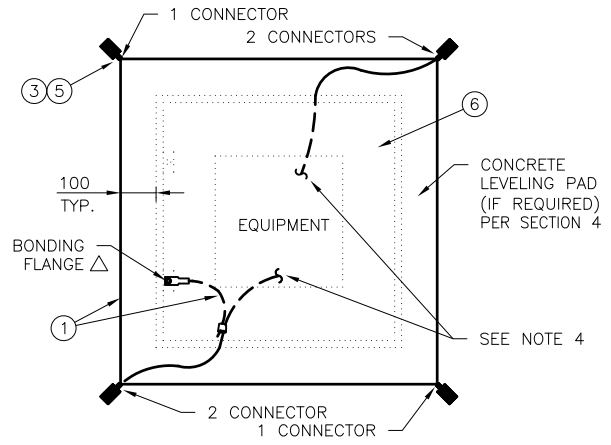
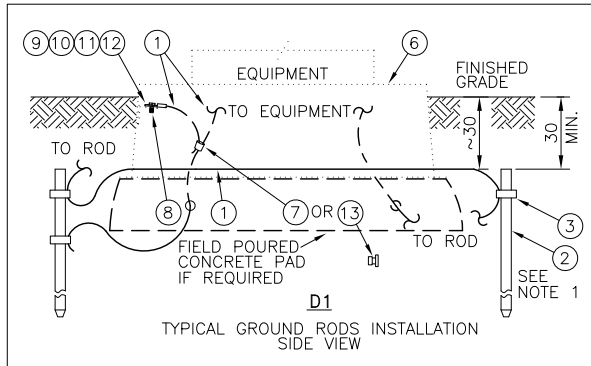


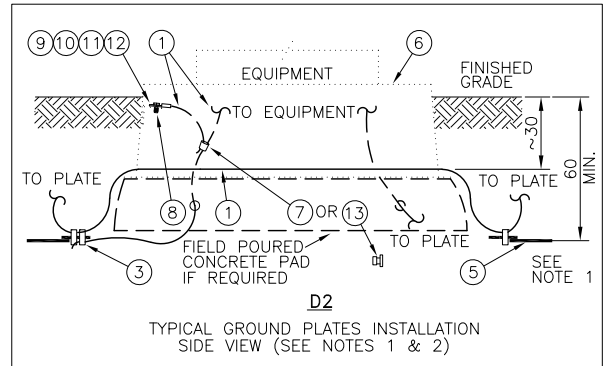
FIG. 1
GROUND GRID WITH GROUND RODS
PLAN VIEW



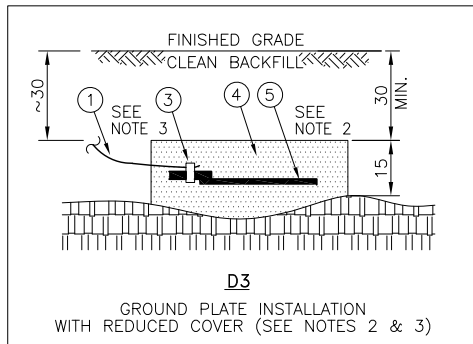
ALT. 1
GROUND GRID WITH GROUND PLATES
PLAN VIEW (SEE NOTES 1 & 2)



D1
TYPICAL GROUND RODS INSTALLATION
SIDE VIEW



D2
TYPICAL GROUND PLATES INSTALLATION
SIDE VIEW (SEE NOTES 1 & 2)



D3
GROUND PLATE INSTALLATION
WITH REDUCED COVER (SEE NOTES 2 & 3)

NOTES:

- GROUND RODS MAY BE SUBSTITUTED WITH GROUND PLATES ONLY IF GROUND RODS CANNOT BE DRIVEN DUE TO ROCKY GROUND CONDITIONS. MAINTAIN 60cm MINIMUM NATIVE SOIL COVER OVER PLATES, 30cm MINIMUM OVER GROUND RODS AND APPROX. 30cm OVER GROUND WIRE(S).
- PLATES INSTALLED WITH LESS THAN 60cm OF COVER MUST BE INSTALLED PER INSET 'D3'. EACH GROUND PLATE REQUIRES MINIMUM ONE BAG OF G.E.M. PLATE TO BE CENTERED WITHIN MIXTURE.
- MECHANICAL PROTECTION (7.5cm OF CONCRETE, 20MPa MIN. STRENGTH) IS REQUIRED OVER PLATES AND GROUND WIRES FOR BURIAL DEPTHS LESS THAN 30cm.
- LEAVE MINIMUM 2m COIL OF #4 AWG BARE COPPER WIRE IN FOUNDATION FOR FINAL CONNECTION TO EQUIPMENT.

PARTS LIST

PART No.	MM No.	DESCRIPTION	QTY	
1	30014480	CONDUCTOR, BARE COPPER, #4 AWG	A/R	A/R
2	30014142	GROUND ROD, 3/4" x 10', GALV.	4	N/A
3	30006646	CONNECTOR, GROUND ROD TO #4 AWG COPPER WIRE	6	6
4	30025402	REDUCED DUST GROUND ENHANCING MATERIAL (G.E.M)	N/A	A/R
5	30025401	GROUND PLATE, GALV., 10" x 16", C/W 8" BAR	N/A	4
6	MM#	ALUMINUM BASE	1	1
7	30007255	CONNECTOR, WEDGE-TYPE, FOR #4 AWG CU	1	1
8	30006884	CONNECTOR, COMPRESSION, 1-HOLE, FOR #4 AWG	1	1
9	30001611	WASHER, SI-BR, LOCK, FOR 1/2" BOLT	1	1
10	30001184	BOLT, 1/2" DIA. 1-1/2" LG, SI-BR	1	1
11	30001499	NUT, HEX FOR 1/2" SI-BR BOLT	1	1
12	30001681	WASHER, FLAT, FOR 1/2" SI-BR BOLT	2	2
13	30006154	CONNECTOR, SPLIT BOLT, CU, #6-2AWG RUN & TAP	A/R	A/R
MM# = REFER TO SECTION 16 ONLY			A/R = AS REQUIRED	
Δ = SUPPLIED WITH EQUIPMENT			N/A = NOT APPLICABLE	

ALL DIMENSIONS IN CENTIMETRES
UNLESS OTHERWISE STATED

01	SEPT 2023	ORIGINAL DU-14-102-R0 IS NOW SUPERSEDED BY THIS NEW DRAWING/REVISION. GENERAL UPDATES. CHANGED TO NEW SECTION 12. CHANGED TO NEW DWG. & NUMBERING FORMAT.	GJ	PC	MM	MM
Rev No.	Date	Revision Particulars	dwn	ckd	des	app

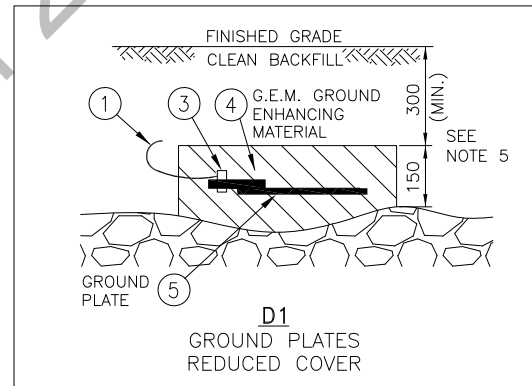
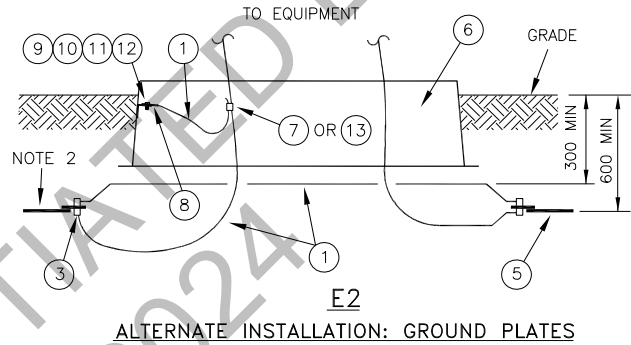
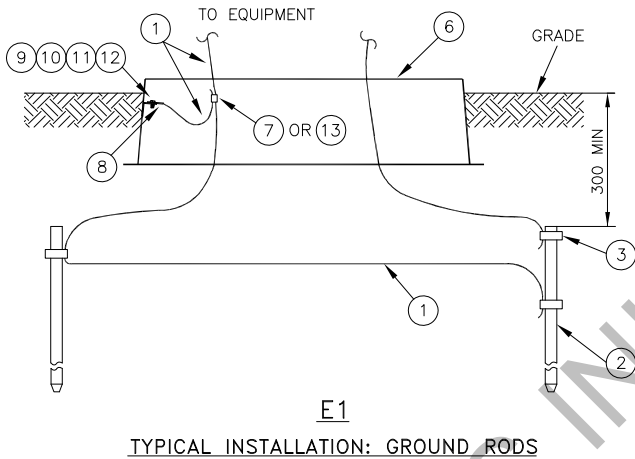
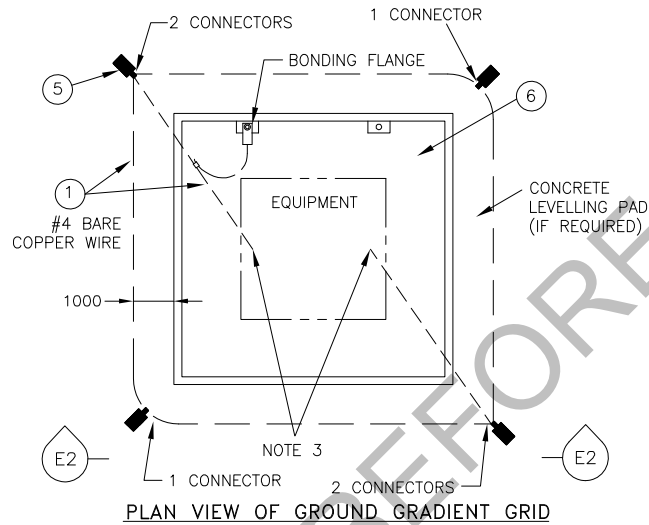
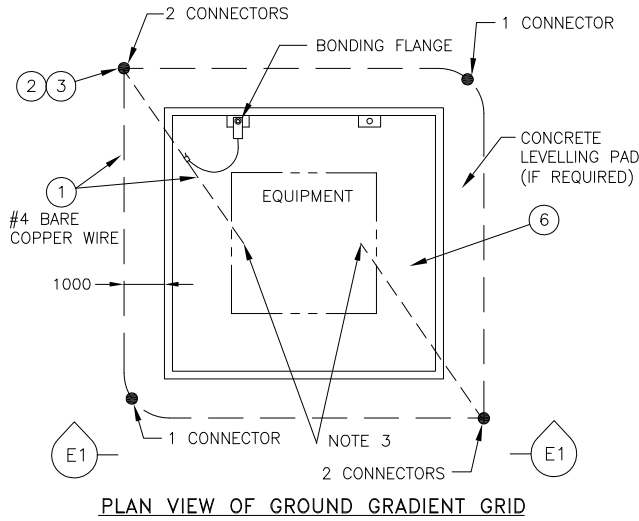


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Drawn By: GJ	Checked By: PC	Designed By: M.MATEVSKI	Design Approved By: M.MATEVSKI P.Eng.
Scale: N.T.S.	Date: (yyyy/mm/dd) 2020/03/12	Pole ID:	

Title: GROUNDING FOR PAD-MOUNTED EQUIPMENT - TYPICAL ALUMINUM BASE INSTALLATION WITH GROUND ROD OR GROUND PLATE	
Drawing No. DU12-102-0500	Rev. No. 01

TITLE BLOCK REV 02 - AUGUST 2014



PARTS LIST			
PART No.	MM No.	DESCRIPTION	QTY
1	30014480	BARE CONDUCTOR, COPPER, #4 AWG	A/R
2	30014142	ROD, GROUND, 3/4" x 10ft. GALVANIZED	A/R
3	30006646	CONNECTOR, GRD WEDGE, GROUND ROD/PLATE TO #4 COPPER WIRE	6
4	30025402	GROUND ENHANCING MATERIAL (G.E.M.)	A/R
5	30025401	GROUND PLATE	A/R
6	MM#	EQUIPMENT BASE, ALUMINUM	A/R
7	30007255	CONNECTOR, TAP WEDGE, 4AWG-4AWG	A/R
8	30006884	CONNECTOR, COMPRESSION, 1-HOLE, #4 CU	1
9	30001611	WASHER, SI-BR, LOCK, FOR 1/2" BOLT	1
10	30001184	BOLT, 1/2" DIA. 1-1/2" LG, SI-BR	1
11	30001499	NUIT, HEX FOR 1/2" SI-BR BOLT	1
12	30001681	WASHER, FLAT, FOR 1/2" SI-BR BOLT	2
13	30006154	CONNECTOR, SPLIT BOLT, CU, 6-2AWG RUN & TAP	A/R
MM# = REFER TO SECTION 16 ONLY		A/R = AS REQUIRED	

REFERENCES:
SECTION 1 DEFINITIONS
SECTION 6C CONSTRUCTION GUIDE
SECTION 16 MATERIALS LIST

NOTES:

- ALL DIMENSIONS ARE IN mm UNLESS STATED OTHERWISE.
- GROUND RODS MAY BE SUBSTITUTED WITH GROUND PLATES ONLY IF GROUND RODS CANNOT BE DRIVEN DUE TO ROCKY GROUND CONDITIONS. MAINTAIN 600mm MINIMUM NATIVE SOIL COVER OVER PLATES AND 300mm OVER GROUND WIRE(S).
- LEAVE 2 m COIL OF #4 WIRE IN FOUNDATION FOR FINAL CONNECTION TO EQUIPMENT.
- PLATES INSTALLED WITH LESS THAN 600mm OF COVER MUST BE INSTALLED PER INSET 'D1'. EACH GROUND PLATE REQUIRES ONE BAG OF G.E.M.(MINIMUM). PLATE TO BE CENTRED WITHIN MIXTURE.
- MECHANICAL PROTECTION (75mm 21 MPa CONCRETE) IS REQUIRED OVER PLATES AND GROUND WIRES FOR BURIAL DEPTHS LESS THAN 300mm.

Rev. No.	Issue Date	Revision	Dwn	Approved By	Date
*	*	*	*	*	*
LS				*	NOV.26,2013
GROUND GRID DETAILS FOR EQUIPMENT INSTALLATION ON ALUMINUM BASES					
Dwg. No.				Rev.	
DU-14-102				00	

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