERED DRILLING FLUID PLAN MUST BE IMPLEMENTED IN THE FIELD WITH PROPOSED EQUIPMENT.
16. ENGINEERED DRILLING FLUID PLAN MUST BE APPROVED AND ACCEPTED PRIOR TO COMMENCING DRILLING. IMPLEMENTATION OF THE APPROVED PLAN WITH PROPOSED EQUIPMENT IS REQUIRED.
17. SEPARATIONS FOR PROPOSED EQUIPMENT FOR ANNUAL PRESSURE MONITORING, DOMINANT SURVEY, SURFACE TRACKING, AND ELECTRONIC DRILL RECORDING SHALL BE REVIEWED AND APPROVED BY THE PROJECT'S AUTHORIZED REPRESENTATIVE AND INSPECTED BEFORE DRILLING ACTIVITIES COMMENCE.
18. DURING CONSTRUCTION THE AREA SURROUNDING THE DRILL PATH SHALL BE MONITORED FOR FLUID RELEASE TO GROUND SURFACE. FLUID RELEASES SHALL BE REPORTED IMMEDIATELY ACCORDING TO THE EMERGENCY RESPONSE PLAN AND AS REQUIRED BY REGULATIONS AND PERMITS.
19. THE LOCATION AND DEPTH OF EXISTING UTILITIES TO BE DETERMINED PRIOR TO CONSTRUCTION.
20. THE MINIMUM PUSH RATING FOR THE PIPE JACKING FRAME SHALL BE 250 TONNES.
21. CROSSING WORKS SHALL ADHERE TO ALL REGULATORY AND PERMIT REQUIREMENTS.
22. SETTLEMENT MONITORING SHALL BE CONDUCTED AS REQUIRED BY CROSSING AGREEMENTS AND PERMITS.
23. CONTRACTOR SHALL STATE AT ENGINEER OF RECORD FOR THE TRENCHLESS INSTALLATION, ENGINEERING AND DESIGN PRODUCTS, AS WELL AS AS-BUILT DATA, SHALL BE SEALED BY THE CONTRACTOR'S PROFESSIONAL ENGINEER REGISTERED IN THE COMMONWEALTH OF MASSACHUSETTS.
24. DEWATERING ACTIVITIES SHALL BE CONDUCTED IN A MANNER AS TO MINIMIZE THE DISCHARGE OF POLLUTANTS FROM DEWATERING OPERATIONS. DEWATERING OPERATIONS SHALL BE CONDUCTED IN ACCORDANCE WITH THE COMMONWEALTH OF MASSACHUSETTS DISCHARGE ELIMINATION SYSTEM (DES) CONSTRUCTION GENERAL PERMIT (CGP) FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES.
25. SHAFTS ARE TO BE BACKFILLED USING AN APPROVED PROCEDURE, AND THE SURFACE RESTORED TO FINAL GRADE FOLLOWING COMPLETION OF THE TUNNELS.

DETAILS



ALL UNITS SHOWN ARE ENGLISH UNITS (FEET AND INCHES)

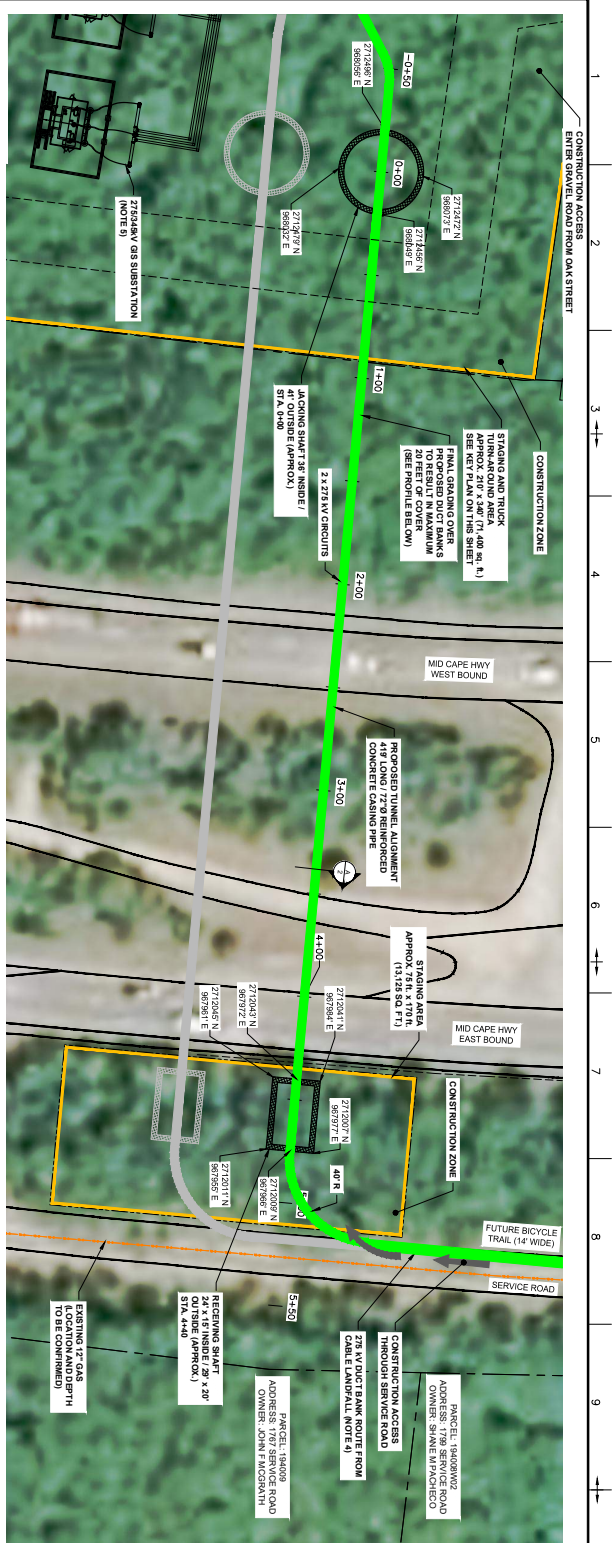
THIS PLAN SET IS PRELIMINARY AND HAS BEEN ISSUED FOR PERMITTING PURPOSES ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES.

PROJECT		NEW ENGLAND WIND 2 CONNECTOR	
TITLE		ROUTE 6 CROSSING	
SHEET		GENERAL NOTES AND DETAILS	
SCALE		AS SHOWN	
DATE		MAY 0 2024	
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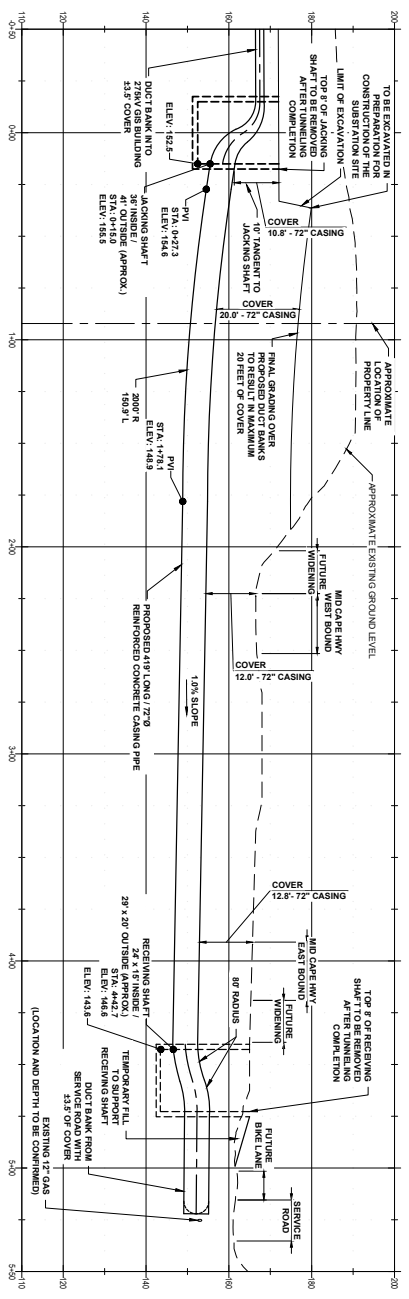
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 Waltham, MA 02451, USA
 Phone: 781.250.8000

1000 Mt. Vernon St., 01110



PLAN
1" = 30'

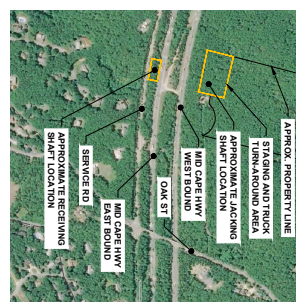
- NOTES:
1. DRAWING SUBJECT TO CHANGE BASED ON FIELD CONDITIONS.
 2. AFTER DUCT BANK IS CONSTRUCTED AND ELECTRICAL WORK IS COMPLETED, JACKING SHAFT TO BE REMOVED AND/OR BACKFILL TO FINISH GRADE.
 3. SEE DRAWING SET CWM-QCP-31C-DW-0001 FOR DETAILS OF INTERACTING 27WV DUCT BANK DETAILS OF 27564WV GAS SUBSTATION.



PROFILES
1" V = 30'
1" H = 30'

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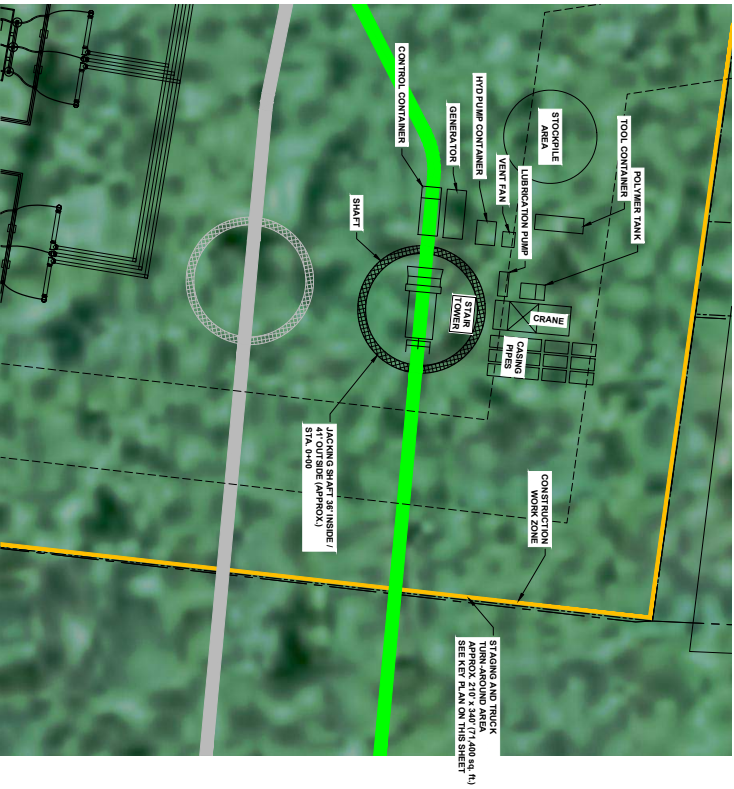
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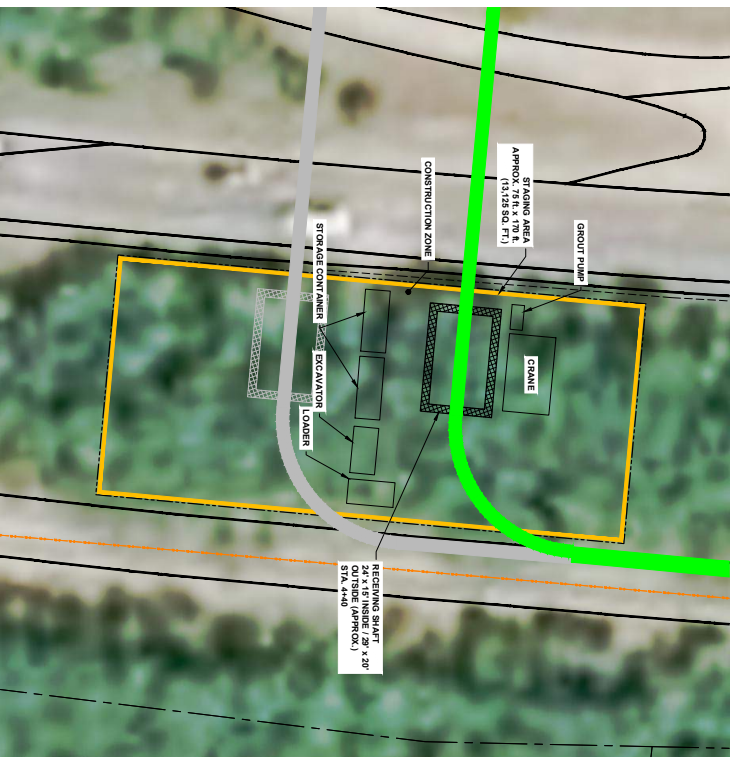
KEY PLAN
1" = 400'

PROJECT	NEW ENGLAND WIND 2 CONNECTOR
TITLE	ROUTE 6 CROSSING - TUNNEL ALIGNMENT 1
DATE	PLAN AND PROFILE
SCALE	CWM-QCP-31C-DW-0006
SHEET NO.	3
DATE	10/20/20
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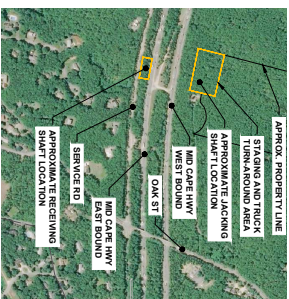
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9	ISSUED FOR STATE PERMITTING	RT	MM	MM
10	ISSUED FOR STATE PERMITTING	RT	MM	MM
11	ISSUED FOR STATE PERMITTING	RT	MM	MM
12	ISSUED FOR STATE PERMITTING	RT	MM	MM



JACKING SHAFT 1
CONSTRUCTION STAGING PLAN
1"=20'



RECEIVING SHAFT 1
CONSTRUCTION STAGING PLAN
1"=20'



KEY PLAN
1"=400'

- NOTES:
1. FINISHING SUBJECT TO CHANGE BASED ON FINAL SUBSTATION ELEVATION AND ELECTRICAL AMPACITY/VIEW EVALUATION
 2. JACKING SHAFT TO BE REMOVED AND/OR BACKFILLED TO FINISH GRADE.

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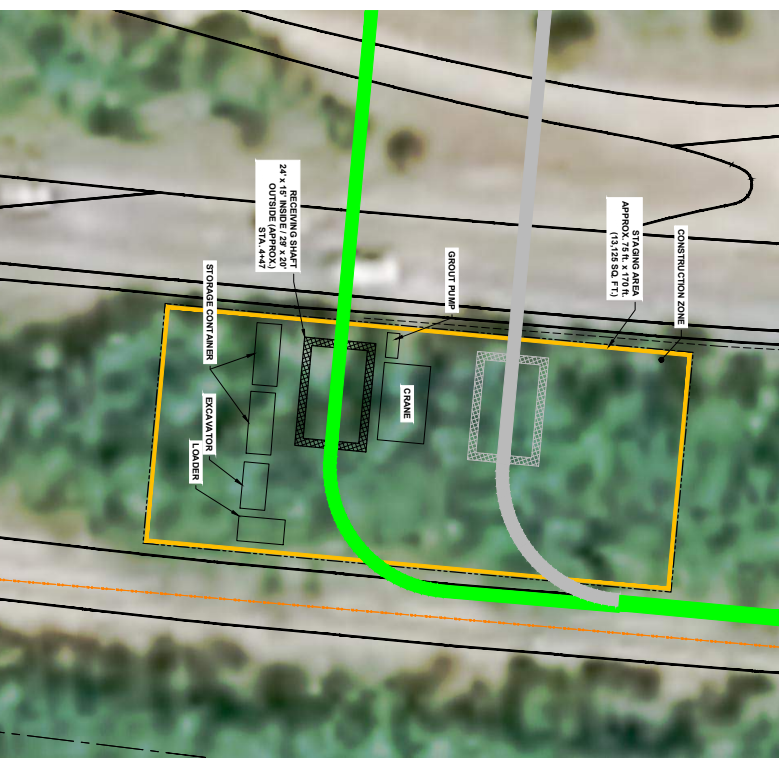
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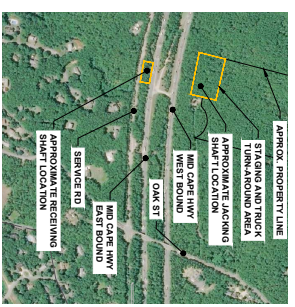
PROJECT: NEW ENGLAND WIND 2 CONNECTOR
 TITLE: ROUTE 6 CROSSING - TUNNEL ALIGNMENT 1
 SHEET: CONSTRUCTION STAGING
 SCALE: AS SHOWN
 DATE: 08/11/2022



JACKING SHAFT 2
CONSTRUCTION STAGING PLAN
1"=20'



RECEIVING SHAFT 2
CONSTRUCTION STAGING PLAN
1"=20'



- NOTES:
1. FINISHING SUBJECT TO CHANGE BASED ON FINAL SUBSTATION ELEVATION AND ELECTRICAL AMPACITY/EVALUATION CONNECTED TO CONDUIT IN CASING PIPE.
 2. JACKING SHAFT TO BE REMOVED AND/OR BACKFILLED TO FRESH GRADE.

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PROJECT:	NEW ENGLAND WIND 2 CONNECTOR
TITLE:	ROUTE 6 CROSSING - TUNNEL ALIGNMENT 2 CONSTRUCTION STAGING
SHEET:	CW-W-00-P-ST-C-DW-0006
SCALE:	AS SHOWN
DATE:	ANS 0
DESIGNER:	ANS 0
CHECKER:	ANS 0
DATE:	ANS 0

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