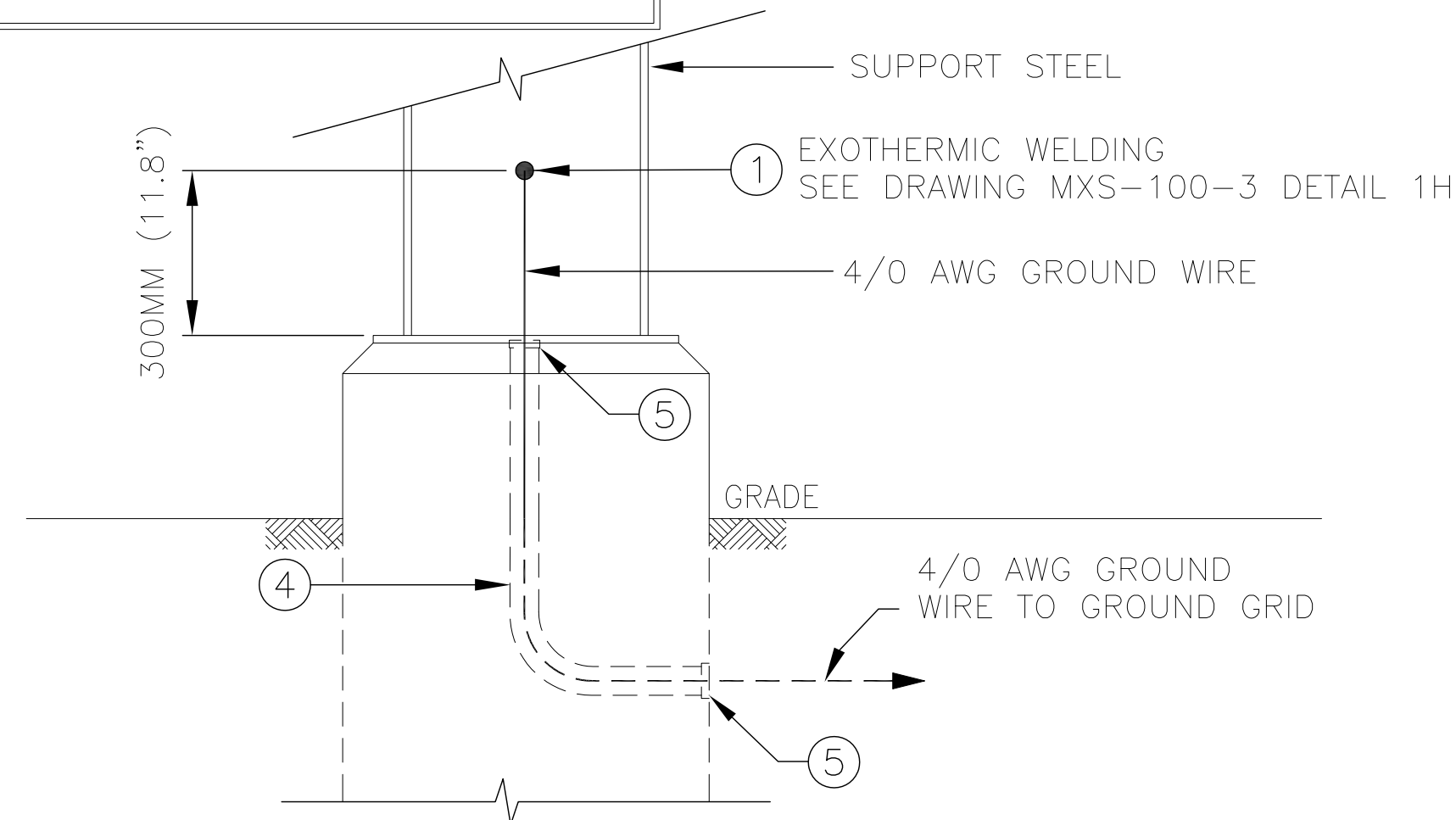


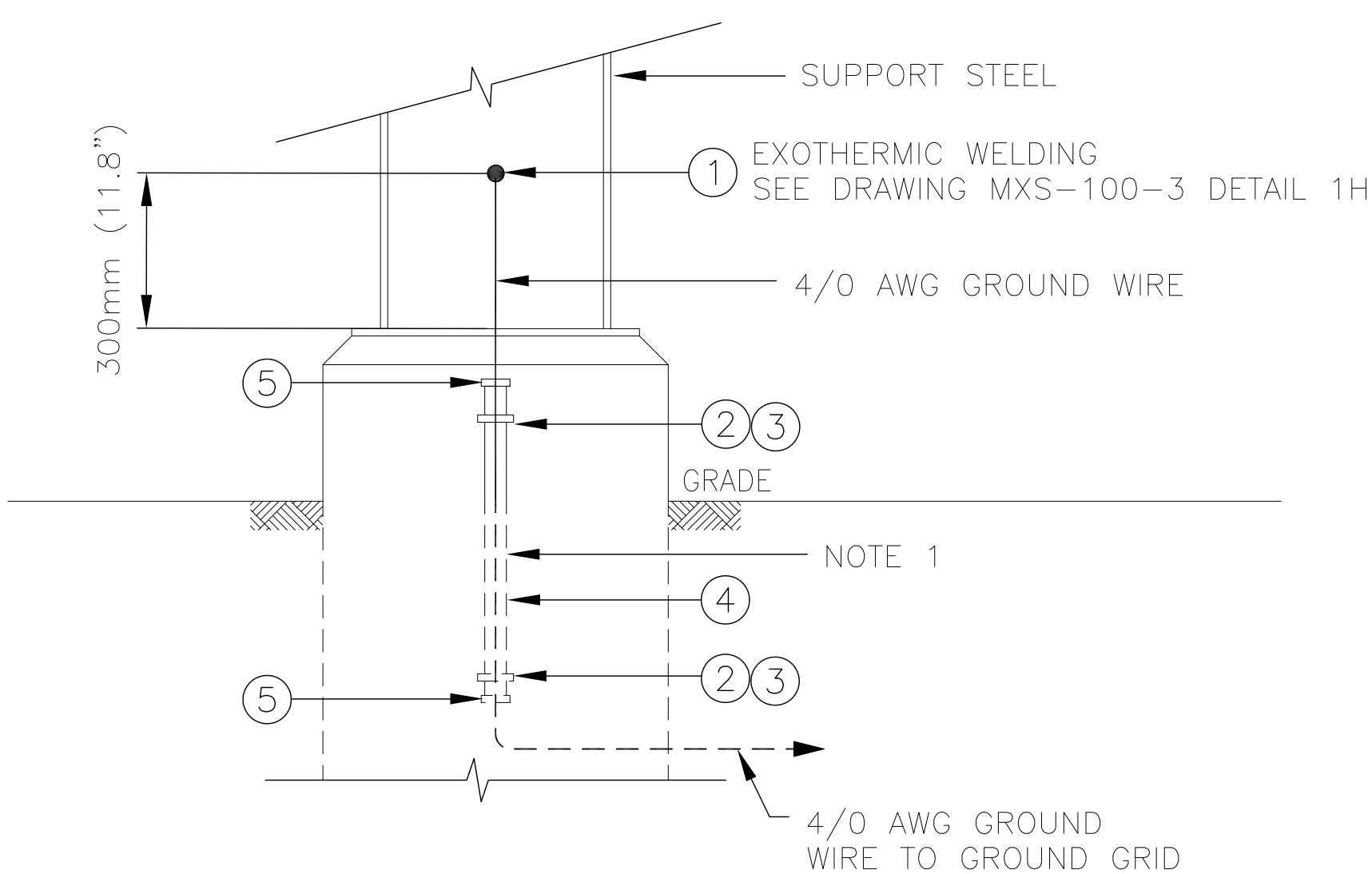
NOTES:

- CONDUITS SHALL BE TERMINATED AT SAME LEVEL AS FOUNDATION ABOVE GRADE. CONDUIT DEPTH SHALL BE SUCH THAT THE GROUND WIRE IS PROTECTED FROM DAMAGE AND CAN BE CONNECTED TO THE GROUND GRID. THE DEPTH WILL BE DETERMINED BASED ON LOCAL SITE CONDITIONS. CONDUIT SHALL BE CAPPED UNTIL GROUNDING CONDUCTOR IS INSTALLED.

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.



DETAIL 1A - EXOTHERMIC CONNECTION TO PROPOSED STRUCTURAL STEEL

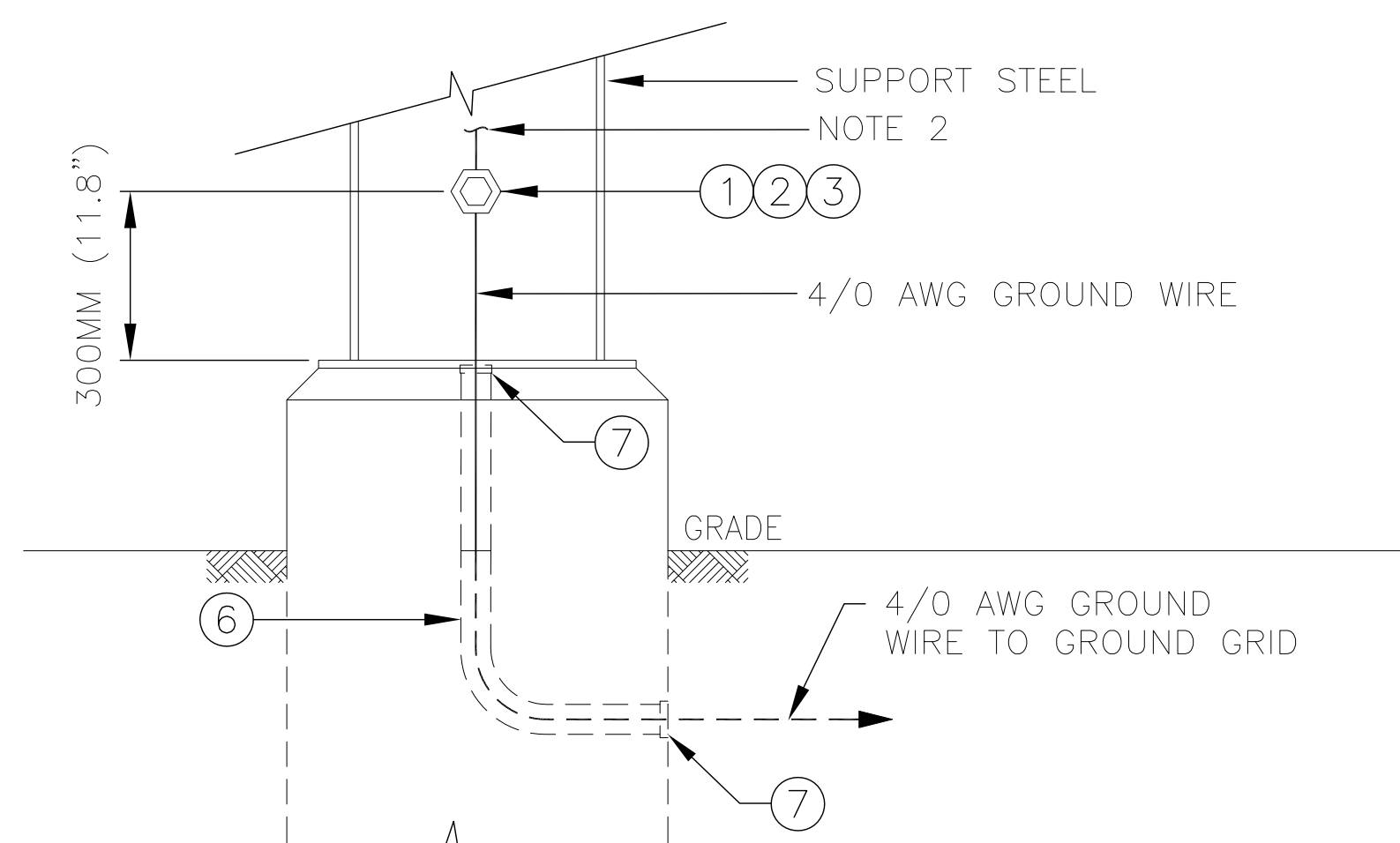


DETAIL 1B - EXOTHERMIC CONNECTION TO EXISTING STRUCTURAL STEEL

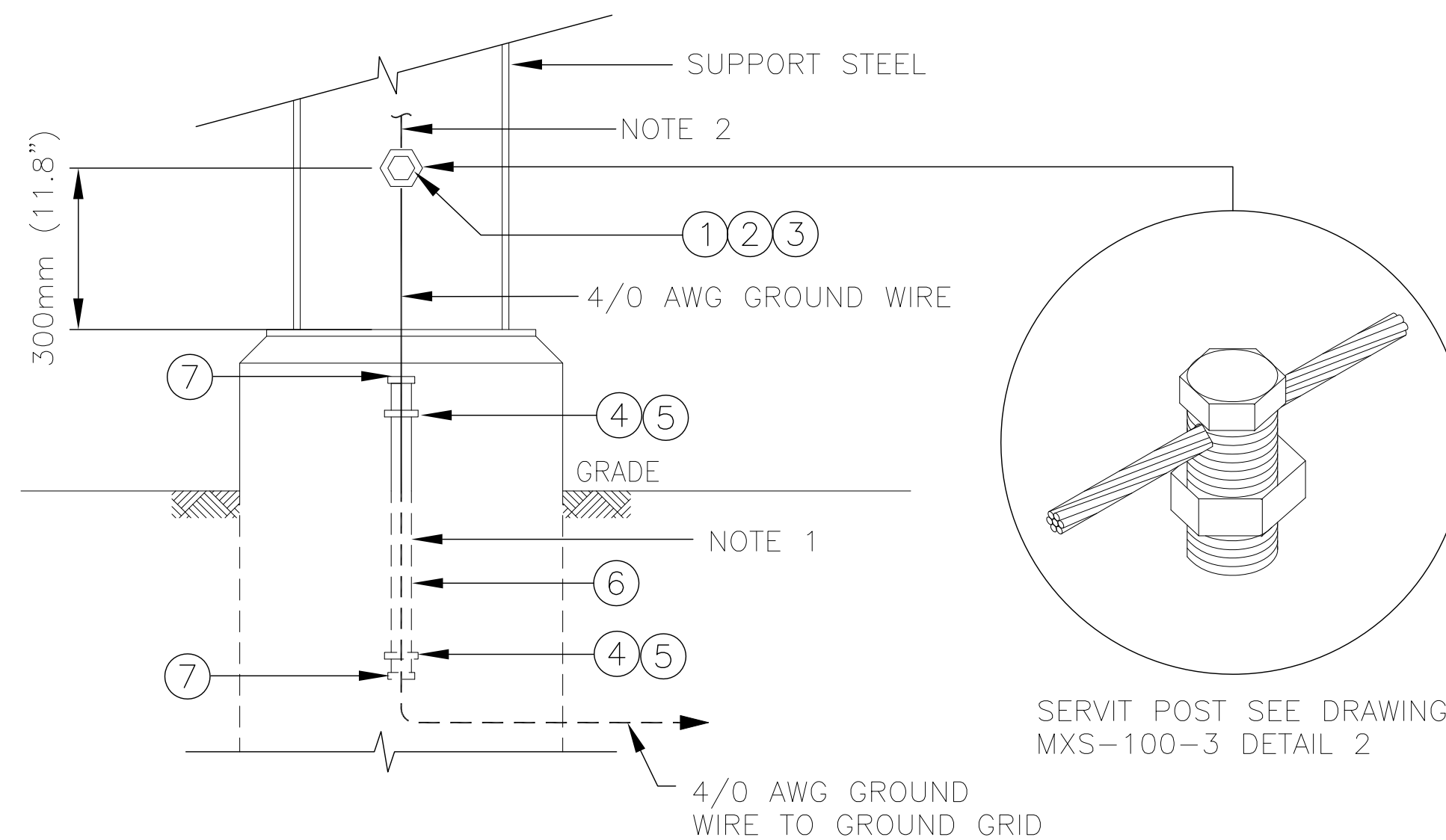
ITEM	QTY	UNIT	MATERIAL DESCRIPTION	MANUFACTURER & CAT. NO.
1	1	EA	VERTICAL CABLE TO VERTICAL STEEL SURFACE EXOTHERMIC CONNECTION	BURNDY: B-8718 OR EQUIVALENT
2	2	EA	ANCHOR, SS 304,316	HILTI: KB3 1/4" X 2-1/4" OR EQUIVALENT
3	2	EA	27mm CONDUIT CLAMP 1-HOLE	T&B: 1278 OR EQUIVALENT
4	PER DESIGN	N/A	27mm CONDUIT	(GENERIC)
5	2	EA	BUSHING	(GENERIC)

NOTES:

- CONDUITS SHALL BE TERMINATED AT SAME LEVEL AS FOUNDATION ABOVE GRADE. CONDUIT DEPTH SHALL BE SUCH THAT THE GROUND WIRE IS PROTECTED FROM DAMAGE AND CAN BE CONNECTED TO THE GROUND GRID. THE DEPTH WILL BE DETERMINED BASED ON LOCAL SITE CONDITIONS. CONDUIT SHALL BE CAPPED UNTIL GROUNDING CONDUCTOR IS INSTALLED.
- CONDUCTOR CAN BE CONTINUED TO CONNECT TO ROOF STRUCTURE ETC, WHERE APPLICABLE.



DETAIL 2A - SERVIT POST CONNECTION TO PROPOSED STRUCTURAL STEEL

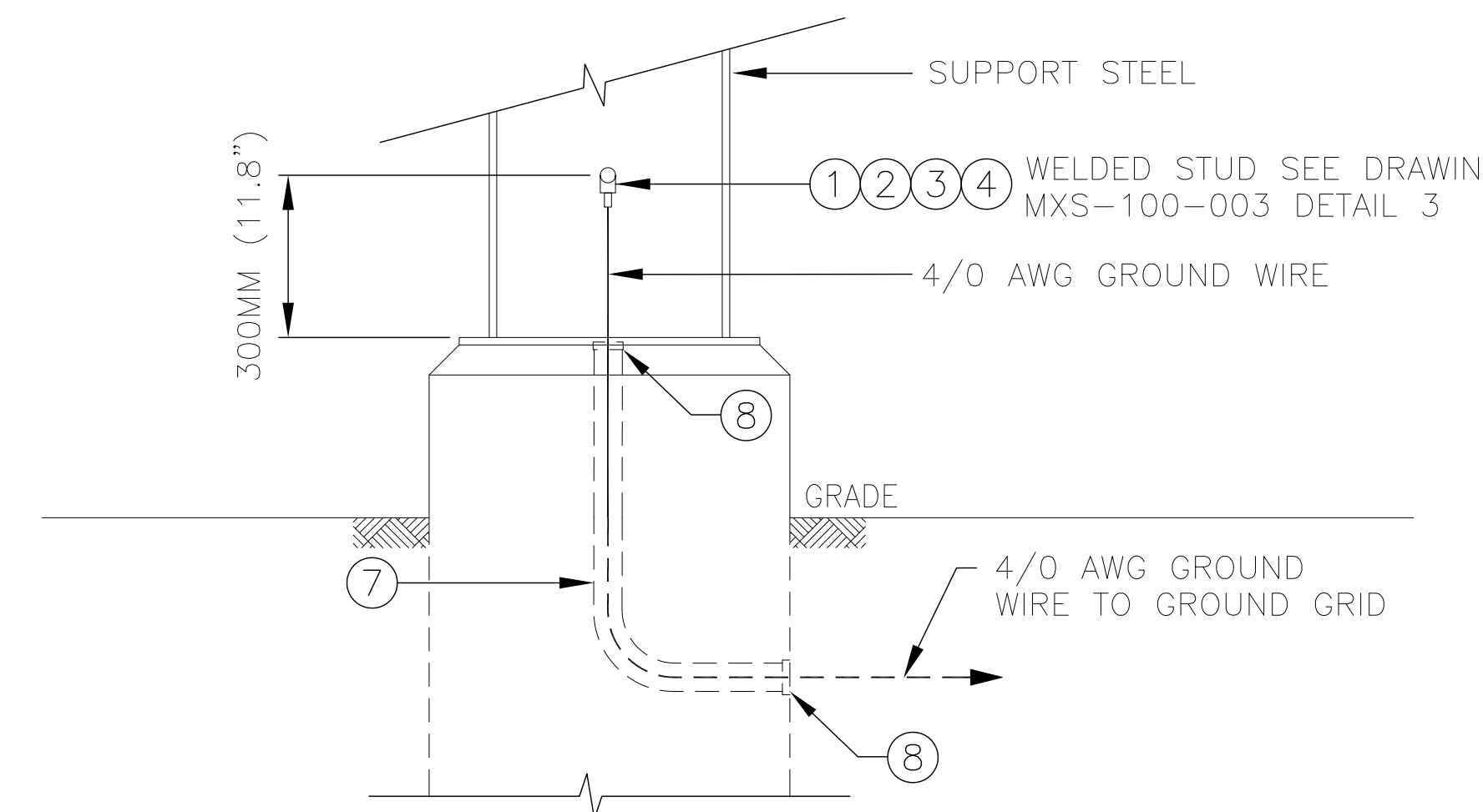


DETAIL 2B - SERVIC POST CONNECTION TO EXISTING STRUCTURAL STEEL

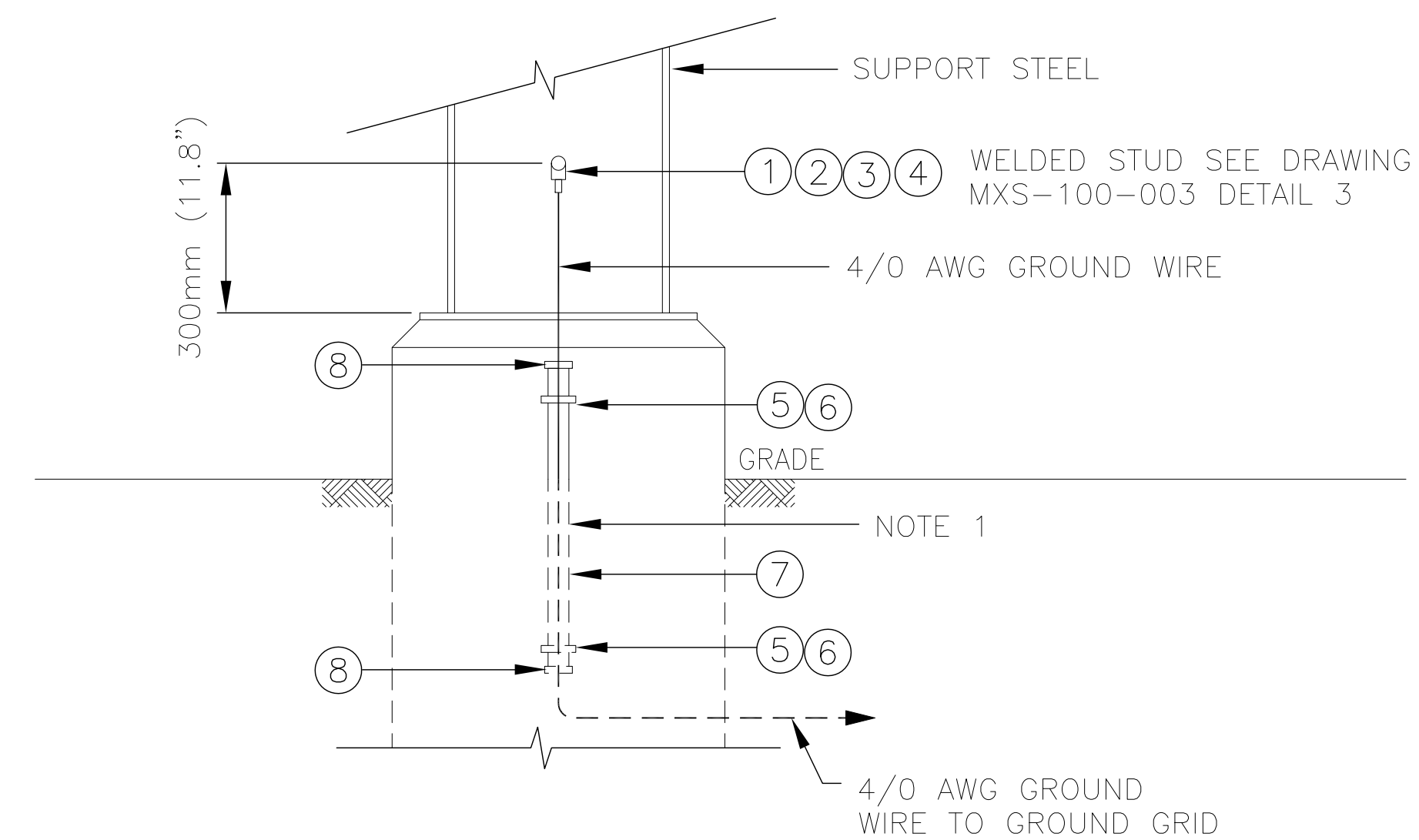
ITEM	QTY	UNIT	MATERIAL DESCRIPTION	MANUFACTURER & CAT. NO.
1	1	EA	CONNECTOR SERVIC POST - K2C28	BURNDY: KC28 OR EQUIVALENT
2	2	EA	LOCK WASHER, DURIMUM, 5/8"-11	BURNDY: 62SWBOX OR EQUIVALENT
3	1	EA	NUT MACH, DURIMUM, 5/8"-11	BURNDY: 62CHENBOX OR EQUIVALENT
4	2	EA	ANCHOR, SS 304,316	HILTI: KB3 1/4" X 2-1/4" OR EQUIVALENT
5	2	EA	27mm CONDUIT CLAMP 1-HOLE	T&B: 1278 OR EQUIVALENT
6	PER DESIGN	N/A	27mm CONDUIT	(GENERIC)
7	2	EA	BUSHING	(GENERIC)

NOTES:

- CONDUITS SHALL BE TERMINATED AT SAME LEVEL AS FOUNDATION ABOVE GRADE. CONDUIT DEPTH SHALL BE SUCH THAT THE GROUND WIRE IS PROTECTED FROM DAMAGE AND CAN BE CONNECTED TO THE GROUND GRID. THE DEPTH WILL BE DETERMINED BASED ON LOCAL SITE CONDITIONS. CONDUIT SHALL BE CAPPED UNTIL GROUNDING CONDUCTOR IS INSTALLED.



DETAIL 3A - WELDED STUD CONNECTION TO PROPOSED STRUCTURAL STEEL



DETAIL 3B - WELDED STUD CONNECTION TO EXISTING STRUCTURAL STEEL

ITEM	QTY	UNIT	MATERIAL DESCRIPTION	MANUFACTURER & CAT. NO.
1	1	EA	TERMINAL 1 HOLE FOR 4/0 WIRE	BURNDY: YA28L-BOX OR EQUIVALENT
2	1	EA	BOLT, HEX, SS, 1/2"-13 NC x 1", A304/A316)	(GENERIC)
3	1	EA	WASHER, SPRING (LOCK), STAINLESS, 1/2", A304/A316	
4	2	EA	WASHER, FLAT, SS, 1/2", A304/A316	
5	2	EA	ANCHOR, SS 304,316	HILTI: KB3 1/4" X 2-1/4" OR EQUIVALENT
6	2	EA	27mm CONDUIT CLAMP 1-HOLE	T&B: 1278 OR EQUIVALENT
7	PER DESIGN	N/A	27mm CONDUIT	(GENERIC)
8	2	EA	BUSHING	(GENERIC)

PLOTTED BY: PAULRI PLOTTED DATE: 2015/04/15 PAPER SIZE AT FULL: ANSI D (22.00 X 34.00 INCHES) FILE: \\FILE-RGC001\DEPT\GOIC017\PROGRAM MANAGEMENT & STANDARD\SPMPS DESIGN STANDARDS\7 REFERENCE MATERIAL\24 ELECTRIFICATION\GROUNDING AND BONDING STANDARD DRAWINGS\MXS-100-002 REV. 1.DWG

REF. NO.	TITLE	NO.	DATE	ISSUED FOR	REV.	DATE	REVISED NOTES
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	xx/04/06	REVISED NOTES

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	

**PARSONS
BRINCKERHOFF**

METROLINX

**TRACTION ELECTRIFICATION
GROUNDING AND BONDING
STANDARD INSTALLATION DESIGN DETAILS
CONNECTIONS TO STRUCTURAL STEEL**

CONTRACT NO. RQ-2011-PP-032	DWG. NO. MXS-100-002	REV. 1	SHEET 5/26
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