

# PLANS FOR PROPOSED FEDERAL-AID HIGHWAY

## FAP 0344: IL ROUTE 83 AND FAU 1518: 63RD ST. INTERSECTION LIGHTING IMPROVEMENTS SECTION 16-00023-00-LT PROJECT M-4003 (743) VILLAGE OF WILLOWBROOK DUPAGE COUNTY

C-91-286-16

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0344	16-00023-00-LT	DUPAGE	17	1
		ILLINOIS	CONTRACT NO. 61D67	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

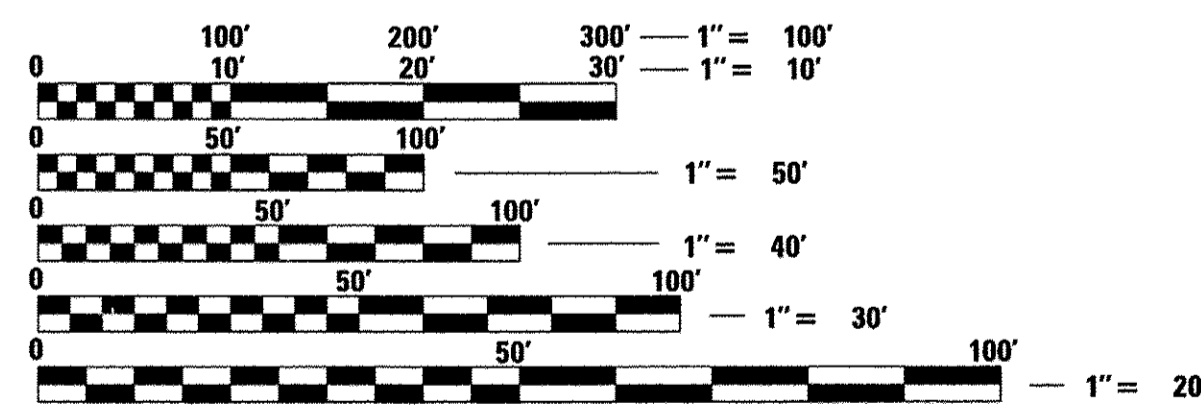
FOR LIST OF HIGHWAY STANDARDS, SEE SHEET NO. 2

**TRAFFIC DATA:**

ADT = 44,200 (2015) IL RT 83  
 ADT = 26,100 (2012) 63RD STREET  
 FUNCTIONAL CLASS = OTHER PRINCIPAL ARTERIAL (IL RT 83)  
 FUNCTIONAL CLASS = MINOR ARTERIAL (63RD STREET)  
 POSTED SPEED LIMIT = 45 MPH (IL RT 83)  
 POSTED SPEED LIMIT = 40 MPH (63RD STREET)



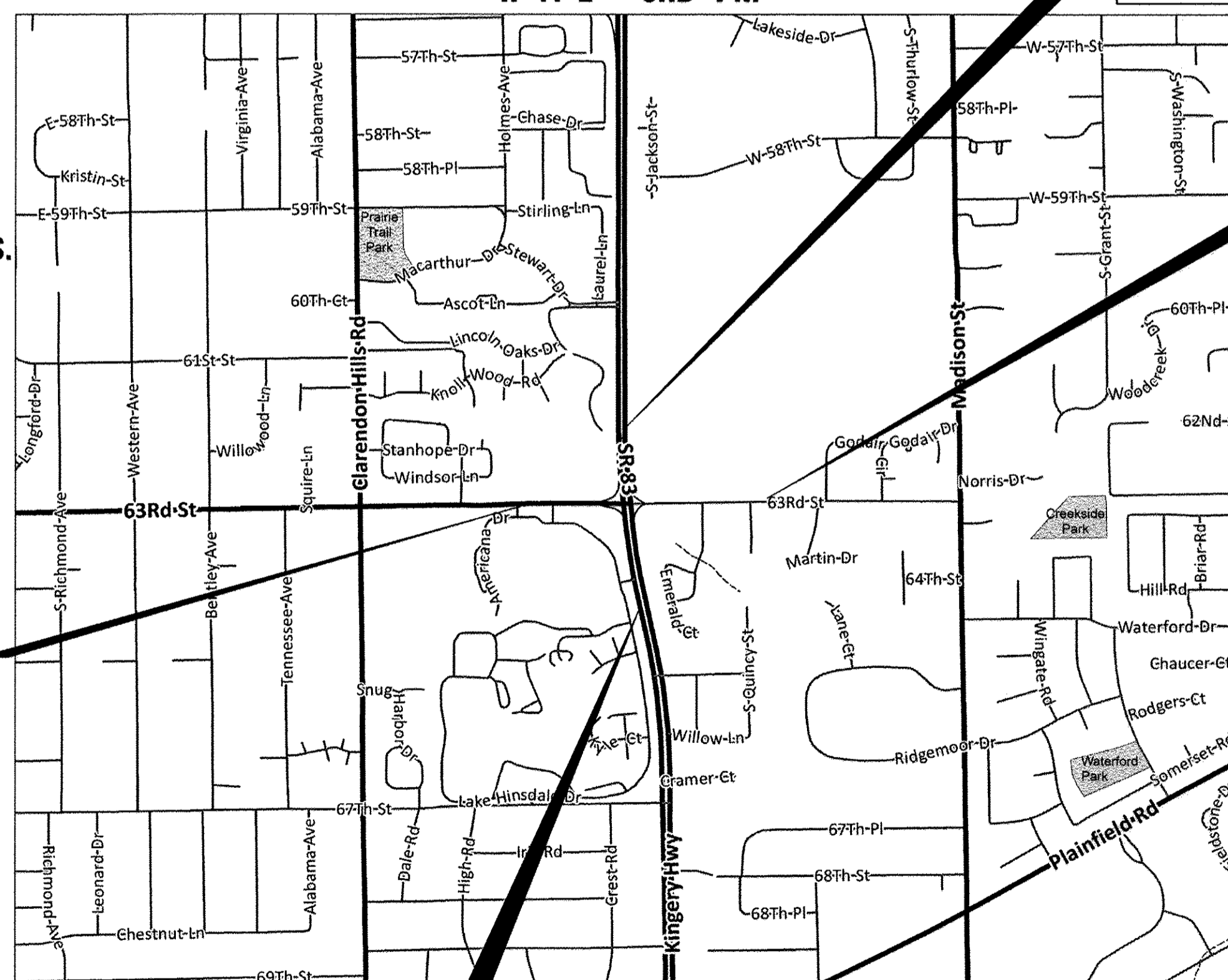
PROGRAM AND OFFICE ENGINEER: CHARLES F. RIDDLE, PE, (847) 705-4406 SCHAUMBURG, IL



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

N.T.S.



**PROJECT IL RT 83  
 END IMPROVEMENT  
 STA 216 + 00**

**PROJECT 63RD ST  
 END IMPROVEMENT  
 STA 122 + 00**

**PROJECT 63RD ST  
 BEGIN IMPROVEMENT  
 STA 101 + 00**

**PROJECT IL RT 83  
 BEGIN IMPROVEMENT  
 STA 201 + 50**

GROSS LENGTH = 3,500 FT. = 0.663 MILE  
 NET LENGTH = 3,500 FT. = 0663 MILE



Anthony J. DeRicco, P.E.  
 ENGINEER  
 ILLINOIS REGISTRATION NO. 062-057484  
 EXPIRATION DATE: 11/30/2017

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

APPROVED: 12/21/2016  
 Frank A. Tiller  
 VILLAGE OF WILLOWBROOK

PASSED: JANUARY 3, 2016  
 C. Holt  
 DISTRICT 1 ENGINEER OF LOCAL ROADS & STREETS

RELEASED FOR BID BASED ON LIMITED REVIEW: January 5, 2017  
 [Signature]  
 REGIONAL ENGINEER

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 OF THE STATE OF ILLINOIS**

**CB** CHRISTOPHER B. BURKE ENGINEERING, LTD.  
 9575 W. Higgins Road, Suite 600  
 Rosemont, Illinois 60018  
 (847) 823-0500  
 PROFESSIONAL DESIGN FIRM NO. 184-001175  
 EXPIRATION DATE: 04/30/17

**INDEX OF SHEETS**

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	INDEX OF SHEETS & GENERAL NOTES
3 - 4	SUMMARY OF QUANTITIES
5 - 10	PROPOSED LIGHTING PLAN
11 - 13	ELECTRICAL DETAILS
14	COMED CORRESPONDENCE
15 - 17	IDOT DISTRICT 1 STANDARDS

**HIGHWAY STANDARDS**

STD NO.	DESCRIPTION
000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
442101-07	CLASS B PATCHES
701426-09	LANE CLOSURE, MULTILANE, INTERMITTANT OR MOVING OPERATION, FOR SPEEDS ≥ 45 MPH
701427-05	LANE CLOSURE, MULTILANE, INTERMITTANT OR MOVING OPERATION, FOR SPEEDS ≤ 40 MPH
701601-09	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERABLE MEDIAN
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-06	TRAFFIC CONTROL DEVICES
838001	BREAKAWAY DEVICES

**ABBREVIATIONS**

A	AMPS
CKT	CIRCUIT
CNC	COILABLE NON-METALLIC CONDUIT
DIA	DIAMETER
FT	FOOT
FOC	FACE OF CURB
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GND	GROUND
HDPE	HIGH DENSITY POLYETHYLENE
HH	HAND HOLE
HPS	HIGH PRESSURE SODIUM
PVC	POLYVINYL CHLORIDE
RGS	RIGID GALVANIZED STEEL CONDUIT
ROW	RIGHT OF WAY
SS	STAINLESS STEEL
STA	STATION
V	VOLTS
W	WATTS
WR	WEATHER RESISTANT

**LIGHTING GENERAL NOTES**

- BEFORE INSTALLING LIGHT STANDARDS NEAR OVERHEAD AND UNDERGROUND ELECTRIC UTILITIES SHALL CALL COM ED FOR LOCATION APPROVAL AND MINIMUM CLEARANCE REQUIREMENTS.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY AS WELL AS SUPERVISION/DIRECTION AND MEANS/METHODS OF CONSTRUCTION.
- ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE FOLLOWING SPECIFICATIONS, WHICH ARE HEREBY MADE A PART HEREOF:
  - "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", AS PREPARED BY IDOT.
  - "THE NATIONAL ELECTRICAL CODE".
  - MUNICIPAL CODES & STANDARDS.
- NO MATERIALS SHALL BE DELIVERED TO THE JOB SITE UNTIL ALL PERTINENT EQUIPMENT SUBMITTALS HAVE BEEN REVIEWED BY THE ENGINEER.
- ALL UNDERGROUND WIRING SHALL BE COPPER XLP TYPE-USE, EXTRA ABRASION RESISTANCE, 600 VOLTS, INSTALLED IN SCH 40 HDPE CONDUIT A MINIMUM 30 INCHES BELOW FINISHED GRADE, FOLLOWING THE ROADWAY OR SIDEWALK EDGE.
- TO MAINTAIN THE STRUCTURAL INTEGRITY OF LIGHT POLES WITH LUMINAIRE ARMS, THEY SHALL NOT BE ERECTED AND LEFT TO STAND WITHOUT LUMINAIRES.
- ALL POLE HANDHOLES SHALL FACE AWAY FROM TRAFFIC.
- THE ELECTRICAL CONTRACTOR SHALL FURNISH TWO SETS OF FULL SIZE RECORD DRAWINGS TO THE OWNER'S REPRESENTATIVE UPON COMPLETION OF THE LIGHTING AND ELECTRICAL IMPROVEMENTS. THE DRAWINGS SHALL SHOW THE INSTALLED LOCATIONS OF ALL LIGHT POLES, UNDERGROUND CONDUITS/WIRING, HANDHOLES, JUNCTION BOXES & CONTROLLER CABINETS. THE DRAWINGS WILL BE REVIEWED BY THE ENGINEER.
- UPON COMPLETION OF THE PROPOSED LIGHTING IMPROVEMENTS, THE CONTRACTOR SHALL PERFORM ELECTRICAL TESTING AND VERIFY THAT THE INSTALLATION COMPLIES WITH THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS. ALL ELECTRICAL TESTING SHALL BE PERFORMED IN THE PRESENCE OF THE ENGINEER AND THE VILLAGE.
- THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE REQUIREMENT FOR BURIED WARNING TAPE, SPECIFIED AS PART OF "TRENCH AND BACKFILL FOR ELECTRICAL WORK". THE INSTALLATION OF THE TAPE SHALL BE INSPECTED AND APPROVED BY THE RESIDENT ENGINEER PRIOR TO BACKFILLING OR DURING PLOWING OPERATIONS, AS APPLICABLE.
- THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE REQUIREMENTS FOR WIRE MARKERS AND SHALL TAG ALL WIRE ACCORDINGLY.
- EQUIPMENT GROUND CONDUCTORS SHALL BE SPLICED AND BONDED AT EACH LIGHT POLE OR OTHER PIECE OF EQUIPMENT.
- CONDUIT MUST BE POSITIONED IN THE FIELD TO AVOID CONFLICT WITH TREES, BUSHES, DRAINS AND OTHER UTILITIES AND LANDSCAPING.
- THE EXACT LOCATIONS OF ALL UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENTS OF THE LIGHTING SYSTEM. FOR THE LOCATIONS OF THE UTILITIES, CALL JULIE TOLL FREE AT 1-800-892-0123. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE EXISTING TRAFFIC SIGNAL CABLES AND CONDUITS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR TIMELY NOTIFICATION AND ALL COORDINATION WITH COM ED FOR NEW ELECTRIC SERVICE TO THE PROPOSED LIGHTING CONTROLLERS. THE ELECTRIC SERVICE COORDINATION PERFORMED BY THE ENGINEER DURING DESIGN IS INCLUDED IN THE PLANS FOR THE CONTRACTORS INFORMATION.
- THE LIGHT POLE LOCATIONS SHALL COMPLY WITH THE MINIMUM CLEAR WIDTH FOR AN ACCESSIBLE ROUTE FOR SIDEWALKS PER CURRENT AMERICAN WITH DISABILITIES ACT (ADA) REQUIREMENTS.
- PRIOR TO ANY ACTIVITY NEAR THE BP PIPELINE RIGHT-OF-WAY, MARCUS JAMERSON, BP'S DAMAGE PREVENTION SPECIALIST MUST BE CONTACTED TO LOCATE AND FLAG THE PIPELINE. MARCUS JAMERSON CAN BE REACHED AT 312-231-2609.

**IDOT GENERAL NOTE**

THE CONTRACTOR SHALL CONTACT THE IDOT TRAFFIC CONTROL SUPERVISOR AT 847-705-4470, 72 HOURS IN ADVANCE OF BEGINNING WORK.

**DUPAGE COUNTY D.O.T. GENERAL NOTES FOR 63RD ST**

- ALL CONSTRUCTION WITHIN THE COUNTY'S RIGHT-OF-WAY SHALL BE PERFORMED ACCORDING TO IDOT'S "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" (LATEST EDITION) AND THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS" (LATEST EDITION).
- DAILY LANE CLOSURES ARE PERMITTED BETWEEN 9:00 AM AND 4:00 PM ONLY. TRAFFIC CONTROL SHALL CONFORM TO IDOT'S HIGHWAY STANDARDS AND THE FHWA'S "MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES" AND IDOT'S SUPPLEMENT AT ALL TIMES DURING CONSTRUCTION. TRAFFIC CONTROL SHALL INCLUDE USE OF ADVANCE WARNING LANE CLOSURE SIGNAGE, AN ARROW BOARD AND TYPE 1 BARRICADES WITH SANDBAGS.
- LANE CLOSURES ARE NOT PERMITTED ON COUNTY ROADWAYS DURING SNOWFALL OR WITHIN 2 HOURS PRIOR TO PREDICTED SNOWFALL OR PRECIPITATION CONDITIONS BETWEEN NOVEMBER 15 AND APRIL 15 FOR MAINTENANCE OF ROADWAY PAVEMENT BY COUNTY HIGHWAY MAINTENANCE DEPARTMENT STAFF AND EQUIPMENT.
- DISTURBED AREAS OF THE RIGHT-OF-WAY SHALL BE DRESSED WITH A MINIMUM OF 6" TOPSOIL AND CLASS 2A SALT TOLERANT SEED (WITH EROSION CONTROL BLANKET) OR SOD (SALT TOLERANT AND STAKED IN PLACE).
- THE DIVISION OF TRANSPORTATION OPERATES/MAINTAINS TRAFFIC SIGNALS AND RELATED EQUIPMENT WITHIN THE VICINITY OF THE PROJECT. CONTACT THE DIVISION OF TRANSPORTATION A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION WITHIN THE COUNTY'S RIGHT-OF-WAY AND WITHIN 300' OF ANY COUNTY MAINTAINED SIGNAL TO LOCATE SAID EQUIPMENT. TRAFFIC SIGNALS AND RELATED EQUIPMENT ARE NOT ON THE JULIE SYSTEM.
- EROSION CONTROL MEASURES SHALL COMPLY WITH THE MINIMUM REQUIREMENTS OF THE DUPAGE COUNTY STORMWATER AND FLOODPLAIN ORDINANCE SPECIFICATIONS AT ALL TIMES.
- EQUIPMENT AND MATERIALS SHALL NOT BE STORED WITHIN THE COUNTY'S RIGHT-OF-WAY AT ANY TIME WITHOUT THE EXPRESS WRITTEN PERMISSION OF THE COUNTY'S ENGINEER, OR HIS DULY AUTHORIZED ASSIGN.
- PAVEMENT, CURB/GUTTER AND STORM STRUCTURES WITHIN THE COUNTY'S RIGHT-OF-WAY SHALL BE MAINTAINED FREE OF MUD/DEBRIS AT ALL TIMES AND SHALL BE CLEANED AS REQUIRED AND/OR AS DIRECTED BY DUPAGE COUNTY.
- CONTACT DUPAGE COUNTY (630/407-6900) A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION TO ARRANGE FOR INSPECTIONS OF AND AT THE COMPLETION OF THE DESCRIBED WORK WITHIN THE COUNTY'S RIGHT-OF-WAY.
- TRENCH BACKFILL FOR NON-PAVED AREAS SHALL BE INSTALLED WITHIN THE COUNTY'S RIGHT-OF-WAY PER DUPAGE COUNTY'S STANDARD.
- TRENCH BACKFILL BELOW EXISTING OR PROPOSED PAVEMENT, CURB/GUTTER AND/OR SIDEWALK SHALL BE INSTALLED WITHIN THE COUNTY'S RIGHT-OF-WAY PER DUPAGE COUNTY'S STANDARD.

**CAUTION  
NOTICE TO CONTRACTOR**

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THE LOCATION AND/OR ELEVATION OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THESE PLANS. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. UNDERGROUND PETROLEUM LINES EXISTING ALONG THE EAST AND WEST SIDE OF IL RT 83. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INFORM ENGINEER OF ANY EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS.

FILE NAME =	USER NAME = dkerr	DESIGNED - GAH	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>INDEX OF SHEETS &amp; GENERAL NOTES IL RT 83 &amp; 63RD ST</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
N:\WILLOWBROOK\150687\Mech\INDEX_150687.sht		DRAWN - LRR	REVISED -			0344	16-00023-00-LT	DUPAGE	17	2
Default	PLOT SCALE = 20'	CHECKED - AJD	REVISED -			CONTRACT NO. 61D67		ILLINOIS FED. AID PROJECT		
	PLOT DATE = 12/21/2016	DATE - 10/13/2016	REVISED -	SCALE: N.T.S.	SHEET 1 OF 1 SHEETS	STA. -	TO STA. -			



			CONSTRUCTION TYPE CODE	CONSTRUCTION TYPE CODE
			0021	0042
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	TOTAL QUANTITY
20800150	TRENCH BACKFILL	CU YD	5	-
21101625	TOPSOIL FURNISH AND PLACE, 6"	SQ YD	10	-
25000210	SEEDING, CLASS 2A	ACRE	0.25	-
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	1	-
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	1	-
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	1	-
25100630	EROSION CONTROL BLANKET	SQ YD	10	-
* 42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	200	-
* 44000600	SIDEWALK REMOVAL	SQ FT	200	-
* 44200970	CLASS B PATCHES, TYPE II, 10 INCH	SQ YD	40	-
* 44201294	CLASS B PATCH - EXPANSION JOINT	FOOT	120	-
* 44201299	DOWEL BARS 1 1/2"	EACH	100	-
* 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	5	-
* 66900450	SPECIAL WASTE PLANS AND REPORTS	LSUM	1	-
* 66900530	SOIL DISPOSAL ANALYSIS	EACH	1	-

\* SPECIALTY ITEM

			CONSTRUCTION TYPE CODE	CONSTRUCTION TYPE CODE
			0021	0042
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	TOTAL QUANTITY
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	LSUM	1	-
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	LSUM	1	-
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	LSUM	1	-
80400100	ELECTRIC SERVICE INSTALLATION	EACH	1	-
* 80400200	ELECTRIC UTILITY SERVICE CONNECTION	LSUM	1	-
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	40	-
81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	310	-
81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	490	-
81028730	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1 1/4" DIA.	FOOT	7750	-
81400730	HANDHOLE, COMPOSITE CONCRETE	EACH	5	-
81702120	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 8	FOOT	38370	-
81702150	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 2	FOOT	170	-
82500335	LIGHTING CONTROLLER, PEDESTAL MOUNTED, 240VOLT, 100AMP	EACH	1	-
83050810	LIGHT POLE, ALUMINUM, 47.5 FT. M.H., 15 FT. MAST ARM	EACH	38	-
83050910	LIGHT POLE, ALUMINUM, 47.5 FT. M.H., 2-15 FT. MAST ARMS	EACH	4	-

\* SPECIALTY ITEM

FILE NAME =	USER NAME = dkerr	DESIGNED - GAH	REVISED -
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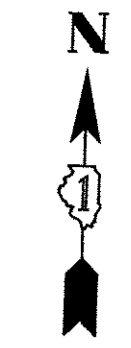
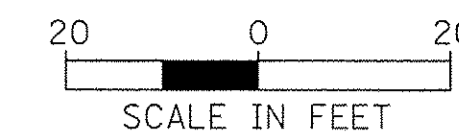
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES (1 OF 2)  
IL RT 83 & 63RD ST**

SCALE: N.T.S. SHEET 1 OF 2 SHEETS STA. - TO STA. -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0344	16-00023-00-LT	DUPAGE	17	3
ILLINOIS FED. AID PROJECT			CONTRACT NO. 61D67	

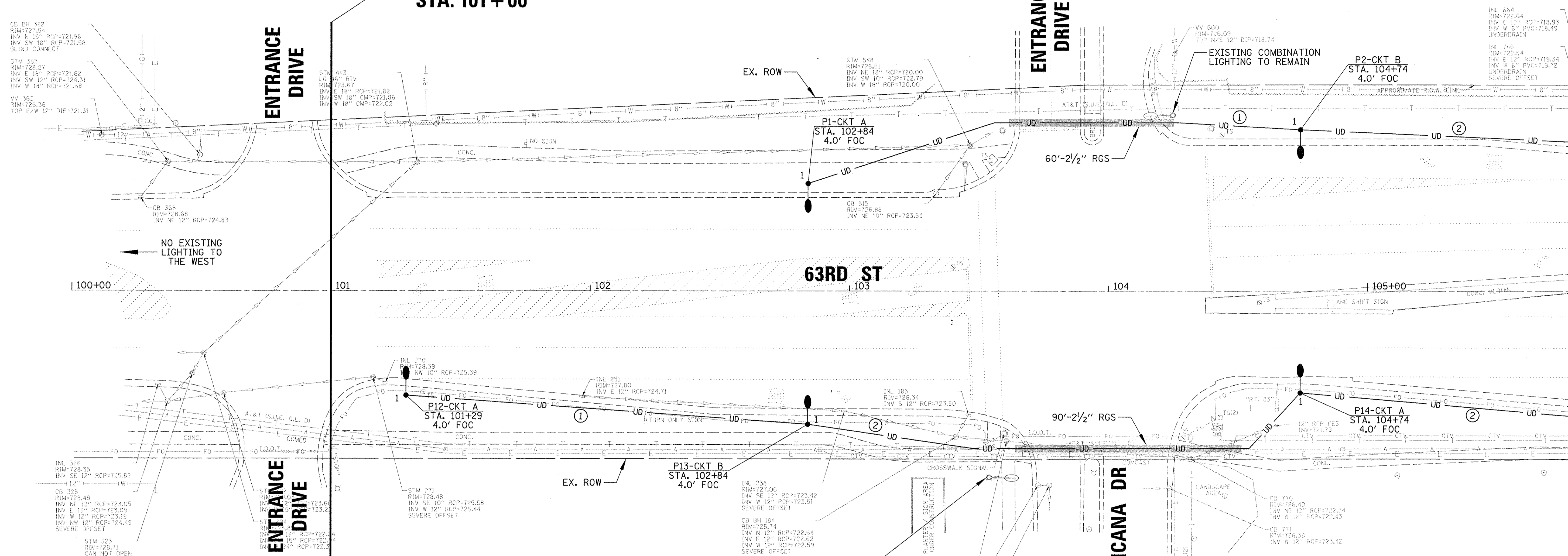




WILLOWBROOK  
SQUARE CENTRE

BEGIN PROJECT  
STA. 101+00

ENTRANCE  
DRIVE



MATCH LINE STA. 105 + 80

**LEGEND**

- 1 - PROPOSED 47.5' SPUN ALUMINUM POLE MOUNTED ON METAL FOUNDATION WITH (1) 280W LED TYPE ROADWAY TYPE LUMINAIRE MOUNTED ON A 15' MAST ARM
- 2 - PROPOSED 47.5' SPUN ALUMINUM POLE MOUNTED ON METAL FOUNDATION WITH (2) 280W LED TYPE ROADWAY TYPE LUMINAIRES MOUNTED ON A 15' MAST ARM 90° APART
- - LUMINAIRE CIRCUIT IDENTIFIER
- - EXISTING 310W HPS COMBINATION LIGHTING MOUNTED AT 40' ON A 12' ARM
- - PROPOSED 120/240V-100A-1Ø PEDESTAL MOUNTED LIGHTING CONTROLLER
- - PROPOSED COMPOSITE CONCRETE HANDHOLE
- - PROPOSED ELECTRIC SERVICE LOCATION
- E- PROPOSED ELECTRIC SERVICE CONDUIT
- UD- PROPOSED 1 1/4" SCH 40 HDPE CONDUIT
- RGS- PROPOSED RGS CONDUIT SLEEVE (SIZE AS INDICATED)
- - LIGHT POLE IDENTIFIER
- - CIRCUIT IDENTIFIER
- - STATION
- - SET BACK FROM FACE OF CURB (FOC) TO CENTER OF POLE

**CONDUCTOR SCHEDULE**

- ① 2/C #8 & 1/C #8 GND XLP-TYPE USE CABLES
  - ② 4/C #8 & 1/C #8 GND XLP-TYPE USE CABLES
- USE BLACK & RED COLOR CONDUCTORS FOR LIGHTING CIRCUITS

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

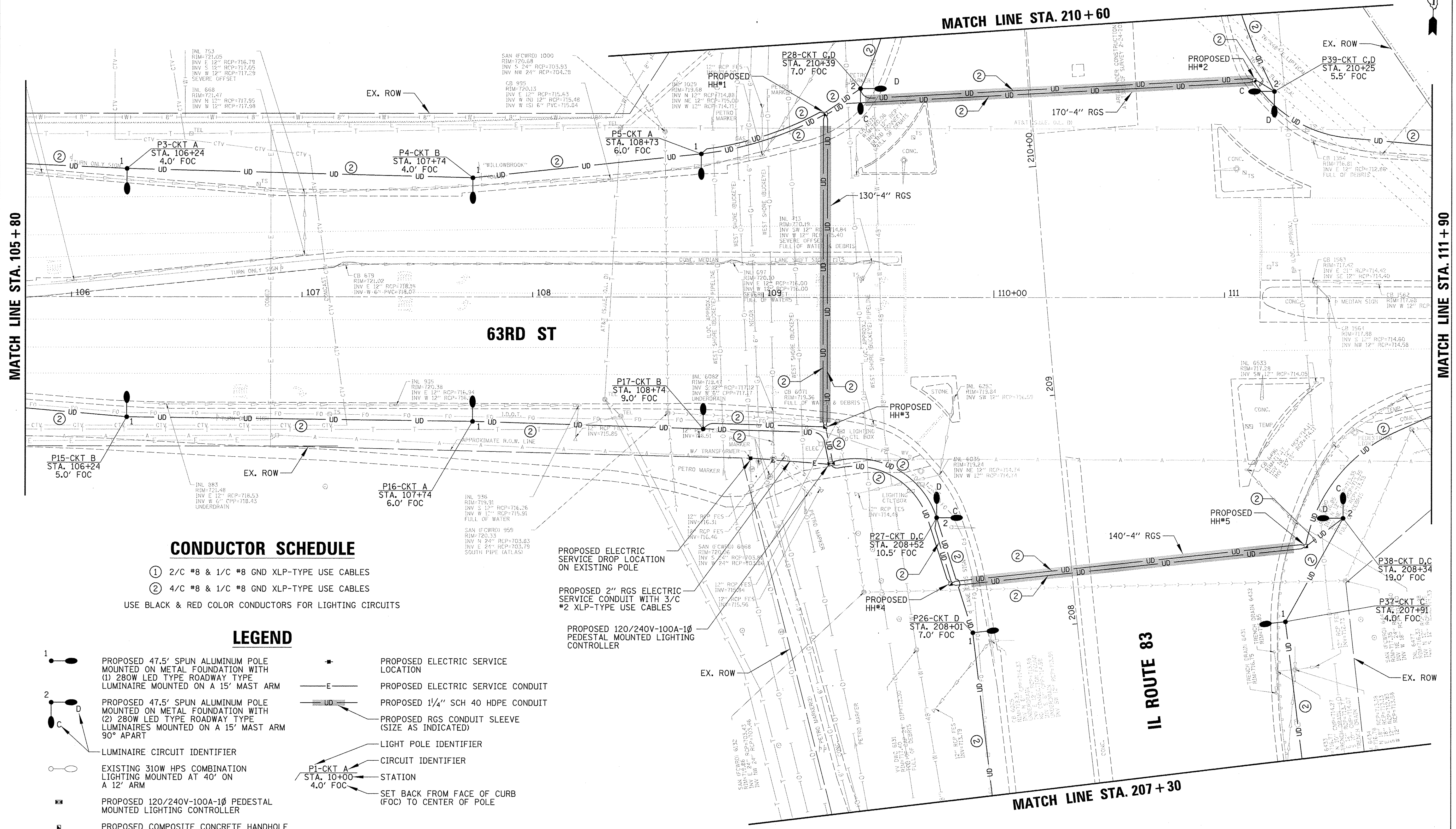
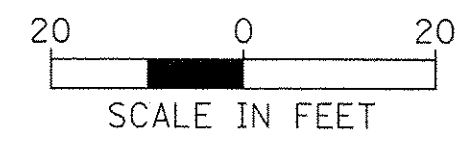
PROPOSED LIGHTING PLAN (1 OF 6)  
IL RT 83 & 63RD ST

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0344	16-00023-00-LT	DUPAGE	17	5
CONTRACT NO. 61D67			ILLINOIS FED. AID PROJECT	

FILE NAME =	USER NAME = dkerr	DESIGNED - GAH	REVISED -
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PLOT SCALE = 20'		CHECKED - AJD	REVISED -
PLOT DATE = 12/21/2016		DATE - 10/13/2016	REVISED -

SCALE: 20' SHEET 1 OF 6 SHEETS STA. 101+00 TO STA. 105+80





**CONDUCTOR SCHEDULE**

- ① 2/C #8 & 1/C #8 GND XLP-TYPE USE CABLES
  - ② 4/C #8 & 1/C #8 GND XLP-TYPE USE CABLES
- USE BLACK & RED COLOR CONDUCTORS FOR LIGHTING CIRCUITS

**LEGEND**

- 1 ● PROPOSED 47.5' SPUN ALUMINUM POLE MOUNTED ON METAL FOUNDATION WITH (1) 280W LED TYPE ROADWAY TYPE LUMINAIRE MOUNTED ON A 15' MAST ARM
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- LUMINAIRE CIRCUIT IDENTIFIER
- EXISTING 310W HPS COMBINATION LIGHTING MOUNTED AT 40' ON A 12' ARM
- PROPOSED 120/240V-100A-1Ø PEDESTAL MOUNTED LIGHTING CONTROLLER
- PROPOSED COMPOSITE CONCRETE HANDHOLE
- PROPOSED ELECTRIC SERVICE LOCATION
- E — PROPOSED ELECTRIC SERVICE CONDUIT
- UD — PROPOSED 1/4" SCH 40 HDPE CONDUIT
- RGS — PROPOSED RGS CONDUIT SLEEVE (SIZE AS INDICATED)
- LIGHT POLE IDENTIFIER
- CIRCUIT IDENTIFIER
- STATION
- SET BACK FROM FACE OF CURB (FOC) TO CENTER OF POLE

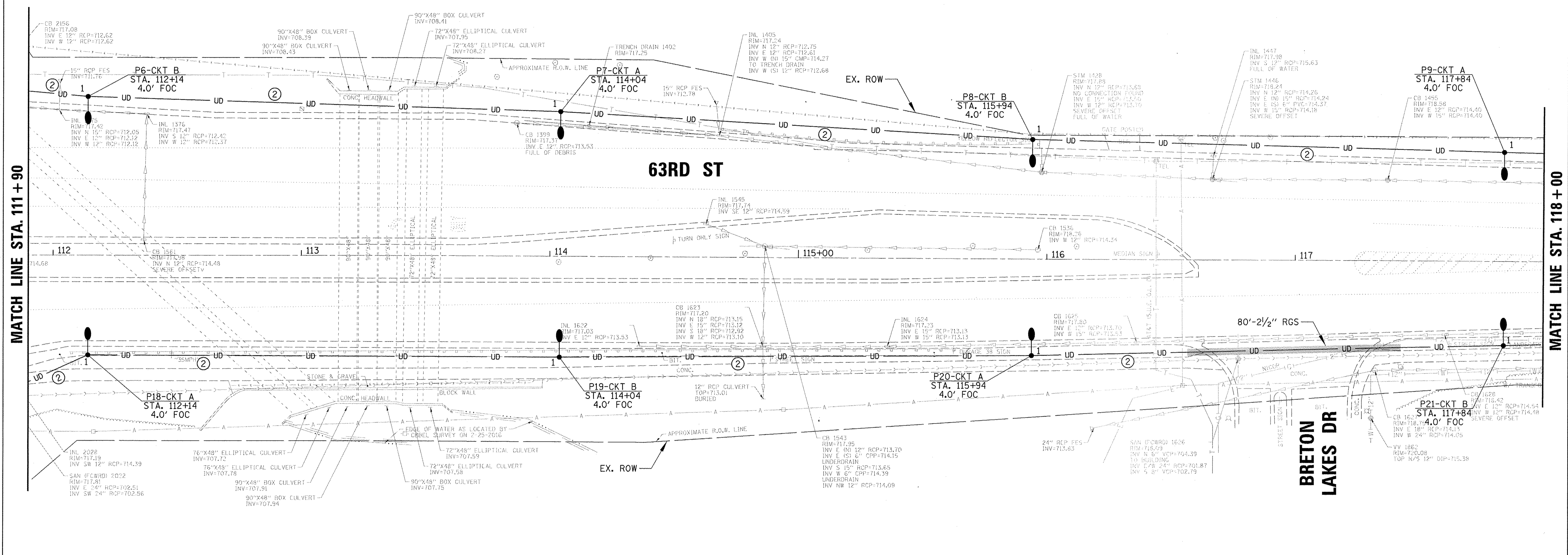
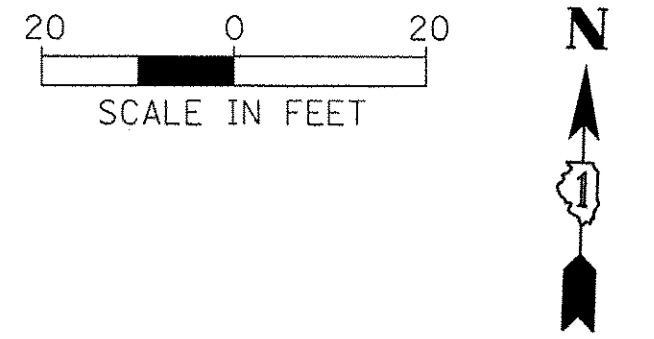
- PROPOSED ELECTRIC SERVICE DROP LOCATION ON EXISTING POLE
- PROPOSED 2" RGS ELECTRIC SERVICE CONDUIT WITH 3/C #2 XLP-TYPE USE CABLES
- PROPOSED 120/240V-100A-1Ø PEDESTAL MOUNTED LIGHTING CONTROLLER

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PROPOSED LIGHTING PLAN (2 OF 6)  
IL RT 83 & 63RD ST

FILE NAME =	USER NAME = dkerr	DESIGNED - GAH	REVISED -
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Default	PLOT SCALE = 20'	CHECKED - AJD	REVISED -
	PLOT DATE = 12/21/2016	DATE - 10/13/2016	REVISED -

SCALE: 20'	SHEET 2 OF 6 SHEETS	STA. 105+80 TO STA. 111+90	F.A.P. RTE. 0344	SECTION 16-00023-00-LT	COUNTY DUPAGE	TOTAL SHEETS 17	SHEET NO. 6
						CONTRACT NO. 61067	
ILLINOIS FED. AID PROJECT							



**LEGEND**

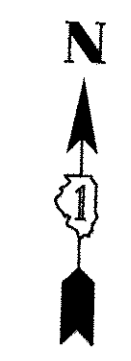
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- - LIGHT POLE IDENTIFIER
- P1-CKT A STA. 10+00 4.0' FOC - CIRCUIT IDENTIFIER
- - STATION
- - SET BACK FROM FACE OF CURB (FOC) TO CENTER OF POLE

**CONDUCTOR SCHEDULE**

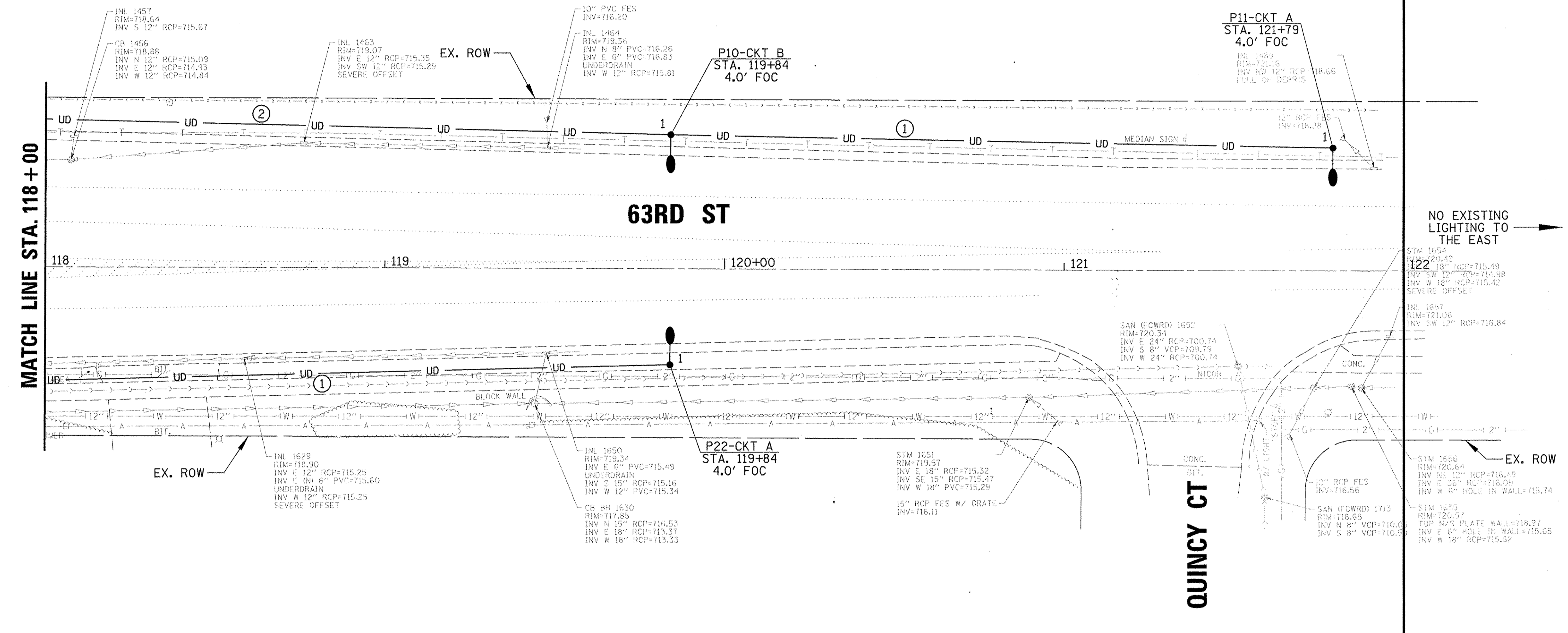
- ① 2/C #8 & 1/C #8 GND XLP-TYPE USE CABLES
  - ② 4/C #8 & 1/C #8 GND XLP-TYPE USE CABLES
- USE BLACK & RED COLOR CONDUCTORS FOR LIGHTING CIRCUITS

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Default	PLOT SCALE = 20'	CHECKED - AJD	REVISED -		SCALE: 20'	SHEET 3	OF 6 SHEETS	STA. 111+90	TO STA. 118+00	CONTRACT NO. 61D67		
	PLOT DATE = 12/21/2016	DATE - 10/13/2016	REVISED -		ILLINOIS FED. AID PROJECT							





END PROJECT  
STA. 122+00



**LEGEND**

- 1 PROPOSED 47.5' SPUN ALUMINUM POLE MOUNTED ON METAL FOUNDATION WITH (1) 280W LED TYPE ROADWAY TYPE LUMINAIRE MOUNTED ON A 15' MAST ARM
- 2 PROPOSED 47.5' SPUN ALUMINUM POLE MOUNTED ON METAL FOUNDATION WITH (2) 280W LED TYPE ROADWAY TYPE LUMINAIRES MOUNTED ON A 15' MAST ARM 90° APART
- LUMINAIRE CIRCUIT IDENTIFIER
- EXISTING 310W HPS COMBINATION LIGHTING MOUNTED AT 40' ON A 12' ARM
- PROPOSED 120/240V-100A-1Ø PEDESTAL MOUNTED LIGHTING CONTROLLER
- PROPOSED COMPOSITE CONCRETE HANDHOLE
- PROPOSED ELECTRIC SERVICE LOCATION
- PROPOSED ELECTRIC SERVICE CONDUIT
- PROPOSED 1/4" SCH 40 HDPE CONDUIT
- PROPOSED RGS CONDUIT SLEEVE (SIZE AS INDICATED)
- LIGHT POLE IDENTIFIER
- CIRCUIT IDENTIFIER
- P1-CKT A STA. 10+00 4.0' FOC STATION
- SET BACK FROM FACE OF CURB (FOC) TO CENTER OF POLE

**CONDUCTOR SCHEDULE**

- ① 2/C #8 & 1/C #8 GND XLP-TYPE USE CABLES
  - ② 4/C #8 & 1/C #8 GND XLP-TYPE USE CABLES
- USE BLACK & RED COLOR CONDUCTORS FOR LIGHTING CIRCUITS

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

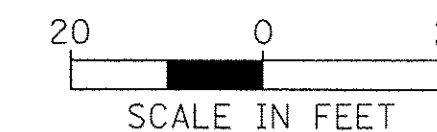
PROPOSED LIGHTING PLAN (4 OF 6)  
IL RT 83 & 63RD ST

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Default	PLOT DATE = 12/21/2016	DATE - 10/13/2016	REVISED -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0344	16-00023-00-ET	DUPAGE	17	8
CONTRACT NO. 61D67				
ILLINOIS FED. AID PROJECT				

SCALE: 20' SHEET 4 OF 6 SHEETS STA. 118+00 TO STA. 122+00



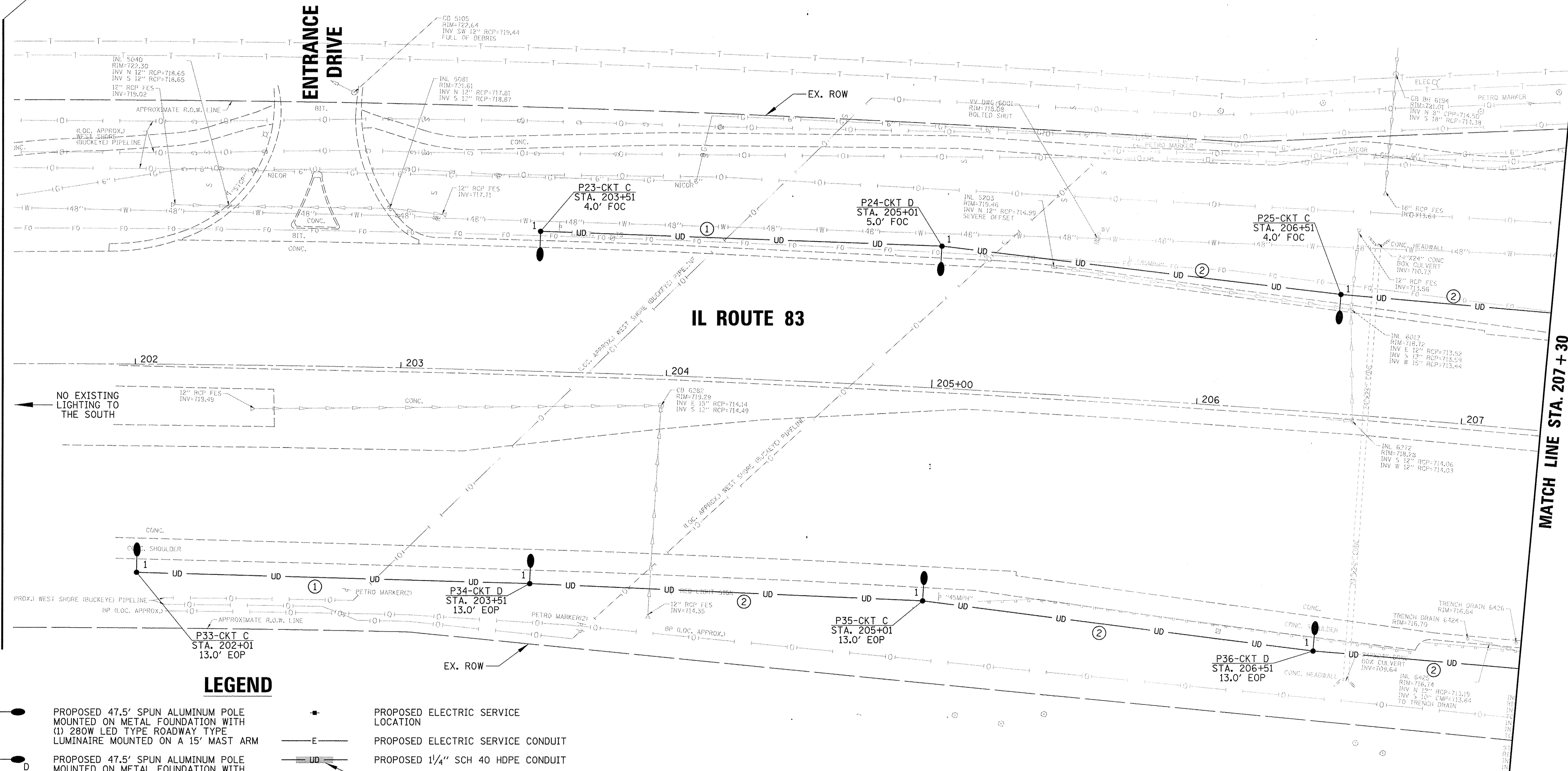


**BEGIN PROJECT  
STA. 201 + 50**

**ENTRANCE  
DRIVE**

**IL ROUTE 83**

**MATCH LINE STA. 207 + 30**



NO EXISTING LIGHTING TO THE SOUTH

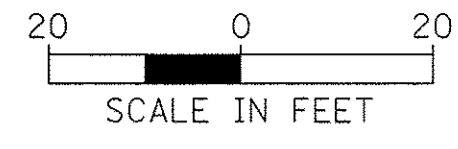
**LEGEND**

- 1 ● PROPOSED 47.5' SPUN ALUMINUM POLE MOUNTED ON METAL FOUNDATION WITH (1) 280W LED TYPE ROADWAY TYPE LUMINAIRE MOUNTED ON A 15' MAST ARM
- 2 ● PROPOSED 47.5' SPUN ALUMINUM POLE MOUNTED ON METAL FOUNDATION WITH (2) 280W LED TYPE ROADWAY TYPE LUMINAIRES MOUNTED ON A 15' MAST ARM 90° APART
- LUMINAIRE CIRCUIT IDENTIFIER
- EXISTING 310W HPS COMBINATION LIGHTING MOUNTED AT 40' ON A 12' ARM
- PROPOSED 120/240V-100A-1Ø PEDESTAL MOUNTED LIGHTING CONTROLLER
- PROPOSED COMPOSITE CONCRETE HANDHOLE
- PROPOSED ELECTRIC SERVICE LOCATION
- E — PROPOSED ELECTRIC SERVICE CONDUIT
- UD — PROPOSED 1/4" SCH 40 HDPE CONDUIT
- RGS — PROPOSED RGS CONDUIT SLEEVE (SIZE AS INDICATED)
- LIGHT POLE IDENTIFIER
- CIRCUIT IDENTIFIER
- P1-CKT A STA. 10+00 4.0' FOC — STATION
- SET BACK FROM FACE OF CURB (FOC) TO CENTER OF POLE

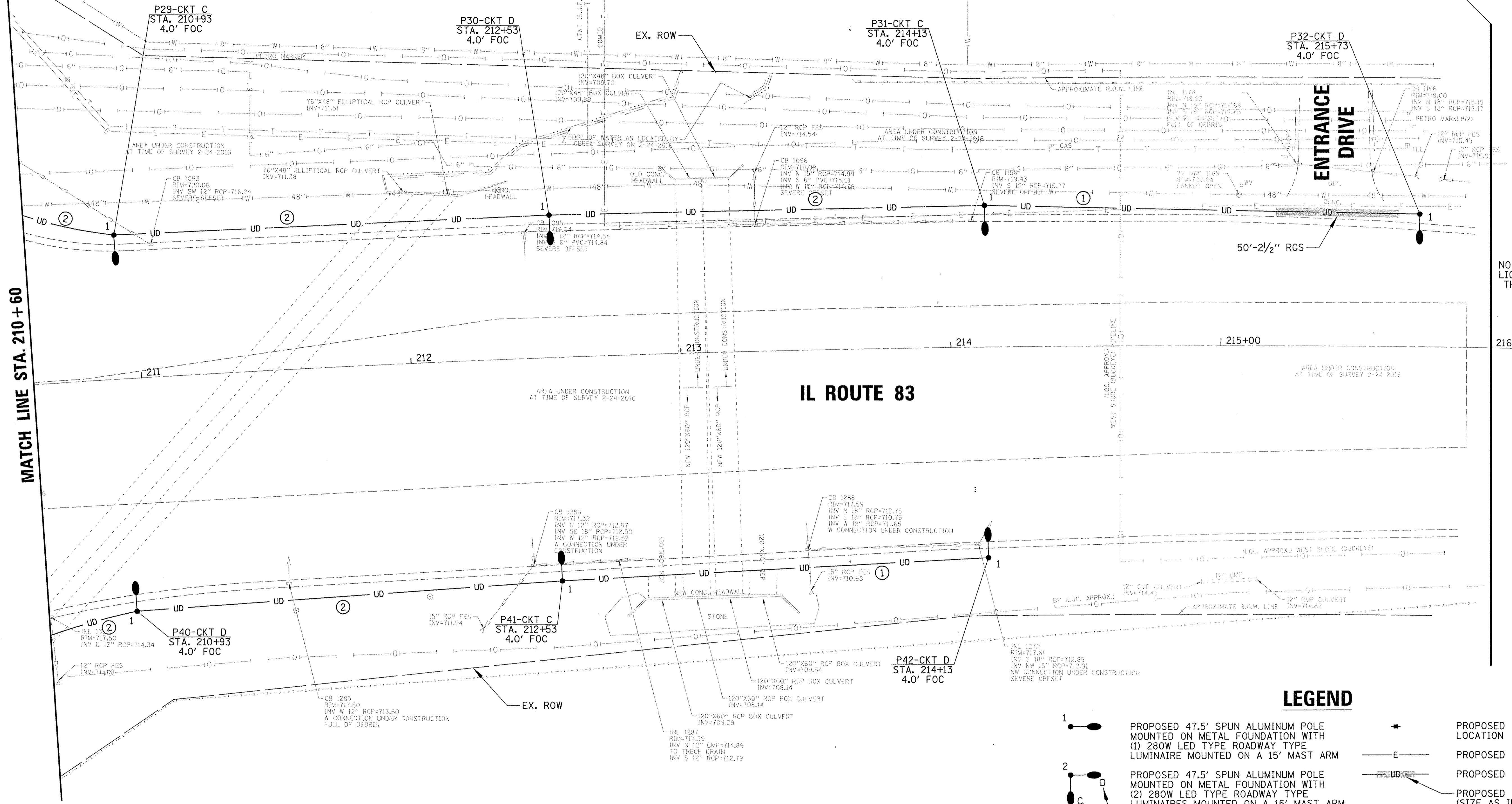
**CONDUCTOR SCHEDULE**

- ① 2/C #8 & 1/C #8 GND XLP-TYPE USE CABLES
  - ② 4/C #8 & 1/C #8 GND XLP-TYPE USE CABLES
- USE BLACK & RED COLOR CONDUCTORS FOR LIGHTING CIRCUITS

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PLOT SCALE = 20'	PLOT DATE = 12/21/2016	DRAWN - LRR	REVISED -		SCALE: 20'	SHEET 5 OF 6 SHEETS	STA. 202+00 TO STA. 207+30	DUPAGE	CONTRACT NO. 61D67	ILLINOIS FED. AID PROJECT		
Default		CHECKED - AJD	REVISED -									
		DATE - 10/13/2016	REVISED -									



**END PROJECT  
STA. 216 + 00**



**IL ROUTE 83**

**MATCH LINE STA. 210 + 60**

NO EXISTING LIGHTING TO THE NORTH

**CONDUCTOR SCHEDULE**

- ① 2/C #8 & 1/C #8 GND XLP-TYPE USE CABLES
  - ② 4/C #8 & 1/C #8 GND XLP-TYPE USE CABLES
- USE BLACK & RED COLOR CONDUCTORS FOR LIGHTING CIRCUITS

**LEGEND**

- 1 (circle with 1) PROPOSED 47.5' SPUN ALUMINUM POLE MOUNTED ON METAL FOUNDATION WITH (1) 280W LED TYPE ROADWAY TYPE LUMINAIRE MOUNTED ON A 15' MAST ARM
- 2 (circle with 2) PROPOSED 47.5' SPUN ALUMINUM POLE MOUNTED ON METAL FOUNDATION WITH (2) 280W LED TYPE ROADWAY TYPE LUMINAIRES MOUNTED ON A 15' MAST ARM 90° APART
- (circle with 1) LUMINAIRE CIRCUIT IDENTIFIER
- (circle with 2) EXISTING 310W HPS COMBINATION LIGHTING MOUNTED AT 40' ON A 12' ARM
- (square) PROPOSED 120/240V-100A-1Ø PEDESTAL MOUNTED LIGHTING CONTROLLER
- (square) PROPOSED COMPOSITE CONCRETE HANDHOLE
- (dot) PROPOSED ELECTRIC SERVICE LOCATION
- (line with 'E') PROPOSED ELECTRIC SERVICE CONDUIT
- (line with 'UD') PROPOSED 1/4" SCH 40 HDPE CONDUIT
- (line with 'RGS') PROPOSED RGS CONDUIT SLEEVE (SIZE AS INDICATED)
- (circle with 'L') LIGHT POLE IDENTIFIER
- (circle with 'C') CIRCUIT IDENTIFIER
- (circle with 'S') STATION
- (line with 'FOC') SET BACK FROM FACE OF CURB (FOC) TO CENTER OF POLE

FILE NAME = N:\WILLowBROOK\150687\Mech\LG1_150687.dwg	USER NAME = dkarr	DESIGNED - GAH	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED LIGHTING PLAN (6 OF 6) IL RT 83 &amp; 63RD ST</b>			F.A.P. RTE. 0344	SECTION 16-00023-00-LT	COUNTY DUPAGE	TOTAL SHEETS 17	SHEET NO. 10	
Default	PLOT SCALE = 20'	DRAWN - LRR	REVISED -		SCALE: 20'	SHEET 6	OF 6 SHEETS	STA. 210+60	TO STA. 216+00	ILLINOIS FED. AID PROJECT			
	PLOT DATE = 12/21/2016	CHECKED - AJD	REVISED -		CONTRACT NO. 61D67								
		DATE - 10/13/2016	REVISED -										



LIGHTING CONTROLLER				
CIRCUIT ID	280W LED LUMINAIRE		TOTAL CIRCUIT LOAD	
	QTY.	LOAD/FIXT. (WATTS)	(WATTS)	AMPS (VOLTS)
A	12	280 W	3,360 W	14.0A (240V)
B	10	280 W	2,800 W	11.7A (240V)
C	12	280 W	3,360 W	14.0A (240V)
D	12	280 W	3,360 W	14.0A (240V)
TOTAL	46	N/A	12,880 W	53.7A (240V)

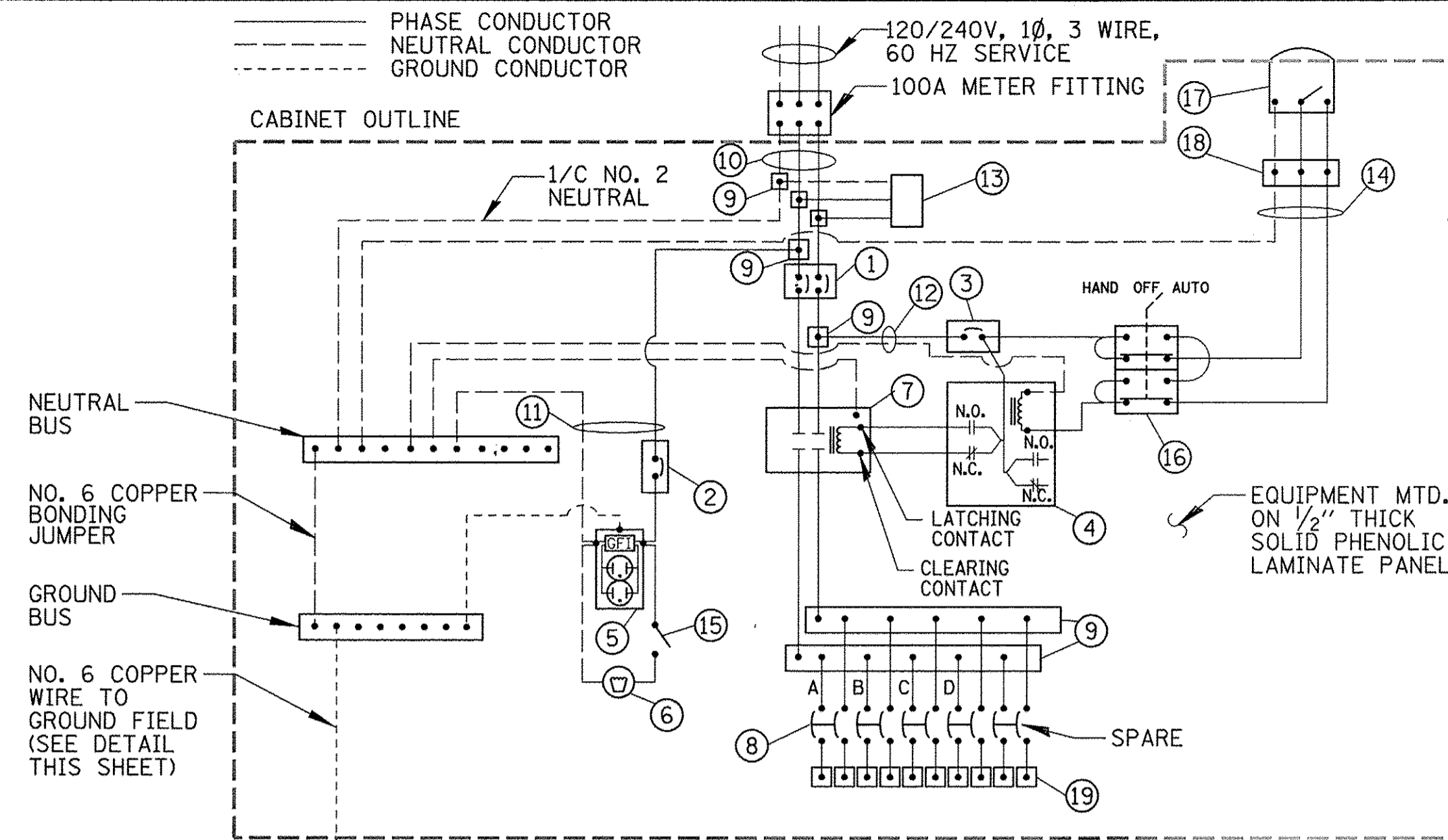
### PROPOSED ELECTRICAL CIRCUIT LOADS

ITEM	SPECIFICATION
① MAIN CIRCUIT BREAKER	100 AMPERE, 2P, 240V SERVICE RATING, 10KAIC
② LAMPHOLDER CIRCUIT BREAKER	20 AMPERE, 1P, 120V RATING, 10KAIC
③ PHOTOELECTRIC CONTROL CIRCUIT BREAKER	15 AMPERE, 1P, 120V RATING, 10KAIC
④ AUXILIARY RELAY	120 V OPERATED DPDT 60 HZ COIL 2 NO & 2 NC CONTACTS
⑤ CABINET RECEPTACLE AND BOX	COMMERCIAL GRADE GFCI 20A/120V, MOUNTED IN A WEATHERPROOF CAST ALUMINUM SINGLE GANG BOX WITH WEATHERPROOF COVER
⑥ CABINET LIGHT	5 WATT LED STRIP LIGHT, 60K HOUR RATING, 65K COLOR TEMPERATURE, DOOR SWITCH CONTROLLED, FASTENED TO TOP OF CABINET
⑦ CONTACTOR	100 AMPERE, 2P, 120V COIL, MECHANICALLY HELD
⑧ BRANCH LINE CIRCUIT BREAKERS	(5) 30A, 2P, 240V RATING, 10KAIC
⑨ POWER DISTRIBUTION BLOCK	600 VOLT, INSULATED, SIZE AS REQ'D, 10KAIC
⑩ SERVICE CABLES	3-600V (XLP-TYPE USE) NO. #2
⑪ LAMPHOLDER WIRE	2-600V XLP NO. 12
⑫ CONTROL WIRE	2-600V XLP NO. 12
⑬ SURGE ARRESTOR	10 K AMPERE RATING
⑭ PHOTOELECTRIC CONTROL WIRE	3-600V XLP NO. 12
⑮ DOOR SWITCH	20A/120V, DOOR MOUNTED SNAP ACTION TYPE PLUNGER SWITCH
⑯ HAND-AUTO-OFF CONTROL SWITCH	20A, 3 POS. MTD IN CAST ALUM. ENCLOSURE
⑰ PHOTOCELL	120V, MTD. ON CABINET, DELAY TYPE, SPST-NC
⑱ TERMINAL BLOCK	3 TERMINAL, SCREW TYPE, MAX. #10 WIRE SIZE
⑲ CIRCUIT BREAKER DIST. BLOCKS	30A, 600V, 10 KAIC - WIRE RANGE: LINE SIDE LUG (1) #2/0-#14 AWG, LOAD SIDE LUGS (2) #4-#14 AWG

#### NOTES:

- ALL ITEMS LISTED IN LIGHTING CONTROLLER COMPONENT SCHEDULE SHALL BE CONSIDERED INCIDENTAL TO THE PRICE BID FOR "LIGHTING CONTROLLER, PEDESTAL MOUNTED, 240 VOLT, 100 AMP" INCLUDING CABINET AND FOUNDATION.
- THE LIGHTING CONTROLLER TOGETHER WITH ALL OF ITS COMPONENTS SHALL BE UL LISTED AS AN "ENCLOSED INDUSTRIAL CONTROL PANEL" UNDER UL508A.
- CONNECTION OF SURGE ARRESTOR TO LINE SIDE OF MAIN CIRCUIT BREAKER SHALL NOT BE "DOUBLE LUGGED."
- THE MAIN CIRCUIT BREAKER SHALL BE LABELED "SERVICE DISCONNECT".
- ALL SWITCHES AND CONTROLS SHALL BE IDENTIFIED USING TWO COLOR ENGRAVED NAMEPLATES.
- THE PANEL MANUFACTURER SHALL LABEL THE CABINET WITH THE APPROPRIATE ARC FLASH WARNING AND PERSONNEL PROTECTION EQUIPMENT REQUIRED FOR SERVICING.
- IN ADDITION TO REQUIRED LABELING, THIS CIRCUIT BREAKER SHALL BE LABELED "SERVICE DISCONNECT", INSTALL RED WARNING PLATE NEXT TO MAIN BREAKER INDICATING "CAUTION - LIVE CIRCUITS EVEN WHEN MAIN CIRCUIT BREAKER IS IN THE OFF POSITION".
- ALL EXPOSED BUS BARS SHALL BE INSULATED.
- ALL WIRING SHALL BE COPPER.

### LIGHTING CONTROLLER COMPONENT SCHEDULE

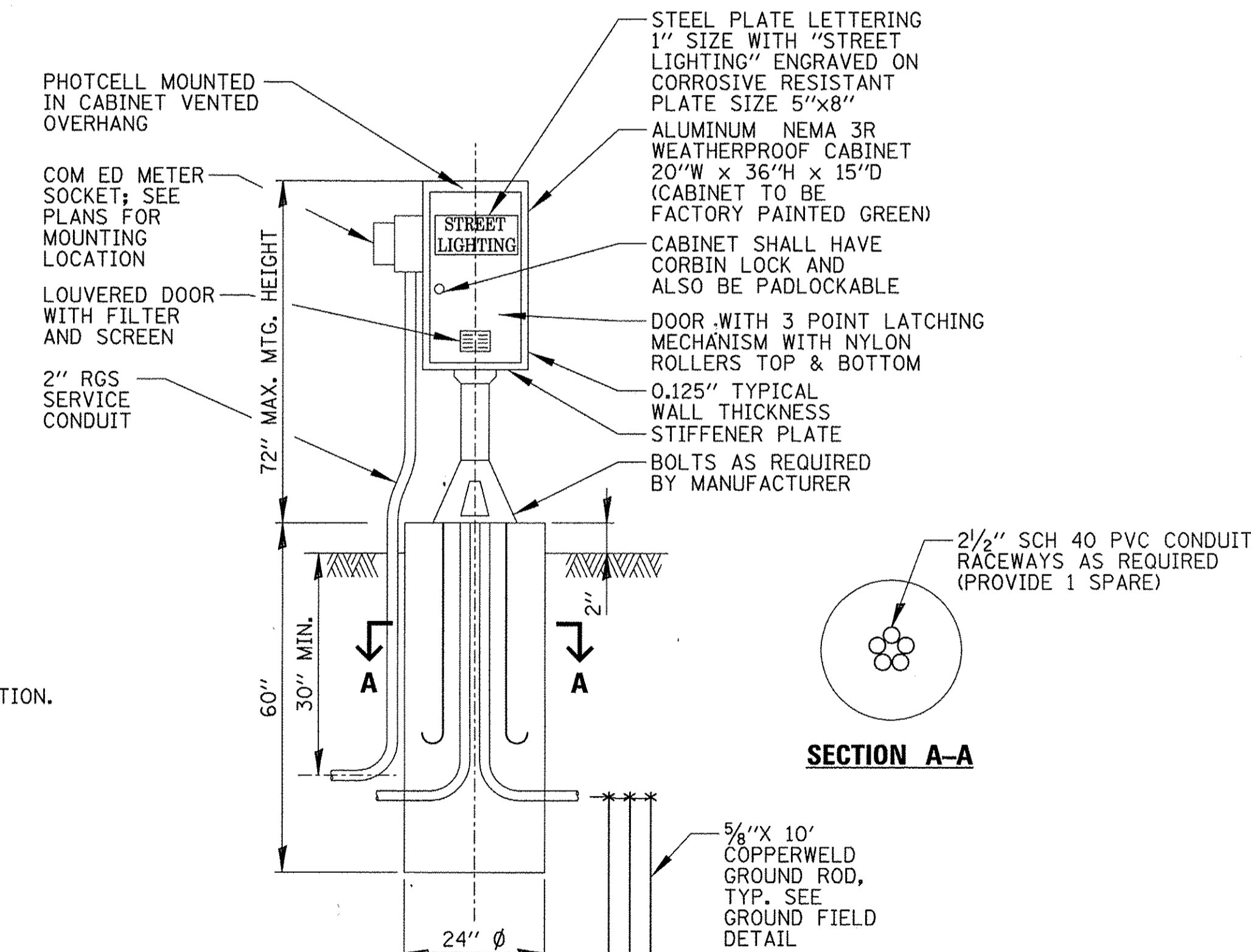


#### NOTES:

- ALL GROUND CONDUCTORS SHALL BE GREEN AND NEUTRAL CONDUCTORS SHALL BE WHITE. PHASE CONDUCTORS SHALL BE COLOR CODED IN ACCORDANCE WITH SECTION 1066.02 OF THE STANDARD SPECIFICATIONS. CONTRACTOR SHALL ONLY USE SOLID COLOR CODED INSULATIONS. COLOR STRIPPING OF PHASE CONDUCTORS SHALL NOT BE ALLOWED.
- IN ADDITION TO THE TERMINATIONS SHOWN, THE NEUTRAL AND GROUND BUS BARS SHALL EACH ACCOMMODATE A MINIMUM OF 8 ADDITIONAL TERMINATIONS (#2-#14).

### LIGHTING CONTROLLER WIRING DETAIL

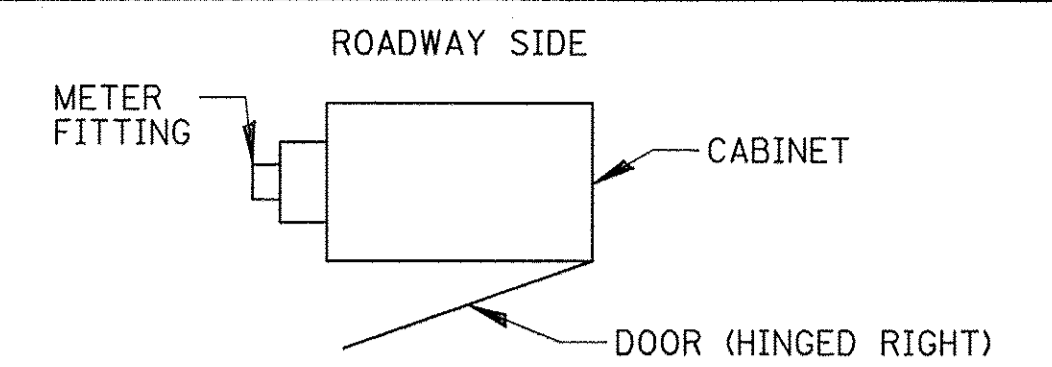
N.T.S.



NOTE:  
ALL ITEMS SHOWN ABOVE INCLUDING FOUNDATION SHALL BE INCLUDED IN THE LIGHTING CONTROLLER PAY ITEM EXCEPT FOR THE SERVICE CONDUIT/CABLES.

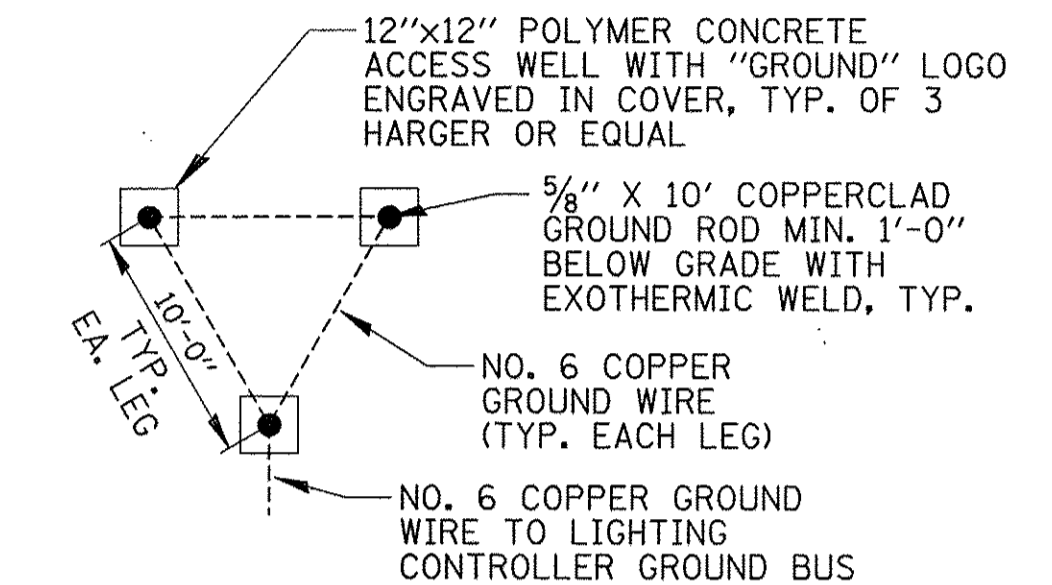
### LIGHTING CONTROLLER CABINET & FOUNDATION

N.T.S.



### CABINET METER FITTING & DOOR ORIENTATION

N.T.S.

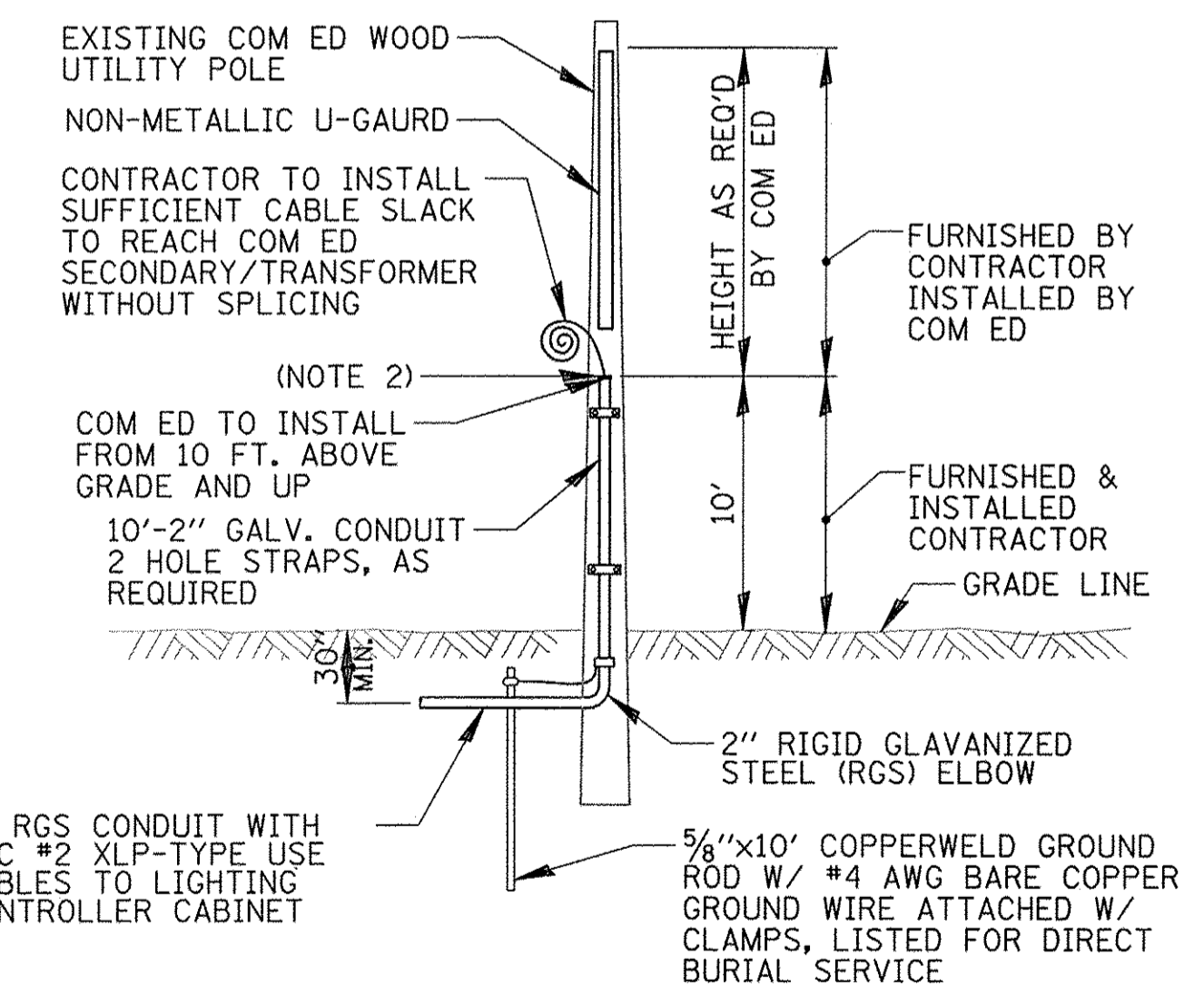


#### NOTES:

- ACCESS WELLS SHALL BE INCLUDED IN THE LIGHTING CONTROLLER PAY ITEM.

### GROUND FIELD DETAIL (TYP.)

N.T.S.



#### NOTES:

- ALL WORK SHALL CONFORM TO COM ED'S BOOK OF "INFORMATION AND REQUIREMENTS FOR THE SUPPLY OF ELECTRIC SERVICE."
- CONTRACTOR SHALL PROVIDE CONDUIT BUSHING AND SEALING COMPOUND AT TOP OF RISER.
- ALL MATERIAL ABOVE (EXCEPT FOR POLE) SHALL BE INCLUDED IN THE PRICE BID FOR "ELECTRIC SERVICE INSTALLATION". THE HORIZONTAL SERVICE CONDUIT AND WIRING FROM POLE TO CONTROLLER SHALL BE PAID FOR SEPARATELY.

### COM ED OVERHEAD CONNECTION POLE

N.T.S.

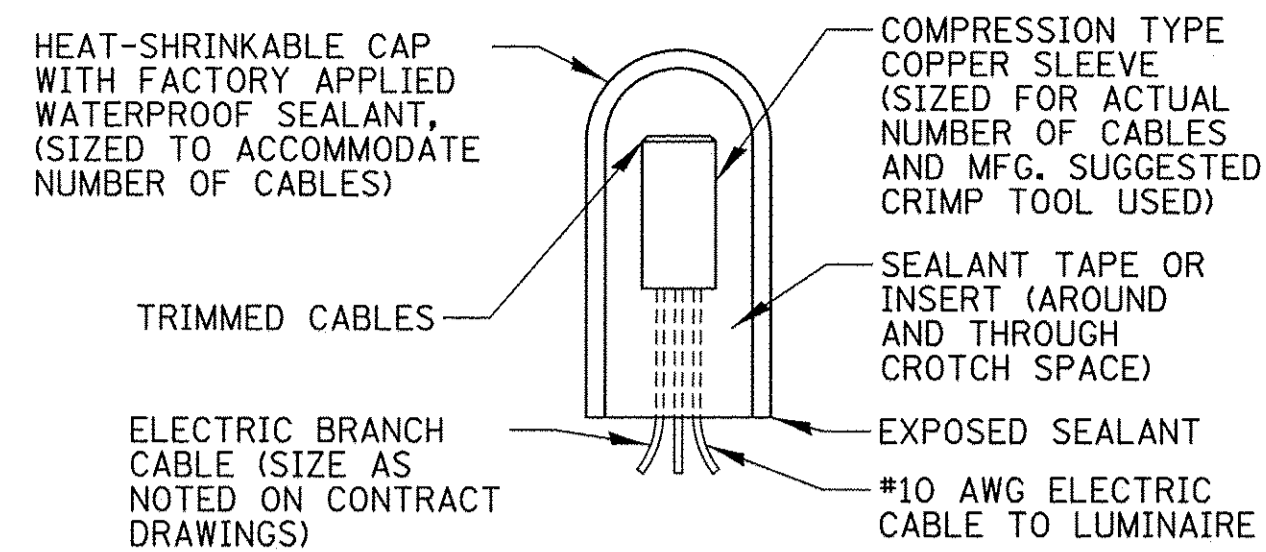
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Default	PLOT DATE = 12/21/2016	DATE - 10/13/2016	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ELECTRICAL DETAILS (1 OF 3)  
IL RT 83 & 63RD ST

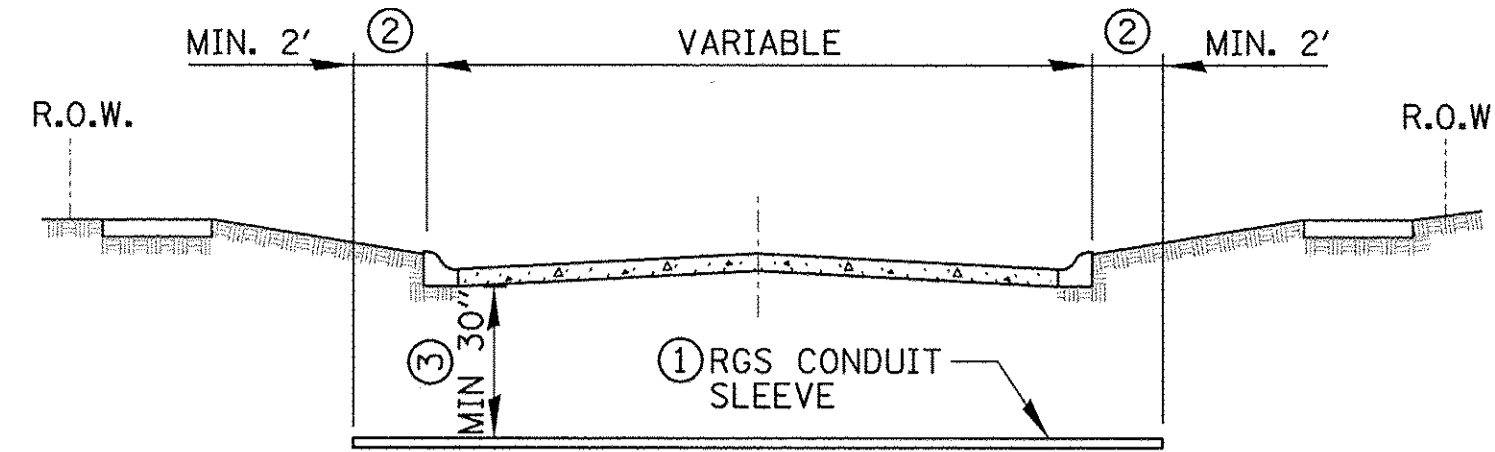
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0344	16-00023-00-LT	DUPAGE	17	11
CONTRACT NO. 61D67			ILLINOIS FED. AID PROJECT	

SCALE: N.T.S. SHEET 1 OF 3 SHEETS STA. - TO STA. -



### SPLICING ELECTRIC CABLE

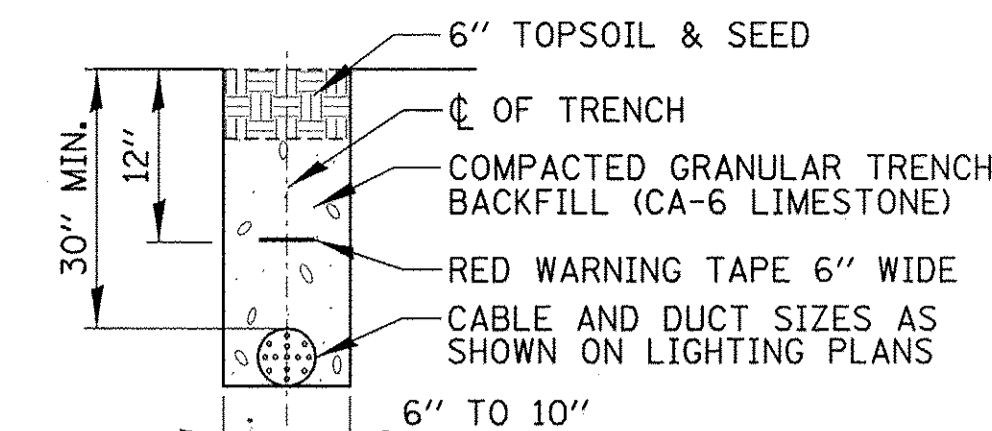
N.T.S.



### ROADWAY CROSSING

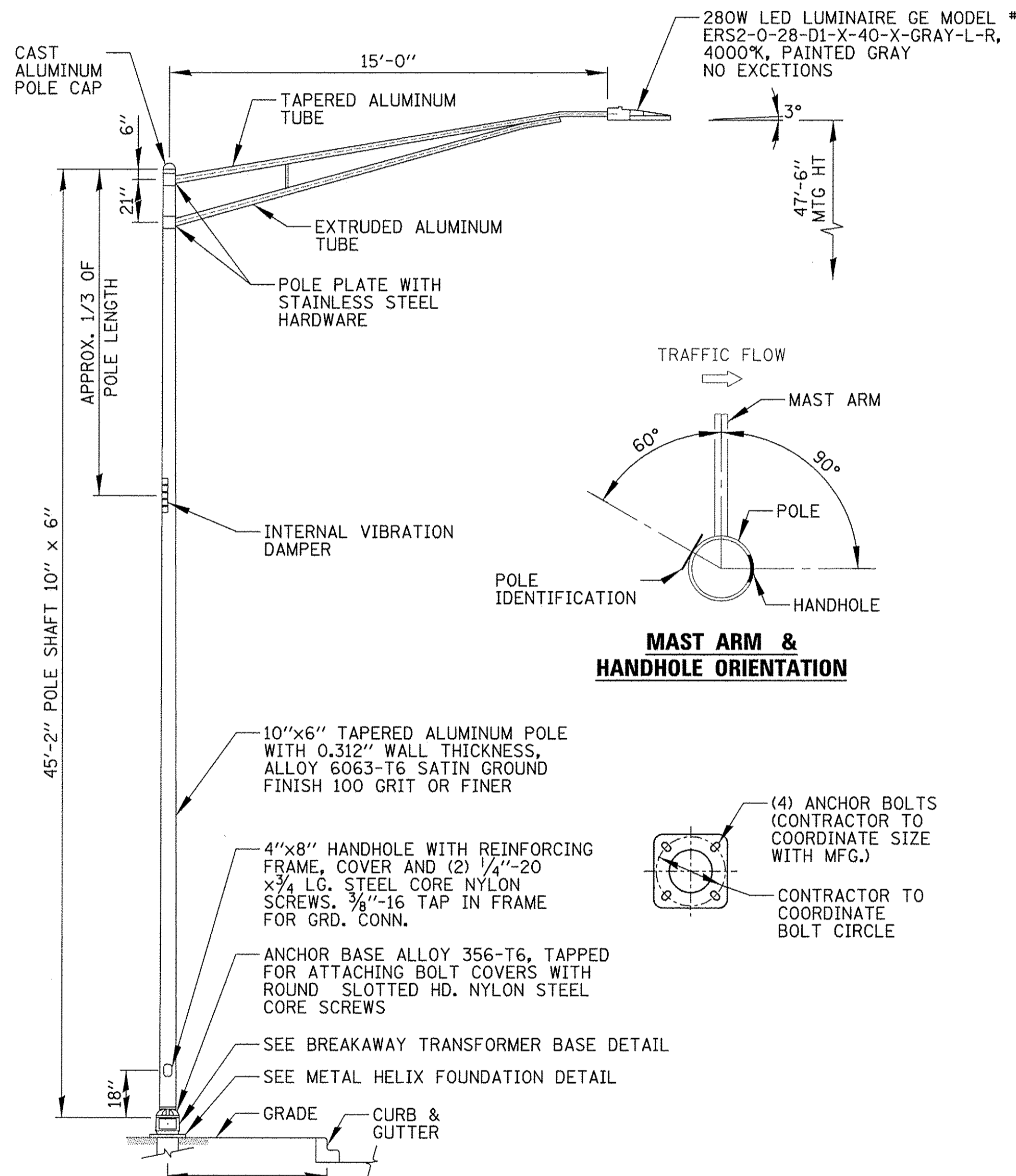
- ① SLEEVE SHALL BE HEAVY WALL RIGID GALVANIZED STEEL (RGS) CONDUIT.
- ② SLEEVE SHALL EXTEND A MINIMUM OF 2 FT. BEYOND BACK OF CURB.
- ③ SLEEVE SHALL BE A MINIMUM OF 30" BELOW ROADWAY OR CURB BOTTOM.

### TRENCH CROSS SECTION

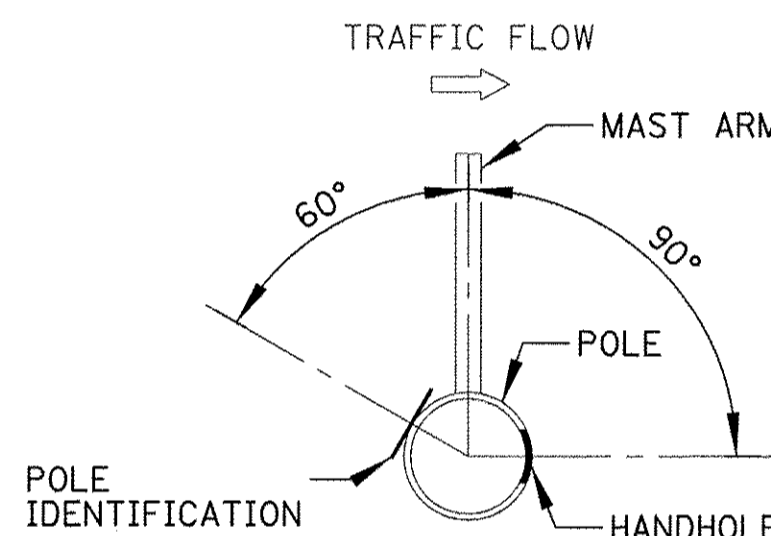


### ELECTRIC CONDUIT INSTALLATION

N.T.S.



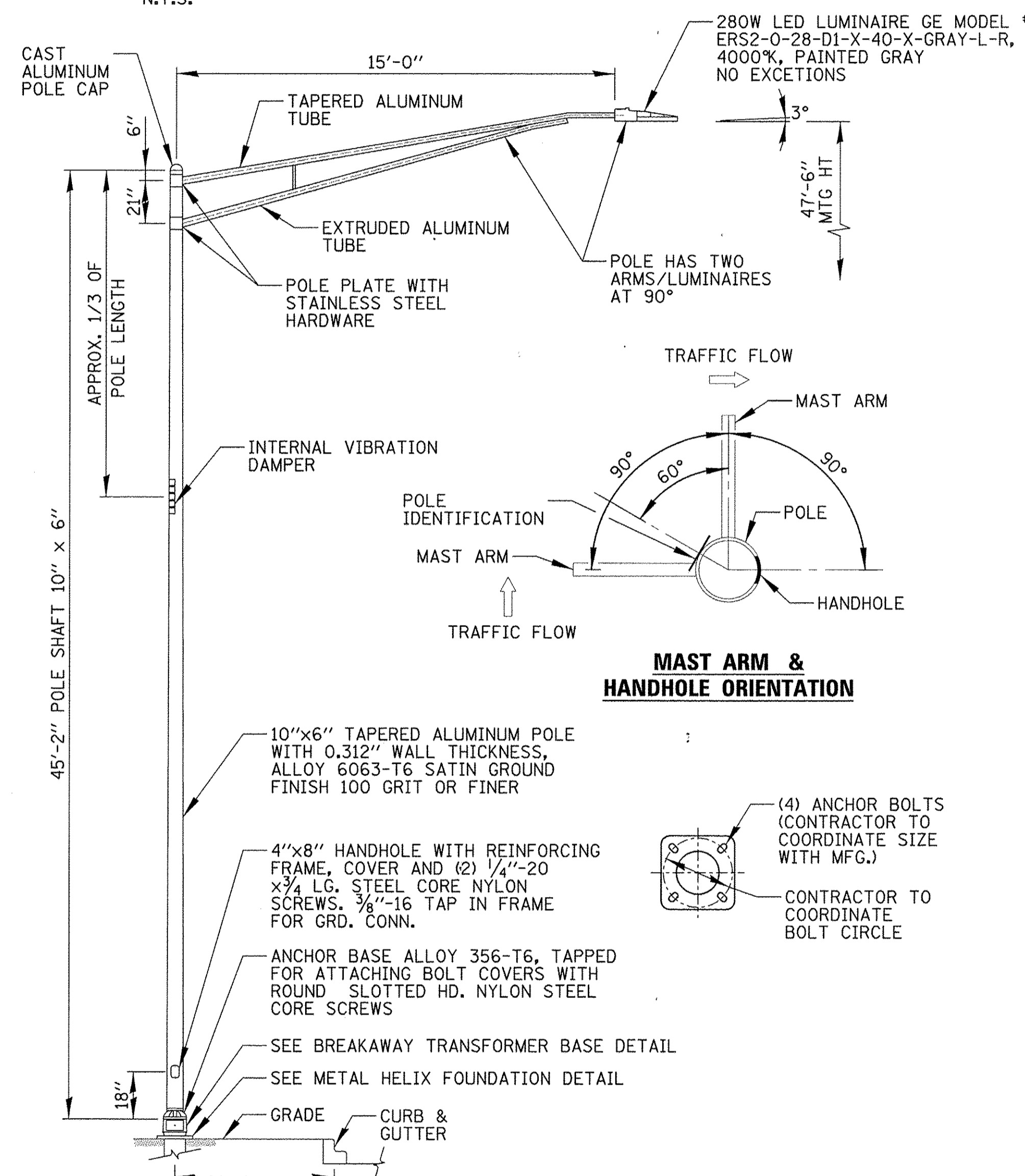
### MAST ARM & HANDHOLE ORIENTATION



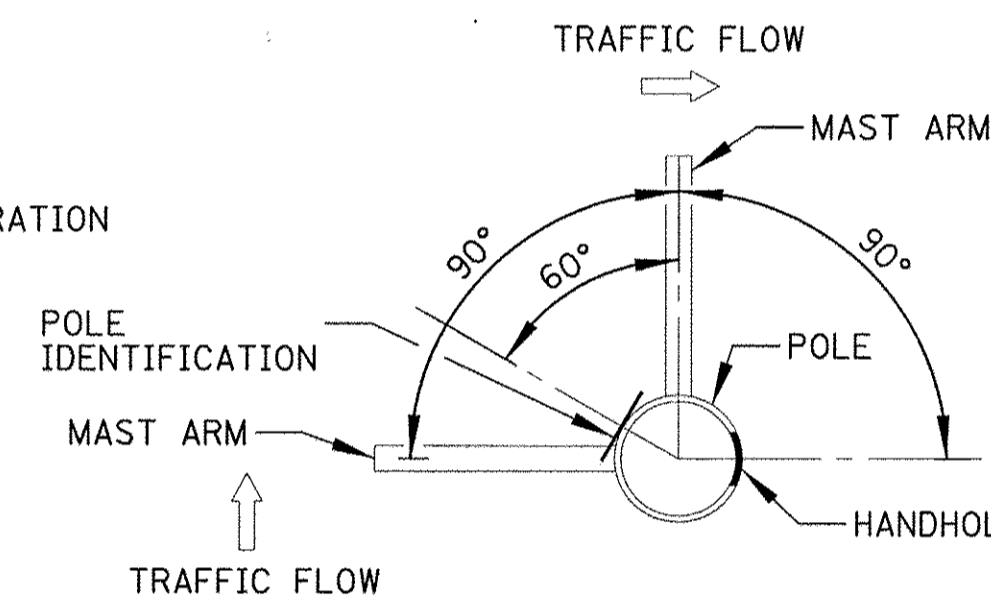
- NOTES:
1. LIGHT POLES SHALL MEET WIND LOADING & VIBRATION REQUIREMENTS ACCORDING TO THE LATEST AASHTO STANDARDS AND ARTICLE 1069.01 IN STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
  2. POLE HANDHOLE SHALL FACE AWAY FROM TRAFFIC.
  3. LED LUMINAIRE SHALL BE PAID FOR UNDER "LUMINAIRE, LED, HORIZONTAL MOUNT, MEDIUM WATTAGE"

### LIGHT POLE TYPE 1 DETAIL

N.T.S.



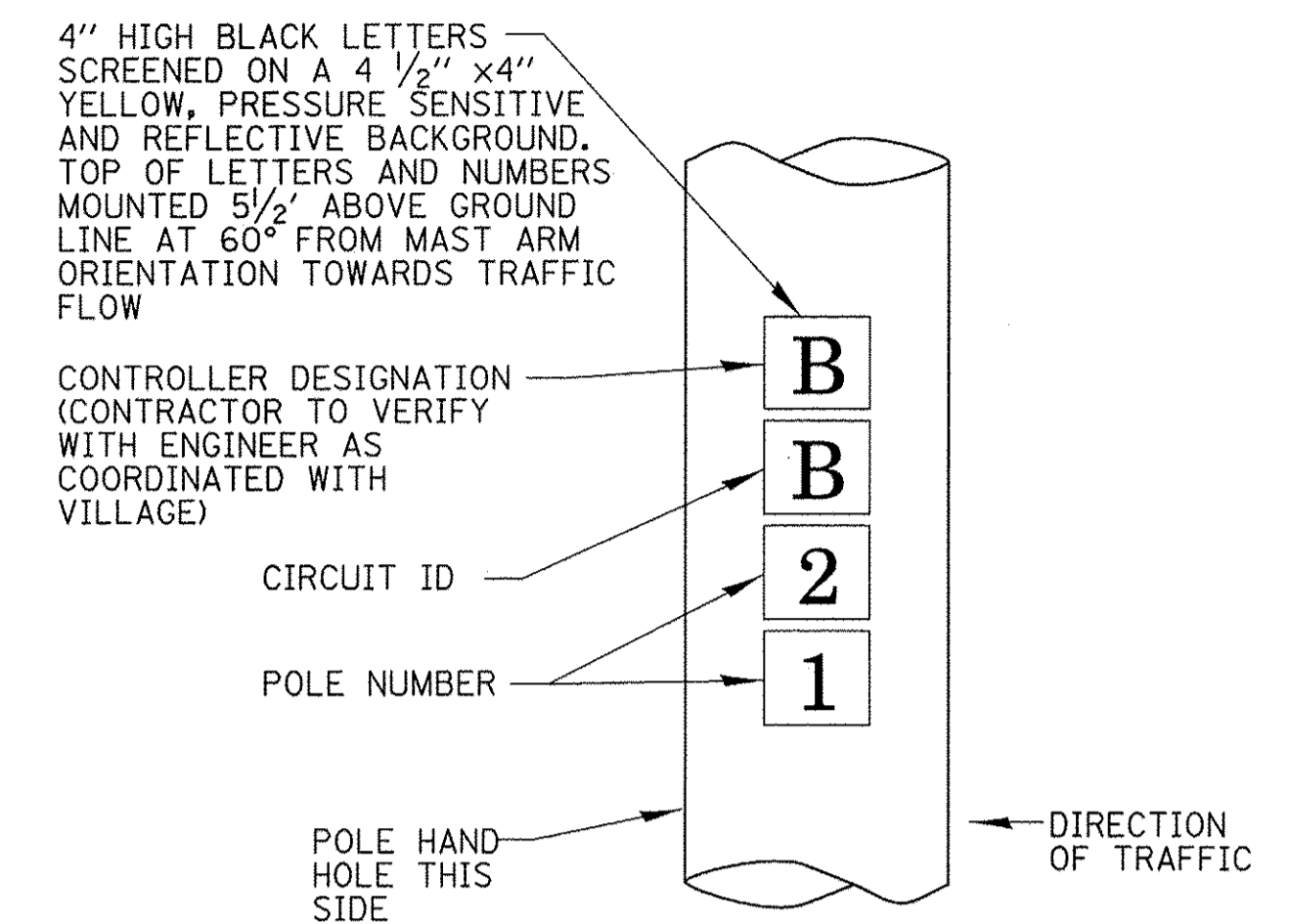
### MAST ARM & HANDHOLE ORIENTATION



- NOTES:
1. LIGHT POLES SHALL MEET WIND LOADING & VIBRATION REQUIREMENTS ACCORDING TO THE LATEST AASHTO STANDARDS AND ARTICLE 1069.01 IN STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
  2. POLE HANDHOLE SHALL FACE AWAY FROM TRAFFIC.
  3. LED LUMINAIRE SHALL BE PAID FOR UNDER "LUMINAIRE, LED, HORIZONTAL MOUNT, MEDIUM WATTAGE"

### LIGHT POLE TYPE 2 DETAIL

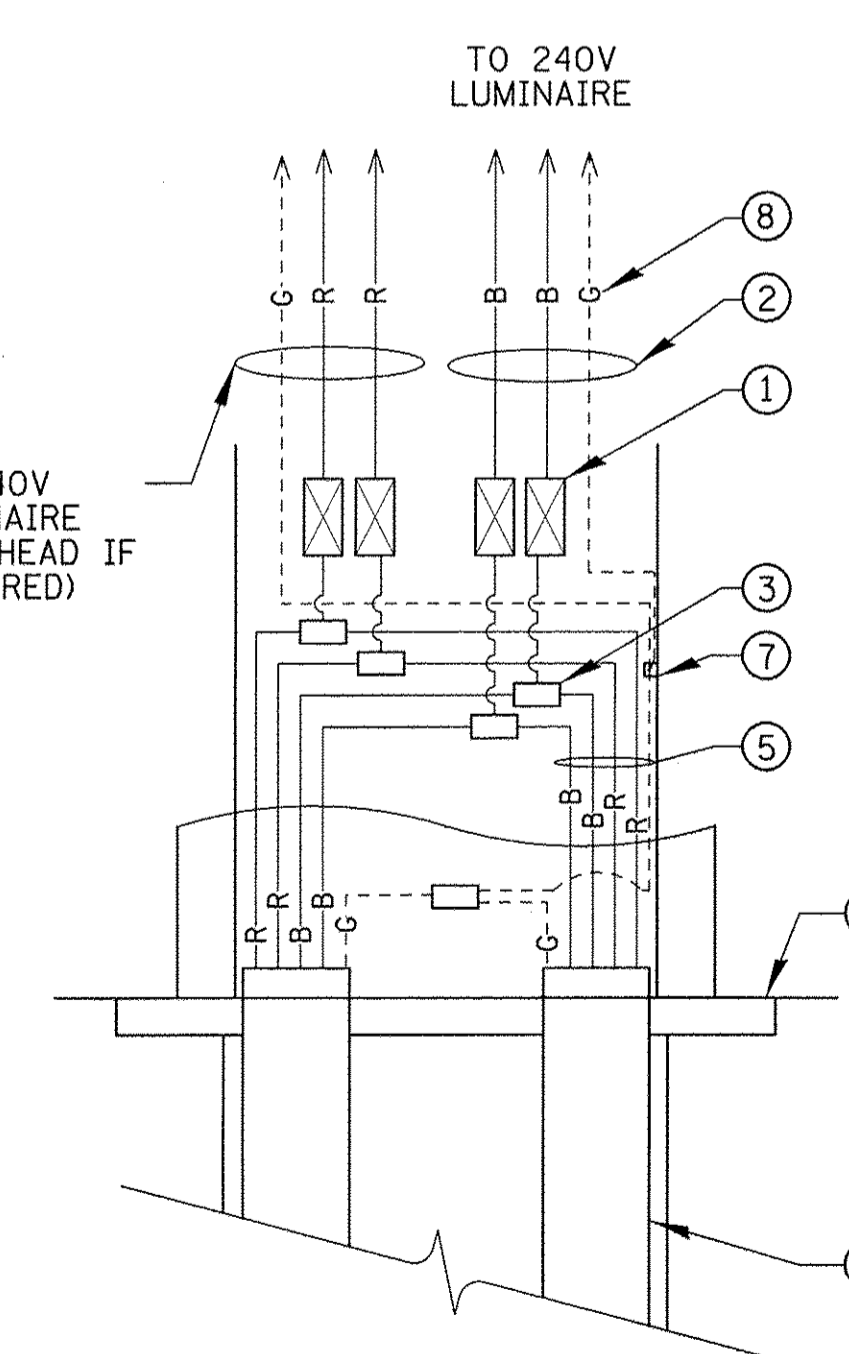
N.T.S.



### POLE IDENTIFICATION

N.T.S.

- PHASE CONDUCTOR
- - - GROUND CONDUCTOR
- - - NEUTRAL CONDUCTOR



- ① 4A TIME-DELAY FUSE INSIDE A 2-POLE BREAKAWAY WATERPROOF FUSE HOLDER & INSULATING BOOTS
- ② NO. 10 POLE WIRES TO LUMINAIRE COLOR TO MATCH BRANCH WIRING
- ③ MULTIPLE COMPRESSION FITTINGS (SPLICE), TYP.
- ④ METAL HELIX BASE PLATE
- ⑤ WIRE AS SHOWN ON PLANS
- ⑥ CABLES IN UNIT DUCT AS SHOWN ON PLANS
- ⑦ POLE GROUND LUG
- ⑧ WIRE COLOR  
R-RED  
B-BLACK  
G-GREEN

### HANDHOLE WIRING DIAGRAM

N.T.S.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ELECTRICAL DETAILS (2 OF 3)  
IL RT 83 & 63RD ST

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0344	16-00023-00-LT	DUPAGE	17	12
CONTRACT NO. 61D67			ILLINOIS FED. AID PROJECT	

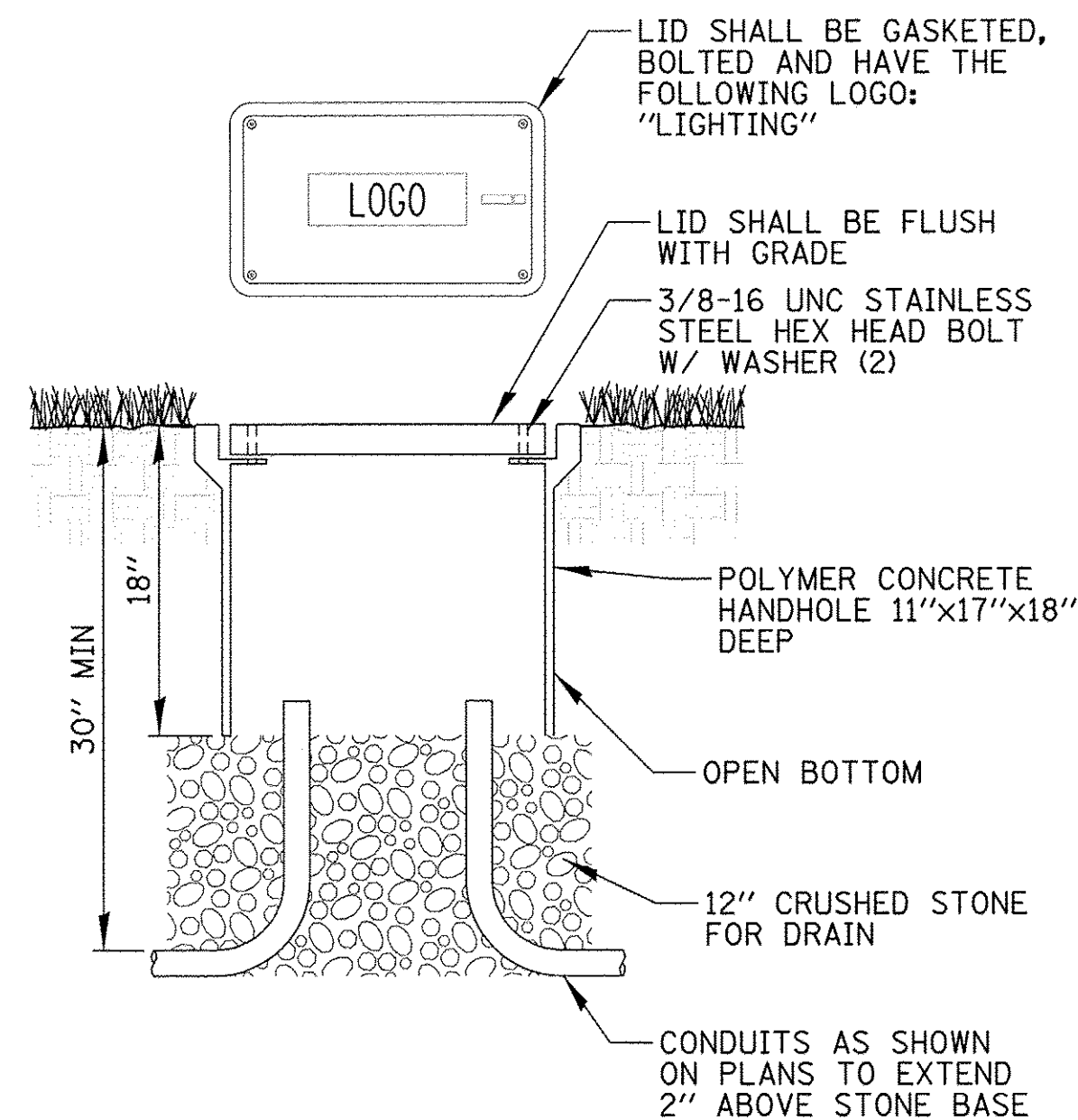
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Default	PLOT SCALE = 20'	CHECKED - AJD	REVISED -
	PLOT DATE = 12/21/2016	DATE - 10/13/2016	REVISED -

SCALE: N.T.S. SHEET 2 OF 3 SHEETS STA. - TO STA. -



### LUMINAIRE AND POLE SCHEDULE

LIGHT POLE IDENTIFIER	POLE TYPE	LUMINAIRE		LOCATION	
		WATTAGE	CKT ID	STATION	OFFSET
P1	1	280W	A	102+84L	4.0' F. O. C.
P2	1	280W	B	104+74L	4.0' F. O. C.
P3	1	280W	A	106+24L	4.0' F. O. C.
P4	1	280W	B	107+74L	4.0' F. O. C.
P5	1	280W	A	108+73L	6.0' F. O. C.
P6	1	280W	B	112+14L	4.0' F. O. C.
P7	1	280W	A	114+04L	4.0' F. O. C.
P8	1	280W	B	115+94L	4.0' F. O. C.
P9	1	280W	A	117+84L	4.0' F. O. C.
P10	1	280W	B	119+84L	4.0' F. O. C.
P11	1	280W	A	121+79L	4.0' F. O. C.
P12	1	280W	A	101+29R	4.0' F. O. C.
P13	1	280W	B	102+84R	4.0' F. O. C.
P14	1	280W	A	104+74R	4.0' F. O. C.
P15	1	280W	B	106+24R	5.0' F. O. C.
P16	1	280W	A	107+74R	6.0' F. O. C.
P17	1	280W	B	108+74R	9.0' F. O. C.
P18	1	280W	A	112+14R	4.0' F. O. C.
P19	1	280W	B	114+04R	4.0' F. O. C.
P20	1	280W	A	115+94R	4.0' F. O. C.
P21	1	280W	B	117+84R	4.0' F. O. C.
P22	1	280W	A	119+84R	4.0' F. O. C.
P23	1	280W	C	203+51L	4.0' F. O. C.
P24	1	280W	D	205+01L	5.0' F. O. C.
P25	1	280W	C	206+51L	4.0' F. O. C.
P26	1	280W	D	208+01L	7.0' F. O. C.
P27	2	(2) 280W	D,C	208+52L	10.5' F. O. C.
P28	2	(2) 280W	C,D	210+39L	7.5' F. O. C.
P29	1	280W	C	210+93L	4.0' F. O. C.
P30	1	280W	D	212+53L	4.0' F. O. C.
P31	1	280W	C	214+13L	4.0' F. O. C.
P32	1	280W	D	215+73L	4.0' F. O. C.
P33	1	280W	C	202+01R	13.0' E. O. P.
P34	1	280W	D	203+51R	13.0' E. O. P.
P35	1	280W	C	205+01R	13.0' E. O. P.
P36	1	280W	D	206+51R	13.0' E. O. P.
P37	1	280W	C	207+91R	4.0' F. O. C.
P38	2	(2) 280W	D,C	208+34R	19.0' F. O. C.
P39	2	(2) 280W	C,D	210+25R	5.5' F. O. C.
P40	1	280W	D	210+93R	4.0' F. O. C.
P41	1	280W	C	212+53R	4.0' F. O. C.
P42	1	280W	D	214+13R	4.0' F. O. C.



**NOTES:**

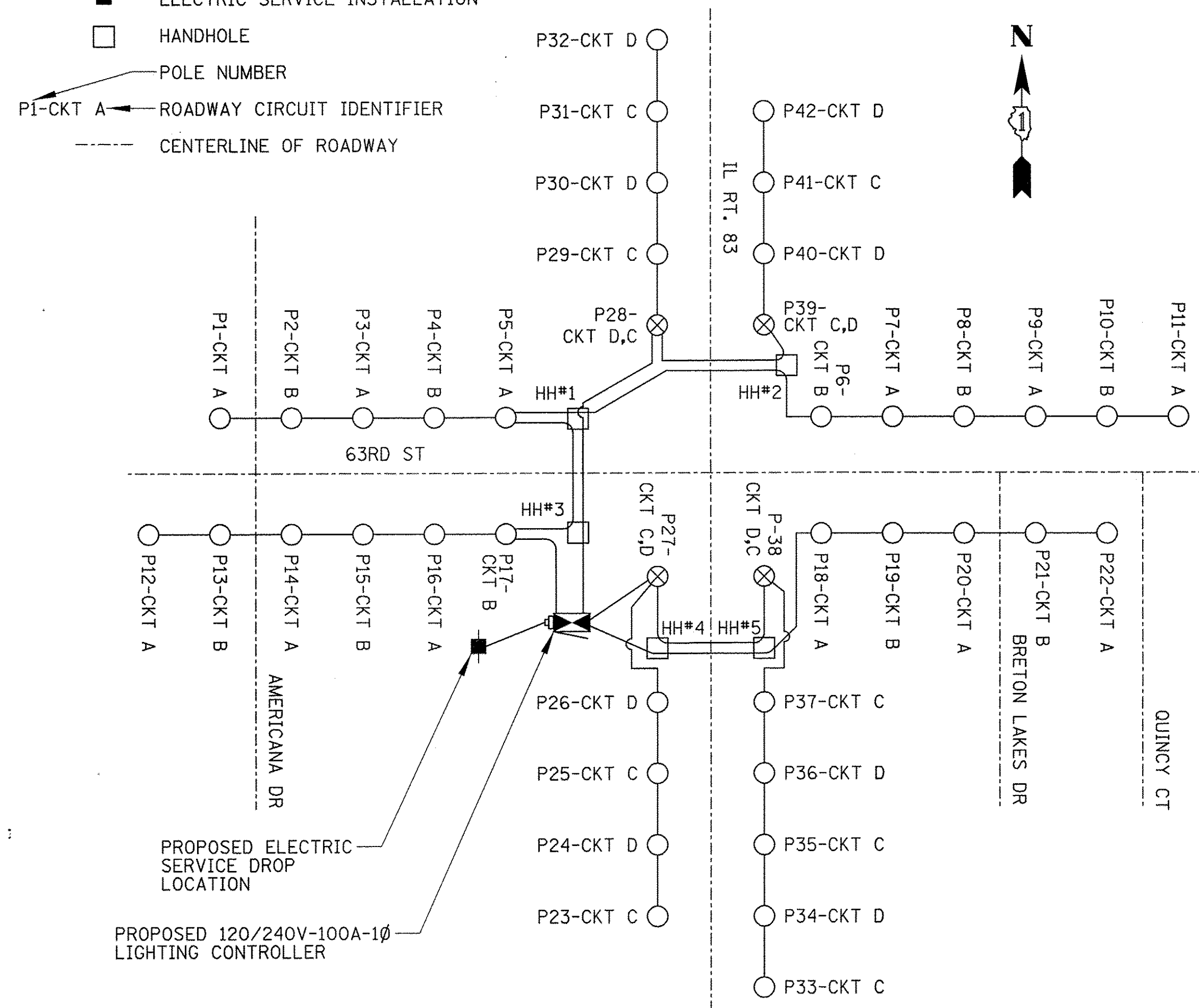
1. NO SPLICING ALLOWED IN HANDHOLES.
2. POLYMER CONCRETE HANDHOLE AND LID SHALL BE GREY.
3. BOX & LID SHALL MEET/EXCEED ANSI TIER 15 LOADING REQUIREMENTS, AND BE TESTED IN ACCORDANCE WITH THE LATEST EDITION OF THE ANSI/SCTE 77 "SPECIFICATION FOR UNDERGROUND ENCLOSURE INTEGRITY", AND THE PROVISIONS OF PARAGRAPHS 5.2.3 AND 5.2.4 OF WESTERN UNDERGROUND COMMITTEE GUIDE 3.6.

### COMPOSITE CONCRETE HANDHOLE

N.T.S.

### ONE-LINE LEGEND

- PROPOSED LIGHT POLE
- ⊗ PROPOSED TWIN HEAD LIGHT POLE
- ELECTRIC CABLE IN CONDUIT
- ⏏ LIGHTING CONTROLLER
- ELECTRIC SERVICE INSTALLATION
- HANDHOLE
- POLE NUMBER
- ← ROADWAY CIRCUIT IDENTIFIER
- - - CENTERLINE OF ROADWAY



### LIGHTING ONE-LINE DIAGRAM

N.T.S.

**Lewis Reynolds**

**From:** Gardner, David A:(ComEd) <david.gardner@ComEd.com>  
**To:** Tuesday, October 11, 2016 8:43 AM  
**Subject:** RE: Acct Number: 3131029076 - IL Rt 83 & 63rd St Lighting

Lewis,

I field check the site yesterday...the transformer location you want to go to is good to go. Let me know when you're ready, have the electrical work inspection sign-off, and what wire size for connection.

Any questions please call or email me.

Dave

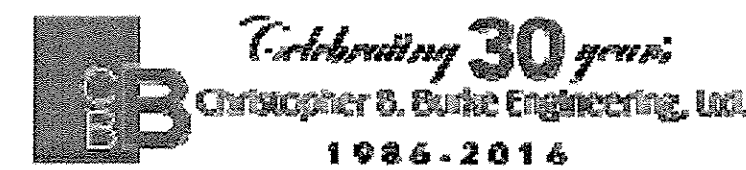
COMED CONTACT: DAVID GARDNER  
 847-366-3897  
 DAVID.GARDNER@COMED.COM

**David Gardner**  
**ComEd Field Engineer**  
**GSR-New Business, Bolingbrook**  
 ☎ 630-985-4074 office  
 ☎ 630-985-4042 fax  
 ✉ david.gardner@comed.com  
<https://www.comed.com/newbusiness>

**From:** Lewis Reynolds [mailto:lreynolds@cbbel.com]  
**Sent:** Monday, October 10, 2016 9:37 AM  
**To:** Gardner, David A:(ComEd)  
**Cc:** Gerald Hennelly  
**Subject:** RE: Acct Number: 3131029076 - IL Rt 83 & 63rd St Lighting

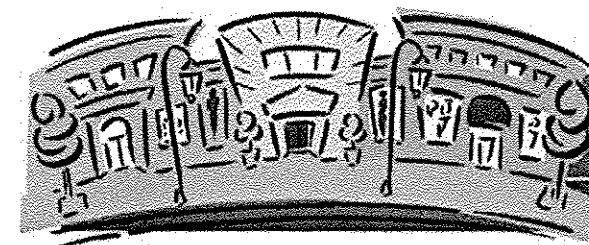
Great, thank you for your help. Let me know if you have any questions.

**Lewis R. Reynolds**  
 Mechanical Engineer  
**Christopher B. Burke Engineering, Ltd.**  
 9575 W. Higgins Road, Suite 600 Rosemont, IL 60018  
 Phone: (847) 823-0500 Fax: (847) 939-5214  
 E-Mail: lreynolds@cbbel.com  
[www.cbbel.com](http://www.cbbel.com)



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**COM ED CORRESPONDENCE**



**ComEd**  
 An Exelon Company

**Service and Meter Application**  
**Switch and Load Information Sheet**

Please complete a separate sheet for each switch – existing or new:

Project Name: IL Rt 83 & 63<sup>rd</sup> St. Roadway Lighting  
 Site Address: 0 N. IL Rt. 83, Willowbrook, IL 60527  
 Switch Name and Location: Lighting Controller, SW Corner IL Rt 83/63<sup>rd</sup> St.

**Service Voltage (check one):**

- 120/240V 1-phase, 3-wire
- 120/240V 3-phase, 4-wire
- 120/208V 3-phase, 4-wire
- Other:
- 4kV  12kV  34kV 3-phase, 3-wire
- 4kV  12kV  3-phase, 4-wire
- 277/480V 3-phase, 4-wire
- 480V 3-phase 3-wire (B-phase Grounded)
- 480V 3-phase 3-wire (Ungrounded – requires ground detection equip.)

**Other Items (check all that apply):**

- New Construction Sq. Ft.
- Building Addition Sq. Ft.
- Relocating Existing Service Entrance
- Hi-Rise/ Vault Service
- Underground Service
- Overhead Service
- Commercial – No. of units Sq. Ft.
- Residential – No. of units Sq. Ft.

Date of Ground Breaking (est.): \_\_\_\_\_ Date to Final Grade (est.): \_\_\_\_\_  
 Date to Energize: August 2017 Hours of Operation Per Day:  8  12  16  24

Switch Size (amps): 100 (If switchgear is 1,200 Amps or larger, customer must submit drawings for ComEd approval)  
 Switch Rating (percentage): 80  
 Secondary Conductors: 1 Sets of 3 /C #2  CU or  AL  
(Number) (No. of conductors) (Size) (Type)

**Total Connected Load Information:**

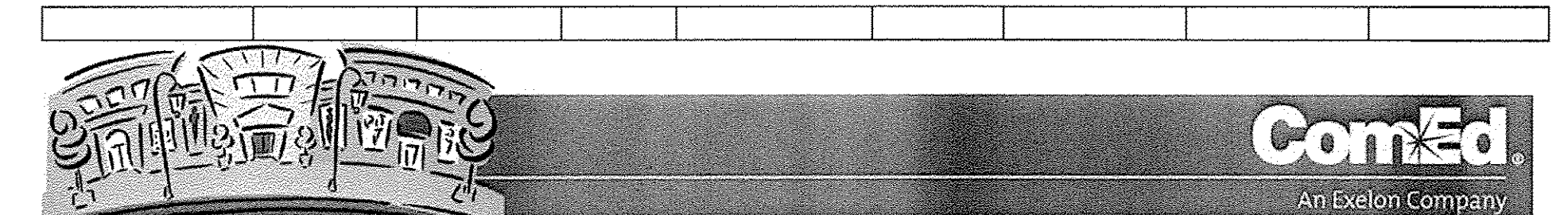
( KW or HP )	Description:	Connected Load:	
		1-phase	3-phase
Lighting:	Roadway Lighting	12.9 KW	
VAC:			
Receptacle:			
Process Heat:			
Water Heat:			
Space Heat:			
Motors*:			
Welders**:			
<b>TOTAL LOAD:</b>		12.9 KW	

**\*Motor Load Detail included above:**

Description	Quantity	Size (HP)	Efficiency Rating	Phase / Voltage	Nema Code	Starts Per Hr. or Day	Starting Amps	Use

**\*\*Welder Detail included above:**

Description	Quantity	Size (kVA)	Type	Max. Inst. Demand	P.F. at Peak	Welds Per Minute	Cycles Per Weld	Hours Per Day Use



**ComEd**  
 An Exelon Company

**Service and Meter Application**  
**Project Information Sheet**

Project Name: IL Rt 83 & 63rd St. Roadway Lighting  
 Site Address: 0 N. IL Rt. 83 City: Willowbrook Zip: 60527

Total Number of Service Entrance Locations (meters/switches) Requested: 1

Legal Name of Entity (Electric Consumer): Village of Willowbrook  
 Corporation  Partnership  Sole Proprietor  Other: Municipality  
 Tax I.D.: \_\_\_\_\_ Existing Account Number: 3131029076

**Principle(s) to Sign Contracts For Service, Easements, Etc.:**

Property Owner: Village of Willowbrook Phone: 6309202261  
 Building Owner: \_\_\_\_\_ Phone: \_\_\_\_\_  
 Building Manager: Tim Halik Phone: \_\_\_\_\_

**Mailing Address For Contracts:**

Company: Christopher B. Burke Engineering Phone: 847-823-0500 Fax: 847-939-5214  
 Address: 9575 W. Higgins Rd. City: Rosemont Zip: 60018

**Mailing Address For Electric Bills:**

Company: Village of Willowbrook Phone: 6309202261 Fax: \_\_\_\_\_  
 Address: 835 Midway Dr City: Willowbrook Zip: 60527

**Project Contacts:**

Consulting Engineer: Lewis Reynolds E-mail: lreynolds@cbbel.com  
 Firm Name: Christopher B. Burke Engineering Phone: 847-823-0500 Fax: 847-939-5214  
 Address: 9575 W. Higgins Rd. City: Rosemont Zip: 60018

**Electrical Contractor:**

Consulting Engineer: \_\_\_\_\_ E-mail: \_\_\_\_\_  
 Firm Name: \_\_\_\_\_ Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
 Address: \_\_\_\_\_ City: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Other: \_\_\_\_\_ E-mail: \_\_\_\_\_  
 Consulting Engineer: \_\_\_\_\_ Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
 Firm Name: \_\_\_\_\_ Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
 Address: \_\_\_\_\_ City: \_\_\_\_\_ Zip: \_\_\_\_\_

**The Following Documents May Be Required:**

1. Plat of Survey with legal description of property (for easement, if required)
2. Site Plan showing building relative to property lines – mark service entrance location(s)
3. Civil drawings (showing water, sewer, gas, phone, electric, pavement, grading, etc.)
4. Complete electrical drawings and/or load detail sheets

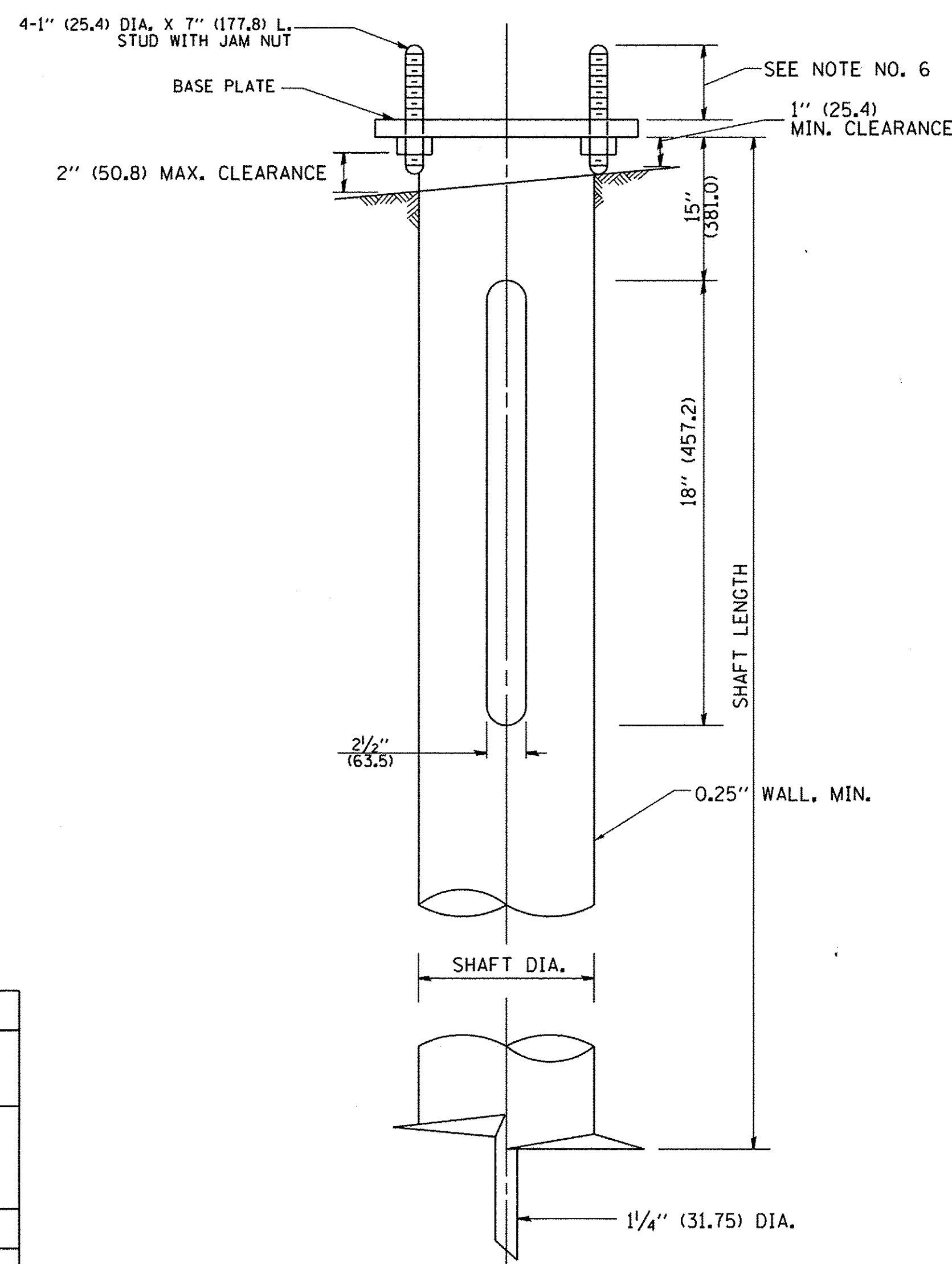
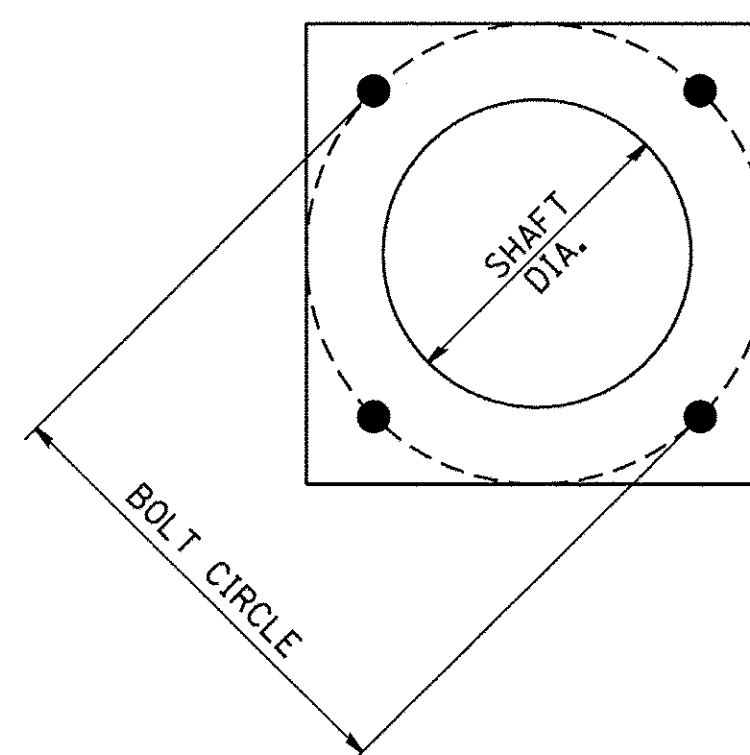
**Information Provided By:**

Print Name: Lewis Reynolds  
 Signature: \_\_\_\_\_  
 Date: 10/4/16

**LIGHTING CONTROLLER SERVICE APPLICATION**

FILE NAME =	USER NAME = dkerr	DESIGNED -- GAH	REVISED --	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>ELECTRIC SERVICE COORDINATION "FOR INFORMATION ONLY"</b> <b>IL RT 83 &amp; 63RD ST</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
N:\WILLOWBROOK\158687\Mech\LD\158687_4.sht	PLOT SCALE = 28'	DRAWN -- LRR	REVISED --			0344	16-00023-00-LT	DUPAGE	17	14	
Default	PLOT DATE = 12/21/2016	CHECKED -- AJD	REVISED --			SCALE: N.T.S.	SHEET 1 OF 1 SHEETS	TO STA. -	ILLINOIS FED. AID PROJECT		
		DATE -- 10/13/2016	REVISED --								





**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 ( $\pm 0.188$ ) TO THE SHAFT AXIS.
11. THE PILOT POINT AND SHAFT AXIS SHALL BE CONCENTRIC ( $\pm 0.125$ ) AND IN LINE ( $\pm 2^\circ$ ).
12. THE BASEPLATE SHALL BE STAMPED WITH THE MANUFACTURERS NAME AND DATE OF MANUFACTURE.

**HELIX FOUNDATION SIZE**

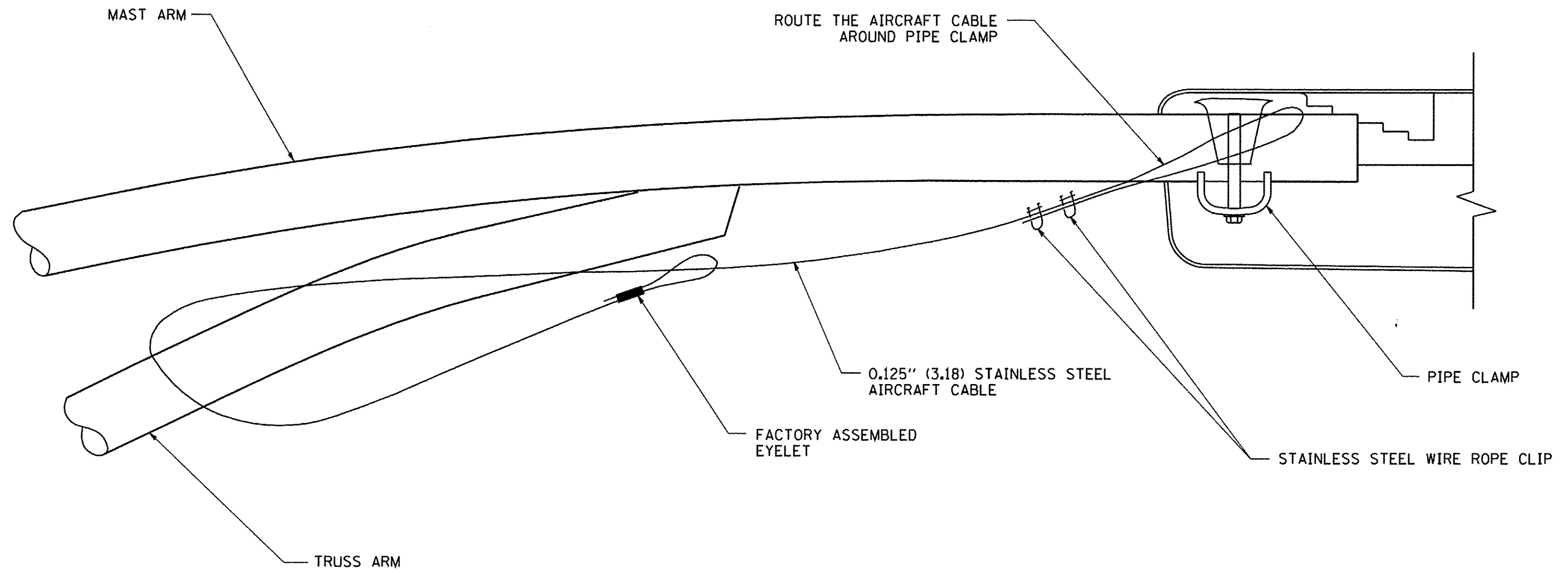
POLE MOUNTING HEIGHT	BOLT CIRCLE	SHAFT DIAMETER	SHAFT LENGTH	BASEPLATE
30 FT.	11 1/2"	8 5/8"	6 FT.	12"x12"x1"
31 FT.-35 FT.	11 1/2"	8 5/8"	6 FT.	12"x12"x1"
36 FT.-40FT.	15"	8 5/8"	6 FT.	15"x15"x1 1/4"
41 FT.-45 FT.	15"	8 5/8"	6 FT.	15"x15"x1 1/4"
46 FT.-50 FT.	15"	10"	8 FT.	15"x15"x1 1/4"

**METAL HELIX FOUNDATION MATERIALS**

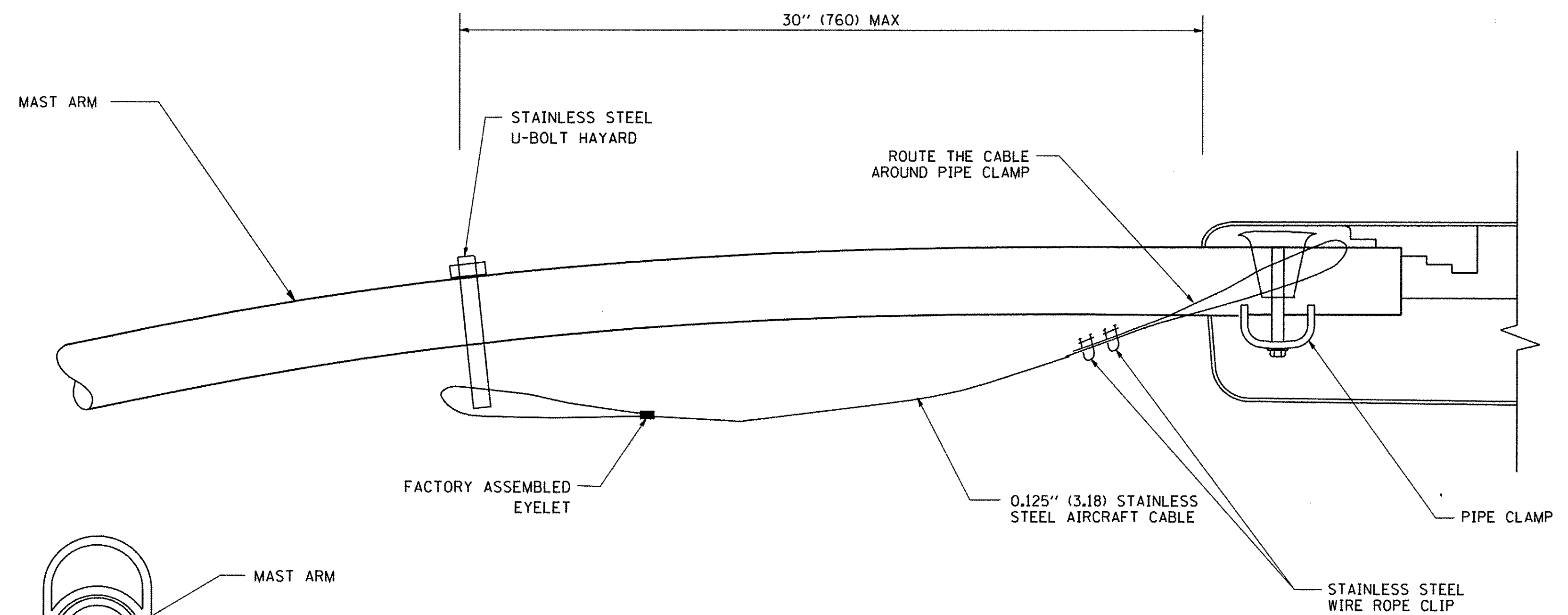
ITEM	MATERIAL REQUIREMENT
BASEPLATE	AASHTO M 270M, GRADE 36 (M270M, GRADE 250)
SHAFT	ASTM A 252, GRADE 2 (PHOSPHOROUS 0.04% MAXIMUM, SULFUR 0.05% MAXIMUM)
HELIX SCREW	AASHTO M 183 (ASTM A 635)
PILOT POINT	AASHTO M 270 (ASTM A 575)
ANCHOR RODS/STUDS	AASHTO M 314 (ASTM F 1554)
HEXAGON NUTS	AASHTO M 291M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

**LIGHT POLE FOUNDATION, METAL**  
N.T.S.

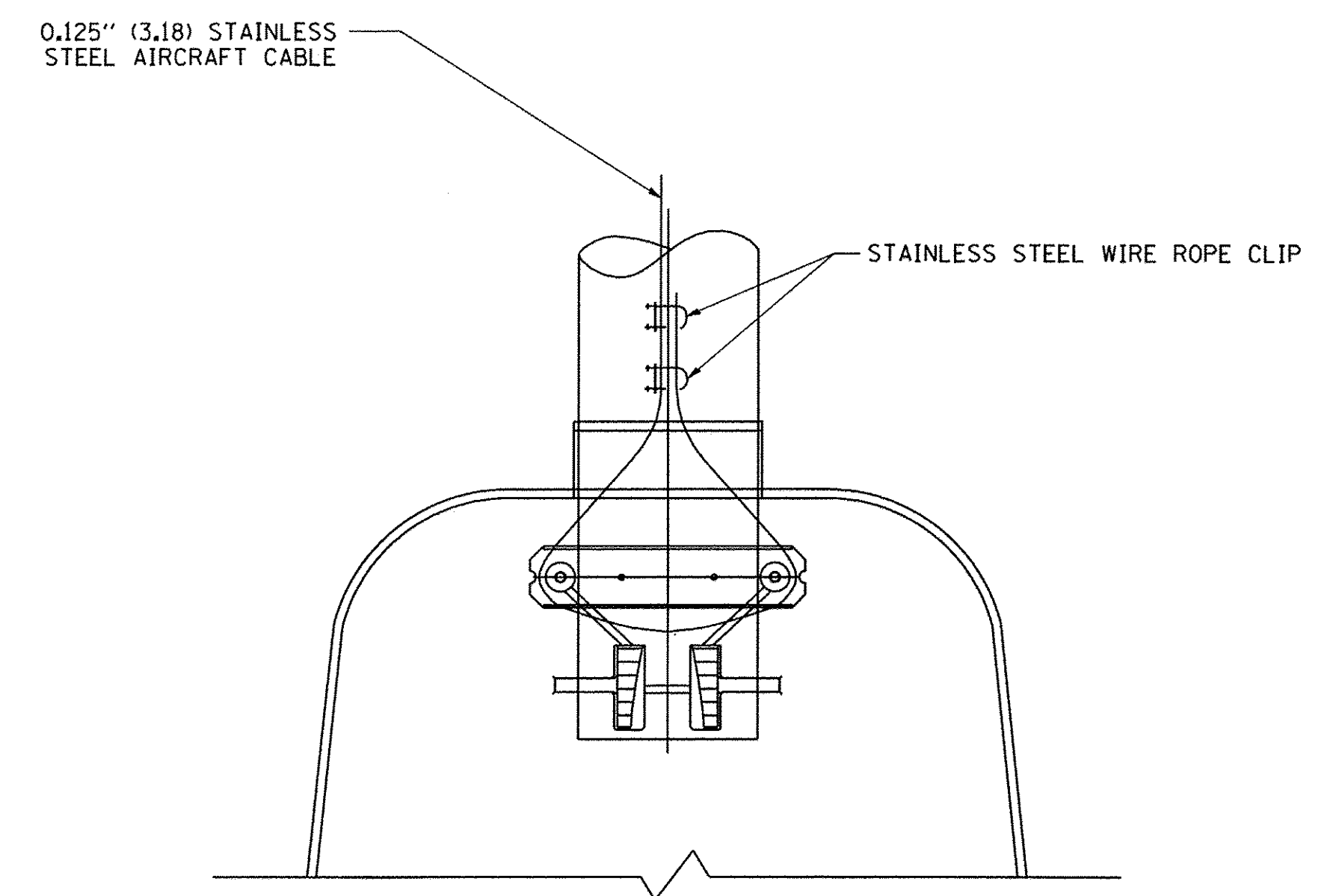
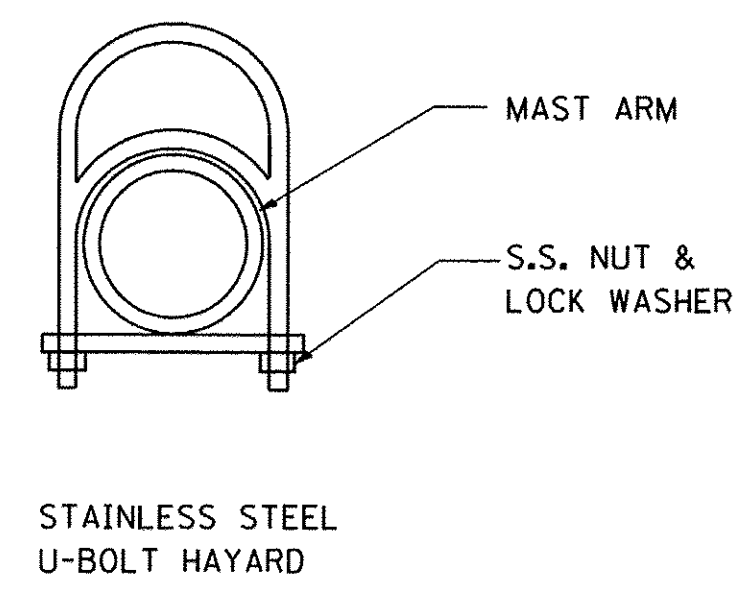
**IDOT STANDARD BE-305**



**SIDE VIEW (TRUSS ARM)**  
N.T.S.



**SIDE VIEW (SINGLE MEMBER OR DAVIT ARM)**  
N.T.S.



**BOTTOM VIEW**  
N.T.S.

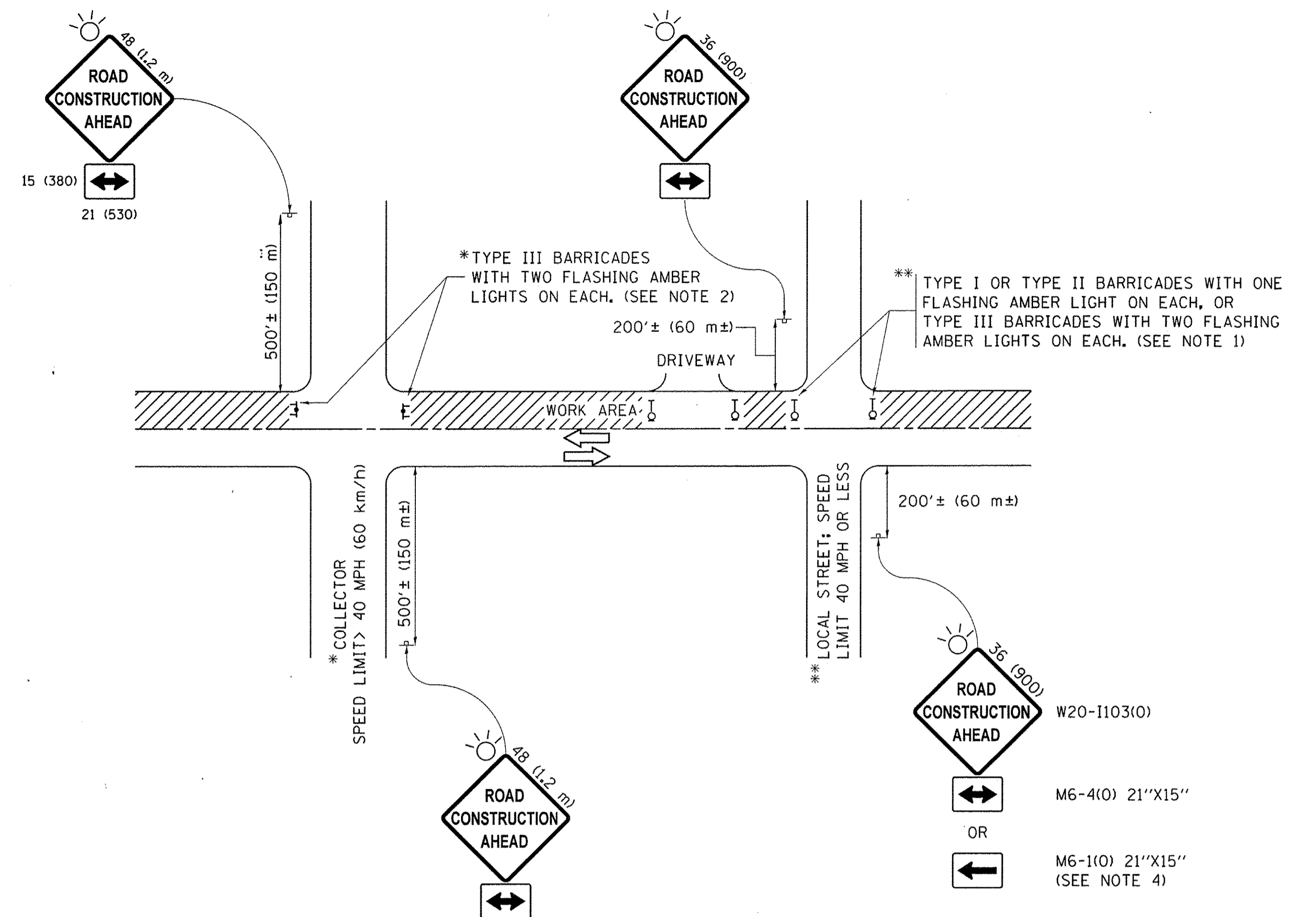
- NOTES:**
1. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.
  2. CONTRACTOR SHALL ADJUST THE WIRE CLIP TO ELIMINATE ANY SLACK FROM THE WIRE ROPE.
  3. THE 0.125" (3.18) STAINLESS STEEL AIRCRAFT CABLE SHALL REMAIN VISIBLE FROM THE GROUND LEVEL.
  4. THE BREAKING STRENGTH OF THE CABLE SHALL BE 1700 LBS. MIN.

**LUMINAIRE SAFETY CABLE ASSEMBLY**  
N.T.S.

**IDOT STANDARD BE-701**  
**REVISED 8-8-2003**

FILE NAME = N:\WILLIAMSBROOK\150687\Mech\STD_150687_02.sht	USER NAME = dkerr	DESIGNED - GAH	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>IDOT DISTRICT 1 STANDARD (2 OF 3)</b> <b>IL RT 83 &amp; 63RD ST</b>		F.A.P. RTE. 0344	SECTION 16-00023-00-CT	COUNTY DUPAGE	TOTAL SHEETS 17	SHEET NO. 16	
Default	PLOT SCALE = 20"	CHECKED - AJD	REVISED -		SCALE: N.T.S.	SHEET 2	OF 3 SHEETS	STA. -	TO STA. -	CONTRACT NO. 61D67		
	PLOT DATE = 12/21/2016	DATE - 10/13/2016	REVISED -		ILLINOIS FED. AID PROJECT							





**NOTES:**

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

**IDOT STANDARD TC-10  
REVISED 9-15-2016**

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

FILE NAME =	USER NAME = dkerr	DESIGNED - GAH	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IDOT DISTRICT 1 STANDARD (3 OF 3) IL RT 83 &amp; 63RD ST</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
N:\WILLOWBROOK\150687\Mech\STD_150687.d3.sht	DRAWN - LRR	REVISED -	0344			16-00023-00-LT	DUPAGE	17	17	
Default	PLOT SCALE = 20'	CHECKED - AJD	REVISED -			CONTRACT NO. 61D67		ILLINOIS FED. AID PROJECT		
	PLOT DATE = 12/21/2016	DATE - 10/13/2016	REVISED -	SCALE: N.T.S.	SHEET 3 OF 3 SHEETS	STA. -	TO STA. -			