03-11-11 LETTING ITEM 009

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2582	10-00102-00-LT	COOK	13	1
	ILLINOIS	CONTRACT NO. 63564		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL–AID HIGHWAY

FAU 2582 (PLUM GROVE ROAD)
SCHAUMBURG ROAD TO STONEWALL CT
SECTION 10–00102–00–LT
PROJECT NO. M–9003 (768)
ROADWAY LIGHTING IMPROVEMENT
VILLAGE OF SCHAUMBURG
COOK COUNTY

C–91–353–11

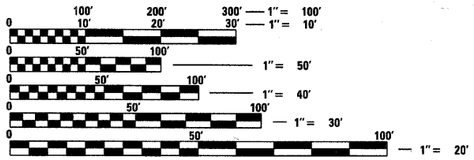
INDEX OF SHEETS

LIST OF STANDARDS:

000001-06 SYMBOLS, ABBREVIATIONS, AND PATTERNS
701501-06 URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701606-07 URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701-07 URBAN LANE CLOSURE, MULTILANE INTERSECTION
701901-01 TRAFFIC CONTROL DEVICES

DESIGN

POSTED SPEED LIMIT - 40 MPH
AVERAGE DAILY TRAFFIC (ADT): 17,400 (2005):
ILLUMINATING ENGINEERING SOCIETY (IES)
ROAD/AREA CLASSIFICATION: COLLECTOR MEDIUM

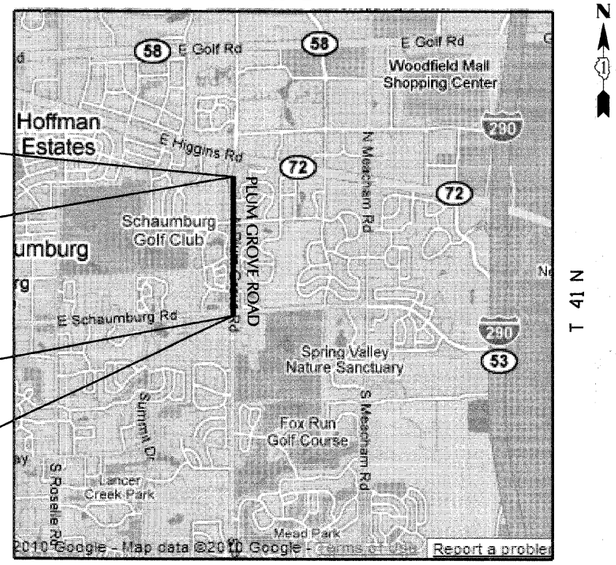


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1–800–892–0123
OR 811

CONTRACT NO. 63564

R 10 E



22W-10N, SCHAUMBURG TOWNSHIP
LOCATION MAP
NOT TO SCALE

GROSS LENGTH = 3951 FT. = 0.75 MILE
NET LENGTH = 3951 FT. = 0.75 MILE

LOCATION OF SECTION INDICATED THUS:–

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

APPROVED January 4, 2011
VILLAGE OF SCHAUMBURG, DIRECTOR OF ENGINEER AND PUBLIC WORKS

PASSED January 5 2011
DISTRICT ONE ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID BASED ON LIMITED REVIEW JANUARY 6, 2011
DEPUTY DIRECTOR OF HIGHWAYS, REGION ONE ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

Sunjoy Inc.
Area Lighting
212 TIMBERCREST DRIVE SCHAUMBURG, ILLINOIS 60193
TEL: 847-891-5486 - FAX: 847-891-5363
e-mail:sunjoy00@hotmail.com

PROGRAM AND OFFICE ENGINEER: CHARLES F. RIDDLE, P.E. 847-705-4406, SCHAUMBURG, IL.
CONSULTANT ENGINEER: JAGDISH SHAH SUNJOY INC.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2582	10-00102-00-LT	COOK	13	2
	ILLINOIS	CONTRACT NO. 63564		

SUMMARY OF QUANTITIES

	CODE NO.	ITEM	UNIT	QUANTITY
*	42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	500
*	44000600	SIDEWALK REMOVAL	SQ FT	500
	67100100	MOBILIZATION	L SUM	1
	70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1
	70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1
	70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1
	80400100	ELECTRIC SERVICE INSTALLATION	EACH	1
	80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1
	81000700	CONDUIT IN TRENCH, 2½" DIA., GALVANIZED STEEL	FOOT	160
	81021370	CONDUIT PUSHED, 4" DIA., PVC	FOOT	710
	81603090	UNIT DUCT, 600V, 3-1C NO.4, 1/C NO.6 GROUND, (XLP-TYPE USE), 1¼" DIA. POLYETHYLENE	FOOT	5,900
	81702460	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 3/0	FOOT	196
	81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	150
	82102250	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT	EACH	26
	83008200	LIGHT POLE, ALUMINUM, 40 FT. M.H., 6 FT. MAST ARM	EACH	26
	X8860215	LIGHT POLE FOUNDATION, 24" DIAMETER, OFFSET	FOOT	24
	83600357	LIGHT POLE FOUNDATION METAL, 15" BOLT CIRCLE, 8" X 8'	EACH	23
	83800205	BREAKAWAY DEVICE, TRANSFORMER BASE, 15 INCH BOLT CIRCLE	EACH	26
	84500110	REMOVAL OF LIGHTING CONTROLLER	EACH	2
	84500130	REMOVAL OF LIGHTING CONTROLLER FOUNDATION	EACH	2
	Z0033028	MAINTENANCE OF LIGHTING SYSTEM	CAL MO	2.0
	X8210405	LUMINAIRE SHIELD	EACH	14
	X8250505	LIGHTING CONTROLLER, SPECIAL	EACH	1

* SPECIALTY ITEMS

GENERAL NOTES

1. THE EXISTING LIGHTING SYSTEM AT PLUM GROVE AND SCHAUMBURG ROAD INTERSECTION IS OWNED AND MAINTAINED BY THE VILLAGE OF SCHAUMBURG ENGINEERING AND PUBLIC WORKS DEPARTMENT TEL: (847-923-6600) LIGHTING SYSTEM SHALL REMAIN OPERATIONAL THROUGHOUT THE PROJECT AT ALL TIMES BETWEEN DUSK TO DAWN OR AS DIRECTED BY THE ENGINEER. NO LIGHTING CIRCUIT OR PORTION THEREOF SHALL BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

2. BEFORE PERFORMING ANY EXCAVATION, REMOVAL OR INSTATTION WORK AT THE PROJECT SITE, THE CONTRACTOR SHALL NOTIFY THE FIELD ENGINEER VILLAGE OF SCHAUMBURG TEL: 847-923-6600 AND REQUEST FOR VILLAGE PRECONSTRUCTION INSPECTION FOR THE VILLAGE MAINTAINED LIGHTING/ELECTRICAL EQUIPMENT. THE REQUEST FOR THE PRECONSTRUCTION INSPECTION SHALL BE MADE NOT LESS THAN SEVEN (7) CALENDER DAYS PRIOR TO THE DESIRED INSPECTION DATE.

3. THE CONTRACTOR SHALL CONDUCT WITH THE VILLAGE ELECTRIC MAINTENANCE CONTRACTOR AN INVENTORY OF THE EXISTING LIGHTING/ELECTRICAL EQUIPMENTS, WHICH WILL BE AFFECTED BY THE IMPROVEMENT. THIS INVENTORY RECORD SHALL BE IN WRITING AND SIGNED BY ALL PARTIES. THE CONTRACTOR SHALL SUBMIT RECORD COPY TO MR.STEVEN WEINSTOCK

4. AT THE CONTRACTOR'S REQUEST, THE VILLAGE ELECTRIC MAINTENANCE CONTRACTOR SHALL MARK AND/OR STAKE (ONLY ONCE PER LOCATION), WITHIN PROJECT LIMITS, ALL UNDERGROUND CABLE ROUTES OWNED AND MAINTAINED BY THE VILLAGE, SEVEN (7) DAYS ADVANCE NOTICE IS REQUIRED BY THE VILLAGE ELECTRIC MAINTENANCE CONTRACTOR.

5. THE PROPOSED LIGHTING IMPROVEMENT SHALL BE COORDINATED WITH THE ENGINEER. THE CONTRACTOR SHALL GIVE IN WRITING TO THE ENGINEER FOR REVIEW, CONSTRUCTION STAGING FOR THE PROPOSED ROADWAY LIGHTING IMPROVEMENT AND THE CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FROM THE ENGINEER. THE CONTRACTOR SHALL MAINTAIN THE EXISTING LIGHTING SYSTEM AS DESCRIBED IN PAY ITEM- " MAINTANANCE OF LIGHTING SYSTEM"

6. BELOW GROUND SPLICING OF THE UNIT DUCT AND CIRCUIT CABLES WILL NOT BE PERMITED.

7. DISCONNECTION OF THE EXISTING CIRCUIT, FURNISHING AND INSTALLING QUICK DISCONNECT WITH FUSES AT THE LIGHT POLE HANDHOLE SHALL BE INCLUDED IN THE PAY ITEM "LUMINARE, SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT."

8. WHERE SEPARATE CIRCUIT RUNS ARE TO BE INSTALLED PARALLEL WITH EACH OTHER, ONE COMMON TRENCH SHALL BE USED AND SHALL BE MEASURED ONLY ONCE FOR PAYMENT, AS TRENCH AND BACKFILL FOR ELECTRICAL WORK.

9. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MARK THE PROPOSED LOCATIONS OF HIGHWAY LIGHTING SYSTEM PER ARTICLE 801.09 OF THE STANDARD SPECIFICATIONS FOR THE ENGINEER'S INSPECTION AND APPROVAL. THE EXACT LOCATIONS OF ALL OTHER ROADWAY LIGHTING ITEMS, INCLUDING THE THE LIGHTING CONTROLLER(S), SHALL BE CONFIRMED WITH THE ENGINEER PRIOR TO STARTING WORK.

10. THE RESPONSIBILITY FOR COORDINATING FINISHED GRADE ELEVATION WITH THE TOP OF THE FOUNDATION HEIGHTS SHALL BE WITH THE CONTRACTOR.

GENERAL NOTES

11. THE CONTRACTOR SHALL SUBMIT PER ARTICLE 801.05 OF THE STANDARD SPECIFICATIONS FOR THE ENGINEER APPROVAL, WITHIN 30 DAYS AFTER CONTRACT EXECUTION, EIGHT (8) COPIES OF APPROVABLE MANUFACTURER'S PRODUCT DATA AND DETAIL SHOP DRAWINGS THE SUBMITTAL SHALL INCLUDE:
    a. TRENCH: ELECTRICAL WARNING TAPE
    b. FOUNDATION: CLASS "SI" CONCRETE, REINFORCEMENT, PVC RACEWAYS. ANCHOR BOLTS WITH NUTS & WASHERS.
    c. CONDUIT: CONDUIT AND CONDUIT FITTINGS.
    d. GROUND ROD: GROUND ROD, COPPER WIRE, EXOTHERMIC WELD.
    e. UNIT DUCT/CABLES: UNIT DUCT, CABLES
    f. ELECTRIC CABLES: ELECTRIC CABLES
    g. ELECTRICAL ITEMS: ELECTRIC TAPES, QUICK DISCONNECT WITH FUSE, LAMPS.
    h. LIGHTING CONTROLLER: CABINET DETAILS COLOR, PANEL WIRING, CATALOG CUTS FOR ELECTRIC MATERIALS.
    i. METAL FOUNDATION: FABRICATION DETAILS
    j. LIGHT POLE: POLE DETAIL SHOP DRAWING, WIND LOAD CALCULATIONS, POLE WIRING
    k. LUMINAIRE: LUMINAIRE CATALOG CUT, LUMINAIRE INTERNAL ELECTRIC COMPONANTS. PHOTOMETRY DATA FILE.

12. ALL ELECTRIC CABLE CIRCUIT SHALL BE FULLY PIGMENTED COLOR CODED AND TAGGED AS SHOWN ON THE DRAWINGS.
    RED/BLACK - CIRCUIT PHASE WIRES
    WHITE-NEUTRAL.
    GREEN-GROUND

13. THE CONTRACTOR SHALL SUBMIT FOUR (4) SETS, OF RECORD DRAWINGS FULL SIZE COMPLETE, NEAT AND ACCURATE TO THE ENGINEER FOR REVIEW AND COMMENT, AS SPECIFIED PER ARTICLE 801.16 OF THE STANDARD SPECIFICATIONS. THE "RECORD DRAWINGS" SHALL BE UPDATED ON A REGULAR BASIS AND DEPICT ALL ROADWAY LIGHTING MATERIAL INSTALLATIONS WITH ANY CHANGES INDICATED IN RED. "RECORD DRAWINGS" SHALL BE SUBMITTED AT LEAST 7 DAYS BEFORE SCHEDULING A FINAL INSPECTION.

14. THE CONTRACTOR SHALL NOTIFY J.U.L.I.E. AT (1-800-892-0123) TO LOCATE AND MARK/STAKE ALL UNDERGROUND UTILITIES.

15. THE LIGHT POLE SETBACK SHALL BE 3.0' FROM THE BACK OF CURB (B6.24) TO THE FACE OF FOUNDATION.

16. RESTORATION OF PARKWAY AND PROJECT SITE SHALL BE INCIDENTAL TO CONTRACT IN ACCORDANCE WITH ALL APPLICABLE CODES AND REGULATIONS AND THE STANDARD SPECIFICATIONS.

17. THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL CODES AND ORDINANCES.

18. THE PROPOSED TRENCH SHALL BE (30 INCH) BELOW FINISHED GRADE, PER SECTION 819 OF THE STANDARD SPECIFICATIONS.

19. ALL ELECTRICAL EQUIPMENT AND PRODUCT SHALL BE UL LISTED AND LABELED

20. POLE FUSES AND ASSOCIATED HARDWARE/MATERIAL AND INSTALLATION SHALL BE INCLUDED IN THE LUMINAIRE PAY ITEM.

21. THE ENGINEER WILL NOT AUTHORIZE PARTIAL ACCEPTANCE OF THE PROJECT. FINAL INSPECTION AND ACCEPTANCE OF THE PROJECT WILL ONLY BE PERMITTED PER ARTICLE 801.15 OF THE STANDARD SPECIFICATIONS.

22. ALL WORK SHALL BE COORDINATED WITH THE CONCURRENT RECONSTRUCTION PROJECT ACCORDING TO THE SPECIAL PROVISIONS.

23. THE CONTRACTOR SHALL VERIFY BOLT CIRCLE OF EXISTING LIGHT POLE TO BE REMOVED.

24. POLYETHYLENE DUCT WITH ELECTRIC CABLE (XLP-TYPE USE) SHALL MEET THE REQUIREMENTS OF THE ARTICLE 816 OF THE STANDARD SPECIFICATIONS.

CIRCUIT CABLES

ALL CONDUCTORS SHALL BE INDIVIDUALLY FULLY PIGMENTEDCOLOR CODED. THE COLOR CODED INSULATION FOR EACH WIRE SHALL RUN THE ENTIRE LENGTH OF THE CONDUCTOR FROM THE CIRCUIT BREAKER TO THE LUMINAIRE WITH THE SAME COLOR.

CAUTION

"THE CONTRACTOR MUST VERIFY WITH UTITILIES AGENCIES (AT&T, COMED, CAMCAST, NICOR, VINAKOM ETC.) THAT THERE ARE NO CONFLICTS BETWEEN THE PROPOSED LIGHT POLE FOUNDATION LOCATIONS AND EXISTING UTILITIES, PROPOSED UTILITIES, EXISTING DRIVEWAYS, AND PROPOSED DRIVEWAYS. IF A CONFLICT IS FOUND, THE CONTRACTOR SHALL IMMEDIATELY INFORM THE ENGINEER IN WRITING. IN THE EVENT OF A CONFLICT, THE CONTRACTOR SHALL OBTAIN WRITTEN INSTRUCTIONS FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED BY THE CONFLICT. FAILING TO SECURE SUCH INSTRUCTIONS, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT HIS OWN RISK AND EXPENSE."

THE PREASSEMBLED ELECTRIC CABLE UNIT DUCT SHALL BE INSTALLED AT A MINIMUM DEPTH OF 30 INCHES IN APPROVED METHOD BY THE ENGINEER - BORED AND PULLED AS SPECIFIED IN ARTICLE 816.03. UNIT DUCT INSTALLATION COST FOR BORED PULLED METHOD SHALL BE INCLUDED IN PAY ITEM- "UNIT DUCT 600V, 3-1/C NO.4 , 1/C NO. 6 GROUND (XLP- TYPE USE), 1¼" DIA. POLYETHYLENE"

LEGEND

- EXISTING LIGHTING UNIT TO REMAIN IN PLACE MAINTAINED BY THE VILLAGE
- EXISTING LIGHTING UNIT TO REMAIN IN PLACE MAINTAINED BY COMED
- EXISTING DECORATIVE LIGHTING UNIT REMAIN IN PLACE, MAINTAINED BY THE VILLAGE
- DECORATIVE LUMINAIRE MOUNTED ON LIGHT POLE, 2- 70 WATT HPS LAMP
- LIGHT POLE, ALUMINUM 40 FT MOUNTING HEIGHT, 6 FT MAST ARM 15" DIA BOLT CIRCLE. LUMINAIRE 250 WATT HPS M.C. III 240 VOLT (LINE TO NEUTRAL) MULTI-TAP BALLAST AUTO-REG TYPE POLE MOUNTED ON BREAKAWAY TRANSFORMER BASE
  - XX — HPS LAMP WATTAGE
    - 40 - 400 WATT HPS LAMP
    - 25 - 400 WATT HPS LAMP
- STA X+XX — STATION FOR POLE LOCATION
- B8 - (B)
  - PHASE WIRE COLOR
  - POLE NUMBER IN CIRCLE
  - BRANCH CIRCUIT BREAKER DESIGNATION
- EV — EXISTING LIGHTING CONTROLLER, REMAIN IN PLACE. MAINTAINED BY THE VILLAGE
- ------- EXISTING BURIED LIGHTING CIRCUIT THE CONTRACTOR MUST VERIFY IN FIELD
- --- R --- EXISTING LIGHTING CIRCUIT TO BE ABANDONED
- ——— SERVICE CABLE CONDUIT 600 V (XLP-TYPE USE) 3 1/C NO. 3/0 2½" DIA. CONDUIT
- ——— PROPOSED POLYETHYLENE UNIT DUCT 3-1/C NO. 4 & 1 1/C NO. 6 GROUND, 600 V (XLP-TYPE USE), 1¼" DIA. POLYETHYLENE. CABLE SHALL BE FULLY PIGMENTED COLOR CODED
- GROUND ROD, ⅝" DIA. x 10 FT
- PROPOSED UTILITY SERVICE, TRANSFORMER POLE MOUNTED
- T/P, D x L x — CONDUIT PVC (SCH. 80)
  - T IN TRENCH
  - P PUSHED
  - LENGTH
  - DIAMETER
- LIGHTING CONTROLLER SPECIAL
- UTILITY PAD MOUNTED TRANSFORMER
- CONDUIT PVC SCH. 80 T=TRENCH, P=PUSH DIA x FT

NOTE:

1. THE MATERIALS AND WORK FOR THIS PROJECT SHALL CONFORM TO THE LATEST APPLICABLE STANDARD SPECIFICATIONS AND SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS ISSUED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION.

Sunjoy Inc.
Area Lighting
Consulting Engineers
212 TIMBERCREST DRIVE
SCHAUMBURG, ILLINOIS
60193-1572

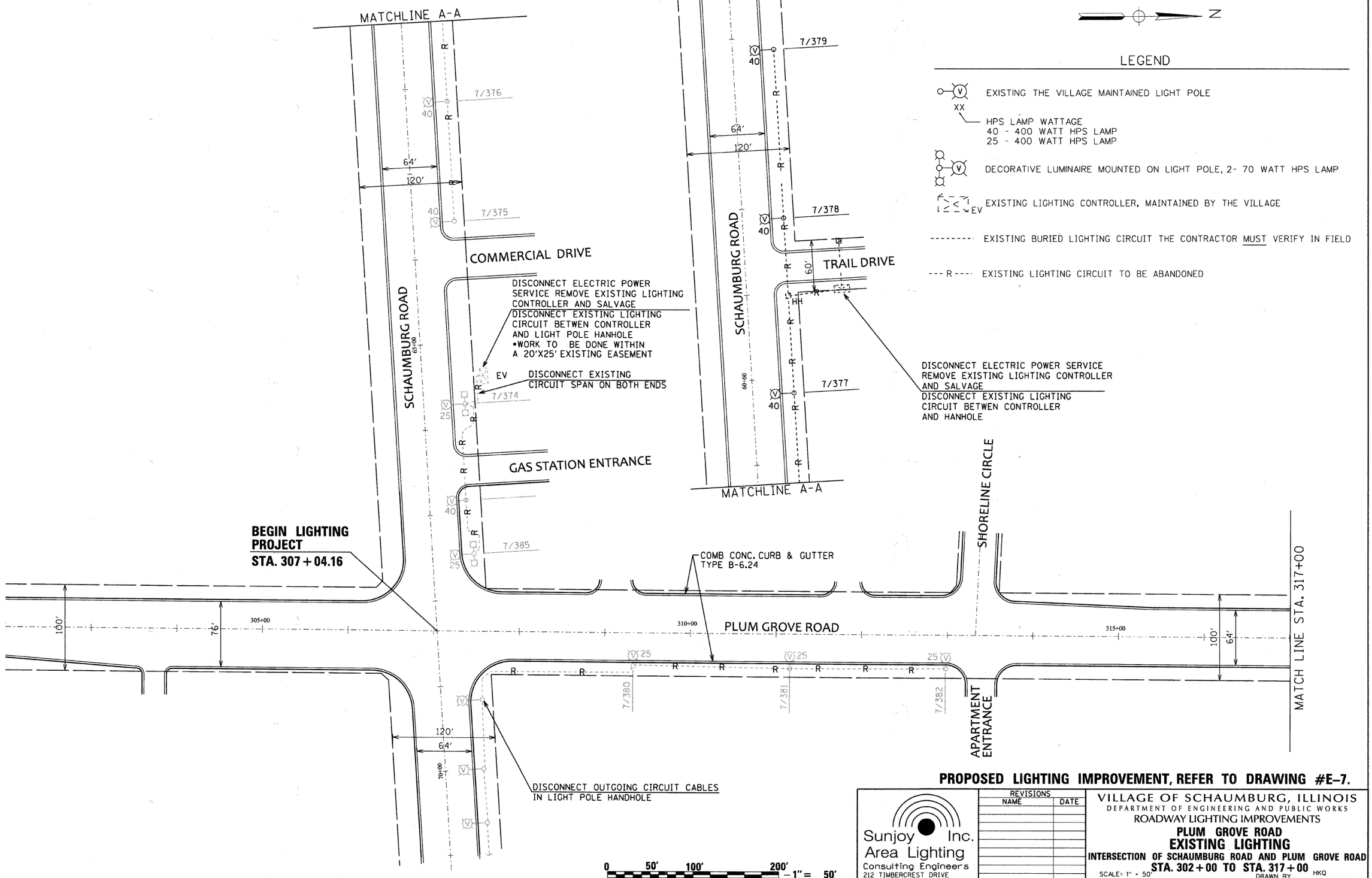
REVISIONS NAME	DATE

VILLAGE OF SCHAUMBURG, ILLINOIS
DEPARTMENT OF ENGINEERING AND PUBLIC WORKS
ROADWAY LIGHTING IMPROVEMENTS
PLUM GROVE ROAD
SUMMARY OF QUANTITIES, GENERAL NOTES AND LEGEND

SCALE: NONE
DATE: 9-21-09
DRAWN BY HKQ
CHECKED BY JS

C:\SUNJOY\Projects\Village of Schaumburg\P2_Plumgrove Road\LEGEND.dgn
1/4/2011

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2582	10-00102-00-LT	COOK	13	3
	ILLINOIS	CONTRACT NO. 63564		



PROPOSED LIGHTING IMPROVEMENT, REFER TO DRAWING #E-7.

Sunjoy Inc.
Area Lighting
Consulting Engineers
212 TIMBERCREST DRIVE
SCHAUMBURG, ILLINOIS
60193-1572

REVISIONS NAME	DATE

VILLAGE OF SCHAUMBURG, ILLINOIS
DEPARTMENT OF ENGINEERING AND PUBLIC WORKS
ROADWAY LIGHTING IMPROVEMENTS

PLUM GROVE ROAD
EXISTING LIGHTING

INTERSECTION OF SCHAUMBURG ROAD AND PLUM GROVE ROAD
STA. 302+00 TO STA. 317+00

SCALE: 1" = 50'
DATE: 9-21-09
DRAWN BY HKQ
CHECKED BY JS

1/4/2011
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2582	10-00102-00-LT	COOK	13	4
	ILLINOIS	CONTRACT NO. 63564		

GROUND ROD:

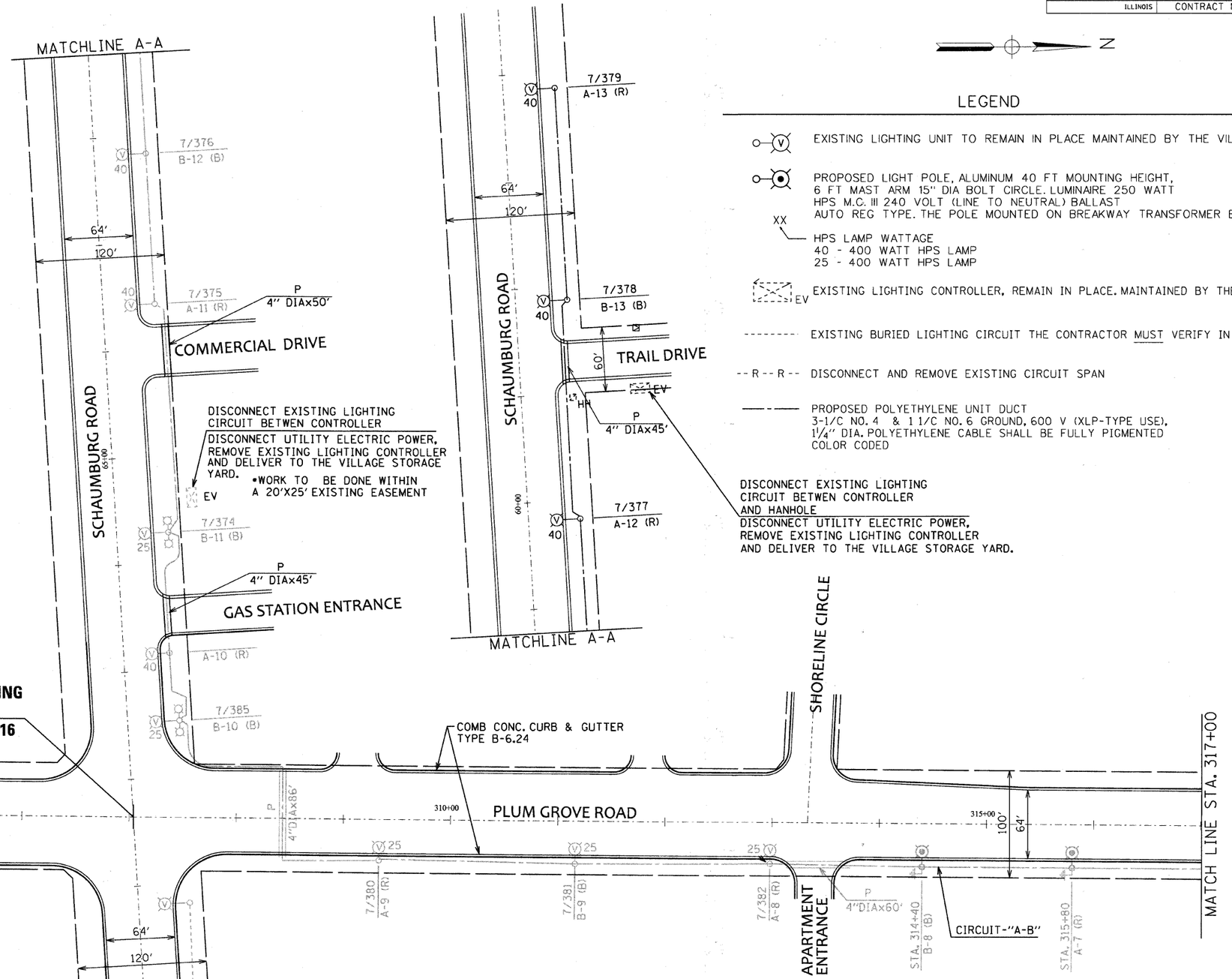
THE CONTRACTOR SHALL FURNISH AND INSTALL AS IDENTIFIED ON THE PROJECT PLANS GROUNDING ROD WITH THE FOLLOWING APPLICABLE PAY ITEMS.

1. #836 - LIGHT POLE FOUNDATION
2. #825 - LIGHTING CONTROLLER
3. #814 - HANDHOLE
4. #813 - JUNCTION BOX
5. #804 - ELECTRIC SERVICE INSTALLATION
6. #830 - LIGHT POLE WOOD

THE GROUNDING ROD DIAMETER AND LENGTH IS NOTED ON THE PROJECT PLANS. THE GROUNDING ROD SHALL CONFORM TO THE ARTICLE #1087.01 (b) OF THE STANDARD SPECIFICATIONS.

THIS ITEM SHALL ALSO INCLUDE BARE COPPER GROUNING ELECTRODE CONDUCTOT (SIZE AS SHOWN ON THE PLAN) AND MECHANICAL GROUND CLAMP (UL LISTED) AND/OR EXOTHERMIC WELD CONNECTION FOR CONTINUOAS GROUNDING (NEC ARTICLE #250) FOR ELECTRIC POWER SERVICE AND SYSTEM EQUIPMENT.

THE GROUNDING ROD SHALL BE INSTALLED AS SHOWN IN THE CONTRACT PLANS AND AS DIRECTED BY THE ENGINEER. MATERIAL COST OF GROUNDING ROD WITH ATTACHED APPURTENANCES AND LABOR COST FOR INSTALLATION SHALL NOT BE PAID SEPARATELY BUT SHALL BE INCLUDED WITH THE ABOVE ASSOCIATED PAY ITEMS.



NOTE:

THE CONTRACTOR SHALL VERIFY IN FIELD:

1. EXISTING LIGHTING SYSTEM AND LIGHTING CIRCUIT.
2. LUMINAIRE HAS MULTI-TAP BALLAST. THE CONTRACTOR MUST CORRECT BALLAST VOLTAGE 120 NEUTRAL TO 240 VOLT-NEUTRAL.
3. NUMBER AND DIAMETER OF RACEWAYS IN EXISTING FOUNDATION.

0 50' 100' 200' 1" = 50'

REV. 05-08-10

N

LEGEND

- EXISTING LIGHTING UNIT TO REMAIN IN PLACE MAINTAINED BY THE VILLAGE
- PROPOSED LIGHT POLE, ALUMINUM 40 FT MOUNTING HEIGHT, 6 FT MAST ARM 15" DIA BOLT CIRCLE. LUMINAIRE 250 WATT HPS M.C. III 240 VOLT (LINE TO NEUTRAL) BALLAST AUTO REG TYPE. THE POLE MOUNTED ON BREAKWAY TRANSFORMER BASE
  - XX — HPS LAMP WATTAGE
    - 40 - 400 WATT HPS LAMP
    - 25 - 400 WATT HPS LAMP
- EV — EXISTING LIGHTING CONTROLLER, REMAIN IN PLACE. MAINTAINED BY THE VILLAGE
- -------- EXISTING BURIED LIGHTING CIRCUIT THE CONTRACTOR MUST VERIFY IN FIELD
- --R--R-- DISCONNECT AND REMOVE EXISTING CIRCUIT SPAN
- ——-——-—— PROPOSED POLYETHYLENE UNIT DUCT 3-1/C NO. 4 & 1 1/C NO. 6 GROUND, 600 V (XLP-TYPE USE), 1¼" DIA. POLYETHYLENE CABLE SHALL BE FULLY PIGMENTED COLOR CODED

PROPOSED LIGHTING IMPROVEMENT, REFER TO DRAWING #E-3.

Sunjoy Inc.
Area Lighting
Consulting Engineers
212 TIMBERCREST DRIVE
SCHAUMBURG, ILLINOIS
60193-1572

REVISIONS NAME	DATE

VILLAGE OF SCHAUMBURG, ILLINOIS
DEPARTMENT OF ENGINEERING AND PUBLIC WORKS
ROADWAY LIGHTING IMPROVEMENTS
PLUM GROVE ROAD
PROPOSED LIGHTING
STA. 307+04.16 TO STA. 317+00

SCALE: 1" = 50'
DATE: 9-21-09
DRAWN BY HKQ
CHECKED BY JS

C:\SUNJOY\Projects\Village of Schaumburg\P2_Plumgrove Road\Elec_01.dgn

1/4/2011

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2582	10-00102-00-LT	COOK	13	5
	ILLINOIS	CONTRACT NO. 63564		

N

MATCH LINE STA. 317+00

COMB CONC. CURB & GUTTER TYPE B-6.24

100'

64'

320+00

PLUM GROVE ROAD

325+00

CIRCUIT-"A-B"

P

4"DIAx98'

LAKELAND DRIVE

MATCH LINE STA. 329+00

STA. 317+20 B-7 (B)

STA. 318+60 A-6 (R)

STA. 320+00 B-6 (B)

STA. 321+40 A-5 (R)

STA. 322+80 B-5 (B)

STA. 324+20 A-4 (R)

STA. 325+65 B-4 (B)

STA. 327+15 A-3 (R)

STA. 328+65 B-3 (B)

POLYETHYLENE DUCT BORED AND PULLED 1¼" DIA WITH ELECTRIC CABLE 600 V (XLP-TYPE USE) 3-1/C NO. 4 AND 1-1/C NO. 6 GROUND (TYP)

PROPOSED LIGHTING CONTROLLER, SPECIAL
200 AMPERE-240/480 VOLT, 1 PHASE, 3 WIRE
1-200 AMP DPST MAIN BREAKER
12-50 AMP SPST BRANCH CIRCUIT BREAKER

SERVICE CABLE
ELECTRIC CABLE IN CONDUIT
600 V (XLP-TYPE USE), 3 1/C NO 3/0
2 1/2" DIA CONDUIT IN TRENCH

P
4"DIAx46'

THACKER ST

CIRCUIT-"E-F"

E-1 (B)

COMB CONC. CURB & GUTTER TYPE B-6.24

UTILITY SERVICE POLE
POLE MOUNTED TRANSFORMER
240/480 VOLT, 1 PHASE, 3 WIRE

MATCH LINE STA. 329+00

100'

64'

330+00

335+00

PLUM GROVE RD

340+00

4" DIAx74'

P

4"DIAx74'

MATCH LINE STA. 342+00

CIRCUIT-"A-B"

B-1 (B)

4"DIAx46'

CIRCUIT-"D-C"

4"DIAx86'

PLUMWOOD DR.

STA. 330+15 A-2 (R)

STA. 331+65 B-2 (B)

STA. 333+10 A-1 (R)

STA. 334+60 D-1 (B)

STA. 335+90 C-1 (R)

STA. 337+25 D-2 (B)

STA. 338+55 C-2 (R)

STA. 339+85 D-3 (B)

STA. 341+05 C-3 (R)

POLYETHYLENE DUCT BORED AND PULLED 1¼" DIA WITH ELECTRIC CABLE 600 V (XLP-TYPE USE) 3-1/C NO. 4 AND 1-1/C NO. 6 GROUND (TYP)

(U) EXISTING LIGHTING UNIT TO REMAIN IN PLACE MAINTAINED BY COMED

0 50' 100' 200' 1" = 50'

Sunjoy Inc.
Area Lighting
Consulting Engineers
212 TIMBERCREST DRIVE
SCHAUMBURG, ILLINOIS
60193-1572

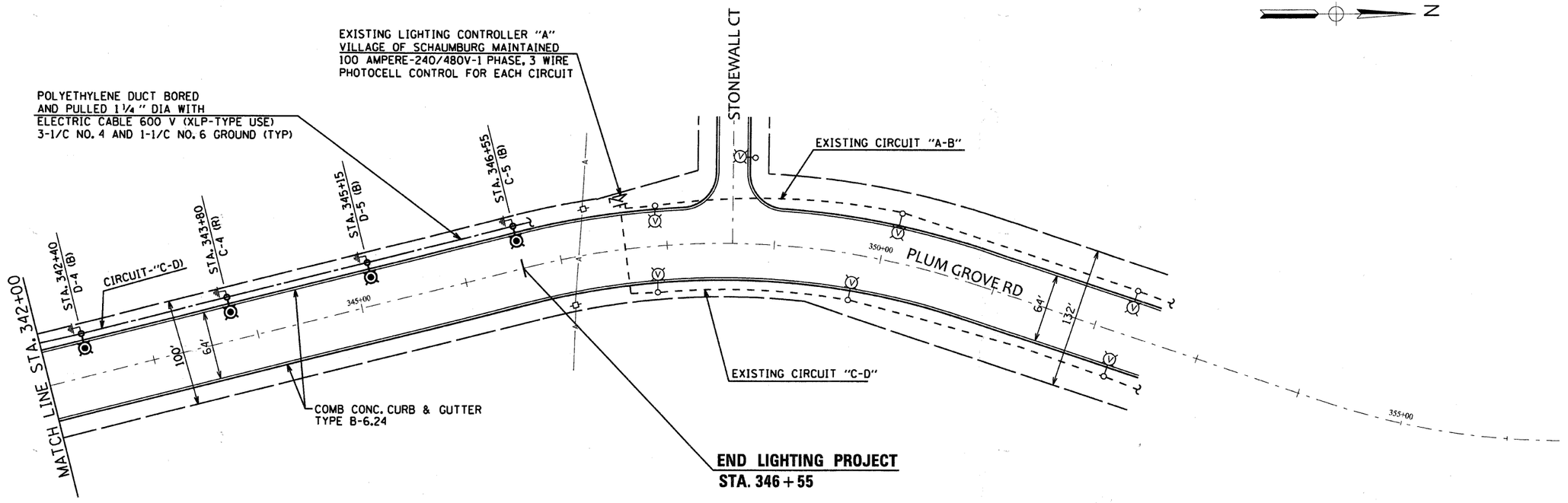
REVISIONS NAME	DATE

VILLAGE OF SCHAUMBURG, ILLINOIS
DEPARTMENT OF ENGINEERING AND PUBLIC WORKS
ROADWAY LIGHTING IMPROVEMENTS
PLUM GROVE ROAD
PROPOSED LIGHTING
STA. 317+00 TO STA. 342+00

SCALE: 1" = 50'
DATE: 9-21-09
DRAWN BY HKQ
CHECKED BY JS

C:\SUNJOY\Projects\Village of Schaumburg\P2_Plumgrove Road\Elec_03.dgn
1/3/2011

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2582	10-00102-00-LT	COOK	13	6
	ILLINOIS	CONTRACT NO. 63564		



0 50' 100' 200' — 1" = 50'

REV. 9-25-10

Sunjoy Inc.
Area Lighting
Consulting Engineers
212 TIMBERCREST DRIVE
SCHAUMBURG, ILLINOIS
60193-1572

REVISIONS NAME	DATE

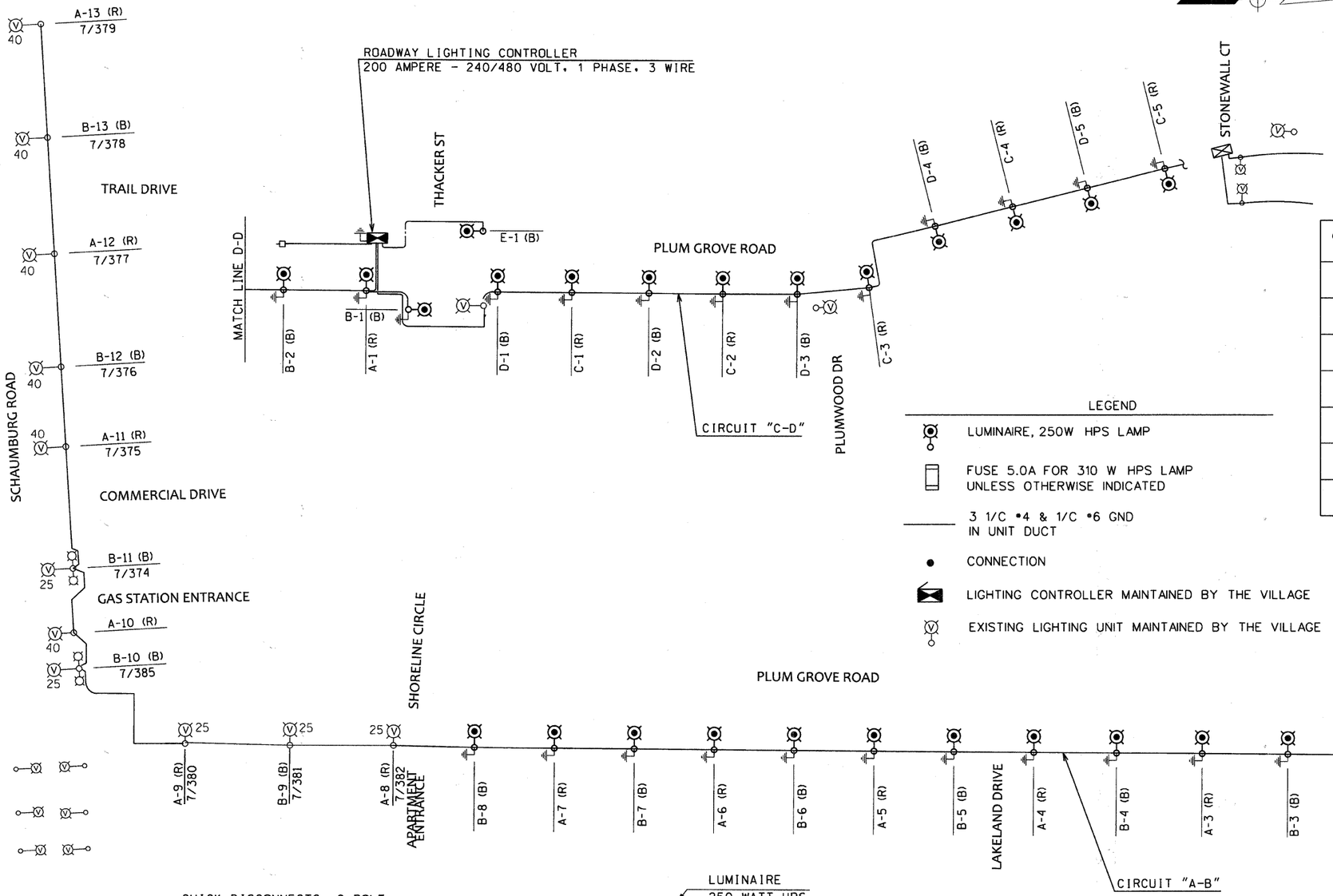
VILLAGE OF SCHAUMBURG, ILLINOIS
DEPARTMENT OF ENGINEERING AND PUBLIC WORKS
ROADWAY LIGHTING IMPROVEMENTS
PLUM GROVE ROAD
PROPOSED LIGHTING
STA. 342+00 TO STA. 346+55

SCALE: 1" = 50'
DATE: 9-21-09
DRAWN BY HKQ
CHECKED BY JS

C:\SUNJOY\Projects\Village of Schaumburg\P2_Plumgrove Road\Elec_04.dgn

1/3/2011

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2582	10-00102-00-LT	COOK	13	7
	ILLINOIS	CONTRACT NO. 63564		

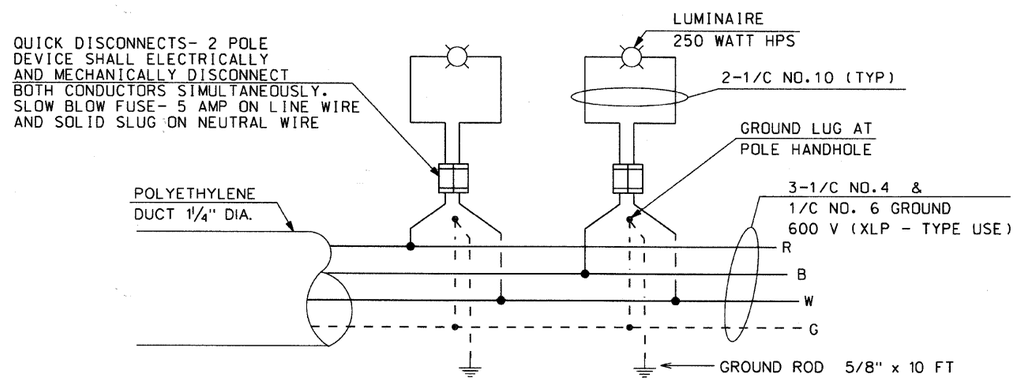


THACKER STREET
CONTROLLER CIRCUIT LOAD
200 AMP-240/480 VOLT, 1 PHASE, 3 WIRE

CIRCUIT RED	AMPERE @240 V	WATTS	CIRCUIT BLACK	AMPERE @240 V	WATTS
A	19.7	4,572	B	19.9	4,412
C	6.5	1,500	D	6.5	1,500
E	1.3	300	F		
SPARE			SPARE		
SPARE			SPARE		
SPARE			SPARE		
TOTAL	27.5	6,372	TOTAL	26.4	5,912

LEGEND

- LUMINAIRE, 250W HPS LAMP
- FUSE 5.0A FOR 310 W HPS LAMP UNLESS OTHERWISE INDICATED
- 3 1/C #4 & 1/C #6 GND IN UNIT DUCT
- CONNECTION
- LIGHTING CONTROLLER MAINTAINED BY THE VILLAGE
- EXISTING LIGHTING UNIT MAINTAINED BY THE VILLAGE



CIRCUIT DETAILS TYP.

Sunjoy Inc.
Area Lighting
Consulting Engineers
212 TIMBERCREST DRIVE
SCHAUMBURG, ILLINOIS
60193-1572

REVISIONS NAME	DATE

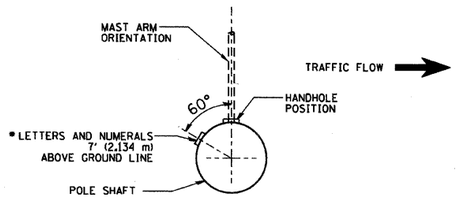
VILLAGE OF SCHAUMBURG, ILLINOIS
DEPARTMENT OF ENGINEERING AND PUBLIC WORKS
ROADWAY LIGHTING IMPROVEMENTS
PLUM GROVE ROAD
CONTROLLER AT THACKER STREET
SINGLE LINE DIAGRAM

SCALE:-
DATE: 9-21-09
DRAWN BY HKQ
CHECKED BY JS

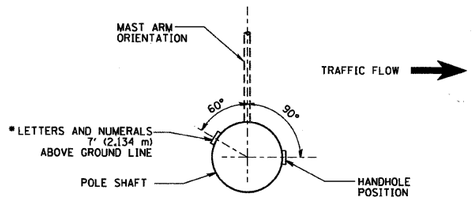
C:\SUNJOY\Projects\Village of Schaumburg\P2_Plumgrove Road\SIN_LINE_01.dgn
12/17/2010

CONTRACT NO.

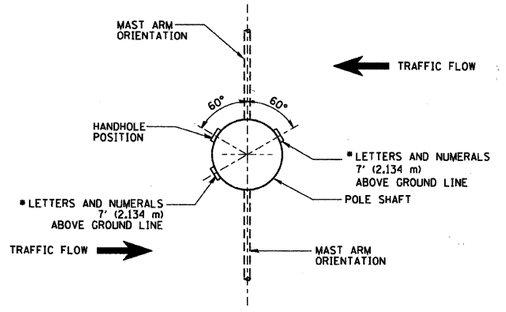
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2582	10-00102-00-LT	COOK	13	8
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



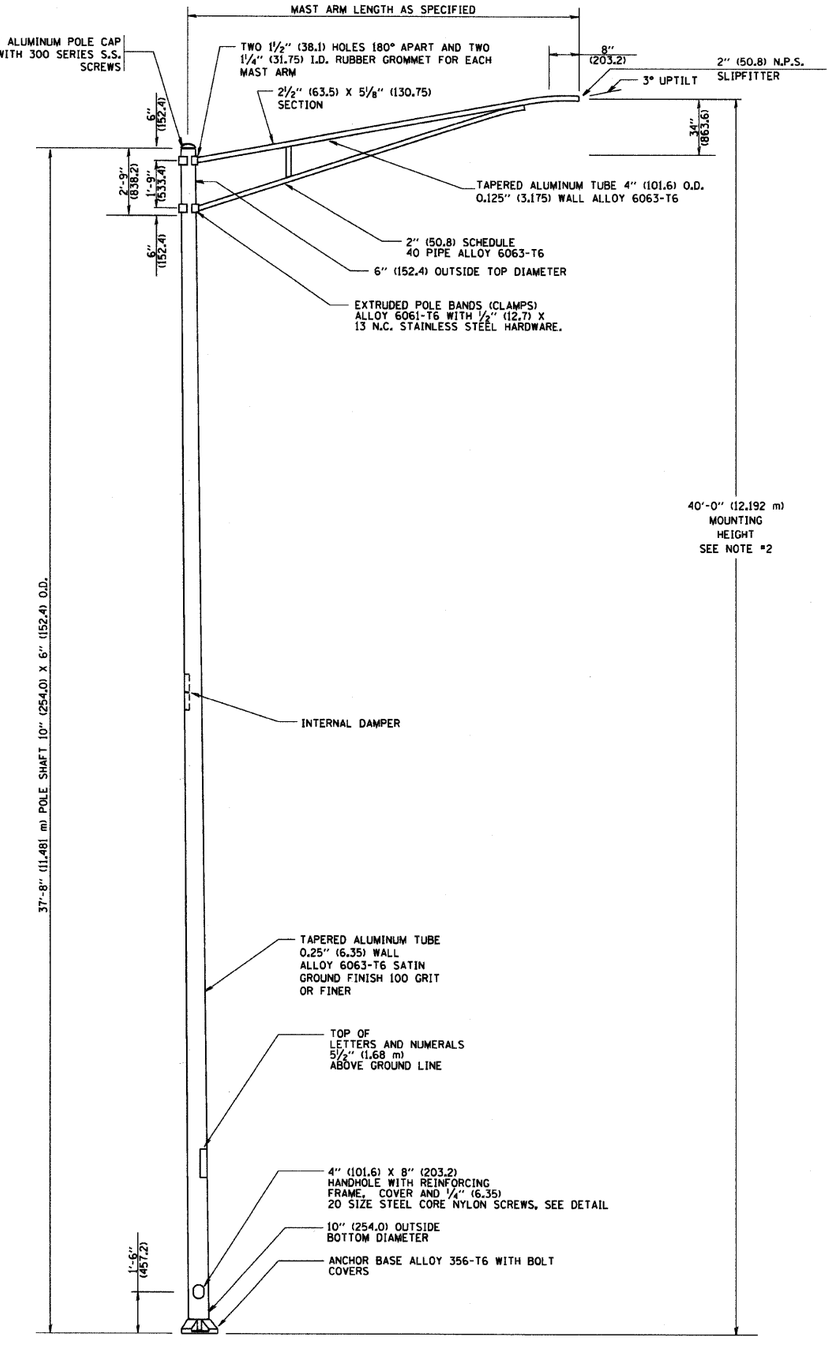
POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES MOUNTED ON BRIDGE PARAPET OR BARRIER WALL

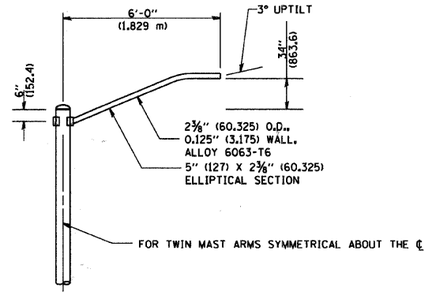


POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES



POSITION OF HANDHOLE AND POLE NUMBER FOR TWIN MAST ARM POLES

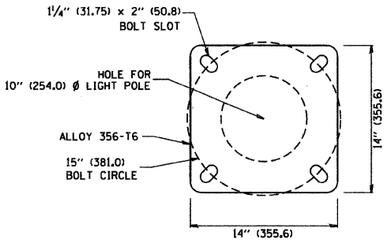




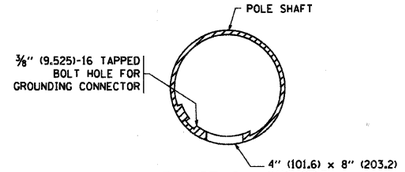
6' (1.8 m) SINGLE MEMBER MAST ARM
(N.T.S.)

NOTES:

1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
2. MOUNTING HEIGHT IS DEFINED AS THE DISTANCE FROM THE CENTERLINE OF THE TENON TO THE BOTTOM OF THE ANCHOR BASE.
3. THE LIGHT POLE WILL MEET AASHTO DESIGN CRITERIA AS SPECIFIED.
4. THE INSTALLING CONTRACTOR WILL PROVIDE A UL LISTED GROUNDING CONNECTOR. BURNDY K2C23, T&B SP4DL OR APPROVED EQUAL.
5. LIGHT POLES WILL NOT BE INSTALLED WITHOUT MAST ARMS AND LUMINAIRES.
6. LIGHT POLES WILL BE SET PLUMB ON THE FOUNDATION WITHOUT THE USE OF LEVELING NUTS, WASHERS OR SHIMS.
7. LIGHTING UNIT IDENTIFICATION NUMBERS SHALL BE INSTALLED BEFORE THE LIGHTING UNIT IS ENERGIZED.



LIGHT POLE BASE PLATE DETAIL
15 INCH (381.0) BOLT CIRCLE



HANDHOLE DETAIL
(N.T.S.)

BE-401

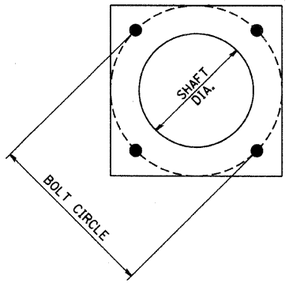
REVISIONS	
NAME	DATE
R. TOMSONS	9-6-00
R. TOMSONS	8-12-03

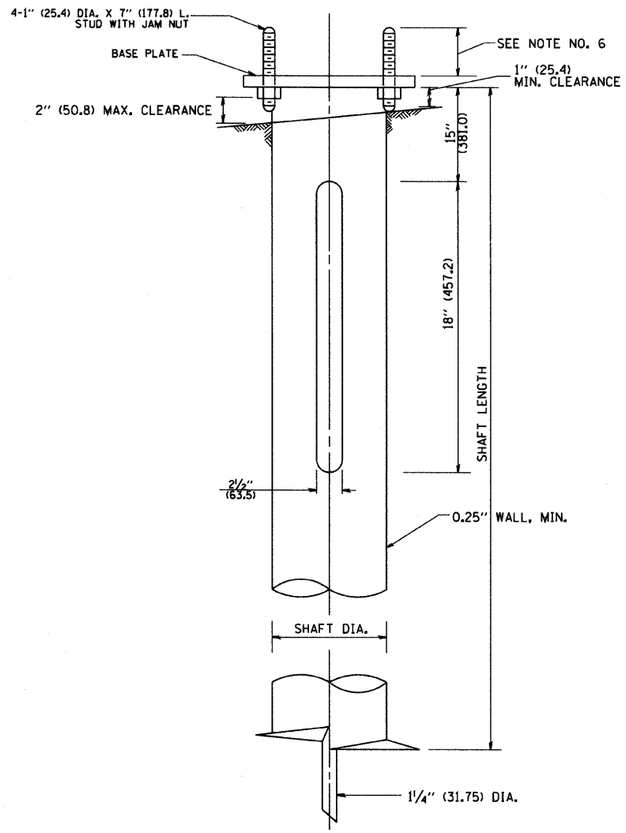
ILLINOIS DEPARTMENT OF TRANSPORTATION
ALUMINUM LIGHT POLE
40'-0" (12.192 m)
MOUNTING HEIGHT

SCALE: NONE
DRAWN BY
CHECKED BY
BE-401

PLOT DATE = 3/6/2007
FILE NAME = K:\district1\be401.dgn
PLOT SCALE = 50.0000 ' / IN.
USER NAME = bauer01

F. A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
2582	10-00102-00-LT	COOK	13	9
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		





HELIX FOUNDATION SIZE

POLE MOUNTING HEIGHT	BOLT CIRCLE	SHAFT DIAMETER	SHAFT LENGTH	BASEPLATE
30 FT.	11½"	8⅝"	6 FT.	12"x12"x1"
31 FT.-35 FT.	11½"	8⅝"	6 FT.	12"x12"x1"
36 FT.-40FT.	15"	8⅝"	6 FT.	15"x15"x1¼"
41 FT.-45 FT.	15"	8⅝"	6 FT.	15"x15"x1¼"
46 FT.-50 FT.	15"	10"	8 FT.	15"x15"x1¼"

METAL HELIX FOUNDATION MATERIALS

ITEM	MATERIAL REQUIREMENT
BASEPLATE	AASHTO M 270M, GRADE 36 (M270M, GRADE 250)
SHAFT	ASTM A 252, GRADE 2 (PHOSPHOROUS 0.04% MAXIMUM, SULFUR 0.05% MAXIMUM)
HELIX SCREW	AASHTO M 183 (ASTM A 635)
PILOT POINT	AASHTO M 270 (ASTM A 575)
ANCHOR RODS/STUDS	AASHTO M 314 (ASTM F 1554)
HEXAGON NUTS	AASHTO M 291M (ASTM A 563) GRADE DH, OR AASHTO M 292 (ASTM A 194) GRADE 2H
WASHERS	AASHTO M 293 (ASTM F 436)

NOTES:

1. ALL DIMENSION IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
2. ALL MATERIAL SHALL BE GALVINIZED ACCORDING TO AASHTO M111, UNLESS OTHERWISE SPECIFIED.
3. ALL WELDS SHALL BE CONTINUOUS AND NOT LESS THAN ¼" (6.35 mm) FILLET WELDS. THE WELDED FOUNDATION SHALL BE CAPABLE OF WITHSTANDING 10,000 FT/LBS (13558.18 n.m) OF INSTALLATION TORQUE APPLIED ABOUT THE AXIS OF THE FOUNDATION.
4. THE HELIX FOUNDATION SHAFT SHALL BE INSTALLED VERTICAL AND THE BASE PLATE SHALL BE IN LEVEL. THE BREAKAWAY COUPLINGS AND HARDWARE SHALL NOT BE USED TO ALIGN THE POLE INSTALLATION.
5. THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE INSTALLATION OF THE LIGHT POLE.
6. THE CONTRACTOR SHALL COORDINATE EXTENSION OF ANCHOR BOLTS ABOVE TOP OF THE BASE PLATE WITH THE BREAKAWAY DEVICE MANUFACTURER'S REQUIREMENTS.
7. ANY VOIDS WITHIN THE METAL FOUNDATION SHALL BE FILLED WITH FINE AGGREGATE.
8. METAL FOUNDATIONS SHALL BE INSTALLED IN UNDISTURBED SOIL. PREDRILLING A PILOT HOLE AND/OR BACKFILLING AROUND THE FOUNDTION IS NOT ALLOWED.
9. THE METAL FOUNDATION SHALL NOT BE INSTALLED TO A TORQUE WHICH EXCEEDS THE MANUFACTURER'S MAXIMUM TORQUE RATING NOR SHALL IT BE INSTALLED TO AN INSTALLATION TORQUE VALUE OF LESS THAN 3,500 FT LB (4,750 KNM). METAL FOUNDATIONS THAT ARE NOT INSTALLED TO FULL INSTALLATION DEPTH OR DO NOT ACHIEVE THE MINIMUM INSTALLATION TORQUE SHALL BE REMOVED AND REPLACED WITH A CONCRETE FOUNDATION AT NO ADDITIONAL COST.
10. THE BASEPLATE SHALL BE PERPENDICULAR TO THE SHAFT AXIS (± 1°) AND THE HOLE CENTERLINE SHALL BE CONCENTRIC (± 0.188) TO THE SHAFT AXIS.
11. THE PILOT POINT AND SHAFT AXIS SHALL BE CONCENTRIC (± 0.125) AND IN LINE (± 2°).
12. THE BASEPLATE SHALL BE STAMPED WITH THE MANUFACTURERS NAME AND DATE OF MANUFACTURE.

BE-305

REVISIONS	
NAME	DATE
CREATED	02/27/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

LIGHT POLE FOUNDATION, METAL

SCALE: NONE

DRAWN BY DB

CHECKED BY

3/5/2007
K:\d\stsd\be305.dgn
V8=BE20
bauerdl

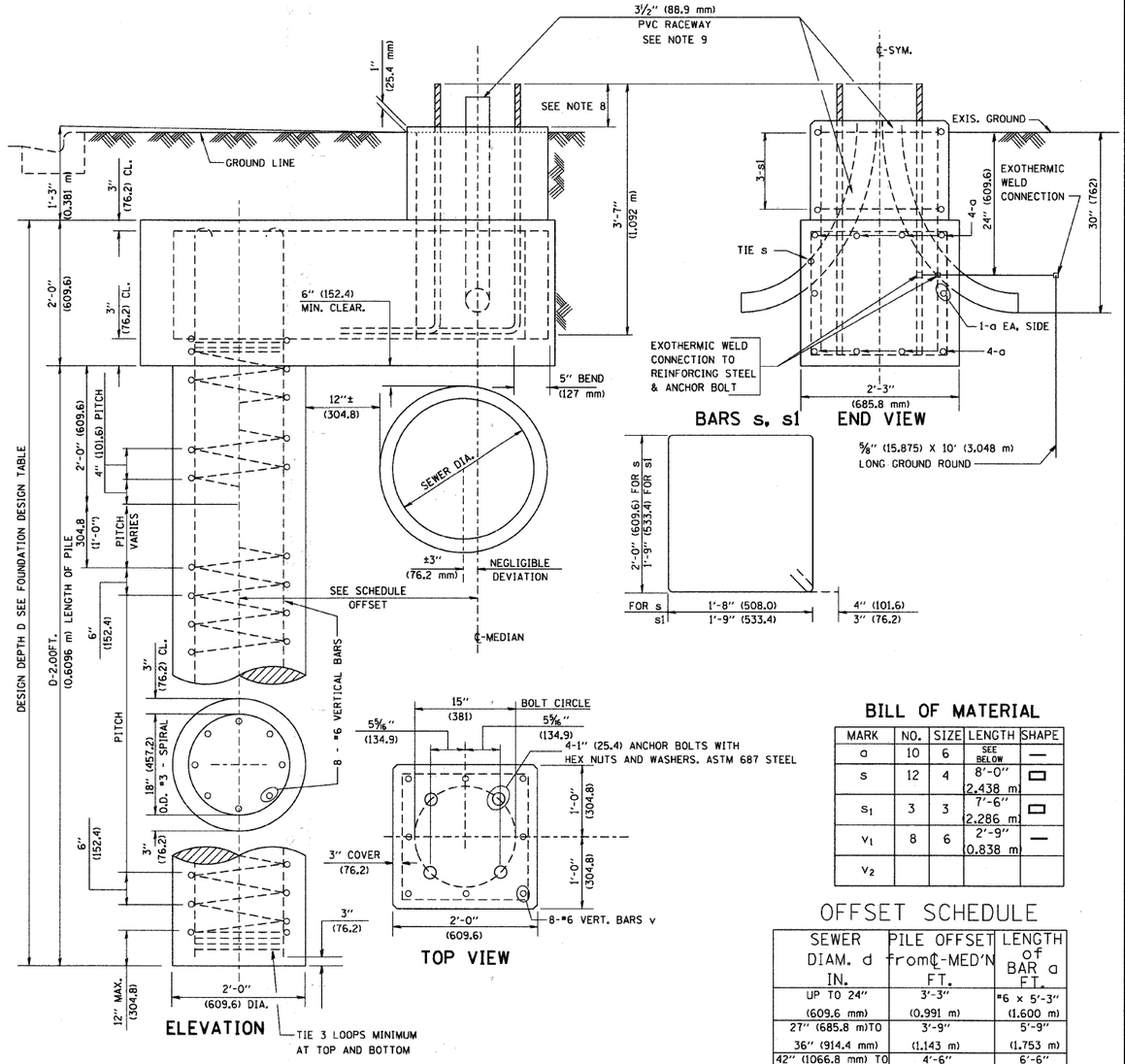
F. A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
2582	10-00102-00-LT	COOK	13	10
STA.	TO STA.			
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

FOUNDATION DESIGN TABLE

TYPE OF SOIL	DESIGN DEPTH OF FOUNDATION		REINFORCEMENT IN FOUNDATION			
			SINGLE ARM		TWIN ARM	
	SINGLE ARM D	TWIN ARM D	VERT BARS	SPIRAL	VERT BARS	SPIRAL
SOFT CLAY	13′-0″ (3.962 m)	15′-0″ (4.572 m)	8-#6X12′-6″ (3.810 m)	#3X122′ (37.186 m)	8-#6X14′-3″ (4.343 m)	#3X141′ (42.977 m)
MEDIUM CLAY	9′-6″ (2.896 m)	10′-9″ (3.277 m)	8-#6X9′-0″ (2.743 m)	#3X90′ (27.432 m)	8-#6X10′-0″ (3.048 m)	#3X100′ (30.480 m)
STIFF CLAY	7′-0″ (2.134 m)	8′-0″ (2.438 m)	8-#6X6′-6″ (1.981 m)	#3X66′ (20.112 m)	8-#6X7′-6″ (2.286 m)	#3X76′ (23.165 m)
LOOSE SAND	9′-0″ (2.743 m)	10′-0″ (3.048 m)	8-#6X8′-6″ (2.591 m)	#3X85′ (25.908 m)	8-#6X9′-6″ (2.896 m)	#3X94′ (28.651 m)
MEDIUM SAND	8′-3″ (2.515 m)	9′-0″ (2.743 m)	8-#6X8′-0″ (2.438 m)	#3X78′ (23.774 m)	8-#6X8′-6″ (2.591 m)	#3X85′ (25.908 m)
DENSE SAND	7′-9″ (2.362 m)	9′-0″ (2.743 m)	8-#6X7′-6″ (2.286 m)	#3X73′ (22.250 m)	8-#6X8′-6″ (2.591 m)	#3X85′ (25.908 m)
ROCK OR SOLIDIFIED SLAG	5′-0″ (1.524 m)	5′-0″ (1.524 m)	NONE	NONE	NONE	NONE

NOTES

1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
2. THE ENGINEER SHALL DETERMINE THE CLASS OF SOIL DURING EXCAVATION AND SELECT THE DESIGN DEPTH OF FOUNDATION FROM THE DESIGN TABLE.
3. EXCAVATION OF THE POLE FOUNDATION SHALL BE MADE WITH AN AUGER, 24″ (609.6 mm) OR 30″ (762.0 mm) IN DIAMETER.
4. THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
5. THE ANCHOR BOLTS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED IN THE FORM.
6. THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
7. ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UM(6 MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
8. THE CONTRACTOR SHALL COORDINATE EXTENSION OF ANCHOR BOLTS ABOVE TOP OF FOUNDATION WITH THE BREAKAWAY DEVICE MANUFACTURER'S REQUIREMENTS. IF LIGHT POLE IS MOUNTED WITHOUT BREAKAWAY DEVICE, ANCHOR BOLTS SHALL PROJECT 2¾″ (69.9 mm) ABOVE TOP OF THE FOUNDATION. THE CONTRACTOR SHALL CONFIRM ANCHOR BOLT EXTENTION WITH ENGINEER.
9. RACEWAYS SHALL PROJECT 1″ (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.
10. THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE LIGHT IS ERECTED.

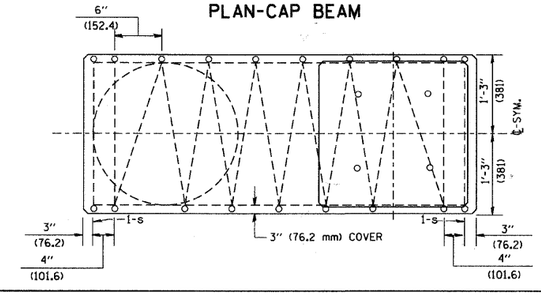


BILL OF MATERIAL

MARK	NO.	SIZE	LENGTH	SHAPE
a	10	6	SEE BELOW	—
s	12	4	8′-0″ 2.438 m	□
s_1	3	3	7′-6″ 2.286 m	□
v_1	8	6	2′-9″ 0.838 m	—
v_2				

OFFSET SCHEDULE

SEWER DIAM. d IN.	PILE OFFSET from℄-MED'N FT.	LENGTH of BAR a FT.
UP TO 24″ (609.6 mm)	3′-3″ (0.991 m)	#6 x 5′-3″ (1.600 m)
27″ (685.8 m)TO 36″ (914.4 mm)	3′-9″ (1.143 m)	5′-9″ (1.753 m)
42″ (1066.8 mm) TO 48″ (1219.2 mm)	4′-6″ (1.372 m)	6′-6″ (1.981 m)
54″ (1371.6 mm) TO 60″ (1524.0 mm)	5′-0″ (1.524 m)	7′-0″ (2.134 m)
66″ (1676.4 mm) TO 72″ (1828.8 mm)	5′-6″ (1.676 m)	7′-6″ (2.286 m)



REVISIONS	
NAME	DATE
S. MANLEY	12-2-93
A. SANEDRIN	12-26-94
R. TOMSONS	06-16-08

ILLINOIS DEPARTMENT OF TRANSPORTATION

LIGHT POLE FOUNDATION
OFFSET
40′ (12.192 m) TO 47½′ (14.478 m) M.H.
15″ (381 mm) BOLT CIRCLE

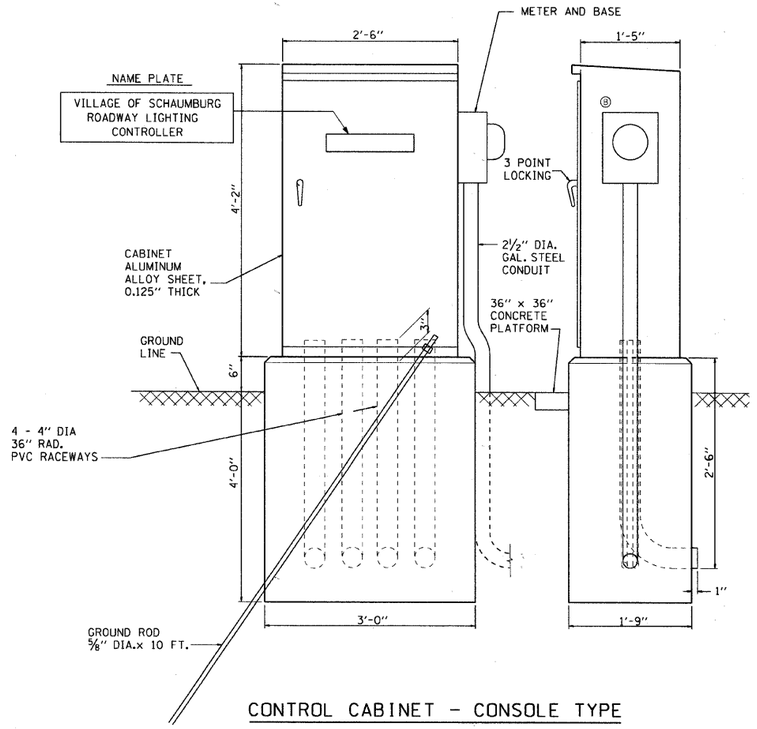
SCALE: NONE

DRAWN BY JKM

CHECKED BY

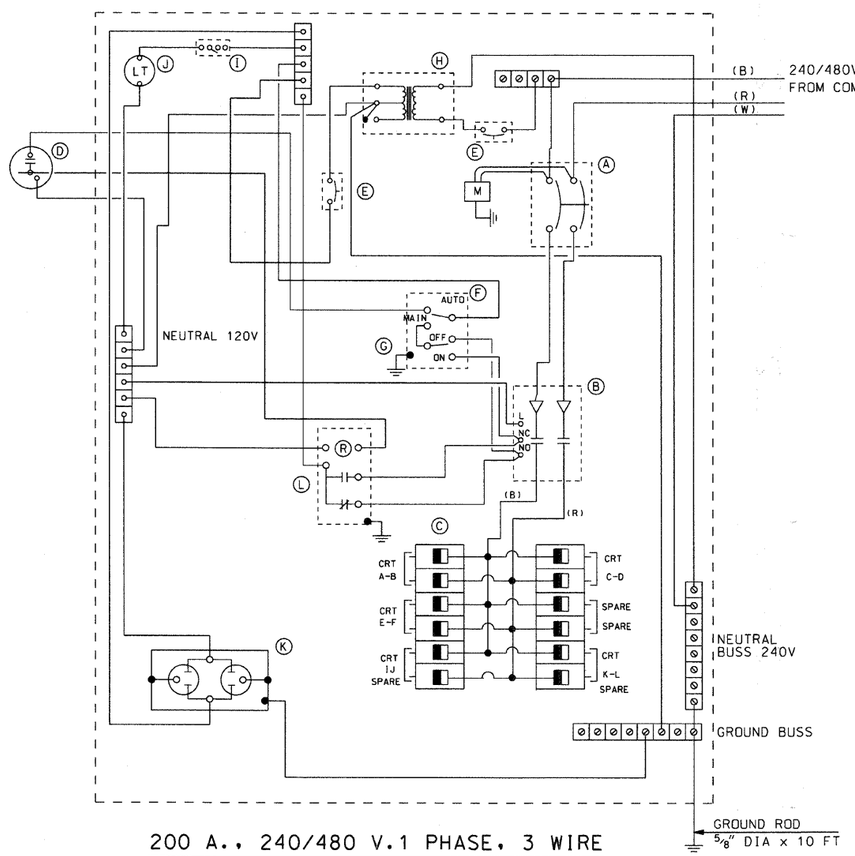
6/16/2008
K:\dist\std24x36\be310.dgn
V1=BE6
bouerdl

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2582	10-00102-00-LT	COOK	13	11
	ILLINOIS	CONTRACT NO. 63564		



CONTROL CABINET - CONSOLE TYPE

PANEL WIRING DIAGRAM



200 A., 240/480 V.1 PHASE, 3 WIRE
WITH PHOTOCELL CONTROL

DEVICE SCHEDULE

ITEM	QUANT.	DESCRIPTION
A	1	225 AMP CIRCUIT BREAKER, MOLDED CASE, THERMAL MAGNETIC, 2-POLE. SINGLE THROW, 600V FRAME, NON-INTERCHANGABLE TRIP. BOLT ON TYPE.
B	1	200 A., ELECTRICALLY OPERATED AND MECHANICALLY HELD LIGHTING CONTACTOR, 2-POLE, 600 V. WITH 120 V. COIL
C	12	240/480 V.1 PHASE PANEL BOARD WITH 200 A. COPPER MAINS SINGLE POLE, 50 A., 277 V. BOLT ON BRANCH CIRCUIT BREAKERS
D	1	PHOTO-ELECTRIC CELL, 120V. MOUNT ON CABINET
E	2	THERMAL MAGNETIC, MOLDED CASE CIRCUIT BREAKER, 1 POLE, 30 A., 277 V. BOLT ON TYPE.
F	1	CONTROL SWITCH, MOMENTARY CONTACT, SPDT, 15 A., 240 V.
G	1	CONTROL SWITCH, TOGGLE TYPE, SPDT, 20 A., 240 V. SPEC. GRADE
H	1	240/120V. STEP DOWN CONTROL TRANSFORMER 750 VA RATED
I	1	MICRO SWITCH (MOUNTED WITH ACTUATOR TO SWITCH WHEN DOOR IS OPEN)
J	1	60 WATT LIGHT FIXTURE VAPORTIGHT WITH GLOBE, GUARD AND MOUNTING BOX
K	1	120 VOLT, 15A. RECEPTACLE, SPECIFICATION GRADE IN NEMA 5-15R WEATHER PROOF BOX WITH FLAP-TYPE COVER
L	1	POWER RELAY WITH CONTACTS RATED FOR CONTACTOR INRUSH CURRENT - 120 V COIL
M	1	SURGE ARRESTOR
N	1	ELECTRIC METER BOX

NOTES

THE CABINET SHALL BE FABRICATED FROM 0.125" THICK ALUMINUM ALLOY SHEET AND SHALL BE REINFORCED WITH ALUMINUM ANGLES. THE CABINET DOOR SHALL BE NEMA TYPE 3 CONSTRUCTION WITH NEOPRENE GASKET. THE DOOR SHALL HAVE STAINLESS STEEL HINGES AND THREE POINT LOCKING SYSTEM.

THE CONTRACTOR SHALL REMOVE VEGITATION AND TOPSOIL, LEVEL THE AREA IN FRONT OF THE CONTROL CABINET DOOR AND PLACE LENGTH WISE, PARALLEL TO CONTROL CABINET, A PRECAST PAD, 36"x60"x3" MINIMUM SIZE. THE COST OF LABOR AND MATERIALS SHALL BE INCIDENTAL TO THE CONTROL CABINET.

CONTROL WIRE SHALL BE #12 AWG, 600V, TYPE "SIS" STRANDED COPPER GRAY SWITCH BOARD WIRE. THE ENDS OF ALL CONTROL WIRES SHALL BE IDENTIFIED.

ALL CONTROL CABINET ITEMS SHALL HAVE SUITABLE IDENTIFICATION. OPEN CIRCUIT BREAKERS, CONTACTORS AND OTHER OPEN DEVICES SHALL HAVE PERMANENT SELF STICKING TAGS. DEVICES IN ENCLOSURES SHALL HAVE ENGRAVED 2-COLOR LAMINATED PLASTIC NAMEPLATES ATTACHED TO ENCLOSURES WITH SCREWS. NAMEPLATES SHALL BE ENGRAVED TO CORRESPOND TO DESIGNATIONS ON THE DRAWINGS. INTERNAL CABINET WIRING SHALL BE IDENTIFIED AS INDICATED OR AS DIRECTED BY THE ENGINEER BY MEANS OF SELF-STICKING TAGS APPLIED AT EACH CONNECTED END. IDENTIFICATION SHALL BE MADE BY THE CABINET MANUFACTURE.

ALL WIRING WITHIN THE CABINET SHALL BE COLOR CODED AS INDICATED.

R = RED BL = BLUE W = WHITE
B = BLACK Y = YELLOW G = GREEN

PROVIDE SEALING GROMMETS FOR ALL OPEN WIRING EXTENDED FROM DEVICES IN BOXES OR CABINETS WITHIN THE CONTROL CABINET.

ALL 120 VOLT SYSTEM CONTROL WIRING SHALL BE #12 AWG STRANDED UNLESS OTHERWISE INDICATED.

THE CABINET SHALL BE PRIMED AND PAINTED IN GREEN COLOR.

THE HEADS OF CONNECTOR SCREWS SHALL BE PAINTED WHITE FOR NEUTRAL BUSS CONNECTION AND GREEN FOR GROUND BUSS CONNECTORS.

PROVIDE SEALING GROMMETS FOR ALL OPEN WIRING EXTENDED FROM DEVICES IN BOXES WITHIN THE CONTROL CABINET.

ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.

THE CONTROLLER SHALL BE CONSTRUCTED TO U.L. STD. 508 AND BEAR THE U.L. LABEL "ENCLOSED INDUSTRIAL CONTROL PANEL".

PROVIDE A HOLDER AND WATERPROOF POUCH ON THE INNER SIDE OF THE CONTROLLER DOOR. THE HOLDER AND POUCH SHALL BE MOUNTED SO THAT RAIN WATER OR CONDENSED WATER CANNOT ENTER THE POUCH WITH THE CABINET DOOR OPEN. FURNISH THE APPROVED COPY OF THE "CONTROL CABINET WIRING DIAGRAM".

Sunjoy Inc.
Area Lighting
Consulting Engineers
212 TIMBERCREST DRIVE
SCHAUMBURG, ILLINOIS
60193-1572

REVISIONS NAME	DATE

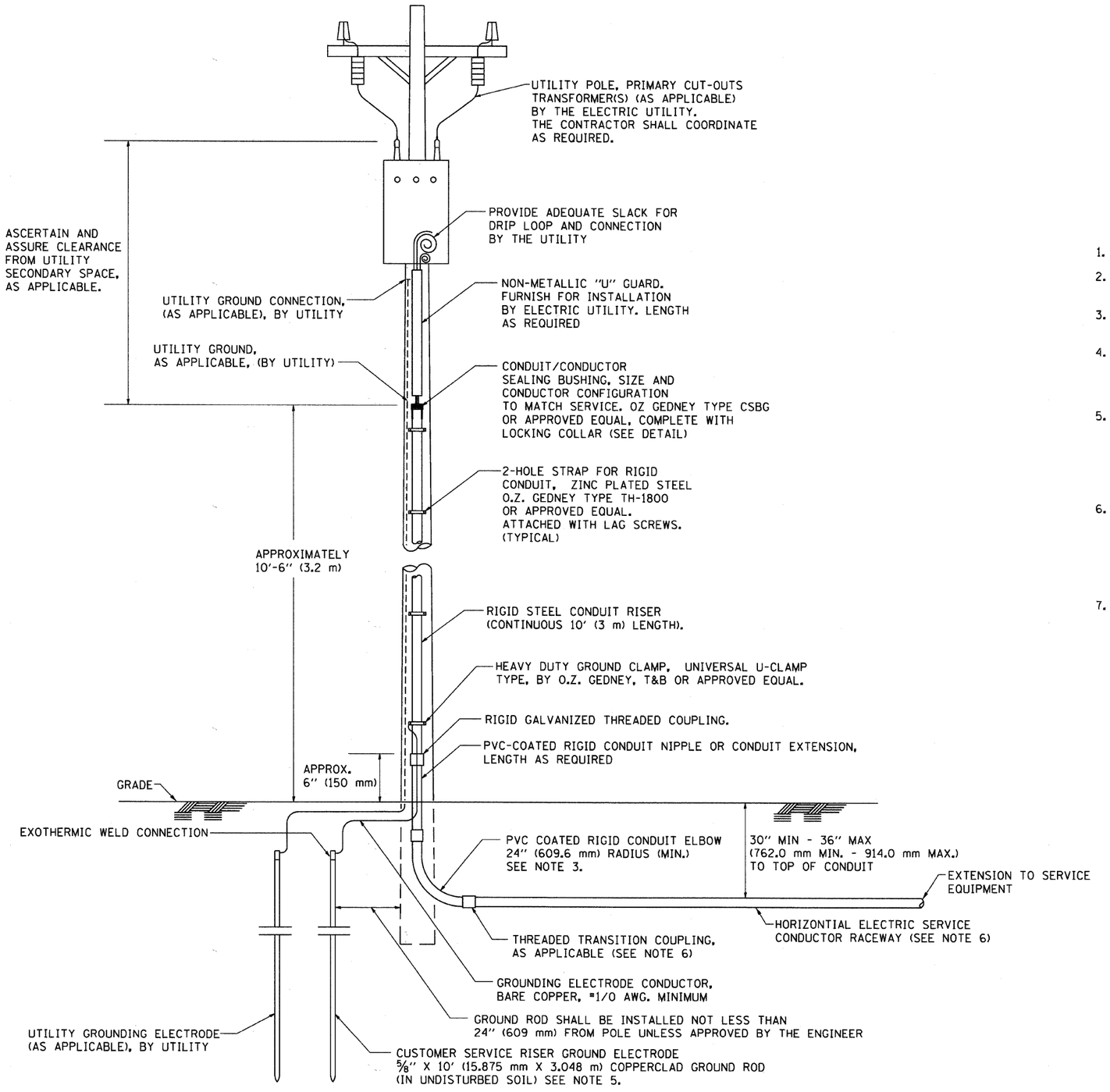
VILLAGE OF SCHAUMBURG, ILLINOIS
DEPARTMENT OF ENGINEERING AND PUBLIC WORKS
ROADWAY LIGHTING IMPROVEMENTS
PLUM GROVE ROAD
LIGHTING CONTROLLER, SPECIAL
200 AMP, 240/480 VOLT, 1 PHASE, 3 WIRE
WITH PHOTOCELL CONTROL

SCALE:
DATE: 9-21-09
DRAWN BY HKQ
CHECKED BY JS

C:\SUNJOY\Projects\Village of Schaumburg\P2_Plumgrove Road\controller8.dgn
12/17/2010

CONTRACT NO.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2582	10-00102-00-LT	COOK	13	12
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

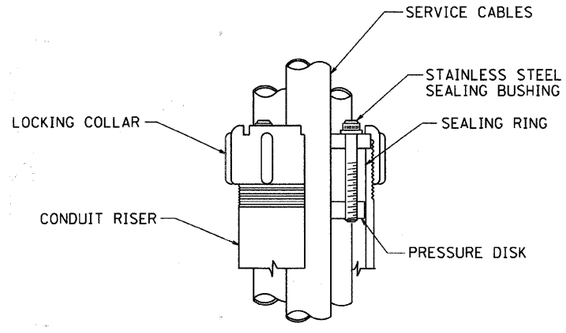


APPLICATION

THIS DETAIL APPLIES FOR LOW VOLTAGE ELECTRIC SERVICE (660 V OR LESS) FROM AN OVERHEAD UTILITY SUPPLY TO SEPERATLY-MOUNTED SERVICE EQUIPMENT.

NOTES

1. SERVICE VOLTAGE SHALL BE AS INDICATED ELSEWHERE IN THE DRAWINGS.
2. UNLESS OTHERWISE INDICATED, ITEMS AND WORK SHALL BE INCLUDED AND PAID AS PART OF THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.
3. CONDUIT AND CONNECTOR DIAMETER SHALL MATCH THE DIAMETER OF THE SERVICE CONDUCTOR RACEWAY AS INDICATED ON THE PLANS.
4. PVC COATED RACEWAYS AND ACCESSORIES SHALL BE CAREFULLY INSTALLED WITH MFR RECOMMENDED TOOLS AND PROCEDURES TO AVOID DAMAGE. ANY DAMAGE SHALL BE REPAIRED WITH COMPATIBLE PVC TOUCH-UP MATERIAL TO THE SATISFACTION OF THE ENGINEER OR THE DAMAGED MATERIAL SHALL BE REPLACED AT NO ADDITIONAL COST.
5. THE CONTRACTOR SHALL OBTAIN INSPECTION AND APPROVAL BY THE ENGINEER OF SERVICE RISER GROUND ELECTRODE, RISER ELBOW, NIPPLE AND CONNECTION TO SERVICE CONDUCTOR RACEWAY EXTENSION BEFORE BACKFILL AND SHALL ALSO OBTAIN INSPECTION OF SERVICE RISER AND SEALING BUSHING BEFORE UTILITY "U" GUARD INSTALLATION AND SERVICE CONNECTION.
6. THE HORIZONTAL ELECTRIC SERVICE CONDUCTOR RACEWAY SHALL BE AS INDICATED AND SHALL BE MEASURED SEPARATELY FOR PAYMENT. WHEN THE RACEWAY IS PVC-COATED RIGID GALVANIZED STEEL, THE COUPLING SHALL BE THE SAME. WHEN THE RACEWAY IS PVC CONDUIT (IN CONCRETE), THE COUPLING SHALL BE A METALIC TO NON METALIC ADAPTER. WHEN THE RACEWAY IS ENCASED IN CONCRETE, THE CONCRETE SHALL EXTEND TO COVER THE COUPLING.
7. PLANS AND DETAILS INDICATE THE GENERAL NATURE AND REQUIREMENTS. THEY DO NOT SHOW EVERY ACCESSORY AND ATTACHMENT, AND THEY DO NOT RELIEVE THE CONTRACTOR OF THE REQUIREMENTS OF THE SPECIFICATIONS AND SPECIAL PROVISIONS TO ASCERTAIN UTILITY REQUIREMENTS AND TO COORDINATE ACCORDINGLY, FURNISHING ALL ITEMS AND WORK NOT PROVIDED BY THE UTILITY, BUT NECESSARY FOR A COMPLETE SERVICE INSTALLATION IS REQUIRED AND SHALL BE INCLUDED IN THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.



SEALING BUSHING DETAIL

BE-220

REVISIONS NAME	DATE
	03/03/06

ILLINOIS DEPARTMENT OF TRANSPORTATION

ELECTRIC SERVICE INSTALLATION AERIAL, REMOTE DISCONNECT BE - 220

SCALE: NONE

DRAWN BY

CHECKED BY MEA

PLOT DATE = 3/5/2007
FILE NAME = K:\district\be228.dgn
PLOT SCALE = 50.0000 ' / IN.
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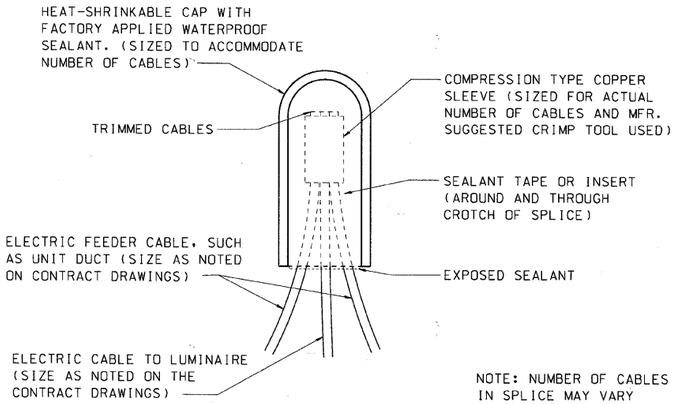
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2582	10-00102-00-LT	COOK	13	13
	ILLINOIS	CONTRACT NO. 63564		

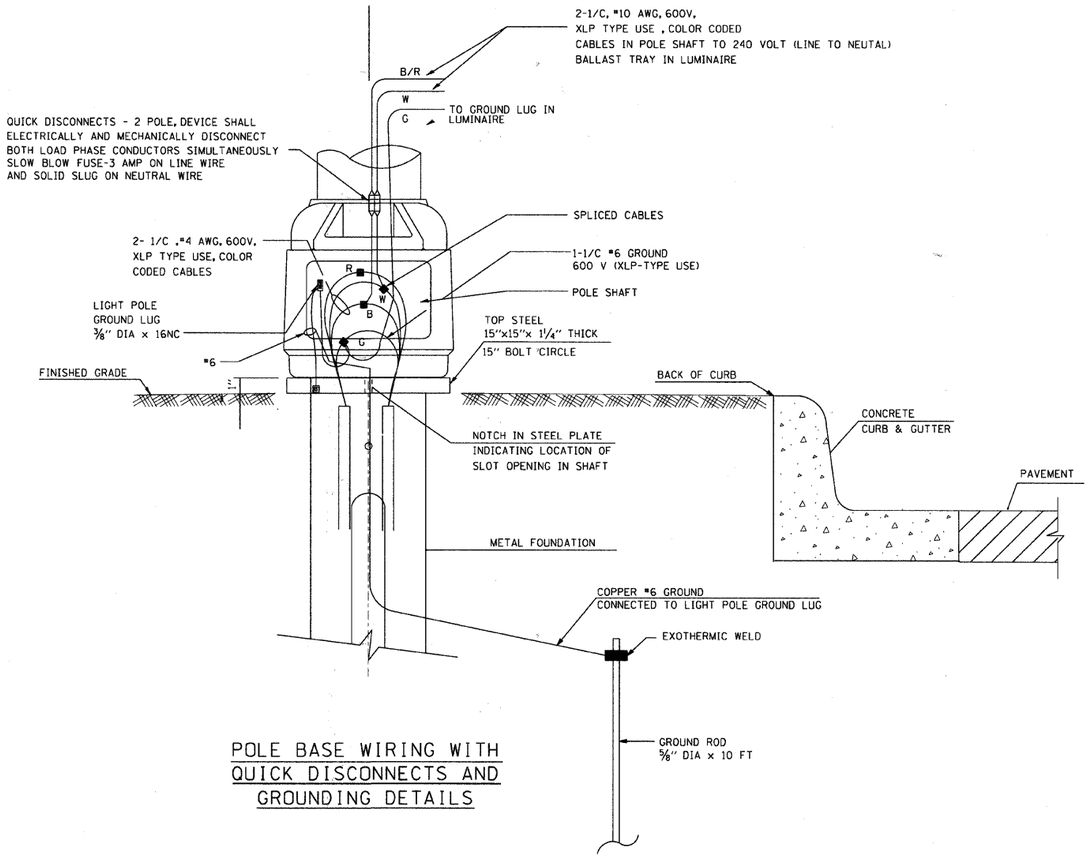


SPLICING ELECTRIC CABLE

CIRCUIT CABLE:

ALL ELECTRIC CABLE SHALL BE 600 V (XLP-TYPE USE), FULLY PIGMENTED COLOR CODED. COLOR CODE SHALL BE-
BLACK/RED PHASE WIRE
WHITE NEUTRAL WIRE
GREEN GROUND WIRE

TRENCH AND BACKFILL



POLE BASE WIRING WITH QUICK DISCONNECTS AND GROUNDING DETAILS

Sunjoy Inc.
Area Lighting
Consulting Engineers
212 TIMBERCREST DRIVE
SCHAUMBURG, ILLINOIS
60193-1572

REVISIONS NAME	DATE

VILLAGE OF SCHAUMBURG, ILLINOIS
DEPARTMENT OF ENGINEERING AND PUBLIC WORKS
ROADWAY LIGHTING IMPROVEMENTS
PLUM GROVE ROAD
ELECTRICAL DETAILS

SCALE: NONE
DATE: 9-21-09
DRAWN BY HKQ
CHECKED BY JS