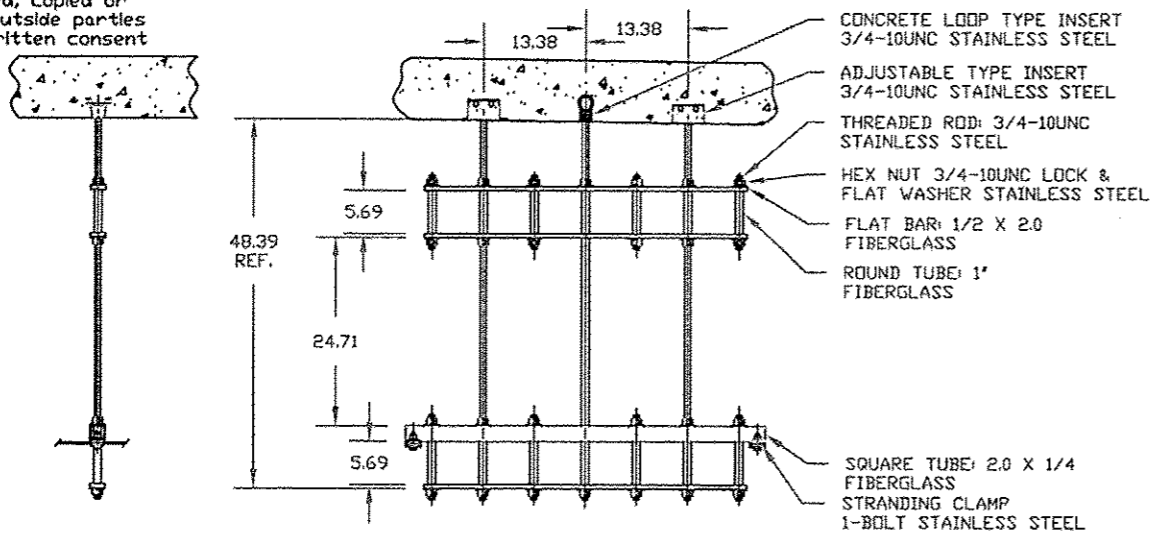


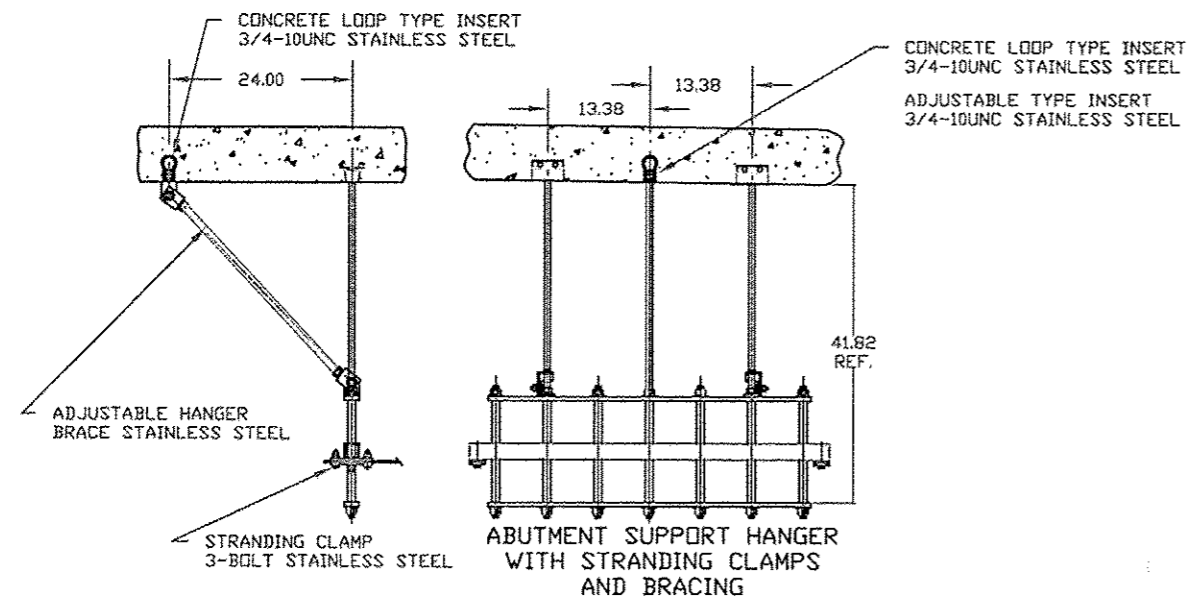
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REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
	1.0	ADDENDUM A	10/15/2013	BRIAN BB



STANDARD SUPPORT HANGER WITH STRANDING CLAMPS



ABUTMENT SUPPORT HANGER WITH STRANDING CLAMPS AND BRACING

CURRENT BILL OF MATERIAL

ITEM NO.	PART NO.	DESCRIPTION	QTY	UNIT
1	26125F3524	ABUTMENT CONDUIT SUPPORT HANGER: 2 HIGH X 6 WIDE FIBERGLASS AND STAINLESS STEEL, OPENING FOR EIGHT 5" FGL DUCTS THREADED RODS THREE @ 3/4-10UNC X 54.00 LONG	2	EA.
2	TBA	STANDARD CONDUIT SUPPORT HANGER: 2 HIGH X 6 WIDE FIBERGLASS AND STAINLESS STEEL, OPENING FOR EIGHT 5" FGL DUCTS THREADED RODS THREE @ 3/4-10UNC X 54.00 LONG	26	EA.
3	08610236	HANGER BRACE ADJUSTABLE: 36 INCH STAINLESS STEEL	6	EA.
4	08409990	CONCRETE INSERT: 3/4-10 LOOP TYPE, STAINLESS STEEL	34	EA.
5	08558300	CONCRETE INSERT SETTING PLUG: 3/4-10	34	EA.
6	TBA	CONCRETE INSERT ADJUSTABLE: 3/4-10 STAINLESS STEEL	36	EA.
7	08408950	STRANDING WIRE: 1/4 X 500 FT., STAINLESS STEEL	2	EA.
8	08409404	GUY STRAND CLAMP: 3-BOLT, STAINLESS STEEL	6	EA.
9	08409504	GUY STRAND CLAMP: 1-BOLT, STAINLESS STEEL	32	EA.
10	08460053	CONDUIT FIBERGLASS: 5" IPS, MW (.557 O.D. X .096 WALL) MEETING NEMA TC-14A	2240	FT.
11	08460153	CONDUIT STOP COUPLING: 5" IPS MW	40	EA.
12	08460453	CONDUIT EXPANSION JOINT O-RING TYPE: 5" IPS MW	16	EA.
13	08460953	CONDUIT SPLIT STOP RING: 5" IPS MW	16	EA.
14	08461553	CONDUIT ADAPTER: 5" IPS MW TO 5" GRC	16	EA.
15	TBA	CONDUIT SWEEP: 5" IPS MW 1125 DEGREE X 25FT RADIUS	16	EA.
16	08460253	CONDUIT 5 DEG. ANGLE COUPLING: 5" IPS MW	16	EA.
17	08463402	CONDUIT EPOXY ADHESIVE CARTRIDGE	25	EA.
18	02288990	CONDUIT EPOXY ADHESIVE GUN	1	EA.

General Construction, Hanger and Conduit Notes

- 1.0 Recommended spacing between Support is 10 foot.
- 2.0 Support Hanger Material shall be manufactured using 316 stainless steel and fiberglass components.
- 3.0 Conduit is 5 inch Fiberglass with minimum wall thickness of .096 inch meeting NEMA TC-14A Specs.
- 4.0 Conduit joints shall be positive locking adhesive bonded bell and spigot.
- 5.0 Conduit expansion joints shall be sliding sleeve with provision for 8 inch of travel.
- 6.0 Bridge abutments must have a block out or be sleeved to allow the fiberglass conduit to pass through. After conduit is placed through abutment seal up opening with state approved sealant.
- 7.0 Place concrete inserts for future support system. Hangers will be installed at a later date.
- 8.0 Conduit support hangers weight 2525 LBS total  
Fiberglass conduit weight 2807 LBS total  
cable weight weight 18,047 LBS total

Grand total being placed on the bridge is 22,059 LBS.

FOR INFORMATION ONLY  
WORK TO BE PERFORMED BY OTHERS  
WITH THE EXCEPTION OF PLACEMENT  
OF INSERTS INTO SUPERSTRUCTURE

NOTE  
NO PART OF THE CONDUIT SUPPORT HANGER  
CAN EXTEND BELOW THE BRIDGE DECK  
GIRDER  
EXTENDED RODS MAY NEED TO BE ALTERED

Condux International, Inc. Support hanger meet the following specifications

Fiberglass Items  
Flat Bar: 1/2 x 2.0  
Round Tube: 1.0" O.D. .105 wall  
Square Tube: 2 x 2 x 1/4  
Fiberglass reinforced with polyester resin with surface veil for better weathering, resin shall contain u.v. inhibitor. Fiberglass is made with continuous strand mat and uni-directional roving, gray in color

Tensile Strength (ASTM D 638) 30,000 PSI  
Tensile Modulus (ASTM D 638) 2.3E6 PSI  
Flexural Strength (ASTM D 790) 30,000 PSI  
Flexural Modulus (ASTM D 790) 2.3E6 PSI  
Compressive Strength (ASTM D 695) 20,000 PSI  
Compressive Modulus 1.4E6 PSI  
Yield shear strength 2000 PSI  
Barcol hardness 50  
Dielectric strength (ASTM D 149) 200 VPM Min.

Stainless steel Hardware Items  
Threaded Rod  
Threaded rod meets (ASTM/ASME B1.1) (ASTM A307 Grade A) (Tensile Strength 60,000 PSI)  
Hexnut  
Hexnut meets (ANSI/ASME B18.2.2)  
Material: 316 Stainless steel (ASTM F594)  
Flatwasher  
Flatwasher meets (ANSI/ASME B18.22.1)  
Material: 316 stainless steel (ASTM F436)  
Lockwasher  
Lockwasher meets (ANSI/ASME B18.21.1)  
Material: 316 Stainless steel (ASTM F436)

Stranding Items  
Stranding Clamps (1-Bolt & 3-Bolt)  
Material: 1/4 x 1.5 (316 Stainless Steel)  
Stranding Wire  
Cable: 1/4" Dia (7 X 19 Steel Aircraft)  
304 Stainless Steel

Bracing  
Adjustable hanger attachment brackets  
Material: angle 2.5 x 2.5 x .25 (316 Stainless steel)

DRAWING APPROVAL  
I APPROVE THIS DRAWING FOR MANUFACTURING  
DATE: \_\_\_\_\_  
Note:  
ALL MEASUREMENTS ARE IN INCHES UNLESS NOTED OTHERWISE

CONDUIT SUPPORT HANGER DETAIL AND BILL OF MATERIALS	CONDUX INTERNATIONAL, INC. MANKATO MN PH. 800-533-2077			
	Project: ComEd Harrison Street Bridge over F.A.I. RTE SB 90/94 Dan Ryan Expressway, Cook County Illinois			
WEIGHT: 0.0 LBS EA	SIZE	FSCM NO.	DWG NO.	REV
QUOTE NO. 3985214498			TBA	1.0
SCALE 1/2	DATE: 06-06-2013	SHEET: CONDUX 3 OF 6		
		SHEET 298C OF 559		