

NOTES:

- 1) PROPERTY BOUNDARIES SHOWN ARE APPROXIMATE AND FOR REPRESENTATION ONLY. RIGHT OF WAY LOCATION HAS BEEN SURVEYED AND PROVIDED BY DOUCET SURVEY, INC.
- 2) DISTRIBUTION UPGRADES TO STRUCTURES AND EQUIPMENT ARE NOT DETAILED IN THIS DRAWING SET. DETAILED ANALYSIS AND INSTALLATION OF EQUIPMENT, OR MODIFICATIONS TO EXISTING STRUCTURES, WILL BE PERFORMED BY OTHERS.

LEGEND

UNDERGROUND UTILITIES:

- DURHAM WATER LINE
- SEWER LINE
- UNH WATER LINE
- FIBER OPTIC
- WATER LINE
- GAS LINE
- GAS LINE

CONDUCTOR/SHIELD WIRES:

- 115KV 1590 ACSR 45/7 "LAPWING"
- 34.5KV 477 ACSR 18/1 "PELICAN"
- 0KV 24 FIBER OPGW OR OKV UNDERBUILD ADSS
- 0KV 4/0 ACSR 6/1 "PENGUIN"
- HENDRIX MESSENGER & SPACER CABLE
- 115KV UNDERGROUND

ROW

- PAN-AM RAILROAD ROW
- PSNH ROW

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TYPICAL WIRE INFORMATION:

0KV 24 FIBER OPGW INSTALLED @ 4,500 LBS. NESC HVY. INITIAL (DISPLAYED @ 120 DEG. F)
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34.5KV 477 ACSR 18/1 INSTALLED @ 3,500 LBS. NESC HVY. INITIAL (DISPLAYED @ 212 DEG. F)
0KV 4/0 ACSR 6/1 INSTALLED @ 2,500 LBS. NESC HVY. INITIAL (DISPLAYED @ 120 DEG. F)
0KV 19 NO. 10 AW @ 4,200 LBS. NESC HVY. INITIAL (DISPLAYED @ 120 DEG. F)
HENDRIX MESSENGER & 477 KCMIL SPACER CABLE @ 9,000 LBS. NESC HVY. INITIAL (DISPLAYED @ 120 DEG. F)

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G	RE-ISSUED FOR PERMITTING	4/24/2015	KMS	KMS	APJ		

DSGN	KMS	4/4/2014
DRN	KMS	4/4/2014
CKD	APJ	4/4/2014

SCALE: 1" = 200' HORIZ.
20' VERT.
FOR 22X34 DWG ONLY

POWER ENGINEERS

PUBLIC SERVICE OF NEW HAMPSHIRE

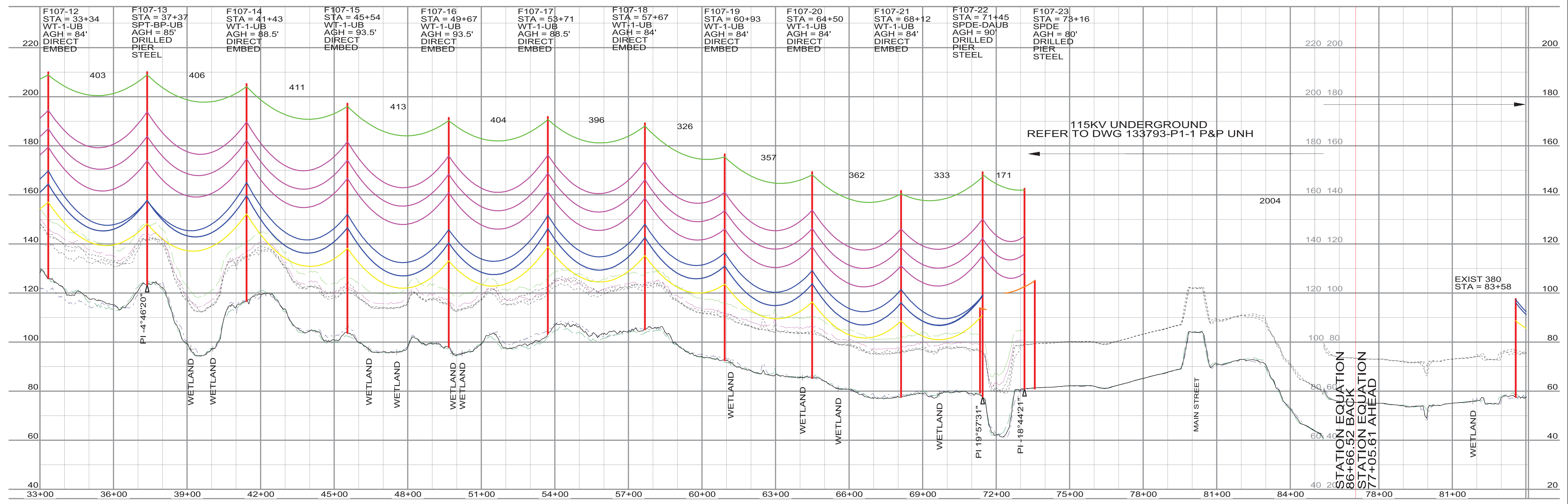
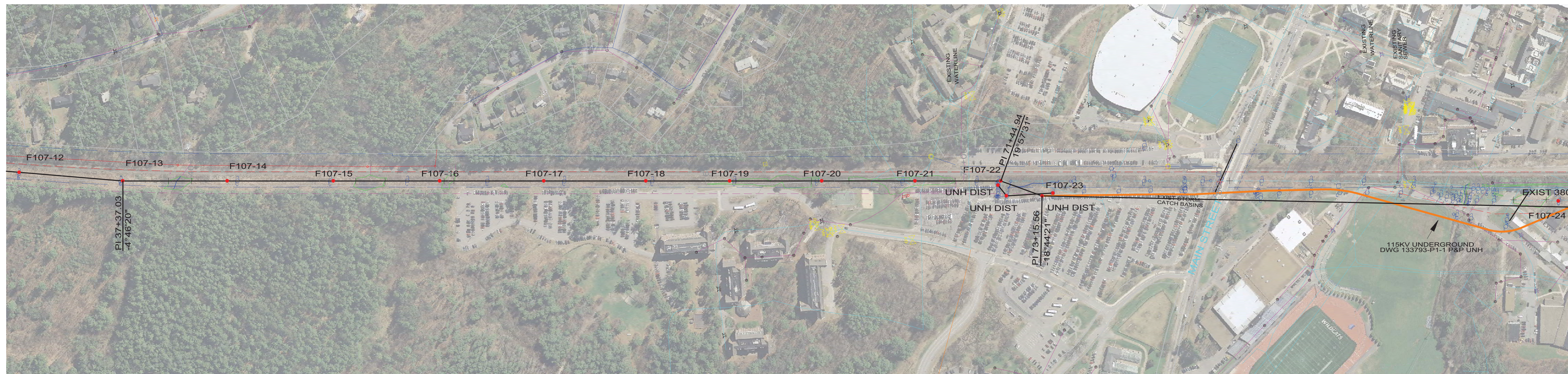
SEACOAST RELIABILITY PROJECT

F107 LINE & STRUCTURE LOCATIONS

JOB NUMBER: 133005

REV: K

DRAWING NUMBER: F10743001



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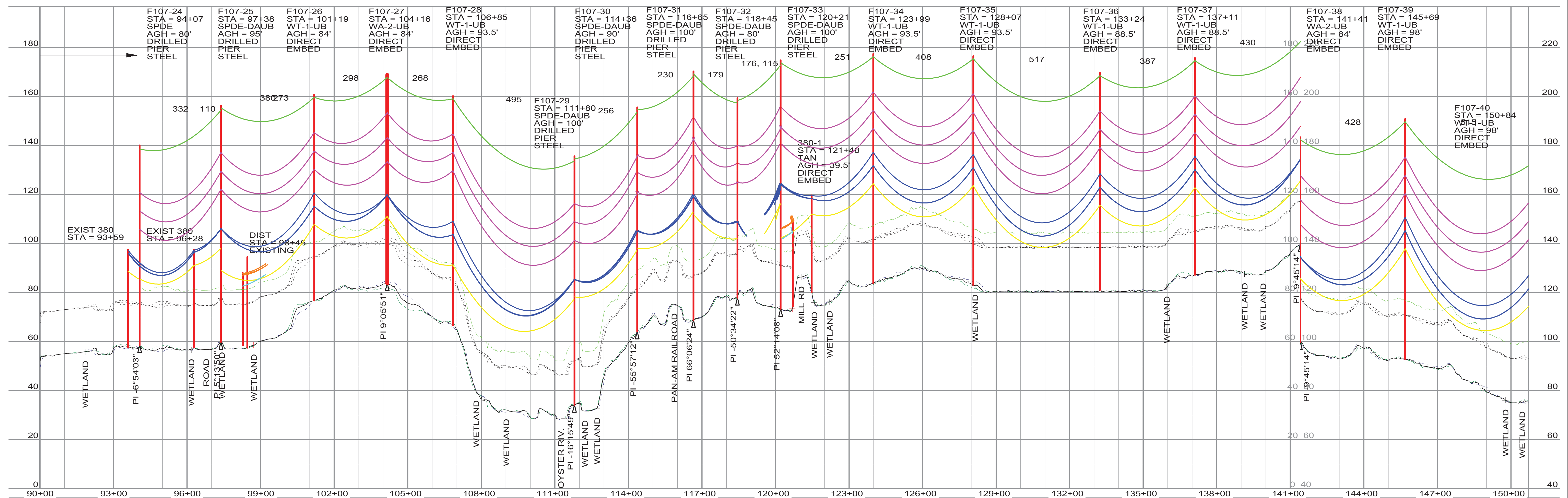
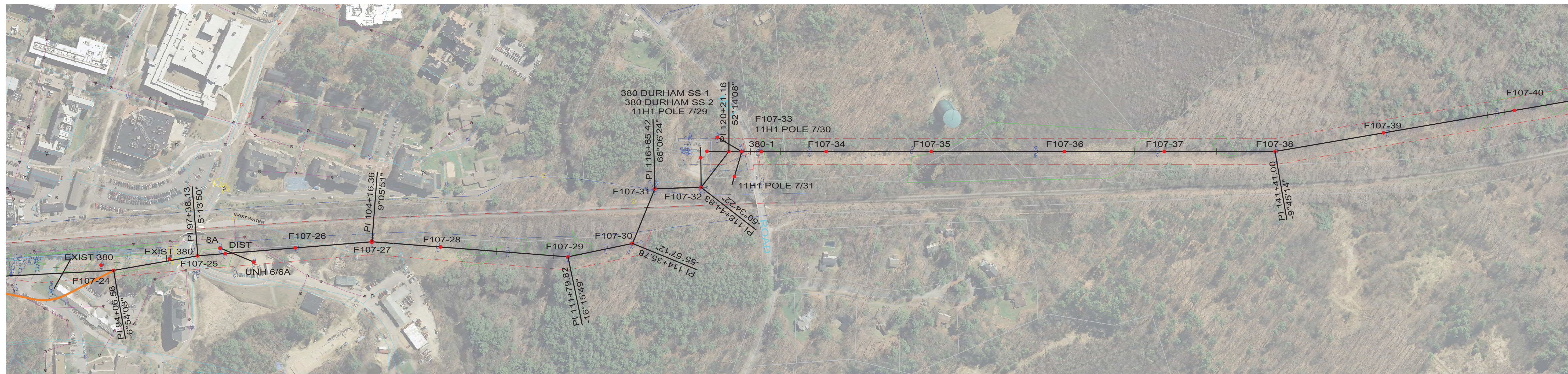
POWER ENGINEERS

PUBLIC SERVICE OF NEW HAMPSHIRE
 SEACOAST RELIABILITY PROJECT
 F107 LINE & STRUCTURE LOCATIONS

JOB NUMBER
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DRAWING NUMBER
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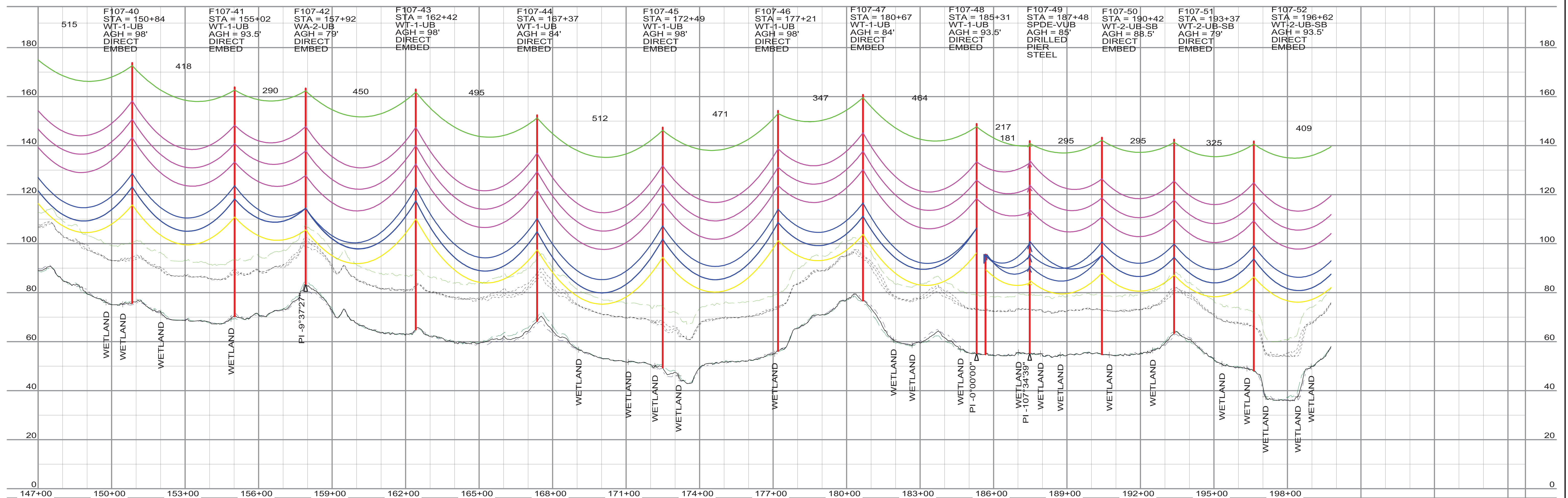
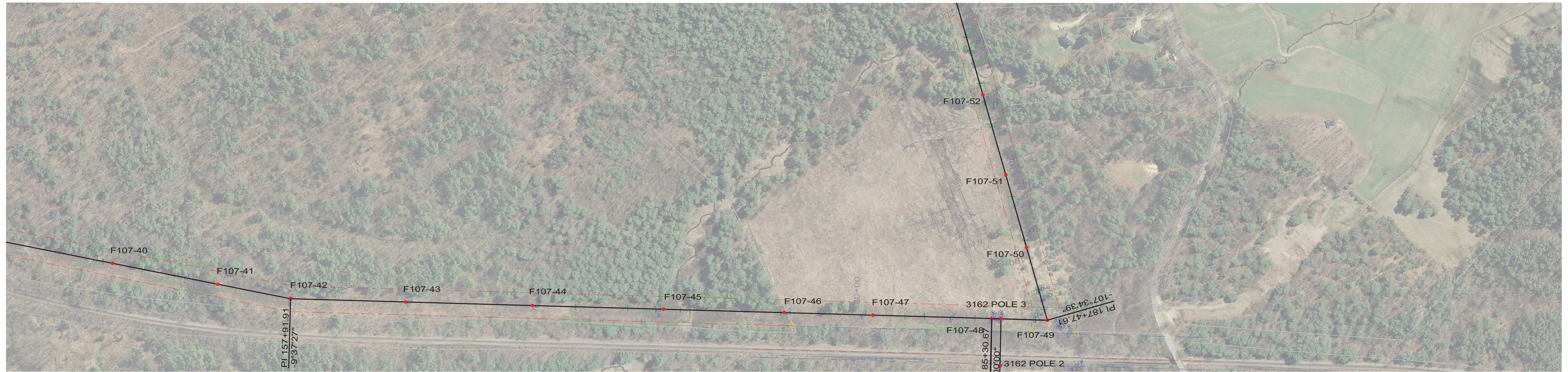
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 SEACOAST RELIABILITY PROJECT

JOB NUMBER: 133005
 DRAWING NUMBER: F10743003



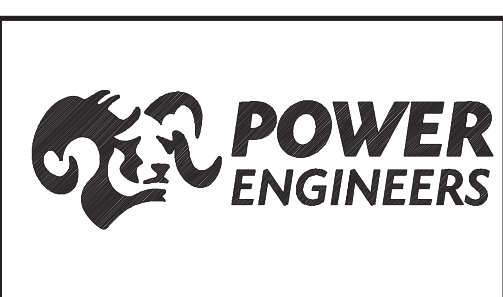
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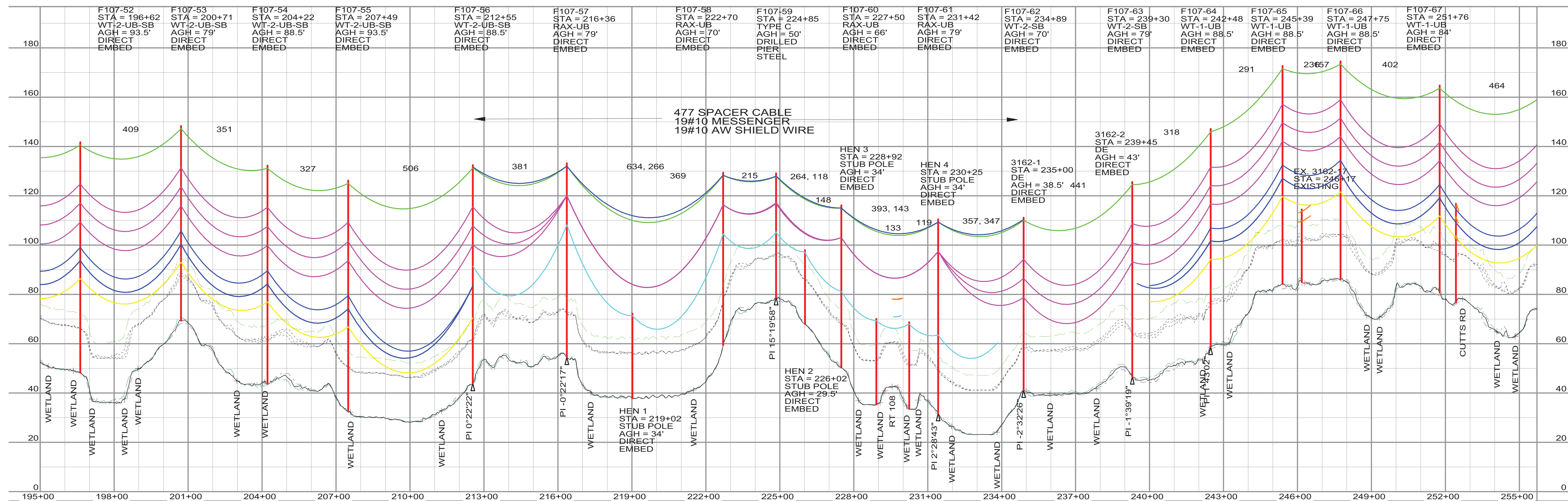
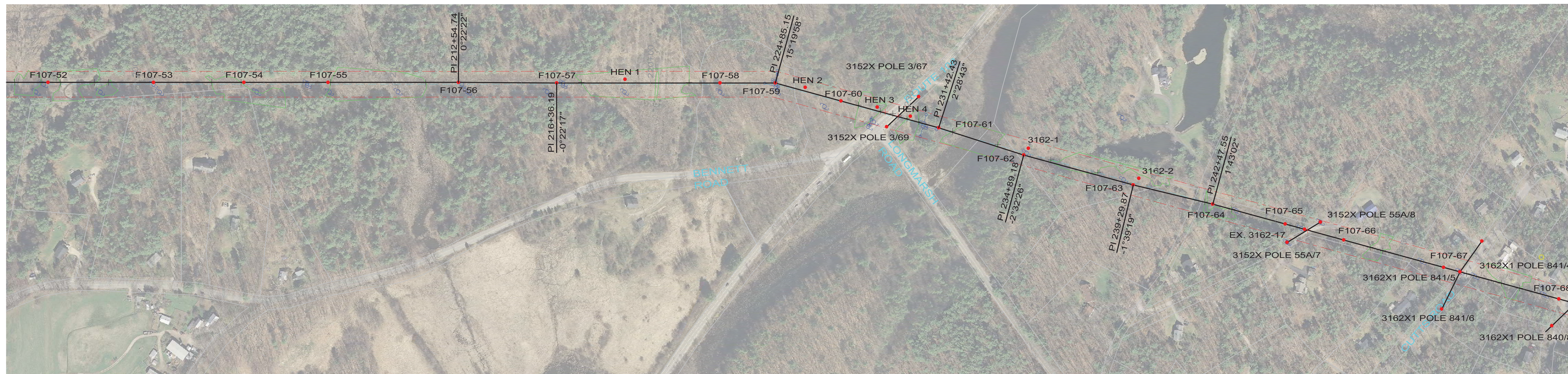
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CKD	APJ	4/4/2014

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PUBLIC SERVICE OF NEW HAMPSHIRE		JOB NUMBER	REV
SEACOAST RELIABILITY PROJECT		133005	L
F107 LINE & STRUCTURE LOCATIONS		DRAWING NUMBER	F10743004



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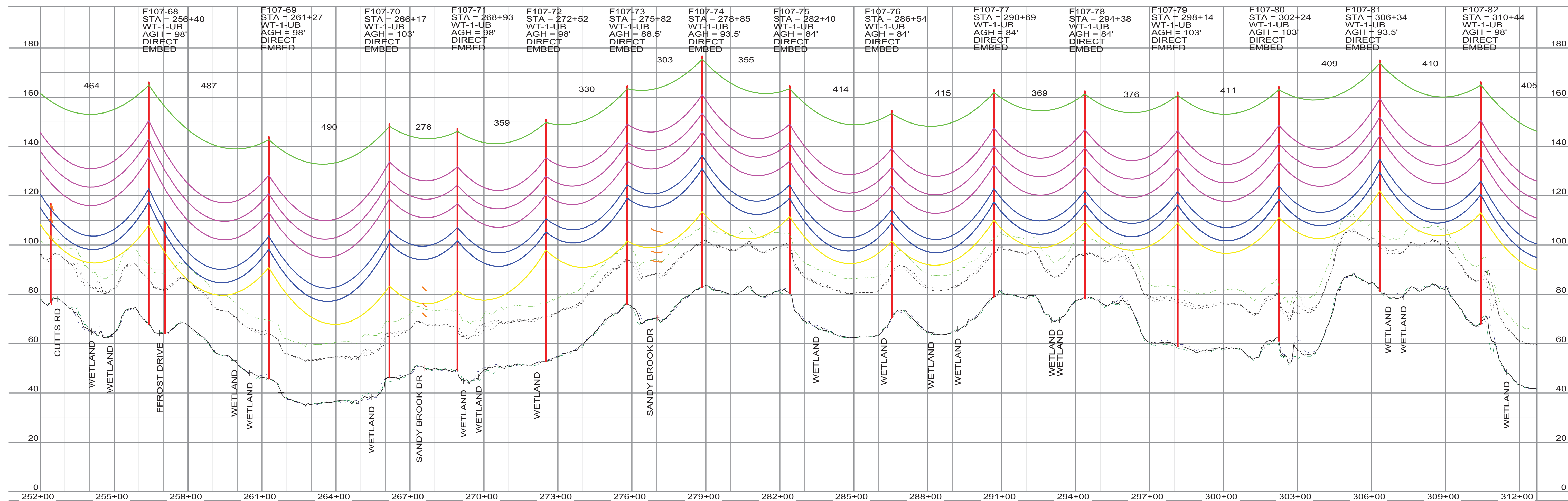
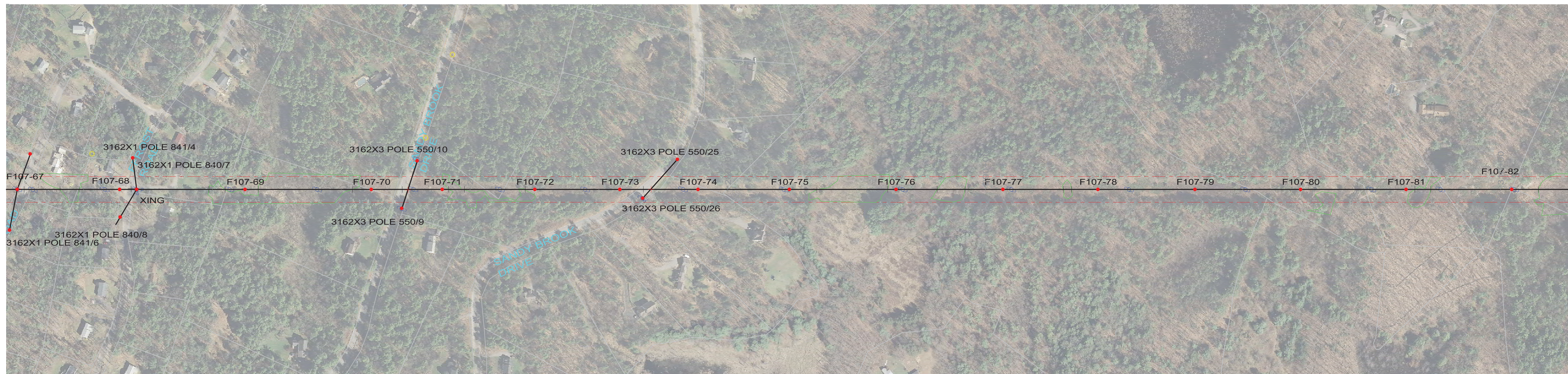
POWER ENGINEERS

PUBLIC SERVICE OF NEW HAMPSHIRE
 SEACOAST RELIABILITY PROJECT
 F107 LINE & STRUCTURE LOCATIONS

JOB NUMBER
133005

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DRAWING NUMBER
F10743005



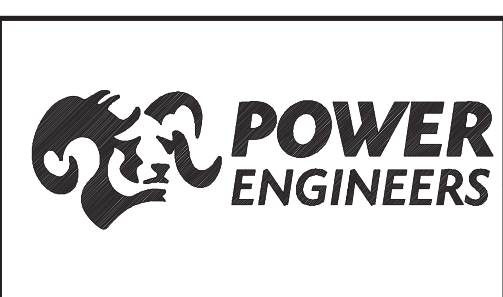
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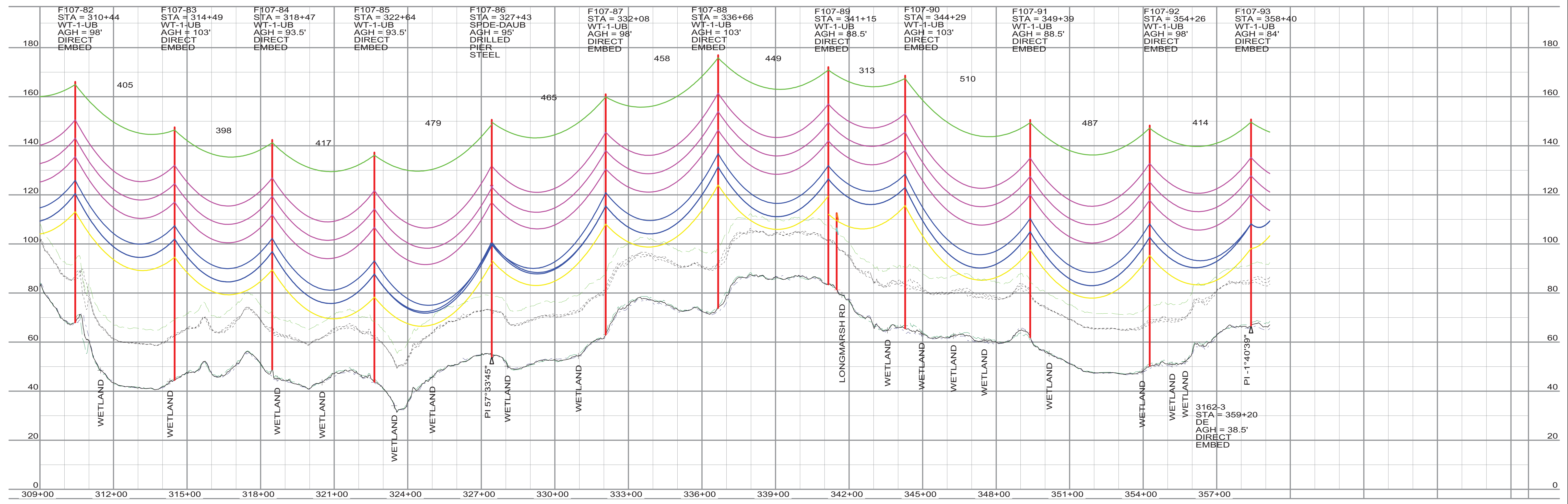
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DSGN	KMS	4/4/2014
DRN	KMS	4/4/2014
CKD	APJ	4/4/2014

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20' VERT.
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PUBLIC SERVICE OF NEW HAMPSHIRE		JOB NUMBER	REV
SEACOAST RELIABILITY PROJECT		133005	△
F107 LINE & STRUCTURE LOCATIONS		DRAWING NUMBER	
		F10743006	



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DSGN KMS 4/4/2014
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SEACOAST RELIABILITY PROJECT

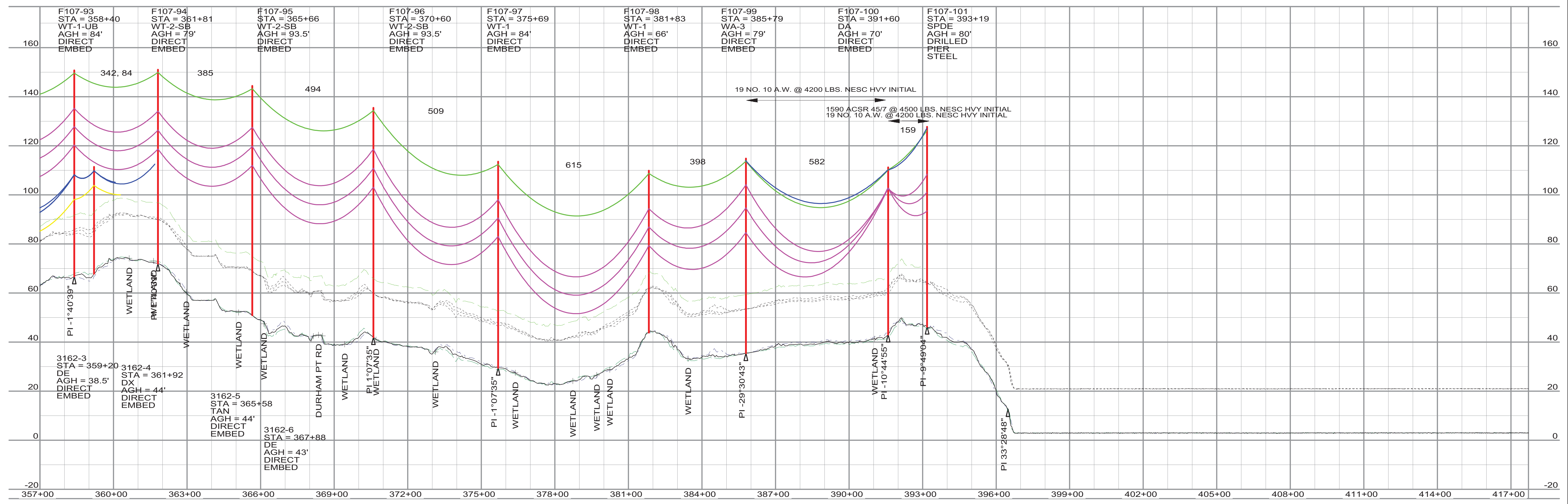
F107 LINE & STRUCTURE LOCATIONS

JOB NUMBER
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REV

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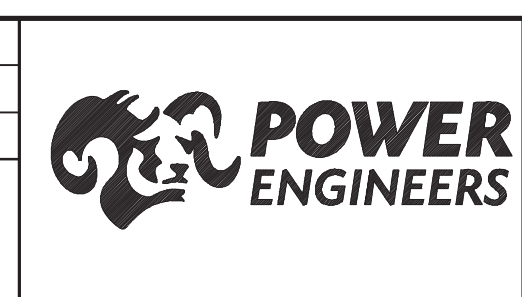
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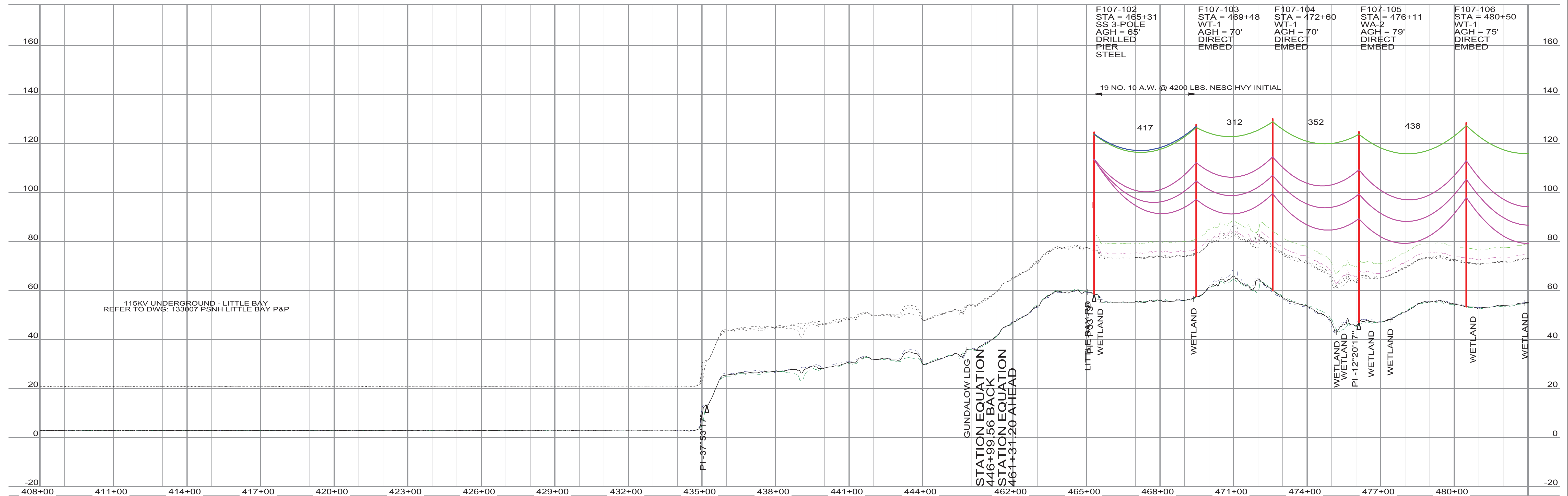
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SEACOAST RELIABILITY PROJECT		133005	L
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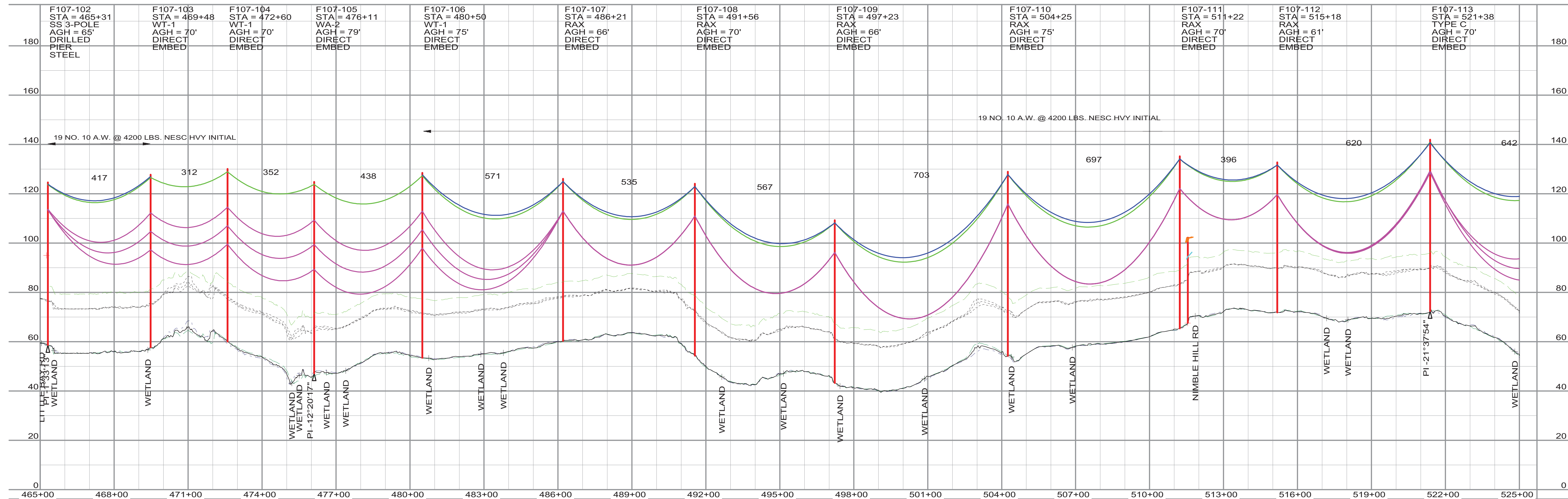
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REV **K**

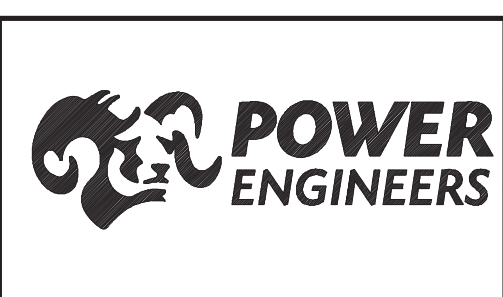


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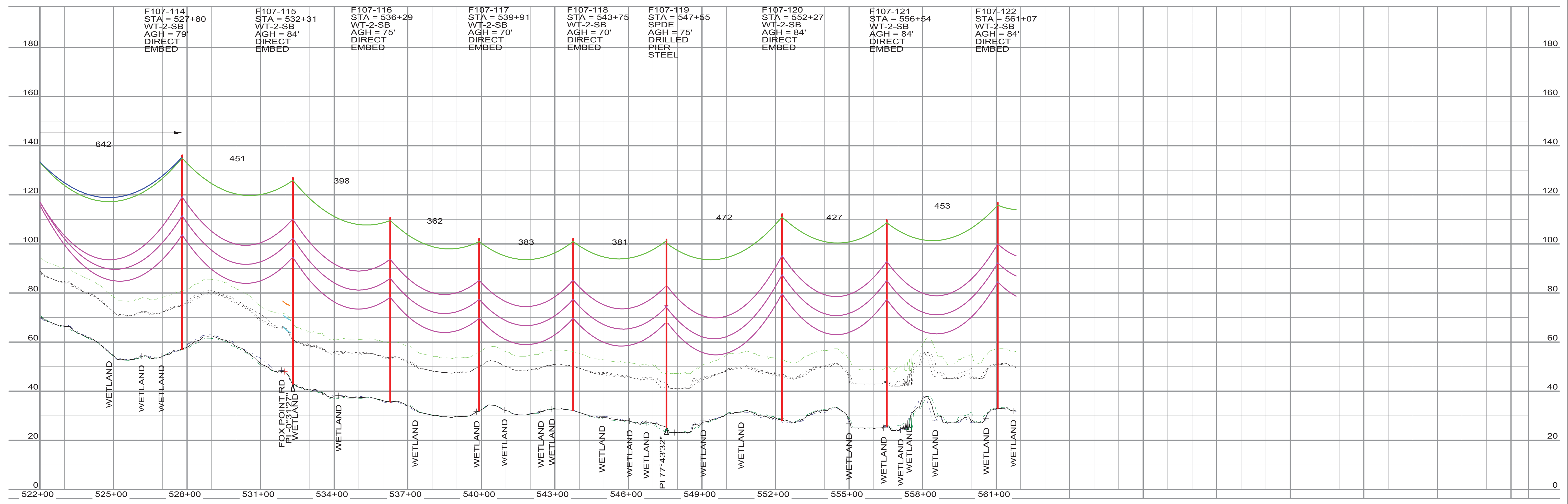
TYPICAL WIRE INFORMATION:
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 115KV 1590 ACSR 45/7 INSTALLED @ 11,400 LBS. NESC HVY. INITIAL (DISPLAYED @ 285 DEG. F)
 34.5KV 477 ACSR 18/1 INSTALLED @ 3,500 LBS. NESC HVY. INITIAL (DISPLAYED @ 212 DEG. F)
 0KV 4/0 ACSR 6/1 INSTALLED @ 2,500 LBS. NESC HVY. INITIAL (DISPLAYED @ 120 DEG. F)
 0KV 19 NO. 10 AW @ 4,200 LBS. NESC HVY. INITIAL (DISPLAYED @ 120 DEG. F)
 HENDRIX MESSENGER & 477 KCMIL SPACER CABLE @ 9,000 LBS. NESC HVY. INITIAL (DISPLAYED @ 120 DEG. F)

REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD	REFERENCE DRAWINGS
L	RE-ISSUED FOR PERMITTING	1/21/2016	KMS	KMS	APJ		
K	RE-ISSUED FOR PERMITTING	12/23/2015	KMS	KMS	APJ		
J	RE-ISSUED FOR PERMITTING	11/13/2015	KMS	KMS	APJ		
I	ISSUED FOR REVIEW	8/21/2015	KMS	KMS	APJ		
H	ISSUED FOR REVIEW	7/24/2015	KMS	KMS	APJ		

DSGN KMS 4/4/2014
 DRN KMS 4/4/2014
 CKD APJ 4/4/2014
 SCALE: 1" = 200' HORIZ.
 20' VERT.
 FOR 22X34 DWG ONLY



PUBLIC SERVICE OF NEW HAMPSHIRE		JOB NUMBER	REV
SEACOAST RELIABILITY PROJECT		133005	L
F107 LINE & STRUCTURE LOCATIONS		DRAWING NUMBER	
		F10743010	



THIS DRAWING WAS PREPARED BY POWER ENGINEERS, INC. FOR A SPECIFIC PROJECT, TAKING INTO CONSIDERATION THE SPECIFIC AND UNIQUE REQUIREMENTS OF THE PROJECT. REUSE OF THIS DRAWING OR ANY INFORMATION CONTAINED IN THIS DRAWING FOR ANY PURPOSE IS PROHIBITED UNLESS WRITTEN PERMISSION FROM BOTH POWER AND POWERS CLIENT IS GRANTED.

TYPICAL WIRE INFORMATION:
 OKV 24 FIBER OPGW INSTALLED @ 4,500 LBS. NESC HVY. INITIAL (DISPLAYED @ 120 DEG. F)
 115KV 1590 ACSR 45/7 INSTALLED @ 11,400 LBS. NESC HVY. INITIAL (DISPLAYED @ 285 DEG. F)
 34.5KV 477 ACSR 18/1 INSTALLED @ 3,500 LBS. NESC HVY. INITIAL (DISPLAYED @ 212 DEG. F)
 OKV 4/0 ACSR 6/1 INSTALLED @ 2,500 LBS. NESC HVY. INITIAL (DISPLAYED @ 120 DEG. F)
 OKV 19 NO. 10 AW @ 4,200 LBS. NESC HVY. INITIAL (DISPLAYED @ 120 DEG. F)
 HENDRIX MESSENGER & 477 KCMIL SPACER CABLE @ 9,000 LBS. NESC HVY. INITIAL (DISPLAYED @ 120 DEG. F)

REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD	REFERENCE DRAWINGS
L	RE-ISSUED FOR PERMITTING	1/21/2016	KMS	KMS	APJ		
K	RE-ISSUED FOR PERMITTING	12/23/2015	KMS	KMS	APJ		
J	RE-ISSUED FOR PERMITTING	11/13/2015	KMS	KMS	APJ		
I	ISSUED FOR REVIEW	8/21/2015	KMS	KMS	APJ		
H	ISSUED FOR REVIEW	7/24/2015	KMS	KMS	APJ		

DSGN	KMS	4/4/2014
DRN	KMS	4/4/2014
CKD	APJ	4/4/2014

SCALE: 1" = 200' HORIZ.
20' VERT.
FOR 22X34 DWG ONLY

PUBLIC SERVICE OF NEW HAMPSHIRE

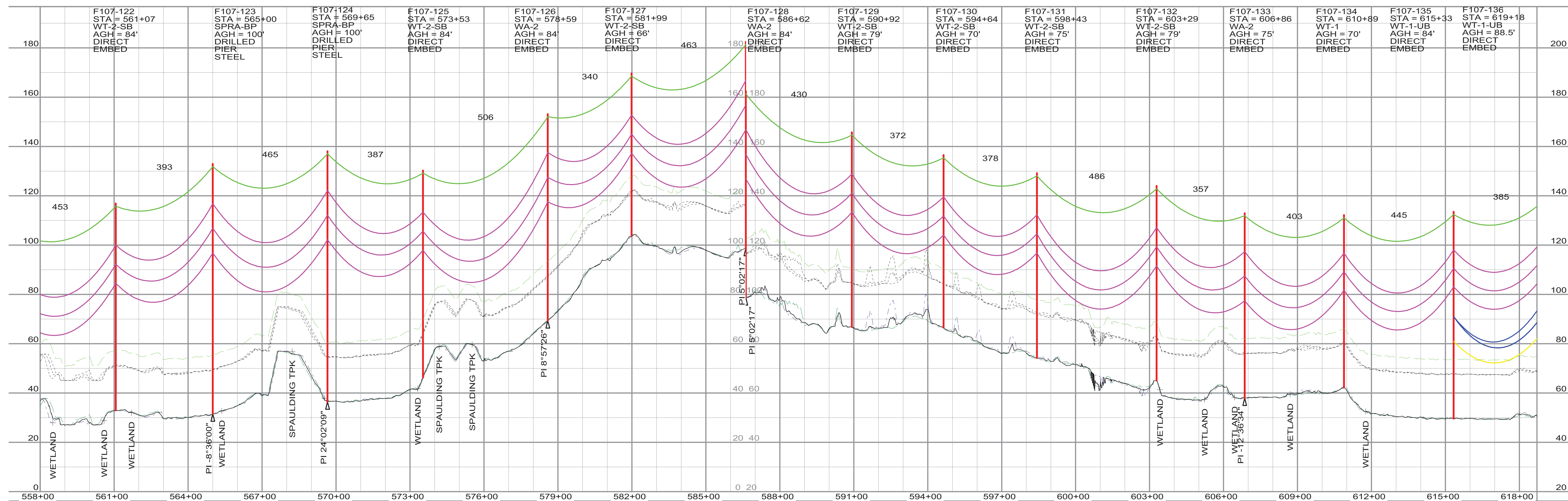
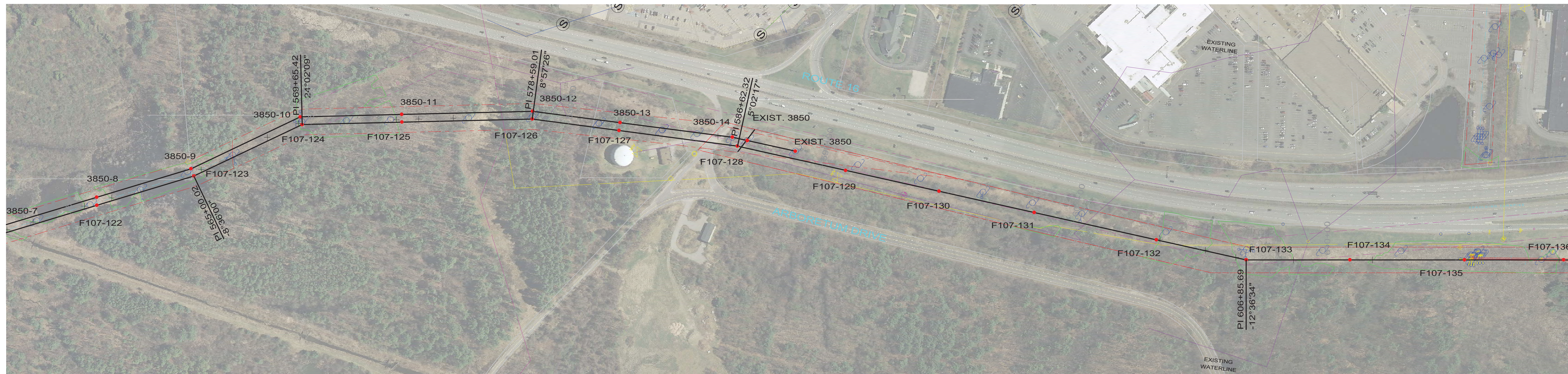
SEACOAST RELIABILITY PROJECT

F107 LINE & STRUCTURE LOCATIONS

JOB NUMBER
133005

DRAWING NUMBER
F10743011

REV
L



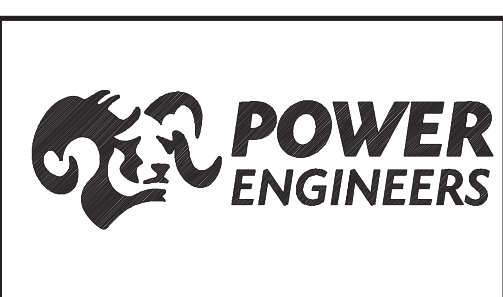
THIS DRAWING WAS PREPARED BY POWER ENGINEERS, INC. FOR A SPECIFIC PROJECT, TAKING INTO CONSIDERATION THE SPECIFIC AND UNIQUE REQUIREMENTS OF THE PROJECT. REUSE OF THIS DRAWING OR ANY INFORMATION CONTAINED IN THIS DRAWING FOR ANY PURPOSE IS PROHIBITED UNLESS WRITTEN PERMISSION FROM BOTH POWER AND POWERS CLIENT IS GRANTED.

TYPICAL WIRE INFORMATION:
 0KV 24 FIBER OPGW INSTALLED @ 4,500 LBS. NESC HVY. INITIAL (DISPLAYED @ 120 DEG. F)
 115KV 1590 ACSR 45/7 INSTALLED @ 11,400 LBS. NESC HVY. INITIAL (DISPLAYED @ 285 DEG. F)
 34.5KV 477 ACSR 18/1 INSTALLED @ 3,500 LBS. NESC HVY. INITIAL (DISPLAYED @ 212 DEG. F)
 0KV 4/0 ACSR 6/1 INSTALLED @ 2,500 LBS. NESC HVY. INITIAL (DISPLAYED @ 120 DEG. F)
 0KV 19 NO. 10 AW @ 4,200 LBS. NESC HVY. INITIAL (DISPLAYED @ 120 DEG. F)
 HENDRIX MESSENGER & 477 KCMIL SPACER CABLE @ 9,000 LBS. NESC HVY. INITIAL (DISPLAYED @ 120 DEG. F)

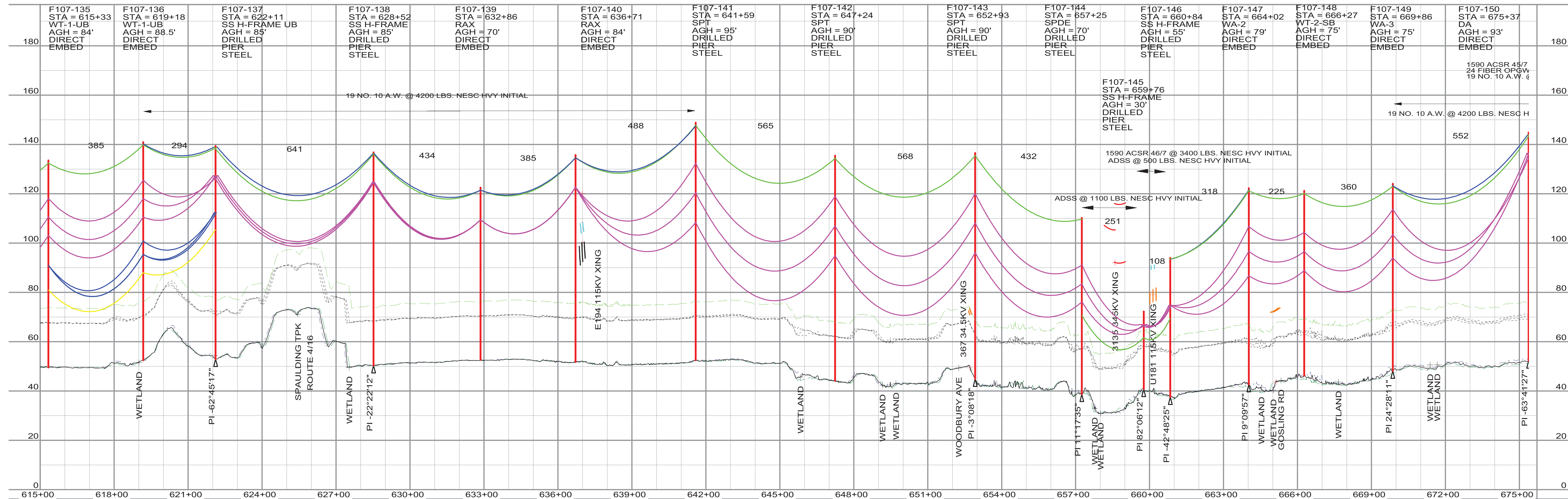
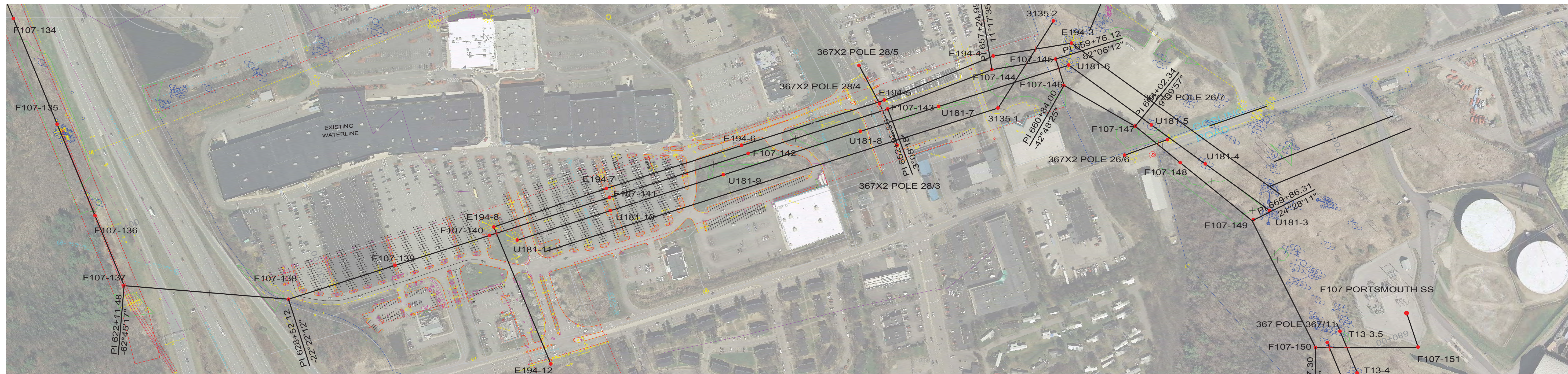
REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD	REFERENCE DRAWINGS
L	RE-ISSUED FOR PERMITTING	1/21/2016	KMS	KMS	APJ		
K	RE-ISSUED FOR PERMITTING	12/23/2015	KMS	KMS	APJ		
J	RE-ISSUED FOR PERMITTING	11/13/2015	KMS	KMS	APJ		
I	ISSUED FOR REVIEW	8/21/2015	KMS	KMS	APJ		
H	ISSUED FOR REVIEW	7/24/2015	KMS	KMS	APJ		

DSGN	KMS	4/4/2014
DRN	KMS	4/4/2014
CKD	APJ	4/4/2014

SCALE: 1" = 200' HORIZ.
20' VERT.
FOR 22X34 DWG ONLY



PUBLIC SERVICE OF NEW HAMPSHIRE		JOB NUMBER	REV
SEACOAST RELIABILITY PROJECT		133005	△
F107 LINE & STRUCTURE LOCATIONS		DRAWING NUMBER	F10743012



THIS DRAWING WAS PREPARED BY POWER ENGINEERS, INC. FOR A SPECIFIC PROJECT, TAKING INTO CONSIDERATION THE SPECIFIC AND UNIQUE REQUIREMENTS OF THE PROJECT. REUSE OF THIS DRAWING OR ANY INFORMATION CONTAINED IN THIS DRAWING FOR ANY PURPOSE IS PROHIBITED UNLESS WRITTEN PERMISSION FROM BOTH POWER AND POWERS CLIENT IS GRANTED.

TYPICAL WIRE INFORMATION:
 0KV 24 FIBER OPGW INSTALLED @ 4,500 LBS. NESC HVY. INITIAL (DISPLAYED @ 120 DEG. F)
 115KV 1590 ACSR 45/7 INSTALLED @ 11,400 LBS. NESC HVY. INITIAL (DISPLAYED @ 285 DEG. F)
 34.5KV 477 ACSR 18/1 INSTALLED @ 3,500 LBS. NESC HVY. INITIAL (DISPLAYED @ 212 DEG. F)
 0KV 4/0 ACSR 6/1 INSTALLED @ 2,500 LBS. NESC HVY. INITIAL (DISPLAYED @ 120 DEG. F)
 0KV 19 NO. 10 AW @ 4,200 LBS. NESC HVY. INITIAL (DISPLAYED @ 120 DEG. F)
 HENDRIX MESSENGER & 477 KCMIL SPACER CABLE @ 9,000 LBS. NESC HVY. INITIAL (DISPLAYED @ 120 DEG. F)

REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD	REFERENCE DRAWINGS
L	RE-ISSUED FOR PERMITTING	1/21/2016	KMS	KMS	APJ		
K	RE-ISSUED FOR PERMITTING	12/23/2015	KMS	KMS	APJ		
J	RE-ISSUED FOR PERMITTING	11/13/2015	KMS	KMS	APJ		
I	ISSUED FOR REVIEW	8/21/2015	KMS	KMS	APJ		
H	ISSUED FOR REVIEW	7/24/2015	KMS	KMS	APJ		

DSGN	KMS	4/4/2014
DRN	KMS	4/4/2014
CKD	APJ	4/4/2014

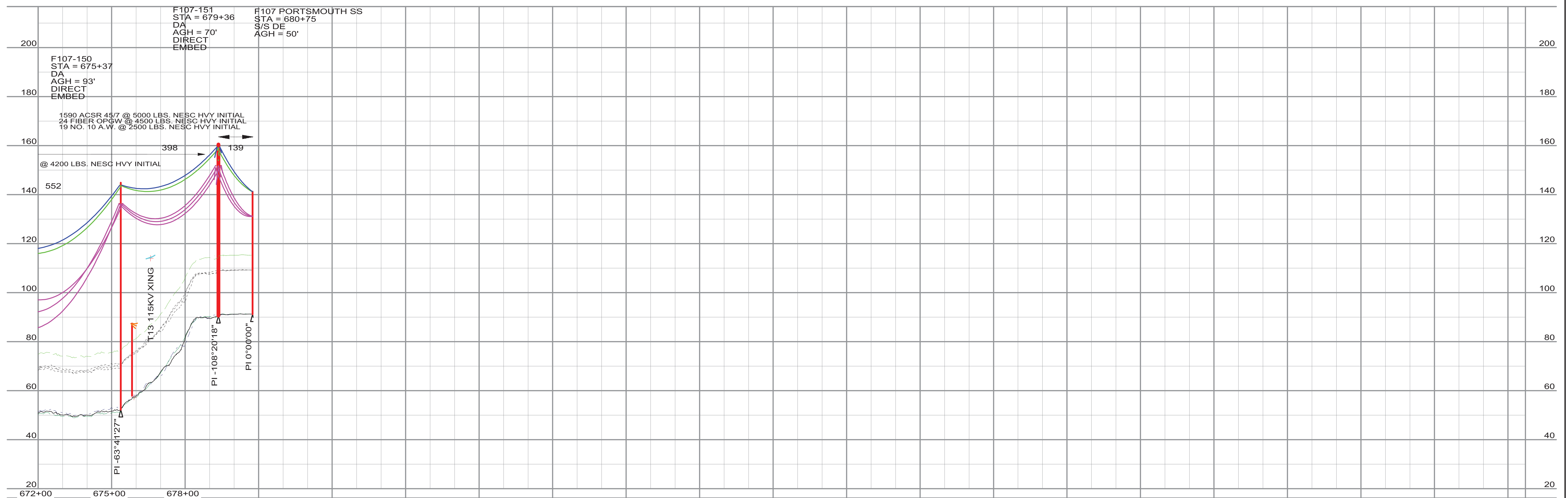
SCALE: 1" = 200' HORIZ.
20' VERT.
FOR 22X34 DWG ONLY

POWER ENGINEERS

PUBLIC SERVICE OF NEW HAMPSHIRE
 SEACOAST RELIABILITY PROJECT
 F107 LINE & STRUCTURE LOCATIONS

JOB NUMBER: 133005
 DRAWING NUMBER: F10743013

REV:



THIS DRAWING WAS PREPARED BY POWER ENGINEERS, INC. FOR A SPECIFIC PROJECT, TAKING INTO CONSIDERATION THE SPECIFIC AND UNIQUE REQUIREMENTS OF THE PROJECT. REUSE OF THIS DRAWING OR ANY INFORMATION CONTAINED IN THIS DRAWING FOR ANY PURPOSE IS PROHIBITED UNLESS WRITTEN PERMISSION FROM BOTH POWER AND POWERS CLIENT IS GRANTED.

TYPICAL WIRE INFORMATION:
 0KV 24 FIBER OPGW INSTALLED @ 4,500 LBS. NESC HVY. INITIAL (DISPLAYED @ 120 DEG. F)
 115KV 1590 ACSR 45/7 INSTALLED @ 11,400 LBS. NESC HVY. INITIAL (DISPLAYED @ 285 DEG. F)
 34.5KV 477 ACSR 18/7 INSTALLED @ 3,500 LBS. NESC HVY. INITIAL (DISPLAYED @ 212 DEG. F)
 0KV 4/0 ACSR 6/1 INSTALLED @ 2,500 LBS. NESC HVY. INITIAL (DISPLAYED @ 120 DEG. F)
 0KV 19 NO. 10 AW @ 4,200 LBS. NESC HVY. INITIAL (DISPLAYED @ 120 DEG. F)
 HENDRIX MESSENGER & 477 KCMIL SPACER CABLE @ 9,000 LBS. NESC HVY. INITIAL (DISPLAYED @ 120 DEG. F)

REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD	REFERENCE DRAWINGS
L	RE-ISSUED FOR PERMITTING	1/21/2016	KMS	KMS	APJ		
K	RE-ISSUED FOR PERMITTING	12/23/2015	KMS	KMS	APJ		
J	RE-ISSUED FOR PERMITTING	11/13/2015	KMS	KMS	APJ		
I	ISSUED FOR REVIEW	8/21/2015	KMS	KMS	APJ		
H	ISSUED FOR REVIEW	7/24/2015	KMS	KMS	APJ		

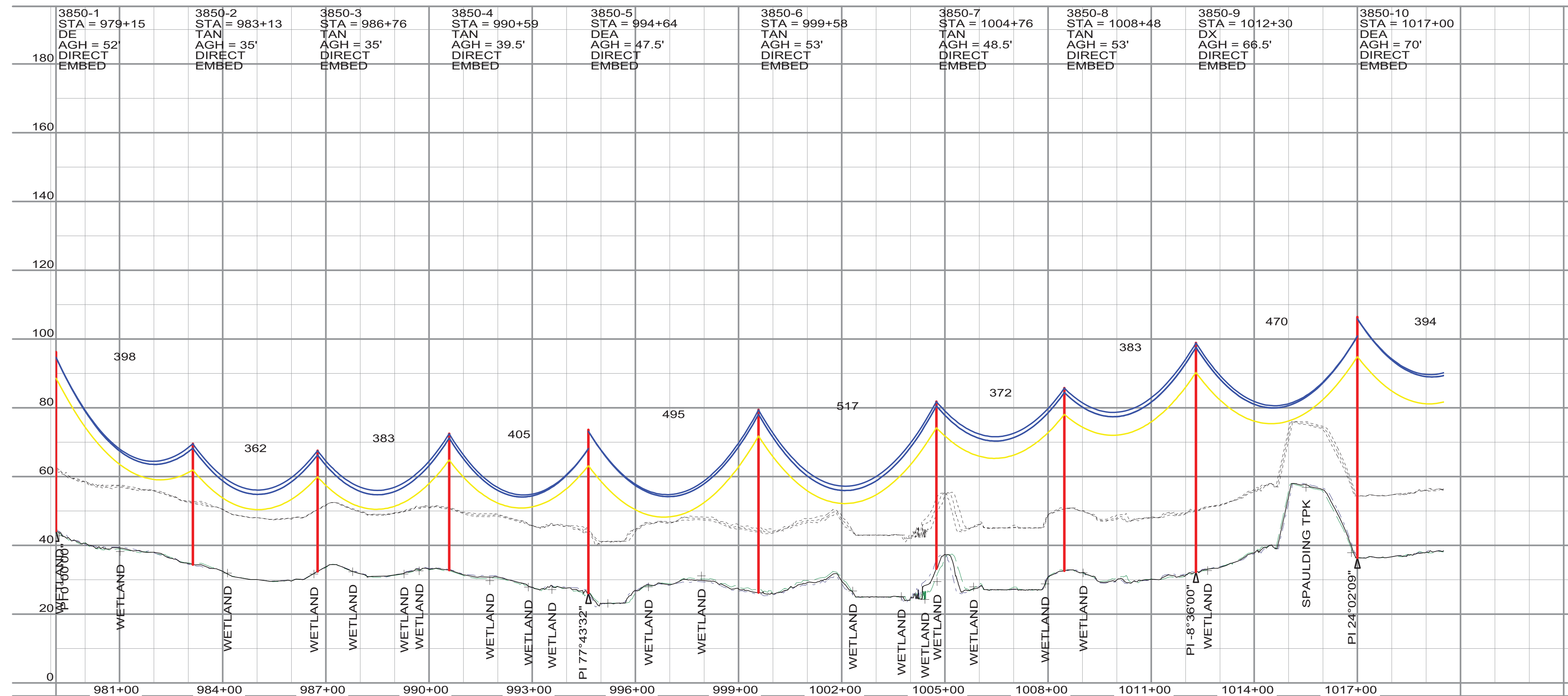
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DRN	KMS	4/4/2014
CKD	APJ	4/4/2014

SCALE: 1" = 200' HORIZ.
20' VERT.

FOR 22X34 DWG ONLY



PUBLIC SERVICE OF NEW HAMPSHIRE	JOB NUMBER	REV
SEACOAST RELIABILITY PROJECT	133005	L
F107 LINE & STRUCTURE LOCATIONS	DRAWING NUMBER	F10743014



NOTES:

- 1) PROPERTY BOUNDARIES SHOWN ARE APPROXIMATE AND FOR REPRESENTATION ONLY. RIGHT OF WAY LOCATION HAS BEEN SURVEYED AND PROVIDED BY DOUCET SURVEY, INC.
- 2) DISTRIBUTION UPGRADES TO STRUCTURES AND EQUIPMENT ARE NOT DETAILED IN THIS DRAWING SET. DETAILED ANALYSIS AND INSTALLATION OF EQUIPMENT, OR MODIFICATIONS TO EXISTING STRUCTURES, WILL BE PERFORMED BY OTHERS.

LEGEND

UNDERGROUND UTILITIES:

- DURHAM WATER LINE
- SEWER LINE
- UNH WATER LINE
- FIBER OPTIC
- WATER LINE
- GAS LINE
- GAS LINE

CONDUCTOR/SHIELD WIRES:

- 34.5KV 477 ACSR 18/1 "PELICAN"
- 0KV 4/0 AWG ACSR 6/1 "PENGUIN"

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TYPICAL WIRE INFORMATION:

34.5KV 477 ACSR 18/1 INSTALLED @ 3,500 LBS. NESC HVY. INITIAL (DISPLAYED @ 212 DEG. F)
0KV 4/0 ACSR 6/1 INSTALLED @ 2,500 LBS. NESC HVY. INITIAL (DISPLAYED @ 120 DEG. F)

REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD	REFERENCE DRAWINGS
B	ISSUED FOR PERMITTING	11/16/2015	KMS	KMS	APJ		
A	ISSUED FOR REVIEW	8/21/2015	KMS	KMS	APJ		

DSGN	KMS	4/4/2014
DRN	KMS	4/4/2014
CKD	APJ	4/4/2014

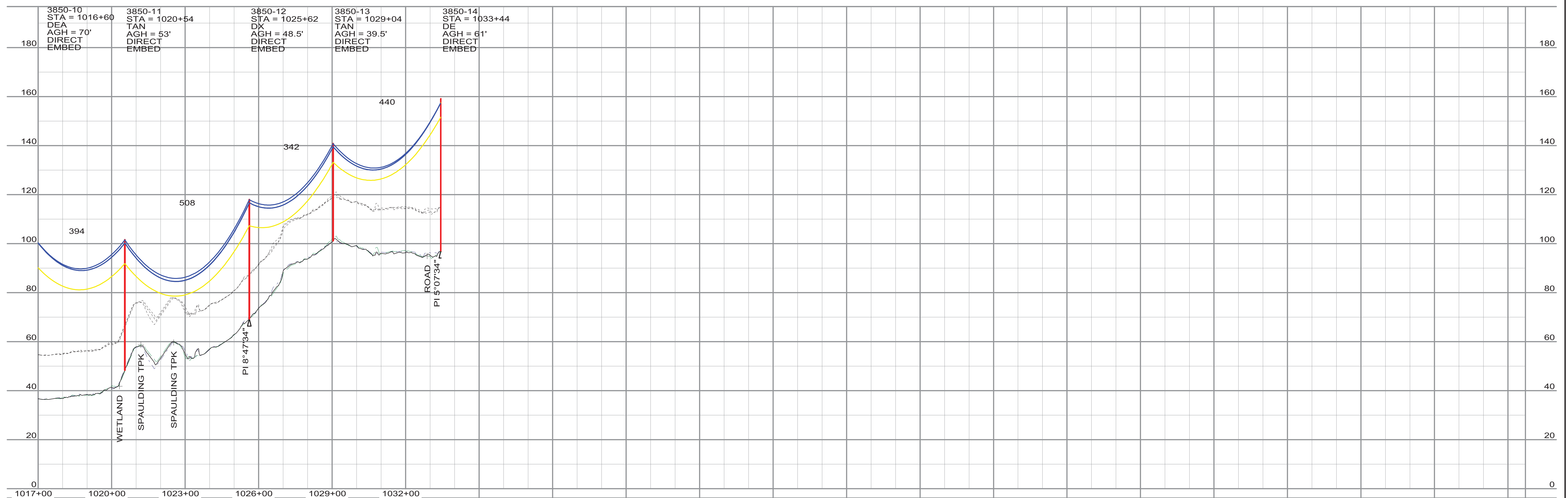
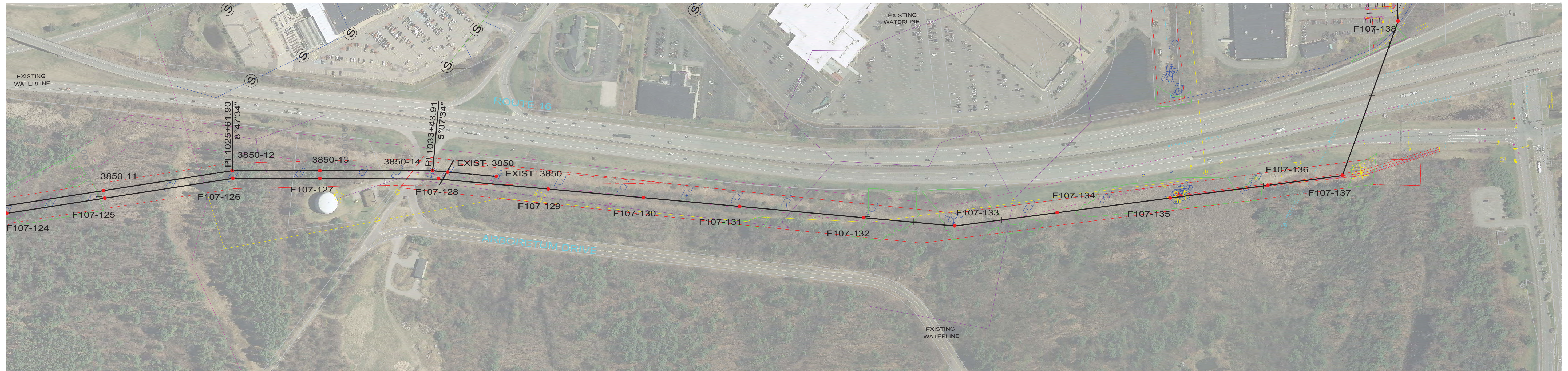
SCALE: 1" = 200' HORIZ.
20' VERT.
FOR 22X34 DWG ONLY

POWER ENGINEERS

PUBLIC SERVICE OF NEW HAMPSHIRE
SEACOAST RELIABILITY PROJECT
3850 LINE & STRUCTURE LOCATIONS

JOB NUMBER 133005
DRAWING NUMBER 385044001

REV B



THIS DRAWING WAS PREPARED BY POWER ENGINEERS, INC. FOR A SPECIFIC PROJECT, TAKING INTO CONSIDERATION THE SPECIFIC AND UNIQUE REQUIREMENTS OF THE PROJECT. REUSE OF THIS DRAWING OR ANY INFORMATION CONTAINED IN THIS DRAWING FOR ANY PURPOSE IS PROHIBITED UNLESS WRITTEN PERMISSION FROM BOTH POWER AND POWERS CLIENT IS GRANTED.

TYPICAL WIRE INFORMATION:

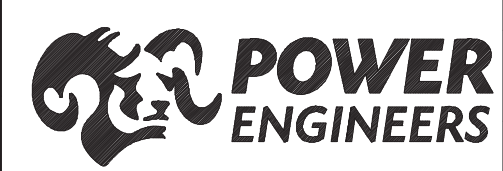
34.5KV 477 ACSR 18/1 INSTALLED @ 3,500 LBS. NESC HVY. INITIAL (DISPLAYED @ 212 DEG. F)
0KV 4/0 ACSR 6/1 INSTALLED @ 2,500 LBS. NESC HVY. INITIAL (DISPLAYED @ 120 DEG. F)

REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD	REFERENCE DRAWINGS
C	RE-ISSUED FOR PERMITTING	1/21/2016	KMS	KMS	APJ		
B	ISSUED FOR PERMITTING	11/16/2015	KMS	KMS	APJ		
A	ISSUED FOR REVIEW	8/21/2015	KMS	KMS	APJ		

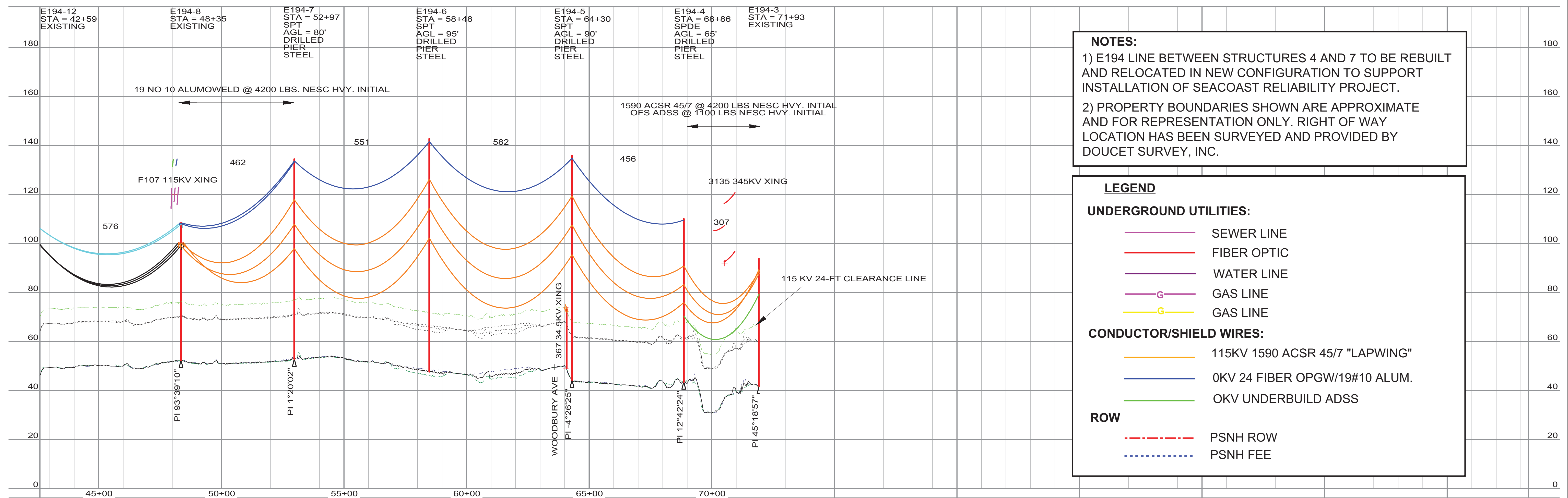
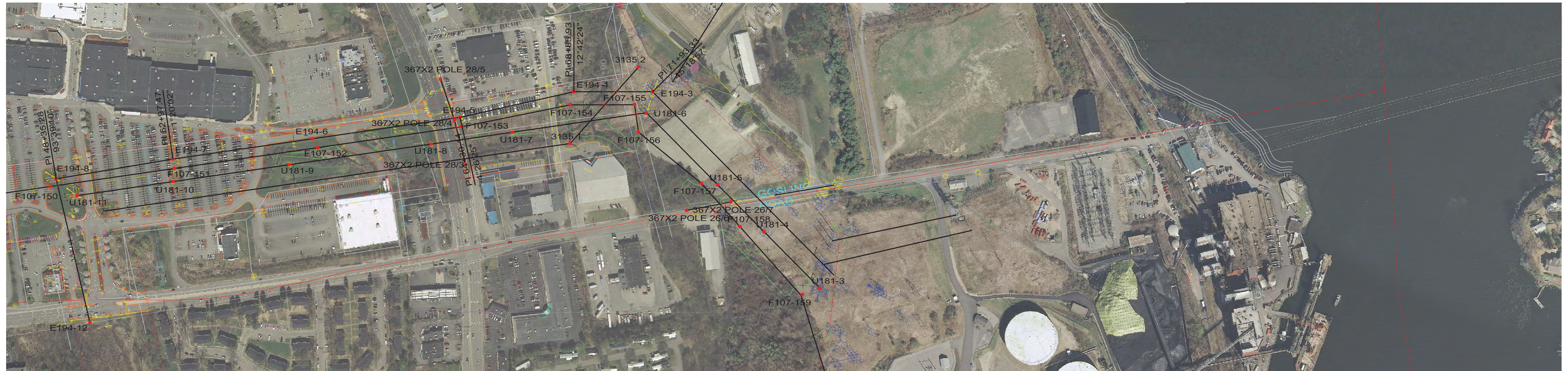
DSGN	KMS	4/4/2014
DRN	KMS	4/4/2014
CKD	APJ	4/4/2014

SCALE: 1" = 200' HORIZ.
20' VERT.

FOR 22X34 DWG ONLY



PUBLIC SERVICE OF NEW HAMPSHIRE		JOB NUMBER	REV
SEACOAST RELIABILITY PROJECT		133005	C
3850 LINE & STRUCTURE LOCATIONS		DRAWING NUMBER	
		385044002	



NOTES:
 1) E194 LINE BETWEEN STRUCTURES 4 AND 7 TO BE REBUILT AND RELOCATED IN NEW CONFIGURATION TO SUPPORT INSTALLATION OF SEACOAST RELIABILITY PROJECT.
 2) PROPERTY BOUNDARIES SHOWN ARE APPROXIMATE AND FOR REPRESENTATION ONLY. RIGHT OF WAY LOCATION HAS BEEN SURVEYED AND PROVIDED BY DOUCET SURVEY, INC.

LEGEND

UNDERGROUND UTILITIES:

- SEWER LINE
- FIBER OPTIC
- WATER LINE
- GAS LINE
- GAS LINE

CONDUCTOR/SHIELD WIRES:

- 115KV 1590 ACSR 45/7 "LAPWING"
- 0KV 24 FIBER OPGW/19#10 ALUM.
- OKV UNDERBUILD ADSS

ROW

- PSNH ROW
- PSNH FEE

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TYPICAL WIRE INFORMATION:
 0KV 24 FIBER OPGW INSTALLED @ 4,500 LBS. NESC HVY. INITIAL (DISPLAYED @ 120 DEG. F)
 115KV 1590 ACSR 45/7 INSTALLED @ 11,400 LBS. NESC HVY. INITIAL (DISPLAYED @ 285 DEG. F)

REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD
C	ISSUED FOR PERMITTING	4/10/2015	KMS	KMS	APJ	
B	ISSUED FOR REVIEW	3/19/2015	KMS	KMS	APJ	
A	E194 STRUCTURE LOCATIONS	2/27/2015	KMS	KMS	APJ	

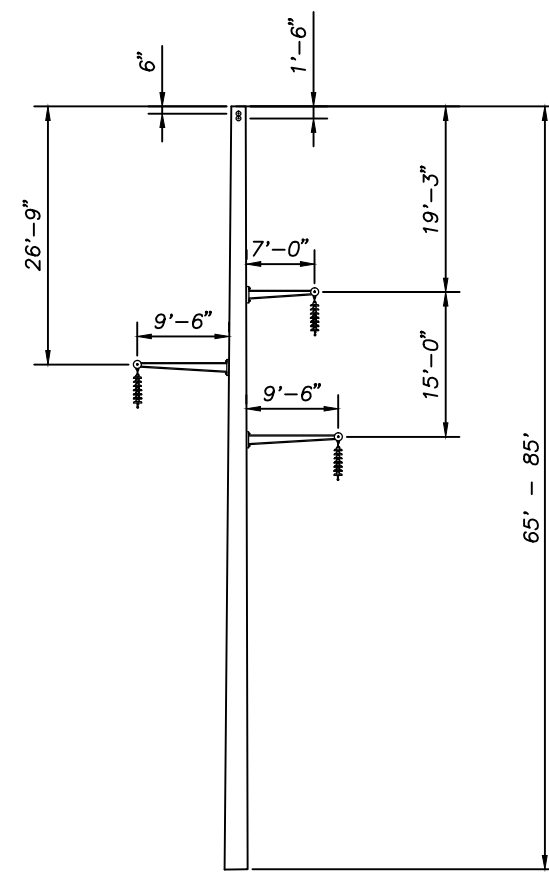
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DRN	KMS	4/4/2014
CKD	APJ	4/4/2014
SCALE: 1" = 200' HORIZ. 20' VERT.		
FOR 22X34 DWG ONLY		

PSNH ROW	PSNH FEE
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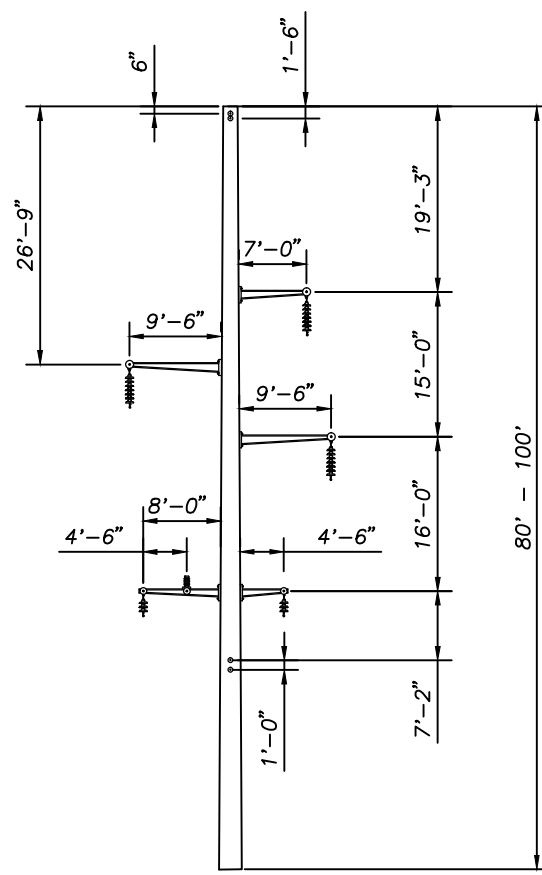
POWER ENGINEERS

PUBLIC SERVICE OF NEW HAMPSHIRE
 SEACOAST RELIABILITY PROJECT
 E194 LINE & STRUCTURE LOCATIONS

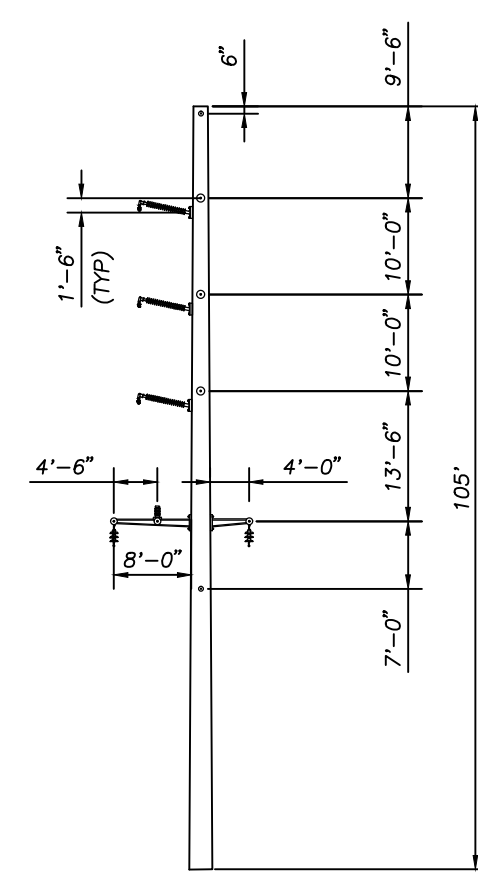
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 DRAWING NUMBER 1 OF 1



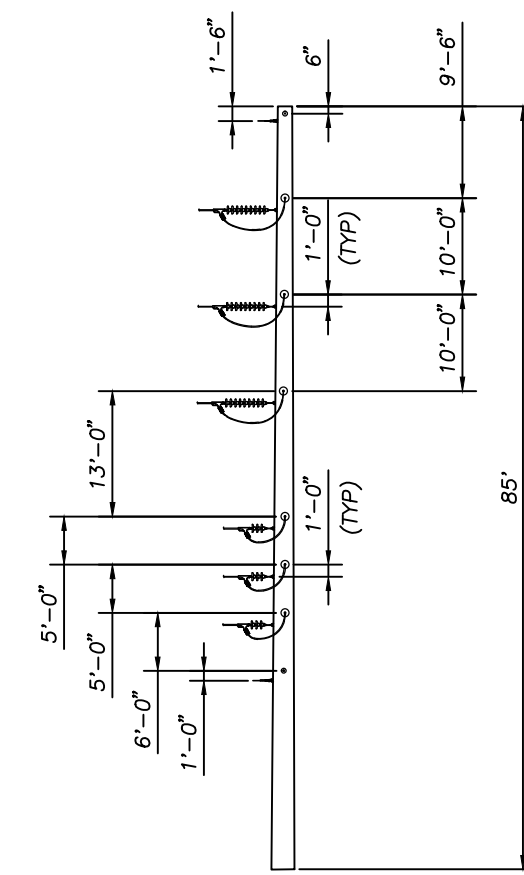
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 DEADEND
 115 KV
 DRILLED PIER FOUNDATION



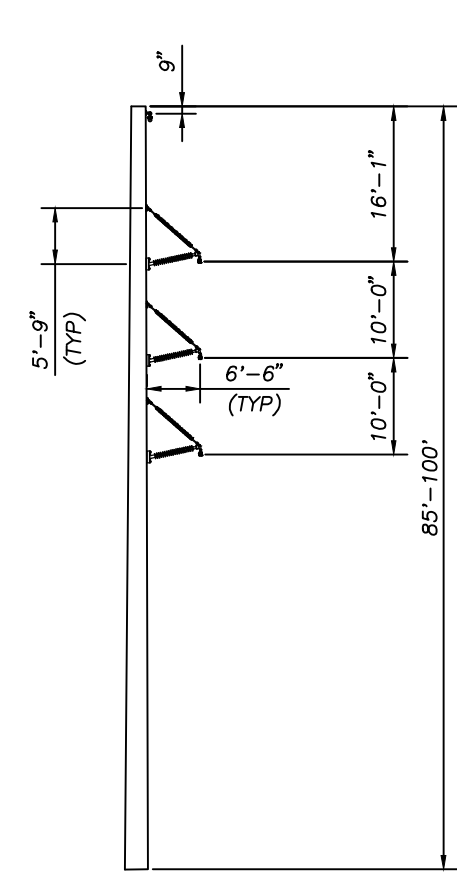
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 SELF SUPPORTING STEEL
 DEADEND
 115 KV WITH 34.5 KV UNDERBUILD
 DRILLED PIER FOUNDATION



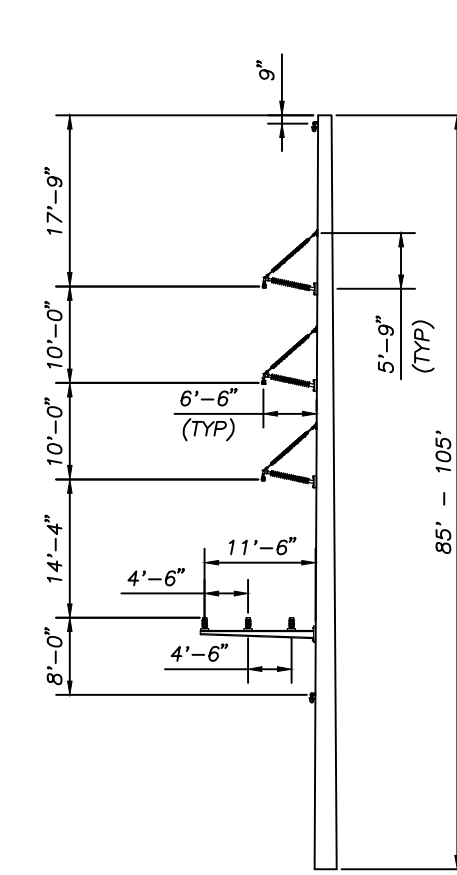
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 DEADEND
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 DRILLED PIER FOUNDATION



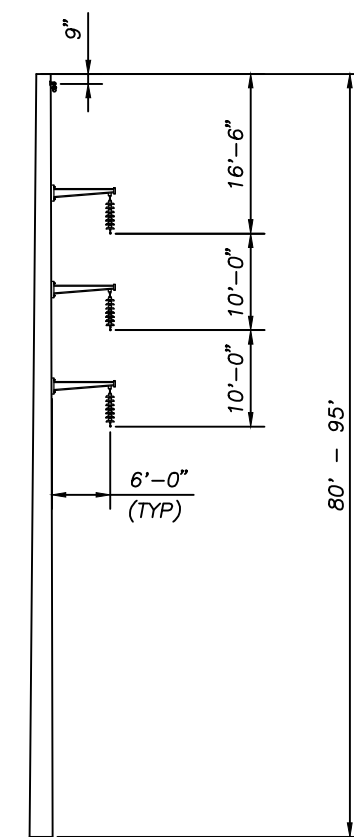
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 DEADEND
 115 KV WITH 34.5 KV UNDERBUILD
 DRILLED PIER FOUNDATION



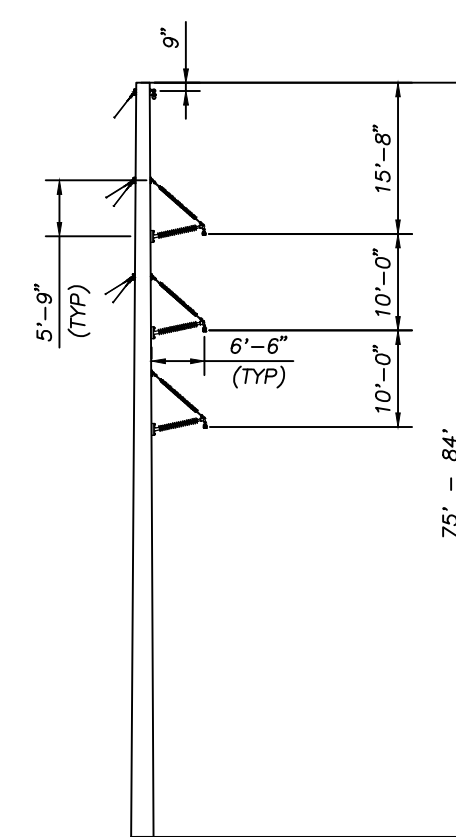
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 2' - 12' ANGLE
 115 KV
 DRILLED PIER FOUNDATION



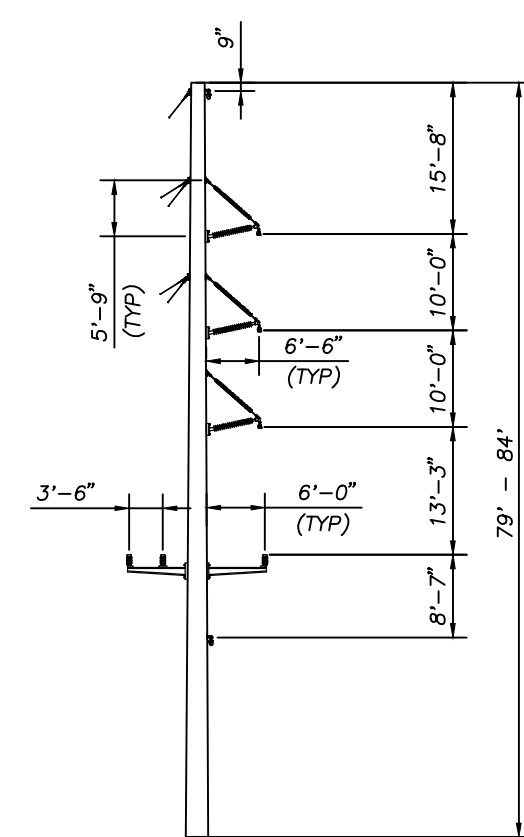
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 SELF SUPPORTING STEEL
 0' - 10' BRACED POST TANGENT/ANGLE
 115 KV WITH 34.5 KV UNDERBUILD
 DRILLED PIER FOUNDATION



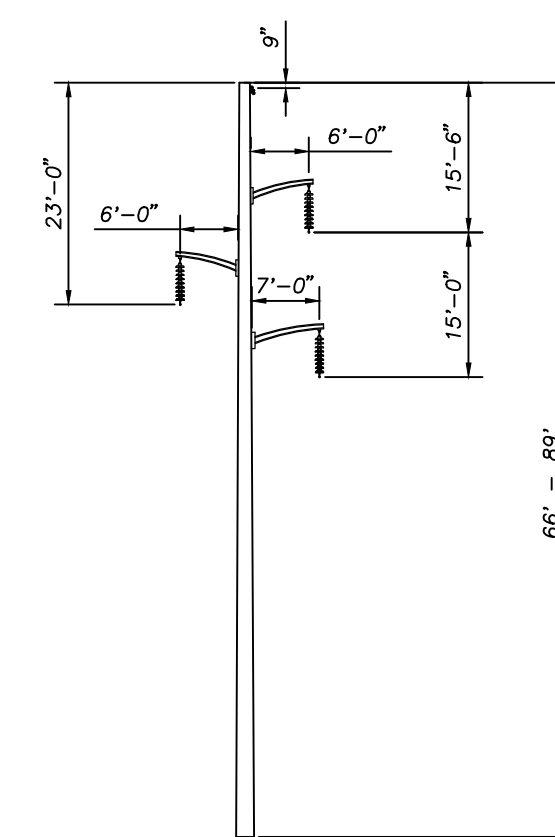
TYPE SPT
 SELF SUPPORTING STEEL
 TANGENT
 115 KV
 DRILLED PIER FOUNDATION



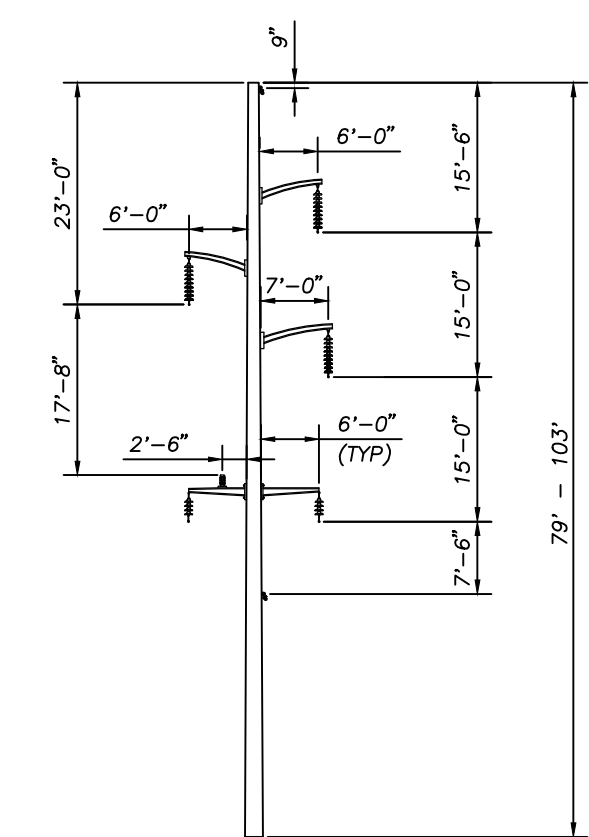
TYPE WA-2
 LAMINATED WOOD OR
 STEEL GUYED SINGLE POLE
 2' - 12' ANGLE
 115 KV
 DIRECT EMBED FOUNDATION



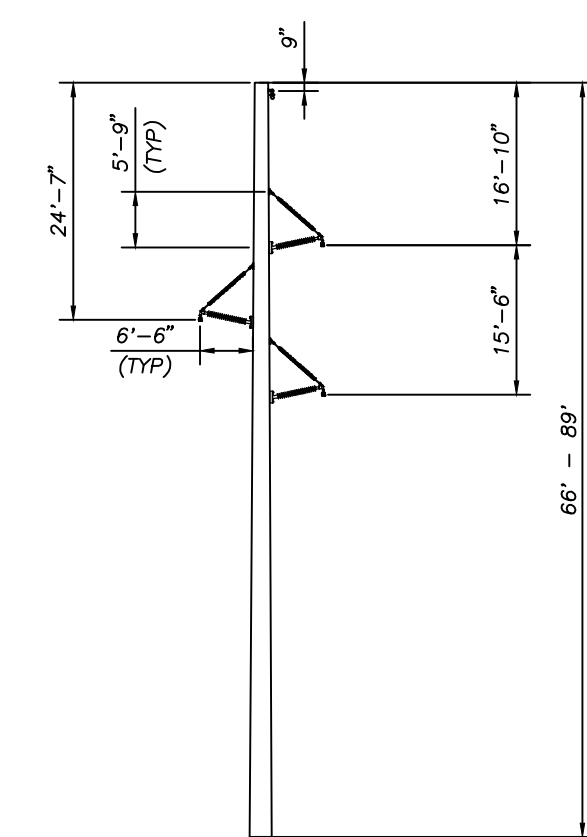
TYPE WA-2-UB
 LAMINATED WOOD OR
 STEEL GUYED SINGLE POLE
 2' - 12' ANGLE
 115 KV WITH 34.5 KV UNDERBUILD
 DIRECT EMBED FOUNDATION



TYPE WT-1
 LAMINATED WOOD OR STEEL SINGLE POLE
 TANGENT
 115 KV
 DIRECT EMBED FOUNDATION



TYPE WT-1-UB
 LAMINATED WOOD OR STEEL SINGLE POLE
 TANGENT
 115 KV WITH 34.5 KV UNDERBUILD
 DIRECT EMBED FOUNDATION



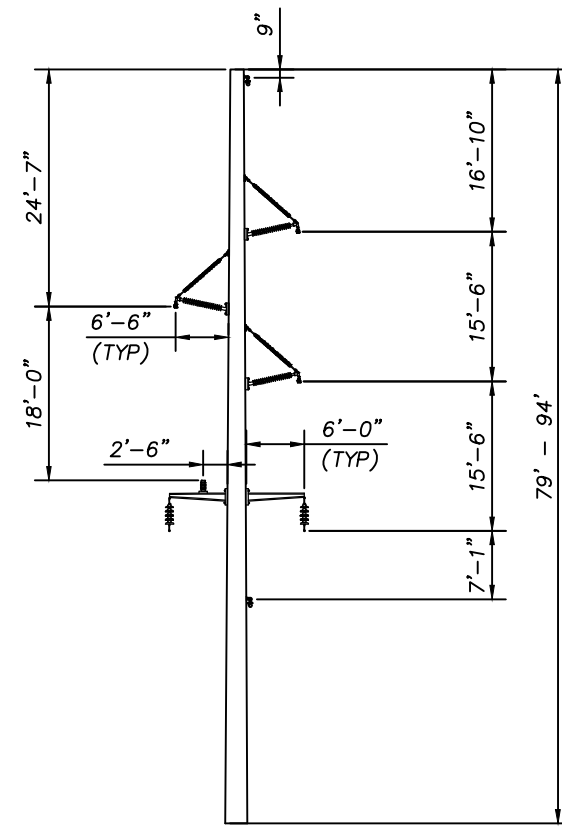
TYPE WT-2-SB
 LAMINATED WOOD OR STEEL SINGLE POLE
 BRACED POST TANGENT
 115 KV
 DIRECT EMBED FOUNDATION

NOTE:
 STRUCTURE GEOMETRIES SUBJECT TO
 CHANGE WITH DETAILED ENGINEERING.

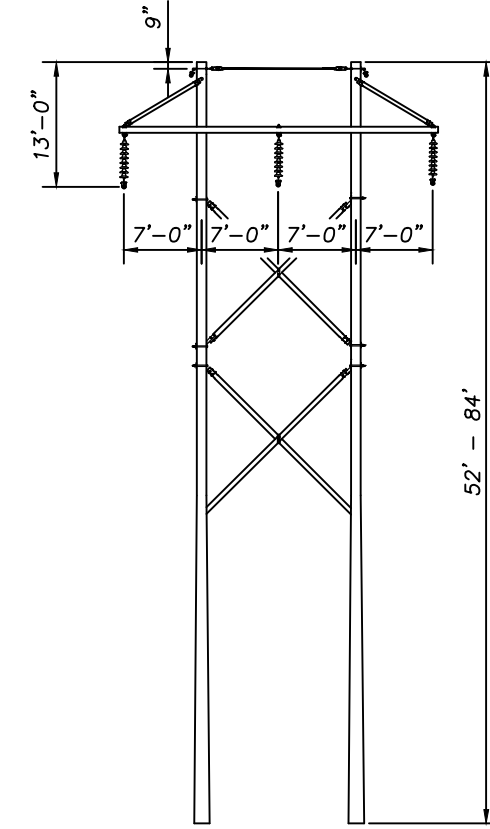
PRELIMINARY

REV	DESCRIPTION	ENG/PE#	DATE	DRN	CHKD	APPR
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C	RE-ISSUED FOR PERMITTING		4/10/15	SCF	KMS	
B	ISSUED FOR PERMITTING		3/13/15	SCF	KMS	
A	ISSUED FOR REVIEW		9/9/14	SCF	KMS	
DWG REV	EPN/DESCRIPTION	CONT/PE#	DATE	DRN	CHKD	APPR

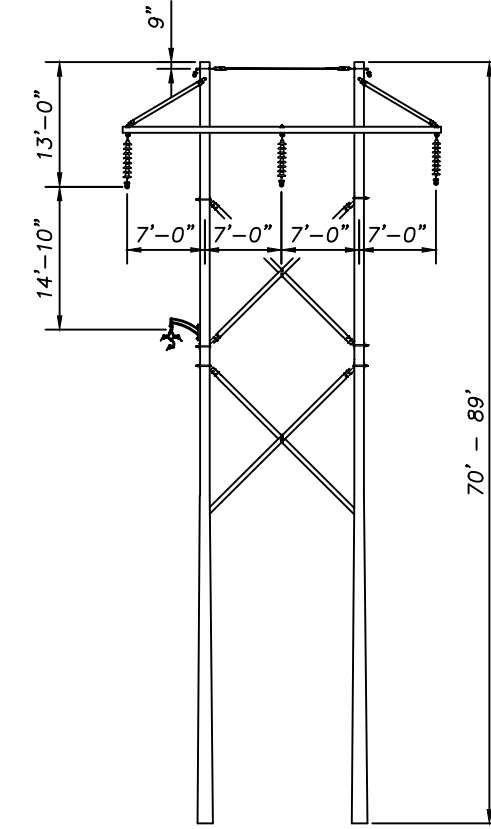
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	DRAWN	SCF
	ENGINEER	KMS
	CHECKED	APJ
TYPE 115 KV STANDARD SECTION F107 STRUCTURE INDEX		APPROVED
		DATE
		9/2/14
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NTS	IMAGE:	F10705SK03



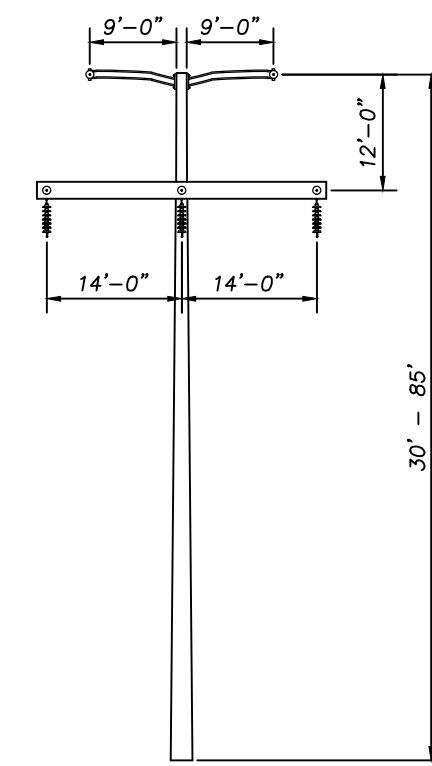
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LAMINATED WOOD OR STEEL SINGLE POLE
BRACED POST TANGENT
115 KV WITH 34.5 KV UNDERBUILD
DIRECT EMBED FOUNDATION



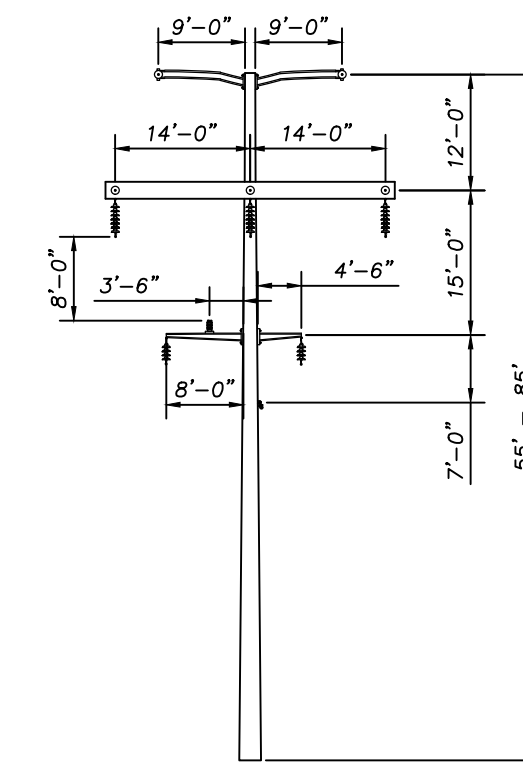
TYPE RAX
ROUNDWOOD H-FRAME
TANGENT
115 KV
DIRECT EMBED FOUNDATION



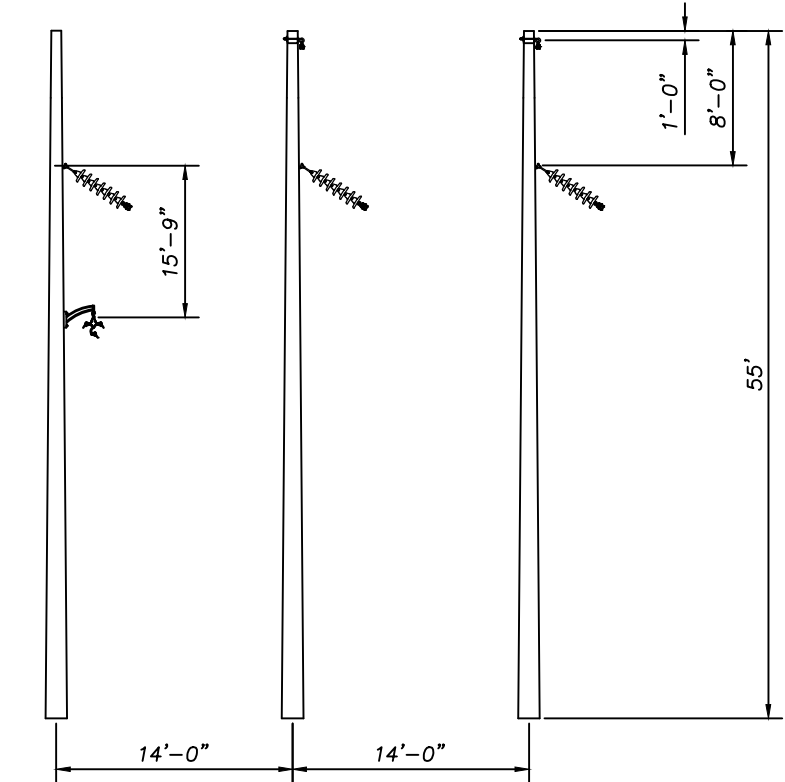
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LAMINATED WOOD H-FRAME
TANGENT
115 KV W/ 34.5 KV UB
DIRECT EMBED FOUNDATION



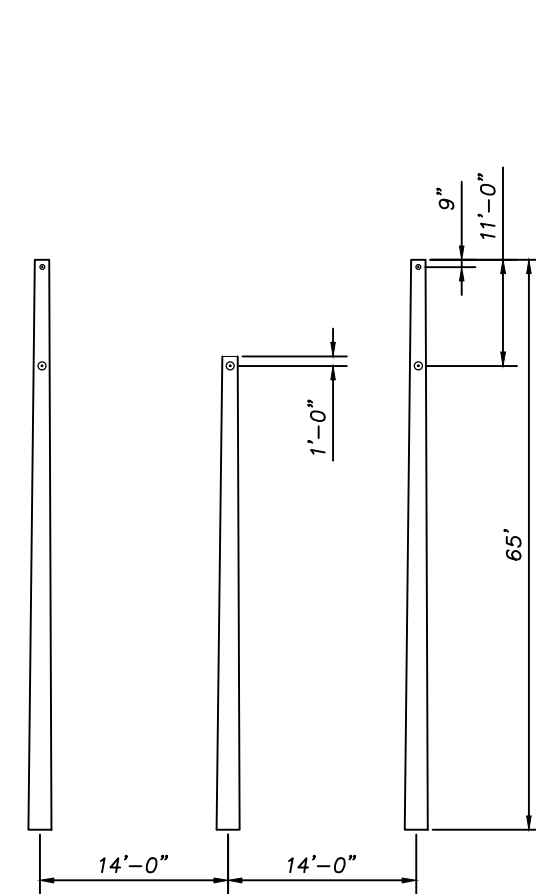
TYPE SS-H-FRAME
SELF SUPPORTING STEEL
DEADEND
115 KV
DRILLED PIER FOUNDATION
NOTE: 16' CONDUCTOR
DAVIT ARMS & 11' SW
DAVIT ARMS FOR LINE
ANGLES > 50°



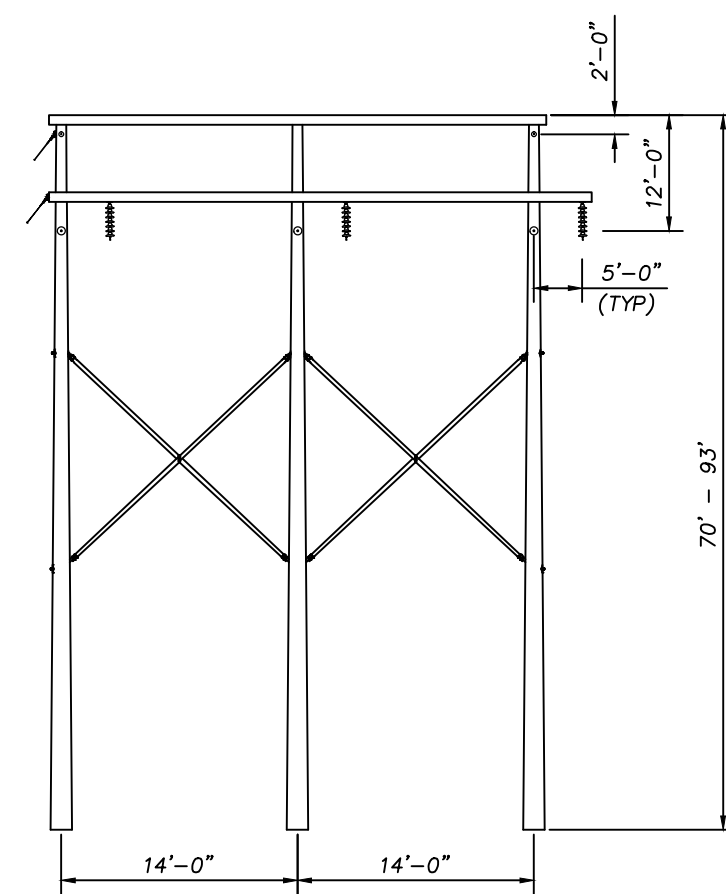
TYPE SS-H-FRAME-UB
SELF SUPPORTING STEEL
DEADEND
115 KV WITH 34.5 KV UNDERBUILD
DRILLED PIER FOUNDATION
NOTE: 16' CONDUCTOR
DAVIT ARMS & 11' SW
DAVIT ARMS FOR LINE
ANGLES > 50°



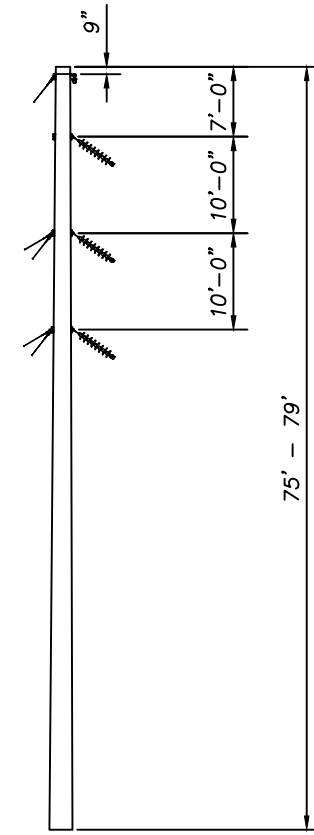
TYPE C-UB
STEEL H-FRAME
12° - 50° ANGLE
115 KV W/ 34.5 KV UB
DRILLED PIER FOUNDATION



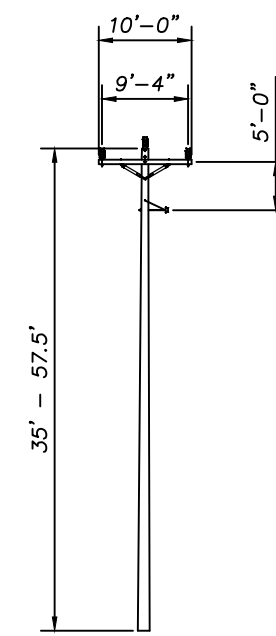
TYPE SS 3-POLE
SELF SUPPORTING STEEL
DEADEND
115 KV
DRILLED PIER FOUNDATION



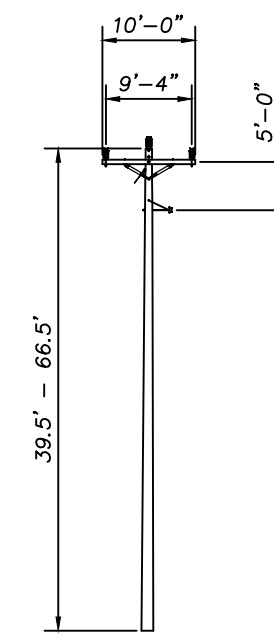
TYPE DA
ROUNDWOOD 3 POLE
DEADEND
115 KV
DIRECT EMBED FOUNDATION



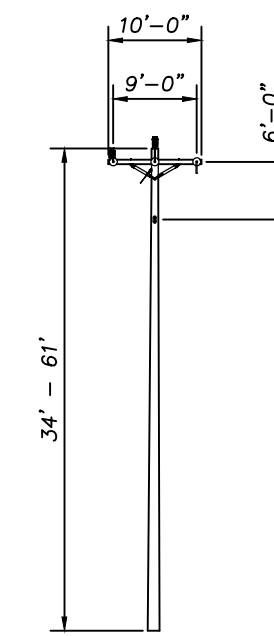
TYPE WA-3
LAMINATED WOOD OR STEEL GUYED
SINGLE POLE
20° - 30° ANGLE
115 KV
DIRECT EMBED FOUNDATION



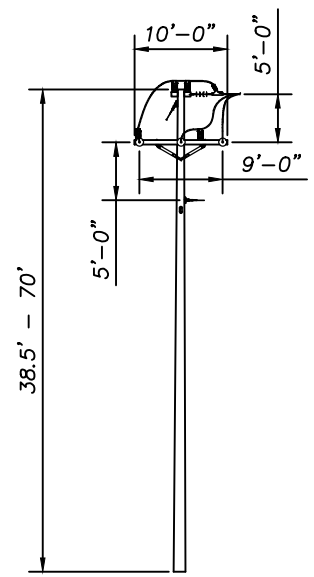
TYPE TAN
ROUNDWOOD SINGLE POLE
TANGENT
34.5 KV
DIRECT EMBED FOUNDATION



TYPE DX
ROUNDWOOD SINGLE POLE
0° - 12° ANGLE
34.5 KV
DIRECT EMBED FOUNDATION



TYPE DE
ROUNDWOOD SINGLE POLE
0° - 15° DEADEND ANGLE
34.5 KV
DIRECT EMBED FOUNDATION

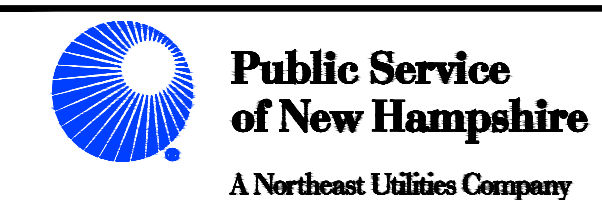


TYPE DEA
ROUNDWOOD SINGLE POLE
15° - 90° DEADEND ANGLE
34.5 KV
DIRECT EMBED FOUNDATION

NOTE:
STRUCTURE GEOMETRIES SUBJECT TO
CHANGE WITH DETAILED ENGINEERING.

PRELIMINARY

REV	DESCRIPTION	ENG/PE#	DATE	DRN	CHKD	APPR
D	ISSUED FOR REVIEW		7/31/15	SCF	KMS	
C	RE-ISSUED FOR PERMITTING		4/24/15	SCF	KMS	
B	RE-ISSUED FOR PERMITTING		4/10/15	SCF	KMS	
A	ISSUED FOR PERMITTING		3/13/15	SCF	KMS	
DWG REV	EPN/DESCRIPTION	CONT/PE#	DATE	DRN	CHKD	APPR

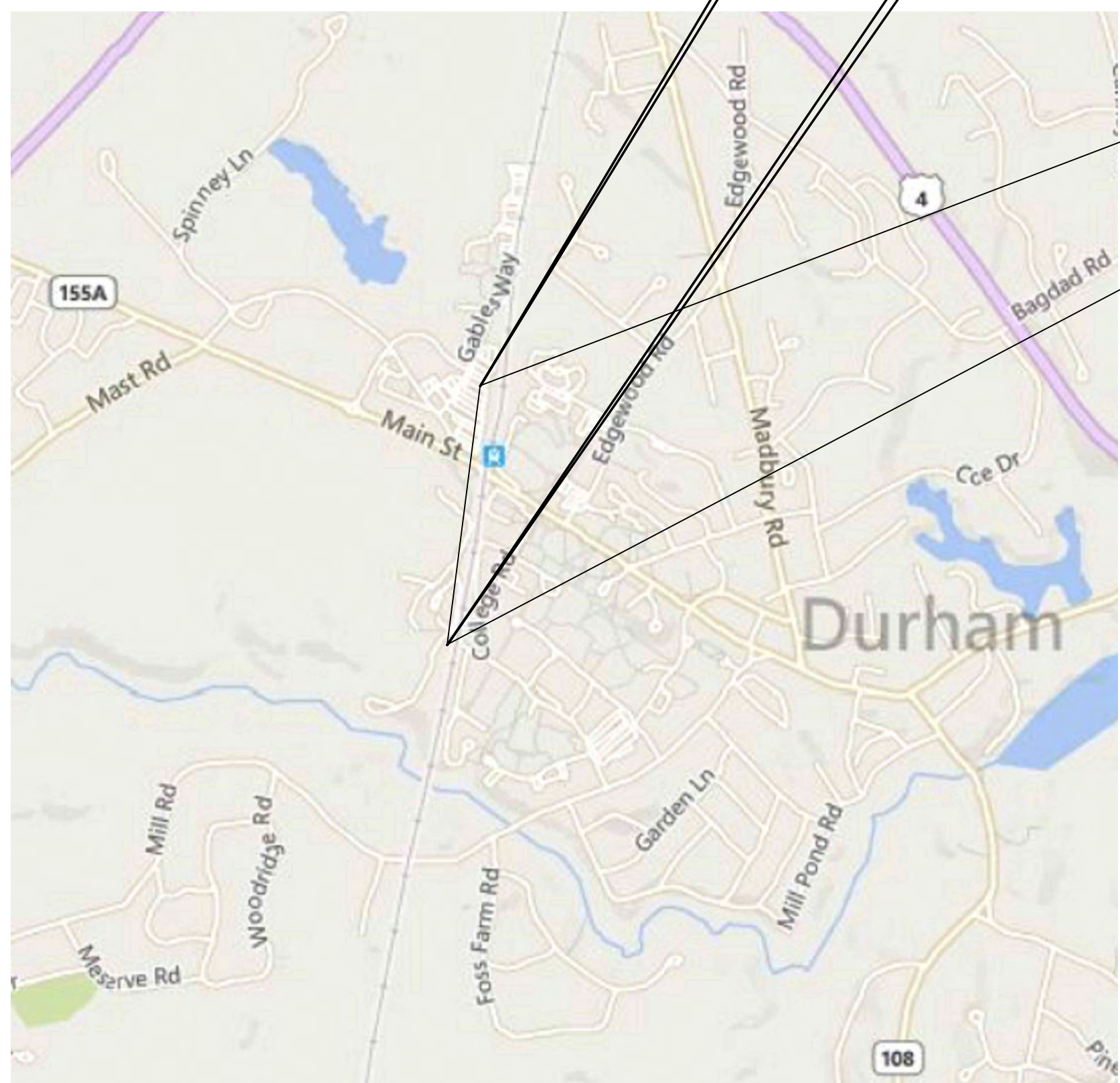


TYPE 34.5 KV & 115 KV STANDARD
SECTION F107 STRUCTURE INDEX

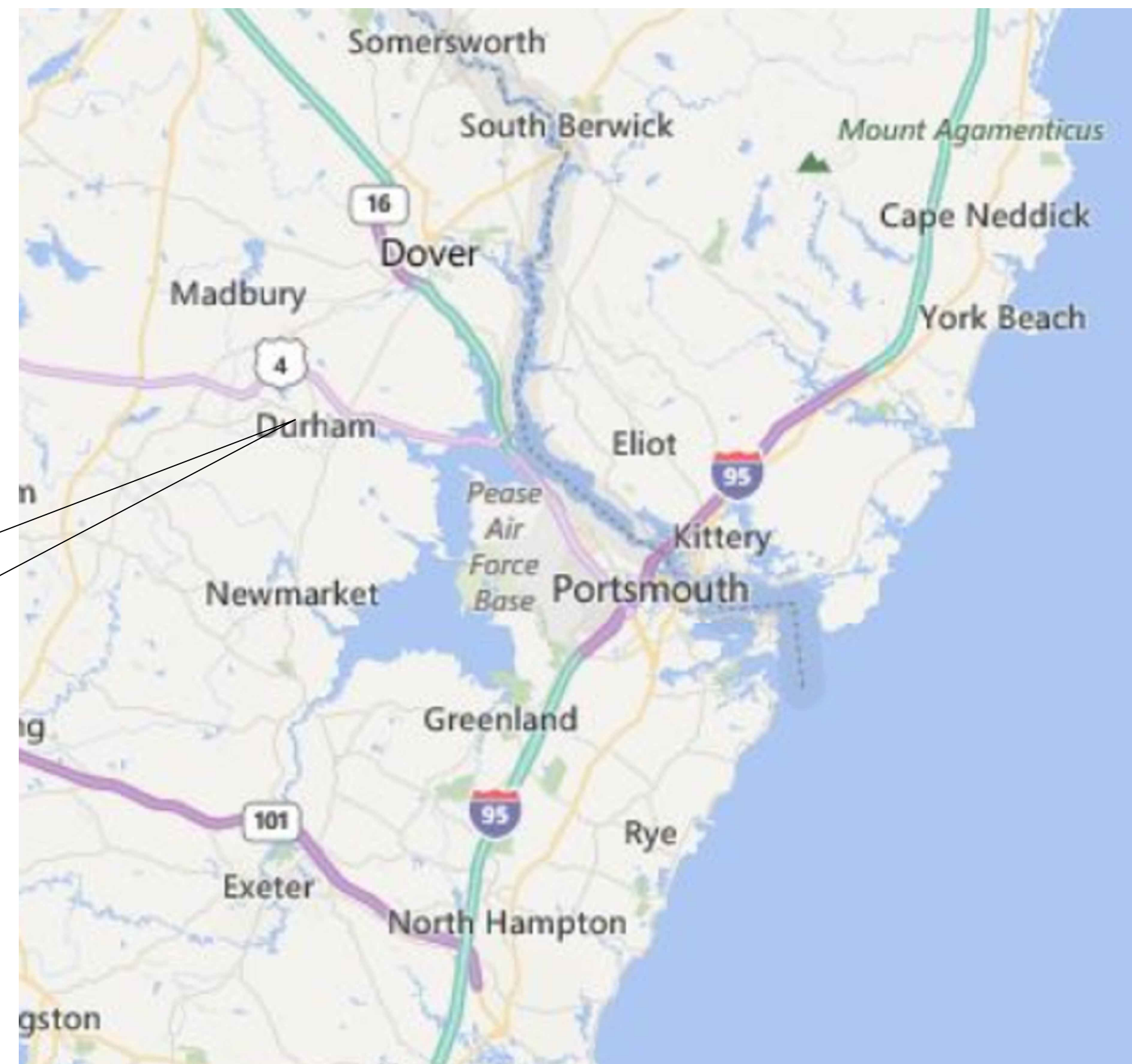
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FILE: F10705SK03.DWG
DRAWING NO.: F10705SK03A

T	D
DRAWN	SCF
ENGINEER	KMS
CHECKED	APJ
APPROVED	
DATE	9/2/14

PUBLIC SERVICE OF NEW HAMPSHIRE
 F-107
 UNH, DURHAM
 115 kV UNDERGROUND TRANSMISSION LINE



VICINITY MAP
 NOT TO SCALE




AREA MAP
 NOT TO SCALE

PROPOSED RISER 23

PROPOSED RISER 24

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THREE BUSINESS DAYS BEFORE YOU DIG CALL
 NEW HAMPSHIRE DIG SAFE SYSTEM, INC.
 TOLL FREE
 1-888-344-7233

Know what's below.
 Call before you dig.

NOTES:

- EXISTING DEPTH OF UTILITY CROSSINGS ASSUMED.
- THE UTILITIES SHOWN HEREON ARE BASED ON FIELD SURVEYS, AERIAL PHOTOGRAPHY AND RECORD DOCUMENTS. OTHER FACILITIES MAY EXIST NOT DISCOVERED THROUGH THE RECORD CHECK. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION, BOTH HORIZONTAL AND VERTICAL, OF ALL UTILITIES THROUGH THE APPROPRIATE UTILITY COMPANIES. CALL BEFORE YOU DIG #811 OR #1-888-344-7233
- ALL VERTICAL CURVES TO BE 400' UNLESS OTHERWISE NOTED.

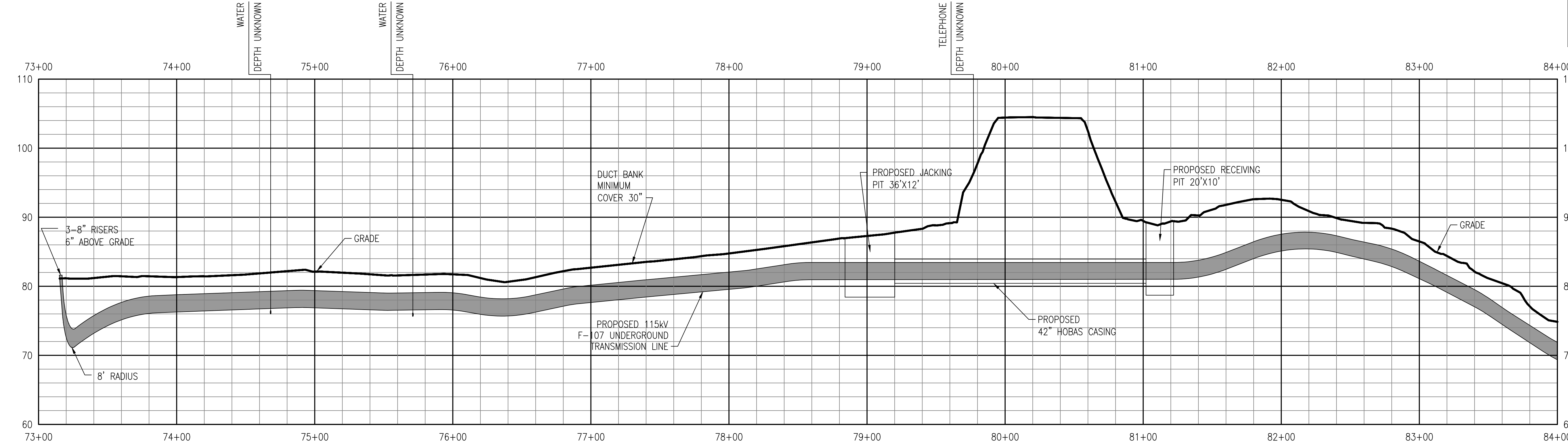
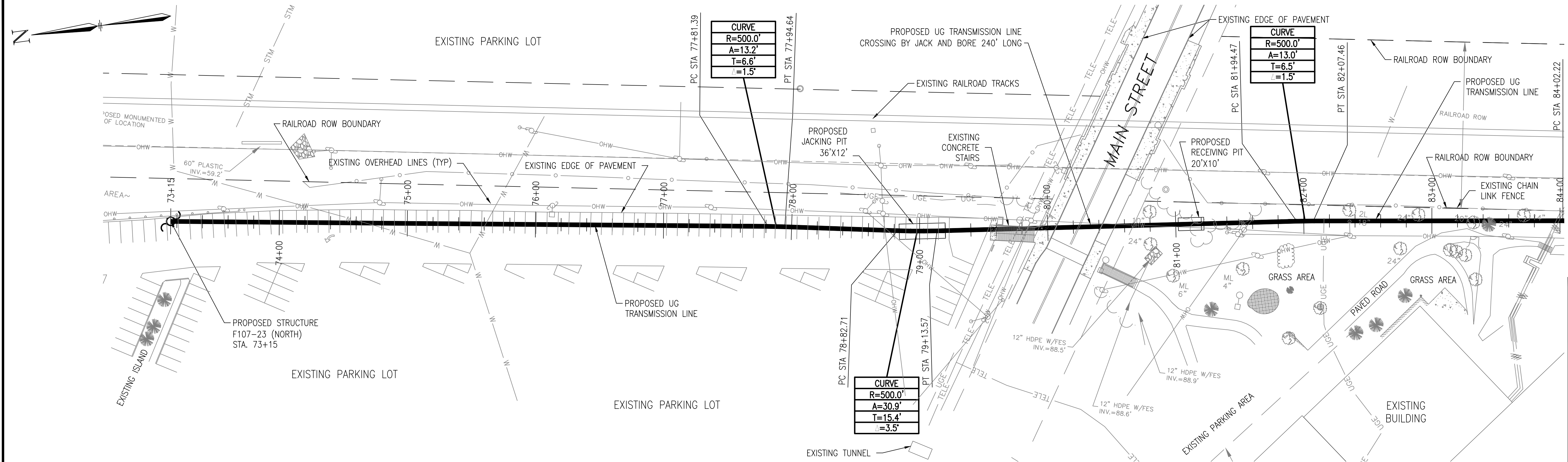
NO.	REVISION	DATE	BY	CHKD	APPRV.
K	ISSUE FOR PERMIT ADJUSTED STATIONING	12-28-15	REO	SCG	TSG
J	ISSUE FOR PERMIT	12-1-15	REO	SCG	TSG
I	REVISED PER PSMT SURVEY PLAN	10-7-15	REO	SCG	TSG
H	REVISED EXTENDED LAYOUT PER UNH	9-25-15	REO	SCG	TSG
G	EXTENDED ALIGNMENT	9-9-15	REO	SCG	TSG
F	REVISED UG. REVERT RISER LOCATION	9-4-15	REO	SCG	TSG
E	REVISED UG. REVERT RISER LOCATION	8-21-15	REO	SCG	TSG
D	REVISED UG. ADJUSTING STATIONING	7/31/15	REO	SCG	TSG
C	PROFILE ADDED	7/31/15	REO	SCG	TSG
B	ISSUED FOR REVIEW	7/13/15	BWF	TSG	CHD
A	DATE				

Public Service
 of New Hampshire
 A Northeast Utilities Company

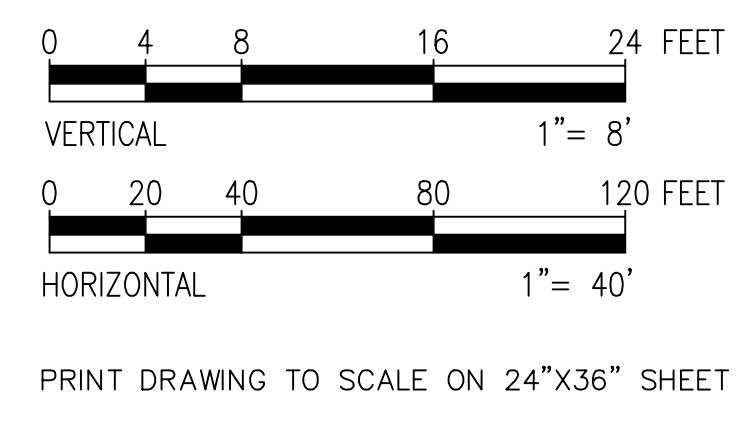
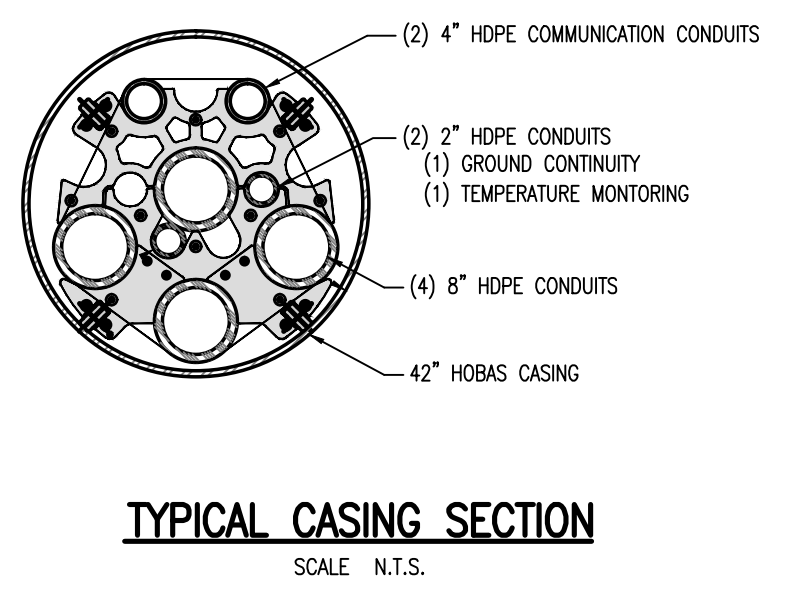
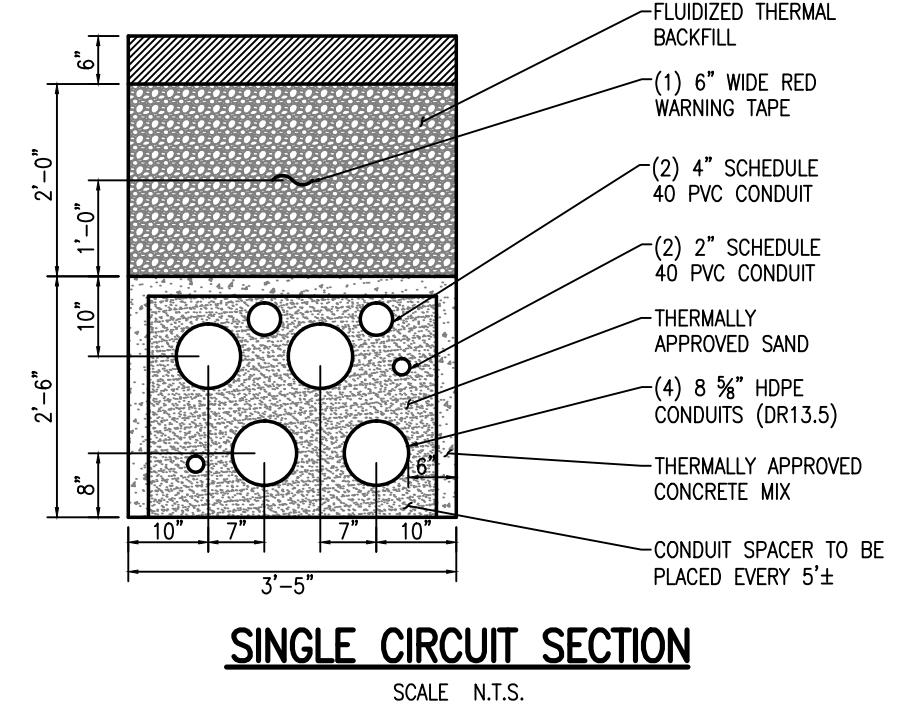
Transmission
 Business

115kV F107 UNDERGROUND
 TRANSMISSION LINE
 PLAN AND PROFILE VIEW
 DATE: 07/13/2015
 SCALE: H=1"=40', V=1"=8'

TOWN:
 DURHAM
 TRANSMISSION LINE:
 F107
 MILE NO.: 2
 DISCIPLINE/SHOT NO.
 SHEET 1 OF 3
 F10740705



- General Notes**
1. THE UTILITIES HAVE NOT BEEN IDENTIFIED AND WILL IMPACT THE DESIGN OF THE UNDERGROUND TRANSMISSION LINE AT THE LOCATION OF ANY CROSSINGS.
 2. ALL PROPERTY LINE INFORMATION IS SHOWN APPROXIMATE AND BASED ON TOWN ASSESSOR'S PLATS ONLY. THE AERIAL TRANSMISSION EASEMENT HAS BEEN ESTABLISHED BY SURVEY.
 3. TOPOGRAPHY IS BASED ON AN AERIAL LIDAR SURVEY AND SATELLITE IMAGERY, THEREFORE GRADES ARE APPROXIMATE. AN ON THE GROUND DETAIL SURVEY WILL BE REQUIRED FOR DESIGN.
 4. DETAIL DESIGN MAY BE OPTIMIZED TO REFLECT ACTUAL CONDITIONS.
 5. ALL EXISTING ROAD MARKINGS ARE ESTIMATED.
 6. CONTRACTOR IS RESPONSIBLE FOR PLACING SILT FENCE OR OTHER APPROVED EROSION CONTROL DEVICES. WETLANDS HAVE NOT BEEN DELINEATED AND HAVE NOT BEEN CONSIDERED FOR DESIGN.
 7. CONTRACTOR SHALL INSTALL SILT SACK OR APPROVED EQUAL TO ALL CATCH BASINS OR CURB INLETS WITHIN THE DEFINED WORK ZONE.
 8. CONTRACTOR SHALL ENSURE PROPER CONTROLS ARE IN PLACE SO WORKERS DO NOT TRACK SEDIMENT PAST THE LIMITS OF WORK.
 9. ALL VERTICAL RADII ARE 500' UNLESS OTHERWISE NOTED



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 TOLL FREE
 1-888-344-7233

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 NOT FOR CONSTRUCTION**

NO.	DATE	REVISION
K	12-28-15	ISSUE FOR PERMIT ADJUSTED STATIONING
J	12-1-15	ISSUE FOR PERMIT SURVEY PLAN
I	10-7-15	REVISED PER PERMIT SURVEY PLAN
H	9-25-15	REVISED EXTENDED LAYOUT PER INH
G	9-9-15	EXTENDED ALIGNMENT
F	9-4-15	REVISED UG AND RISER LOCATION
E	8-21-15	REVISED UG AND RISER LOCATION
D	7-31-15	REVISED UG AND RISER LOCATION
C	7-31-15	PROFILE ADDED
B	7/31/15	ISSUED FOR REVIEW
A	7/13/15	DATE
		DESIGNED
		DRAWN
		CHECKED
		APPROVED

Public Service of New Hampshire
 A Northeast Utilities Company

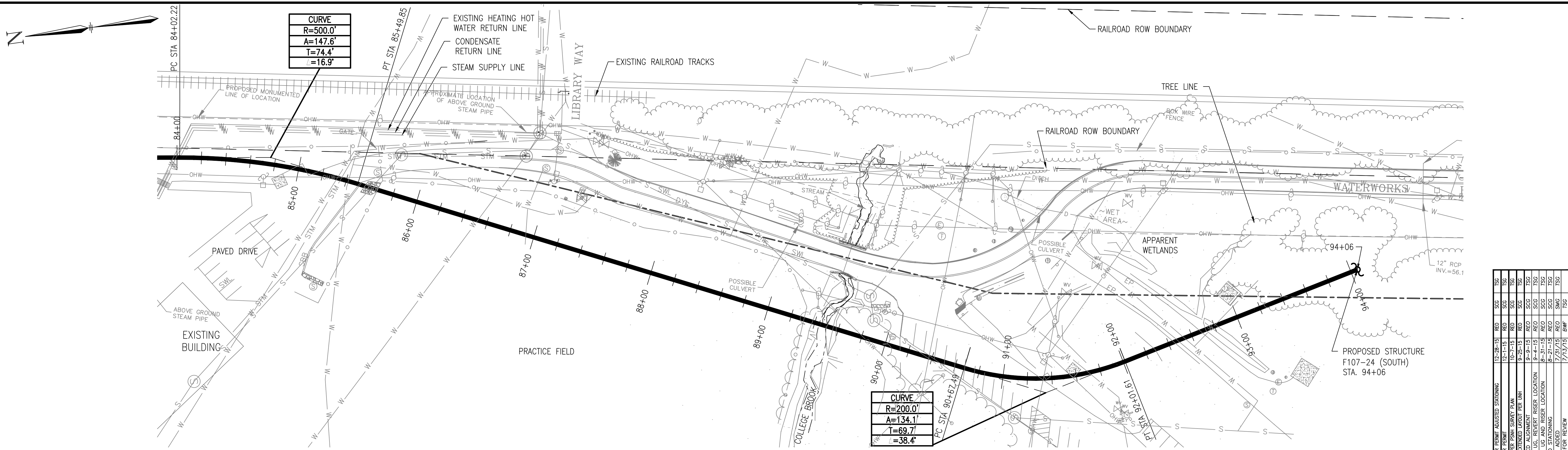
Transmission Business

115kV F107 UNDERGROUND TRANSMISSION LINE
 PLAN AND PROFILE VIEW

DES: TSG CMT: TSG
 DRAW: BWF APR:
 TOWN: DURHAM
 TRANSMISSION LINE: F107
 MILE NO: 2
 DISCIPLINE/SHT NO:
 SHEET 2 OF 3
 F10740705

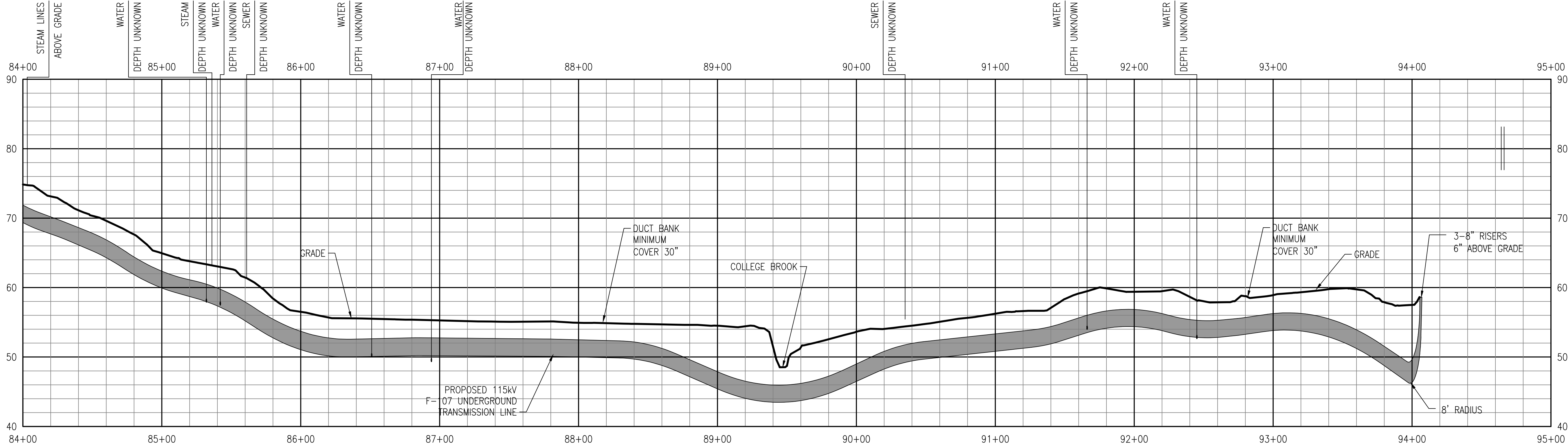
DATE: 07/13/2015
 SCALE: H = 1"=40', V = 1"=8'

REVISION: 01/23/2014

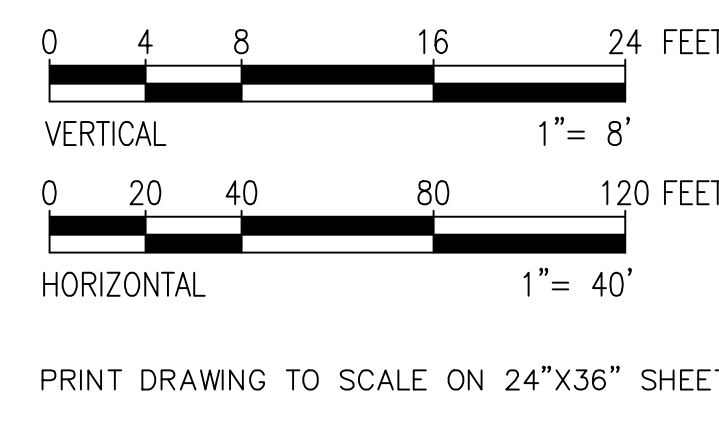
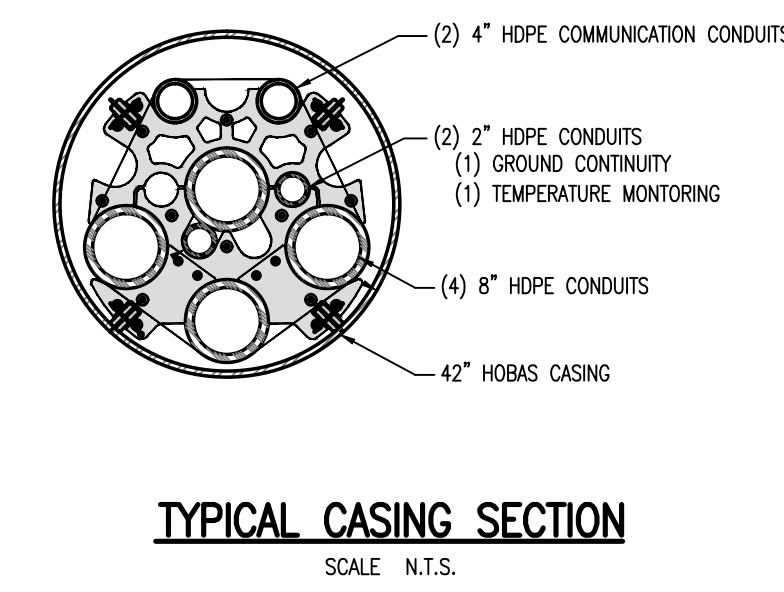
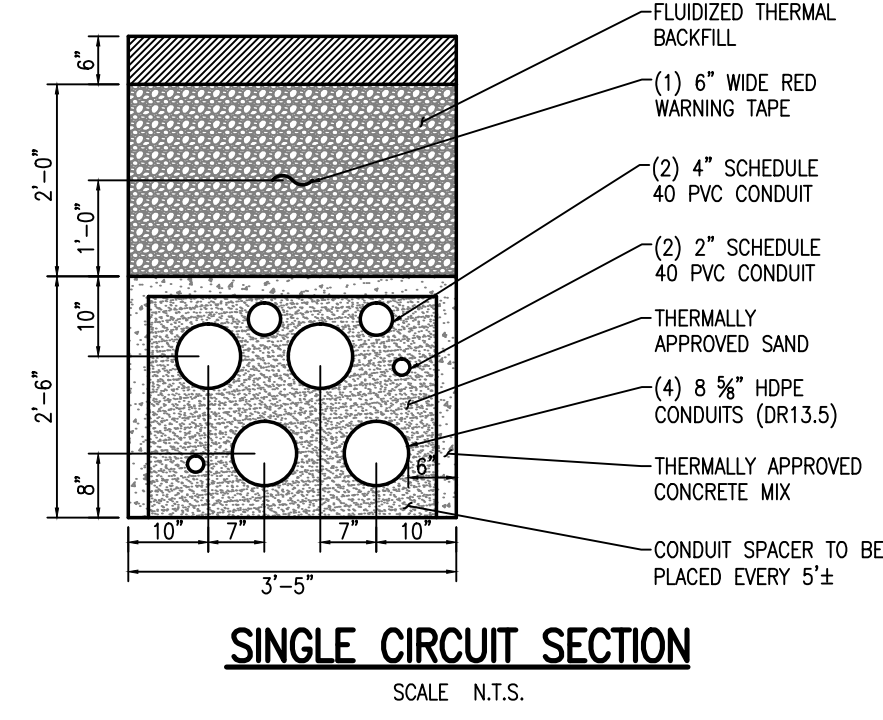


CURVE
 R=500.0'
 A=147.6'
 T=74.4'
 Δ=16.9'

CURVE
 R=200.0'
 A=134.1'
 T=69.7'
 Δ=38.4'



- General Notes**
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 2. ALL PROPERTY LINE INFORMATION IS SHOWN APPROXIMATE AND BASED ON TOWN ASSESSOR'S PLATS ONLY. THE AERIAL TRANSMISSION EASEMENT HAS BEEN ESTABLISHED BY SURVEY.
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 9. ALL VERTICAL RADII ARE 500' UNLESS OTHERWISE NOTED



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POWER ENGINEERS

NO.	DATE	BY	CHKD.	APPV.
K	12-28-15	REO	SCG	TSO
J	12-1-15	REO	SCG	TSO
I	10-7-15	REO	SCG	TSO
H	9-25-15	REO	SCG	TSO
G	9-9-15	REO	SCG	TSO
F	9-4-15	REO	SCG	TSO
E	8-31-15	REO	SCG	TSO
D	7-31-15	REO	SCG	TSO
C	7-31-15	REO	SCG	TSO
B	7-31-15	REO	SCG	TSO
A	7/31/15	BWF	TSO	TSO
		DATE	DRWN	CHKD

Public Service of New Hampshire
 A Northeast Utilities Company

Transmission Business

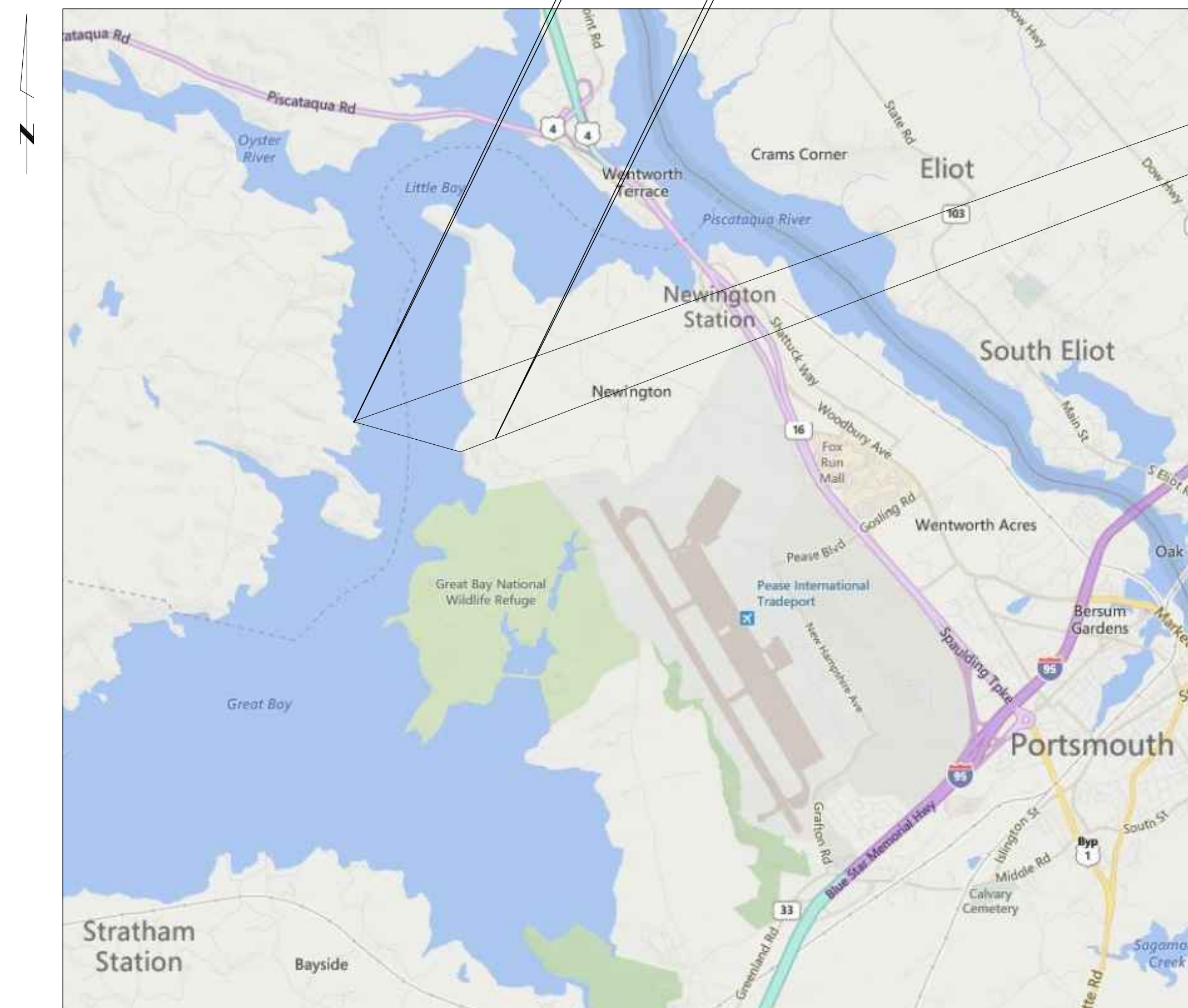
115kV F107 UNDERGROUND TRANSMISSION LINE
 PLAN AND PROFILE VIEW

DES: TSG CHK: TSG
 DRW: BWF APR:
 TOWN: DURHAM
 TRANSMISSION LINE: F107
 MILE NO: 2
 DISCIPLINE/SHT NO:
 SHEET 3 OF 3
 F10740705

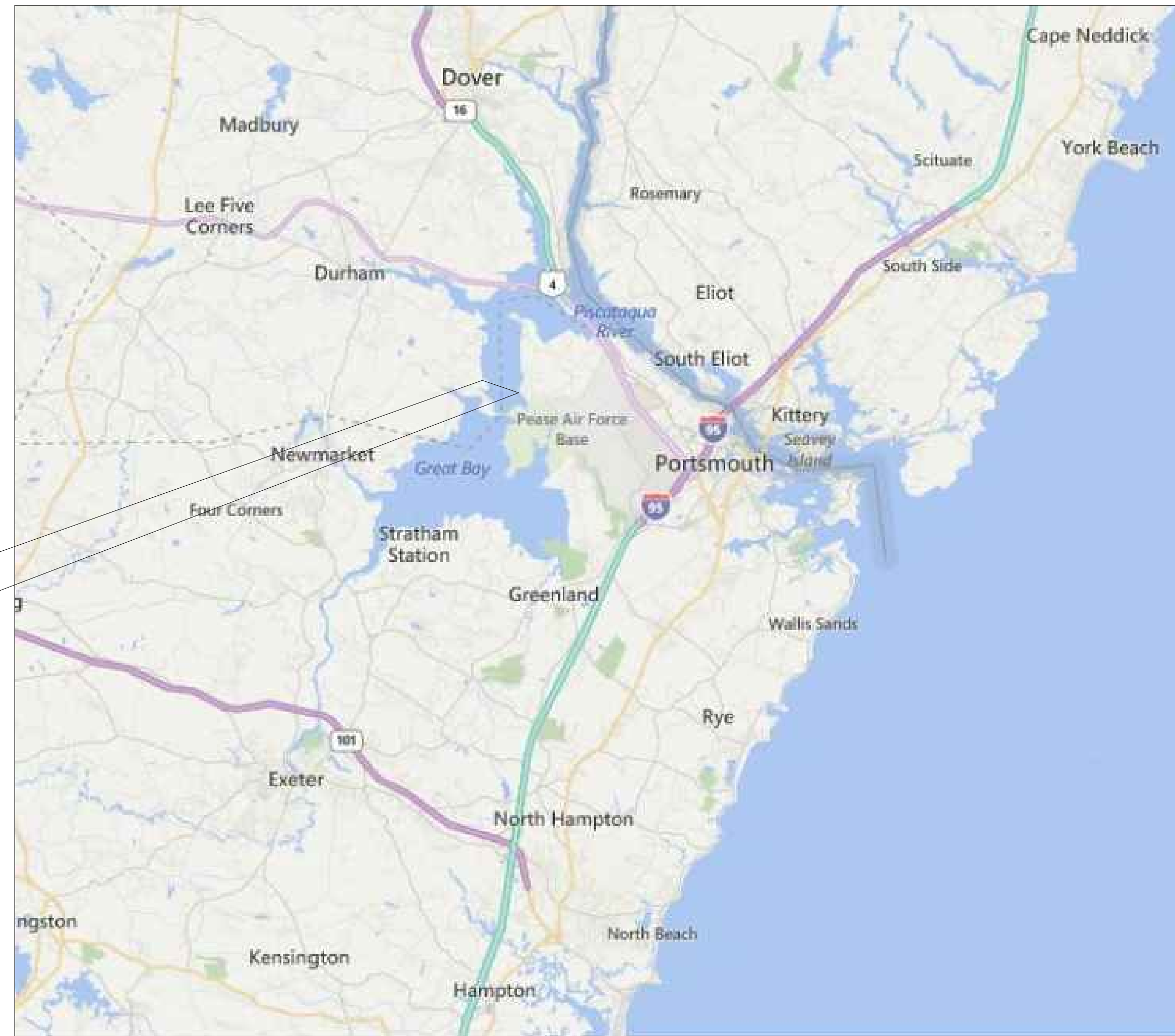
DATE: 07/13/2015
 SCALE: H=1"=40' V=1"=8'

REVISION: 01/23/2014

PUBLIC SERVICE OF NEW HAMPSHIRE
 F-107
 LITTLE BAY, PORTSMOUTH
 115 kV UNDERGROUND TRANSMISSION LINE



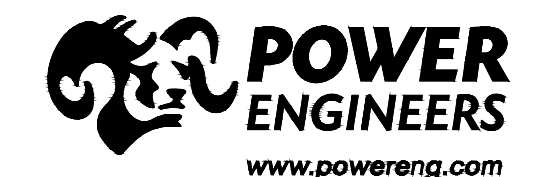
VICINITY MAP
 NOT TO SCALE



AREA MAP
 NOT TO SCALE



Know what's below.
 Call before you dig.



NOTES:

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3. ALL VERTICAL CURVES TO BE 400' UNLESS OTHERWISE NOTED.

NO.	REVISION	DATE	BY	CHKD.	APPRV.
7	ISSUE FOR PERMIT RELOCATE RISER	12/28/15	REC	SCG	TSG
6	ISSUE FOR PERMIT	12/14/15	REC	SCG	TSG
5	ISSUE FOR PERMIT	11/19/15	REC	SCG	TSG
4	ISSUE FOR PERMIT - ALIGNMENT ADJ.	5-18-15	REC	SCG	TSG
3	ISSUED FOR REVIEW - ALIGNMENT ADJ.	9-8-15	REC	SCG	TSG
2	ISSUED FOR REVIEW - ALIGNMENT ADJ.	10/14/14	SCG	SCG	TSG
1	ISSUED FOR REVIEW	8-25-14	JRD	TSG	CS
0	ISSUED FOR REVIEW				

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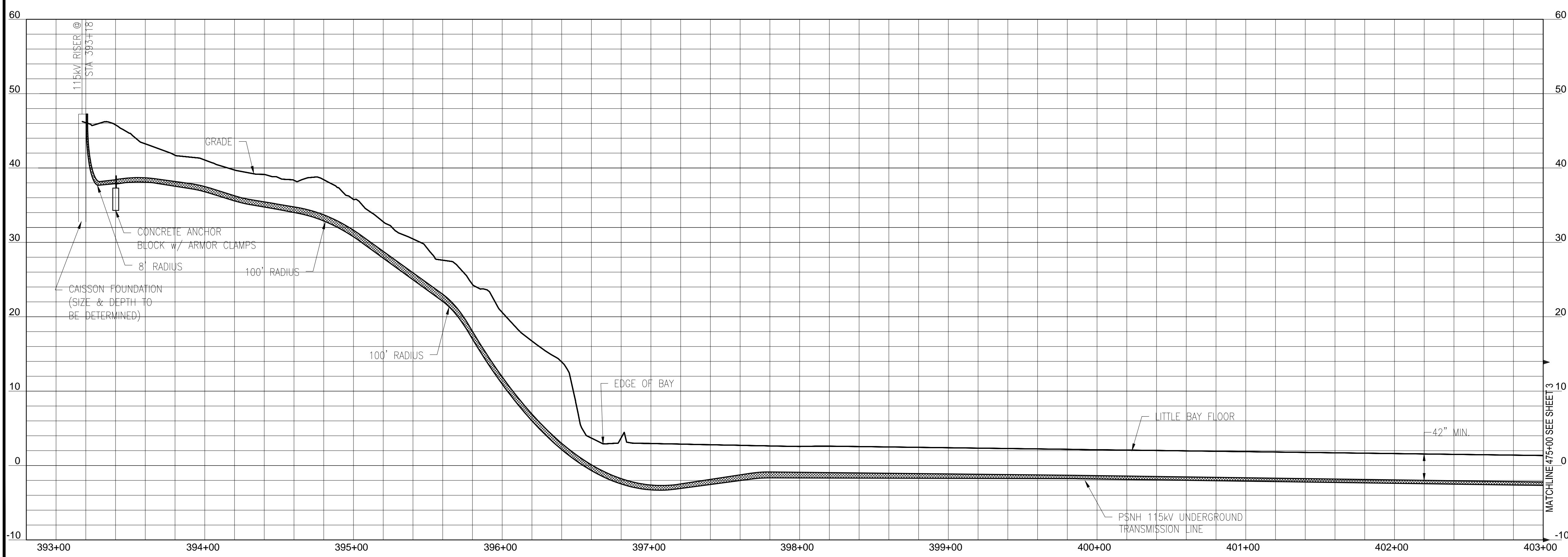
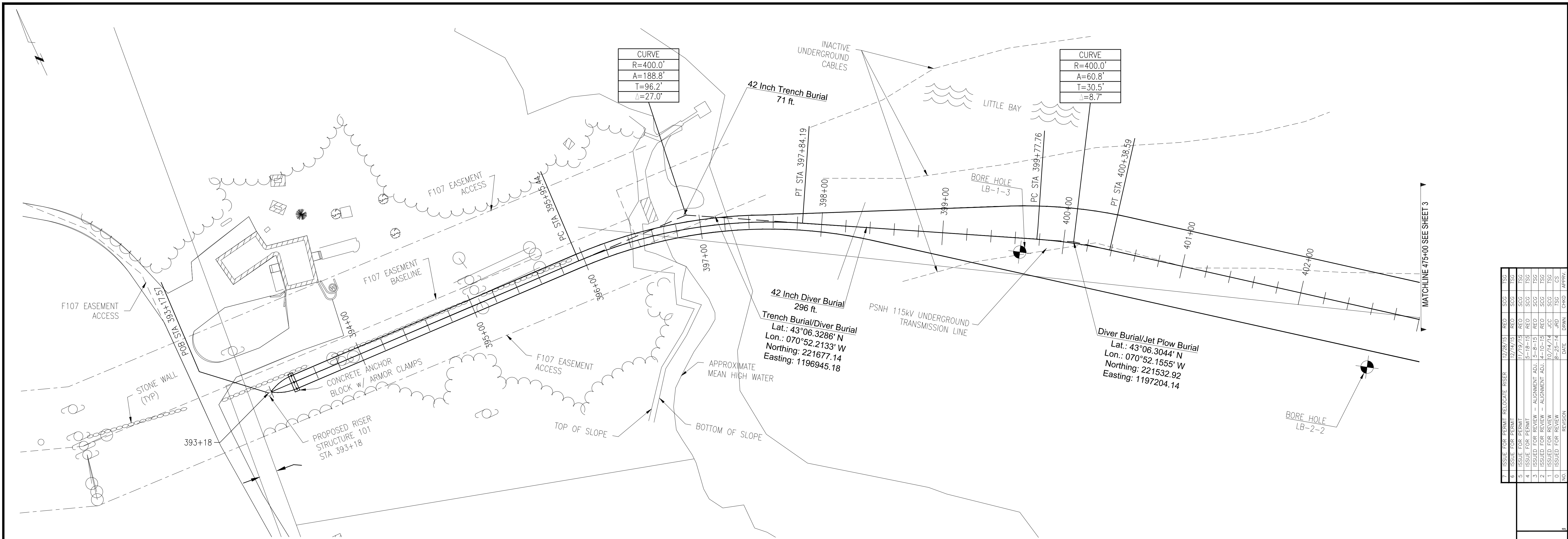
T 7

UNDERGROUND TRANSMISSION
 PLAN & PROFILE
 SEACOAST RELIABILITY PROJECT
 SCALE: H: 1"=40', V: 1"=8'
 DATES: 8/25/2015

DES: TSG
 CHECKED: TSG
 DRAW: REC
 APR: TSG
 TOWN: NEWINGTON, NH
 TRANSMISSION LINE: F-107
 MILE NO.:
 DISCIPLINE/SHT NO.:
 SHEET 1 OF 12

COVER

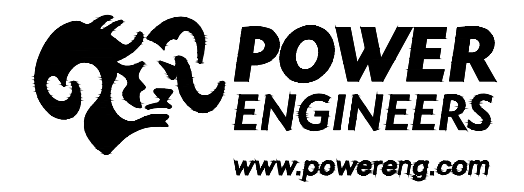
REVISION: 01/23/2014



NO.	REVISION	DATE	DRWN	CHKD	APPRV
7	ISSUED FOR PERMIT	12/28/15	REG	SCG	TSG
6	ISSUE FOR PERMIT	12/14/15	REG	SCG	TSG
5	ISSUE FOR PERMIT	11/19/15	REG	SCG	TSG
4	ISSUE FOR PERMIT	5-18-15	REG	SCG	TSG
3	ISSUED FOR REVIEW - ALIGNMENT ADJ.	9-8-15	REG	SCG	TSG
2	ISSUED FOR REVIEW - ALIGNMENT ADJ.	10/14/14	SCG	SCG	TSG
1	ISSUED FOR REVIEW	8-25-14	JRD	TSG	CS
0	ISSUED FOR REVIEW				

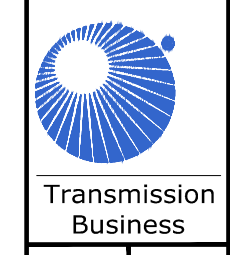


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 - ALL VERTICAL CURVES TO BE 400' UNLESS OTHERWISE NOTED.
 - ANCHOR BLOCK DESIGN, BY OTHERS, TO INCLUDE PULLING TENSIONS AND ACCIDENTAL ENTANGLEMENT BY PASSING VESSELS.

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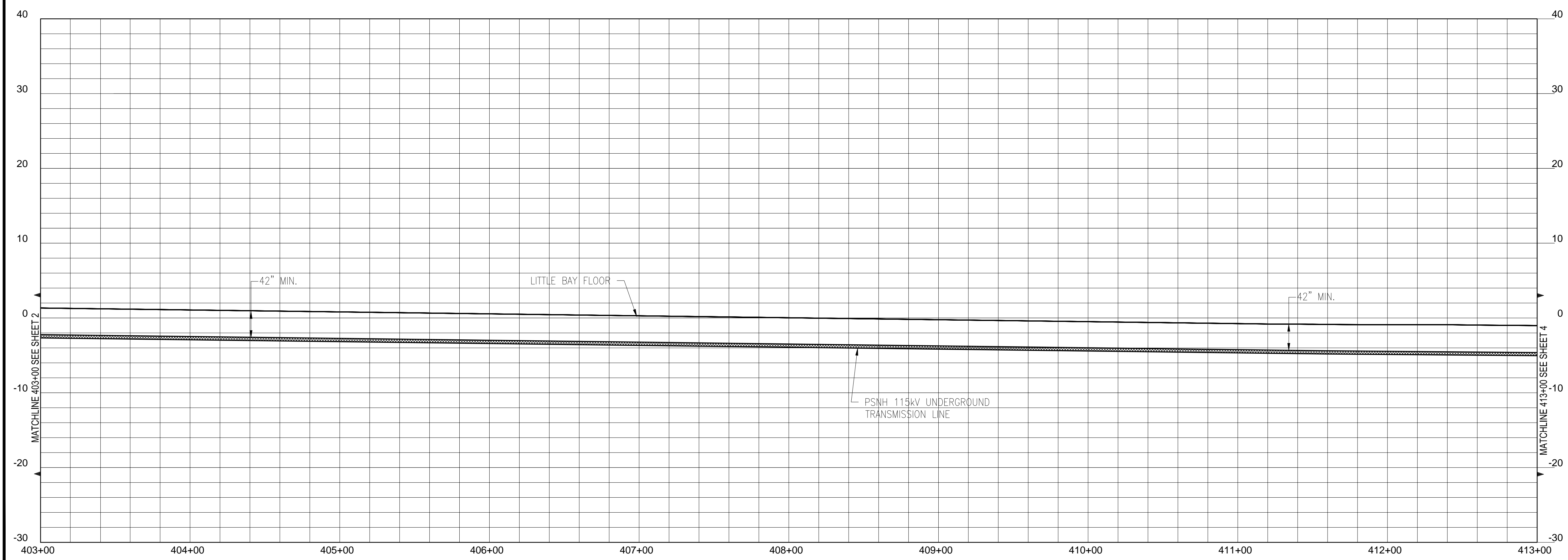
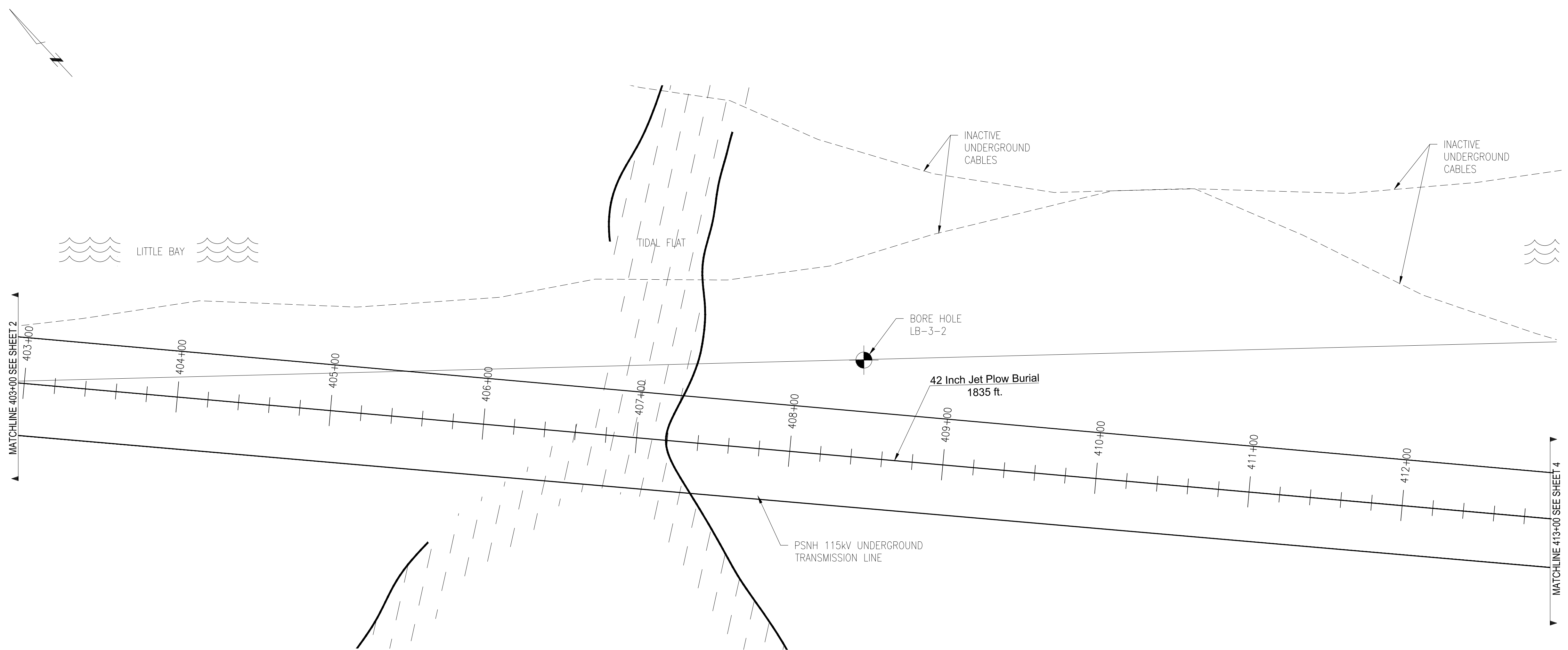


T 7

UNDERGROUND TRANSMISSION
PLAN & PROFILE
SEACOAST RELIABILITY PROJECT
SCALE: H: 1"=40', V: 1"=8'
DATE: 8/25/2015
DES: TSG
CHKD: TSG
DRW: REG
APR: TSG

TOWN:
NEWINGTON, NH
TRANSMISSION LINE:
F-107
MILE NO: 8
DISCIPLINE/SHT NO.

SHEET 2 OF 12
2 OF 12
REVISION: 01/23/2014



811
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POWER ENGINEERS
www.powereng.com

- NOTES:
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 - ALL VERTICAL CURVES TO BE 400' UNLESS OTHERWISE NOTED.

NO.	REVISION	DATE	DRWN	CHKD	APPRV.
7	ISSUED FOR PERMIT	12/28/15	REC	SCG	TSG
6	ISSUE FOR PERMIT	12/14/15	REC	SCG	TSG
5	ISSUE FOR PERMIT	11/19/15	REC	SCG	TSG
4	ISSUE FOR PERMIT	5-18-15	REC	SCG	TSG
3	ISSUED FOR REVIEW - ALIGNMENT ADJ.	9-8-15	REC	SCG	TSG
2	ISSUED FOR REVIEW - ALIGNMENT ADJ.	10/14/14	SCG	SCG	TSG
1	ISSUED FOR REVIEW	8-25-14	JRP	TSG	CS
0	ISSUED FOR REVIEW				

Public Service of New Hampshire
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Transmission Business

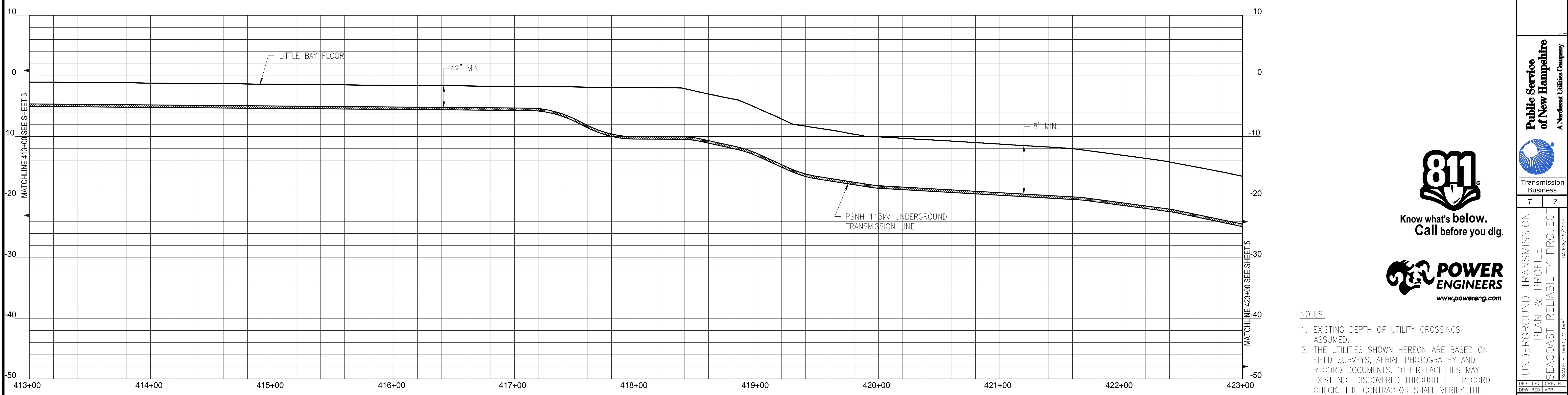
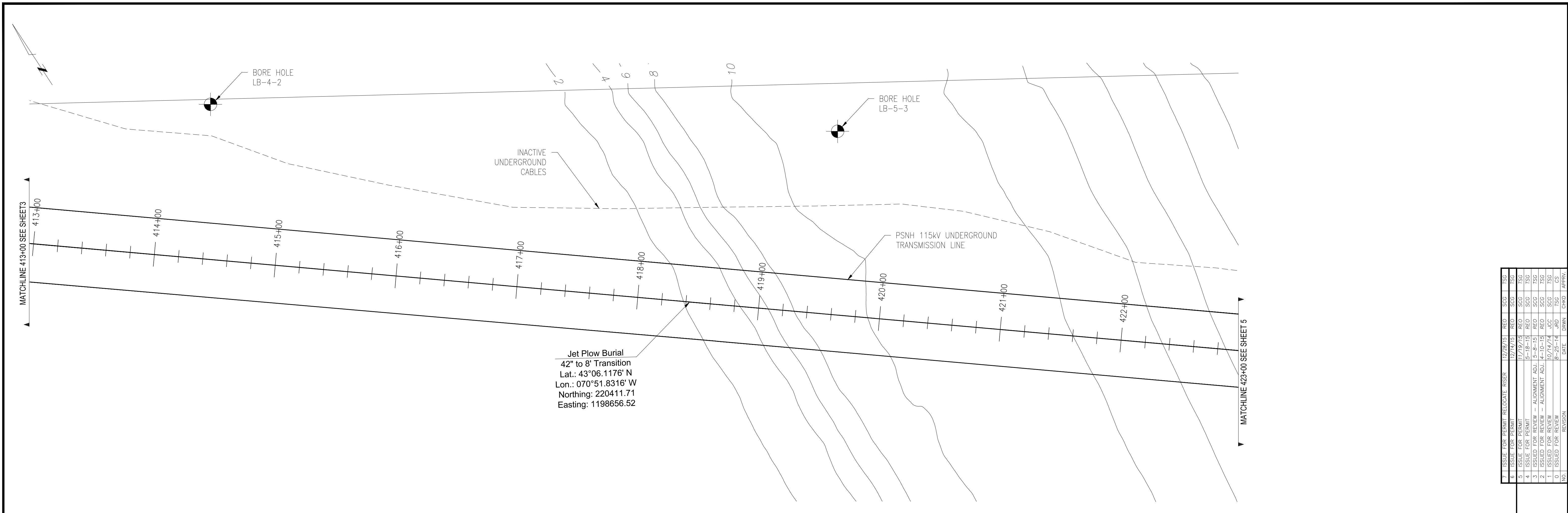
UNDERGROUND TRANSMISSION PLAN & PROFILE
SEACOAST RELIABILITY PROJECT
SCALE: H. 1"=40', V. 1"=8'

DES: TSG
CHKD: TSG
DRW: REC
APR: TSG

TOWN: NEWINGTON, NH
TRANSMISSION LINE: F-107
MILE NO: 8
DISCIPLINE/SHT NO.

SHEET 3 OF 12
3 OF 12

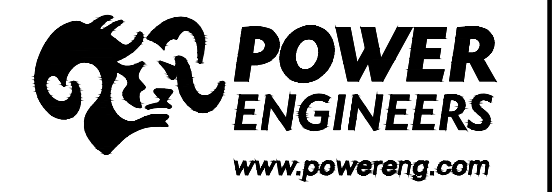
REVISION: 01/23/2014



NO.	REVISION	DATE	DRWN	CHKD	APPRV.
7	ISSUE FOR PERMIT RELOCATE RISER	12/28/15	REC	SCG	TSG
6	ISSUE FOR PERMIT	12/14/15	REC	SCG	TSG
5	ISSUE FOR PERMIT	11/19/15	REC	SCG	TSG
4	ISSUE FOR PERMIT - ALIGNMENT ADJ.	5-18-15	REC	SCG	TSG
3	ISSUED FOR REVIEW - ALIGNMENT ADJ.	5-18-15	REC	SCG	TSG
2	ISSUED FOR REVIEW - ALIGNMENT ADJ.	10/14/14	SCG	SCG	TSG
1	ISSUED FOR REVIEW	10/14/14	SCG	SCG	TSG
0	ISSUED FOR REVIEW	8-25-14	JRD	TSG	CS



Know what's below.
Call before you dig.



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 - ALL VERTICAL CURVES TO BE 400' UNLESS OTHERWISE NOTED.

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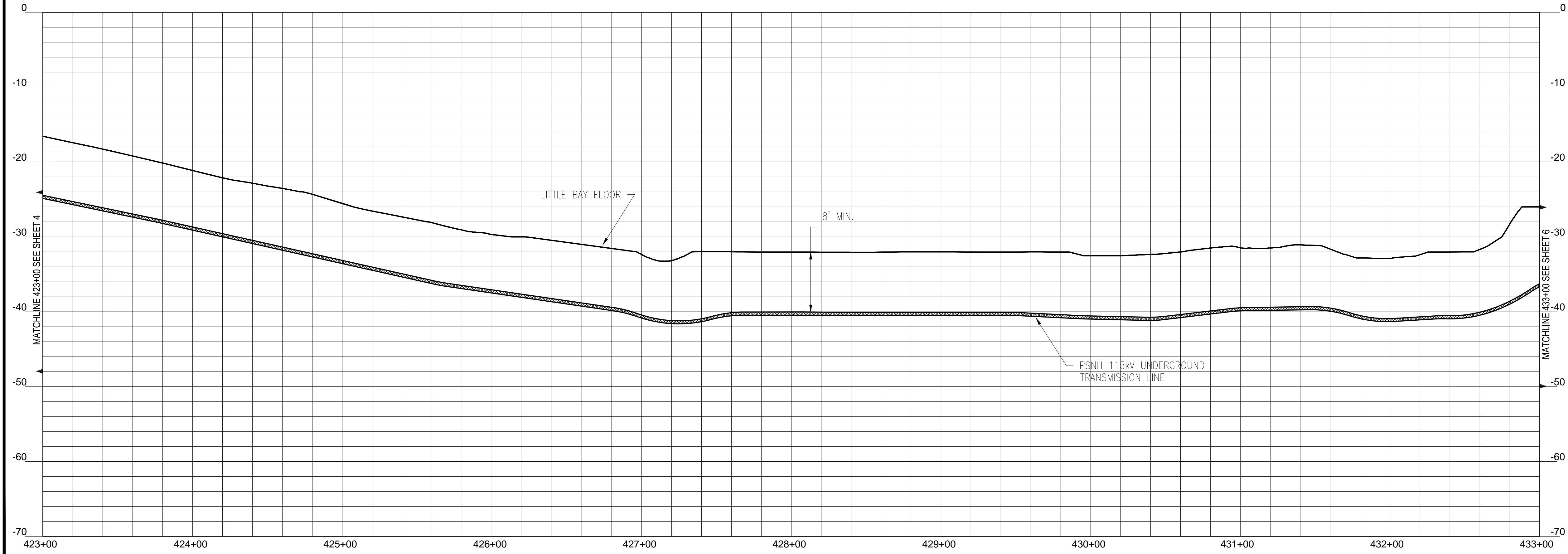
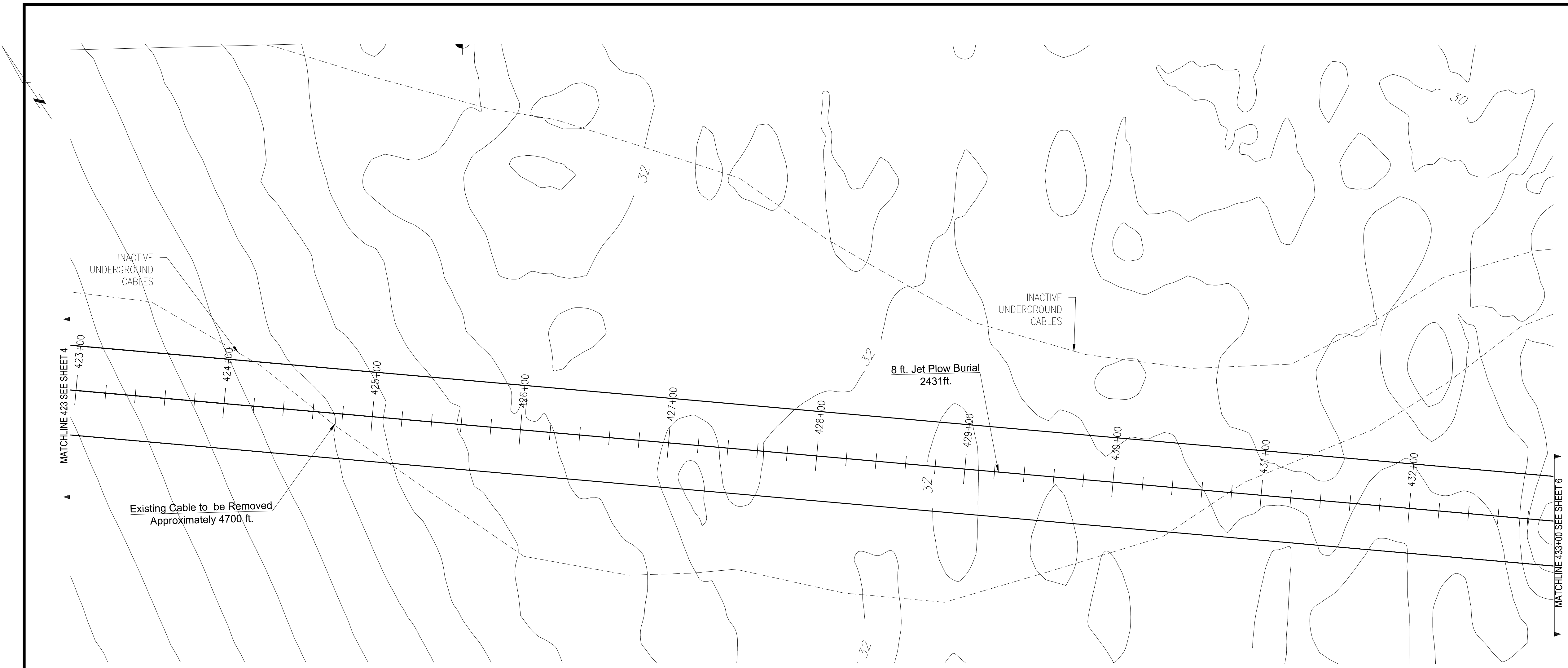
T 7

UNDERGROUND TRANSMISSION
PLAN & PROFILE
SEACOAST RELIABILITY PROJECT
SCALE: H: 1"=40', V: 1"=8'
DATE: 8/25/2015

TOWN: NEWINGTON, NH
TRANSMISSION LINE: F-107
MILE NO: 8
DISCIPLINE/SHT NO.

SHEET 4 OF 12

REVISION: 01/23/2014



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1	ISSUE FOR REVIEW	8-25-14	JRP	TSG	CS
0	ISSUE FOR REVIEW				

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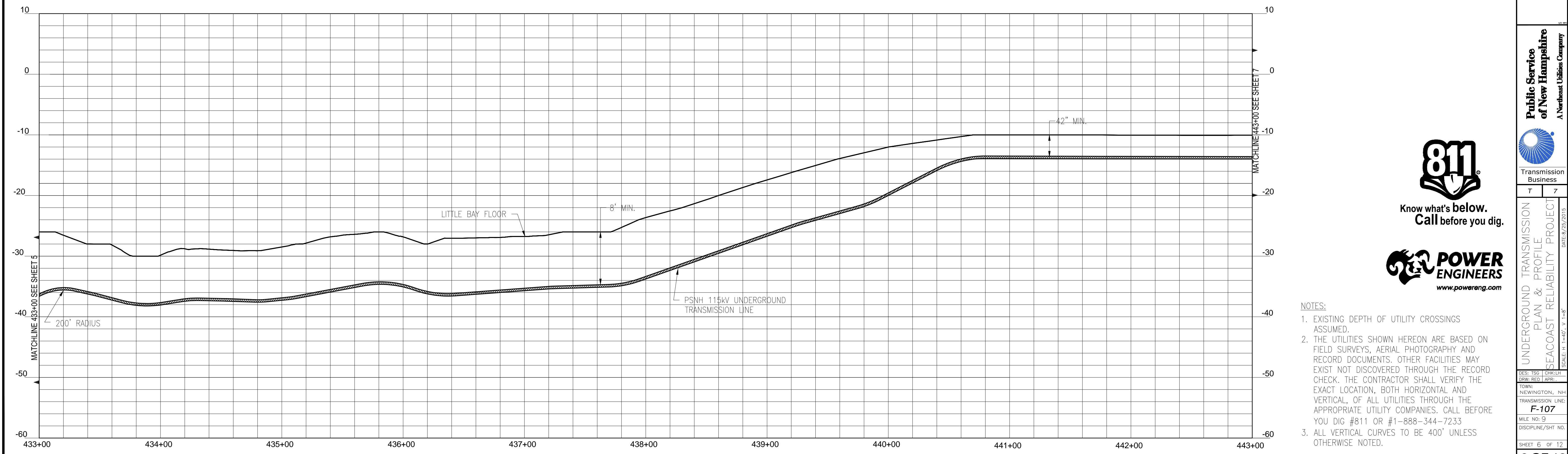
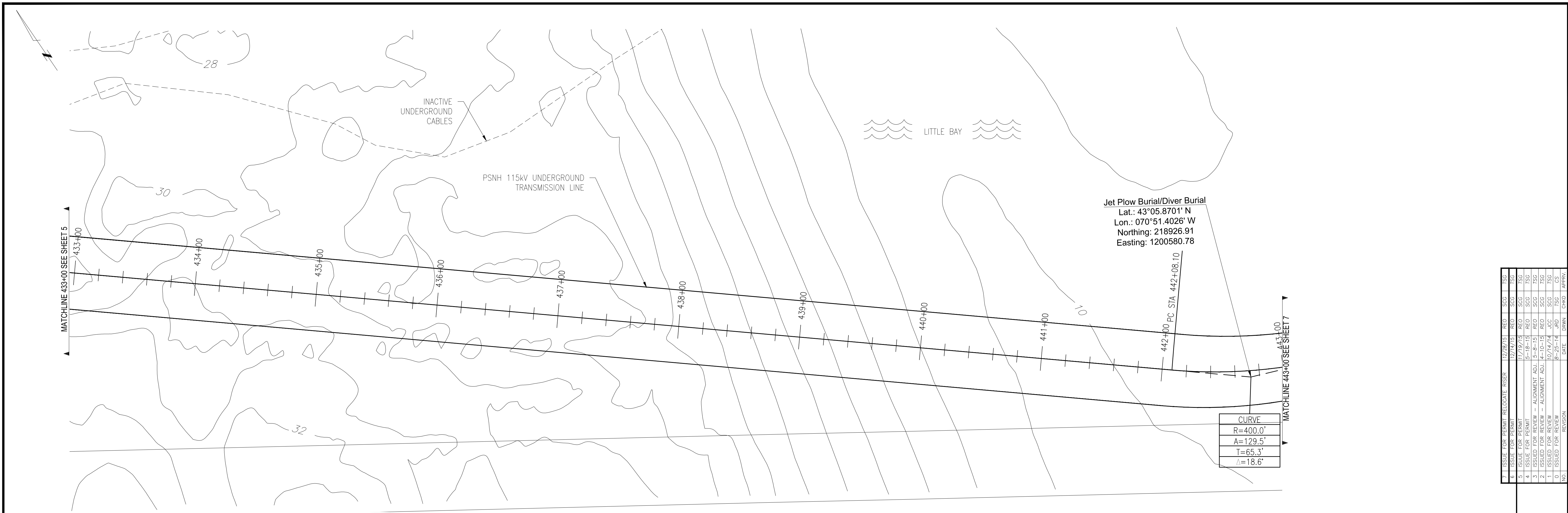
Transmission Business

UNDERGROUND TRANSMISSION PLAN & PROFILE
SEACOAST RELIABILITY PROJECT
SCALE: H: 1"=40', V: 1"=8'

TOWN: NEWINGTON, NH
TRANSMISSION LINE: F-107
MILE NO: 8
DISCIPLINE/SHT NO: SHEET 5 OF 12

DATE: 8/25/2015

REVISION: 01/23/2014



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0	ISSUED FOR REVIEW				

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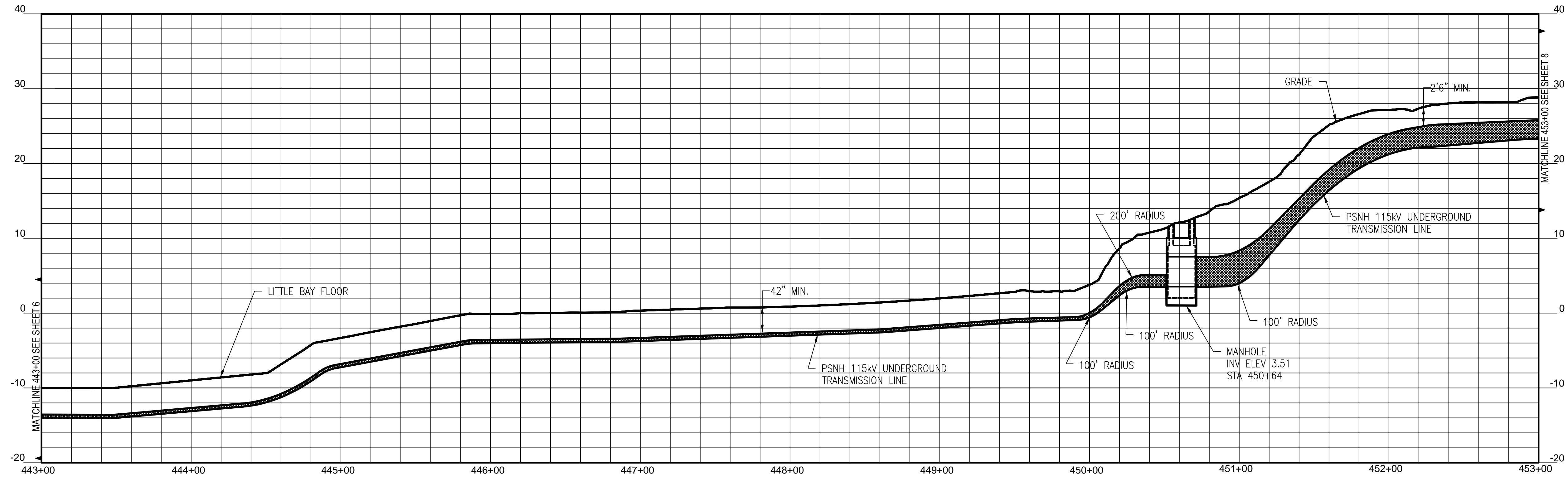
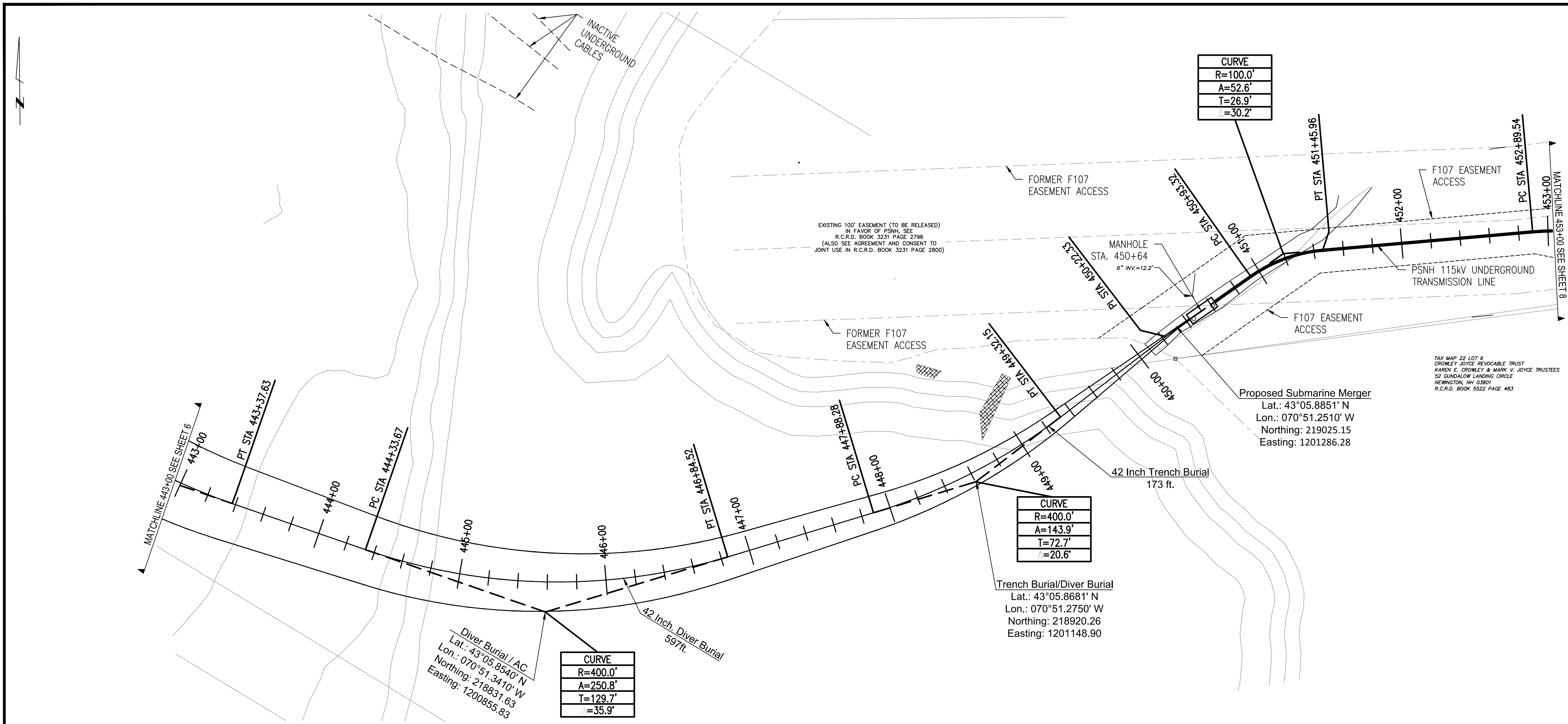
Transmission Business

UNDERGROUND TRANSMISSION PLAN & PROFILE
SEACOAST RELIABILITY PROJECT
SCALE: H. 1"=40', V. 1"=8'

DES: TSG
CHKD: TSG
DRW: REG
APR: TSG

TOWN: NEWINGTON, NH
TRANSMISSION LINE: F-107
MILE NO: 9
DISCIPLINE/SHT NO: SHEET 6 OF 12

6 OF 12
REVISION: 01/23/2014



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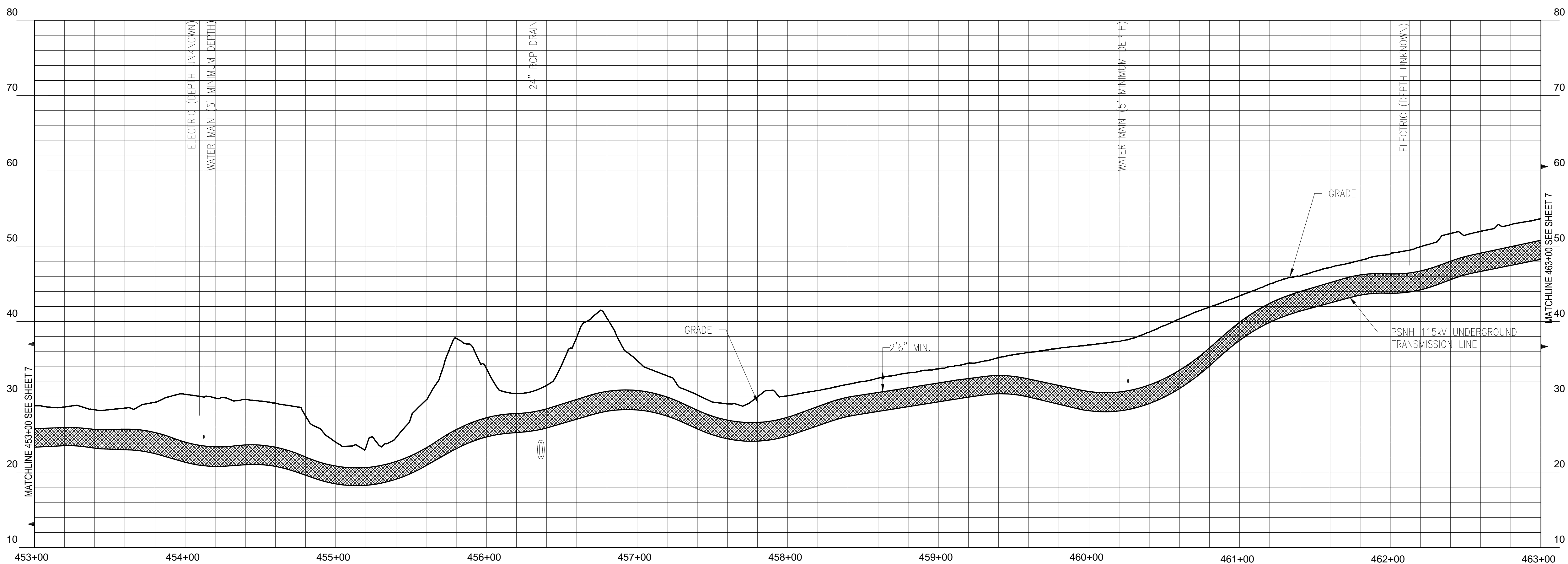
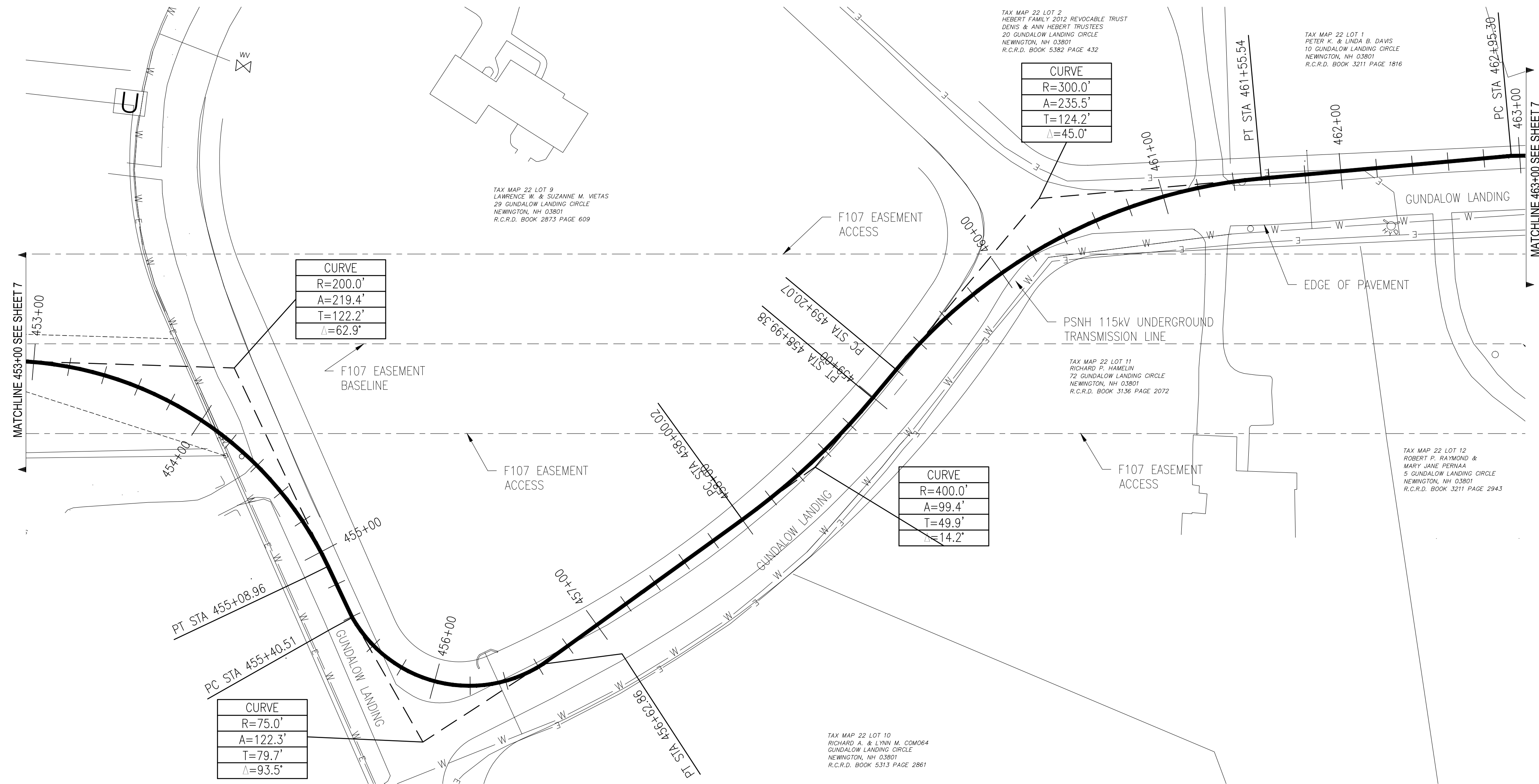
DATE: 8/25/2015

DES: TSC
CHKD: TSC
DRW: REG
APR: TSC

TOWN: NEWINGTON, NH
TRANSMISSION LINE: F-107
MILE NO: 9
DISCIPLINE/SHT NO.

SHEET 7 OF 12
7 OF 12

REVISION: 01/23/2014



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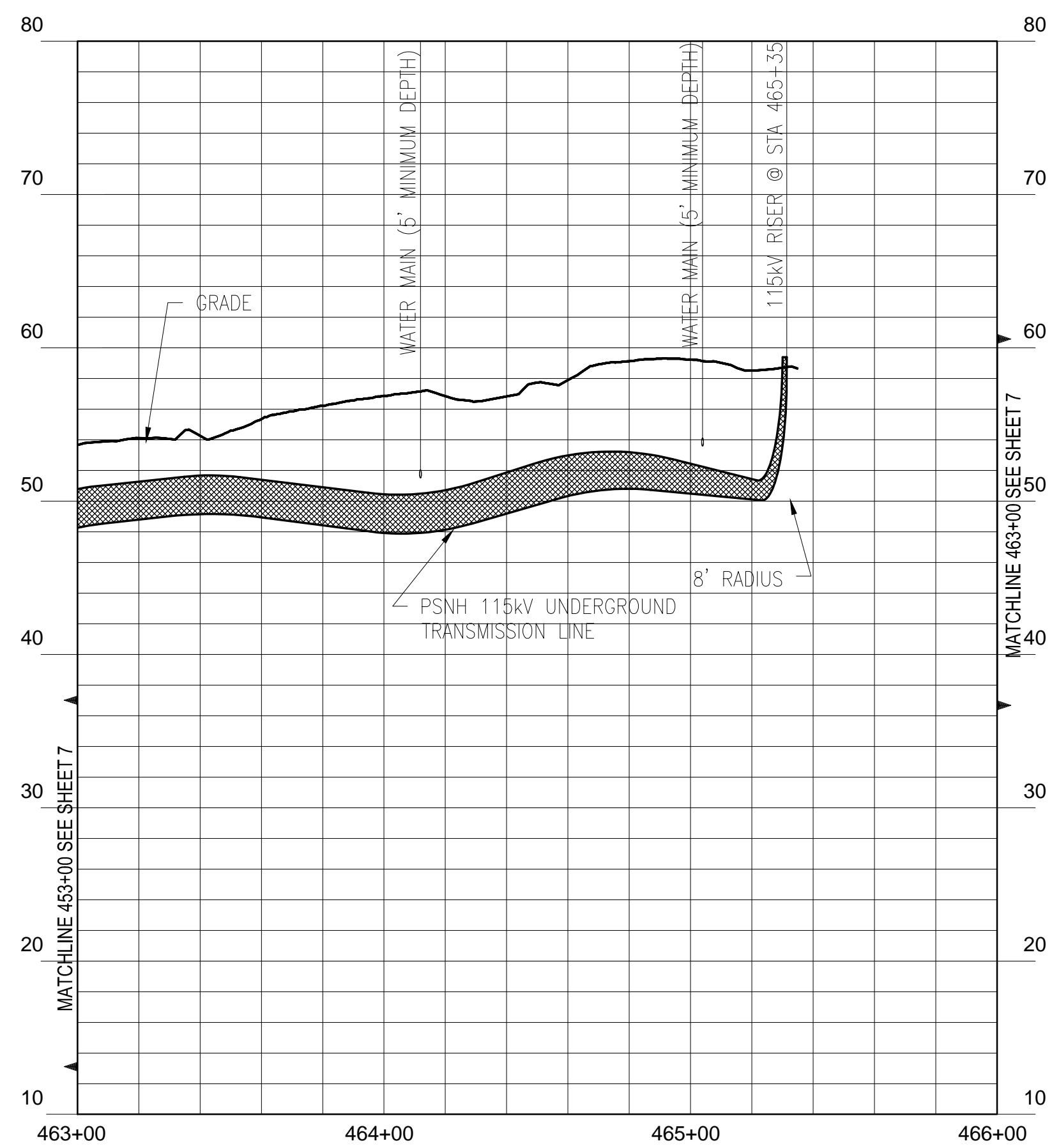
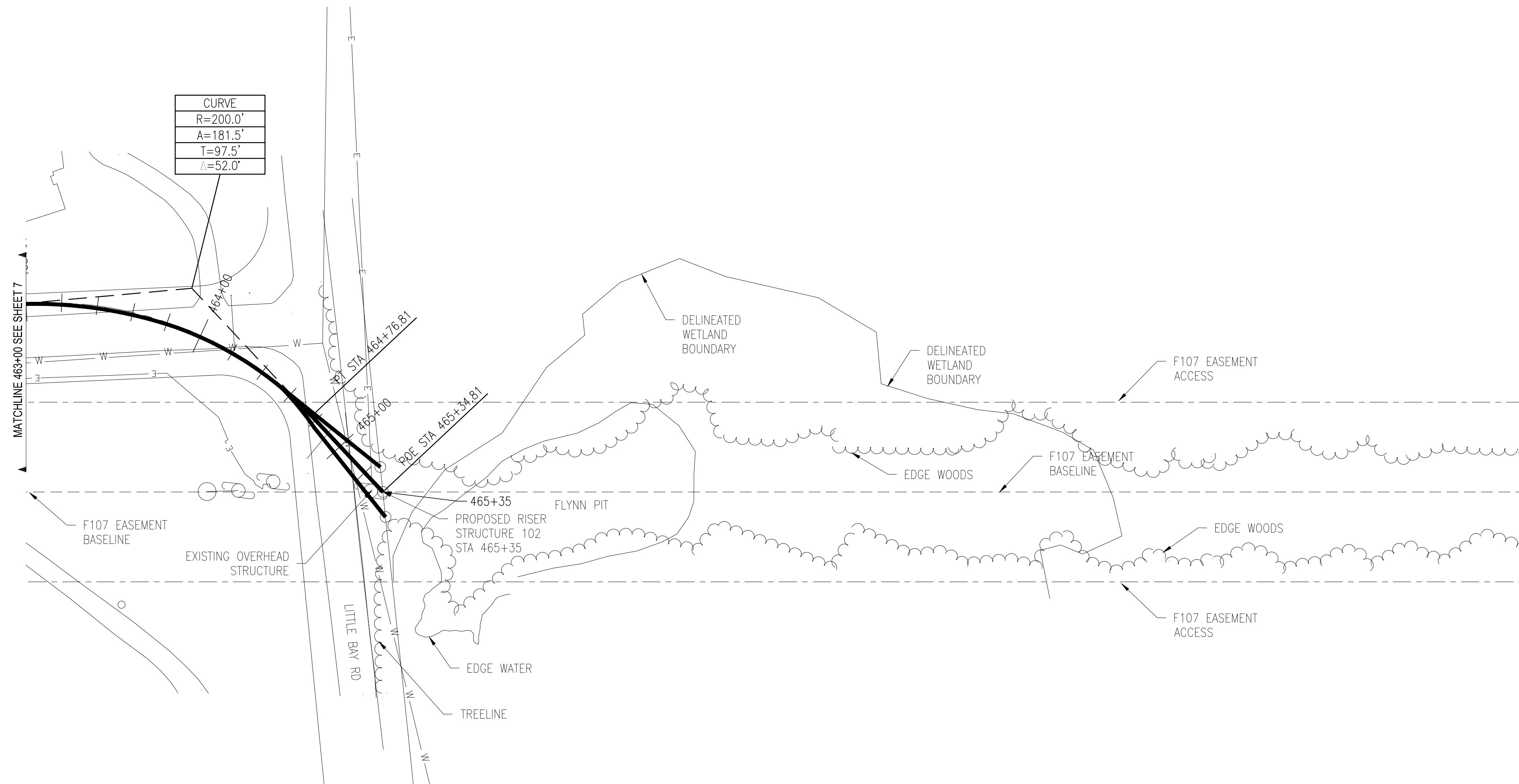
UNDERGROUND TRANSMISSION PLAN & PROFILE
SEACOAST RELIABILITY PROJECT
SCALE: H: 1"=40', V: 1"=8'

DES: TSG
CHKD: JRD
DRAW: REC
APR: APR

TOWN: NEWINGTON, NH
TRANSMISSION LINE: F-107
MILE NO: 9
DISCIPLINE/SHT NO: 8 OF 12

DATE: 8/25/2015

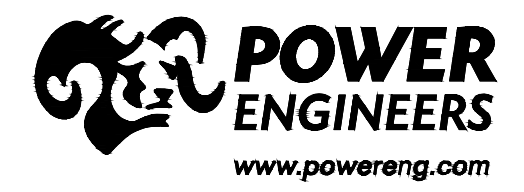
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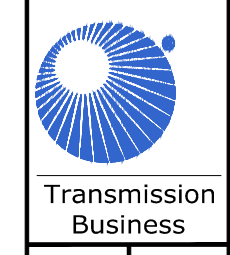


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UNDERGROUND TRANSMISSION
PLAN & PROFILE
SEACOAST RELIABILITY PROJECT
SCALE: H: 1"=40', V: 1"=8'
DATE: 8/25/2015

DES: TSG
CHKD: TSG
DRW: REC

TOWN: NEWINGTON, NH

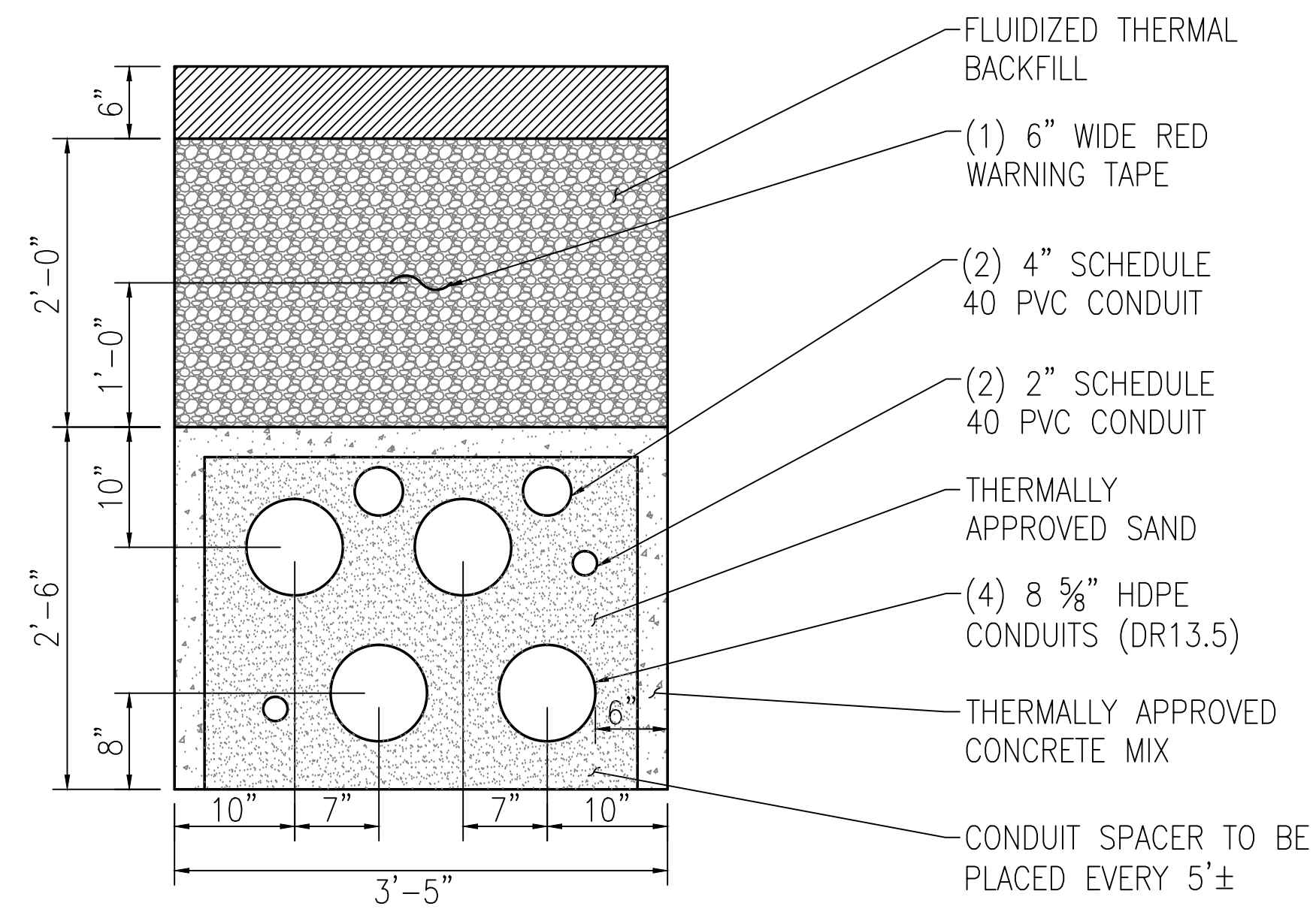
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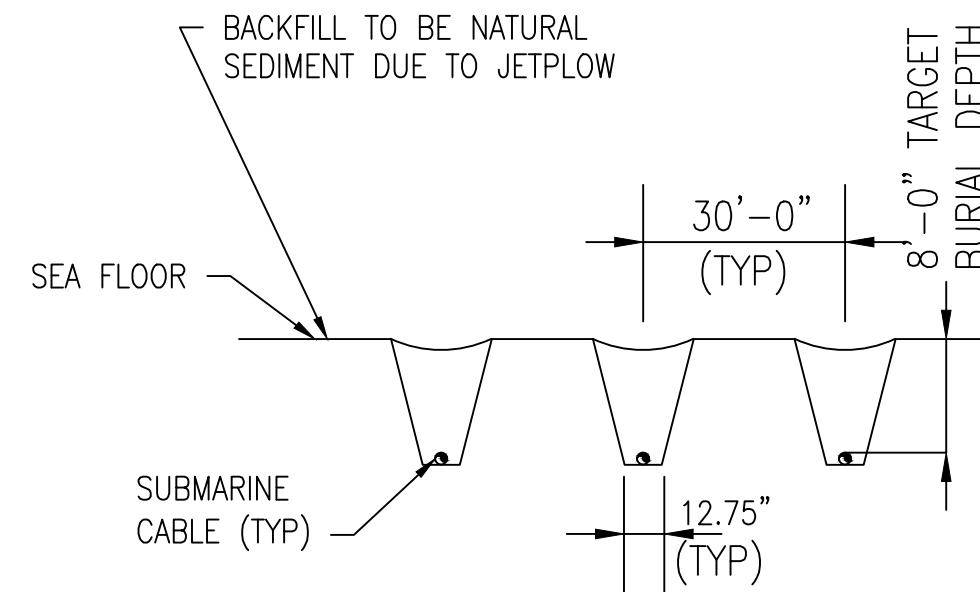
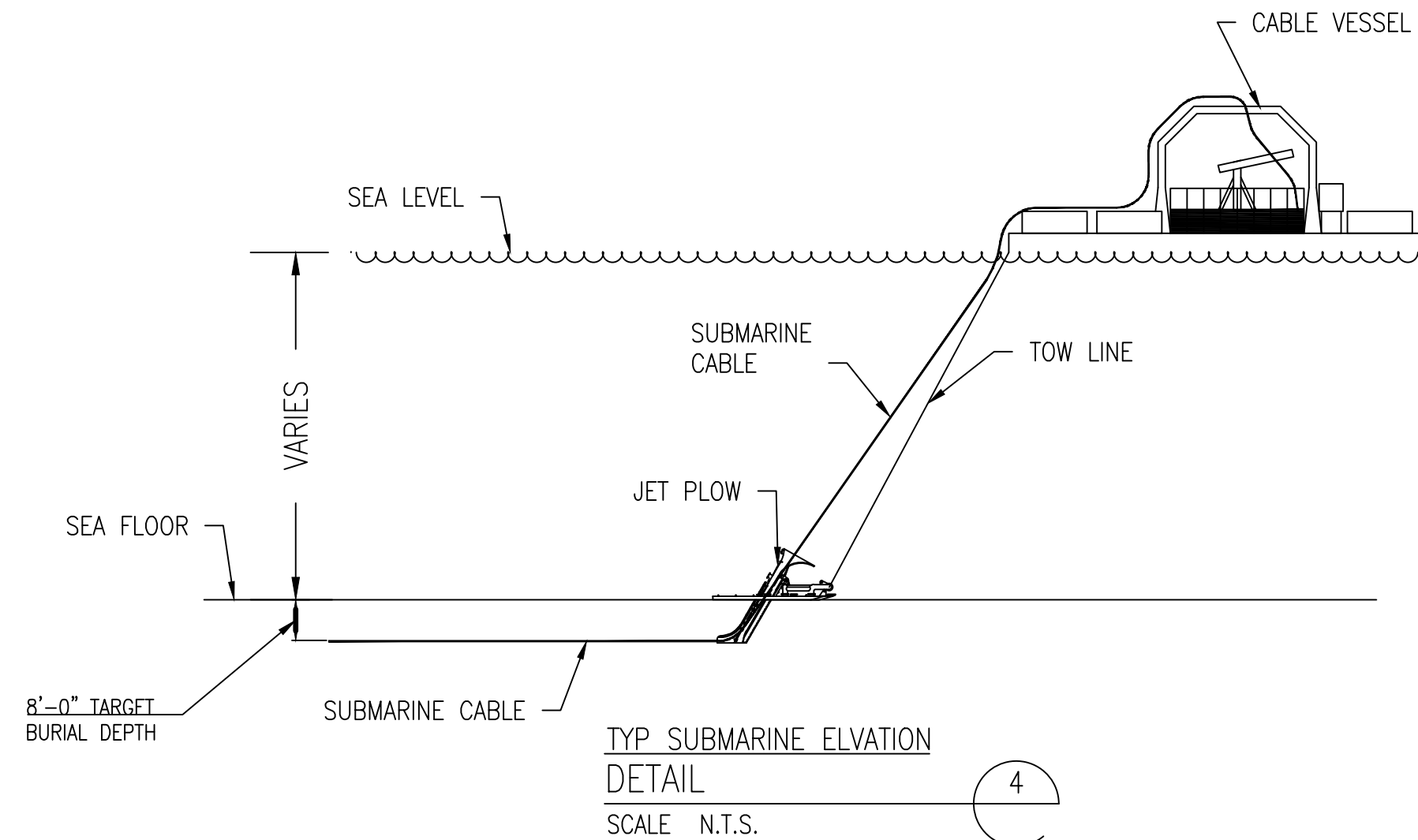
SHEET 8 OF 12

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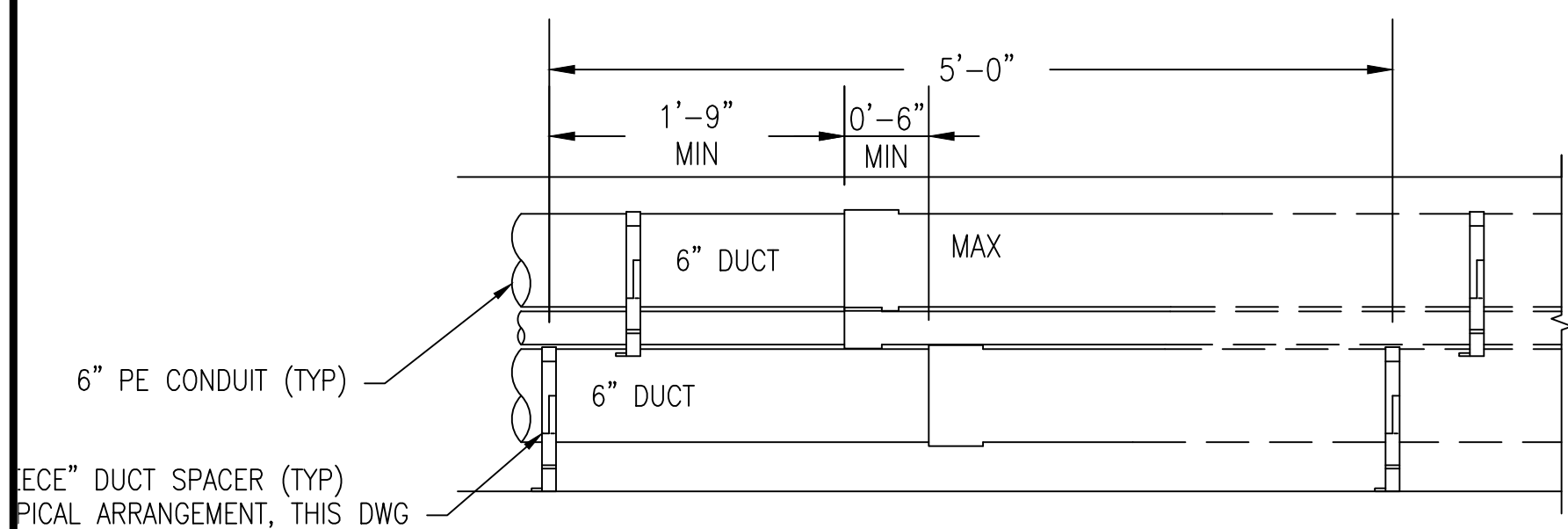
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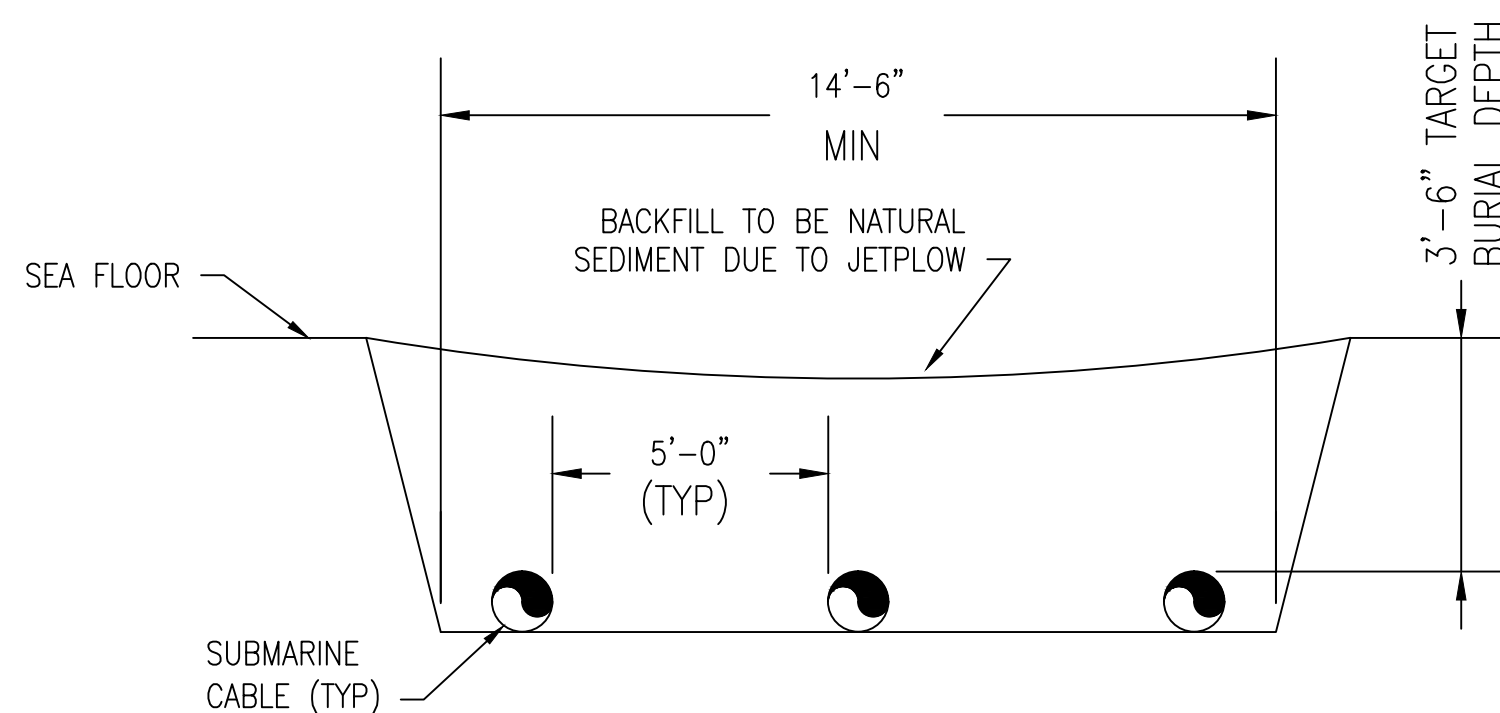
TYP TRENCH DETAIL
 SCALE N.T.S.



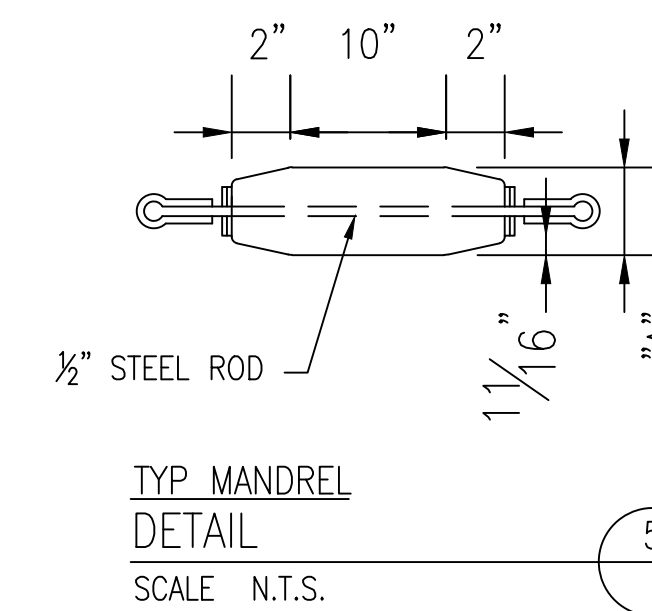
TYP SUBMARINE CROSS SECTION DETAIL
 SCALE N.T.S.



TYP DUCT ELEVATION DETAIL
 SCALE N.T.S.



WEST BANK SUBMARINE CROSS SECTION DETAIL
 SCALE N.T.S.



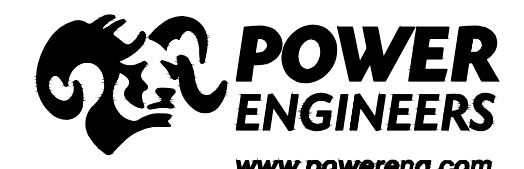
DIMENSION "A" TO BE 1/2" LESS THAN THE INSIDE DIAMETER OF THE SPECIFIED SIZE CONDUIT.

NO.	REVISION	DATE	DRWN	CHKD	APPRV
7	ISSUE FOR PERMIT RELOCATE RISER	12/28/15	REG	SCG	TSG
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0	ISSUED FOR REVIEW	8-25-14	REG	SMG	TSG

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NOTES:

- NOTES:
 1. STAGGER BELL ENDS.
 2. AVOID STANDING ON CONDUIT.
 3. BELL ENDS SHALL BE INSTALLED ALL IN THE SAME DIRECTION BETWEEN TERMINATIONS. (SEE PULL DIRECTION DETAIL.)
 4. ALL TRENCH DETAILS AND PHASING SHOWN AS LOOKING AHEAD STATIONS.
 5. ALL DUCT SPACERS ARE UNDERGROUND DEVICES "WUNPEECE" SPACERS, OR APPROVED EQUIVALENT.

DATE	NO.
7	7

UNDERGROUND TRANSMISSION PLAN & PROFILE
 SEACOAST RELIABILITY PROJECT
 SCALE: AS NOTED

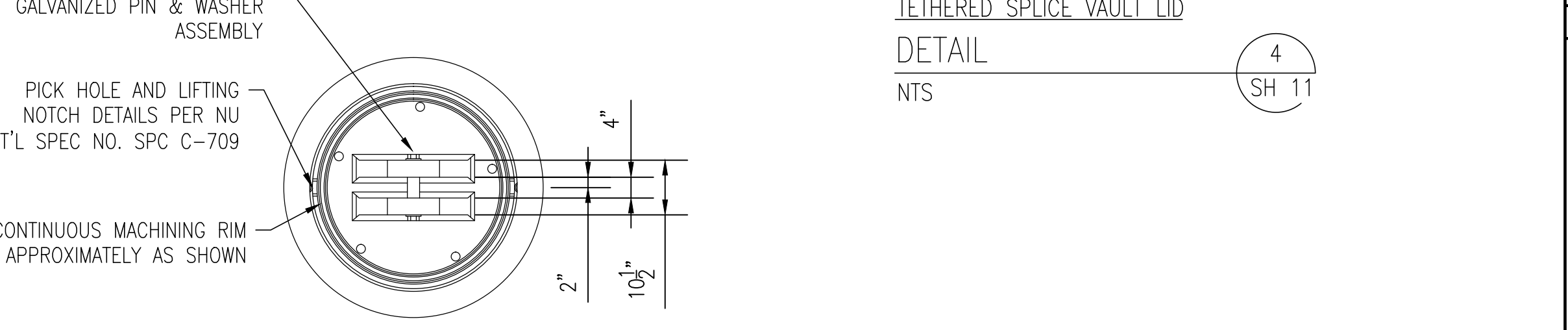
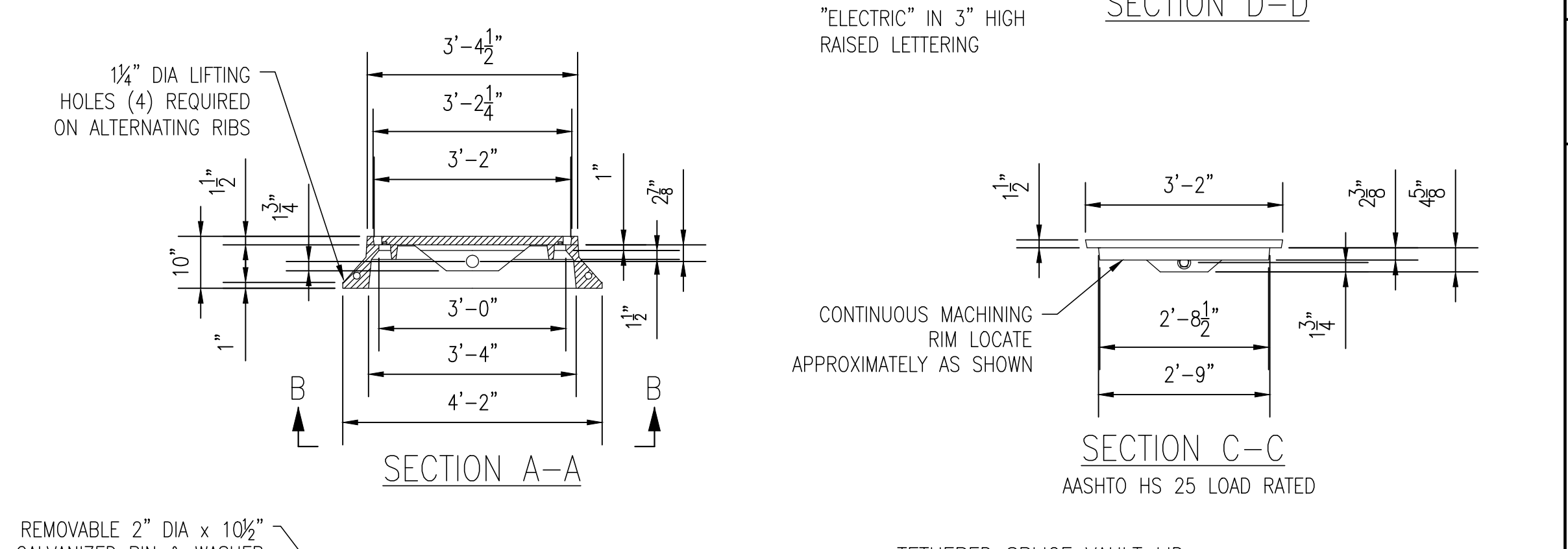
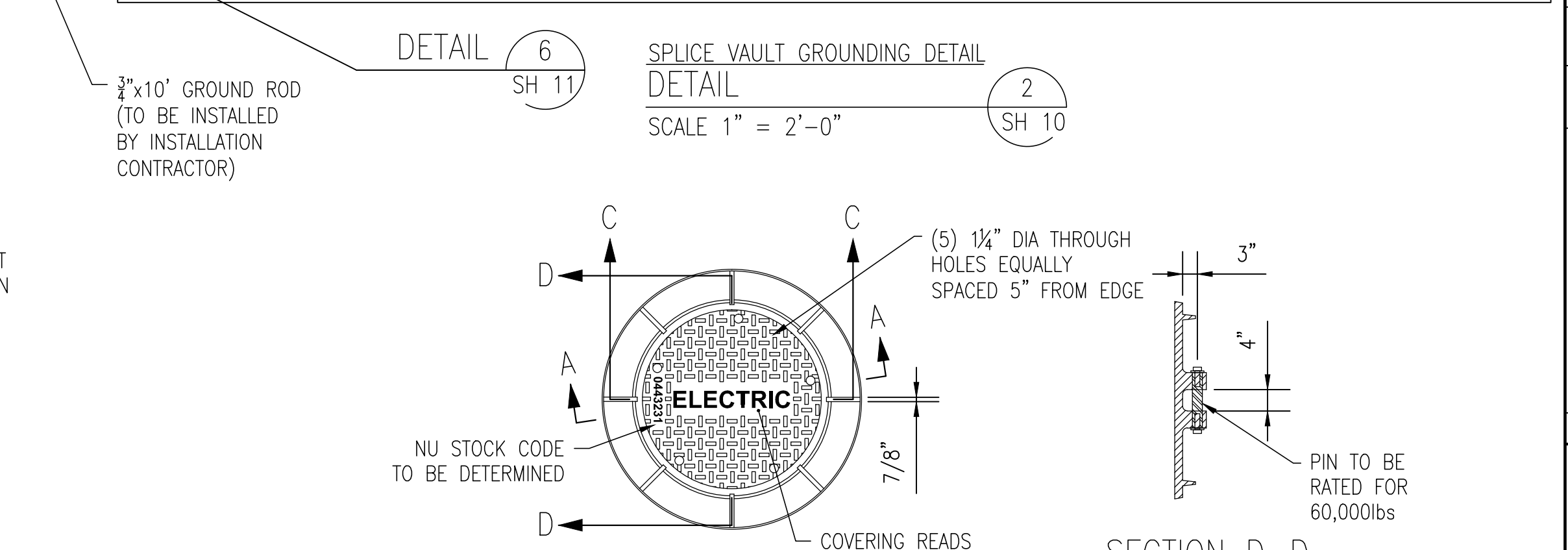
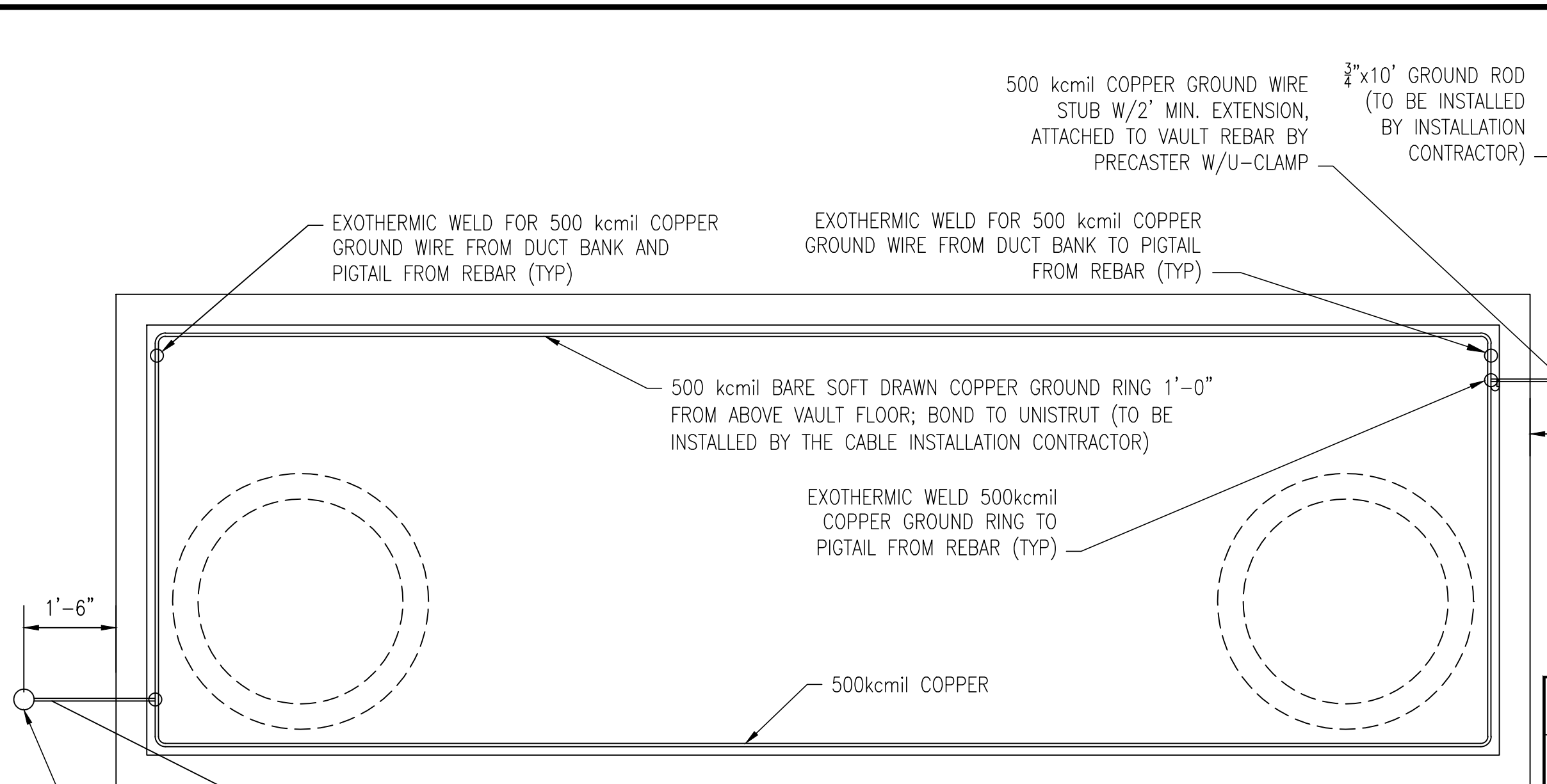
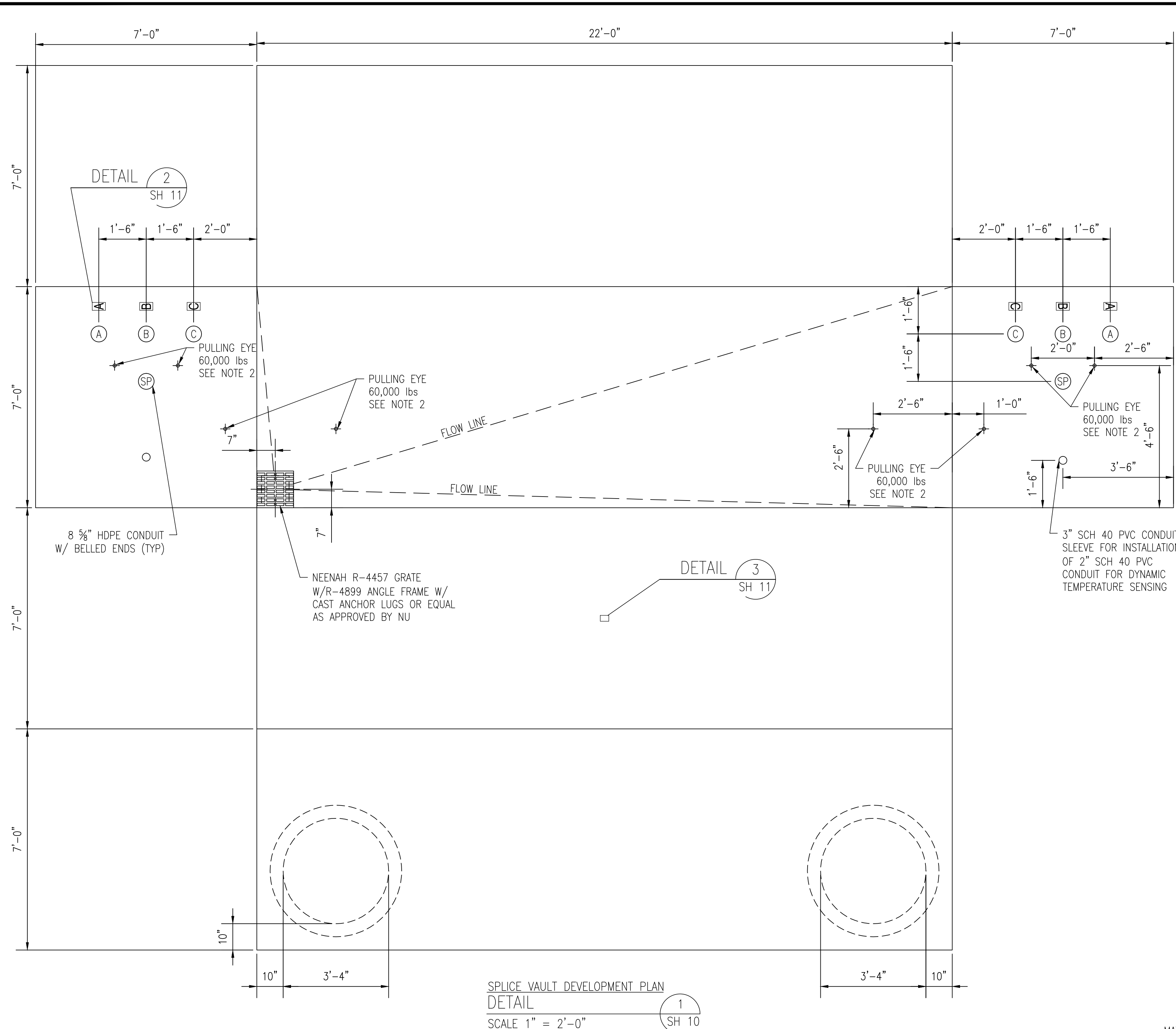
DES: TSG
 CHKD: TSG
 DRW: REG
 APR: TSG

TOWN: NEWINGTON, NH
 TRANSMISSION LINE: F-107

MILE NO:
 DISCIPLINE/SHT NO.

SHEET 10 OF 12
 DETAILS

REVISION: 01/23/2014



SPLICE VAULT DEVELOPMENT PLAN
DETAIL 1
SCALE 1" = 2'-0"
SH 10

SPLICE VAULT FRAME DETAIL
DETAIL 3
SCALE 1" = 2'-0"
SH 10

TETHERED SPLICE VAULT LID
DETAIL 4
SCALE: AS NOTED
SH 11

NOTES:

- ALL DIMENSIONS ARE INSIDE DIMENSIONS.
- PULLING HARDWARE SHALL BE GOOD FOR 60,000lbs OF TENSION, MINIMUM.
- SUMP SHALL BE CAPABLE OF HANDLING SUMP PUMP, MINIMUM 4" DEEP.
- CONDUITS MUST ALWAYS BE INSTALLED IN THE SAME DIRECTION (BELL END FLUSH WITH INTERIOR WALL OF VAULT).
- CABLE & ACCESSORIES CONTRACTOR TO FIELD VERIFY ACTUAL SPLICE VAULT DEPTHS. CONTRACTOR IS RESPONSIBLE FOR ALL SAFETY & ENTRY/EXIT REQUIREMENTS.
- ALL CHIMNEY RINGS SHALL BE MORTARED OR OTHERWISE "KEYED" TO PREVENT HORIZONTAL DISPLACEMENT AND SHALL BE SECURELY MORTARED TO SPLICE VAULT ROOF.
- MANHOLE RING SHALL BE SECURELY FASTENED TO THE SPLICE VAULT ROOF OR CHIMNEY USING INSERTS AND BOLTS OR OTHER MEANS WITH PRIOR APPROVAL.

- REINFORCING STEEL SHALL BE BONDED TO 500kcmil SOFT DRAWN BARE COPPER BONDING JUMPERS.
- MULTISECTION SPLICE VAULTS SHALL INCORPORATE EITHER SHIPLAP OR TONGUE AND GROOVE JOINTS UTILIZING APPROPRIATE SILICONE, POLYMERIC OR ELASTOMERIC SEALANTS.
- ALL UNISTRUT TO BE GROUNDED BY CONTRACTOR.
- ALL EXTERNAL SURFACES OF VAULT SHALL BE SEALED USING SONNEDORN HYDROCID 700 OR OWNER APPROVED EQUIVALENT.
- NO STEEL REINFORCING BAR MAY ENCAPSULATE ANY INDIVIDUAL CONDUIT.
- INSTALL CIRCUIT IDENTIFICATION LABELS ON VAULT WALL AND INSTALL DANGER WARNING SIGN IN CHIMNEY.
- CONTRACTOR SHALL PROVIDE RACKING FOR 50' OF DYNAMIC TEMPERATURE SENSING CABLE TO BE COILED ON THE WALL OPPOSITE THE CABLE SPLICES.

NO.	REVISION	DATE	CHG	APPRV.	ISSUE FOR PERMIT	ISSUE FOR PERMIT	ISSUE FOR PERMIT	ISSUE FOR PERMIT	ISSUE FOR PERMIT	ISSUE FOR PERMIT
1	1-19-14	REO	SGC	TSG						
2	5-18-15	REO	SMG	TSG						
3	5-8-15	ADJ.	SMG	TSG						
4	10-17-15	REO	SMG	TSG						
5	10-29-14	ADJ.	SMG	TSG						
6	12-28-14	ADJ.	SMG	TSG						
7	12-14-15	REO	SMG	TSG						

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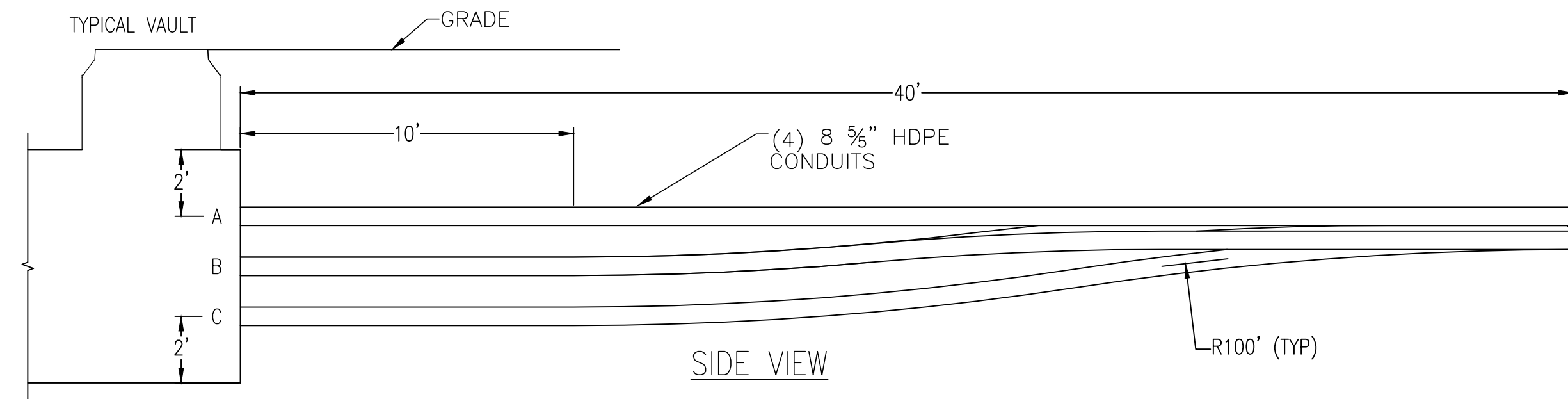
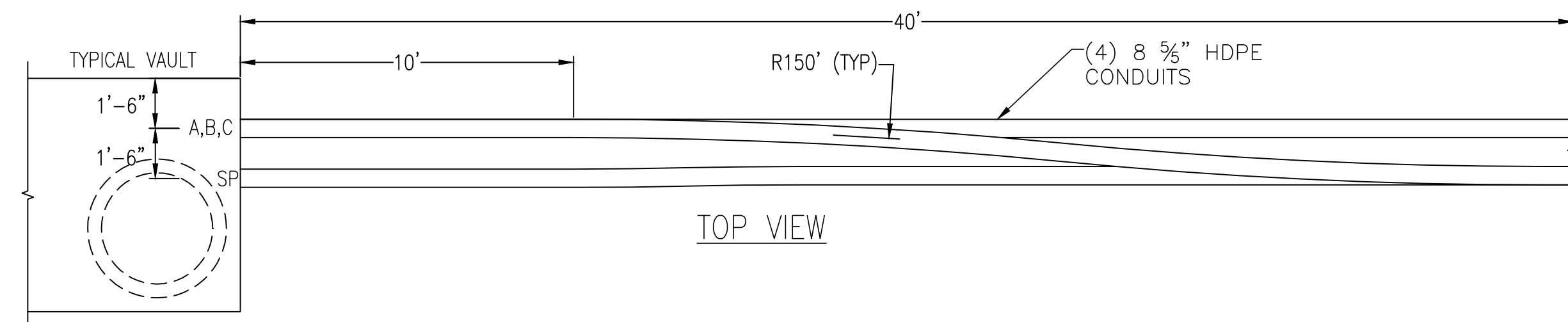
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UNDERGROUND TRANSMISSION PLAN & PROFILE
SEACOAST RELIABILITY PROJECT
SCALE: AS NOTED

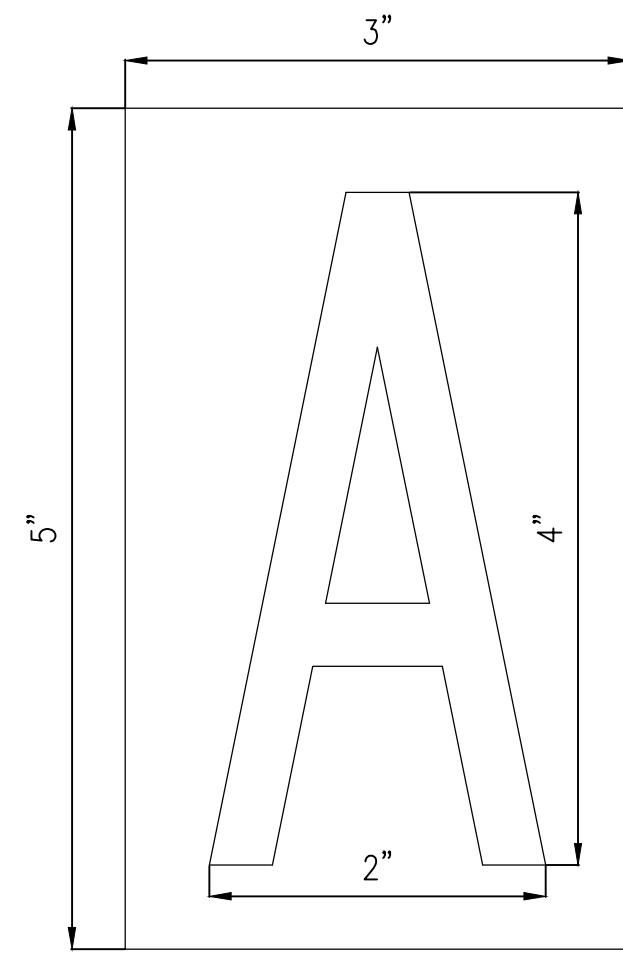
TOWN: NEWINGTON, NH
TRANSMISSION LINE: F-107
MILE NO.:
DISCIPLINE/SH. NO.:
SHEET 11 OF 12
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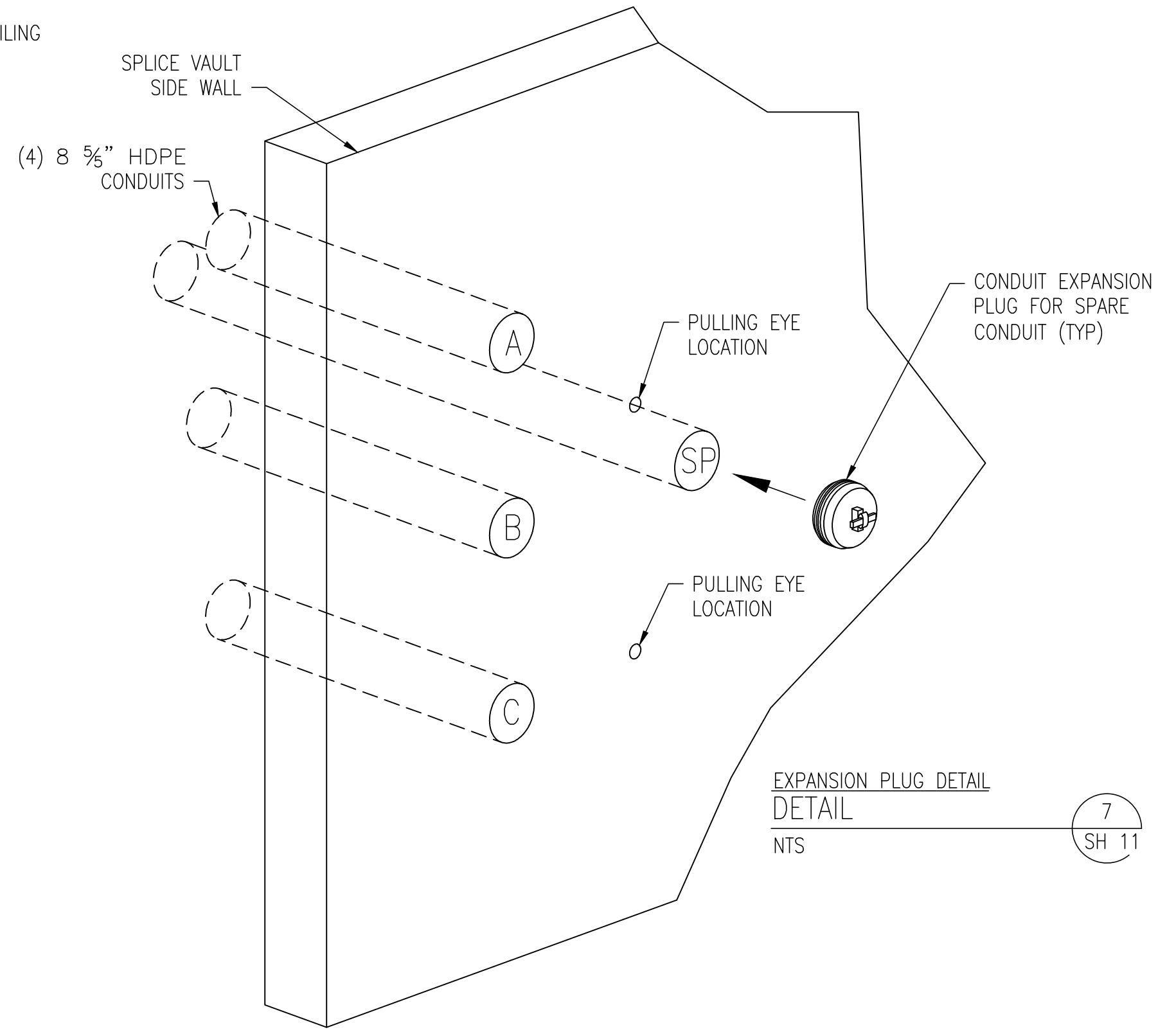
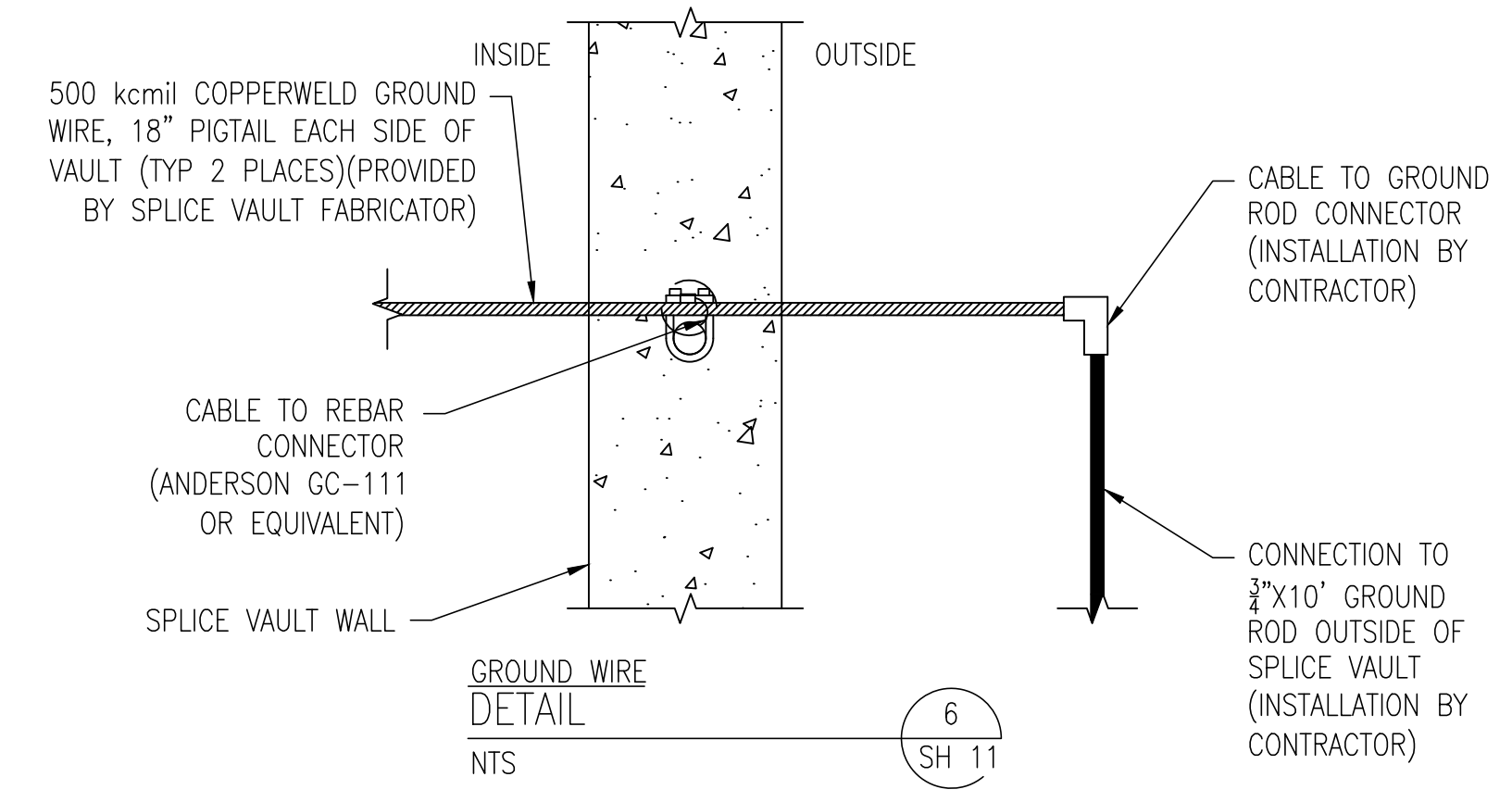
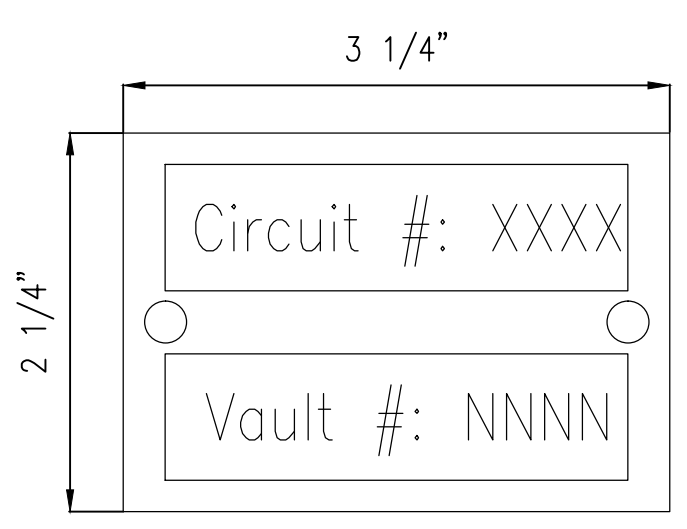
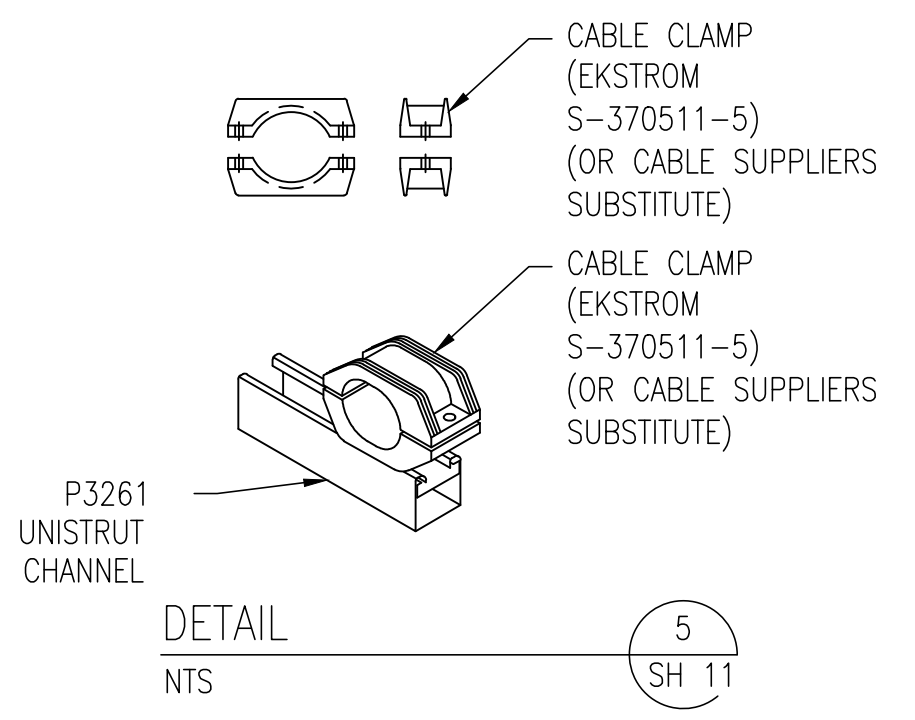
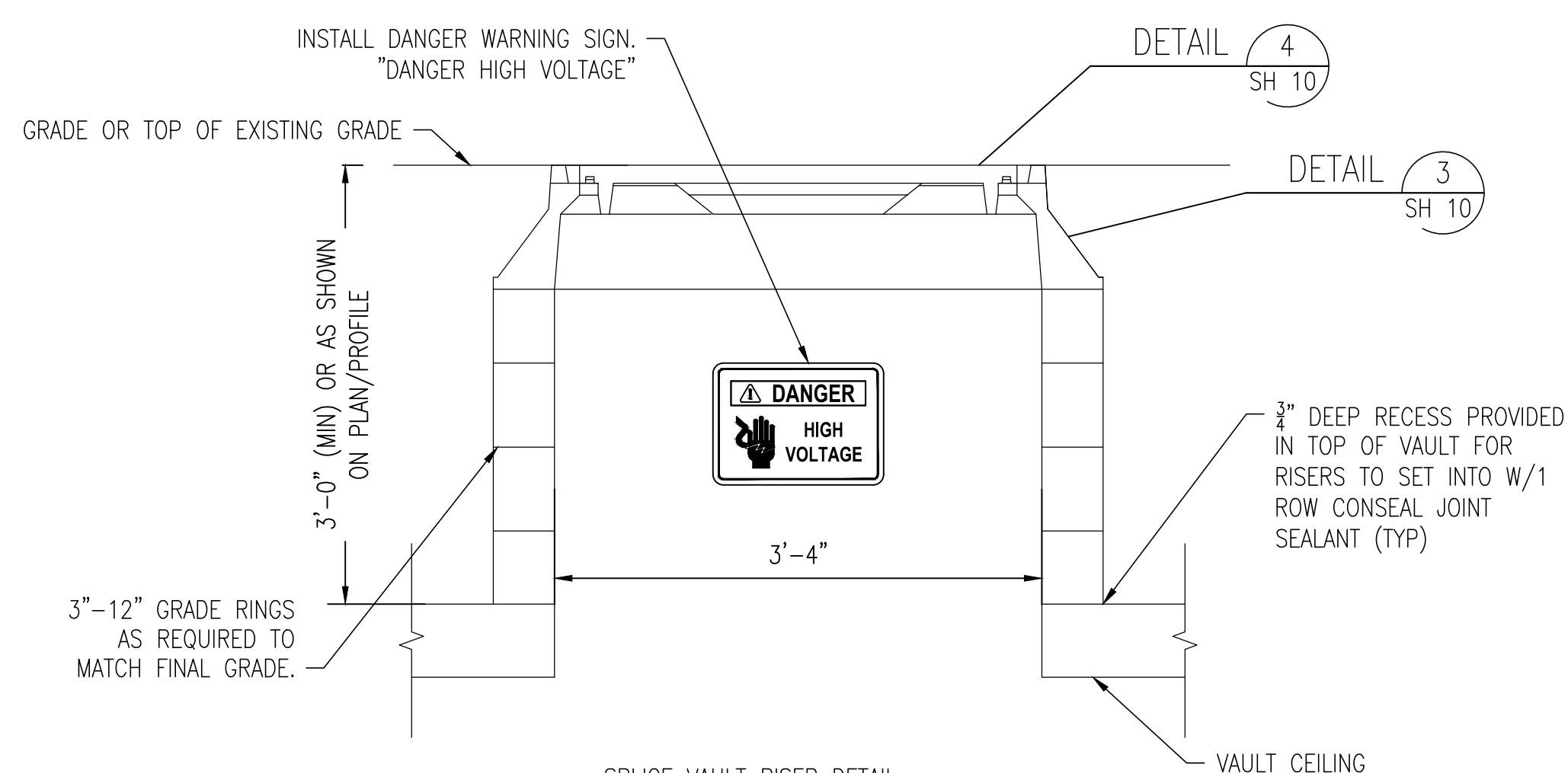
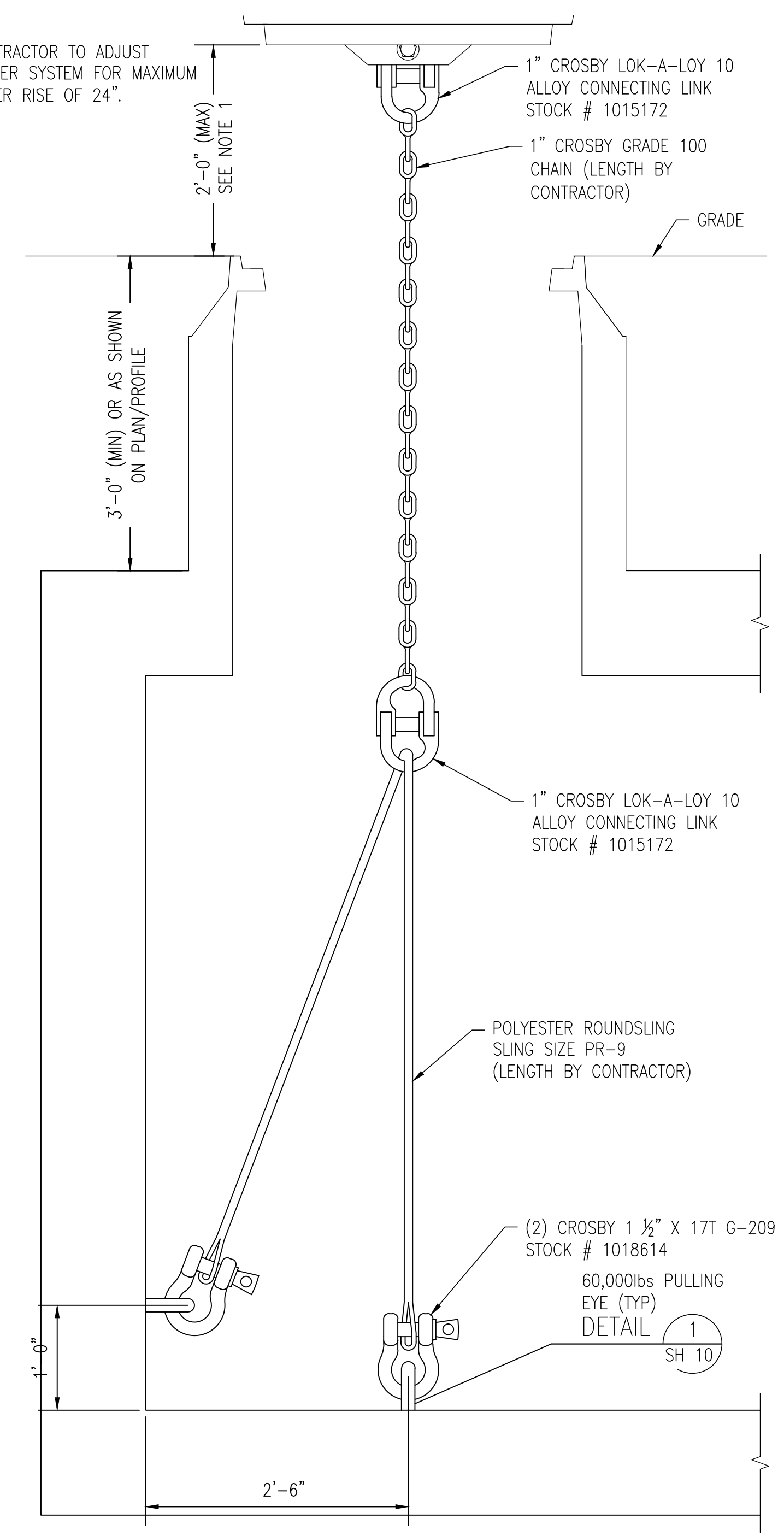


SPLICE VAULT TRANSITION DETAIL
DETAIL
NTS
1
SH 11



- NOTES
- CHARACTER SHALL BE 4" HIGH BOLD TYPE.
 - CHARACTER SHALL BE CENTERED ON SIGN.
 - BACKGROUND: WHITE
LETTERING: BLACK
CHARACTERS: A, B & C AS SHOWN

- NOTE:
- CONTRACTOR TO ADJUST TETHER SYSTEM FOR MAXIMUM COVER RISE OF 24".



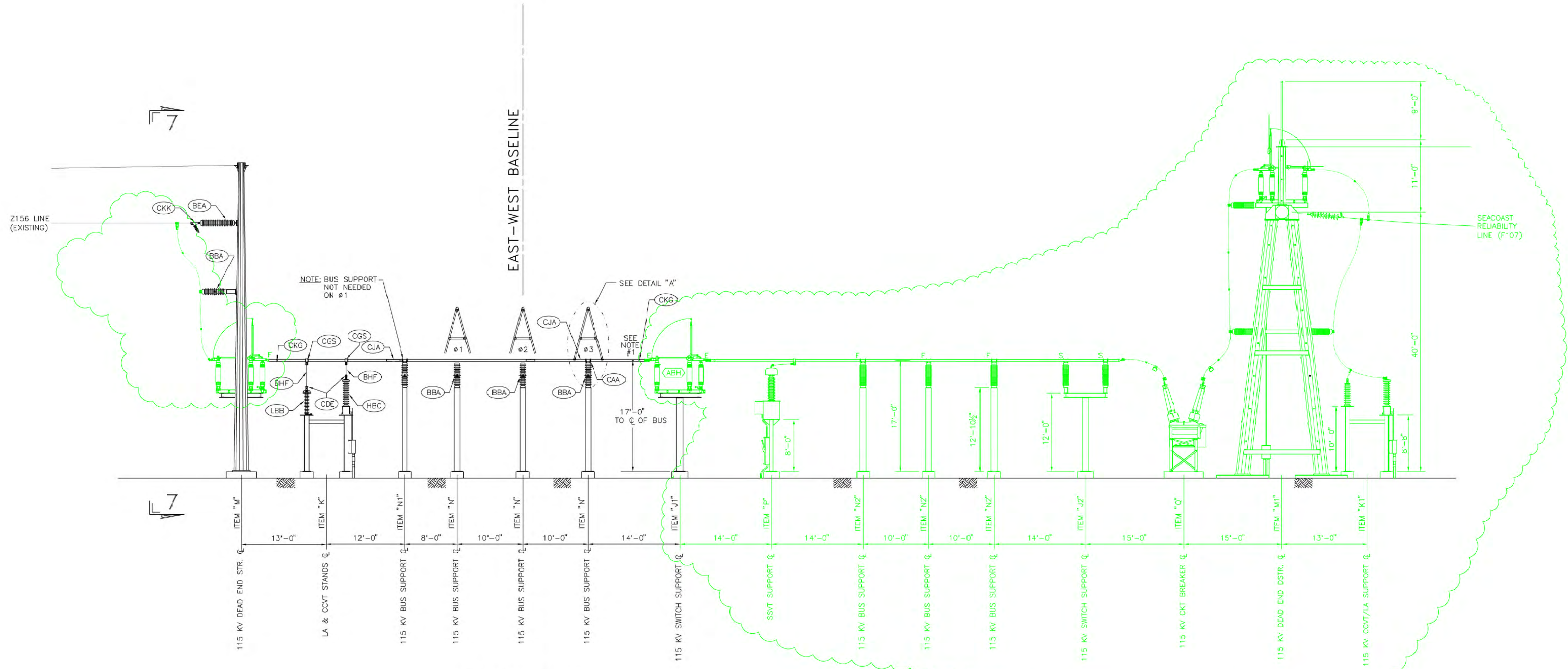
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3	ISSUE FOR REVIEW - ALIGNMENT ADJ.	5-8-15	RED	SMG	TSG
2	ISSUE FOR REVIEW - ALIGNMENT ADJ.	10/14/14	RED	SMG	TSG
1	ISSUE FOR REVIEW	10/14/14	RED	SMG	TSG
0	ISSUE FOR REVIEW	8-25-14	JED	TSG	CS

Public Service of New Hampshire
Transmission Business

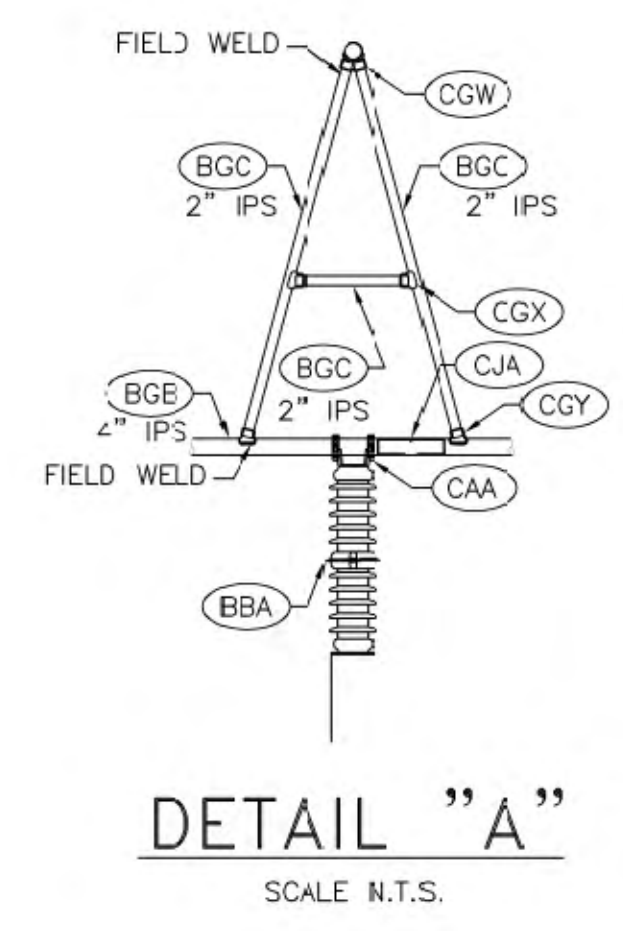
UNDERGROUND TRANSMISSION PLAN & PROFILE
SEACOAST RELIABILITY PROJECT
DATE: 8/25/2015
SCALE: AS NOTED
TOWN: NEWINGTON, NH
TRANSMISSION LINE: F-107
MILE NO.:
DISCIPLINE/SHT NO.:
SHEET 12 OF 12
DETAILS

811
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SECTION 1-1
SCALE 1/8" = 1'-0"



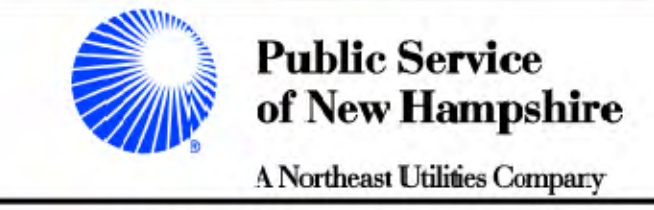
NOTES:
1.) 477 KCMIL DAMPING CONDUCTOR TO BE INSTALLED IN MAIN 4" IPS BUS RUN.

LEGEND:
<XXX> 2014 CONSTRUCTION, WO# T1276C-DWG# 062516002



ADDITIONS

CONTRACT SERVICES		DRAWN FOR REVISION R8464				T 2	
0 ISSUED FOR PERMITTING		4/2015	LEIDOS	SAH	NAL	DRAWN MDL	
1 AS BUILT		12/05	MAR	RGF	RSP	ENGINEER RGP	
2 CORRECT BUS SUPPORT LAYOUT		5/06	MAR	RGF	RSP	CHECKED RGP	
1 EPN/DESCRIPTION		CONT/PE#	DATE	DRN	CHKD	APPR	APPROVED RGP
FILE: 062514002.DWG		SCALE: 1/8" = 1'-0"		DRAWING NO. 062514002		DATE 11/02	



GENERAL ARRANGEMENT
SECTION 1-1
PORTSMOUTH 115/34.5 KV S/S
PORTSMOUTH, NH