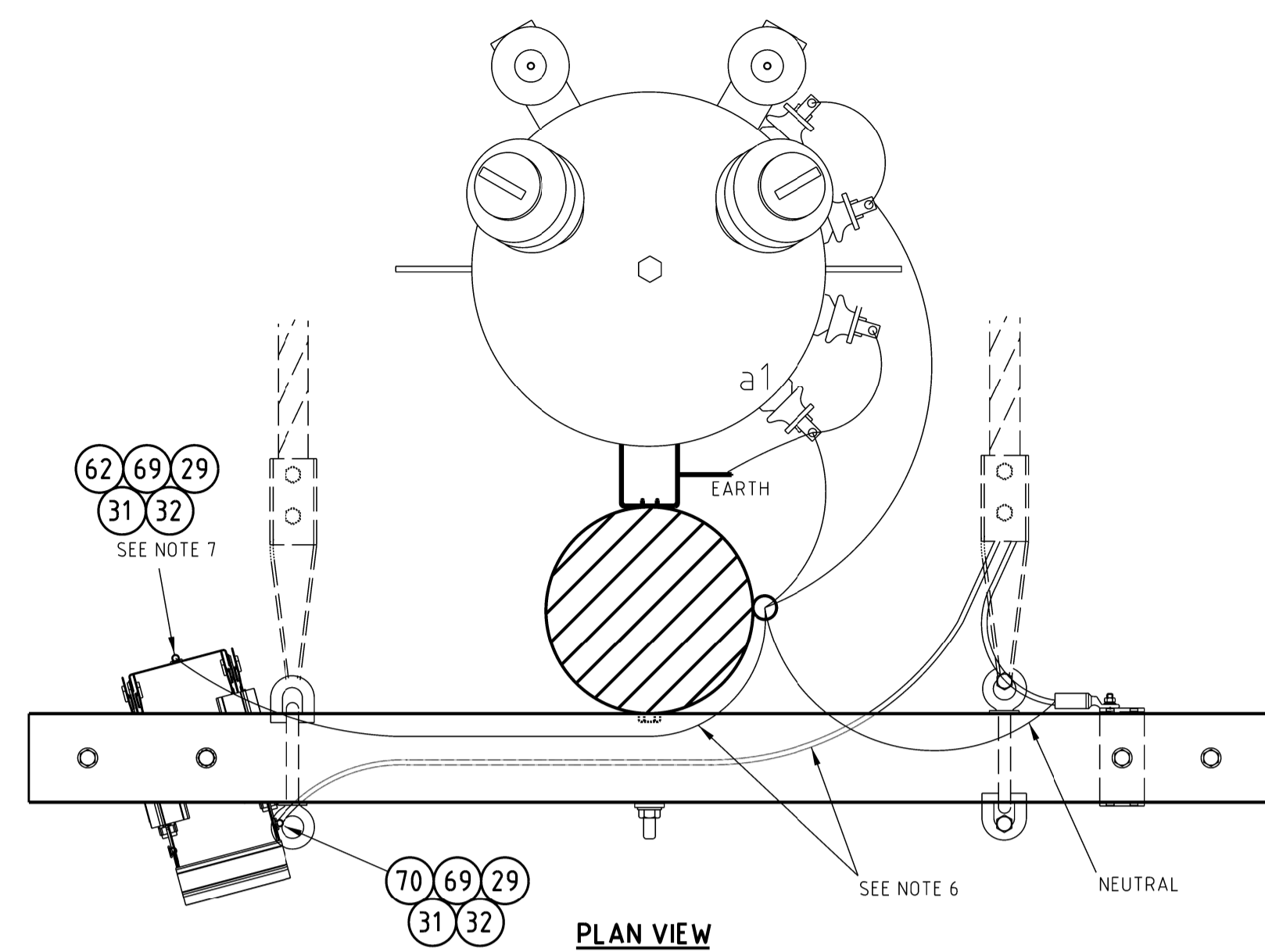
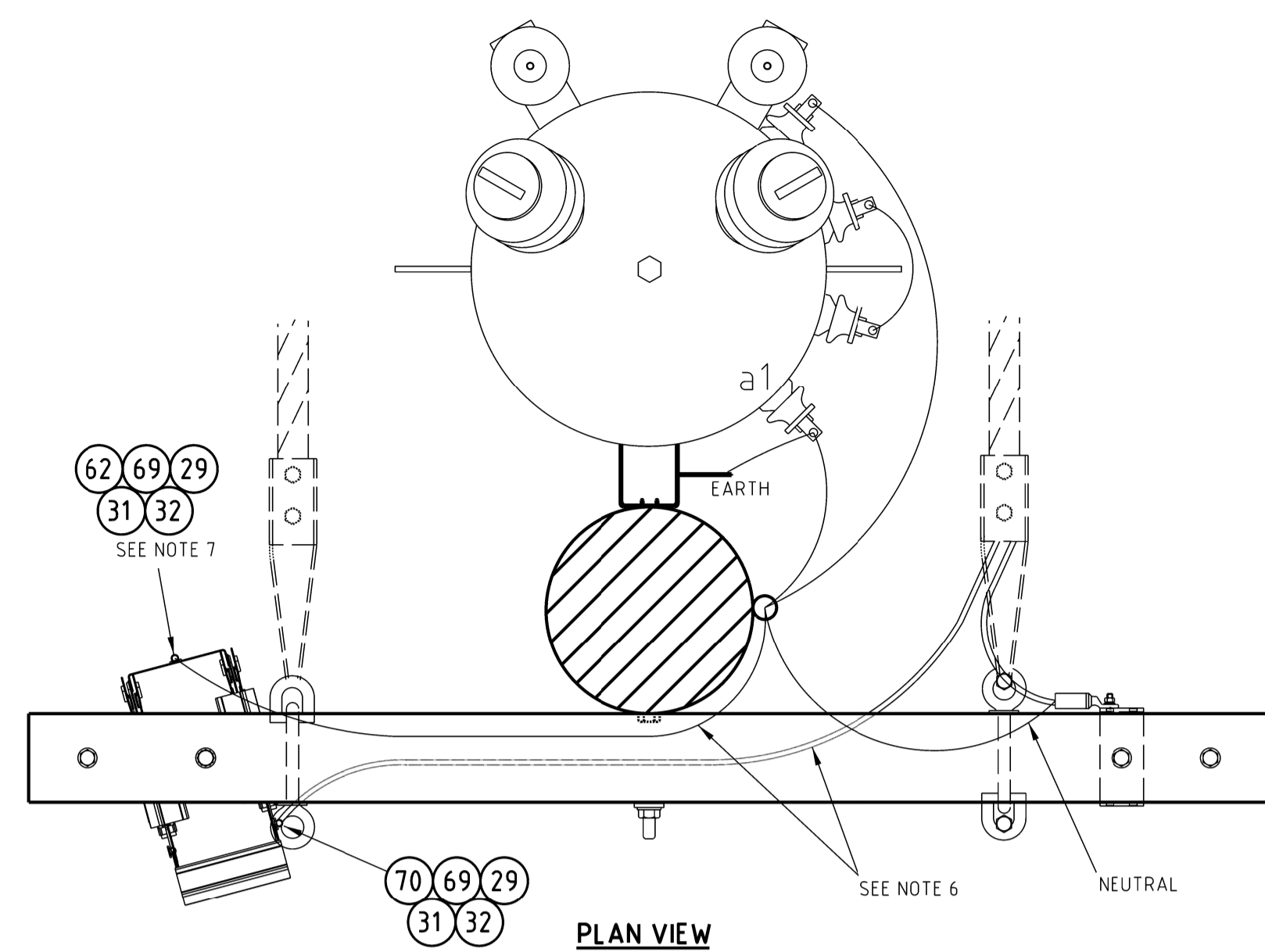


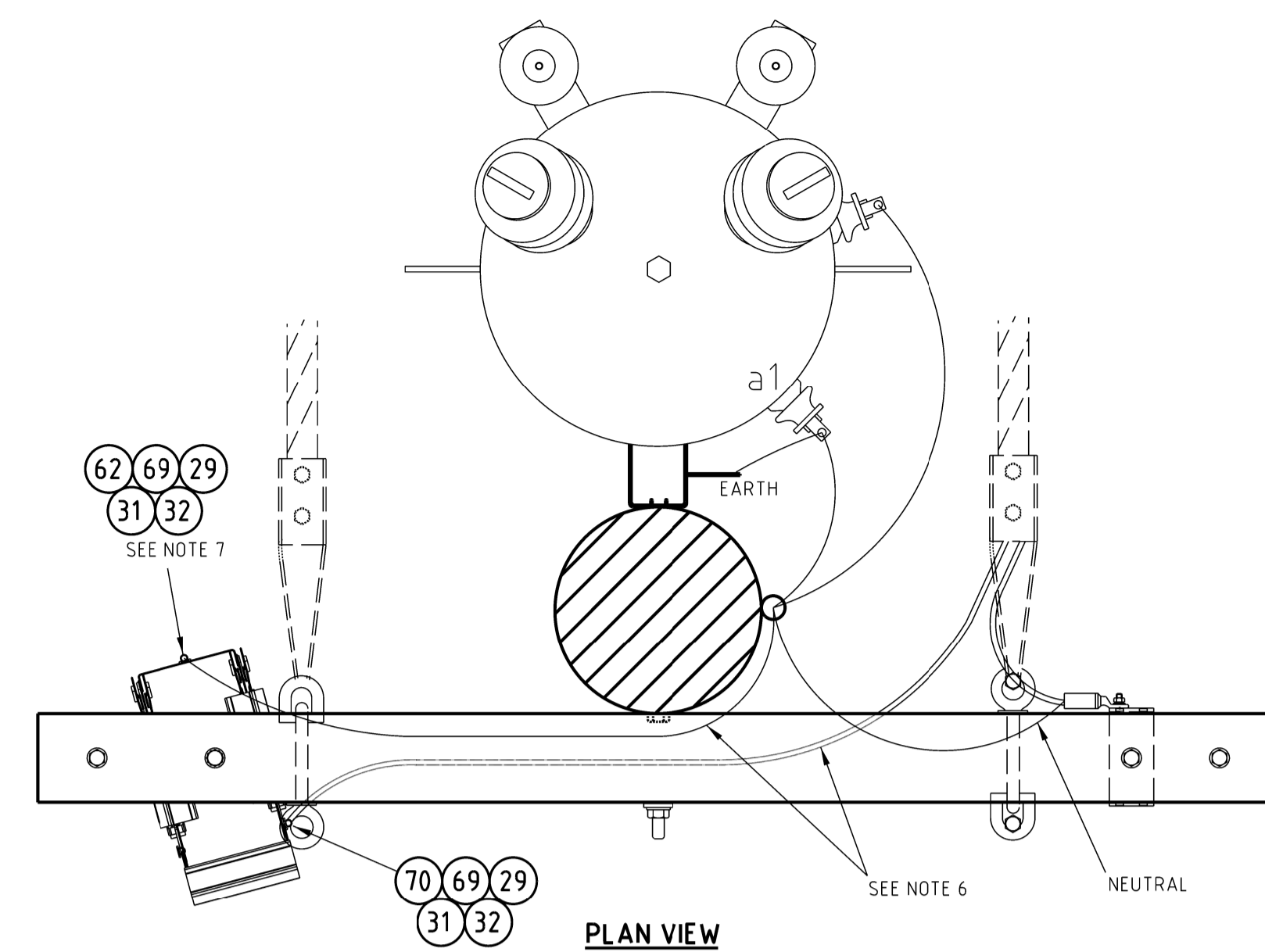
**DETAIL 'B'**  
LV TRANSFORMER a2, a3 & a4  
BUSHING CONNECTIONS  
SCALE 15



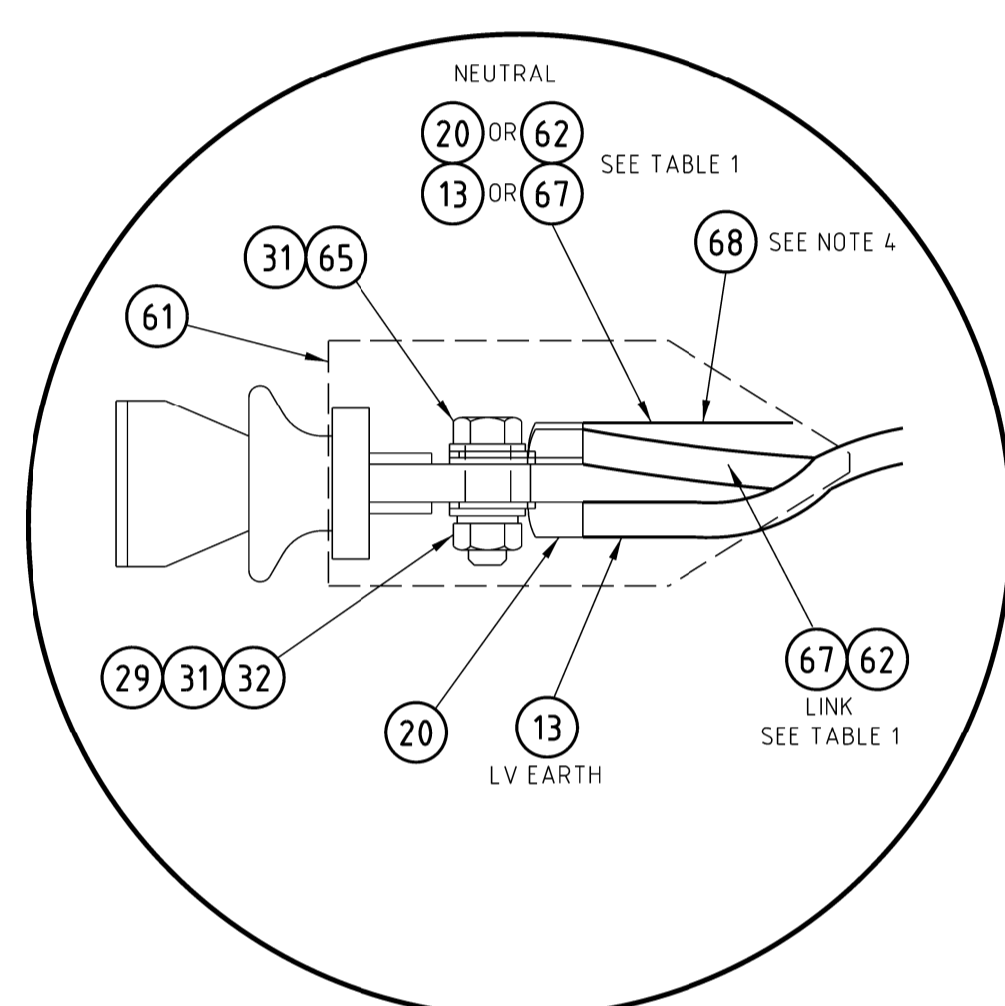
**PLAN VIEW**



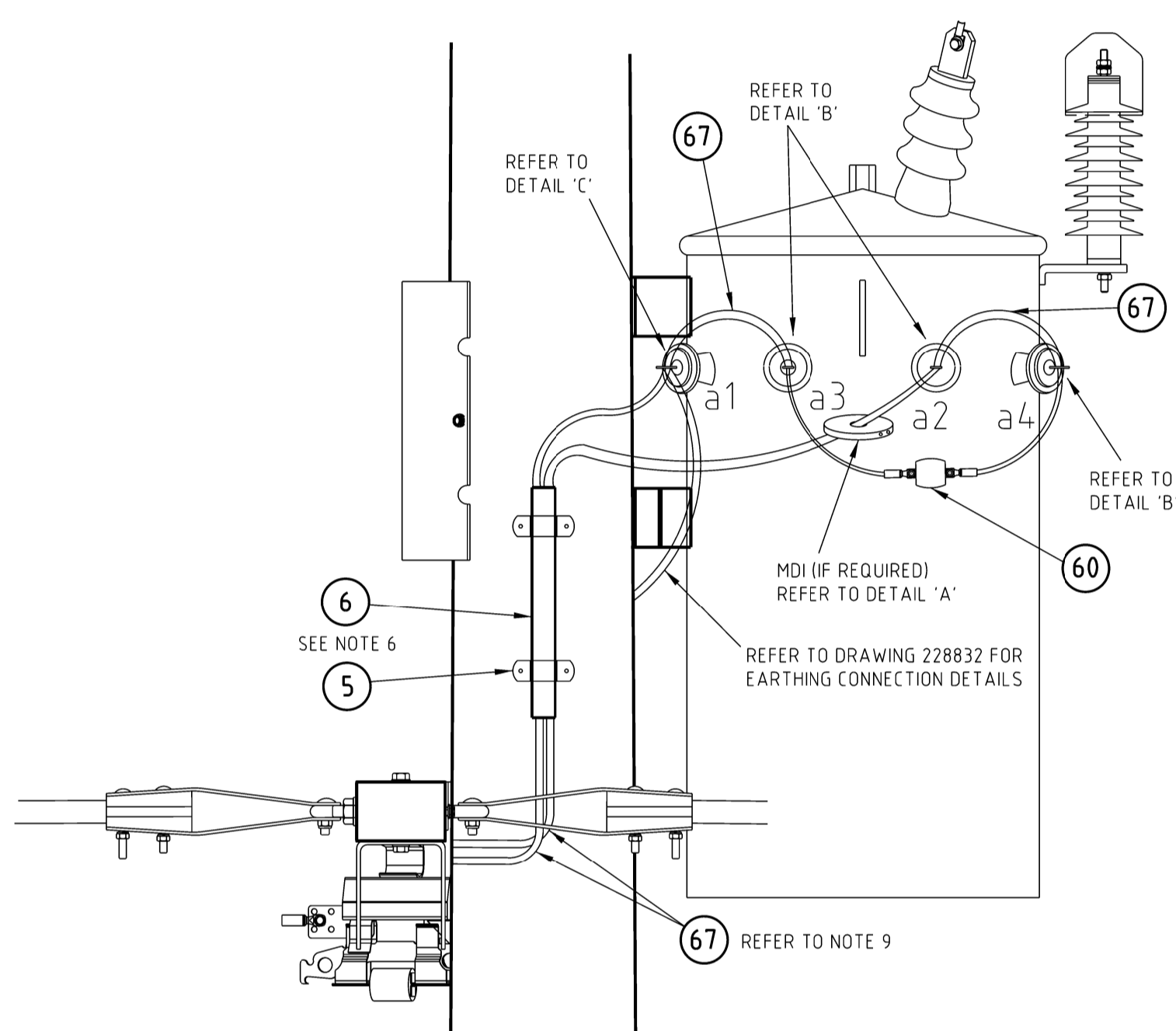
**PLAN VIEW**



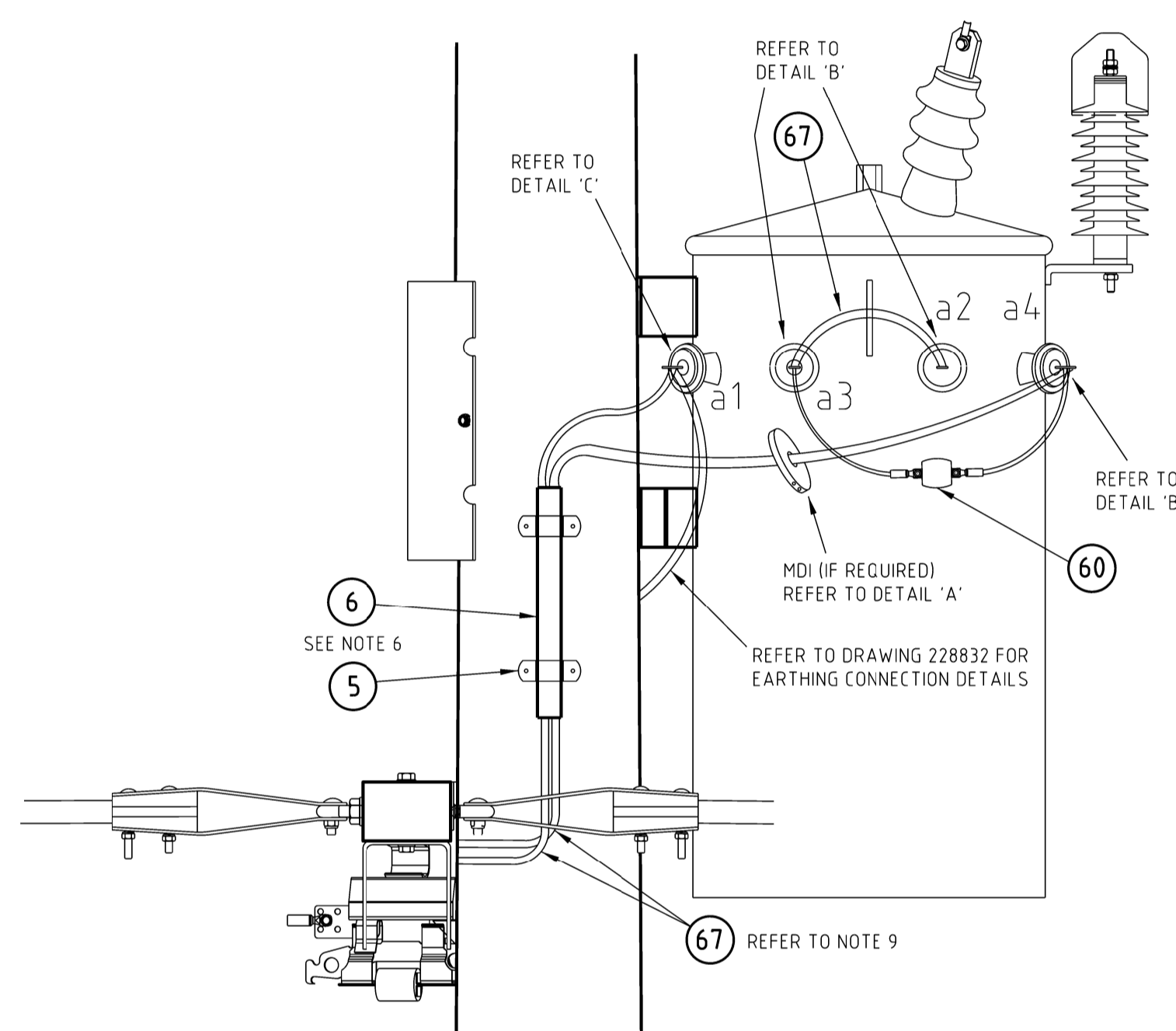
**PLAN VIEW**



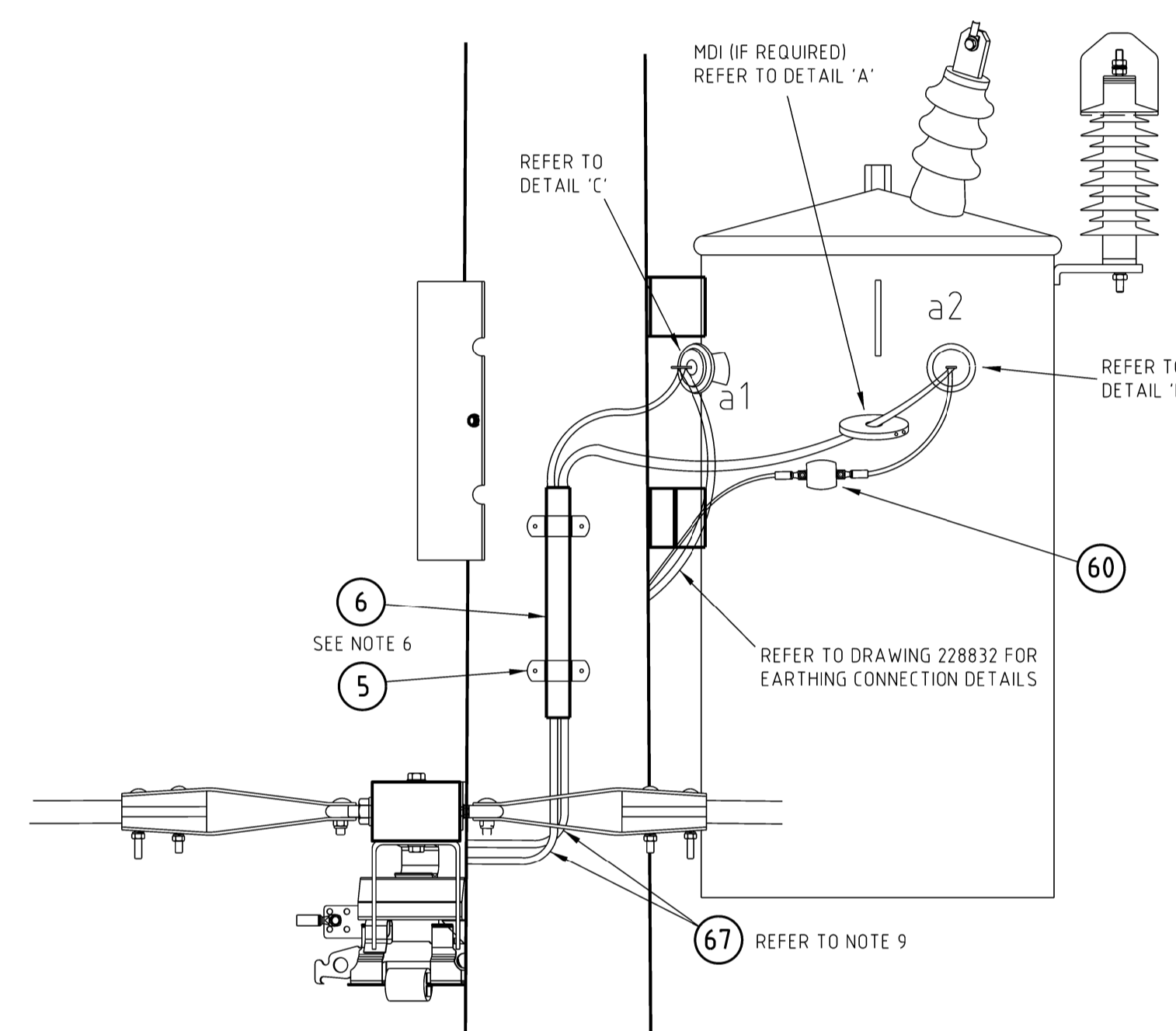
**DETAIL 'C'**  
LV TRANSFORMER 'a1' CONNECTION  
SCALE 12



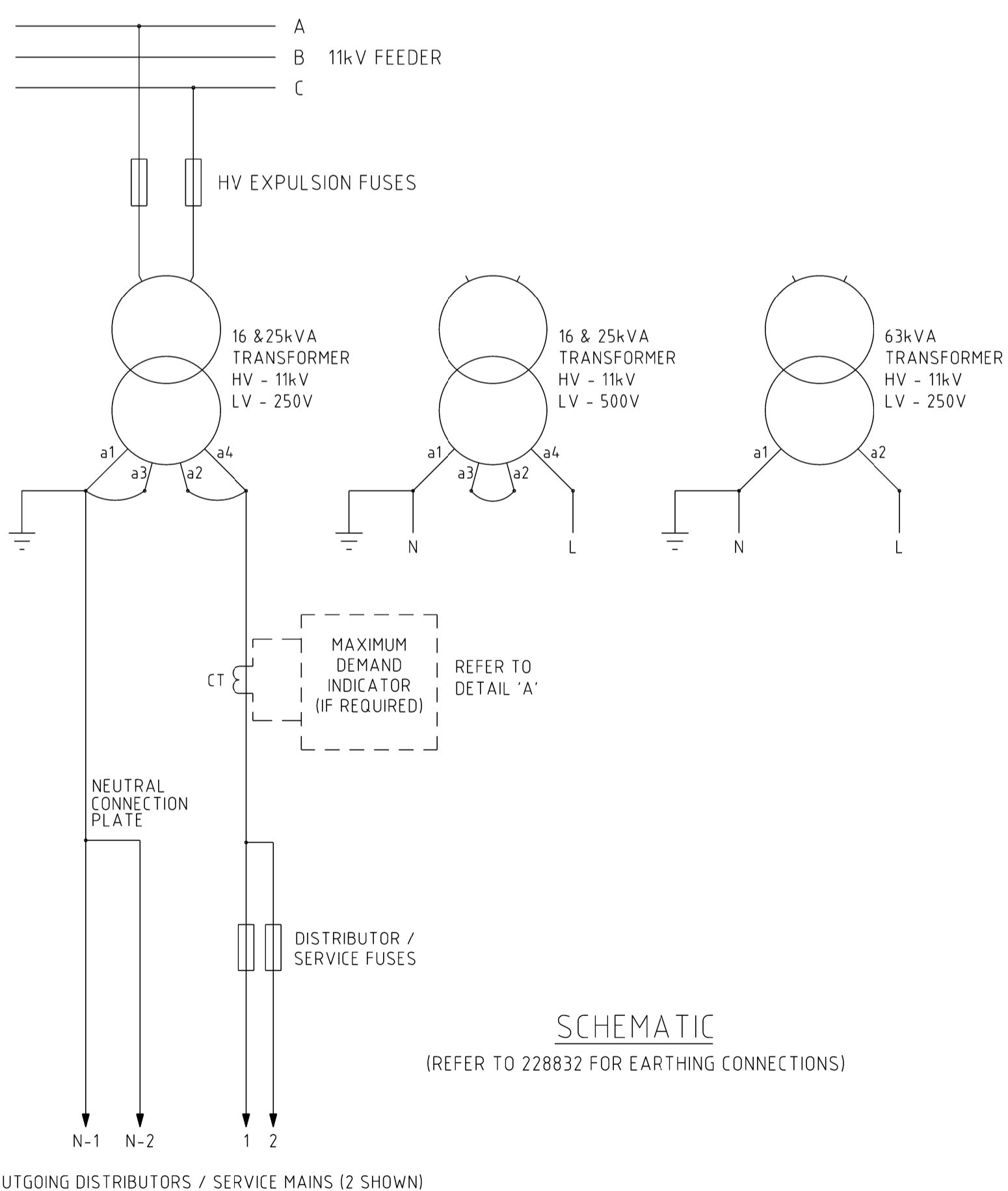
**LV TRANSFORMER CONNECTION DETAILS**  
16 & 25kVA 250 VOLT  
SIDE VIEW  
SCALE 110



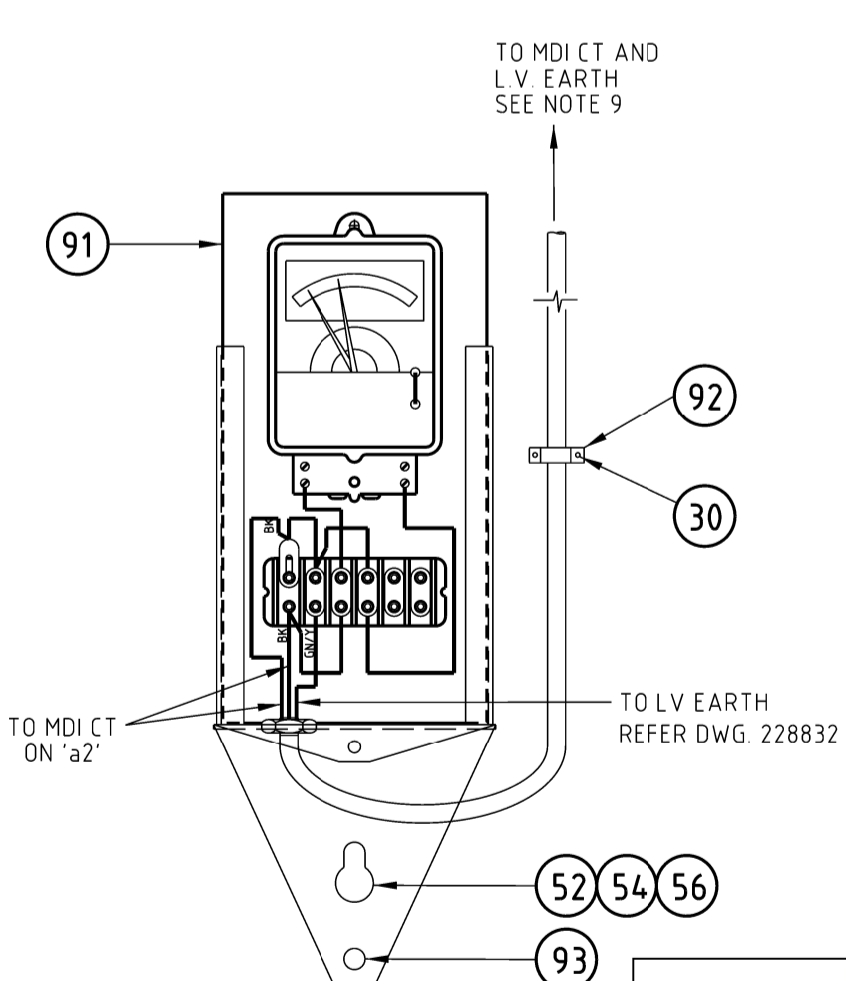
**LV TRANSFORMER CONNECTION DETAILS**  
16 & 25kVA 500 VOLT  
SIDE VIEW  
SCALE 110



**LV TRANSFORMER CONNECTION DETAILS**  
63kVA 250 VOLT  
SIDE VIEW  
SCALE 110

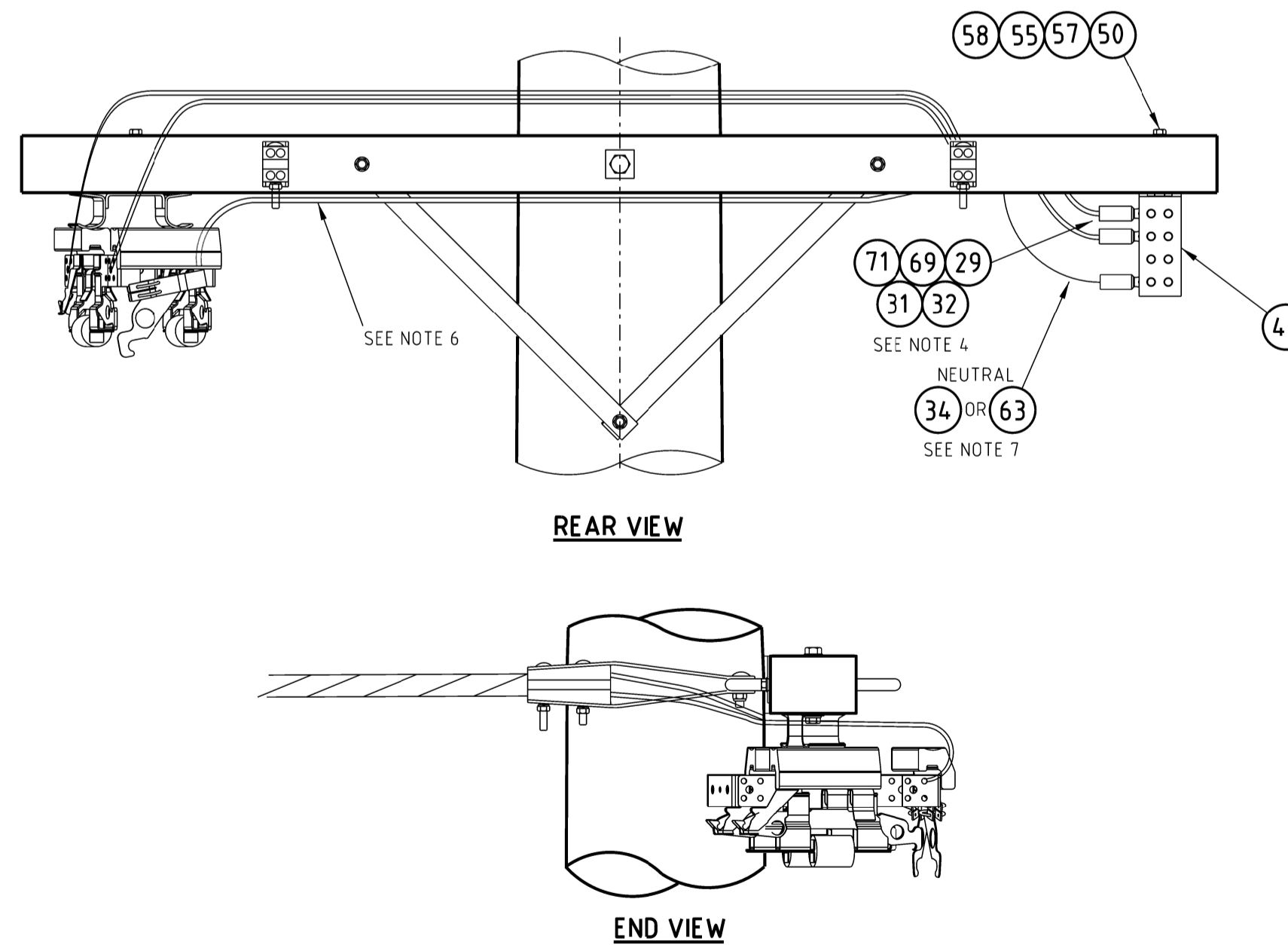


**SCHEMATIC**  
(REFER TO 228832 FOR EARTHING CONNECTIONS)



**DETAIL 'A'**  
MDI CONNECTIONS  
SCALE 15

MDI CT RATIOS	
TRANSFORMER RATING	CT RATIO
16kVA	150/5
25kVA	150/5
63kVA	200/5



**LV ABC CONNECTION DETAILS**

REFER TO DRAWING 228837 FOR OPEN WIRE DETAILS

CABLE SIZES (Item 67)		
TRANSFORMER SIZE	PHASE CONDUCTOR (Cu/XLPE - Black Insulation)	NEUTRAL CONDUCTOR (Cu/XLPE - Black Insulation)
UP TO 25kVA	1 X 35mm <sup>2</sup>	1 X 70mm <sup>2</sup>
63kVA	1 X 95mm <sup>2</sup>	1 X 95mm <sup>2</sup>

TABLE 1 - LV TRANSFORMER CABLE SIZES

**NOTES**

- SINGLE CIRCUIT LV FUSES MAY BE USED WHERE SPECIFIED.
- WHEN STANDING ON POLE FACING REAR OF TRANSFORMER DUAL CIRCUIT LV FUSES TO BE CONNECTED AS FOLLOWS:  
- LH FUSE CONNECTS TO CIRCUIT IN FRONT OF THE TRANSFORMER.  
- RH FUSE CONNECTS TO CIRCUIT AT THE REAR OF THE TRANSFORMER.
- PARALLELED ABC TO TERMINATE ON THE LOAD SIDE OF THE SWITCH-FUSE UNIT.
- PROVIDE WATER BLOCKING ON LUGS USING HEATSHRINK ACROSS BARREL AND ABC CABLE.
- REFER TO SCHEMATIC DIAGRAM FOR CONNECTION AND CABLE SIZE DETAILS. REMOVE COPPER BRIDGES ON LV BUSHINGS & INSTALL INSULATED CABLE AS PER DETAIL 'A' & 'B'. NEUTRAL CABLE TO BE CONNECTED TO LV ABC CONNECTION PLATE. PHASE CABLE TO BE CONNECTED TO LINE SIDE OF LV DROPOUT FUSE.
- LV CABLE TO BE PROPERLY SUPPORTED USING THE NECESSARY CABLE TIES, CONDUIT AND SADDLES.
- INSTALL MEDIUM WALLED MASTIC LINED BLACK HEATSHRINK OVER THE BARE LUG BARREL AND CABLE INSULATION.
- SERVICES MAY BE TAKEN OFF THE LV CROSSARM OR DIRECTLY OFF THE POLE, PROVIDING 700mm MINIMUM APPROACH DISTANCE TO HV IS MAINTAINED. SERVICE TAKE-OFF SHALL NOT BE BELOW LV CROSSARM.
- MDI TO BE INSTALLED IF SPECIFIED. MDI CT TO BE CONNECTED TO PRE-WIRED CABLING SUPPLIED WITH MDI UNIT. SECURE CT PRE-WIRED CABLING USING ADDITIONAL CONDUIT, SADDLES AND CABLE TIES AS REQUIRED. CONNECT MDI EARTH CABLE AS DETAILED ON DRAWING 228832 USING CONDUIT, SADDLES AND CABLE TIES AS REQUIRED.

ITEM NUMBERS ARE SHOWN ○

REFER TO DRAWINGS 228831 OR 244227 FOR ITEM NUMBERS

CAD DRAWING	20 SEP 2010
DRW: P. JONES	
CHKD: PHILLIP JONES	
DATE: 08/05/2020	
ITEM NUMBERS CORRECTED	
APPD: GLENK FORD	
DATE: 21/10/2021	
MDI CT RATIO TABLE ADDED	
APPD: P. TURPIN	



145 NEWCASTLE RD WALLSEND, NSW 2287

SCALE	AS SHOWN
DESIGNED	C. MABBUTT
DRAWN	P. JARVIS
CHECKED	D. GRIEV
APPROVED	15/10/12
DATE	
PROJECT NUMBER	STD
PROJTRAK NUMBER	

STANDARD CONSTRUCTION	
SINGLE PHASE - 11/22kV POLE MOUNTED DISTRIBUTION SUBSTATION	
0-63kVA	
LV TRANSFORMER & LV ABC CONNECTIONS	
DRAWING No	228834
SHEET	01
AMD	4