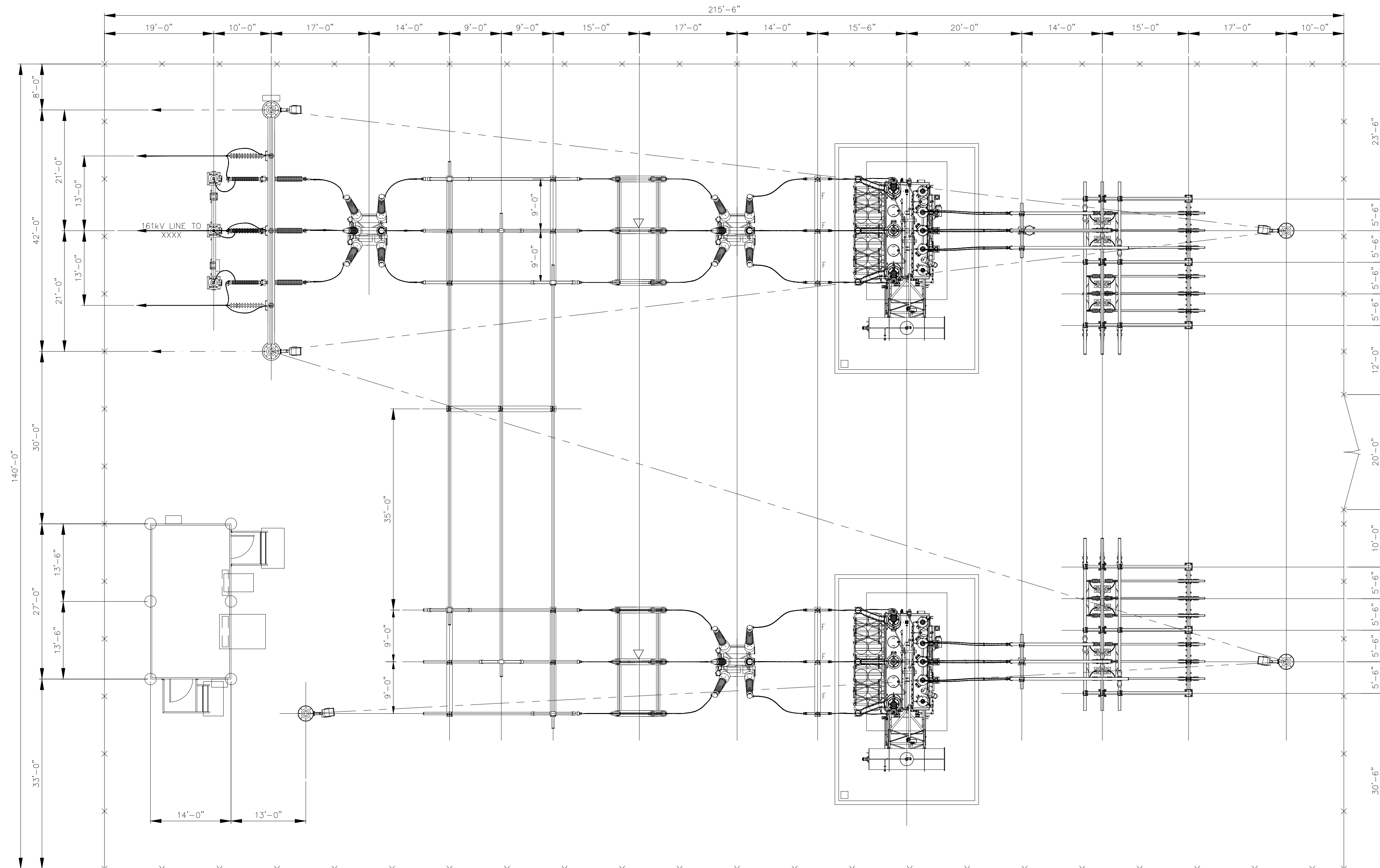


## **APPENDIX C – Substation Preliminary Design**

## ELECTRICAL CLEARANCES


DESCRIPTION	VOLTAGE	CLASS	SYSTEM
OPERATING VOLTAGE	161 kV	34.5 kV	
BIL	750 kV	200 kV	
CENTERLINE TO CENTERLINE FOR $\phi$ TO $\phi$ FOR RIGID BUS <sup>1</sup>	9'-0"	3'-0"	
MINIMUM $\phi$ TO GROUND <sup>1</sup>	4'-8"	1'-3"	
BOTTOM OF INSULATOR OR BUSHING PORCELAIN TO FDN. TOP <sup>2,3</sup>	8'-6"	8'-6"	
VERTICAL CLEARANCE OF UNGUARDED LIVE PARTS TO FDN. TOP <sup>2,3</sup>	12'-10"	9'-6"	
CLEARANCE FROM PERIMETER FENCE TO LIVE PARTS	15'-0"	11'-0"	
HIGH BUS HEIGHT, BUS CENTERLINE ABOVE FDN. <sup>4</sup>	23'-0"	N/A	
LOW BUS HEIGHT, BUS CENTERLINE ABOVE FDN. <sup>4</sup>	14'-0"	N/A	

1. IEEE C37.30.1-2011
2. IEEE 1427
3. NESC, PART 1, SECTION 12
4. NESC, PART 2, TABLE 232-1



HOLD FOR  
VENDOR DRAWINGS

PRELIMINARY  
NOT FOR CONSTRUCTION

--								SCALE:  1/16" = 1'-0"  			
--											
--											
--											
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--											
A	7/22/2021	SKETCH				JRD	-	-	S&L	PREP: JRD	CHKD: -
NO	DATE	REVISIONS AND RECORD OF ISSUE				DRWN	REV'D	APPR	COMP	APPD: -	DATE: 7/22/2021

CONTRACTOR/INSTALLER SHALL TAKE ALL APPROPRIATE PRECAUTIONS TO ENSURE THE SAFETY OF ALL PEOPLE LOCATED ON THE WORK SITE; INCLUDING CONTRACTOR'S /INSTALLER'S PERSONNEL (OR THAT OF ITS SUB-CONTRACTOR(S)) PERFORMING THE WORK.

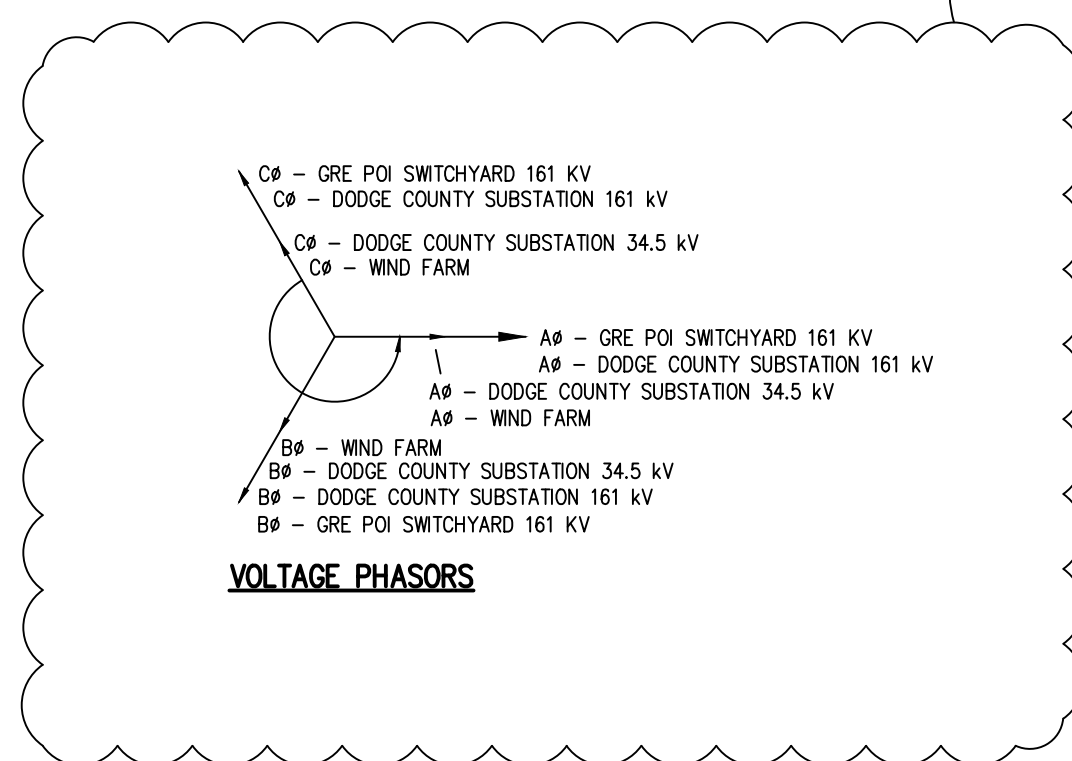
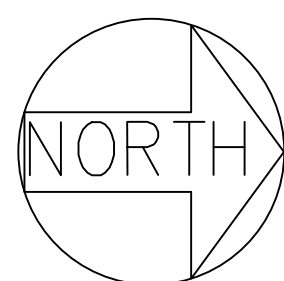
ANY MODIFICATION OR ADDITION TO THIS  
DRAWING BY ANY ORGANIZATION OTHER  
THAN SARGENT & LUNDY IS NOT THE  
RESPONSIBILITY OF SARGENT & LUNDY.



Dodge County Wind, LLC

DODGE COUNTY WIND, LLC  
161/34.5 kV SUBSTATION  
ULTIMATE ELECTRICAL PLAN

13666-084-E1-0100



HOLD NOTES:

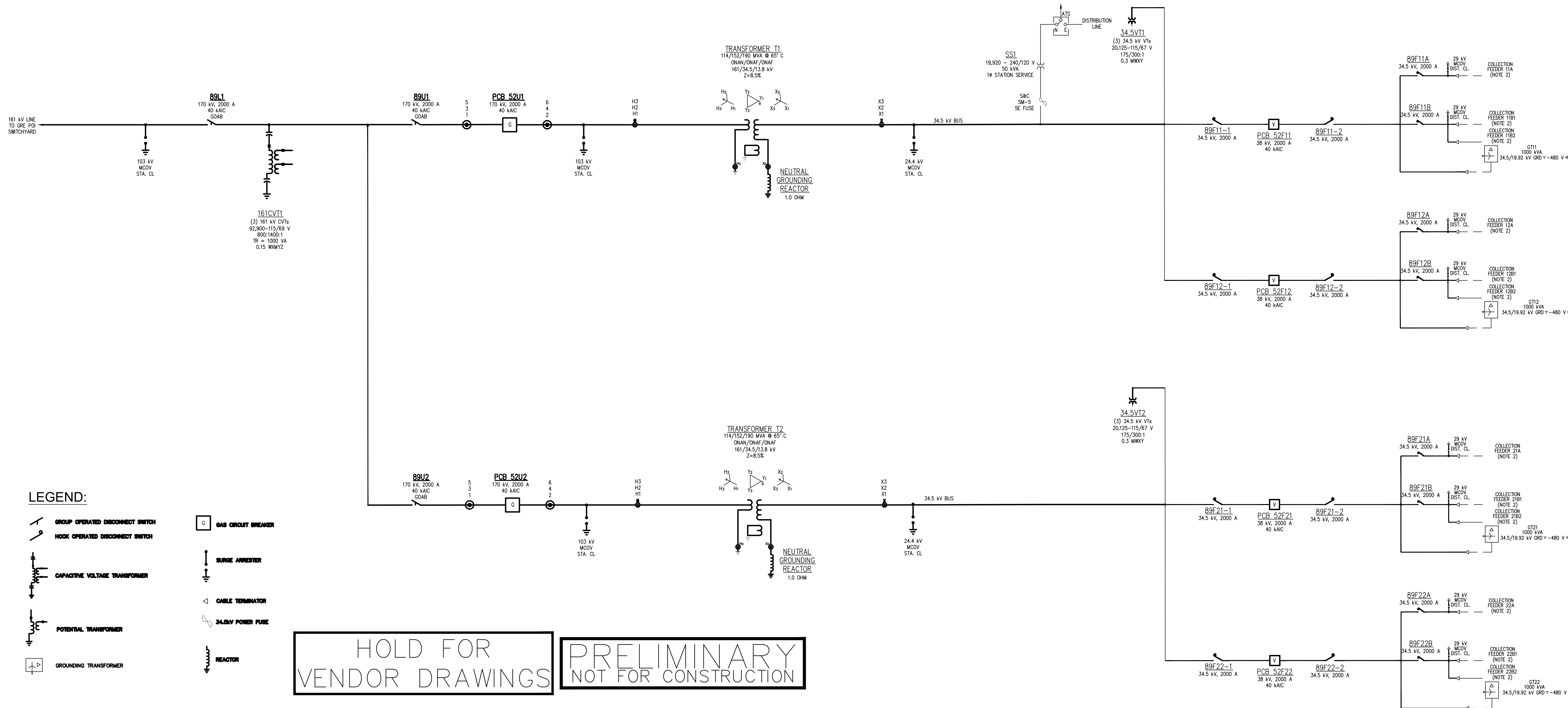
1. PHASOR DIAGRAM PENDING POI PHASING VERIFICATION
2. PENDING COLLECTION EOR SIZING

NOTES:

1. ALL BREAKERS, SWITCHES AND DISCONNECTS SHALL BE NORMALLY CLOSED (NC) DURING NORMAL OPERATION UNLESS OTHERWISE NOTED.
2. COLLECTION FEEDER NUMBERING PENDING FINAL NEXTERA ARRAY DESIGN

\* - ON CB SIDE

\*\* - ON FENCE SIDE

[illegible]

### Representative Photo of Collection Substation



Exact configuration or technology may vary from the representative photo.

**Representative Photo of Collection Substation**



Exact configuration or technology may vary from the representative photo.

**Representative Photo of Collection Substation**



Exact configuration or technology may vary from the representative photo.