

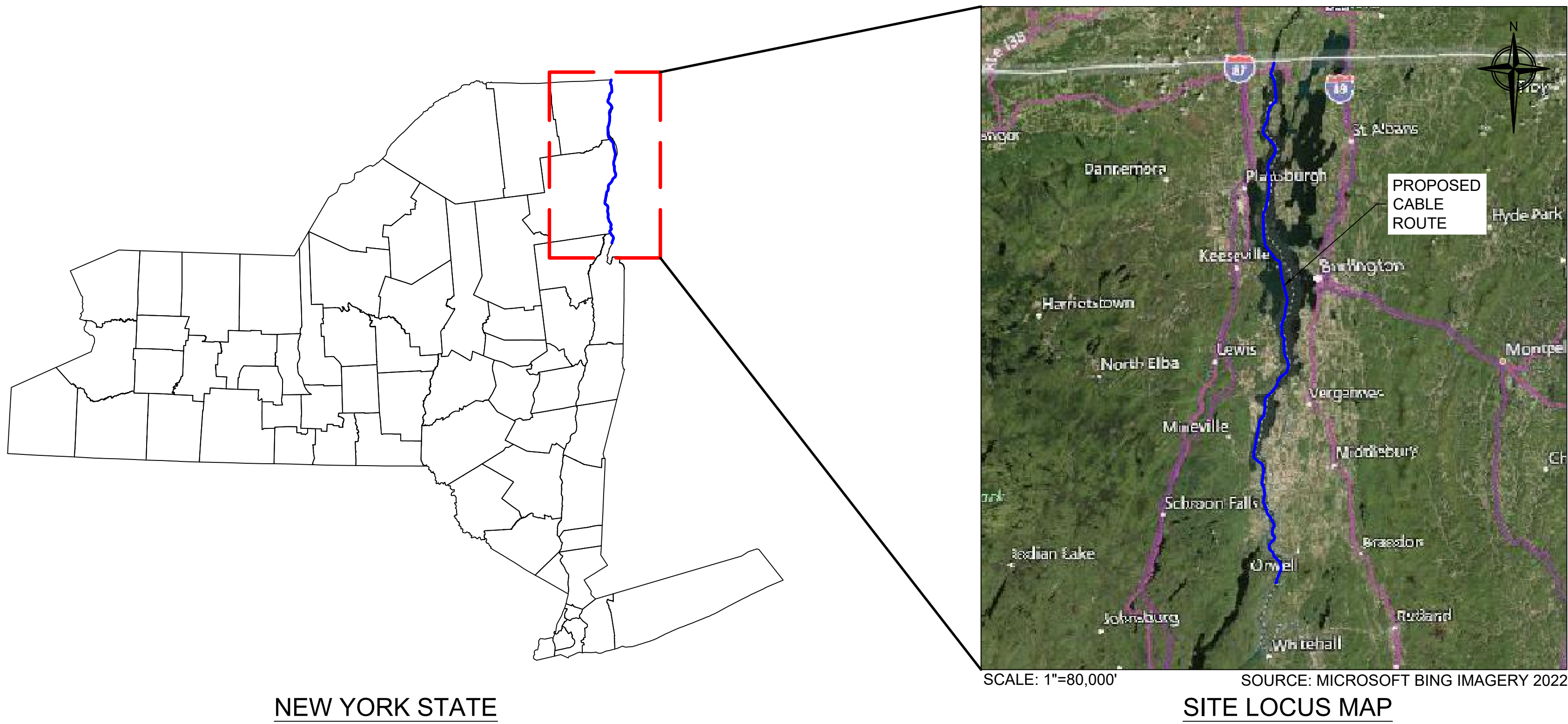


Appendix A: Pre-lay Mattress Location Drawings

CHPE - LAKE CHAMPLAIN PRE-LAY MATTRESSING DRAWINGS
EM&CP SEGMENT 18A

PREPARED FOR:
CALDWELL MARINE INTERNATIONAL
1333 CAMPUS PARKWAY
WALL, NEW JERSEY 07753

APRIL 4, 2023
REVISED JULY 6, 2023



PREPARED BY:



FIRM REGISTRATION NO.:
NY 0010187

DRAWING INDEX

DRAWING NUMBER	Sheet Number	Sheet Title
-	1	COVER
N-1	2	NOTES & TYPICAL DETAILS
SO-1	3	SITE OVERVIEW
SO-2	4	CO-LOCATED INFRASTRUCTURE SUMMARY TABLE
C-1	5	LC-08, 08A, 09A, 09B, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19
C-2	6	LC- 34, 35, 36, 36A

FOR PERMITTING ONLY

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REFERENCE NOTES

1. LAKE CHAMPLAIN BASE PLAN AND BATHYMETRIC DATA PREPARED BY OCEAN SURVEYS INC. AND PROVIDED BY CALDWELL MARINE IN FEBRUARY 2023.
2. CHARTED UTILITIES MAPPED BY OCEAN SURVEYS AND INCLUDED IN ABOVE REFERENCED BASE PLAN. CHARTED UTILITY LOCATIONS SHOWN IN GRAY WITH ITALICIZED TEXT.
3. UTILITY CROSSING LOCATION INFORMATION PROVIDED BY THE CERTIFICATE HOLDERS IN MARCH AND JUNE 2023.

COORDINATE SYSTEM NOTES:

1. HORIZONTAL: UTM WITH NAD83 DATUM, ZONE 18, U.S. SURVEY FOOT (UTM83-18F).
2. VERTICAL: NAVD88.

INSTALLATION NOTES:

1. REFER TO SECTION 11.2 OF THE PROCEDURAL DOCUMENT, CHAMPLAIN HUDSON POWER EXPRESS, SHALLOW MATTRESS PLACEMENT (<150FT WATERDEPTH), (LAKE CHAMPLAIN SEGMENT), DATED JANUARY 30, 2023, PREPARED BY CALDWELL MARINE INTERNATIONAL, LLC, APPENDIX F OF THE EM&CP, FOR ADDITIONAL PRE-LAY MATTRESSING INSTALLATION DETAILS.
2. FOR UTILITY CROSSINGS IN WATER DEPTHS GREATER THAN (>) OR EQUAL TO (=) 150', PROPOSED USE OF POLY-SHELL CLADDING (URADUCT PRODUCT OR SIMILAR) SHALL BE INSTALLED ON PROPOSED SUBMARINE CABLE DURING SUBMARINE CABLE INSTALLATION OVER THE EXISTING UTILITY CROSSING LOCATION(S). REFER TO SECTION 11.2 OF THE PROCEDURAL DOCUMENT, CHAMPLAIN HUDSON POWER EXPRESS, SHALLOW MATTRESS PLACEMENT (<150FT WATERDEPTH), (LAKE CHAMPLAIN SEGMENT), DATED JANUARY 30, 2023, PREPARED BY CALDWELL MARINE INTERNATIONAL, LLC, APPENDIX F, NOTE:2-BULLET 2 OF THE EM&CP.

DOCUMENT USE:

1. THESE PLANS AND THE CORRESPONDING CAD DOCUMENTS ARE INSTRUMENTS OF PROFESSIONAL SERVICE PREPARED BY TRC ENGINEERS, INC., AND SHALL NOT BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN FOR WHICH IT WAS CREATED WITHOUT THE EXPRESSED WRITTEN CONSENT OF TRC ENGINEERS, INC. ANY UNAUTHORIZED USE, REUSE, MODIFICATION, OR ALTERATION, INCLUDING AUTOMATED CONVERSION OF THIS DOCUMENT, SHALL BE AT THE USER'S SOLE RISK WITHOUT LIABILITY OR LEGAL EXPOSURE TO TRC ENGINEERS, INC.
2. CONTRACTOR SHALL NOT RELY SOLELY ON ELECTRONIC VERSIONS OF PLANS, SPECIFICATIONS, OR DATA FILES THAT ARE OBTAINED FROM THE DESIGNERS OR OWNER, BUT SHALL VERIFY LOCATIONS OF PROJECT FEATURES IN ACCORDANCE WITH THE PAPER COPIES OF THE PLANS AND SPECIFICATIONS THAT ARE SUPPLIED AS PART OF THE CONTRACT DOCUMENTS.
3. SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS, AND ARE NOT NECESSARILY SCALED TO THEIR ACTUAL DIMENSIONS OR LOCATIONS ON THE DRAWINGS. THE CONTRACTOR SHALL REFER TO THE DETAIL SHEET DIMENSIONS, MANUFACTURER'S LITERATURE, SHOP DRAWINGS, AND FIELD MEASUREMENTS OF SUPPLIED PRODUCTS FOR LAYOUT OF THE PROJECT FEATURES.

GENERAL NOTES:

1. CROSSING DESIGNS DEPICTED IN THESE PLANS MAY CHANGE IN RESPONSE TO OWNER-SPECIFIC REQUIREMENTS IDENTIFIED DURING ANY ONGOING NEGOTIATIONS. IF NECESSARY, A CHANGE NOTICE WILL BE SUBMITTED AS NEEDED TO UPDATE THE PLANS.

LEGEND

2530+00

48

STATIONING (FEET)

PROPOSED CABLE ROUTE

MILE POSTS (STATUTE MILE)

SUBMARINE CABLE

CHARTED UTILITY

APPROXIMATE UTILITY CROSSING AREA

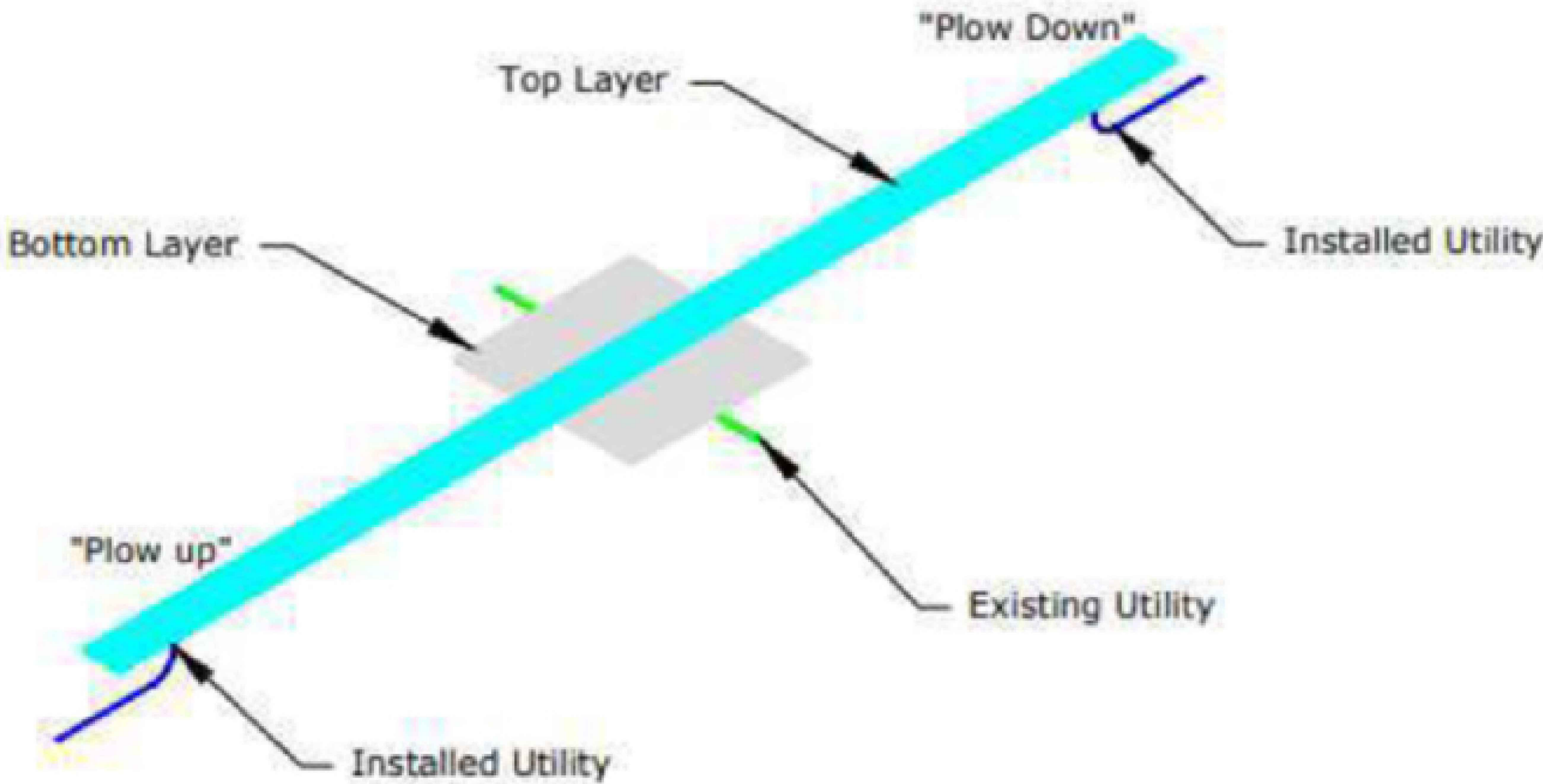
NEW YORK - VERMONT STATE LINE

LIMIT OF ALLOWED DEVIATION ZONE (20-FOOT ELEVATION - NOAA LOW WATER DATUM, +72.5-FOOT ELEVATION - NAVD88)

5-FOOT CONTOUR (NAVD88)

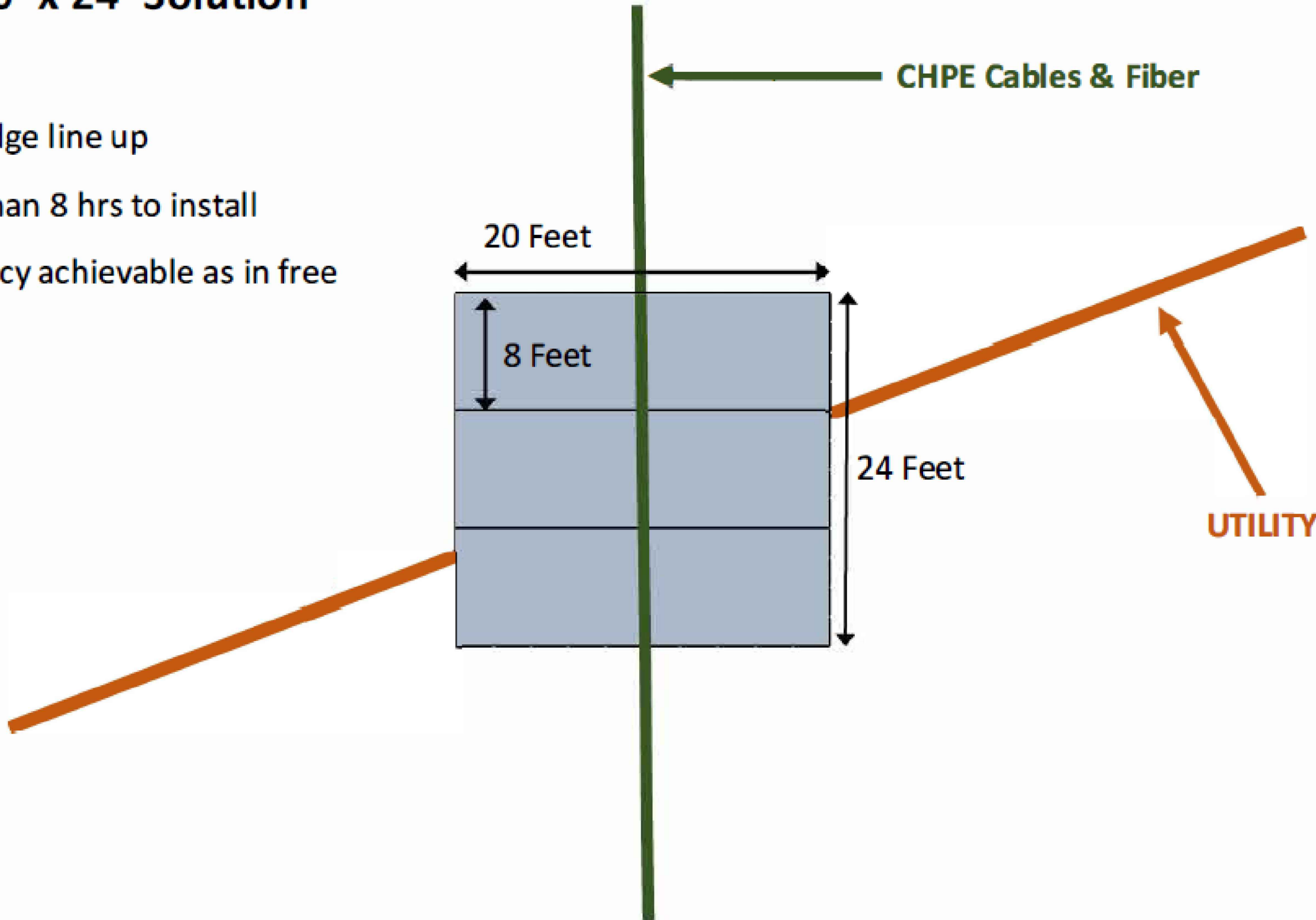
1-FOOT CONTOUR (NAVD88)

ISOMETRIC VIEW



3 Mattress 20' x 24' Solution

- Easy edge to edge line up
- Estimate less than 8 hrs to install
- Position accuracy achievable as in free lay mode



REFERENCE NOTE:

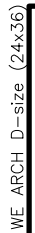
1. TYPICAL CONCRETE MATTRESS UTILITY CROSSING DETAILS FROM EM&CP APPENDIX E - DOCUMENTATION OF CI CONSULTATIONS, ATTACHMENT 3 - MARINE CI CROSSING MATTRESS DETAIL R1, PROVIDED BY WSP ON MARCH 28, 2023.

1
2 TYPICAL CONCRETE MATTRESS UTILITY CROSSING DETAILS
SCALE: NTS

				REFERENCE DRAWINGS		REVISIONS					DRAWING APPROVALS			CHPE - LAKE CHAMPLAIN PRE-LAY MATTRESSING EM&CP SEGMENT 18A NOTES & TYPICAL DETAILS			
				DWG. NO.	TITLE	NO.	DESCRIPTION	DATE	DRAWN	CHK	APPR	DRAWN	DATE				
						1	CI LOCATIONS UPDATE	7/6/2023	MMO	GJR	SB	MMO	3/12/2023				
												CHECKED	DATE				
												GJR	3/15/2023				
												ENGINEER	DATE	SCALE PROJECT NO. DRAWING NO. SHT.NO.			
												SB	4/4/2023				
														NTS	532345	N-1	2

USER: D:\WORK\H
WE 000000 0-0000 0-0000 0-0000


WE ARCH D-size (24x36)

[illegible]

NY 0010187

LAKE CHAMPLAIN CO-LOCATED INFRASTRUCTURE SUMMARY TABLE		
CHPE REFERENCE #		PROPOSED PROTECTION METHOD
LC-08		CONCRETE MATTRESS
LC-08A		CONCRETE MATTRESS
LC-09A		CONCRETE MATTRESS
LC-09B		CONCRETE MATTRESS
LC-10		CONCRETE MATTRESS
LC-11		CONCRETE MATTRESS
LC-12		CONCRETE MATTRESS
LC-13		CONCRETE MATTRESS
LC-14		CONCRETE MATTRESS
LC-15		CONCRETE MATTRESS AND URADUCT*
LC-16		CONCRETE MATTRESS AND URADUCT*
LC-17		CONCRETE MATTRESS AND URADUCT*
LC-18		CONCRETE MATTRESS AND URADUCT*
LC-19		CONCRETE MATTRESS AND URADUCT*
LC-20		URADUCT*
LC-20A		URADUCT*
LC-20B		URADUCT*
LC-21		URADUCT*
LC-22		URADUCT*
LC-30		URADUCT AND CC HALF SHELLS*
LC-31		URADUCT AND CC HALF SHELLS*
LC-34		CONCRETE MATTRESS, URADUCT, CC HALF SHELLS*
LC-35		CONCRETE MATTRESS, URADUCT, CC HALF SHELLS*
LC-36		CONCRETE MATTRESS, URADUCT, CC HALF SHELLS*
LC-36A		CONCRETE MATTRESS AND URADUCT*


* DENOTES LOCATION WHERE SPECIFIC CROSSING PROTECTION DETAILS WILL BE ADDRESSED AS PART OF THE SEGMENT 18B LAKE CHAMPLAIN CABLE INSTALLATION EM&CP TO BE SUBMITTED AT A LATER DATE.



Sharon L. Burke

REFERENCE DRAWINGS		REVISIONS					DRAWING APPROVALS	
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		1	CI LOCATIONS UPDATE	7/6/2023	MMO	GJR	SB	

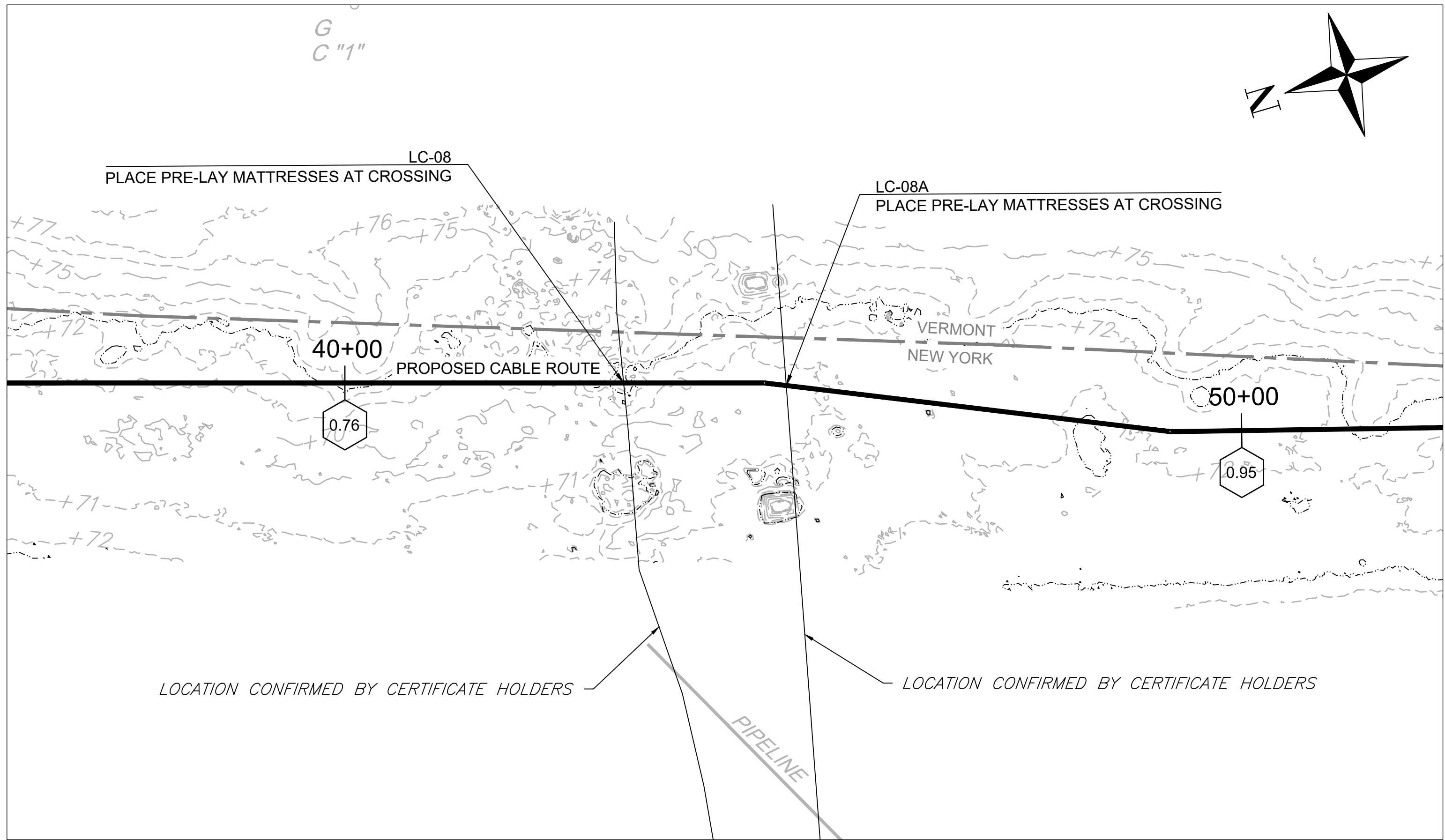
DRAWING APPROVALS	
DRAWN	DATE
MMO	3/12/2023
CHECKED	DATE
GJR	3/15/2023
ENGINEER	DATE
SB	4/4/2023



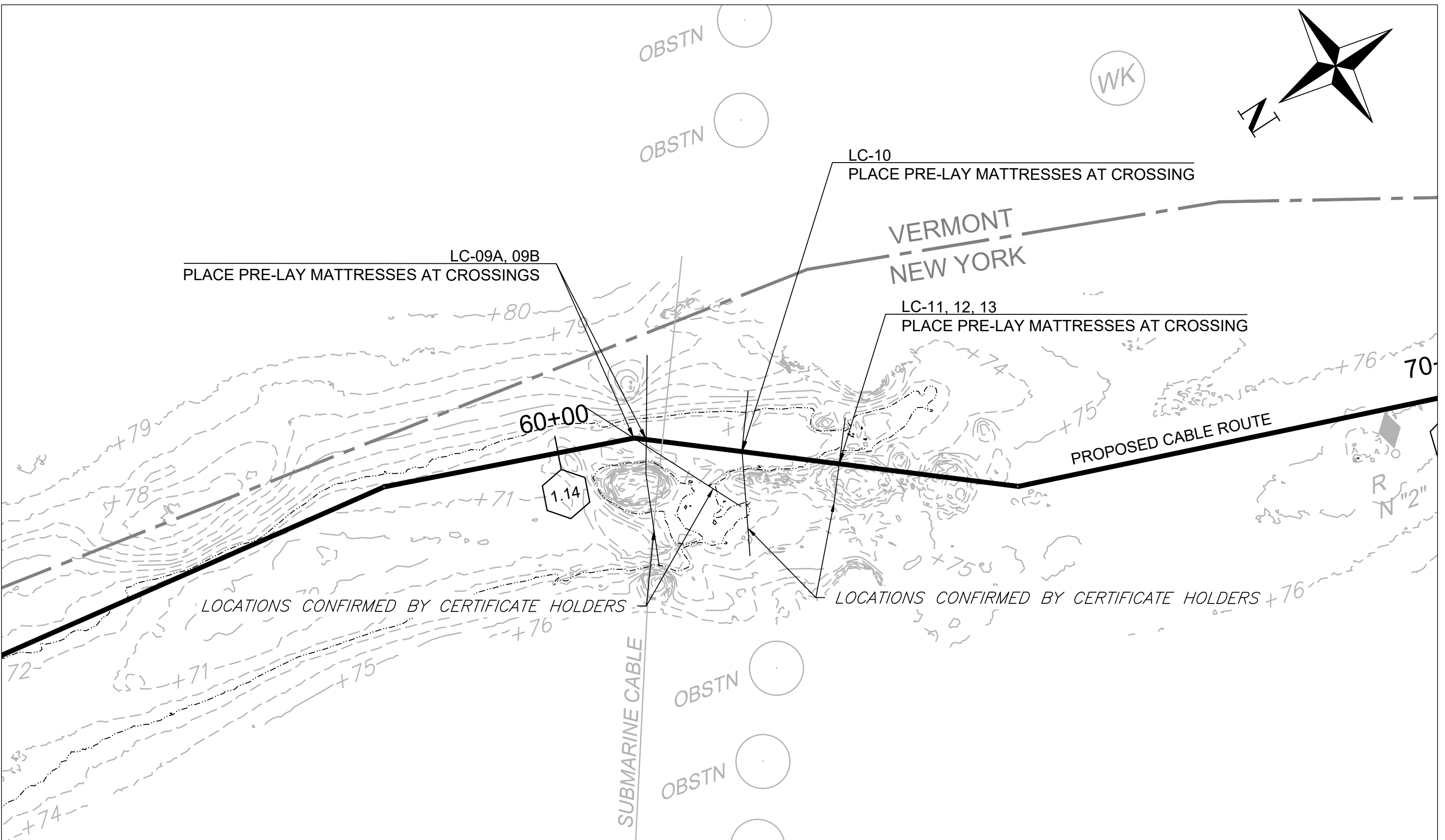
NEW YORK REGISTRATION NO. NY 0010187

CHPE - LAKE CHAMPLAIN PRE-LAY MATTRESSING EM&CP SEGMENT 18A CO-LOCATED INFRASTRUCTURE SUMMARY TABLE			
SCALE	PROJECT NO.	DRAWING NO.	SHT.NO.
NTS	532345	SO-2	4

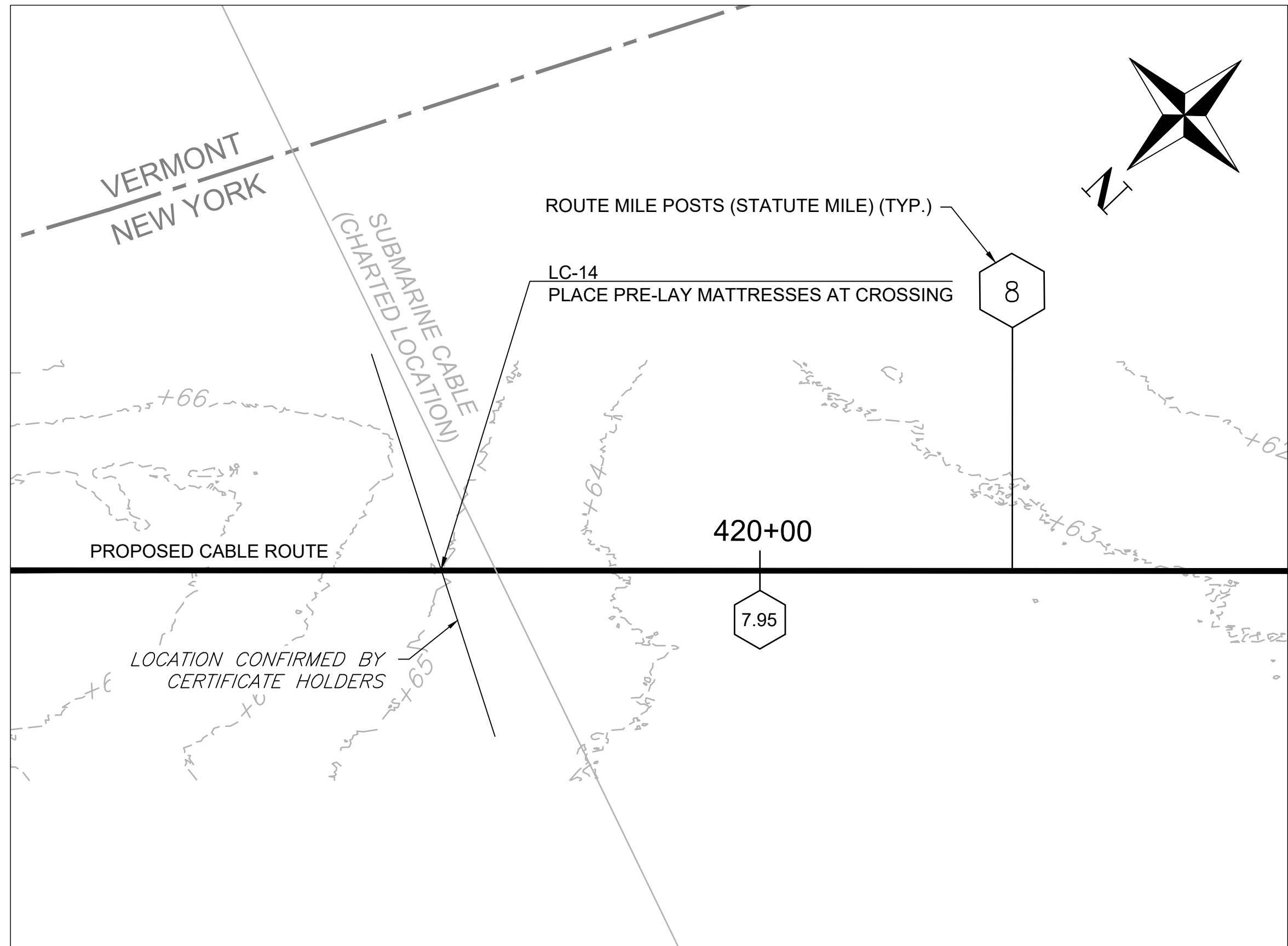
NY 0010187



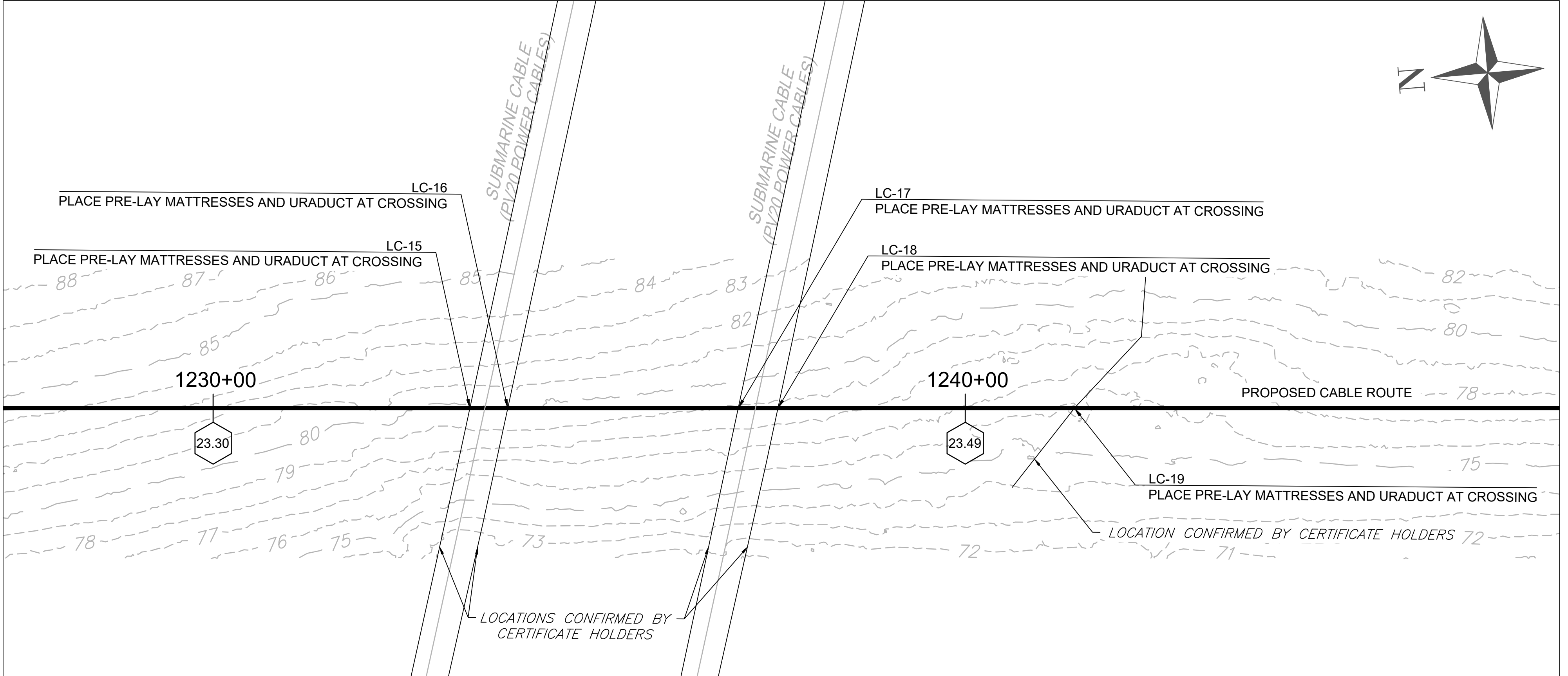
1
5
UTILITY LC-08 LC-08A
SCALE: 1" = 100'






2
5
UTILITY CROSSINGS LC-09 LC-09A LC-10 LC-11 LC-12 LC-13
SCALE: 1" = 100'



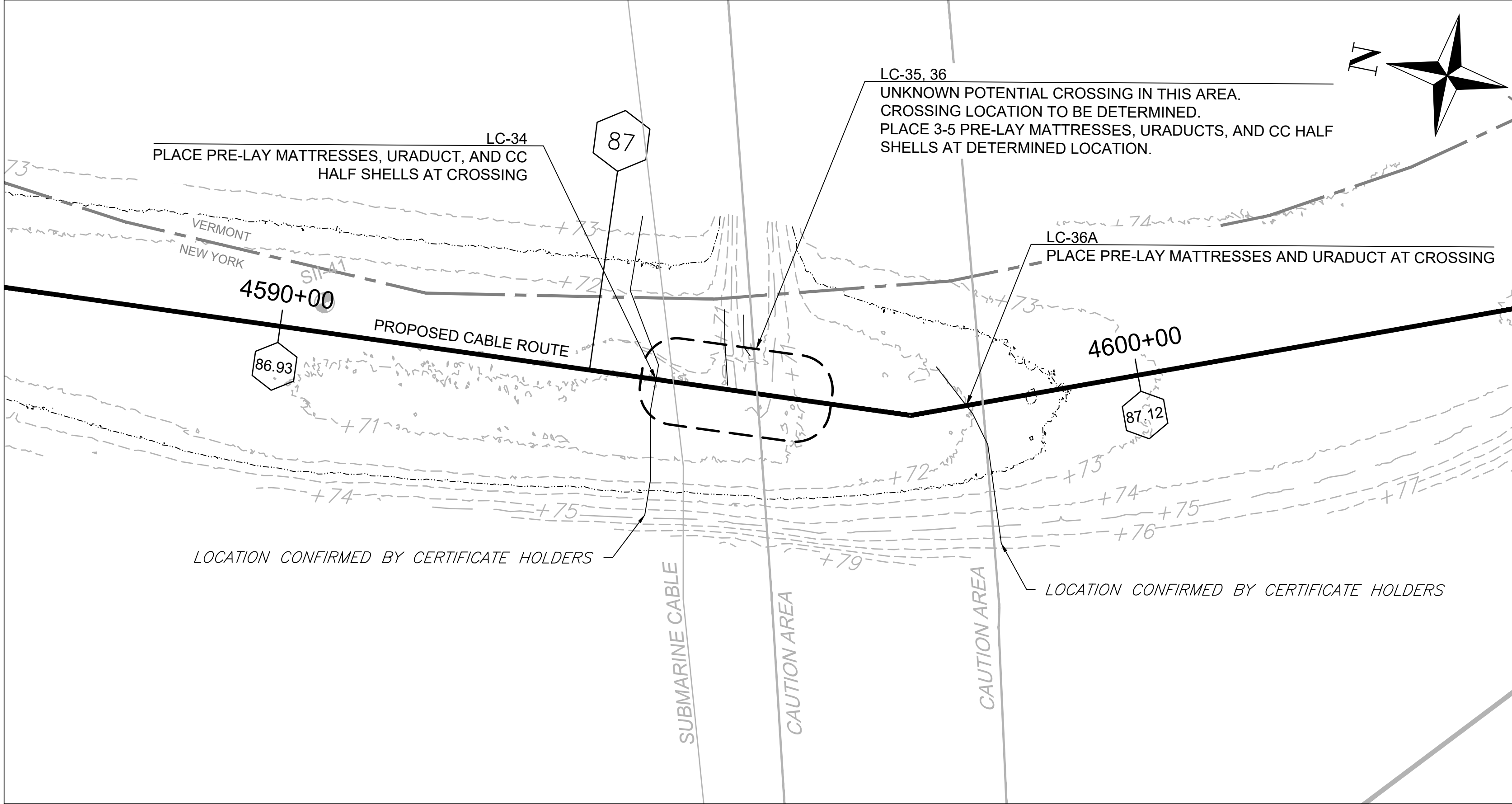
3
5
UTILITY CROSSING LC-14
SCALE: 1" = 100'



4
5
UTILITY CROSSING LC-15 LC-16 LC-17 LC-18 LC-19
SCALE: 1" = 100'

			 <i>Sharon L. Burke</i>	REFERENCE DRAWINGS		REVISIONS							DRAWING APPROVALS		 <small>FIRM REGISTRATION NO.: NY 0010187</small>	CHPE - LAKE CHAMPLAIN PRE-LAY MATTRESSING EM&CP SEGMENT 18A LC-08, 08A, 09A, 09B, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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1
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UTILITY CROSSINGS LC-34 LC-35 LC-36 LC-36A

SCALE: 1" = 100'

			REFERENCE DRAWINGS		REVISIONS					DRAWING APPROVALS		<div>TRC</div> <div>NEW YORK REGISTRATION NO. NY 0010187</div> <div>SCALE PLAN: 0 100'</div>	CHPE - LAKE CHAMPLAIN PRE-LAY MATTRESSING			
			DWG. NO.	TITLE	NO.	DESCRIPTION	DATE	DRAWN	CHK	APPR	DRAWN	DATE	EM&CP SEGMENT 18A			
					1	CI LOCATIONS UPDATE	7/6/2023	MMO	GJR	SB	MMO	3/12/2023	LC- 34, 35, 36, 36A			
											CHECKED	DATE	SCALE	PROJECT NO.	DRAWING NO.	SHT. NO.
											GJR	3/15/2023	1" = 100'	532345	C-2	6
											ENGINEER	DATE				
											SB	4/4/2023				



Sharon L. Burke