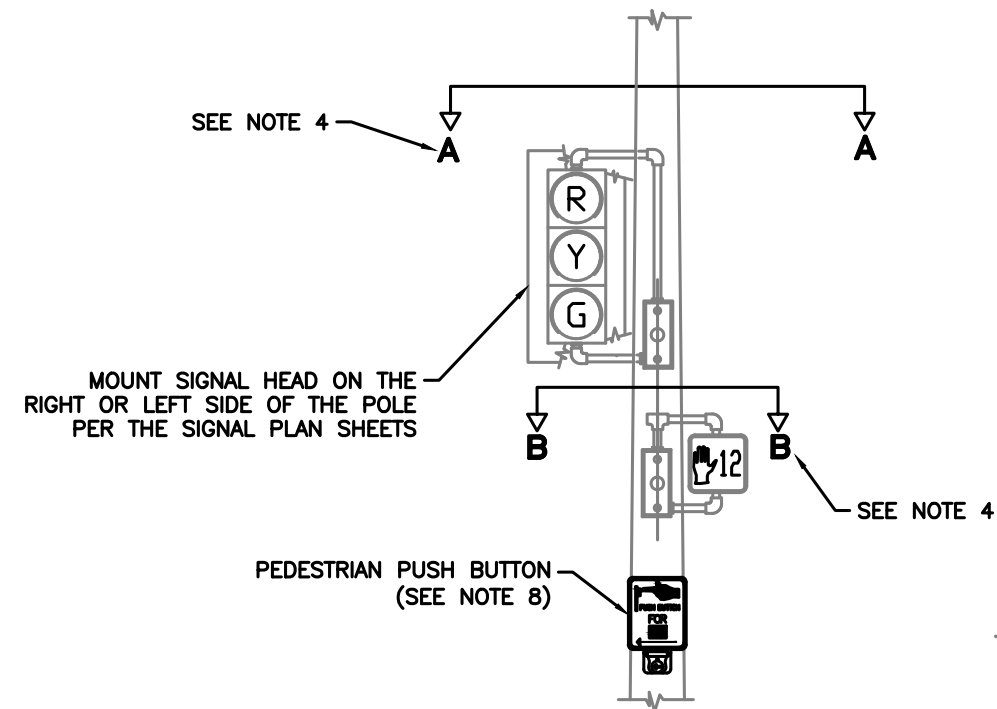
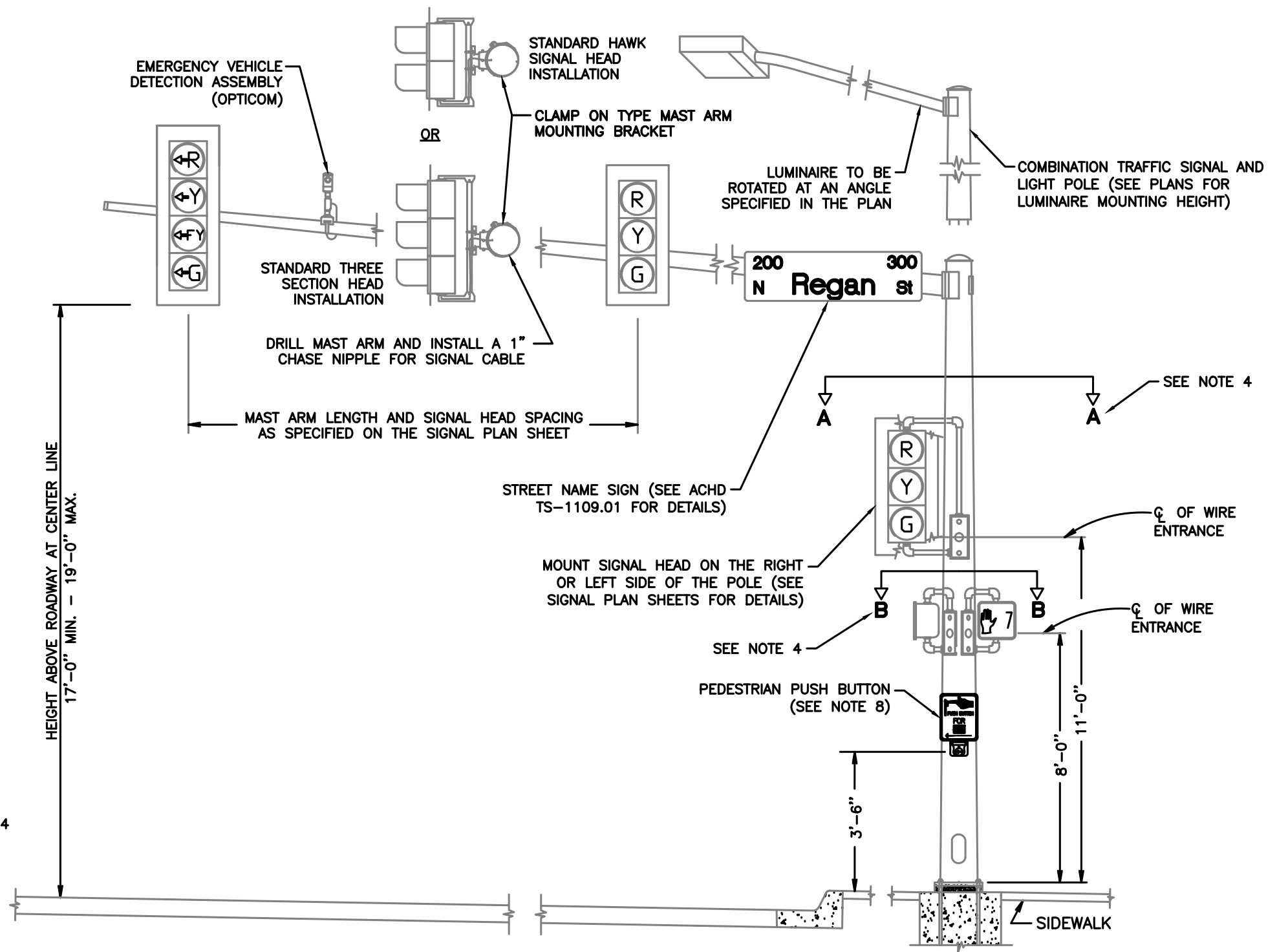


NOTES:

1. THIS STANDARD DETAIL SHOWS TYPICAL INSTALLATION. SEE SIGNAL PLAN SHEETS FOR QUANTITY OF SIGNAL AND LIGHTING COMPONENTS TO BE INSTALLED.
2. ORIENTATION OF SIGNAL COMPONENTS SHALL BE AS SHOWN, UNLESS OTHERWISE SPECIFIED ON THE SIGNAL PLAN SHEETS.
3. SEE ACHD DETAIL TS-1110.01 FOR FOUNDATION DETAILS.
4. SEE ACHD DETAIL TS-1106.02 FOR TYPICAL SIGNAL AND PED HEAD INSTALLATION DETAILS.
5. ALL SIGNAL COMPONENTS SHALL BE LEVELED AFTER THE POLE HAS BEEN PLUMBED.
6. THE SPECIFIC LOCATION OF EACH POLE SHALL BE AS INDICATED ON THE SIGNAL PLAN SHEETS. POLE LOCATIONS SHALL BE VERIFIED BY ACHD PRIOR TO FOUNDATION INSTALLATION.
7. ALL SIGNALS SHALL COMPLY WITH THE MOST RECENTLY ADOPTED EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
8. PED PUSH BUTTONS SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS, IN COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA), AND THE MOST RECENTLY ADOPTED EDITION OF THE MUTCD.



**MAST ARM POLE
W/SINGLE PED POLE BRACKET**

**MAST ARM POLE
W/TWO PED SIGNAL BRACKETS**

NO.	DATE	BY	DESCRIPTION
10/2021	JES		Added single bracket ped pole mount
1/2020	JES		Modified ped push button notes
• REVISIONS •			

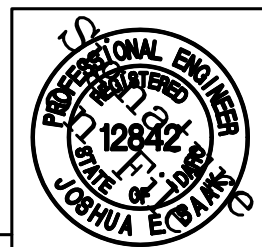


Traffic Engineering Division

3775 Adams Street Boise, ID 83714
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• SIGNATURES •	
Scale: NTS	Drawn By: Joshua Seak
Date: 12/16/2011	Design By: Joshua Seak
File: TS-1106.01.DWG	Approved By: Greg Fullerton

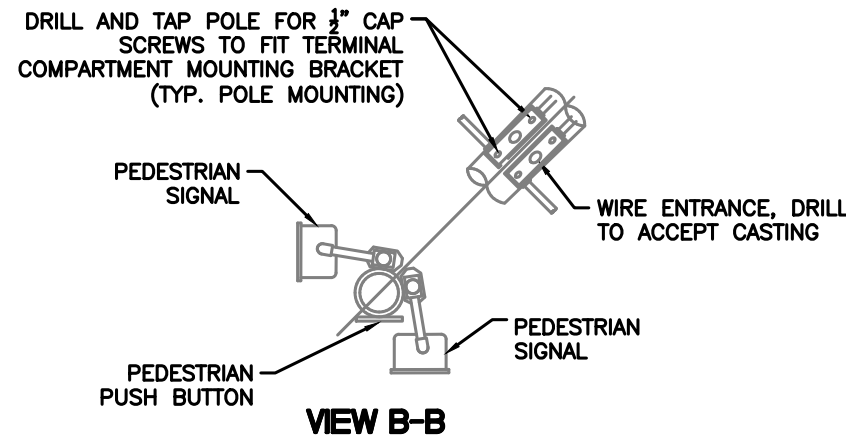
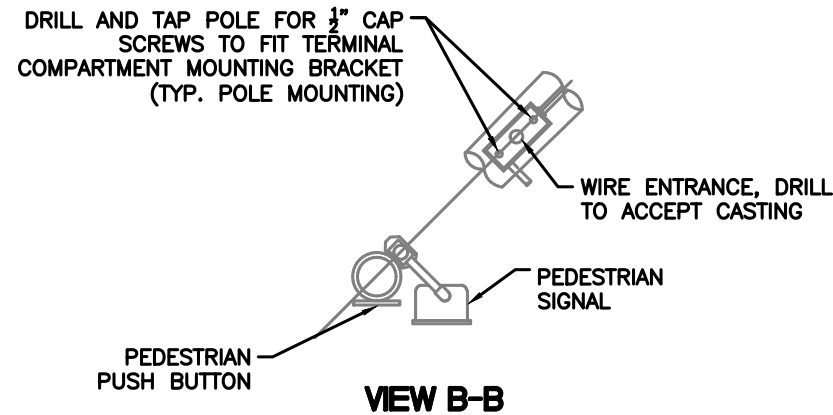
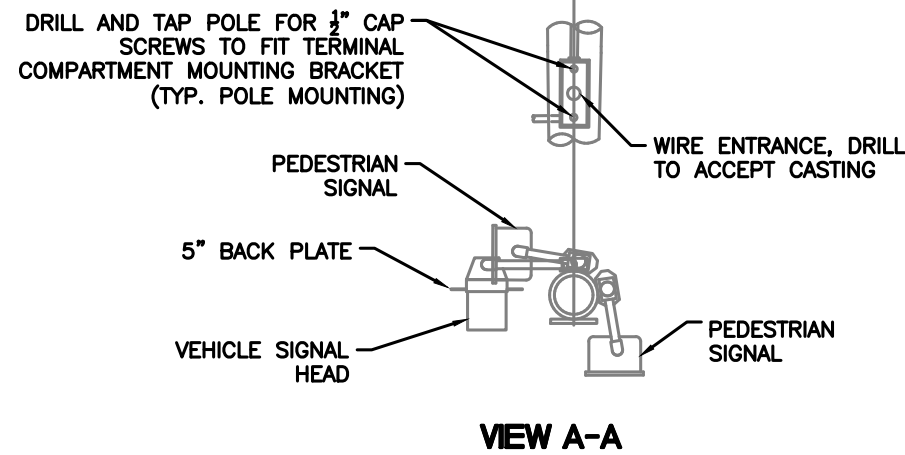
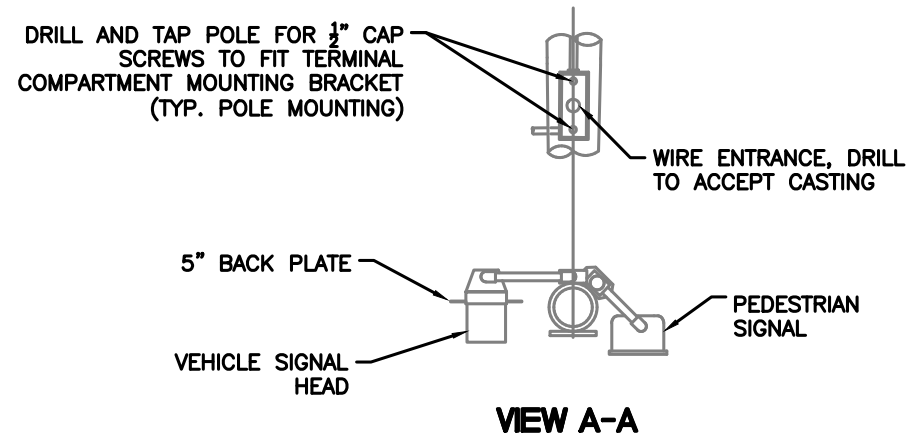
• SHEET TITLE •	
Standard Traffic Signal Mast Arm	



STANDARD DETAIL NO. TS-1106.01

NOTES:

1. THIS DRAWING SHOWS TYPICAL INSTALLATION DETAILS ONLY. SEE PLAN SHEETS FOR QUANTITY AND LOCATION OF SIGNAL AND LIGHTING COMPONENTS TO BE INSTALLED.
2. SIGNAL COMPONENT ORIENTATION SHALL BE AS SHOWN UNLESS OTHERWISE SPECIFIED ON THE PLAN SHEETS.
3. SEE ACHD STANDARD DRAWING TS-1110.01 FOR FOUNDATION DETAILS.
4. SEE ACHD STANDARD DRAWING TS-1106.01 FOR TYPICAL SIGNAL MAST ARM AND POLE DETAILS.
5. ALL SIGNAL COMPONENTS SHALL BE LEVELED AFTER THE POLE HAS BEEN PLUMBED.
6. THE SPECIFIC LOCATION OF EACH POLE INSTALLATION SHALL BE AS INDICATED ON THE PROJECT PLAN SHEETS. THE LOCATION SHALL BE FIELD VERIFIED BY ACHD PRIOR TO FOUNDATION INSTALLATION.
7. ALL CONDUIT ELBOWS USED IN CONCRETE BASES SHALL BE RPC.
8. PED PUSH BUTTONS SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS, IN COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA), AND THE MOST RECENTLY ADOPTED EDITION OF THE MUTCD.



**MAST ARM POLE
W/SINGLE PED POLE BRACKET**

**MAST ARM POLE
W/TWO PED SIGNAL BRACKETS**

NO.	DATE	BY	DESCRIPTION
1	1/2020	JES	Modified ped push button notes

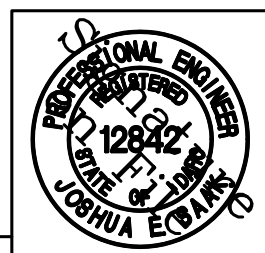
• REVISIONS •



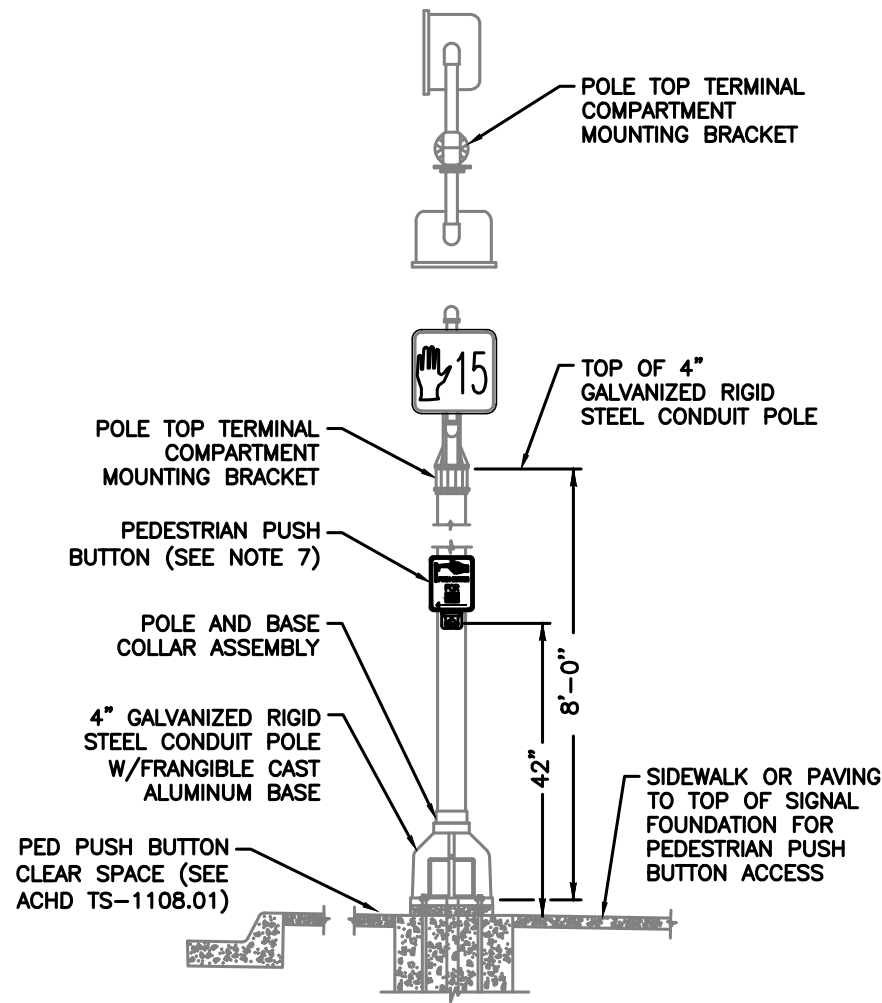
ACHD
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3775 Adams Street Boise, ID 83714
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• SIGNATURES •	
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Date: 11/22/2021	Design By: Joshua Seak
File: TS-1106.02.DWG	Approved By: Greg Fullerton

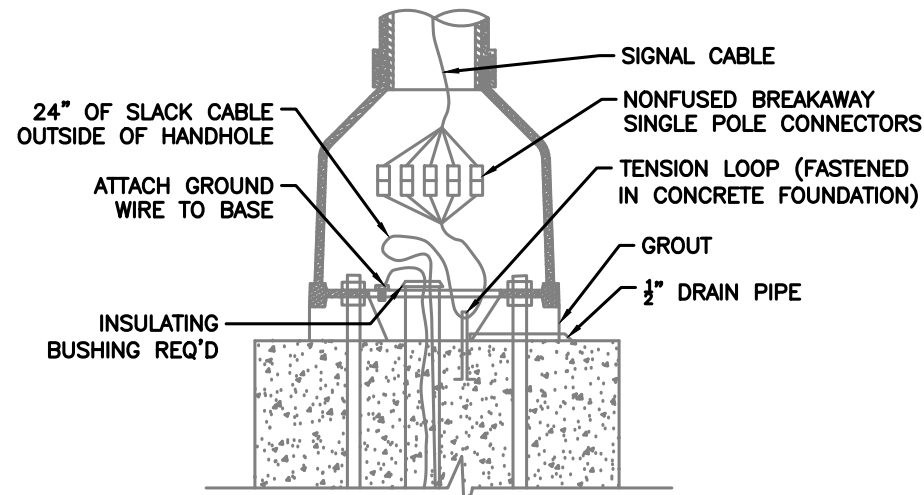
• SHEET TITLE •
Standard Traffic Signal Pole Details



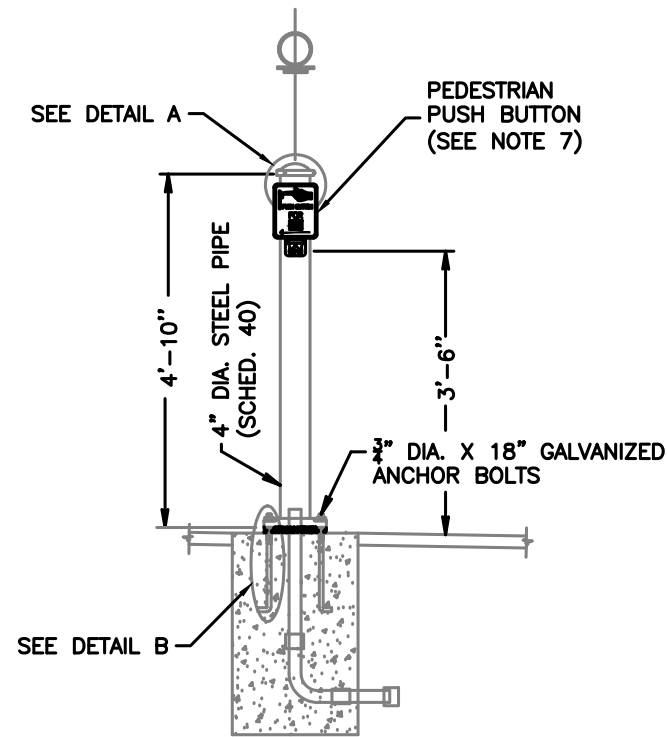
• STANDARD DETAIL NO. •
TS-1106.02



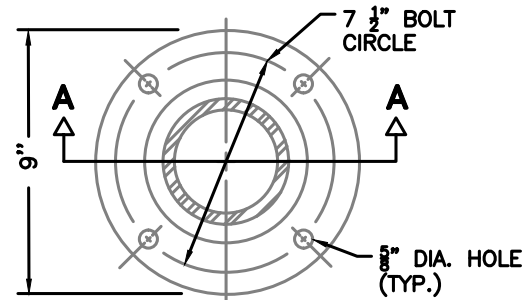
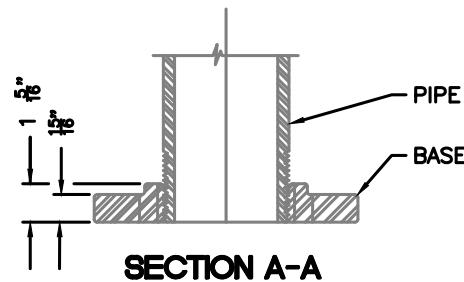
**PEDESTRIAN SIGNAL
W/BREAKAWAY BASE**



**TYPICAL SIGNAL PEDESTAL
CONNECTOR INSTALLATION**

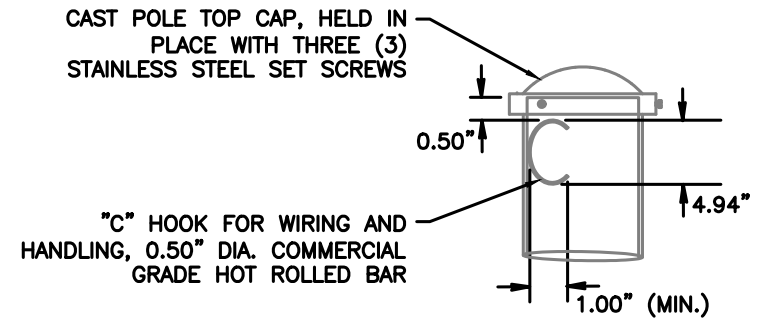


**PEDESTRIAN PUSH
BUTTON POLE**

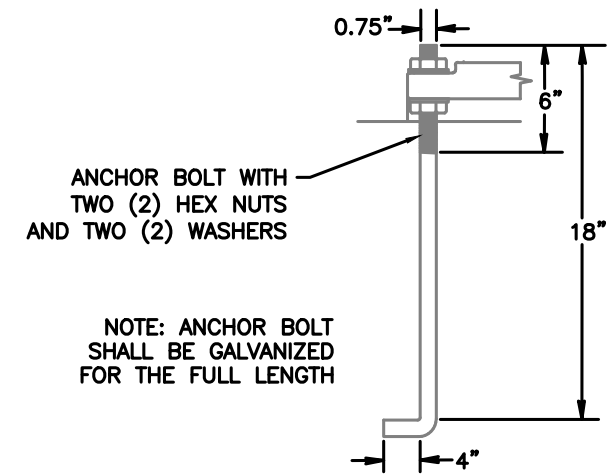


**FRANGIBLE CAST IRON
PIPE FLANGE**

- NOTES:**
1. THIS DRAWING SHOWS TYPICAL INSTALLATION DETAILS ONLY. SEE PLAN SHEETS FOR QUANTITY AND LOCATION OF SIGNAL AND LIGHTING COMPONENTS TO BE INSTALLED.
 2. SIGNAL COMPONENT ORIENTATION SHALL BE AS SHOWN UNLESS OTHERWISE SPECIFIED ON THE PLAN SHEETS.
 3. SEE ACHD STANDARD DRAWING TS-1110.01 FOR FOUNDATION DETAILS.
 4. ALL SIGNAL COMPONENTS SHALL BE LEVELED AFTER THE POLE HAS BEEN PLUMBED.
 5. SPECIFIC LOCATION OF EACH POLE INSTALLATION SHALL BE AS INDICATED ON THE PROJECT PLAN SHEETS. THE LOCATION SHALL BE FIELD VERIFIED BY ACHD PRIOR TO FOUNDATION INSTALLATION.
 6. ALL CONDUIT ELBOWS USED IN CONCRETE BASES SHALL BE RPC.
 7. PED PUSH BUTTONS SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS AND IN COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA).



**PEDESTRIAN PUSH BUTTON
POLE - DETAIL A**



**PEDESTRIAN PUSH BUTTON
POLE - DETAIL B**

NO.	DATE	BY	DESCRIPTION
1	12/2021	JES	Added pole details

• REVISIONS •

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• SIGNATURES •	
Scale: NTS	Drawn By: Joshua Seak
Date: 12/3/2021	Design By: Joshua Seak
File: TS-1106.03.DWG	Approved By: Greg Fullerton

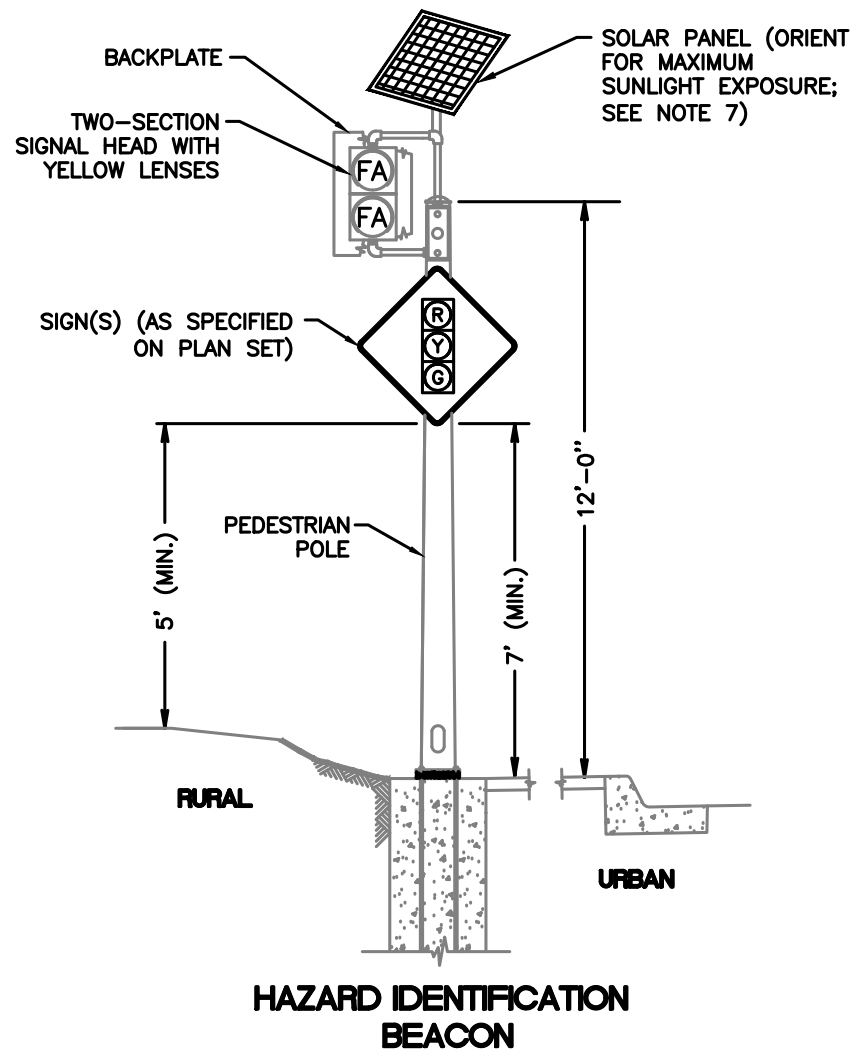
• SHEET TITLE •
Standard Breakaway Pedestrian Signal Pole Details

PROFESSIONAL ENGINEER
REGISTERED
12842
STATE OF IDAHO
JOSHUA E. SEAK

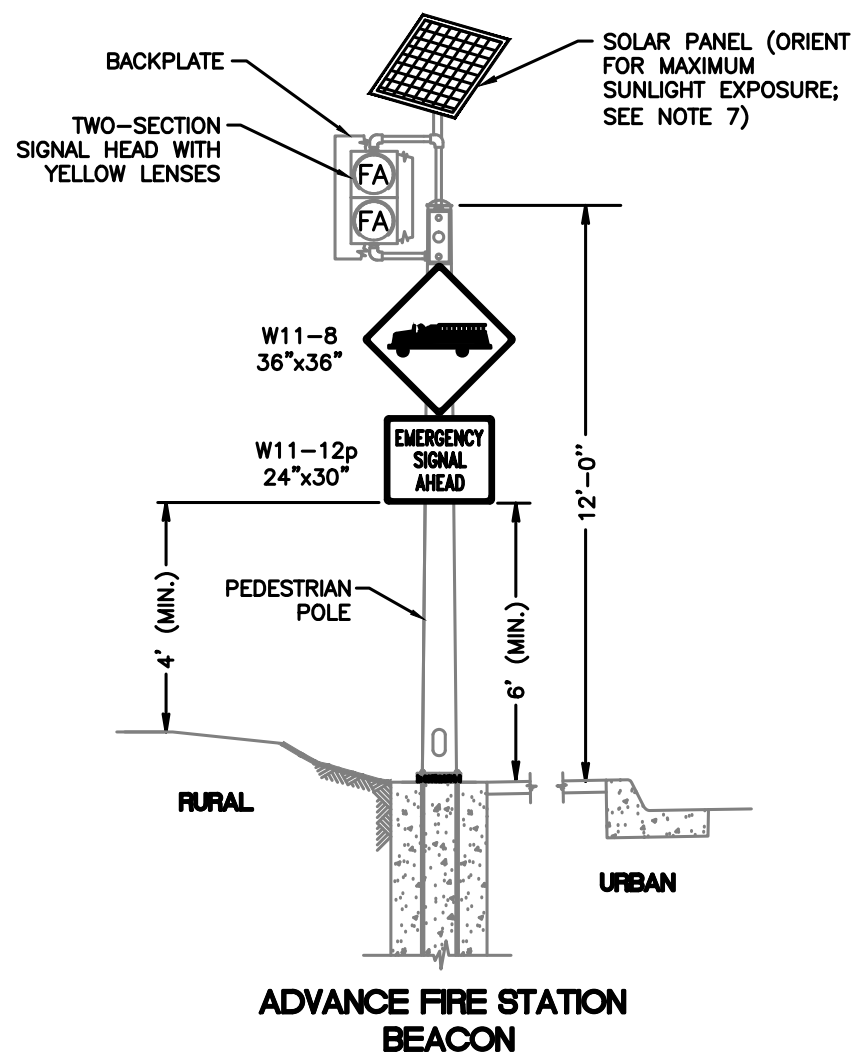
• STANDARD DETAIL NO. •
TS-1106.03

NOTES:

1. THIS DRAWING SHOWS TYPICAL INSTALLATION DETAILS ONLY. SEE PLAN SHEETS FOR QUANTITY AND LOCATION OF SIGNAL AND SIGNAL RELATED COMPONENTS TO BE INSTALLED.
2. SIGNAL COMPONENT ORIENTATION SHALL BE AS SHOWN UNLESS OTHERWISE SPECIFIED ON THE PLAN SHEETS.
3. SEE ACHD STANDARD DRAWING TS-1110.01 FOR FOUNDATION DETAILS.
4. ALL SIGNAL COMPONENTS SHALL BE LEVELED AFTER THE POLE HAS BEEN PLUMBED.
5. SPECIFIC LOCATION OF EACH POLE INSTALLATION SHALL BE AS INDICATED ON THE PROJECT PLAN SHEETS. THE LOCATION SHALL BE FIELD VERIFIED BY ACHD PRIOR TO FOUNDATION INSTALLATION.
6. ALL CONDUIT ELBOWS USED IN CONCRETE BASES SHALL BE RPC.
7. SOLAR PANELS, WHEN SPECIFIED ON THE PLANS, SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDED INSTRUCTIONS.



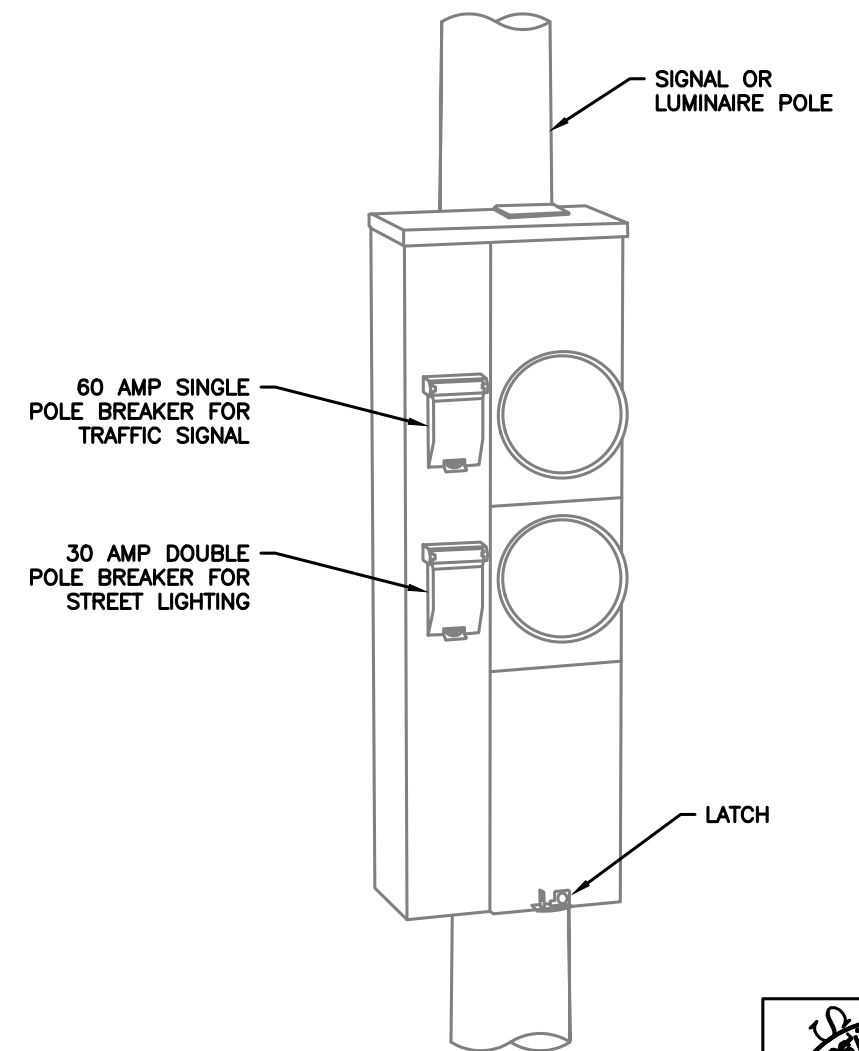
HAZARD IDENTIFICATION BEACON



ADVANCE FIRE STATION BEACON

NOTES:

1. THIS DRAWING SHOWS TYPICAL INSTALLATION DETAILS ONLY. SEE PLAN SHEETS FOR QUANTITY AND LOCATION OF SIGNAL AND SIGNAL RELATED COMPONENTS TO BE INSTALLED.
2. ORIENTATION SHALL BE SHOWN AS SPECIFIED ON THE PLAN SHEETS.
3. GROUND NEW SERVICE PER THE NATIONAL ELECTRICAL CODE (NEC) AND ALL STATE AND LOCAL REGULATIONS.
4. NEW ELECTRICAL SERVICE SHALL BE INSPECTED BY THE DIVISION OF BUILDING SAFETY.
5. COORDINATE WITH IDAHO POWER TO DISCONNECT POWER FOR WORK TO TAKE PLACE.
6. IF APPLICABLE, COORDINATE WITH BOISE CITY TO HAVE THE METER INSTALLED FOR STREET LIGHTING.
7. IF APPLICABLE, THE TRAFFIC SIGNAL SHALL REMAIN OPERATIONAL BY GENERATOR DURING POWER OUTAGES.
8. IF APPLICABLE, ALL TRAFFIC SHALL BE STOPPED USING AN APPROVED TRAFFIC CONTROL PLAN DURING CONNECTION AND DISCONNECTION OF THE GENERATOR.



POLE MOUNTED DUAL METER SERVICE ENCLOSURE

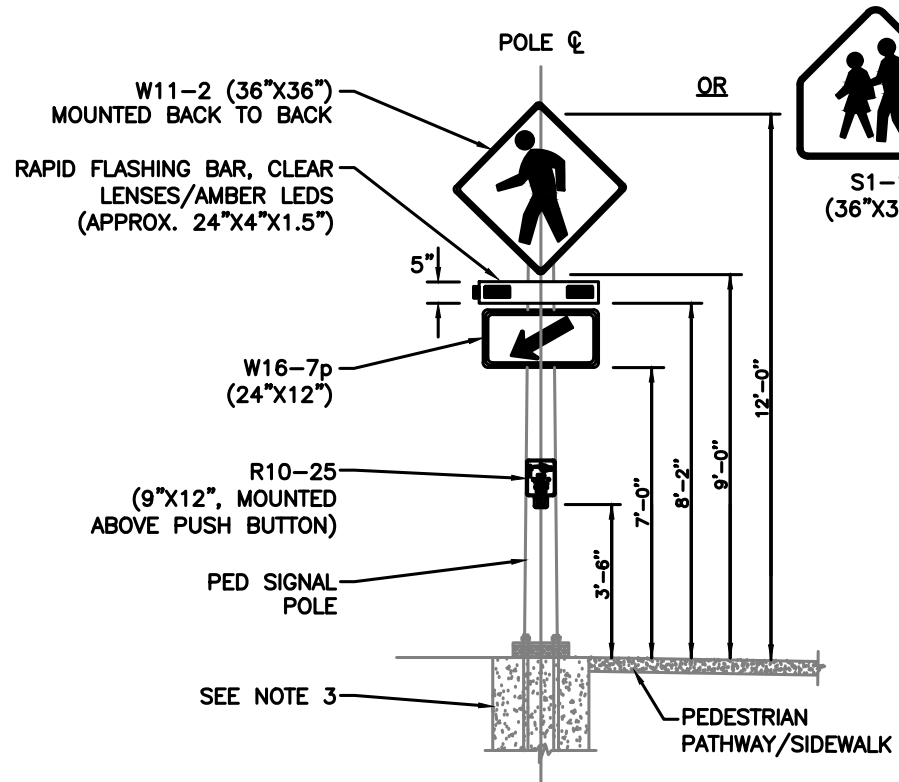
NO.	DATE	BY	DESCRIPTION
12/2021	JES		Added dual meter pole mounted service detail
11/2021	JES		Added solar panel option

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www.achdidaho.org

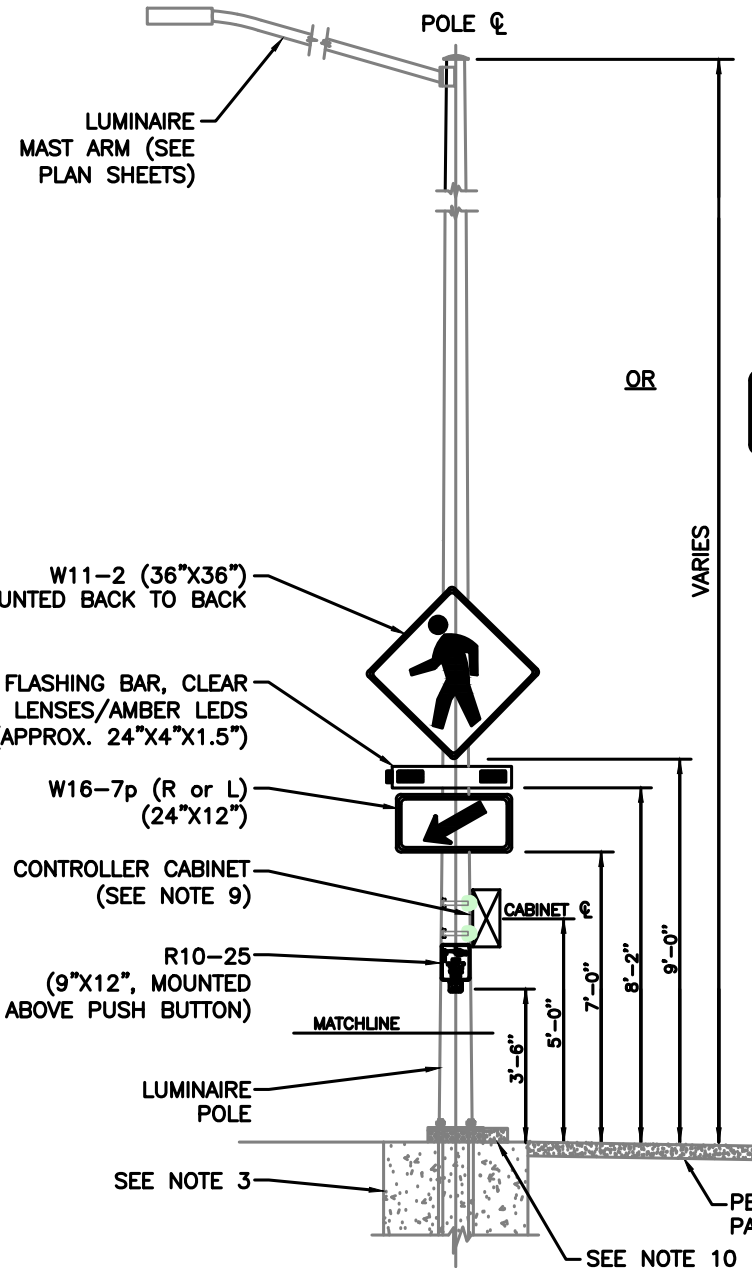
• SIGNATURES •	
Scale: NTS	Drawn By: Joshua Seak
Date: 12/18/2011	Design By: Joshua Seak
File: TS-1106.04.DWG	Approved By: Greg Fullerton

• SHEET TITLE •	
Standard Pedestrian Signal Pole and Hazard Beacon Details	

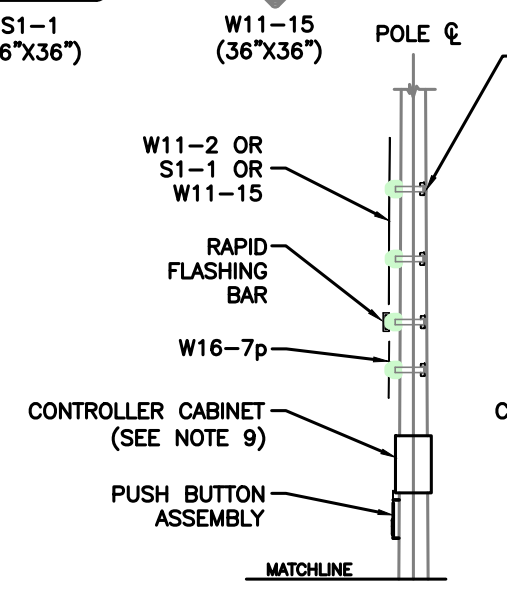
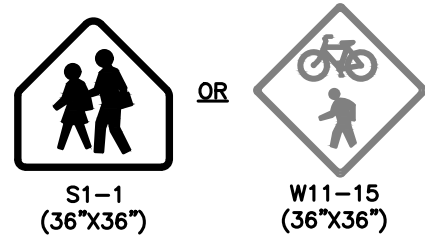
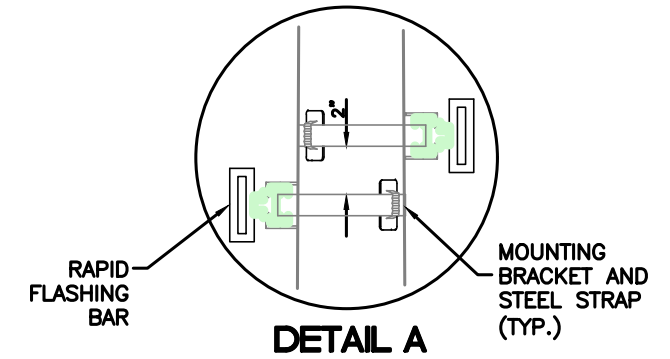
PROFESSIONAL ENGINEER
REGISTERED
12842
STATE OF IDAHO
JOSHUA E. SEAK
• STANDARD DETAIL NO. •
TS-1106.04



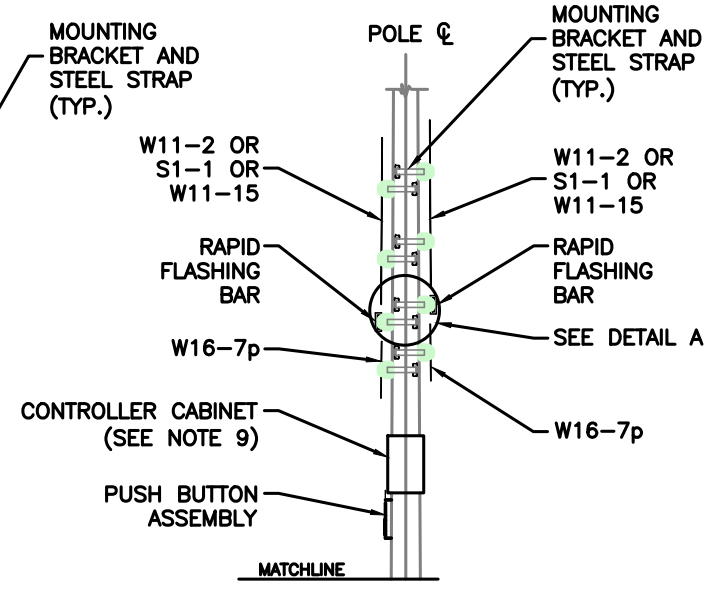
RECTANGULAR RAPID FLASHING BEACON, PEDESTRIAN POLE MOUNT



RECTANGULAR RAPID FLASHING BEACON, LUMINAIRE POLE MOUNT



SIDE VIEW, UNI-DIRECTIONAL



SIDE VIEW, BI-DIRECTIONAL

- NOTES:**
- THIS DRAWING SHOWS TYPICAL INSTALLATION DETAILS ONLY. SEE PLAN SHEETS FOR QUANTITY AND LOCATION OF SIGNAL AND LIGHTING COMPONENTS TO BE INSTALLED.
 - ORIENTATION OF SIGNAL COMPONENTS SHALL BE AS SHOWN UNLESS OTHERWISE SPECIFIED ON THE PLAN SHEETS.
 - SEE ACHD STANDARD DRAWING TS-1110.01 FOR FOUNDATION DETAILS.
 - ALL SIGNAL COMPONENTS SHALL BE LEVELED AFTER THE POLE HAS BEEN PLUMBED.
 - SPECIFIC LOCATION OF EACH POLE INSTALLATION SHALL BE AS INDICATED ON THE PROJECT PLAN SHEETS. THE LOCATION SHALL BE FIELD VERIFIED BY ACHD PRIOR TO FOUNDATION INSTALLATION.
 - ALL CONDUIT ELBOWS USED IN CONCRETE BASES SHALL BE RPC.
 - SEE ACHD STANDARD DETAIL TS-1108 FOR PED PUSHBUTTON DETAILS. PED PUSHBUTTONS SHALL BE INSTALLED IN COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT.
 - TERMINATE RRFB CONNECTIONS PER MANUFACTURER'S RECOMMENDATIONS.
 - CONTROL CABINET ENCLOSURES SHALL BE SIZED BY THE RRFB MANUFACTURER. CABINET LOCATION SHALL BE INSTALLED ACCORDING TO THE PROJECT PLAN SHEETS.
 - INSTALL RAISED CONCRETE CURB (6" HEIGHT) UNDER RRFB CONTROLLER CABINET. CURB SHOULD ENCOMPASS THE ENTIRE WIDTH AND DEPTH OF THE CONTROLLER ABOVE AND BE EITHER EPOXIED INTO OR BOLTED TO THE SIDEWALK. CURB SHALL NOT IMPEDE ON PEDESTRIAN SPACE OR LIMIT SIDEWALK WIDTH TO LESS THAN THAT REQUIRED BY THE ADA.

NO.	DATE	BY	DESCRIPTION
5/2022	JES		Added W11-15 sign option
1/2021	JES		Added concrete curb detail

• REVISIONS •



• SIGNATURES •	
Scale: NTS	Drawn By: Joshua Seak
Date: 11/28/2016	Design By: Joshua Seak
File: TS-1106.06.DWG	Approved By: Greg Fullerton

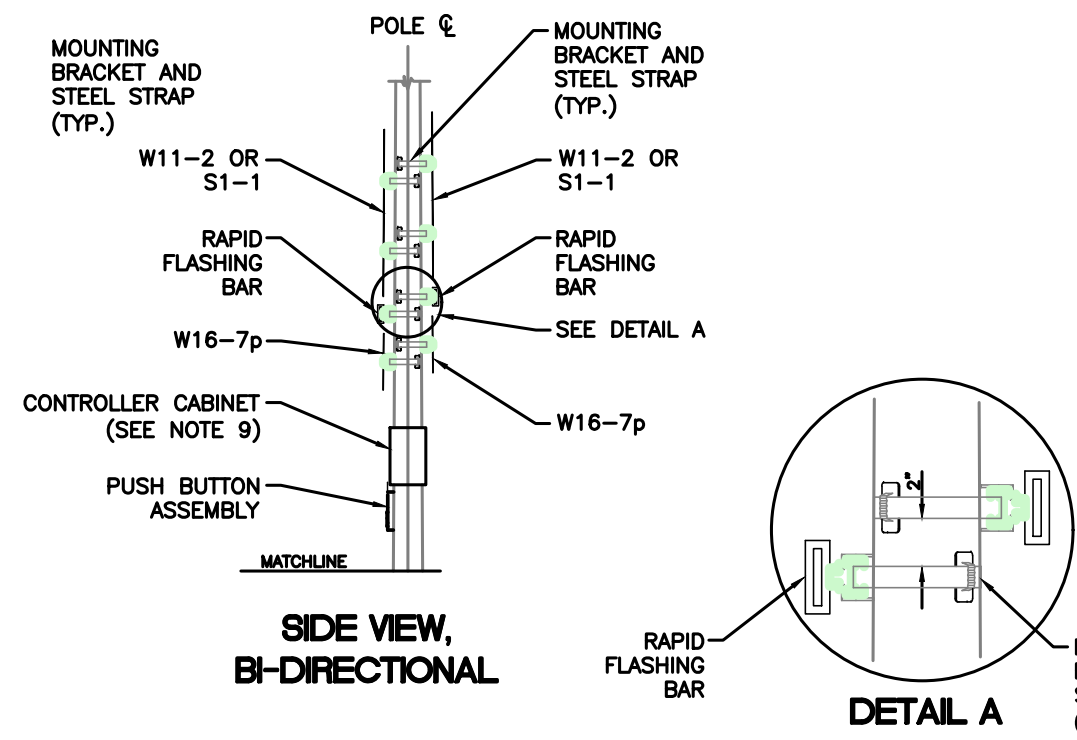
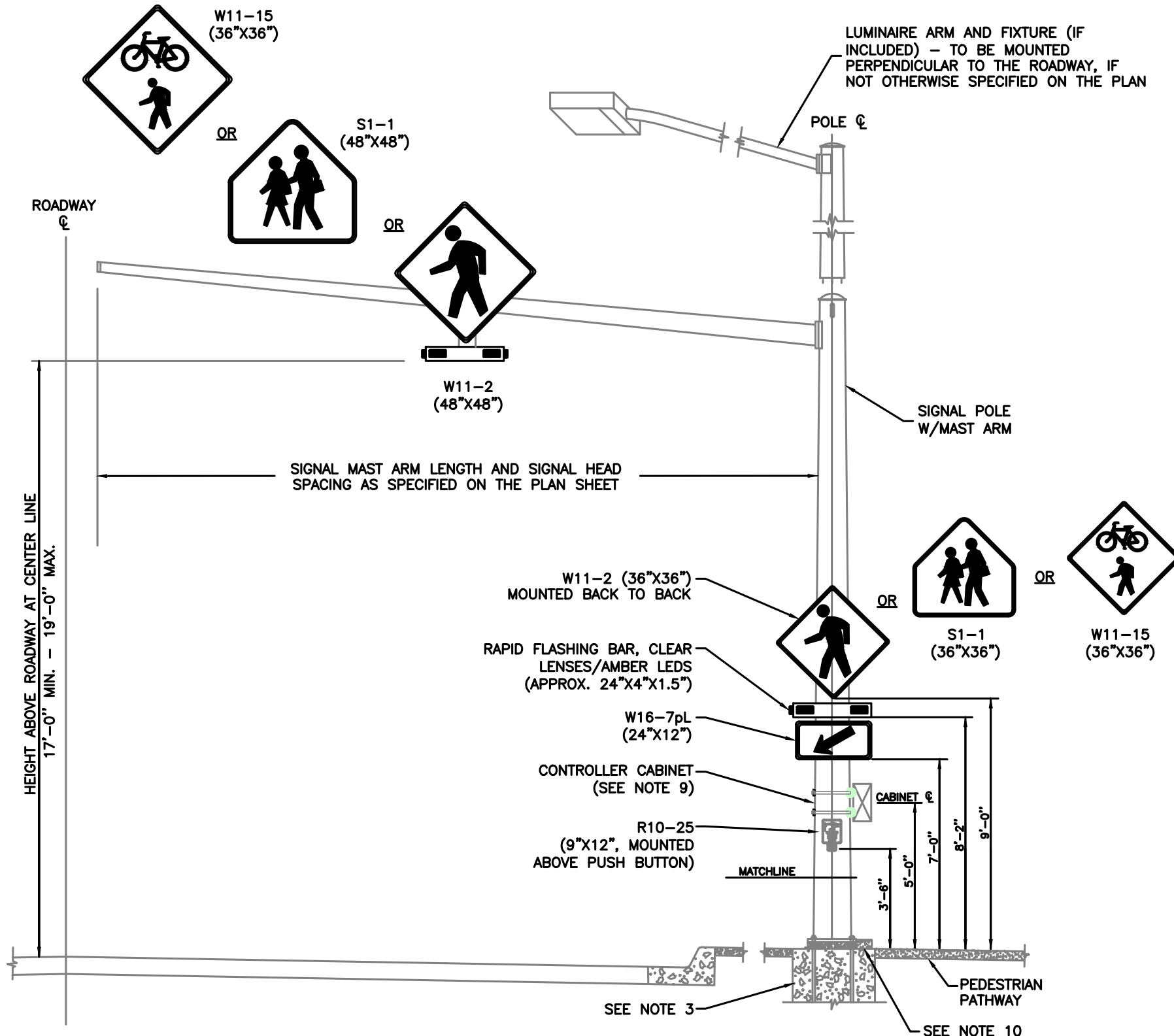
• SHEET TITLE •	
Rectangular Rapid Flashing Beacon (RRFB) Details	



S:\Traffic Specifications\2020 Standard Plans\ts-1106.06.DWG

NOTES:

1. THIS DRAWING SHOWS TYPICAL INSTALLATION DETAILS ONLY. SEE PLAN SHEETS FOR QUANTITY AND LOCATION OF SIGNAL AND LIGHTING COMPONENTS TO BE INSTALLED.
2. ORIENTATION OF SIGNAL COMPONENTS SHALL BE AS SHOWN UNLESS OTHERWISE SPECIFIED ON THE PLAN SHEETS.
3. SEE ACHD STANDARD DRAWING TS-1110.01 FOR FOUNDATION DETAILS.
4. ALL SIGNAL COMPONENTS SHALL BE LEVELED AFTER THE POLE HAS BEEN PLUMBED.
5. SPECIFIC LOCATION OF EACH POLE INSTALLATION SHALL BE AS INDICATED ON THE PROJECT PLAN SHEETS. THE LOCATION SHALL BE FIELD VERIFIED BY ACHD PRIOR TO FOUNDATION INSTALLATION.
6. ALL CONDUIT ELBOWS USED IN CONCRETE BASES SHALL BE RPC.
7. SEE ACHD STANDARD DETAIL TS-1108 FOR PED PUSHBUTTON DETAILS. PED PUSHBUTTONS SHALL BE INSTALLED IN COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT.
8. TERMINATE RRFB CONNECTIONS PER MANUFACTURER'S RECOMMENDATIONS.
9. CONTROL CABINET ENCLOSURES SHALL BE SIZED BY THE RRFB MANUFACTURER. CABINET LOCATION SHALL BE INSTALLED ACCORDING TO THE PROJECT PLAN SHEETS.
10. INSTALL RAISED CONCRETE CURB (6" HEIGHT) UNDER RRFB CONTROLLER CABINET. CURB SHOULD ENCOMPASS THE ENTIRE WIDTH AND DEPTH OF THE CONTROLLER ABOVE AND BE EITHER EPOXIED INTO OR BOLTED TO THE SIDEWALK. CURB SHALL NOT IMPEDE ON PEDESTRIAN SPACE OR LIMIT SIDEWALK WIDTH TO LESS THAN THAT REQUIRED BY THE ADA.

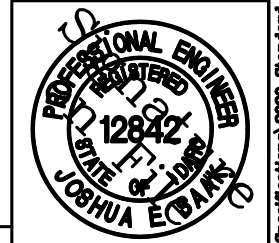


TYPICAL RECTANGULAR RAPID FLASHING BEACON, MAST ARM MOUNT

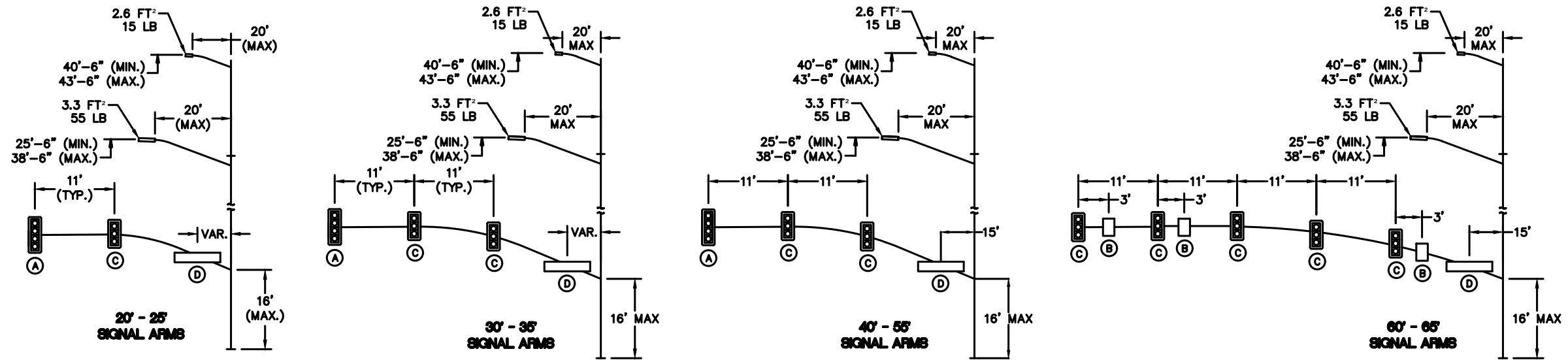
NO.	DATE	BY	DESCRIPTION
5/2022	JES		Added W11-15 sign option



• SIGNATURES •		• SHEET TITLE •	
Scale: NTS	Drawn By: Joshua Seak	Rectangular Rapid Flashing Beacon (RRFB) Details	
Date: 12/8/2021	Design By: Joshua Seak		
File: TS-1106.06.DWG	Approved By: Greg Fullerton		



STANDARD DETAIL NO. TS-1106.06



DEVICE	DESCRIPTION	PROJ. AREA (FT²)	WEIGHT (LBS)
A	12"-4 SEC. SIGNAL WITH BACKPLATES	10.90	45
B	30" X 36" DIRECTIONAL SIGN	7.50	25
C	12"-3 SEC. SIGNAL WITH BACKPLATES	8.50	35
D	30" X VAR. STREET NAME SIGN	±20.00	±35

DESIGN CRITERIA:

1994 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS.

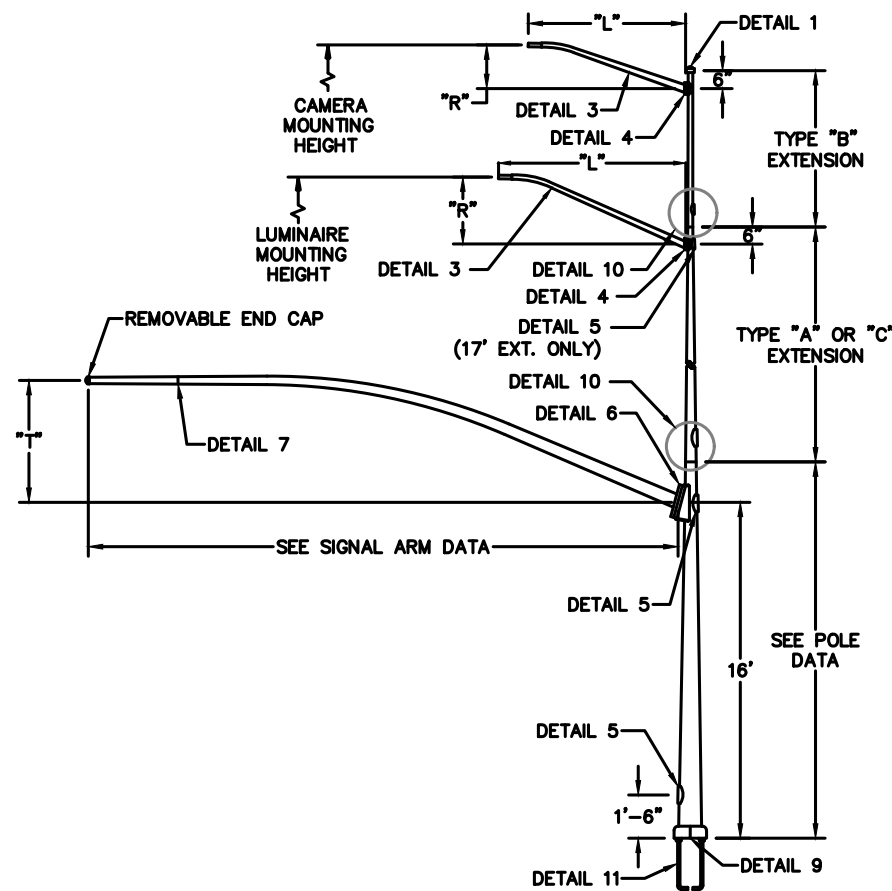
WIND VELOCITY:

80 MPH ISOTACH.

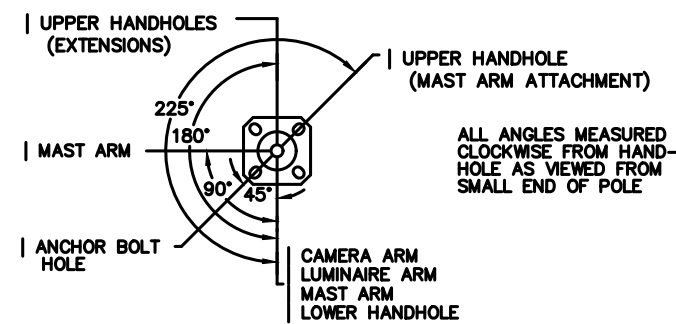
LOADING INFORMATION

MATERIAL DATA		
COMPONENT	DESIGNATION	MIN. YIELD (KSI)
TAPERED TUBES-7 & 3 GAUGE	A595 GR.A	55
TAPERED TUBES-ALL OTHERS	A572	65
BASE PLATE	A36	36
SIGNAL ARM ATTACHMENT	A36	36
SIGNAL ARM CONN. BOLTS	A325	---
LUMINAIRE ARM ATTACHMENT	A36	36
LUMINAIRE ARM CONN. BOLTS	SAE GR. 5	---
ANCHOR BOLTS (RED COLOR)	ASTM F1554	105
ANCHOR BOLTS (YELLOW COLOR)	ASTM F1554	55
NUTS	ASTM A563 GR. A	---
WASHERS	ASTM F436	---
GALVANIZING-HARDWARE	A153	---

FINISH NOTES	
POLES, LUMINAIRE ARMS & MAST ARMS UP TO 55' SPAN	60' & 65' MAST ARM SPAN (OPTIONAL 55' SPAN)
INTERIOR SURFACES:	INTERIOR SURFACES:
CORROSION INHIBITING MODIFIED ALKYD	CORROSION INHIBITING MODIFIED ALKYD
OR	EXTERIOR PRIME COAT:
EPOXY PRIMER	CORROSION INHIBITING POLYAMIDE EPOXY
EXTERIOR PRIME COAT:	EXTERIOR SURFACES:
ZINC RICH EPOXY POWDER	ACRYLIC POLYURETHANE ENAMEL
EXTERIOR SURFACES:	PAINT COLOR:
TGIC OR URETHANE POLYESTER POWDER	F314AN (BLACK)
PAINT COLOR:	
F530G (BLACK)	



ADA - X AND XI POLES



RADIAL INDEX

MATERIAL NOTES:

- ALL PLATE MATERIAL CONSISTING OF A36 GR. 36 MAY BE SUBSTITUTED WITH A572 GR. 50 OR 55 MATERIAL.
- HANDHOLE COVER MATERIAL MAY BE SUBSTITUTED WITH 10 GAUGE MATERIAL.

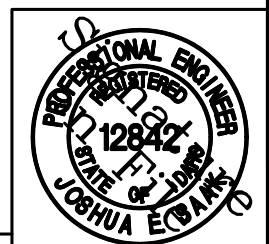
NO.	DATE	BY	DESCRIPTION
• REVISIONS •			



Traffic Engineering Division

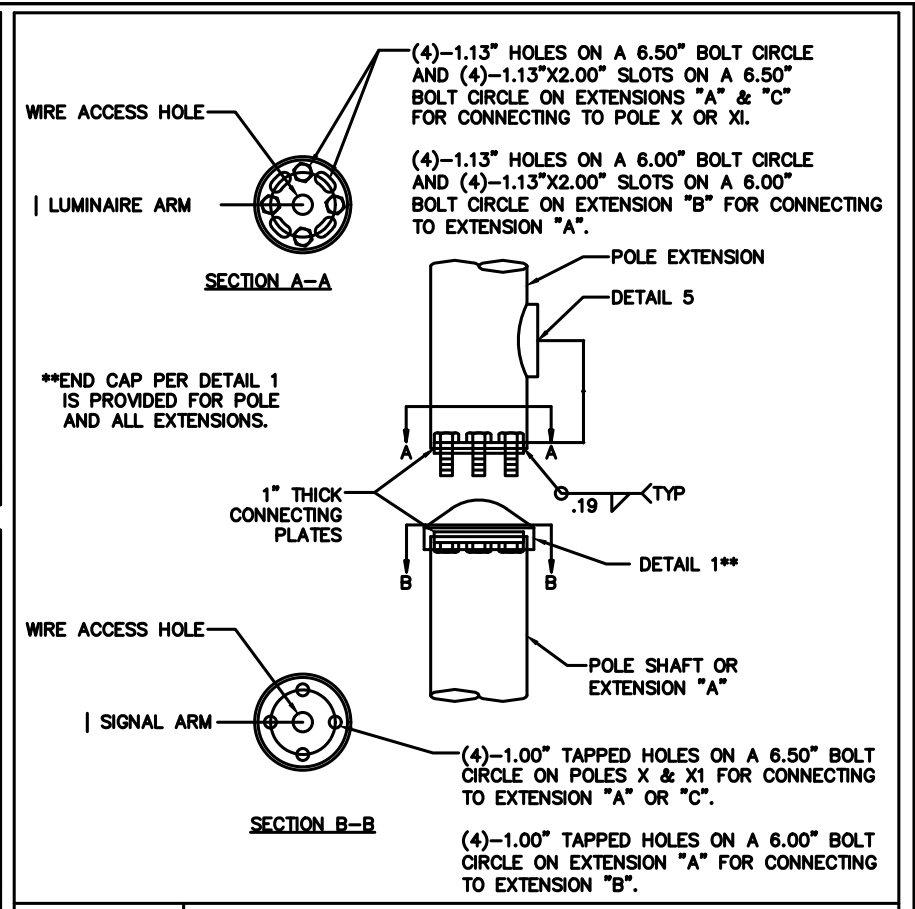
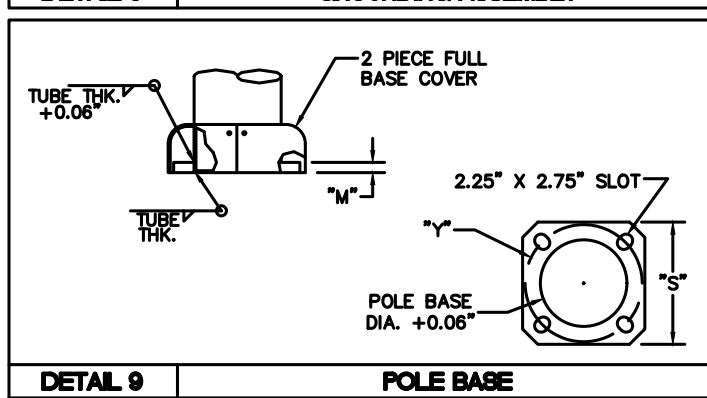
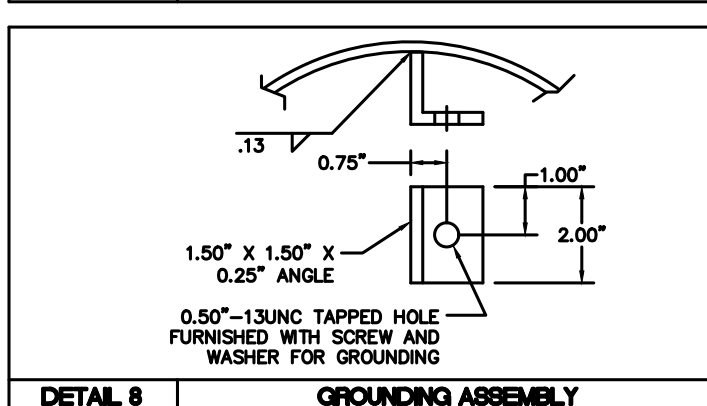
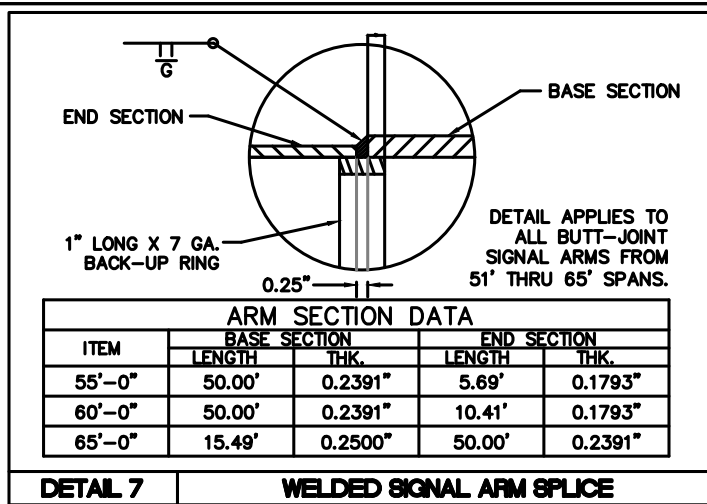
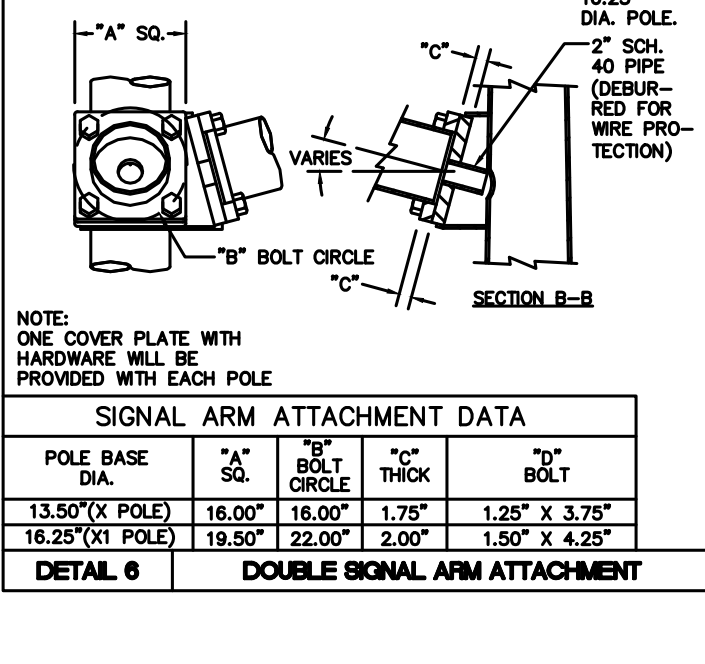
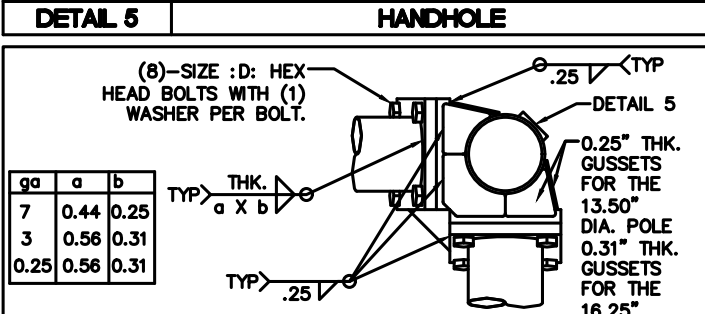
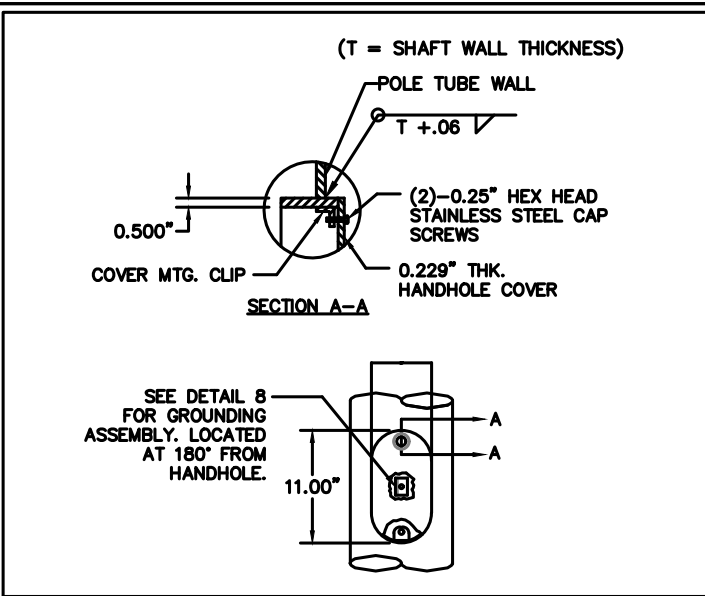
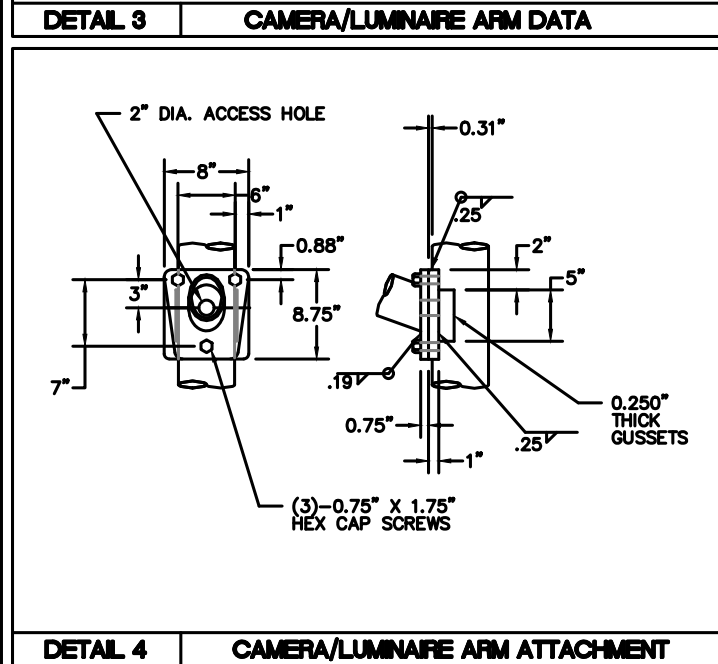
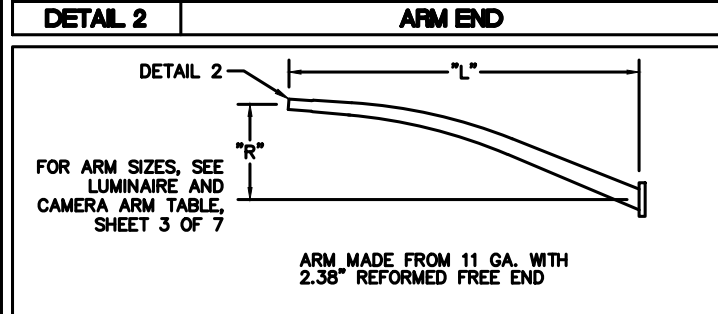
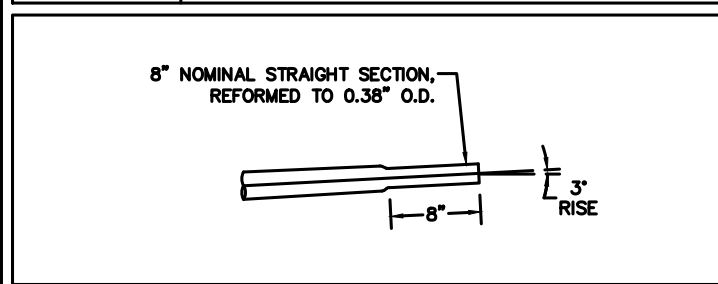
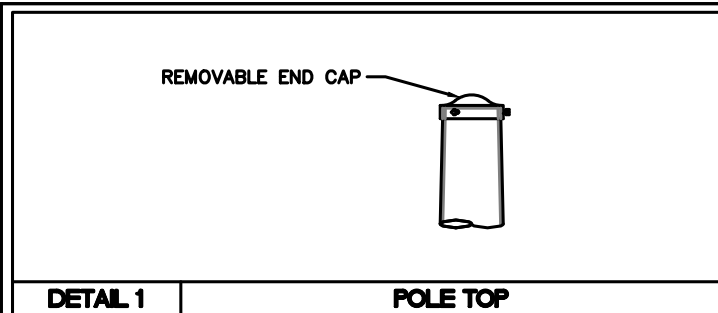
• SIGNATURES •	
Scale: NTS	Drawn By: Valmont/Joshua Saak
Date: 12/21/2022	Design By: Valmont
File: TS-1106.07.DWG	Approved By: Greg Fullerton

• SHEET TITLE •	
Standard Signal Structures	



• STANDARD DETAIL NO. •

TS-1106.07



NO.	DATE	BY	DESCRIPTION
• REVISIONS •			

ACHD

Traffic Engineering Division

3775 Adams Street Boise, ID 83714
www.achd.idaho.org

• SIGNATURES •

Scale: NTS	Drawn By: Valmont/Joshua Seak
Date: 12/21/2022	Design By: Valmont
File: TS-1106.08.DWG	Approved By: Greg Fullerton

• SHEET TITLE •

Standard Signal Structure Details

PROFESSIONAL ENGINEER
REGISTERED
12842
STATE OF IDAHO
JOSHUA E. CARMICHAEL

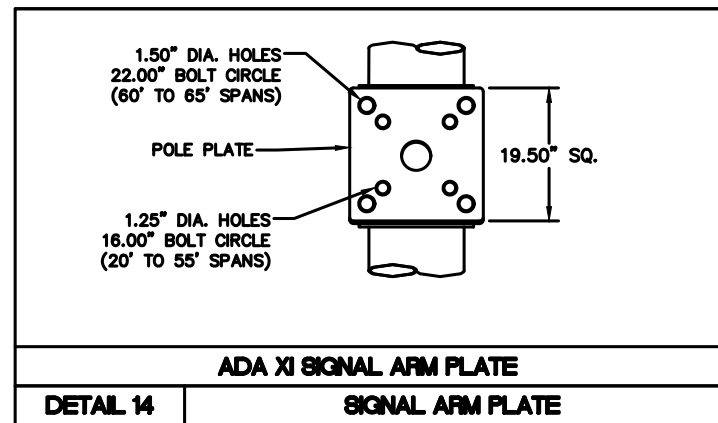
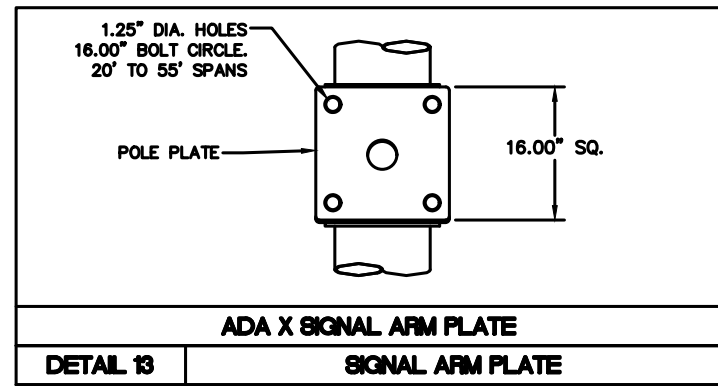
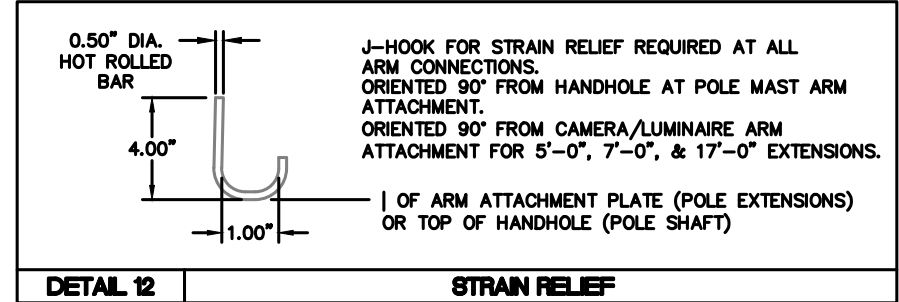
• STANDARD DETAIL NO. •
TS-1106.08

POLE DATA																
DESIGNATION KEY				POLE TUBE				POLE BASE				ANCHOR BOLT				
POLE SERIES	POLE TYPE	FIRST SIGNAL ARM SPAN	SECOND SIGNAL ARM SPAN	LENGTH (FT)	BASE DIA. (IN)	TOP DIA. (IN)	GAUGE/THK. (IN)	SQUARE "S" (IN)	BOLT CIRCLE "Y" (IN)	THK. "M" (IN)	SLOT LENGTH (IN)	DIA. "K" (IN)	LENGTH "J" (IN)	HOOK "H" (IN)	THREAD LENGTH "U" (IN)	MIN. YIELD (KSI)/COLOR
ADA	X	45' 50' 55'	45' 40' 30'	18.00	13.50	10.98	0.313	19.00	18.00	2.00	2.75	2.00	84.00	6.00	12.00	55 YELLOW
ADA XI	XI	55' 60' 65'	55' 55' 40'	18.00	16.25	13.73	0.313	22.00	21.00	2.00	2.75	2.00	84.00	6.00	12.00	105 RED

POLE EXTENSION DATA								
LUMINAIRE MOUNTING HEIGHT	SECTION	BASE DIAMETER	TOP DIAMETER	LENGTH	GAUGE	CONNECTING PLATES		
						BOTTOM BOLT CIRCLE	TOP BOLT CIRCLE	
35'-6" MIN. / 38'-6" MAX.	A	11.00"	8.62"	17'-0"	7	6.50"	6.00"	
40'-6" MIN. / 43'-6" MAX.	B	8.62"	7.92"	5'-0"	11	6.00"	NA	
25'-6" MIN. / 28'-6" MAX.	C	11.00"	10.02"	7'-0"	7	6.50"	NA	

SIGNAL ARM DATA						
SIGNAL ARM TUBE					SIMPLEX INFO (DETAILS 6 AND 14)	
NOMINAL SPAN (FT)	FIXED END DIA. (IN)	FREE END DIA. (IN)	GAUGE OR THICK (IN)	RISE "T" (FT)	SIMPLEX BOLT CIRCLE (IN)	SIMPLEX BOLT DIA. (IN)
20	7.00	4.11	7	4.00	16.00	1.25
25	8.00	4.42	7	4.00	16.00	1.25
30	9.00	4.73	7	4.00	16.00	1.25
35	10.00	5.04	7	4.00	16.00	1.25
40	10.00	4.35	7	4.00	16.00	1.25
45	11.00	4.63	7	5.50	16.00	1.25
50	11.00	4.00	3	5.50	16.00	1.25
55	11.00	3.09	SEE DET. 7	5.50	16.00	1.25
60	13.00	4.42	SEE DET. 7	5.50	22.00	1.50
65	14.69	5.51	SEE DET. 7	5.50	22.00	1.50

LUMINAIRE/CAMERA ARM DATA				
ARM SPAN "L" (FT)	FIXED END DIA. (IN)	FREE END DIA. (IN)	GA.	RISE HEIGHT "R"
4	3.00	2.38	11	1'-0"
6	3.29	2.38	11	1'-6"
8	3.58	2.38	11	1'-10"
10	3.86	2.38	11	2'-2"
12	4.15	2.38	11	2'-6"
15	4.58	2.38	11	3'-0"
18	4.97	2.38	11	3'-6"
20	5.26	2.38	11	4'-0"

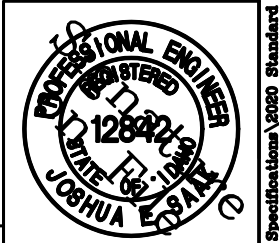


NO.	DATE	BY	DESCRIPTION
• REVISIONS •			

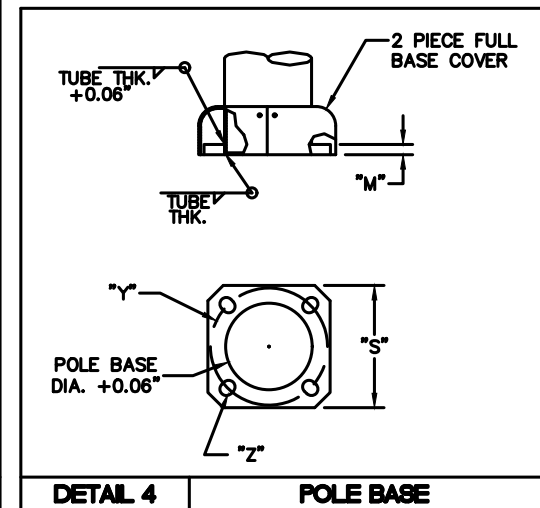
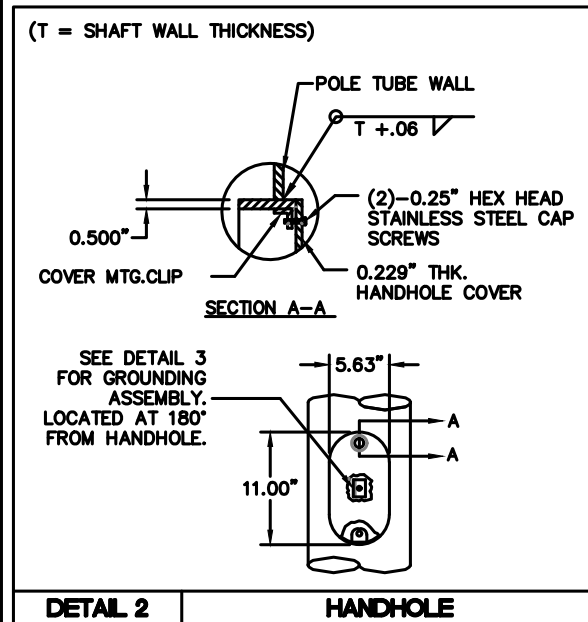
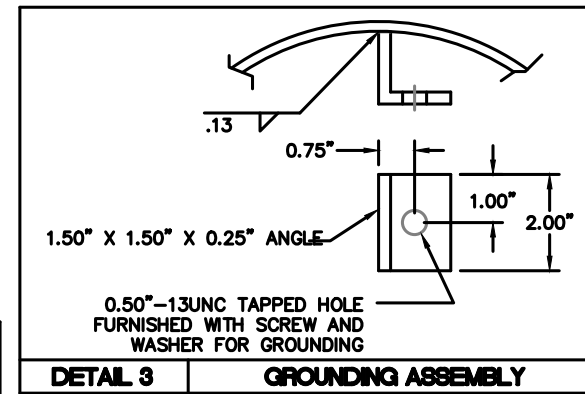
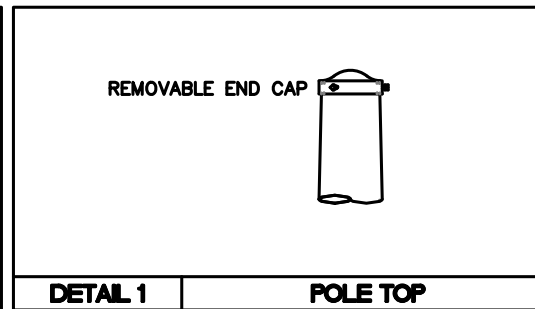
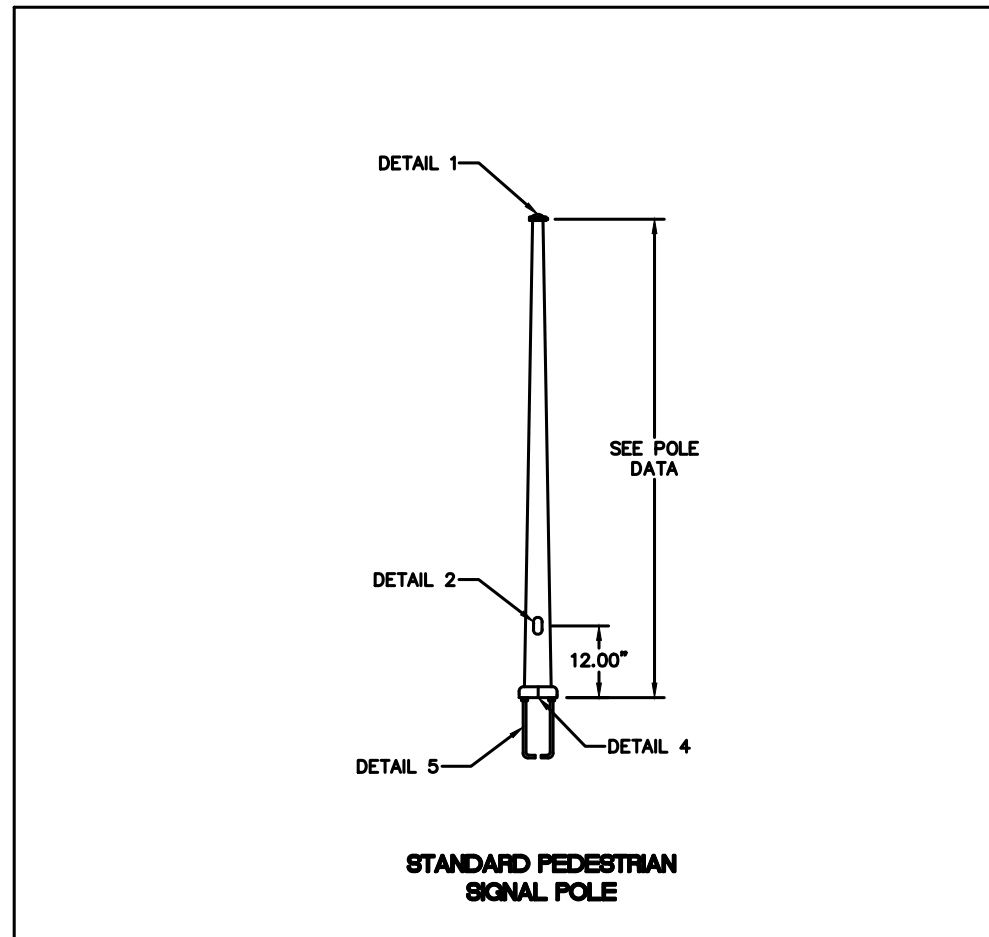


• SIGNATURES •	
Scale: NTS	Drawn By: Valmont/Joshua Seak
Date: 12/21/2022	Design By: Valmont
File: TS-1106.09.DWG	Approved By: Greg Fullerton

• SHEET TITLE •	
Signal Structure Data	



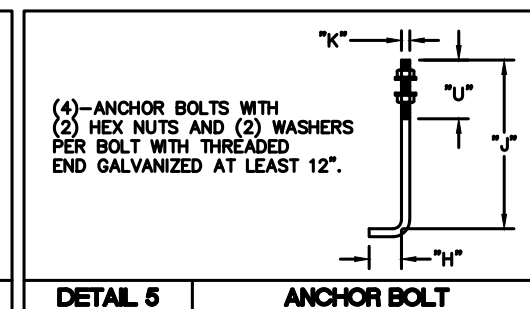
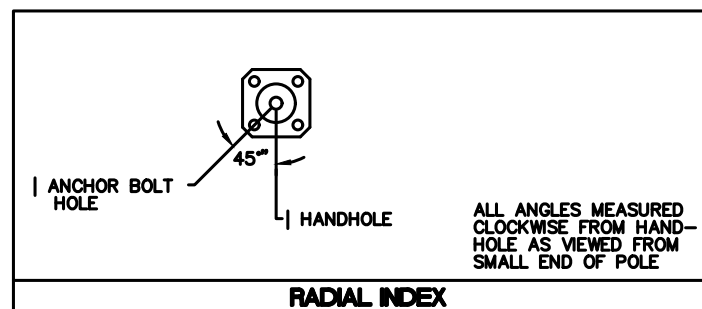
• STANDARD DETAIL NO. •
TS-1106.09



MATERIAL DATA		
COMPONENT	ASTM DESIGNATION	MIN. YIELD (KSI)
TAPERED TUBES	A595 GR. A	55
BASE PLATE	A36	36
ANCHOR BOLTS	F1554	55
GALVANIZING	A153	
FINISH NOTES		
INTERIOR SURFACES: CORROSION INHIBITING MODIFIED ALKYD OR EPOXY PRIMER EXTERIOR PRIME COAT: ZINC RICH EPOXY POWDER EXTERIOR SURFACES: TGIC OR URETHANE POLYESTER POWDER PAINT COLOR: F530G (BLACK)		

MATERIAL NOTE:

- ALL PLATE MATERIAL CONSISTING OF A36 GR. 36 MAY BE SUBSTITUTED WITH A572 GR. 50 OR 55 MATERIAL.
- HANDHOLE COVER MATERIAL MAY BE SUBSTITUTED WITH 10 GAUGE MATERIAL.



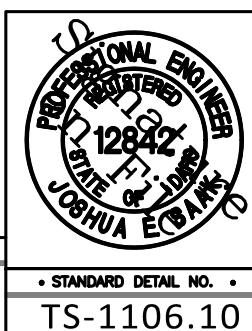
PED POLE DATA											
POLE TUBE				POLE BASE				ANCHOR BOLT			
BASE DIA. (IN)	TOP DIA. (IN)	LENGTH (FT)	GAUGE OR THICK (IN)	SQUARE \"S\" (IN)	BOLT CIRCLE \"Y\" (IN)	THK. \"M\" (IN)	HOLE / SLOT \"Z\" (IN)	DIA. \"K\" (IN)	LENGTH \"J\" (IN)	HOOK \"H\" (IN)	THREAD LENGTH \"U\" (IN)
8.00	6.32	12.00	3	13.88	12.75	0.75	1.25	1.00	36.00	4.00	6.00

NO.	DATE	BY	DESCRIPTION
• REVISIONS •			

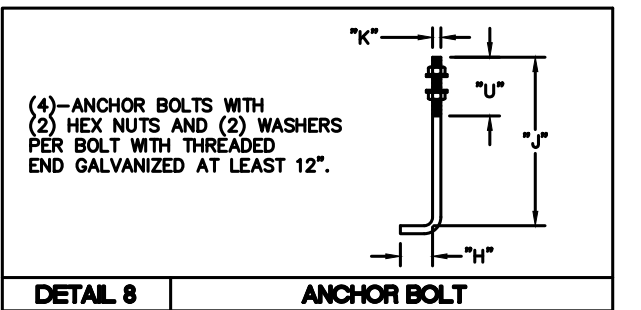
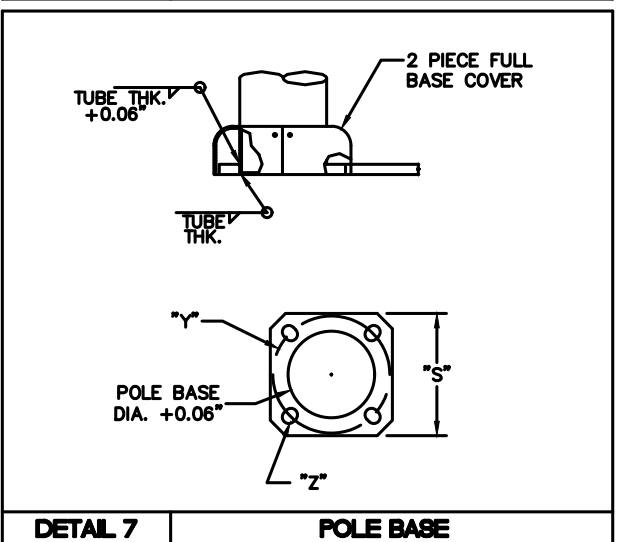
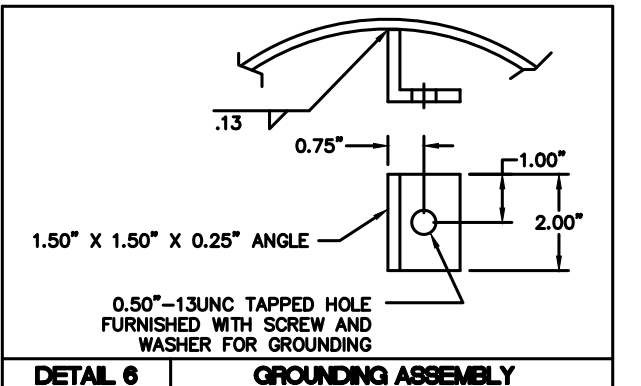
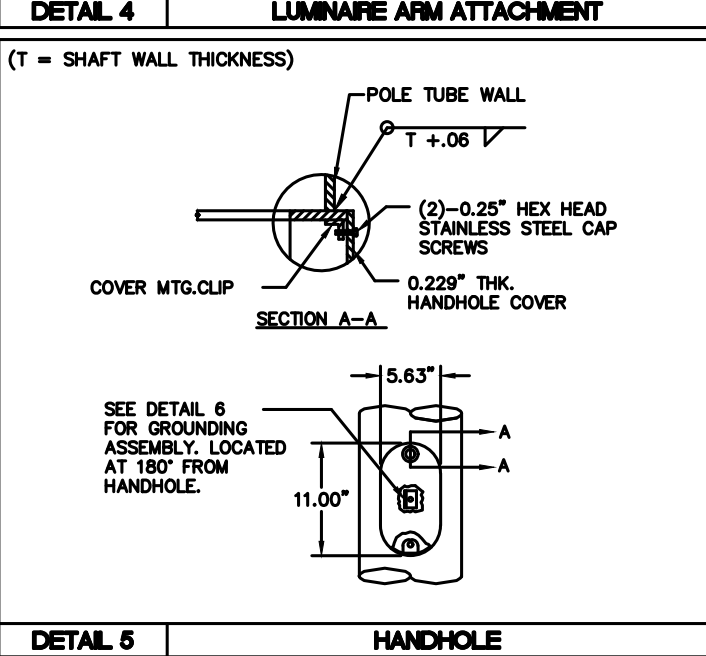
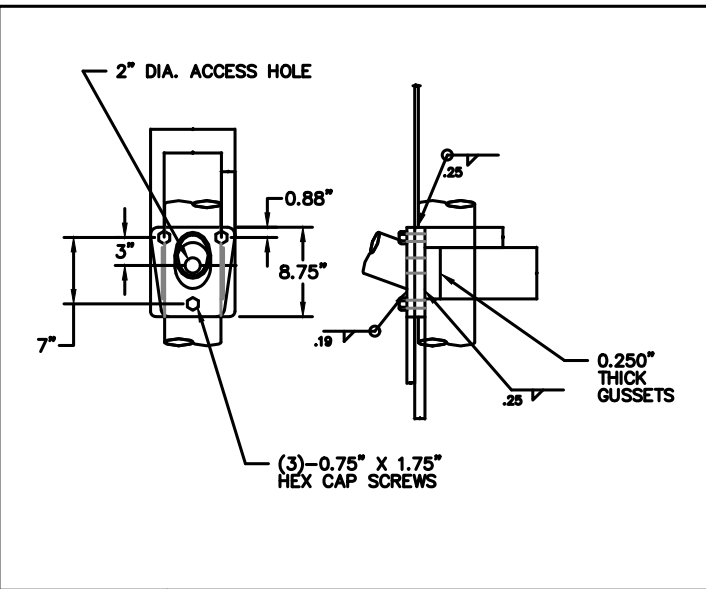
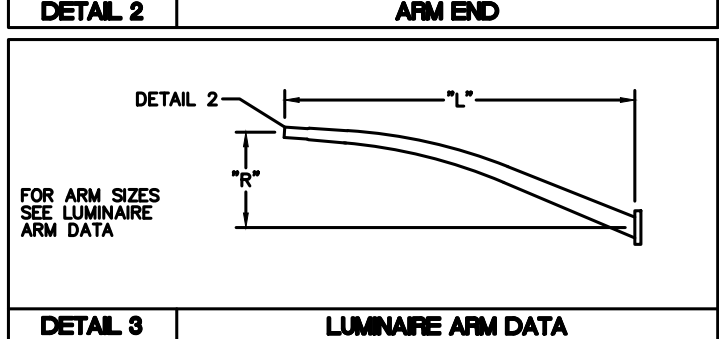
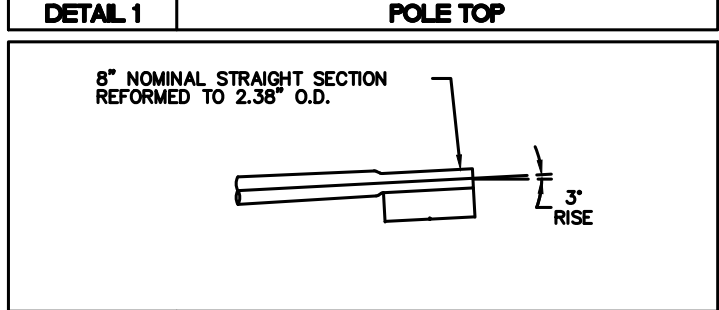
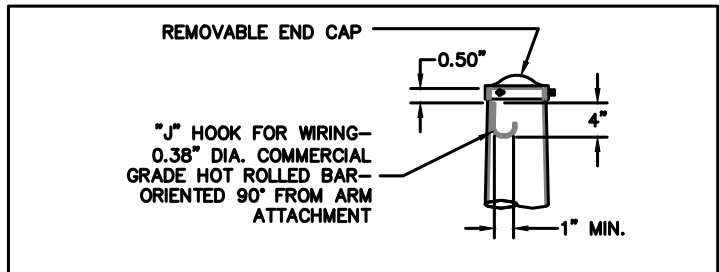
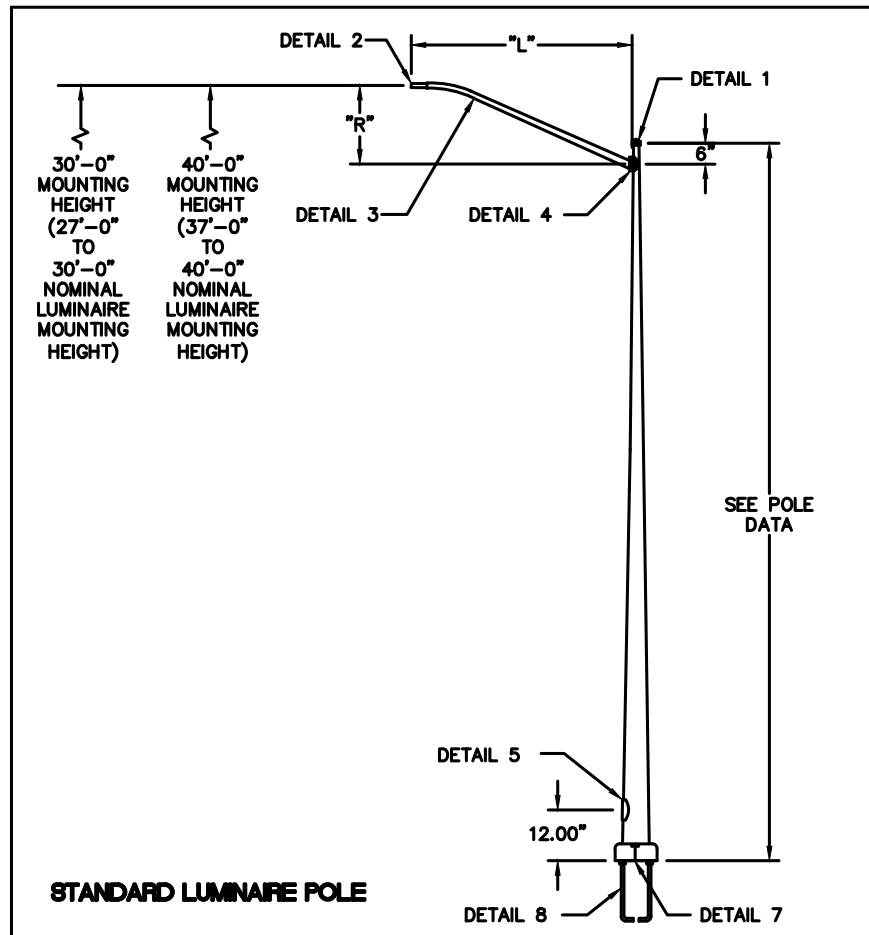


• SIGNATURES •	
Scale: NTS	Drawn By: Valmont/Joshua Saak
Date: 12/21/2022	Design By: Valmont
File: TS-1106.10.DWG	Approved By: Greg Fullerton

• SHEET TITLE •	
Standard Pedestrian Signal Pole Data	

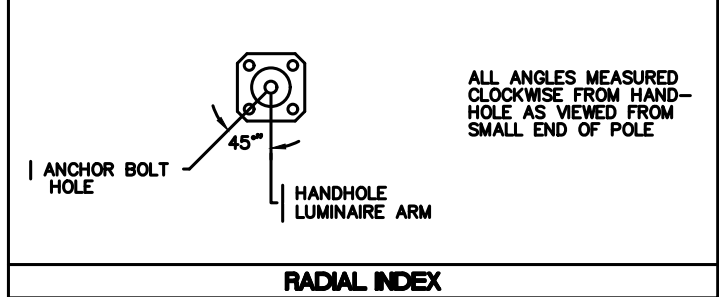


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MATERIAL DATA		
COMPONENT	ASTM DESIGNATION	MIN. YIELD (KSI)
TAPERED TUBES	A595 GR. A	55
BASE PLATE	A36	36
ANCHOR BOLTS	F1554	55
NUTS	A563 GR.A	
WASHERS	F463	55
LUMINAIRE ARM TUBE	A595 GR. A	
LUMINAIRE ARM SIMPLEX	A36	36
GUSSETS	A36	36
CONNECTING BOLTS	SAE GR.5	
GALVANIZING	A153, A123	

FINISH NOTES	
INTERIOR SURFACES:	CORROSION INHIBITING MODIFIED ALKYD
OR	EPOXY PRIMER
EXTERIOR PRIME COAT:	ZINC RICH EPOXY POWDER
EXTERIOR SURFACES:	TGIC OR URETHANE POLYESTER POWDER
PAINT COLOR:	F530G (BLACK)



LUMINAIRE ARM DATA				
"L" ARM SPAN (FT)	DIA. FIXED END (IN)	DIA. FREE END (IN)	GA.	RISE HEIGHT "R"
4	3.00	2.38	11	1'-0"
6	3.29	2.38	11	1'-6"
8	3.58	2.38	11	1'-10"
10	3.86	2.38	11	2'-2"
12	4.15	2.38	11	2'-6"
15	4.58	2.38	11	3'-0"
18	4.97	2.38	11	3'-6"
20	5.26	2.38	11	4'-0"

MOUNTING HEIGHT (FT)	POLE TUBE				POLE BASE				ANCHOR BOLT			
	BASE DIA. (IN)	TOP DIA. (IN)	LENGTH (FT)	GAUGE OR THICK (IN)	SQUARE "S" (IN)	BOLT CIRCLE "Y" (IN)	THK. "M" (IN)	HOLE / SLOT "Z" (IN)	DIA. "K" (IN)	LENGTH "J" (IN)	HOOK "H" (IN)	THREAD LENGTH "U" (IN)
30.00	9.80	5.95	26.50	7	13.88	12.75	1.00	1.13 X 1.69	1.00	36.00	4.00	6.00
40.00	9.80	4.69	36.50	7	13.88	12.75	1.00	1.13 X 1.69	1.00	36.00	4.00	6.00

- MATERIAL NOTES:**
- ALL PLATE MATERIAL CONSISTING OF A36 GR. 36 MAY BE SUBSTITUTED WITH A572 GR. 50 OR 55 MATERIAL.
 - HANDHOLE COVER MATERIAL MAY BE SUBSTITUTED WITH 10 GAUGE MATERIAL.

NO.	DATE	BY	DESCRIPTION
• REVISIONS •			

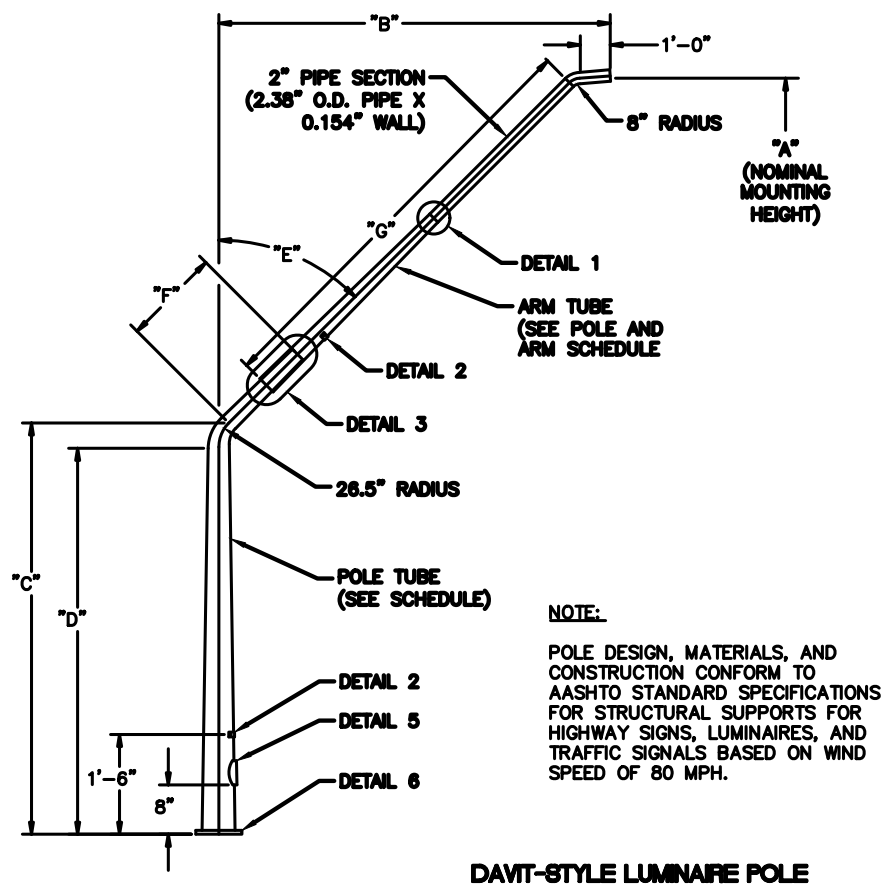
AACHD
Traffic Engineering Division
3775 Adams Street Boise, ID 83714
www.aachdidaho.org

• SIGNATURES •	
Scale: NTS	Drawn By: Valmont/Joshua Seak
Date: 12/21/2022	Design By: Valmont
File: TS-1106.11.DWG	Approved By: Greg Fullerton

• SHEET TITLE •	
Standard Luminaire Pole Data	

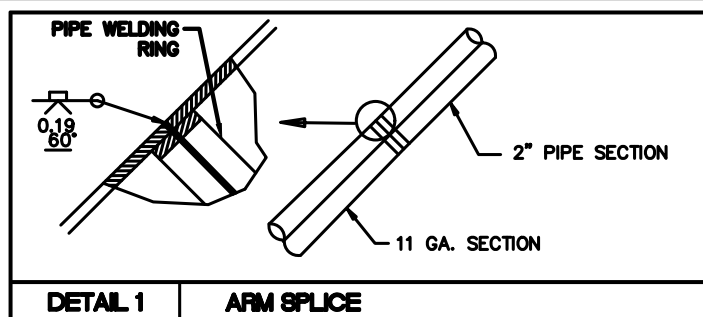
PROFESSIONAL ENGINEER
REGISTERED
12842
STATE OF IDAHO
JOSHUA ECKHART

• STANDARD DETAIL NO. •
TS-1106.11

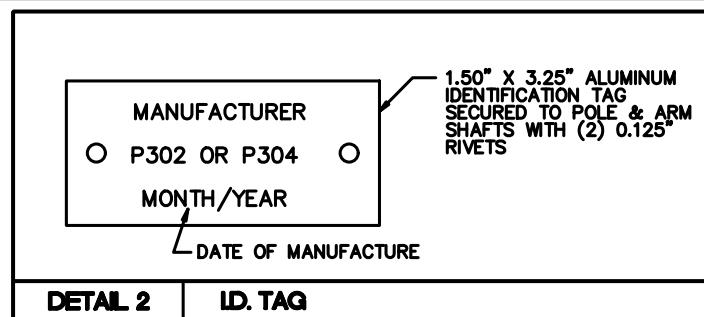


DAVIT-STYLE LUMINAIRE POLE

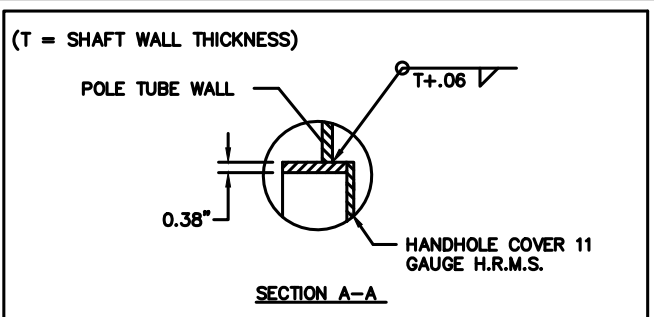
NOTE:
POLE DESIGN, MATERIALS, AND CONSTRUCTION CONFORM TO AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS BASED ON WIND SPEED OF 80 MPH.



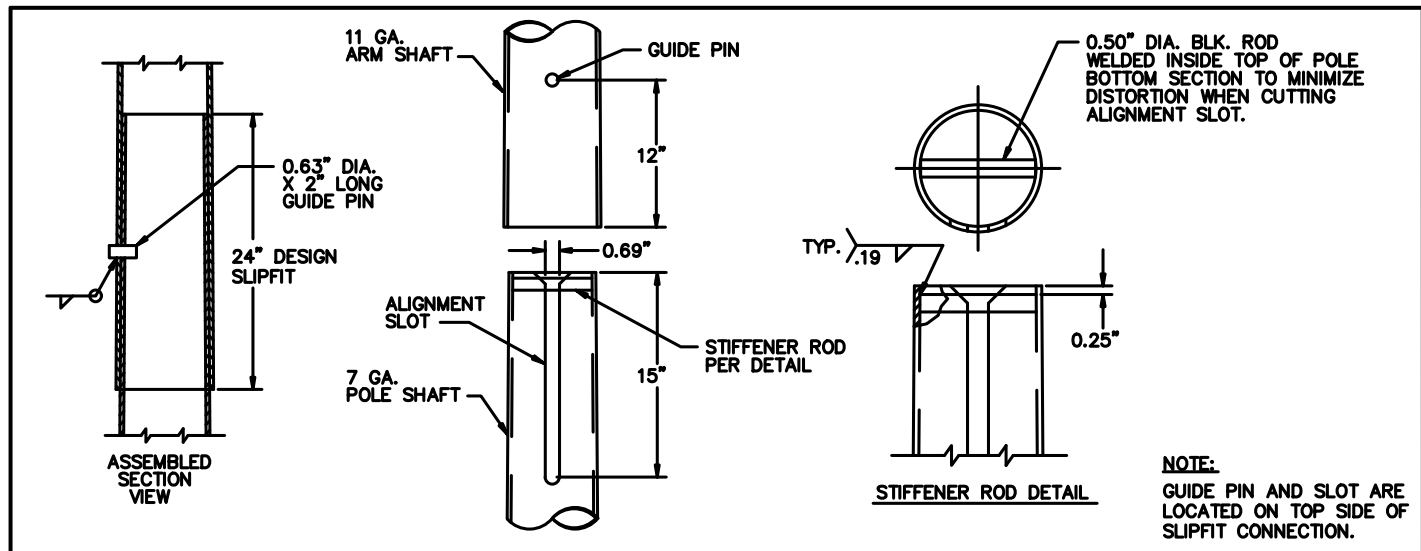
DETAIL 1 ARM SPLICE



DETAIL 2 ID. TAG

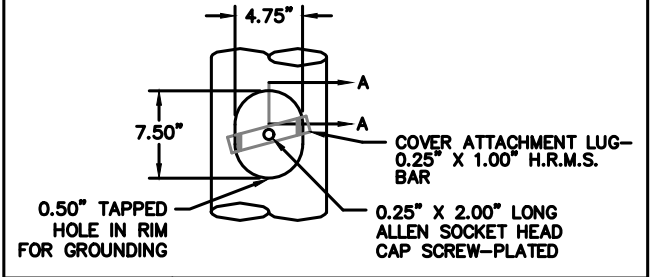


DETAIL 4 HANDHOLE



DETAIL 3 SLIPFIT CONNECTION

NOTE:
GUIDE PIN AND SLOT ARE LOCATED ON TOP SIDE OF SLIPFIT CONNECTION.

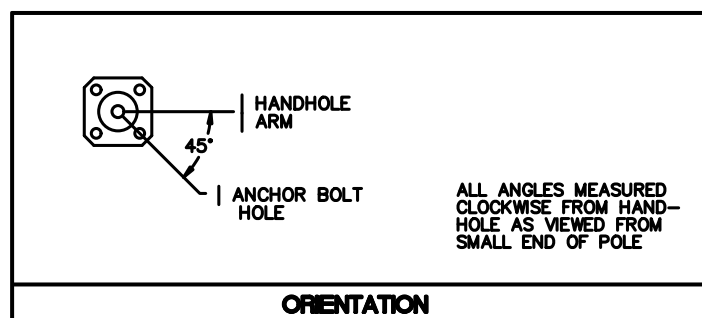


DETAIL 5 POLE BASE

POLE AND ARM SCHEDULE

POLE TYPE	MOUNTING HEIGHT "A" (FT)	ARM SPAN "B" (FT)	HEIGHT AFTER BEND "C" (FT)	START OF BEND "D" (FT)	DEGREE OF BEND "E"	STRAIGHT LENGTH "F" (FT)	ARM NOMINAL OVERALL STRAIGHT LENGTH (TUBE ARM & PIPE) "G" (FT)	POLE TUBE				POLE BASE			ANCHOR BOLT (BY OTHERS)	ARM TUBE				
								BASE DIA. (IN)	TOP DIA. (IN)	LENGTH (FT)	GAUGE OR THK. (IN)	SQUARE "S" (IN)	BOLT CIRCLE "Y" (IN)	THK. "N" (IN)	HOLE / SLOT "Z" (IN)	BOLT DIAMETER (IN)	BASE DIA. (IN)	TOP DIA. (IN)	GAUGE OR THICK (IN)	LENGTH (FT)
P302	30.00	13.25	19.31	17.75	44°	3.75	13.75	7.57	4.33	23.17	7	13.50	12.50	1.50	1.50 X 2.25	1.25	4.83	2.91	11	13.75
P304	40.00	20.00	21.00	19.50	45°	3.75	24.09	7.83	4.33	25.00	7	13.50	12.50	1.50	1.50 X 2.25	1.25	4.83	2.40	11	17.36

ALTHOUGH RARE, VIBRATIONS SEVERE ENOUGH TO CAUSE DAMAGE CAN OCCASIONALLY OCCUR IN STRUCTURES OF ALL TYPES. BECAUSE THEY ARE INFLUENCED BY MANY INTERACTING VARIABLES, VIBRATIONS ARE GENERALLY UNPREDICTABLE. THE USER'S MAINTENANCE PROGRAM SHOULD INCLUDE OBSERVATION FOR EXCESSIVE VIBRATION AND EXAMINATION FOR ANY STRUCTURAL DAMAGE OR BOLT LOOSENING.



ORIENTATION

MATERIAL NOTES

- ALL PLATE MATERIAL CONSISTING OF A36 GR. 36 MAY BE SUBSTITUTED WITH A572 GR. 50 OR 55 MATERIAL.
- HANDHOLE COVER MATERIAL MAY BE SUBSTITUTED WITH 10 GAUGE MATERIAL.

MATERIAL DATA

COMPONENT	ASTM DESIGNATION	MIN. YIELD (KSI)
POLE SHAFT - TAPERED	A595 GR. A	55
ARM SHAFT - TAPERED	A595 GR. A	55
ARM SHAFT - PIPE		46
BASEPLATE	A36	36
GALVANIZING	A123 & A153	

FINISH NOTES

INTERIOR SURFACES:
CORROSION INHIBITING MODIFIED ALKALOID OR EPOXY PRIMER

EXTERIOR PRIME COAT:
ZINC RICH EPOXY POWDER

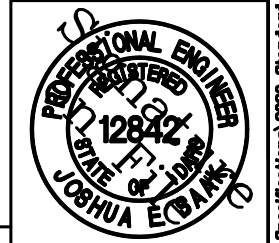
EXTERIOR SURFACES:
TGIC OR URETHANE POLYESTER POWDER

PAINT COLOR:
F530G (BLACK)

NO.	DATE	BY	DESCRIPTION
• REVISIONS •			

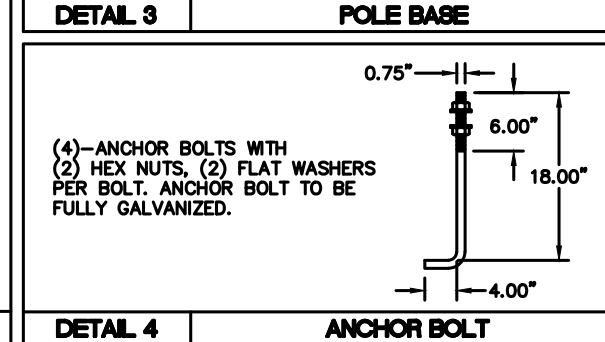
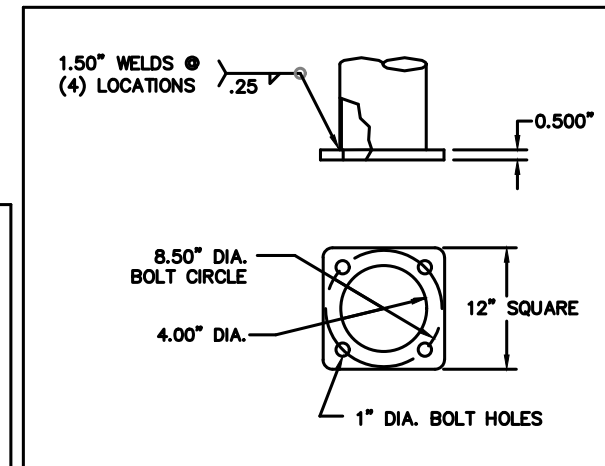
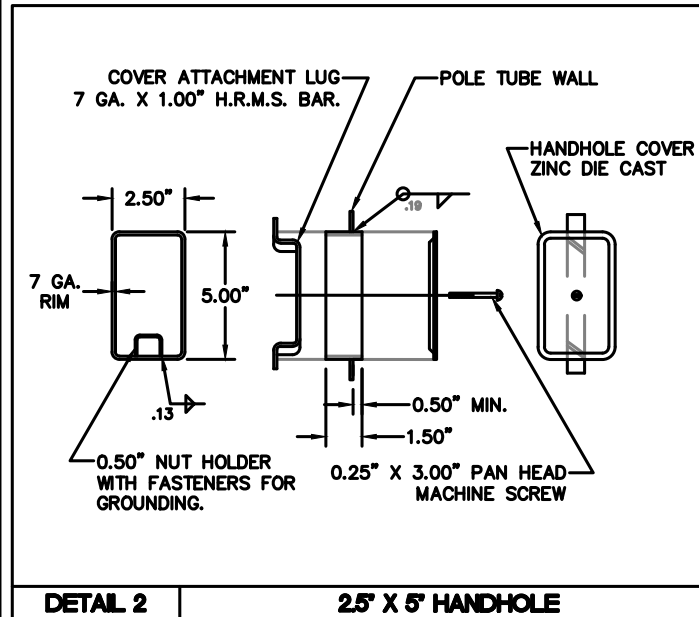
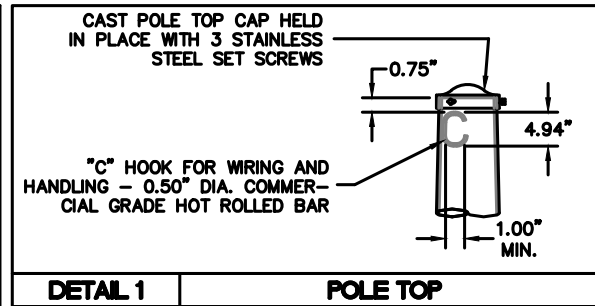
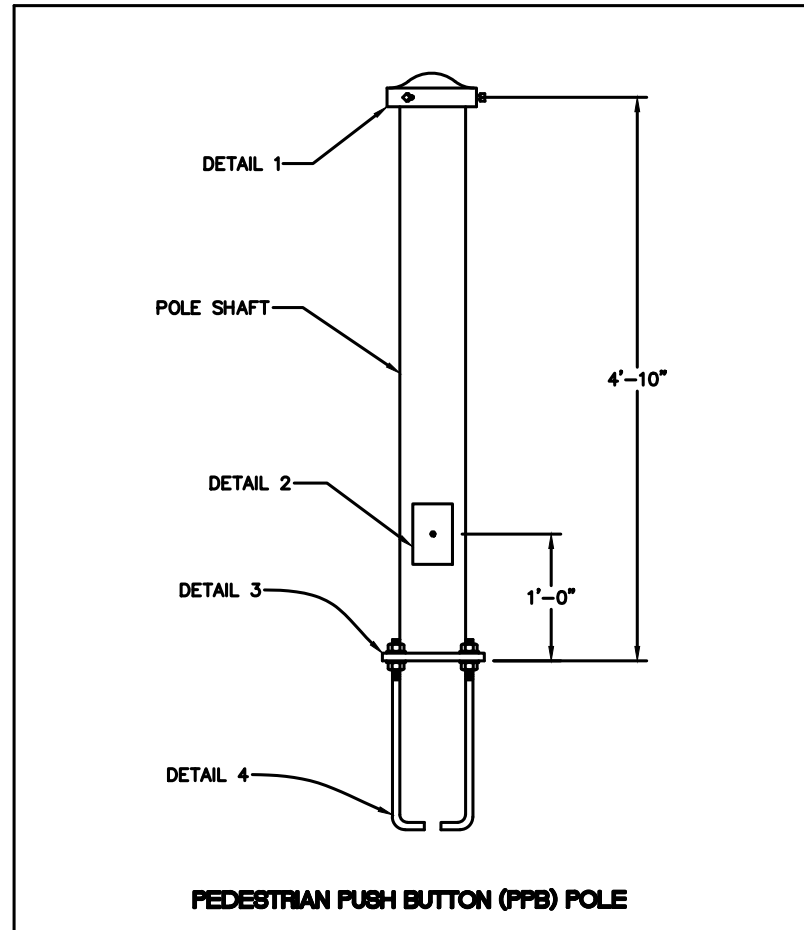


• SIGNATURES •		• SHEET TITLE •	
Scale: NTS	Drawn By: Valmont/Joshua Seak	Standard Davit-Style Luminaire Pole Data	
Date: 12/21/2022	Design By: Valmont		
File: TS-1106.12.DWG	Approved By: Greg Fullerton		



STANDARD DETAIL NO. TS-1106.12

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MATERIAL DATA		
COMPONENT	ASTM DESIGNATION	MIN. YIELD (KSI)
POLE SHAFT 4" SCH. 40	A53 GRADE B	36
BASEPLATE	A36	36
ANCHOR BOLTS	F1554 GR. 36	36
GALVANIZING - STRUCTURE	A123	

FINISH NOTES

INTERIOR SURFACES:
CORROSION INHIBITING
MODIFIED ALKYD

OR

EPOXY PRIMER

EXTERIOR PRIME COAT:
ZINC RICH EPOXY POWDER

EXTERIOR SURFACES:
TGIC OR URETHANE
POLYESTER POWDER

PAINT COLOR:
F530G (BLACK)

- MATERIAL NOTES:**
- ALL PLATE MATERIAL CONSISTING OF A36 GR. 36 MAY BE SUBSTITUTED WITH A572 GR. 50 OR 55 MATERIAL.
 - HANDHOLE COVER MATERIAL MAY BE SUBSTITUTED WITH 10 GAUGE MATERIAL.

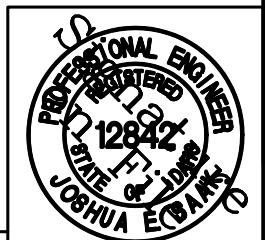
NO.	DATE	BY	DESCRIPTION

• REVISIONS •

ACHD
Traffic Engineering Division
3775 Adams Street Boise, ID 83714
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• SIGNATURES •	
Scale: NTS	Drawn By: Valmont/Joshua Seak
Date: 12/21/2022	Design By: Valmont
File: TS-1106.13.DWG	Approved By: Greg Fullerton

• SHEET TITLE •	
Standard Pedestrian Push Button Pole Data	



• STANDARD DETAIL NO. •
TS-1106.13

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