



LEGEND:

- U181 LINE:
- U181 STR:



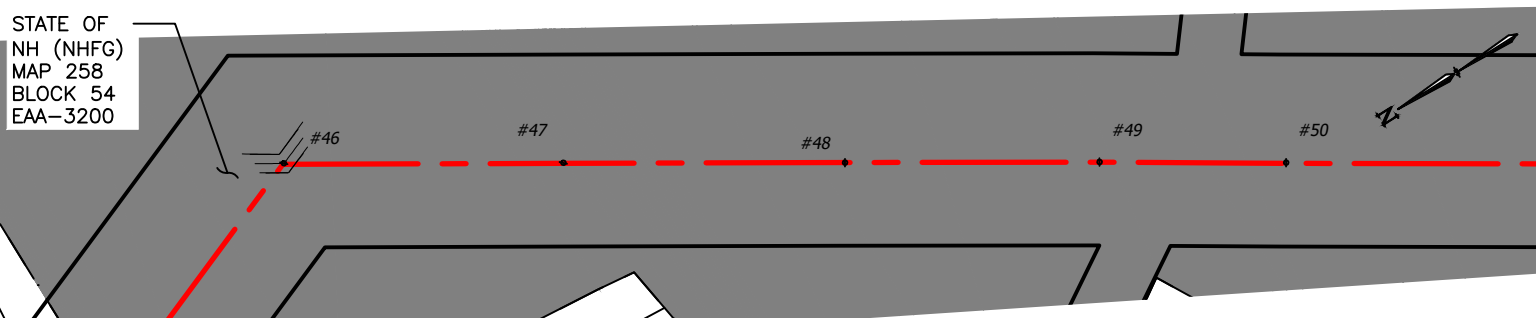
U181 115kV LINE
STATE LAND CROSSING, LOCATION PLAN
PORTSMOUTH, NEW HAMPSHIRE
EXHIBIT 1

T	1
DRAWN CTS	
ENGINEER PRA	
CHECKED CJN	
APPROVED PRA	
DATE 03/27/2023	

DWG REV	EPN/DESCRIPTION	CONT/PE#	DATE	DRN	CHKD	APPR
1	ISSUED TO DOE		3/27/23	CTS	CJN	PRA

SCALE 1" = 1500'	FILE: 04090-81001.DWG IMAGE:	DRAWING NO. 04090-81001
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9/7/2023 8:24 AM - spensct - C:\Users\spensct\appdata\local\temp\AcPublish_25976\04090-81001.dwg - EXHIBIT 2



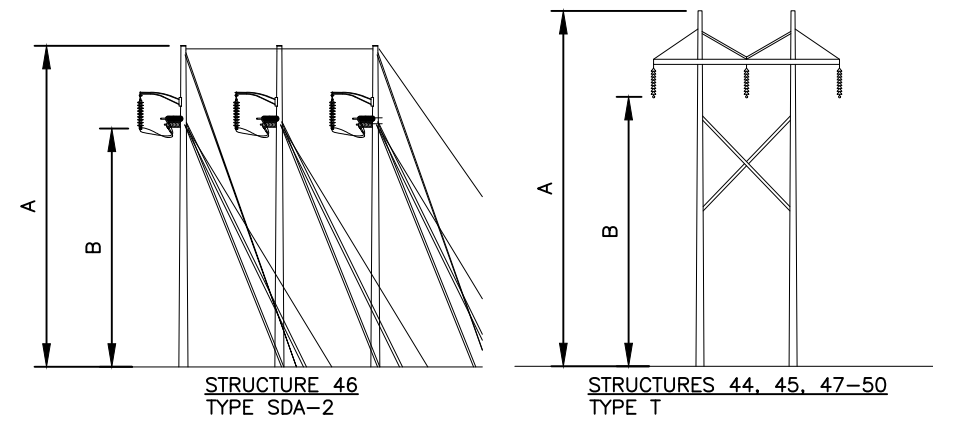
PLAN VIEW
SCALE: 1" = 300'

LEGEND:

- STRUCTURE (WITH GUYS)
- #46
- PROPERTY BOUNDARY
- U181 LINE 115KV LINE, ϕ OF CONSTRUCTION
- LIMITS OF EVERSOURCE RIGHT OF WAY
- WATERBODY

STRUCTURE LOCATION		
STRUCTURE	LONGITUDE	LATITUDE
44	-70.79247129	43.05756208
45	-70.79202097	43.05669667
46	-70.79147033	43.05562694
47	-70.79234856	43.05461741
48	-70.79323695	43.05360106
49	-70.79403881	43.05268056
50	-70.79463142	43.05200877
51	-70.79580342	43.05067672

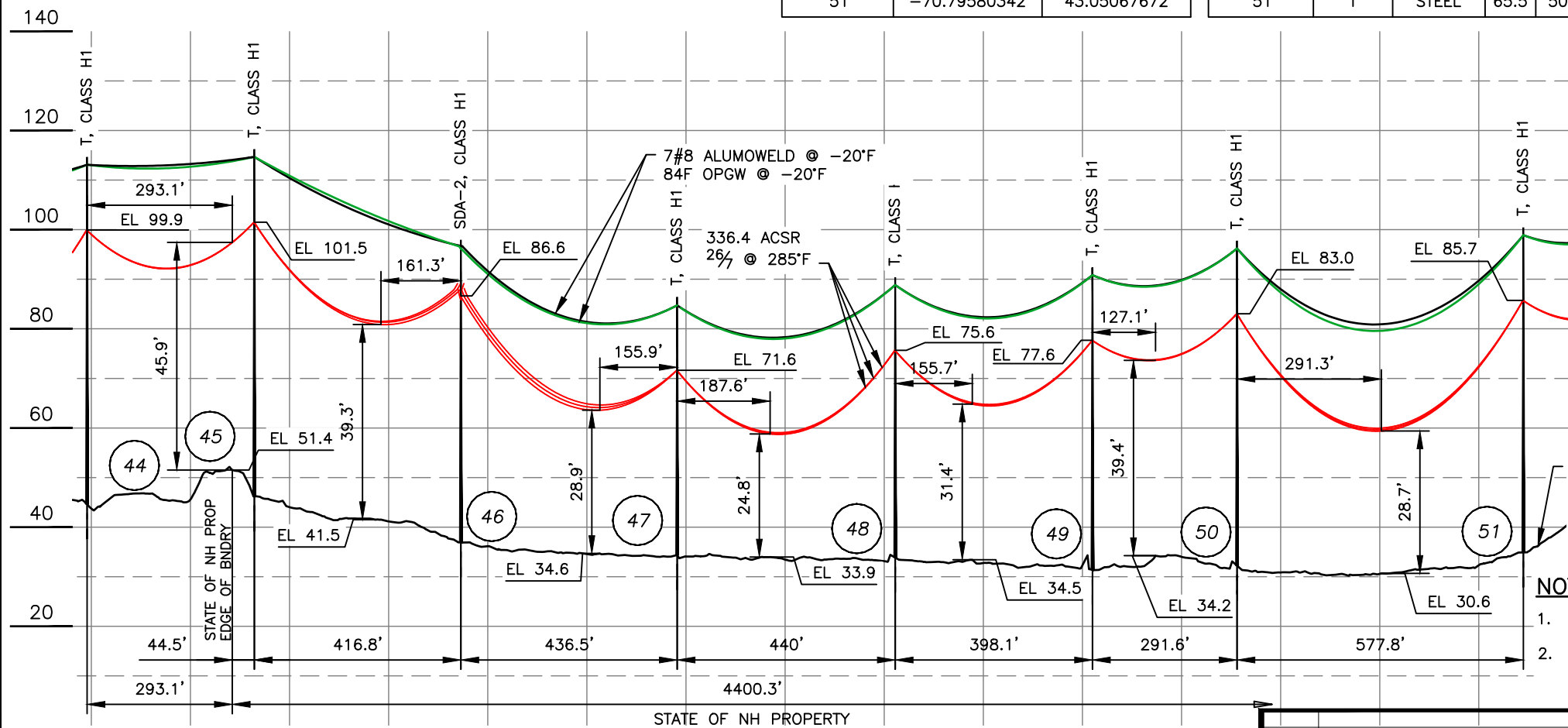
STRUCTURE DETAILS				
STRUCTURE	TYPE	MATERIAL	A	B
44	T	STEEL	70	55.3
45	T	STEEL	70	55.8
46	SDA-2	STEEL	61	49.8
47	T	STEEL	52	37.3
48	T	STEEL	56.5	41.8
49	T	STEEL	61	46.3
50	T	STEEL	65.5	50.8
51	T	STEEL	65.5	50.8



STRUCTURE 46
TYPE SDA-2
STR 46: IS AN EVERSOURCE TYPE SDA-2, SINGLE CIRCUIT STEEL POLE DEADEND, HORIZONTAL CONFIG.

STRUCTURES 44, 45, 47-50
TYPE T
STR'S: 44, 45, 47, 48, 49, 50 AND 51 ARE AN EVERSOURCE TYPE T, SINGLE CIRCUIT STEEL POLE TANGENT, HORIZONTAL CONFIG.

STRUCTURE DETAIL
SCALE: NTS



NESC VERTICAL CLEARANCE (FT)		FROM TABLE 232.1, C2-2012
NATURE OF SURFACE UNDERNEATH WIRES, CONDUCTORS OR CABLES	115kV	
OTHER AREAS TRAVERSED BY VEHICLES, SUCH AS CULTIVATED, GRAZING, FOREST, AND ORCHARD LANDS, INDUSTRIAL SITES, COMMERCIAL SITES, ETC	20.1	

CABLE SCHEDULE						
WIRE	QTY OF CABLES	DESCRIPTION	DESIGN CONDITIONS			
			MAX DESIGN TENSION (lb)	TEMP (°F)	ICE (in)	WIND (psf)
CONDUCTOR	3	336.4 26/7 ACSR "Linnet"	4000	0	0.5	4
STATIC	1	7#8 ALUMOWELD	3500	0	0.5	4
OPGW	1	0.646" OPGW	4400	0	0.5	4

- NOTES:**
- PARCEL INFORMATION PROVIDED BY NH GRANIT.
 - ELEVATIONS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988.

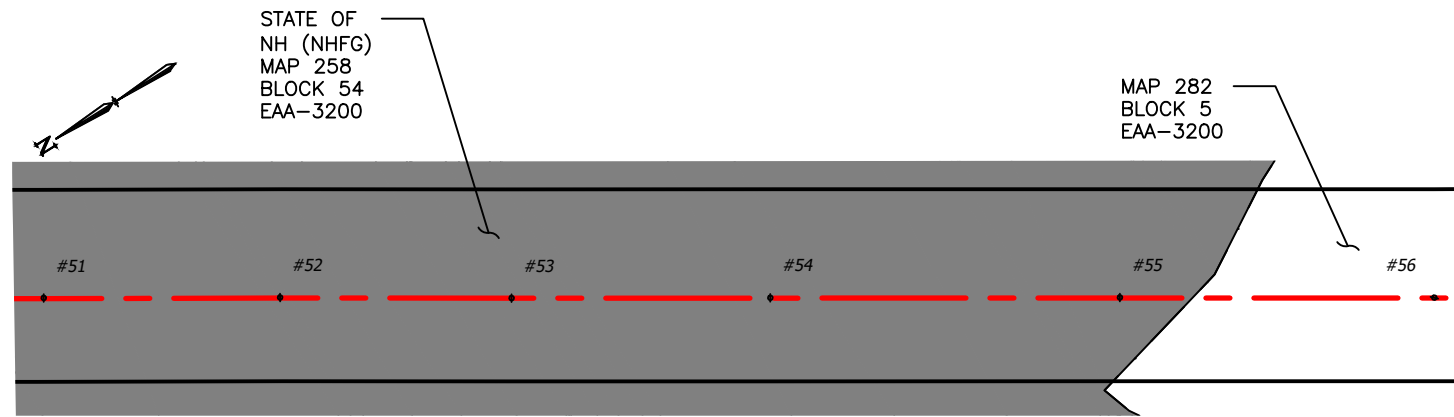
PROFILE VIEW
SCALE: HORZ 1" = 300'
VERT 1" = 30'

U181, 115kV LINE
STATE LAND CROSSING
PORTSMOUTH, NEW HAMPSHIRE
EXHIBIT 2

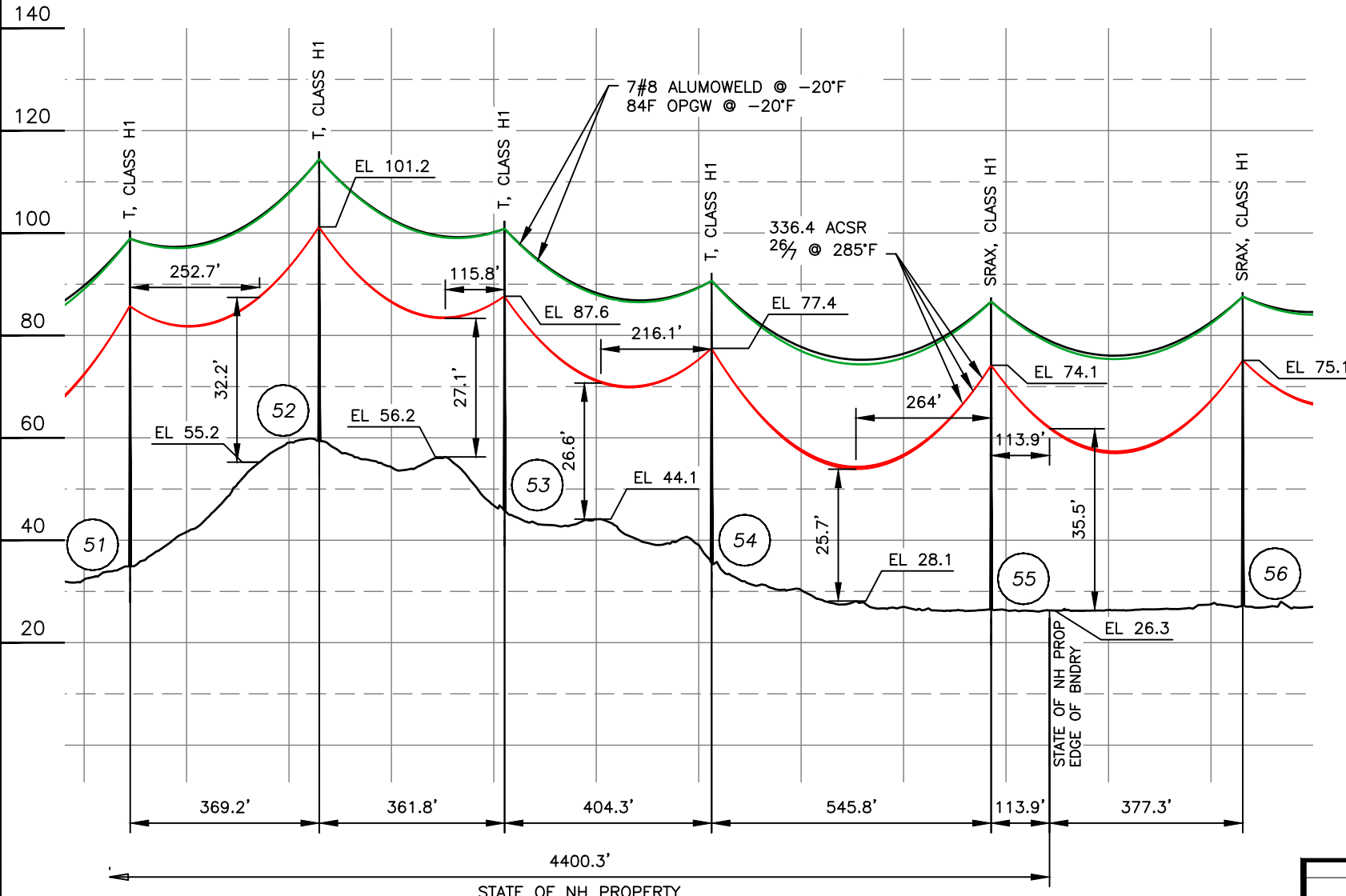
T	2
DRAWN	CTS
ENGINEER	PRA
CHECKED	CJN
APPROVED	PRA
DATE	03/27/2023

DWG REV	EPN/DESCRIPTION	CONT/PE#	DATE	DRN	CHKD	APPR
2	UPDATED DIMENSIONS AND TENSIONS		8/24/23	CTS	APS	APS
1	ISSUED TO DOE		3/27/23	CTS	CJN	PRA

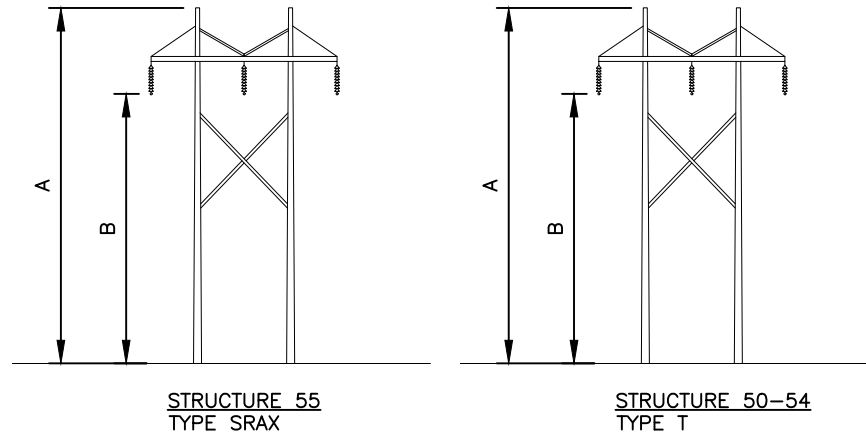
SCALE: AS SHOWN
FILE: 04090-81001.DWG
DRAWING NO.: 04090-81001



PLAN VIEW
SCALE: 1" = 300'



PROFILE VIEW
SCALE: HORZ 1" = 300'
VERT 1" = 30'



STR 55: ARE AN EVERSOURCE TYPE SRAX, SINGLE CIRCUIT STEEL POLE TANGENT, HORIZONTAL CONFIG.
STR'S 50,51,52,53,54: ARE EVERSOURCE TYPE T, SINGLE CIRCUIT STEEL POLES TANGENT, HORIZONTAL CONFIG.

STRUCTURE DETAILS				
STRUCTURE	TYPE	MATERIAL	A	B
51	T	STEEL	65.5	50.8
52	T	STEEL	56.5	41.8
53	T	STEEL	56.5	41.8
54	T	STEEL	56.5	46.3
55	SRAX	STEEL	60.9	47.6
56	SRAX	STEEL	60.9	47.6

STRUCTURE DETAIL
SCALE: NTS

LEGEND:

- #135 STRUCTURE
- PROPERTY BOUNDARY
- U181 LINE 115KV LINE, C OF CONSTRUCTION
- LIMITS OF EVERSOURCE RIGHT OF WAY
- WATERBODY

STRUCTURE LOCATION		
STRUCTURE	LONGITUDE	LATITUDE
50	-70.79463142	43.05200877
51	-70.79580342	43.05067672
52	-70.79654853	43.04982382
53	-70.79727959	43.04898845
54	-70.79809803	43.04805578
55	-70.79920062	43.04679551
56	-70.8001955	43.0456623

NESC VERTICAL CLEARANCE (FT)		FROM
TABLE 232.1, C2-2012		
NATURE OF SURFACE UNDERNEATH WIRES, CONDUCTORS OR CABLES		115kv
OTHER AREAS TRAVERSED BY VEHICLES, SUCH AS CULTIVATED, GRAZING, FOREST, AND ORCHARD LANDS, INDUSTRIAL SITES, COMMERCIAL SITES, ETC		20.1

CABLE SCHEDULE						
WIRE	QTY OF CABLES	DESCRIPTION	DESIGN CONDITIONS			
			MAX DESIGN TENSION (lb)	TEMP (°F)	ICE (in)	WIND (psf)
CONDUCTOR	3	336.4 26/7 ACSR "Linnet"	1500	0	0.5	4
STATIC	1	7#8 ALUMOWELD	914	0	0.5	4
OPGW	1	0.646" OPGW	1096	0	0.5	4

- NOTES:**
- PARCEL INFORMATION PROVIDED BY NH GRANIT.
 - ELEVATIONS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988.

DWG REV	EPN/DESCRIPTION	CONT/PE#	DATE	DRN	CHKD	APPR
2	UPDATED DIMENSIONS AND TENSIONS		8/24/23	CTS	APS	APS
1	ISSUED TO DOE		3/27/23	CTS	CJN	PRA

EVERSOURCE ENERGY

U181, 115kV LINE
STATE LAND CROSSING
PORTSMOUTH, NEW HAMPSHIRE
EXHIBIT 3

DRAWN CTS	T 2
ENGINEER PRA	
CHECKED CJN	
APPROVED PRA	
DATE 03/27/2023	