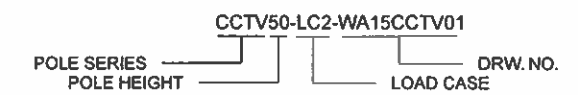


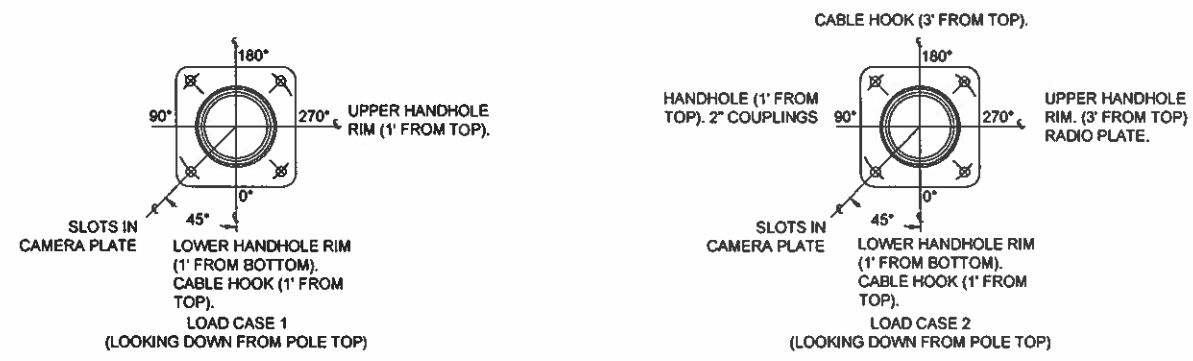
DESIGN NOMENCLATURE



NOTES

- WELDING OF STRUCTURES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AWS STRUCTURAL WELDING CODE D1.1 - STEEL LONGITUDINAL SEAM WELD IS 80% MIN. PENETRATION, EXCEPT FOR 6" FROM END OF SECTION AT FLANGE, BASEPLATE AND SLIP JOINT ARE 100% PENETRATION.
- POLE SHAFT IS ROUND WITH 0.1375 TAPER
- LOAD CASE 1:
 - EFFECTIVE PROJECTED AREA OF CAMERA = 4 SQ. FT AT 2 FT. ABOVE TOP OF POLE (85 LBS)
 - 12" DIAMETER DISH AT POLE HEIGHT WE.P.A. OF 1.3 SQ. FT. (78 LBS)
 - NEMA CABINET =1.33 SQ.FT. AT 3 FT.-8 IN. FROM TOP OF POLE (45 LBS)
- LOAD CASE 2:
 - EFFECTIVE PROJECTED AREA OF CAMERA = 4 SQ. FT AT 2 FT. ABOVE TOP OF POLE (85 LBS)
 - SIDE CAMERA =0.54 SQ.FT. AT 1 FT. FROM TOP OF POLE (10 LBS)
 - SIDE CAMERA =0.54 SQ.FT. AT 2 FT. FROM TOP OF POLE (10 LBS)
 - (2) NEMA CABINETS INSTALLED BACK TO BACK =1.33 SQ.FT. AT 3 FT.-8 IN. FROM TOP OF POLE (45 LBS EA.)
 - RADIO EQUIP. =2.25 SQ.FT. AT 2 FT. FROM TOP OF POLE (10 LBS)
 - RADIO EQUIP. =2.25 SQ.FT. AT 8 FT. FROM TOP OF POLE (10 LBS)
- LOADS PER AASHTO AASHTO LRFD 2015
 - LOCATION: WASHINGTON STATE
 - BASIC WIND SPEED: 115 MPH
 - MEAN RECURRENCE INTERVAL: 1700
 - FATIGUE CATEGORY: NONE
 - GALLOPING LOADS: NO
 - NATURAL WIND GUST: NO
 - TRUCK INDUCED GUST: NO
- DEFLECTION CRITERIA:
 - MAXIMUM ALLOWABLE DEFLECTION:
 - 30 MPH WIND: 0.7"
 - 35 MPH WIND: 0.8"
 - 70 MPH WIND: 1.4"
 - LOAD CASE 1 CAMERA POLES GROUND MOUNT OR UP TO 30 FT. ELEVATED BRIDGE MOUNT MEET DEFLECTION DESIGN CRITERIA.
- FOR DETAILS SEE WA15CCTV01 SHEET 2 OF 2
- FOR "WELDING" AND "WELDING INSPECTION" NOTES SEE WA15CCTV01 SHEET 2 OF 2.

POLE DATA					BASE				CONNECTION		
STRUCTURE NAME	SHAFT LENGTH "A"	THK	BASE OD	TOP OD	BASE DETAIL	BASE "F"	BASE "BC"	BASE THK "T"	QTY	DIA	LEN
CCTV15-LC1	15'-0"	0.1793"	11 7/16"	9 3/8"	B1	25"	25 1/2"	1 1/4"	4	1 1/4"	52"
CCTV20-LC1	20'-0"	0.1793"	12 1/8"	9 3/8"	B1	25"	25 1/2"	1 1/4"	4	1 1/4"	52"
CCTV25-LC1	25'-0"	0.1793"	12 13/16"	9 3/8"	B1	25"	25 1/2"	1 1/4"	4	1 1/4"	52"
CCTV30-LC1	30'-0"	0.1793"	13 1/2"	9 3/8"	B1	25"	25 1/2"	1 1/4"	4	1 1/4"	52"
CCTV35-LC1	35'-0"	0.1793"	14 3/16"	9 3/8"	B1	25"	25 1/2"	1 1/4"	4	1 1/4"	52"
CCTV40-LC1	40'-0"	0.2391"	14 7/8"	9 3/8"	B1	25"	25 1/2"	1 1/4"	4	1 1/4"	52"
CCTV45-LC1	45'-0"	0.3125"	17 5/8"	11 7/16"	B1	25"	25 1/2"	1 1/4"	4	1 1/4"	52"
CCTV50-LC1	50'-0"	0.3125"	19"	12 1/8"	B1	25"	25 1/2"	1 1/4"	4	1 1/4"	52"
CCTV15-LC2	15'-0"	0.1793"	11 7/16"	9 3/8"	B1	25"	25 1/2"	1 1/4"	4	1 1/4"	52"
CCTV20-LC2	20'-0"	0.1793"	12 1/8"	9 3/8"	B1	25"	25 1/2"	1 1/4"	4	1 1/4"	52"
CCTV25-LC2	25'-0"	0.1793"	12 13/16"	9 3/8"	B1	25"	25 1/2"	1 1/4"	4	1 1/4"	52"
CCTV30-LC2	30'-0"	0.1793"	13 1/2"	9 3/8"	B1	25"	25 1/2"	1 1/4"	4	1 1/4"	52"
CCTV35-LC2	35'-0"	0.1793"	14 3/16"	9 3/8"	B1	25"	25 1/2"	1 1/4"	4	1 1/4"	52"
CCTV40-LC2	40'-0"	0.3125"	14 7/8"	9 3/8"	B1	25"	25 1/2"	1 1/4"	4	1 1/4"	52"
CCTV45-LC2	45'-0"	0.3125"	17 5/8"	11 7/16"	B1	25"	25 1/2"	1 1/4"	4	1 1/4"	52"
CCTV50-LC2	50'-0"	0.3125"	19"	12 1/8"	B1	25"	25 1/2"	1 1/4"	4	1 1/4"	52"

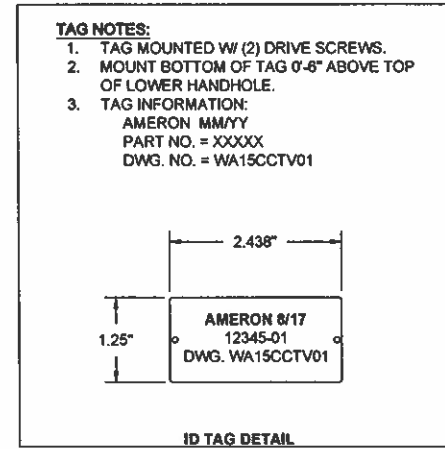
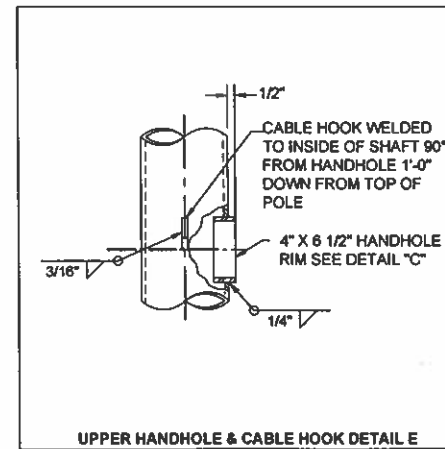
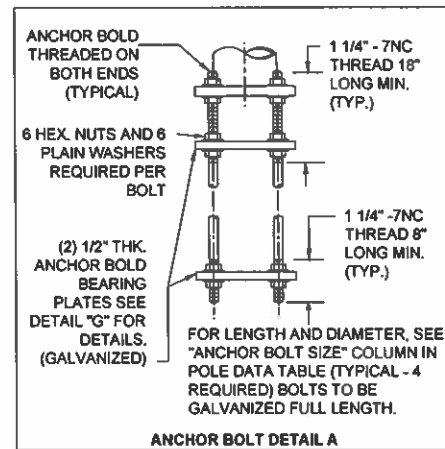
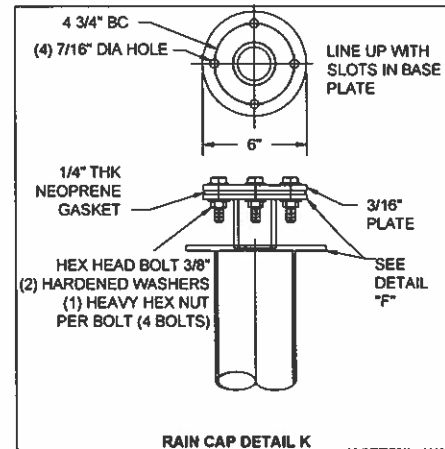
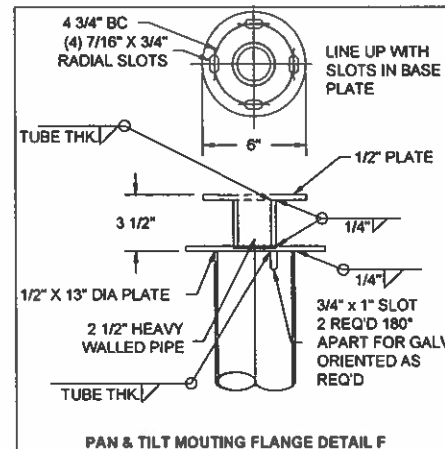
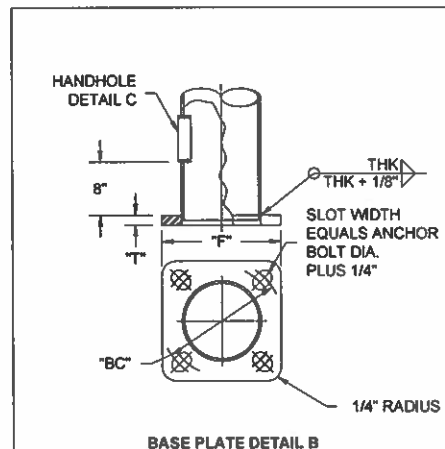
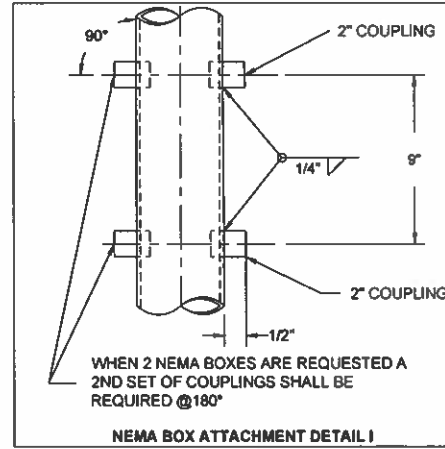
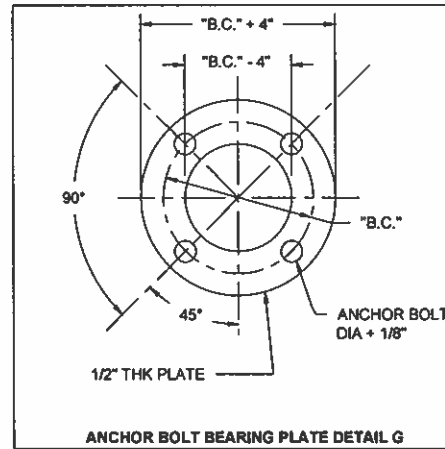
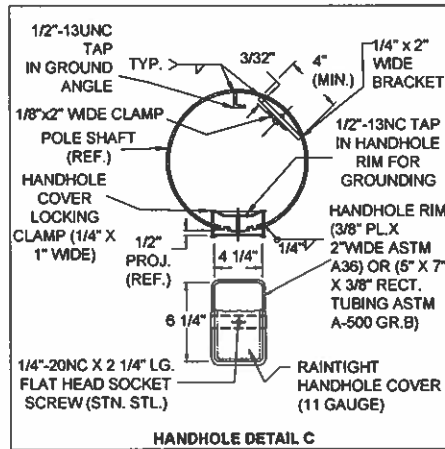
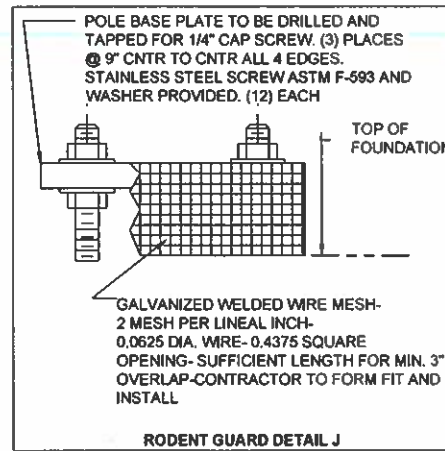
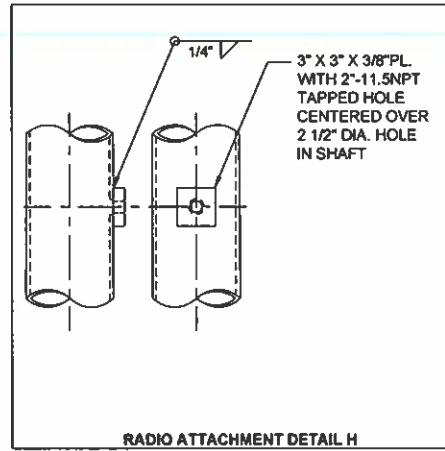
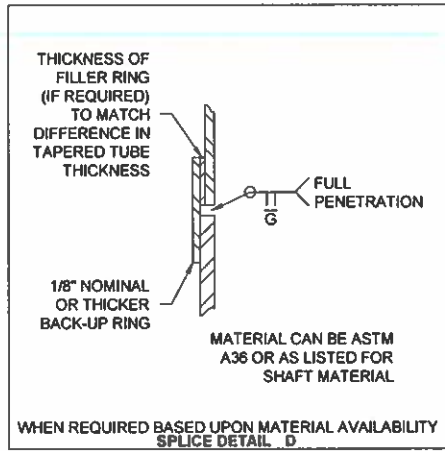


ORIENTATION DIAGRAM

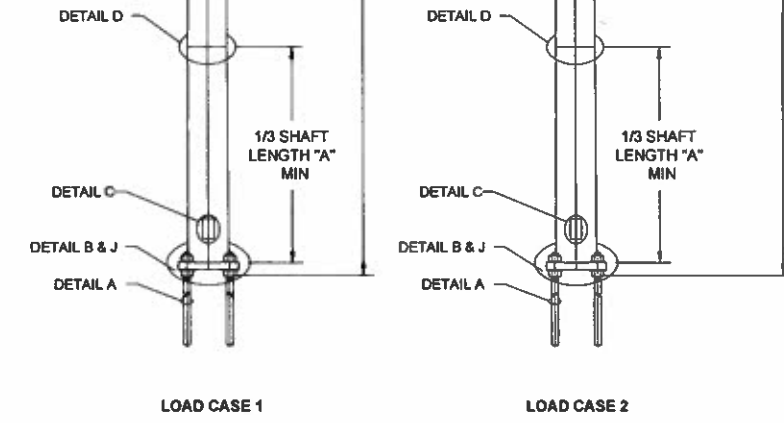
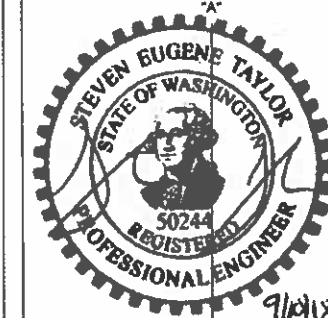
APPROVED
 Manufacturer's Pole Plan
 Approved For Listing As A
 Pre-Approved Drawing
 WSDOT Bridge & Structures Office
 By GB Date 9-17-2018



REV.	DATE	DESCRIPTION	BY	APPR
A	9/10/18	REVISED PER WASHINGTON DOT COMMENT	ST	GM
A	9/17/18	REVISED PER WASHINGTON DOT COMMENT	ST	GM
AMERON POLE PRODUCTS DIVISION STATE OF WASHINGTON CCTV 2015 STANDARD DETAILS				
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DRAWING NUMBER	WA15CCTV01	REVISION	SHEET	SCALE
		B	1 OF 2	NTS



APPROVED
 Manufacturer's Pole Plan
 Approved For Listing As A
 Pre-Approved Drawing
 WSDOT Bridge & Structures Office
 By GB Date 9-17-2018



WELDING INSPECTION:

- WELDING INSPECTION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF WASHINGTON STATE DEPARTMENT STANDARD SPECIFICATION SECTION 6-03.3(25) AND 2015 AASHTO, INCLUDING LATEST INTERIMS, WELD INSPECTION SECTION 14.5.3
- ALL LONGITUDINAL PARTIAL PENETRATION SEAM WELDS SHALL BE INSPECTED BY MAGNETIC PARTICLE METHOD ON THE OD FOR 30% OF LENGTH.
- COMPLETE JOINT PENETRATION (CJP) SEAM WELD WITH A SHAFT THICKNESS 0.3125 AND GREATER SHALL BE 100% ULTRASONICALLY INSPECTED.
- CJP WELD WITH A SHAFT THICKNESS OF LESS THAN 0.3125 SHALL BE MAGNETIC PARTICLE INSPECTED ON BOTH SIDES OF THE WELD WHEN BACKING IS NOT USED. THE CJP WELD SHALL BE INSPECTED THE ENTIRE LENGTH ON THE OD AND ID OF ALL SHAFTS. FOR SHAFTS WITH A NOMINAL OD LESS THAN 10.5 INCHES, WHERE ACCESS TO THE ID IS RESTRICTED, THE ID SHALL BE INSPECTED FOR A MINIMUM LENGTH OF 2 INCHES. SHAFTS WITH OD LESS THAN OR EQUAL TO 8 INCHES REQUIRE VISUAL INSPECTION ONLY AND SHALL BE PERFORMED PRIOR TO GALVANIZING.

WELDING:

- WELDING OF STRUCTURES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AWS STRUCTURAL WELDING CODE D1.1-STEEL, 60% MINIMUM PENETRATION IS REQUIRED FOR ALL LONGITUDINAL SEAM WELDS OF POLE AND ARM SECTIONS EXCEPT FOR THE FOLLOWING LOCATIONS WHICH REQUIRE 100% PENETRATION:
- 6 INCHES ADJACENT TO COMPLETE JOINT PENETRATION WELDS OF SHAFT TUBE TO BASEPLATE, FLANGE PLATE AND BUTT WELDED SPLICES WITH A NOMINAL OD OF 5" OR GREATER AND TOP OF POLE TO TENON PLATE.
- 1.5 TIMES THE DIAMETER PLUS 6" ON ALL SLIP JOINTS OF THE FEMALE SECTION OF SHAFTS WITH A NOMINAL OD OF 10" OR GREATER.
- ONE DIAMETER ON ALL SLIP JOINTS OF FEMALE SECTION OF SHAFTS WITH A NOMINAL OD LESS THAN 10"

GENERAL NOTES	
MATERIAL SPECIFICATIONS	
*STEEL TO HAVE SILICON CONTENT OF 0.0 - 0.06 OR 0.15 - 0.25	
*SHAFT	STEEL OF 50 K.S.I. MINIMUM YIELD. ASTM A-572 GR.50, ASTM A-595 GR. A, ASTM A-709 GR.50, ASTM A-1008 GR.50, ASTM A-1011 GR.50, ASTM A-1018 GR.50, THE ABOVE LISTED MATERIALS ARE USED BASED UPON AVAILABILITY AT TIME OF PURCHASE OF MATERIAL LOTS FOR PRODUCING POLE SHAFTS
*BASEPLATES	ASTM A-36
*FLANGES	ASTM A-36
PIPE	ASTM A-53 GRADE B, A-500 GR B, OR A-513
*ANCHOR BOLTS	ASTM F-1554 GR 105
MANUFACTURING PROCESSES	
BUTT WELDS	GROUND FLUSH WITH BASE METAL
LONGITUDINAL WELDS	BUTT WELDED BY HIGH FREQUENCY ELECTRICAL RESISTANCE PROCESS
CIRCUMFERENTIAL WELDS	BUTT WELDED WITH PERMANENT BACKUP RING
FINISH COATING	
STRUCTURE	HOT DIP GALVANIZE PER ASTM A-123
HARDWARE	HOT DIP GALVANIZE PER ASTM F-2329
DESIGN CRITERIA	
STRUCTURE AND HARDWARE	IN ACCORDANCE WITH TO 2015 AASHTO LRFD STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SUPPORTS
WELDING	IN ACCORDANCE WITH CURRENT AWS D1.1 SPECIFICATION

NOTES

- POLE SHAFT IS ROUND WITH 0.1375 TAPER.
- AMERON RESERVES THE RIGHT TO INSTALL TOOLING LUGS OR HOLES TO FACILITATE IN THE GALVANIZING PROCESS. THESE LUGS/HOLES WILL NOT IMPEDE WITH FIT FORM OR FUNCTION OF THE FINISHED PRODUCT AND ARE TO BE USED SOLELY BY THE MANUFACTURER.
- AMERON DISCLAIMS ANY WARRANTY ASSOCIATED WITH FATIGUE INITIATED BY HARMONIC OR INDUCED VIBRATION THAT ARE INFLUENCED BY INTERACTING VARIABLES IN OR AROUND THE VICINITY OF THE INSTALLED PRODUCT. IT SHALL BE THE RESPONSIBILITY OF THE OWNER ESSENTIAL MAINTENANCE FROM EXCESSIVE VIBRATION, OR THE EFFECTS THEREOF, INCLUDING BUT NOT LIMITED TO CRACKING, BOLT/NUT LOOSENING OR OTHER ASSOCIATED STRUCTURAL DAMAGE

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STATE OF WASHINGTON				
CCTV				
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