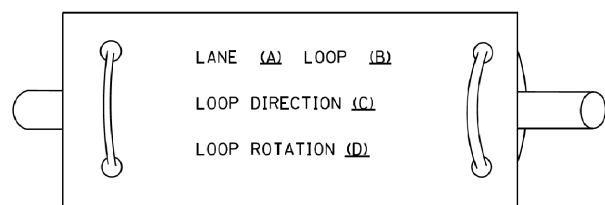


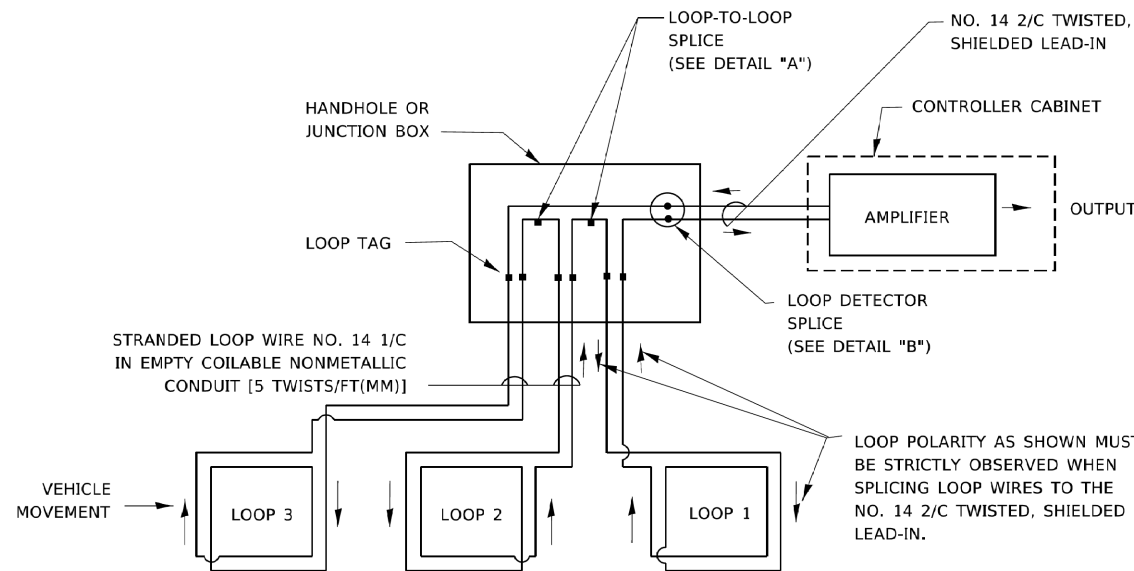
LOOP DETECTOR NOTES

- EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
- 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.
- EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
- ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES 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" (450 mm) APART.
- 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. SEE DETAIL BELOW RIGHT.
- PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, 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.

LOOP LEAD-IN CABLE TAG

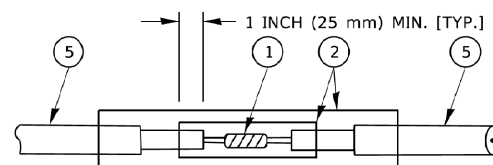


- LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

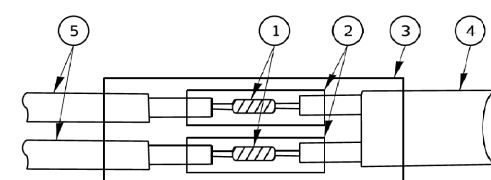


DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES. SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE,
- THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.

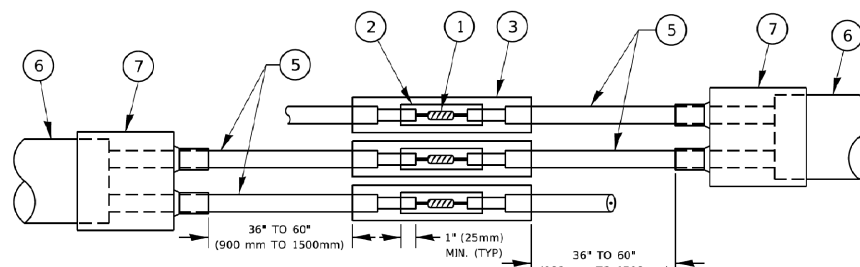


DETAIL "A"
LOOP-TO-LOOP SPLICE

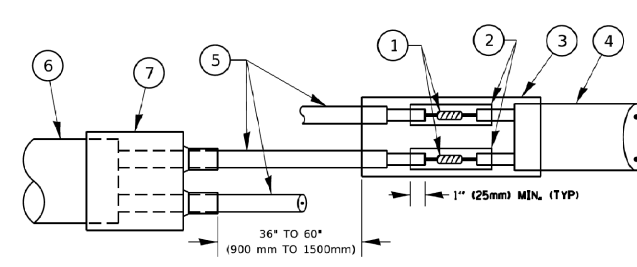


DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

PREFORMED LOOP

LOOP DETECTOR SPLICE

- WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- NO. 14 2/C TWISTED, SHIELDED CABLE.
- LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE. PREFORMED LOOP
- XL POLYOLEFIN 2 CONDUCTOR
- BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

1 REVISED ENTIRE SHEET 5/29/2024

MODEL: Default

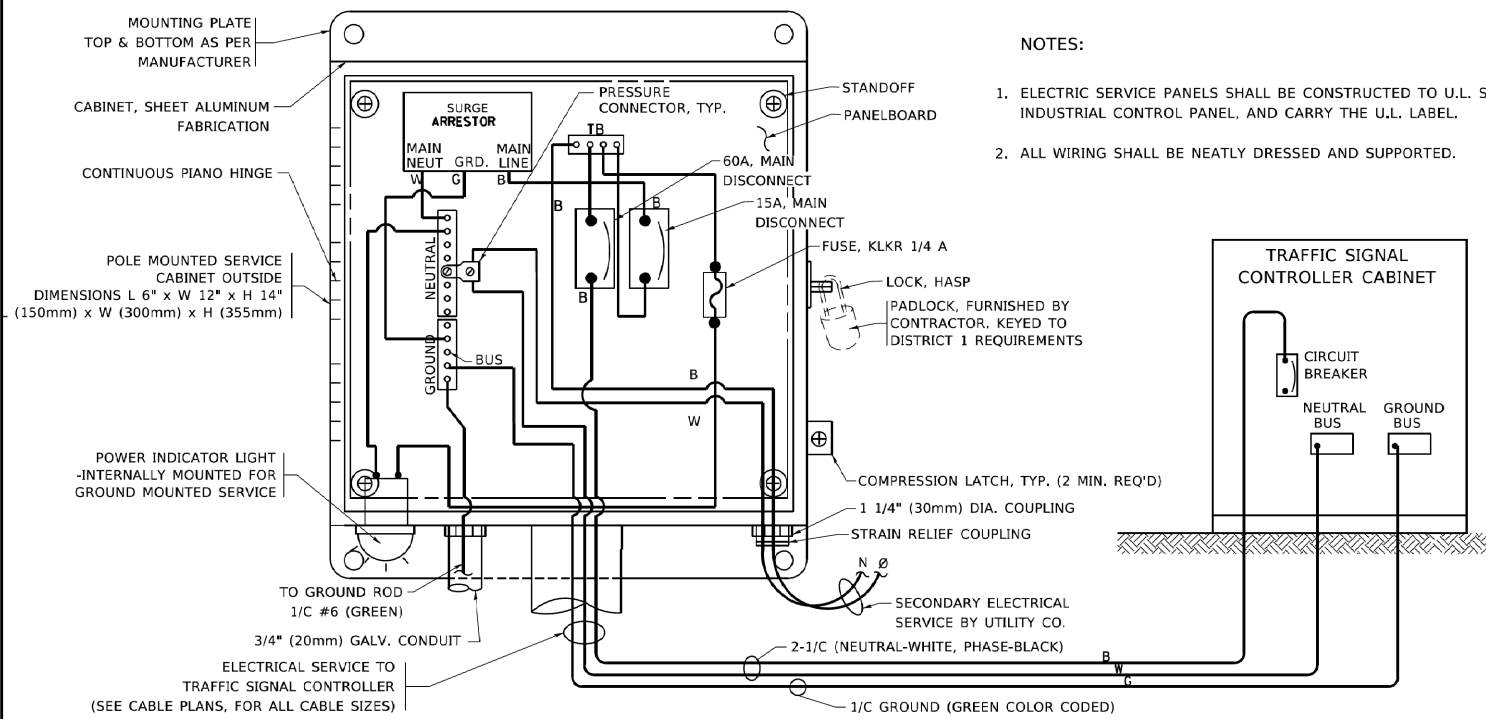
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	DRAWN -	REVISED -	
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PLOT DATE = 3/4/2019	DATE -	REVISED -	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

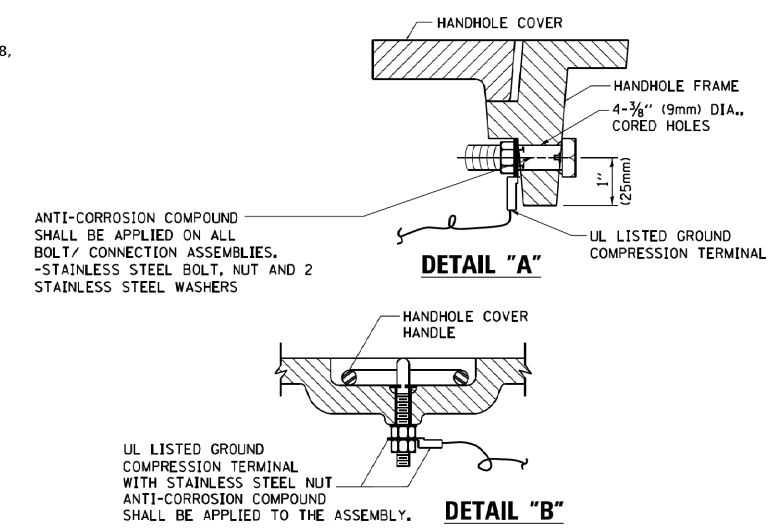
**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE SHEET 2 OF 7 SHEETS STA. TO STA.

F.A.P. RTE. 351	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	TS-05	WILL	137	50
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62U76	

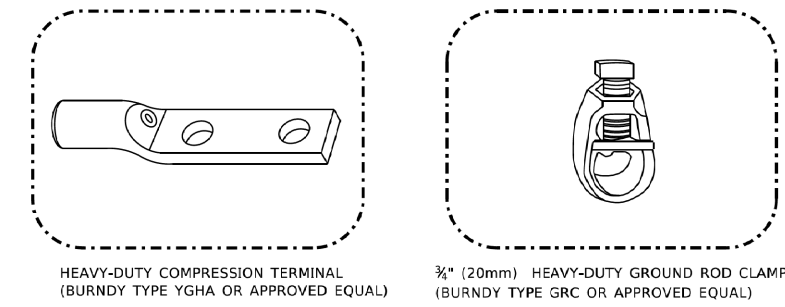
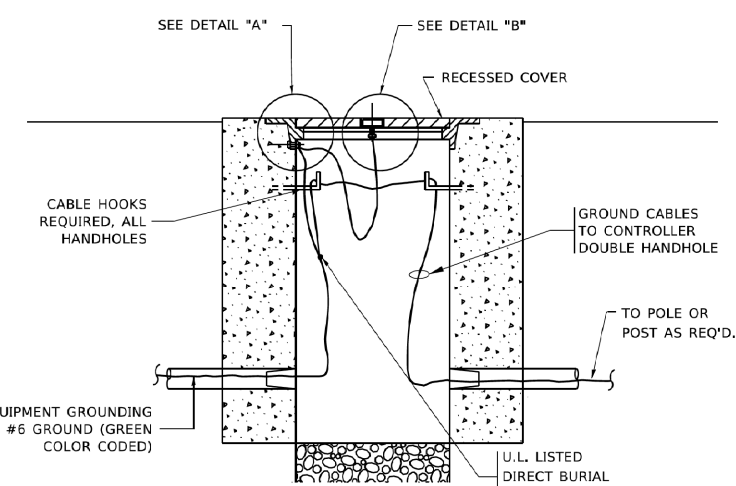


ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
 (NOT TO SCALE)



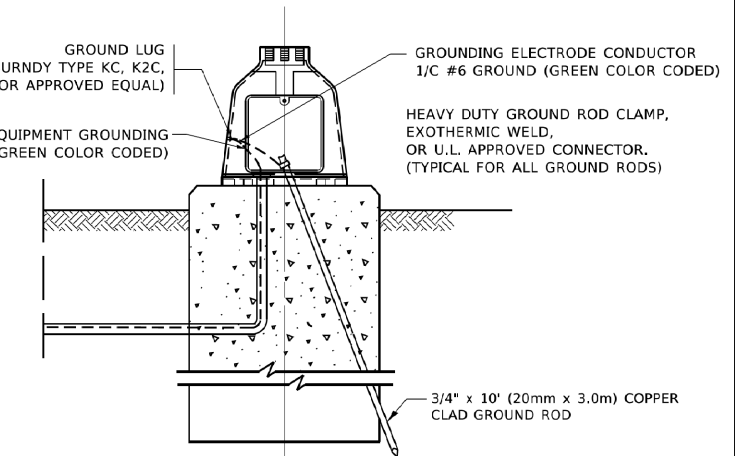
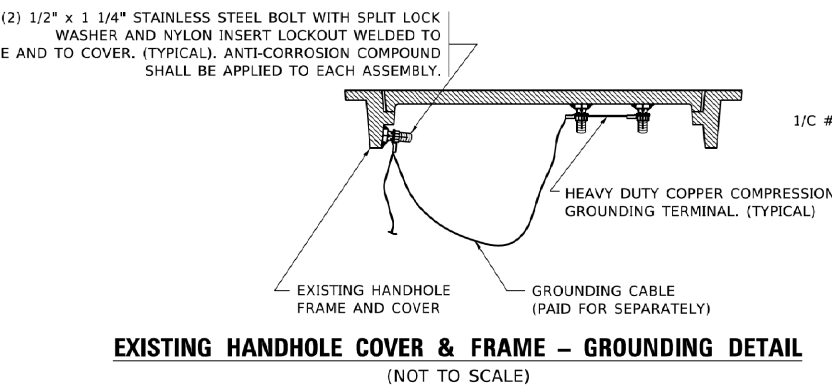
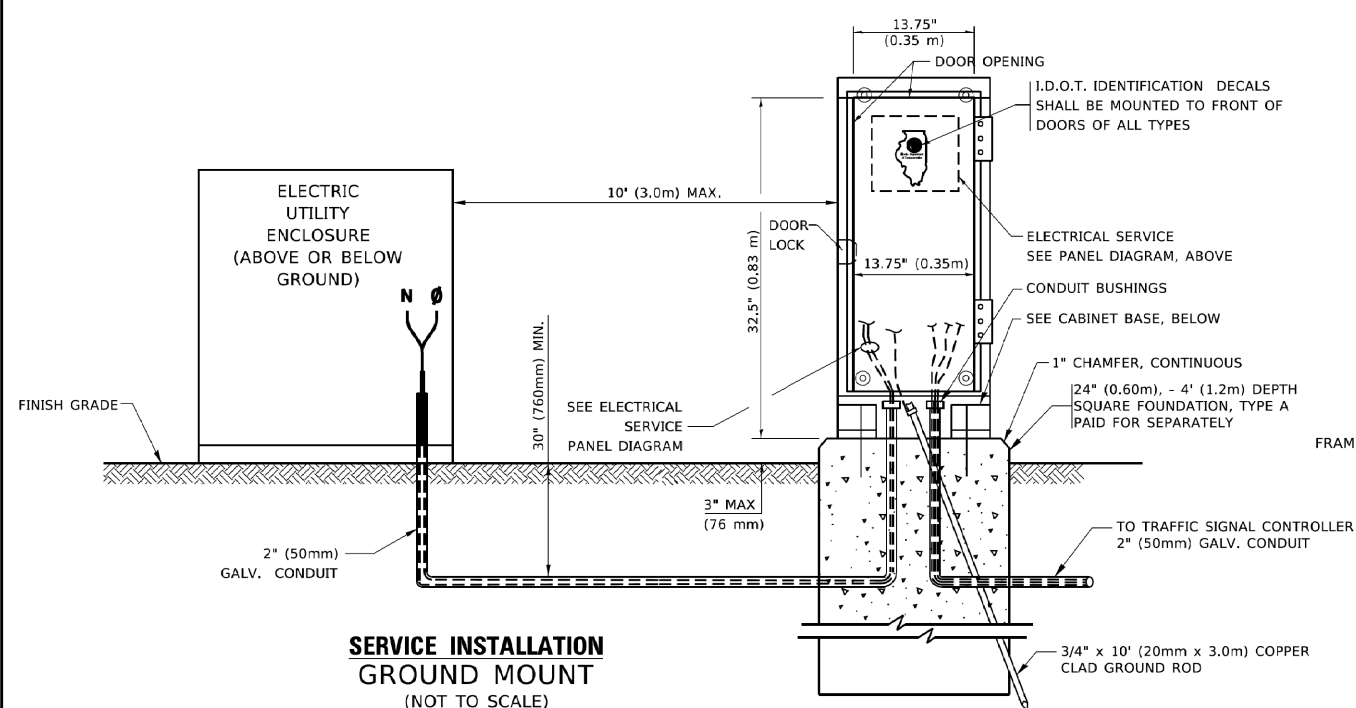
NOTES:
GROUNDING SYSTEM

- THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
- THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
- ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
- THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



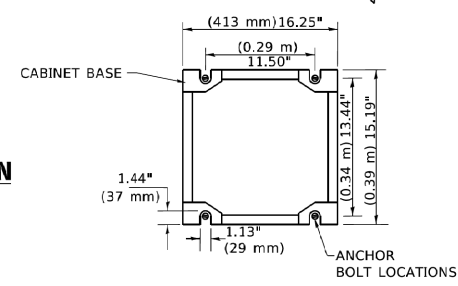
NOTES:

- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES. 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES. 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



SERVICE INSTALLATION GROUND MOUNT
 (NOT TO SCALE)

CABINET – BASE BOLT PATTERN
 (NOT TO SCALE)



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

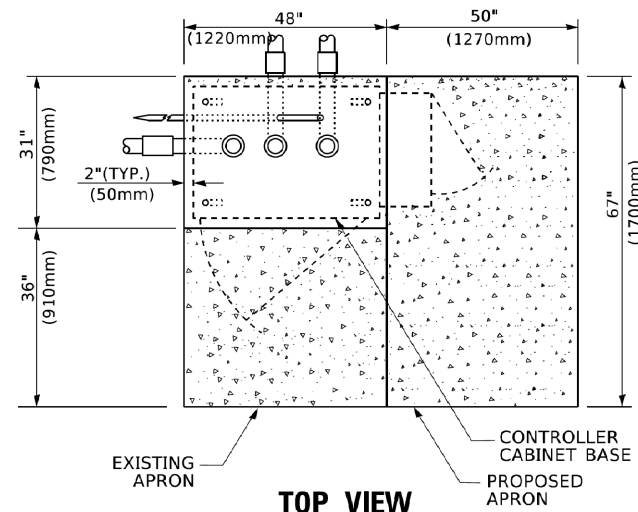
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

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PLOT DATE = 3/4/2019	DATE -	REVISED -

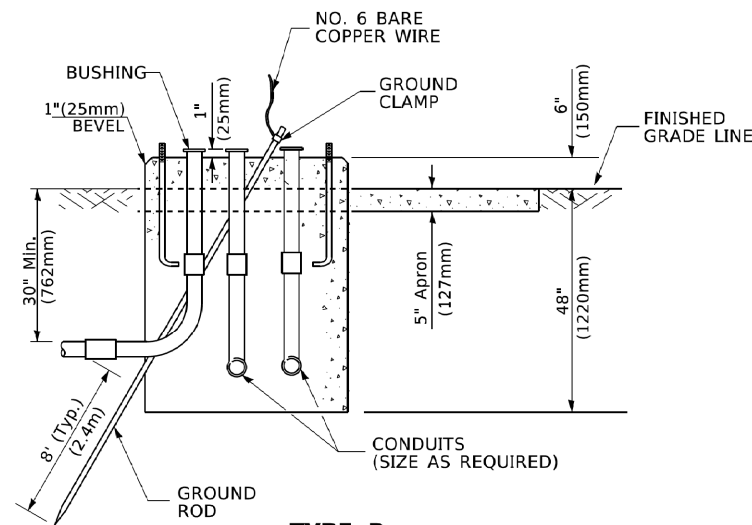
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F.A.P. RTE. 351	SECTION 2019-047-TS	COUNTY WILL	TOTAL SHEETS 137	SHEET NO. 52
TS-05		CONTRACT NO. 62U76		
ILLINOIS FED. AID PROJECT				

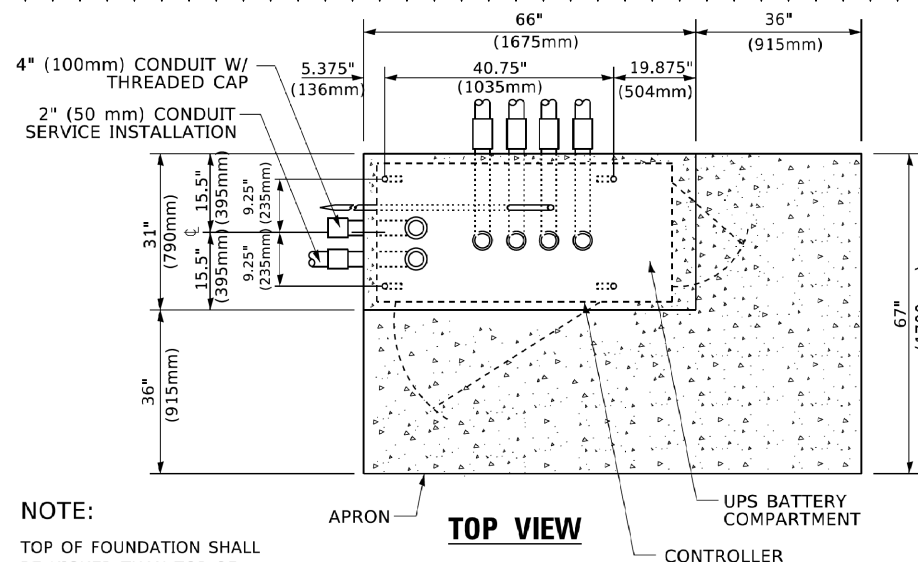
1 REVISED ENTIRE SHEET 5/29/2024 A



TOP VIEW

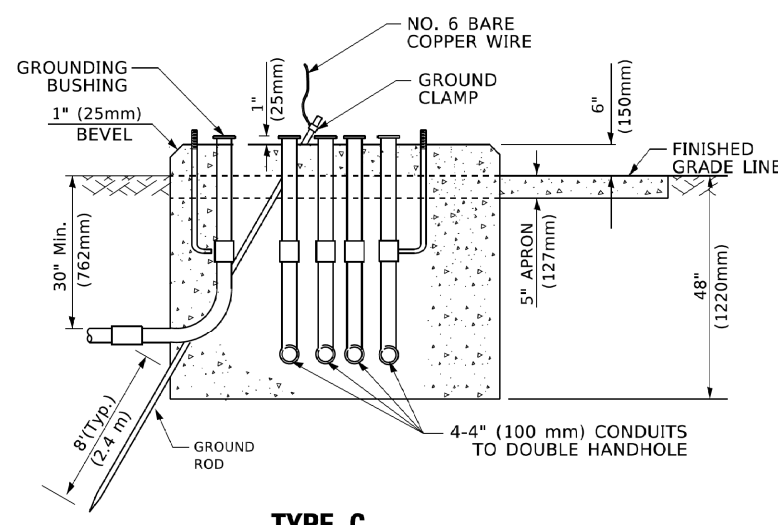


**TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET**

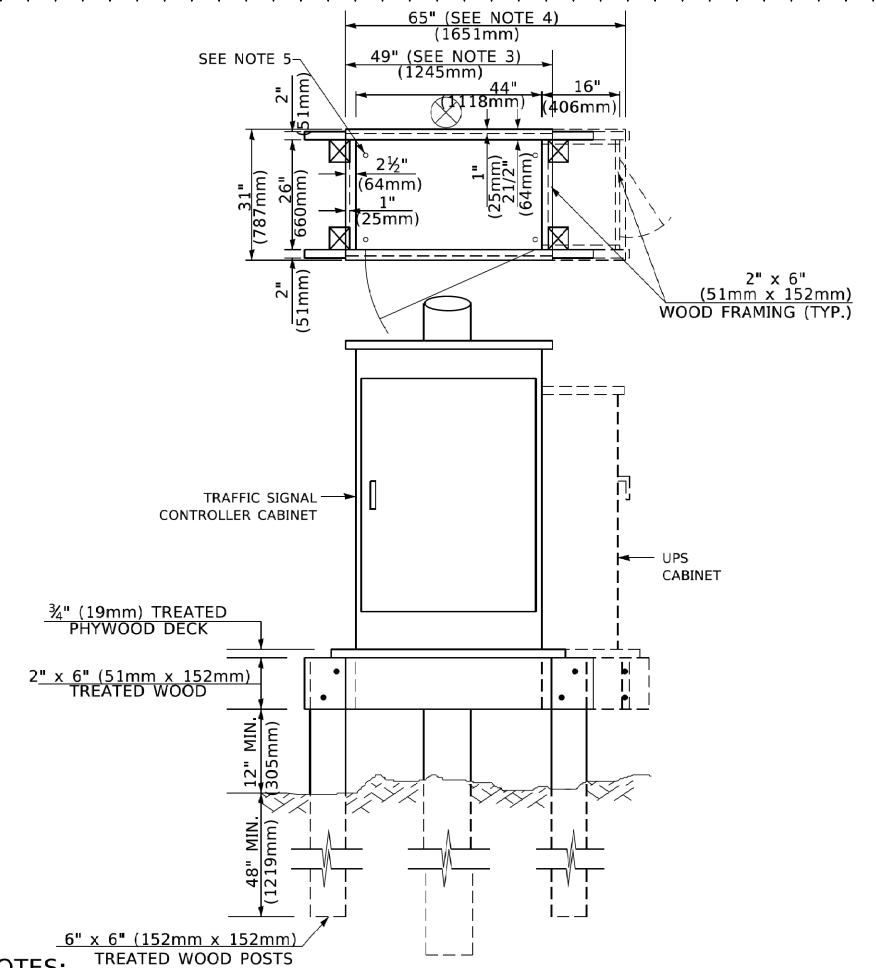


TOP VIEW

NOTE:
TOP OF FOUNDATION SHALL BE HIGHER THAN TOP OF DOUBLE HANDHOLE



**TYPE C
FOR GROUND MOUNTED
SUPER P (TYPE IV) AND SUPER R (TYPE V)
CONTROLLER CABINETS**



NOTES:

- BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
- BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
- PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
- PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
- DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
- FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION.

**TEMPORARY SIGNAL CONTROLLER
WOOD SUPPORT PLATFORM**

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

CABLE SLACK

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE (MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

VERTICAL CABLE LENGTH

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
TYPE D - CONTROLLER	4'-0" (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0" (1.2m)

DEPTH OF FOUNDATION

MAST ARM LENGTH	① FOUNDATION DEPTH	FOUNDATION DIAMETER	SPIRAL DIAMETER	QUANTITY OF REBARS	SIZE OF REBARS
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 55' (16.8 m) and up to 65' (19.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 65' (19.8 m) and less than 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

NOTES:

- These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Qu) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & Structures should be contacted for a revised design if other conditions are encountered.
- Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
- Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations.
- For mast arm assemblies with dual arms refer to state standard 878001..

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

REVISI... ENTIRE SHEET 5/29/2024

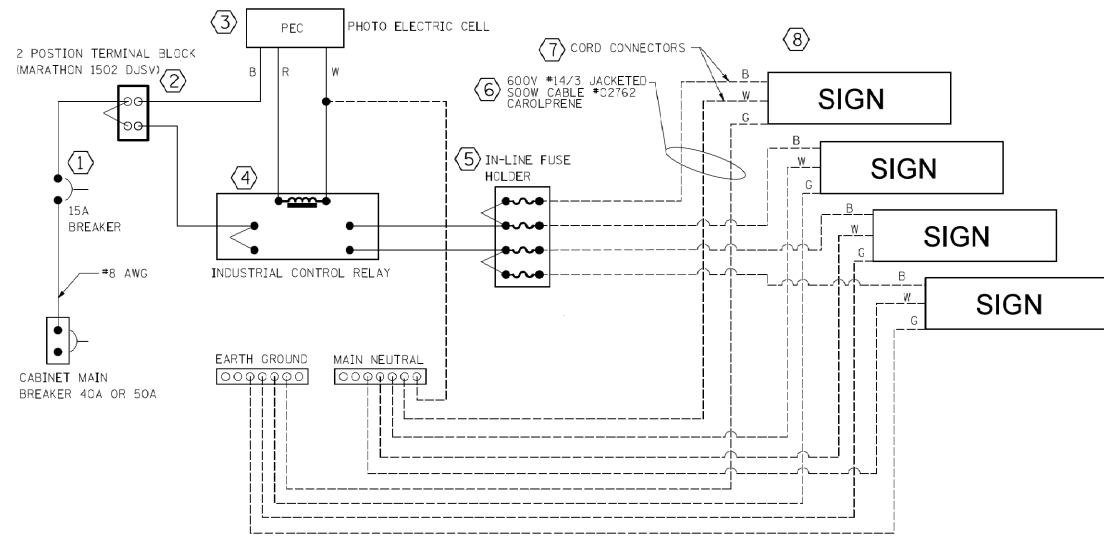
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE SHEET 5 OF 7 SHEETS STA. TO STA.

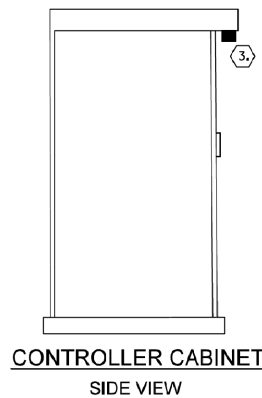
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	2019-047-TS	WILL	137	53
TS-05			CONTRACT NO. 62U76	
ILLINOIS FED. AID PROJECT				

MODEL: Default

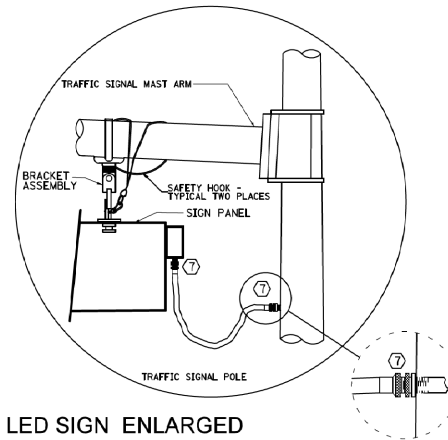


LED SIGN WIRING DETAIL

DESCRIPTION	NOTES
1. CIRCUIT BREAKER, 15 AMPERE	
2. TERMINAL BLOCK	
3. PHOTO ELECTRIC CONTROL	
4. CONTRACTOR (INDUSTRIAL CONTROL RELAY)	BOLT ON W/SCREW TERMINAL
5. IN-LINE FUSE HOLDER WITH 5 AMP FUSE	
6. ELECTRIC CABLE, No. 14, 3/C (BLACK, WHITE, GREEN)	
7. CORD/CABLE CONNECTOR	
8. SIGN MOUNTING HARDWARE	



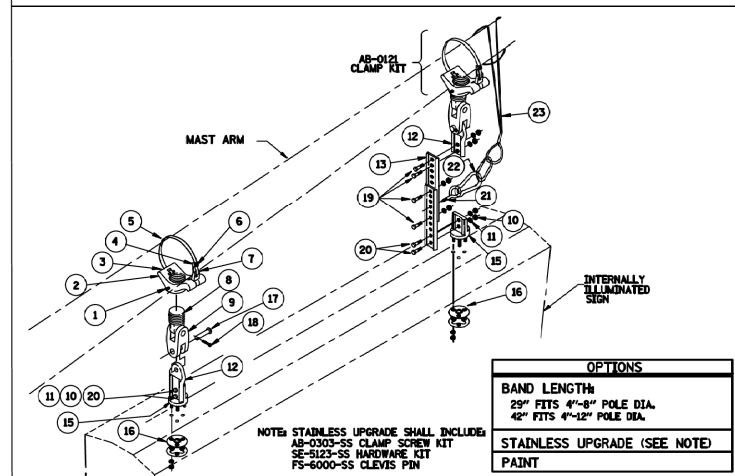
CONTROLLER CABINET SIDE VIEW



LED SIGN ENLARGED CABLE CONNECTOR DETAIL (NOT TO SCALE)

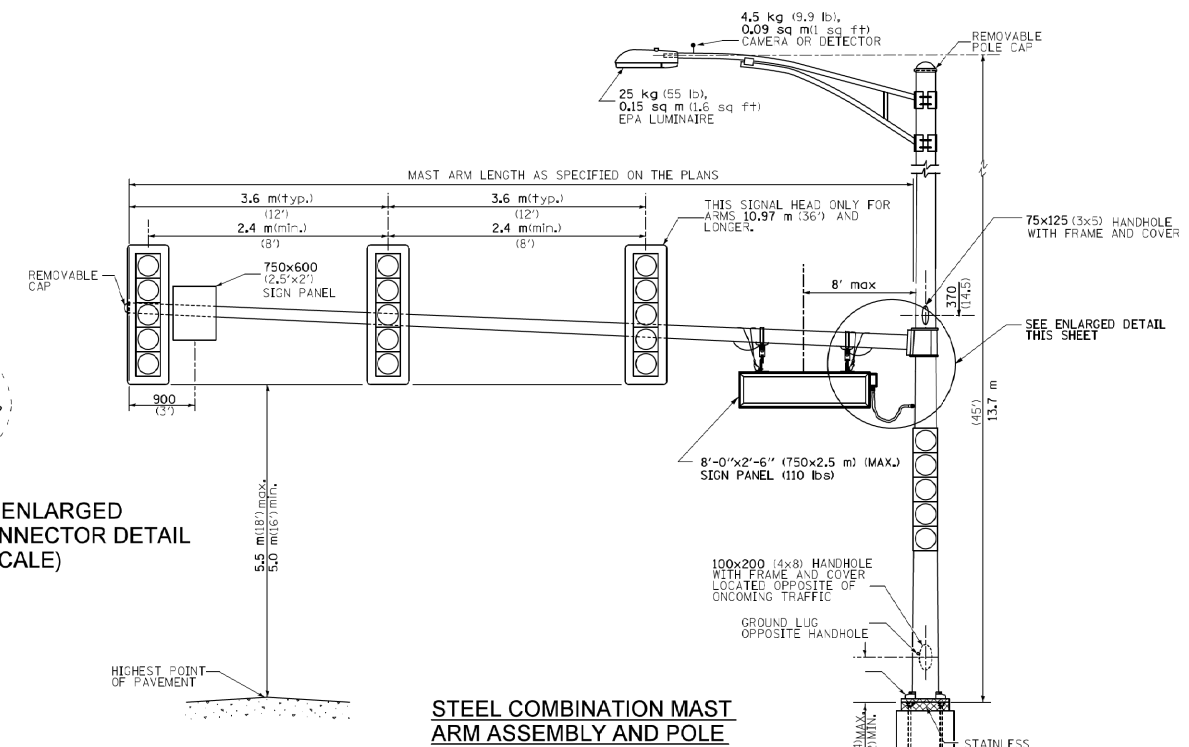
LED SIGN ENLARGED CABLE CONNECTOR DETAIL (NOT TO SCALE)

TITLE: BRACKET, FREE-SWINGING MAST ARM SIGN W/BAND MOUNT MINI-BRAC

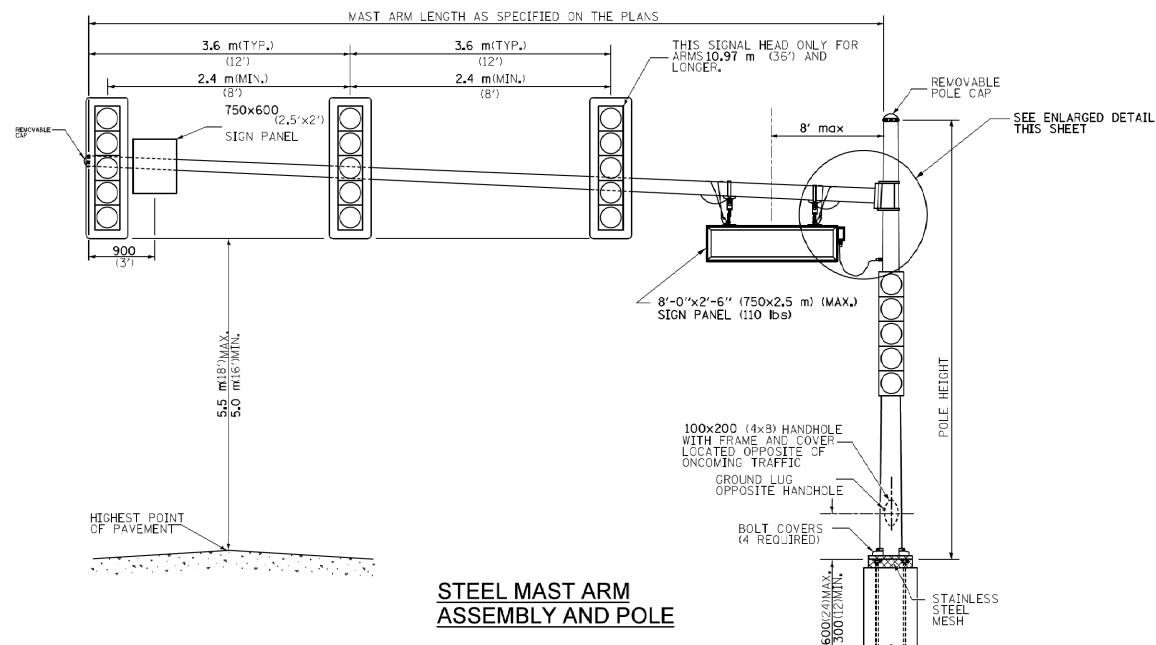


ITEM	DESCRIPTION	QTY
1	SCREW, SET SQ HD 1/4"-20 x 5/8", STAINLESS	2
2	CLAMP, MINI-BRAC BAND MOUNT, 1 1/2" NPS, ALUM	2
3	PIN, GROOVE 3/16" x 1 1/4", ZINCI	2
4	CLAMP, BAND 5/8", STAINLESS	2
5	BAND, 5/8", STAINLESS	2
6	SCREW, SET SOC HD 5/16"-18, STAINLESS	2
7	KIT, CLAMP SCREW FOR MINI-BRAC, GALV	2
8	ADAPTER, SPAN WIRE, DIE CAST ALUM W/ SS INSERT	2
9	CLEVIS-CLEVIS, 1/2" x 1/2", ALUM W/ STAINLESS BUSHINGS	2
10	NUT, HEX HD 5/16", STAINLESS	8
11	WASHER, SPLIT LOCK, 5/16", STAINLESS	8
12	EXTENDER CONNECTOR HANGER, ALUM W/ STAINLESS BUSHINGS	2
13	EXTENDER, 11"	2
15	HANGER, TRI-STUD, ALUM	2
16	HARDWARE KIT W/ GASKET, 5/16" - 18, STAINLESS	2
17	PIN, CLEVIS, 5/8" x 2 1/4" EL, GALV	4
18	PIN, COTTER HUMPED, 5/32" x 1.775" 304 STAINLESS	4
19	BOLT, HEX HD, 5/16" - 18 x 1", STAINLESS	4
20	BOLT, HEX HD, 5/16" - 18 x 1 1/4", STAINLESS	4
21	EYE HOOK, STAINLESS STEEL (RATED FOR APPROPRIATE LOAD)	2
22	CARABINER HOOK, STAINLESS STEEL, (RATED FOR APPROPRIATE LOAD)	2
	CABLE, SAFETY, FOR SIGN HANGERS, STAINLESS	2
	SLEEVE, COMPRESSION, OVAL, STAINLESS	4
	WIRE ROPE, 3/16" X 7 X 19, AIRCRAFT, TYPE 304 STAINLESS	2
	CONNECTOR, THREADED, 3/16" X 1-1/2", STAINLESS	2
	INSTRUCTIONS, SAFETY CABLE FOR SIGN HANGERS	2

LED SIGN BRACKET DETAIL



STEEL COMBINATION MAST ARM ASSEMBLY AND POLE



STEEL MAST ARM ASSEMBLY AND POLE

GENERAL NOTE:

- SIGNAL HEADS, SIGN PANELS, AND OTHER ATTACHMENT ARE SHOWN FOR MINIMUM DESIGN LOADING PURPOSES ONLY. EACH SIGNAL HEAD SHALL WEIGH 36 Kg (80 lb) AND HAVE A PROJECTED AREA OF 1.37 sq. m (14.7 sq ft.).
- PHOTO ELECTRIC CELL IS TO BE MOUNTED ABOVE CABINET DOOR.
- THE SIGN SHALL BE LOCATED AT A MAXIMUM OF 8' FROM CENTER OF SIGN TO POLE.
- SIGN IS TO BE MOUNTED A MINIMUM OF 16' ABOVE PAVEMENT.
- CERTAIN ADDITIONAL INFORMATION MAY BE ALLOWED ON THE SIGN. VERIFY WITH ENGINEER.
- SIGNS SHALL NOT BE ENERGIZED WHEN TRAFFIC SIGNALS ARE POWERED BY THE UPS. THE SIGNS SHALL BE CONNECTED TO THE UPS BYPASS CIRCUITRY.
- ALL 120 VOLT SYSTEM AND CONTROL WIRING SHALL BE #12 AWG STRANDED UNLESS OTHERWISE INDICATED.
- ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.
- ALL WIRING WITHIN THE CABINET SHALL BE COLOR CODED AS INDICATED:
R = RED BL = BLUE W = WHITE
B = BLACK Y = YELLOW G = GREEN

All dimensions are in millimeters (inches) unless otherwise shown.

REVISED SHEET 5/29/2024

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WSP USA Inc.
30 N. LASALLE STREET
SUITE 4000
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1884

USER NAME = USMM706094	DESIGNED - R.A.C.	REVISED - 04/24/2024
PLOT SCALE = 1:10.166921	DRAWN - R.A.C.	REVISED - ADDENDUM A 5/24/24
PLOT DATE = 5/24/2024	CHECKED - M.J.M.	REVISED -
	DATE - 11/03/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LED INTERNALLY ILLUMINATED STREET NAME SIGN DETAIL
IL 7 / IL 53

F.A.P. RTE. 351	SECTION 2019-047-TS	COUNTY WILL	TOTAL SHEETS 137	SHEET NO. 56A
SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.			CONTRACT NO. 62076	
ILLINOIS FED. AID PROJECT				



- NOTES:
1. PROPOSED SIGNALS HAVE BEEN LOCATED TO AVOID FUTURE CONFLICTS WITH A PLANNED SHARED-USE PATH. DOUBLE HANDHOLE PROVIDED IN THE NW CORNER AND CONDUIT SIZING IS APPROPRIATE TO ACCOMMODATE POTENTIAL FUTURE PEDESTRIAN SIGNAL POSTS WITH APS BUTTONS.
 2. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS. THIS WORK SHALL BE CONSIDERED INCLUDED IN THE CONTRACT UNIT COST FOR DETECTOR LOOP, TYPE I.
 3. ALL RED SIGNAL FACES SHALL HAVE A LENS COVER INSTALLED. THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR EACH LED SIGNAL FACE, LENS COVER.

16' POST, TYPE A FOUNDATION
STA 499+51.9, 83.7' LT

SEE TS SHT NO. 15
MATCH LINE STA. 1001+50

LED INTERNALLY ILLUMINATED
STREET NAME SIGN

50' MAST ARM, 36" DIA. FND
(15 FEET DEPTH)
STA 500+54.6, 89.2' LT

SERVICE INSTALLATION,
GROUND MOUNTED, METERED
STA 500+69.1, 86.5' LT

FULL-ACTUATED CONTROLLER AND
TYPE SUPER P CABINET (WITH CONCRETE PAD)
STA 500+58.2, 86.7' LT

SEE LANDSCAPING PLANS FOR GRADING
DETAIL FOR CONTROLLER FOUNDATION.

EX ROW

EXISTING ELECTRIC
UTILITY POLE

28' MAST ARM, 30" DIA. FND
(10 FEET DEPTH)
STA 500+91.5, 58.2' LT

POTENTIAL FUTURE SHARED-USE PATH
PLANNED BY OTHERS (SEE NOTE 1)

278' UC
2"

POTENTIAL FUTURE SHARED-USE PATH
PLANNED BY OTHERS (SEE NOTE 1)

42' MAST ARM, 36" DIA. FND
(15 FEET DEPTH, 13'+2' FOR GRADE)
STA 499+16.6, 51.5' LT

LED INTERNALLY ILLUMINATED
STREET NAME SIGN

69' UC
2"

16' UC
3"

29' UC
3"

251' UC
2"

128' UC
4" (2)

131' UC
4"

58' UC
2"

4' UC
2"

5' UC
(4) 4"

10' UC
3"

5' UC
4"

90' UC
2"

154' UC
4"

246' UC
2"

8' UC
3"

18' UC
3"

52' MAST ARM, 36" DIA. FND
(17 FEET DEPTH, 15'+2' FOR GRADE)
STA 499+32.6, 90.4' RT

LED INTERNALLY ILLUMINATED
STREET NAME SIGN

76' UC
2"

16' UC
3"

12' UC
3"

34' MAST ARM, 36" DIA. FND
(13 FEET DEPTH, 11'+2' FOR GRADE)
STA 500+67.6, 89.0' RT

LED INTERNALLY ILLUMINATED
STREET NAME SIGN

236' UC
2"

14' UC
3"

11' UC
3"

8' UC
3"

11' UC
3"

11' UC
3"

14' UC
3"

14' UC
3"

14' UC
3"

14' UC
3"

RENWICK RD.

250' TO STOP BAR

IL ROUTE 7
(BROADWAY ST.) /
IL ROUTE 53

IL ROUTE 7
(W. 9TH ST.)

MATCH LINE STA. 502+00
SEE TS SHT NO. 15

MATCH LINE STA. 998+00
SEE TS SHT NO. 15

REVISD ENTIRE SHEET 5/29/2024

TS 7510



R10-5
30" x 36"
8 REQUIRED

SIGN PANEL, TYPE 1

MODEL: R10-5
FILE NAME: WSP\Projects\Illinois\2019-047-TS\Drawings\Traffic Signal\TS-7510-02.dwg

wsp
WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1884

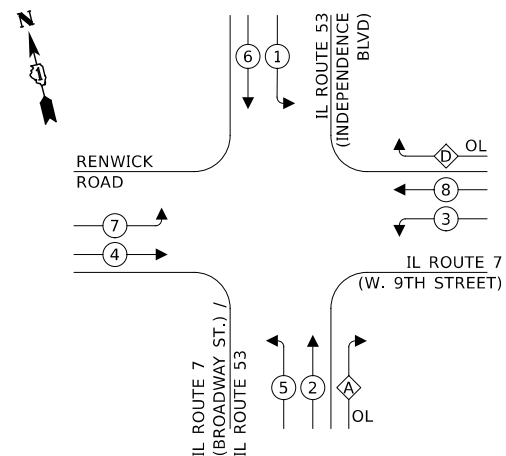
USER NAME = USMM706094	DESIGNED - R.A.C.	REVISED - 04/24/2024
PLOT SCALE = 1:40	DRAWN - R.A.C.	REVISED - ADDENDUM A 5/24/24
PLOT DATE = 5/24/2024	CHECKED - M.J.M.	REVISED -
	DATE - 11/03/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

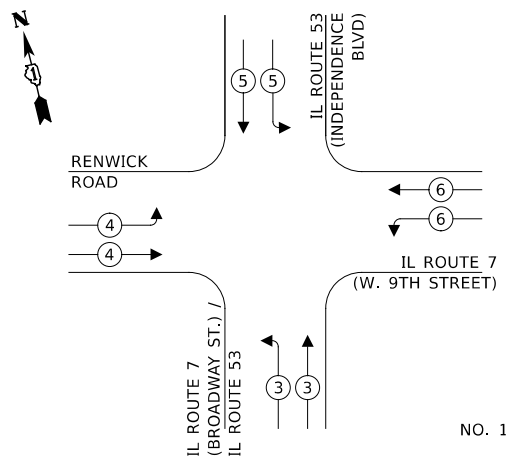
SCALE:		SHEET 14 OF 17 SHEETS	STA. TO STA.
IL 7 / IL 53		TRAFFIC SIGNAL INSTALLATION PLAN	

F.A.P. RTE. 351	SECTION 2019-047-TS	COUNTY WILL	TOTAL SHEETS 137	SHEET NO. 62
CONTRACT NO. 62U76				
ILLINOIS FED. AID PROJECT				

CONTROLLER SEQUENCE



EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND:

- ← * → PROTECTED PHASE
- ← OL → OVERLAP

RIGHT TURN OVERLAP PHASE DESIGNATION:

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 3
D	= 8	+ 1

TRAFFIC SIGNAL ELECTRIC SERVICE REQUIREMENTS

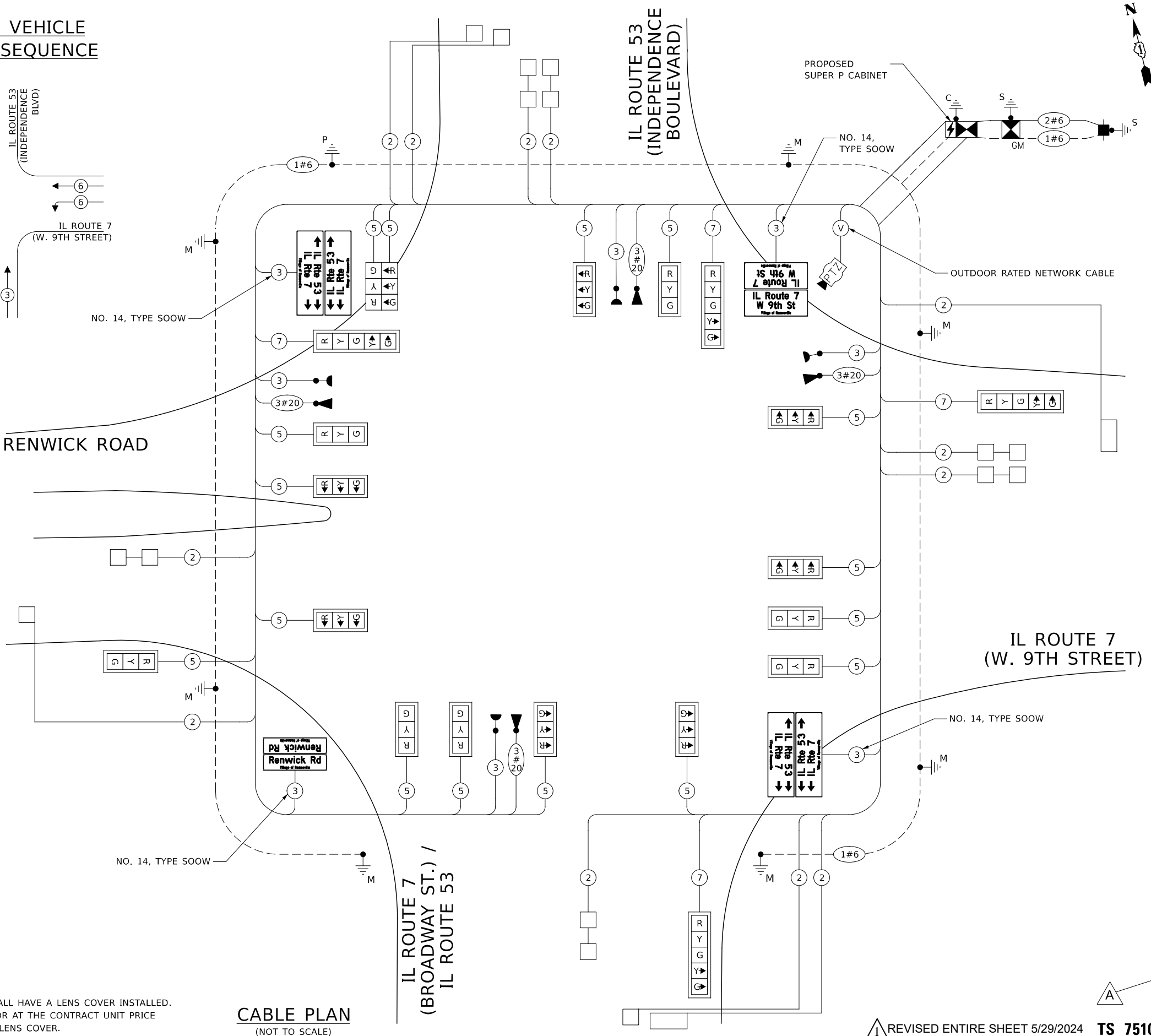
TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	16	11	176.0
4 - SECTION	-	14	-
5 - SECTION	4	13	52.0
PROGRAMMABLE SIGNAL			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL CONTROLLER	1	150	150.0
MASTER CONTROLLER	-	100	-
UPS	1	25	25.0
DETECTION RADAR	-	20	-
DETECTION VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
PTZ CAMERA	1	75	75.0
NETWORK SWITCH II OR III	1	35	35.0
CELLULAR MODEM	1	15	15.0
TOTAL UPS SIZING			528.0
UPS CHARGING	1	225	225.0
BATTERY HEATER MAT	1	180	180.0
CABINET HEATER	1	200	200.0
FLASHER	1	15	15.0
LED STREET NAME SIGN	4	120	480.0
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING			1,628.0

ENERGY COSTS TO:
ILLINOIS DEPARTMENT OF TRANSPORTATION
 201 CENTER CT.
 SCHAUMBURG, IL 60196
 ENERGY SUPPLY: CONTACT: RICK OSTER
 PHONE: (779) 231-0625
 COMPANY: COMMONWEALTH EDISON
 ACCOUNT NUMBER: ---

NOTES:
 1. ALL RED SIGNAL FACES SHALL HAVE A LENS COVER INSTALLED.
 THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR EACH LED SIGNAL FACE, LENS COVER.

DESIGNED - R.A.C.	REVISED - 04/24/2024
DRAWN - R.A.C.	REVISED - ADDENDUM A 5/24/24
CHECKED - M.J.M.	REVISED -
DATE - 11/03/2023	REVISED -

CABLE PLAN
(NOT TO SCALE)



REVISION 1 REVISED ENTIRE SHEET 5/29/2024 **TS 7510**

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

CABLE PLAN, CONTROLLER SEQUENCE AND EMERGENCY VEHICLE PREEMPTION SEQUENCE IL 7 / IL 53

SCALE: SHEET 16 OF 17 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	2019-047-TS	WILL	137	64
CONTRACT NO. 62U76				

MODEL & MODEL NAMES FILE NAME: WSP\US\Projects\2019-047-TS\Drawings\TS-7510-64.dwg



IL ROUTE 7 (W. 9TH STREET)

IL ROUTE 53 (INDEPENDENCE BOULEVARD)

IL ROUTE 7 (BROADWAY ST.) / IL ROUTE 53

RENNICK ROAD

Renwick Rd



