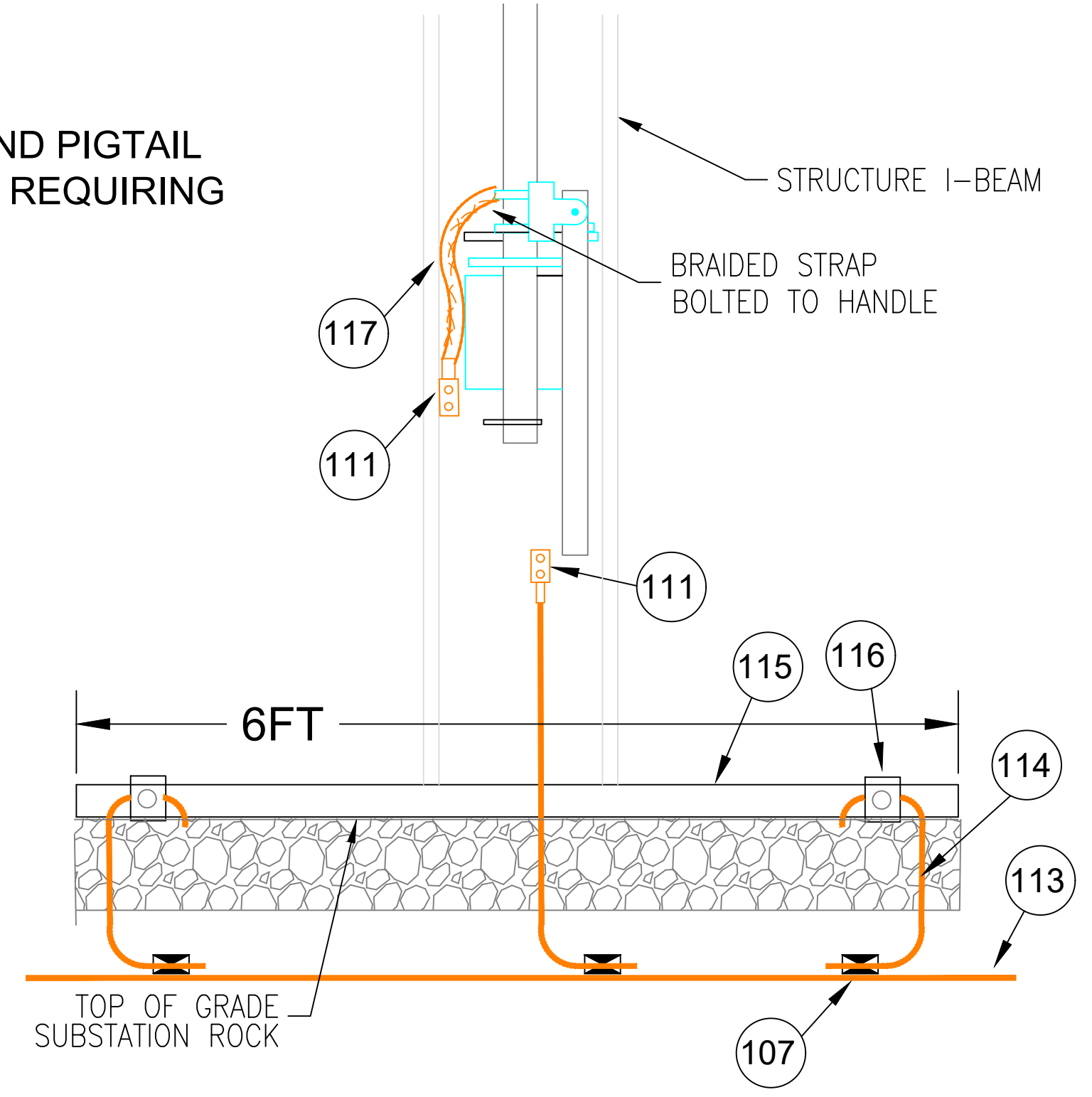


4' ABOVE GROUND PIGTAIL AT EVERY POST REQUIRING GROUNDING



GROUND GRATE & SWITCH HANDLE GROUNDING
DETAIL J

NOTES:

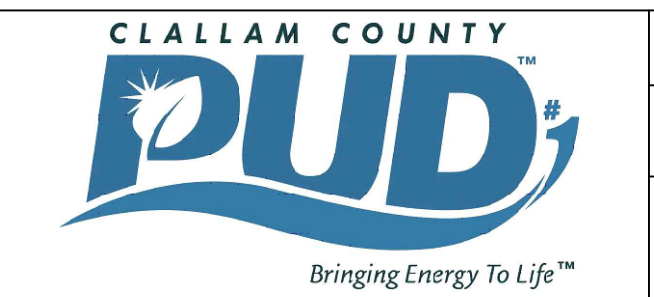
1. GROUND WIRE TO BE BURIED A MINIMUM OF 18" BELOW TOP GRADE OF SUBSTATION ROCK.
2. PUD WILL INSTALL ALL GROUND CONNECTIONS TO FENCE POSTS AND GATES.
3. CONTRACTOR TO LEAVE 4' (ABOVE GROUND) PIGTAIL AT ALL FENCE POST LOCATIONS WHICH ARE TO BE GROUNDED.
4. CONTRACTOR TO MAKE ALL EQUIPMENT & STRUCTURAL STEEL GROUND CONNECTIONS.

LEGEND:

- 1) GROUND WIRE, 1/0 COPPER
- 2) CRIMP CONNECTION: SEE DETAIL B OR C E5-2-2
- 3) STRUCTURE GROUND: SEE DETAIL G, E5-2-2
- × 4) GROUND ROD: SEE DETAIL A, E5-2-2
- ⊗ 5) FENCE GATE POST/CORNER POST (3-1/2"): SEE DETAIL E, F & H E5-2-2
- ⊠ 6) FENCE LINE POSTS (2-1/2"): SEE DETAIL D, E5-2-2
- △ 7) CMU GROUND, SEE DETAIL J, E5-2-2
- 8) METAL GROUND GRATE, SEE DETAIL I THIS PAGE
- (9) 1-1/2" GATE FRAME
- (10) 2-1/2" LINE POST
- (11) 3-1/2" CORNER POST/GATE POST

0	ISSUED FOR CONSTRUCTION	12/6/23	BENP					E4-2	STEEL & CONCRETE DETAILS
REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD			REFERENCE DRAWINGS

DSGN	BENP	7/2022
DRN	BENP	7/2022
CKD		
SCALE:	N.T.S.	



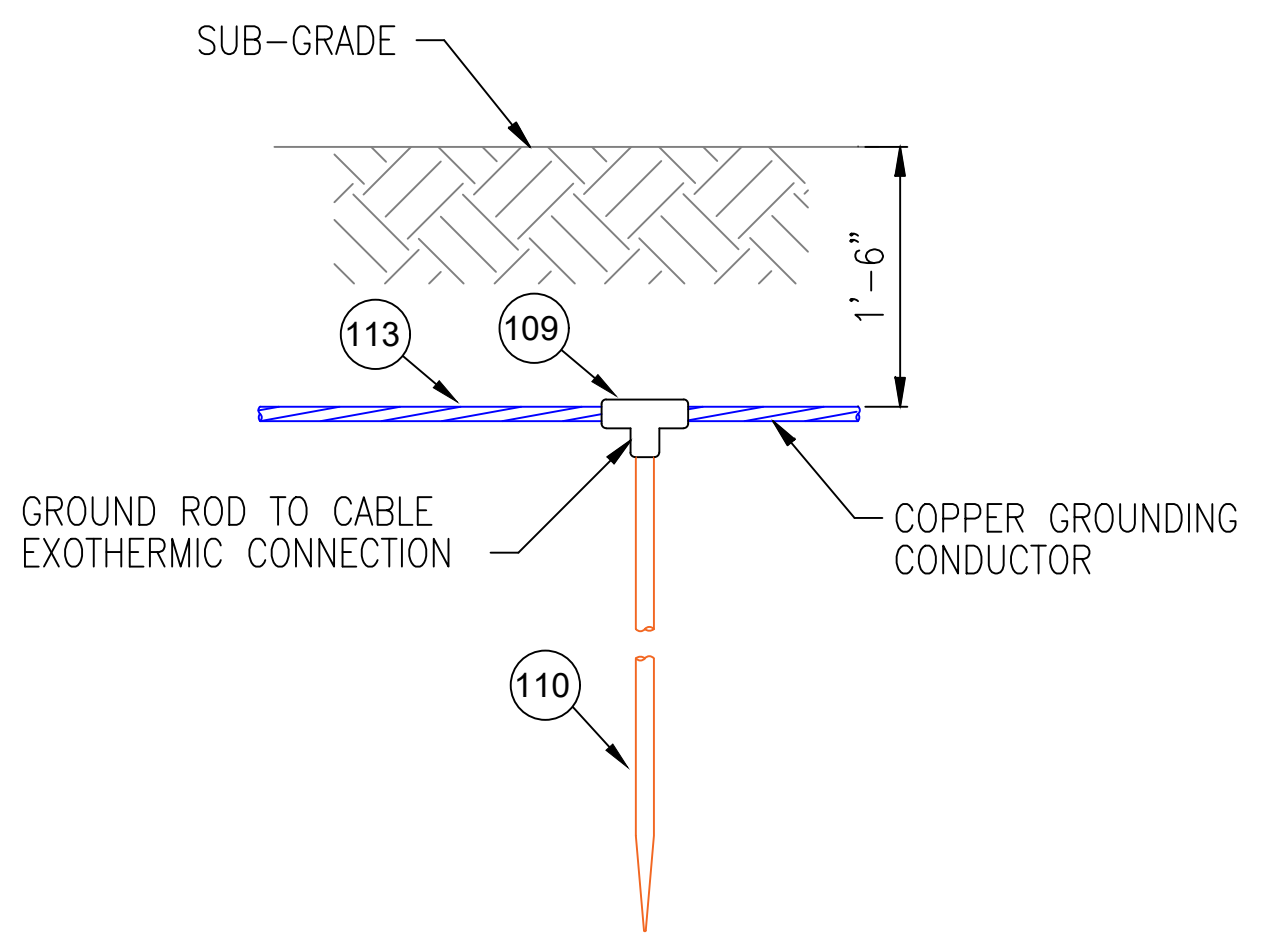
CLALLAM COUNTY PUD
LIBERTY STATION
GROUNDING PLAN

JOB NUMBER	REV
21-2316	△
DRAWING NUMBER	
E5-3-1	

NOTES:

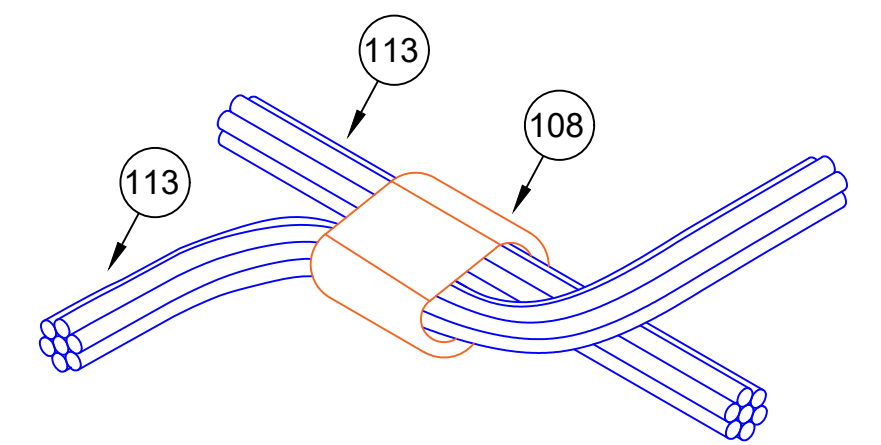
- GROUND WIRE TO BE BURIED A MINIMUM OF 18" BELOW TOP GRADE OF SUBSTATION ROCK.
- PUD WILL INSTALL ALL GROUND CONNECTIONS TO FENCE POSTS AND GATES.
- CONTRACTOR TO LEAVE 4' (ABOVE GROUND) PIGTAIL AT ALL FENCE POST LOCATIONS WHICH ARE TO BE GROUNDED.
- CONTRACTOR TO MAKE ALL EQUIPMENT & STRUCTURAL STEEL GROUND CONNECTIONS.

ITEM	DESCRIPTION	SPECIFICATION	MANUFACTURER	PART NUMBER	QTY	STOCK#
101	FENCE LINE TOP RAIL CLAMP (1-1/4")	GROUND CLAMP, CABLE TO PIPE #8 to #4 CABLE, 1-1/4" PIPE	TRAVIS PDU	17-121	30	
102	FENCE GATE RAIL CLAMP (1-1/2")	GROUND CLAMP, CABLE TO PIPE #4 to 2/0 CABLE, 1-1/2" PIPE	TRAVIS PDU	17-125	10	
103	FENCE LINE POST CLAMP (2-1/2")	GROUND CLAMP, CABLE TO PIPE #4 to 2/0 CABLE, 2-1/2" PIPE	TRAVIS PDU	17-135	30	
104	FENCE GATE/CORNER POST CLAMP (3-1/2")	GROUND CLAMP, CABLE TO PIPE #4 to 2/0 CABLE, 3-1/2" PIPE	TRAVIS PDU	17-147	20	
105	COPPER FLEX BRAID	TINNED CU FLEX BRAID, 400A, 18" LONG, W/ 1-HOLE PAD EACH END	TRAVIS PDU	111-183-18-1HPS	10	
106	CRIMPIT	#6AWG TO #6AWG COPPER, PARALLEL CRIMPIT	FCI/BURNDY	YC26C26	150	6060300
107	CRIMPIT	#6AWG TO 1/0 COPPER, PARALLEL CRIMPIT	FCI/BURNDY	YC26C2	100	6060100
108	CRIMPIT	1/0 TO 1/0 COPPER, PARALLEL CRIMPIT	FCI/BURNDY	YC4C6	100	6061200
109	CADWELD PLUS ONE SHOT	1/0STRAND TO 3/4" ROD, EXOTHERMIC CONNECTION	ERICO CADWELD	GT1182CPLUS	30	6659000
110	GROUND ROD	10' X 3/4" GROUND ROD	HUBBEL	8620	30	3423000
111	2-HOLE JUMPER PAD, 1/0CU	2-HOLE NEMA STRAIGHT LUG, 1/0, AL/CU RATED	ANDERSON	VAUL-1/0-BN	40	6731700
112	BOLTED BRONZE CONNECTOR	BOLTED BRONZE CONNECTOR FLAT	HUBBEL		30	6673200
113	1/0-7STR COPPER WIRE	1/0-7STR COPPER WIRE			3250	5051000
114	#6AWG SOLID COPPER WIRE	#6AWG SOLID COPPER WIRE			500	5030300
115	GROUND GRATE 4' X 6' HD GALVANIZED	GROUND GRATE 4' X 6' HD GALVANIZED	ANIXTER	EF4X6MAT	4	3420700
116	GROUNDING STUD #6-1/0	GROUNDING STUD #6-1/0	HUBBEL	GC-207	8	6589900
117	12" BRAIDED GROUND STRAP	12" BRAIDED GROUND STRAP	TRAVIS	111-184-12-1HPS	4	6686200



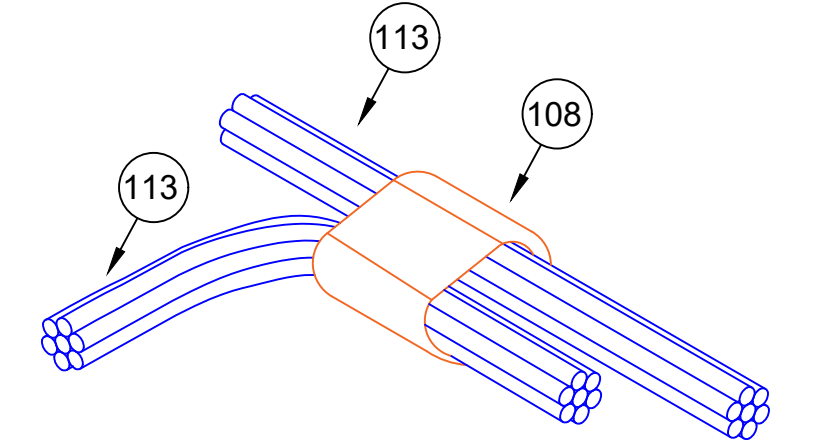
CABLE TO GROUND ROD EXOTHERMIC CONNECTION

DETAIL A



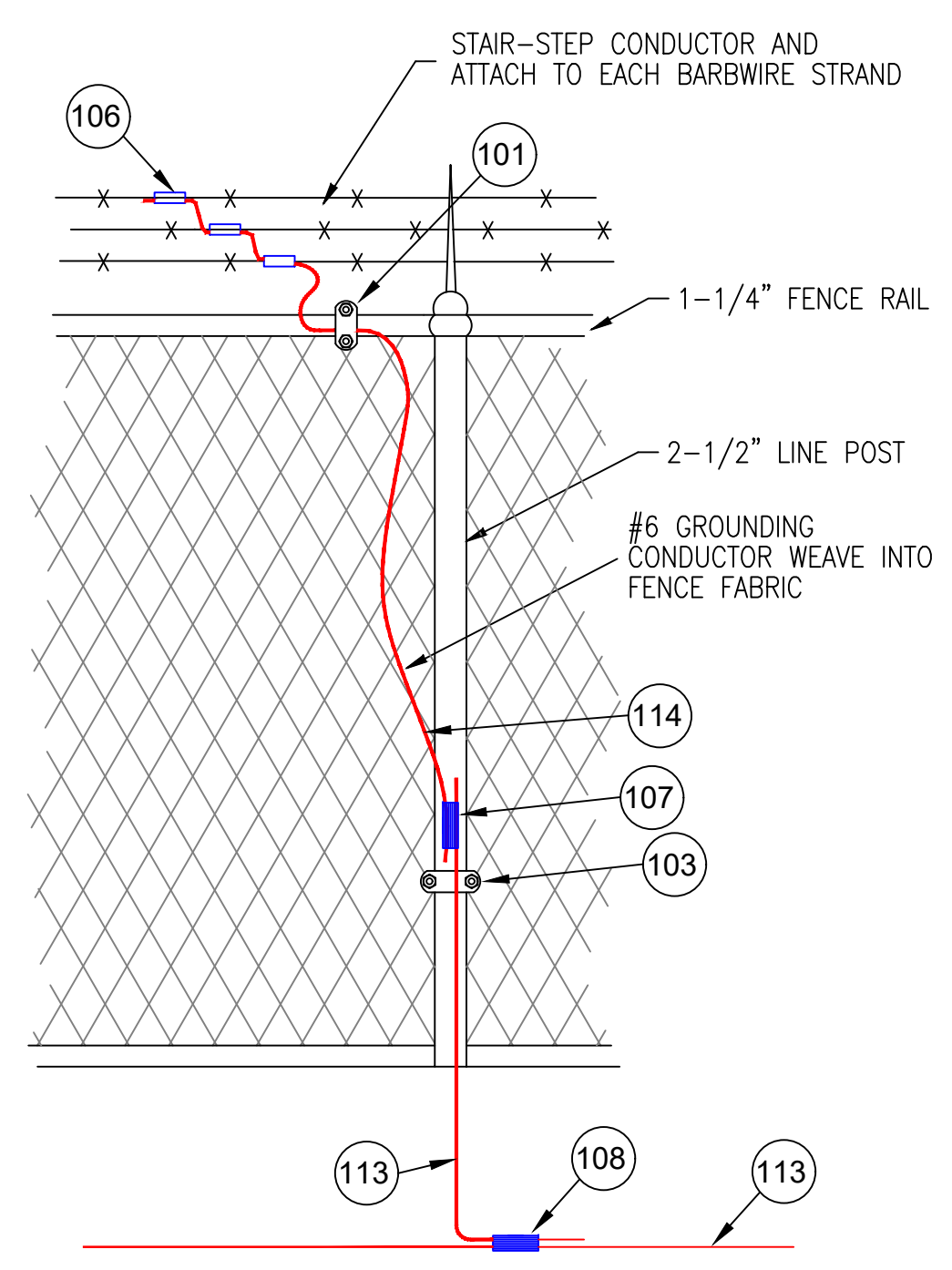
CABLE CROSS CRIMP CONNECTION

DETAIL B



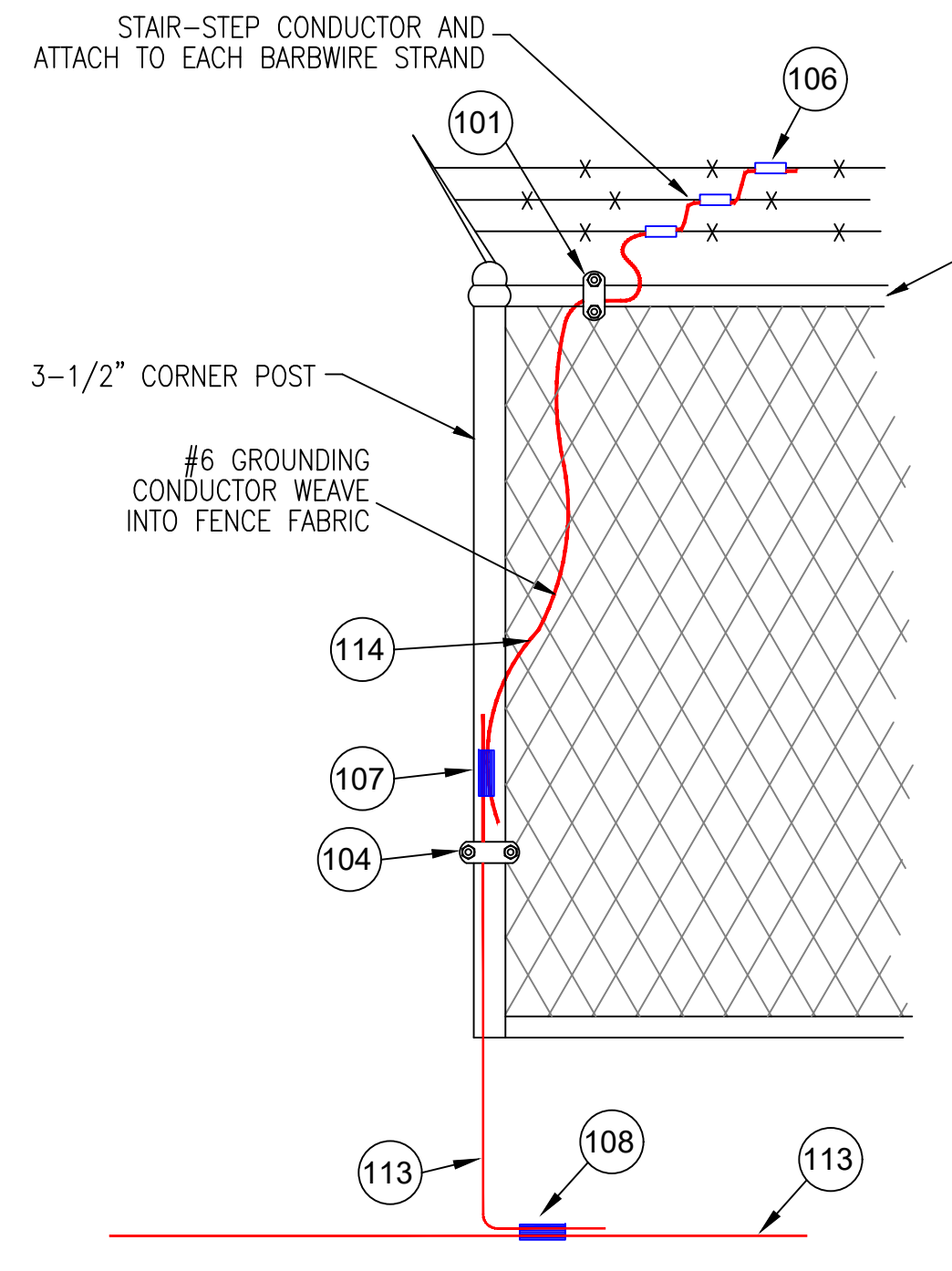
CABLE TEE CRIMP CONNECTION

DETAIL C



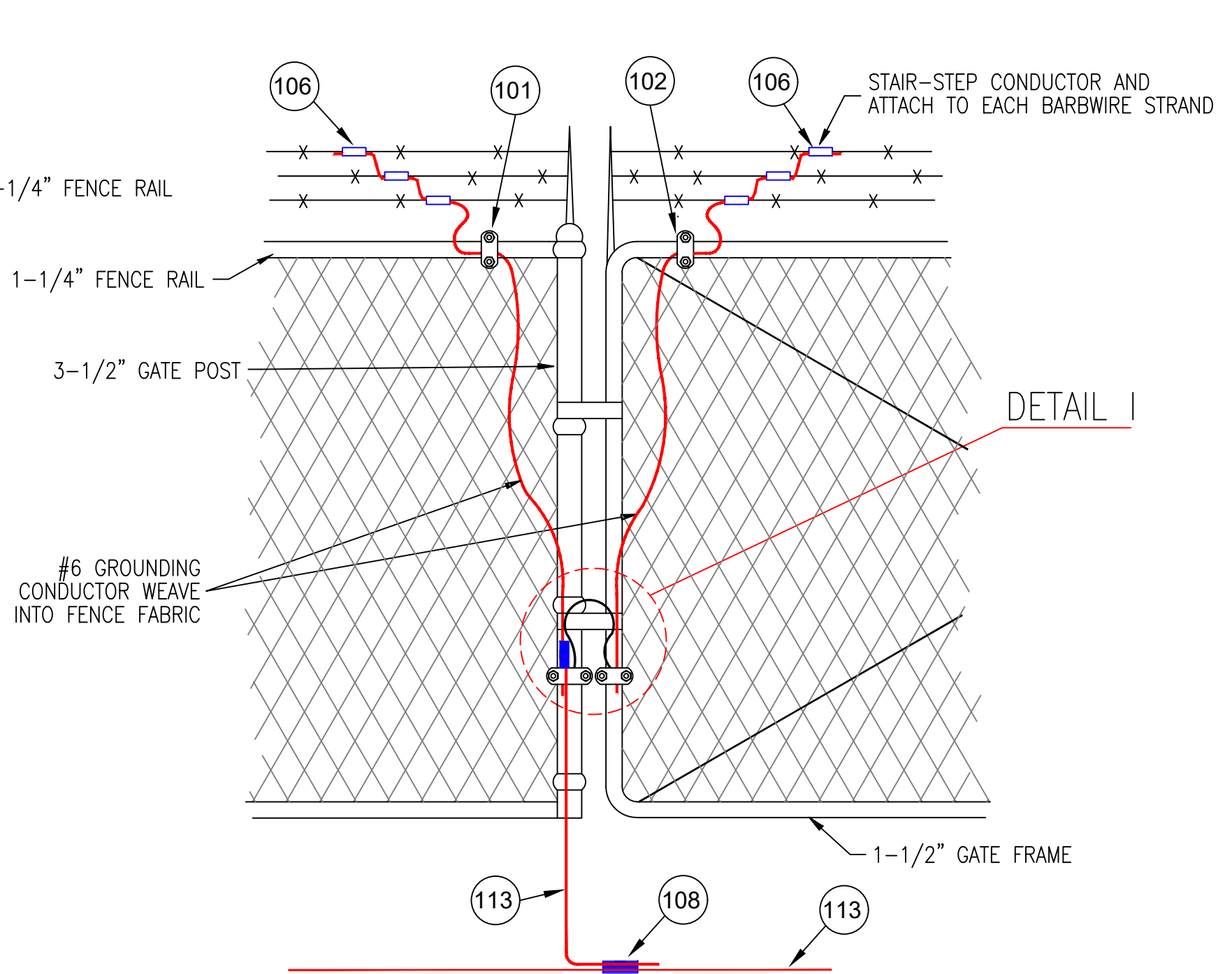
FENCE LINE POST

DETAIL D



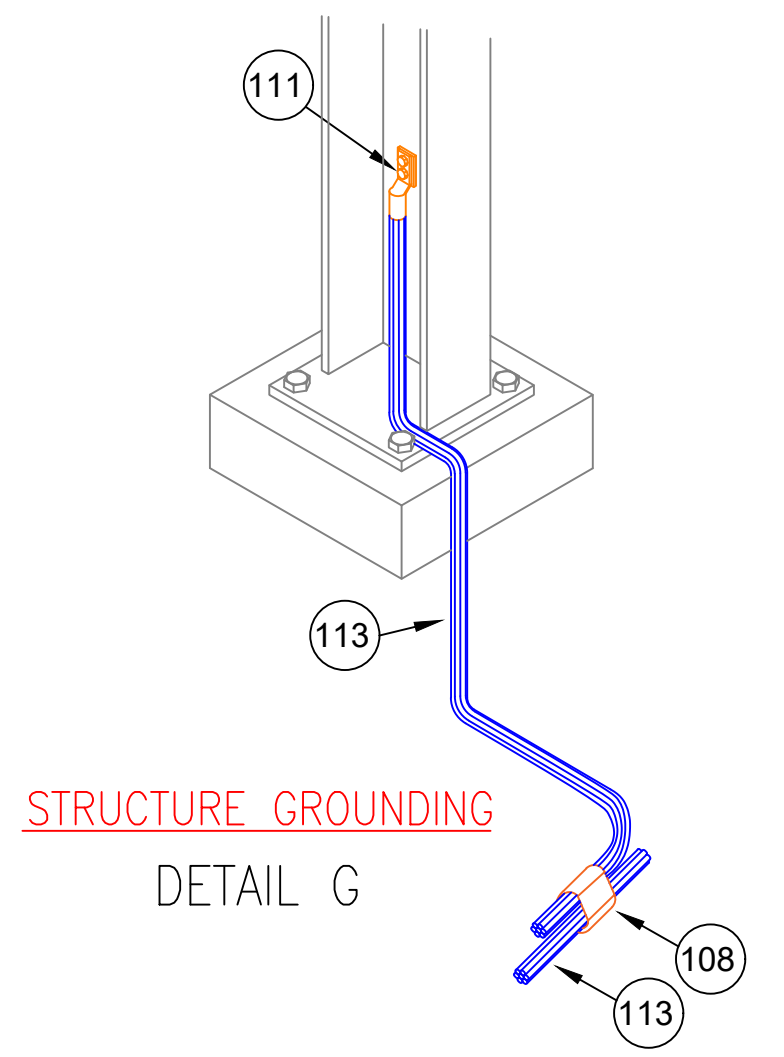
FENCE CORNER POST

DETAIL E



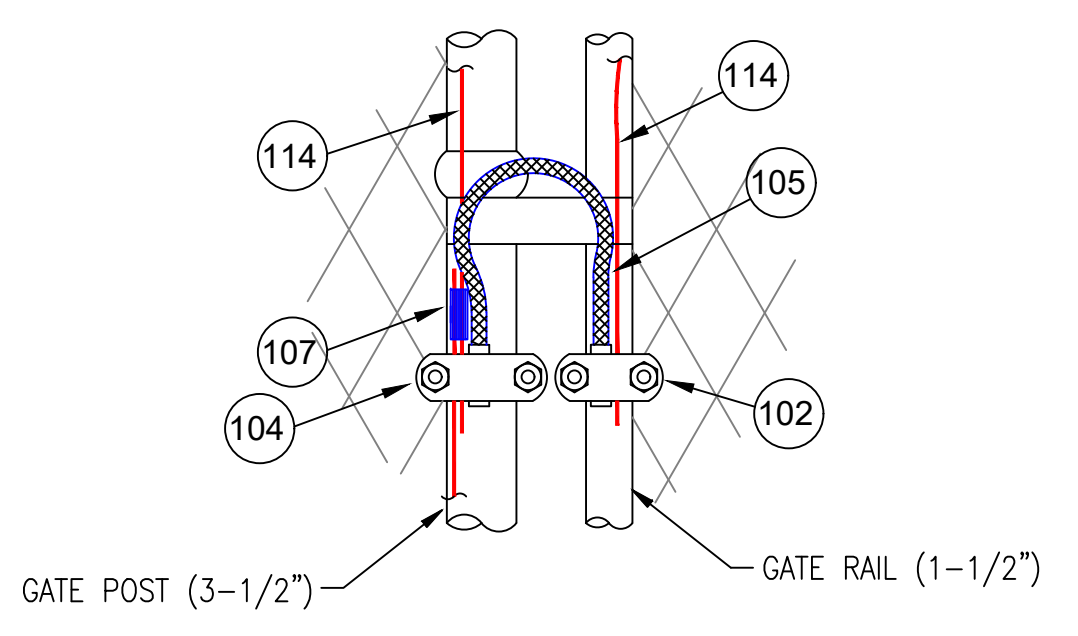
GATE POST

DETAIL F



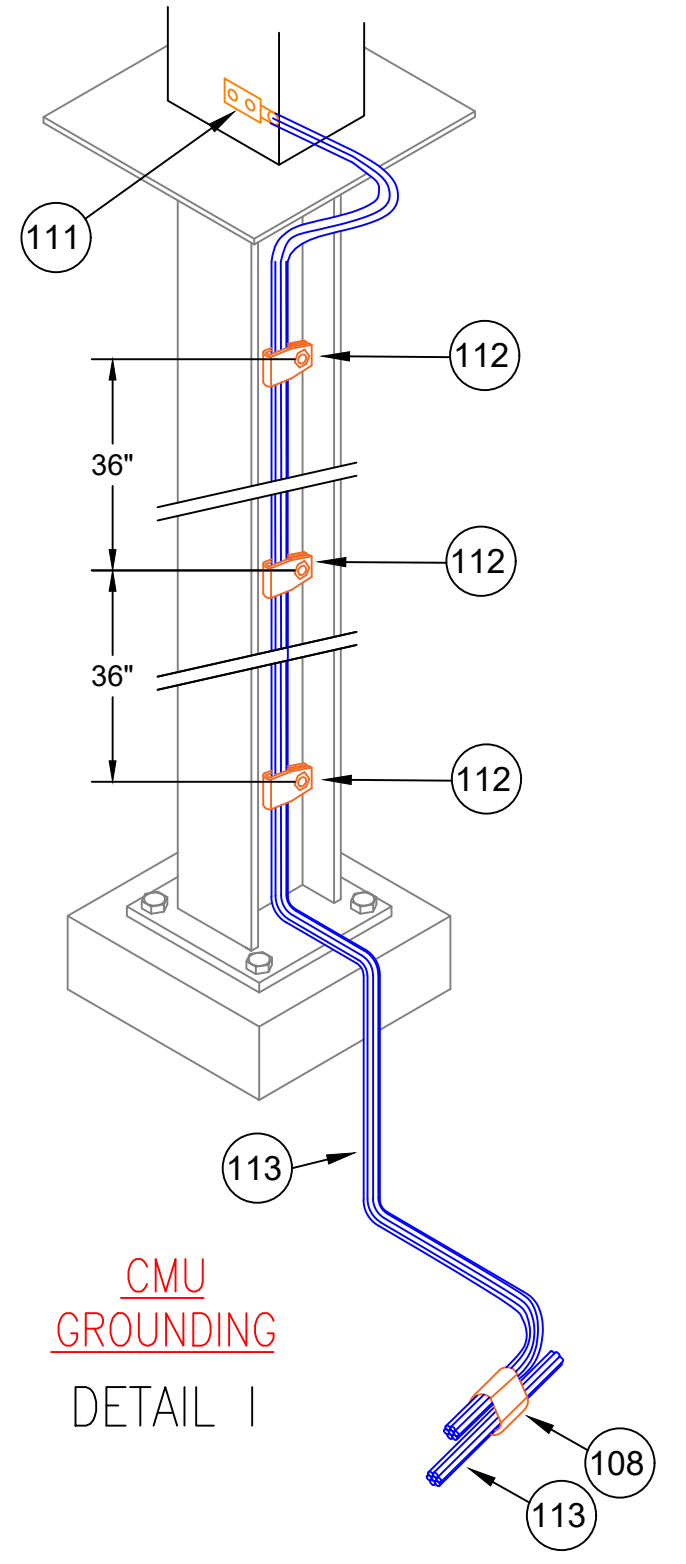
STRUCTURE GROUNDING

DETAIL G



GATE POST

DETAIL H



CMU GROUNDING

DETAIL I

NOTE:
Fence line posts are to be grounded every other post, starting from the corner post.

NOTE:
Fence corner posts are double grounded. As detailed above, in both directions.

					DSGN	BENP	7/2022		CLALLAM COUNTY PUD LIBERTY STATION GROUNDING DETAILS	JOB NUMBER	21-2316	REV	
					DRN	BENP	7/2022			DRAWING NUMBER	E5-3-2		
					CKD								
0	ISSUED FOR CONSTRUCTION	12/6/23	BENP		E4-2	STEEL & CONCRETE DETAILS							
REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD	REFERENCE DRAWINGS						

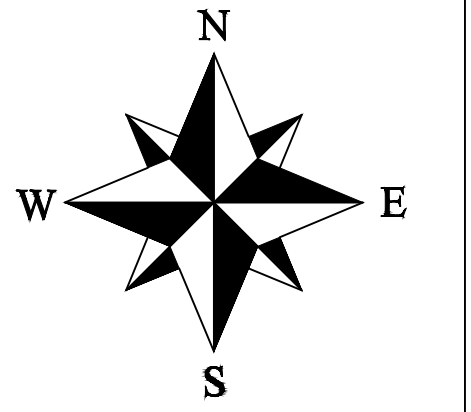
N.T.S.

A

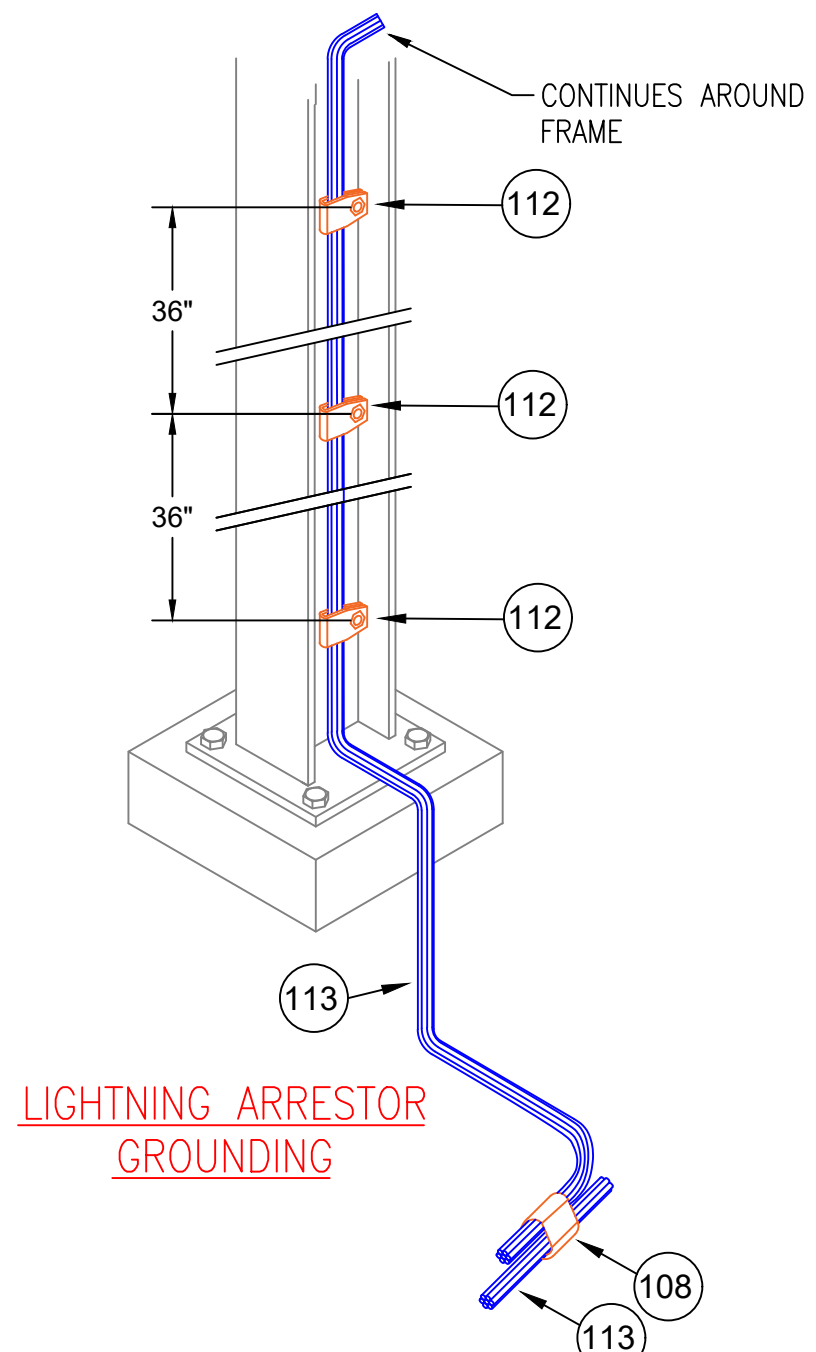
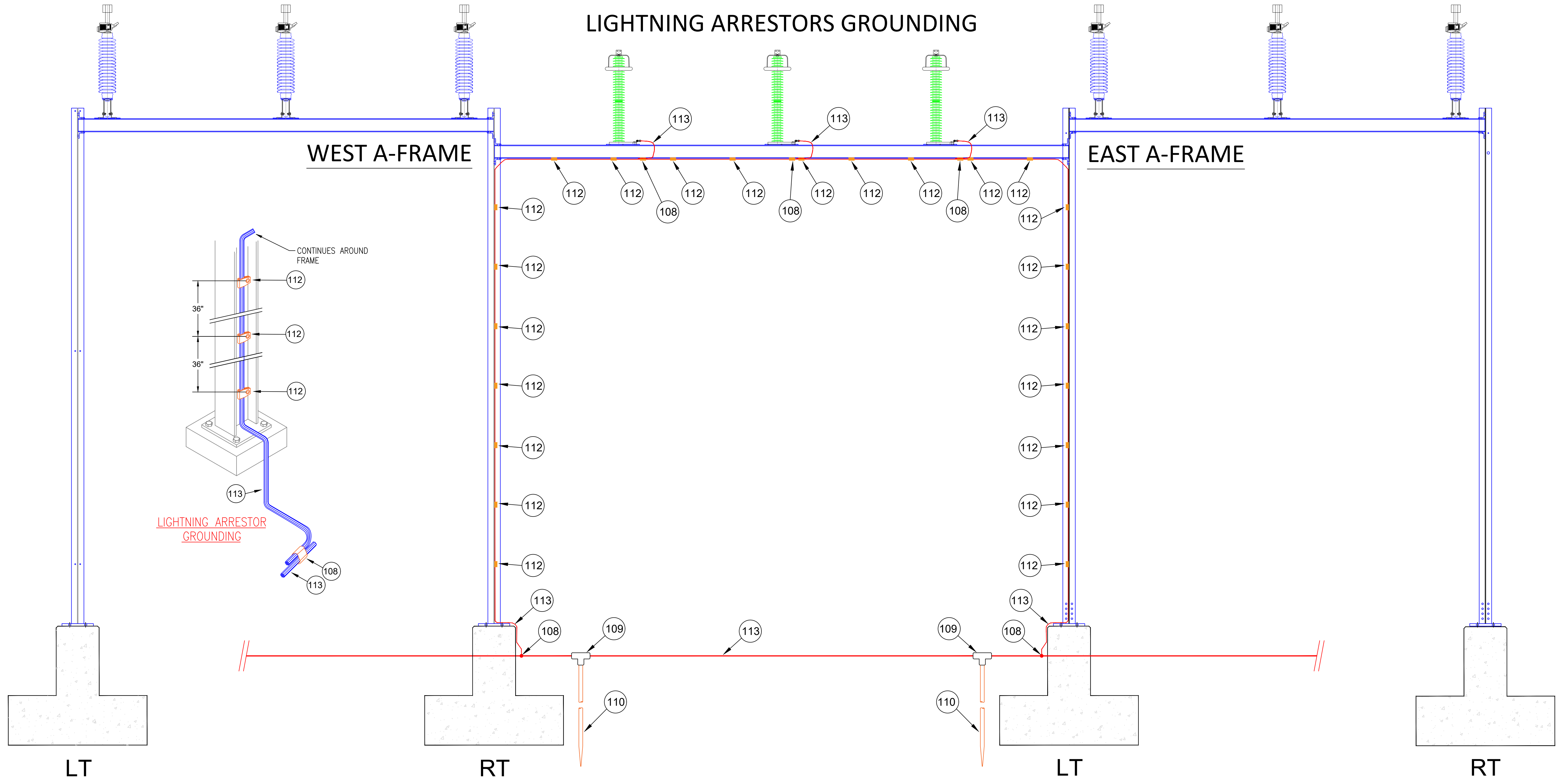
B

C

D



LIGHTNING ARRESTORS GROUNDING



SEE DETAIL-H FOR ARRESTER GROUNDING

										DSGN	BENP	7/2022		CLALLAM COUNTY PUD	JOB NUMBER	REV
									DRN	BENP	7/2022	LIBERTY STATION		21-2316	△	
									CKD			LIGHTNING ARRESTOR GROUNDING DETAILS		DRAWING NUMBER		
0	ISSUED FOR CONSTRUCTION	12/6/23	BENP				E4-2	STEEL & CONCRETE DETAILS	SCALE:	N.T.S.				E5-3-3		
REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD		REFERENCE DRAWINGS								