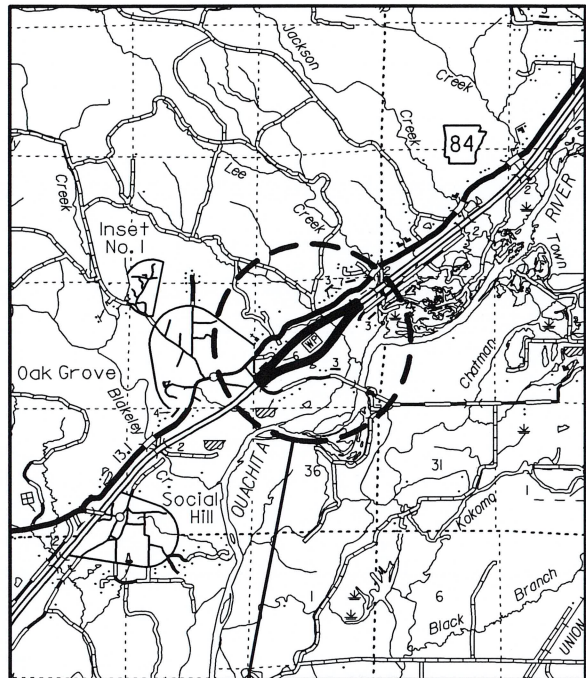


DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061826	1	16
SOCIAL HILL REST AREA SAFETY IMPVTS. (S)						



VICINITY MAP

PROJECT  
LOCATION

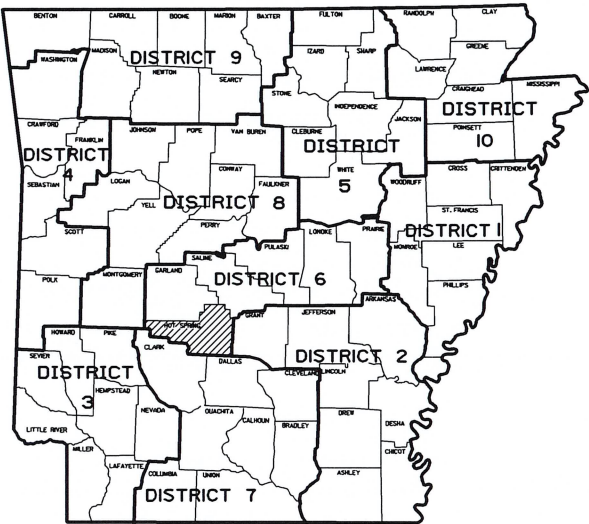
"A FULLY-CONTROLLED ACCESS FACILITY"  
ARKANSAS DEPARTMENT OF TRANSPORTATION  
CONSTRUCTION PLANS FOR STATE HIGHWAY

# SOCIAL HILL REST AREA SAFETY IMPVTS. (S)

HOT SPRING COUNTY  
ROUTE I-30 SECTION 21

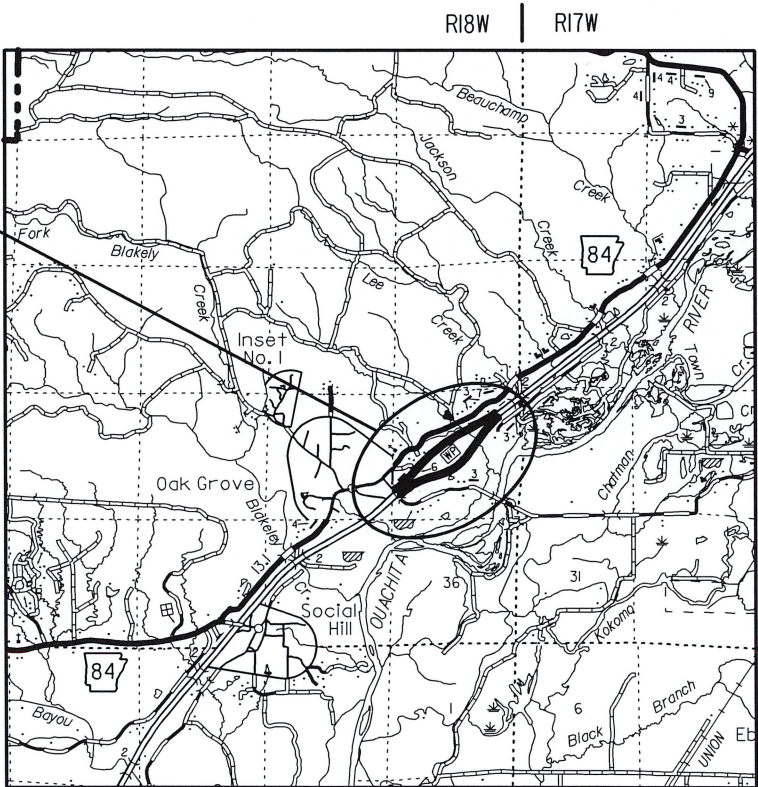
JOB 061826

FED. AID PROJ. HSIP-0030( 34 )



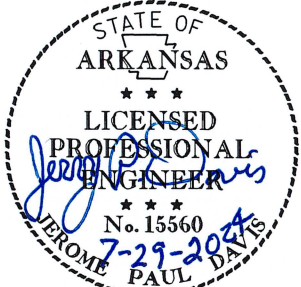
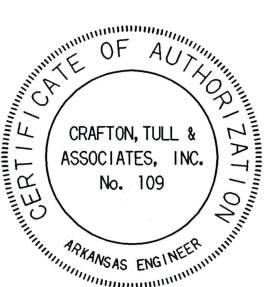
ARK. HWY. DIST. NO. 6

JOB 061826  
LOG MILE 93

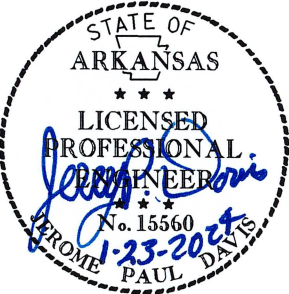


NOT TO SCALE

BEGINNING OF PROJECT	MID-POINT OF PROJECT	END OF PROJECT
LAT. = N 34°20' 57"	LAT. = N 34°21' 05"	LAT. = N 34°21' 13"
LONG. = W 92°53' 43"	LONG. = W 92°53' 28"	LONG. = W 92°53' 13"



DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061826	2	16
INDEX OF SHEETS AND STANDARD DRAWINGS						



INDEX OF SHEETS

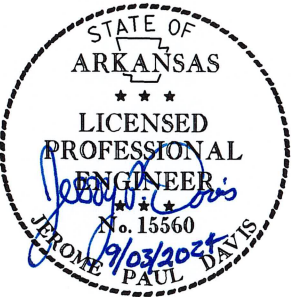
SHEET NO.	TITLE
1	TITLE SHEET
2	INDEX OF SHEETS AND STANDARD DRAWINGS
3	GOVERNING SPECIFICATIONS AND GENERAL NOTES
4	SUMMARY OF QUANTITIES AND REVISIONS
5 - 7	SURVEY CONTROL DETAILS
8	ILLUMINATION NOTES AND SUMMARY OF QUANTITIES
9 - 10	ILLUMINATION LAYOUT
11	ILLUMINATION TABLES
12 - 16	ILLUMINATION DETAILS

ROADWAY STANDARD DRAWINGS

DRWG.NO.	TITLE	DATE
SD-6	HEAVY DUTY PULL BOX	11-16-17
SD-9	SERVICE POINT	11-07-19



DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
8/22/24		6	ARK.	061826	3	16
9/3/24		GOVERNING SPECIFICATIONS AND GENERAL NOTES				



GOVERNING SPECIFICATIONS

ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 2014, AND THE FOLLOWING SPECIAL PROVISIONS AND SUPPLEMENTAL SPECIFICATIONS:

NUMBER	TITLE
ERRATA	ERRATA FOR THE BOOK OF STANDARD SPECIFICATIONS
FHWA-1273	REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS
FHWA-1273	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - NOTICE TO CONTRACTORS
FHWA-1273	SUPPLEMENT - SPECIFIC EQUAL EMPLOYMENT OPPORTUNITY RESPONSIBILITIES (23 U.S.C. 140)
FHWA-1273	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - GOALS AND TIMETABLES
FHWA-1273	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - FEDERAL STANDARDS
FHWA-1273	SUPPLEMENT - POSTERS AND NOTICES REQUIRED FOR FEDERAL-AID PROJECTS
FHWA-1273	SUPPLEMENT - WAGE RATE DETERMINATION
100-3	CONTRACTOR'S LICENSE
100-4	DEPARTMENT NAME CHANGE
102-2	ISSUANCE OF PROPOSALS
102-3	PREQUALIFICATION OF BIDDERS
103-2	CONTACT INFORMATION FOR MOTORIST DAMAGE CLAIMS
105-4	MAINTENANCE DURING CONSTRUCTION
107-2	RESTRAINING CONDITIONS
108-1	LIQUIDATED DAMAGES
108-2	WORK ALLOWED PRIOR TO ISSUANCE OF WORK ORDER
108-3	WORK ORDER FOR FIXED COMPLETION DATE CONTRACTS
306-1	QUALITY CONTROL AND ACCEPTANCE
802-5	CONCRETE FOR STRUCTURES
JOB 061826	BIDDING REQUIREMENTS AND CONDITIONS
JOB 061826	BUY AMERICA - CONSTRUCTION MATERIALS
JOB 061826	CARGO PREFERENCE ACT REQUIREMENTS
JOB 061826	CONCRETE PULL BOX
JOB 061826	DOCUMENTATION OF PAYMENTS MADE TO DISADVANTAGED BUSINESS ENTERPRISES
JOB 061826	ELECTRICAL CONDUCTORS FOR LUMINAIRES
JOB 061826	ELECTRICAL CONDUCTORS-IN-CONDUIT
JOB 061826	HIGH MAST ILLUMINATION ASSEMBLY
JOB 061826	LIQUIDATED DAMAGES PROCEDURE FOR BID LETTINGS
JOB 061826	MANDATORY ELECTRONIC CONTRACT
JOB 061826	MANDATORY ELECTRONIC DOCUMENT SUBMITTAL
JOB 061826	PEDESTAL TYPE SERVICE POINT ASSEMBLY
JOB 061826	PROHIBITION OF CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT
JOB 061826	UTILITY ADJUSTMENTS

GENERAL NOTES

- ANY EQUIPMENT OR APPURTENANCE THAT INTERFERES WITH THE PROPOSED CONSTRUCTION AND WHICH MAY BE THE PROPERTY OF UTILITY SERVICE ORGANIZATIONS SHALL BE MOVED BY THE OWNERS UNLESS OTHERWISE PROVIDED.
- ALL LAND MONUMENTS LOCATED WITHIN THE CONSTRUCTION AREA SHALL BE PROTECTED IN ACCORDANCE WITH SECTION 107.12 OF THE STANDARD SPECIFICATIONS.
- ALL TREES THAT DO NOT DIRECTLY INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE SPARED AS DIRECTED BY THE ENGINEER. CARE AND DISCRETION SHALL BE USED TO ENSURE THAT ALL TREES NOT TO BE REMOVED SHALL BE HARMED AS LITTLE AS POSSIBLE DURING THE CONSTRUCTION OPERATIONS.
- THIS PROJECT IS COVERED UNDER A SECTION 404 NATIONWIDE 14 PERMIT. REFER TO SECTION 110 OF THE STANDARD SPECIFICATIONS, EDITION OF 2014, FOR PERMIT REQUIREMENTS.

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
8/22/24		6	ARK.	061826	4	16
9/3/24		SUMMARY OF QUANTITIES AND REVISIONS				



SUMMARY OF QUANTITIES

ITEM NUMBER	ITEM	QUANTITY	UNIT
601	MOBILIZATION	1.00	LUMP SUM
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/1 A.W.G., E.G.C.)	1712	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/2 A.W.G., E.G.C.)	1183	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/4 A.W.G., E.G.C.)	1287	LIN. FT.
SP	ELECTRICAL CONDUCTORS FOR LUMINAIRES	636	LIN. FT.
710	NON-METALLIC CONDUIT (2")	2778	LIN. FT.
710	NON-METALLIC CONDUIT (3")	498	LIN. FT.
SP, SS, & 711	CONCRETE PULL BOX (TYPE 2 HD)	6	EACH
SP, SS, & 711	CONCRETE PULL BOX (TYPE 3 HD)	2	EACH
SP	HIGH MAST ILLUMINATION ASSEMBLY (150'-5 LUMINAIRE)	2	EACH
SP	HIGH MAST ILLUMINATION ASSEMBLY (150'-6 LUMINAIRE)	2	EACH
SP	PEDESTAL TYPE SERVICE POINT (100 AMP)	1	EACH

REVISIONS

DATE	REVISION	SHEET NUMBER
8/22/2024	ADDED SS 108-3 "WORK ORDER FOR FIXED COMPLETION DATE CONTRACTS"	3, 4
9/3/2024	REMOVED SS 802-4 "CEMENT" AND ADDED SS 802-5 "CONCRETE FOR STRUCTURES"	3, 4



USER: pc5226  
DESIGN FILE: G:\22\2000\_0124\4\TRANSP\061826 SOCIAL HILL LIGHTING\ dgn\survey.ctb\024\ Survey Control.dgn  
PLOTTED: 1/23/2024 11:34 SCALE: 1:100

SURVEY CONTROL COORDINATES

Project Name: s061826  
Date: 9/22/2023  
Coordinate System: ARKANSAS STATE PLANE - SOUTH ZONE BASED ON GPS CONTROL,  
GRID FEET.  
Units: U.S. SURVEY FOOT

Point Name	Northing	Easting	Elev	Feature	Description
1	1925816.6842	1042255.4181	340.480	CTL	AHTD STD. MON. STAMPED PN: 1
2	1926000.1685	1042844.9263	335.149	CTL	AHTD STD. MON. STAMPED PN: 2
3	1926113.5421	1043340.3309	329.928	CTL	AHTD STD. MON. STAMPED PN: 3
4	1926632.2458	1043959.1210	329.874	CTL	AHTD STD. MON. STAMPED PN: 4
5	1926350.8999	1044079.0925	322.942	CTL	AHTD STD. MON. STAMPED PN: 5
6	1927030.2650	1044853.8278	291.706	CTL	AHTD STD. MON. STAMPED PN: 6
7	1927575.5694	1044207.4905	302.041	CTL	AHTD STD. MON. STAMPED PN: 7
8	1927056.2526	1043514.2492	325.620	CTL	AHTD STD. MON. STAMPED PN: 8
9	1926623.4057	1043041.4444	335.724	CTL	AHTD STD. MON. STAMPED PN: 9
10	1926227.0618	1042613.0123	340.833	CTL	AHTD STD. MON. STAMPED PN: 10
100	1926366.2798	1042894.7886	344.434	GPS	AHTD GPS #300013
101	1925455.7518	1041632.8944	358.858	GPS	AHTD GPS #300013A
999	1916625.9410	1119026.4747	230.807	BM	NGS 2ND ORDER BM A 81 PID EJ0702

\*Note - Rebar and Cap - Standard - 5/8" Rebar with 2" Aluminum Cap stamped  
\*(standard markings common to all caps), or as indicated  
(other markings indicated in the point description of the individual point).  
USE CAF = 1.0 FOR STAKEOUT FOR THIS PROJECT  
GRID COORDINATES ARE STORED UNDER FILE NAME s061450gi.ctb  
HORIZONTAL DATUM: NAD 83 (2011)  
VERTICAL DATUM: NAVD 88 POSITIONAL ACCURACY THIRD ORDER, UNLESS SPECIFIED OTHERWISE  
AT A SPECIFIC POINT.

REFERENCE POINTS (1500 SERIES) ARE TO BE USED TO ESTABLISH CONTROL  
IF THE PRIMARY CONTROL POINTS LISTED ABOVE HAVE BEEN DESTROYED.  
REFERENCE POINTS ARE NOT TO BE USED FOR VERTICAL CONTROL

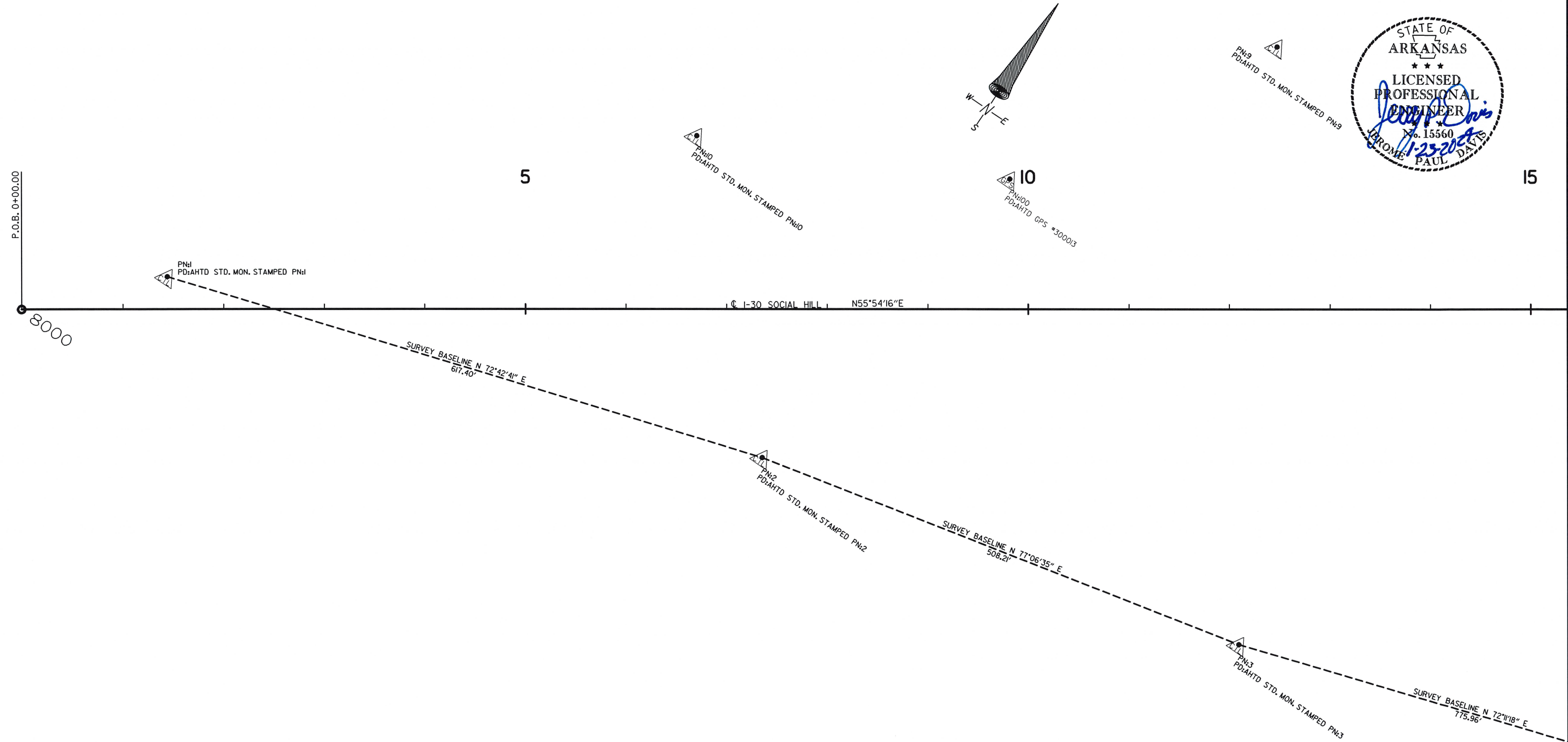
BASIS OF BEARING:  
ARKANSAS STATE PLANE GRID BEARINGS - 0302-SOUTH ZONE  
DETERMINED FROM GPS CONTROL POINTS: 300013-300013A  
CONVERGENCE ANGLE: 02-29-58.69 LEFT AT LAT N 34-21-03.11 LON W092-53-33.73  
GRID AZIMUTH = ASTRONOMICAL AZIMUTH - CONVERGENCE ANGLE.

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061826	5	16
SURVEY CONTROL DETAILS						



Alignment Name: CL Const. I-30 SOCIAL HILL				
8000	P.O.B.	0+00.00	1925709.2559	1042154.0236
8001	P.O.E.	30+00.00	1927390.9800	1044638.3351

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061826	6	16
SURVEY CONTROL DETAILS						

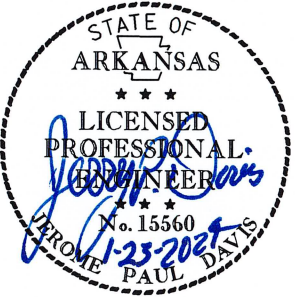




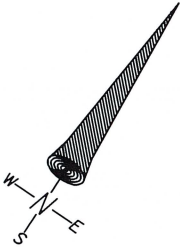
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DESIGN FILE: G:\22\2000\_0124\4\TRANSP\061826 SOCIAL HILL LIGHTING\dgn\survey.ctb\0244 Survey Control.dgn  
PLOTTER: 1/23/2024 11:34 SCALE: 1:100

PN:7  
PD:AHTD STD. MON. STAMPED PN:7

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061826	7	16
SURVEY CONTROL DETAILS						



PN:8  
PD:AHTD STD. MON. STAMPED PN:8



20

25

P.O.E. 30+00.00

8001

I-30 SOCIAL HILL N55°54'16"E

PN:4  
PD:AHTD STD. MON. STAMPED PN:4

SURVEY BASELINE N 23°05'40" W  
305.86'

SURVEY BASELINE N 66°01'03" E  
979.24'

PN:6  
PD:AHTD STD. MON. STAMPED PN:6

SURVEY BASELINE N 72°11'18" E  
775.96'

PN:5  
PD:AHTD STD. MON. STAMPED PN:5

SURVEY CONTROL DETAILS



USER: PC5226  
DESIGN FILE: G:\2212000\_012414\TRANSP\061826 SOCIAL HILL LIGHTING\Lighting\I-30 Social Hill Lighting.dgn  
PLOTTER: 6/25/2024 09:46  
SCALE: 1/8"=1'-0"

GENERAL NOTES

1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE (NFPA 70, CURRENT EDITION), LIFE SAFETY CODE (NFPA 101, CURRENT EDITION), UNDERGROUND FACILITIES DAMAGE PREVENTION ACT (§14-271-101 ET SEQ.), AND LOCAL ELECTRICAL CODE. IN ADDITION, ALL PARTS OF THIS INSTALLATION SHALL BE IN ACCORDANCE WITH THE ARKANSAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, CURRENT EDITION.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE DOCUMENTATION TO PROJECT ENGINEER, TO ENSURE ARKANSAS STATE CODES (§17-28-101 ET SEQ. AND §20-31-101 ET SEQ.) ARE MET. THE DOCUMENTATION SHALL INCLUDE:

(1) ELECTRICIANS' LICENSE INFORMATION AND EXPIRATION DATE.

(2) THE RATIO OF LICENSED-ELECTRICIAN-TO-APPRENTICE-ELECTRICIANS.

(3) PRINTED SEARCH RESULT OF LICENSED ELECTRICIANS FROM ARKANSAS DEPARTMENT OF LABOR ELECTRICIAN LICENSEE DIRECTOR (<https://www.ark.org/labor/electrician/search.php>)  
ALL LICENSES SHALL BE VALID AND CURRENT
3. THE CONTRACTOR SHALL NOT ENGAGE IN EXCAVATION OR DEMOLITION ACTIVITIES WITHOUT HAVING FIRST NOTIFIED THE ARKANSAS ONE CALL CENTER IN ACCORDANCE WITH UNDERGROUND FACILITIES DAMAGE PREVENTION ACT. NOT ALL UTILITY COMPANIES ARE MEMBERS OF THE ARKANSAS ONE CALL SYSTEM. THE CONTRACTOR IS ADVISED TO CONTACT ALL NON-MEMBER UTILITIES AS WELL AS THE ONE CALL CENTER.
4. UNDERGROUND UTILITIES EXIST WITHIN AND ADJACENT TO THE LIMITS OF CONSTRUCTION. SOME UTILITIES MAY HAVE BEEN RELOCATED SINCE THE TIME OF DESIGN AND THE CONTRACTOR'S NOTICE TO PROCEED. THE CONTRACTOR SHALL CONTACT THE UTILITY COMPANIES INVOLVED AND VERIFY THE LOCATIONS OF UNDERGROUND UTILITIES. THE CONTRACTOR SHALL MAINTAIN THE UTILITY LOCATION MARKINGS UNTIL IT IS NO LONGER NECESSARY.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS OF REPAIR OR REPLACEMENT OF EXISTING UTILITIES DAMAGED DURING THE CONSTRUCTION.
6. ANY EQUIPMENT OR APPURTENANCE THAT INTERFERES WITH THE PROPOSED CONSTRUCTION AND WHICH MAYBE THE PROPERTY OF UTILITY SERVICE ORGANIZATIONS SHALL BE MOVED BY THE OWNERS UNLESS OTHERWISE PROVIDED.
7. CONDUIT INSTALLED UNDER ROADWAY SURFACES SHALL BE INSTALLED BY A PUSHING OR BORING METHOD OR AS DIRECTED BY ENGINEER. PVC OR HDPE CONDUIT SHALL BE USED. PVC CONDUIT SHALL BE MARKED "DIR. BORING" OR "DIRECTIONAL BORING" AS PER NEC.
8. NON-DESTRUCTIVE MEG TEST AND CURRENT LEAKAGE TEST SHALL BE PERFORMED ON NEW CONDUCTORS, IN THE PRESENCE OF FIELD INSPECTOR. THE TEST VOLTAGE SHALL BE LIMITED TO 600 VOLTS. ANY CONDUCTOR NOT MEETING THE MINIMUM ACCEPTABLE VALUE SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE USING NEW CONDUCTOR. THE RESULTS SHALL BE DOCUMENTED AND PROVIDED TO THE JOB ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES CAUSED BY MEG TEST WHILE DEVICES OR ACCESSORIES ARE STILL CONNECTED AND SHALL BE REPLACED AT CONTRACTOR'S EXPENSE. SEE SPECIAL PROVISION ELECTRICAL CONDUCTORS-IN-CONDUIT
9. PULL BOX LIDS SHALL CLOSE FLUSH WITHOUT PINCHING ANY CONDUCTORS. CONDUIT LENGTHS IN PULL BOXES SHALL BE SET ACCORDINGLY. ANY CONDUCTORS THAT HAVE BEEN DAMAGED BY PINCHING SHALL BE COMPLETELY REPLACED AT THE CONTRACTOR'S EXPENSE.
10. EACH ROADWAY ILLUMINATION POLE SHALL BE BONDED TO EQUIPMENT GROUNDING CONDUCTOR PER NEC. SEE ARTICLES 250 AND 410.
11. ALL ELECTRICAL COMPONENTS SHALL BE UL LISTED.
12. ALL LUMINAIRE ASSEMBLIES SHALL HAVE BUG RATING OF U0.
13. BEFORE FINAL ACCEPTANCE, CONTRACTOR SHALL PROVIDE 2 SETS OF LEDGER SIZE (11"x17") AS-BUILT PLANS TO THE MAINTENANCE AUTHORITY AND ARDOT.
14. PULL CABLE SHALL BE MINIMUM 1/4" PULL NYLON OR POLYESTER ROPE, OR 1200 LBS PULL TAPE WHEN PULLING CONDUCTORS. STEEL CABLE OR FISH TAPE SHALL NOT BE USED. CONNECT PULLING DEVICES TO COPPER WIRE AND NOT TO JACKET. USE PULLING COMPOUND PER MANUFACTURER'S REQUIREMENTS. ALL BENDS SHALL NOT BE LESS THAN RECOMMENDED BY NEC FOR CONDUCTORS USED.
15. ALL CONCRETE PULL BOXES SHALL BE TYPE 3 HD UNLESS OTHERWISE INDICATED ON THE PLANS.
16. SLACK CABLES IN PULL BOXES SHALL BE 3 FEET.

17. FOUNDATION FOR ALL POLES SHALL BE EXTENDED IF NECESSARY TO ACCOMMODATE THE REQUIREMENT FOR CLEARANCE ABOVE ROADWAY AND MEET POLE SCHEDULE AT LOCATIONS WHERE THE GROUND ELEVATION AT THE POLE IS BELOW THE ELEVATION OF THE ROADWAY. POLE FOUNDATION SHALL BE AT THE SAME ELEVATION LEVEL OF THE ROADWAY. WORK WILL BE SUBSIDIARY TO THE LED ROADWAY ILLUMINATION POLE PAY ITEM.
18. ELECTRICAL SERVICE SHALL BE PROVIDED BY THE CITY/COUNTY (MAINTENANCE AUTHORITY) TO A SERVICE POLE WITH EXTERNAL RAIN TIGHT BREAKER (MAIN BREAKER), GALVANIZED STEEL SERVICE RISER, METER LOOP (IF REQUIRED), AND WEATHERHEAD AT A MUTUALLY ACCEPTABLE POINT WITHIN THE RIGHT-OF-WAY. THE CONTRACTOR SHALL PROVIDE THE SERVICE POINT ASSEMBLY PER PLANS SET AND CONTRACT PRIOR TO THE DATE ELECTRICAL COMPANIES PROVIDE SERVICE.
19. CONTRACTOR SHALL ATTACH A PERMANENT TAG OF RIGID PLASTIC OR NON-FERROUS METAL TO EACH CONDUIT AT PULLBOXES, POLE BASES, AND JUNCTION BOXES. TAGS SHALL BE EMBOSSED, STAMPED, OR ENGRAVED WITH LETTERS 1/4" OR GREATER IN HEIGHT AND SECURED TO THE CONDUIT WITH NYLON OR PLASTIC TIES. EACH TAG SHALL INDICATE THE END LOCATION OF CONDUIT RUN. THE COST OF THE TAGS SHALL BE SUBSIDIARY TO THE CONDUIT PAY ITEM.  
EXAMPLES FOR CONDUIT: SERVICE POINT TO PULL BOX 1 (SP TO PB-1)  
PULL BOX 1 TO SERVICE POINT (PB-1 TO SP)  
PULL BOX 1 TO PULL BOX 2 (PB-1 TO PB-1)
20. CONDUIT BELL END FITTINGS SHALL BE INSTALLED ON ALL TERMINATING ENDS OF NON-METALLIC CONDUIT RUNS. THIS INCLUDES PULL BOXES AND POLE BASES. THE COST OF THE FITTINGS SHALL BE CONSIDERED SUBSIDIARY TO THE PAY ITEM. ALL NON-METALLIC CONDUIT SHALL USE LONG SWEEP 90 DEGREE ELBOWS ON ALL CONDUIT BENDS.
21. PRIOR TO THE ORDERING OF ALL LIGHTING EQUIPMENT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A COPY OF THE APPLICABLE BROCHURES CONTAINING THE DESIGN CRITERIA FOR THE EQUIPMENT WHICH THE CONTRACTOR PROPOSES TO INSTALL FOR APPROVAL. THE SPECIFIC ITEMS THAT ARE PROPOSED FOR USE SHALL BE THE APPLICABLE BROCHURES. A LIST SHALL BE ATTACHED TO IDENTIFY THE PAY ITEM AND CONTAIN THE MANUFACTURER, QUANTITY, MODEL, AND IDENTIFYING DESCRIPTIONS OF EACH ITEM. ADEQUATE ENGINEERING DATA, ESSENTIAL SHOP DRAWINGS, AND SCHEMATIC DIAGRAMS SHALL BE PROVIDED FOR REVIEW. PARTIAL SUBMITTALS WILL NOT BE ACCEPTED FOR CONSIDERATION AND SHALL BE RETURNED FOR CORRECTION WITHOUT REVIEW.

IF THE ENGINEER DETERMINES THAT THE EQUIPMENT SUBMITTAL MEETS THE DESIGN CRITERIA APPROVAL WILL BE PROVIDED. IF THE EQUIPMENT SUBMITTAL FOR USE IS REJECTED, THE CONTRACTOR SHALL RE-SUBMIT THE EQUIPMENT SUBMITTAL WITHIN FIFTEEN (15) DAYS OF NOTIFICATION OF EQUIPMENT REJECTION. THE EQUIPMENT RESUBMITTAL WILL BE CONSIDERED THE STARTING POINT OF A NEW APPROVAL CYCLE AS DESCRIBED.

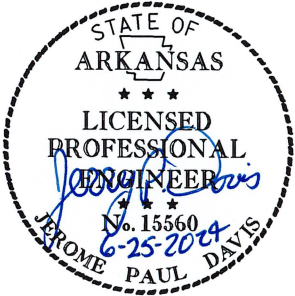
SUMMARY OF LIGHTING QUANTITIES

ITEM NUMBER	ITEM	QUANTITY	UNIT
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/1 A.W.G., E.G.C.)	1712	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/2 A.W.G., E.G.C.)	1183	LIN. FT.
SP	ELECTRICAL CONDUCTORS-IN-CONDUIT (2C/4 A.W.G., E.G.C.)	1287	LIN. FT.
SP	ELECTRICAL CONDUCTORS FOR LUMINAIRES	636	LIN. FT.
710	NON-METALLIC CONDUIT (2")	2778	LIN. FT.
710	NON-METALLIC CONDUIT (3")	498	LIN. FT.
SP, SS, & 711	CONCRETE PULL BOX (TYPE 2 HD)	6	EACH
SP, SS, & 711	CONCRETE PULL BOX (TYPE 3 HD)	2	EACH
SP	HIGH MAST ILLUMINATION ASSEMBLY (150'-6 LUMINAIRE)	2	EACH
SP	HIGH MAST ILLUMINATION ASSEMBLY (150'-5 LUMINAIRE)	2	EACH
SP	PEDESTAL TYPE SERVICE POINT (100 AMP)	1	EACH

ILLUMINATION NOTES AND SUMMARY OF QUANTITIES

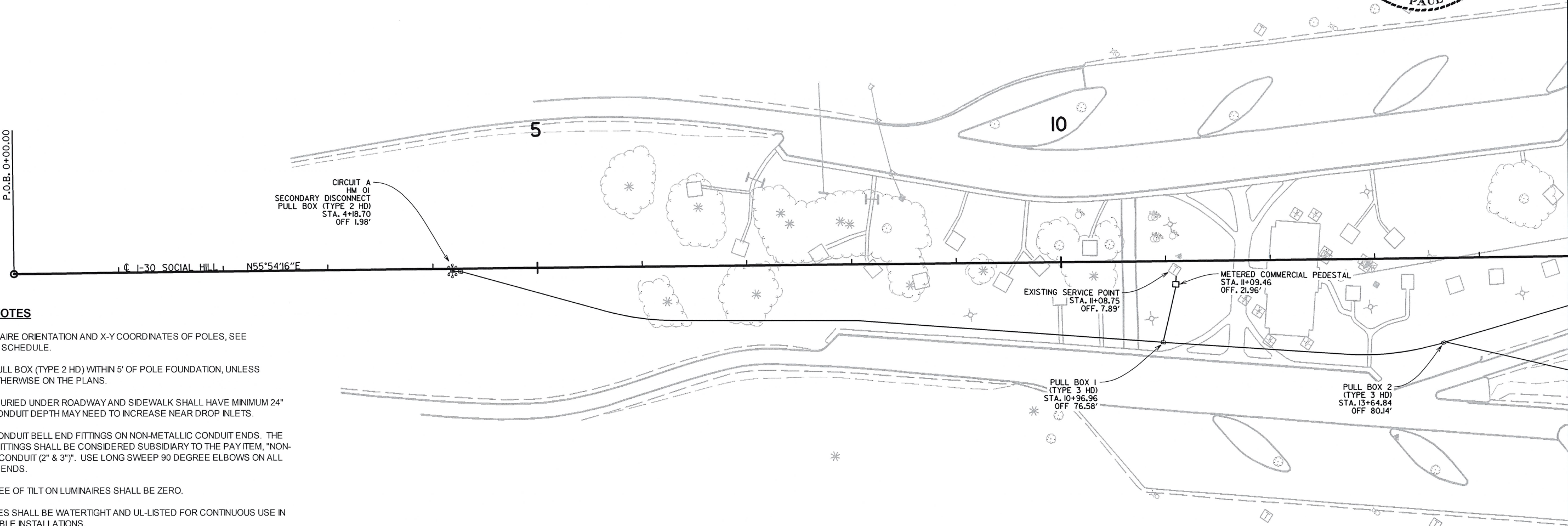
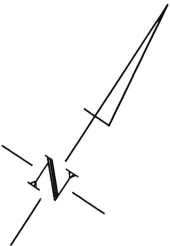
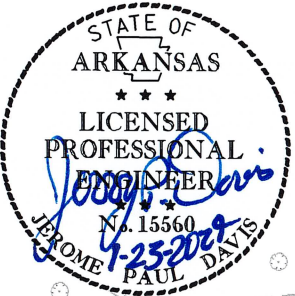
LOCATION: I-30  
CITY: MALVERN  
COUNTY: HOT SPRING  
DISTRICT: 6      SCALE: N/A      DRAWN BY: PC

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061826	8	16
ILLUMINATION NOTES AND SUMMARY OF QUANTITIES						





DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061826	9	16
ILLUMINATION LAYOUT						



**LIGHTING NOTES**

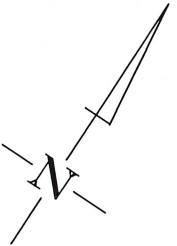
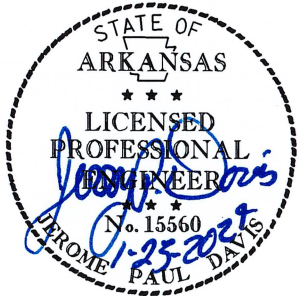
1. FOR LUMINAIRE ORIENTATION AND X-Y COORDINATES OF POLES, SEE LUMINAIRE SCHEDULE.
2. INSTALL PULL BOX (TYPE 2 HD) WITHIN 5' OF POLE FOUNDATION, UNLESS SHOWN OTHERWISE ON THE PLANS.
3. CONDUIT BURIED UNDER ROADWAY AND SIDEWALK SHALL HAVE MINIMUM 24" DEPTH. CONDUIT DEPTH MAY NEED TO INCREASE NEAR DROP INLETS.
4. INSTALL CONDUIT BELL END FITTINGS ON NON-METALLIC CONDUIT ENDS. THE COST OF FITTINGS SHALL BE CONSIDERED SUBSIDIARY TO THE PAY ITEM, "NON-METALLIC CONDUIT (2" & 3")". USE LONG SWEEP 90 DEGREE ELBOWS ON ALL CONDUIT BENDS.
5. THE DEGREE OF TILT ON LUMINAIRES SHALL BE ZERO.
6. ALL SPLICES SHALL BE WATERTIGHT AND UL-LISTED FOR CONTINUOUS USE IN SUBMERSIBLE INSTALLATIONS.
7. USE MINIMUM 1/4" PULL ROPE OR 1200 LBS. PULL TAPE WHEN PULLING CONDUCTORS.
8. E.G.C. SHALL BE EXOTHERMICALLY BONDED TO GROUND ROD.
9. CONDUCT A MINIMUM 14-DAY BURN TEST FOR THE COMPLETE LIGHTING SYSTEM. REPLACE BURNED OUT AND NOTICEABLY DIM LUMINAIRES; MALFUNCTIONING EQUIPMENT SHALL BE CORRECTED, AND RETEST THE SYSTEM. OTHERWISE, REMOVE AND REPLACE WITH NEW EQUIPMENT.
10. SEE STANDARD DRAWING SD-6 FOR PULL BOX CONSTRUCTION.
11. ALL METAL POLES SHALL BE GROUNDED TO E.G.C. PER NEC (2020) ARTICLE 410 PART IV AND PART V.
12. 2C/\* A.W.G., E.G.C. INDICATES TWO CURRENT CARRYING CONDUCTORS AND ONE E.G.C.. \* INDICATES THE DIFFERENT WIRE SIZE PER WIRING DIAGRAM.
13. THE CONTRACTOR SHALL LABEL ALL CONDUCTORS IN PULL BOXES AND AT SPLICE POINT.
14. CONDUCTORS SHALL CONTINUOUSLY RUN DIRECTLY FROM SERVICE POINTS TO ELECTRICAL DEVICES AND/OR PULL BOXES WITHOUT SPLICES BEING MADE IN CONDUIT.



**ILLUMINATION LAYOUT**

LOCATION: I-30  
CITY: MALVERN  
COUNTY: HOT SPRING  
DISTRICT: 6  
SCALE: 1"=100' DRAWN BY: PC

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061826	10	16
ILLUMINATION LAYOUT						



30

P.O.E. 30+00.00

25

20

15

CIRCUIT B  
HM 02  
SECONDARY DISCONNECT  
PULL BOX (TYPE 2 HD)  
STA. 20+46.16  
OFF -233.75'

PULL BOX 3  
(TYPE 2 HD)  
STA. 17+74.66  
OFF -34.49'

CIRCUIT C  
HM 03  
SECONDARY DISCONNECT  
PULL BOX (TYPE 2 HD)  
STA. 15+26.67  
OFF 108.49'

PULL BOX 4  
(TYPE 2 HD)  
STA. 20+13.39  
OFF 240.81'

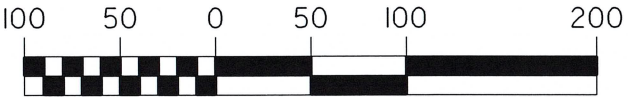
CIRCUIT D  
HM 04  
SECONDARY DISCONNECT  
PULL BOX (TYPE 2 HD)  
STA. 26+01.67  
OFF 373.67'

LIGHTING NOTES

1. FOR LUMINAIRE ORIENTATION AND X-Y COORDINATES OF POLES, SEE LUMINAIRE SCHEDULE.
2. INSTALL PULL BOX (TYPE 2 HD) WITHIN 5' OF POLE FOUNDATION, UNLESS SHOWN OTHERWISE ON THE PLANS.
3. CONDUIT BURIED UNDER ROADWAY AND SIDEWALK SHALL HAVE MINIMUM 24" DEPTH. CONDUIT DEPTH MAY NEED TO INCREASE NEAR DROP INLETS.
4. INSTALL CONDUIT BELL END FITTINGS ON NON-METALLIC CONDUIT ENDS. THE COST OF FITTINGS SHALL BE CONSIDERED SUBSIDIARY TO THE PAY ITEM, "NON-METALLIC CONDUIT (2" & 3")". USE LONG SWEEP 90 DEGREE ELBOWS ON ALL CONDUIT BENDS.
5. THE DEGREE OF TILT ON LUMINAIRES SHALL BE ZERO.
6. ALL SPLICES SHALL BE WATERTIGHT AND UL-LISTED FOR CONTINUOUS USE IN SUBMERSIBLE INSTALLATIONS.
7. USE MINIMUM 1/4" PULL ROPE OR 1200 LBS. PULL TAPE WHEN PULLING CONDUCTORS.
8. E.G.C. SHALL BE EXOTHERMICALLY BONDED TO GROUND ROD.
9. CONDUCT A MINIMUM 14-DAY BURN TEST FOR THE COMPLETE LIGHTING SYSTEM. REPLACE BURNED OUT AND NOTICEABLY DIM LUMINAIRES; MALFUNCTIONING EQUIPMENT SHALL BE CORRECTED, AND RETEST THE SYSTEM. OTHERWISE, REMOVE AND REPLACE WITH NEW EQUIPMENT.
10. SEE STANDARD DRAWING SD-6 FOR PULL BOX CONSTRUCTION.
11. ALL METAL POLES SHALL BE GROUNDED TO E.G.C. PER NEC (2020) ARTICLE 410 PART IV AND PART V.
12. 2C/\* A.W.G., E.G.C. INDICATES TWO CURRENT CARRYING CONDUCTORS AND ONE E.G.C.. \* INDICATES THE DIFFERENT WIRE SIZE PER WIRING DIAGRAM.
13. THE CONTRACTOR SHALL LABEL ALL CONDUCTORS IN PULL BOXES AND AT SPLICE POINT.
14. CONDUCTORS SHALL CONTINUOUSLY RUN DIRECTLY FROM SERVICE POINTS TO ELECTRICAL DEVICES AND/OR PULL BOXES WITHOUT SPLICES BEING MADE IN CONDUIT.

ILLUMINATION LAYOUT

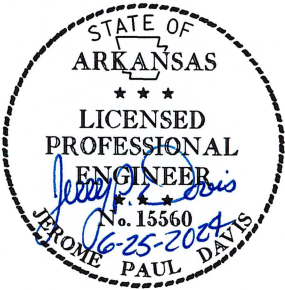
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CITY: MALVERN  
COUNTY: HOT SPRING  
DISTRICT: 6      SCALE: 1"=100'      DRAWN BY: PC





USER: PC5226  
DESIGN FILE: G:\2212000\_012414\TRANSP\061826 SOCIAL HILL LIGHTING\ dgn\lighting\I-30 Social Hill Lighting.dgn  
PLOTTER: 6/25/2024 09:46  
SCALE: 1:100

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061826	II	16
ILLUMINATION TABLES						



LUMINAIRE SCHEDULE												
POLE NO.	NORTHING	EASTING	STA.	OFFSET (FT.)	CENTERLINE	MOUNTING HT. (FT.)	WATTS	VOLTAGE	DELIVERED LUMENS	ORIENTATION ANGLE (PLAN NORTH = 0°, CLOCKWISE ROTATION)	IES CLASSIFICATION	FIXTURE NAME
HIGH MAST 01	1925942.3260	1042501.8630	4+18.70	1.98	I-30 SOCIAL HILL	150	3492	240V	483756	325°	TYPE III	HMLED4-P4-40K-XXX-NAS-XXX
HIGH MAST 02	1927049.8550	1043717.4240	20+46.16	-233.75		150	2910	240V	403130	320°	TYPE III	HMLED4-P4-40K-XXX-NAS-XXX
HIGH MAST 03	1926517.8800	1043557.4150	15+26.67	108.49		150	3492	240V	483756	345°	TYPE III	HMLED4-P4-40K-XXX-NAS-XXX
HIGH MAST 04	1926426.3960	1043566.8360	26+01.67	373.67		150	2910	240V	403130	140°	TYPE III	HMLED4-P4-40K-XXX-NAS-XXX
SERVICE POINT	1926324.2571	1043076.6029	11+08.75	7.89		N/A	N/A	N/A	N/A	N/A	N/A	N/A

HIGH MAST 01, VOLTAGE DROP, CIRCUIT A, 2C/4AWG, EGC									
SEGMENT	VOLTAGE	PHASE	SETS	CONDUCTOR	CURRENT	Z/1000ft	LENGTH	VD	% VD
SP TO HM 01	240	1	1	4	14.55	0.31	764	6.89	2.87
HM 01 TO HMA 01	240	1	1	8	14.55	0.78	159	3.61	1.50
TOTAL								4.37	

NOTE: NEC 230.31(B) STATES MINIMUM UNDERGROUND SERVICE CONDUCTOR SIZE TO BE 8 AWG.

HIGH MAST 02, VOLTAGE DROP, CIRCUIT B, 2C/2AWG, EGC									
SEGMENT	VOLTAGE	PHASE	SETS	CONDUCTOR	CURRENT	Z/1000ft	LENGTH	VD	% VD
SP TO HM 02	240	1	1	2	12.13	0.19	1183	5.45	2.27
HM 02 TO HMA 02	240	1	1	8	12.13	0.78	159	3.01	1.25
TOTAL								3.52	

NOTE: NEC 230.31(B) STATES MINIMUM UNDERGROUND SERVICE CONDUCTOR SIZE TO BE 8 AWG.

HIGH MAST 03, VOLTAGE DROP, CIRCUIT C, 2C/4AWG, EGC									
SEGMENT	VOLTAGE	PHASE	SETS	CONDUCTOR	CURRENT	Z/1000ft	LENGTH	VD	% VD
SP TO HM 03	240	1	1	4	14.55	0.31	523	4.72	1.97
HM 03 TO HMA 03	240	1	1	8	14.55	0.78	159	3.61	1.50
TOTAL								3.47	

NOTE: NEC 230.31(B) STATES MINIMUM UNDERGROUND SERVICE CONDUCTOR SIZE TO BE 8 AWG.

HIGH MAST 04, VOLTAGE DROP, CIRCUIT D, 2C/1AWG, EGC									
SEGMENT	VOLTAGE	PHASE	SETS	CONDUCTOR	CURRENT	Z/1000ft	LENGTH	VD	% VD
SP TO HM 04	240	1	1	1	12.13	0.15	1712	6.23	2.59
HM 04 TO HMA 04	240	1	1	8	12.13	0.78	159	3.01	1.25
TOTAL								3.84	

NOTE: NEC 230.31(B) STATES MINIMUM UNDERGROUND SERVICE CONDUCTOR SIZE TO BE 8 AWG.

ILLUMINATION DESIGN CRITERIA		
DESCRIPTION	AVERAGE (FC)	AVG/MIN
I-30 SOCIAL HILL REST AREA	0.6	4:1

NOTES:  
1. DESIGN BASIS WAS AASHTO ROADWAY LIGHTING DESIGN GUIDE, 7TH ED.  
2. HMLED4-P4-40K-XXX-NAS-XXX DESIGN FIXTURE OR APPROVED EQUAL SHALL BE USED.

ILLUMINATION STATISTICS				
DESCRIPTION	AVERAGE (FC)	MAXIMUM (FC)	MINIMUM (FC)	AVG/MIN
I-30 - OFF RAMP (EB)	0.73	1.4	0.2	3.65:1
I-30 - OFF RAMP (WB)	0.68	1.6	0.2	3.40:1
I-30 - ON RAMP (EB)	0.69	1.7	0.2	3.45:1
I-30 - ON RAMP (WB)	0.70	1.4	0.2	3.50:1

NOTE: CALCULATIONS WERE BASED ON 0.85 LIGHT LOSS FACTOR.

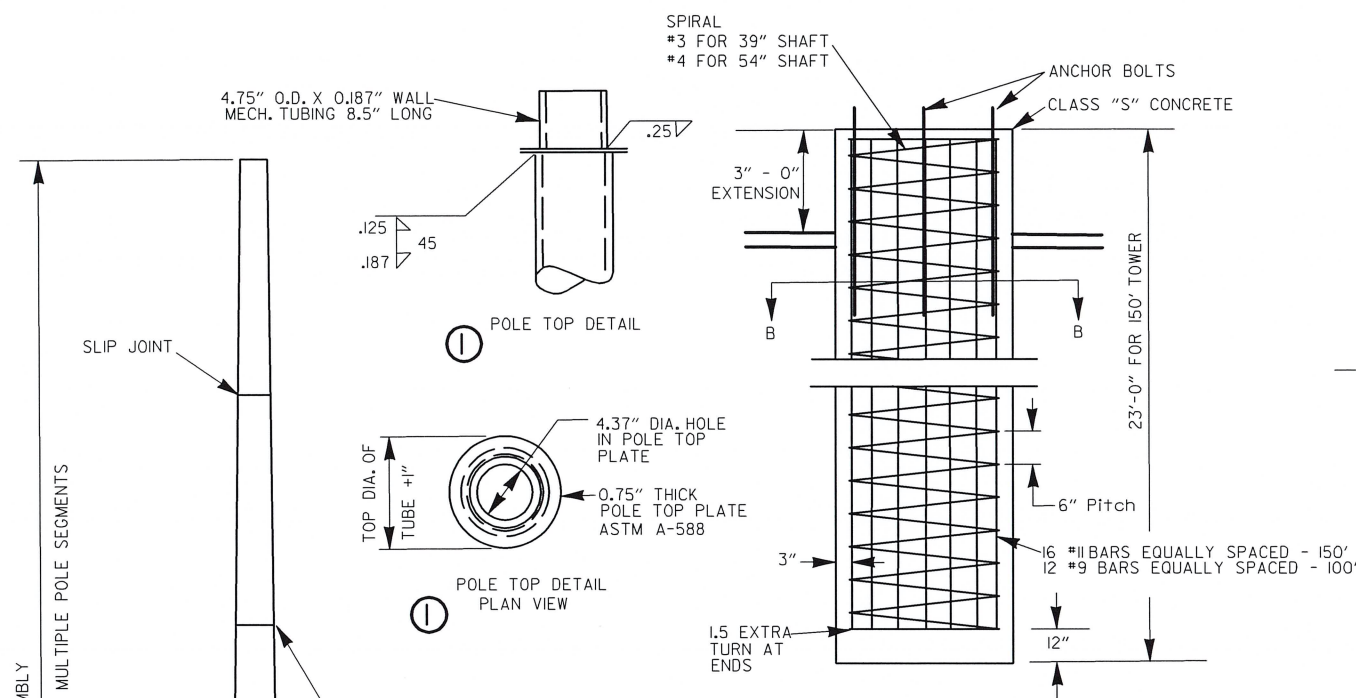
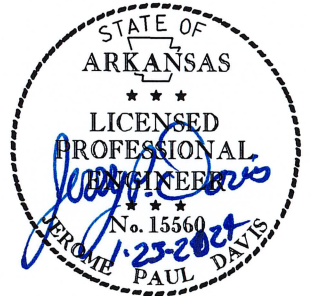
ELECTRICAL SERVICE DATA								
CIRCUIT ID	LOCATION	SERVICE VOLTAGE	SERVICE CONDUIT SIZE	SERVICE CONDUCTORS	MAIN CIRCUIT BREAKER	BRANCH CIRCUIT BREAKER	BRANCH CIRCUIT (AMPS)	KVA LOAD
I-30								
A	N - 1926324.2571 E - 1043076.6029	240V, SINGLE PHASE	2" NMC	2C/4 A.W.G., E.G.C.	2P/100A	2P/20A	14.55	3.49
B				2C/2 A.W.G., E.G.C.		2P/20A	12.13	2.91
C				2C/4 A.W.G., E.G.C.		2P/20A	14.55	3.49
D				2C/1 A.W.G., E.G.C.		2P/20A	12.13	2.91

ILLUMINATION TABLES

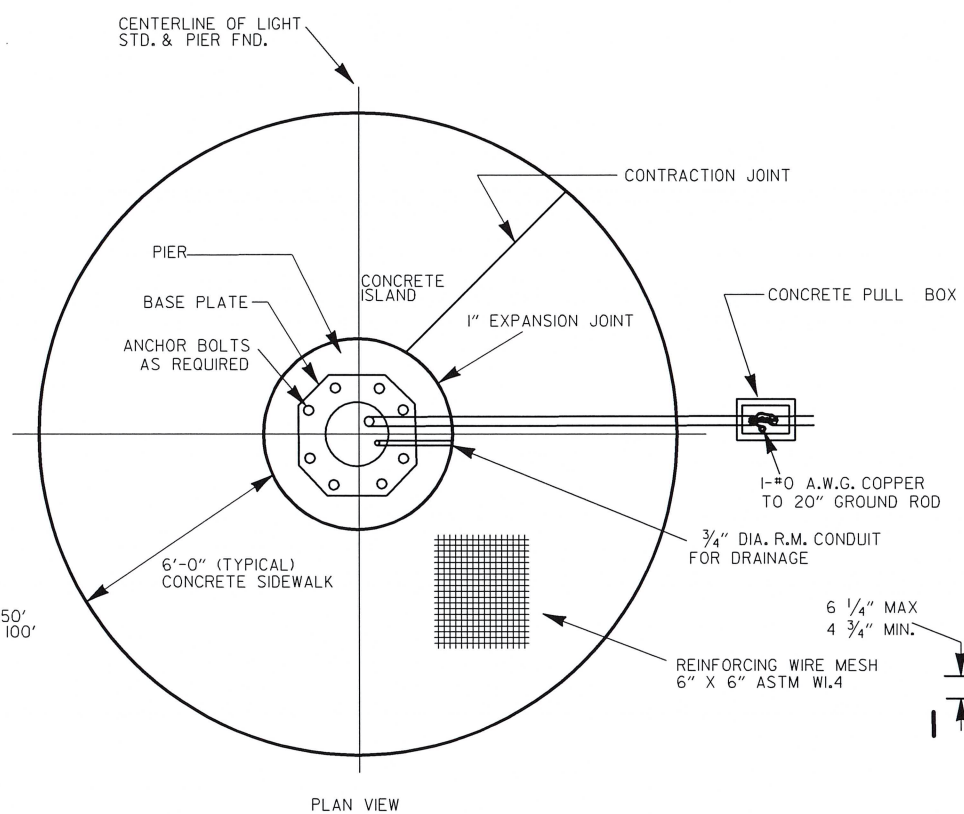
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COUNTY: HOT SPRING  
DISTRICT: 6  
SCALE: N/A  
DRAWN BY: PC



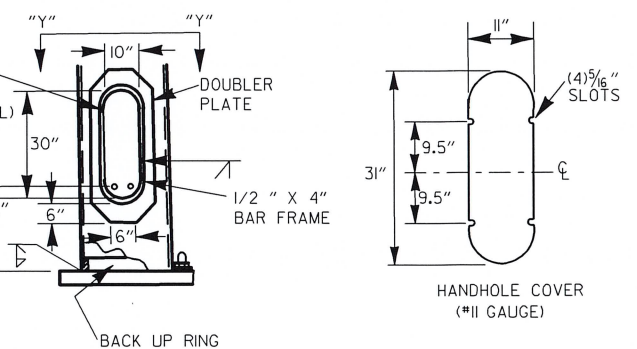
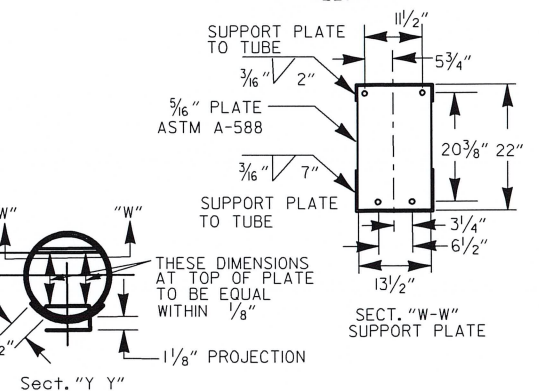
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ILLUMINATION DETAILS						



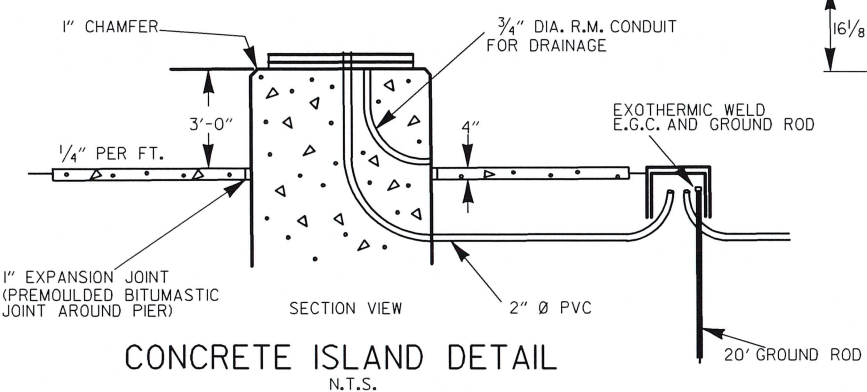
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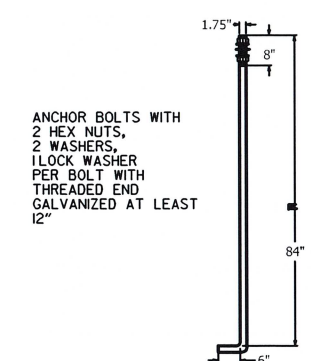
CONCRETE ISLAND DETAILS  
N.T.S.



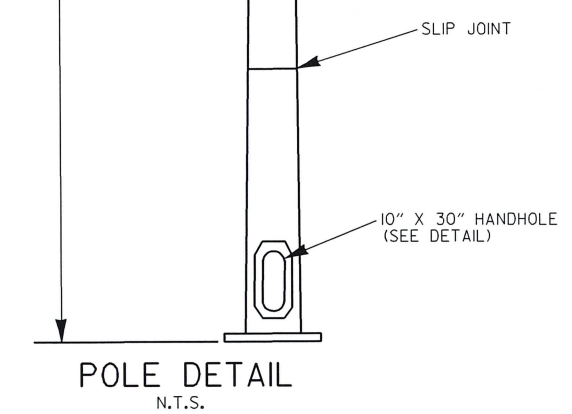
HANDHOLE AND BASE DETAILS  
N.T.S.



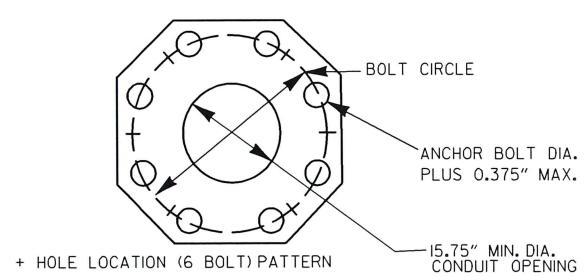
CONCRETE ISLAND DETAIL  
N.T.S.



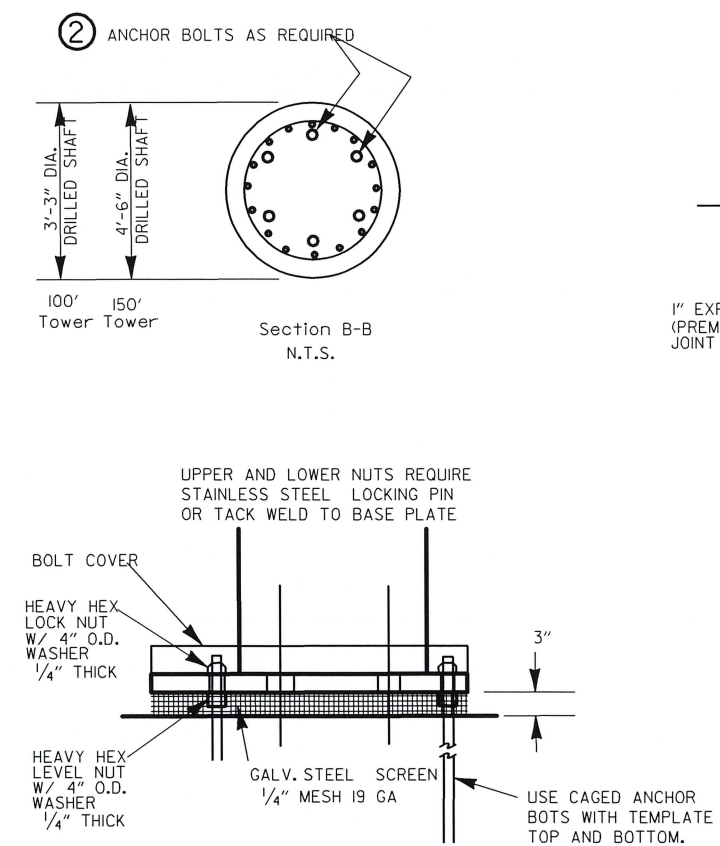
ANCHOR BOLT DETAILS  
N.T.S.



POLE DETAIL  
N.T.S.



BASE PLATE DETAIL  
N.T.S.



BASE PLATE ANCHOR DETAIL  
N.T.S.

- NOTE:
- THESE DETAILS ARE NOT INTENDED TO LIMIT COMPETITION. THE DETAILS AND SPECIAL PROVISIONS GOVERN THE MINIMUM QUALITY REQUIREMENTS CONCERNING MATERIALS AND OPERATION.
  - POLE AND ANCHOR BOLTS ARE DESIGNED BY THE MANUFACTURER.

ILLUMINATION DETAILS

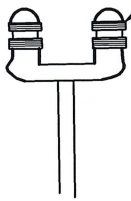
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CITY: MALVERN  
COUNTY: HOT SPRING  
DISTRICT: 6 SCALE: N/A DRAWN BY: PC



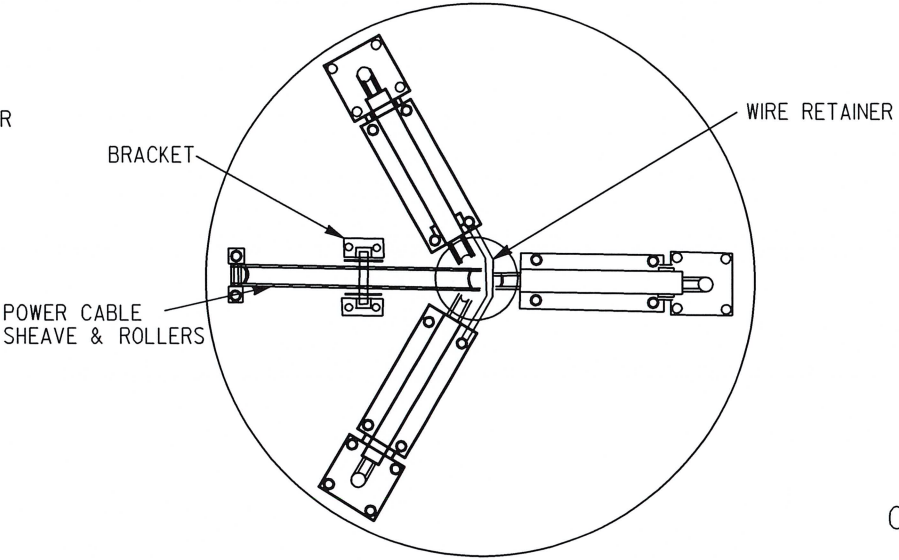
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		6	ARK.	061826	13	16
ILLUMINATION DETAILS						



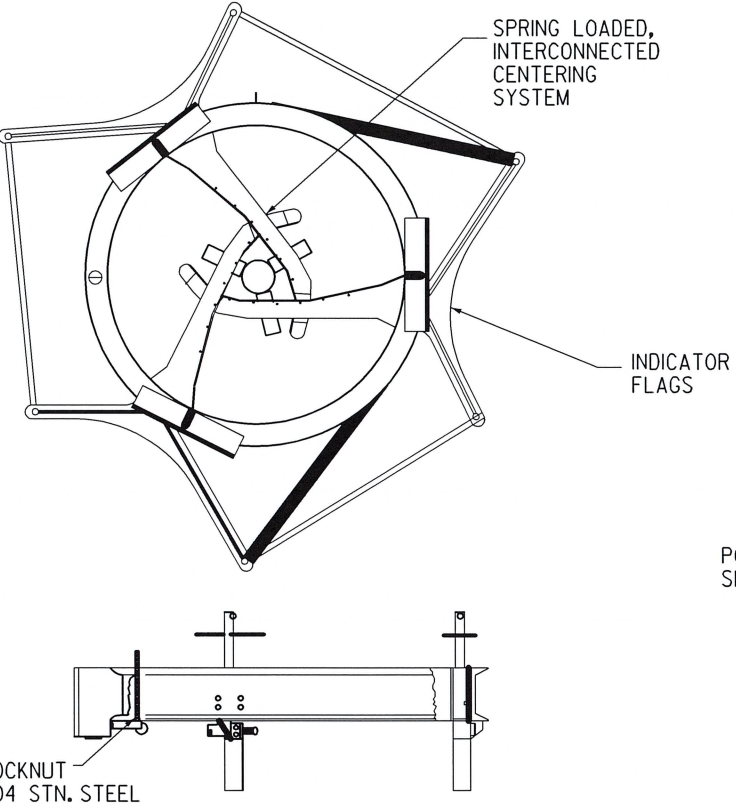
FAA APPROVED  
OBSTRUCTION LIGHT  
ALL STRUCTURES  
EXCEEDING 200'  
ABOVE GROUND LEVEL  
OR AS DIRECTED



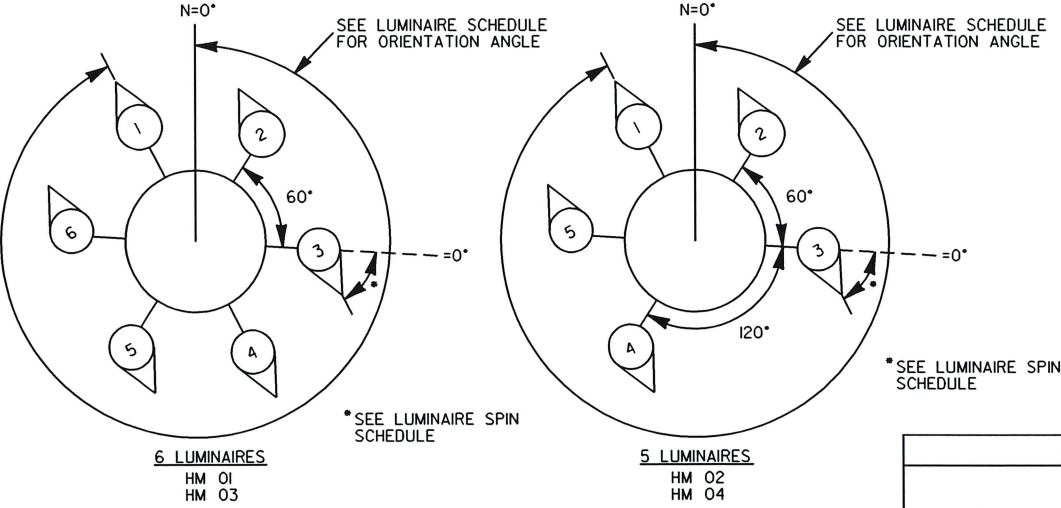
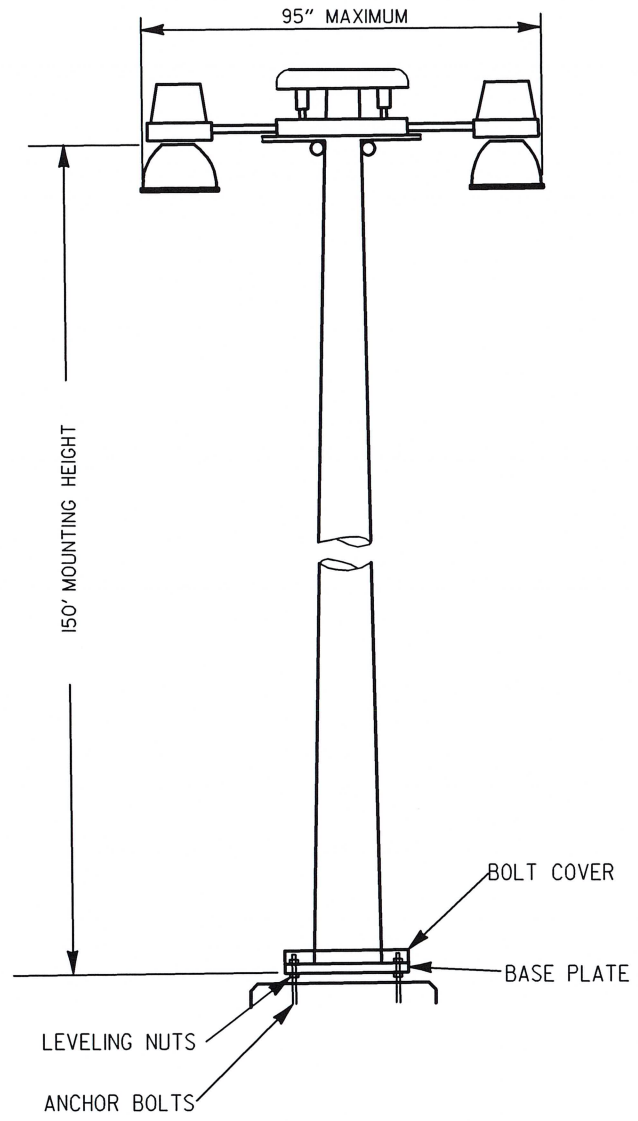
OBSTRUCTION LIGHT



TOP VIEW

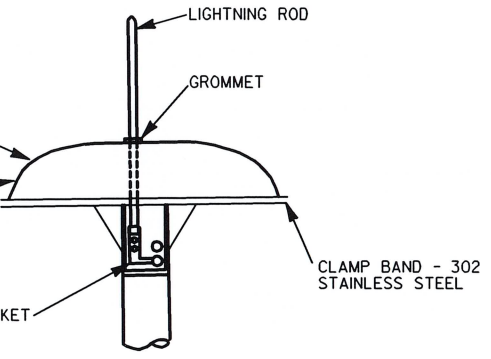


RISER SUPPORT ASSEMBLY

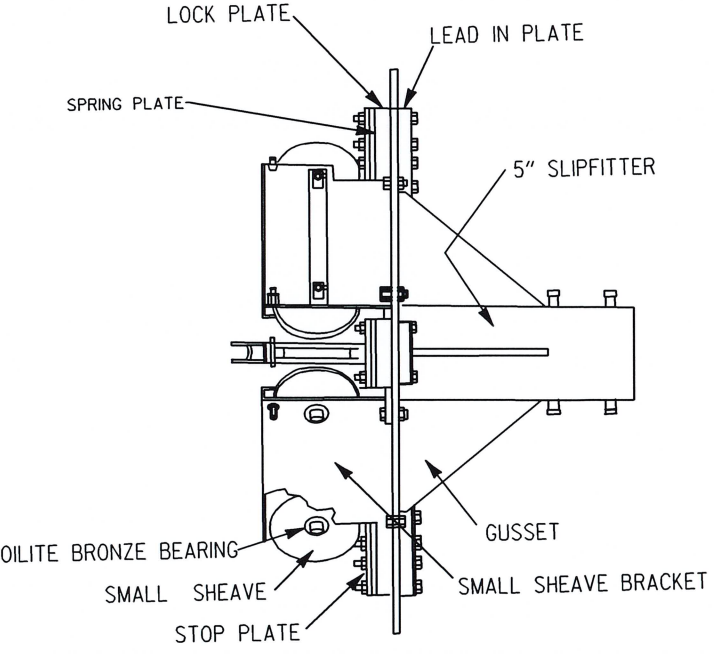


MAST ARM LAYOUT

LUMINAIRE SPIN SCHEDULE						
POLE NO.	LUMINAIRE SPIN (CLOCKWISE ROTATION)					
	1	2	3	4	5	6
HIGH MAST 01	0°	300°	60°	0°	300°	60°
HIGH MAST 02	0°	300°	60°	300°	60°	N/A
HIGH MAST 03	0°	300°	60°	0°	300°	60°
HIGH MAST 04	0°	300°	60°	300°	60°	N/A



LIGHTNING ROD



SIDE VIEW

HEAD FRAME ASSEMBLY

ILLUMINATION DETAILS

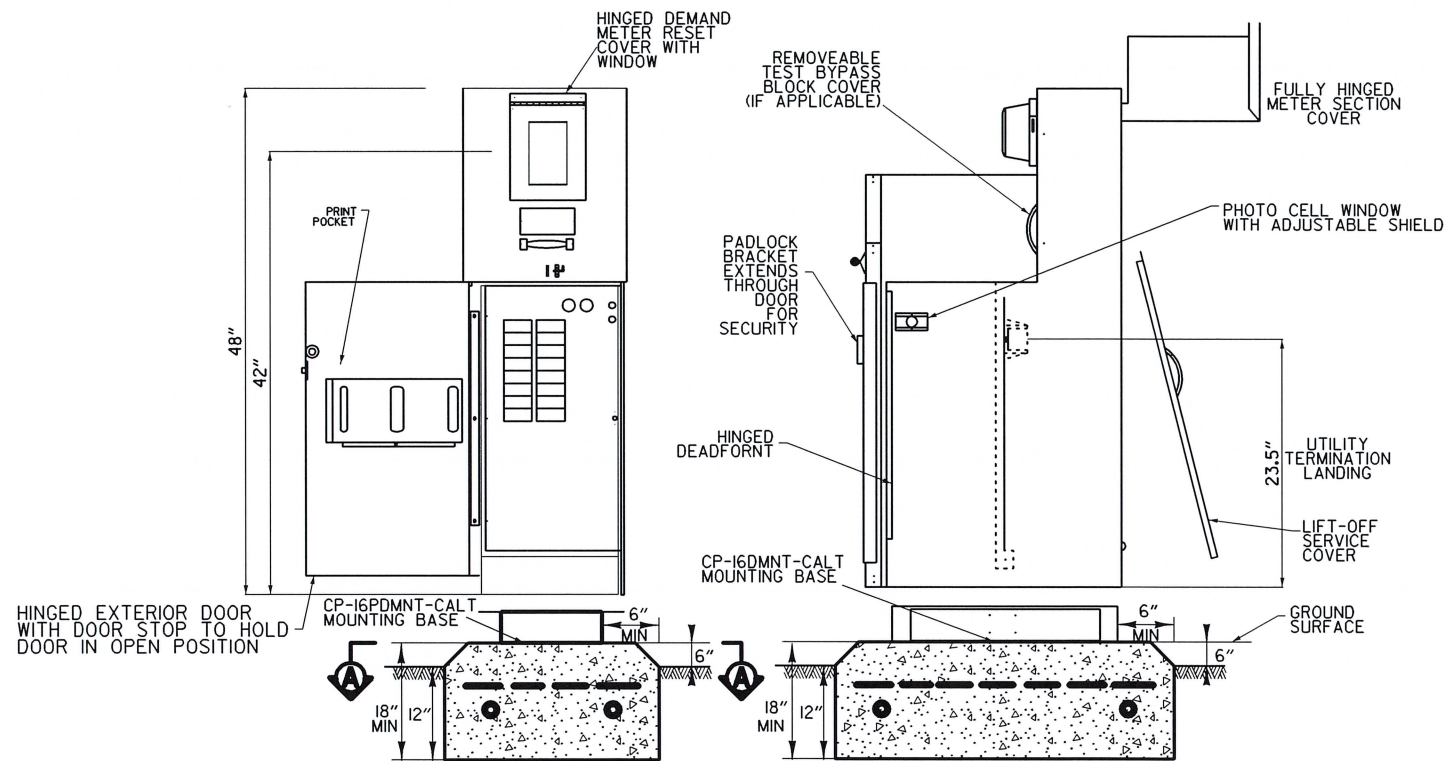
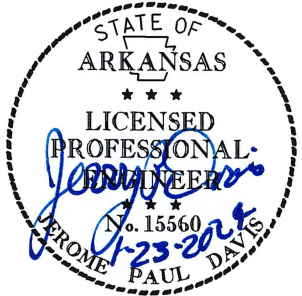
NOTE:  
THESE DETAILS ARE NOT INTENDED TO LIMIT COMPETITION.  
THE DETAILS AND SPECIAL PROVISIONS GOVERN THE MINIMUM  
QUALITY REQUIREMENTS CONCERNING MATERIALS AND OPERATION.

LOCATION: I-30  
CITY: MALVERN  
COUNTY: HOT SPRING  
DISTRICT: 6 SCALE: N/A DRAWN BY: PC

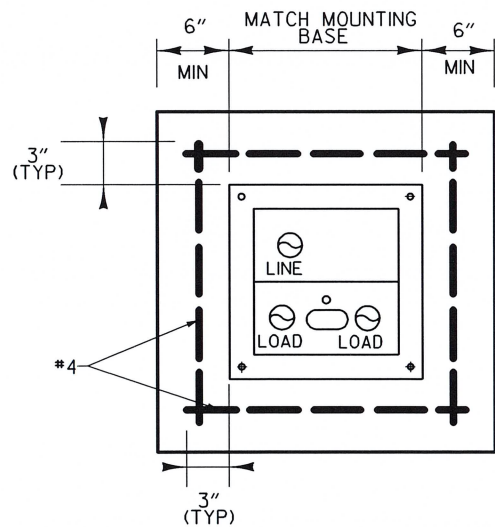
STATE OF  
ARKANSAS  
\*\*\*  
LICENSED  
PROFESSIONAL  
ENGINEER  
\*\*\*  
No. 15560  
1-23-2029  
JEROME PAUL DAVIS



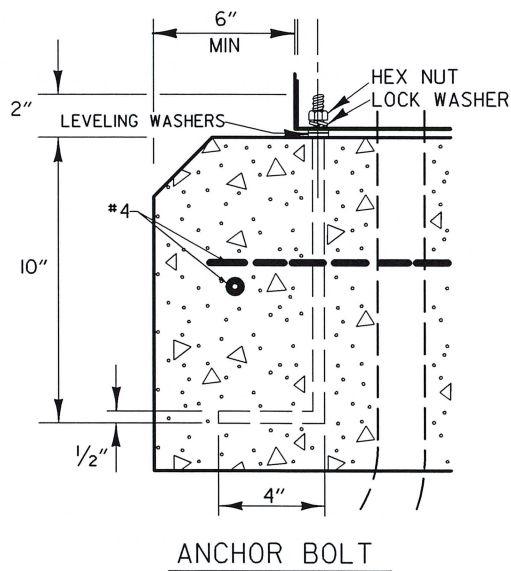
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		6	ARK.	061826	15	16
ILLUMINATION DETAILS						



METERED COMMERCIAL PEDESTAL  
100 AMP (N.T.S.)

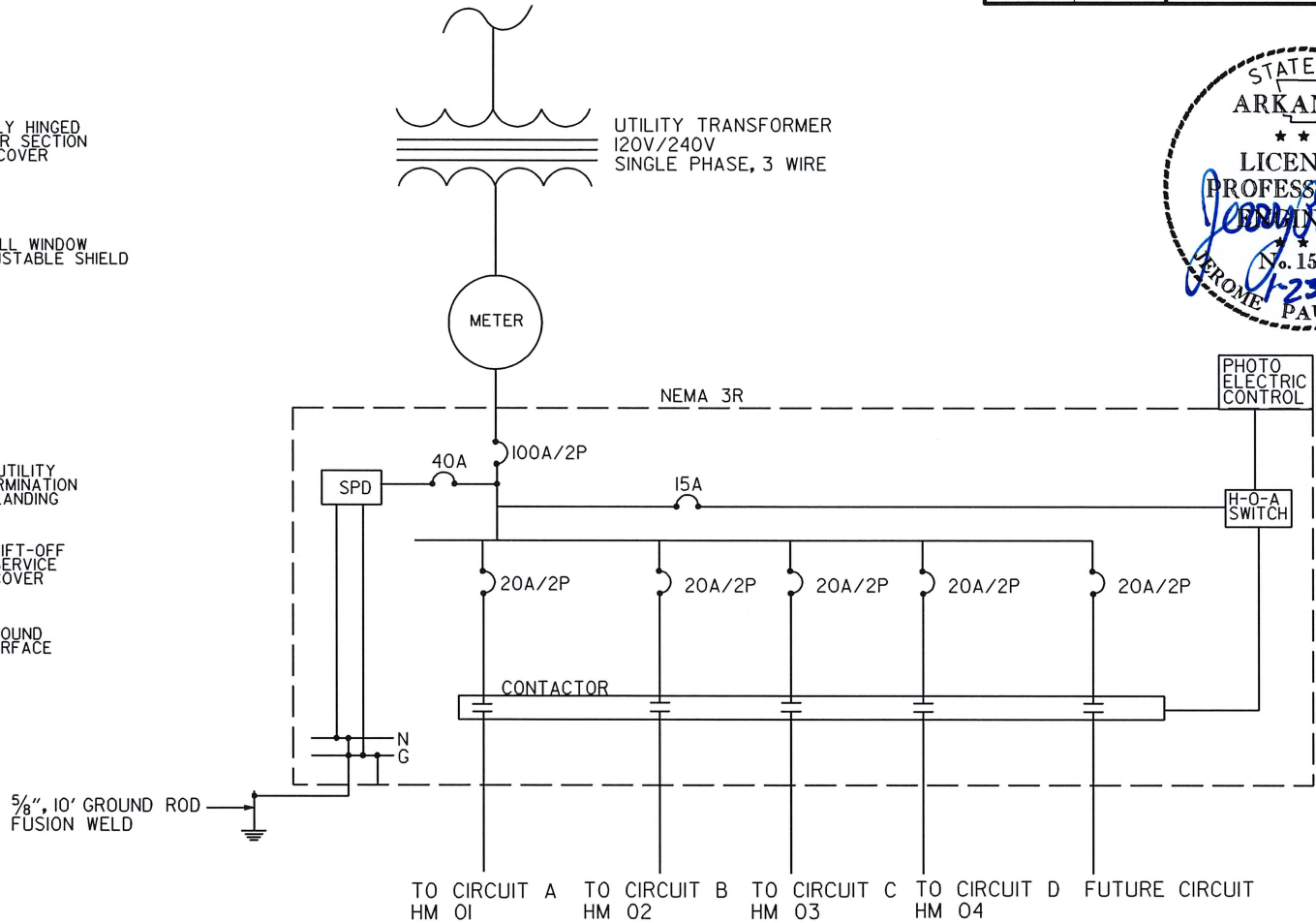


SECTION A-A

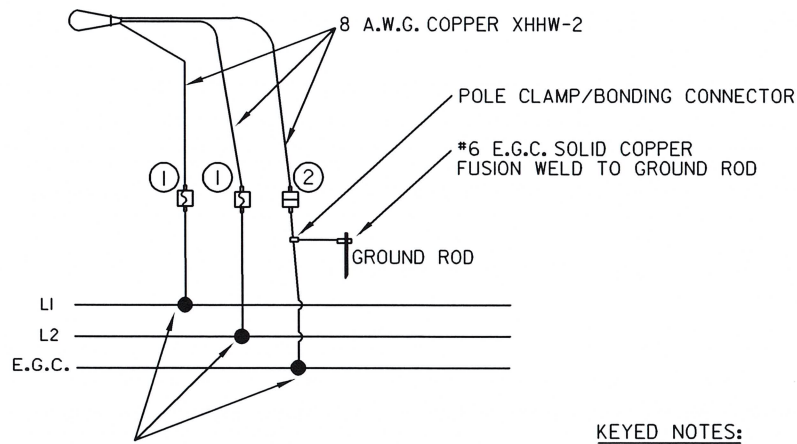


NOTES:

- CONCRETE FOR CAST-IN-PLACE FOUNDATION SHALL BE CLASS S WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH,  $f'_c = 3,500$  PSI.
- ALL REINFORCING STEEL SHALL BE GRADE 60 AND CONFORM TO AASHTO M31OR M53.



ONE-LINE DIAGRAM



MULTI-PORT CONNECTOR  
HOMAC RXL, POLARIS EDGE,  
UTILCO SAFETYSUB, OR EQUIVALENT

TYPICAL WIRING FOR LUMINAIRES  
THREE-WIRE CIRCUIT-CENTER GROUNDED  
LUMINAIRE SERVED AT 240 VAC.

(120/240 VOLT SERVICE)

LUMINAIRE WIRING SCHEMATICS

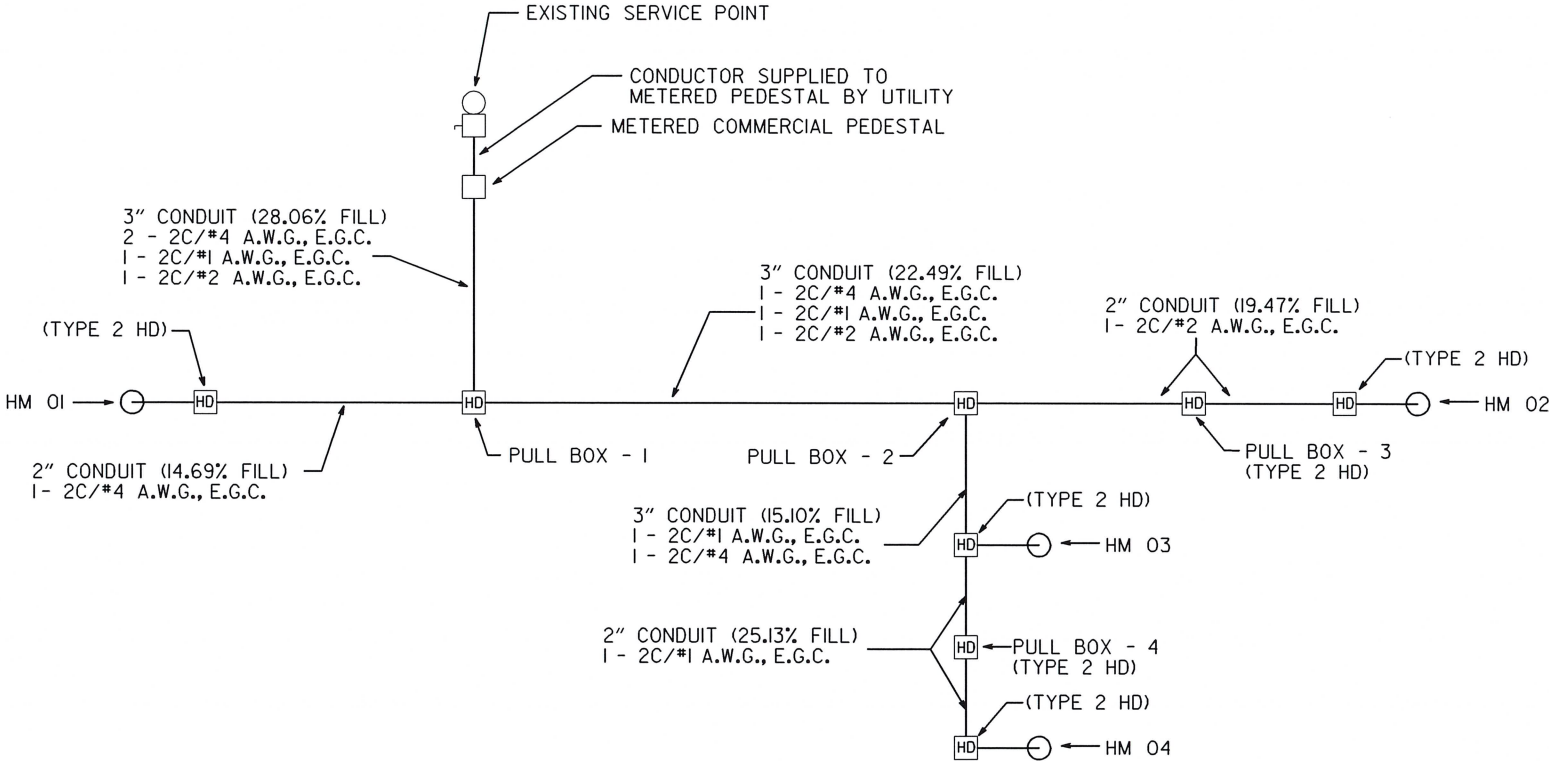
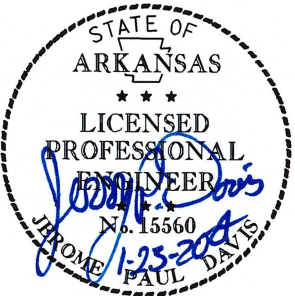
KEYED NOTES:

- FUSED CONNECTOR - SHALL BE WATERTIGHT, UL-LISTED, AND DESIGNED AS BREAKAWAY (HOMAC FLOOD-SEAL, EATON BUSSMANN OR EQUAL). USE A FUSED CONNECTOR FOR THE LINE WIRE ON ALL POLES. USE MANUFACTURER'S RECOMMENDED FUSE SIZE.
- UN-FUSED CONNECTOR - SHALL BE WATERTIGHT AND SHALL BE DESIGNED AS BREAKAWAY (HOMAC FLOOD-SEAL, EATON BUSSMANN, OR EQUAL).

ILLUMINATION DETAILS

LOCATION: I-30  
CITY: MALVERN  
COUNTY: HOT SPRING  
DISTRICT: 6 SCALE: N/A DRAWN BY: PC

DATE REVISED	DATE REVISED	FED. RD. DIST. NO.	STATE	JOB NO.	SHEET NO.	TOTAL SHEETS
		6	ARK.	061826	16	16
ILLUMINATION DETAILS						



WIRING DIAGRAM

CONDUIT FILL			
CONDUIT SIZE	CONDUCTORS	CONDUIT FILL	MAX FILL
2"	2C/#1 A.W.G., E.G.C.	25.13%	40%
2"	2C/#2 A.W.G., E.G.C.	19.47%	40%
2"	2C/#4 A.W.G., E.G.C.	14.69%	40%
2"	2C/#8 A.W.G., E.G.C.	7.77%	40%
3"	2C/#1 A.W.G., E.G.C. 2C/#2 A.W.G., E.G.C. (2) 2C/#4 A.W.G., E.G.C.	28.06%	40%
3"	2C/#1 A.W.G., E.G.C. 2C/#2 A.W.G., E.G.C. 2C/#4 A.W.G., E.G.C.	22.49%	40%
3"	2C/#1 A.W.G., E.G.C. 2C/#4 A.W.G., E.G.C.	15.10%	40%

WIRING NOTES:

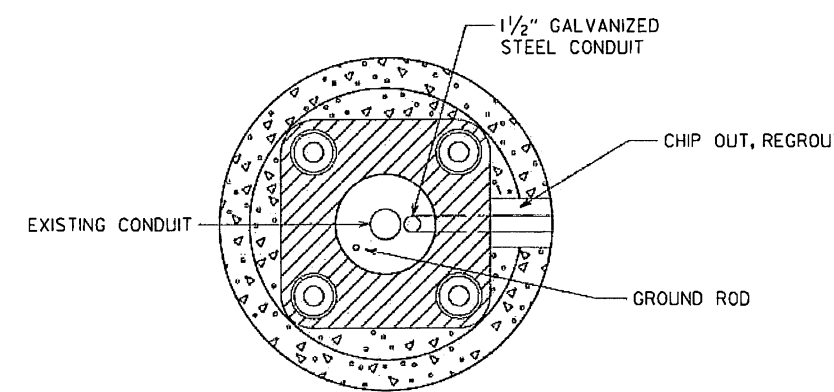
- CIRCUIT A  
1-2C/#4 A.W.G., E.G.C. IN SCH.40 NON-METALLIC CONDUIT (2" OR 3", SEE DIAGRAM).  
CONDUCTOR SHALL CONTINUE THROUGH PULL BOX 1 TO PULL BOX HM 01.  
CONDUCTOR SHALL BE CONNECTED TO THE SECONDARY SERVICE POINT  
NEAR THE POLE BASE. REFER TO SECONDARY SERVICE POINT/WIRING  
DIAGRAMS IN ILLUMINATION DETAILS SHEET.
- CIRCUIT B  
1-2C/#2 A.W.G., E.G.C. IN SCH.40 NON-METALLIC CONDUIT (2" OR 3" SEE DIAGRAM).  
CONDUCTOR SHALL CONTINUE THROUGH PULL BOX 1 TO PULL BOX HM 02.  
CONDUCTOR SHALL BE CONNECTED TO THE SECONDARY SERVICE POINT  
NEAR THE POLE BASE. REFER TO SECONDARY SERVICE POINT/WIRING  
DIAGRAMS IN ILLUMINATION DETAILS SHEET.
- CIRCUIT C  
1-2C/#4 A.W.G., E.G.C. IN SCH.40 NON-METALLIC CONDUIT (2" OR 3", SEE DIAGRAM).  
CONDUCTOR SHALL CONTINUE THROUGH PULL BOX 1 TO PULL BOX HM 03.  
CONDUCTOR SHALL BE CONNECTED TO THE SECONDARY SERVICE POINT  
NEAR THE POLE BASE. REFER TO SECONDARY SERVICE POINT/WIRING  
DIAGRAMS IN ILLUMINATION DETAILS SHEET.
- CIRCUIT D  
1-2C/#1 A.W.G., E.G.C. IN SCH.40 NON-METALLIC CONDUIT (2" OR 3", SEE DIAGRAM).  
CONDUCTOR SHALL CONTINUE THROUGH PULL BOX 1 TO PULL BOX HM 04.  
CONDUCTOR SHALL BE CONNECTED TO THE SECONDARY SERVICE POINT  
NEAR THE POLE BASE. REFER TO SECONDARY SERVICE POINT/WIRING  
DIAGRAMS IN ILLUMINATION DETAILS SHEET.
- UNLESS OTHERWISE NOTED, TYPE 3 HD PULL BOXES AND  
1-2C/#8 A.W.G., E.G.C. ELECTRICAL CONDUCTOR FOR LUMINAIRE SHALL BE USED.

ILLUMINATION DETAILS

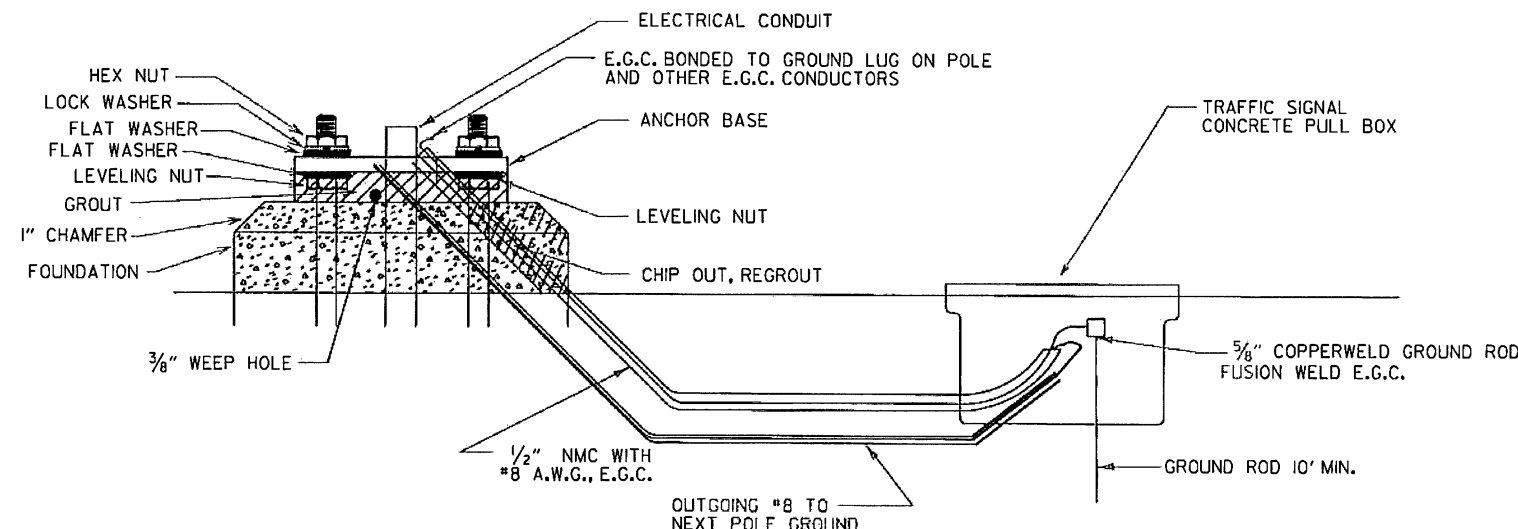
LOCATION: I-30  
CITY: MALVERN  
COUNTY: HOT SPRING  
DISTRICT: 6      SCALE: N/A      DRAWN BY: PC



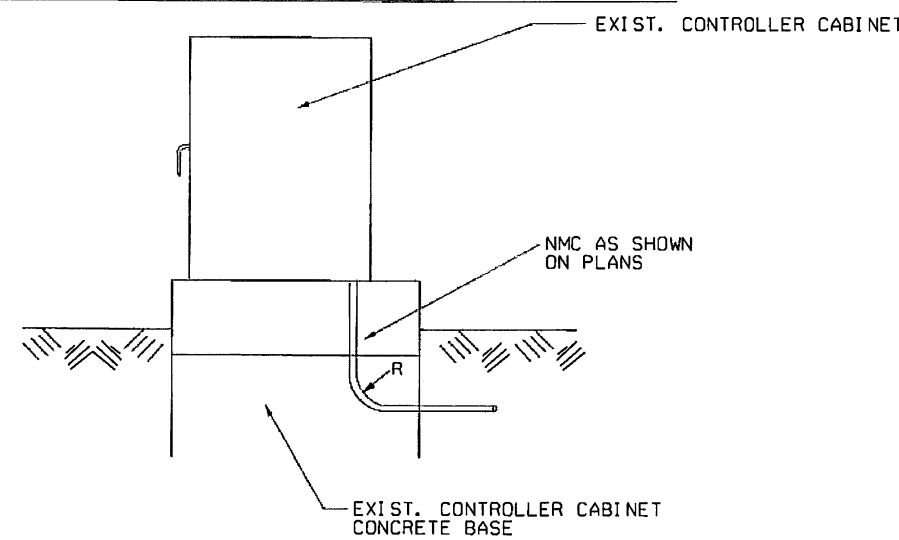
CONDUIT ENTRY TO EXISTING POLE BASE



ANCHOR BASE

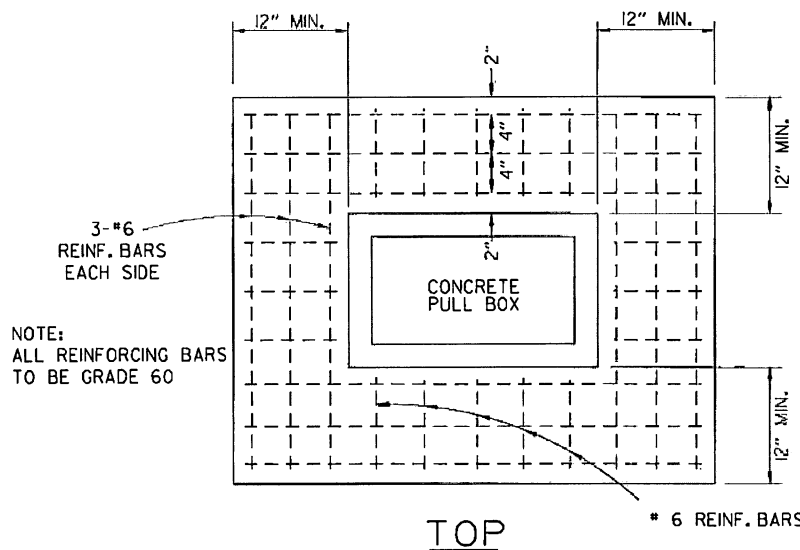
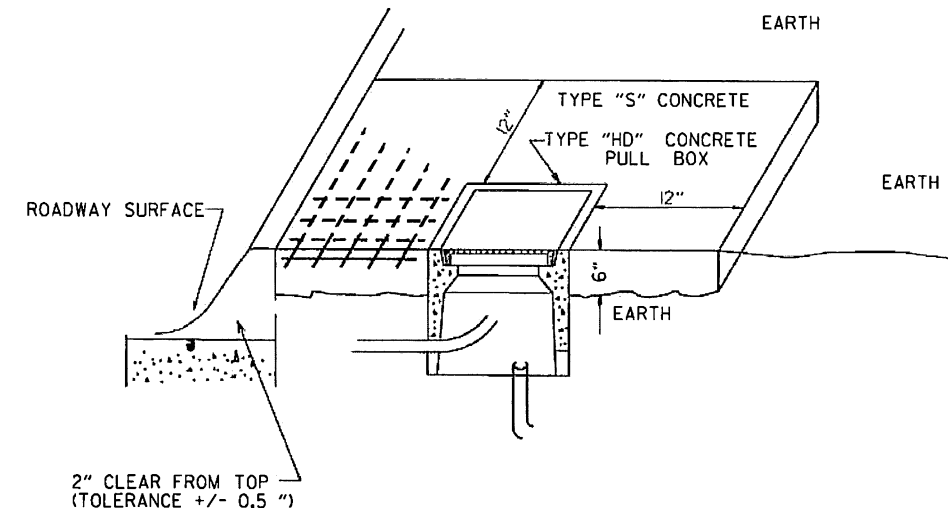


CONDUIT ENTRY TO EXISTING CONTROLLER CABINET

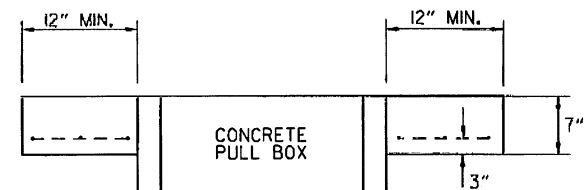


NOTE: ENTRY TO CABINET SHALL BE THROUGH A CUT IN THE BASE SUFFICIENT TO PROVIDE ADEQUATE CONDUIT RADIUS FOR ITEM.

TYPE "HD" CONCRETE PULL BOX DETAIL



NOTE: ALL REINFORCING BARS TO BE GRADE 60



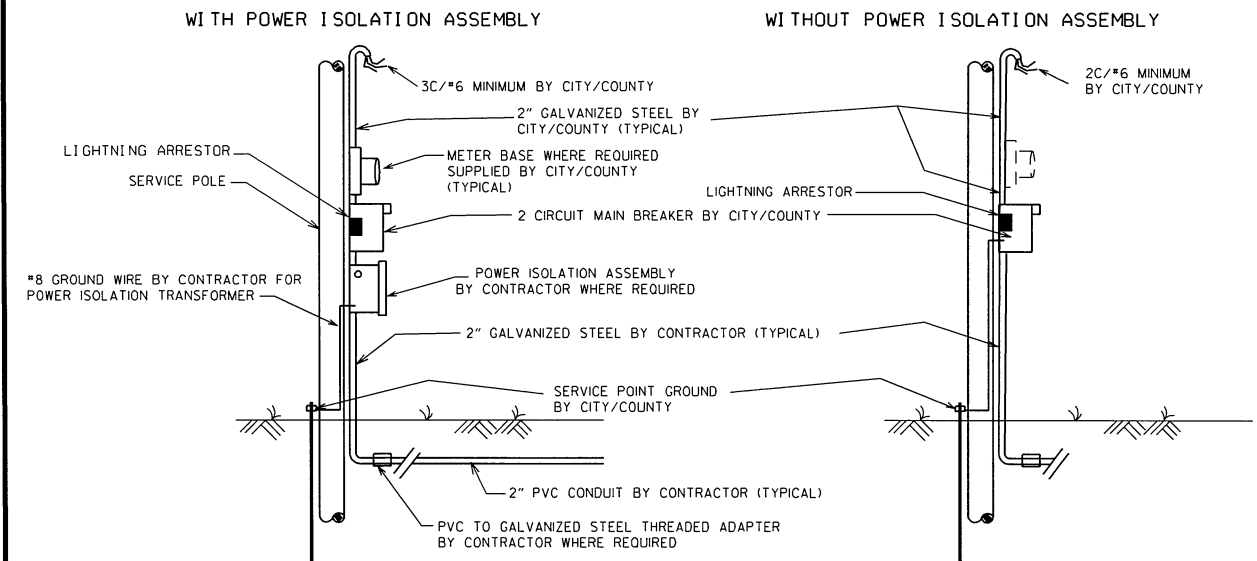
ELEVATION

NOTE: ALL TYPE 1 AND TYPE 2 HD CONCRETE PULL BOXES ARE INSTALLED WITH AN APRON OF CONCRETE 12" WIDE AND 7" IN DEPTH. ALL PAYMENT SHALL BE INCLUDED IN THE PRICE OF THE TYPE HD CONCRETE PULL BOX. THE CONCRETE PULL BOX SHALL BE INSTALLED FLUSH TO SURROUNDING GRADE UNLESS OTHERWISE INSTRUCTED BY THE ENGINEER. THE CONCRETE SHALL BE CLASS "S". THREE #6 REINFORCING BARS IN THE APRON ON ALL SIDES OF THE CONCRETE PULL BOX IS REQUIRED IN CONCRETE.

DATE	REVISION	FILMED
11-16-17	REVISED NOTES	
09-02-15	REVISED PULL BOX DEPTH	
09-12-13	ISSUED AS STANDARD DRAWING	
05-21-09	REVISED GROUNDING	
07-31-08	ADDED & REVISED CONDUIT ENTRY	
06-23-04	REVISED CLEARANCE AT CURB ENTRY	
01-04-02	ADDED REINFORCING TO BOX APRON	
07-02-01	REVISED	
12-27-99	REVISED NOTES	
11-18-98	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION
HEAVY DUTY PULL BOX
STANDARD DRAWING SD-6

MAIN BREAKER NOT NEAR CONTROLLER CABINET  
SECONDARY REQUIRED



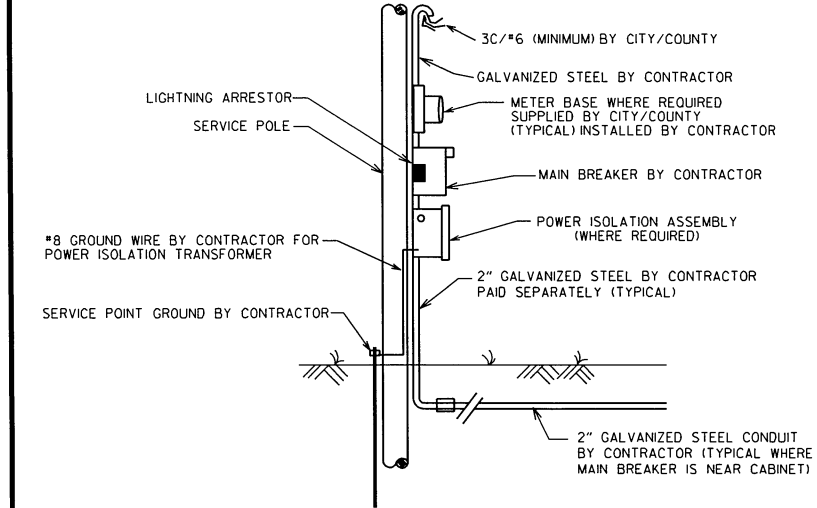
NOTES TO CONTRACTOR AND AGENCY RESPONSIBLE FOR MAINTENANCE OF THE INTERSECTION (CITY/COUNTY):

ELECTRICAL SERVICE TYPICALLY FALLS INTO TWO CATEGORIES: MAIN BREAKER NEAR CONTROLLER CABINET; AND MAIN BREAKER NOT NEAR CONTROLLER CABINET. THE CONTRACTOR'S AND THE CITY'S/COUNTY'S RESPONSIBILITY VARIES ACCORDINGLY AS INDICATED ON THESE DETAILS.

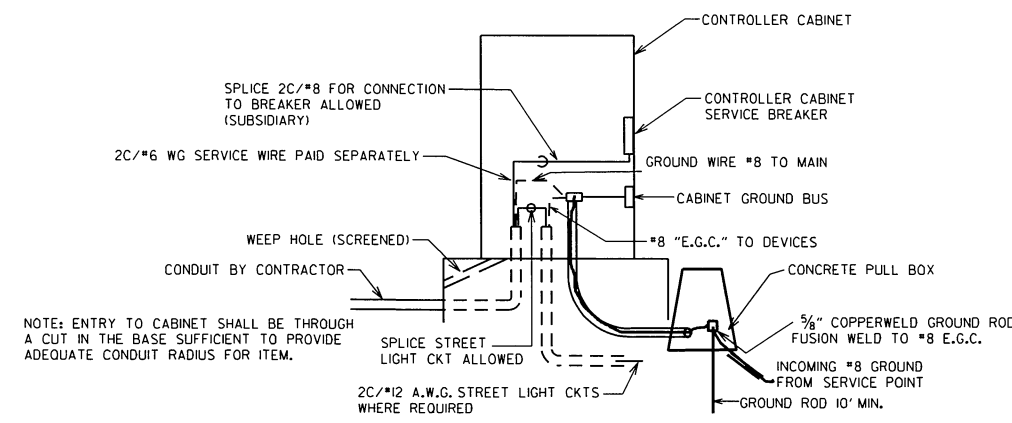
ALL SITUATIONS: ELECTRICAL SERVICE SHALL BE PROVIDED BY THE CITY/COUNTY TO A SERVICE POLE WITH EXTERNAL RAINIGHT BREAKER (MAIN BREAKER) AT A MUTUALLY ACCEPTABLE POINT WITHIN THE RIGHT-OF-WAY. SERVICE POINT INCLUDES GALVANIZED STEEL CONDUIT TO A POINT 18" BELOW GROUND LINE, TWO CIRCUIT MAIN BREAKER, LIGHTNING ARRESTOR, POWER ISOLATION ASSEMBLY WHERE REQUIRED, METER LOOP IF REQUIRED BY LOCAL UTILITY COMPANY, ELECTRICAL CONDUCTORS AND WEATHERHEAD. WHERE STREET LIGHTING IS INCLUDED AS PART OF SIGNAL INSTALLATION STREET LIGHTING CIRCUIT (2C/#12 A.W.G. UF RATED, TYPICAL) SHALL BE KEPT SEPARATE FROM THE CIRCUIT SERVING TRAFFIC SIGNAL. SERVICE WIRE AND WIRING FROM THE CONTROLLER TO MAIN BREAKER IS PROVIDED BY THE CONTRACTOR AS A PART OF THIS CONTRACT. WIRE AND WIRING FROM MAIN BREAKER, AND CONNECTION TO THE UTILITY IS THE RESPONSIBILITY OF THE CITY/COUNTY.

MAIN BREAKER NOT NEAR CONTROLLER CABINET: THE MAIN BREAKER ASSEMBLY, GALVANIZED STEEL CONDUIT, WEATHERHEAD AND WIRE ABOVE MAIN BREAKER AND CONNECTION TO THE UTILITY SHALL BE PROVIDED BY CITY/COUNTY. CONTRACTOR SHALL PROVIDE AS PART OF CONTRACT SECONDARY BREAKER, CONDUIT, WIRE AND WIRING TO THE MAIN BREAKER.

MAIN BREAKER NEAR CONTROLLER CABINET: ALL COMPONENTS OF THE SERVICE POINT WITH THE EXCEPTION OF THE WIRE AND WIRING ABOVE THE MAIN BREAKER IS FURNISHED AND INSTALLED BY THE CONTRACTOR. WIRING FROM MAIN BREAKER INCLUDING CONNECTION TO THE UTILITY, IS THE RESPONSIBILITY OF THE CITY/COUNTY. IF METER LOOP IS REQUIRED, METER BASE AND HARDWARE IS PROVIDED BY THE CITY/COUNTY AND INSTALLED BY THE CONTRACTOR.

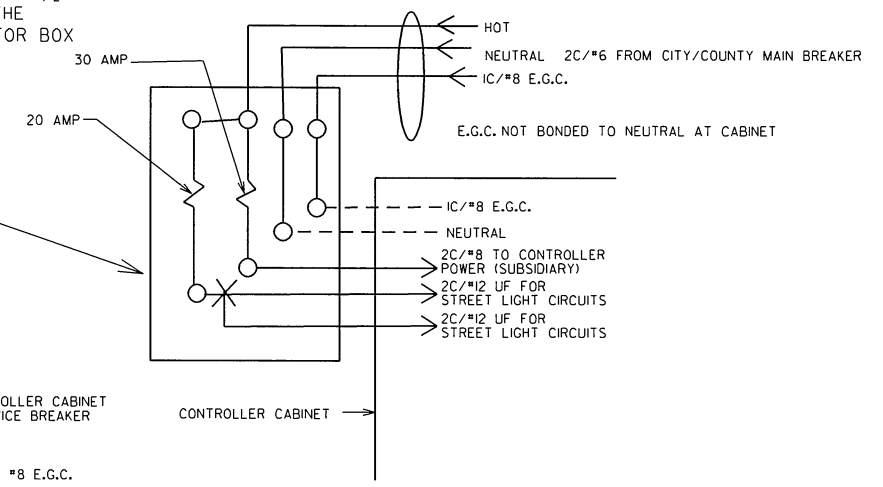
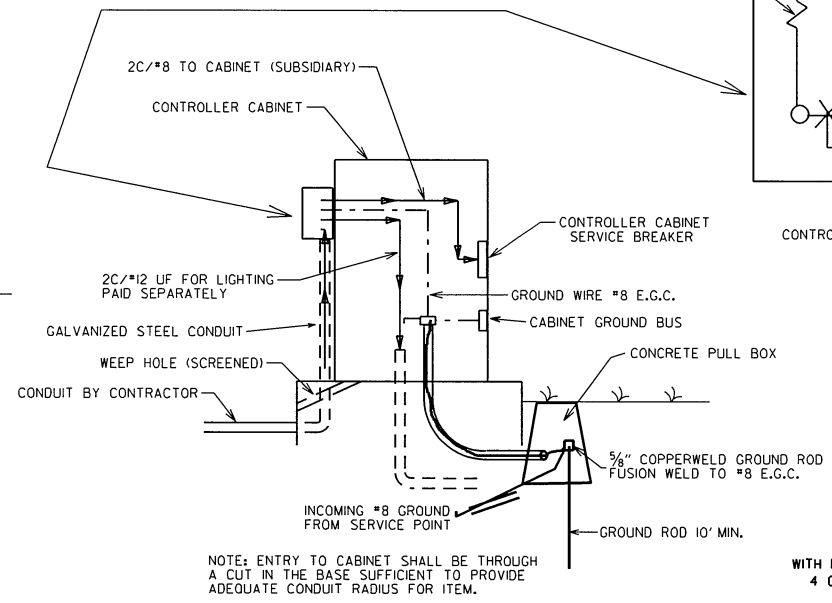


MAIN BREAKER NEAR CONTROLLER CABINET  
SECONDARY NOT REQUIRED



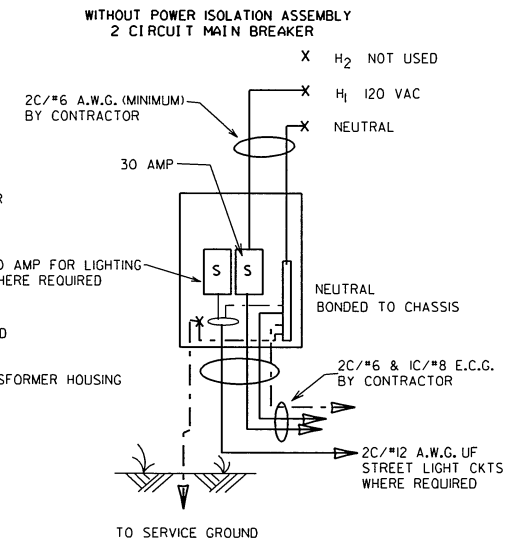
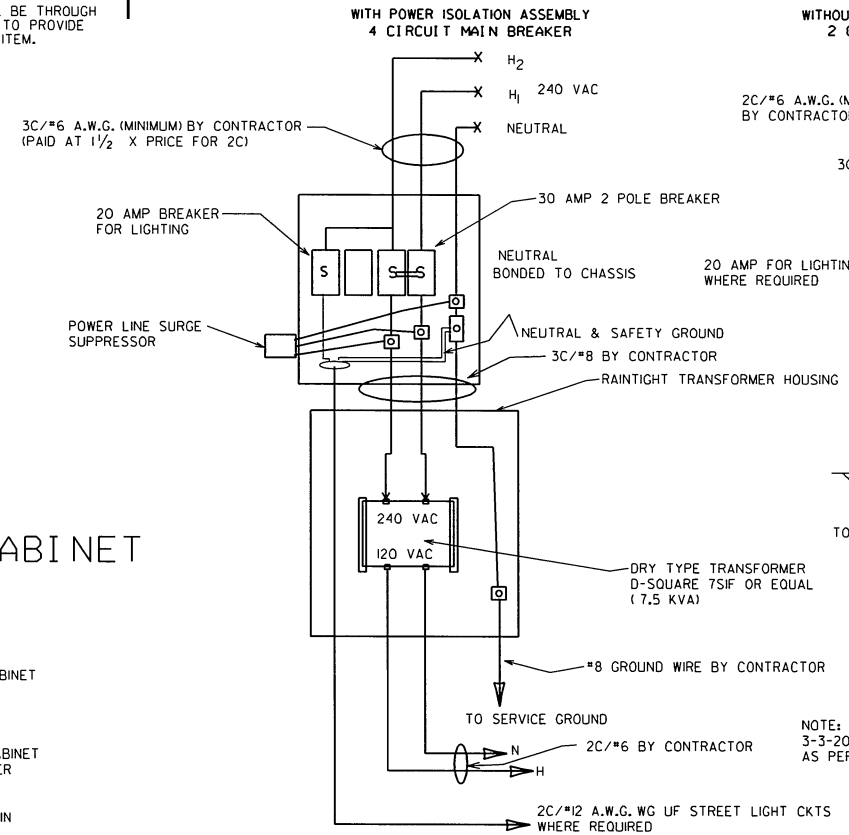
GROUND ROD - A 10' X 5/8" GROUND ROD SHALL BE INSTALLED IN THE CONCRETE PULL BOX FOR EACH POLE AND THE CONTROLLER. PAYMENT FOR THE GROUND ROD AND 1/2" NMC SHALL BE INCLUDED IN ITEM 701. THE CONCRETE PULL BOX AND CONDUCTOR BOX SHALL BE PAID FOR SEPARATELY.

SECONDARY BREAKER BY CONTRACTOR  
(SUBSIDIARY)



MAIN BREAKER WIRING  
(TYPICAL)

SERVICE GROUND IS TYPICALLY TIED TO NEUTRAL AT THE MAIN BREAKER. AS SUCH, CONTROLLER GROUND IS NOT TIED TO NEUTRAL AT SECONDARY BREAKER OR IN CONTROLLER CABINET.



11-07-19	REVISED	
11-16-17	REVISED NOTES	
09-12-13	ISSUED AS STANDARD DRAWING	
04-18-13	ADDED LIGHTNING ARRESTOR	
05-21-09	REVISED GROUNDING	
01-31-08	REVISED GROUNDING	
03-03-03	ADDED EGC NOTE	
09-26-01	REVISED	
12-27-99	REVISED	
01-28-99	REVISED	
02-05-99	ISSUED	
DATE	REVISION	FILMED

ARKANSAS STATE HIGHWAY COMMISSION  
SERVICE POINT  
STANDARD DRAWING SD-9