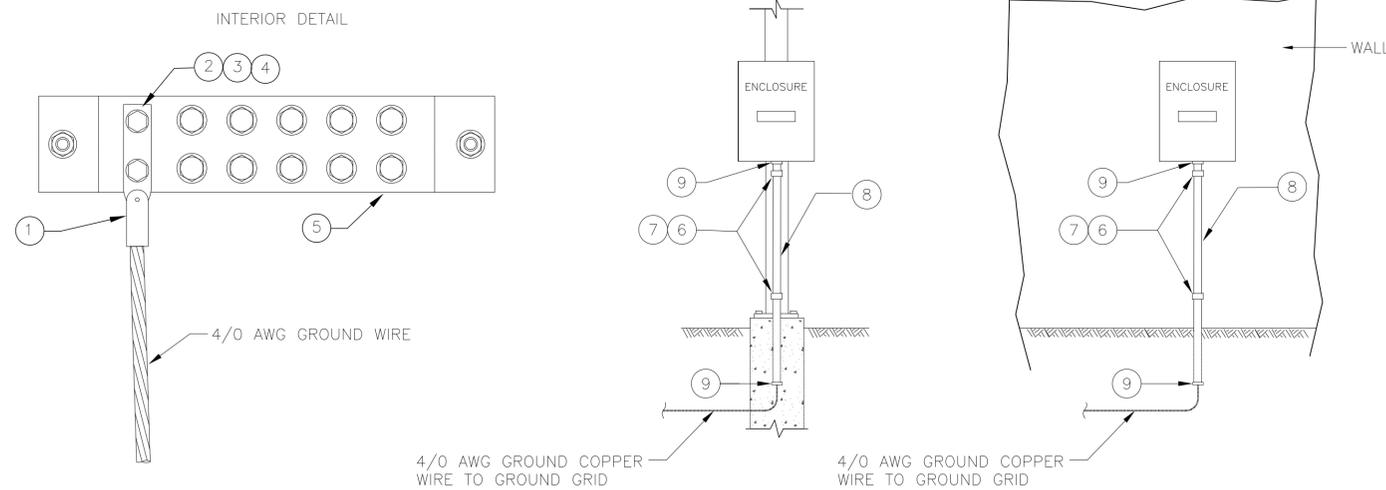
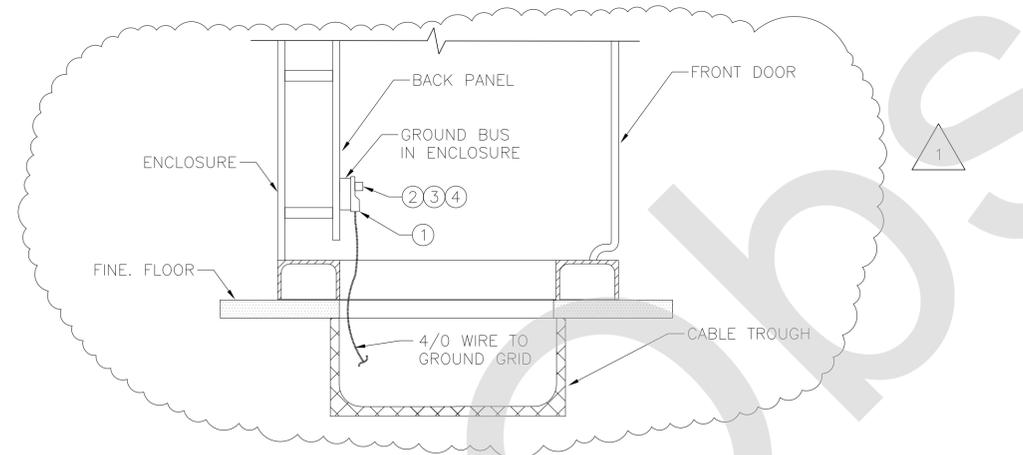


PLOTTED BY: PAULRI PLOTTED DATE: 2015/04/15 PAPER SIZE AT FULL: ANSI D (22.00 x 34.00 INCHES) FILE: \\FILE-RGDC01\DEPT\GOIC017 PROGRAM MANAGEMENT & STANDARDS\PMPS DESIGN STANDARDS\7 REFERENCE MATERIAL\24 ELECTRIFICATION\GROUNDING AND BONDING STANDARD DRAWINGS\MXS-200-003 REV.1.DWG



DETAIL 1 - GROUNDING CONNECTION TO WALL & POLE MOUNTED METAL ENCLOSURES

ITEM	QTY	UNIT	MATERIAL DESCRIPTION	MANUFACTURER & CAT. NO.
1	1	EA	TERMINAL, 2 HOLE, SEE DRAWING MXS-100-1 DETAIL 5	BURNDY: YA28L-BOX OR EQUIVALENT
2	2	EA	DURIUM BOLT 1/2"-13 X 1", W/NUT	BURNDY: 50X100 HEB BOX OR EQUIVALENT
3	4	EA	DURIUM FLAT WASHER 1/2"	BURNDY: 50 FW BOX OR EQUIVALENT
4	4	EA	DURIUM SPRING WASHER 1/2"	BURNDY: 50 SW BOX OR EQUIVALENT
5	1	EA	COPPER GROUND BUS 6mm X 50mm X 300mm (1/4" X 2" X 12") MIN	(GENERIC)
6	2	EA	ANCHOR, SS 304	HILTI: KBS 1/4"X2-1/4" OR EQUIVALENT
7	2	EA	27mm CONDUIT CLAMP 1-HOLE	T&B: 1278 OR EQUIVALENT
8	PER DESIGN	N/A	27mm CONDUIT	(GENERIC)
9	2	EA	BUSHING	(GENERIC)

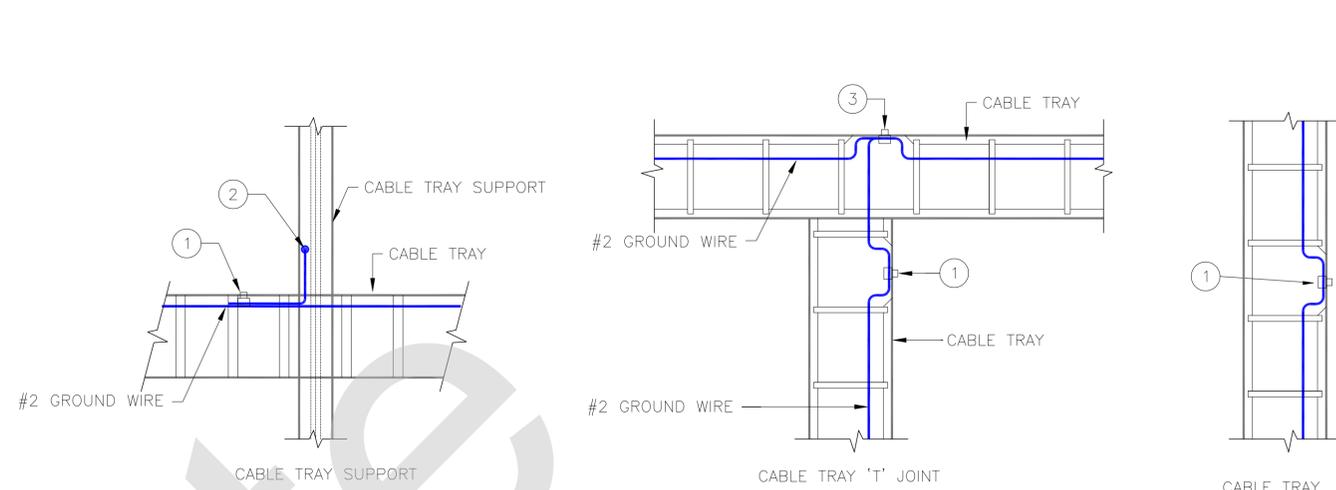


DETAIL 2 - GROUNDING CONNECTION TO STANDALONE METALLIC ELECTRICAL ENCLOSURE

ITEM	QTY	UNIT	MATERIAL DESCRIPTION	MANUFACTURER & CAT. NO.
1	1	EA	TERMINAL, 2 HOLE, SEE DRAWING MXS-100-1 DETAIL 5	BURNDY: YA28L-BOX OR EQUIVALENT
2	1	EA	DURIUM BOLT 1/2"-13 X 1", W/NUT	BURNDY: 50X100 HEB BOX OR EQUIVALENT
3	1	EA	DURIUM FLAT WASHER 1/2"	BURNDY: 50 FW BOX OR EQUIVALENT
4	1	EA	DURIUM SPRING WASHER 1/2"	BURNDY: 50 SW BOX OR EQUIVALENT

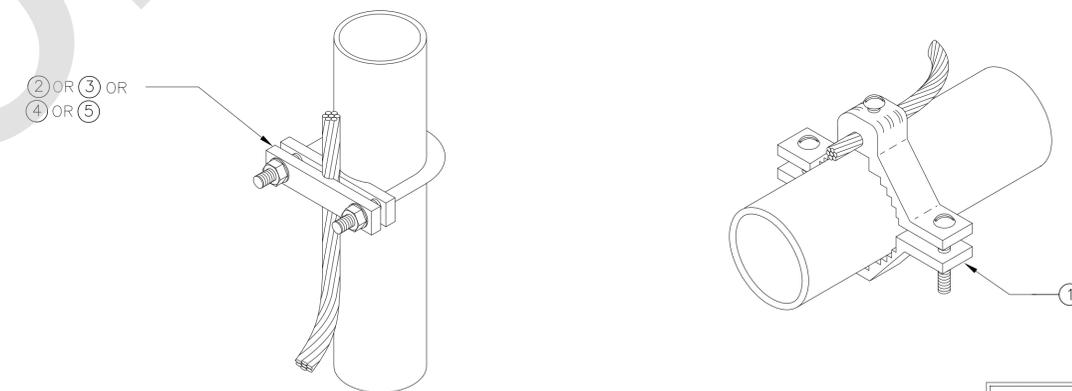
REFERENCE DRAWINGS		ISSUE		REVISIONS	
DWG NO.	TITLE	NO.	DATE	ISSUED FOR	REV. DATE
		3	15/04/06	FINAL DESIGN	
		2	15/03/06	100% DESIGN	
		1	15/02/09	90% DESIGN	
		0	15/01/16	60% DESIGN	
		1	15/04/15	REVISED DETAIL 2	

DRAWN BY: RCW 14/12/11	DESIGNED BY: SXF 14/12/11
CHECKED BY: CTG 15/01/16	APPROVED BY: ZBT 15/01/16
SCALE: NTS FULL SIZE ONLY	



DETAIL 3 - GROUNDING OF METALLIC CABLE TRAYS AND CHASE WAYS

ITEM	QTY	UNIT	MATERIAL DESCRIPTION	MANUFACTURER & CAT. NO.
1	2/SECTION	EA	GROUND CONNECTOR FOR COPPER WIRE	BURNDY: GBL30 OR EQUIVALENT
2	1/SUPPORT	EA	GROUND CONNECTOR FOR TWO COPPER WIRE	BURNDY: GL2929 OR EQUIVALENT
3	1/JOINT	EA	GROUND CONNECTOR FOR TWO COPPER WIRE	BURNDY: GL4C4C OR EQUIVALENT



DETAIL 4 - GROUNDING CONNECTION TO METALLIC CONDUITS/PIPE (WATER,SEWER,GAS,FUEL)

ITEM	QTY	UNIT	MATERIAL DESCRIPTION	MANUFACTURER & CAT. NO.
1	1	EA	CAST BRONZE GROUND CLAMPS	BURNDY: C22HD/ODB OR EQUIVALENT
2	1	EA	MECHANICAL GROUNDING CONNECTOR, WIRE TO 2" PIPE	BURNDY: GAR1829 OR EQUIVALENT
3	1	EA	MECHANICAL GROUNDING CONNECTOR, WIRE TO 2 1/2" PIPE	BURNDY: GAR1929 OR EQUIVALENT
4	1	EA	MECHANICAL GROUNDING CONNECTOR, WIRE TO 3" PIPE	BURNDY: GAR2029 OR EQUIVALENT
5	1	EA	MECHANICAL GROUNDING CONNECTOR, WIRE TO 3 1/2" PIPE	BURNDY: GAR2129 OR EQUIVALENT

NOTE:
THIS DRAWING IS PROVIDED FOR INSTRUCTIONAL DESIGN PURPOSES ONLY BASED ON METROLINX GO TRANSIT DESIGN GUIDELINES AND REQUIREMENTS. THE CONSULTANT SHALL VERIFY FOR LOCAL CODE COMPLIANCE, EXISTING SITE CONDITIONS AND INTER DISCIPLINARY DRAWING COORDINATION. ALL DIMENSIONS AND SPECIFICATIONS SHOULD BE VERIFIED BY CONSULTANT AND/OR CONTRACTOR BEFORE ACTUAL CONSTRUCTION BEGINS.

**PARSONS
BRINCKERHOFF**

METROLINX

TRACTION ELECTRIFICATION
GROUNDING AND BONDING
STANDARD INSTALLATION DESIGN DETAILS
ELECTRICAL ENCLOSURES

CONTRACT NO. RQ-2011-PP-032	DWG. NO. MXS-200-003	REV. 1	SHEET 11/26
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