

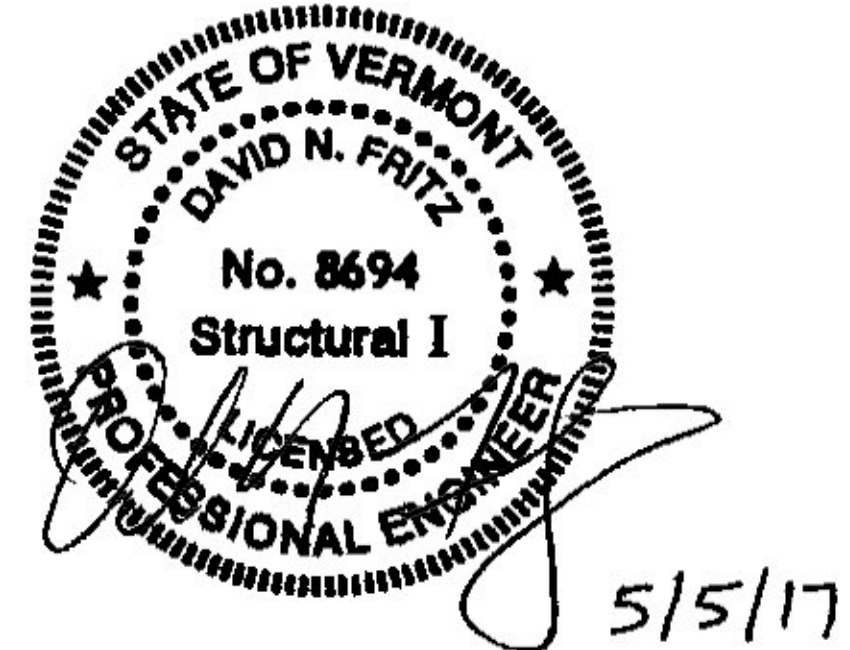
QTY	POLE ID	UMC DESIGN NUMBER	MAST ARM DATA					MAST ARM FLANGE CONNECTION DATA (in)								POLE BASE CONNECTION DATA (in)						LUM ARM REQ'D				
			SPAN	TUBE SIZE	SLIP JOINT LENGTH	MTG HEIGHT	RISE ANGLE	ORIENT	(QTY) BOLT SIZE	X	Y	W	H	ØCA	APL	PPL	G	POLE TUBE SIZE	BC	S	F		ØCB	P	T	ANCHOR BOLT SIZE
1	#4	50400-B775-Y1	10'-0"	7E-8.00x6.60x10'-0"	-	20'-0"	3'	180°	(4) 1	12	9	15 1/2	12 1/2	6	2	1 1/4	3/16	7E-11.00x8.06x21'-0"	15	17	5 3/4	8	5 1/4	2	(8) 1 x 36 x 4	NO
1	#1	50400-B775-Y2	35'-0"	7E-10.00x5.10x35'-0"	-	20'-0"	3'	180°	(4) 1 1/4	14 1/2	10 1/2	18 1/2	14 1/2	8	2	1 1/2	1/4	3E-13.00x8.80x30'-0"	17 1/2	20	6 11/16	10	6	2	(8) 1 1/4 x 42 x 6	YES
1	#2	50400-B775-Y3	45'-0"	3E-11.50x9.12x17'-0" 7E-9.76x5.60x29'-9"	1'-9"	20'-0"	3'	180°	(4) 1 1/4	17	13	21	17	8	2 1/4	1 3/4	1/4	3E-14.50x10.30x30'-0"	19	21 1/2	7 1/4	11 1/2	6	2	(8) 1 1/4 x 42 x 6	YES
1	#3	50400-B775-Y4	55'-0"	3E-14.00x10.82x22'-9" 7E-11.49x6.70x34'-3"	2'-0"	20'-0"	3'	180°	(4) 1 1/2	19 1/2	15	24	19 1/2	8	2 1/4	1 3/4	1/4	3E-17.00x12.80x30'-0"	22	25	8 7/16	13 1/2	6 3/4	2	(8) 1 1/2 x 54 x 6	YES

3 GA = 0.250" WALL THICKNESS  
7 GA = 0.179" WALL THICKNESS  
E = ROUND TAPERED STEEL TUBE @ 0.14 in/ft TAPER

**DESIGN CRITERIA:**

- DESIGNED IN ACCORDANCE WITH THE 2013 "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS" FOR 90 M.P.H. WIND ZONE. THE DESIGN PARAMETERS INCLUDE:  
50 YEAR STRUCTURE DESIGN LIFE  
FATIGUE CATEGORY II CONSIDERATION FOR:  
NATURAL WIND GUST  
TRUCK-INDUCED GUST (65 MPH TRUCK VEHICLE SPEED)
- ANCHOR BOLTS ANALYZED FOR STEEL STRENGTH ONLY. THE ANCHOR BOLT EMBEDMENT LENGTH SHOWN ON THIS DRAWING SHALL BE VERIFIED BY THE FOUNDATION ENGINEER.
- THE EXPOSED LENGTH OF THE ANCHOR BOLT BETWEEN THE TOP OF THE FOUNDATION AND THE BOTTOM OF THE LEVELING NUT SHOULD NOT EXCEED ONE BOLT DIAMETER.
- VIBRATION IS MORE LIKELY TO OCCUR WHEN STRUCTURES ARE INSTALLED WITHOUT ATTACHING THE SIGNALS AND OR SIGNS. THEREFORE, THE INTENDED EQUIPMENT OR DAMPENING DEVICES MUST BE INSTALLED AT THE TIME OF ERECTION. BECAUSE VIBRATION IS GENERALLY UNPREDICTABLE, A MAINTENANCE PROGRAM SHOULD INCLUDE INSPECTION FOR INDICATIONS OF EXCESSIVE VIBRATION OR FATIGUE AND EXAMINATION FOR ANY STRUCTURAL DAMAGE OR BOLT LOOSENING.
- CUSTOMER TO CONFIRM ALL DIMENSIONS & ORIENTATIONS BEFORE RELEASING ORDER FOR MANUFACTURING.

MATERIAL SPECIFICATIONS	
TAPERED TUBE	ASTM A595 GR A
PLATE	ASTM A36
BAR HANDHOLE FRAME	ASTM A529 GR 50 or ASTM A572 GR 50 or ASTM A500 GR B
HANDHOLE COVER	ASTM A1011 or A36
ANCHOR BOLTS	ASTM F1554 GR 55
ANCHOR BOLT NUTS	ASTM A563 GR A
FLAT WASHERS	ASTM F436
ARM CONNECTION BOLTS	ASTM A325
ARM CONNECTION NUTS	ASTM A563 GR DH
CLAMP	ASTM A36 or A1011
POLE TOP/ARM END CAP	ASTM B26 (356.0F) or A1011
PIPE	ASTM A500 GR B or A53 GR B
COUPLING	ASTM A513
S.S. HARDWARE	AISI-300 SERIES (18-8)
STRUCTURE FINISH	H.D. GALV TO ASTM A123 & POWDER COAT
HARDWARE FINISH	H.D. GALV TO ASTM A153



STATE: VT	REQ / SO# : DVT-0810-2	REV	DESCRIPTION	DATE	REV BY/CHK BY
PROJECT NAME: PROJ. NO. NHG-019-3(60)		REVISIONS			
<b>ROUND TAPERED STEEL TRAFFIC CONTROL STRUCTURES RUTLAND, VERMONT</b>					
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				JEF	JAD
			SCALE	ENG REF	
			50400-B775	RO	50400-B775
			REVISION	SHEET	
			RO	1 of 3	