

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
559	10-00101-00-LT	COOK	15	1
		ILLINOIS	CONTRACT NO. 63563	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL-AID HIGHWAY

FAU 559 (IL 58, GOLF ROAD)
BASSWOOD ROAD TO I-290
ROADWAY LIGHTING IMPROVEMENT
SECTION 10-00101-00-LT
PROJECT NO. M-9003 (769)
VILLAGE OF SCHAUMBURG
COOK COUNTY

C-91-352-11

INDEX OF SHEETS

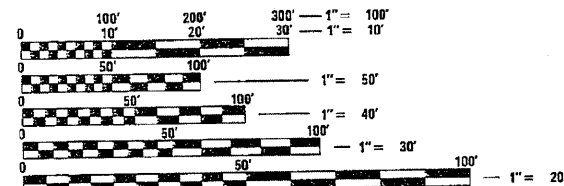
SHEET NO.	DESCRIPTION
1.	COVER SHEET
2.	SUMMARY OF QUANTITIES, GENERAL NOTES AND LEGEND
3.	ELECTRIC CIRCUIT MAINTAINED BY VILLAGE OF SCHAUMBURG
4.	PROPOSED ORNAMENTAL LIGHTING
5.	PROPOSED ORNAMENTAL LIGHTING
6.	PROPOSED ORNAMENTAL LIGHTING
7.	PROPOSED ORNAMENTAL LIGHTING
8.	ONE LINE CIRCUIT DIAGRAM LIGHTING CONTROLLER AT COMMONS DRIVE
9.	ONE LINE CIRCUIT DIAGRAM LIGHTING CONTROLLER AT ROOSEVELT DRIVE
10.	ALUMINUM LIGHT POLE (47'-6") M.H.
11.	LIGHT POST FOUNDATION, METAL
12.	OFFSET FOUNDATION
13.	LIGHTING CONTROLLER, CONSOLE TYPE 200 AMP, 240/480 VOLT, 1 PHASE, 3 WIRE
14.	ELECTRIC SERVICE INSTALLATION TRANSFORMER MOUNTED ON PAD
15.	ELECTRICAL DETAILS

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): 45,900 (2005):
ILLUMINATING ENGINEERING SOCIETY (IES)
ROAD/AREA CLASSIFICATION: MAJOR MEDIUM

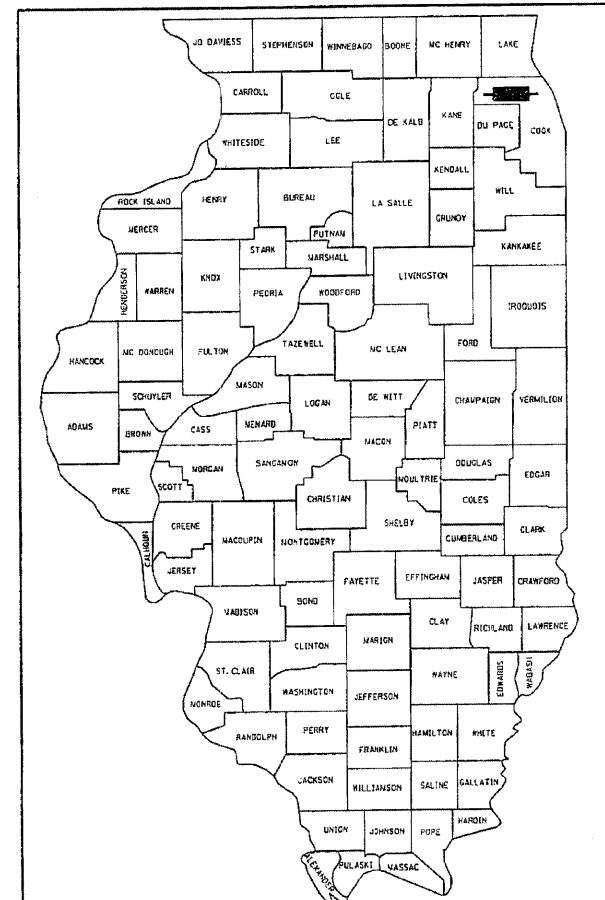


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

CONTRACT NO. 63563

GROSS LENGTH = 10,325 FT. = 1.96 MILE
NET LENGTH = 9075 FT. = 1.72 MILE
OMISSION = 1265 FT. = 0.239 MILE



LOCATION OF SECTION INDICATED THUS: - [rectangle] -

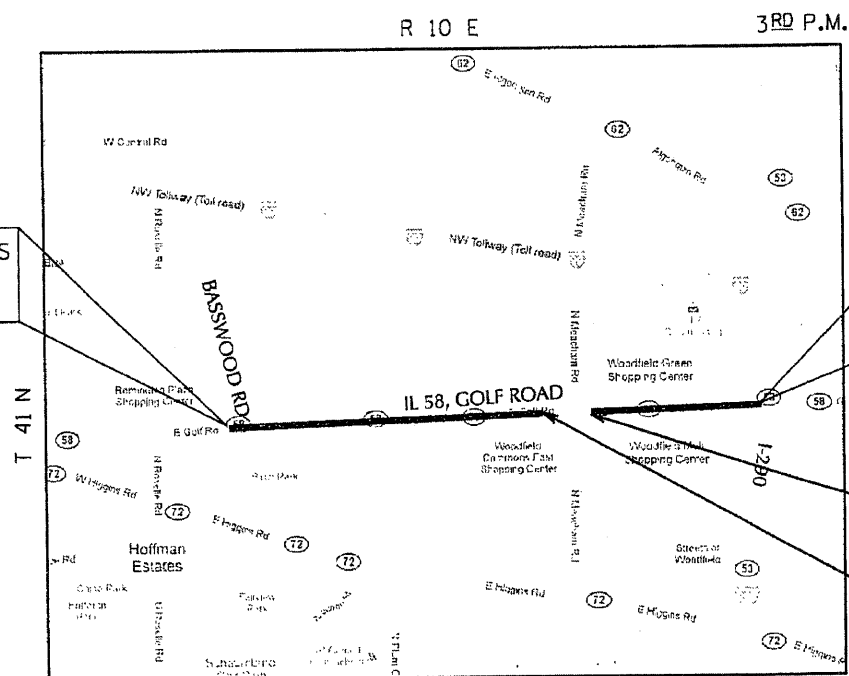
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

APPROVED March 10, 2011
Steven Rubenstein
VILLAGE OF SCHAUMBURG, DIRECTOR OF ENGINEER AND PUBLIC WORKS

PASSED _____ 20____
DISTRICT ONE ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID
BASED ON LIMITED
REVIEW MARCH 10, 2011
Diana M. [Signature]
DEPUTY DIRECTOR OF HIGHWAYS, REGION ONE ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS



LOCATION MAP
NOT TO SCALE



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 847-705-4406, SCHAUMBURG, IL
CONSULTANT ENGINEER: JAGDISH SHAH SUNJOY INC.

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	QUANTITY
* 42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SO FT	500
* 44000600	SIDEWALK REMOVAL	SO 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	2
80400200	ELECTRIC UTILITY SERVICE CONNECTION	L. SUM	1
81000700	CONDUIT IN TRENCH, 2 1/2" DIA GALVANIZED STEEL	FOOT	470
81021370	CONDUIT PUSHED, 4" DIA PVC	FOOT	1,475
81603090	UNIT DUCT 600 V, 3-1/C NO.4, 1/C NO.6 GROUND (XLP TYPE-USE), 1 1/2" DIA. POLYETHYLENE	FOOT	20,360
81702460	ELECTRIC CABLE IN CONDUIT 600 V (XLP-TYPE USE) 3-1/C NO. 3/0	FOOT	530
81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	450
82102400	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 400 WATT	EACH	124
83050710	LIGHT POLE, ALUMINUM, 47.5 FT M.H., 6 FT MAST ARM	EACH	124
X83050215	LIGHT POLE FOUNDATION, 24" DIAMETER, OFFSET	FOOT	96
83600357	LIGHT POLE FOUNDATION, METAL, 15" BOLT CIRCLE, 8" x 8"	EACH	112
83800205	BREAKAWAY DEVICE, TRANSFORMER BASE 15 INCH BOLT CIRCLE	EACH	124
84500110	REMOVAL OF LIGHTING CONTROLLER	EACH	1
84500120	REMOVAL ELECTRIC SERVICE INSTALLATION	EACH	1
84500130	REMOVAL OF LIGHTING CONTROLLER FOUNDATION	EACH	1
Z0033028	MAINTENANCE OF LIGHTING SYSTEM	CAL MO	6
X8040310	ELECTRICAL SERVICE DISCONNECT	EACH	2
X8250505	LIGHTING CONTROLLER, SPECIAL	EACH	2

* SPECIALTY ITEMS

GENERAL NOTES

- THE EXISTING LIGHTING SYSTEM SOUTH AND NORTH ON BASSWOOD ROAD, SOUTH ON COMMONS DRIVE, SOUTH AND NORTH NATIONAL PARKWAY, NORTH ON ROOSEVELT ROAD, NORTH ON EAST DRIVE IS MAINTAINED BY THE VILLAGE OF SCHAUMBURG. EXISTING CIRCUIT SYSTEM AT WOODFIELD SHOPPING AREA, ON WEST DRIVE, MIDDLE DRIVE AND EAST DRIVE IS MAINTAINED BY THE PRIVATE DEVELOPER BOTH EXISTING LIGHTING SYSTEM IS SEPARATE FROM THE PROPOSED GOLF ROAD LIGHTING IMPROVEMENT.
- BEFORE PERFORMING ANY EXCAVATION, REMOVAL OR INSTANTION 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.
- 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
- 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.
- 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"
- BELOW GROUND SPLICING OF THE UNIT DUCT AND CIRCUIT CABLES WILL NOT BE PERMITTED.
- DISCONNECTION AND REMOVAL OF THE EXISTING CIRCUITS, FURNISHING AND INSTALLING QUICK DISCONNECT WITH FUSES AND CIRCUIT CABLES IN THE LIGHT POLE SHALL BE INCLUDED IN THE PAY ITEM "LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 400 WATT
- 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.
- 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.
- THE RESPONSIBILITY FOR COORDINATING FINISHED GRADE ELEVATION WITH THE TOP OF THE FOUNDATION HEIGHTS SHALL BE WITH THE CONTRACTOR.

GENERAL NOTES

- 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:
 - TRENCH: ELECTRICAL WARNING TAPE
 - FOUNDATION: CLASS "SI" CONCRETE, REINFORCEMENT, PVC RACEWAYS, ANCHOR BOLTS WITH NUTS & WASHERS.
 - CONDUIT: CONDUIT AND CONDUIT FITTINGS.
 - GROUND ROD: GROUND ROD, COPPER WIRE, EXOTHERMIC WELD.
 - UNIT DUCT/CABLES: UNIT DUCT, CABLES
 - ELECTRIC CABLES: ELECTRIC CABLES
 - ELECTRICAL ITEMS: ELECTRIC TAPES, QUICK DISCONNECT WITH FUSE, LAMPS.
 - LIGHTING CONTROLLER: CABINET DETAILS COLOR, PANEL WIRING, CATALOG CUTS FOR ELECTRIC MATERIALS.
 - METAL FOUNDATION: FABRICATION DETAILS
 - LIGHT POLE: POLE DETAIL SHOP DRAWING, WIND LOAD CALCULATIONS, POLE WIRING
 - LUMINAIRE: LUMINAIRE CATALOG CUT, LUMINAIRE INTERNAL ELECTRIC COMPONENTS, PHOTOMETRY DATA FILE.
- 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
- 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.
- THE CONTRACTOR SHALL NOTIFY J.U.L.I.E. AT (1-800-892-0123) TO LOCATE AND MARK/STAKE ALL UNDERGROUND UTILITIES.
- THE LIGHT POLE SETBACK SHALL BE 3.0' FROM THE BACK OF CURB TO THE FACE OF FOUNDATION.
- RESTORATION OF PARKWAY AND PROJECT SITE SHALL BE INCIDENTAL TO CONTRACT IN ACCORDANCE WITH ALL APPLICABLE CODES AND REGULATIONS AND THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL CODES AND ORDINANCES ISSUED BY THE VILLAGE OF SCHUMBURG.
- THE PROPOSED TRENCH SHALL BE (30 INCH) BELOW FINISHED GRADE, PER SECTION 819 OF THE STANDARD SPECIFICATIONS.
- ALL ELECTRICAL EQUIPMENT AND PRODUCT SHALL BE UL LISTED AND LABELED
- POLE FUSES AND ASSOCIATED HARDWARE/MATERIAL AND INSTALLATION SHALL BE INCLUDED IN THE LUMINAIRE PAY ITEM.
- 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.
- ALL WORK SHALL BE COORDINATED WITH THE CONCURRENT RECONSTRUCTION PROJECT ACCORDING TO THE SPECIAL PROVISIONS.
- THE CONTRACTOR SHALL VERIFY BOLT CIRCLE OF EXISTING LIGHT POLE TO BE REMOVED.
- POLYETHYLENE DUCT WITH ELECTRIC CABLE (XLP-TYPE USE) SHALL MEET THE REQUIREMENTS OF THE ARTICLE 816 OF THE STANDARD SPECIFICATIONS.
- THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT 847-705-4470. A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TEMPORARY TRAFFIC CONTROL DEVICES.

LEGEND

- EXISTING LIGHTING UNIT, REMIAN IN PLACE MAINTAINED BY THE STATE 48' MH, 8' MA 400W HPS, M-C-III
- EXISTING LIGHT TOWER UNIT, REMIAN IN PLACE MAINTAINED BY THE STATE 100' MH, 3-700W HPS, M-C-III
- EXISTING LIGHTING UNIT, REMIAN IN PLACE MAINTAINED BY PRIVATE DEVELOPERS 40' MH, 0.75' MA 400W HPS, M-C-III
- EXISTING TWIN ARM LIGHTING UNIT, REMIAN IN PLACE MAINTAINED BY PRIVATE DEVELOPERS 50' MH, 2-0.75' MA 400W HPS
- EXISTING LIGHTING UNIT, REMIAN IN PLACE MAINTAINED BY THE VILLAGE OF SCHAUMBURG 30' MH, 6' MA 200 HPS
- EXISTING LIGHTING UNIT, REMIAN IN PLACE MAINTAINED BY THE VILLAGE OF SCHAUMBURG 40' MH, 6' MA 250 HPS
- EXISTING TWIN ARM LIGHTING UNIT, REMIAN IN PLACE MAINTAINED BY THE VILLAGE OF SCHAUMBURG 40' MH, 2'-6" MA 250W HPS, M-C-III
- EXISTING LIGHTING CONTROLLER TO BE REMOVED
- EXISTING ELECTRIC UTILITY SERVICE PAD MOUNTED TRANSFORMER
- EXISTING LIGHTING CIRCUIT
- GROUND ROD, 5/8" DIA x 10 FT (PLEASE REFER SHEET *E-3 FOR NOTE)
- PROPOSED UNIT DUCT BORED AND PULLED UNIT DUCT 600 V, 3-1/C NO. 4, 1/C NO. 6 GROUND (XLP TYPE-USE), 1 1/2" POLYETHYLENE
- LIGHTING CONTROLLER, SPECIAL 200 AMPERE, 240/480 VOLT, 1 PHASE, 3 WIRE, PHOTOCCELL CONTROL
- SERVICE CABLE IN CONDUIT ELECTRIC CABLE IN CONDUIT 600 V (XLP-TYPE USE-2), 3-1/C NO. 3/0 2 1/2" DIA CONDUIT
- PROPOSED LIGHT POLE, ALUMINUM 47.5 FT MOUNTING HEIGHT, 6 FT MAST ARM, 15" DIA BOLT CIRCLE, LUMINAIRE 400 WATT CLEAR HPS LAMP, M-C-III, MULTI TAP CWA BALLAST (240 VOLT LINE TO NEUTRAL) POLE MOUNTED ON METAL FOUNDATION WITH BREAKAWAY TRANSFORMER BASE
- PVC CONDUIT, SCHEDULE 80 CONDUIT IN TRENCH (T) OR PUSHED (P)
- LENGTH
DIAMETER
- STA.
A3 (R)
- COLOR OF PHASE WIRE
- POLE NUMBER IN CIRCUIT
- BRANCH CIRCUIT BREAKER IDENTIFICATION
- EXISTING TRAFFIC SIGNAL POLE
- REMOVE EXISTING ABANDONED CIRCUIT

CIRCUIT CABLES

ALL CONDUCTORS SHALL BE INDIVIDUALLY FULLY PIGMENTED/COLOR 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.

UTILITIES

- EXISTING ROW
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING GAS LINE
- EXISTING ELECTRIC CABLE
- EXISTING TELEPHONE LINE

UTILITIES INFORMATION FOR REFERENCE ONLY (BY OTHERS). SUNJOY INC. IS NOT RESPONSIBLE FOR ANY ERROR AND OMISSION. THE CONTRACTOR SHOULD VERIFY EACH UTILITY WITH THE RESPECTIVE UTILITY COMPANY OR VILLAGE OF SCHAUMBURG.

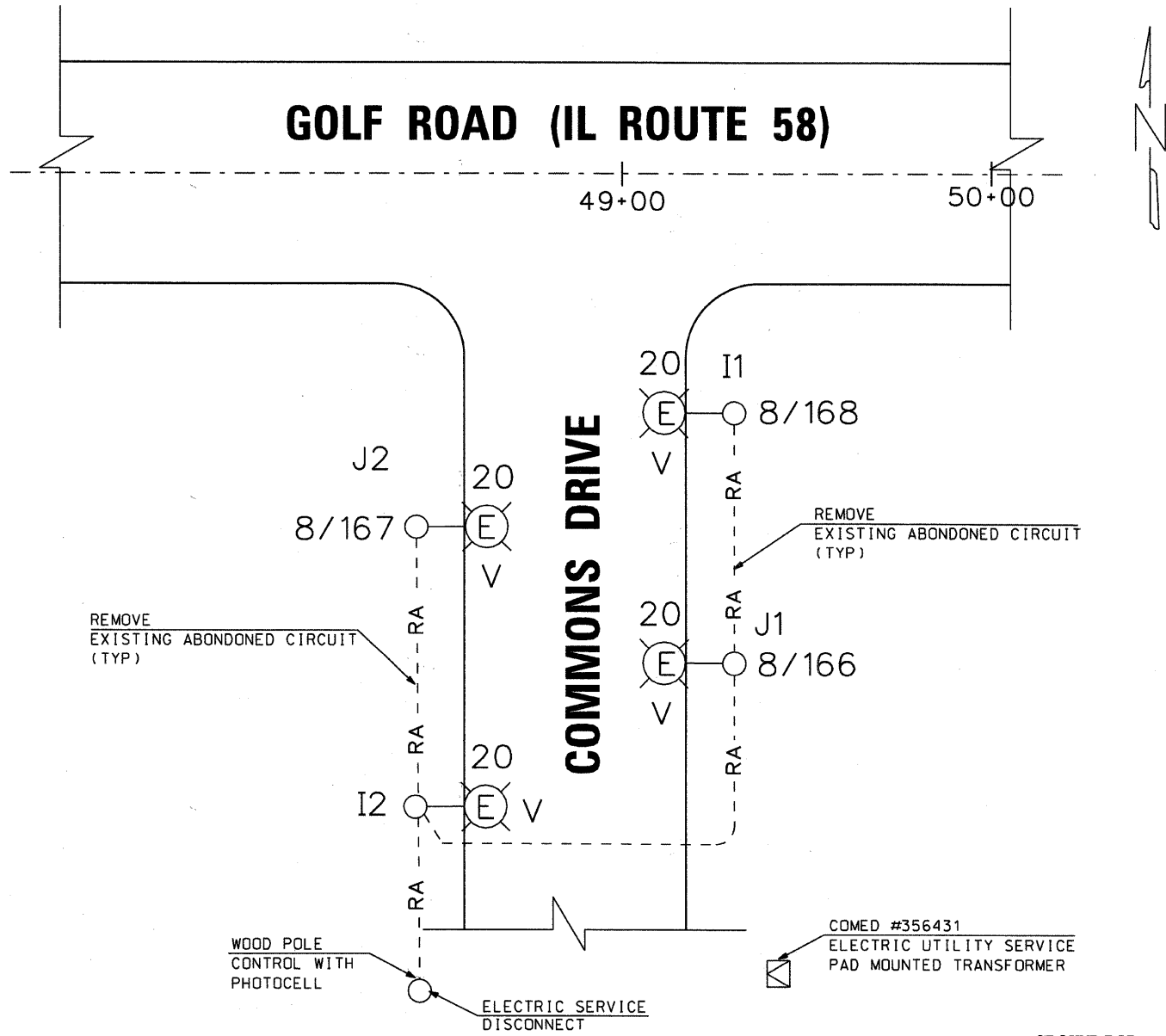
THE PREESEMBLED ELECTRIC CABLE UNIT DUCT SHALL BE INSTALLED AT A MINIMUM DEPTH OF 30 INCHES IN APPROVED METHOD BY THE ENGINEER - BORED AND PULLED AS SPECIFIED IN ARTICLE 816.03. UNIT DUCT INSTALLATION COST FOR BORED PULLED METHOD SHALL BE INCLUDED IN PAY ITEM- "UNIT DUCT 600V, 3-1/C NO.4, 1/C NO.6 GROUND (XLP- TYPE USE), 1 1/2" DIA. POLYETHYLENE"



REVISIONS	
NAME	DATE
SUNJOY INC.	9/18/10

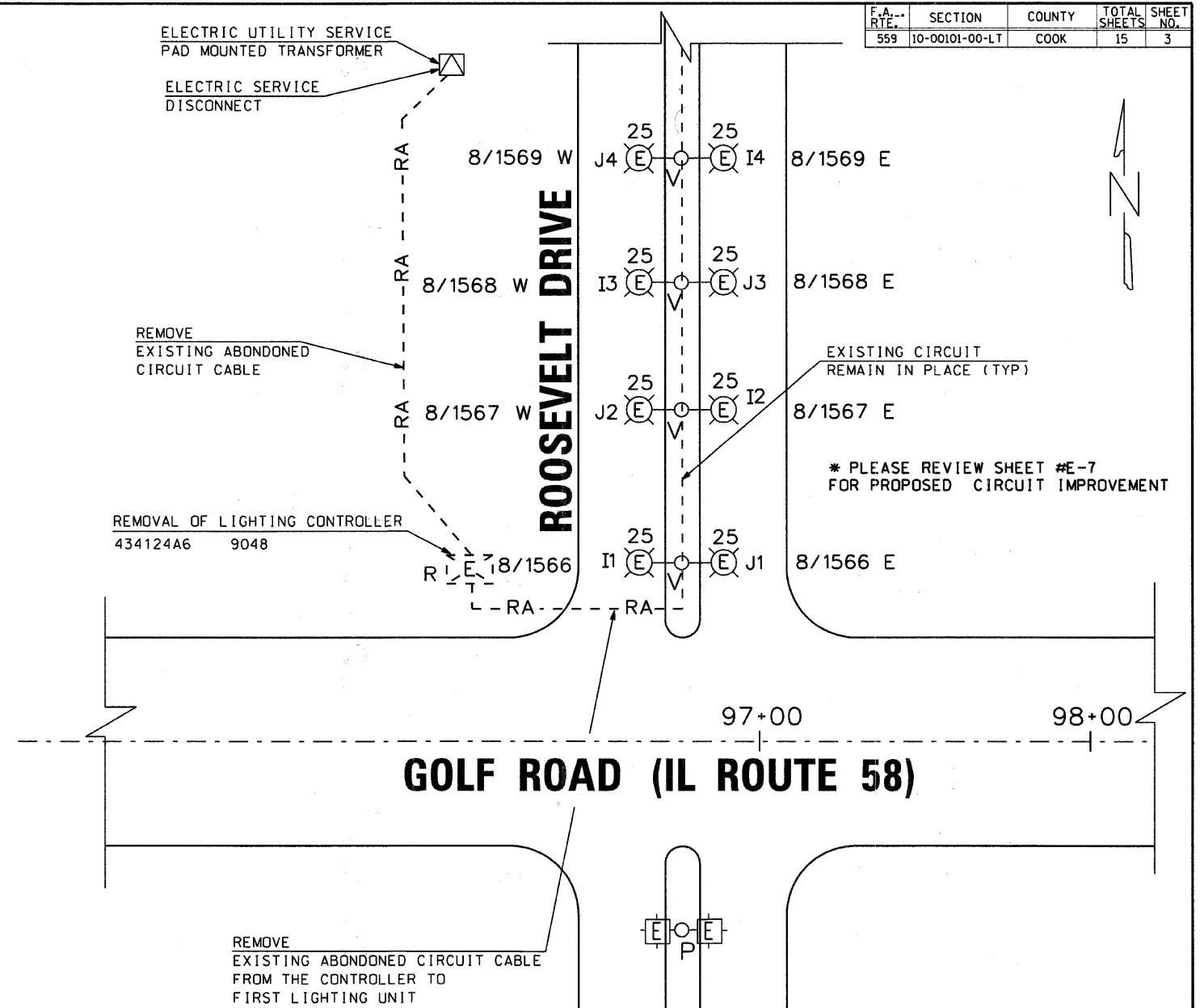
VILLAGE OF SCHAUMBURG, ILLINOIS
DEPARTMENT OF ENGINEERING AND PUBLIC WORKS
IL ROUTE 58 (GOLF ROAD) LIGHTING IMPROVEMENTS
BASSWOOD ROAD TO I-290 UNDERPASS
**SUMMARY OF QUANTITIES,
GENERAL NOTES, LEGEND**

SCALE: NONE
DATE: 10-05-09
DRAWN BY: HKO
CHECKED BY: JS



DETAIL 1
(SEE NOTE 4)

- NOTE:**
1. THE CONTRACTOR SHALL VERIFY WITH THE ENGINEER (VILLAGE OF SCHAUMBURG) ELECTRIC POWER TRANSFORMER LOCATION, CIRCUIT CABLE TYPE AND SIZE AND CONNECTION WITH LIGHTING UNIT
 2. THE CONTRACTOR SHALL VERIFY WITH THE ENGINEER (VILLAGE OF SCHAUMBURG) LUMINAIRE LAMP WATTAGE TYPE OF BALLAST, VOLTAGE OF BALLAST.
 3. ALL EXISTING ELECTRICAL CIRCUIT IMPROVEMENT SHALL BE CO-ORDINATED WITH THE ENGINEER (VILLAGE OF SCHAUMBURG) . THE CONTRACTOR MUST OBTAIN WRITTEN APPROVAL FROM THE ENGINEER (VILLAGE OF SCHAUMBURG) FOR CIRCUIT IMPROVEMENT
 4. FOUR EXISTING LIGHTING UNITS SHOWN IN DETAIL #1 SHALL BE RECONNECTED TO NEW CONTROLLER #1. FOR DETAILS SEE DWG E-5 OF E-15
 5. EXISTING LIGHTING UNITS ON ROOSEVELT DRIVE, SHOWN IN DETAIL #2 SHALL BE RECONNECTED TO NEW CONTROLLER #2. FOR DETAILS SEE DWG E-7 OF E-15



DETAIL 2
(SEE NOTE 5)

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 GROUNDING 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.



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
IL ROUTE 58 (GOLF ROAD) LIGHTING IMPROVEMENTS
BASSWOOD ROAD TO I-290 UNDERPASS
ELECTRIC CIRCUIT MAINTAINED BY THE VILLAGE OF SCHAUMBURG
EXISTING LIGHTING CIRCUITS DETAILS
1. COMMONS 2. ROOSEVELT DRIVE

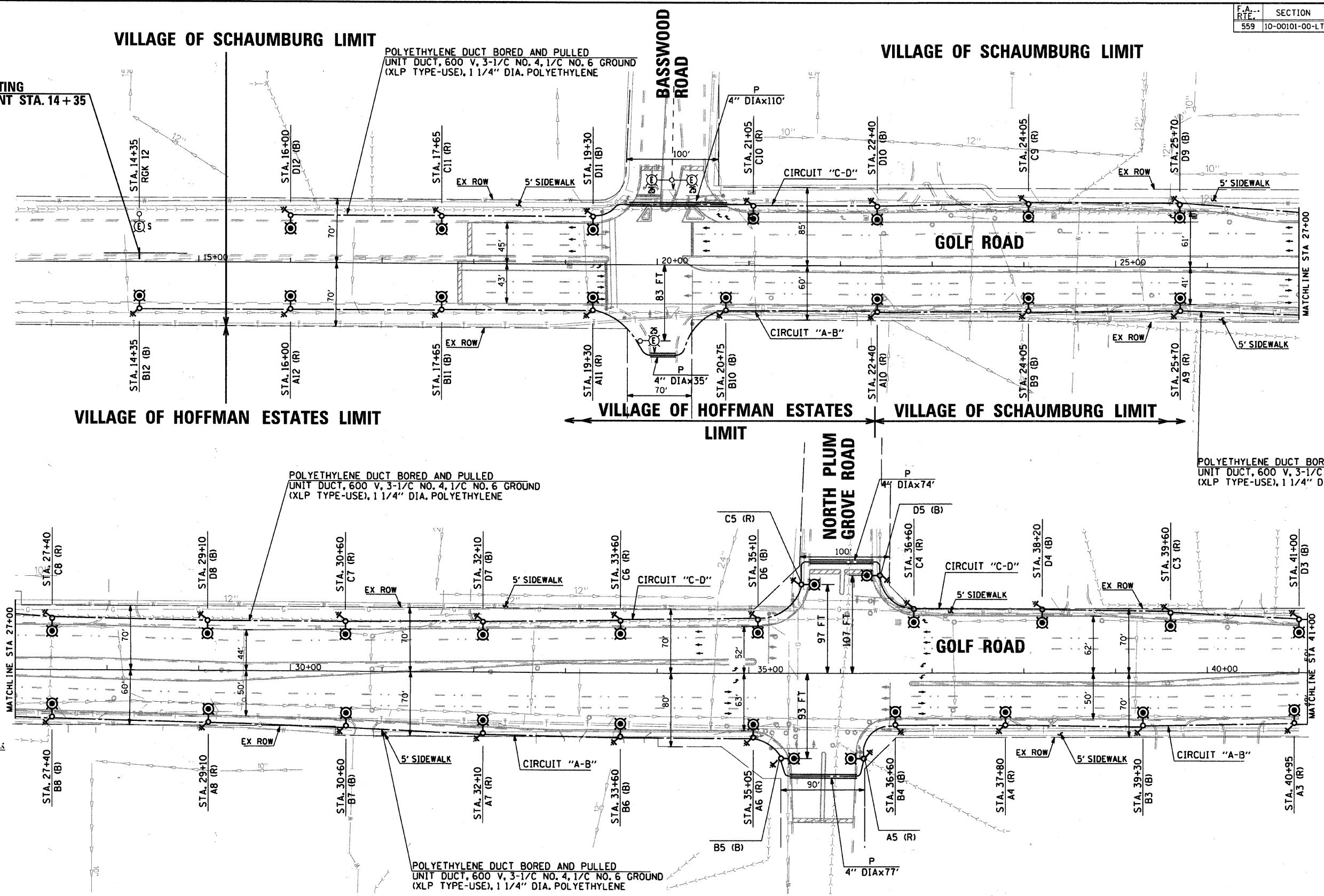
SCALE: 1" = 20'
DATE: 10-05-09
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CHECKED BY: JS

3/7/2011

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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
559	10-00101-00-LT	COOK	15	4

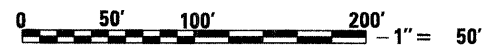
BEGIN LIGHTING IMPROVEMENT STA. 14 + 35



POLYETHYLENE DUCT BORED AND PULLED
UNIT DUCT, 600 V, 3-1/2" NO. 4, 1/2" NO. 6 GROUND
(XLP TYPE-USE), 1 1/4" DIA. POLYETHYLENE

POLYETHYLENE DUCT BORED AND PULLED
UNIT DUCT, 600 V, 3-1/2" NO. 4, 1/2" NO. 6 GROUND
(XLP TYPE-USE), 1 1/4" DIA. POLYETHYLENE

POLYETHYLENE DUCT BORED AND PULLED
UNIT DUCT, 600 V, 3-1/2" NO. 4, 1/2" NO. 6 GROUND
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Sunjoy Inc.
Area Lighting
Consulting Engineers
212 TIMBERCREST DRIVE
SCHAUMBURG, ILLINOIS
60193-1572

REVISIONS	
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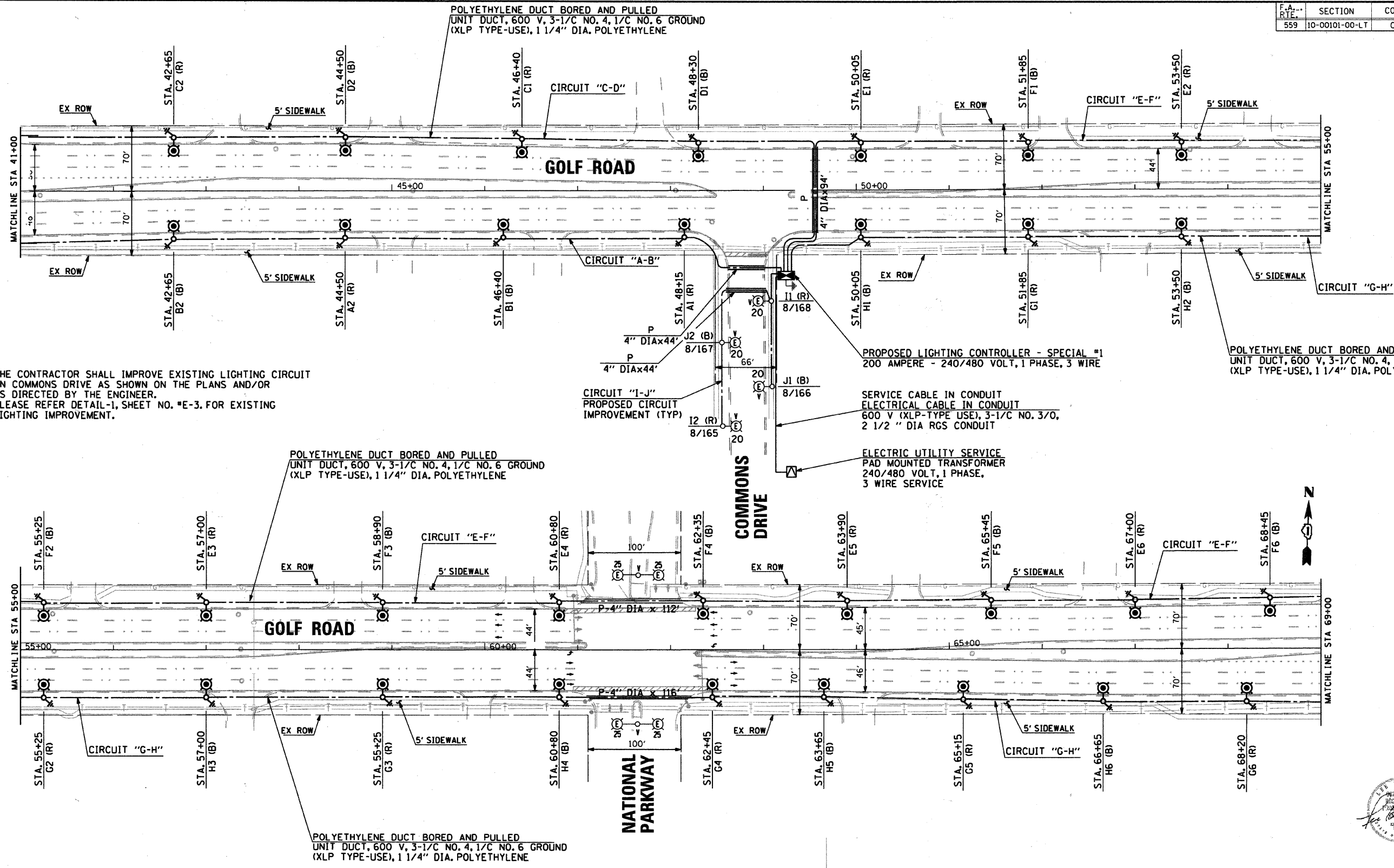
VILLAGE OF SCHAUMBURG, ILLINOIS
DEPARTMENT OF ENGINEERING AND PUBLIC WORKS
IL ROUTE 58 (GOLF ROAD) LIGHTING IMPROVEMENTS
BASSWOOD ROAD TO I-290 UNDERPASS
PROPOSED ROADWAY LIGHTING
STA. 14 + 35 TO STA. 41 + 00
SCALE: 1" = 50'
DATE: 10-05-09
DRAWN BY: HKO
CHECKED BY: JS

3/8/2011

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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
559	10-00101-00-LT	COOK	15	5



* THE CONTRACTOR SHALL IMPROVE EXISTING LIGHTING CIRCUIT ON COMMONS DRIVE AS SHOWN ON THE PLANS AND/OR AS DIRECTED BY THE ENGINEER. PLEASE REFER DETAIL-1, SHEET NO. *E-3. FOR EXISTING LIGHTING IMPROVEMENT.

POLYETHYLENE DUCT BORED AND PULLED
UNIT DUCT, 600 V, 3-1/C NO. 4, 1/C NO. 6 GROUND
(XLP TYPE-USE), 1 1/4" DIA. POLYETHYLENE

POLYETHYLENE DUCT BORED AND PULLED
UNIT DUCT, 600 V, 3-1/C NO. 4, 1/C NO. 6 GROUND
(XLP TYPE-USE), 1 1/4" DIA. POLYETHYLENE

PROPOSED LIGHTING CONTROLLER - SPECIAL #1
200 AMPERE - 240/480 VOLT, 1 PHASE, 3 WIRE

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

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

3/7/2011

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

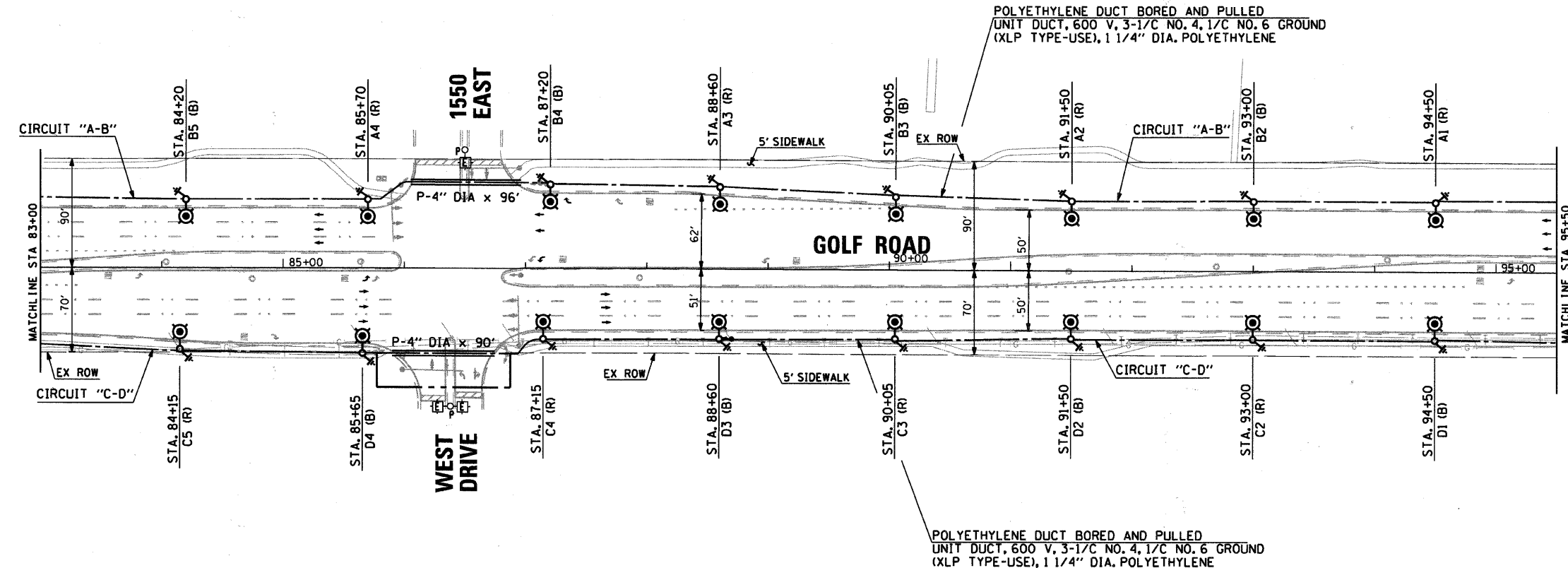
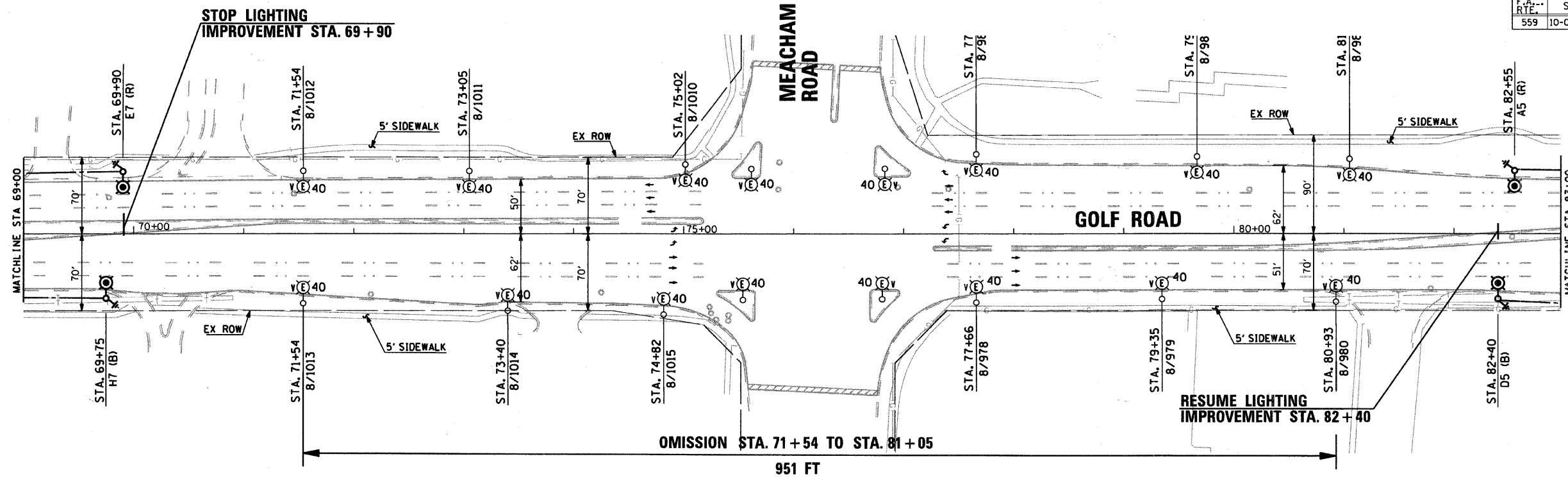
REVISIONS	
NAME	DATE
SUNJOY INC.	9/18/10

VILLAGE OF SCHAUMBURG, ILLINOIS
DEPARTMENT OF ENGINEERING AND PUBLIC WORKS
IL ROUTE 58 (GOLF ROAD) LIGHTING IMPROVEMENTS
BASSWOOD ROAD TO I-290 UNDERPASS
PROPOSED ROADWAY LIGHTING
STA. 41 + 00 TO STA. 69 + 00

SCALE: 1" = 50'
DATE: 10-05-09

DRAWN BY: HKO
CHECKED BY: JS





3/7/2011

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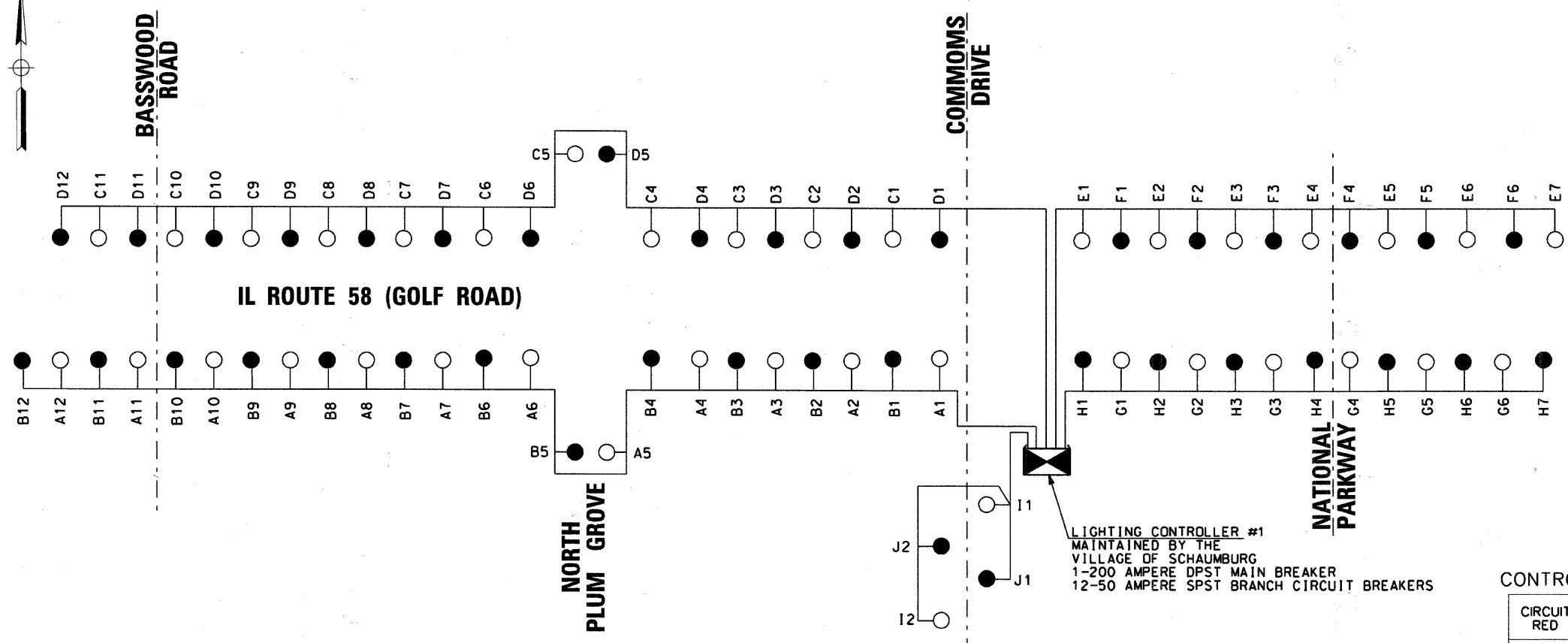
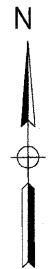
Sunjoy Inc.
Area Lighting
Consulting Engineers
212 TIMBERCREST DRIVE
SCHAUMBURG, ILLINOIS
60193-1572

REVISIONS	
NAME	DATE
SUNJOY INC.	9/18/10

VILLAGE OF SCHAUMBURG, ILLINOIS
DEPARTMENT OF ENGINEERING AND PUBLIC WORKS
IL ROUTE 58 (GOLF ROAD) LIGHTING IMPROVEMENTS
BASSWOOD ROAD TO I-290 UNDERPASS
PROPOSED ROADWAY LIGHTING
STA. 69+00 TO STA. 95+00

SCALE: 1" = 50'
DATE: 10-05-09
DRAWN BY: HKO
CHECKED BY: JS





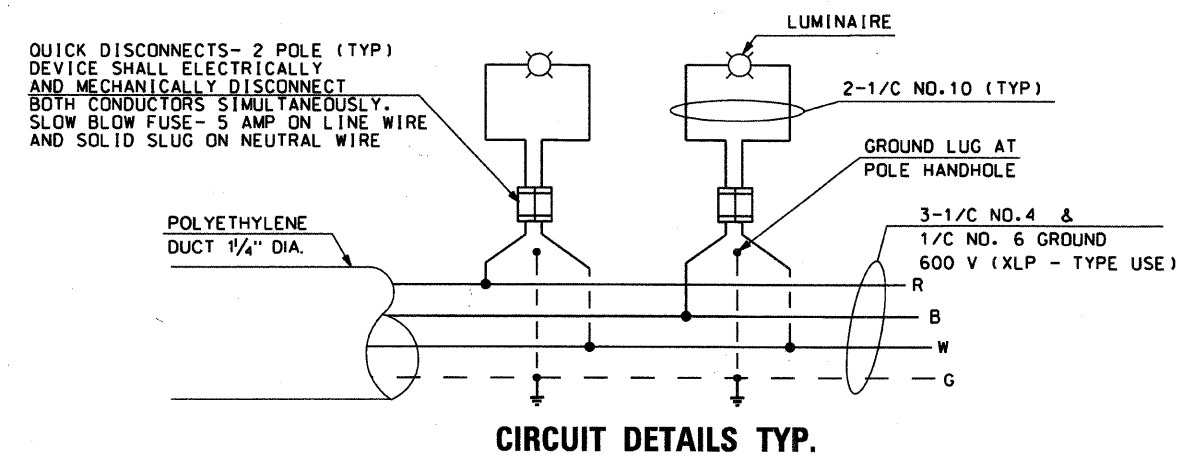
- LEGEND**
- LUMINAIRE ON RED CIRCUIT
 - LUMINAIRE ON BLACK CIRCUIT
 - ⊠ CONTROL CABINET
 - ⊙ LUMINAIRE
 - ⊞ SLOW BLOW FUSE- 5 AMP ON LINE WIRE AND SOLID SLUG ON NEUTRAL WIRE
 - PROPOSED CIRCUIT
3 1/2" *4 & 1/2" *6 GND
600 V (XLP-TYPE USE)
 - CONNECTION

CIRCUIT LOAD
CONTROLLER-200 AMP 240/480 VOLT, 1 PHASE

CIRCUIT RED	AMPERE @240 V	WATTS	CIRCUIT BLACK	AMPERE @240 V	WATTS
A	24	5,616	B	26	6,084
C	22	5,148	D	24	5,616
E	14	3,276	F	12	2,808
G	12	2,808	H	14	3,276
I	2.6	600	J	2.6	600
K	SPARE		L	SPARE	
TOTAL	74.6	17,448	TOTAL	78.6	18,384

240 VOLT LINE
400 WATT HPS LAMP: 2.00 AMPERE / 468 WATT
250 WATT HPS LAMP: 2.3 AMPERE / 300 WATT

ONE LINE CIRCUIT DIAGRAM



CIRCUIT DETAILS TYP.

3/7/2011

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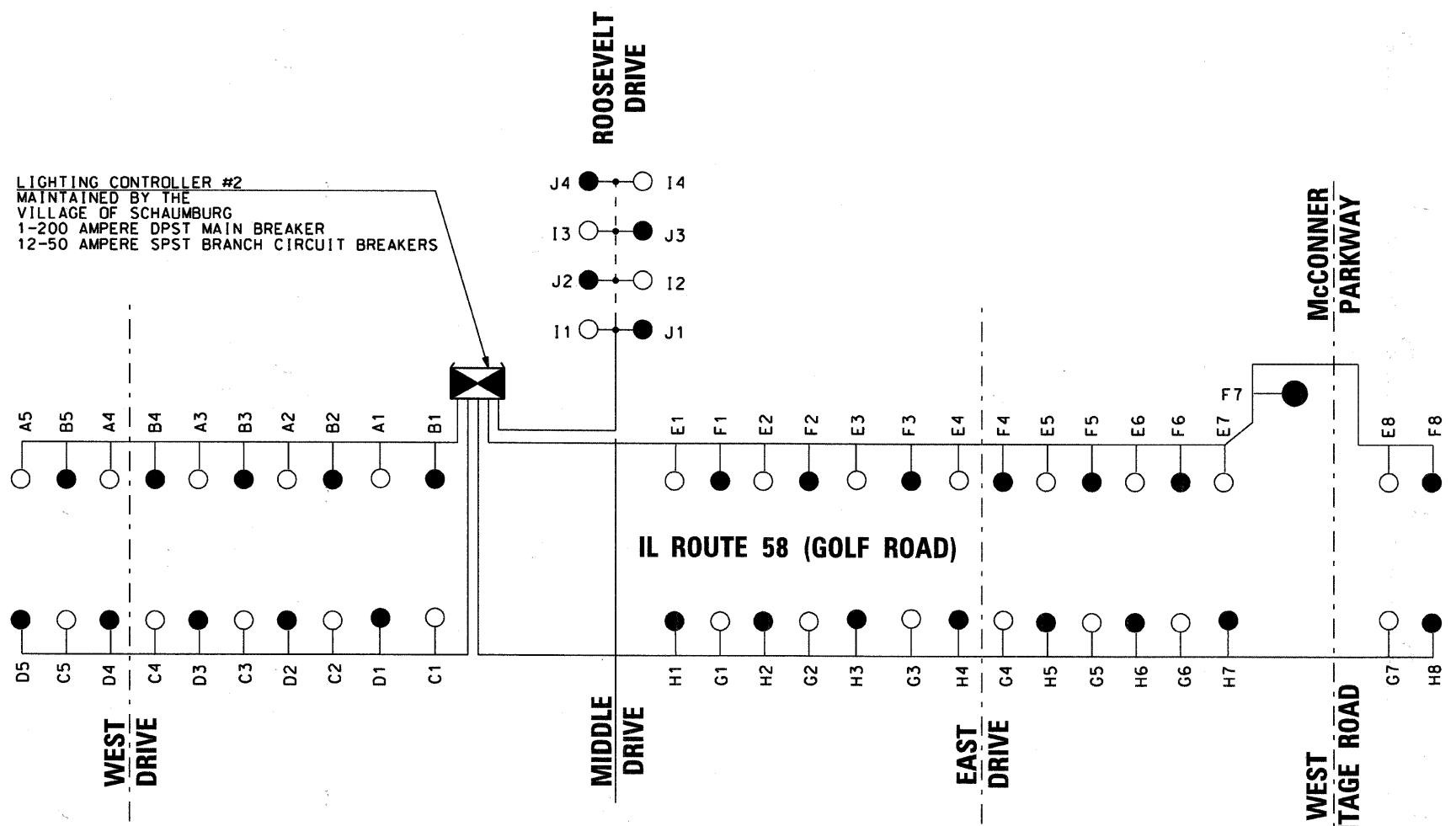
REVISIONS	
NAME	DATE

VILLAGE OF SCHAUMBURG, ILLINOIS
DEPARTMENT OF ENGINEERING AND PUBLIC WORKS
IL ROUTE 58 (GOLF ROAD) LIGHTING IMPROVEMENTS
BASSWOOD ROAD TO I-290 UNDERPASS
ONE LINE CIRCUIT DIAGRAM LIGHTING CONTROLLER AT COMMONS DRIVE

SCALE: NONE
DATE: 10-05-09
DRAWN BY: HKQ
CHECKED BY: JS



3/7/2011



ONE LINE CIRCUIT DIAGRAM

LEGEND

- LUMINAIRE ON RED CIRCUIT
- LUMINAIRE ON BLACK CIRCUIT
- CONTROL CABINET
- LUMINAIRE
- SLOW BLOW FUSE- 5 AMP ON LINE WIRE AND SOLID SLUG ON NEUTRAL WIRE
- PROPOSED CIRCUIT**
3 1/2" *4 & 1/2" *6 GND
600 V (XLP -TYPE USE)
- CONNECTION

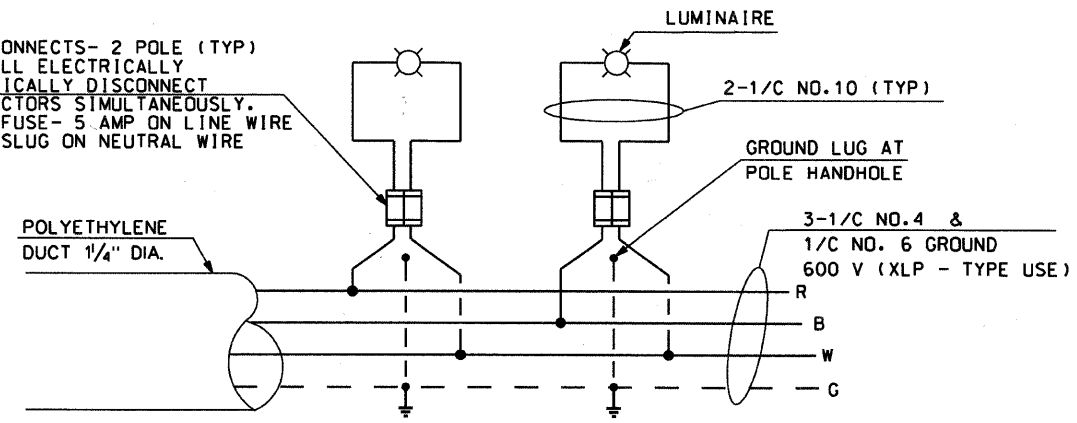
CIRCUIT LOAD
CONTROLLER-200 AMP 240/480 VOLT, 1 PHASE

CIRCUIT RED	AMPERE @240 V	WATTS	CIRCUIT BLACK	AMPERE @240 V	WATTS
A	10	2,340	B	10	2,340
C	10	2,340	D	10	2,340
E	16	3,744	F	16	3,744
G	14	3,276	H	16	3,744
I	2.6	600	J	2.6	600
K	SPARE		L	SPARE	
TOTAL	52.6	12,300		54.6	12,768

240 VOLT LINE
400 WATT HPS LAMP: 2.00 AMPERE / 468 WATT
250 WATT HPS LAMP: 2.3 AMPERE / 300 WATT



QUICK DISCONNECTS- 2 POLE (TYP) DEVICE SHALL ELECTRICALLY AND MECHANICALLY DISCONNECT BOTH CONDUCTORS SIMULTANEOUSLY. SLOW BLOW FUSE- 5 AMP ON LINE WIRE AND SOLID SLUG ON NEUTRAL WIRE



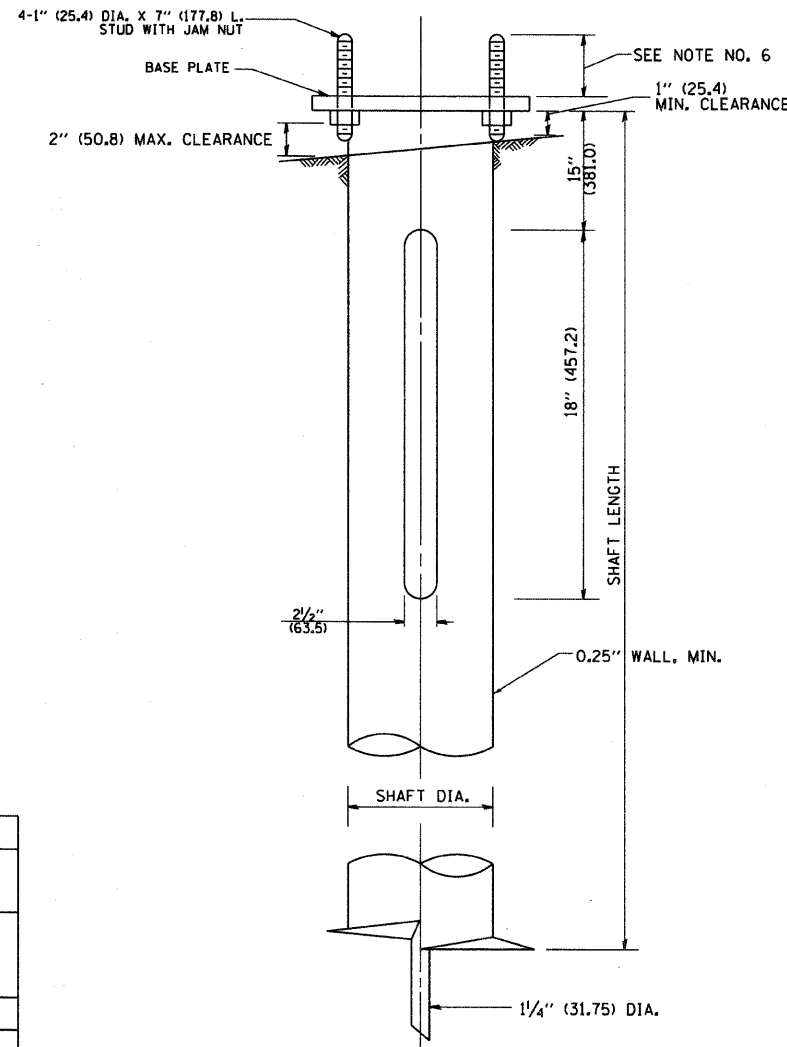
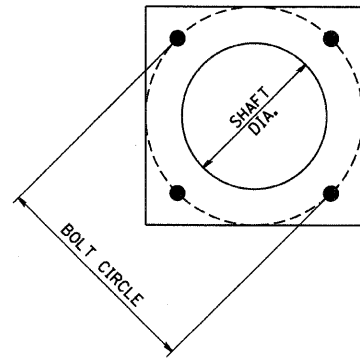
CIRCUIT DETAILS TYP.

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

REVISIONS	
NAME	DATE

VILLAGE OF SCHAUMBURG, ILLINOIS
DEPARTMENT OF ENGINEERING AND PUBLIC WORKS
IL ROUTE 58 (GOLF ROAD) LIGHTING IMPROVEMENTS
BASSWOOD ROAD TO I-290 UNDERPASS
ONE LINE CIRCUIT DIAGRAM LIGHTING CONTROLLER AT COMMONS DRIVE

SCALE: NONE
DATE: 10-05-09
DRAWN BY: HKQ
CHECKED BY: JS



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 1/4" (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 FOUNDATION 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 ($\pm 1^\circ$) 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 ($\pm 2^\circ$).
12. THE BASEPLATE SHALL BE STAMPED WITH THE MANUFACTURERS NAME AND DATE OF MANUFACTURE.

HELIX FOUNDATION SIZE

POLE MOUNTING HEIGHT	BOLT CIRCLE	SHAFT DIAMETER	SHAFT LENGTH	BASEPLATE
30 FT.	11 1/2"	8 5/8"	6 FT.	12"x12"x1"
31 FT.-35 FT.	11 1/2"	8 5/8"	6 FT.	12"x12"x1"
36 FT.-40FT.	15"	8 5/8"	6 FT.	15"x15"x1 1/4"
41 FT.-45 FT.	15"	8 5/8"	6 FT.	15"x15"x1 1/4"
46 FT.-50 FT.	15"	10"	8 FT.	15"x15"x1 1/4"

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)

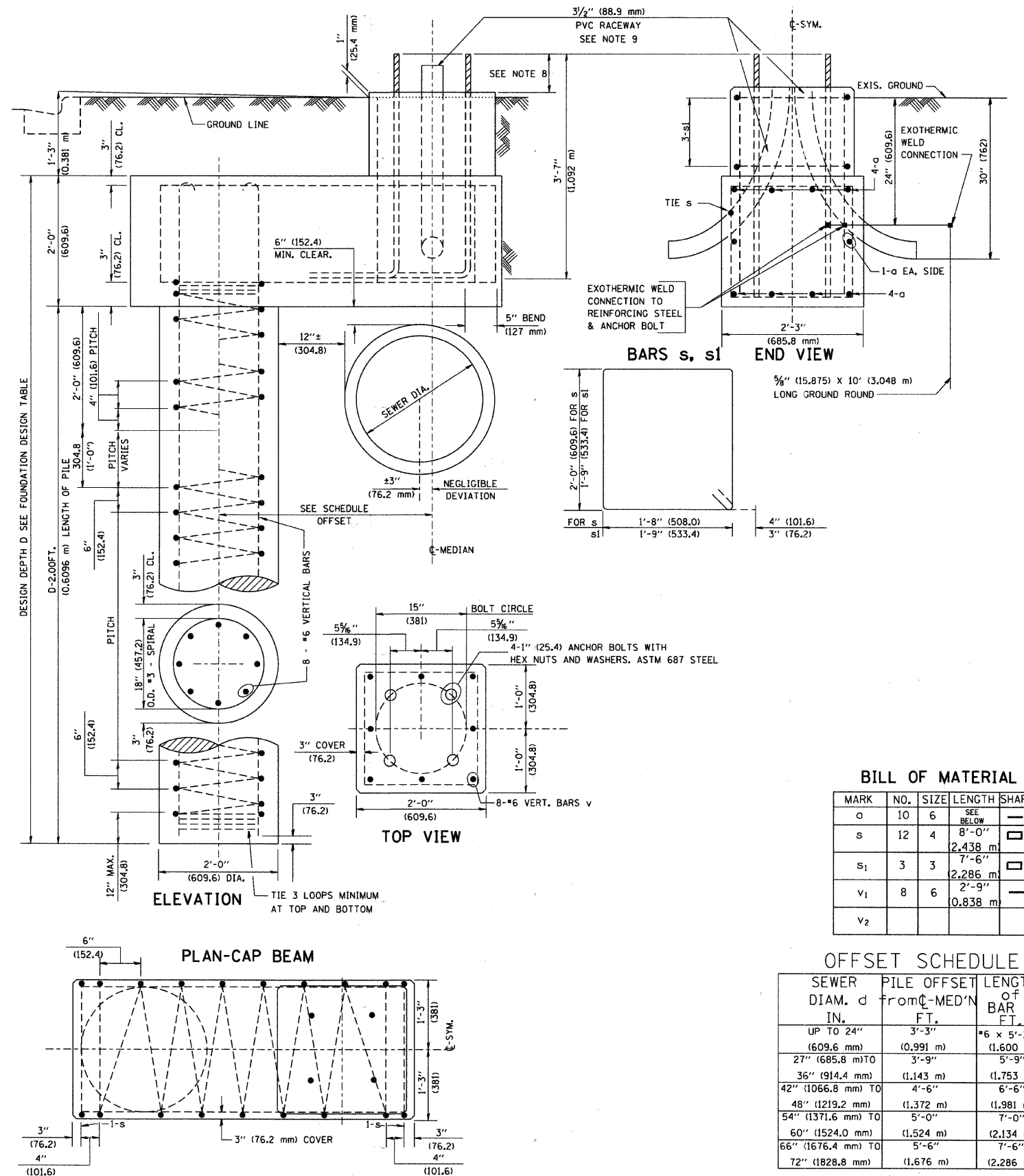
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	PLOT SCALE = 50,000' / IN.	DRAWN - DLB	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	BE-305 CONTRACT NO. 63563				
	PLOT DATE = 1/4/2008	CHECKED -	REVISED -		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT								
		DATE - 02-27-07	REVISED -										

FOUNDATION DESIGN TABLE

TYPE OF SOIL	DESIGN DEPTH OF FOUNDATION		REINFORCEMENT IN FOUNDATION			
	SINGLE ARM D	TWIN ARM D	SINGLE ARM		TWIN ARM	
			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

- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ENGINEER SHALL DETERMINE THE CLASS OF SOIL DURING EXCAVATION AND SELECT THE DESIGN DEPTH OF FOUNDATION FROM THE DESIGN TABLE.
- EXCAVATION OF THE POLE FOUNDATION SHALL BE MADE WITH AN AUGER, 24" (609.6 mm) OR 30" (762.0 mm) IN DIAMETER.
- 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.
- THE ANCHOR BOLTS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED IN THE FORM.
- 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.
- 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 2 3/4" (69.9 mm) ABOVE TOP OF THE FOUNDATION. THE CONTRACTOR SHALL CONFIRM ANCHOR BOLT EXTENTION WITH ENGINEER.
- RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.
- THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE LIGHT IS ERECTED.



BILL OF MATERIAL

MARK	NO.	SIZE	LENGTH	SHAPE
o	10	6	SEE BELOW	—
s	12	4	2.438 m	□
s ₁	3	3	2.286 m	□
v ₁	8	6	0.838 m	—
v ₂				

OFFSET SCHEDULE

SEWER DIAM. d IN.	PILE OFFSET FROM C-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 mm) TO	3'-9"	5'-9"
36" (914.4 mm) TO	(1.143 m)	(1.753 m)
42" (1066.8 mm) TO	4'-6"	6'-6"
48" (1219.2 mm) TO	(1.372 m)	(1.981 m)
54" (1371.6 mm) TO	5'-0"	7'-0"
60" (1524.0 mm) TO	(1.524 m)	(2.134 m)
66" (1676.4 mm) TO	5'-6"	7'-6"
72" (1828.8 mm)	(1.676 m)	(2.286 m)

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		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

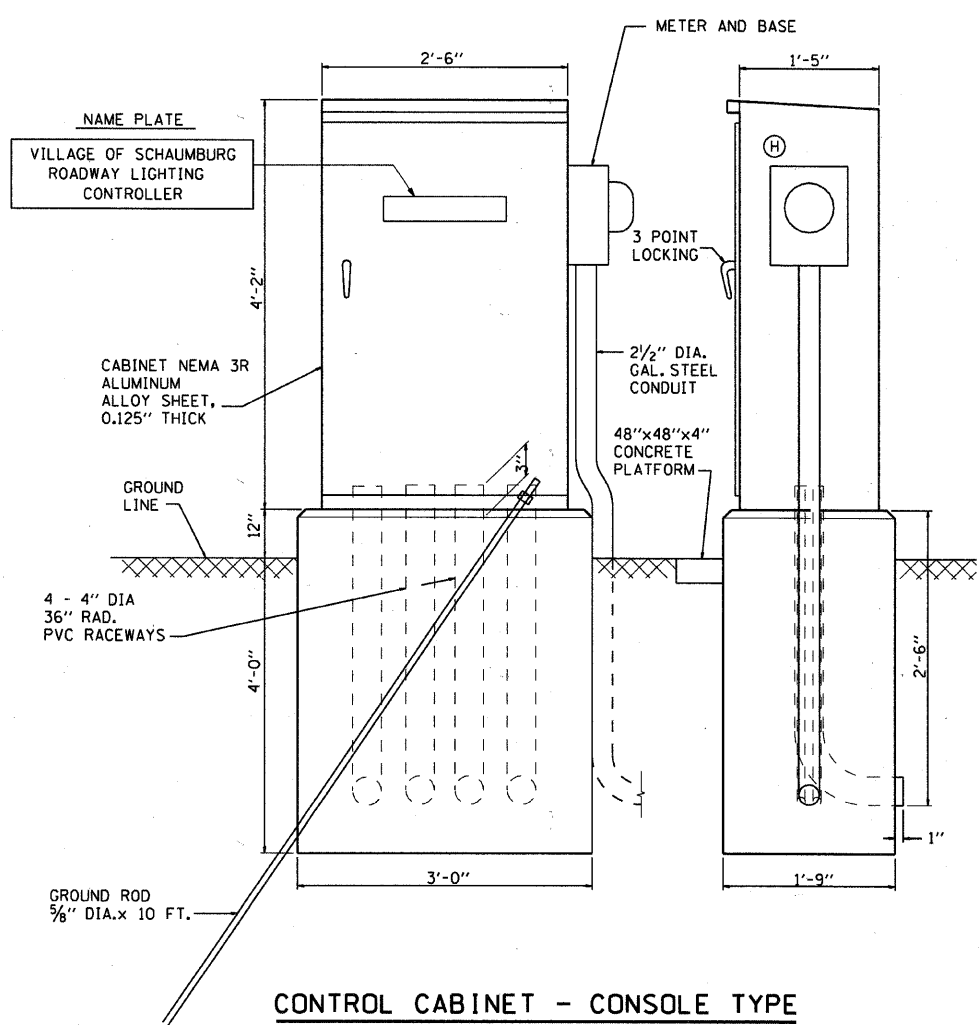
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHT POLE FOUNDATION OFFSET
40" (12.192 m) TO 47 1/2" (14.478 m) M.H.
15" (381 mm) BOLT CIRCLE

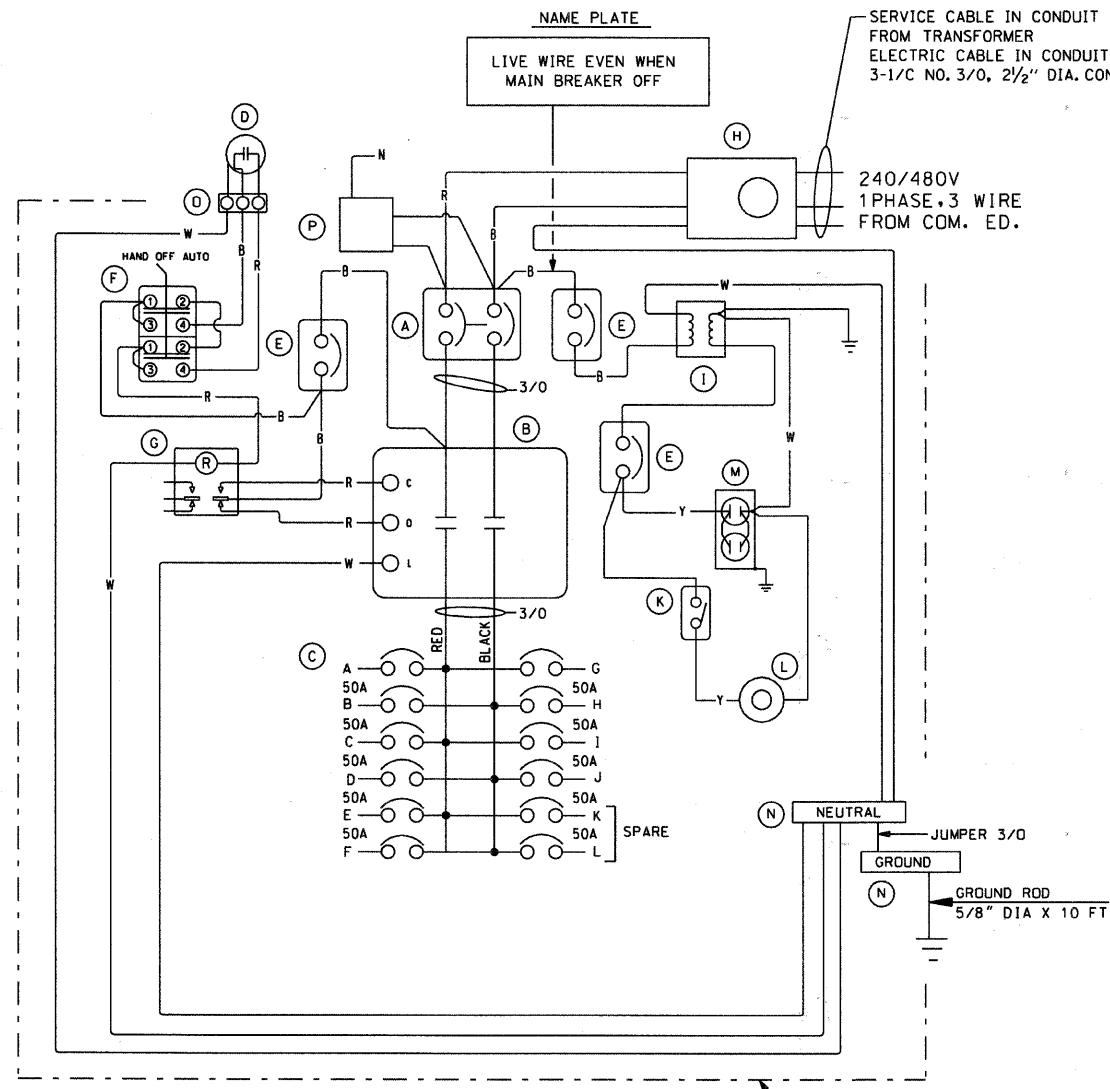
SCALE: SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE. 559	SECTION 1-00101-00-LT	COUNTY COOK	TOTAL SHEETS 15	SHEET NO. 12
BE-310		CONTRACT NO. 63563		
ILLINOIS FED. AID PROJECT				

6/16/2008
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CONTROL CABINET - CONSOLE TYPE



PANEL WIRING
200 AMPERE- 240/480 VOLT, 1 PHASE-3 WIRE
PHOTOCELL CONTROL

DEVICE SCHEDULE		
ITEM	QUANT.	DESCRIPTION
(A)	1	CIRCUIT BREAKER, MOLDED CASE, THERMAL MAGNETIC, 2-POLE, 600V. A.C., 225A. FRAME, 200A. NON-INTERCHANGABLE TRIP, BOLT-ON TYPE; INTERRUPTING CAPACITY OF NOT LESS THAN 22,000 RMS SYMMETRICAL AMPERES AT 480V.
(B)	1	LIGHTING CONTACTOR (REMOTE CONTROL SWITCH) MECHANICALLY HELD, ASCO OR EQUAL 920, MOUNTED ON SUB PANEL 200A., 2P., 600V. WITH 240V. COIL.
(C)	1	PANELBOARD (INTERIOR ONLY) 480/240V. SINGLE PHASE WITH 200A. COPPER MAINS AND TWELVE IP-50A BOLT-ON BRANCH BREAKERS EACH RATED 277V. WITH INTERRUPTING CAPACITY OF NOT LESS THAN 14,000 RMS SYMMETRICAL AMPERES AT 277V.
(D)	1	PHOTOCELL MOUNTED IN CABINET OVERHANG-240 VOLT, CALIBRATED FOR A "TURN-ON" SETTING OF .05 TO 2.1 FC.
(E)	3	CIRCUIT BREAKER, MOLDED CASE, THERMAL MAGNETIC, 1-POLE, 277V., BOLT-ON TYPE, 15 AMP WITH AN INTERRUPTING RATING OF NOT LESS THAN 14,000 RMS SYMMETRICAL AMPERES AT 277V.
(F)	1	MANUAL-OFF-AUTO 3-POSITION SWITCH
(G)	1	CONTROL RELAY 240 VOLT COIL
(H)	1	SOCKET FOR ELECTRIC UTILITY CO. METER.
(I)	1	STEP DOWN TRANSFORMER 240x480/120x240V, 1.5KVA.
(J)		
(K)	1	MICRO SWITCH, 20A (MOUNT WITH ACTUATOR TO SWITCH WHEN DOOR OPENED)
(L)	1	60 WATT, 120V LIGHT FIXTURE, VAPORTIGHT, WITH GLOBE AND GUARD AND MOUNTING BOX.
(M)	1	GFI RECEPTACLE, 120V., 15A., PREMIUM SPEC. GRADE, NEMA REFERENCE 5-15R IN WEATHER-PROOF BOX WITH FLAP-TYPE COVER.
(N)	2	COPPER GROUND AND NEUTRAL BUS 1/4"x1"x12" MIN. SIZE WITH LUGS PLUS 4 SPARE LUGS.
(O)	1	SURGE ARRESTOR, 480/240 VOLT, 3 WIRE

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 VEGETATION AND TOPSOIL, LEVEL THE AREA IN FRONT OF THE CONTROL CABINET DOOR AND PLACE LENGTH WISE, PARALLEL TO CONTROL CABINET, A PRECAST PAD, 48"x48"x4" 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.

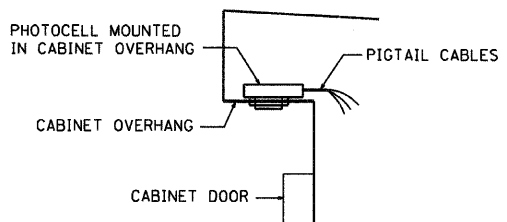
ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.

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".

ALL POWER WIRING SHALL BE RHH RHW
ALL CONTROL WIRING SHALL BE #12 MTW

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



PHOTOCELL IN CABINET OVERHANG DETAIL
NOT TO SCALE

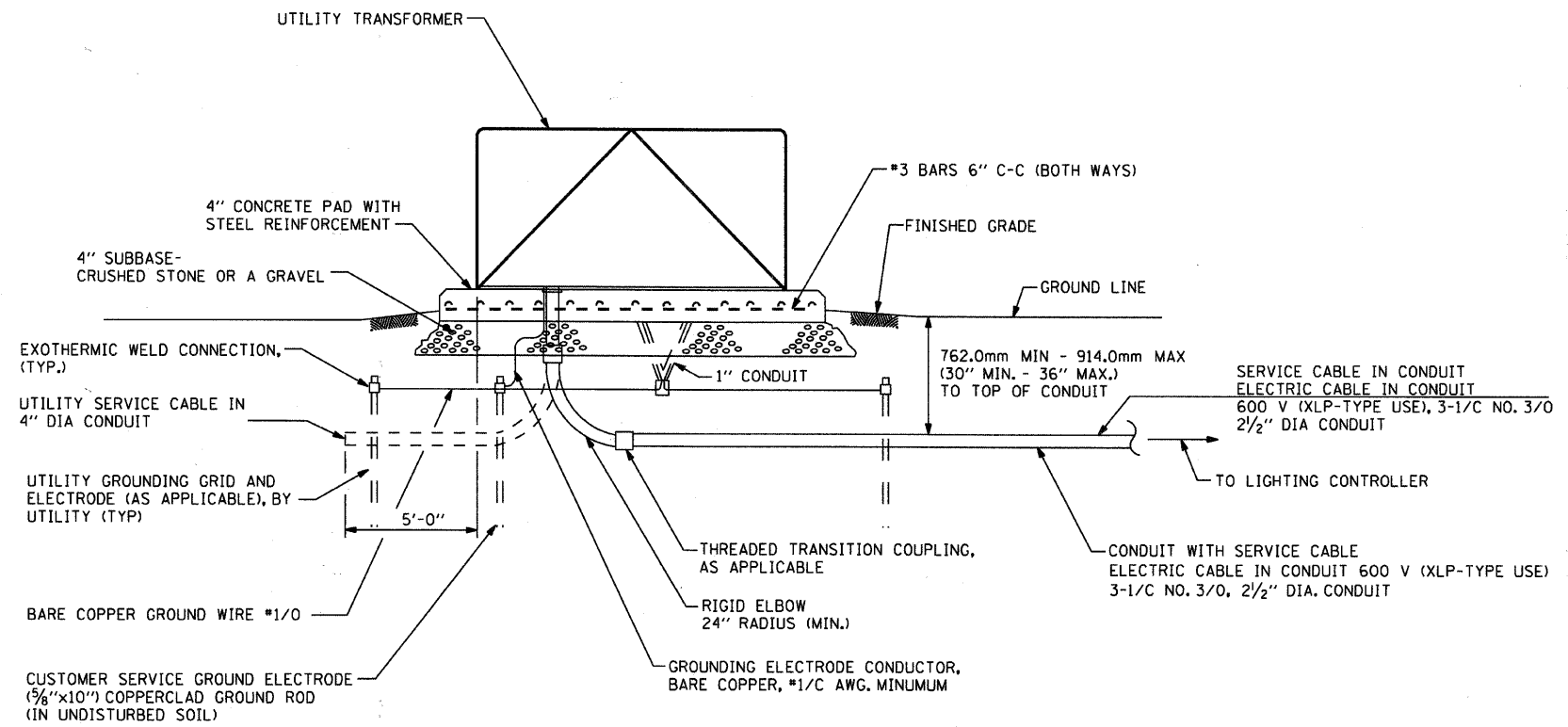
Sunjoy Inc.
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60193-1572

REVISIONS	
NAME	DATE

VILLAGE OF SCHAUMBURG, ILLINOIS
DEPARTMENT OF ENGINEERING AND PUBLIC WORKS
IL ROUTE 58 (GOLF ROAD) LIGHTING IMPROVEMENTS
BASSWOOD ROAD TO I-290 UNDERPASS
LIGHTING CONTROLLER, SPECIAL
200 AMP, 240/480 VOLT, 1 PHASE, 3 WIRE
WITH PHOTOCELL CONTROL
SCALE-NONE
DATE: 10-05-09
DRAWN BY: HKO
CHECKED BY: JS

NOTES:

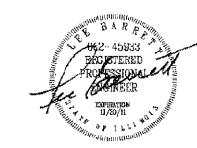
1. THE PAY ITEM - "ELECTRIC UTILITY SERVICE CONNECTION" SHALL CONSIST OF PAYMENT FOR WORK PERFORMED BY THE ELECTRIC UTILITY COMPANY IN PROVIDING OR MODIFYING ELECTRIC SERVICE AS INDICATED.
2. THE PAY ITEM- "ELECTRIC SERVICE INSTALLATION" SHALL CONSIST OF ALL MATERIAL AND LABOR REQUIRED TO EXTEND, CONNECT OR MODIFY THE ELECTRIC SERVICE AS INDICATED OR SPECIFIED, WHICH IS OVER AND ABOVE THE WORK PERFORMED BY UTILITY COMPANY. THE SERVICE METER SOCKET, AS APPLICABLE, MOUNTED ELSEWHERE, SHALL BE INCLUDED IN THIS PAY ITEM.
3. SERVICE VOLTAGE SHALL BE AS INDICATED ELSEWHERE IN THE PROJECT DRAWINGS.
4. ELECTRIC SERVICE SPAN BETWEEN THE CONTROLLER AND UTILITY TRANSFORMER SHALL NOT EXCEED 250 FEET.
5. CONDUIT FOR SERVICE CABLE:
 - 5.1 CONDUIT DIAMETER AND CONDUIT FITTINGS SHALL BE SIZED WITH WIRE GAUGE AND MAXIMUM NUMBER OF CONDUCTORS PERMITTED BY NEC.
 - 5.2 CONDUIT FOR SERVICE CABLE SHALL BE AS INDICATED AND SHALL BE MEASURED SEPARATELY FOR PAYMENT.
 - 5.3 PVC COATED GALVANIZED STEEL CONDUIT AND CONDUIT FITTINGS OF THE SAME TYPE SHALL BE CAREFULLY INSTALLED WITH MANUFACTURER'S RECOMMENDED TOOLS AND PROCEDURES. DAMAGE TO CONDUIT 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.
 - 5.4 THE COUPLING (CONDUIT FITTING) SHALL BE A METALIC TO NON-METALIC ADAPTER BETWEEN STEEL CONDUIT AND PVC CONDUIT.
 - 5.5 CONCRETE COVER OVER THE ENCASED RACEWAY RUN SHALL BE A MINIMUM 3 INCH ALL AROUND.
6. PLANS AND DETAILS INDICATE THE GENERAL NATURE AND REQUIREMENTS OF THE UTILITY SERVICE WITHOUT EVERY ACCESSORY AND ATTACHMENT. THE CONTRACTOR IS OBLIGED TO COMPLY WITH THE REQUIREMENTS OF THE UTILITY COMPANY. THE CONTRACTOR SHALL COORDINATE IN FURNISHING ALL MATERIAL AND WORK NOT PROVIDED BY THE UTILITY FOR COMPLETING ELECTRIC SERVICE INSTALLATION.
7. THE CONTRACTOR SHALL OBTAIN INSPECTION AND APPROVAL BY THE ENGINEER AND UTILITY COMPANY BEFORE BACKFILL AND/OR ENCLOSING ELECTRIC SERVICE INSTALLATION.



**PROPOSED SERVICE INSTALLATION WITH TRANSFORMER FOUNDATION DETAIL
TRANSFORMER - PAD MOUNTED**

3/7/2011

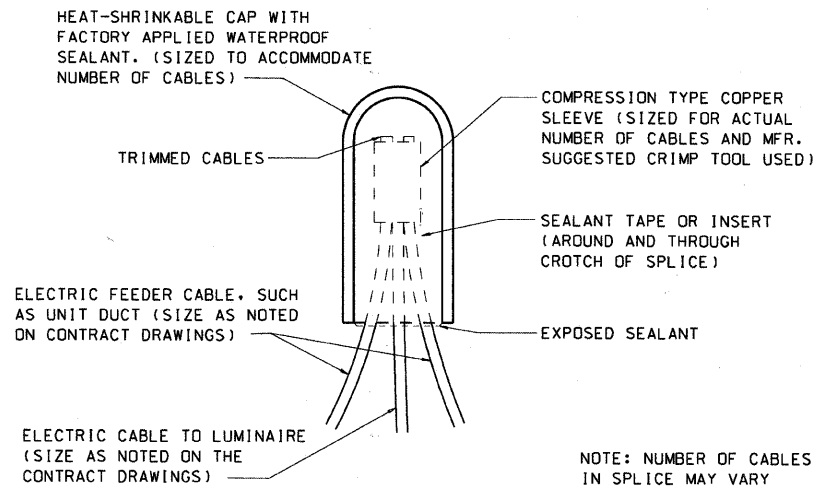
C:\SUNJOY\Projects\Village of Schaumburg\Golf Road\bf_el_02.dgn



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

REVISIONS	
NAME	DATE

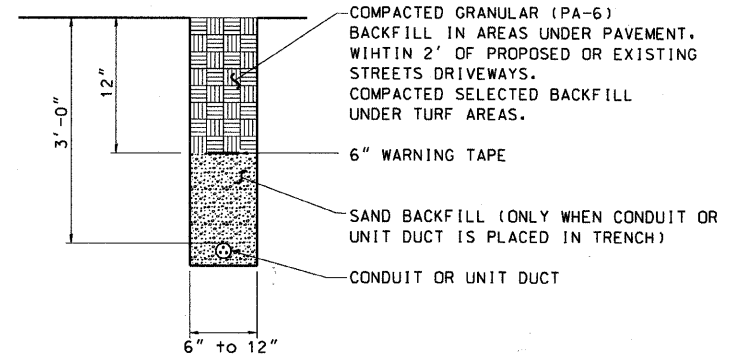
VILLAGE OF SCHAUMBURG, ILLINOIS
DEPARTMENT OF ENGINEERING AND PUBLIC WORKS
IL ROUTE 58 (GOLF ROAD) LIGHTING IMPROVEMENTS
BASSWOOD ROAD TO I-290 UNDERPASS
ELECTRIC SERVICE INSTALLATION
TRANSFORMER MOUNTED ON PAD
SCALE: NONE
DATE: 10-05-09
DRAWN BY: HKQ
CHECKED BY: JS



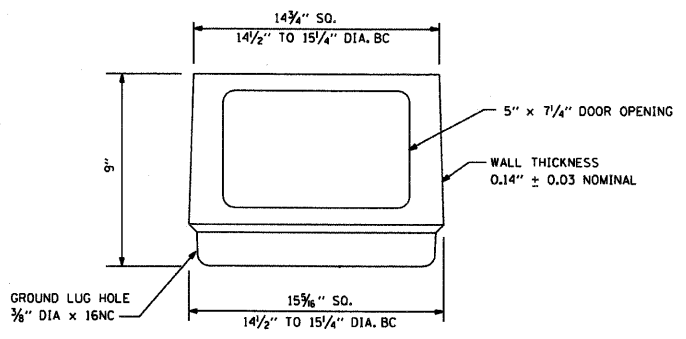
SPLICING ELECTRIC CABLE

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

NOTE: NUMBER OF CABLES IN SPLICE MAY VARY

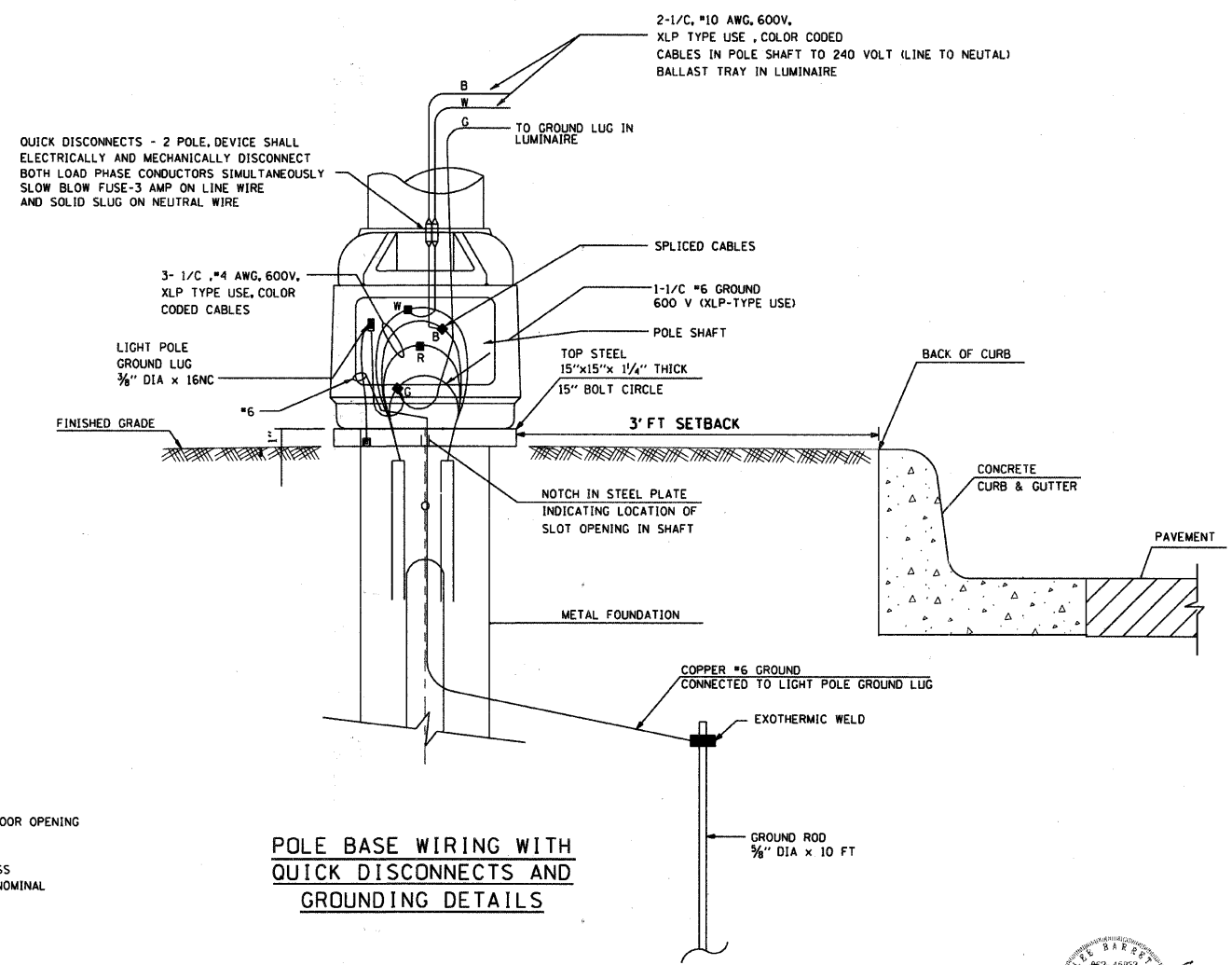


TRENCH AND BACKFILL



BREAKWAY TRANSFORMER DETAILS

NOTE:
 MATERIAL SHALL CONFORM TO ASTM DESIGNATION: B108 ALLOY 356-T6
 BASE CONFORMS TO BREAKAWAY CRITERIA OF AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS (1985)



POLE BASE WIRING WITH QUICK DISCONNECTS AND GROUNDING DETAILS

3/7/2011

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 Area Lighting
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 212 TIMBERCREST DRIVE
 SCHAMBURG, ILLINOIS
 60193-1572

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 DEPARTMENT OF ENGINEERING AND PUBLIC WORKS
 IL ROUTE 58 (GOLF ROAD) LIGHTING IMPROVEMENTS
BASSWOOD ROAD TO I-290 UNDERPASS
ELECTRICAL DETAILS

SCALE: NONE
 DATE: 10-05-09

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