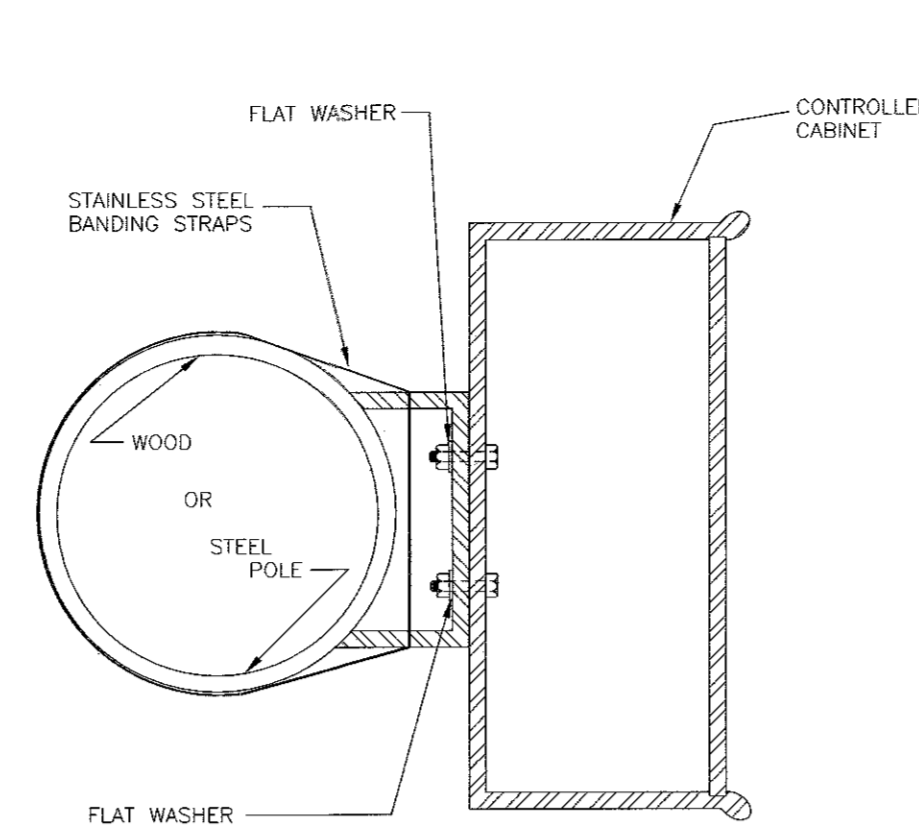
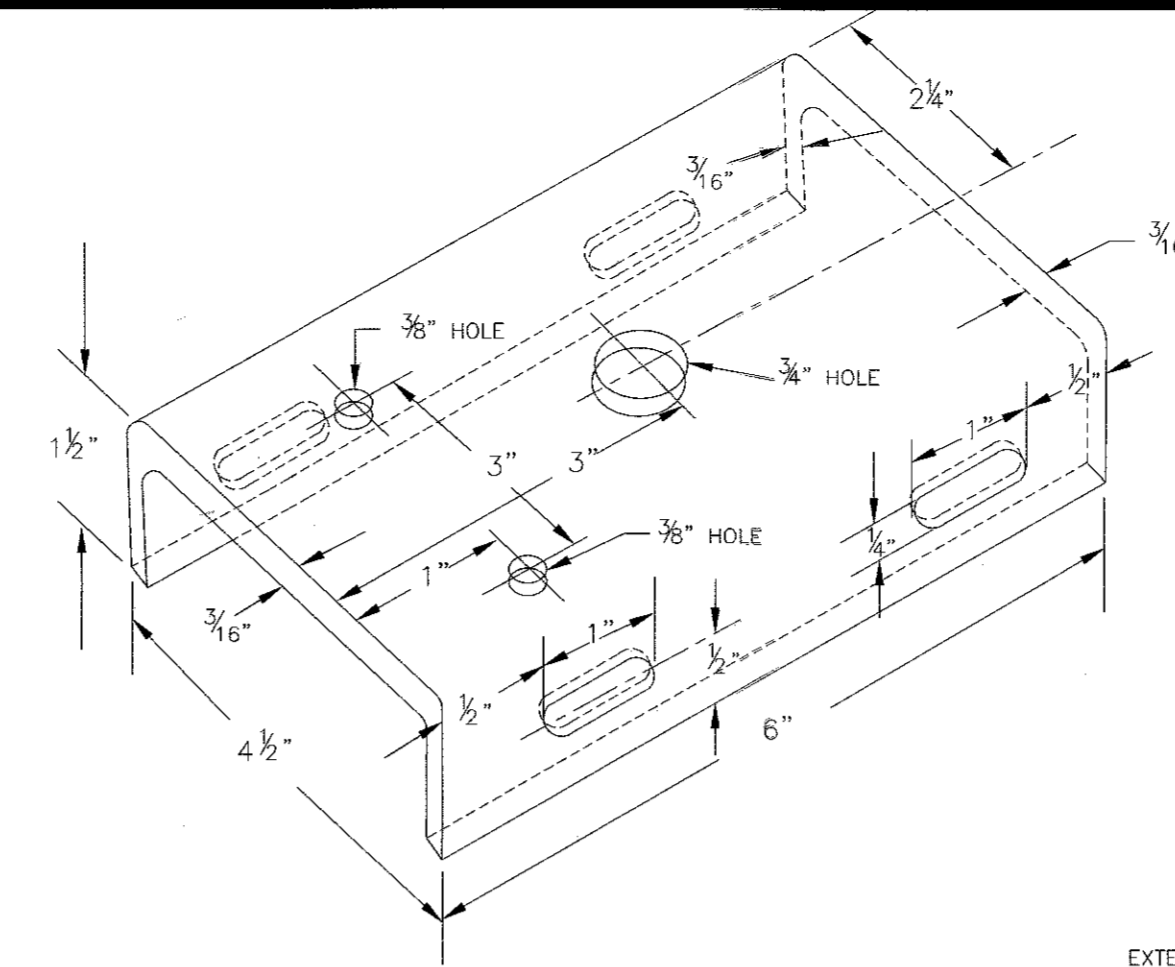


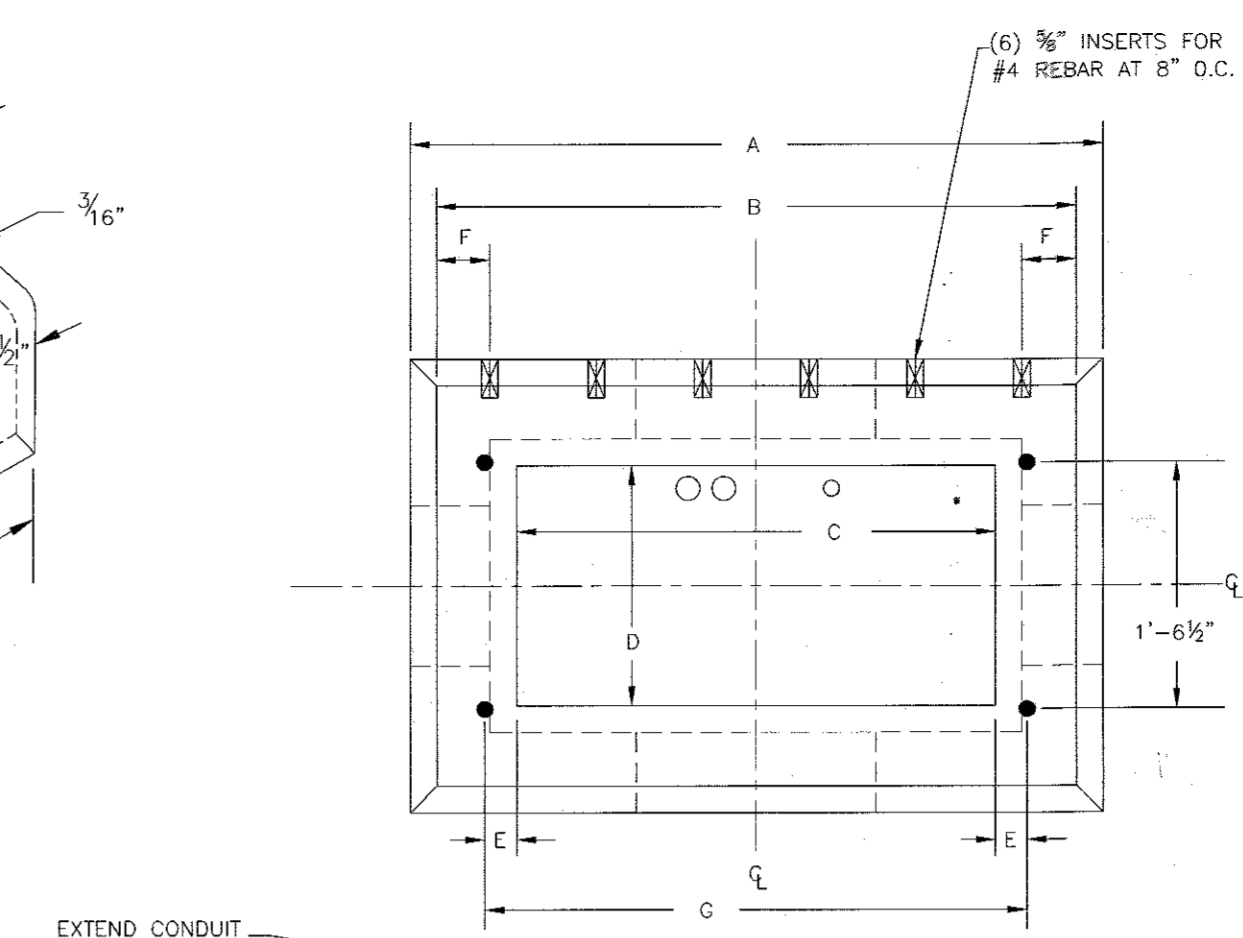
INSTALLING NEW CONDUIT INTO AN EX SOLID BASE MOUNTED CABINET



STAINLESS STEEL MOUNTING BRACKET (2 PER CABINET)



TYPICAL BRACKET

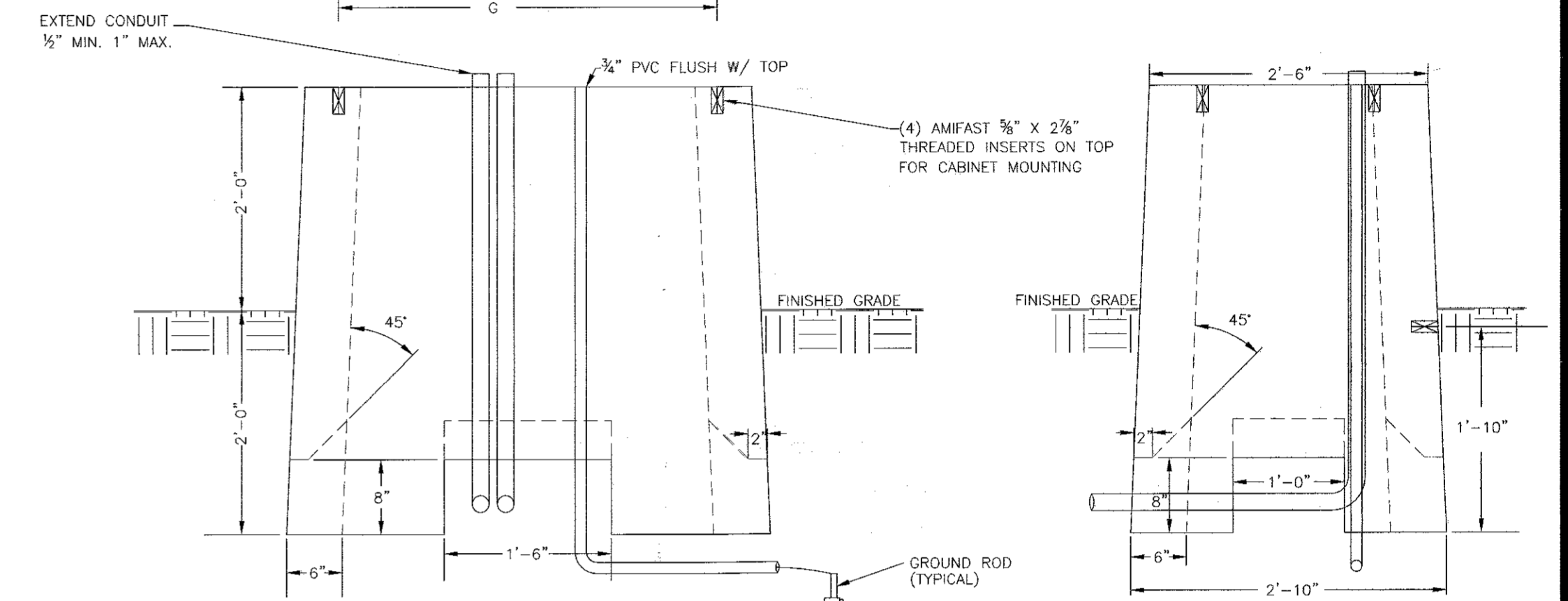


PRECAST CONCRETE BASE SPECIFICATIONS
 1. CONCRETE MINIMUM COMPRESSION STRENGTH:
 $f'c = 5,000$ PSI @ 28 DAYS
 2. REINFORCING STEEL:
 ASTM A615, $F_y = 60,000$ PSI

BASE MOUNT CABINET

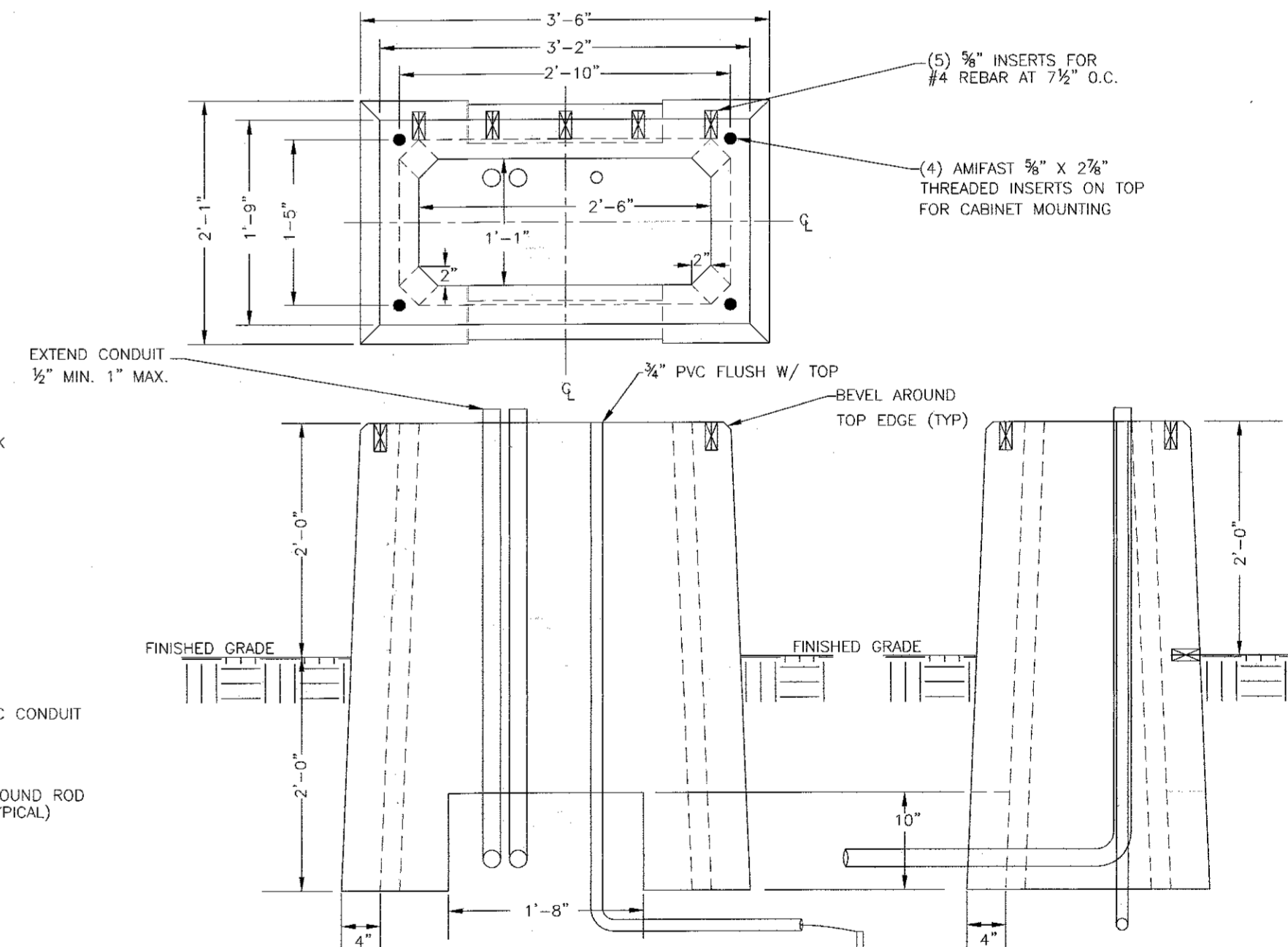
NOTES:

1. WALL-MOUNTED JUNCTION BOX SHALL BE A GALVANIZED STEEL NEMA 3R CONTINUOUS HINGED ENTRY BOX OR APPROVED EQUIVALENT. BOX SHALL HAVE A POWDER COAT FINISH WITH A GALVANIZED STEEL CONTINUOUS HINGE W/ A STAINLESS STEEL PIN ON THE LEFT SIDE AND CAPTIVE SCREWS ON THE RIGHT. THE BOX SHALL HAVE A HASP (OR APPROVED ALTERNATIVE) ON THE RIGHT SIDE FOR PADLOCKING DOOR.
2. DRILL HOLE INTO CABINET AND INSTALL THREADED NIPPLE. INSTALL RUBBER GASKET, FLAT METAL WASHER AND LOCKER RING ON BOTH SIDES.
3. JUNCTION BOX SHALL BE ATTACHED TO THE CABINET WITH FOUR METAL SCREWS. MOUNTING HOLES SHALL BE INSIDE THE BOX AROUND THE FOUR CORNERS.
4. THE CONTRACTOR SHALL APPLY SEALANT BETWEEN THE EDGE OF THE JUNCTION BOX AND THE CABINET. SEALANT SHALL BE RATED FOR OUTDOOR USE, WATER-PROOF BELOW WATER LINES, UV RESISTANT AND CLEAR OR GRAY IN COLOR.



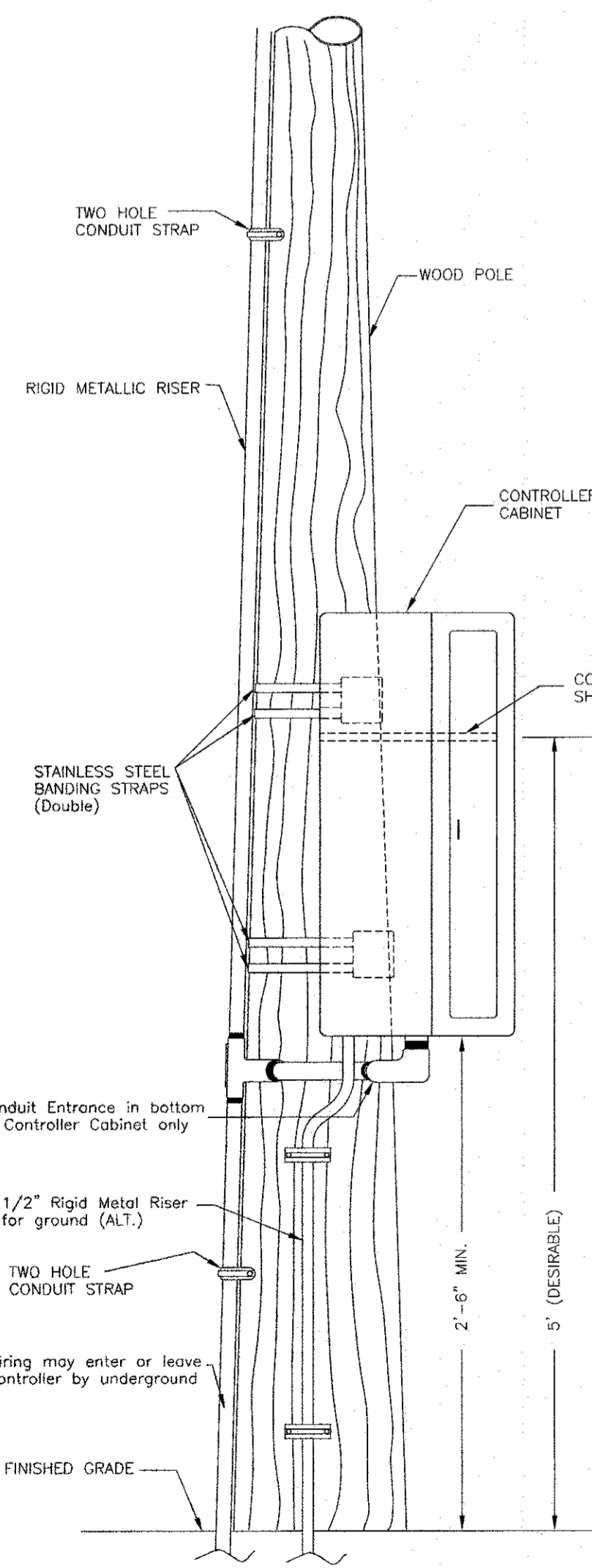
SIZE	A	B	C	D	E	F	G
LARGE	4'-4"	4'-0"	3'-0"	1'-6"	2 3/8"	4"	3'-4 3/4"
MODIFIED	5'-3"	4'-11"	3'-11"	1'-6"	3 1/16"	9 1/2"	4'-6 3/8"

LARGE & MODIFIED CABINET BASE (PRECAST CONCRETE)

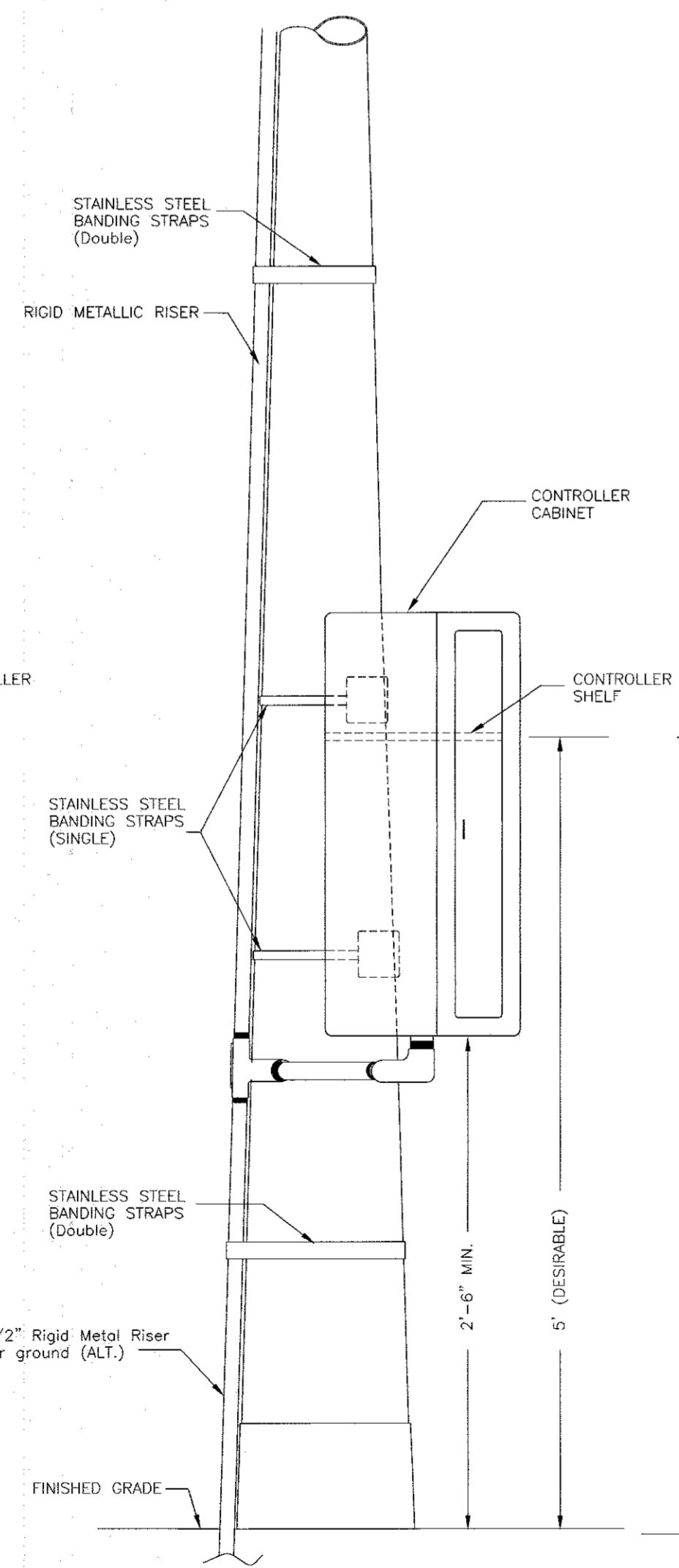


SMALL CABINET BASE (PRECAST CONCRETE)

Sheet 1 of 18

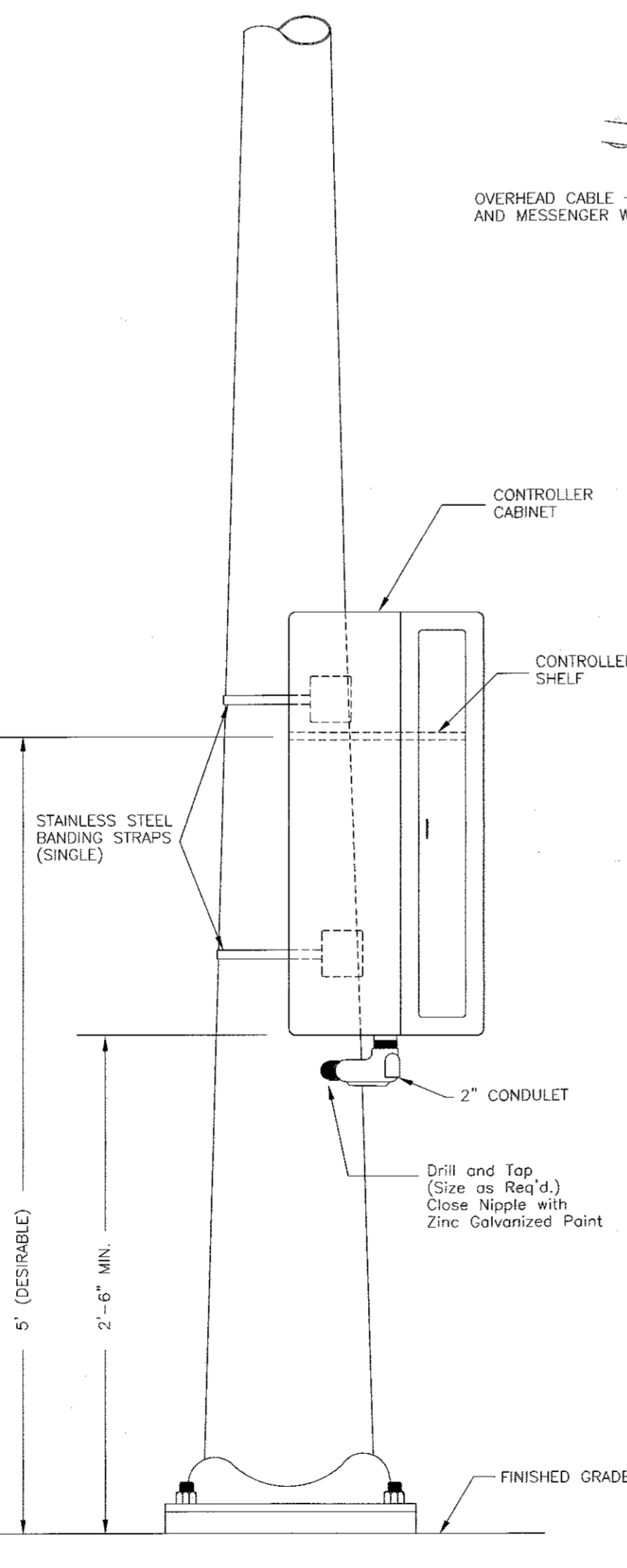


CONTROLLER CABINET ON WOOD POLE

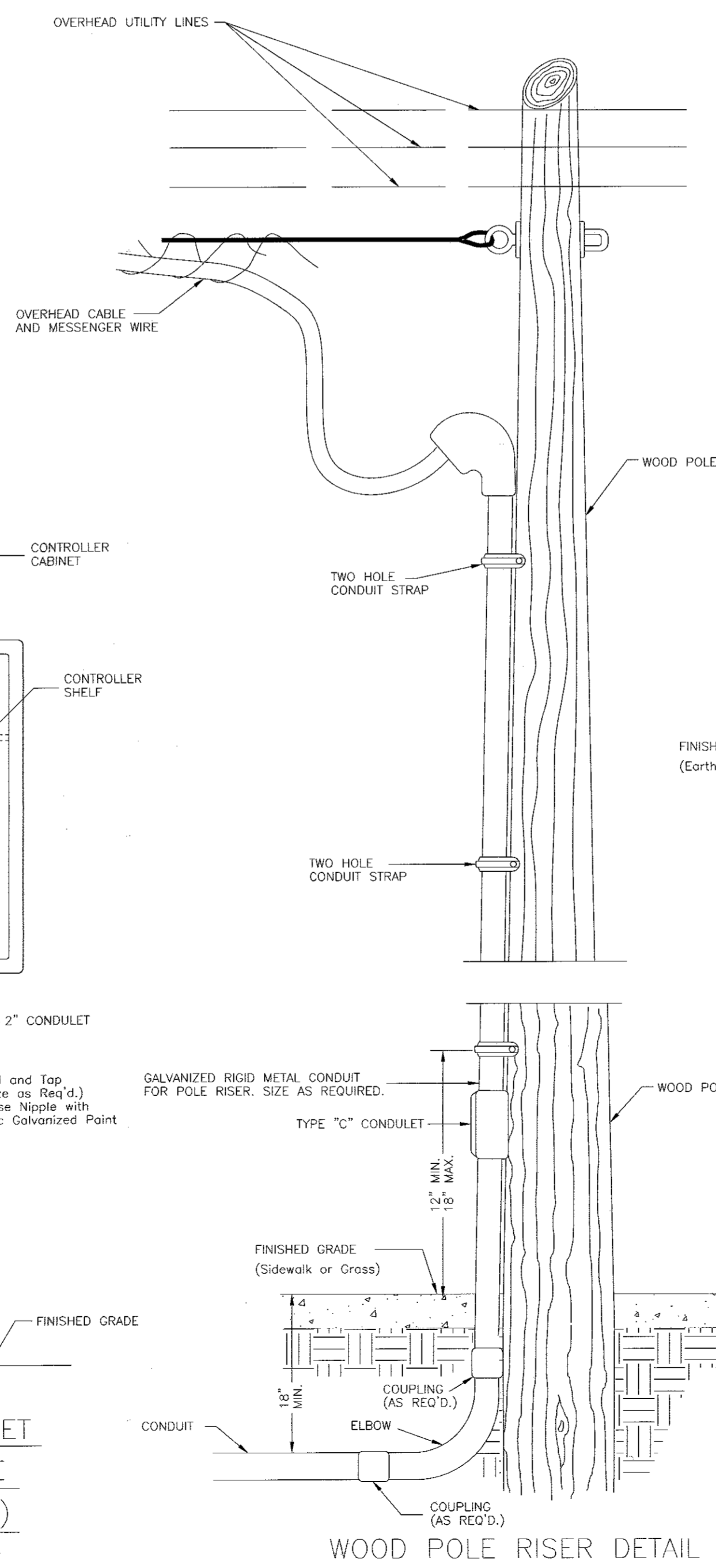


CONTROLLER CABINET ON STEEL POLE (EMBEDDED)

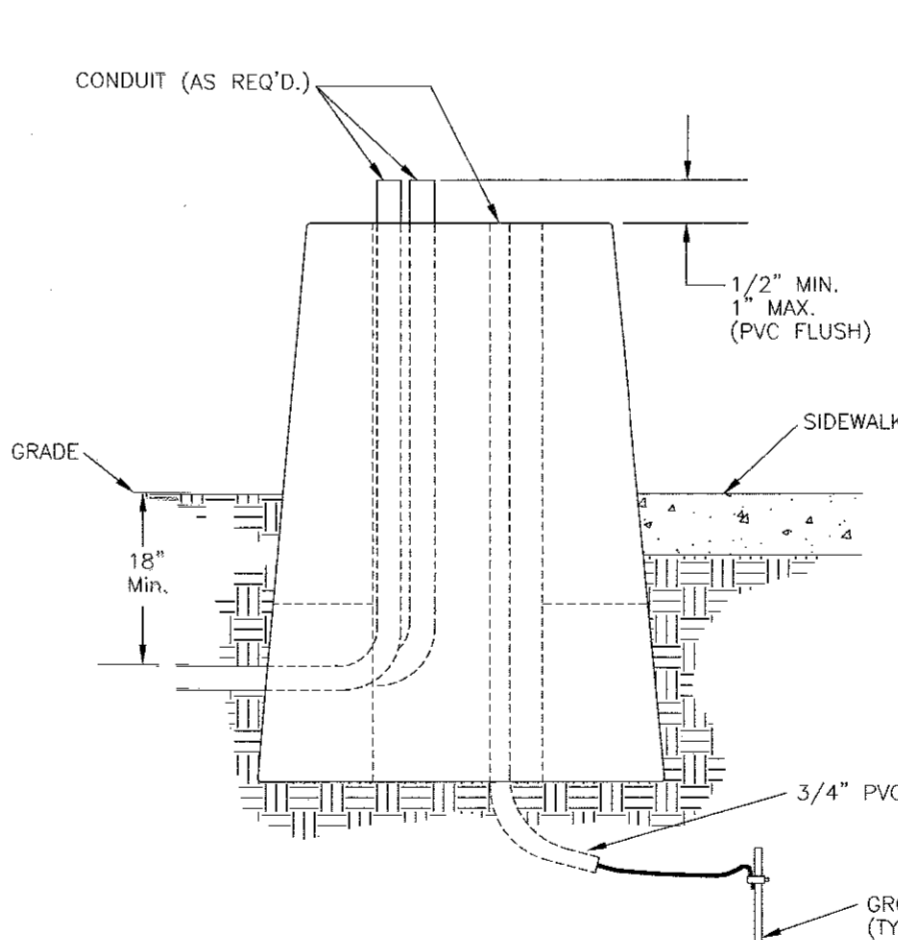
WITHOUT PROVISION FOR INTERNAL WIRING



CONTROLLER CABINET ON STEEL POLE (ANCHOR BASE)



WOOD POLE RISER DETAIL



BASE MOUNT CABINET FOUNDATION

REVISIONS				APPROVED	
NO.	DATE	BY	REMARKS	C.T.E.	C.E.

DIVISION OF ENGINEERING

DESIGN STANDARD

Controller Cabinet and Riser Installation Details

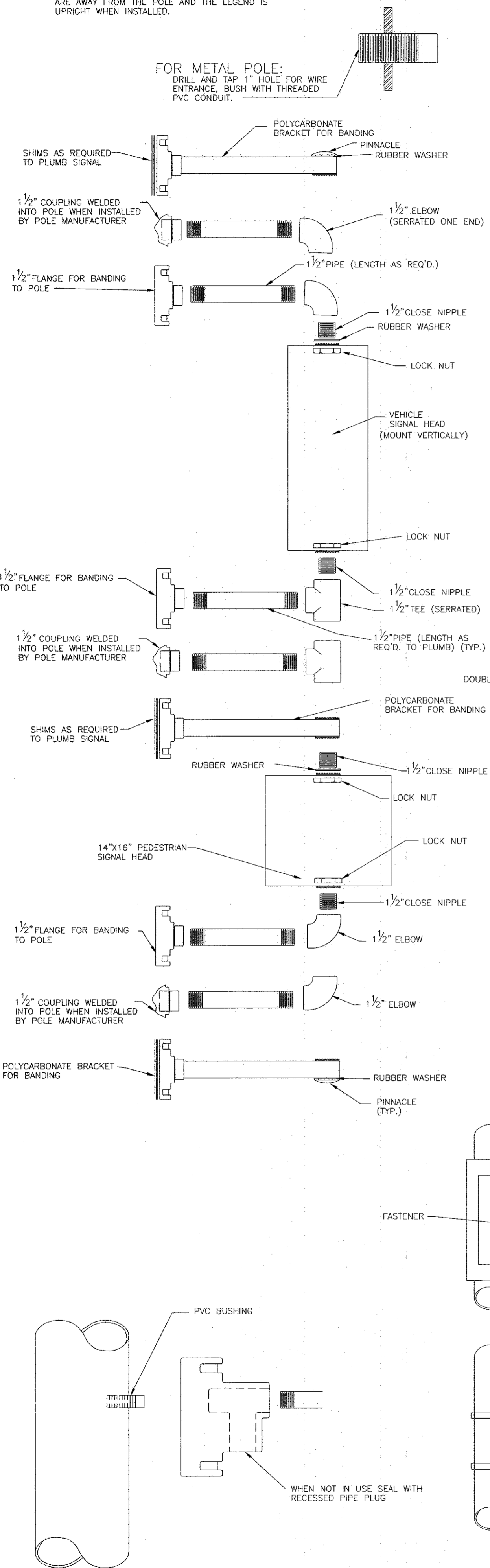
APPROVED BY: MEMPHIS, TENN.

Randy J. Zeller 11/29/20
 CITY TRAFFIC ENGINEER DATE

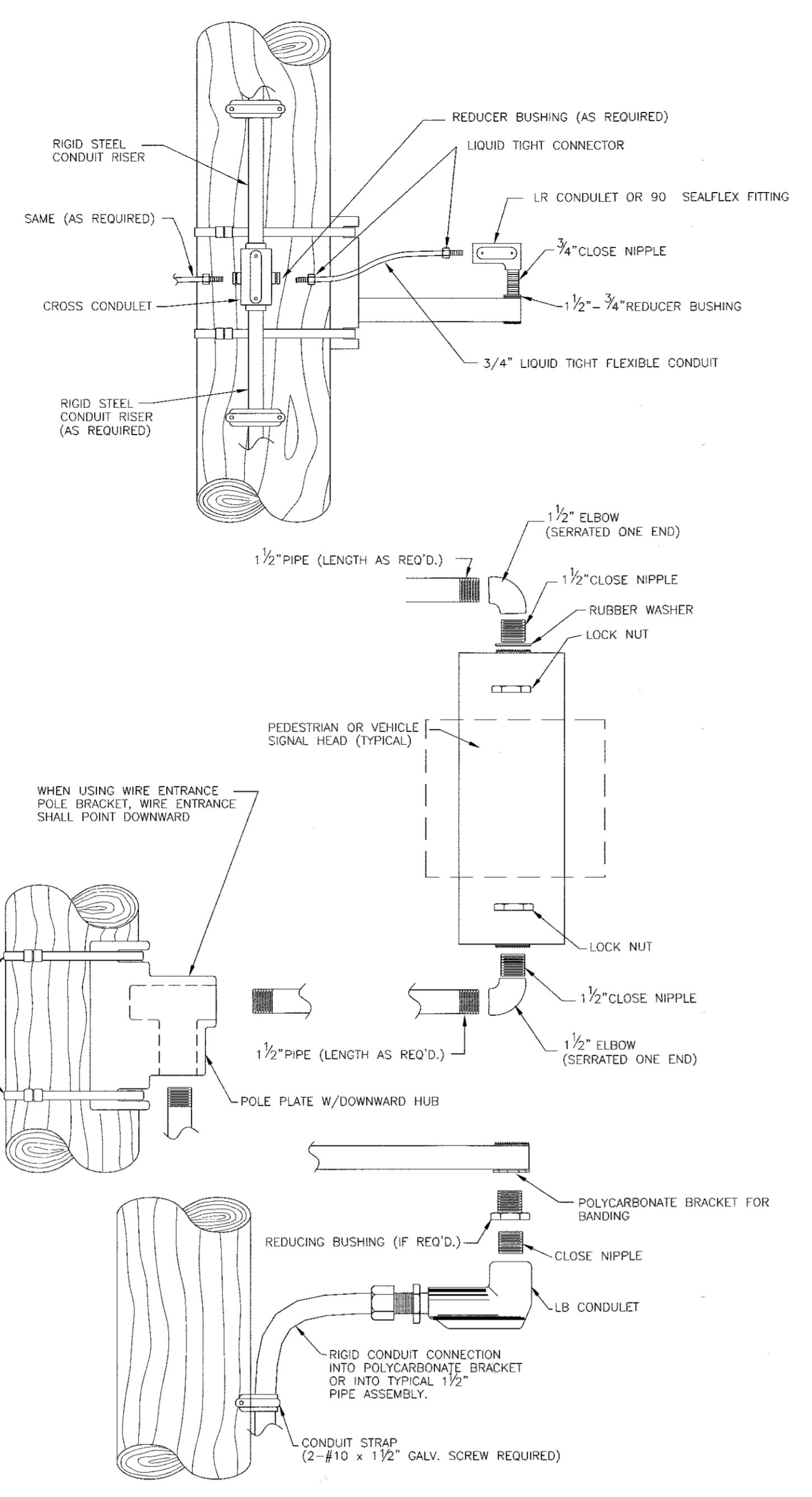
WBS 11/30/22
 CITY ENGINEER DATE

DATE: 11-17-2022
 SCALE: N.T.S.
 DRAWN BY: MP
 CHECKED BY: RT

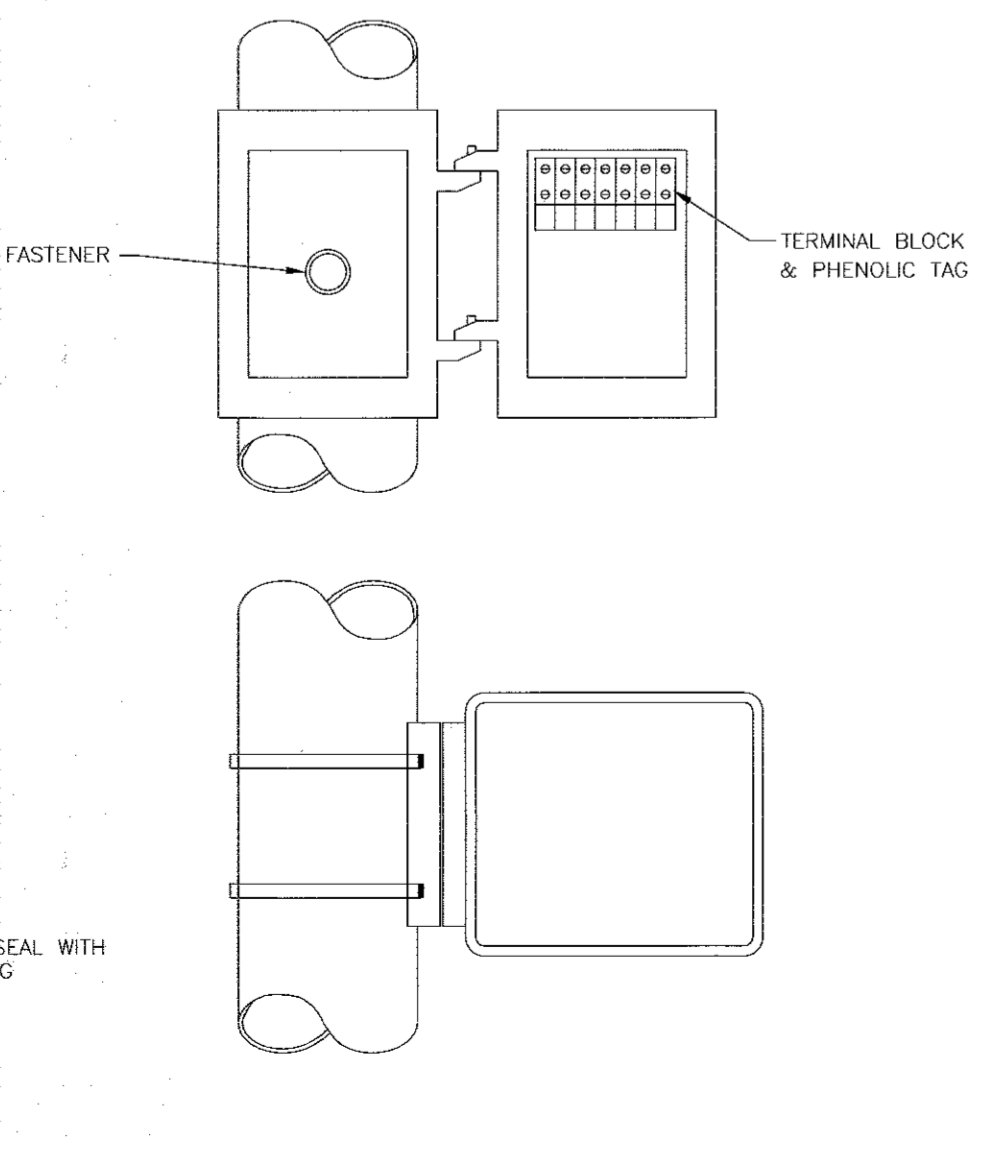
NOTE: THE DOORS ON ALL POLE MOUNTED PEDESTRIAN SIGNAL HEADS SHALL BE ORIENTED SO THE HINGES ARE AWAY FROM THE POLE AND THE LEGEND IS UPRIGHT WHEN INSTALLED.



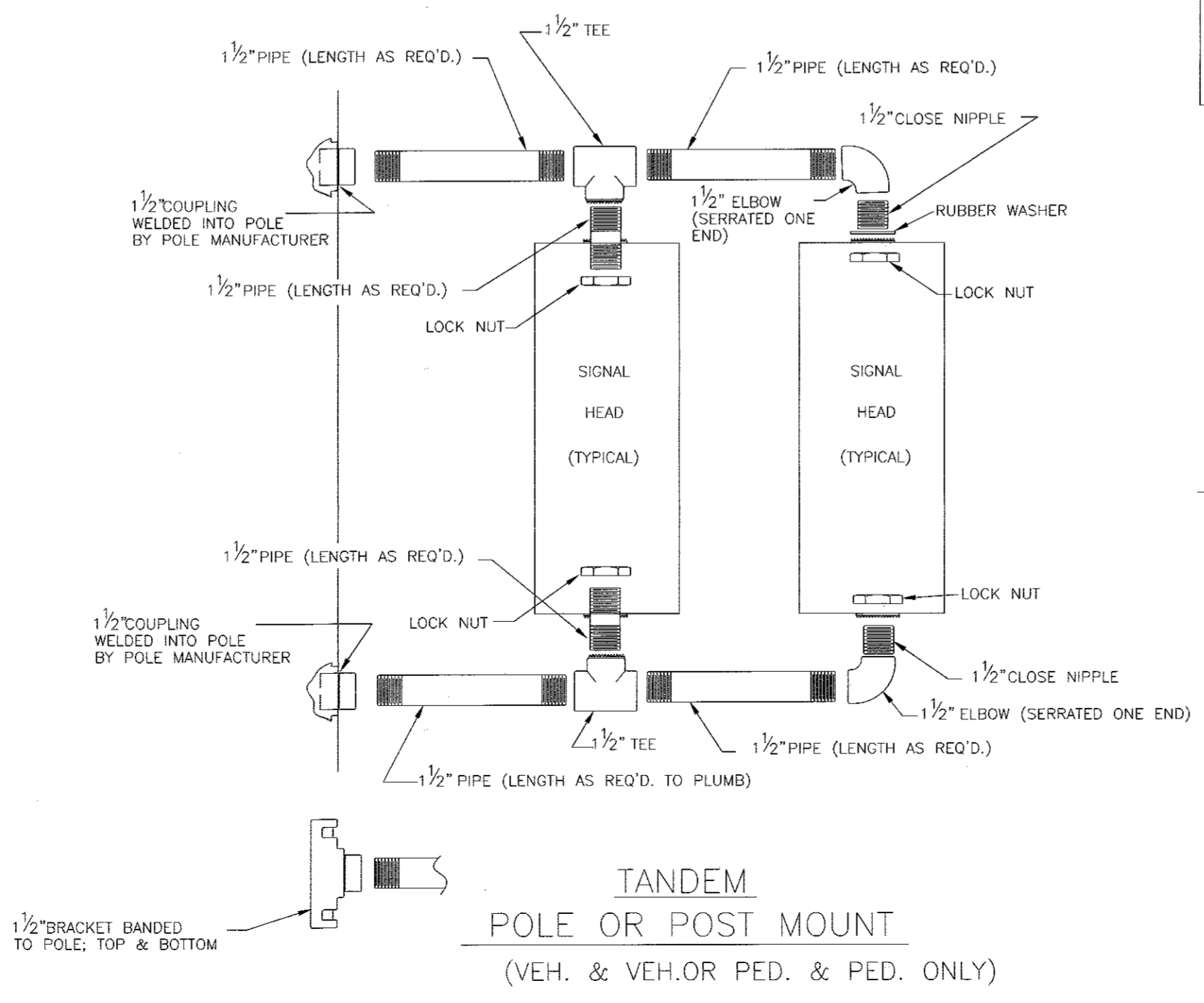
METAL POLE MOUNT



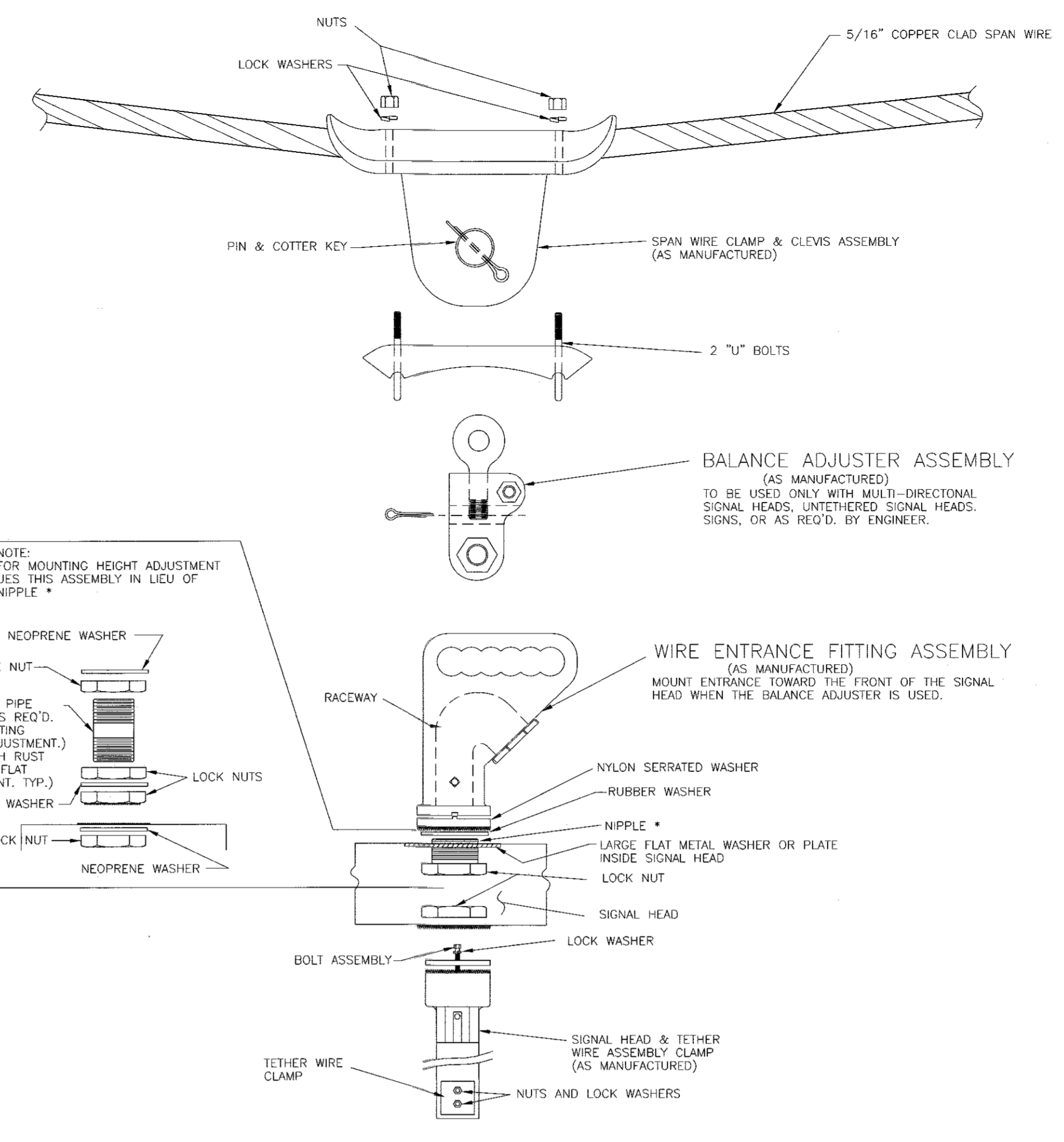
WOOD POLE MOUNT



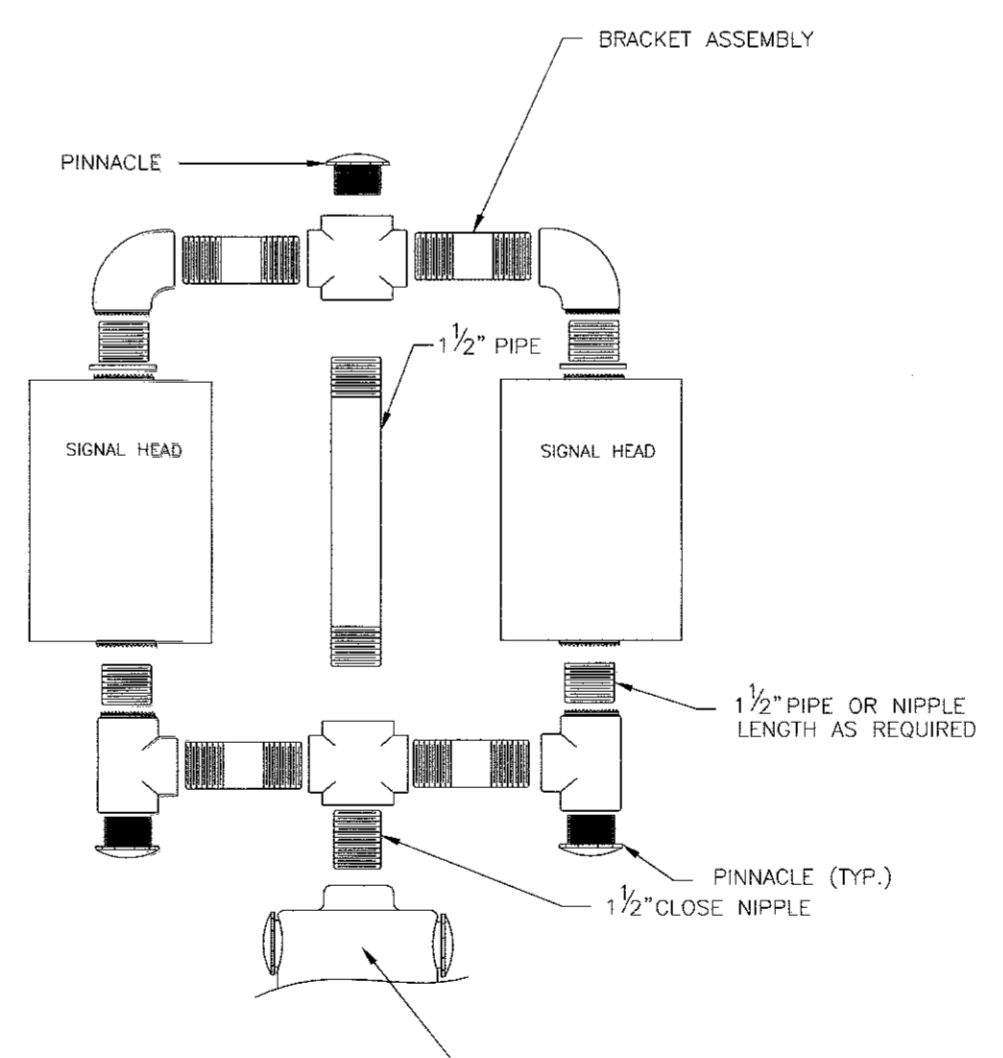
CLAMSHELL MOUNT



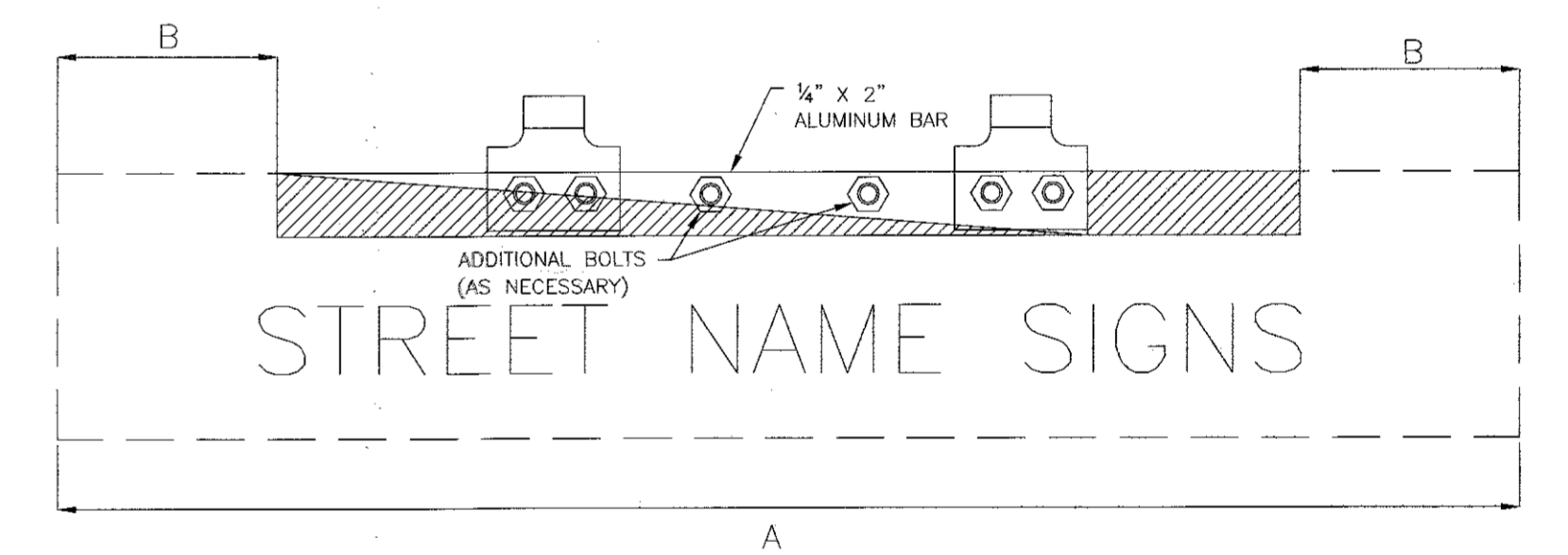
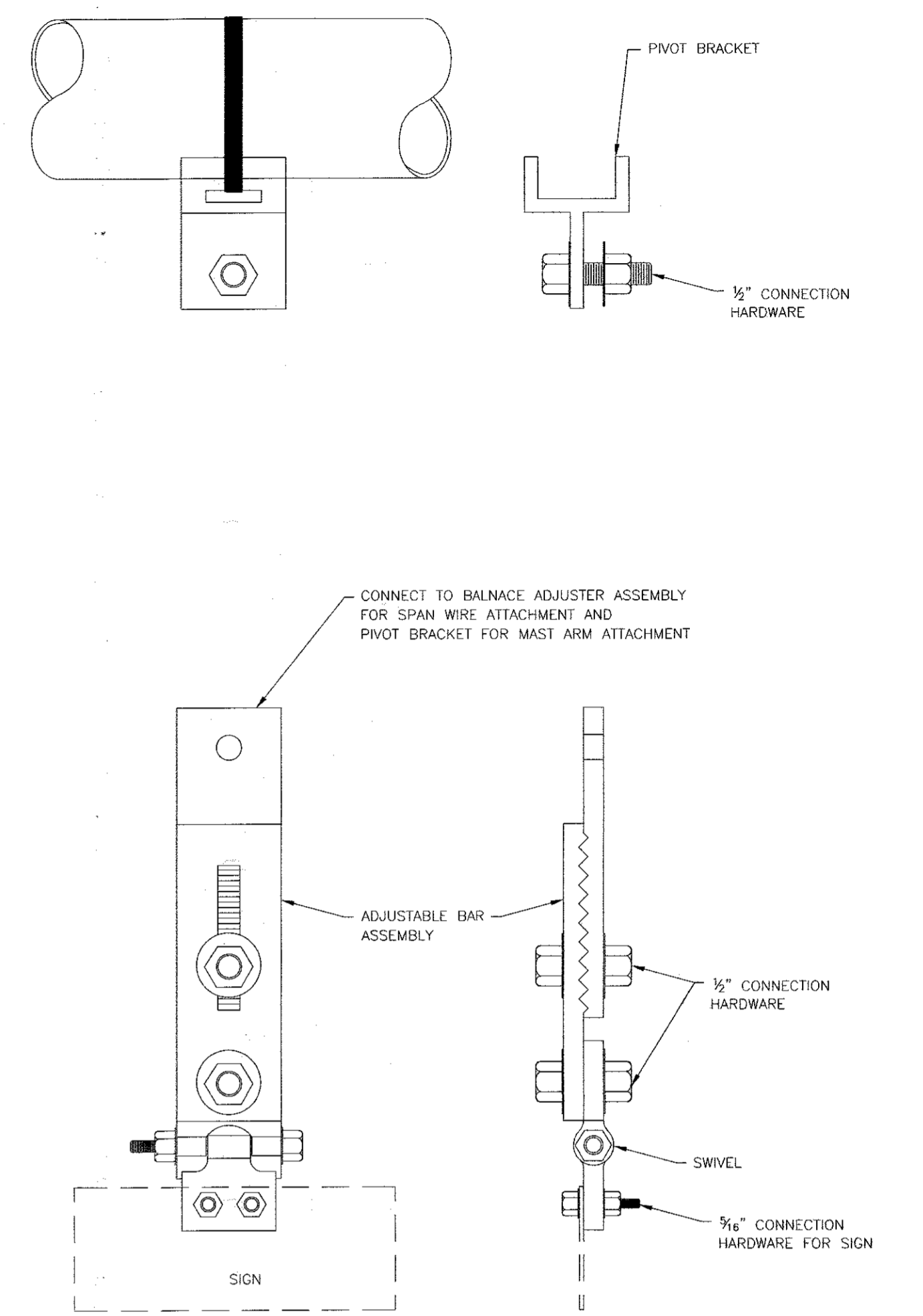
TANDEM POLE OR POST MOUNT (VEH. & VEH. OR PED. & PED. ONLY)



SPAN WIRE MOUNT



POST TOP MOUNTED-TWO WAY UNDERGROUND FEED



BAR POSITIONING

A	B
3'	6"
4'	8"
5'	12"
6'	18"
7'	20"
8'	22"
9'	24"

OVERHEAD SIGN MOUNTING

DESIGN STANDARD
Signal Head and Sign Mounting

APPROVED BY: _____ DATE: 11-17-2022

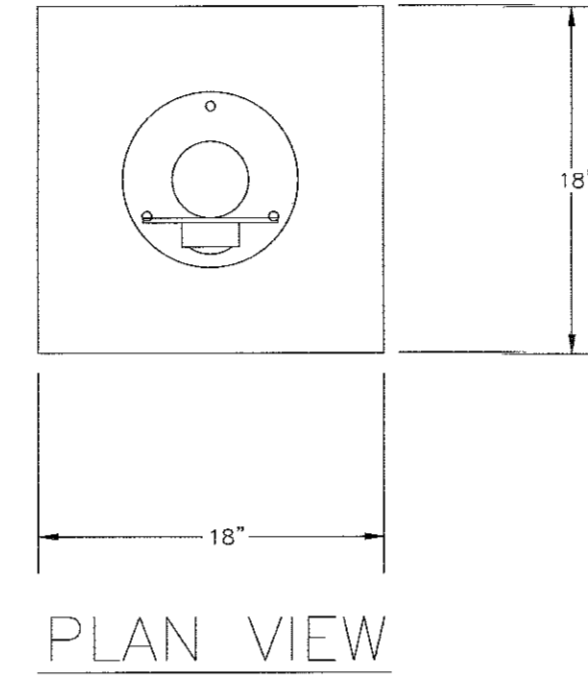
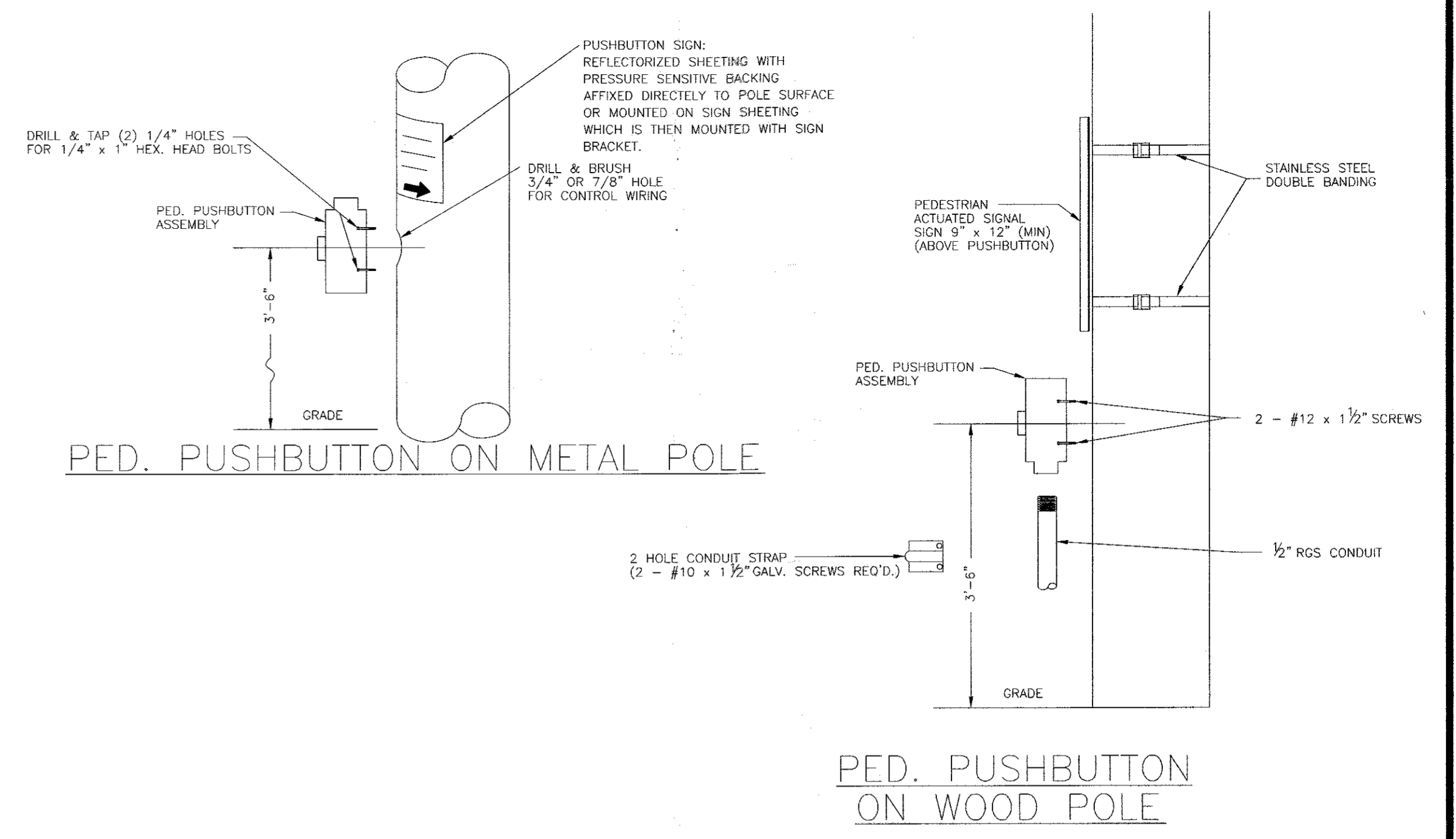
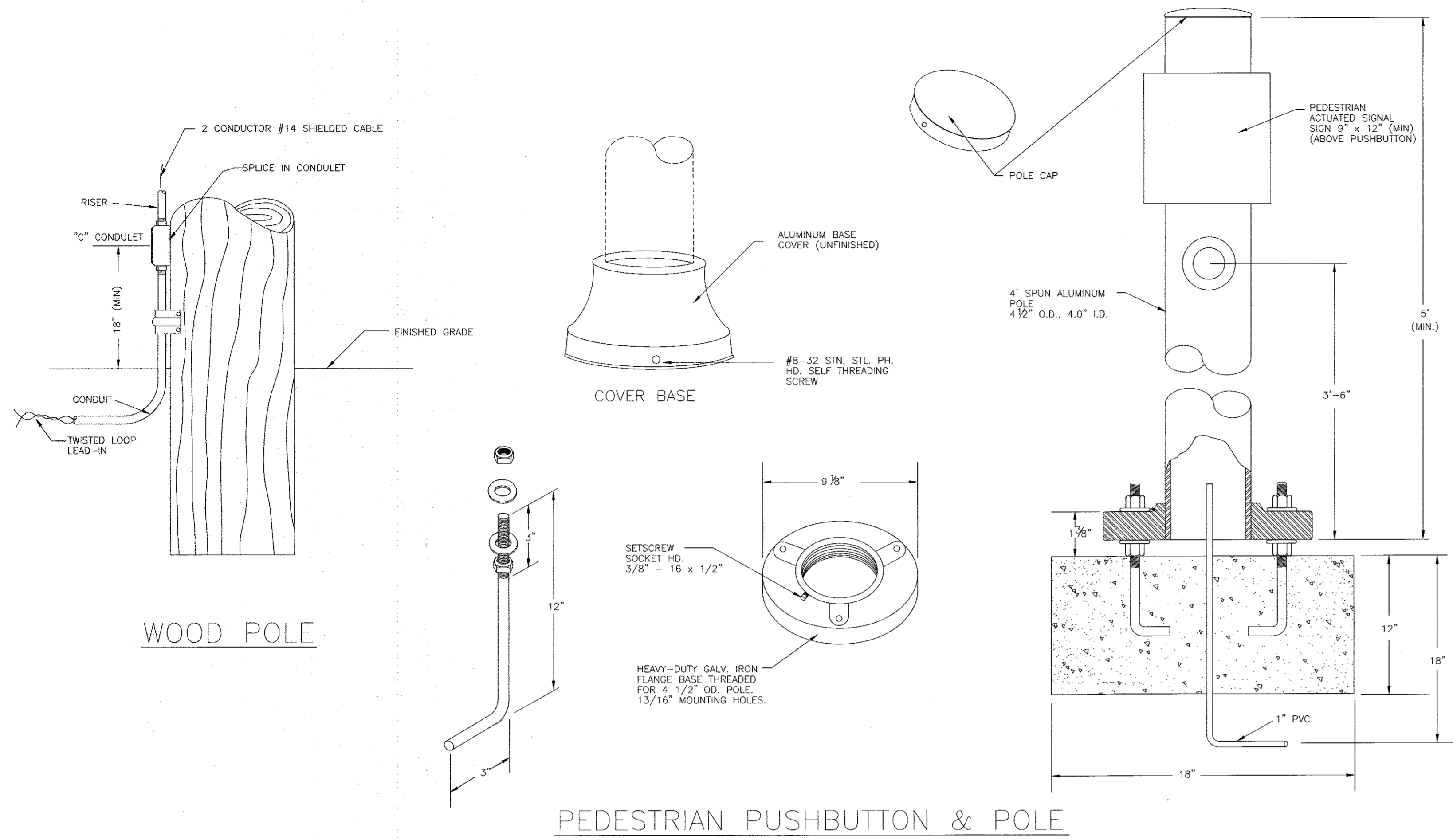
CITY ENGINEER _____ DATE: 11/30/22

SCALE: N.T.S.

DRAWN BY: MP

CHECKED BY: RT

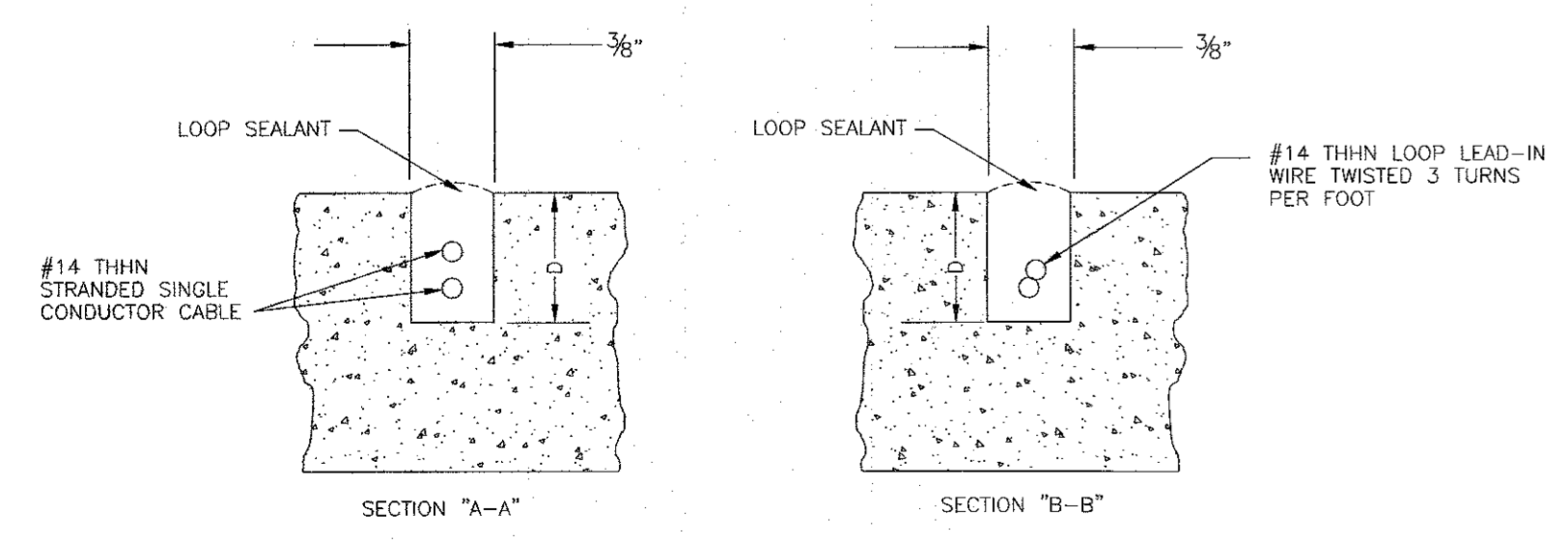
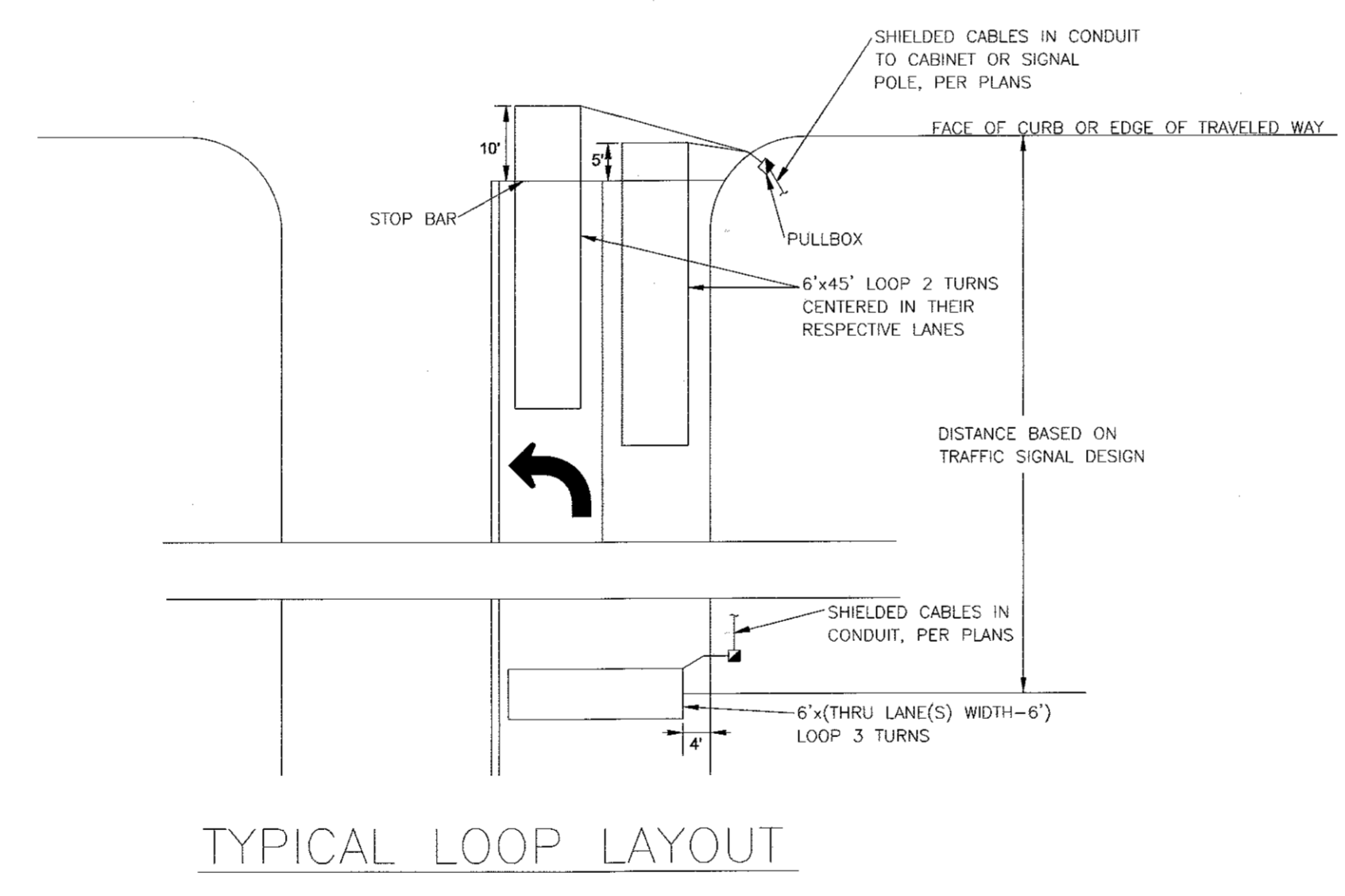
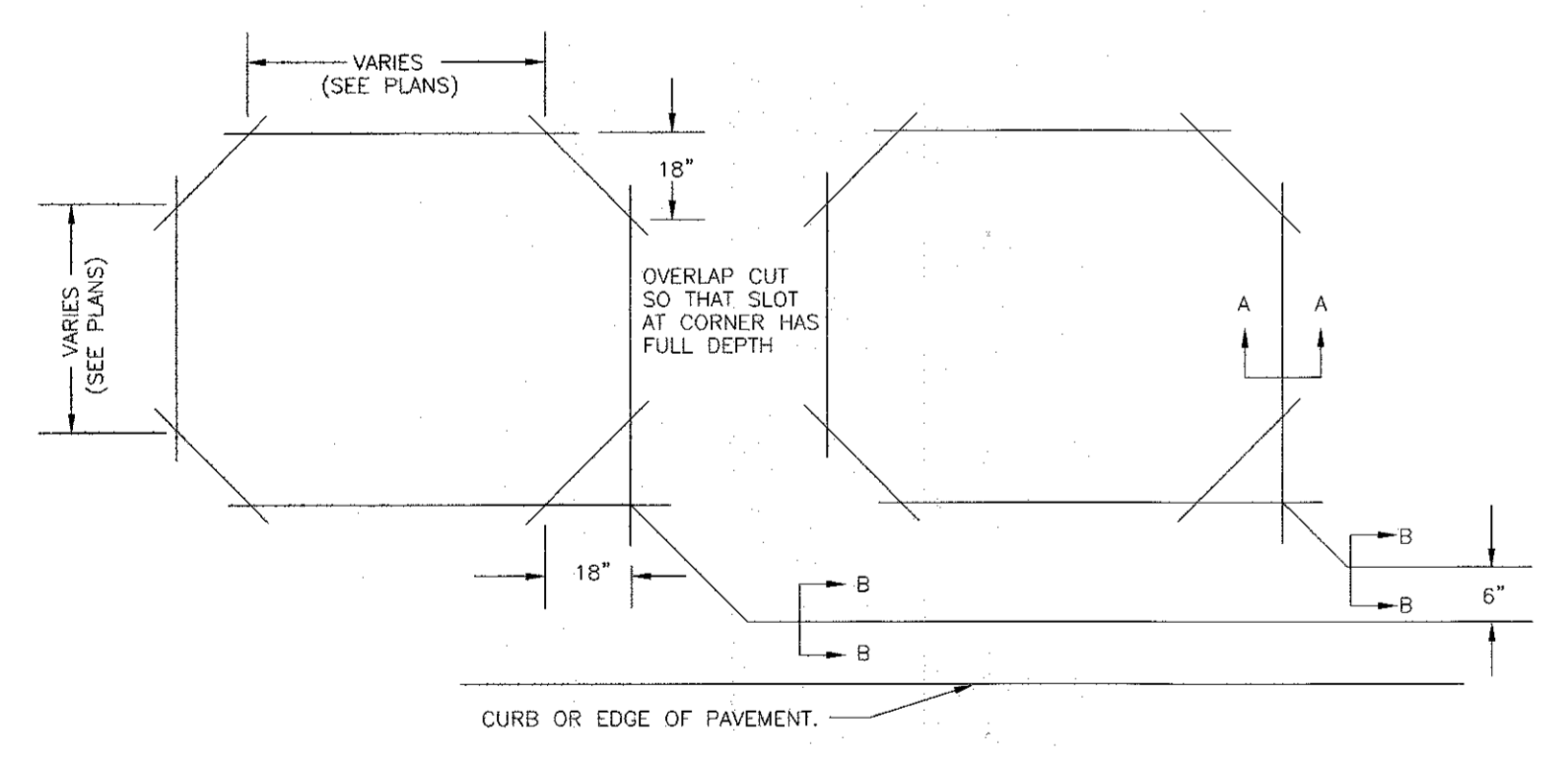
NO.	DATE	BY	REVISIONS	REMARKS	APPROVED	
					C.T.E.	C.E.



DETECTION LOOP NOTES

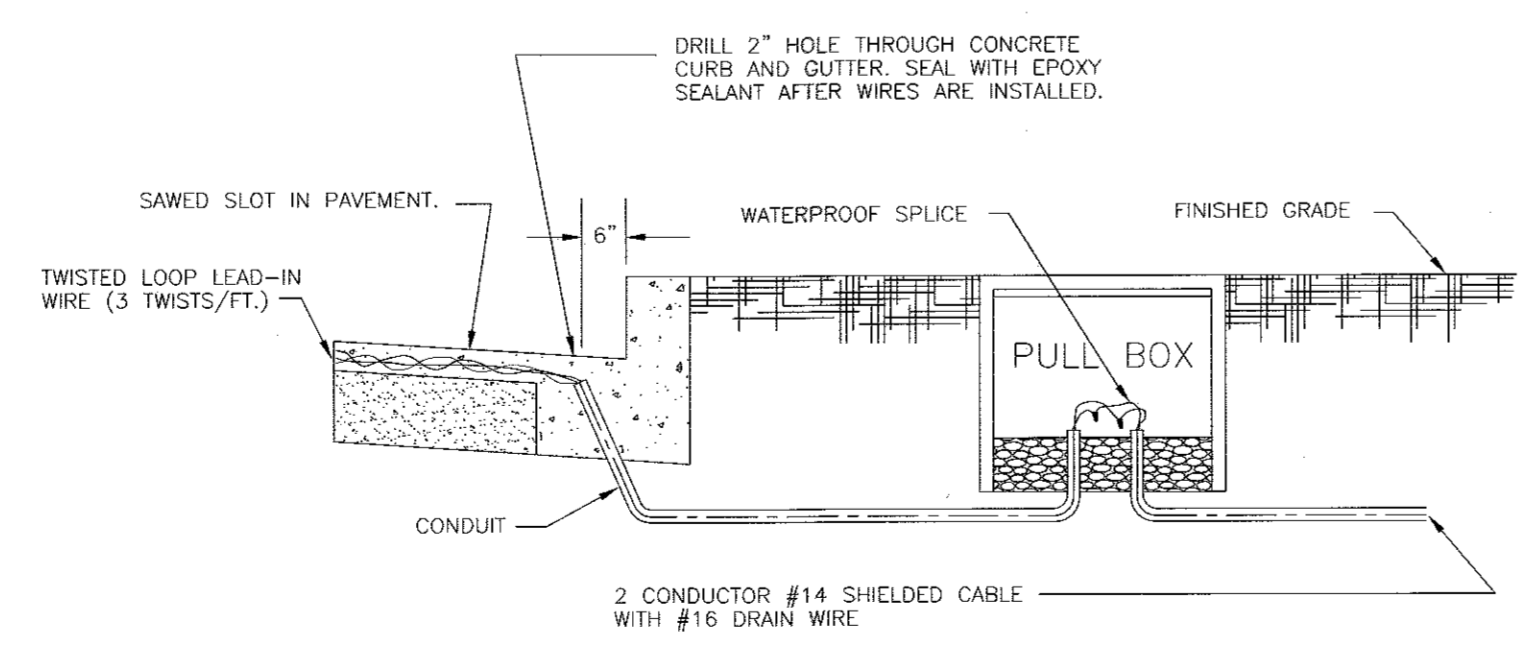
1. THE DETECTION LOOPS SHALL BE OF THE SIZE AND LOCATION DETAILED IN THE PLANS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
2. THE CONTRACTOR SHALL INSTALL LOOPS BY CUTTING A 3/8 INCH WIDE SLOT IN THE ROADWAY SURFACE WITH A DIAMOND OR ABRASIVE SAW, INSTALLING THE WIRE AND BACKFILLING WITH SEALER. SAW SLOTS SHALL BE 2 INCHES IN DEPTH IN ASPHALT PAVEMENT, AND 1 1/2 INCHES IN DEPTH IN CONCRETE PAVEMENT. SLOTS FOR TWISTED LOOP LEAD-INS SHALL BE 3/8 INCHES WIDE.
3. THE CONTRACTOR SHALL EXERCISE CARE IN PLACING THE DETECTION LOOPS AND LEAD-INS IN THE PAVEMENT SLOTS. THE SLOTS SHALL BE CLEANED AND BLOWN WITH OIL-FREE AIR. THE WIRE SHALL BE PUSHED INTO THE SLOTS WITH A BLUNT WOODEN STICK TO PREVENT DAMAGE TO THE INSULATION. USE OF METAL TOOLS WILL NOT BE PERMITTED FOR THIS OPERATION.
4. BEFORE THE SLOTS ARE SEALED, THE RESISTANCE OF THE DETECTION LOOPS AND LEAD-INS (INCLUDING SPLICES) SHALL BE CHECKED AGAINST GROUND WITH A MEGGER. A RESISTANCE OF LESS THAN TEN MEGOHMS WILL INDICATE A FAULT REQUIRING CORRECTION BEFORE SLOTS ARE SEALED.
5. ALSO BEFORE THE SLOTS ARE SEALED, THE INDUCTANCE OF THE DETECTION LOOP AND LEAD-INS SHALL BE CHECKED AT THE LOCATION OF THE DETECTOR SENSOR UNIT. THE INDUCTANCE SHALL BE NO LESS THAN 100 MICROHENRIES AND NO MORE THAN 300 MICROHENRIES. IF IT MEASURES OUT OF THIS RANGE THE LOOP SHALL BE REPAIRED TO PROVIDE AN INDUCTANCE READING BETWEEN 100 AND 300 MICROHENRIES BEFORE THE SLOTS ARE SEALED.
6. AFTER THE LOOP WIRES ARE INSTALLED AND ALL CHECKS SATISFACTORILY COMPLETED, THE SLOT SHALL THEN BE BACKFILLED AND SEALED WITH A LOOP SEALANT CONFORMING TO STANDARD SPECIFICATIONS.
7. LOOPS AND TWISTED LEAD-INS SHALL BE CONSTRUCTED OF ONE UNBROKEN LENGTH OF #14 THNN WIRE. NO TWISTED LEAD-INS SHALL EXCEED 100 FEET IN LENGTH. THNN INSULATION SHALL BE COLOR-CODED AS SHOWN ON THE PLANS.
8. SPLICES OF TWISTED PAIRS TO SHIELDED CABLE SHALL BE PERMITTED ONLY IN PULL BOXES, CABINETS, CONDULETS, AND POLE BASES AS SHOWN ON PLANS.
9. ALL LEADS FROM THE SPLICE TO CONTROLLER SHALL CONSIST OF A TWO CONDUCTOR SHIELDED CABLE, #14 AWG STRANDED, CONFORMING TO STANDARD SPECIFICATIONS.
10. LOOP LEADS SHALL NOT BE COILED. TERMINAL BLOCKS SHALL BE USED FOR ALL CONNECTIONS IN EQUIPMENT CABINETS.
11. LOOP WIRES AND LEAD-INS ARE TO BE LABELED AS SHOWN ON THE PLANS. ALL LEADS ARE TO BE PERMANENTLY LABELED IN PULL-BOXES, CONDULETS, POLE BASES, AND CONTROLLER CABINETS.
12. THE SHIELD DRAIN WIRE ON TWO CONDUCTOR SHIELDED CABLE SHALL BE BONDED TO THE GROUND BUSS IN THE CONTROLLER CABINET.
13. SHIELD CONTINUITY SHALL BE MAINTAINED IN SPLICES OF TWO CONDUCTOR SHIELDED CABLE.

CAUTION:
GENTLY TAMP IN WIRE WITH BLUNT WOOD TOOL TO AVOID DAMAGE TO INSULATION. DO NOT USE SHARP OBJECT.



LOOPS IN CONCRETE OR ASPHALT

D - SLOT DEPTH IN ASPHALT SHALL BE 2 - INCHES.
D - SLOT DEPTH IN CONCRETE SHALL BE 1 1/2 INCHES.



LOOP DETECTOR WIRING INSTALLATION INTO PULL BOX OR POLE FOUNDATION

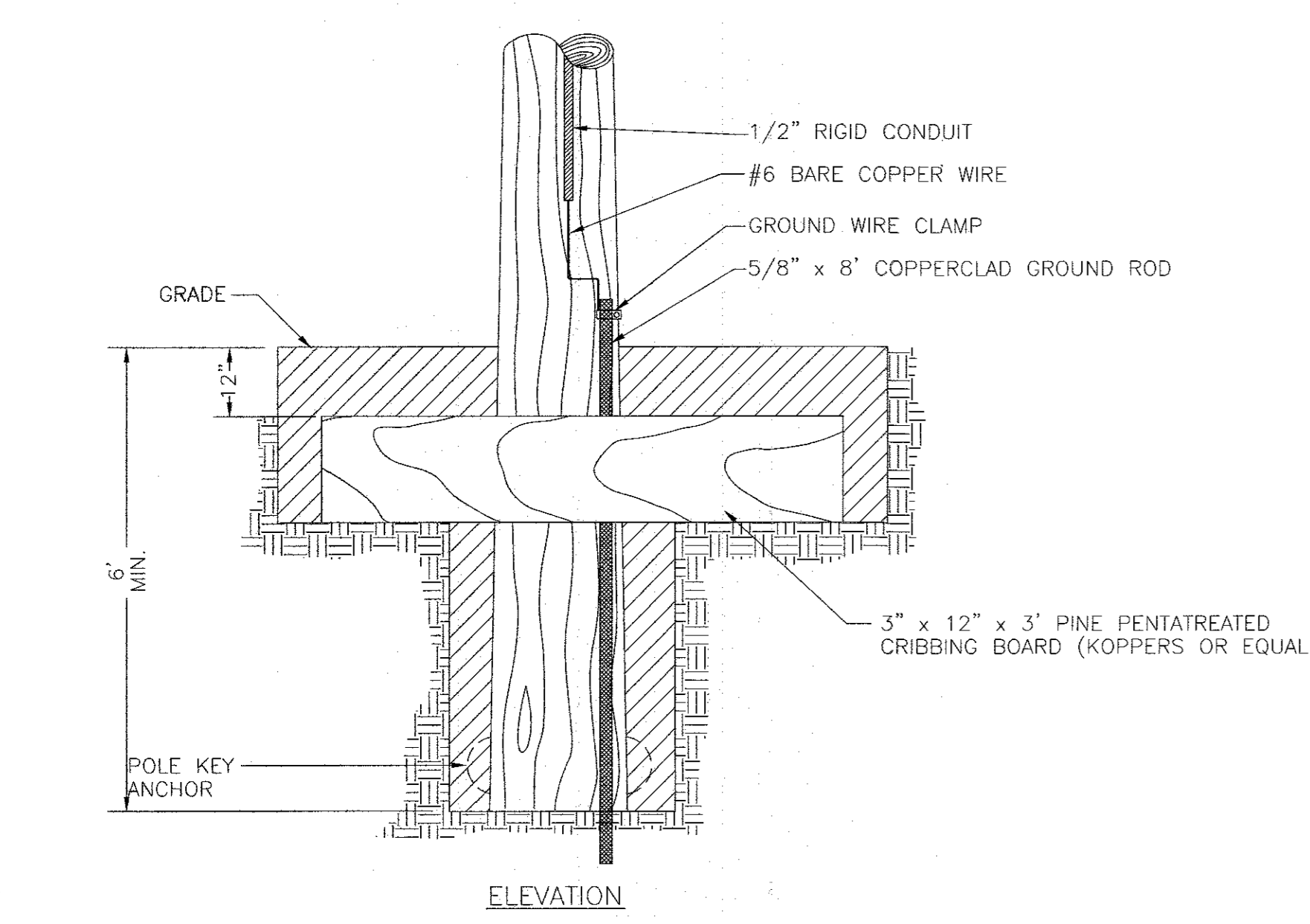
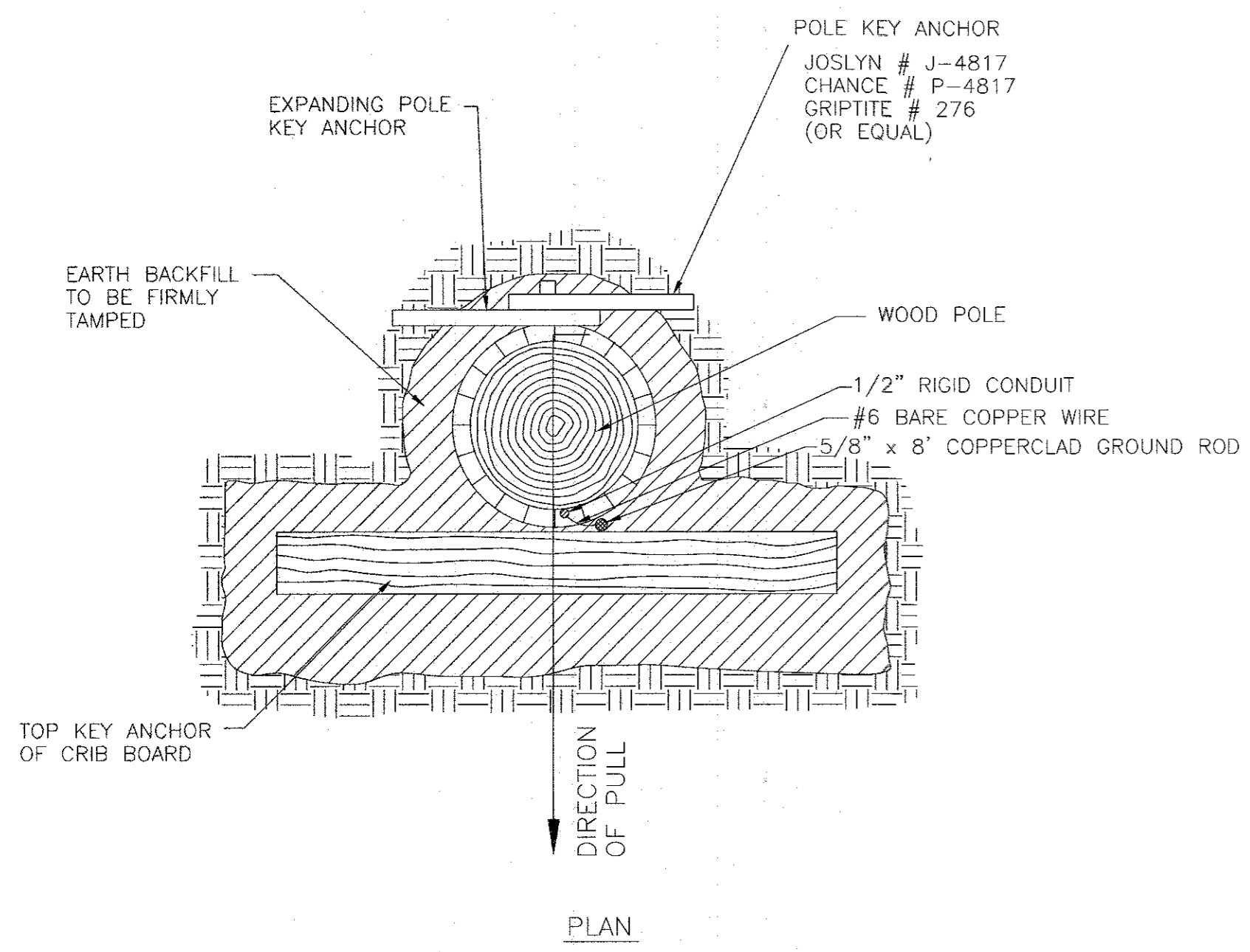
REVISIONS				APPROVED	
NO.	DATE	BY	REMARKS	C.T.E.	C.E.

DESIGN STANDARD
Pedestrian and Vehicle Detection
Detail

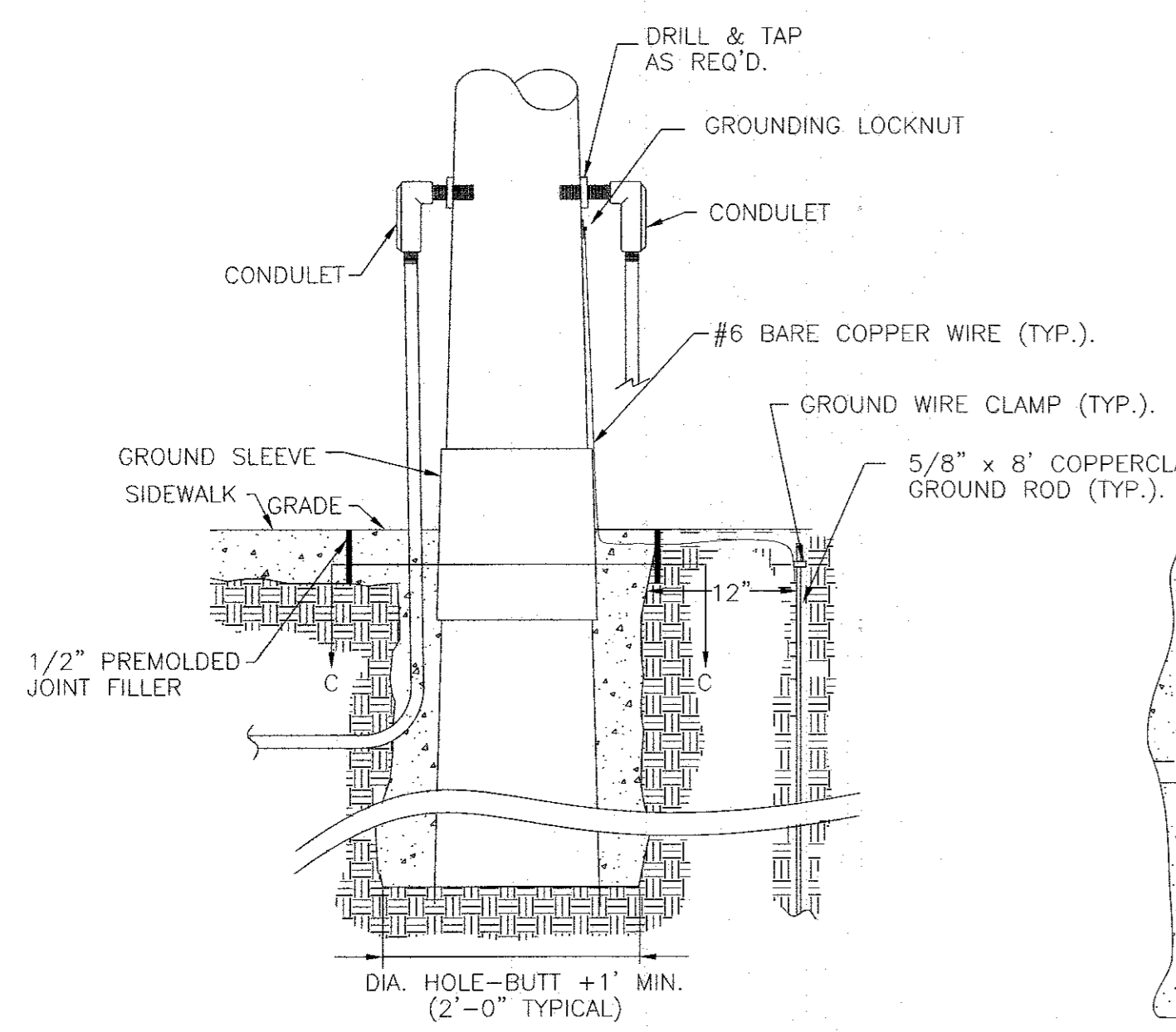
APPROVED BY: _____
MEMPHIS, TENN.

CITY ENGINEER: *Benjamin J. Zolner* DATE: 11-17-2022
DATE: 11/30/22

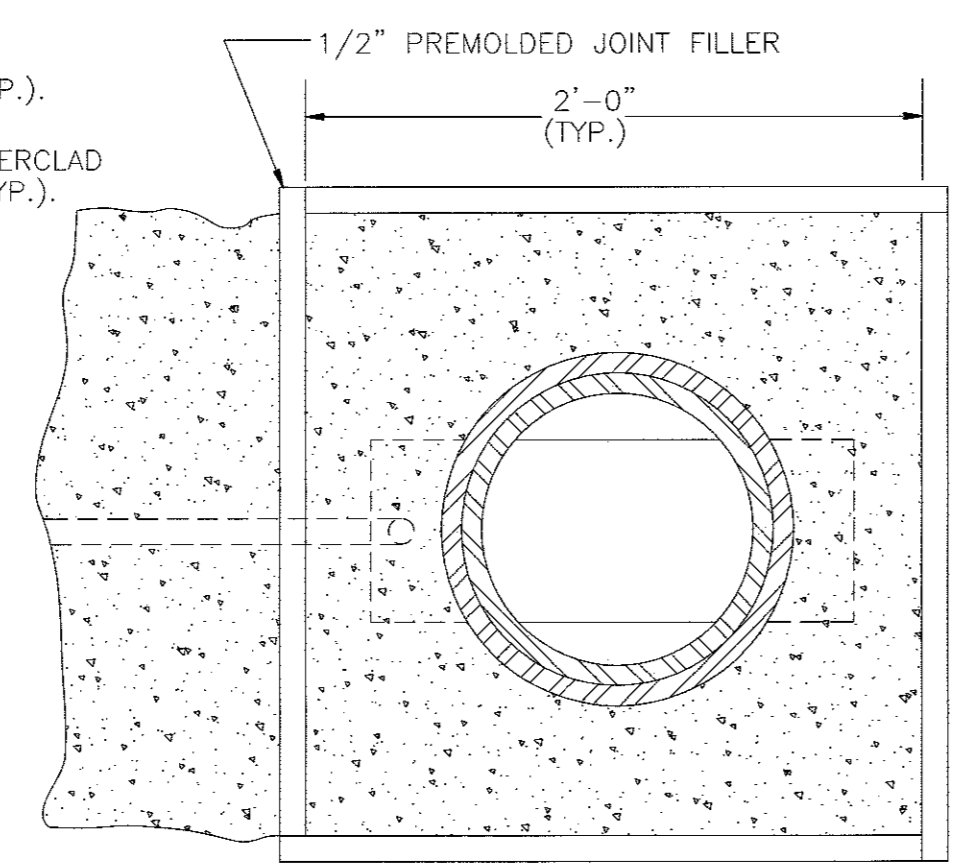
DATE: 11-17-2022
SCALE: N.T.S.
DRAWN BY: MP
CHECKED BY: RT



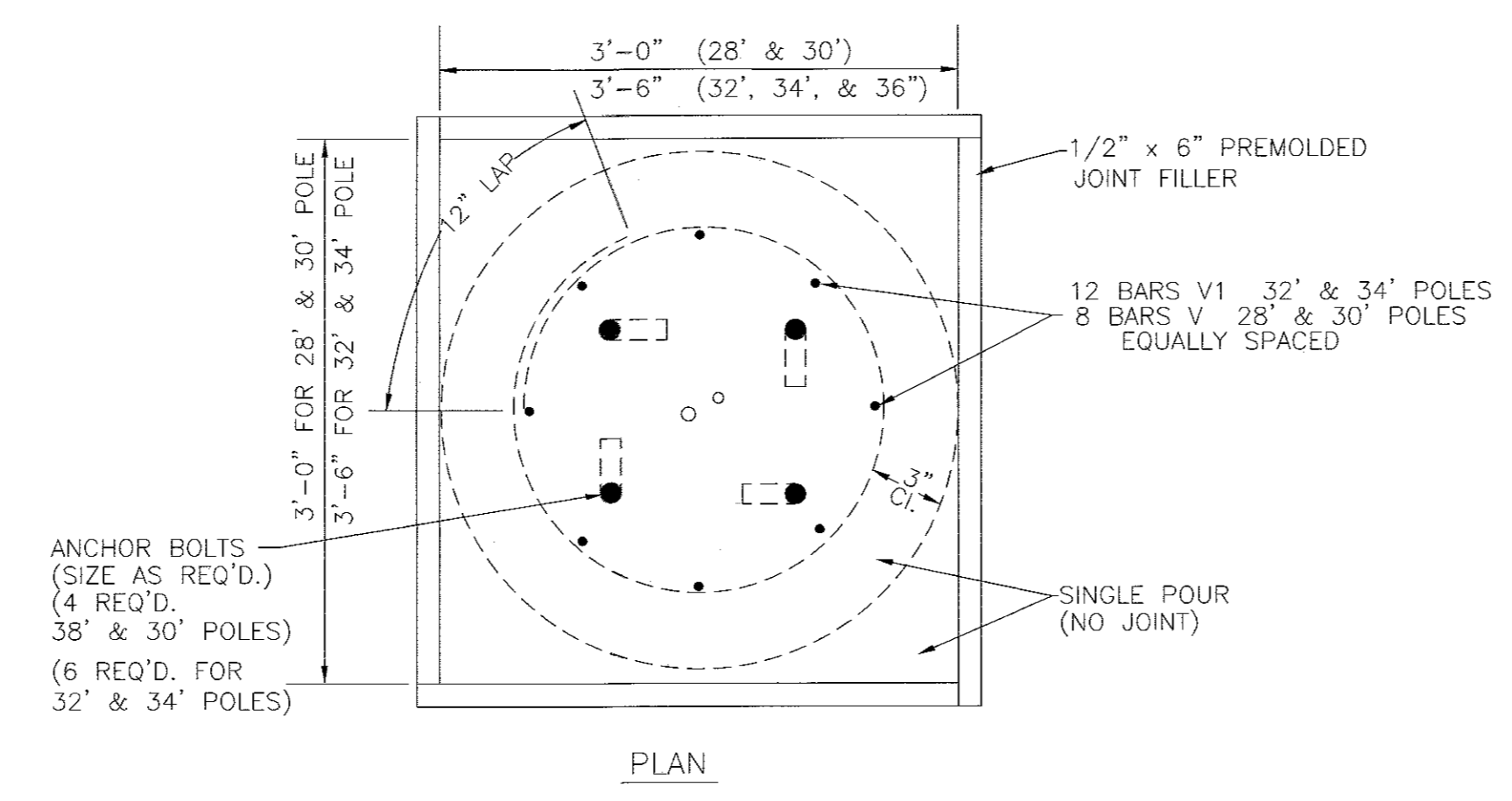
WOOD POLE



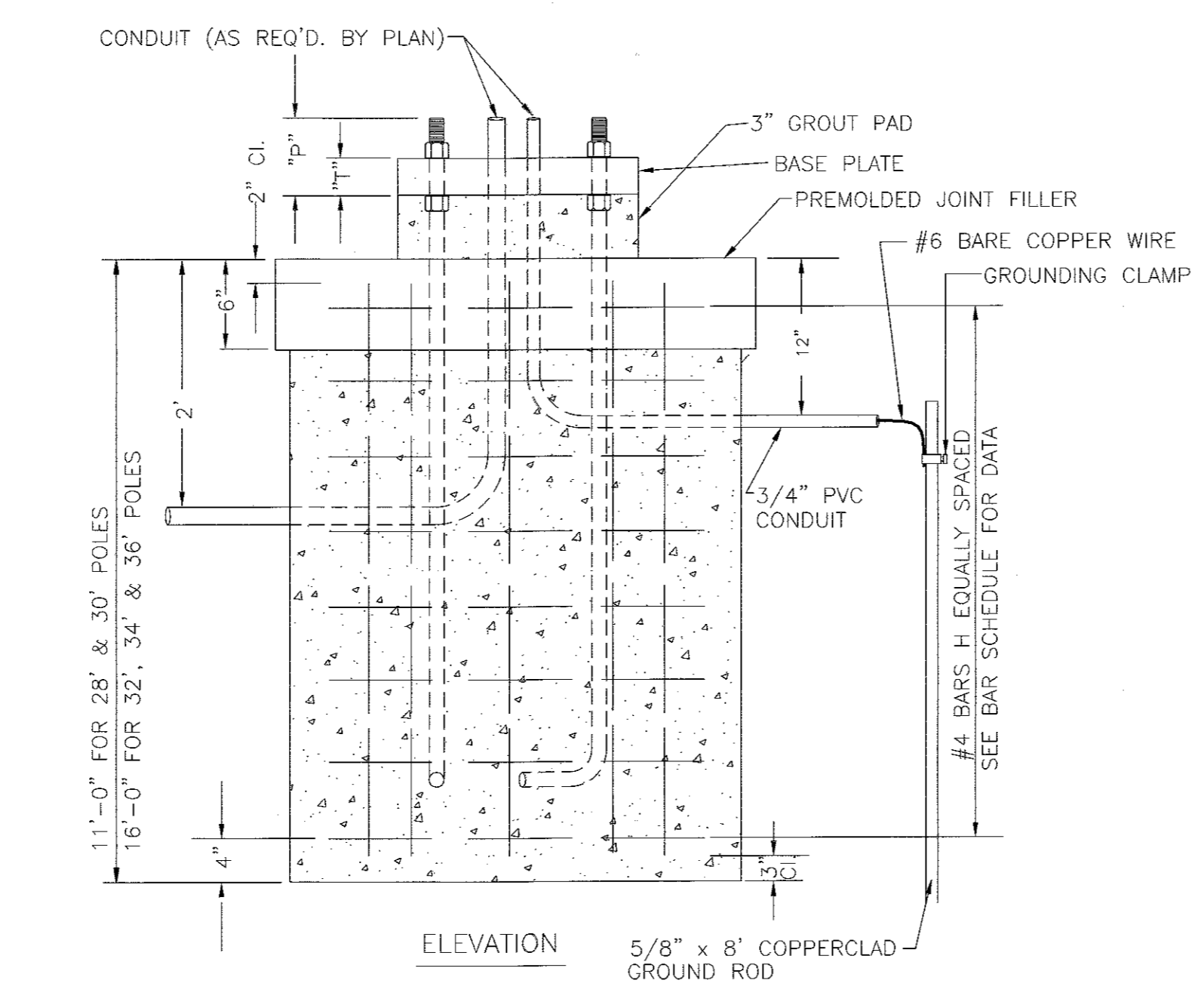
EXISTING EMBEDDED STEEL POLE (TYPE 2)



SECTION C-C



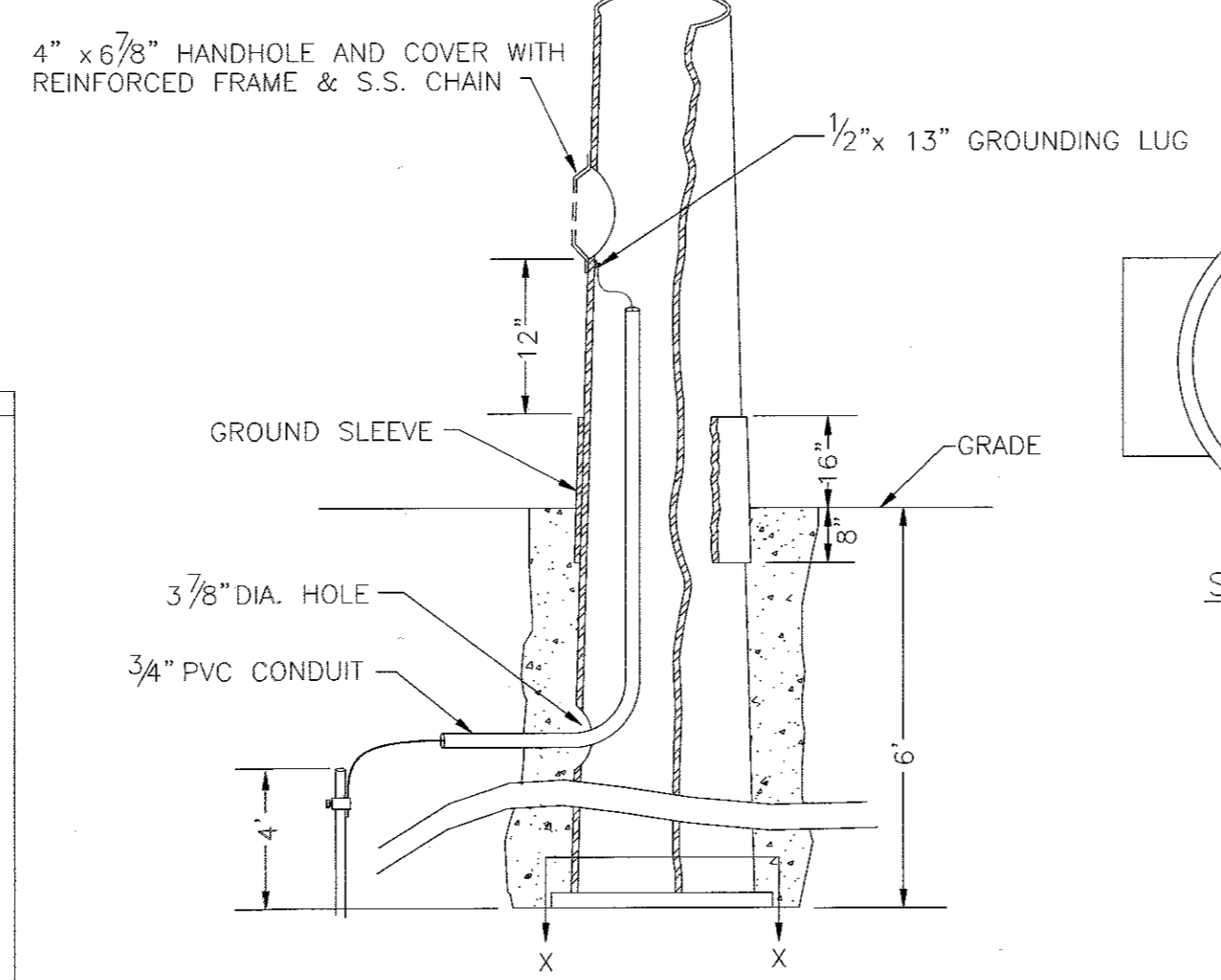
PLAN



STEEL POLE FOUNDATION

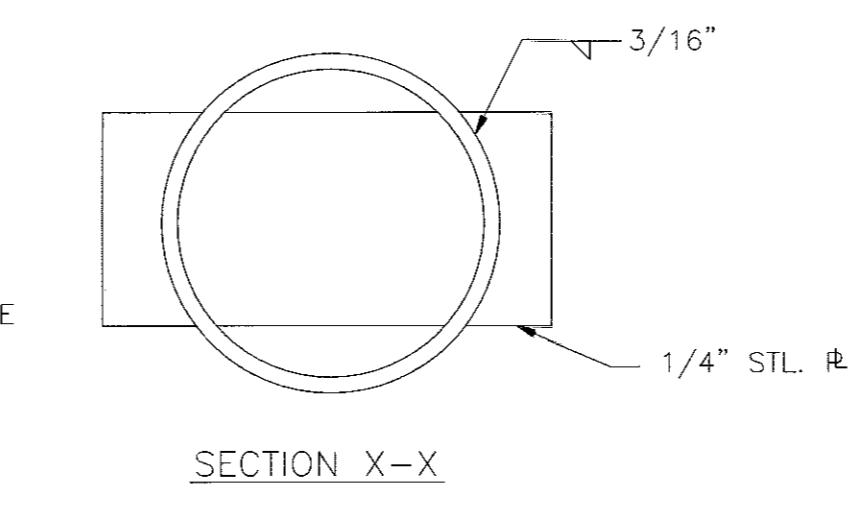
TABLE OF FOOTING DATA

BAR SCHEDULE						
POLE LENGTH	BARS	NO. REQ'D.	SIZE	LENGTH	WT.(lbs) EACH	TOTAL WT.(lbs)
28' & 30'	H	11	4	8'-9"	5.8	64
	V	8	8	10'-7"	28.3	226
32', 34' & 36'	H1	16	4	10'-4"	6.9	110
	V1	12	10	15'-7"	67.1	805

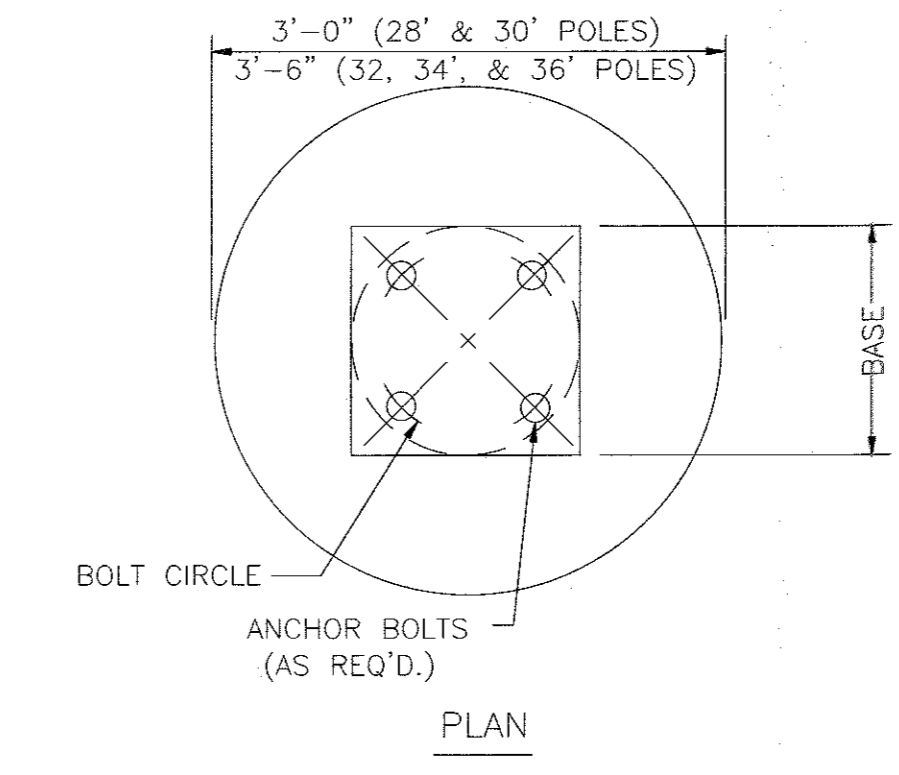


NEW EMBEDDED STEEL POLE (TYPE 1)

POLE DATA													
POLE LENGTH	GA. NO.	BASE SIZE	B	C	F	H	P	R	S	T	BOLT DIA.	BOLT LENGTH	BENDING MOMENT AT YIELD (FT-LBS)
28' & 30'	0	12"	16"	21"	11 5/16"	2 1/8"	4"	3 3/4"	17"	1 3/4"	1 1/2"	90"	130,000
32' & 34'	0.375"	19"	25"	40 3/4"	—	2 1/2"	5"	3 3/4"	31"	2"	2 1/4"	90"	467,000
36'	0.375"	19"	25"	40 3/4"	—	2 1/2"	5"	3 3/4"	31"	2"	2 1/4"	90"	467,000

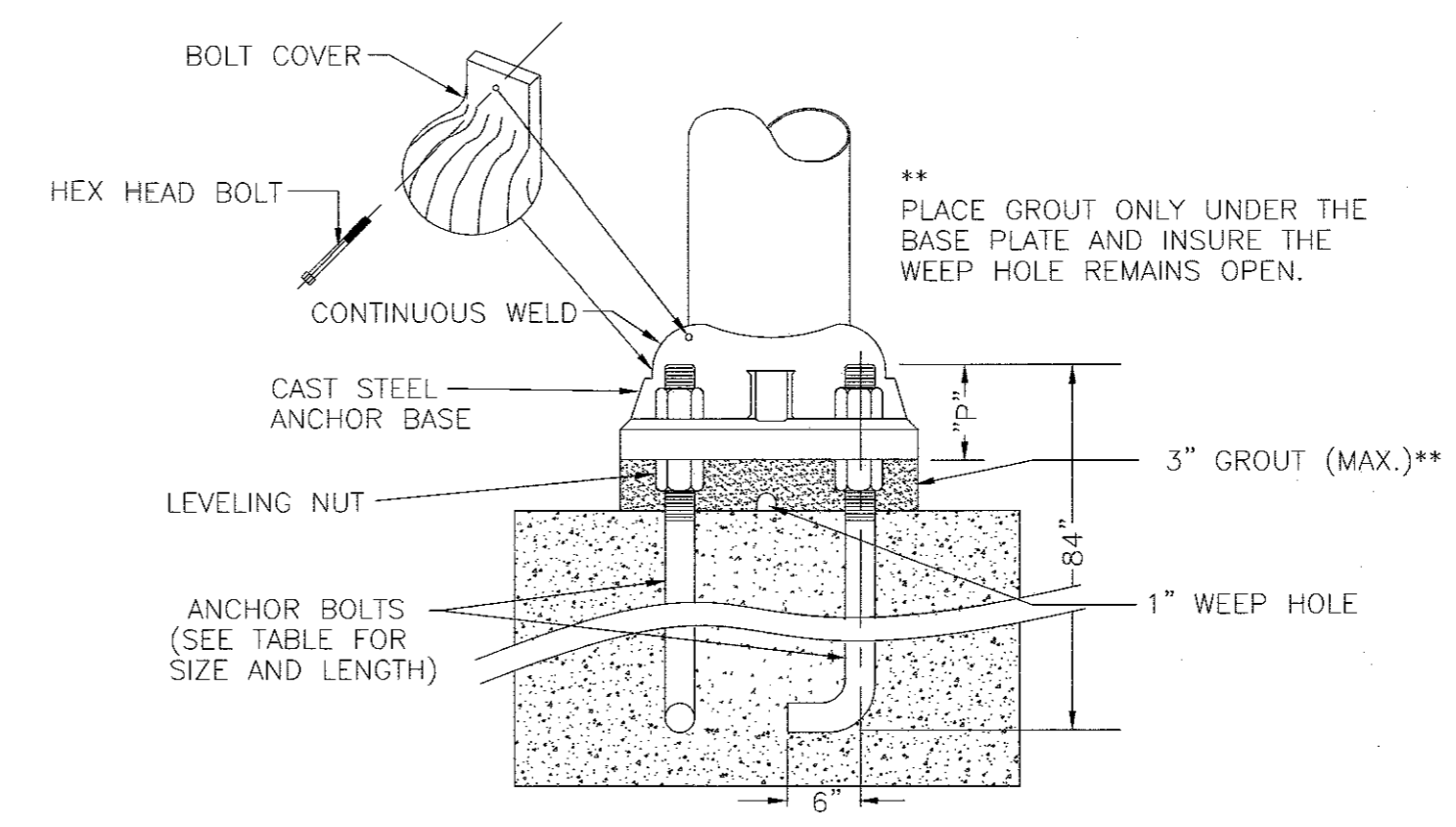


SECTION X-X



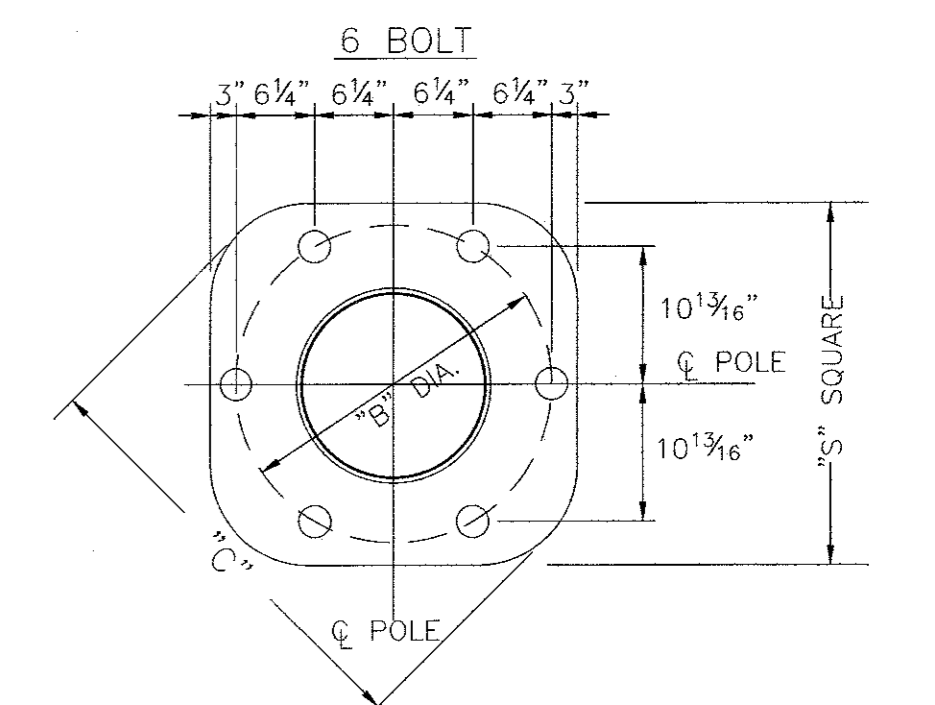
PLAN

*NOTE: THE ANCHOR BOLTS AND EMBEDMENTS SHALL BE DESIGNED SO AS TO DEVELOP THE ULTIMATE STRENGTH OF THE POLE.

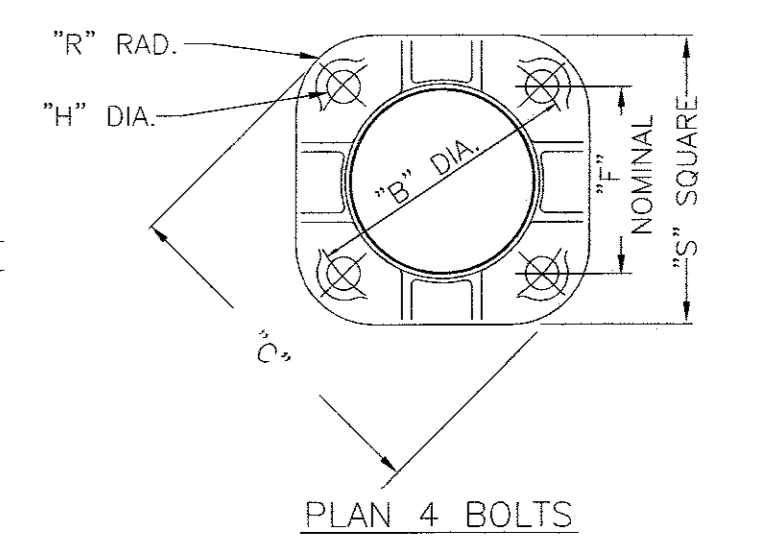


ANCHOR BASE INSTALLATION

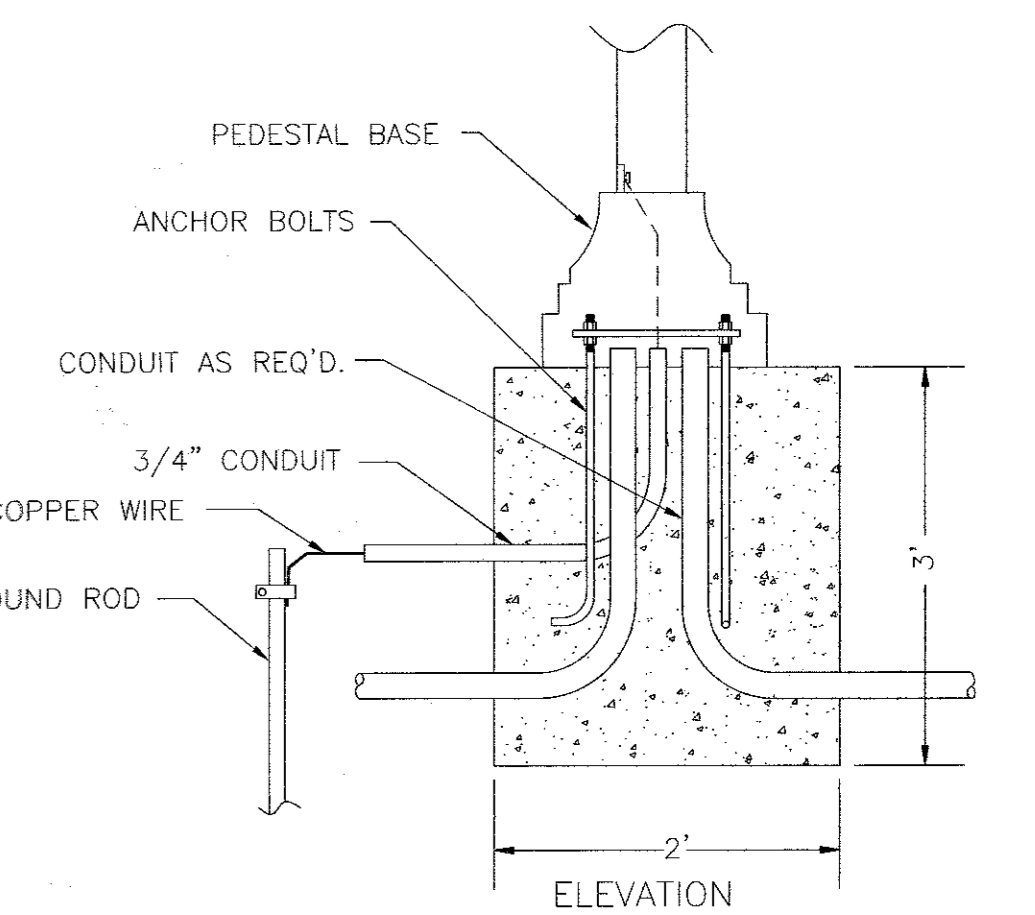
ANCHOR BOLT DATA						
POLE HEIGHT	ITEM	NO. REQ'D.	SIZE	LENGTH	WT.(lbs.) EACH	TOTAL WT.(lbs.)
28' & 30'	ANCHOR BOLTS	4	1 3/4"	90"	61.35	245.4
	ANCHOR BOLTS	6	2 1/4"	90"	101.47	608.8
28' & 30'	NUTS	8	1 1/2"	—	2.04	16.3
	NUTS	12	2 1/4"	—	4.19	50.3



PLAN 6 BOLT



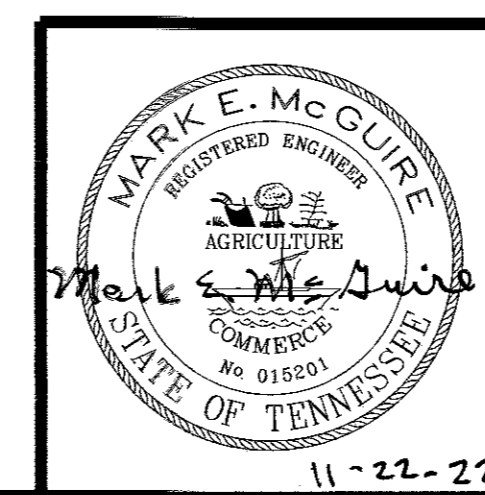
PLAN 4 BOLTS
BASE: STEEL POLE



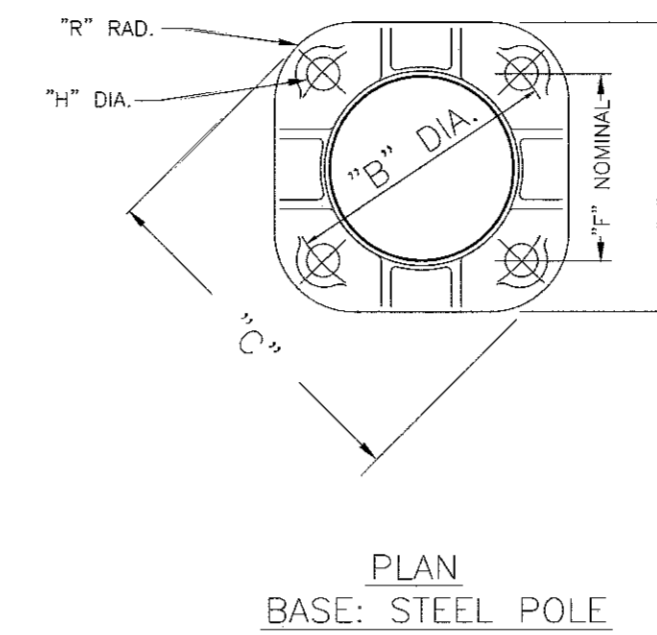
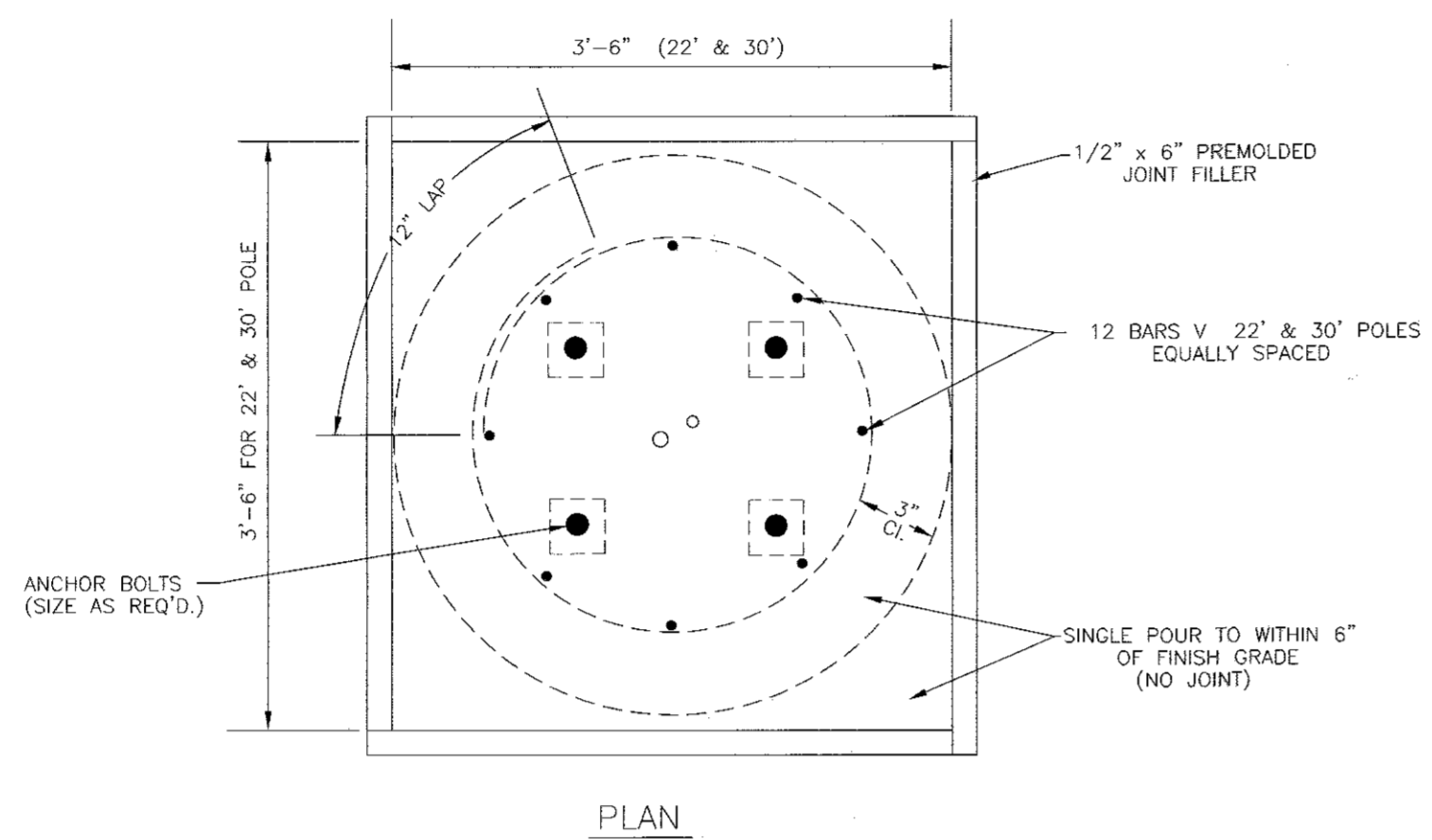
PEDESTAL FOUNDATION

DESIGN STANDARD
Strain Pole
Foundation Details

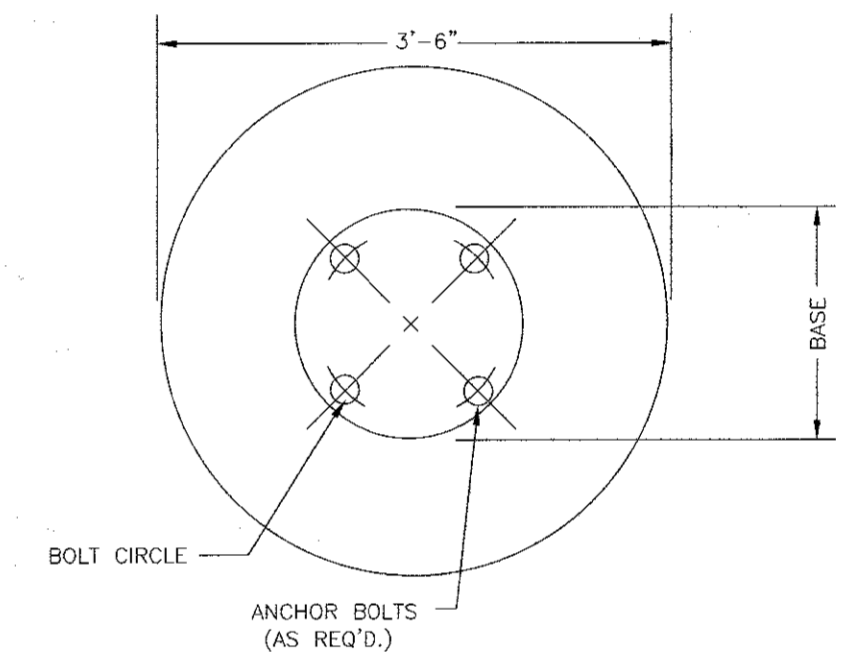
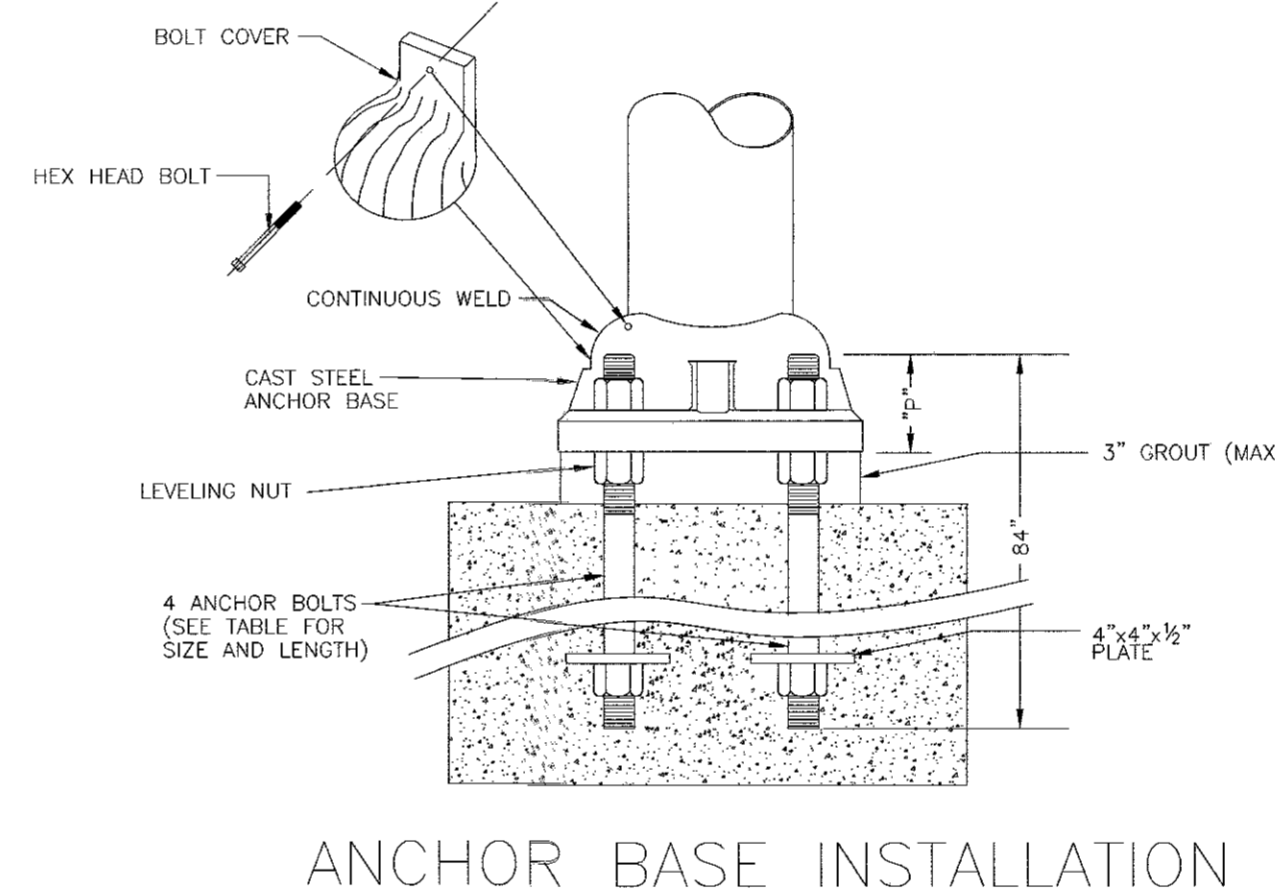
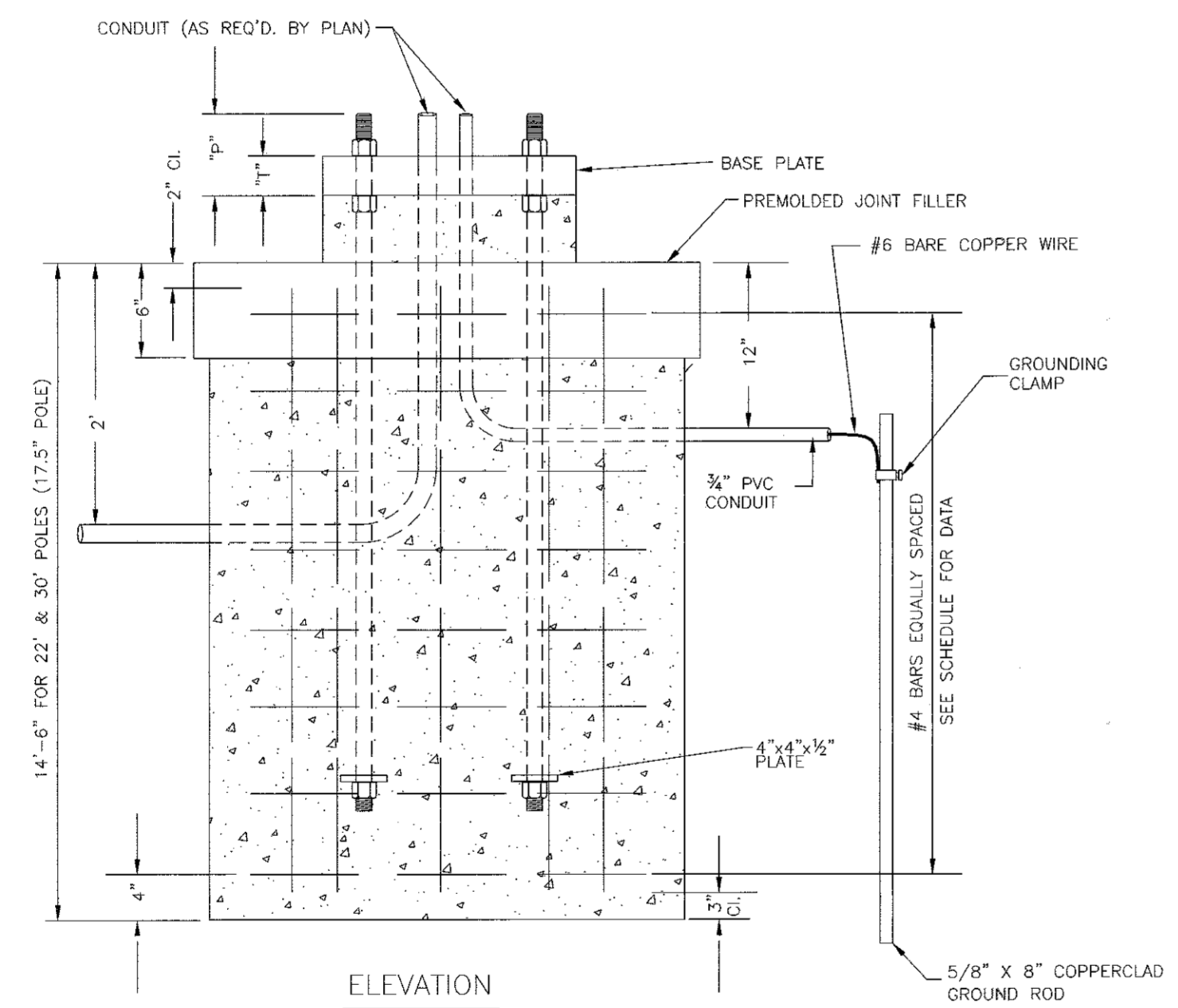
APPROVED BY: MEMPHIS, TENN.
DATE: 11/17/2022
SCALE: N.T.S.
DRAWN BY: MP
CHECKED BY: MM/RT



REVISIONS				APPROVED	
NO.	DATE	BY	REMARKS	C.T.E.	C.E.



*NOTE: THE ANCHOR BOLTS AND EMBEDMENTS SHALL BE DESIGNED SO AS TO DEVELOP THE ULTIMATE STRENGTH OF THE POLE.



STEEL POLE FOUNDATION

BAR SCHEDULE

POLE HEIGHT	BARS	NO. REQ'D.	SIZE	LENGTH	WT.(lbs.) EACH	TOTAL WT.(lbs.)	SHAPE	POLE BASE
22',30'	H	15	4	10'-6"	7.0#	105	○	17.5"
22',30'	V	12	10	14'-1"	60.6#	727	—	17.5"

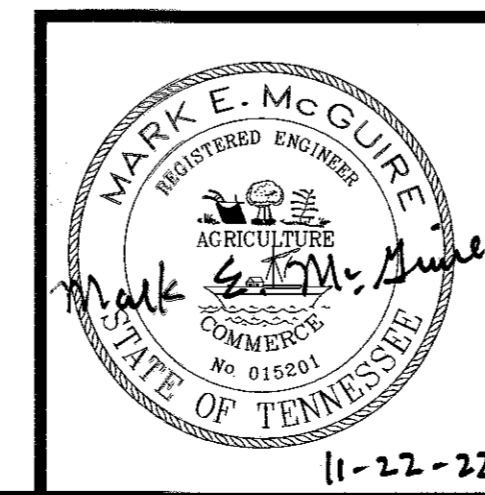
ANCHOR BOLT DATA

POLE HEIGHT	ITEM	NO. REQ'D.	SIZE	LENGTH	WT.(lbs.) EACH	TOTAL WT.(lbs.)
22',30'	ANCHOR BOLTS	4	2"	84"	80.19	320.7
22',30'	NUTS	8	2"	—	2.99	23.9

POLE DATA

POLE LENGTH	GA. NO. (THICK.)	BASE SIZE	B	C	F	H	P	R	S	T	BENDING MOMENT AT YIELD (FT. LBS.)
22',30'	0.250	17.5"	23"	30.5"	16 1/4"	2 1/4"	4 1/2"	3 3/4"	24"	2"	260,000

NOTE: FOUNDATION DETAILS ARE APPLICABLE TO CITY STANDARD TRAFFIC SIGNAL POLES. IF NON-STANDARD POLES ARE USED, FOUNDATION DESIGNS ARE REQUIRED.



REVISIONS				APPROVED	
NO.	DATE	BY	REMARKS	C.T.E.	C.E.

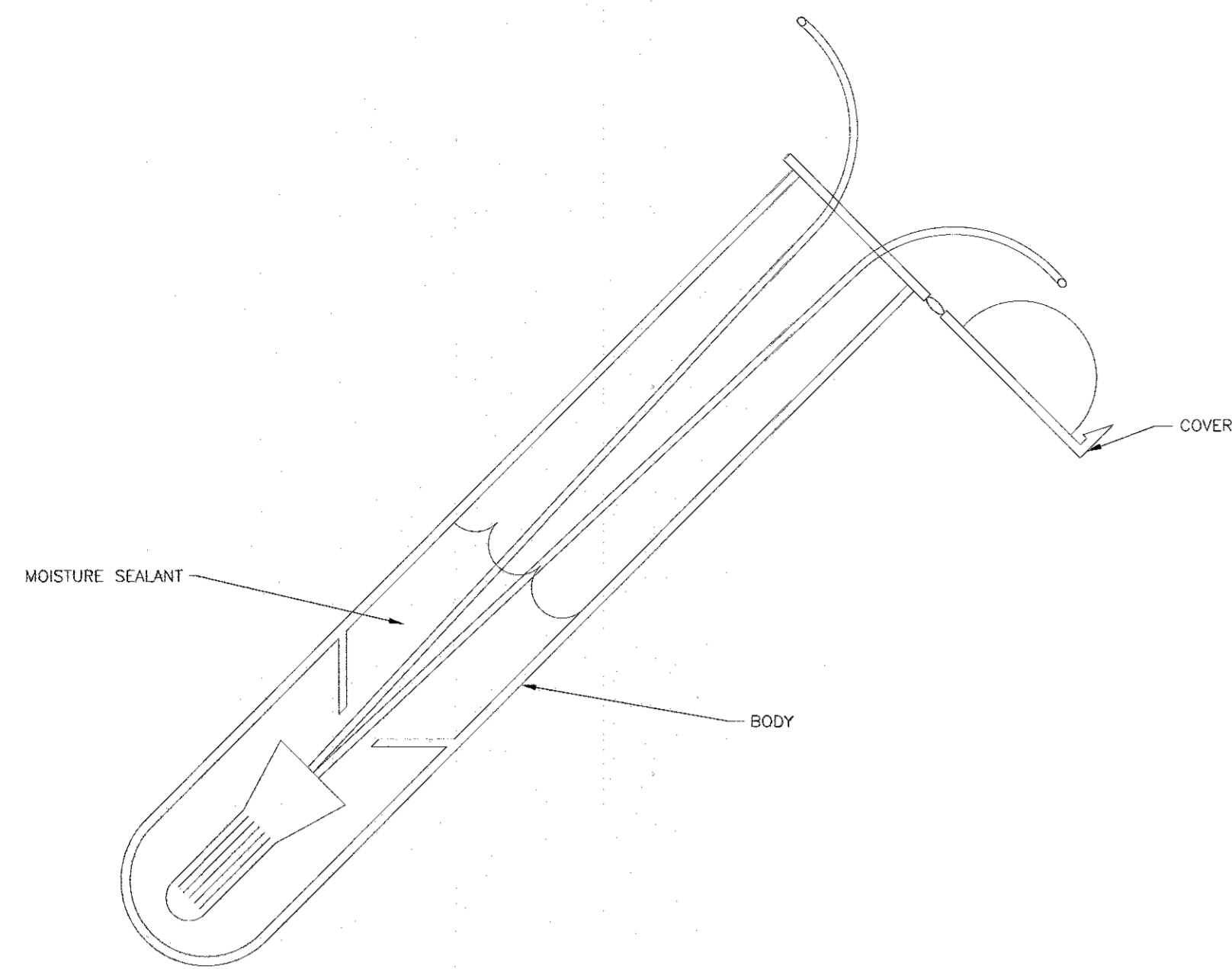
DIVISION OF ENGINEERING

DESIGN STANDARD

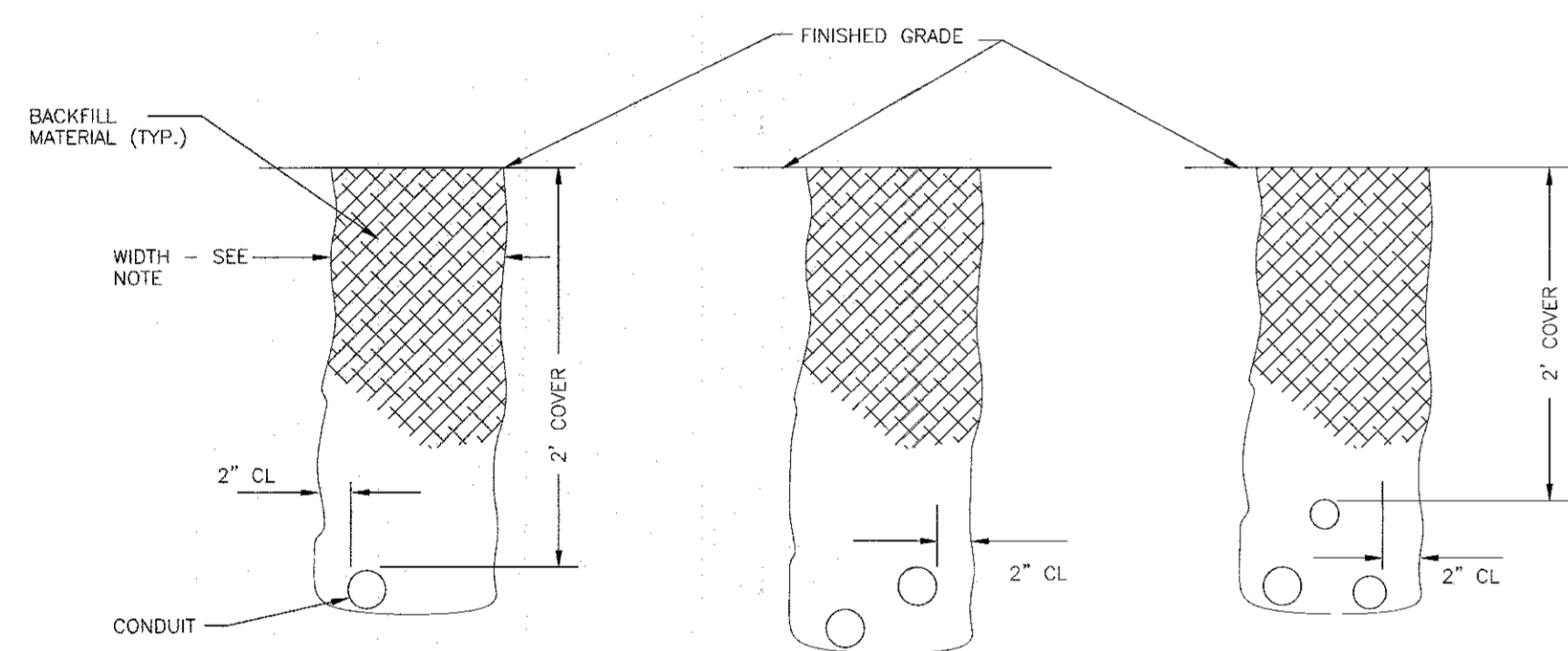
Mast-Arm Pole
Foundation Details

APPROVED BY: MEMPHIS, TENN.

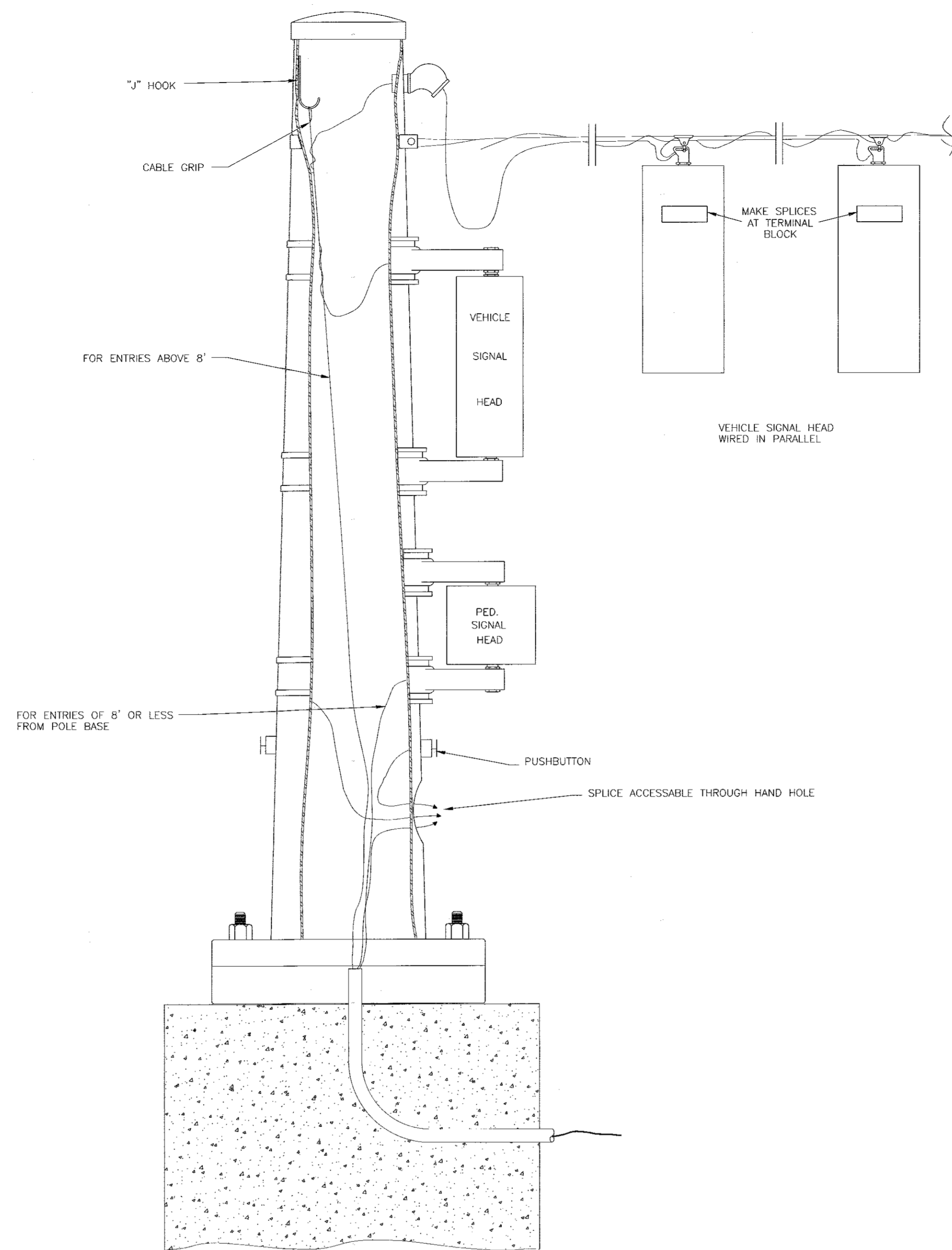
APPROVED: *Mark E. McGuire* 11/30/22 DATE: 11/17/2022
CITY TRAFFIC ENGINEER DATE: N.T.S.
W.S. 11/30/22 DRAWN BY: MP
CITY ENGINEER DATE: CHECKED BY: MM/RT



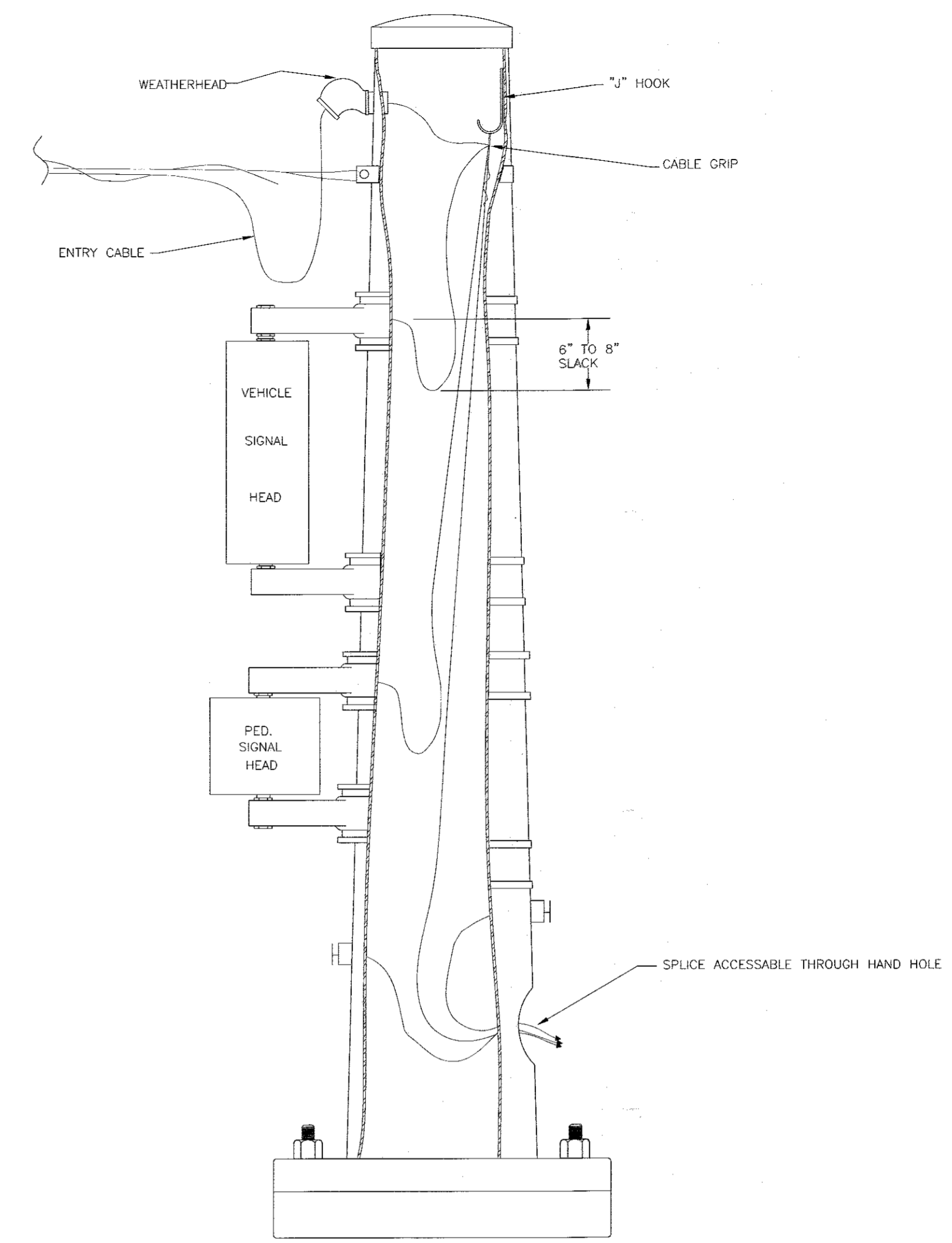
TYPICAL WIRE SPlice METHOD
3M DBY-6 DIRECT BURIED SERVICE WIRE
SPlice KIT OR EQUIVALENT



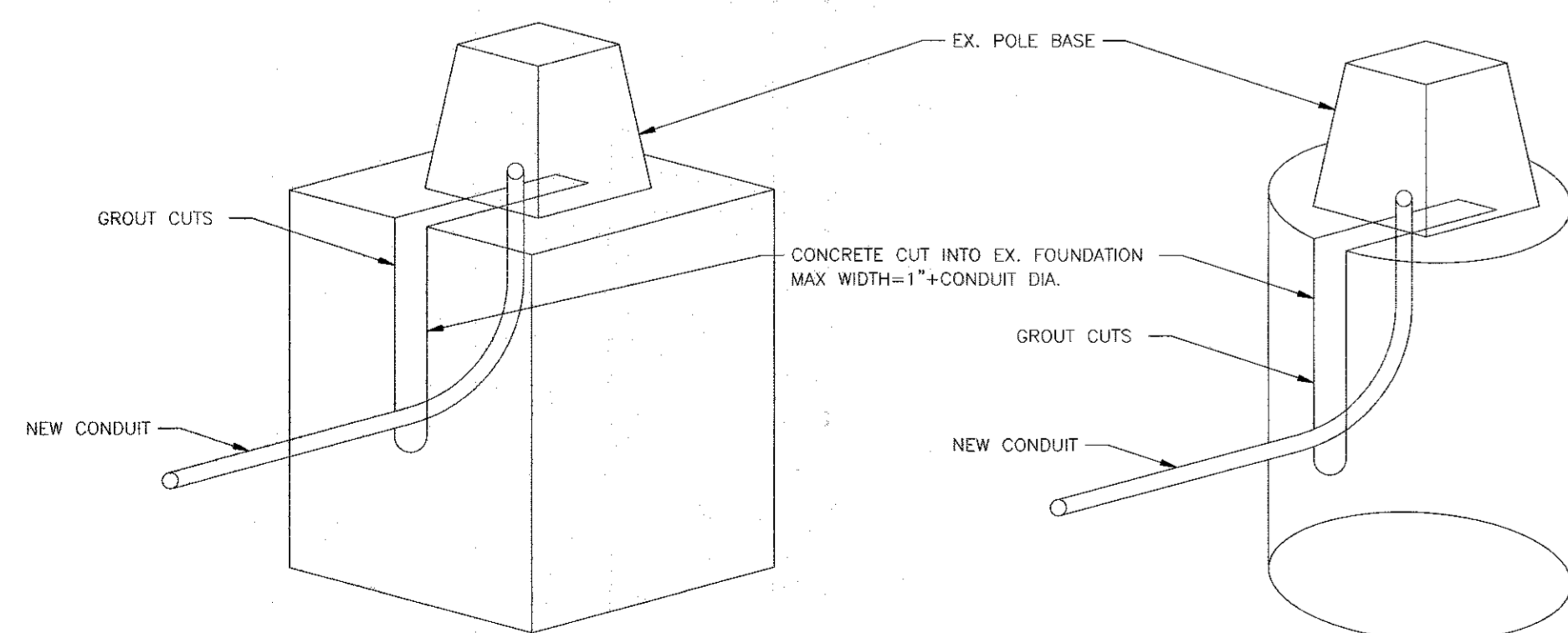
NOTE: MAINTAIN MIN. TRENCH WIDTH REQUIRED TO INSTALL CONDUIT.
CONDUIT PLACEMENT IN TRENCH



UNDERGROUND ENTRY



WEATHERHEAD ENTRY
(TYPICAL)

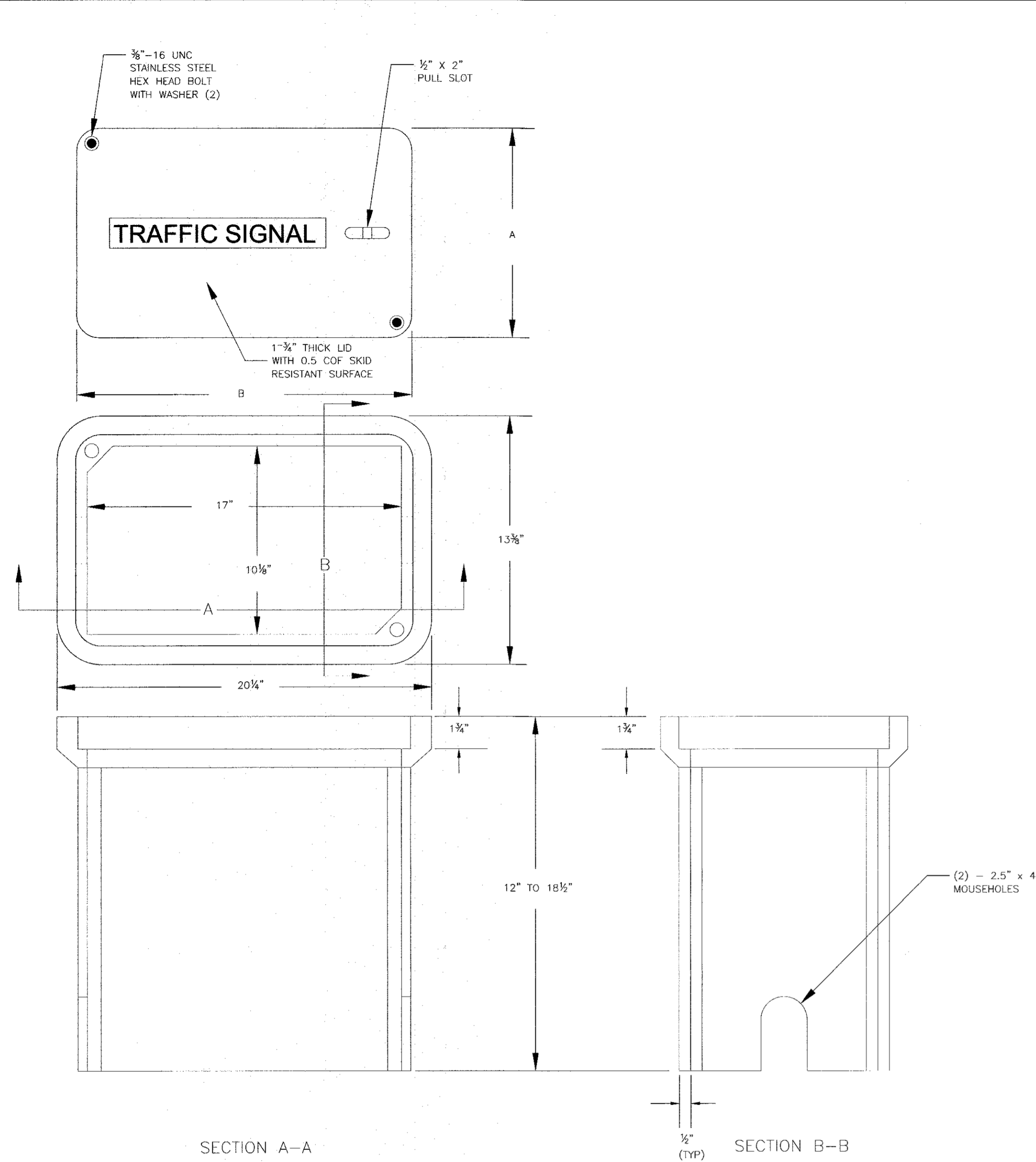


*NOTE: NEW CONDUIT INSTALLATION MUST BE PERFORMED WITHOUT INTERFERING WITH SIGNAL OPERATION
INSTALLATION OF NEW CONDUIT INTO EXISTING PEDESTAL/POLE FOUNDATION

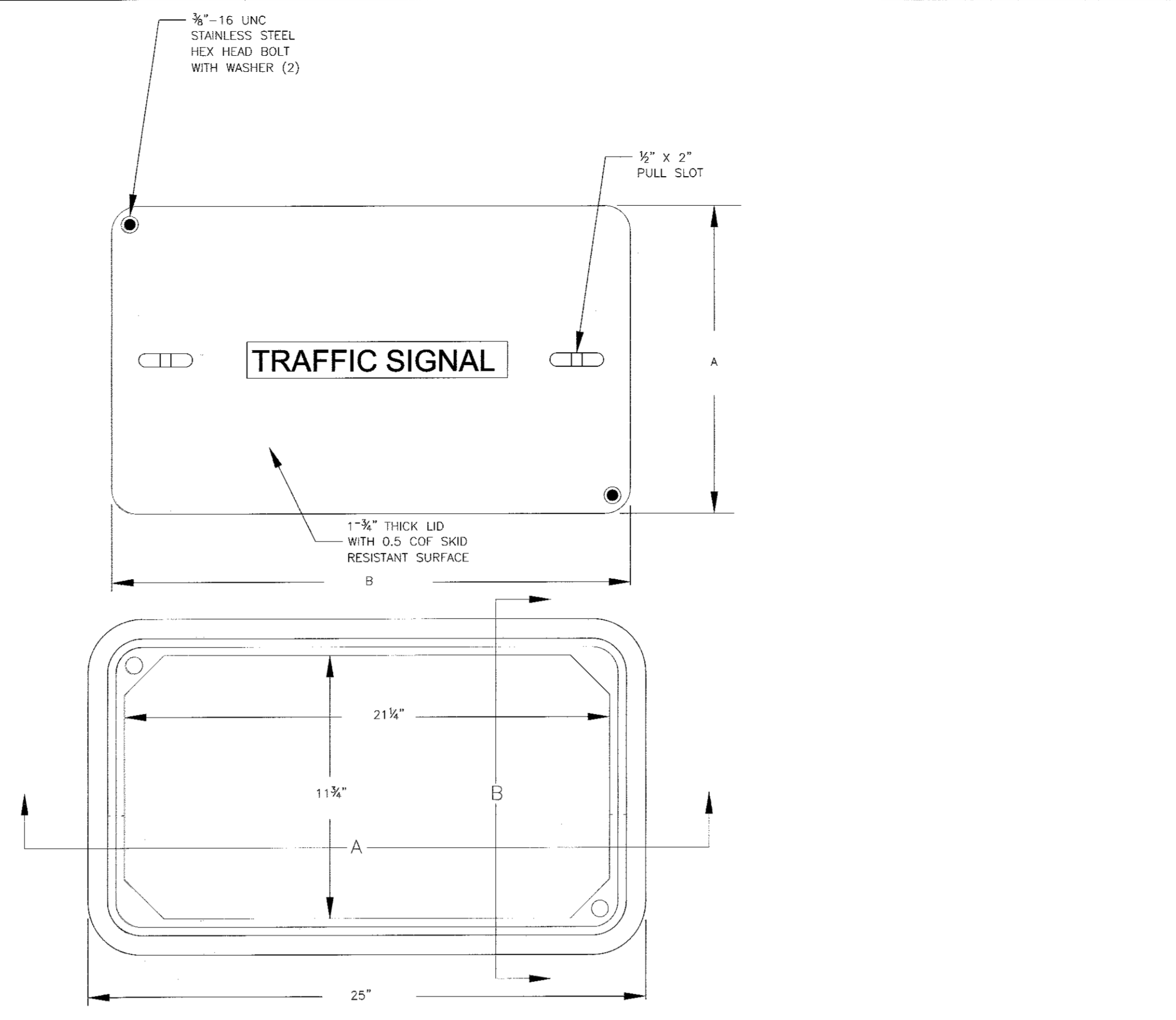
REVISIONS				APPROVED	
NO.	DATE	BY	REMARKS	C.T.E.	C.E.

DIVISION OF ENGINEERING
DESIGN STANDARD
Splicing, Cable, and
Conduit Details

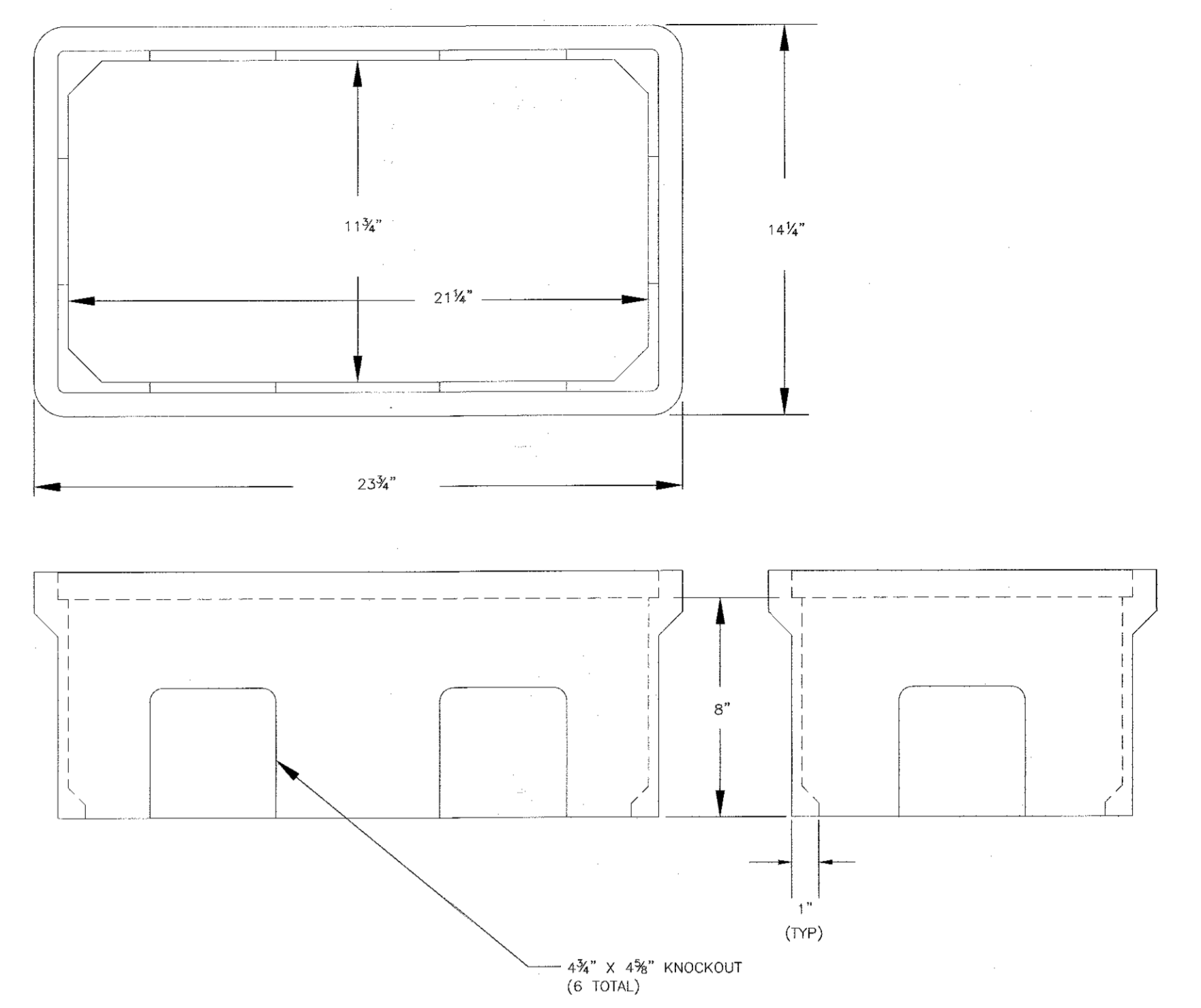
APPROVED BY: MEMPHIS, TENN.
Ronald J. Z...
CITY TRAFFIC ENGINEER DATE: 11/30/22
DATE: 11-17-2022
SCALE: N.T.S.
DRAWN BY: MP
CHECKED BY: RT



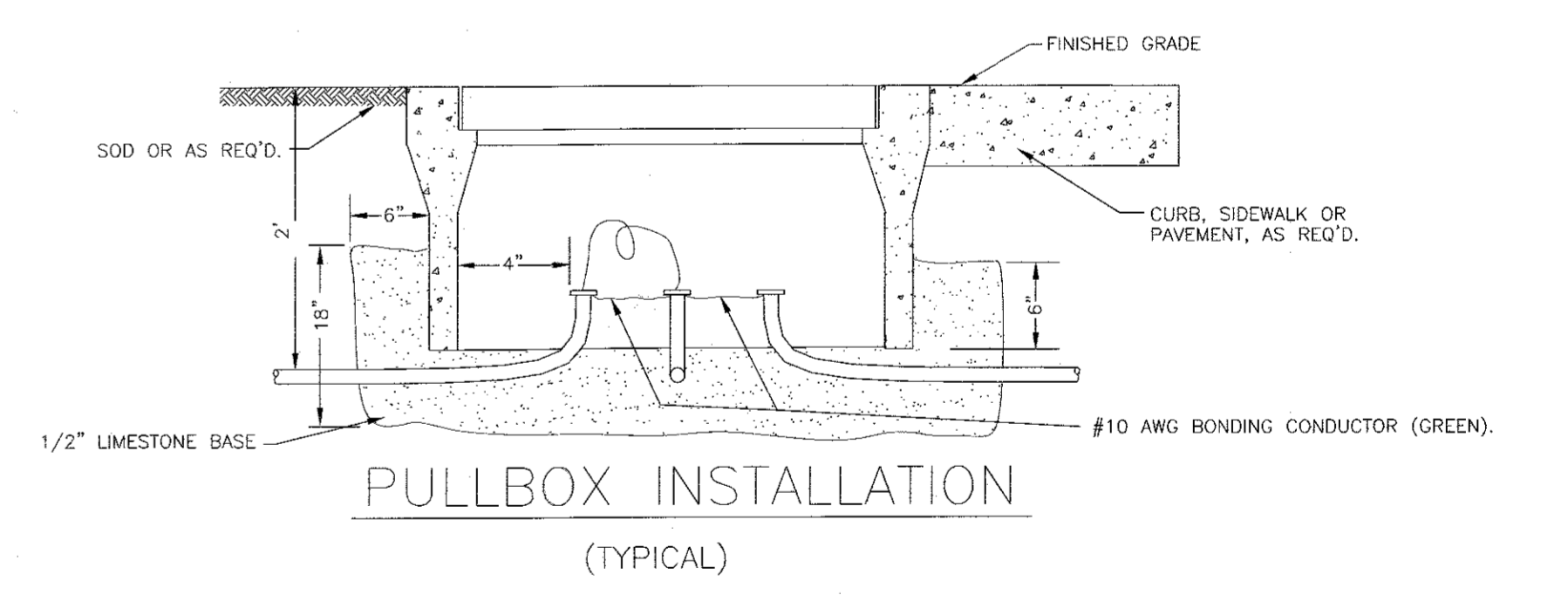
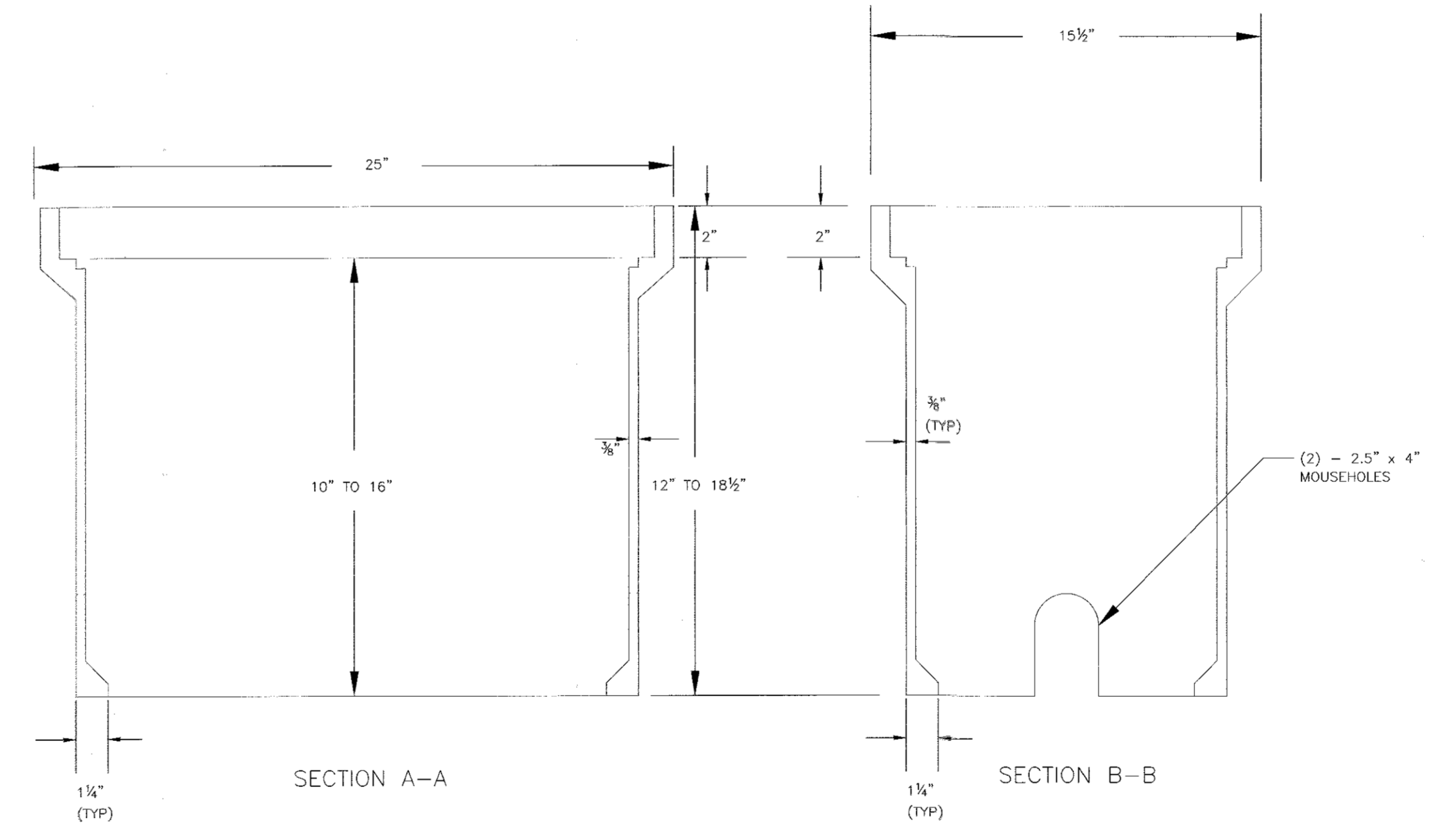
TYPE B PULLBOX



TYPE A PULLBOX



TYPE B BOTTOM EXTENSION



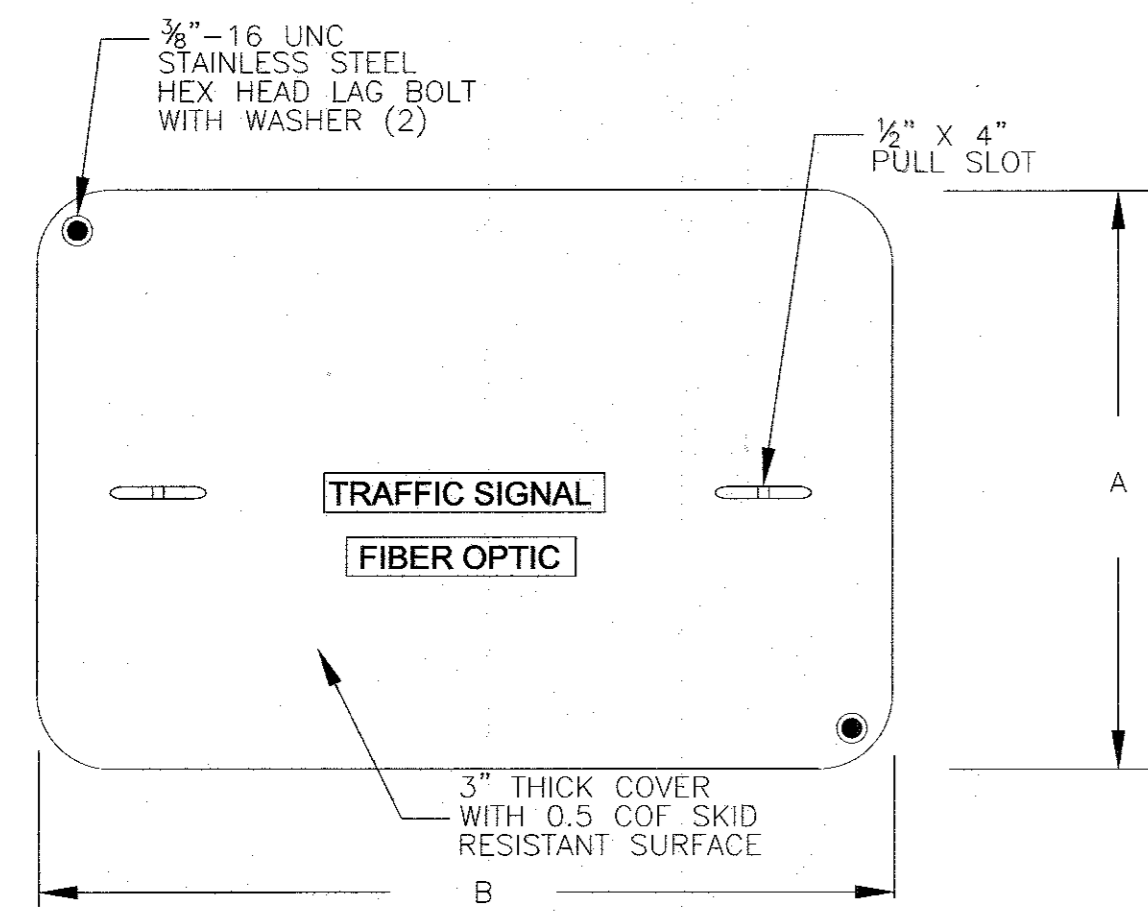
PULLBOX INSTALLATION (TYPICAL)

11" x 18" & 13" x 24" STACKABLE PULLBOX ASSEMBLY

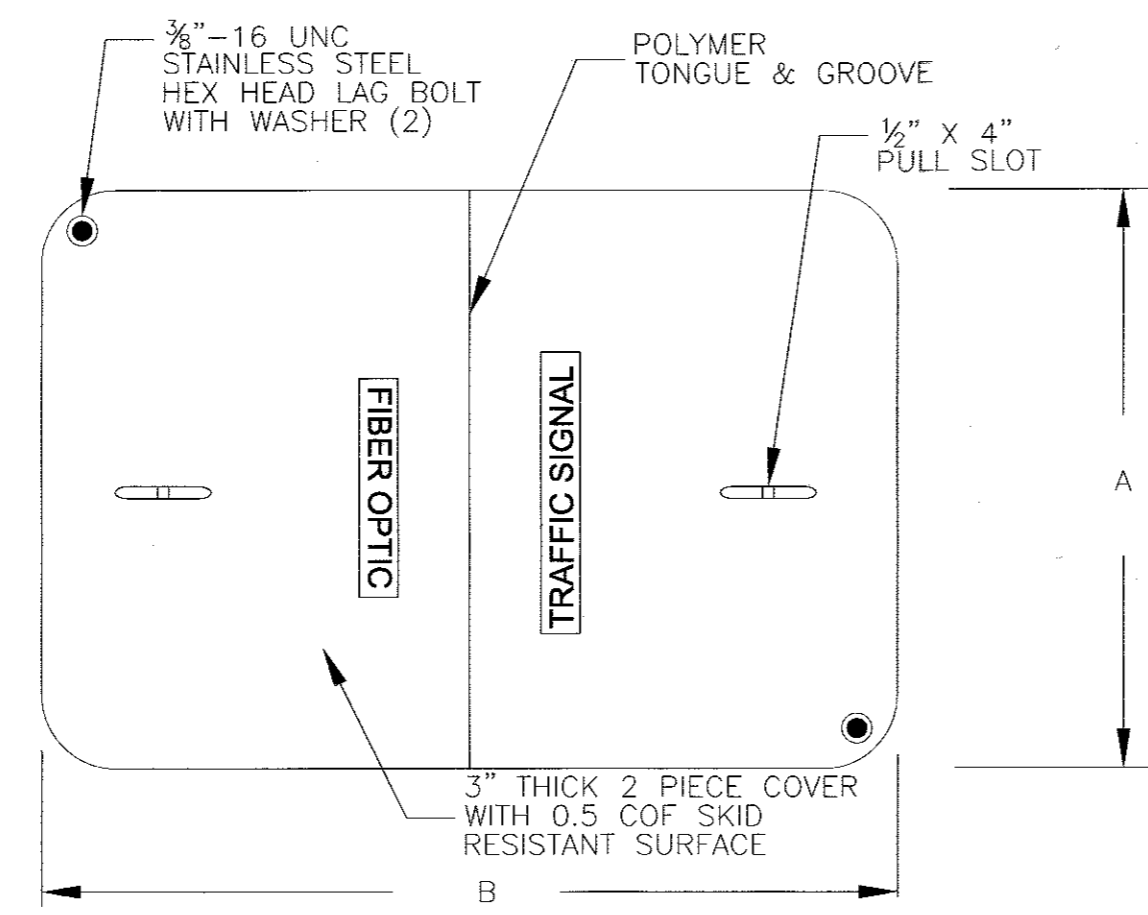
TYPE	A	B
TYPE A	13 3/4"	23 1/4"
TYPE B	11 1/4"	18 1/8"

DIVISION OF ENGINEERING
DESIGN STANDARD
 Traffic Signal Pull Boxes
 Details
 APPROVED BY: MEMPHIS, TENN.
 APPROVED BY: *Randall Johnson* DATE: 11/17/22
 CITY TRAFFIC ENGINEER
 DATE: 11/30/22
 SCALE: N.T.S.
 DRAWN BY: MP
 CHECKED BY: RT

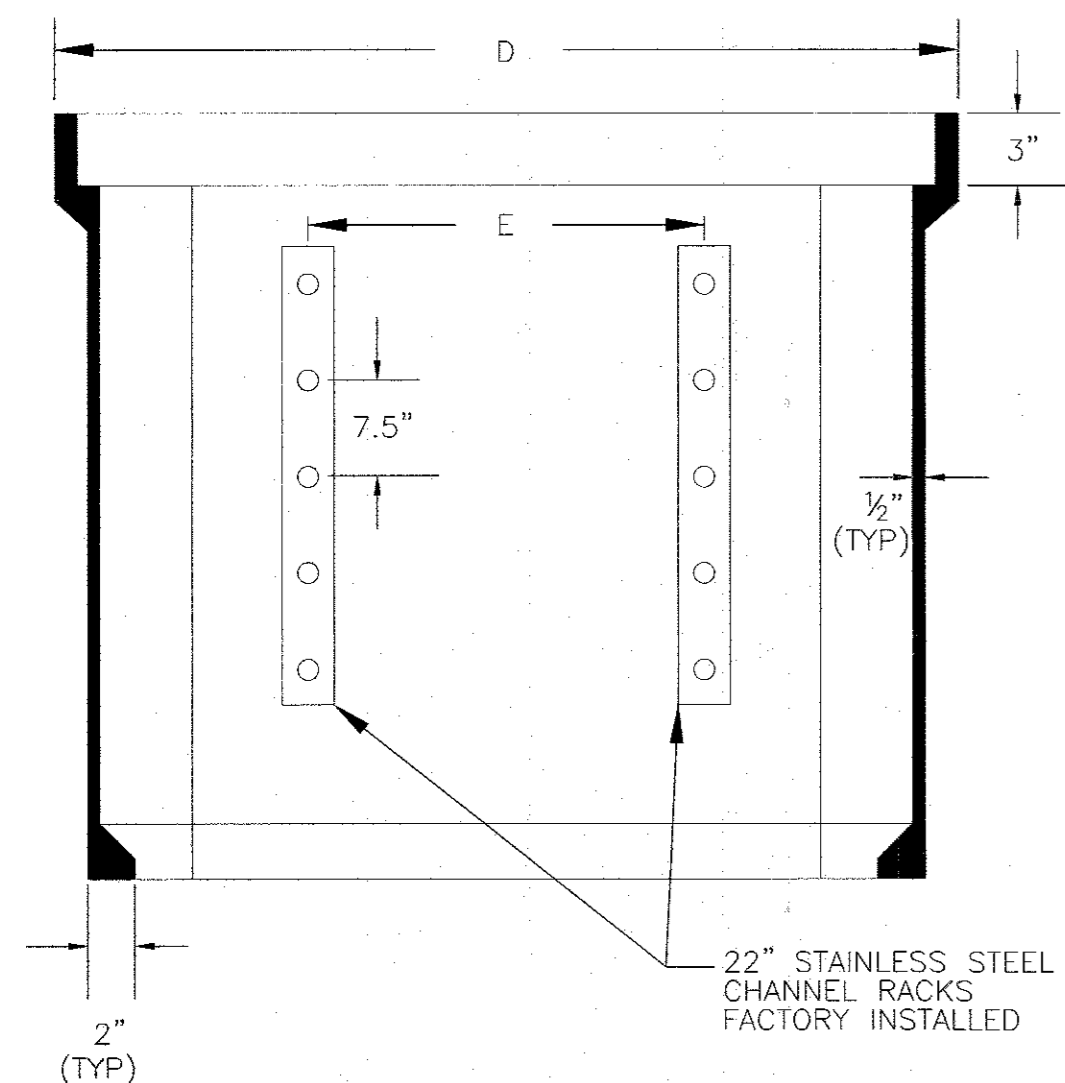
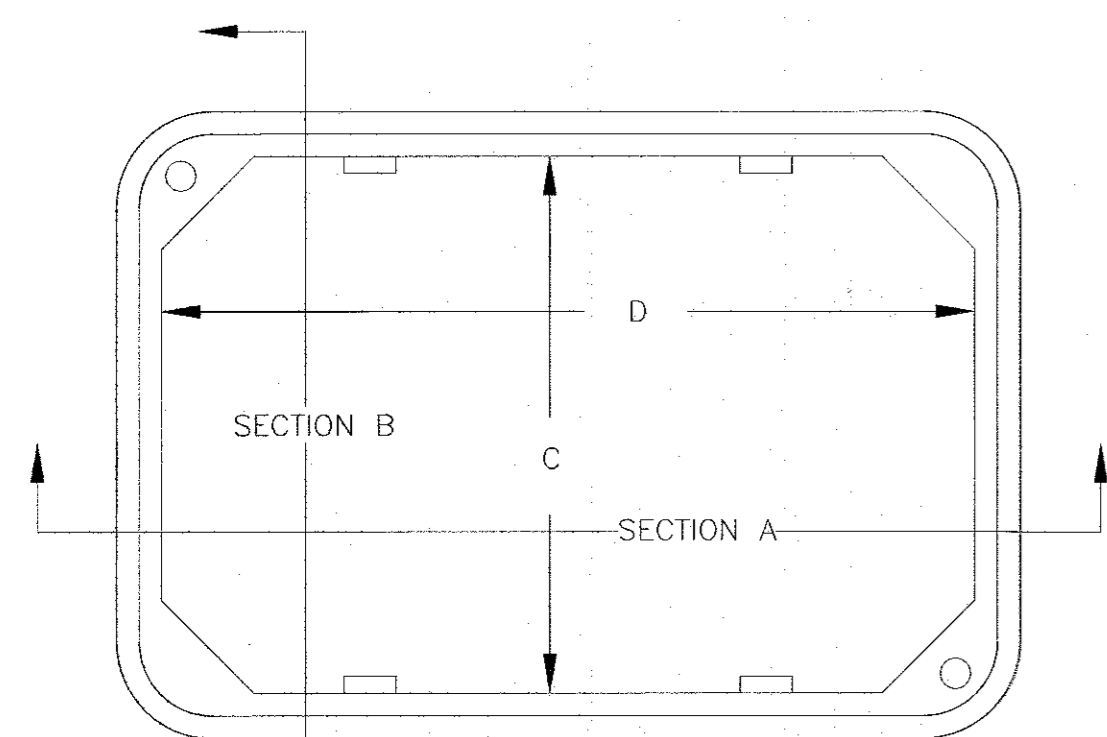
REVISIONS				APPROVED	
NO.	DATE	BY	REMARKS	C.T.E.	C.E.



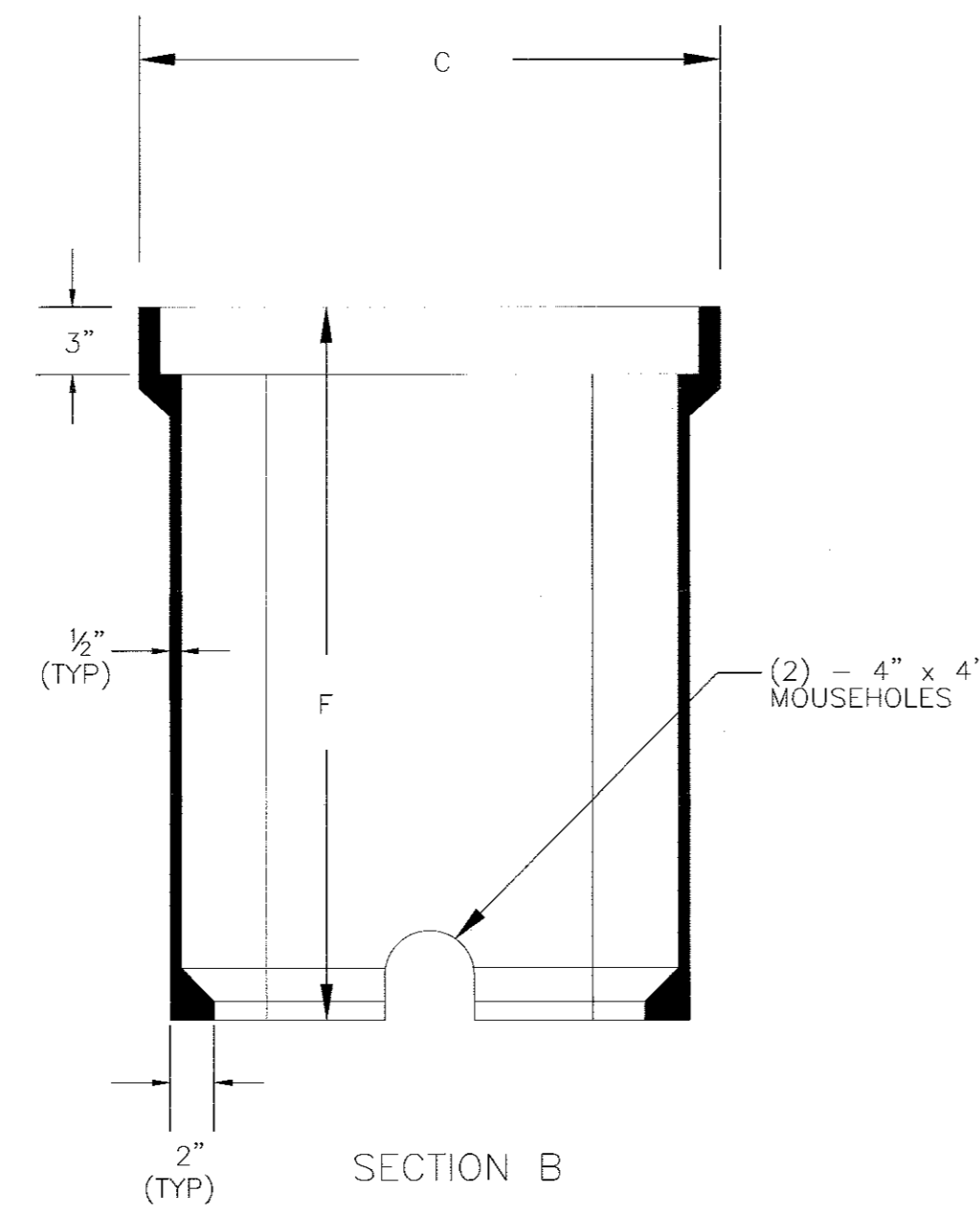
TYPE A PULLBOX LID



TYPE B PULLBOX LID



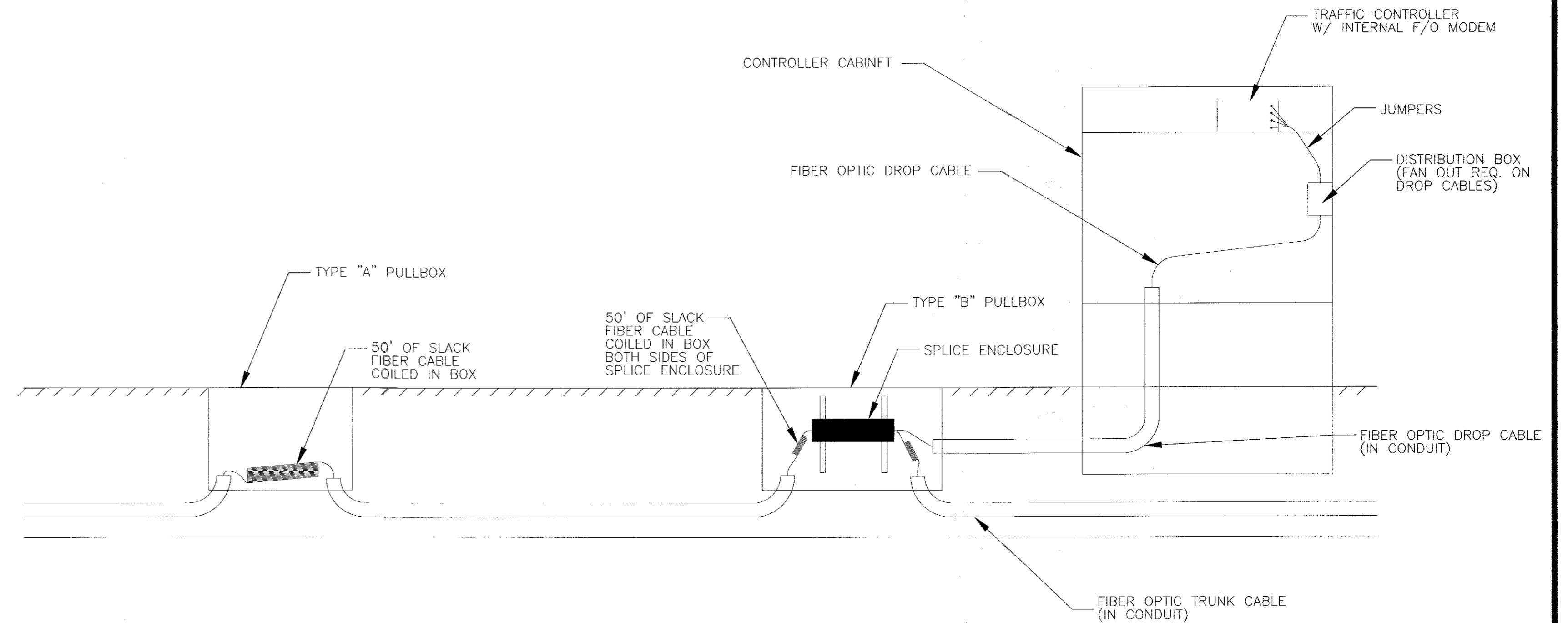
SECTION A



FIBER OPTIC PULLBOX (STACKABLE) ASSEMBLY

24" x 36" PG STYLE (STACKABLE) ASSEMBLY

TYPE	A	B	C	D	E	F
TYPE A	24"	36"	22"	34"	16"	24"
TYPE B	30"	48"	28"	46"	25"	36"



NOTES:

1. NOTCHES SHALL BE PROVIDED FOR REMOVING THE COVER.
2. TYPE "A" BOXES ARE TO BE USED WHEN NO SPLICING IS REQUIRED.
3. TYPE "B" BOXES ARE TO BE USED WHEN SPLICING IS REQUIRED WITHIN THE PULLBOX OR FOR FUTURE USE AT A TRAFFIC SIGNAL.
4. IF NEEDED, STACKABLE BOTTOM EXTENDERS MAY BE USED. SIZE AND MATERIAL TO MATCH PROPOSED PULLBOX TYPE AND CITY SPECIFICATIONS.
5. REFER TO CONTROLLER CABINET AND RISER INSTALLATION DETAILS, SHEET 1, FOR POLE MOUNTED CABINET ENTRY. USE 90 DEGREE SWEEP PIPES FOR FIBER CABLE.

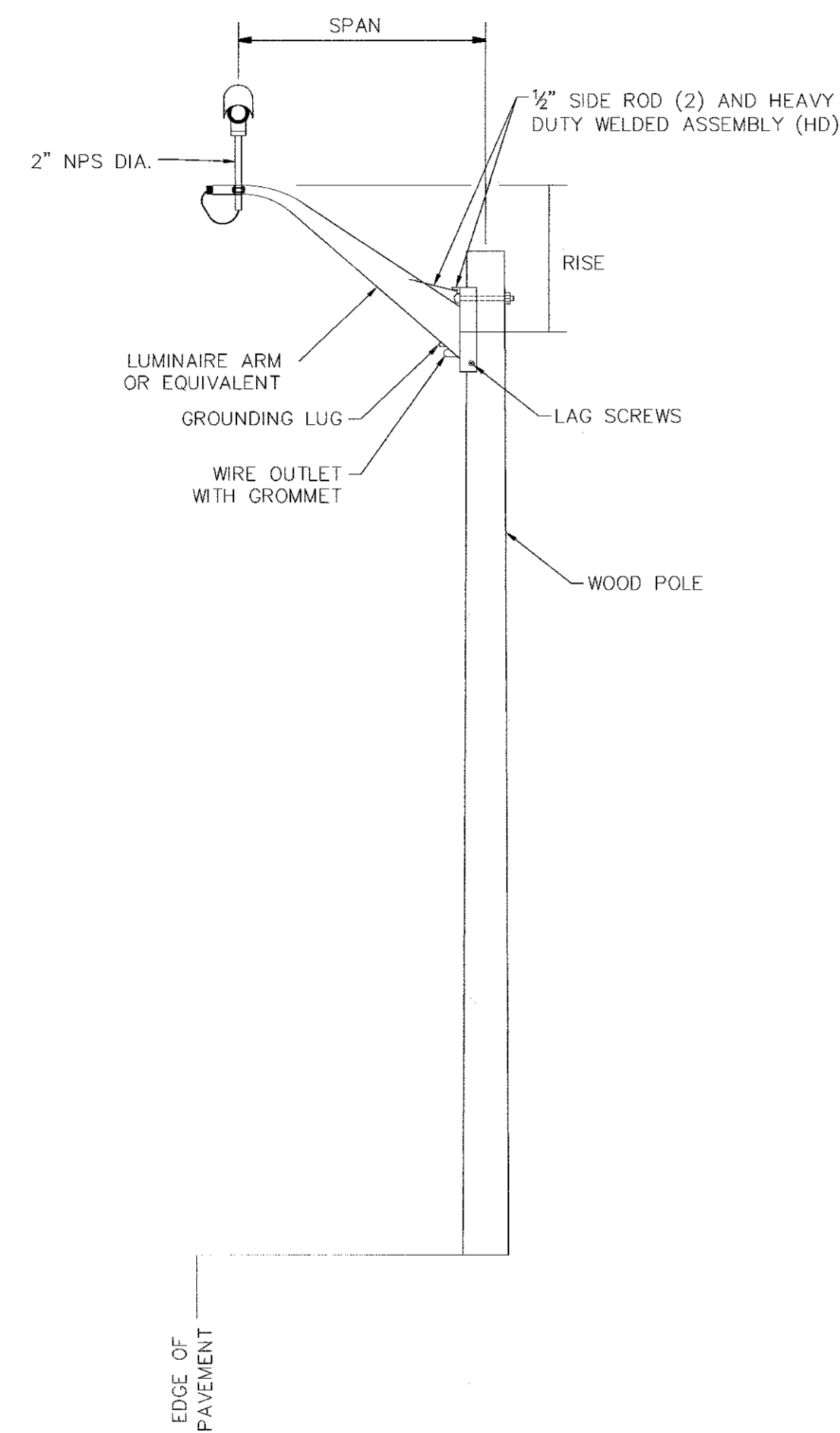
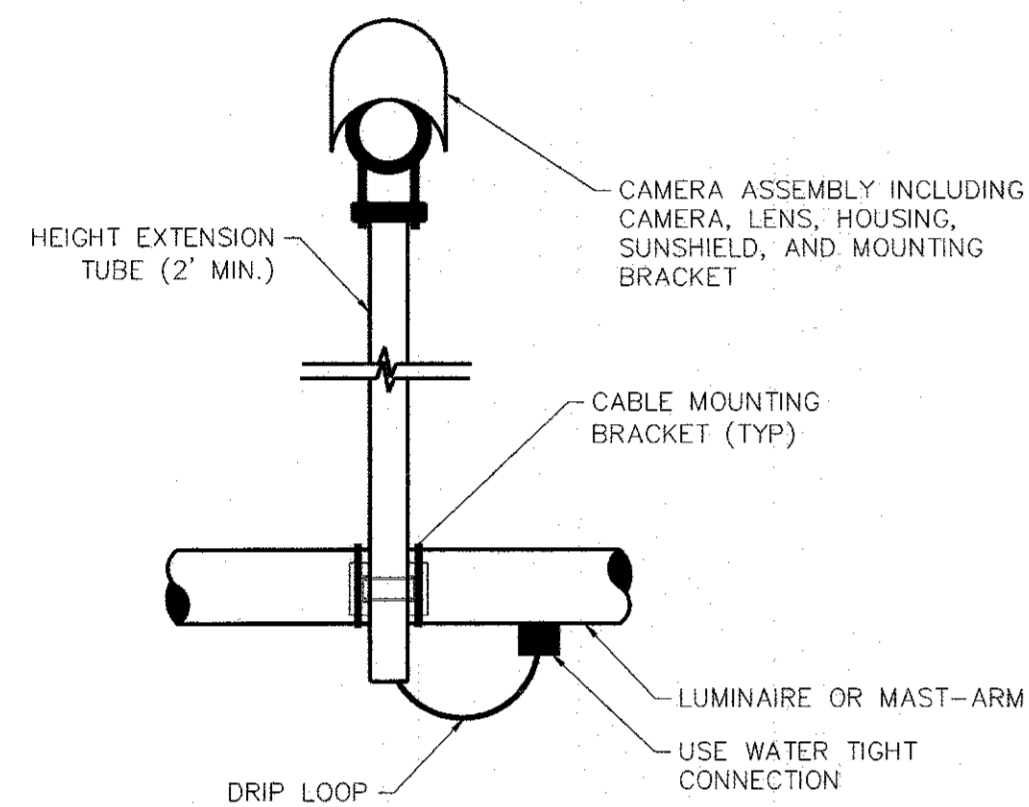
REVISIONS				APPROVED	
NO.	DATE	BY	REMARKS	C.T.E.	C.E.

DIVISION OF ENGINEERING
DESIGN STANDARD
Fiber Optic Pull Box Details

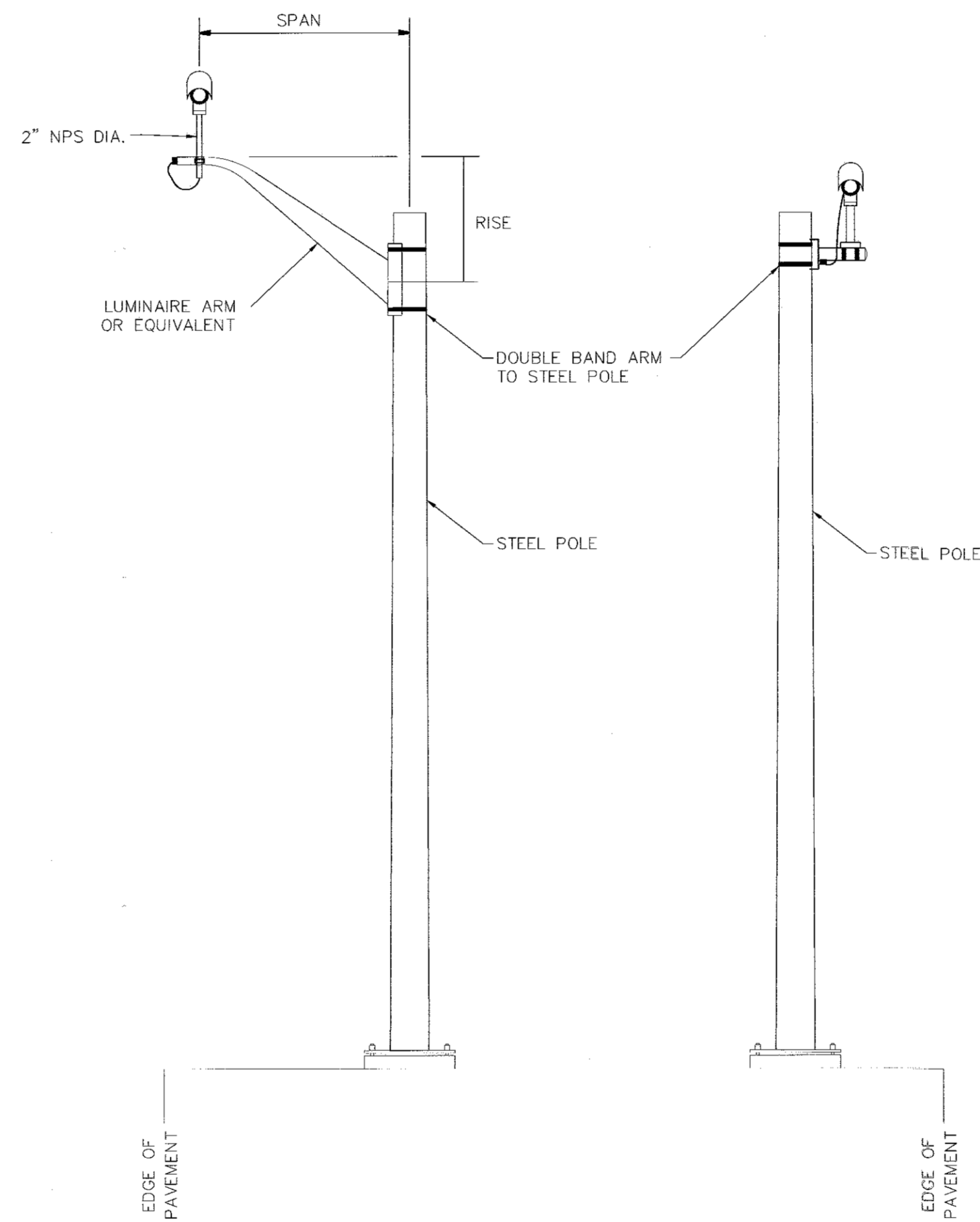
APPROVED BY: _____ MEMPHIS, TENN.
DATE: 11/22/22
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LUMINAIRE DIMENSIONS

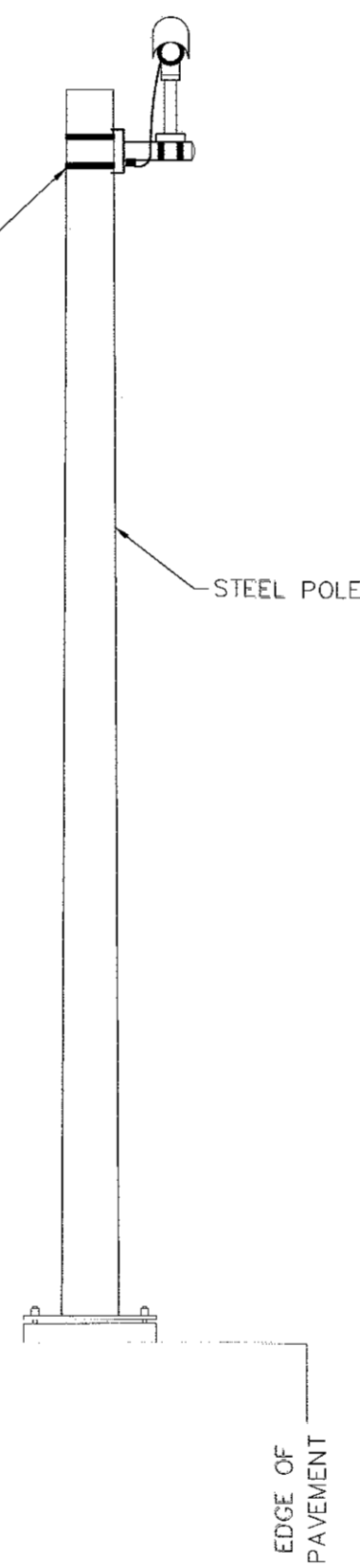
SIZE	SPAN	RISE
12' STANDARD	138"	46"
12' HEAVY DUTY	138"	46"
14' HEAVY DUTY	162"	46"
16' HEAVY DUTY	192"	46"



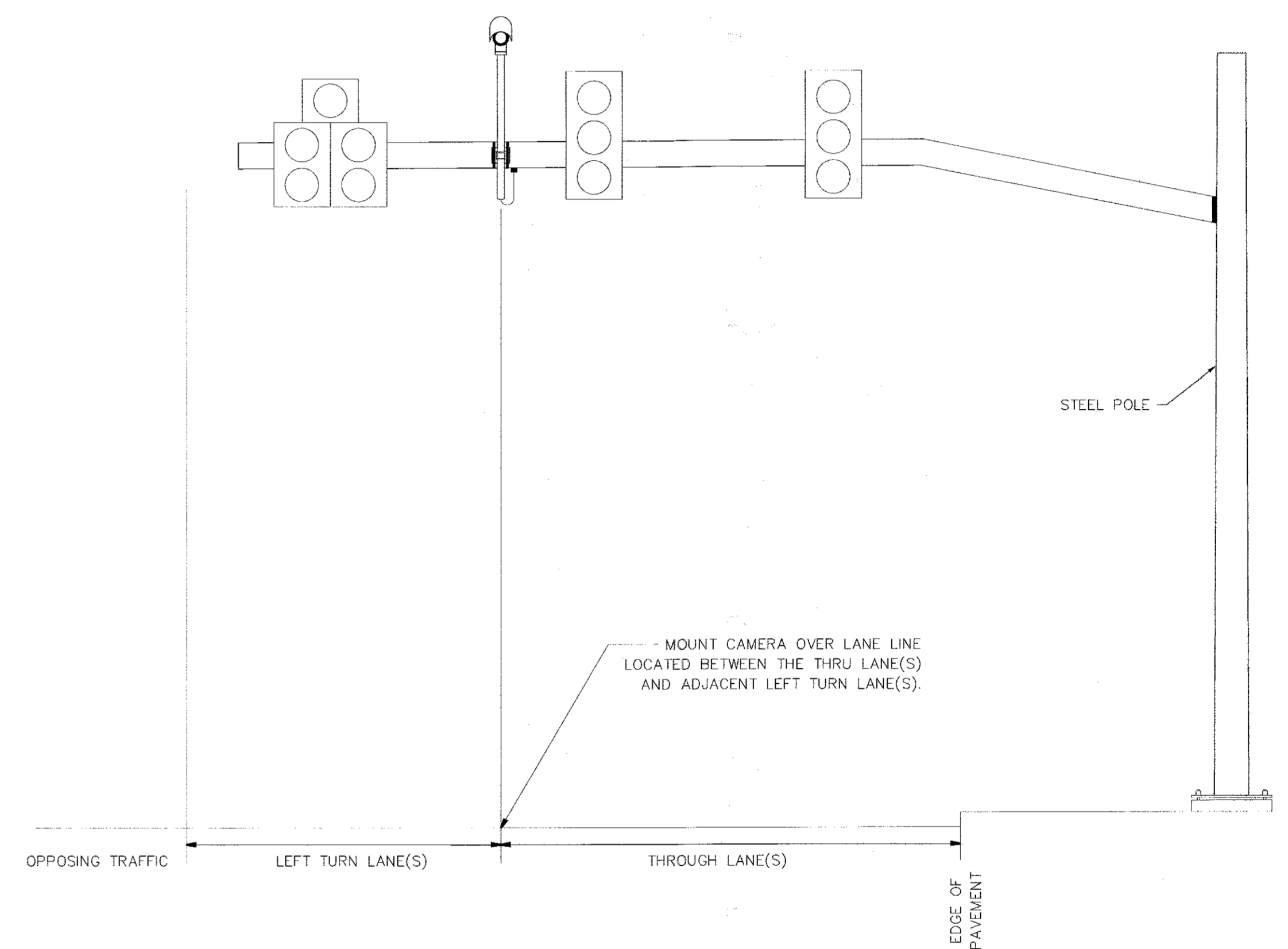
TYPE 1 MOUNT



TYPE 2 MOUNT



TYPE 3 MOUNT



TYPE 4 MOUNT

VIDEO DETECTION CAMERA MOUNTING NOTES:

1. WHEN AIMING CAMERA, HORIZON SHALL NOT BE VISIBLE IN THE FIELD OF VIEW.
2. CAMERA ENCLOSURE ASSEMBLY SHALL BE ROTATABLE AFTER INSTALLATION TO PROVIDE PROPER ALIGNMENT.
3. VIDEO CABLE SHALL BE APPROVED BY CITY OF MEMPHIS BEFORE INSTALLATION.
4. SUNSHIELD SHALL BE EXTENDED TO THE MAXIMUM EXTENT WITHOUT BEING IN THE CAMERA FIELD OF VIEW.
5. COMBINATION VIDEO/RADAR DETECTORS CAN ONLY BE INSTALLED ON MAST-ARMS AND SHALL BE MOUNTED PER MANUFACTURER'S RECOMMENDATIONS.

VIDEO DETECTION CAMERA MOUNTING DETAILS

REVISIONS				APPROVED	
NO.	DATE	BY	REMARKS	C.T.E.	C.E.

DIVISION OF ENGINEERING

DESIGN STANDARD

Camera Mounting Details

APPROVED BY: _____ DATE: 11-17-2022

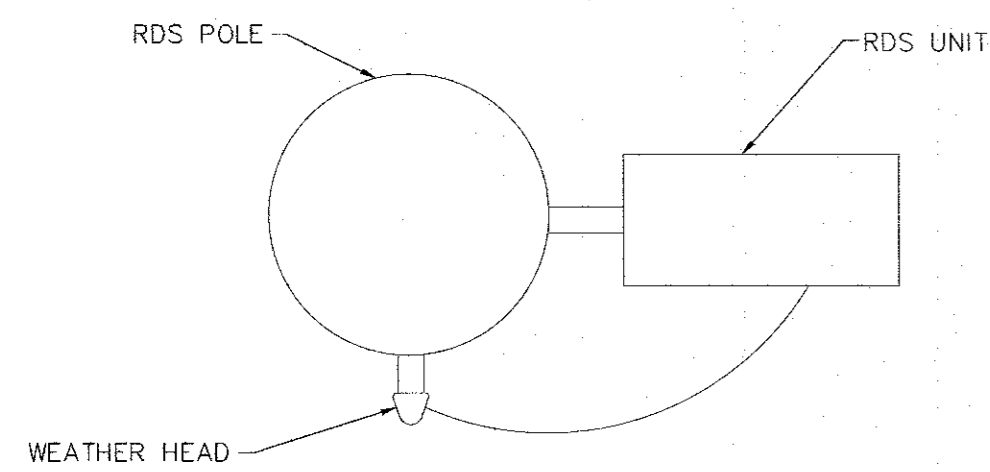
CITY TRAFFIC ENGINEER: *Randa O'Zell* DATE: 11/17/22

CITY ENGINEER: *WJ* DATE: 11/30/22

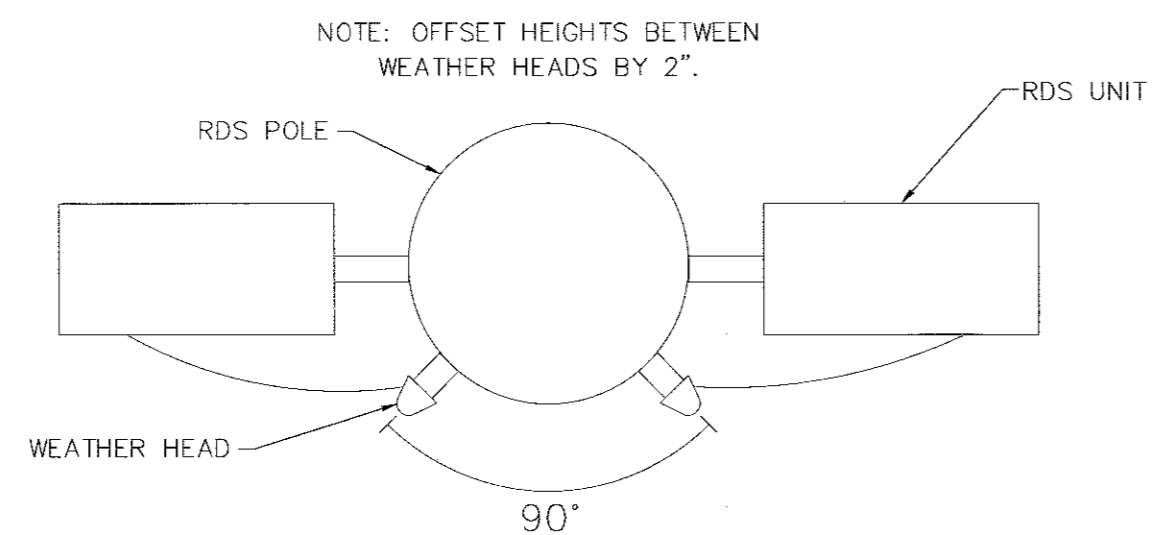
SCALE: N.T.S.

DRAWN BY: MP

CHECKED BY: RT

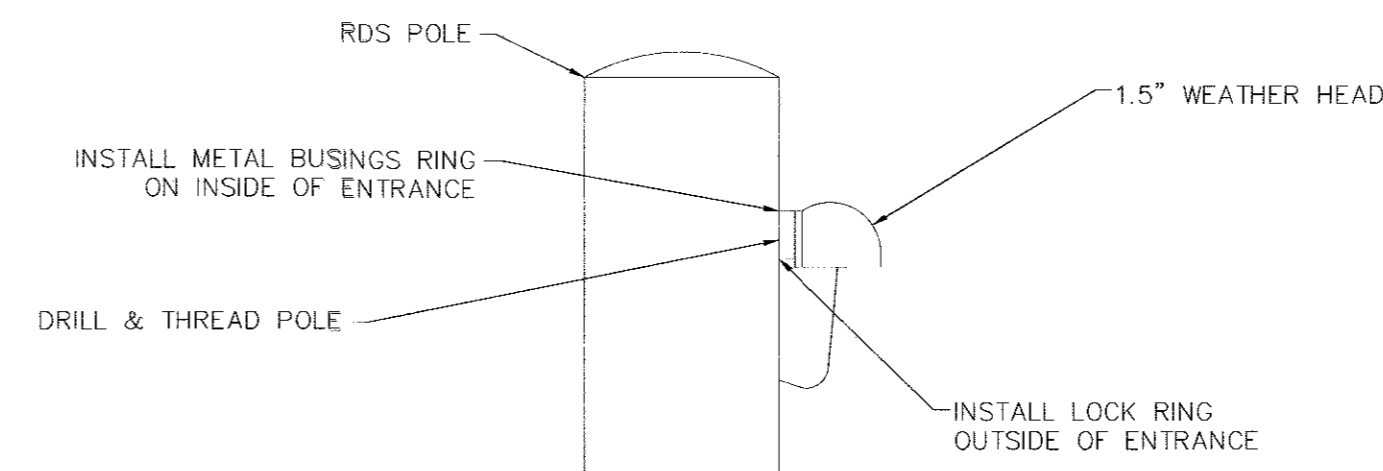


CASE 1: SINGLE RDS UNIT ON POLE



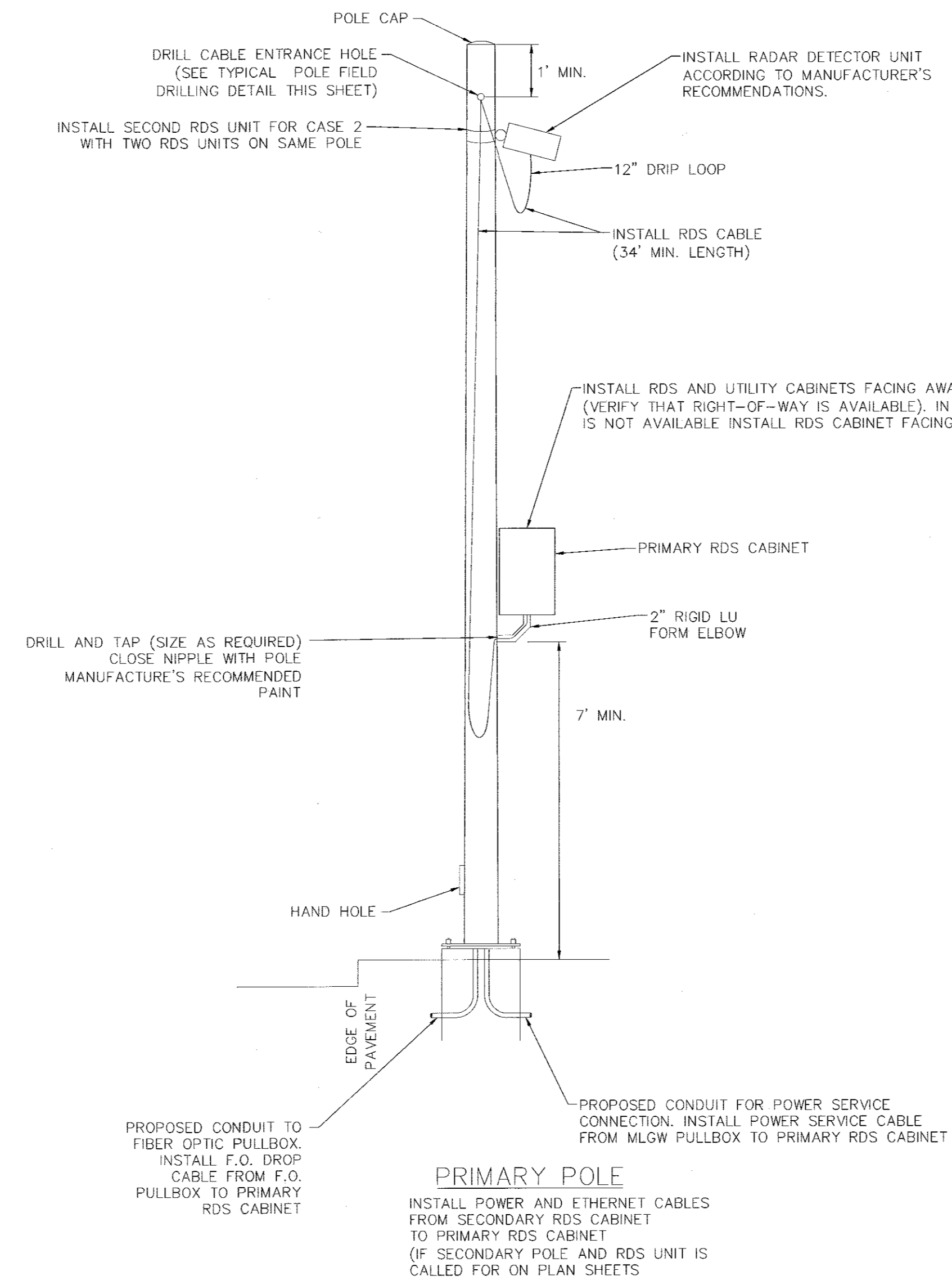
CASE 2: TWO RDS UNITS ON POLE

WEATHER HEAD LOCATION DETAIL (PLAN VIEW)

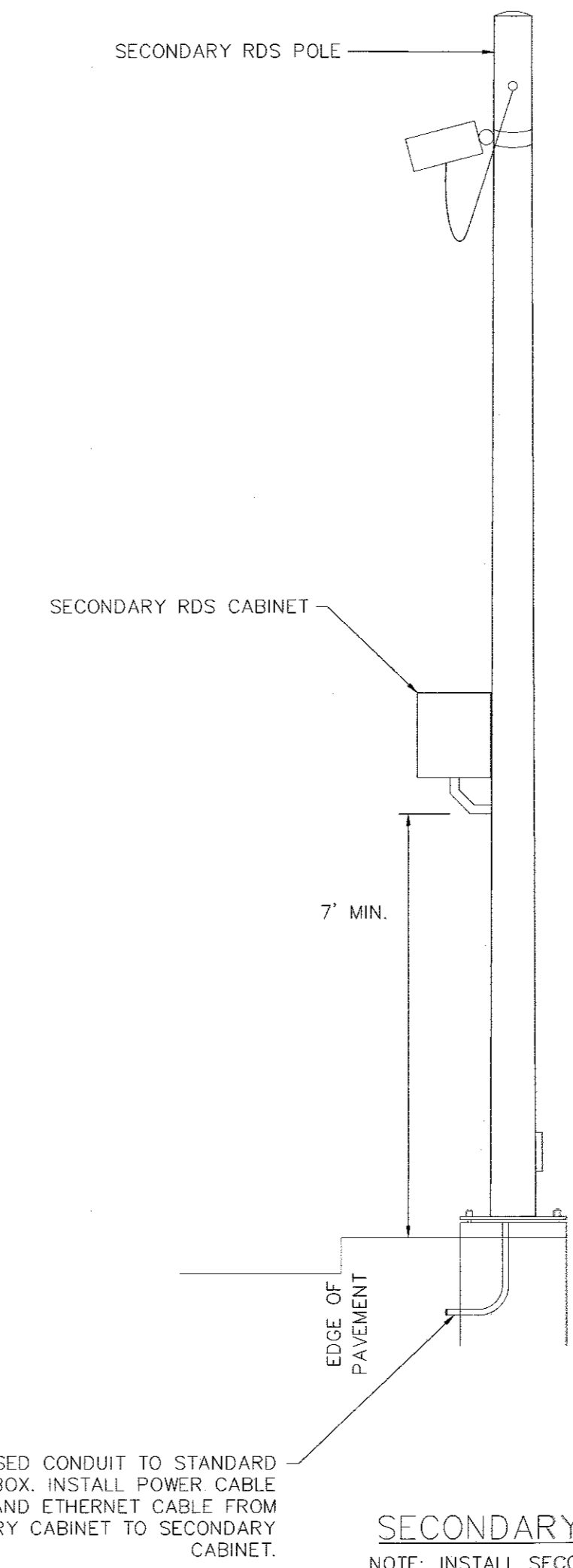


NOTE: SEE WEATHER HEAD LOCATION DETAIL FOR POSITIONING OF WEATHER HEAD(S) RELATIVE TO THE RDS UNITS.

TYPICAL POLE FIELD DRILLING DETAIL



PRIMARY POLE
 INSTALL POWER AND ETHERNET CABLES FROM SECONDARY RDS CABINET TO PRIMARY RDS CABINET (IF SECONDARY POLE AND RDS UNIT IS CALLED FOR ON PLAN SHEETS)



SECONDARY POLE
 NOTE: INSTALL SECONDARY RDS POLE AS NEEDED FOR PLAN SHEETS.

TYPICAL RADAR DETECTION SYSTEM (RDS) ON NEW 20' ALUMINUM PEDESTAL POLE

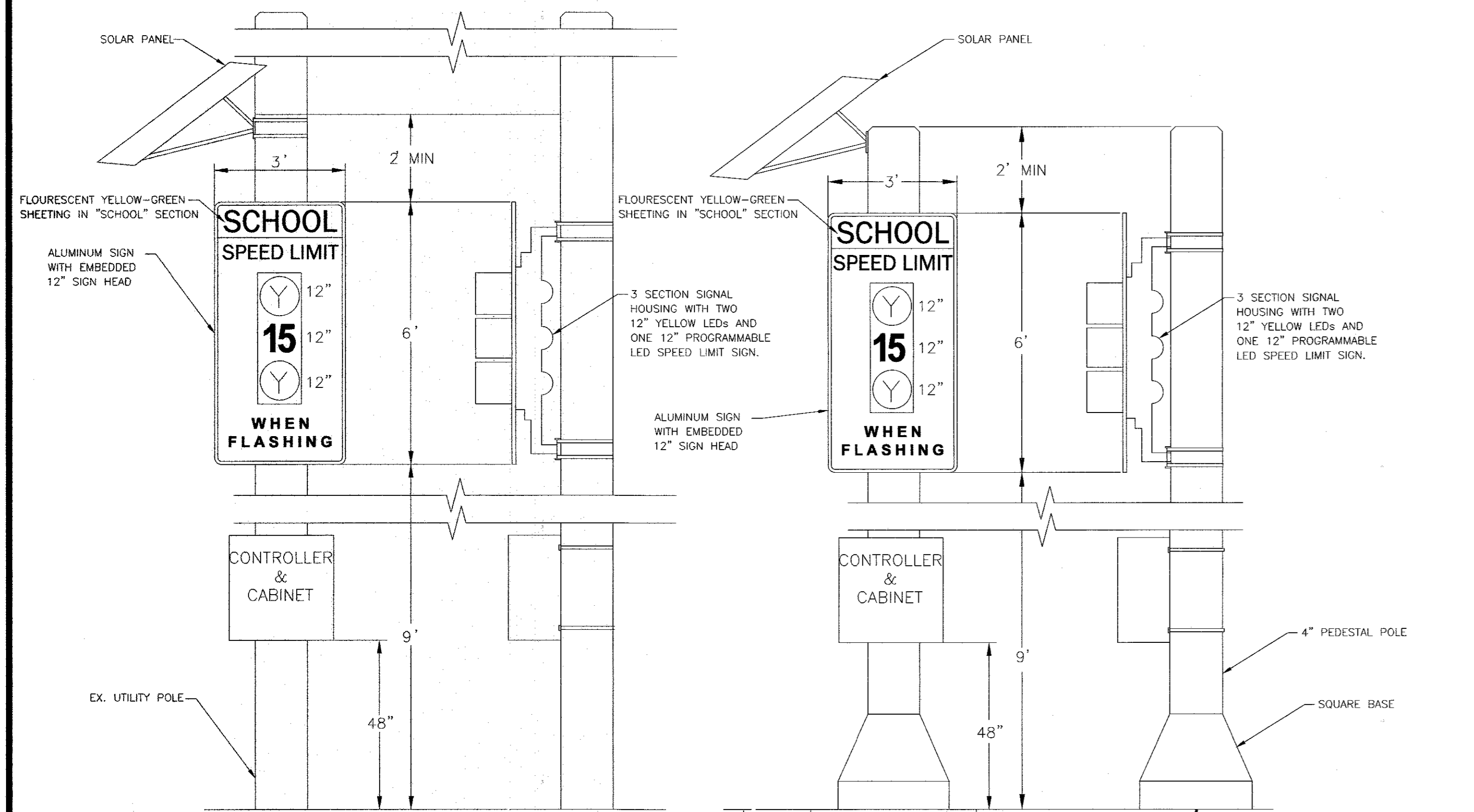
NOTES

1. REFER TO MANUFACTURER SPECIFICATIONS FOR INSTALLATION AND OPERATION REQUIREMENTS.
2. REFER TO CITY STANDARDS FOR FOUNDATION AND CONDUIT INSTALLATION.
3. COORDINATE WITH MLGW FOR ELECTRIC SERVICE.

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NO.	DATE	BY	REMARKS	C.T.E.	C.E.

DIVISION OF ENGINEERING
DESIGN STANDARD
 RDS Mounting Details

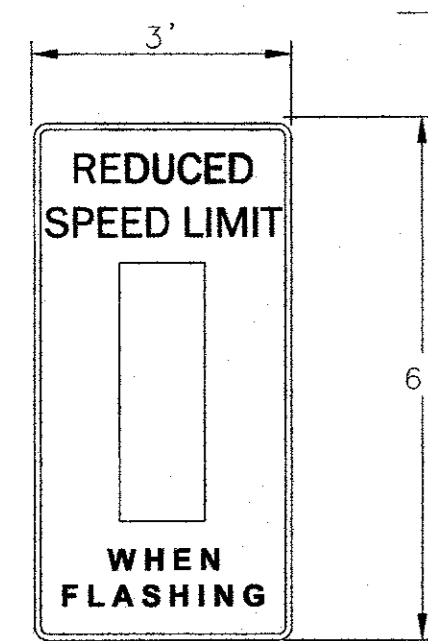
APPROVED BY: _____ MEMPHIS, TENN.
 DATE: 11/29/22
 SCALE: N.T.S.
 DRAWN BY: MP
 CHECKED BY: RT



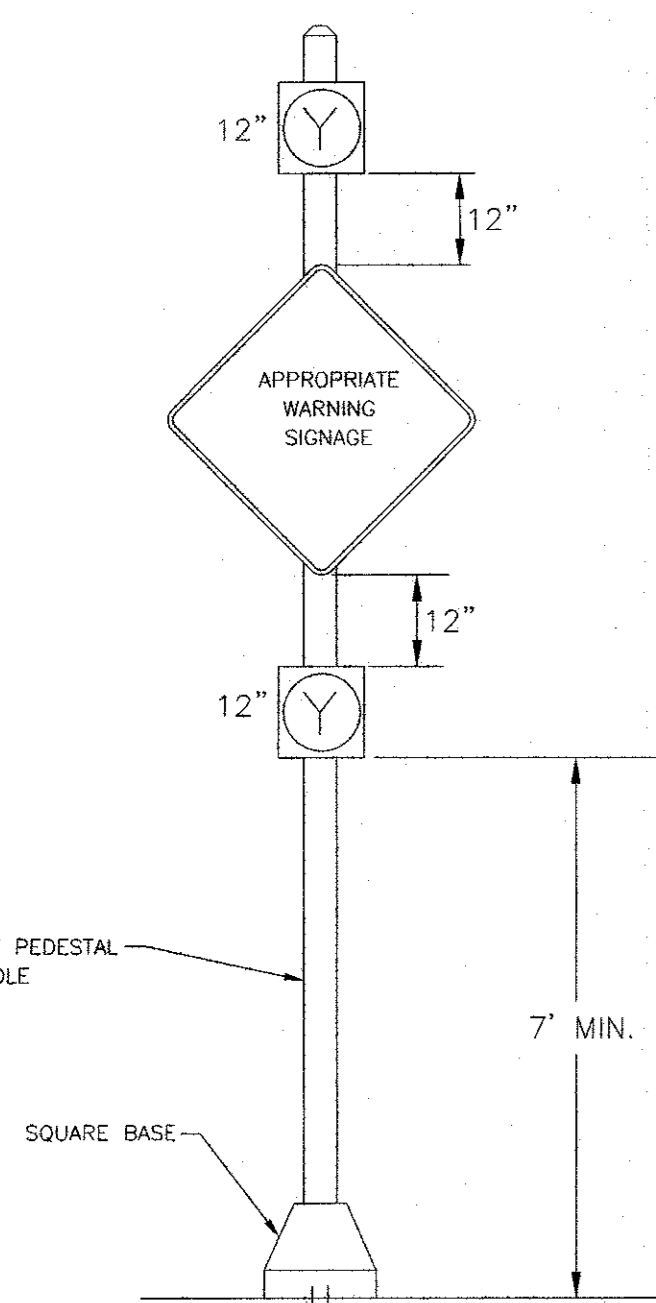
EX. UTILITY POLE MOUNTING

17' PEDESTAL MOUNTING

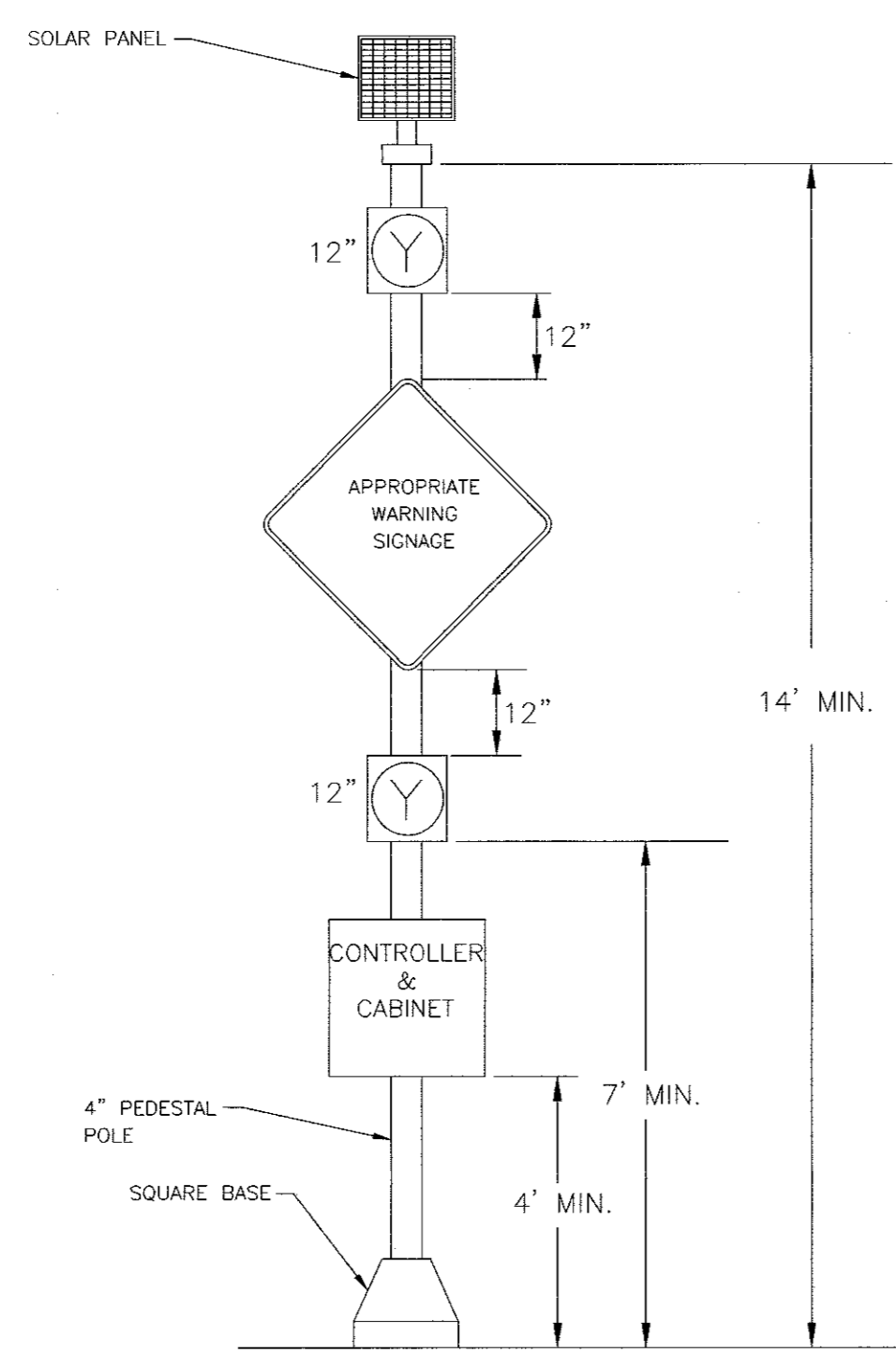
SCHOOL (REDUCED SPEED) FLASHER ASSEMBLY



REDUCED SPEED ZONE SIGN

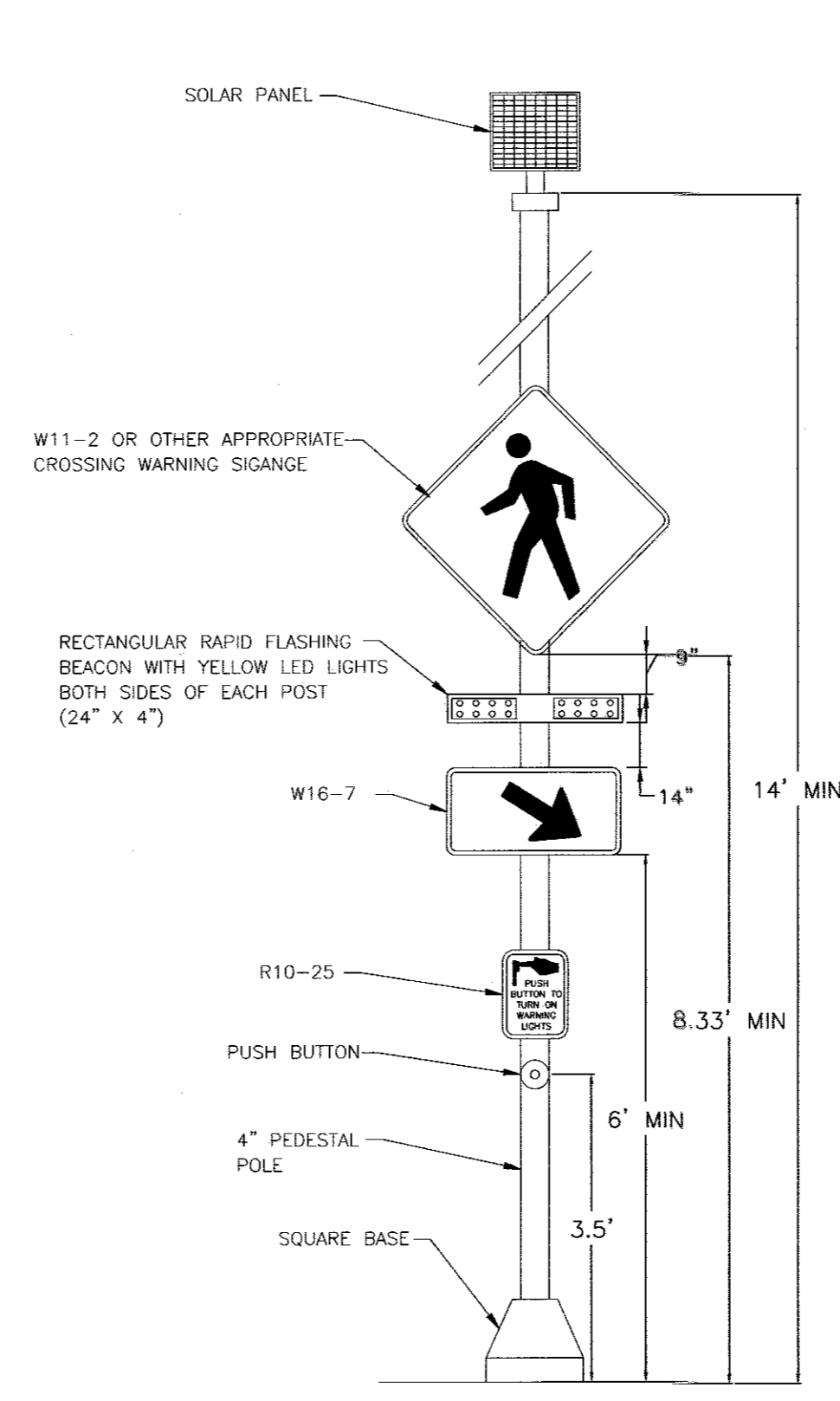


SEE SCHOOL FLASHER DETAIL FOR FOUNDATION OPTIONS

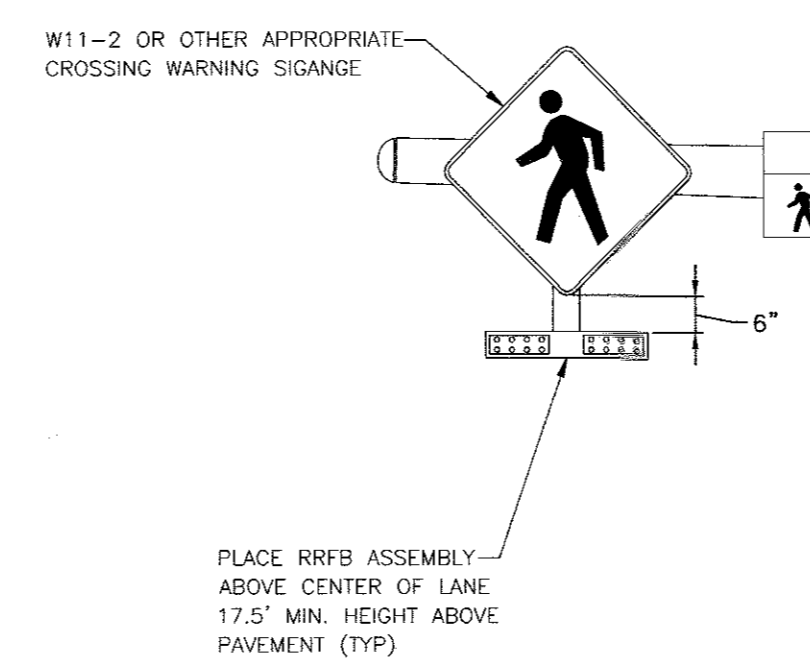


SEE SCHOOL FLASHER DETAIL FOR FOUNDATION OPTIONS

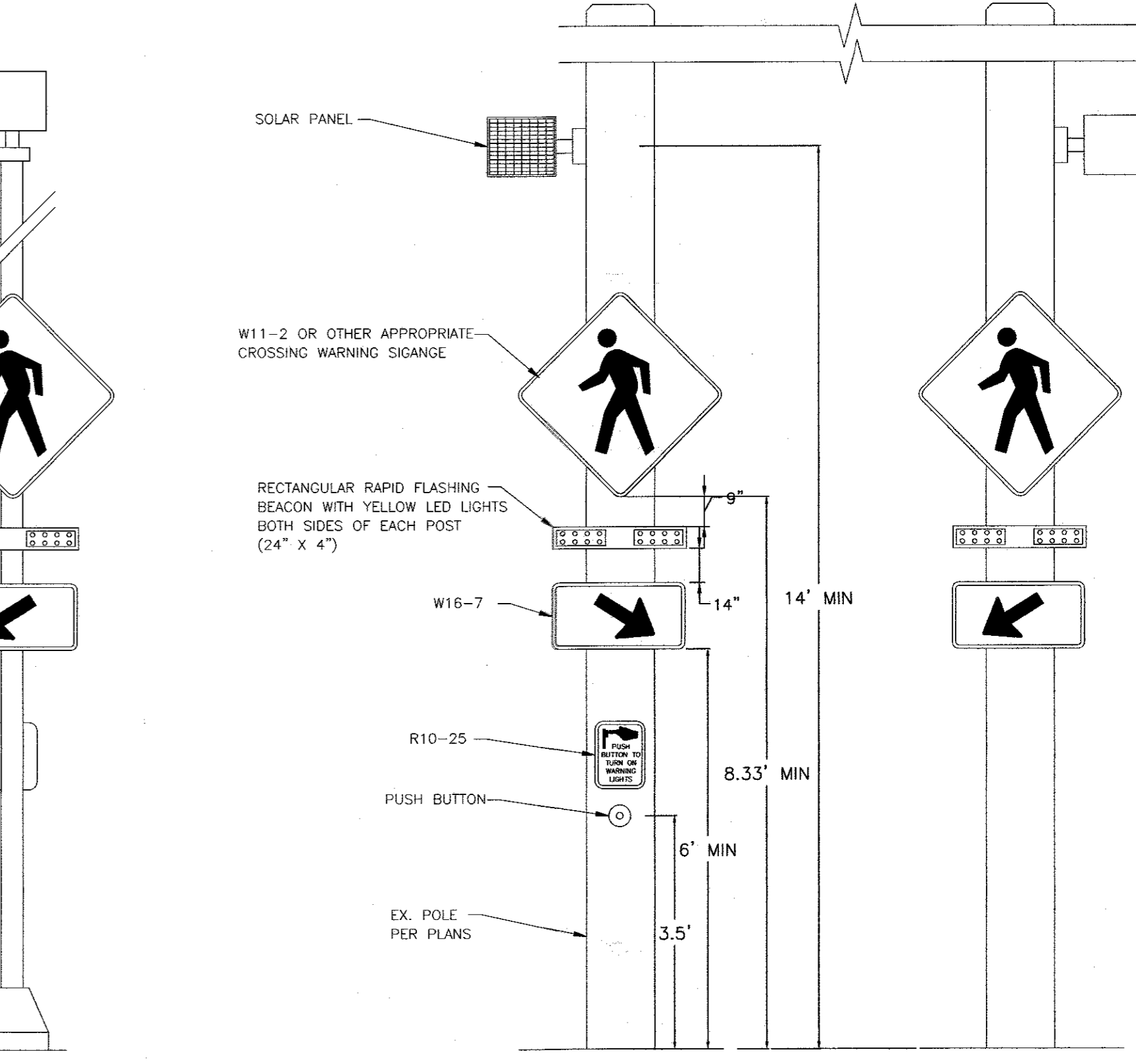
WARNING BEACON



17' PEDESTAL MOUNTING

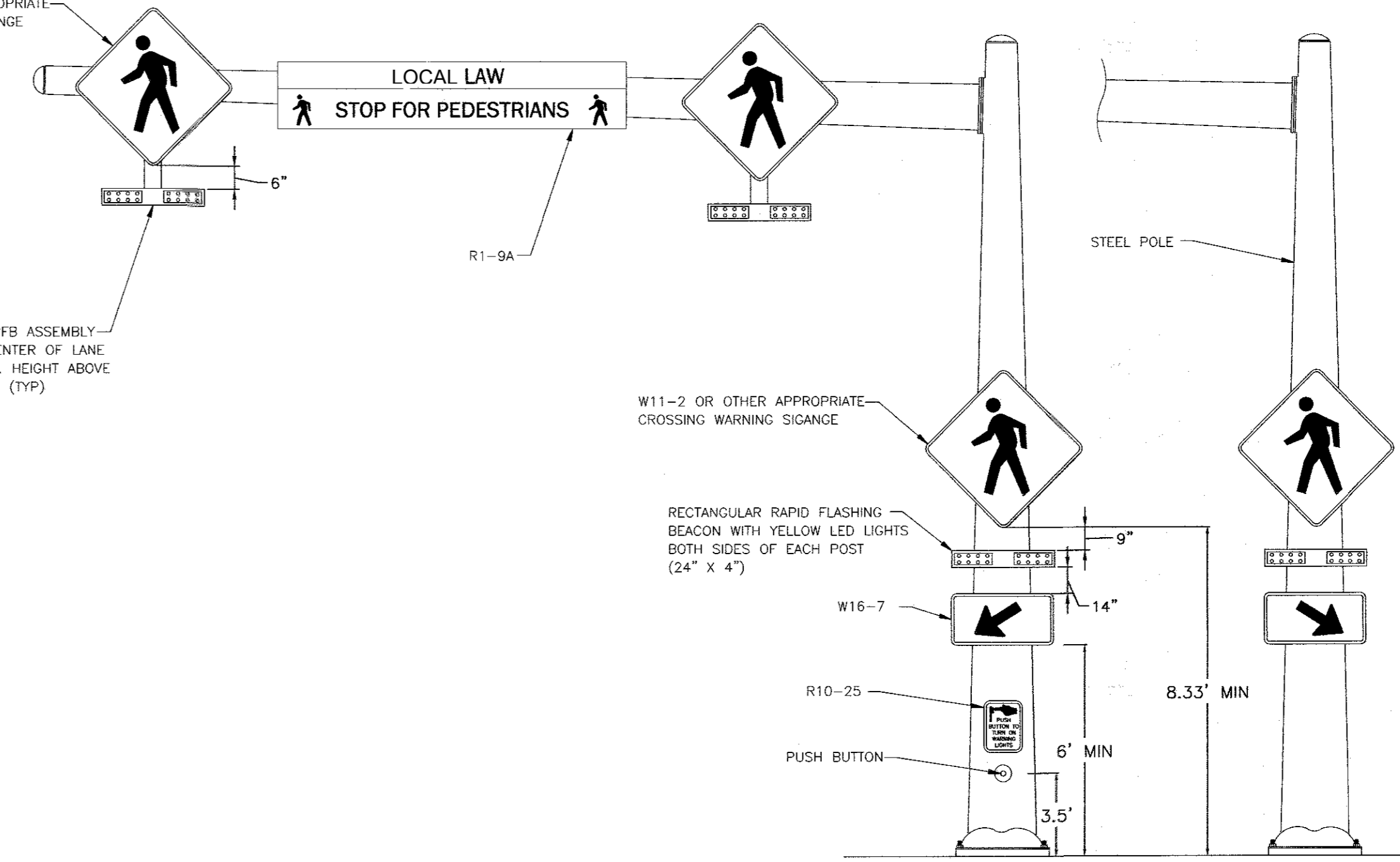


EX. UTILITY POLE MOUNTING



MAST ARM MOUNTING

RRFB TYPE PEDESTRIAN BEACON



DESIGN STANDARD

RRFBs, Beacons
and School Flashers

APPROVED BY: MEMPHIS, TENN.

APPROVED BY: *[Signature]* DATE: 11-17-2022
CITY ENGINEER DATE: 11/20/22 SCALE: N.T.S.
DRAWN BY: MP
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REVISIONS				APPROVED	
NO.	DATE	BY	REMARKS	C.T.E.	C.E.