LIGHT STANDARDS AND FOUNDATIONS
CONCRETE HANDHOLES
CONCRETE HANDHOLE TYPE W & POLYMER H
ELECTRICAL CONNECTIONS
UNDERBRIDGE LUMINAIRES
SERVICE ENTRANCE AND CABINET - TYPE I
COMMUTER PARKING LOT LIGHTING DETAILS
UTILITY TRANSFORMER PAD
STRUCTURE RELATED ELECTRICAL DETAILS
CONDUIT CONNECTION AT BRIDGE WINGWALL
PRECAST RETAINING WALL ELECTRICAL DETAIL
BRIDGE INSPECTION RECEPTACLES
CONDUIT EXPANSION FITTINGS
MEDIAN ELECTRICAL DETAILS
MEDIAN ELECTRICAL DETAILS
NAVIGATION LIGHTS
LIGHT STANDARD FOUNDATION - SPECIAL

					DESIGNER/DRAFTER:
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				THE CONDITIONS OF ACTUAL QUANTITIES	
				OF WORK WHICH WILL BE REQUIRED.	
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INDEX OF DRAWINGS

	DRAWING TITLE	
HOLE		



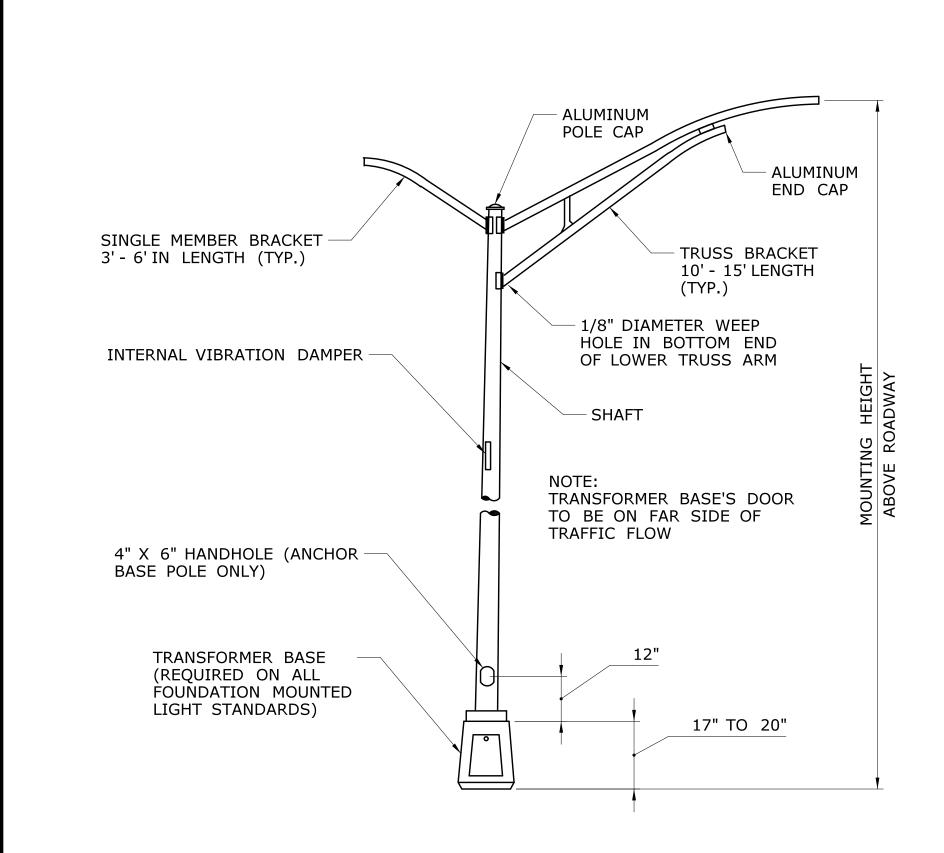
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DRAWING TITLE: ILLUMINATION GUIDE SHEET INDEX	SHEET NO.
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ALUMINUM LIGHT STANDARD

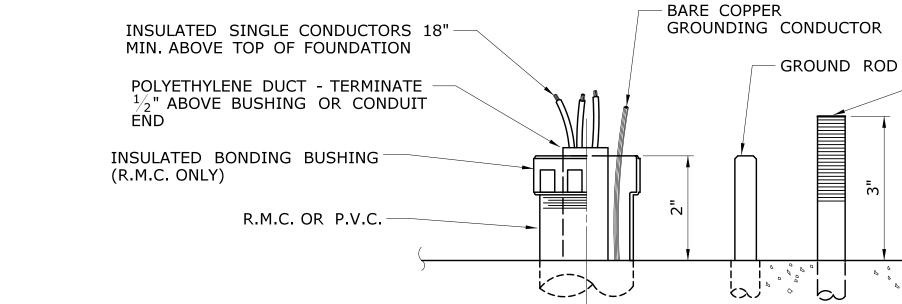
	ALUMINUM LIGHT STANDARD - DIMENSION TABLE						
MOUNTING	BRACKET LENGTH	SHAFT D	IAMETER	SHAFT WALL THICKNESS	BASE TYPE	ANCHOR BOLT SIZE	BOLT CIRCLE DIAMETER
HEIGHT		воттом	ТОР				

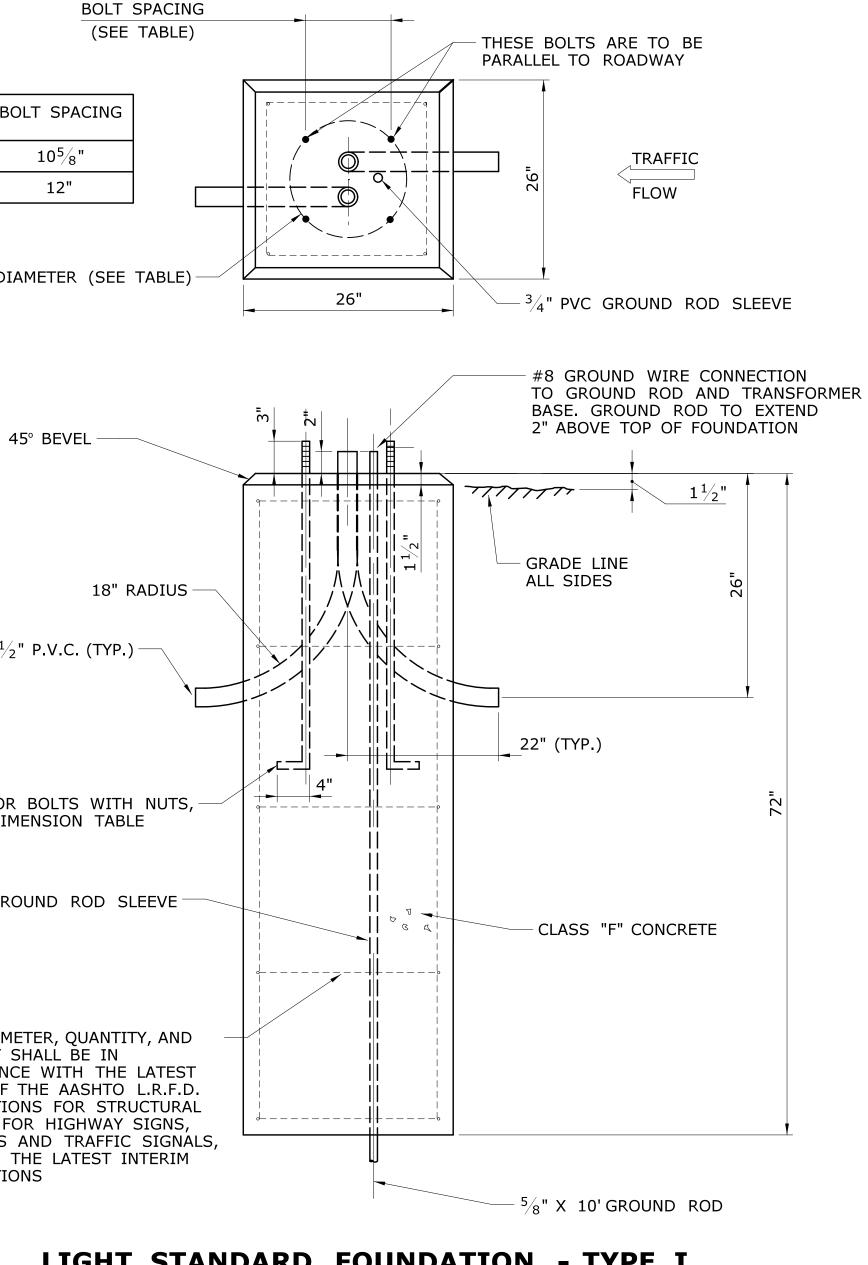
LIGHT STANDARD NOTES:

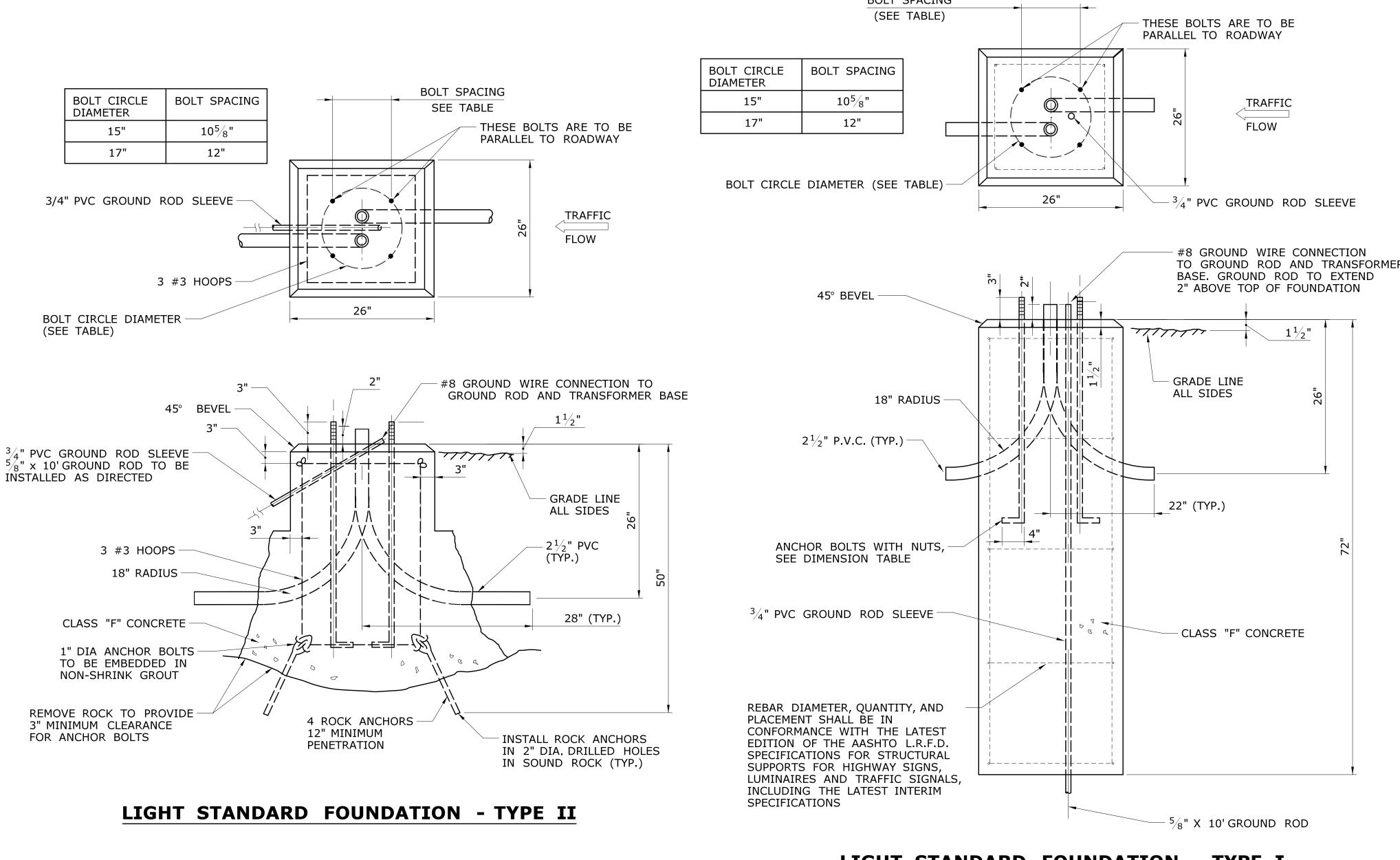
- 1) ALUMINUM ALLOY SHALL BE 6063, T6 TEMPER. 5)
- 2) BOLT CIRCLE SHOWN IS FOR ANCHOR BASE BOTTOM OR TRANSFORMER BASE BOTTOM (WHICHEVER IS APPLICABLE).
- 3) TO BE DESIGNED TO AASHTO "STANDARD SPECIFICATION FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS" FOR 90 M.P.H. WINDS. 6)
- 4) WELDING DESIGN AND FABRICATION SHALL CONFORM TO THE LATEST EDITION OF THE ANSI/AWS D1.2, STRUCTURAL WELDING CODE - ALUMINUM.
- FOR BASE CONNECTION WELDS, FABRICATION INSPECTION AND TESTING SHALL BE PERFORMED AS NECESSARY PRIOR TO ASSEMBLY, DURING ASSEMBLY, DURING WELDING, AND AFTER WELDING, TO ENSURE THAT MATERIALS AND WORKMANSHIP MEET THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. FABRICATION INSPECTION AND TESTING IS THE RESPONSIBILITY OF THE CONTRACTOR. VERIFICATION INSPECTION AND TESTING IS THE PREROGATIVE OF THE ENGINEER (CONNDOT).
- NON-DESTRUCTIVE TESTING FOR ALUMINUM SHALL BE AS FOLLOWS: A RANDOM 25% OF ALL BASE CONNECTION WELDS SHALL BE INSPECTED IN ACCORDANCE WITH ASTM E-165 STANDARD PRACTICE FOR LIQUID PENETRANT INSPECTION METHOD.

				DESIGNER/DRAFTER:	A 589488 D	SIGNATURE/	PROJECT TITLE:
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-		-	QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED			OFFICE OF ENGINEERING	-
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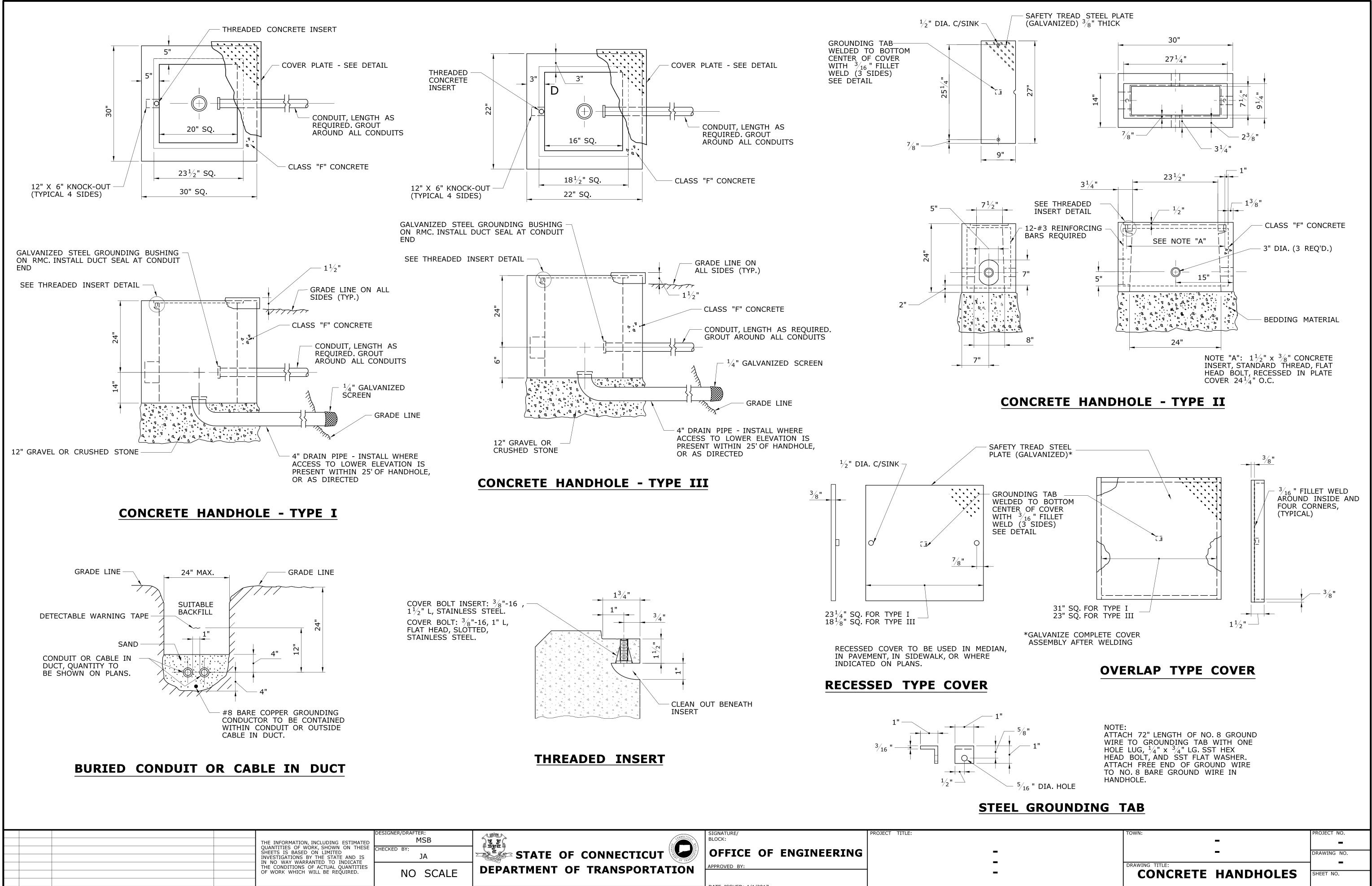




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LIGHT STANDARD FOUNDATION - TYPE I

- ANCHOR BOLT

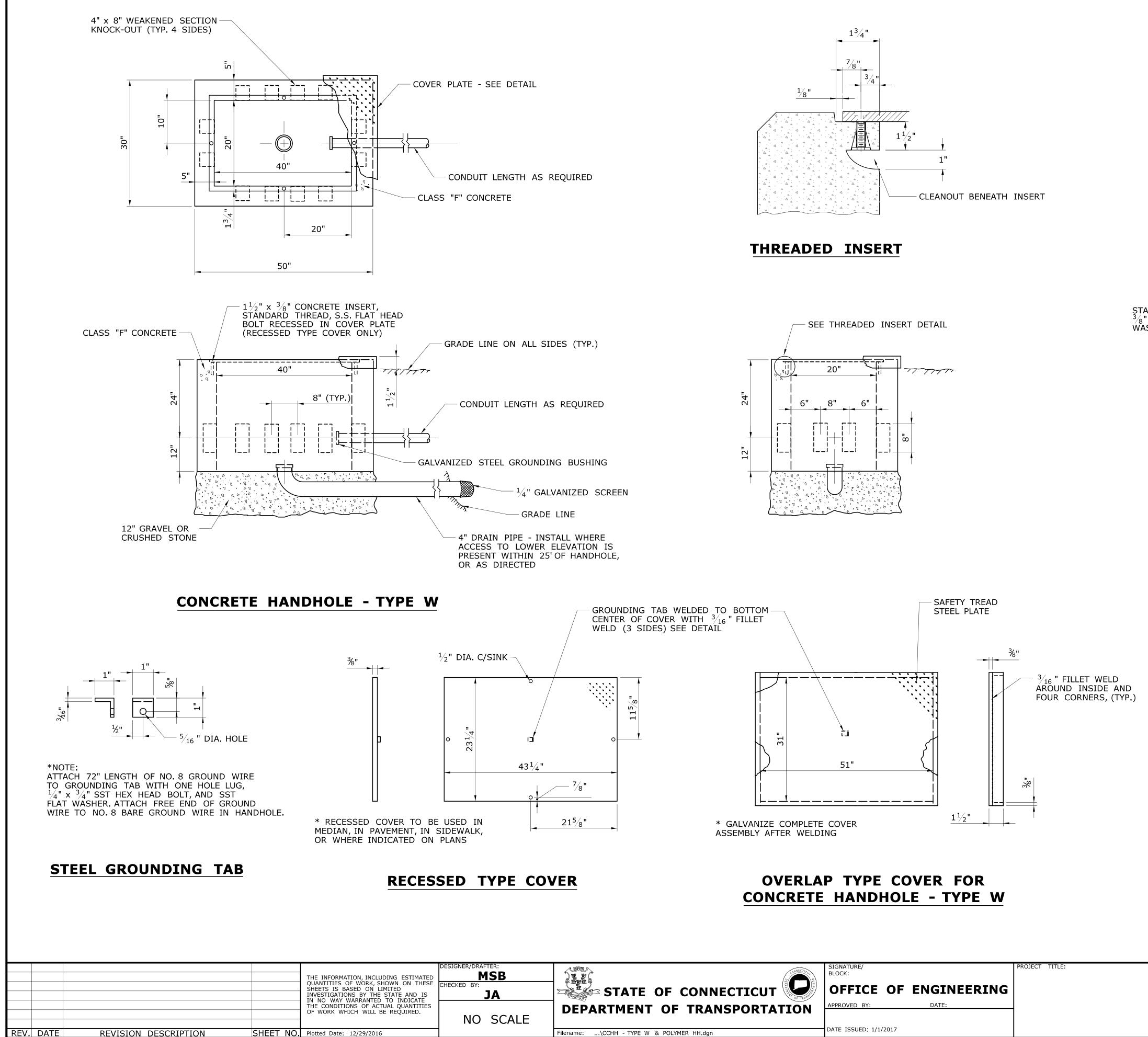


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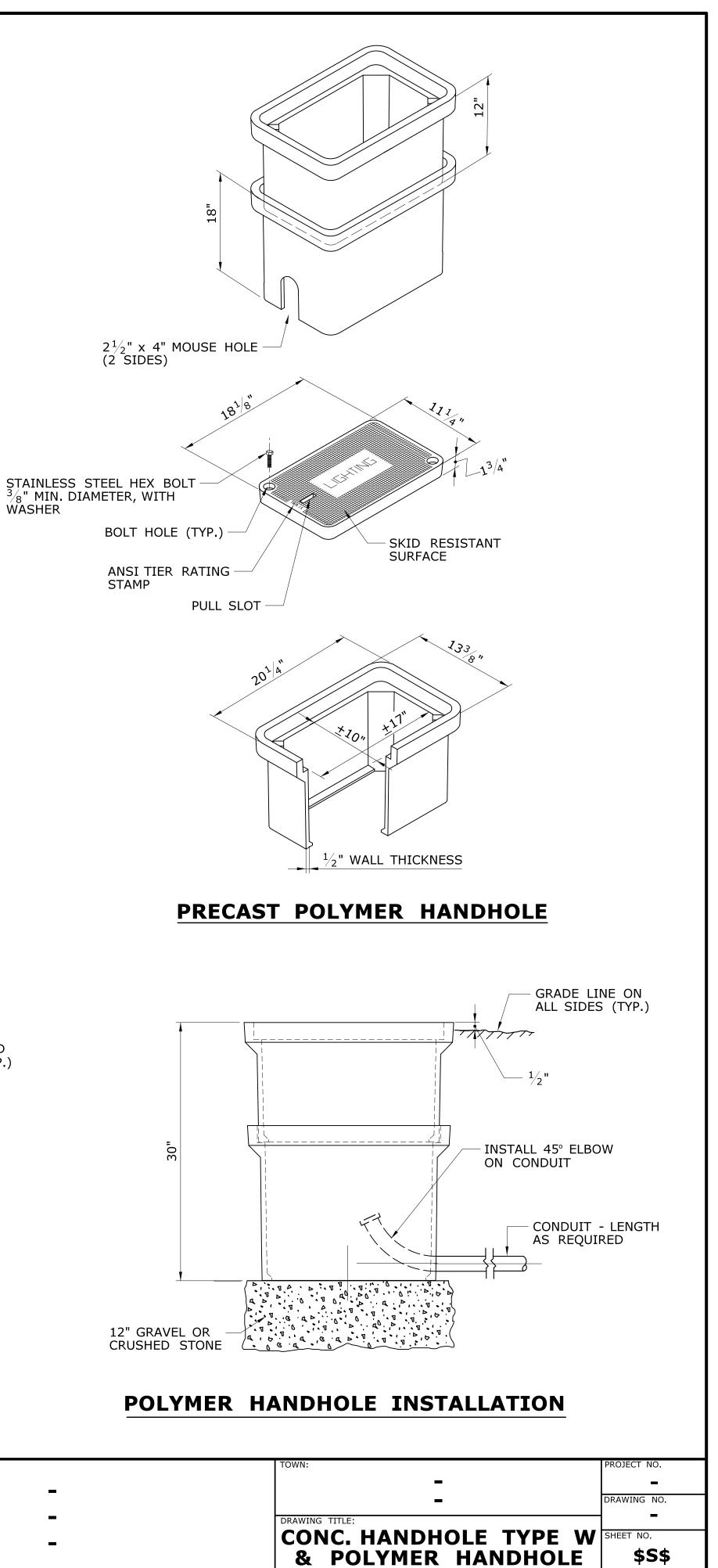
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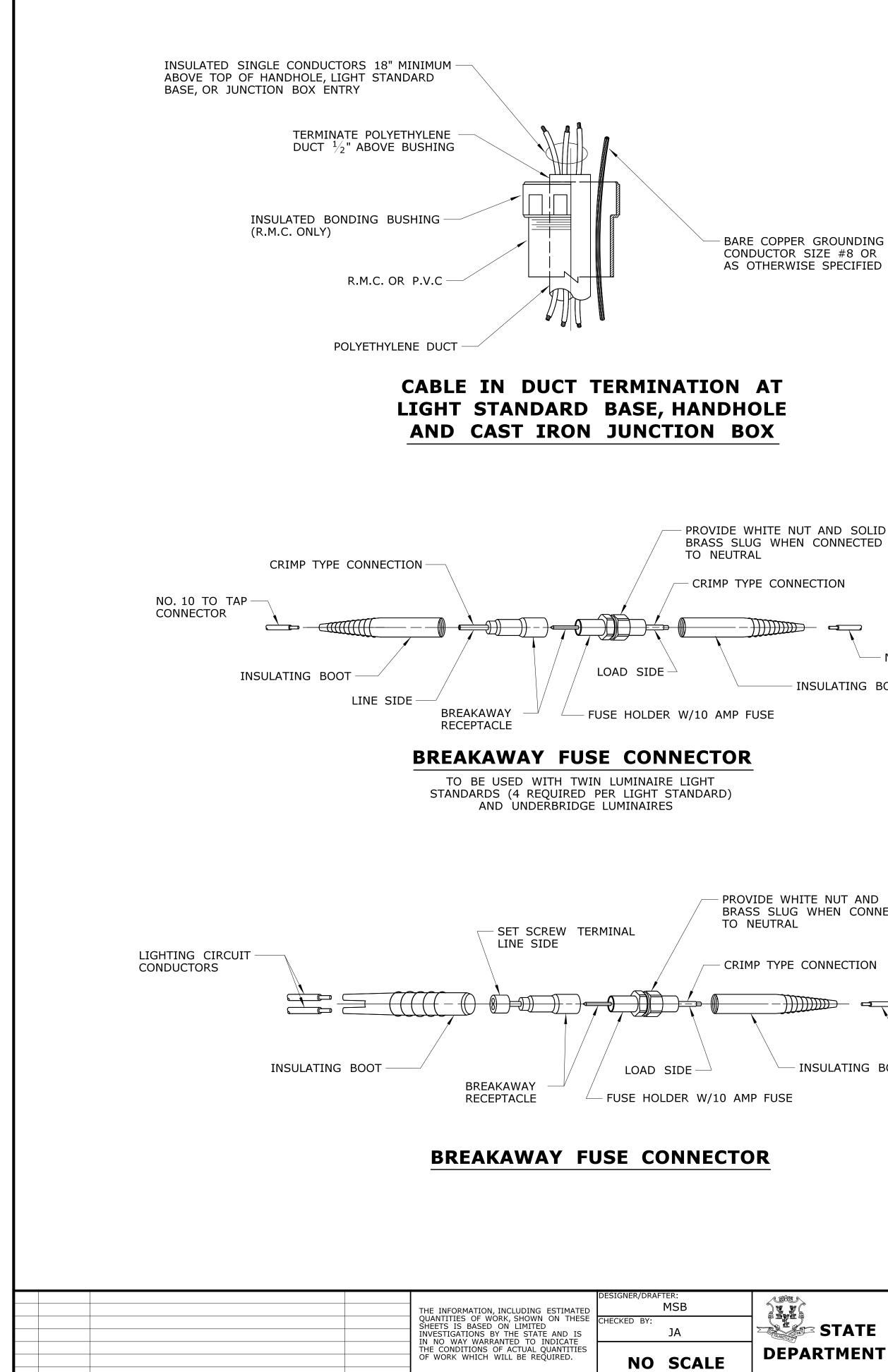
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LE BEL

- NO. 10 TO BALLAST - INSULATING BOOT

CRIMP TYPE CONNECTION

TO NEUTRAL

PROVIDE WHITE NUT AND SOLID BRASS SLUG WHEN CONNECTED

- INSULATING BOOT

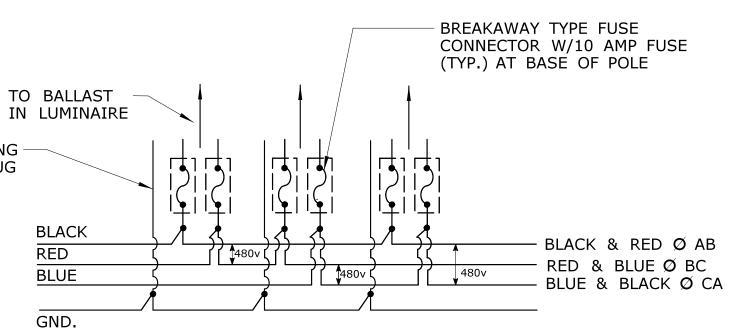
- NO. 10 TO BALLAST

- CRIMP TYPE CONNECTION

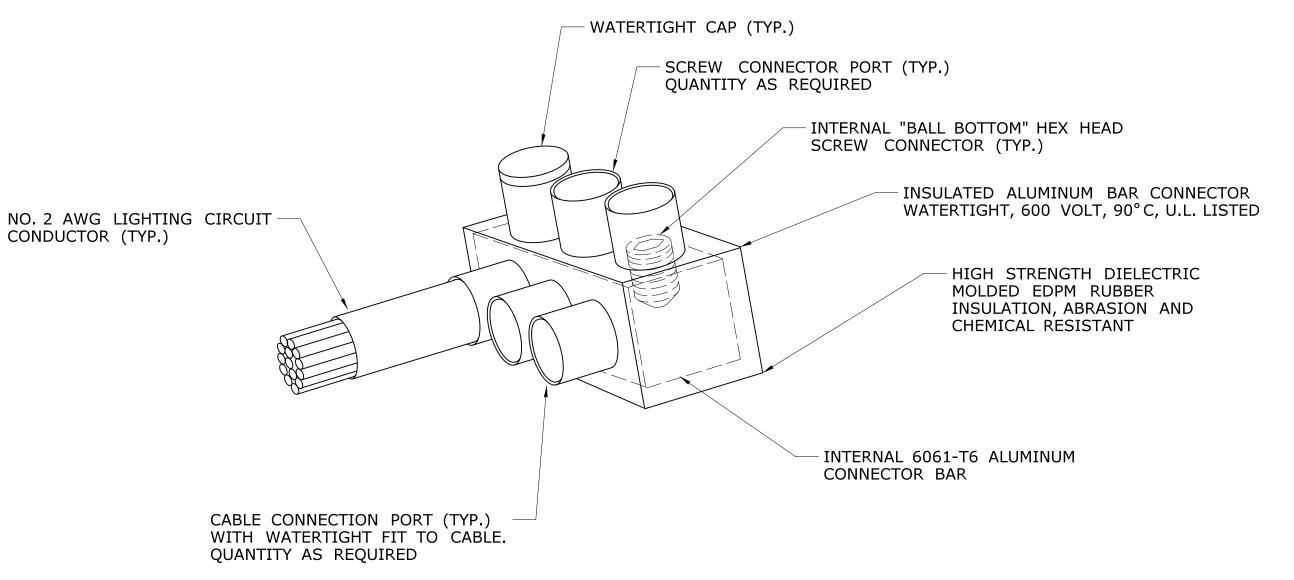
BRASS SLUG WHEN CONNECTED

CONDUCTOR SIZE #8 OR AS OTHERWISE SPECIFIED

NO. 10 GROUND WIRE FROM GROUNDING SYSTEM IN POLE BASE TO GROUND LUG IN LUMINAIRE (TYPICAL)







APPLY RUBBER SPLICING TAPE WITH APPROX. 50% OVERLAP TO A THICKNESS OVER THE CONNECTOR $1\frac{1}{2}$ TIMES THE FACTORY APPLIED INSULATION AND TAPER DOWN TO THE JACKET AT A POINT APPROX. $1\frac{1}{2}$ " FROM THE EDGE OF PENCIL

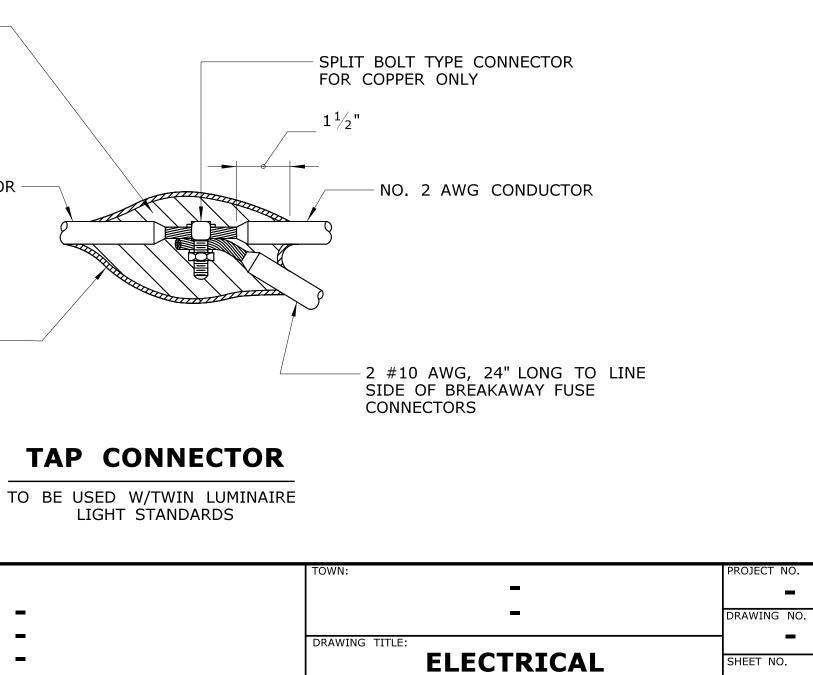
NO. 2 AWG CONDUCTOR

COVER THE ENTIRE SPLICE PLUS $1\frac{1}{2}$ " OF JACKET AT EACH END WITH 4 LAYERS OF SCOTCH #88 (OR EQUAL) PLASTIC ELECTRICAL TAPE CONSISTING OF TWO TAPES APPLIED SPIRALLY WITH A 50% OVERLAP

3 PHASE 3 WIRE SYSTEM

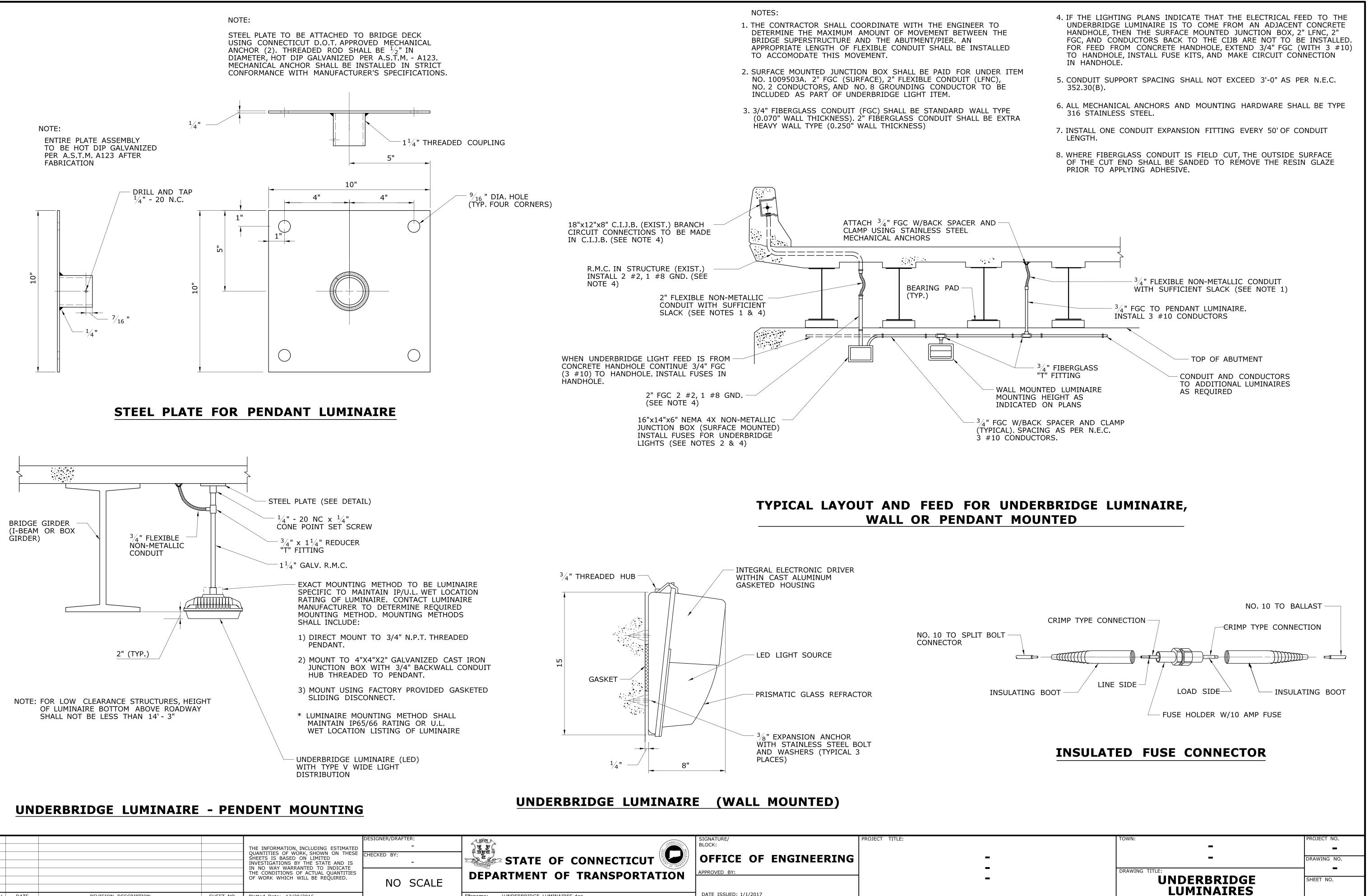
WATERTIGHT CONNECTOR

TO BE USED IN HANDHOLES AND JUNCTION BOXES



CONNECTIONS

SHEET NO.

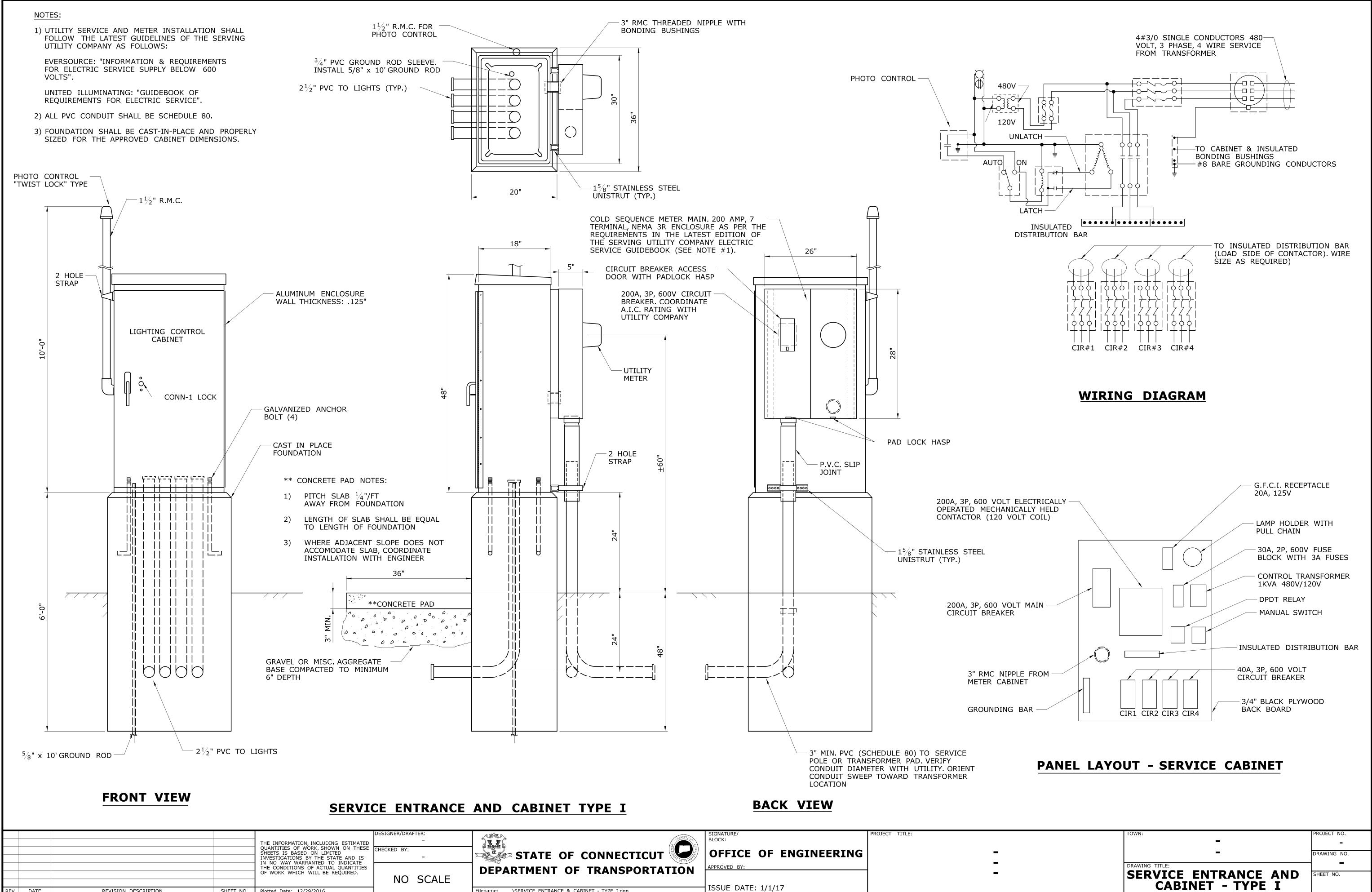


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CONNECTICIA	SIGNATURE/ BLOCK:	PROJECT TITLE:
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Filename:\UNDERBRIDGE LUMINAIRES.dgn	DATE ISSUED: 1/1/2017	

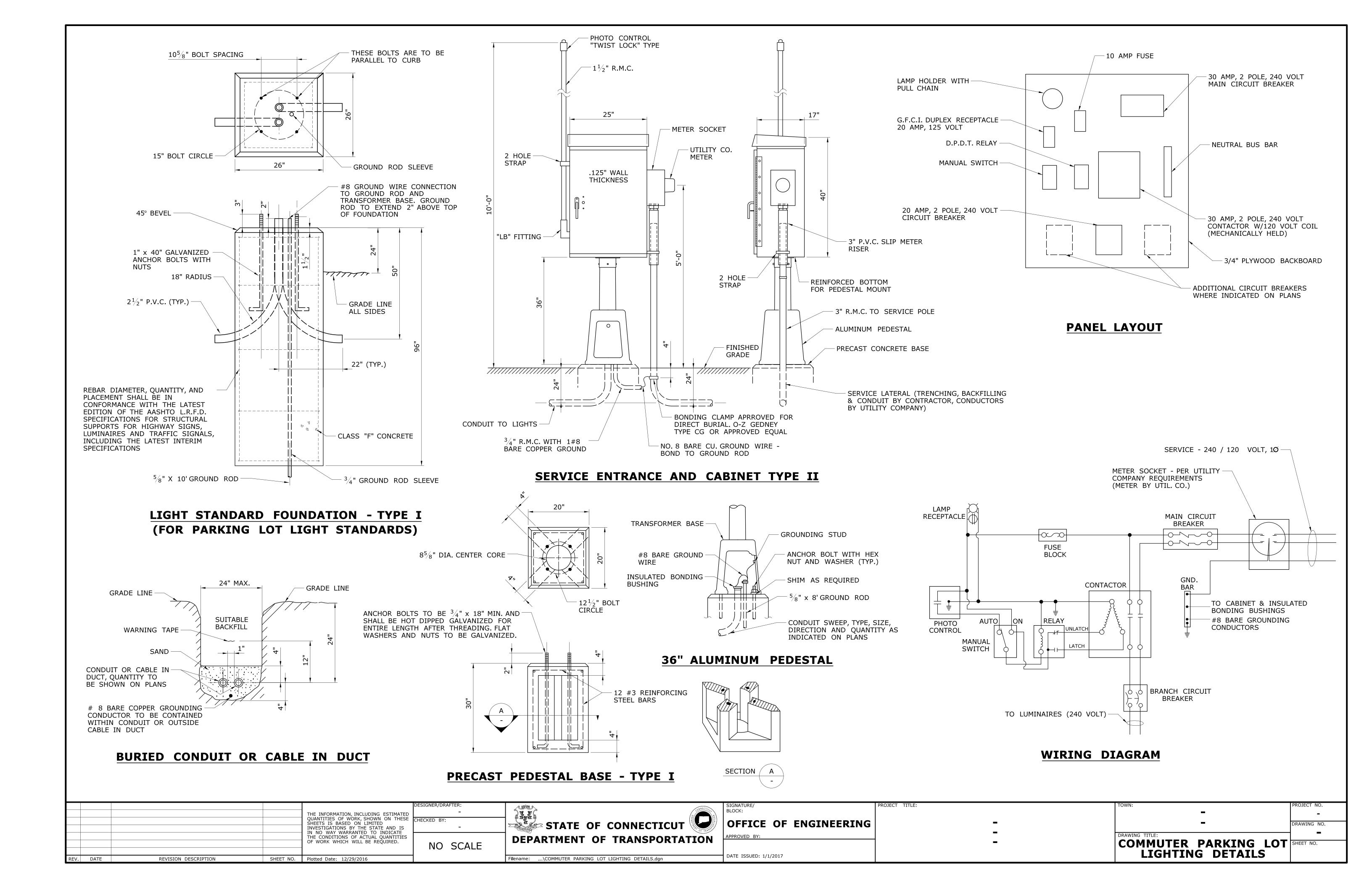


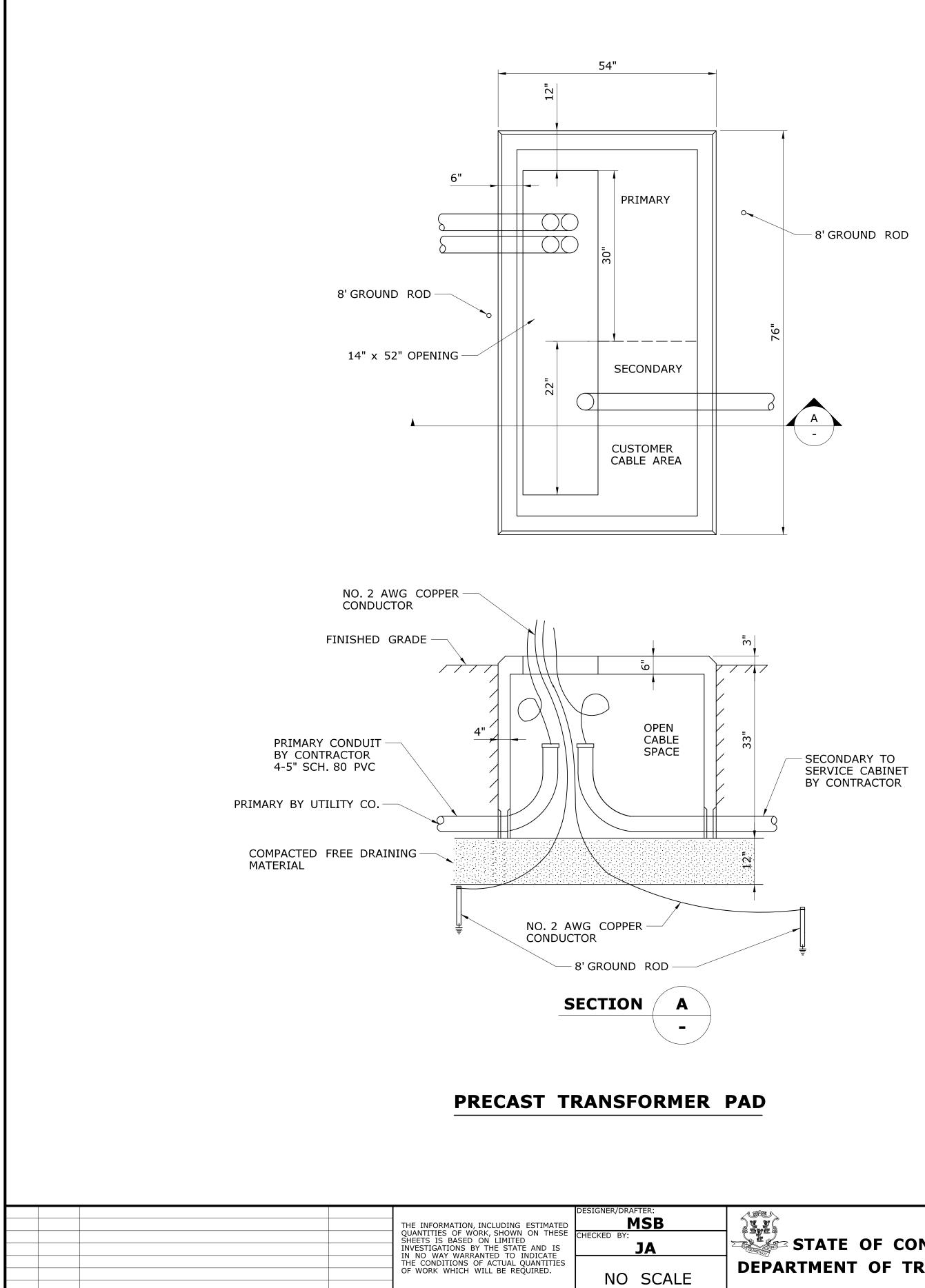
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STATE OF CONNECTICUT	SIGNATURE/ BLOCK: OFFICE OF ENGINEERING	PROJECT TITLE:
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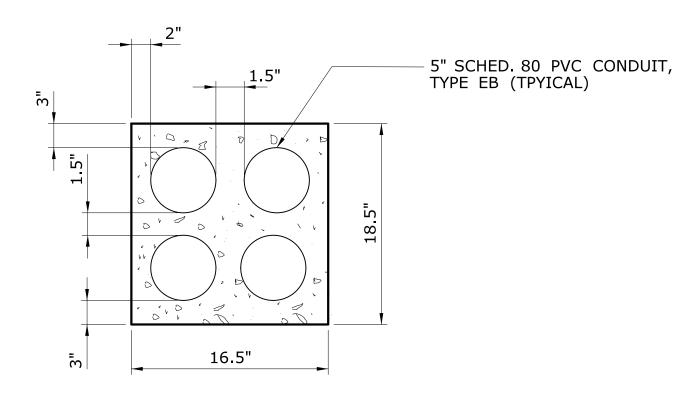




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REVISION DESCRIPTION



CONDUIT BANK CONSTRUCTION

CONDUIT BANK NOTES:

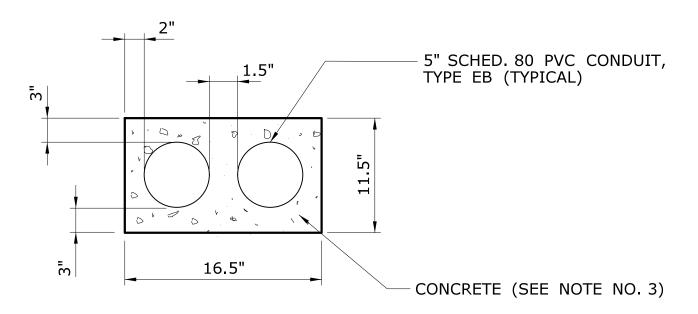
- 1. CONDUIT BANK INSTALLATION SHALL CONFORM TO EVERSOURCE SPECIFICATIONS AND REQUIREMENTS (DTR 73.209) OR MOST RECENT REVISION.
- 2. MINIMUM COVER FROM TOP OF CONDUIT BANK TO PAVEMENT OR EARTH SURFACE SHALL BE 24".
- 3. CONCRETE SHALL BE 2500 PSI, 1#2" MAXIMUM STONE, 6"-9" SLUMP OF SUCH CONSISTANCY THAT SPADING WILL ENSURE THE FLOW OF CONCRETE BETWEEN AND UNDER THE INDIVIDUAL DUCTS, BUT NOT SO WET AS TO FLOAT THE DUCTS. FOR TIER BUILDUP CONSTRUCTION A STIFFER CONSISTENCY SHOULD BE USED.

TRANSFORMER PAD NOTES:

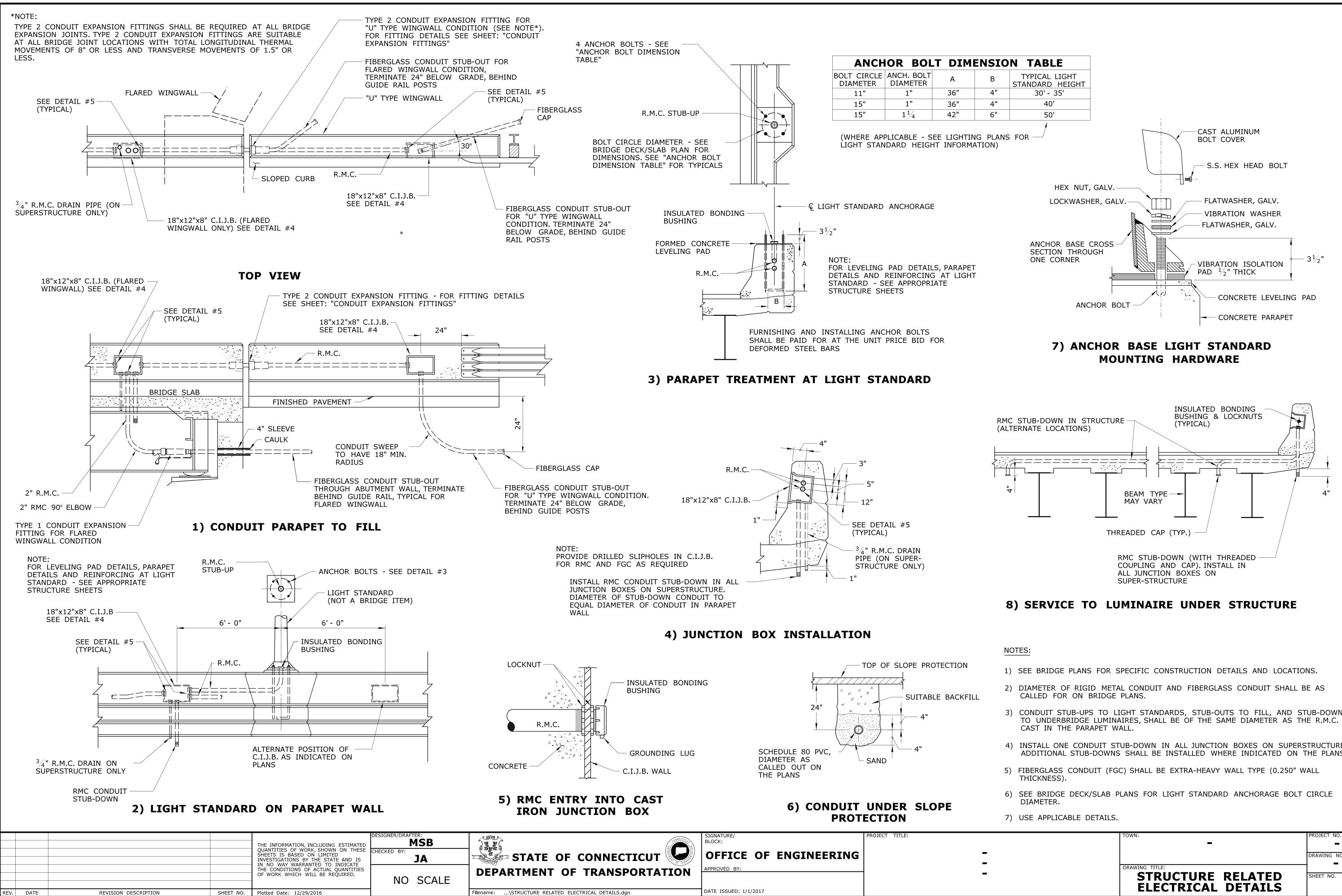
- 1. TRANSFORMER PAD AND INSTALLATION SHALL CONFORM TO THE FOLLOWING EVERSOURCE SPECIFICATIONS AND REQUIREMENTS:
 - DTR 42.047 DTR 42.061 DTR 58.301 SPC P-015 & P-016

2. CONCRETE 35 MPa AT 28 DAYS, STEEL # 4 BARS, ASTM A615 GRADE 40.

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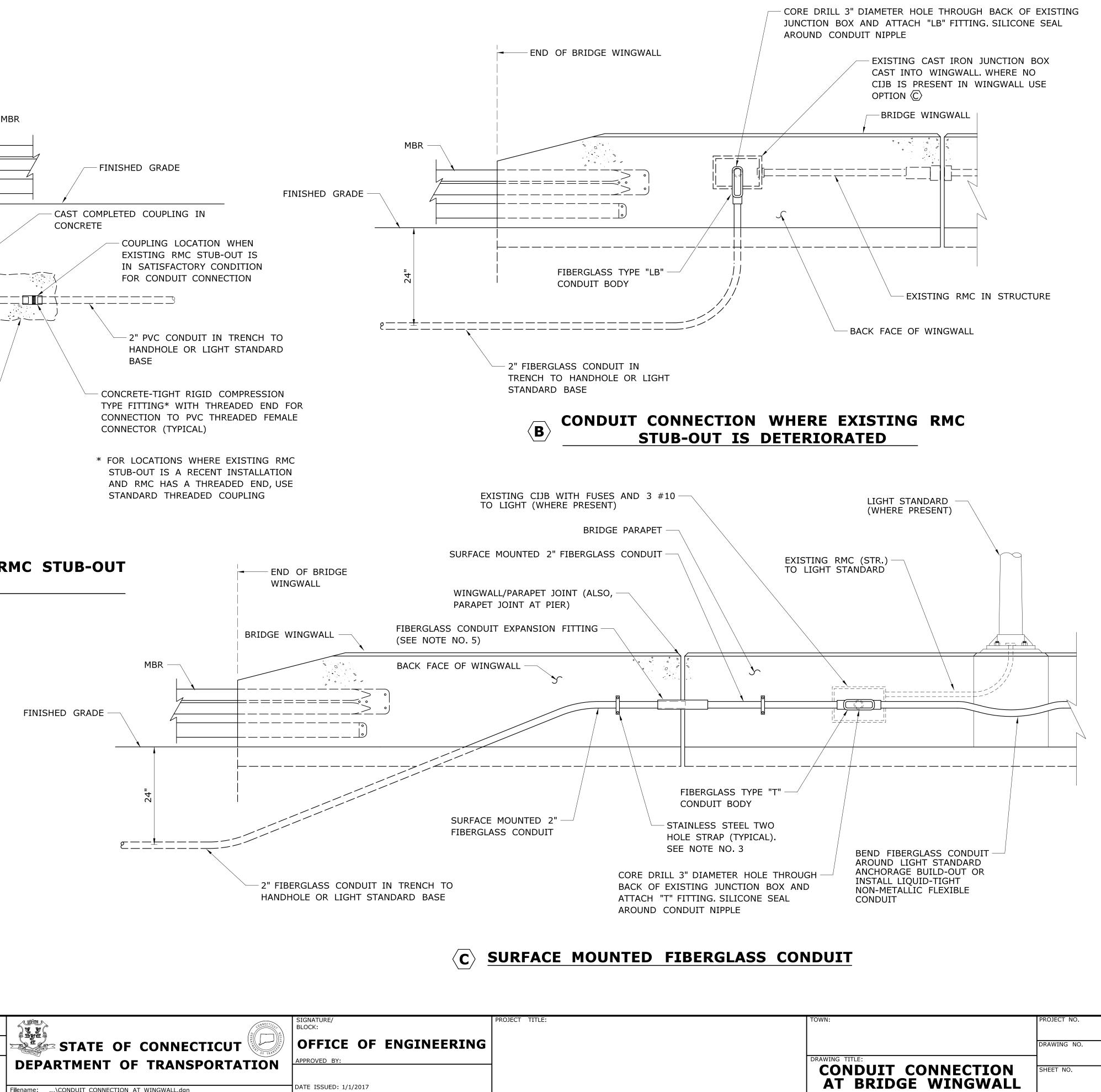
TOWN:	PROJECT NO.
-	DRAWING NO.
DRAWING TITLE:	
UTILITY	SHEET NO.
TRANSFORMER PAD	\$S\$



- 3) CONDUIT STUB-UPS TO LIGHT STANDARDS, STUB-OUTS TO FILL, AND STUB-DOWNS
- 4) INSTALL ONE CONDUIT STUB-DOWN IN ALL JUNCTION BOXES ON SUPERSTRUCTURE. ADDITIONAL STUB-DOWNS SHALL BE INSTALLED WHERE INDICATED ON THE PLANS.

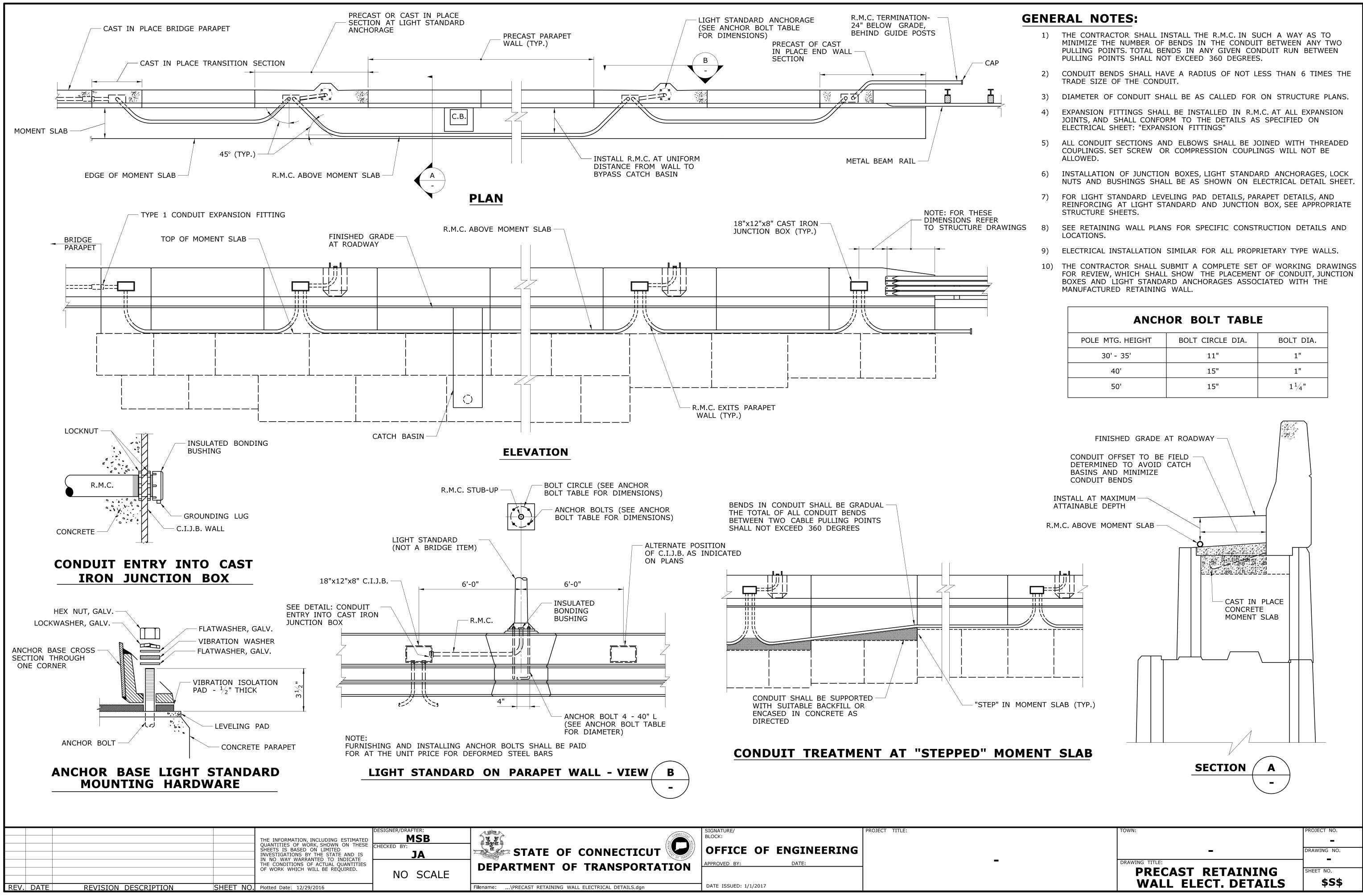
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TOWN:	PROJECT NO.

	C.I.J.B. (WHERE PRESENT)
	FRONT (ROAD SIDE)
	BRIDGE WINGWALL
	EXISTING RMC STUB-OUT (NO C.I.J.B. IN WINGWALL)
	EXISTING RMC STUB-OUT
	(C.I.J.B. IN WINGWALL)
	CHIP AWAY CONCRETE TO EXPOSE
	ALTERNATE COUPLING LOCATION WHEN CONDITION OF
	EXISTING EXPOSED RMC IS TOO DETERIORATED FOR PROPER CONDUIT CONNECTION (SEE NOTE 1)
	CUT EXISTING RMC BACK TO UNDAMAGED CONDUIT. CLEAN ————————————————————————————————————
1	ENCASE COMPLETED COUPLING AND EXPOSED
	RMC IN CONCRETE BACK TO WINGWALL
	$\langle \mathbf{A} \rangle$ conduit connection to existing R
	(SEE NOTE 1)
	NOTES:
	 IN LOCATIONS WHERE THE EXISTING EXPOSED RMC STUB-OUT IS DETERIORATED TO SUCH A DEGREE THAT THE CONDUIT CONNECTION CANNOT BE PROPERLY MADE, THE CONTRACTOR HAS THREE INSTALLATION OPTIONS AS FOLLOWS:
l	I) CHIP AWAY EXISTING CONCRETE WINGWALL MATERIAL TO EXPOSE NON-DETERIORATED RMC AS SHOWN IN DETAIL $\langle \overline{A} \rangle$.
	II) CARRY OUT CONDUIT CONNECTION AS SHOWN IN DETAIL $\langle B \rangle$.
	III) CARRY OUT CONDUIT CONNECTION AS SHOWN IN DETAIL $\langle \overline{\mathbb{C}} \rangle$.
	2) FIBERGLASS CONDUIT SHALL BE "EXTRA HEAVY" WALL TYPE WITH A WALL THICKNESS OF 0.250".
	3) FIBERGLASS CONDUIT SUPPORT SPACING SHALL NOT EXCEED 3'-0" AS PER N.E.C. 352.30(B).
	4) ALL CONDUIT BEAM CLAMPS AND ATTACHMENT HARDWARE SHALL BE STAINLESS STEEL.
	5) INSTALL ONE FIBERGLASS CONDUIT EXPANSION FITTING EVERY 50' OF CONDUIT LENGTH. AND AT ALL BRIDGE EXPANSION JOINTS.
	6) WHERE FIBERGLASS CONDUIT IS FIELD CUT, THE OUTSIDE SURFACE OF THE CUT END SHALL BE SANDED TO REMOVE THE RESIN GLAZE PRIOR TO APPLYING ADHESIVE.
	7) COST OF CONCRETE REMOVAL AND CONCRETE ENCASEMENT SHALL BE COVERED UNDER THE COST OF THE CONDUIT.
	8) COST OF CORE DRILLING INTO THE BACK OF A C.I.J.B. SHALL BE COVERED UNDER THE
	ITEM: 0602903A - DRILLING HOLES. 9) TRADE SIZE OF PVC AND FIBERGLASS CONDUIT SHALL BE 2" UNLESS OTHERWISE INDICATED
	ON THE PLANS.
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	THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDUTIONS OF ACTUAL QUANTITIES MSB
	THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.
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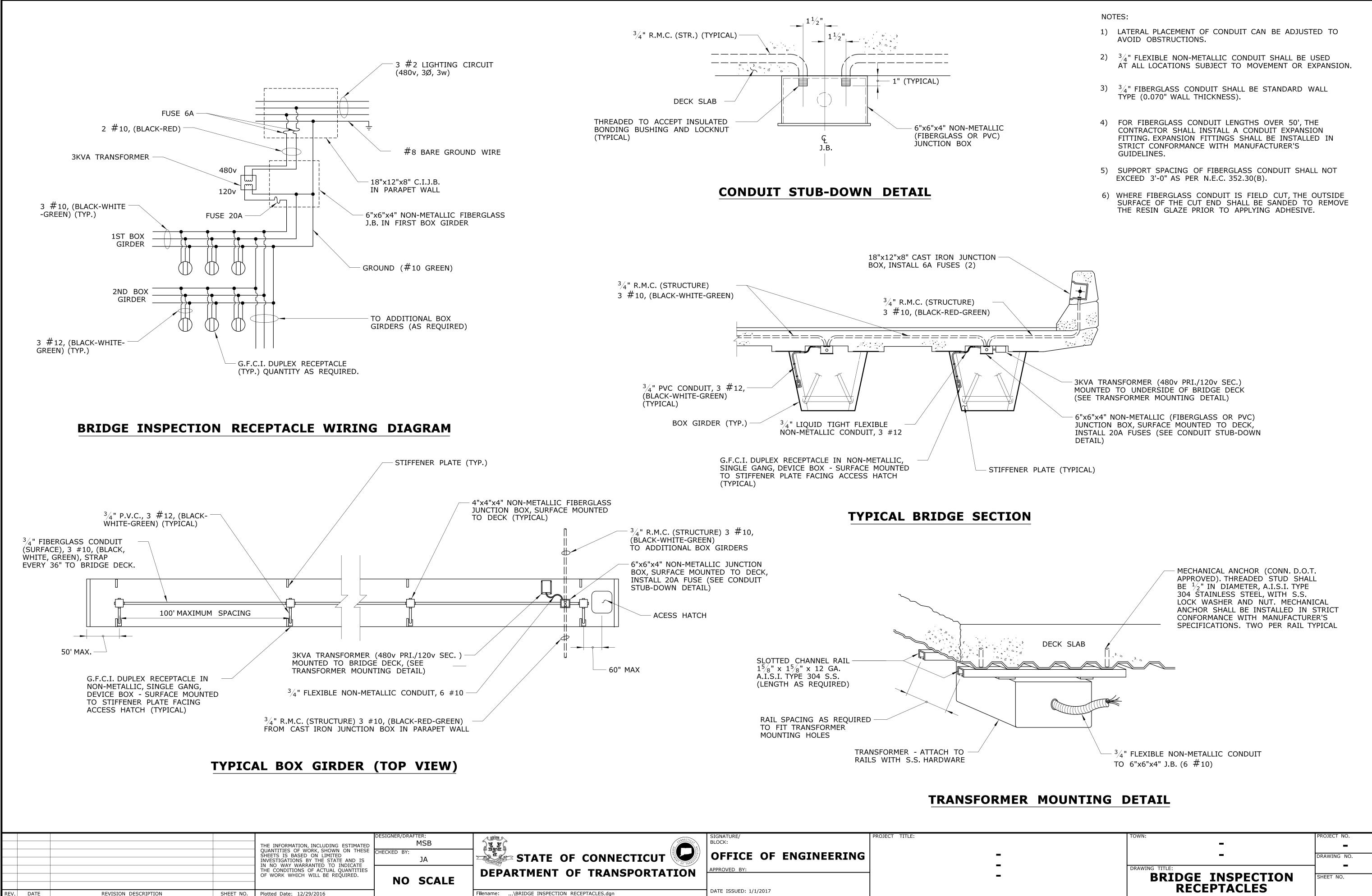


SHEET NO.



CONNECTICIA VE V	SIGNATURE/ BLOCK:	PROJECT TITLE:
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Filename:\PRECAST RETAINING WALL ELECTRICAL DETAILS.dgn	DATE ISSUED: 1/1/2017	

ANCHOR BOLT TABLE				
POLE MTG. HEIGHT	BOLT CIRCLE DIA.	BOLT DIA.		
30' - 35'	11"	1"		
40'	15"	1"		
50'	15"	1 ¹ /4"		



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		SUFFICIENT SLACK 8" MOVEMENT	· /	GASKET WATERTIGHT PAC	ULATING BUSHING
			E	XPANSION FITT	<u>ING TYPE 1</u>
				THE INFORMATION, INCLUDING ESTIMATE QUANTITIES OF WORK, SHOWN ON THES SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS	DESIGNER/DRAFTER: MSB CHECKED BY: JA
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CONCRETE

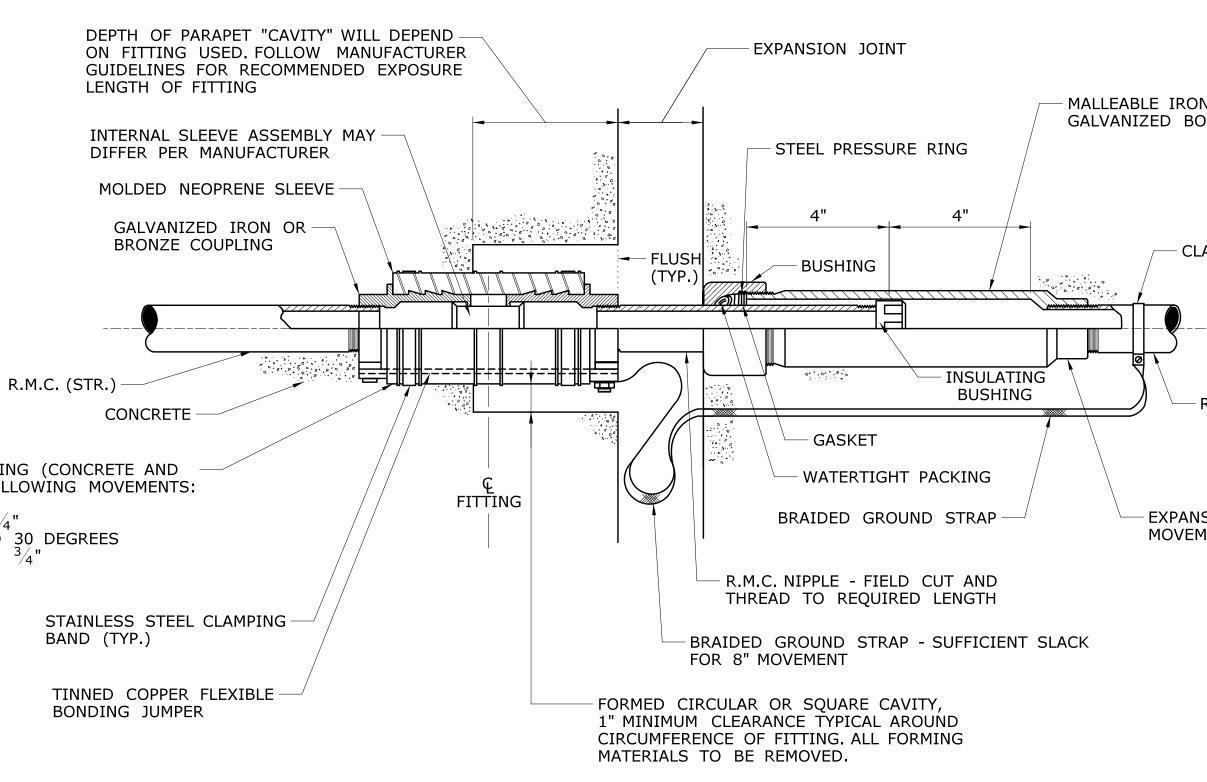
- EXPANSION JOINT

- STEEL PRESSURE RING

BUSHING

4"

EXPANSION / DEFLECTION COUPLING (CONCRETE AND WATER TIGHT) PROVIDES THE FOLLOWING MOVEMENTS: LINEAR EXPANSION - UP TO $\frac{3}{4}$ " LINEAR CONTRACTION - UP TO 3/4" ANGULAR MISALIGNMENT - UP TO 30 DEGREES PARALLEL MISALIGNMENT - UP TO $\frac{3}{4}$ "



EXPANSION FITTING TYPE 2

- EXPANSION FITTING - 8" LONGITUDINAL MOVEMENT (CONCRETE AND WATER TIGHT)

- CLAMP

R.M.C. (STR.)

GROUND STRAP

NOTES:

- 1) TYPE 1 CONDUIT EXPANSION FITTINGS SHALL BE REQUIRED AT ALL EXPANSION JOINT LOCATIONS IN CAST-IN-PLACE CONCRETE RETAINING WALLS SHARING COMMON PILE SUPPORTED FOOTINGS.
- 2) TYPE 2 CONDUIT EXPANSION FITTINGS SHALL BE REQUIRED AT ALL BRIDGE EXPANSION JOINTS. TYPE 2 CONDUIT EXPANSION FITTINGS ARE SUITABLE AT ALL BRIDGE JOINT LOCATIONS WITH TOTAL LONGITUDINAL THERMAL MOVEMENTS OF 8" OR LESS AND TRANSVERSE MOVEMENTS OF 1.5" OR LESS.
- 3) TYPE 2 CONDUIT EXPANSION FITTINGS SHALL BE REQUIRED AT ALL EXPANSION JOINT LOCATIONS IN CAST-IN-PLACE RETAINING WALLS WHERE THE FOUNDATION TRANSITIONS FROM A PILE SUPPORTED FOUNDATION TO A SPREAD FOOTING FOUNDATION.
- 4) ORIENTATION OF CONDUIT EXPANSION FITTING SHALL BE FIELD DETERMINED.



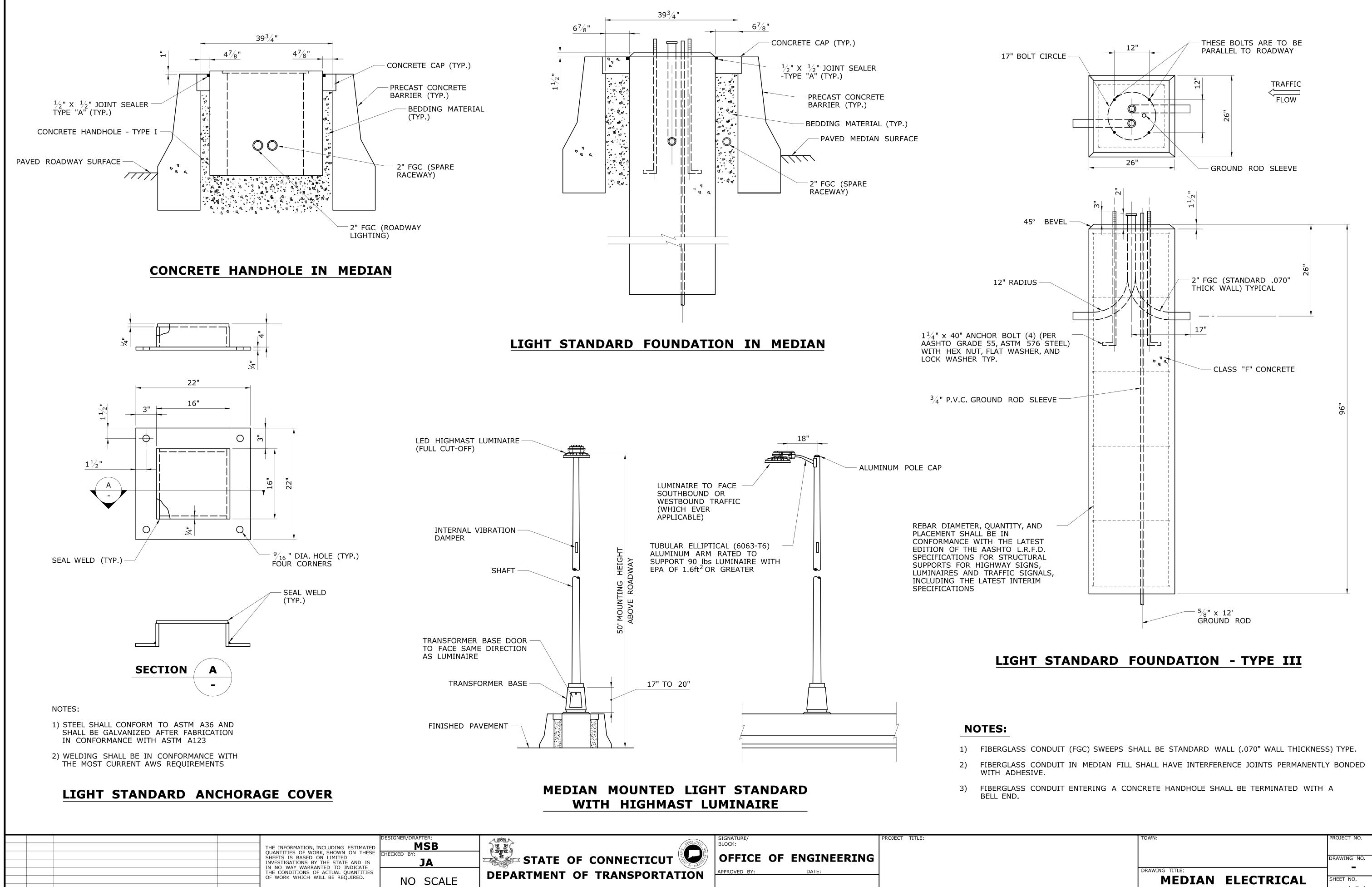
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D	Y		

CLAMP (TYP.)

- R.M.C. (STR.)

- EXPANSION FITTING - 8" LONGITUDINAL MOVEMENT (CONCRETE AND WATER TIGHT)

OJECT NO. -DRAWING NO. DRAWING TITLE: CONDUIT EXPANSION SHEET NO. FITTINGS



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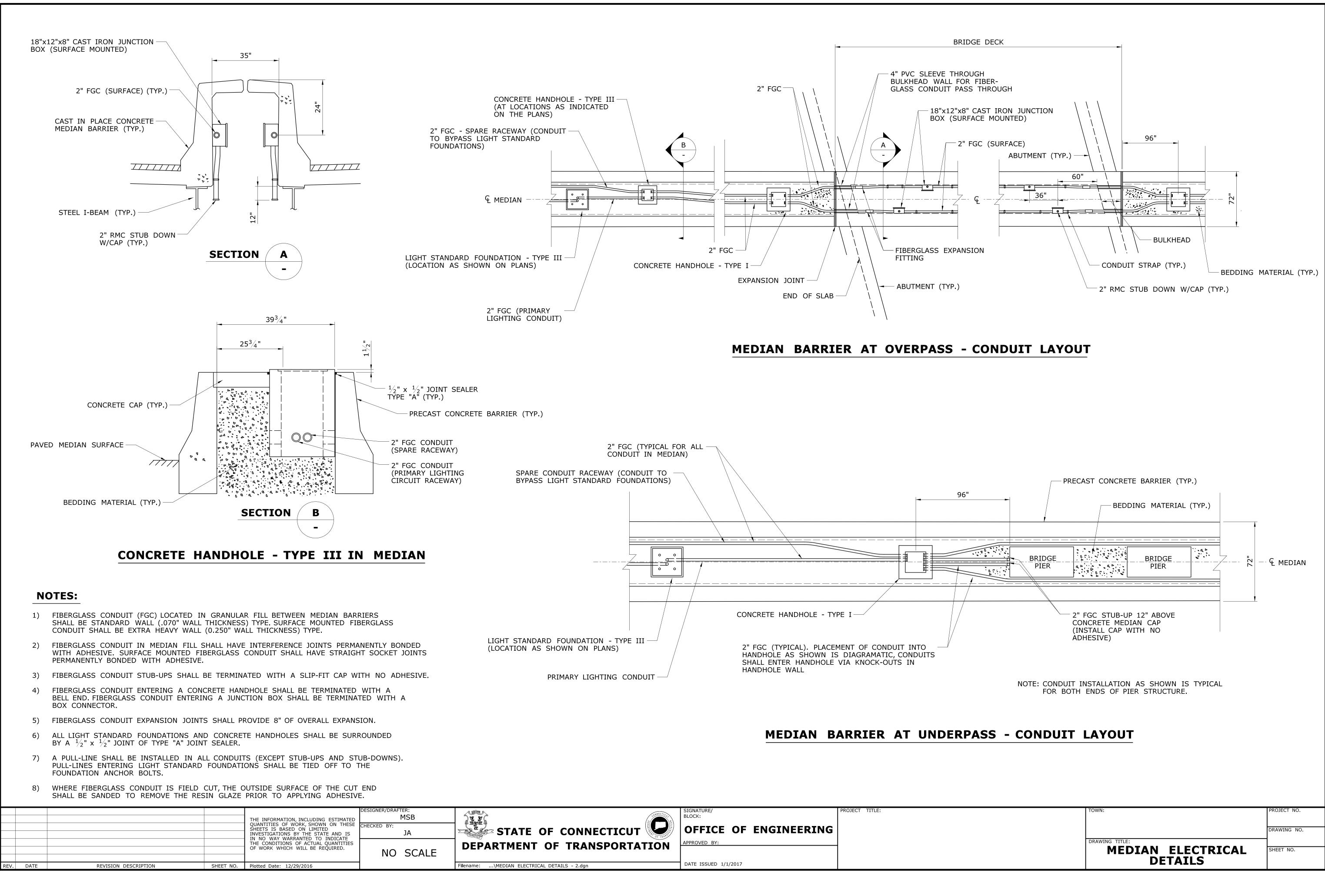
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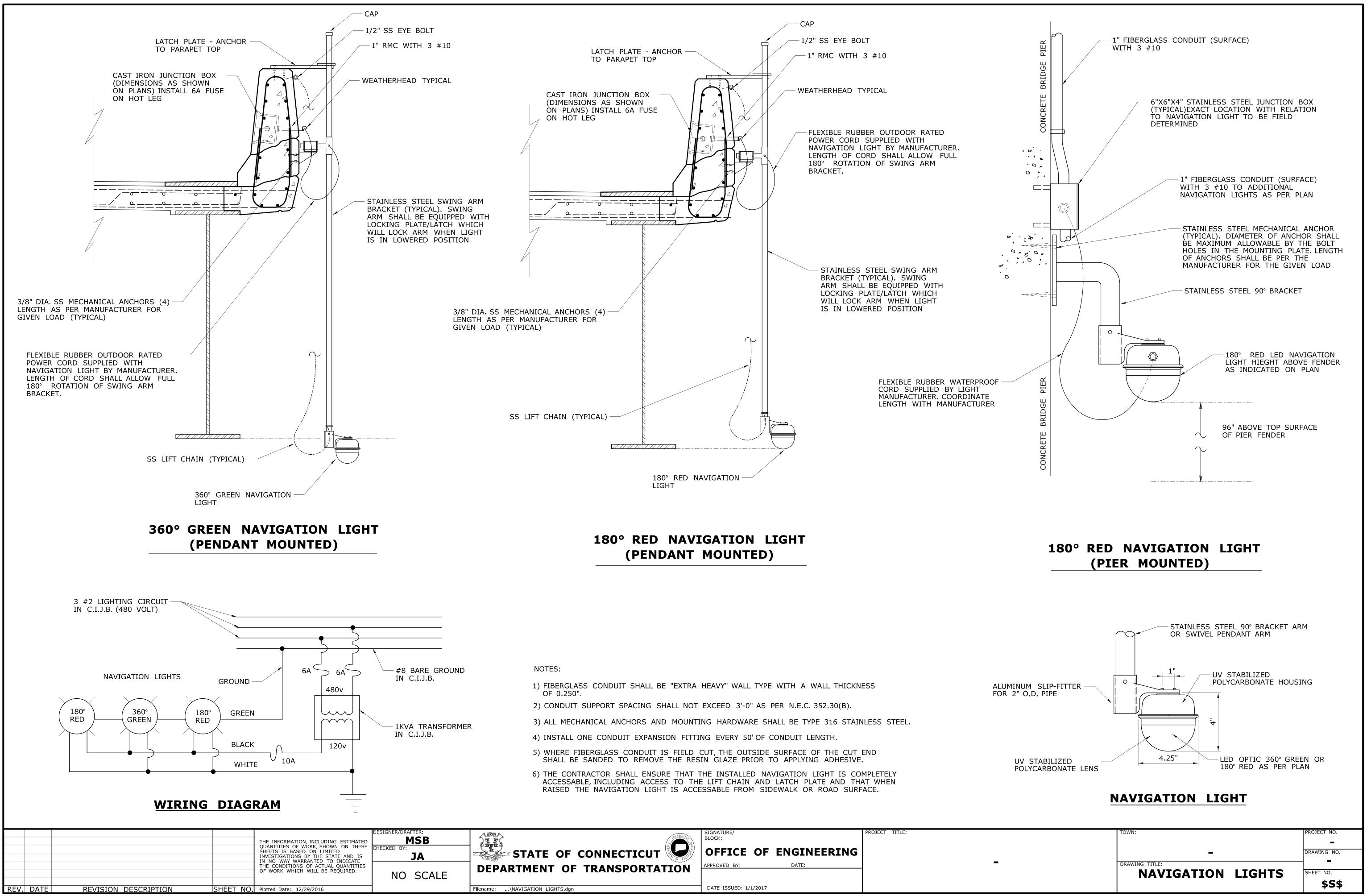
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DETAILS

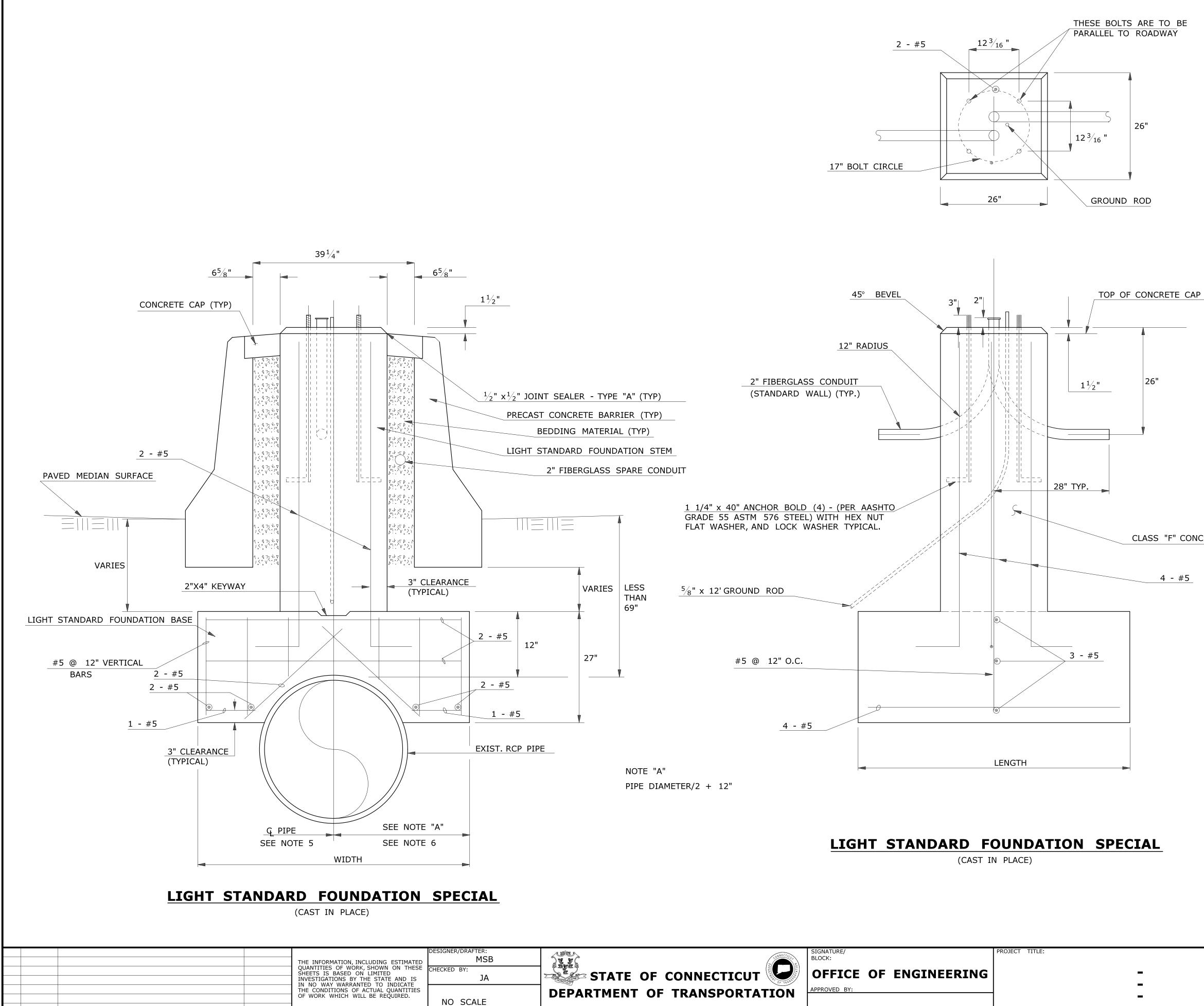
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CONSTRUCTION NOTES:

- 1. DETAILS APPLY TO LOCATIONS WITH PIPE CLEARANCE OF LESS THAN 69" FROM PAVED MEDIAN SURFACE.
- 2. ALL STEEL REINFORCEMENT TO BE EPOXY COATED AND SHALL BE ASTM A615 GRADE 60.
- 3. FIBERGLASS CONDUIT SWEEPS SHALL BE PRE-FORMED FROM THE CONDUIT MANUFACTURER AND SHALL HAVE STANDARD 0.070" WALL.
- 4. THE G OF THE LIGHT STANDARD FOUNDATION STEM NEED NOT MATCH THE & OF THE PIPE, BUT SHALL BE PLACED IN CENTER OF CONCRETE BARRIER.
- 5. EDGE OF LIGHT STANDARD FOUNDATION STEM CANNOT EXCEED BEYOND LIGHT STANDARD FOUNDATION BASE, IF NECESSARY ENLARGE THE LIGHT STANDARD FOUNDATION BASE.
- 6. THE LENGTH OF THE LIGHT STANDARD FOUNDATION BASE SHALL EQUAL THE WIDTH OF LIGHT STANDARD FOUNDATION BASE.
- 7. WHERE SUFFICIENT CLEARANCE ABOVE EXISTING DRAINAGE PIPE ALLOWS FOR THE INSTALLATION OF PRECAST LIGHT STANDARD FOUNDATION (TYPE I), THE 12' GROUND ROD SHALL BE INSTALLED IN THE GROUND ROD SLEEVE PRIOR TO PLACEMENT OF THE FOUNDATION IN THE MEDIAN. THE GROUND ROD SHALL BE BENT 90° AS IT EXITS THE BOTTOM OF THE FOUNDATION, TO AVOID POSSIBLE CONFLICTS WITH BURIED DRAINAGE PIPE. UNDER NO CIRCUMSTANCES SHALL THE GROUND ROD BE DRIVEN WHEN THERE IS DRAINAGE PIPE PRESENT UNDER THE MEDIAN.

CLASS "F" CONCRETE

4 - #5

TOWN:	PROJECT NO.
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-	DRAWING NO.
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LIGHT STANDARD	SHEET NO.
FOUNDATION - SPECIAL	