TRAFFIC SIGNAL LEGEND

ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED
TRAFFIC SIGNAL CABINET			HANDHOLE -SQUARE			SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD	R R R Y Y G G G	R R R Y
UNINTERRUPTABLE POWER SUPPLY	3		-ROUND			-(EV) ELONGATED VISORS	G G G	G G G P EV
COMMUNICATION CABINET	ECC	СС	DOUBLE HANDHOLE			SIGNAL HEAD WITH BACKPLATE		
MASTER CONTROLLER	EMC	MC	HEAVY DUTY HANDHOLE -SQUARE		H (-(RB) RETROREFLECTIVE BACKPLATE -(P) PROGRAMMABLE SIGNAL HEAD		R R R Y Y Y Y
MASTER MASTER CONTROLLER	ЕММС	MMC	-ROUND			-(EV) ELONGATED VISORS	RB P EV	RB P EV
SERVICE INSTALLATION -(P) POLE MOUNTED	-D-P	- P	JUNCTION BOX			PEDESTRIAN SIGNAL HEAD	© C D	₩ C D
SERVICE INSTALLATION			RAILROAD CANTILEVER MAST ARM	X OZ X	X CZ X	WITH COUNTDOWN TIMER		
-(G) GROUND MOUNTED -(GM) GROUND MOUNTED METERED	⊠ ^G ⊠ ^{GM}	G M GM	RAILROAD FLASHING SIGNAL	∑⊖∑	X•X	ILLUMINATED LED SIGN "NO LEFT TURN"/"NO RIGHT TURN"		
CELLULAR MODEM	© ^{CM}	€ CM	RAILROAD CROSSING GATE	∑0∑	X-X-	ELECTRIC CABLE, SIGNAL, NO. 14 -		
TELEPHONE CONNECTION	ET	T	RAILROAD CROSSBUCK	否		2/C, 3/C, 5/C, 7/C		
STEEL MAST ARM ASSEMBLY AND POLE	<u></u>		RAILROAD CONTROLLER BUNGALOW			ELECTRIC CABLE, LEAD-IN, NO. 14, 1 PAIR		——————————————————————————————————————
ALUMINUM MAST ARM ASSEMBLY AND POLE		•	UNDERGROUND CONDUIT (UC),			SERVICE CABLE, 2/C - NO. 2, NO. 4, NO. 6	2#2	
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE	0 - X	•*	GALVANIZED STEEL			140. 2, 140. 4, 140. 0	2#4	2#4
SIGNAL POST		a a DM	TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE				2#6	2#6
-(BM) BARREL MOUNTED - TEMPORARY	0	• • BM	SYSTEM ITEM	S	SP	GROUND CABLE NO. 6 SOLID COPPER (GREEN), 1/C	1#6	1#6
WOOD POLE GUY WIRE	⊗ >	❸ ≻	INTERSECTION ITEM	1	IP		,	
SIGNAL HEAD	<i>→</i>	→	REMOVAL ITEM		R	ELECTRIC CABLE, TRACER, NO. 14, 1/C		
SIGNAL HEAD WITH BACKPLATE	+->	+-	RELOCATE ITEM ABANDON ITEM		RL A	ELECTRIC CABLE, RAILROAD, NO. 14, 3/C	RAILROAD NO. 14 3/C	RAILROAD NO. 14 3/C
SIGNAL HEAD - PROGRAMMABLE	-⊳ ^P +⊳ ^P	→ P + → P	CONTROLLER CABINET AND		A DOE	ELECTRIC CABLE, NAILROAD, NO. 14, 5/C	3	3
FLASHER INSTALLATION -(FS) SOLAR POWERED	o-⊳ ^F o-⊳ ^{FS}	F FS	FOUNDATION TO BE REMOVED		RCF	ELECTRIC CABLE, STREET NAME SIGN NO. 14, 3/C, TYPE SOOW	SOOW 3	soow 3
	r r r r r r r r r r r r r r r r r r r	F FS FS −	MAST ARM POLE AND FOUNDATION TO BE REMOVED		RMF	VENDOR CABLE		
PEDESTRIAN SIGNAL HEAD PEDESTRIAN PUSH BUTTON	-0	-1	SIGNAL POST AND FOUNDATION TO BE REMOVED		RPF			——————————————————————————————————————
-(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON			DETECTOR LOOP, TYPE I	[] ()		EMERGENCY VEHICLE PRIORITY LINE SENSOR CABLE, NO. 20, 3/C	3#20	3#20
RADAR DETECTION SENSOR	R	R	PREFORMED DETECTOR LOOP		P P	OUTDOOR RATED NETWORK CABLE	ONC	—ONC
VIDEO DETECTION CAMERA		V ■	WIRELESS DETECTOR SENSOR			FIBER OPTIC CABLE		
RADAR/VIDEO DETECTION ZONE						-12F: 12 MULTIMODE -24F: 12 MULTIMODE / 12 SINGLE MODE -36F: 12 MULTIMODE / 24 SINGLE MODE	24F	
PAN, TILT, ZOOM (PTZ) CAMERA	PTZ	PTZ				-24SM: 24 SINGLE MODE -48SM: 48 SINGLE MODE	36F	
EMERGENCY VEHICLE LIGHT DETECTOR CONFIRMATION BEACON	∞ <	◄					24SM	
WIRELESS INTERCONNECT	ο - 	•- 						
WIRELESS INTERCONNECT RADIO REPEATER	ERR	RR				GROUND ROD -(C) CONTROLLER	<u> </u>	<u>.</u> C .M .P .S
WIRELESS ACCESS POINT						-(M) MAST ARM -(P) POST	1 <u>1</u> <u>1</u> <u>1</u>	↓
						-(S) SERVICE		
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: NONE

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE

SHEET 1 OF 7 SHEETS STA. TO STA.

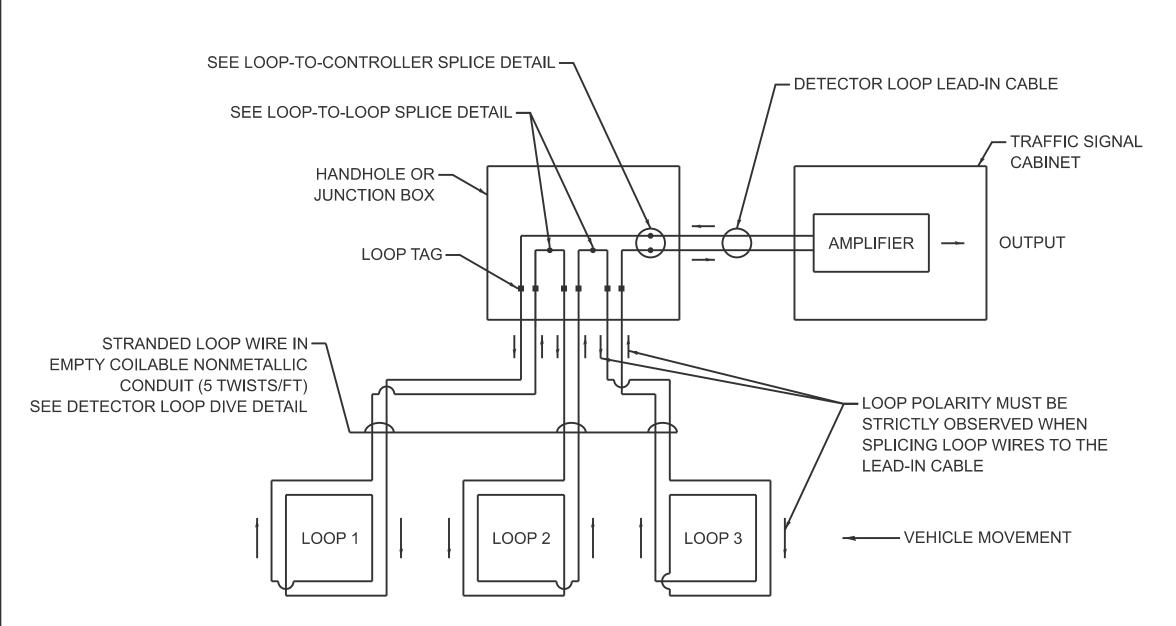
TS-01 COUNTY SHEETS

COUNTY SHEETS

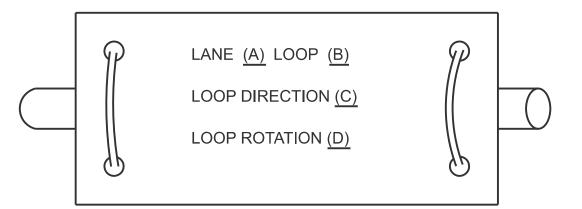
CONTRACT NO.

DETECTOR LOOP NOTES:

- 1. LOOPS SHALL BE SPLICED IN SERIES.
- 2. SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" AT A DEPTH OF 3". IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- 3. LOOP CORNERS SHALL BE DRILLED WITH A 2" DIAMETER CORE.
- 4. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NON-METALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6". EMPTY COILABLE NON-METALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE DETECTOR LOOP PAY ITEM.
- 5. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
- 6. EACH LEAD-IN CABLE SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP NUMBER, LOOP DIRECTION (IN OR OUT), AND LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE) IN WATER PROOF INK. SEE DETECTOR LOOP LEAD-IN CABLE TAG DETAIL. THE CONTRACTOR SHALL MARK THE LOOP LOCATIONS ON THE RECORD DRAWINGS AND PRESENT THEM TO THE ENGINEER AFTER THE FINAL INSPECTION.
- 7. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- 8. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND THE DIVE HOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" APART.
- 9. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS.
- 10. PREFORMED DETECTOR LOOPS SHALL BE USED WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.



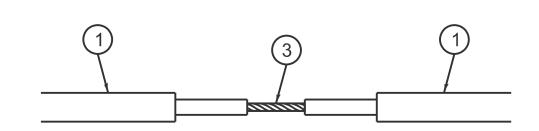
DETECTOR LOOP WIRING SCHEMATIC

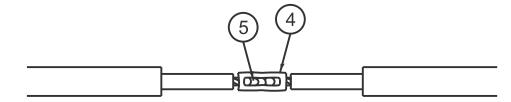


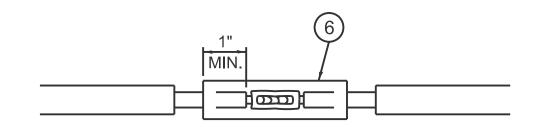
A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY.

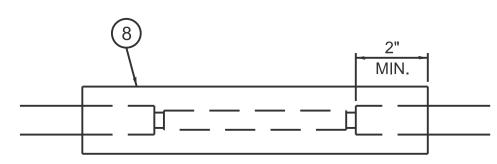
- B. LOOP #1 IS THE LOOP CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

DETECTOR LOOP LEAD-IN CABLE TAG







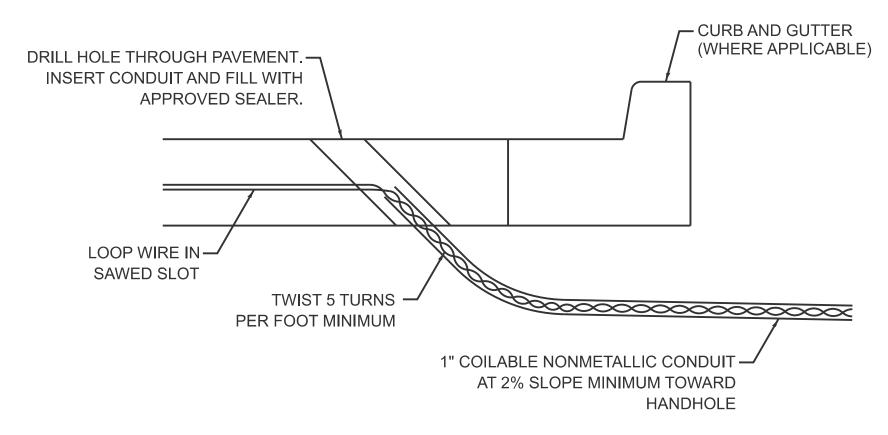


LOOP-TO-LOOP SPLICE DETAIL

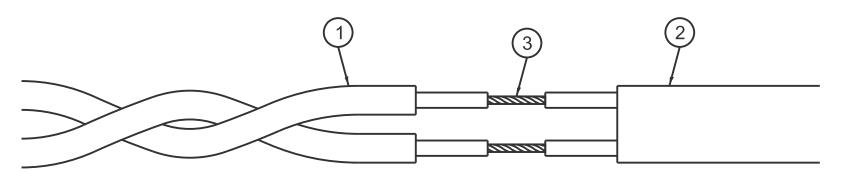
- 1 DETECTOR LOOP CABLE.
- 2 DETECTOR LOOP LEAD-IN CABLE
- 3) BARE CONDUCTORS TWISTED TOGETHER.
- 4) BUTT SPLICE CRIMP CONNECTOR.
- 5 SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE SPLICES SHALL BE STAGGERED.
- 6 WCSMW 30/100 HEAT SHRINK TUBE, 3" MINIMUM LENGTH, UNDERWATER GRADE.
- 7 SELF-INFUSED, SILICONE ELECTRICAL TAPE TIGHTLY WRAPPED AROUND

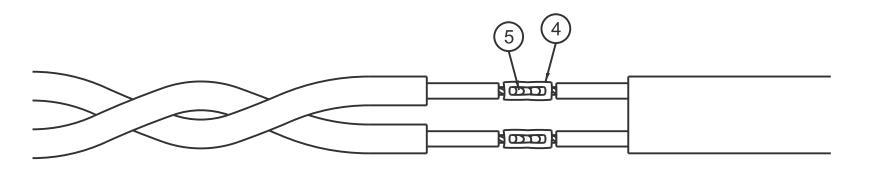
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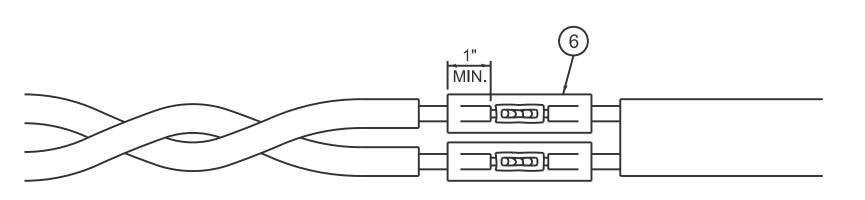
8 WCS 200/750 HEAT SHRINK TUBE, 8" MINIMUM LENGTH, UNDERWATER

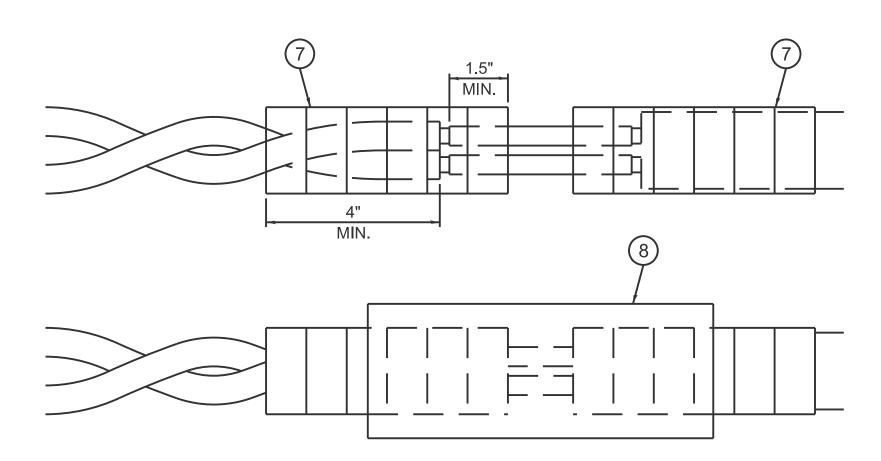


DETECTOR LOOP DIVE DETAIL









LOOP-TO-CONTROLLER SPLICE DETAIL

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SHEET 2 OF 7 SHEETS STA. TO STA.

F.A. RTE. SECTION COUNTY TOTAL SHEETS NO.

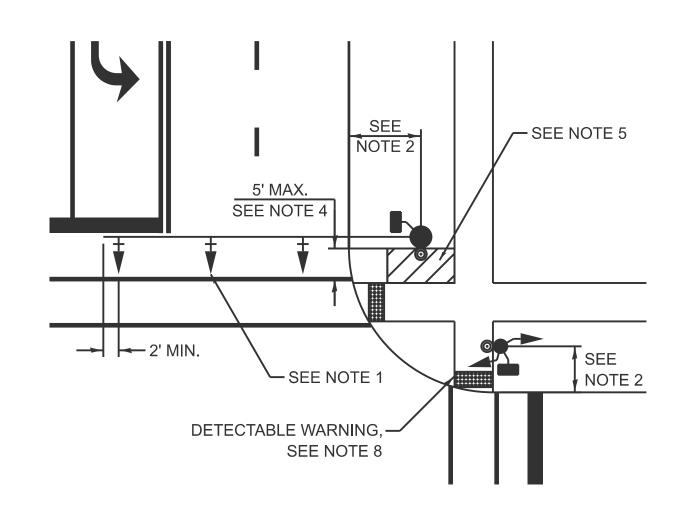
TS-01 CONTRACT NO.

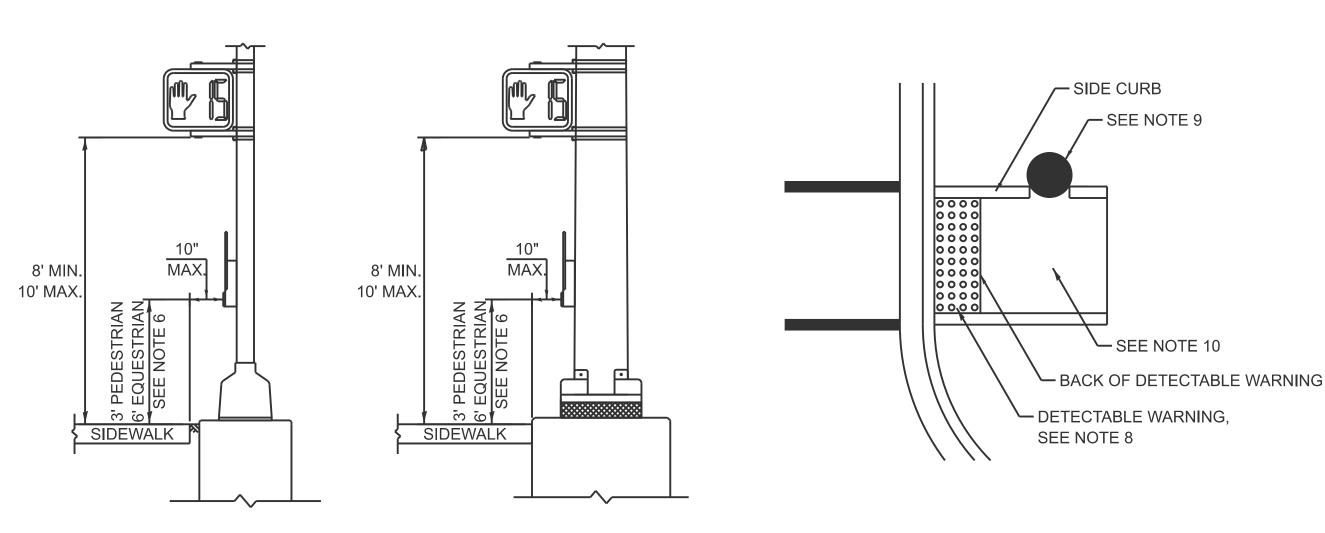
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NOTES:

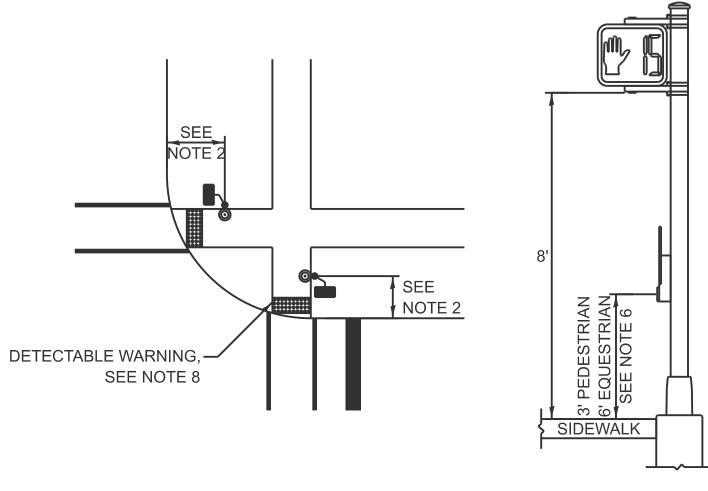
- 1. THE MAST ARM MOUNTED SIGNAL HEADS SHALL BE CENTERED ON THE LANES OR AS SHOWN ON THE TRAFFIC SIGNAL PLANS.
- 2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET MINIMUMS TABLE.
- 3. A 4' MINIMUM UNOBSTRUCTED PEDESTRIAN ACCESS ROUTE SHALL BE MAINTAINED.
- 4. THE PUSH-BUTTON SHALL BE LOCATED 5' OR LESS FROM THE OUTSIDE EDGE OF THE MARKED CROSSWALK FARTHEST FROM THE INTERSECTION FOR THE CROSSWALK THAT THE PUSH-BUTTON CONTROLS.
- 5. IF THE MAST ARM POLE OR SIGNAL POST WHERE THE PUSH-BUTTON IS TO BE INSTALLED IS NOT IMMEDIATELY ADJACENT TO THE SIDEWALK, PROVIDE A FIRM, STABLE, AND SLIP RESISTANT SURFACE UP TO THE MAST ARM POLE OR SIGNAL POST. THE MINIMUM PAVED AREA IN FRONT OF THE PUSH-BUTTON SHALL BE 2.5' X 4'. IF THIS DOES NOT MEET THE REQUIREMENT STATED IN NOTE 3, A SEPARATE PEDESTRIAN SIGNAL POST SHALL BE INSTALLED TO PLACE THE PUSH-BUTTON ADJACENT TO THE SIDEWALK SURFACE.
- 6. THE HEIGHT OF THE PEDESTRIAN PUSH-BUTTON SHALL BE 36". IF APPROVED BY THE AREA TRAFFIC SIGNAL ENGINEER, THE PUSH-BUTTON MAY BE LOCATED AT A HEIGHT BETWEEN 30" AND 42". THE HEIGHT OF THE EQUESTRIAN PUSH-BUTTON SHAL BE 72" OR AS DIRECTED BY THE ENGINEER.
- 7. THE FACE OF THE PUSH-BUTTON SHALL BE PARALLEL TO THE CROSSWALK IT CONTROLS.
- 8. THE PUSH-BUTTON SHALL BE LOCATED BEHIND THE DETECTABLE WARNING.
- 9. WHERE A PUSH-BUTTON IS BEING INSTALLED ON A MAST ARM POLE OR SIGNAL POST ADJACENT TO THE PEDESTRIAN ACCESS ROUTE, THE PROPOSED FOUNDATION SHALL BE INSTALLED WITHIN THE SIDE CURB IN ORDER TO MEET THE 10" REACH REQUIREMENT.
- 10. THE SIDEWALK PANEL IN FRONT OF THE PUSH-BUTTON SHALL HAVE A SLOPE LESS THAN 5%.
- 11. WHERE TWO PEDESTRIAN PUSH-BUTTONS ARE PROVIDED ON THE SAME CORNER, THEY SHALL BE 10' OR MORE APART. EXCEPTION: IN ALTERATIONS WHERE TECHNICALLY INFEASIBLE TO PROVIDE 10' SEPARATION BETWEEN PUSH-BUTTONS ON THE SAME CORNER.
- 12. CORRESPONDING PEDESTRIAN EQUIPMENT (SIGNAL HEAD AND PUSH-BUTTON) SHALL BE INSTALLED ON THE SAME POST CLOSEST TO THE CROSSWALK IT CONTROLS.
- 13. PEDESTRIAN SIGNAL HEADS INSTALLED ON MAST ARM POLES OR SIGNAL POSTS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) NOT LESS THAN 8' OR MORE THAN 10' ABOVE SIDEWALK LEVEL. PEDESTRIAN SIGNAL HEADS INSTALLED ON PEDESTRIAN SIGNAL POSTS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) NOT LESS THAN 8' ABOVE SIDEWALK LEVEL. THE PEDESTRIAN SIGNAL HEADS SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
- 14. THE LOCATIONS OF THE PEDESTRIAN PUSH-BUTTONS AND PEDESTRIAN SIGNAL HEADS SHALL MEET THE REQUIREMENTS OF THE MUTCD, PROWAG, AND THE REQUIREMENTS ON THIS DETAIL SHEET.

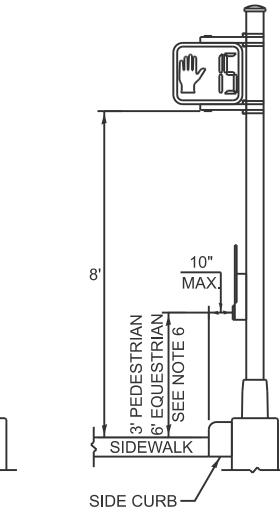
TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

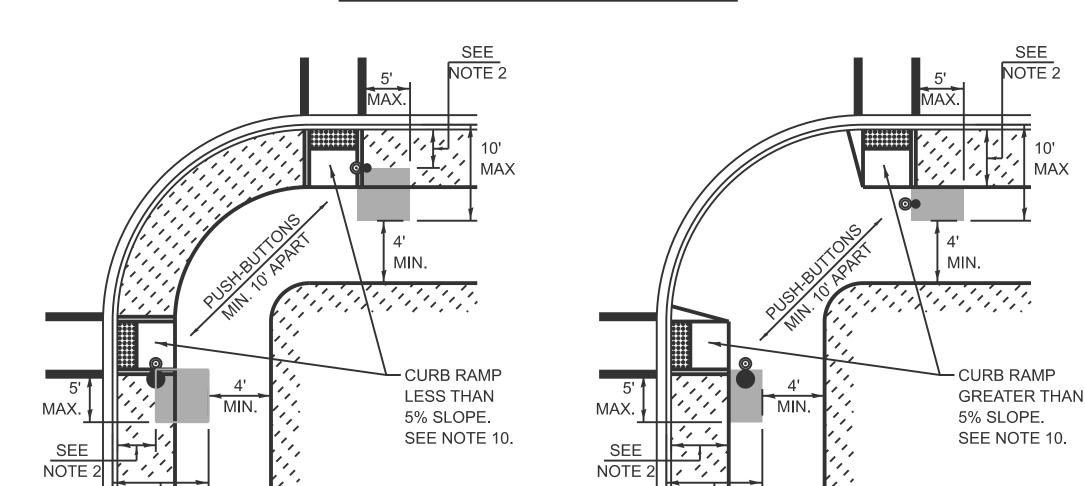




PEDESTRIAN SIGNAL POST







PUSH-BUTTON LOCATIONS

TRAFFIC SIGNAL EQUIPMENT	BARRIER CURB (MINIMUM DISTANCE FROM THE BACK OF CURB TO THE CENTER OF THE FOUNDATION)	SHOULDER / NON-BARRIER CURB (MINIMUM DISTANCE FROM THE EDGE LINE OF THE RIGHT-MOST LANE TO THE CENTER OF THE FOUNDATION)
MAST ARM ASSEMBLY AND POLE	6'	SHOULDER WIDTH + 2', MINIMUM 10'
SIGNAL POST	4'	SHOULDER WIDTH + 2', MINIMUM 10'
PEDESTRIAN SIGNAL POST	4'	4' - SEE NOTE 2
TEMPORARY WOOD POLE	6'	SHOULDER WIDTH + 2', MINIMUM 10'
TRAFFIC SIGNAL CABINET	6' - SEE NOTE 3	SHOULDER WIDTH + 6', MINIMUM 16' - SEE NOTE 3
SERVICE CABINET	6' - SEE NOTE 3	SHOULDER WIDTH + 6', MINIMUM 16' - SEE NOTE 3

TRAFFIC SIGNAL EQUIPMENT OFFSET MINIMUMS

NOTES:

- 1. CONTACT THE AREA TRAFFIC SIGNAL ENGINEER FOR ASSISTANCE LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS AND THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
- 2. MINIMUM DISTANCE FROM THE BACK OF THE DETECTABLE WARNING.
- 3. MINIMUM DISTANCE TO THE ROADWAY SIDE OF THE FOUNDATION.

SCALE: NONE

4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" TABLE AND THE TRAFFIC SIGNAL PLAN COULD AFFECT THE PLACEMENT OF THE TRAFFIC SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS, AND THE PEDESTRIAN PUSH-BUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THESE REQUIREMENTS. THE LOCATIONS OF THE PEDESTRIAN PUSH-BUTTONS AND PEDESTRIAN SIGNAL HEADS SHALL MEET THE REQUIREMENTS OF THE MUTCD, PROWAG, AND THE REQUIREMENTS ON THIS DETAIL SHEET.

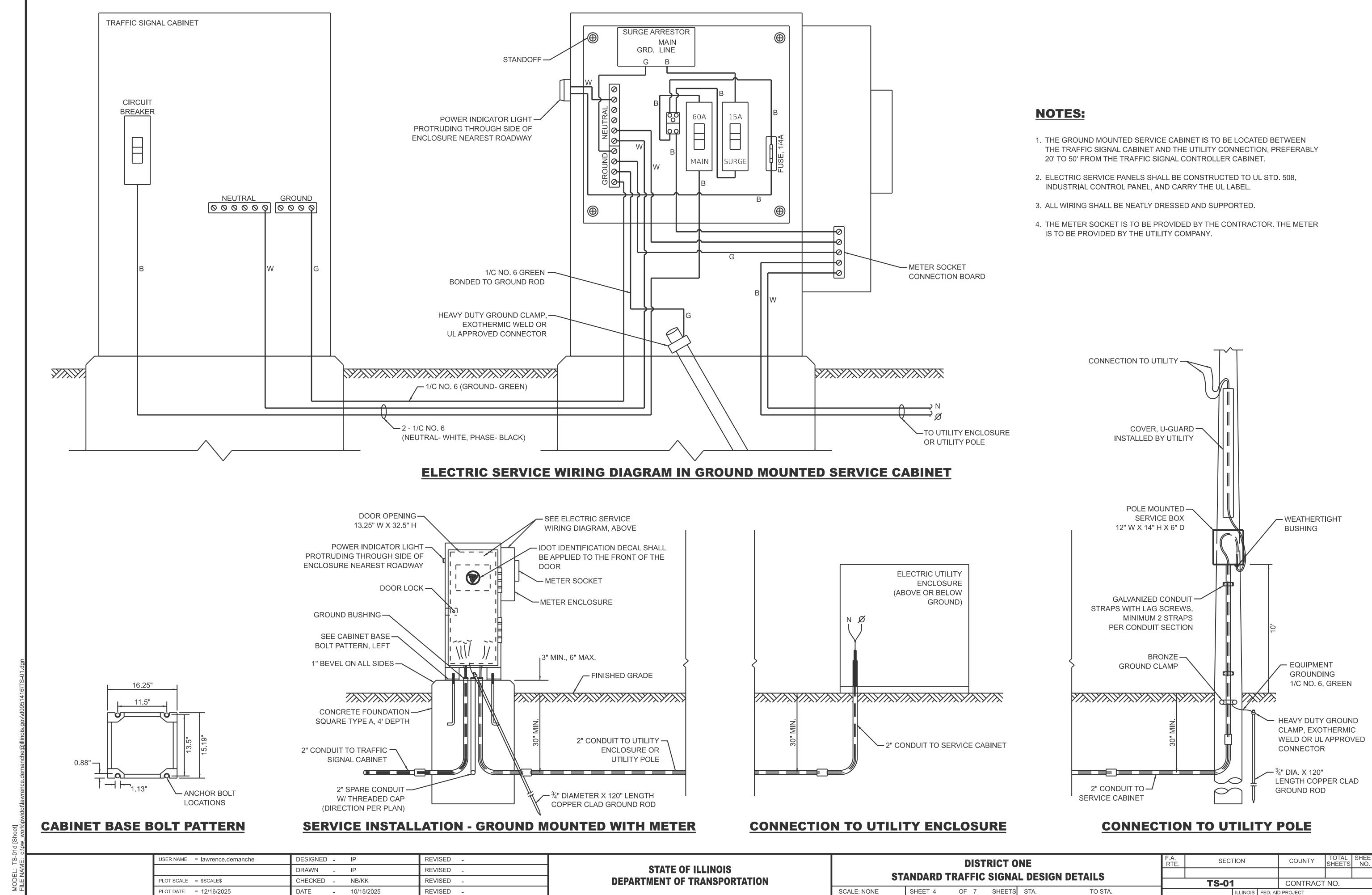
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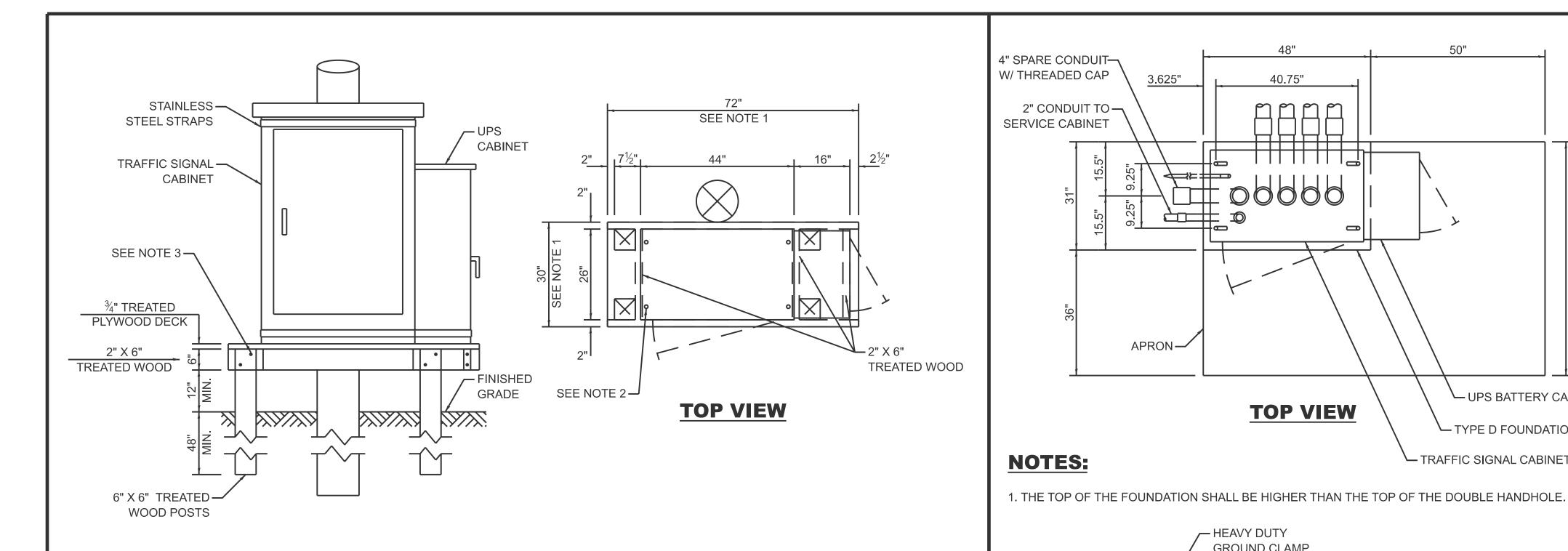
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS							SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	SHEET 3	OF 7	SHEETS	STA.	TO STA.		ILLINOIS FED	. AID PROJECT		

PREFERRED PUSH-BUTTON LOCATION

E: c:\pw_work\pwidot\lawrence.demanche@illinois.gov\d0951416\TS-01





NOTES:

- 1. THE PLATFORM SIZE IS BASED ON A TRAFFIC SIGNAL CABINET TYPE IV WITH BASE DIMENSIONS OF 26" X 44" AND UNINTERRUPTABLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" X 25". ADJUST THE PLATFORM SIZE TO FIT THE BASE DIMENSIONS OF THE CABINET SUPPLIED
- 2. DRILLED HOLES THROUGH THE PLATFORM ARE TO MATCH THE TRAFFIC SIGNAL CABINET BOLT TEMPLATE. THE CABINET SHALL BE FASTENED TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS, AND NUTS.
- 3. ALL WOOD SUPPORT FRAMING SHALL BE FASTENED TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION

TEMPORARY TRAFFIC SIGNAL CABINET WOOD SUPPORT PLATFORM

MAST ARM LENGTH	FOUNDATION DEPTH	FOUNDATION DIAMETER	SPIRAL DIAMETER	QUANTITY OF REBARS	SIZE OF REBARS
LESS THAN 30'	10'	30"	24"	8	#6
GREATER THAN OR EQUAL TO 30'	13.5'	30"	24"	8	#6
AND LESS THAN 40'	11'	36"	30"	12	#7
GREATER THAN OR EQUAL TO 40' AND LESS THAN 50'	13'	36"	30"	12	#7
GREATER THAN OR EQUAL TO 50' AND UP TO 55'	15'	36"	30"	12	#7
GREATER THAN OR EQUAL TO 56' AND LESS THAN 65'	21'	42"	36"	16	#8
GREATER THAN OR EQUAL TO 65' AND UP TO 75'	25'	42"	36"	16	#8

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

DEPTH FOUNDATION TYPE A - SIGNAL POST, SERVICE CABINET TYPE C - TRAFFIC SIGNAL CABINET WITH UPS TYPE D - TRAFFIC SIGNAL CABINET

DEPTH OF FOUNDATIONS

MAST ARM MOUNTED SIGNAL HEAD (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM) BRACKET MOUNTED SIGNAL HEAD (MAST ARM POLE OR SIGNAL POLE) PEDESTRIAN SIGNAL HEAD PEDESTRIAN PUSH BUTTON SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP SERVICE INSTALLATION POLE MOUNT TO GROUND SERVICE INSTALLATION GROUND MOUNT FOUNDATION (SIGNAL POST, MAST ARM, TRAFFIC SIGNAL CABINET, SERVICE CABINET)

40.75"

TOP VIEW

- HEAVY DUTY **GROUND CLAMP**

— GROUND BUSHING

4-4" CONDUITS TO

TYPE D FOUNDATION

TYPE IV AND TYPE V TRAFFIC SIGNAL CABINET

AND UPS BATTERY CABINET

SEE NOTE 1

APRON-

NO. 6 BARE

COPPER WIRE

VERTICAL CABLE LENGTH

SCALE: NONE

LENGTH CABLE SLACK HANDHOLE 6.5' DOUBLE HANDHOLE 13' SIGNAL POST **MAST ARM** 2' TRAFFIC SIGNAL CABINET OR SERVICE CABINET 1.5' FIBER OPTIC CABLE AT TRAFFIC SIGNAL CABINET 13' 1.5' GROUND CABLE AT SIGNAL POST, MAST ARM, OR CABINET GROUND CABLE AT HANDHOLE OR DOUBLE HANDHOLE 6.5' GROUND CABLE BETWEEN HANDHOLE FRAME AND COVER

CABLE SLACK LENGTH

TYPES A, C & D

TYPE E FOUNDATION NOTES:

- 1. FOR STANDARD AND COMBINATION MAST ARM ASSEMBLIES. FOUNDATION DEPTHS FOR STANDARD DUAL MAST ARMS WITH THE LONGEST ARM LENGTH UP TO AND INCLUDING 55' SHALL BE INCREASE BY 1' OF THAT SHOWN IN THE TABLE, BASED ON THE LONGER OF THE TWO ARMS.
- 2. SEE STATE STANDARD 878001 CONCRETE FOUNDATION DETAILS FOR MORE INFORMATION.

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1. THE TOP OF THE FOUNDATION SHALL BE HIGHER THAN THE TOP OF THE DOUBLE HANDHOLE.
HEAVY DUTY GROUND CLAMP
NO. 6 BARE— COPPER WIRE 1" BEVEL— GROUND BUSHING 3" MIN. SEE NOTE 1 GRADE
30" MIN. APPROIN
GROUND ROD 4-4" CONDUITS TO
DOUBLE HANDHOLE

TOP VIEW

─ UPS BATTERY

- TRAFFIC SIGNAL CABINET BASE

COMPARTMENT

— TYPE C FOUNDATION

40.75"

4" SPARE CONDUIT-

W/ THREADED CAP

SERVICE CABINET

NOTES:

LENGTH

20'+L

13'

10'

6'

13.5'

13.5'

6'

3'

UPS BATTERY CABINET

- FINISHED GRADE

TYPE D FOUNDATION

TRAFFIC SIGNAL CABINET BASE

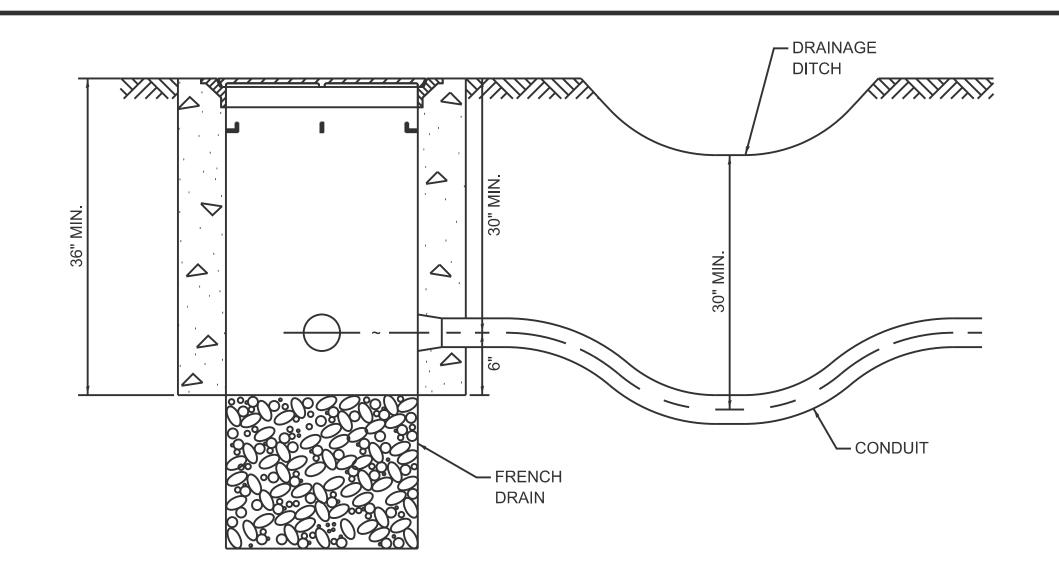
2" CONDUIT TO -

APRON-

TYPE C FOUNDATION SUPER P AND SUPER R TRAFFIC SIGNAL CABINETS

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

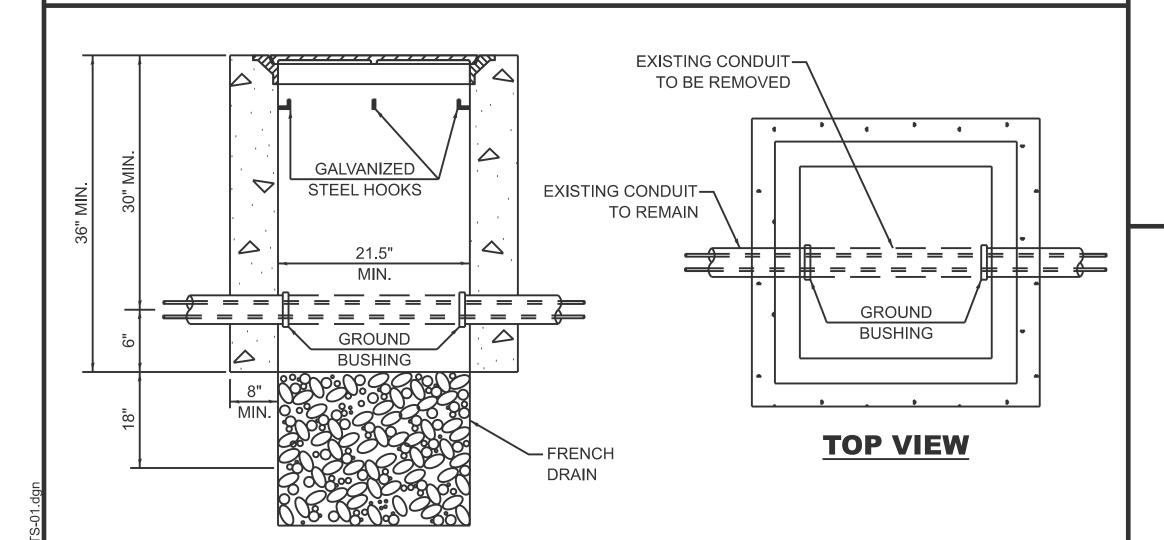
VERTICAL CABLE



NOTES:

- 1. THE CONDUIT DEPTH SHALL BE A MINIMUM OF 30" BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING GROUND.
- 2. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL CONDUIT PLACED UNDER ROADWAY PAVEMENT, MULTI-USE PATHS, SIDEWALKS AND SOIL SURFACES.
- 3. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

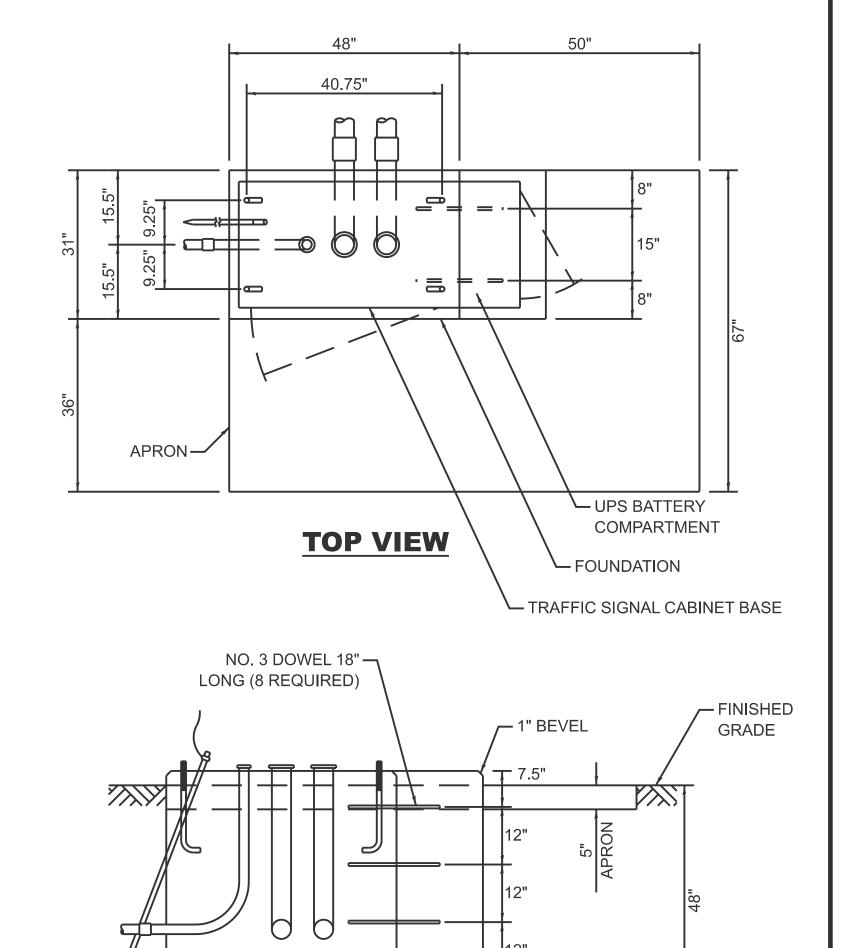
HANDHOLE WITH MINIMUM CONDUIT DEPTH



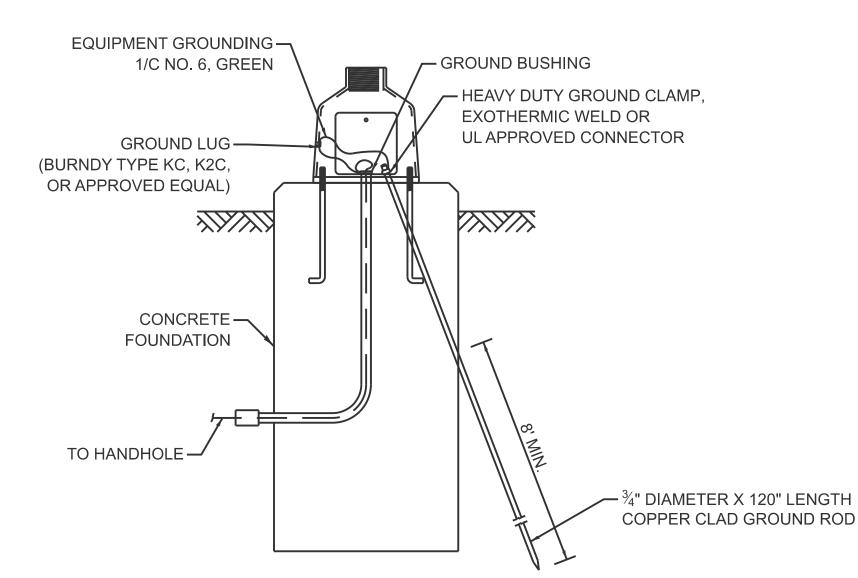
NOTES:

- 1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
- 2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

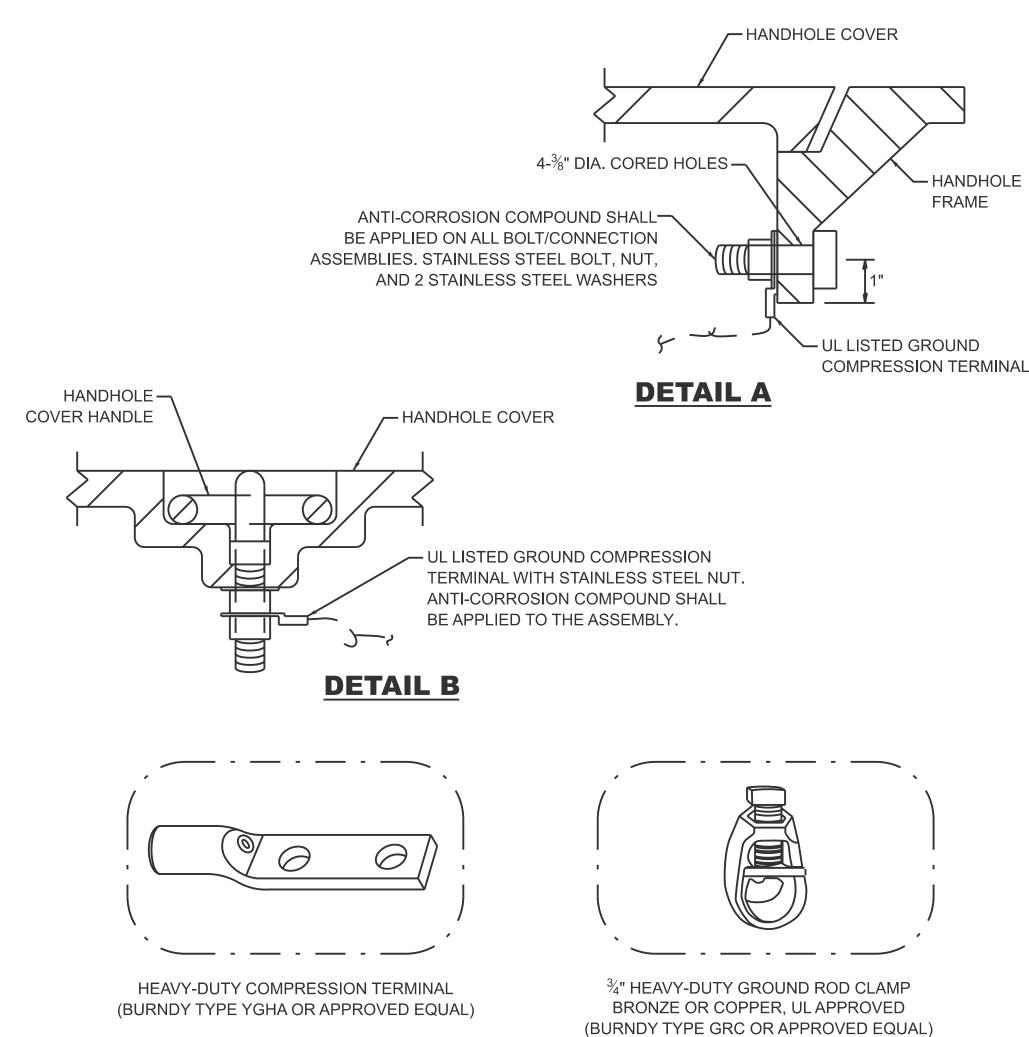
HANDHOLE TO INTERCEPT EXISTING CONDUIT



MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION

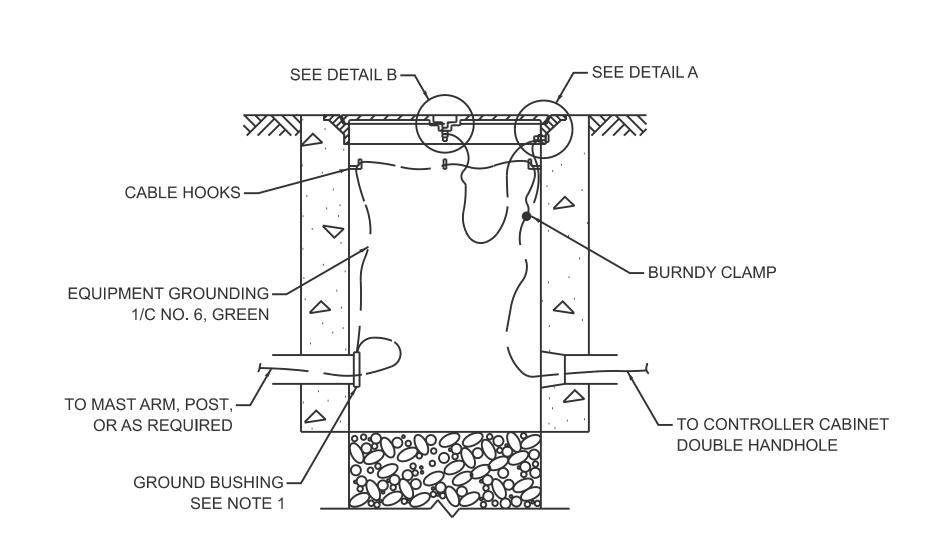


MAST ARM / POST GROUNDING DETAIL



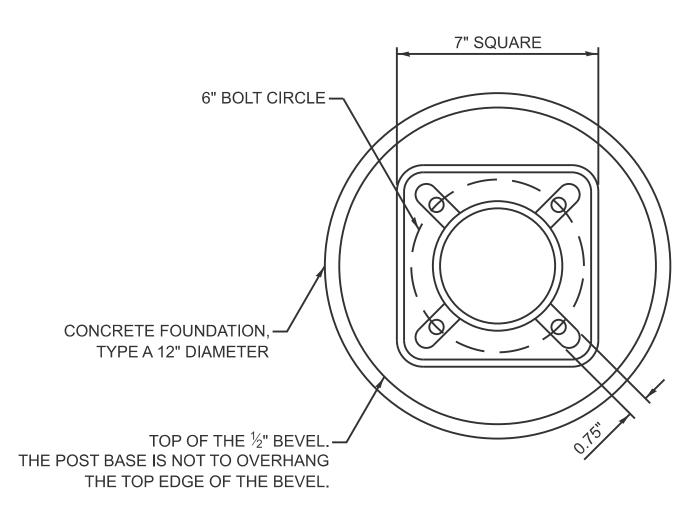
NOTES:

- CONDUIT THAT HAS BEEN DRILLED INTO AN EXISTING HANDHOLE WILL REQUIRE A GROUND BUSHING FOR THE CONDUIT TO BE PROPERLY GROUNDED.
- 2. GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES. 6.5' OF SLACK SHALL BE PROVIDED IN SINGLE AND DOUBLE HANDHOLES. 5' OF SLACK SHALL BE PROVIDED BETWEEN THE FRAME AND COVER.



HANDHOLE GROUNDING DETAIL

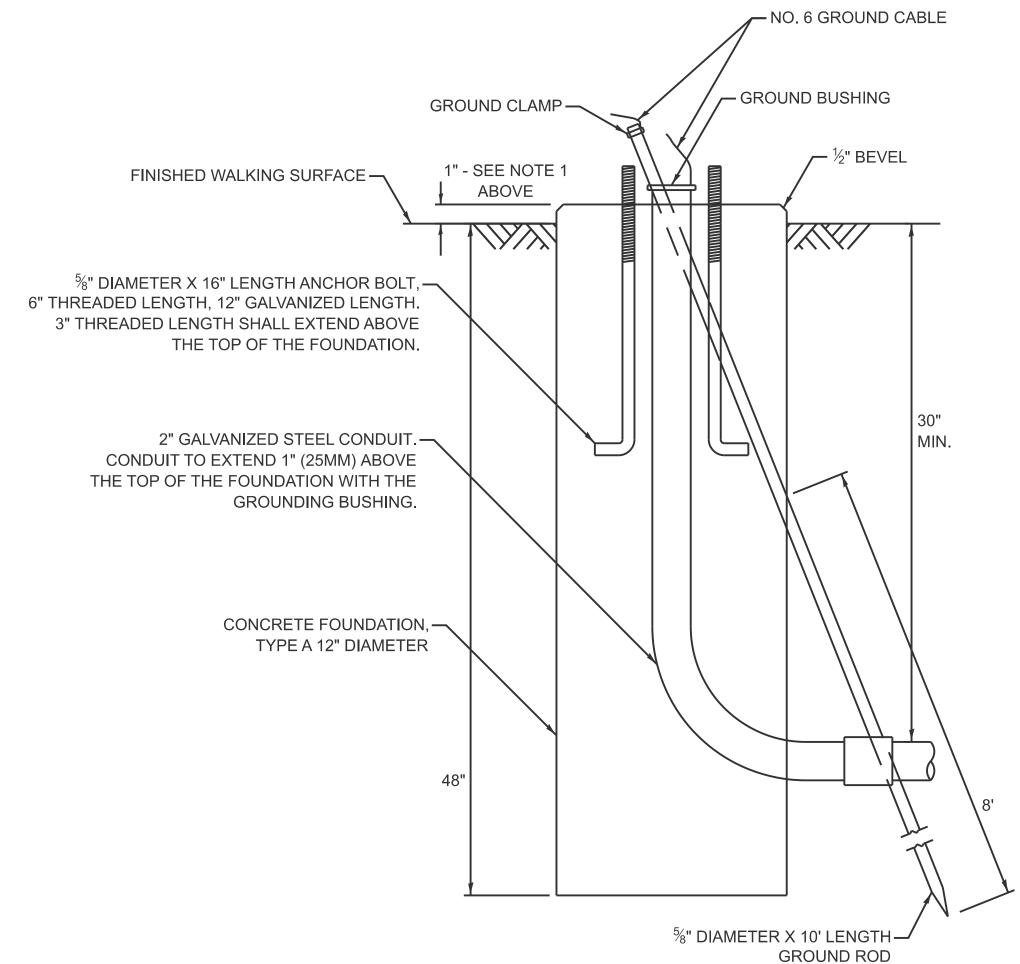
USER NAME = lawrence.demanche	DESIGNED -	IP	REVISED -		DISTRIC			RICT O	NF		F.A. RTF	SECTION	COUNTY	TOTAL	HEET
	DRAWN -	IP	REVISED -	STATE OF ILLINOIS							1(1)			OFFICE	110.
PLOT SCALE = \$SCALE\$	CHECKED -	NB/KK	REVISED -	DEPARTMENT OF TRANSPORTATION	STANDARD TRAFFIC SIGNAL DESIGN DETAILS						TS-01	CONTRACT	NO.	\neg	
PLOT DATE = 12/16/2025	DATE -	10/15/2025	REVISED -		SCALE: NONE	SHEET 6	OF 7	SHEETS	STA.	TO STA.		ILLINOIS FED. A	D PROJECT		



BOLT PATTERN

NOTES:

1. IF THE PEDESTRIAN SIGNAL POST FOUNDATION IS INSTALLED WITHIN A SIDEWALK CURB, THE TOP OF THE FOUNDATION SHALL BE INSTALLED



CONCRETE FOUNDATION,

PEDESTRIAN SIGNAL POST, 10 FT.

36"

PEDESTRIAN SIGNAL POST, 5 FT.

COUNTDOWN PEDESTRIAN SIGNAL HEAD

ALUMINUM OR —

R10-3E SIGN

ALUMINUM —

PEDESTRIAN PUSH-BUTTON -

GALVANIZED STEEL POST, 4.5" OUTSIDE DIAMETER

CAST IRON GALVANIZED BASE

CENTERED ON THE FOUNDATION

— FINISHED WALKING SURFACE —

ALUMINUM OR —

ALUMINUM OR —

DRILLED AND TAPPED — **GROUNDING HOLE**

GALVANIZED STEEL POST CAP

PUSH-BUTTON STATION

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION SCALE: NONE

DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS

TOTAL SHEET NO. SECTION COUNTY TS-01 CONTRACT NO.

SIGN NOTES:

Finish Crossing If Started

TIME REMAINING To Finish Crossing

DON'T CROSS

TO CROSS

R10-3E

9" X 15"

- 1. THE SIGN PANELS SHALL BE TYPE AP SHEETING.
- 2. WHEN SIGN R10-3E IS INSTALLED AT MEDIANS WHERE ONLY ONE PUSH-BUTTON IS BEING USED FOR BOTH DIRECTIONS, THE ARROW SHALL BE BI-DIRECTIONAL

CAUTION

WALK TIME

SHORTENED

APPROACHES

W10-I101

18" X 24"

3. SIGN W10-I101 IS REQUIRED FOR EACH PEDESTRIAN SIGNAL HEAD AT RAILROAD INTERSECTIONS.

FLUSH WITH THE TOP OF THE SIDEWALK CURB.

TYPE A 12-INCH DIAMETER

REVISED -DESIGNED - IP USER NAME = lawrence.demanche REVISED DRAWN - IP CHECKED -NB/KK REVISED PLOT SCALE = \$SCALE\$ REVISED PLOT DATE = 12/16/2025 - 10/15/2025

SHEET 7 OF 7 SHEETS STA.

ILLINOIS FED. AID PROJECT