



## ESSEX JUNCTION STP 5300(13) – CRESCENT CONNECTOR

December 19, 2022

ADDENDUM #1 - This addendum provides the following:

1. Clarification of the prequalification requirements: As stated in the Invitation to Bid, PREQUALIFICATION OF CONTRACTORS, Responsibility of Bidders, all bidders must have BOTH Annual Prequalification, (1) or (1)(a), AND Contract-Specific Prequalification, (2).
2. Unit prices for the N.A.B.I. on the Bid Form. A revised Bid Form will be provided with the final addendum incorporating all revisions:

204.22	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)	\$75.00/CY
406.50	PRICE ADJUSTMENT, ASPHALT CEMENT (N.A.B.I.)	\$1.00/LU
632.10	RAILROAD FLAGGERS (N.A.B.I.)	\$1.00/DL
653.03	MAINTENANCE OF EPSC PLAN (N.A.B.I.)	\$2,866.97/LU
690.50	PRICE ADJUSTMENT, FUEL (N.A.B.I.)	\$1.00/LU
3. Clarifications regarding details for the ornamental fences. Revised Special Provision attached:
  - a. 900.640 SPECIAL PROVISION (FENCE, ORNAMENTAL BLACK STEEL WITH GATE) and 900.640 SPECIAL PROVISION (FENCE, ORNAMENTAL WHITE VINYL PICKET) shall be 3-foot fence systems. The 29" height restriction has been removed from the specification.
  - b. 900.640 SPECIAL PROVISION (FENCE, ORNAMENTAL BLACK STEEL WITH GATE) shall include a 4 foot wide gate at the walkway to the house. Gate size has been added to the specification.
4. Requirements regarding salvaged materials: Any and all traffic signal equipment or street lighting equipment removed as part of the project shall be salvaged to the City of Essex Junction. New Notice to Bidders attached.
5. Clarification of Traffic Signal ornamental detail requirements: Plan sheets 89 and 92, in the General Notes and List of Major Equipment, indicate that new traffic signal poles and mast arms are to "MATCH THE OTHERS IN THE CITY'S DOWNTOWN" and "MATCH TOWN ORNAMENTAL STDS". There are no formal standards for the ornamental features. The intent is to reasonably match the traffic signals at Five Corners, including the fluted poles, decorative bases and mast arm style. The shop drawings for the Five Corners signals is attached for reference.

ORNAMENTAL FENCE

1. DESCRIPTION. This work shall consist of installing fence at the location(s) indicated in the Contract Documents and as directed by the Engineer.

The work under this Section shall be performed in accordance with these provisions, the Plans, Section 620 of the Standard Specifications, and the manufacturers specifications.

2. MATERIALS.

Ornamental Fence - Black Steel with Gate:

Fence shall be made of steel and have a powder coated black finish. This shall be a 3-foot fence system with a 4-foot wide gate. No portion of the pickets shall extend above the top rail.

Acceptable ornamental fencing systems are available from the following manufacturers, or approved equal:

Master Halco

Product: Monumental Imperial Fence – Style A, 2 Rail

Tel.: (800) 969-3058

Website: [www.masterhalco.com](http://www.masterhalco.com)

Ameristar Fence Products, Inc.

Product: Montage Majestic, 2 Rail

Tel.: (888) 333-3422

Website: [www.ameristarfence.com](http://www.ameristarfence.com)

Merchants Metals

Product: Monroe Style, 2 Rail

Tel.: (800) 447-5713

Website: [www.merchantsmetals.com](http://www.merchantsmetals.com)

Ornamental Fence - Black Steel (6 Feet):

Fence shall be made of steel and have a powder coated black finish. The fence shall stand approximately 6 feet high, with no portion of the pickets extending above the top rail.

Acceptable ornamental fencing systems are available from the following manufacturers, or approved equal:

Master Halco

Product: Monumental Imperial Fence – Style D, 3 Rail with Acorn post caps

Tel.: (800) 969-3058

Website: [www.masterhalco.com](http://www.masterhalco.com)

Ameristar Fence Products, Inc.

Product: Aegis 3 Rail Majestic w/Rings

Tel.: (888) 333-3422

Website: [www.ameristarfence.com](http://www.ameristarfence.com)

Merchants Metals

Product: Monroe Style, 3 Rail, 1 Row of Rings with Ball post caps

Tel.: (800) 447-5713

Website: [www.merchantsmetals.com](http://www.merchantsmetals.com)

Ornamental Fence – White Vinyl Picket:

Fence shall be made of white vinyl and shall be a 3-foot fence system.

Acceptable ornamental fencing systems are available from the following manufacturers, or approved equal:

Master Halco

Product: Illusions Traditional Picket

Tel.: (800) 969-3058

Website: [www.masterhalco.com](http://www.masterhalco.com)

CertainTeed

Product: Cape Cod

Tel.: (800) 233-8990

Website: [www.certainteed.com](http://www.certainteed.com)

PlyGem

Product: Wide Scalloped Picket

Tel.: (888) 975-9436

Website: [www.plygem.com](http://www.plygem.com)

Other ornamental fencing systems that meet the requirements of the Contract Documents may be used upon approval of the Engineer.

3. INSTALLATION. The fence shall be installed in the locations indicated on the plans, in accordance with the manufacturers' recommendations, and in general conformance with the requirements of Subsection 620.05.
4. METHOD OF MEASUREMENT. The quantity of Special Provision (Fence, Ornamental) to be measured for payment will be the number of linear feet installed in the complete and accepted work. Measurement will be along the top of the fence from outside to outside of end posts for each continuous run of fence.
5. BASIS OF PAYMENT. The accepted quantity of Special Provision (Fence, Ornamental) will be paid for at the Contract unit price per linear foot. Payment will be full compensation for furnishing, transporting, handling, assembling, and placing the railing components; and for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
900.640 Special Provision (Fence, Ornamental Black Steel with Gate)	Linear Foot
900.640 Special Provision (Fence, Ornamental Black Steel, 6 Feet)	Linear Foot
900.640 Special Provision (Fence, Ornamental White Vinyl Picket)	Linear Foot

**NOTICE TO BIDDERS - SALVAGED MATERIALS.** The Contractor is hereby notified that any and all traffic signal equipment or street lighting equipment removed and not re-used on the project shall remain the property of the City of Essex Junction.

All costs for loading and delivering these salvaged materials will be incidental to all other Contract items.

The Contractor shall load the salvaged materials onto suitable transport and deliver them to the City Public Works Facility location on Elm Street in Essex Junction.



does not match sheet 23

does not match drawing

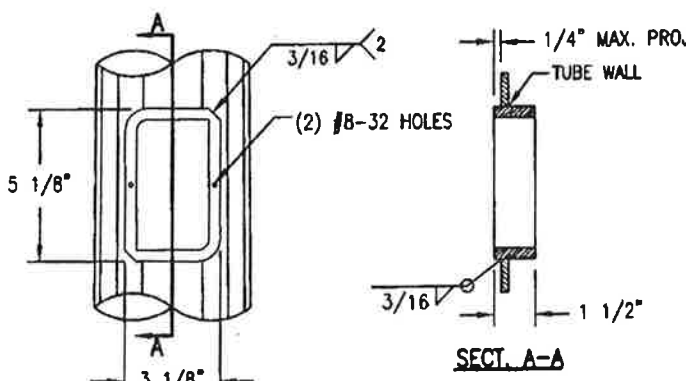
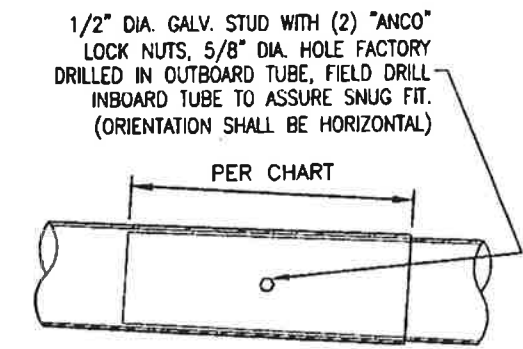
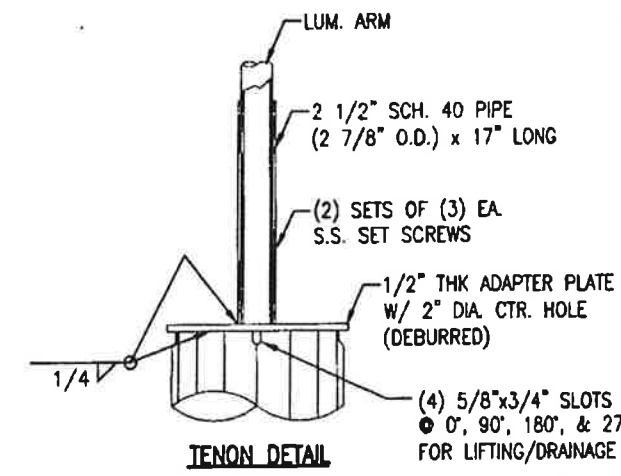
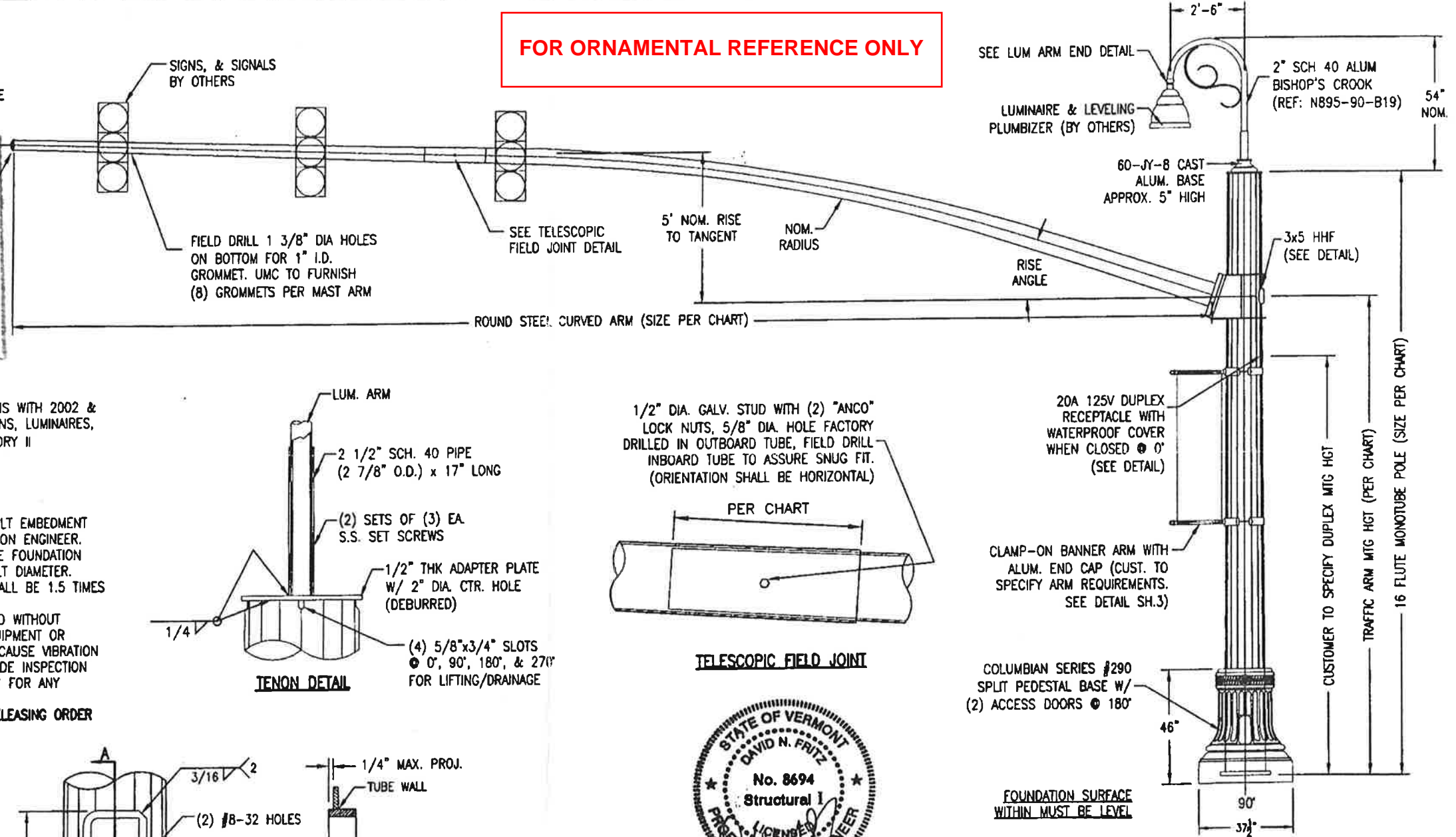
QTY.	DESIGN NO.	ARM SPAN	TRAFFIC ARM SIZE	JOINT LENGTH	TRAF. ARM MTG. HT.	ARM ORIENT	RISE ANGLE	ARM RAD.	ARM FLANGE CONNECTION DATA							POLE SIZE	BASE DATA					LOADED DEFLECTION	ARM END ANGLE			
									BOLT Ø	X	Y	W	H	APT	PPT		G	GW	BC	S	F			T	P	ANCHOR BOLT
1	50603-B224-Y1	40.5'	3E-11.0x5.26x41'-0"	-	16'-0"	180°	18°	60'	1 1/2"	9"	14"	17 1/4"	20"	1 3/4"	1 1/2"	3/8"	3/8"	3F-16.5x13.36x22'-5"	21"	22"	14 7/8"	1 1/4"	6"	1 1/2"x54"x6"	6.69"	1.82°
1	50603-B224-Y2	44'	3E-12.5x8.86x26'-0" 11E-9.39x6.52x20'-6"	1'-9"	16'-0"	180°	18°	60'	1 1/2"	9"	14"	17 1/4"	20"	1 3/4"	1 1/2"	3/8"	3/8"	3F-16.5x13.36x22'-5"	21"	22"	14 7/8"	1 1/4"	6"	1 1/2"x54"x6"	5.70"	2.02°
1	50603-B224-Y3	55.5'	0E-14.25x9.77x32'-0" 7E-10.41x6.81x25'-9"	1'-9"	16'-0"	180°	11°	60'	1 1/2"	22"	15"	27"	20"	2 1/4"	2"	1/2"	3/8"	3F-18.5x15.36x22'-5"	22"	23"	15 9/16"	1 1/4"	6"	1 1/2"x54"x6"	11.31"	1.50°

11 GA = .120" WALL THICKNESS  
 7 GA = .1793" WALL THICKNESS  
 3 GA = .250" WALL THICKNESS  
 0 GA = .3125" WALL THICKNESS  
 E = ROUND STEEL MONOTUBE @ .14 in/ft TAPER  
 F = 16-FLUTE STEEL MONOTUBE @ .14 in/ft TAPER

APPROVED  REVISE - RESUBMIT  
 NOT APPROVED  APPROVED - NOTED  
 DATE 6/19/08 BY [Signature]  
 Donald L. Hamlin, Consulting Engineers, Inc. assumes none of the responsibilities of its consultants or the Contractor by virtue of this approval.  
 DONALD L. HAMLIN, CONSULTING ENGINEERS, Inc.  
 P. O. BOX 9, ESSEX JUNCTION, VERMONT 05452

- DESIGN CRITERIA**
- DESIGNED IN ACCORDANCE WITH 2001 AASHTO "STANDARD SPECIFICATIONS WITH 2002 & 2003 INTERIM REVISIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" FOR 90 M.P.H. WIND ZONE WITH FATIGUE CATEGORY II CONSIDERATION FOR:  
 NATURAL WIND GUSTS  
 TRUCK GUSTS (AT 65 MPH VEHICLE VELOCITY)  
 GALLOPING
  - 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.
  - PER AASHTO THE MINIMUM LENGTH OF ANY TELESCOPIC FIELD JOINT SHALL BE 1.5 TIMES THE INSIDE DIAMETER OF THE END OF THE FEMALE SECTION.
  - 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 ORIENTATIONS & MOUNTING HEIGHTS BEFORE RELEASING ORDER FOR MANUFACTURING

MATERIAL	SPECIFICATION
TUBES	ASTM-A595 GR A
PLATE	ASTM-A36
DECO BASE/CASTINGS	ALUMINUM AA319.0-F
ANCHOR BOLTS	ASTM-A276, TYPE 304
A.BOLT NUTS	ASTM-A194/A 194M, GR 8
HANDHOLE FRAME	ASTM-A529 GR 50
HANDHOLE COVER	ASTM-A1011
ARM END CAP	ASTM-A1011
SST HARDWARE	AISI-300 SERIES (18-8)
ARM CONN. BOLTS	ASTM-A325
FLATWASHERS	ASTM-F436
ARM JOINT STUD	ASTM-A36
"ANCO" LOCK NUTS	ASTM-A563 GR DH
ALUM PIPE, BAR	6061, 6063
STRUCTURE FINISH	H.D. GALV. TO ASTM-A123 & FINISH PAINT PER UMS 1005
HARDWARE FINISH	H.D. GALV. TO ASTM-A153



REV	DESCRIPTION	DATE	BY	CHK BY
R2	ADDED STRUCTURE FINISH	5/27/08	LRR	SAD
R1	ADDED DESIGN Y3 PER NVT-17214-2	5/15/08	LRR	JW

STATE: VT      REQ# / SO#: NVT-17214-1

PROJECT NAME: FIVE CORNERS

ORNAMENTAL TRAFFIC SIGNAL POLE FOR THE CITY OF ESSEX JUNCTION, VERMONT

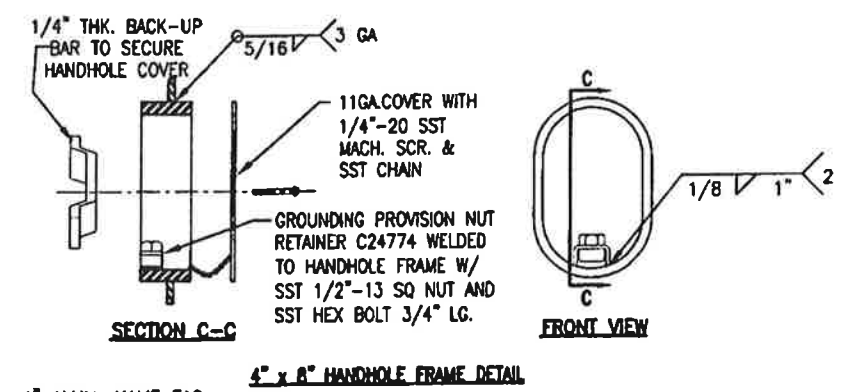
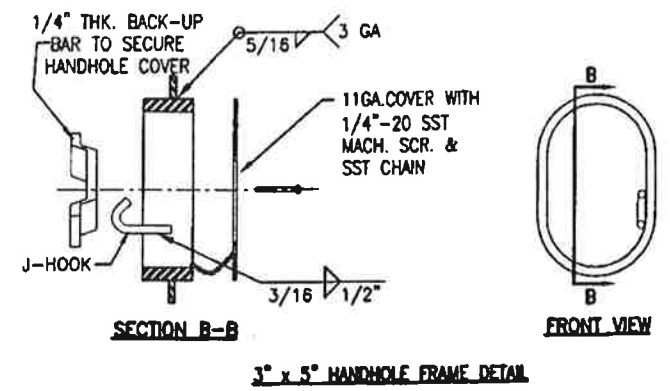
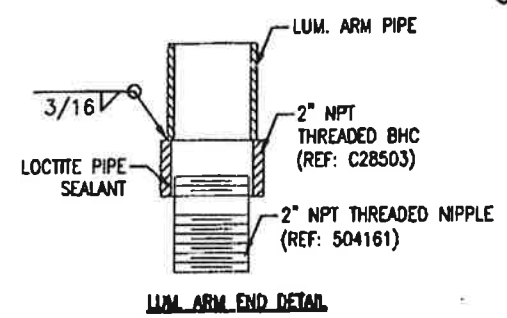
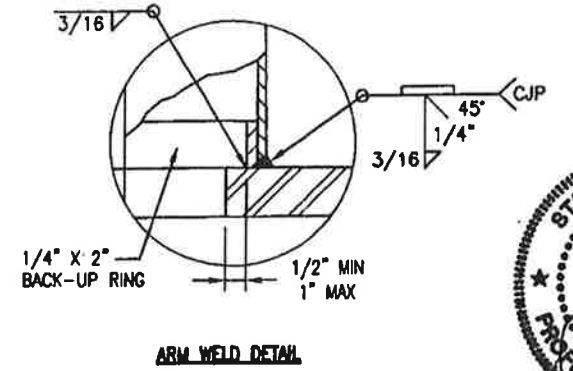
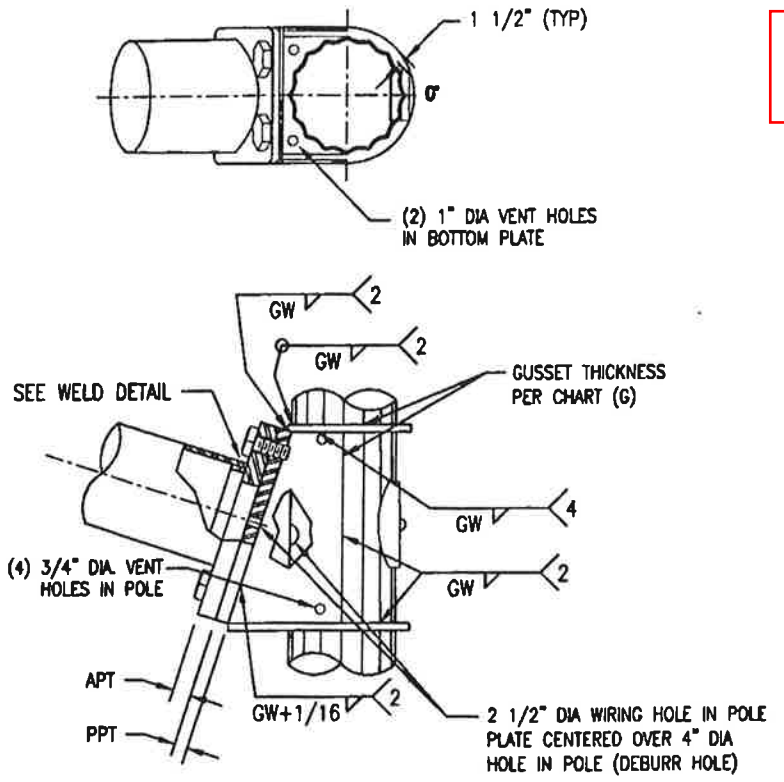
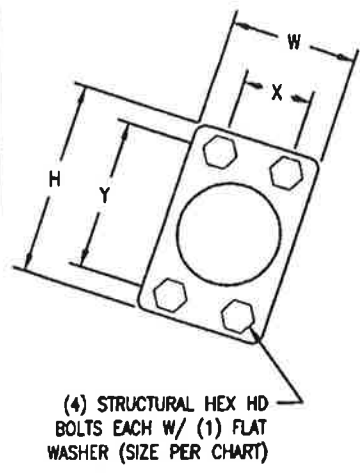
DESIGNED BY: LRR      CHECKED BY: J.A.B.      DATE: 4/25/08      SCALE: NTS      ENG REF: 50603-B224

REVISION: R2      SHEET: 1 of 4

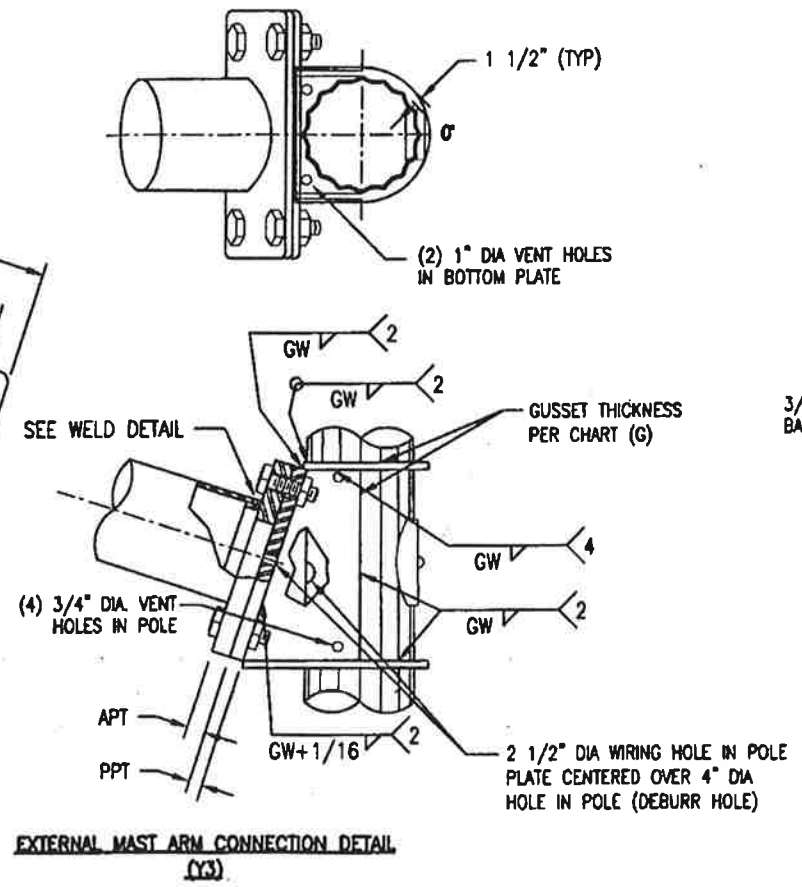
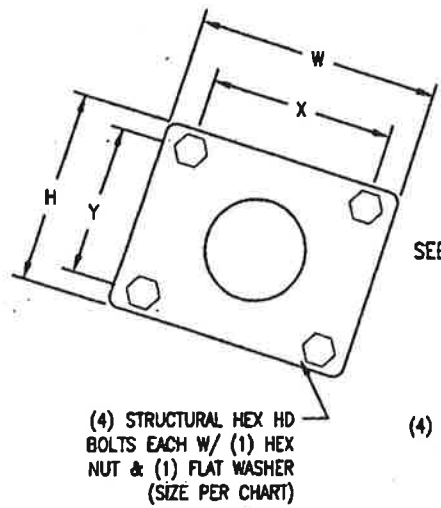
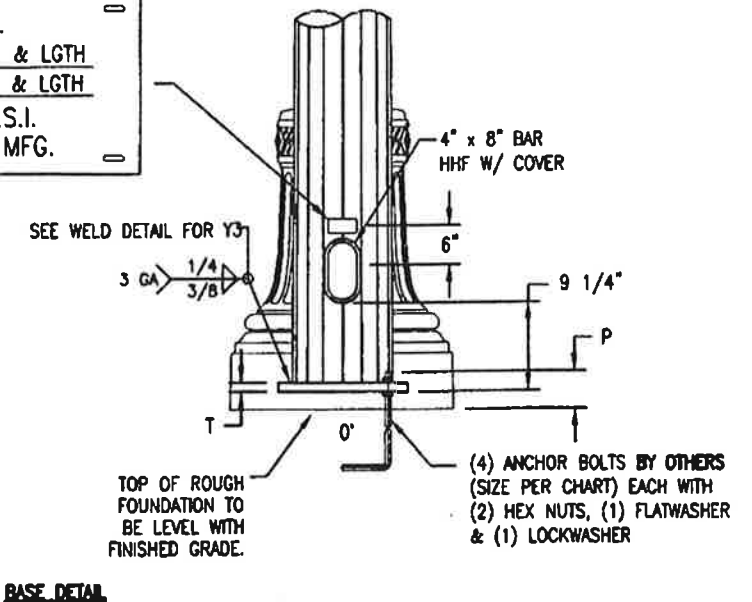
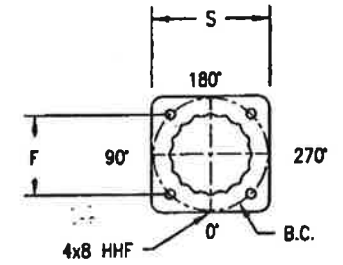
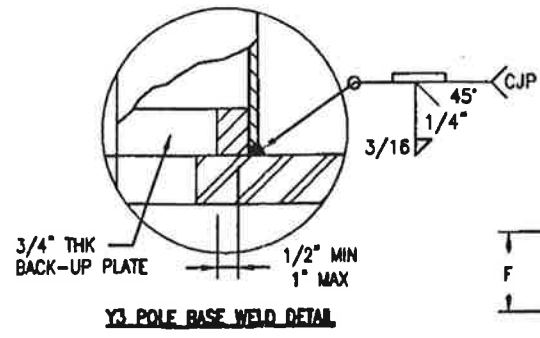
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U.M.C.  
POLE GA. DIA. & LGTH  
ARM GA. DIA. & LGTH  
55 K.S.I.  
YEAR OF MFG.



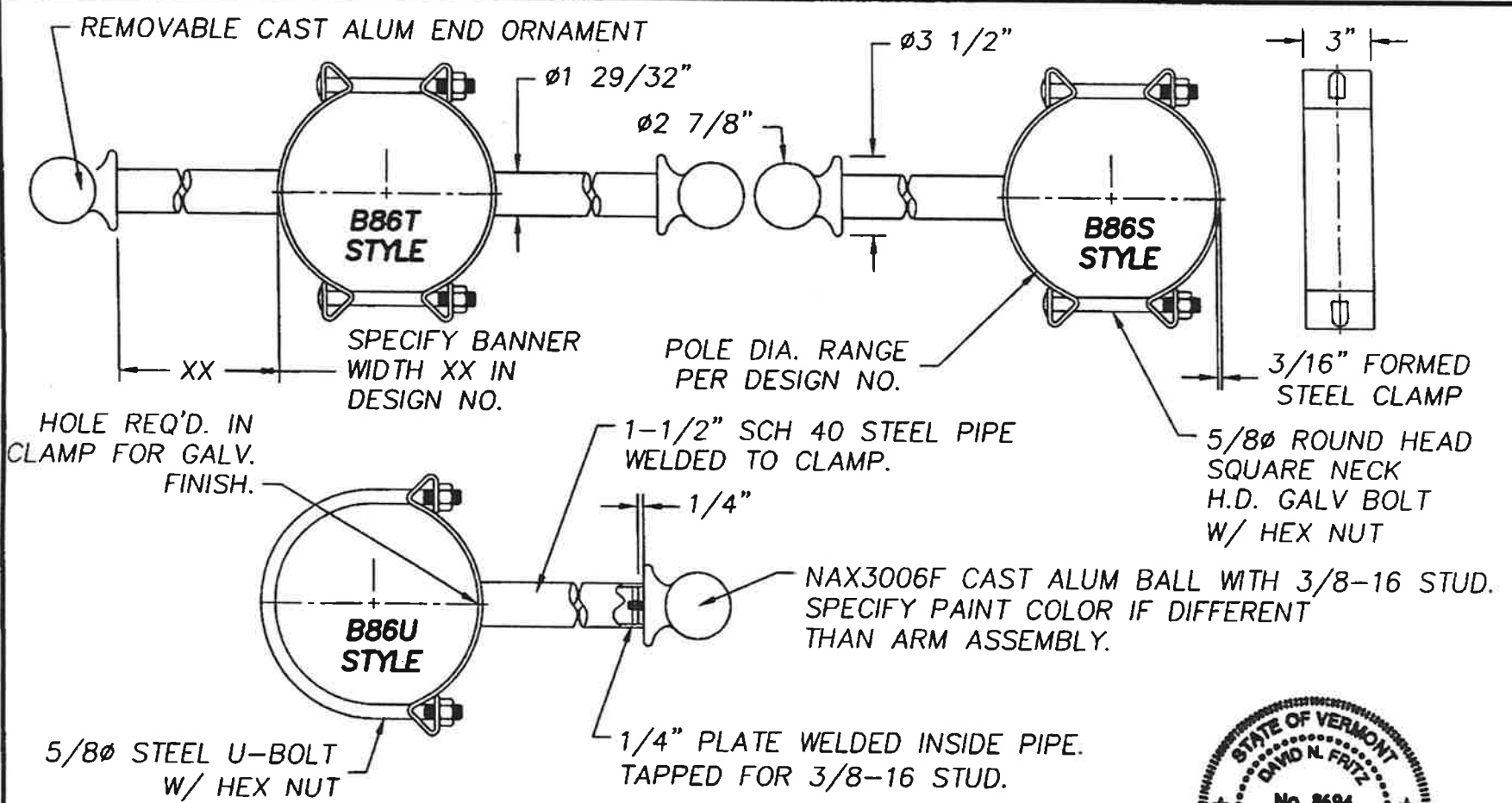
STATE: VT	REQ / SO# : NVT-17214-1	REV	DESCRIPTION	DATE	BY / CHK BY
PROJECT NAME: FIVE CORNERS			REVISIONS		
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				R2	2 OF 4

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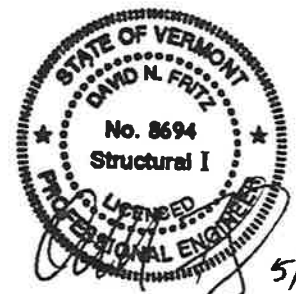


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- NOTES:
1. FINISH PER SALES ORDER.
  2. ALL ITEMS EXCEPT NUTS & THREADS FINISH PAINTED.
  3. ALL ITEMS ASSEMBLED AND SHIPPED AS COMPLETE UNIT.



B86U STYLE DESIGN NUMBER	B86T STYLE DESIGN NUMBER	B86S STYLE DESIGN NUMBER	RANGE		NOM. CLAMP SIZE
			MIN.	MAX.	
B86U-A327-3-XX	B86T-A327-3-XX	B86S-A327-3-XX	3.1"	3.6"	3
B86U-A327-4-XX	B86T-A327-4-XX	B86S-A327-4-XX	3.6"	4.4"	4
B86U-A327-4.5-XX	B86T-A327-4.5-XX	B86S-A327-4.5-XX	4.4"	5.2"	4 1/2
B86U-A327-5-XX	B86T-A327-5-XX	B86S-A327-5-XX	5.2"	5.8"	5
B86U-A327-6-XX	B86T-A327-6-XX	B86S-A327-6-XX	5.8"	6.8"	6
B86U-A327-7-XX	B86T-A327-7-XX	B86S-A327-7-XX	6.8"	7.9"	7
B86U-A327-8-XX	B86T-A327-8-XX	B86S-A327-8-XX	7.9"	9.0"	8
B86U-A327-9-XX	B86T-A327-9-XX	B86S-A327-9-XX	9.0"	10.1"	9
B86U-A327-10-XX	B86T-A327-10-XX	B86S-A327-10-XX	10.1"	11.3"	10
B86U-A327-11-XX	B86T-A327-11-XX	B86S-A327-11-XX	11.3"	12.1"	11
B86U-A327-12-XX	B86T-A327-12-XX	B86S-A327-12-XX	12.1"	13.4"	12
B86U-A327-13-XX	B86T-A327-13-XX	B86S-A327-13-XX	13.4"	14.5"	13
B86U-A327-14-XX	B86T-A327-14-XX	B86S-A327-14-XX	14.5"	15.5"	14
B86U-A327-15-XX	B86T-A327-15-XX	B86S-A327-15-XX	15.5"	16.5"	15
B86U-A327-16-XX	B86T-A327-16-XX	B86S-A327-16-XX	16.5"	17.5"	16
B86U-A327-17-XX	B86T-A327-17-XX	B86S-A327-17-XX	17.5"	18.5"	17
B86U-A327-18-XX	B86T-A327-18-XX	B86S-A327-18-XX	18.5"	19.5"	18
B86U-A327-19-XX	B86T-A327-19-XX	B86S-A327-19-XX	19.5"	20.5"	19
B86U-A327-20-XX	B86T-A327-20-XX	B86S-A327-20-XX	20.5"	21.5"	20
B86U-A327-21-XX	B86T-A327-21-XX	B86S-A327-21-XX	21.5"	22.5"	21
B86U-A327-22-XX	B86T-A327-22-XX	B86S-A327-22-XX	22.5"	23.5"	22

STATE: VT	REQ# / SO# : NVT-17214-1	REV	DESCRIPTION	DATE	REV BY	CHK BY
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<b>50603-B224</b>					REVISION	SHEET
					R2	3 OF 4

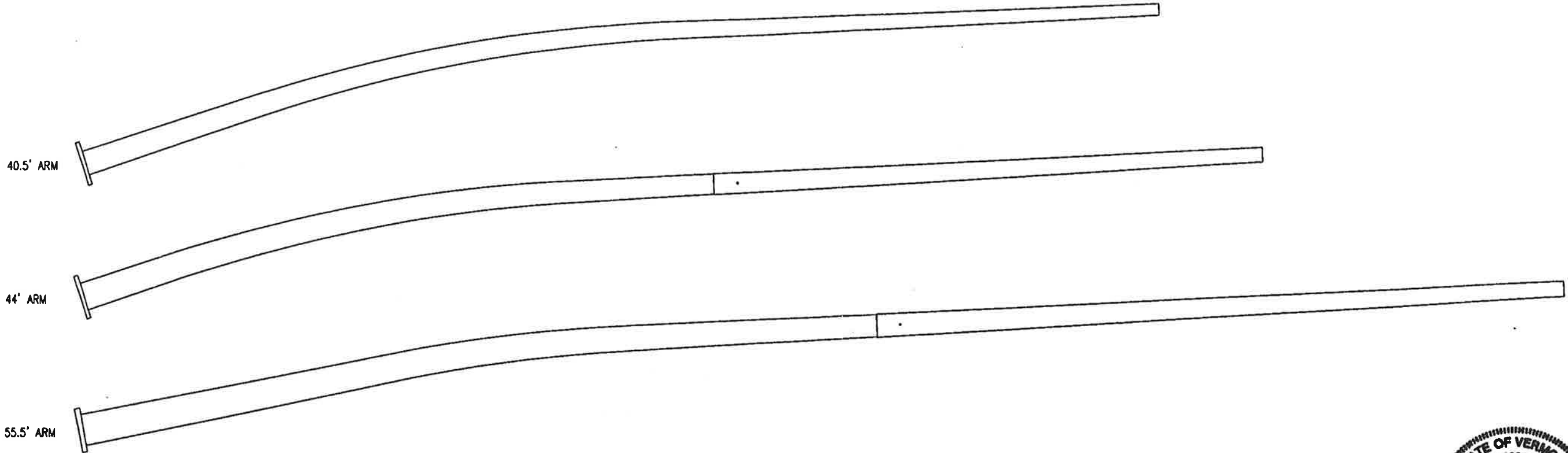


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5/28/08

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			50603-B224		REVISION	SHEET	
					R2	4 OF 4	

A B C D E F G H

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Specification: UMS-1006	Page 1 of 1
Revision Date: 9.22.06	Rev: 0
Created By: Scott J. Thor	
Revised By:	
Approved By: Scott J. Thor	



## UMC POWDER COATING SPECIFICATION

### 1.1. Blasting

1.1.1. All threads shall be protected from damage during blasting process

#### 1.1.2. Preparation-Steel

1.1.2.1. Blast to SSPC-SP6.

#### 1.1.3. Preparation-Aluminum and Galvanized

1.1.3.1. Blast to SSPC-SP7.

### 1.2. Powder Coating

1.2.1. Powder finish 3-5 mil both inside and outside of poles and all surfaces of parts with Tiger Drylac Super Durable Series 38.

### 1.3. Powder Baking

1.3.1. Bake part per powder manufacturer's recommendations.

1.3.2. Galvanized parts shall be pre-baked to ensure all gasses are released from the galvanized surface before powder coating after which the top coat shall be applied.

### 1.4. Final Inspection

1.4.1. All products shall receive a final inspection before packaging.

1.4.2. A mil thickness of 3-5 shall be verified and documented.

Quote	17214
Project	Essex Junction, VT 5 Corners
Color #	HDG and Powder Coated Black # 27038
Date	5-9-08
PO	1284

<input checked="" type="checkbox"/> APPROVED	<input type="checkbox"/> REVISE - RESUBMIT
<input type="checkbox"/> NOT APPROVED	<input type="checkbox"/> APPROVED AS NOTED
DATE <u>6/19/08</u>	BY <u>[Signature]</u>
Donald L. Hamlin, Consulting Engineers, Inc. assumes none of the responsibilities of its consultants or the Contractor by virtue of this approval.	
DONALD L. HAMLIN, CONSULTING ENGINEERS, Inc. P. O. BOX 9, ESSEX JUNCTION, VERMONT 05452	