

09-21-12 LETTING ITEM 018

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
**PLANS FOR PROPOSED
FEDERAL AID HIGHWAY**

F. A. I. D. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3778	06-00082-01-LT	COOK	17	1
STA. 10+00		TO STA. 62+00		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT HPP M-9003(774)	

CONTRACT #63726

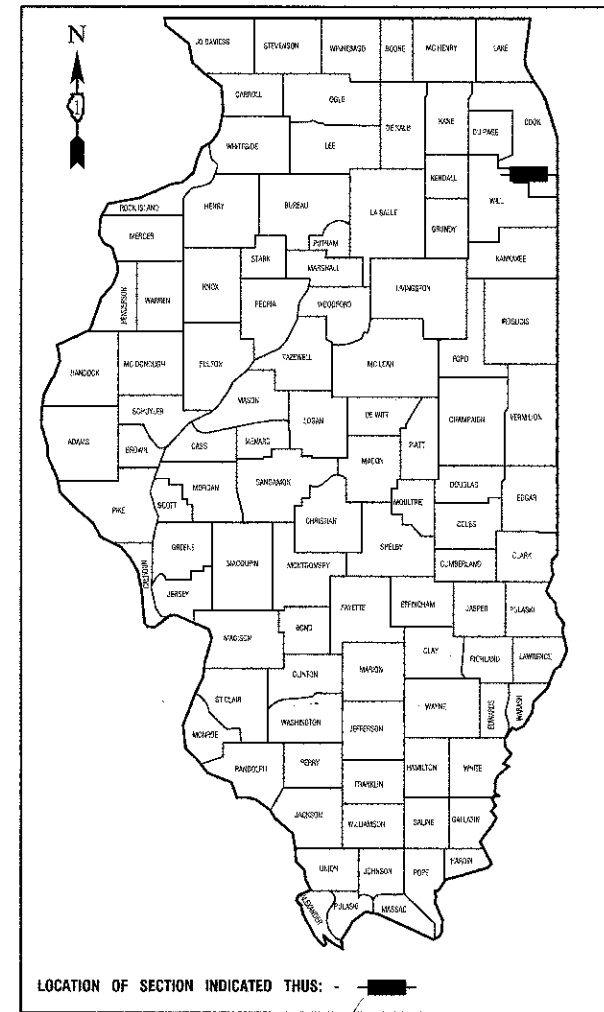
INDEX OF SHEETS

- COVER SHEET
- SUMMARY OF QUANTITIES
- 5. STREET LIGHTING PLANS
- SINGLE LINE DIAGRAM
- 9. PAVEMENT MARKINGS
- 14. STREET LIGHTING DETAILS
- DISTRICT 1 DETAILS

HIGHWAY STANDARDS

- | | |
|-----------|---|
| 00001-06 | STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS |
| 42401-06 | PERPENDICULAR CURB RAMPS FOR SIDEWALKS |
| 701502-04 | URBAN LANE CLOSURE, 2L 2W, UNDIVIDED |
| 701606-08 | URBAN LANE CLOSURE, MULTILANE, 2W,
WITH MOUNTABLE MEDIAN |
| 701701-08 | URBAN LANE CLOSURE, MULTILANE INTERSECTION |
| 701801-05 | SIDEWALK, CORNER OR CROSSWALK CLOSURE |
| 701901-02 | TRAFFIC CONTROL DEVICES |

**FAU 3778 (PULASKI ROAD)
123RD STREET TO 115TH STREET
STREET LIGHTING
SECTION NO.: 06-00082-01-LT
PROJECT NO. HPP-M-9003 (774)
VILLAGE of ALSIP
COOK COUNTY
C-91-363-11**



STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

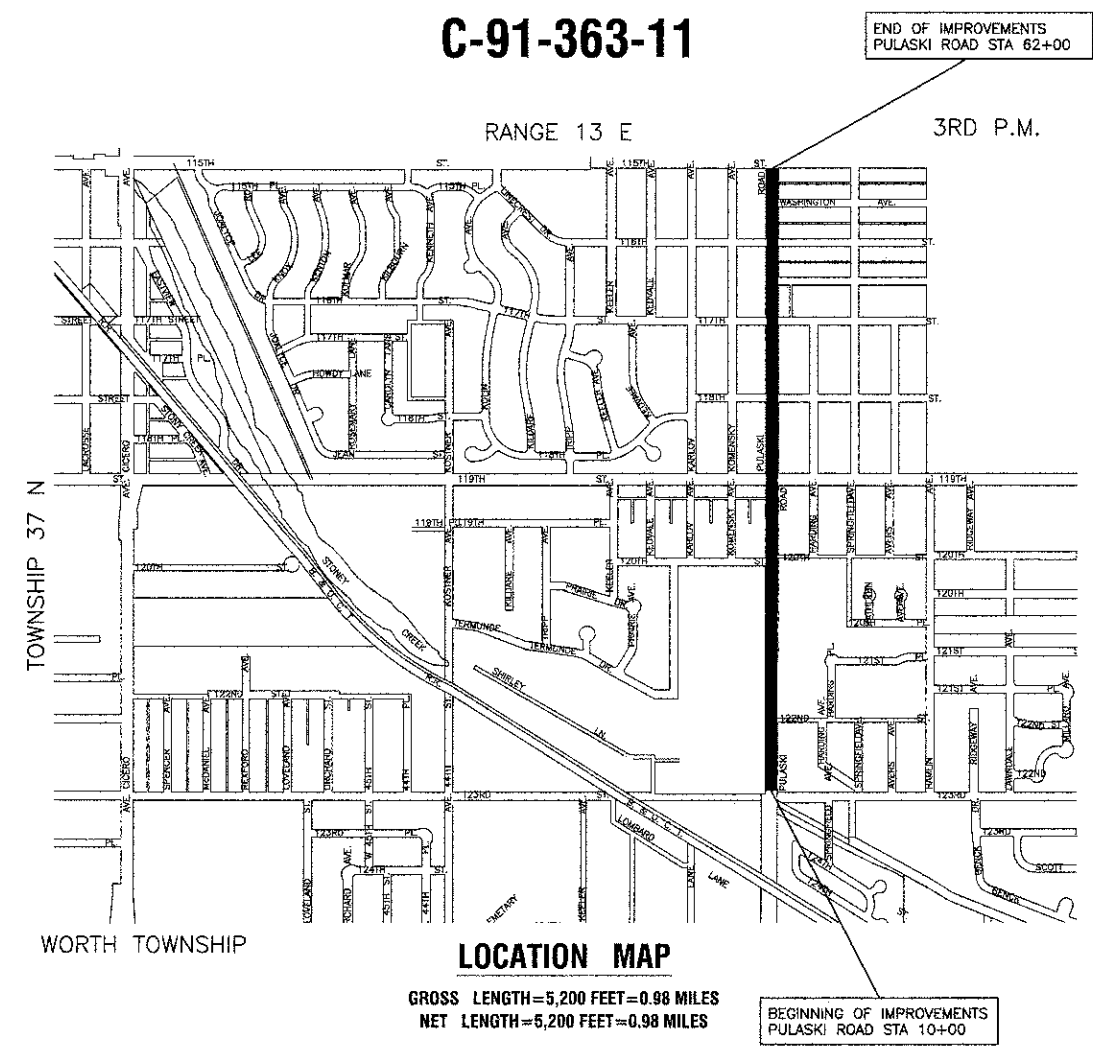
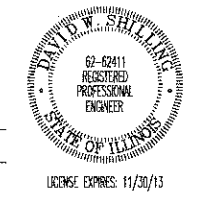
Approved: 7/16/12
Galina S. Kaban
President, Village of ALSIP

Passed: JULY 20, 2012
Chet Paul Host
District 1 Engineer of Local Roads & Streets

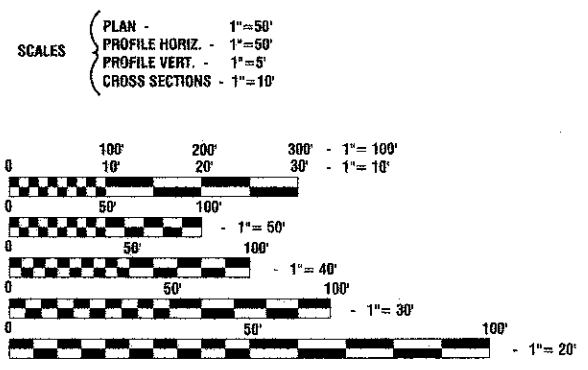
Released for Bid Based on Limited Review: JULY 23, 2012
J. Britner
Deputy Director of Highways, Region 1 Engineer

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THE STATE OF ILLINOIS

PREPARED BY OR UNDER THE
DIRECT SUPERVISION OF:
David W. Skilling
7/16/2012



LOCATION MAP
GROSS LENGTH=5,200 FEET=0.98 MILES
NET LENGTH=5,200 FEET=0.98 MILES



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. 63726

PROGRAM AND OFFICE ENGINEER: CHARLES F. RIDDLE, P.E. 847-705-4406, SCHAUMBURG, IL.
CONSULTANTS: ROBINSON ENGINEERING, LTD. 708-331-6700

SUMMARY OF QUANTITIES					SAFETY	
S.I.	CODE NO.	PAY ITEM	UNIT	QUAN	21	
	21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	1550	1550	
	25200110	SODDING, SALT TOLERANT	SQ YD	1550	1550	
	25200200	SUPPLEMENTAL WATERING	UNIT	400	400	
*	42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	1930	1930	
*	42400800	DETECTABLE WARNINGS	SQ FT	76	76	
*	44000600	SIDEWALK REMOVAL	SQ FT	1930	1930	
	67100100	MOBILIZATION	L SUM	1	1	
	70102622	TRAFFIC CONTROL AND PROTECTION, STANDARD 701502	L SUM	1	1	
	70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	1	
	70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1	
	70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1	
*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	2684	2684	
*	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	620	620	
*	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	328	328	
*	78300100	PAVEMENT MARKING REMOVAL	SQ FT	1861	1861	
	80400100	ELECTRIC SERVICE INSTALLATION	EACH	2	2	
	80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1	1	
	81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	3900	3900	
	81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	135	135	
	81603136	UNIT DUCT, 600V, 5-1C NO.4, 1/C NO.6 GROUND, (XLP-TYPE USE), 1 1/2" DIA. POLYETHYLENE	FOOT	13500	13500	
	81702440	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 1/0	FOOT	180	180	
	82500365	LIGHTING CONTROLLER, BASE MOUNTED, 480VOLT, 150AMP	EACH	2	2	
	83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	232	232	
	83600355	LIGHT POLE FOUNDATION, METAL, 15" BOLT CIRCLE, 8" X 6'	EACH	32	32	
	84200500	REMOVAL OF LIGHTING UNIT, SALVAGE	EACH	46	46	

* - INDICATES SPECIALTY ITEMS

SUMMARY OF QUANTITIES					SAFETY	
S.I.	CODE NO.	PAY ITEM	UNIT	QUAN	21	
	84200804	REMOVAL OF POLE FOUNDATION	EACH	46	46	
	84500110	REMOVAL OF LIGHTING CONTROLLER	EACH	2	2	
	84500130	REMOVAL OF LIGHTING CONTROLLER FOUNDATION	EACH	2	2	
	84500120	REMOVAL OF ELECTRIC SERVICE INSTALLATION	EACH	2	2	
	X2130010	EXPLORATION TRENCH, SPECIAL	FOOT	200	200	
	X8300001	LIGHT POLE, SPECIAL	EACH	66	66	
	X8360215	LIGHT POLE FOUNDATION, 24" DIAMETER, OFFSET	FOOT	50	50	
	X8380084	BREAKAWAY DEVICE, COUPLING	EACH	264	264	
*	XX006947	HOT-MIX ASPHALT DRIVEWAY REMOVAL AND REPLACEMENT	SQ YD	150	150	
	Z0033028	MAINTENANCE OF LIGHTING SYSTEM	CAL MO	12	12	
Δ	Z0076600	TRAINEES	HOUR	500	500	
Δ	Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	500	500	

GENERAL NOTES: Δ - 0042

- ALL WORK TO CONFORM TO THE NATIONAL ELECTRICAL CODE AND ANY APPLICABLE LOCAL CODES.
- CONTRACTOR TO VERIFY LOCATION OF ALL UNDERGROUND UTILITIES BEFORE TRENCHING OR AUGURING.
- CONTRACTOR SHALL CALL JULIE FOR UTILITY LOCATES. PRIOR TO CONSTRUCTION, ANY OVERHEAD CLEARANCE ISSUES SHOULD BE COORDINATED WITH COMED FOR APPROVAL.
- ALL CONDUIT TO BE 2 1/2" DIAMETER UNLESS OTHERWISE SPECIFIED.
- ANY TREE TRIMMING REQUIRED AS DIRECTED BY THE ENGINEER SHALL BE PERFORMED BY THE CONTRACTOR, AND THE COST OF THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO RESTORE ANY SPECIALIZED LANDSCAPING, (i.e. DECORATIVE ROCKS, SHRUBS, PLANTS, ECT.) OR SHALL REPLACE IT, THE COST OF WHICH SHALL BE CONSIDERED INCLUDED IN THE COST OF THE CONTRACT.
- CARE IS TO BE TAKEN AS NOT TO DAMAGE ANY OF THE EXISTING TRAFFIC SIGNAL CONDUITS, DETECTORS AND EQUIPMENT. IF ANY OF THE TRAFFIC SIGNAL CONDUIT AND/OR EQUIPMENT IS DAMAGED, THE CONTRACTOR SHALL REPAIR AND/OR REPLACE THE CONDUIT AND/OR EQUIPMENT AT NO COST TO THE COUNTY, STATE, OR THE VILLAGE.
- THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE REQUIREMENT FOR BURIED WARNING TAPE. THE INSTALLATION OF THE TAPE SHALL BE INSPECTED AND APPROVED BY THE RESIDENT ENGINEER DURING PLOWING OPERATIONS, AS APPLICABLE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ESTABLISHMENT OF FINISHED GRADE. THE RESIDENT ENGINEER MAY ASSIST THE CONTRACTOR, AS APPLICABLE, BUT THE RESPONSIBILITY FOR COORDINATING THE FINISHED GRADE ELEVATION WITH THE TOP OF THE FOUNDATION HEIGHTS AND THE LIGHT SHALL REMAIN WITH THE CONTRACTOR.
- NO POLES SHALL BE ERECTED UNTIL THE RESPECTIVE FOUNDATIONS HAVE CURED, AS APPROVED BY THE ENGINEER.
- THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE REQUIREMENTS FOR WIRE MARKERS AND SHALL TAG ALL 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 AND UNIT DUCT MUST BE POSITIONED IN THE FIELD TO AVOID CONFLICT WITH TREES, BUSHES, DRAINS AND OTHER UTILITIES AND LANDSCAPING.
- ALL DISTURBED AREAS WHERE RESTORATION IS NOT COVERED BY APPLICABLE SECTIONS OF THE SPECIAL PROVISIONS MUST BE RESTORED TO THE SATISFACTION OF THE ENGINEER. THE WORK MUST BE CONSIDERED INCLUDED IN THE COST OF THE CONTRACT. SEPARATE PAYMENT WILL NOT BE MADE.
- 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.
- SHOULD THERE BE A DELAY BETWEEN THE TOPSOIL AND SODDING OPERATIONS, ALL MAJOR DISTURBED AREAS SHALL BE REQUIRED TO HAVE A SOIL EROSION CONTROL BLANKET INSTALLED.
- SIGNS MOUNTED ON EXISTING POLES SHALL BE RELOCATED TO NEW LIGHT POLES AS DIRECTED BY THE ENGINEER. NEW BLACK STAINLESS STEEL BANDS AND HARDWARE SHALL BE USED. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE NEW LIGHT POLES.

PREPARED BY:



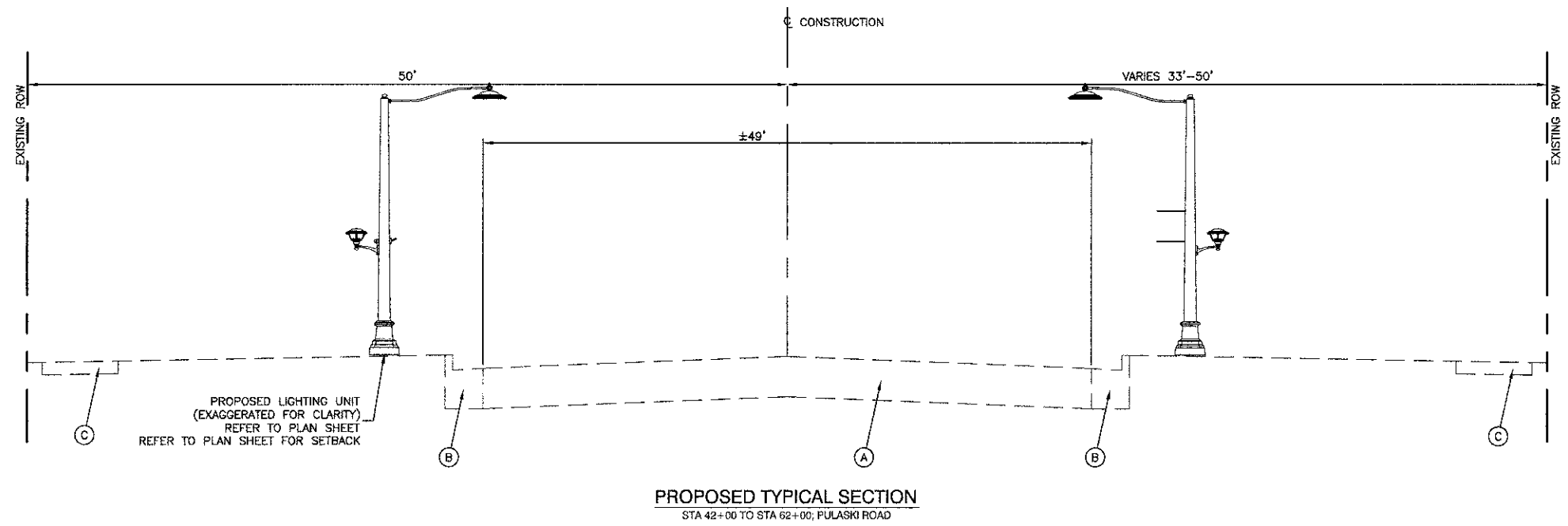
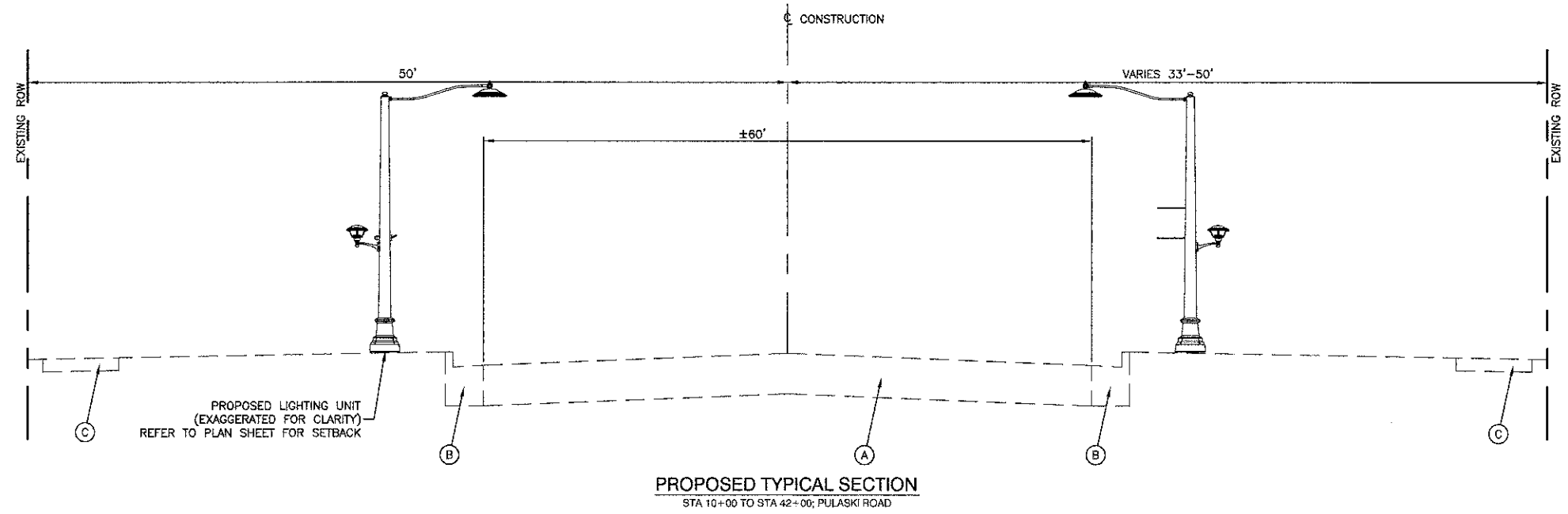
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CHECKED -- PAP	REVISED --	
PLOT SCALE =	DRAWN -- ACAD	REVISED --
PLOT DATE = 06/27/12	CHECKED -- ACAD	REVISED --

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PULASKI ROAD STREET LIGHTING		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SUMMARY OF QUANTITIES & GENERAL NOTES		3778	06-00082-01-LT	COOK	17	2
SCALE:		SHEET NO. 2 OF 17 SHEETS		STA.	TO STA.	
FED. ROAD DIST. NO. 1		ILLINOIS		FED. AID PROJECT HPP M-9003(774)		

CONTRACT NO. 63126



- EXISTING LEGEND**
- (A) HOT-MIX-ASPHALT PAVEMENT
 - (B) COMBINATION CONCRETE CURB & GUTTER
 - (C) PCC SIDEWALK

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

MIXTURE TYPE	AIR VOIDS
DRIVEWAYS	
HOT MIX ASPHALT SURFACE COURSE, MIX "D", N50(IL-9.5mm); 2"	4% @ 50 Gyr.
HOT MIX ASPHALT BASE COURSE, (HMA BINDER IL-19.0mm); 8" (3 LIFTS)	4% @ 50 Gyr.

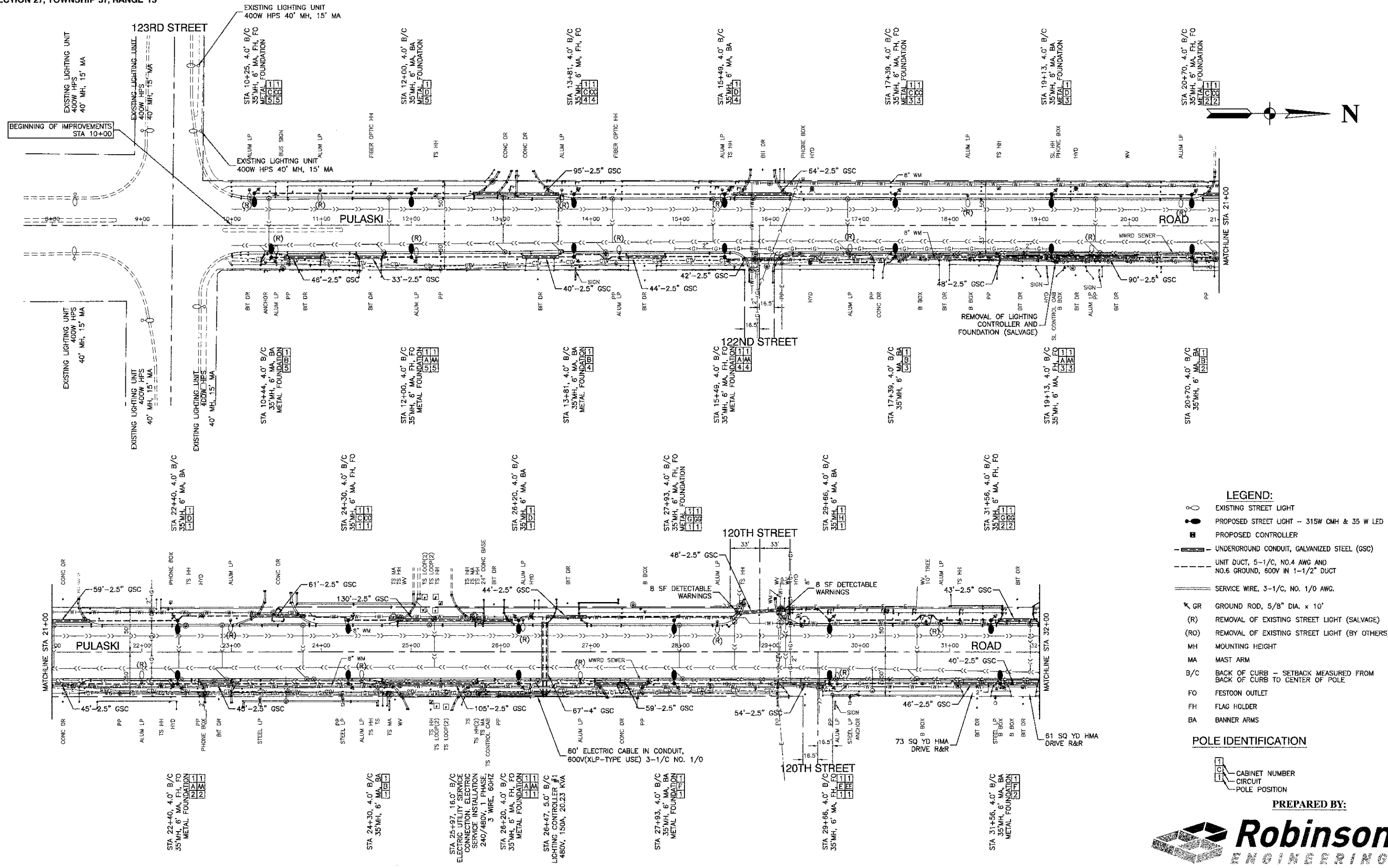
NOTE:
THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE QUANTITIES IS 112 LBS/SY/IN.

THE "AC-TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 70-22" AND FOR NON-POLYMERIZED HMA, THE "AC-TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.



FILE NAME = 06R26_02-TYPX-01 - IDO: TYPX 01	USER NAME =	DESIGNED -- DWS	REVISED --	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PULASKI ROAD STREET LIGHTING TYPICAL CROSS SECTIONS	F.A.U. RITE:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	PLOT SCALE =	CHECKED -- PAP	REVISED --			3778	06-00082-01-LT	COOK	17	3	
	PLOT DATE = 06/27/12	DRAWN -- ACAD	REVISED --			CONTRACT NO. 63726					
		CHECKED -- ACAD	REVISED --			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT HPP M-9003(774)					

SECTION 26, TOWNSHIP 37, RANGE 13
SECTION 27, TOWNSHIP 37, RANGE 13



- LEGEND:**
- EXISTING STREET LIGHT
 - PROPOSED STREET LIGHT -- 315W CMH & 35 W LED
 - PROPOSED CONTROLLER
 - UNDERGROUND CONDUIT, GALVANIZED STEEL (GSC)
 - - - UNIT DUCT, 5-1/C, NO.4 AWG AND NO.6 GROUND, 600V IN 1-1/2" DUCT
 - SERVICE WIRE, 3-1/C, NO. 1/0 AWG.
 - ⋈ GR GROUND ROD, 5/8" DIA. x 10'
 - (R) REMOVAL OF EXISTING STREET LIGHT (SALVAGE)
 - (RO) REMOVAL OF EXISTING STREET LIGHT (BY OTHERS)
 - MH MOUNTING HEIGHT
 - MA MAST ARM
 - B/C BACK OF CURB - SETBACK MEASURED FROM BACK OF CURB TO CENTER OF POLE
 - FO FESTOON OUTLET
 - FH FLAG HOLDER
 - BA BANNER ARMS
- POLE IDENTIFICATION**
- 1 CABINET NUMBER
 - 2 CIRCUIT
 - 3 POLE POSITION

PREPARED BY:



FILE NAME = 06826_02-PLAN-01 - IDOT P01

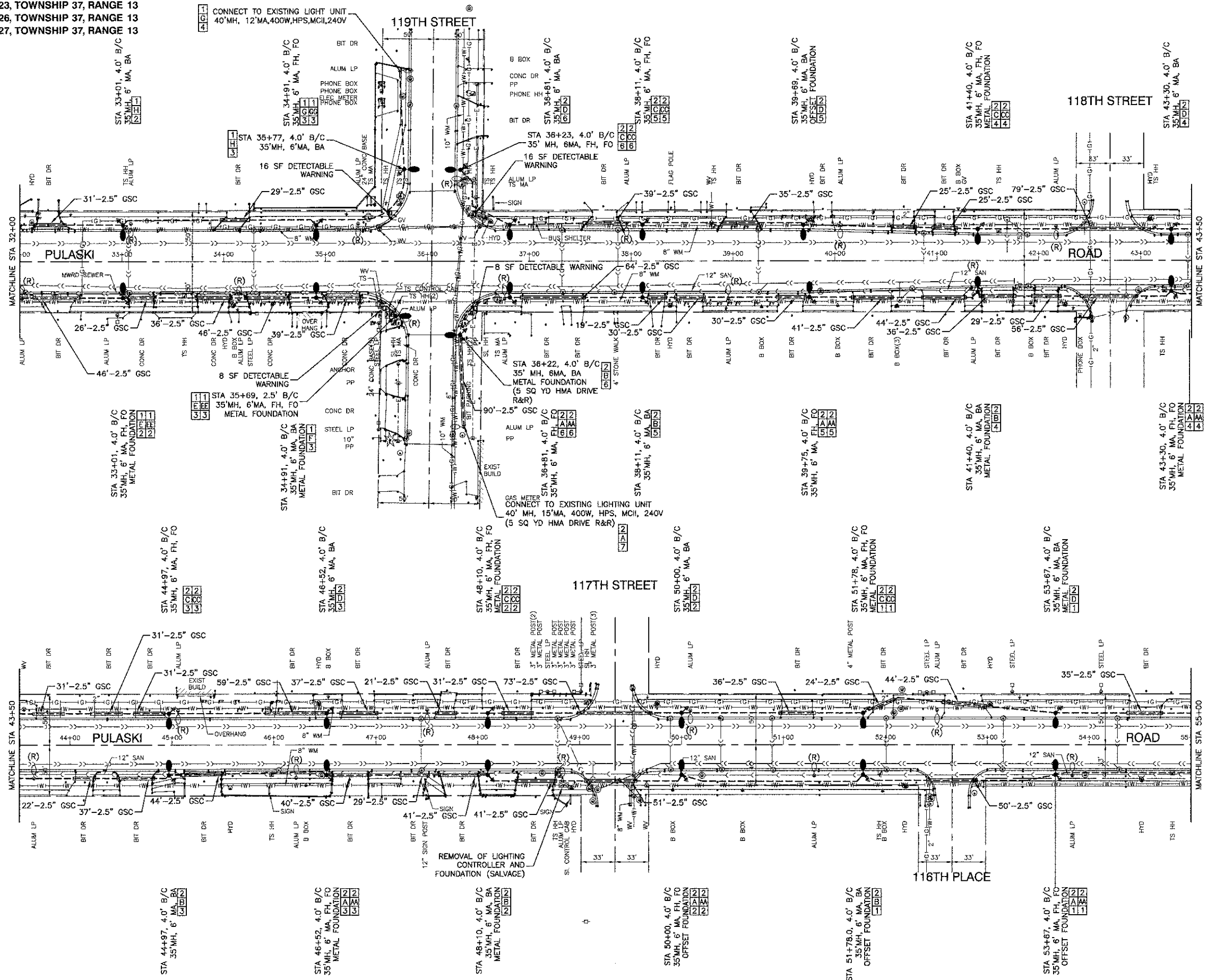
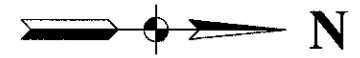
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PLOT DATE = 06/27/12	DRAWN -- MED	REVISED --
	CHECKED -- AG	REVISED --

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PULASKI ROAD STREET LIGHTING STREET LIGHTING PLANS	
SCALE: 1"=60'	SHEET NO. 4 OF 17 SHEETS
STA. 10+00	TO STA. 32+00

F.A.U. RFE:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3778	06-00082-01-LT	COOK	17	4
CONTRACT NO. 63126				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT: HPP M-6003(774)				

SECTION 22, TOWNSHIP 37, RANGE 13
 SECTION 23, TOWNSHIP 37, RANGE 13
 SECTION 26, TOWNSHIP 37, RANGE 13
 SECTION 27, TOWNSHIP 37, RANGE 13



- LEGEND:**
- EXISTING STREET LIGHT
 - PROPOSED STREET LIGHT -- 315W CMH & 35 W LED
 - PROPOSED CONTROLLER
 - UNDERGROUND CONDUIT, GALVANIZED STEEL (GSC)
 - UNIT DUCT, 5-1/2", NO.4 AWG AND NO.6 GROUND, 600V IN 1-1/2" DUCT
 - SERVICE WIRE, 3-1/2", NO. 1/0 AWG.
 - GR GROUND ROD, 5/8" DIA. x 10'
 - (R) REMOVAL OF EXISTING STREET LIGHT (SALVAGE)
 - (RO) REMOVAL OF EXISTING STREET LIGHT (BY OTHERS)
 - MH MOUNTING HEIGHT
 - MA MAST ARM
 - B/C BACK OF CURB -- SETBACK MEASURED FROM BACK OF CURB TO CENTER OF POLE
 - FO FESTOON OUTLET
 - FH FLAG HOLDER
 - BA BANNER ARMS
- POLE IDENTIFICATION**
- CABINET NUMBER
 - CIRCUIT
 - POLE POSITION

FILE NAME = 06626_02-PLAN-01 - IDOT P02

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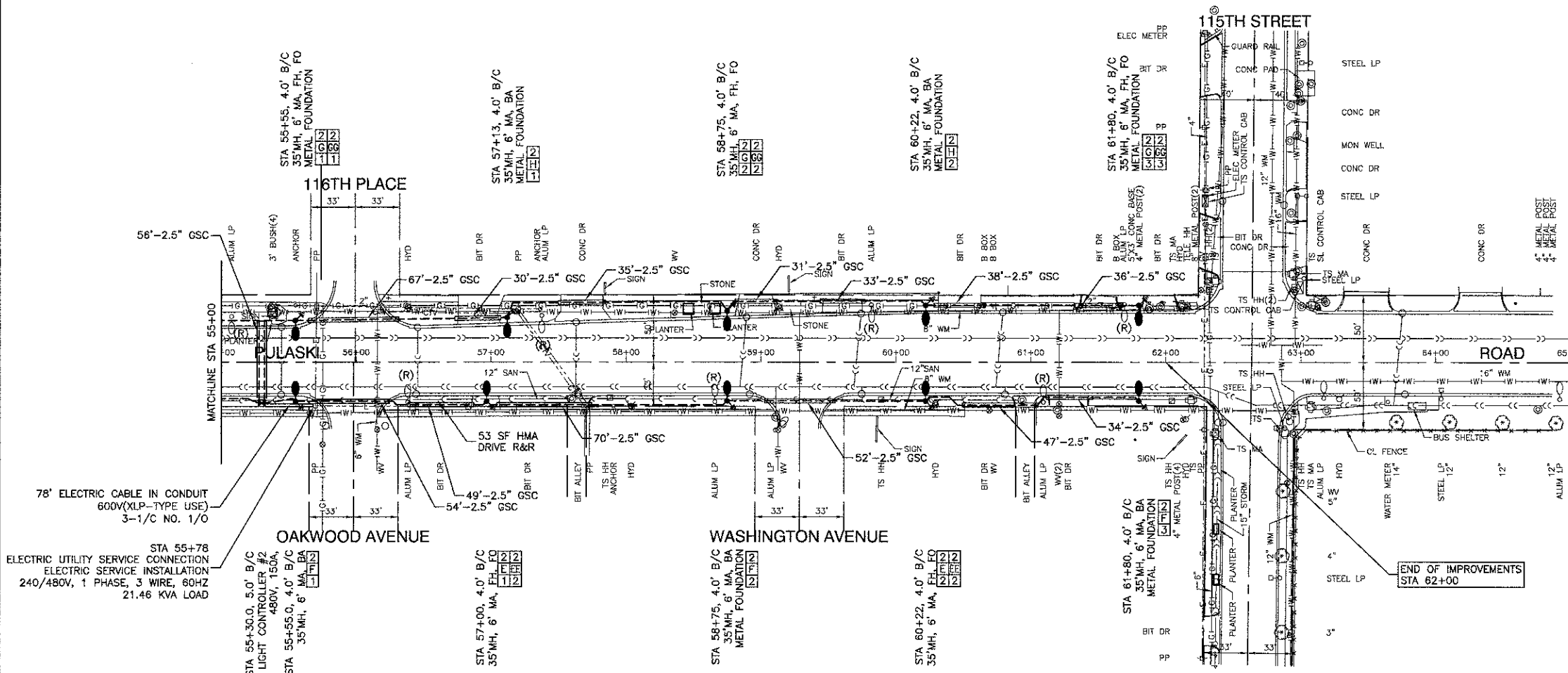
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PULASKI ROAD
 STREET LIGHTING
 STREET LIGHTING PLANS

SCALE: 1"=50' SHEET NO. 5 OF 17 SHEETS STA. 32+00 TO STA. 55+00

F.A.U. RITE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3778	06-00082-01-LT	COOK	17	5
CONTRACT NO. 6372Lb				
RED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT HPP M-9003(774)				

PREPARED BY:
 Robinson ENGINEERING



78" ELECTRIC CABLE IN CONDUIT
600V(XLP-TYPE USE)
3-1/C NO. 1/0

STA 55+78
ELECTRIC UTILITY SERVICE CONNECTION
ELECTRIC SERVICE INSTALLATION
240/480V, 1 PHASE, 3 WIRE, 60HZ
21.46 KVA LOAD

- LEGEND:**
- EXISTING STREET LIGHT
 - PROPOSED STREET LIGHT - 315W CMH & 35 W LED
 - PROPOSED CONTROLLER
 - UNDERGROUND CONDUIT, GALVANIZED STEEL (GSC)
 - - - UNIT DUCT, 5-1/C, NO.4 AWG AND NO.6 GROUND, 600V IN 1-1/2" DUCT
 - SERVICE WIRE, 3-1/C, NO. 1/0 AWG.
 - GR GROUND ROD, 5/8" DIA. x 10'
 - (R) REMOVAL OF EXISTING STREET LIGHT (SALVAGE)
 - (RO) REMOVAL OF EXISTING STREET LIGHT (BY OTHERS)
 - MH MOUNTING HEIGHT
 - MA MAST ARM
 - B/C BACK OF CURB - SETBACK MEASURED FROM BACK OF CURB TO CENTER OF POLE
 - FO FESTOON OUTLET
 - FH FLAG HOLDER
 - BA BANNER ARMS
- POLE IDENTIFICATION**
- 1 CABINET NUMBER
 - 01 CIRCUIT
 - 1 POLE POSITION

PREPARED BY:



FILE NAME = 08626_02-PLAN-01 - IDOT P03
USER NAME =
PLOT SCALE =
PLOT DATE = 06/27/12

DESIGNED — DWS	REVISED —
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DRAWN — MED	REVISED —
CHECKED — AG	REVISED —

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

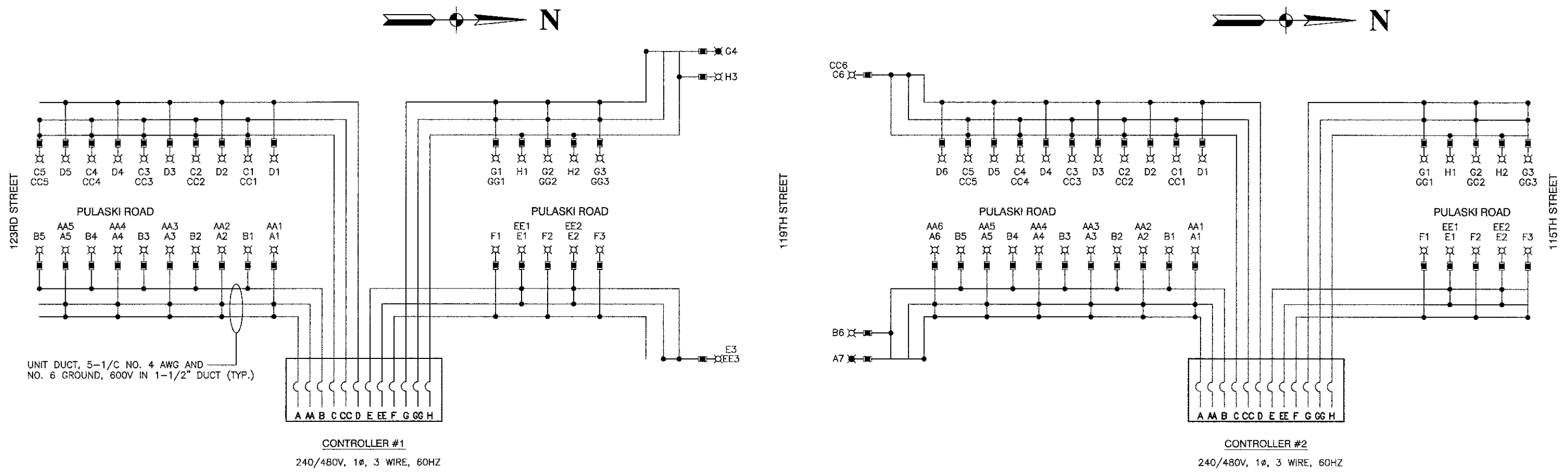
PULASKI ROAD
STREET LIGHTING
STREET LIGHTING PLANS

SCALE: 1"=50'

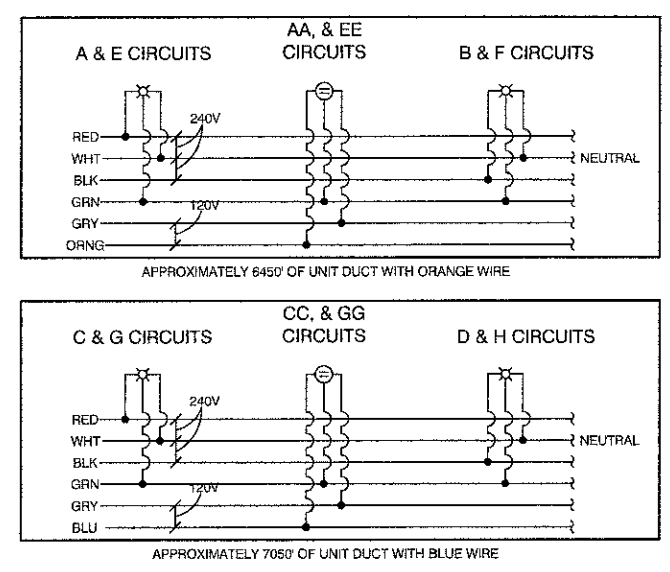
SHEET NO. 6 OF 17 SHEETS

STA. 55+00 TO STA. 66+00

F.A.U. RITE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3778	06-00082-01-LT	COOK	17	6
CONTRACT NO. 63126				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT HPP M-9003(774)				



TYPICAL CIRCUIT WIRING



INDIVIDUAL LOAD DATA			
NOMINAL	INPUT VOLTS	MAX INPUT AMPS	INPUT WATTS
315W CMH	240.00	1.50	353.00
35W LED	240.00	0.30	51.00
FESTOON GFI	120.00	2.50	300.00
EXIST. 400W	240.00	2.00	478.00

NOMINAL WATTAGE	FUSE SIZE
315 & 35	6.0 AMP
400	5.0 AMP
FESTOON OUTLET	6.0 AMP

LUMINAIRE FUSE SIZE TABLE

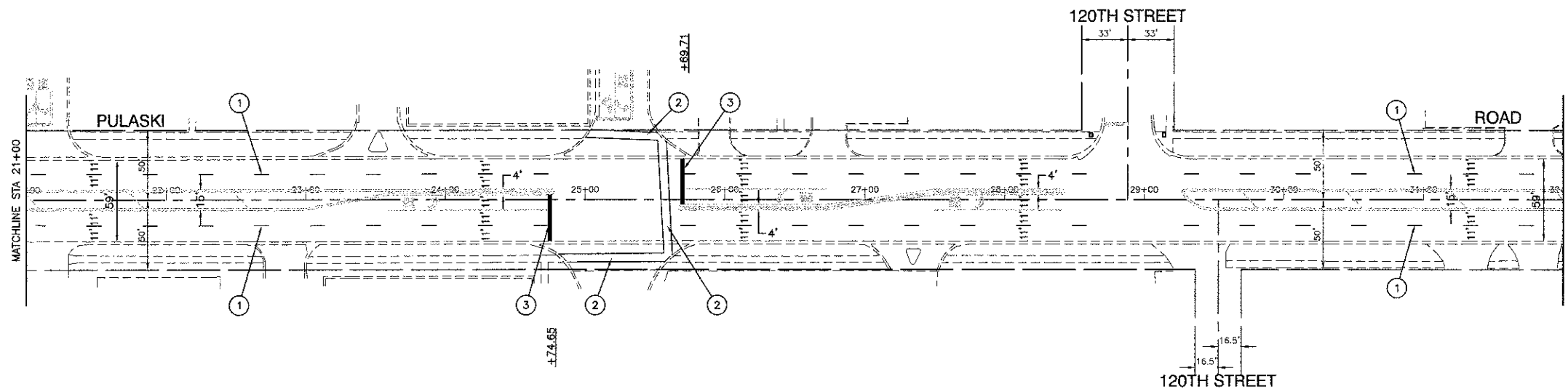
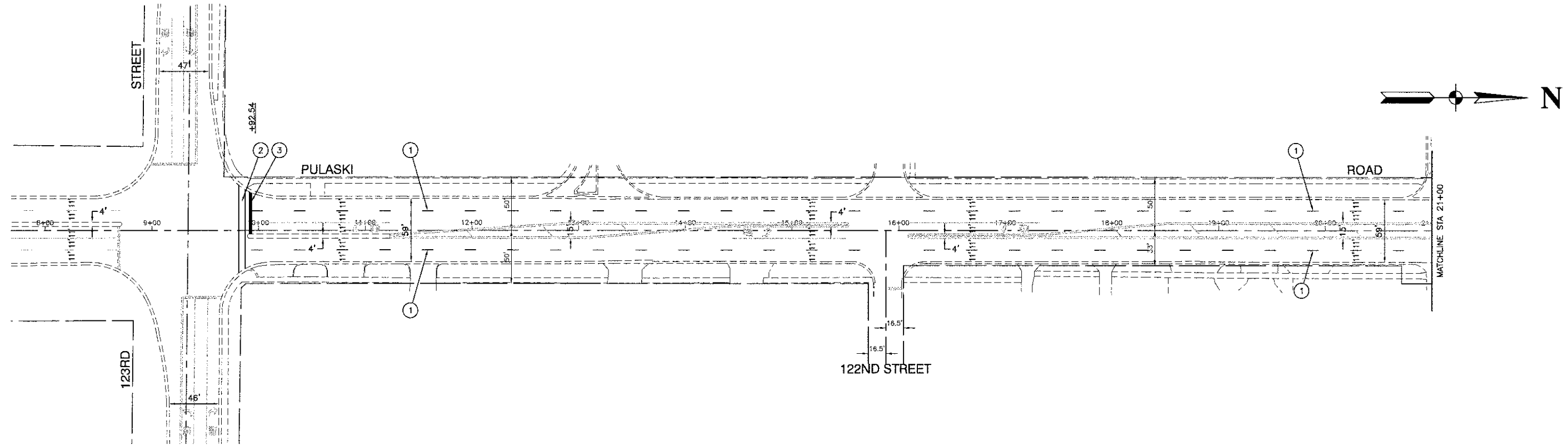
LOAD TABULATIONS CONTROLLER #1			
CIRCUIT	WATTS	AMPS @ 240V	
		RED PHASE	BLACK PHASE
A	2,020	9.00	
B	2,020		9.00
C	2,020	9.00	
D	2,020		9.00
E	1,212	5.40	
F	1,212		5.40
G	1,690	7.40	
H	1,212		5.40
LUMINAIRE SUBTOTAL	13,406	30.80	28.80
AA	1500.00	6.3	
CC	1500		6.3
EE	900	3.8	
GG	900		3.8
GFCI SUBTOTAL	4800	10.0	10.0
CAB TOTAL	18206	40.8	38.8
TOTAL AMPS @ 240 V		79.60	

LOAD TABULATIONS CONTROLLER #2			
CIRCUIT	WATTS	AMPS @ 240V	
		RED PHASE	BLACK PHASE
A	2,902	12.80	
B	2,424		10.80
C	2,424	10.80	
D	2,424		10.80
E	808	3.60	
F	1,212		5.40
G	1,212	5.40	
H	808		3.60
LUMINAIRE SUBTOTAL	14,214	32.60	30.60
AA	1200.00	5.0	
CC	1500		6.3
EE	1200	5.0	
GG	1200		5.0
GFCI SUBTOTAL	5100	10.0	11.3
CAB TOTAL	19314	42.6	41.9
TOTAL AMPS @ 240 V		84.45	

NOTES

1. EQUIPMENT GROUND CONDUCTORS SHALL BE SPLICED AND BOUNDED AT EACH LIGHT POLE OR OTHER EQUIPMENT.

- LEGEND**
- ⊗ LUMINAIRE, 315W CHM & 35W LED
 - ⊗ LUMINAIRE, 400W HPS, 240V
 - ⊕ GFCI DUPLEX OUTLET
 - FUSE -- REFER TO FUSE SIZE TABLE
 - A LUMINAIRE CIRCUIT, 240V
 - AA GFCI CIRCUIT, 120V
 - ⎓ CIRCUIT BREAKER
 - CONNECTION



LEGEND

- ① THERMOPLASTIC PAVEMENT MARKING - LINE 4" WHITE
- ② THERMOPLASTIC PAVEMENT MARKING - LINE 6" WHITE (6' C-C)
- ③ THERMOPLASTIC PAVEMENT MARKING - LINE 24"

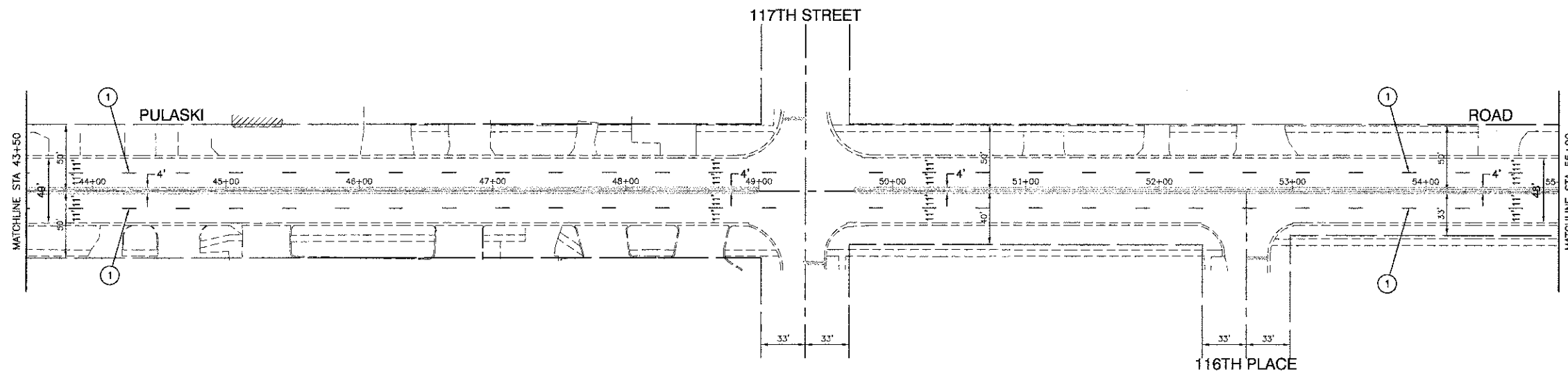
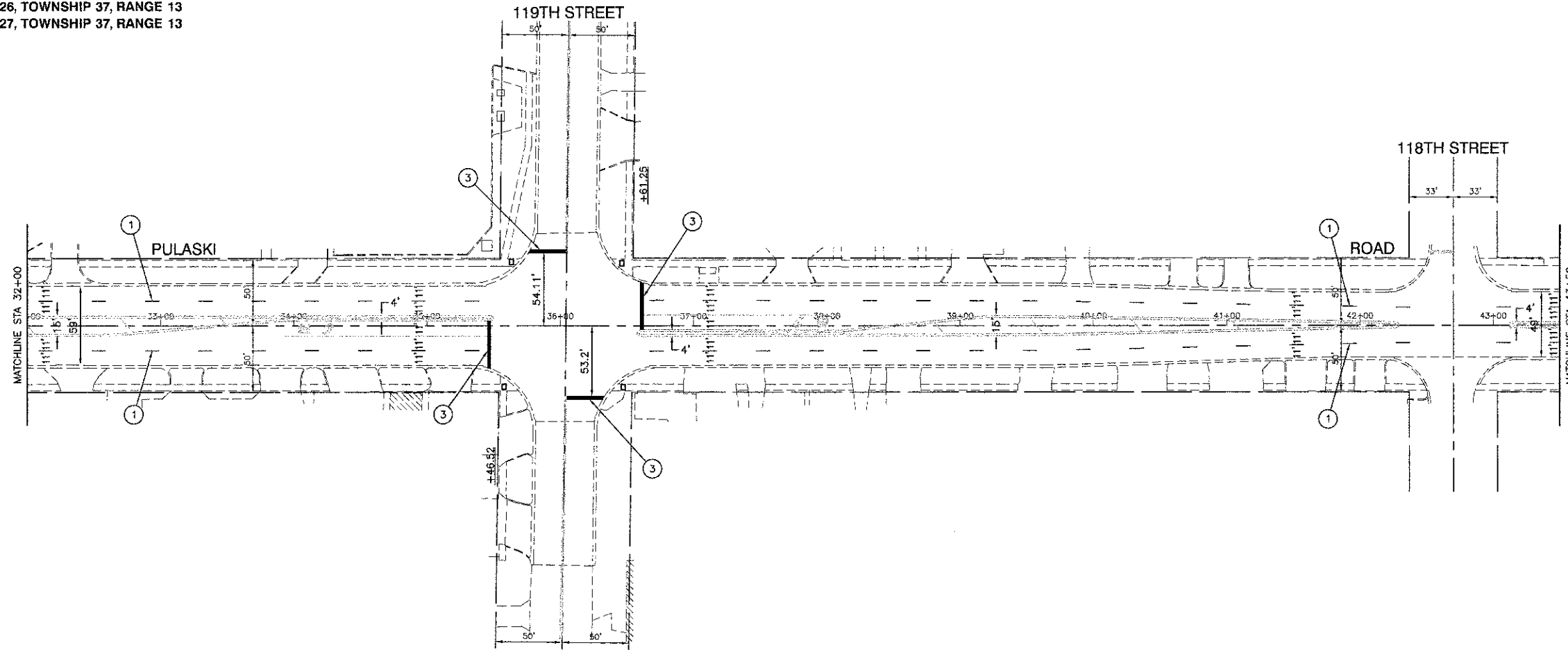
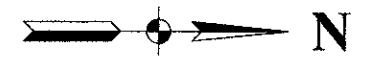
NOTE:
AT ALL LOCATIONS WHERE THERMOPLASTIC PAVEMENT MARKINGS IS PROPOSED, THE EXISTING PAVEMENT MARKINGS SHALL BE REMOVED. AT ALL OTHER LOCATIONS, THE EXISTING MARKINGS SHALL REMAIN.

PREPARED BY:



FILE NAME = 06626_02-PLAN-01 - IDOT P04	USER NAME =	DESIGNED -- DWS	REVISED --	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PULASKI ROAD PAVEMENT MARKING PLAN 123RD STREET TO STA 32+00			FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 1"=50'	DRAWN -- AG	REVISED --					3778	06-00082-01-LT	COOK	17	8
PLOT DATE = 06/27/12	CHECKED -- AG	REVISED --		SCALE: 1"=50'			SHEET NO. 8 OF 17 SHEETS			STA. 10+00 TO STA. 32+00		
								FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT HPP M-9003(774)				

SECTION 22, TOWNSHIP 37, RANGE 13
 SECTION 23, TOWNSHIP 37, RANGE 13
 SECTION 26, TOWNSHIP 37, RANGE 13
 SECTION 27, TOWNSHIP 37, RANGE 13



LEGEND

- ① THERMOPLASTIC PAVEMENT MARKING - LINE 4" WHITE
- ② THERMOPLASTIC PAVEMENT MARKING - LINE 6" WHITE (6' C-C)
- ③ THERMOPLASTIC PAVEMENT MARKING - LINE 24"

NOTE:
 AT ALL LOCATIONS WHERE THERMOPLASTIC PAVEMENT MARKINGS IS PROPOSED, THE EXISTING PAVEMENT MARKINGS SHALL BE REMOVED. AT ALL OTHER LOCATIONS, THE EXISTING MARKINGS SHALL REMAIN.

PREPARED BY:



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USER NAME =
PLOT SCALE = 1"=50'
PLOT DATE = 06/27/12

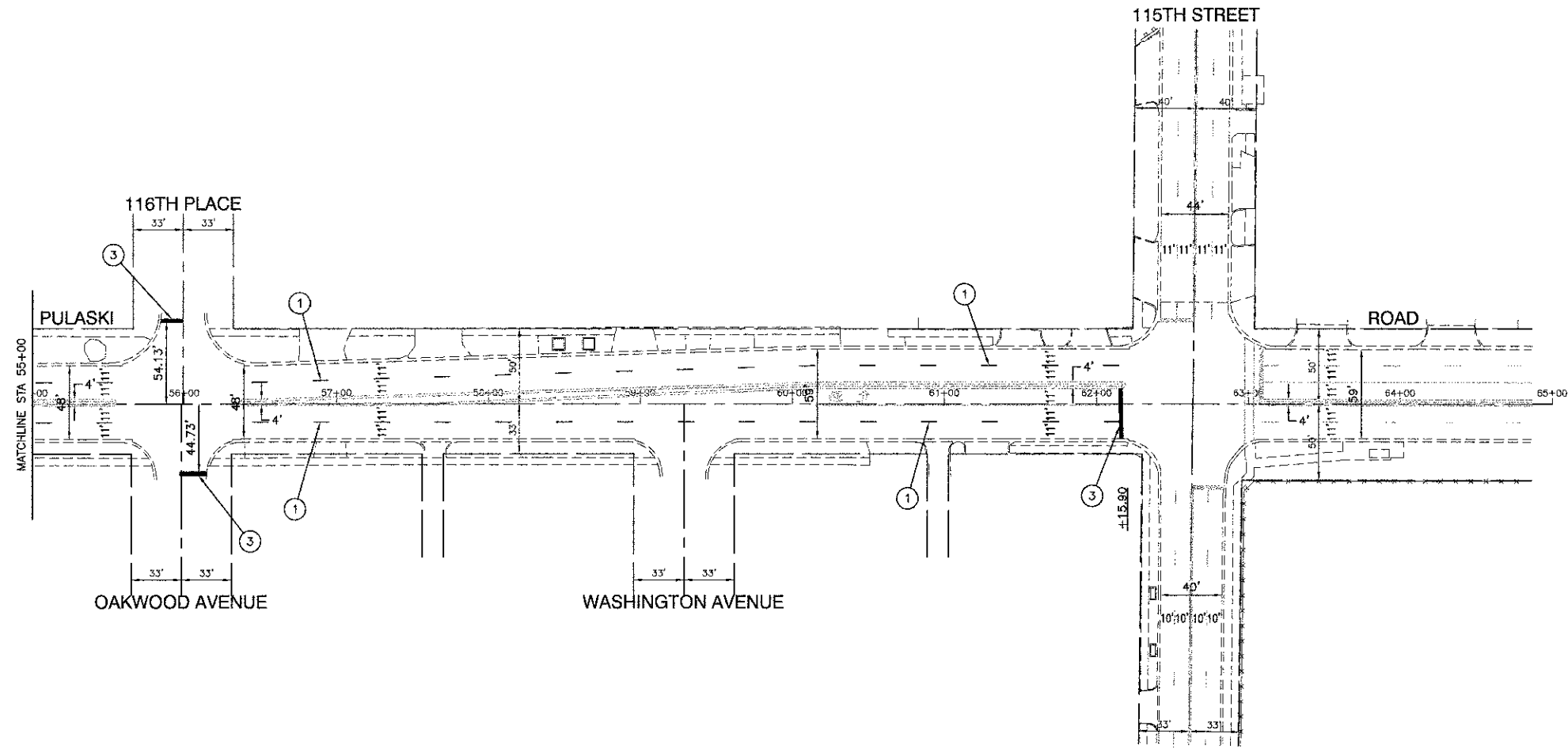
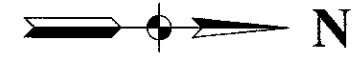
DESIGNED -- DWS	REVISED --
CHECKED -- TRL	REVISED --
DRAWN -- AG	REVISED --
CHECKED -- AG	REVISED --

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PULASKI ROAD PAVEMENT MARKING PLAN STA 32+00 TO STA 55+00	
SCALE: 1"=50'	SHEET NO. 9 OF 17 SHEETS STA. 32+00 TO STA. 55+00

F.A.U. RTE. 3778	SECTION 06-00082-01-LT	COUNTY COOK	TOTAL SHEETS 17	SHEET NO. 9
FED. ROAD DIST. NO. 1 ILLINOIS		FED. AID PROJECT HPP M-9003(774)		

CONTRACT NO. 637Z6



LEGEND

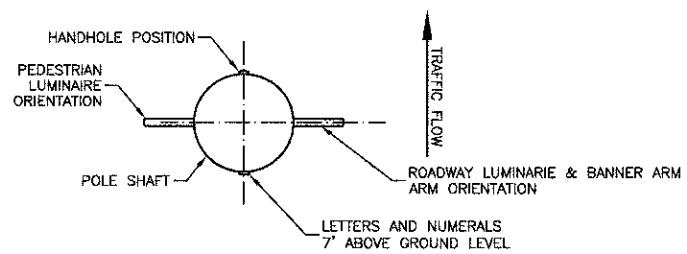
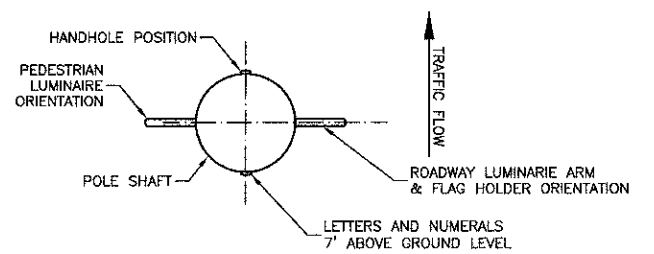
- ① THERMOPLASTIC PAVEMENT MARKING - LINE 4" WHITE
- ② THERMOPLASTIC PAVEMENT MARKING - LINE 6" WHITE (6' C-C)
- ③ THERMOPLASTIC PAVEMENT MARKING - LINE 24"

NOTE:
AT ALL LOCATIONS WHERE THERMOPLASTIC PAVEMENT MARKINGS IS PROPOSED, THE EXISTING PAVEMENT MARKINGS SHALL BE REMOVED. AT ALL OTHER LOCATIONS, THE EXISTING MARKINGS SHALL REMAIN.

PREPARED BY:

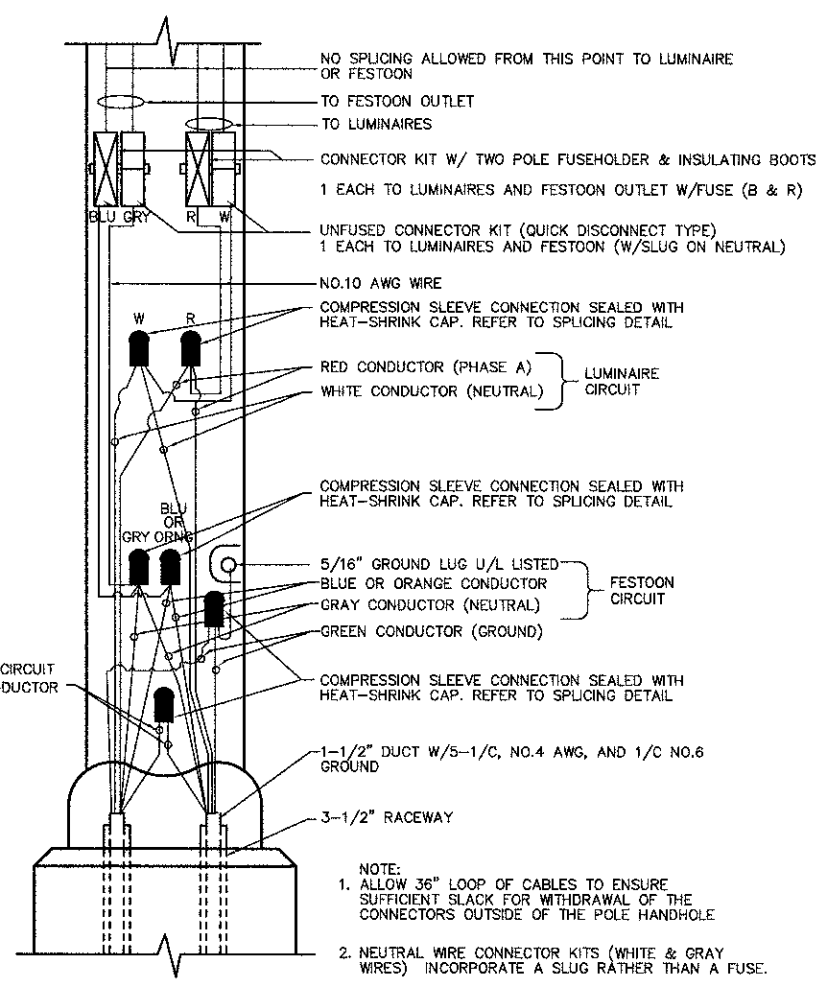
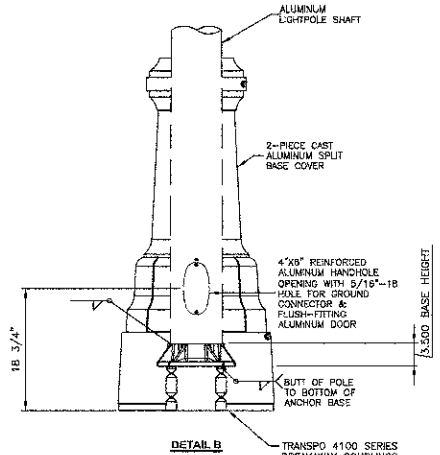
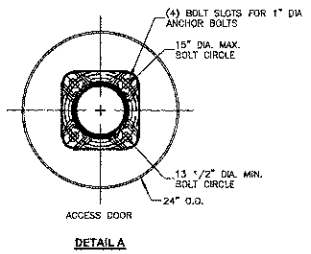
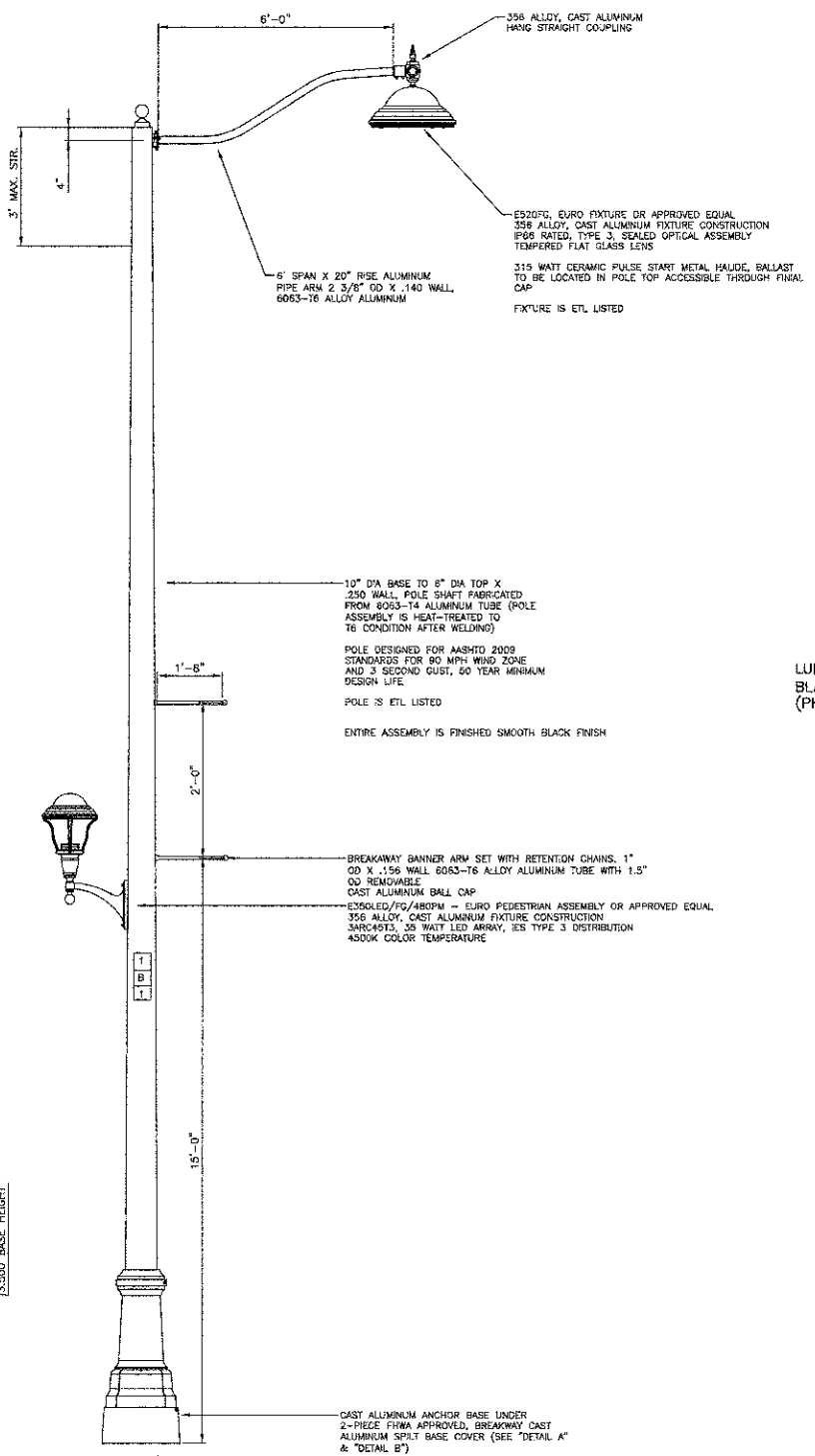
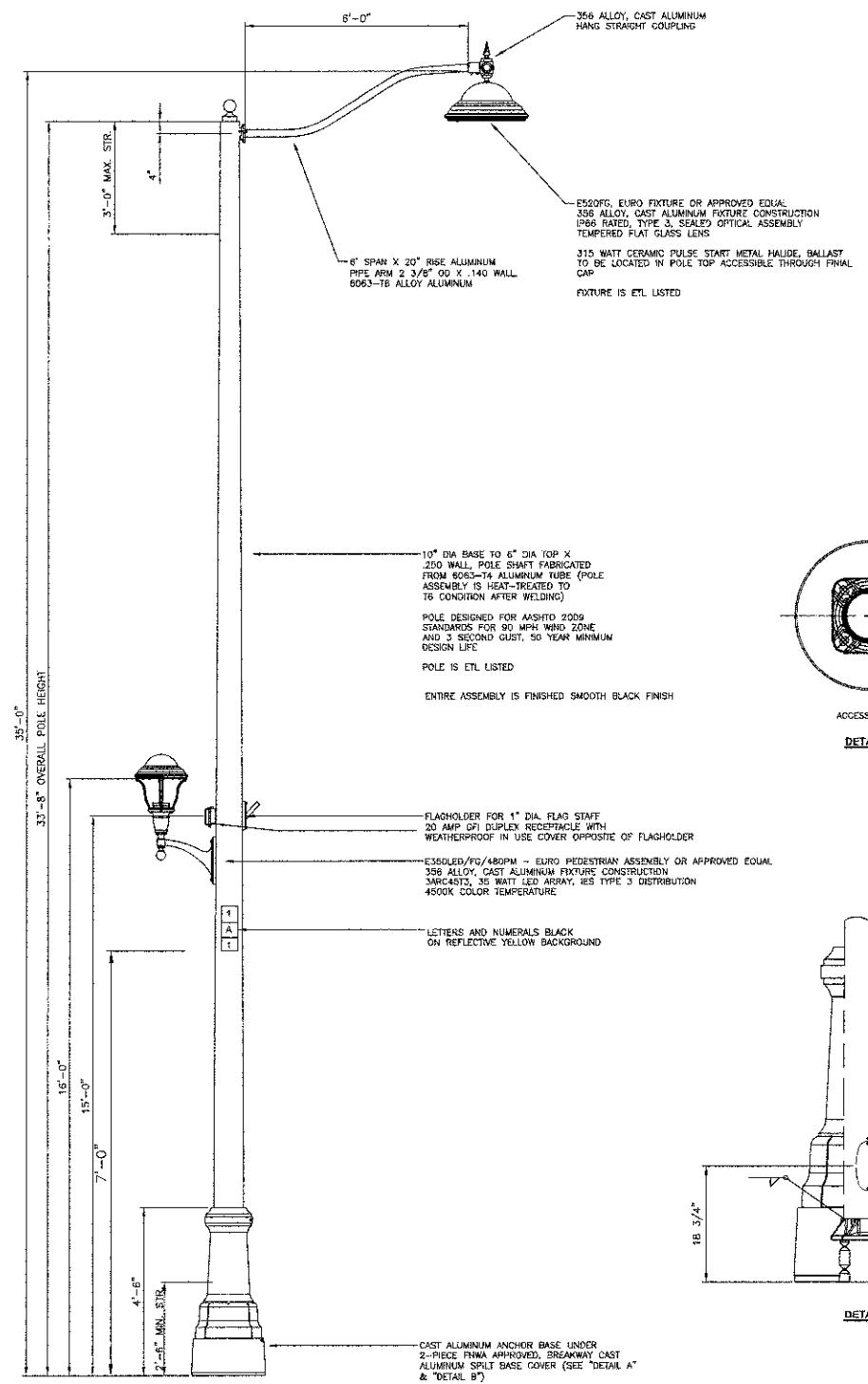


FILE NAME = 08826_02_PLAN01 - IDOT.PDG	USER NAME =	DESIGNED --- DWS	REVISED ---	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PULASKI ROAD PAVEMENT MARKING PLAN STA 55+00 TO 115TH STREET	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 1"=50'	CHECKED --- TRL	REVISED ---			3778	06-00082-01-LT	COOK	17	10
PLOT DATE = 06/27/12	DRAWN --- AG	REVISIED ---		SCALE: 1"=50'	SHEET NO. 10 OF 17 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT HPP M-9003(774) CONTRACT NO. 63726		



NOMINAL WATTAGE	FUSE SIZE
315 & 35	6.0 AMP
400	5.0 AMP
FESTOON OUTLET	6.0 AMP

LUMINAIRE FUSE SIZE TABLE



35' MH, 6' MA, FH, FO

35' MH, 6' MA, BA

TYPICAL POLE INSTALLATION

POLE HANDHOLE WIRING DIAGRAM
(TYPICAL FOR LUMINAIRE INSTALLATION)
(WITH FESTOON)

FILE NAME = 06628_02-DT15-01 - DTLS P101

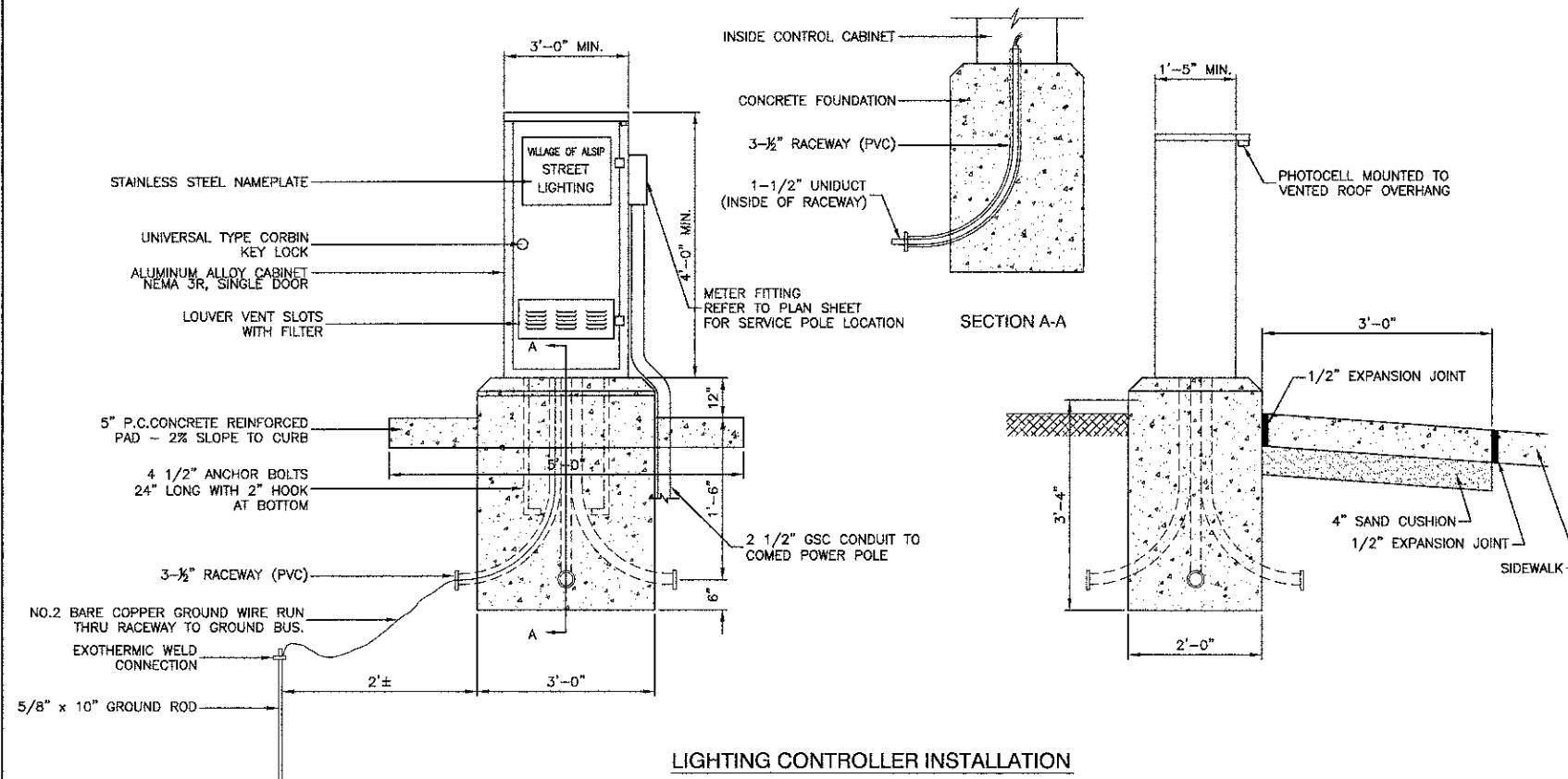
USER NAME =	DESIGNED -- DWS	REVISED --
PLOT SCALE =	CHECKED -- PAP	REVISED --
PLOT DATE = 06/27/12	DRAWN -- MED	REVISED --
	CHECKED -- AG	REVISED --

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PULASKI ROAD
STREET LIGHTING
CONSTRUCTION DETAILS

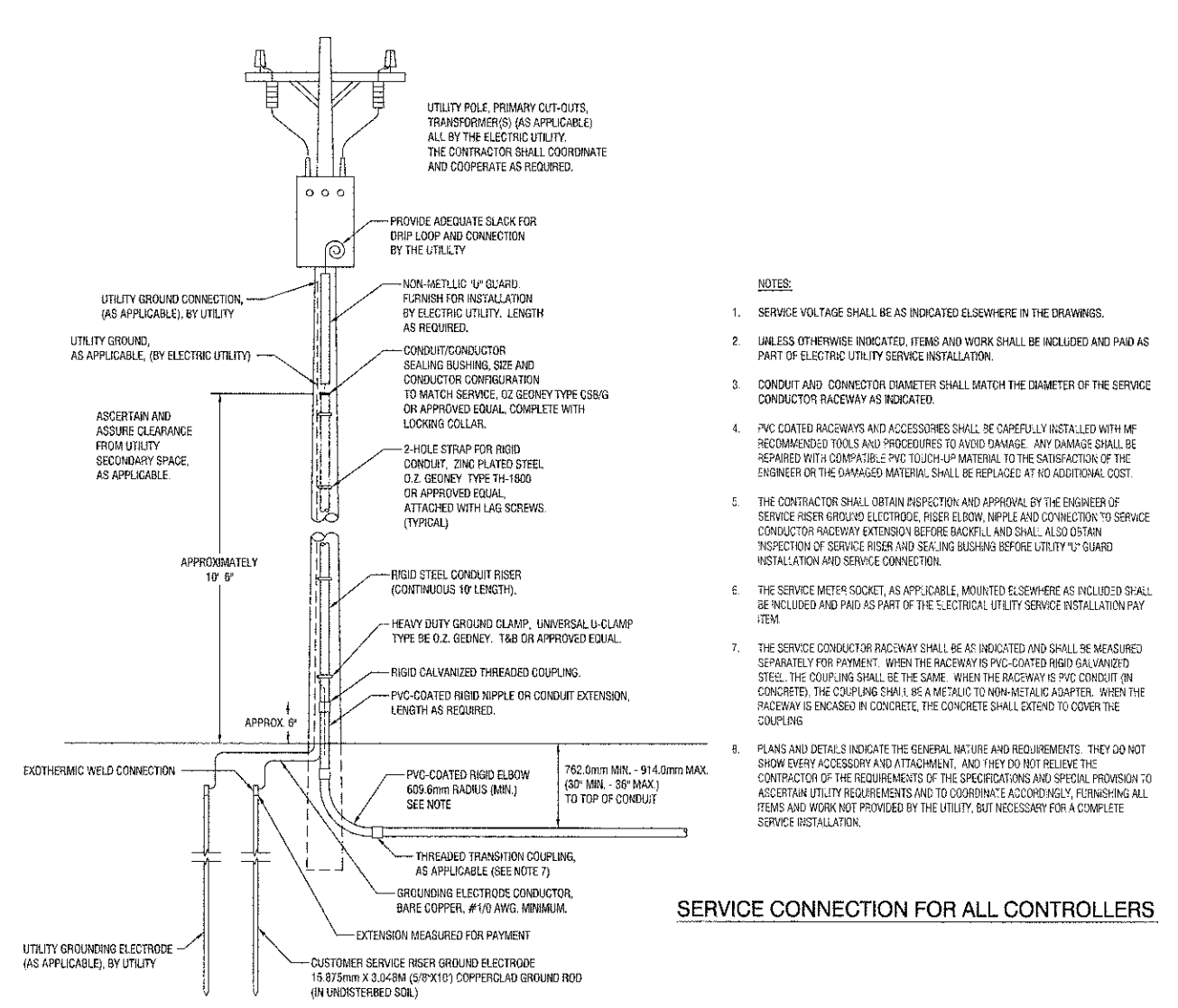
F.A.U. RTE. 3778	SECTION 08-00082-01-LT	COUNTY COOK	TOTAL SHEETS 17	SHEET NO. 11
CONTRACT NO. 63726				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT HPP M-9003(774)				

SCALE: SHEET NO. 11 OF 17 SHEETS STA. TO STA.



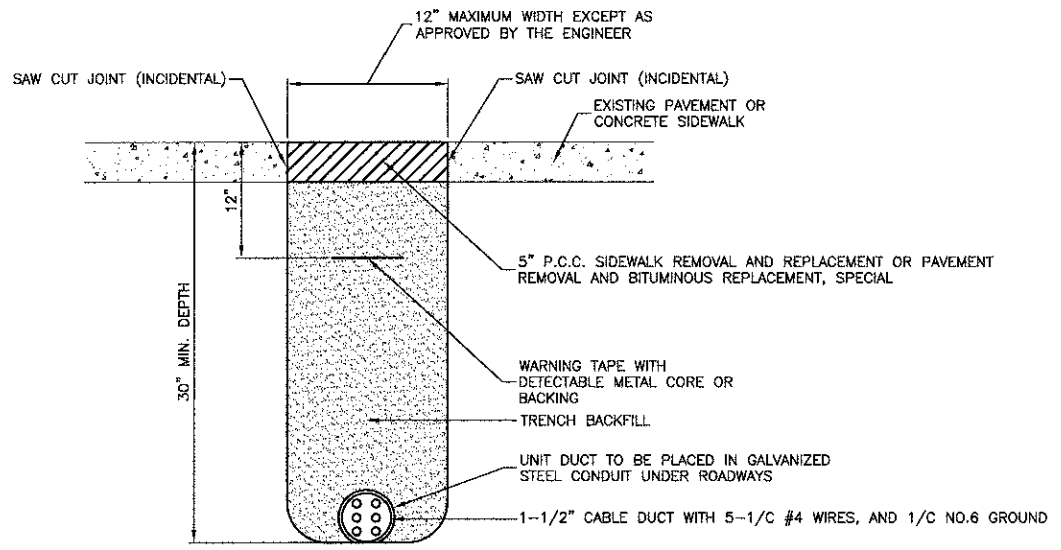
LIGHTING CONTROLLER INSTALLATION

- NOTE:
1. ORIENT CABINET SO DOOR OPENS AWAY FROM TRAFFIC.
 2. METER FITTING TO BE LOCATED ON THE SIDE OF THE CABINET CLOSEST TO SERVICE POLE.

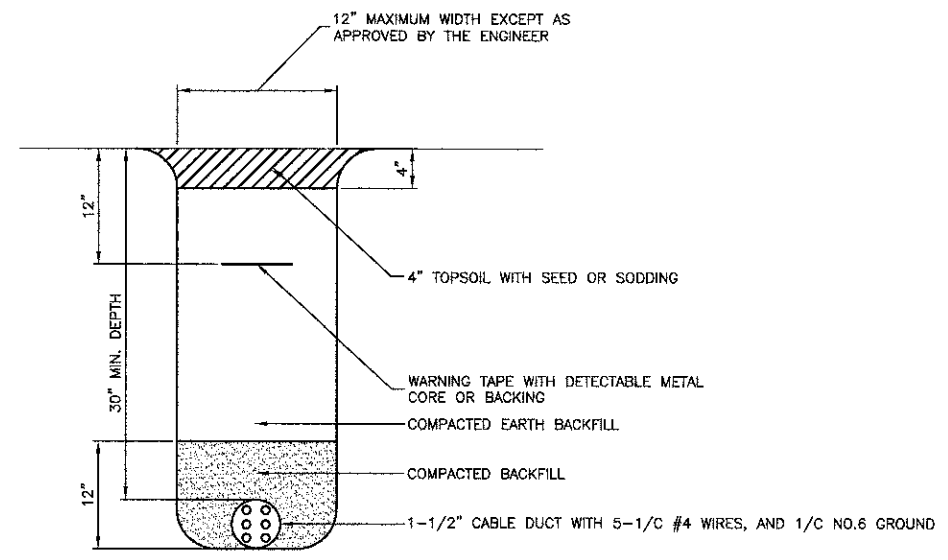


SERVICE CONNECTION FOR ALL CONTROLLERS

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

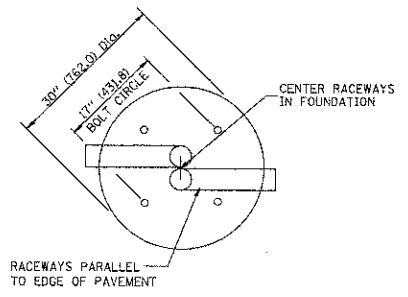
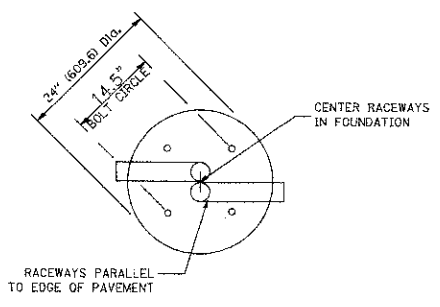


HOT-MIX ASPHALT PAVEMENT OR CONCRETE SIDEWALK REMOVAL AND REPLACEMENT



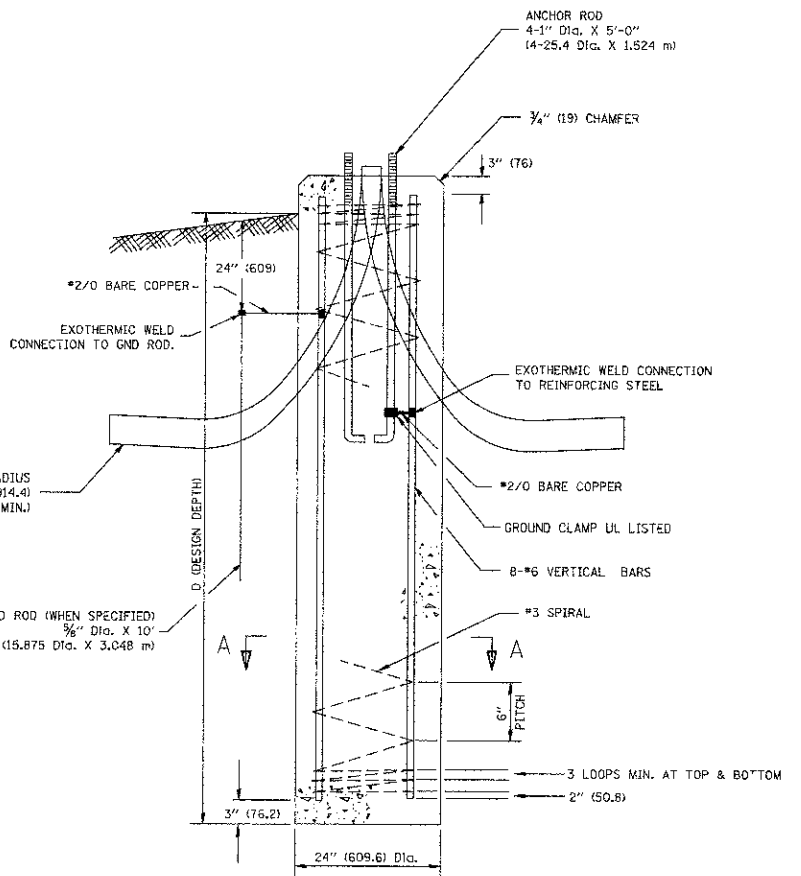
TRENCH DETAIL

SOIL CONDITIONS	DESIGN DEPTH "D" OF FOUNDATION	
	SINGLE ARM POLE	TWIN ARM POLE
SOFT CLAY Qu = 0.375 TON/SQ. FT.	13'-0" (3.96 m)	15'-0" (4.57 m)
MEDIUM CLAY Qu = 0.75 TON/SQ. FT.	9'-6" (2.93 m)	10'-9" (3.23 m)
STIFF CLAY Qu = 1.50 TON/SQ. FT.	7'-0" (2.13 m)	8'-0" (2.44 m)
LOOSE SAND φ = 34°	9'-0" (2.74 m)	10'-0" (3.05 m)
MEDIUM SAND φ = 37.5°	8'-3" (2.52 m)	9'-0" (2.74 m)
DENSE SAND φ = 40°	7'-9" (2.36 m)	9'-0" (2.74 m)

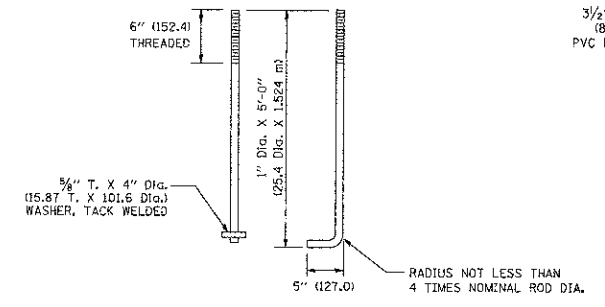


TOP VIEW

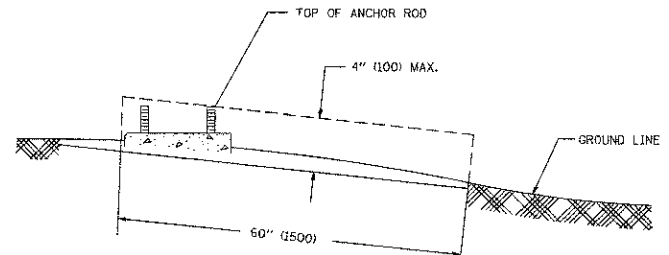
TOP VIEW



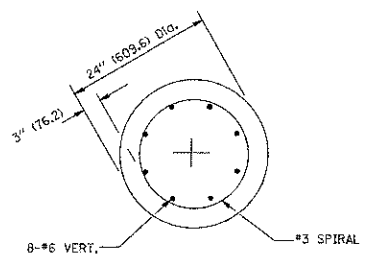
FOUNDATION DETAIL



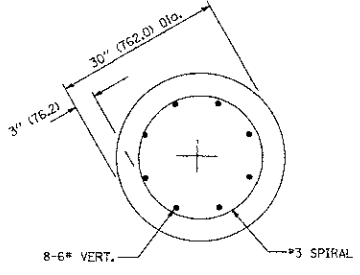
ANCHOR ROD DETAIL



FOUNDATION EXTENSION DETAIL



SECTION A-A



SECTION A-A

NOTES

- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED.
- THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 100MM (4 IN.) ABOVE THE FINISHED GRADE WITHIN A 60 IN. (1.5 M) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED, IN ACCORDANCE WITH AASHTO GUIDELINES. IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
- THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
- THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP SHALL BE CHAMFERED 3/4-IN. (20 MM).
- THE CONCRETE SHALL BE CLASS SI. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
- 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 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 0H, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
- ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UMG MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
- THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES (150 MM) WITH A MINIMUM OF 3 INCHES (75 MM) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
- ANCHOR RODS SHALL PROJECT 2 3/4" (69.9 MM) ABOVE THE TOP OF THE FOUNDATION. IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
- THE CONTRACTOR SHALL USE A #3 SPIRAL AT 6" (152.4 MM) PITCH OR MAY SUBSTITUTE #3 TIES AT 12" (304.8 MM) O.C. WITH THE APPROVAL OF THE ENGINEER.
- THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
- THE RACEWAYS SHALL PROJECT 1" (25.4 MM) ABOVE THE TOP OF THE FOUNDATION.

FILE NAME = 0826_02-DTLS-01 - DTLS P(4)

USER NAME =	DESIGNED -- DWS	REVISED --
PLOT SCALE =	CHECKED -- PAP	REVISED --
PLOT DATE = 06/27/12	DRAWN -- MED	REVISED --
	CHECKED -- AG	REVISED --

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PULASKI ROAD STREET LIGHTING CONSTRUCTION DETAILS		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SCALE:		3778	08-0082-01-LT	COOK	17	14
SHEET NO. 14 OF 17 SHEETS		STA. TO STA.		CONTRACT NO. 63726		

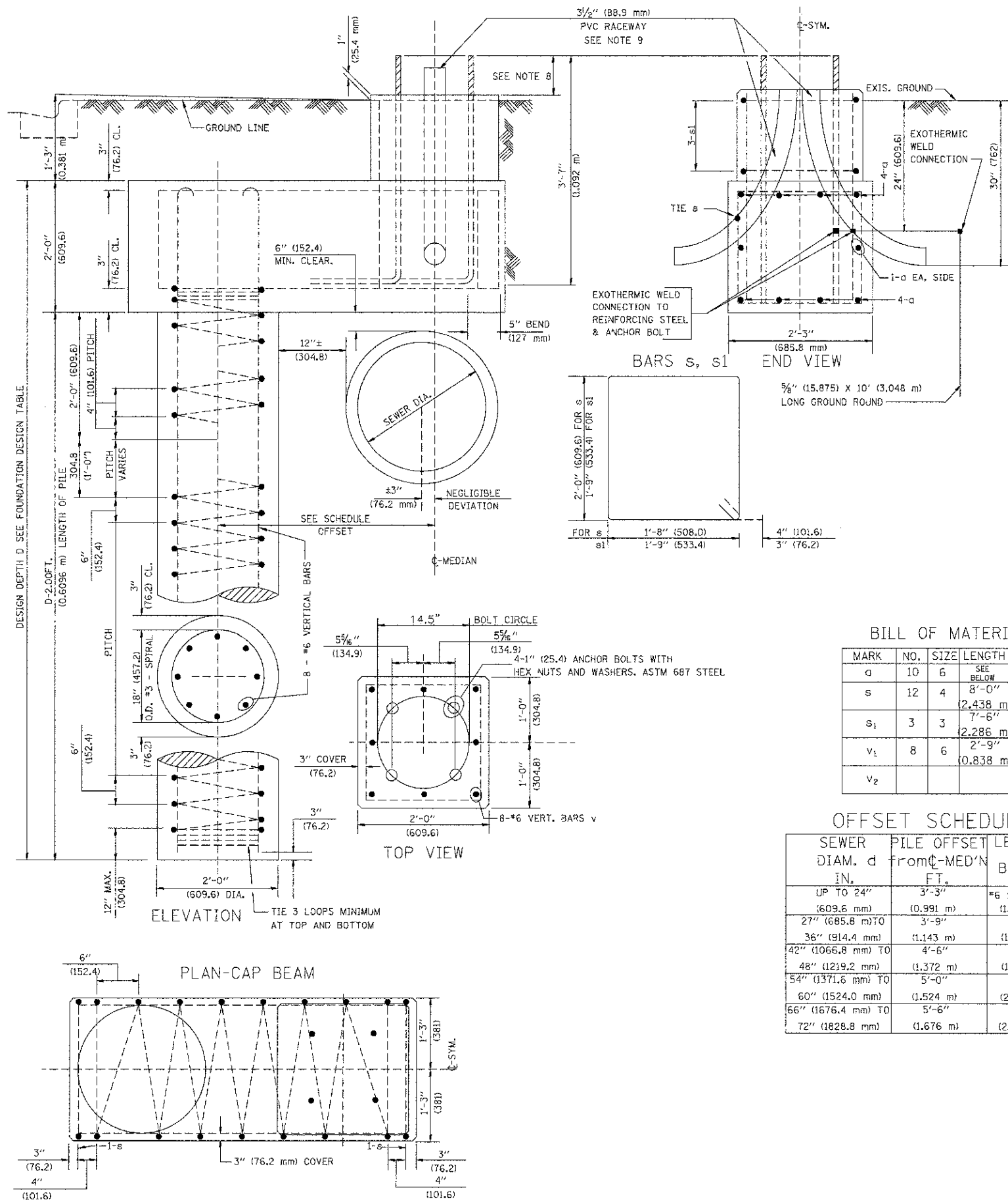
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT HPP M-9003(774)
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FOUNDATION DESIGN TABLE

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
q	10	6	SEE BELOW	—
s	12	4	8'-0" (2.438 m)	□
s ₁	3	3	7'-6" (2.286 m)	□
v ₁	8	6	2'-9" (0.838 m)	—
v ₂				

OFFSET SCHEDULE

SEWER DIAM. d IN.	PILE OFFSET from 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" (1.143 m)	5'-9" (1.753 m)
36" (914.4 mm) TO	4'-6" (1.372 m)	6'-6" (1.981 m)
42" (1066.8 mm) TO	5'-0" (1.524 m)	7'-0" (2.134 m)
48" (1219.2 mm) TO	5'-6" (1.676 m)	7'-6" (2.286 m)
54" (1371.6 mm) TO	6'-0" (1.828 m)	8'-0" (2.438 m)
60" (1524.0 mm) TO	6'-6" (1.981 m)	8'-6" (2.591 m)
66" (1676.4 mm) TO	7'-0" (2.134 m)	9'-0" (2.743 m)
72" (1828.8 mm) TO	7'-6" (2.286 m)	9'-6" (2.896 m)

FILE NAME = 06820_02-DTL8-01 - DTL8 P(5)

USER NAME	DESIGNED	CHECKED	PLOT SCALE	PLOT DATE
	DWS	PAP		08/27/12
	AG			

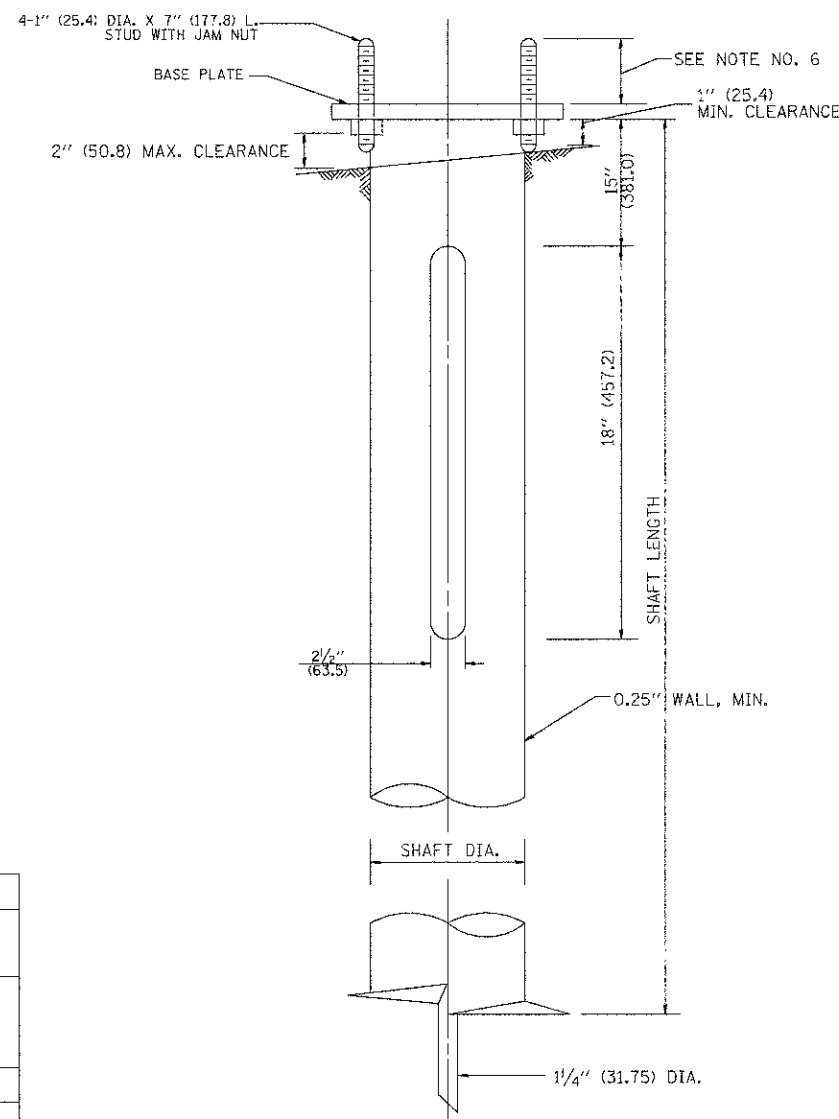
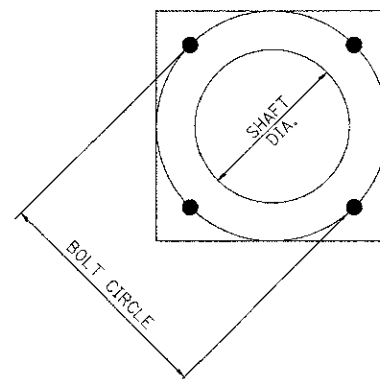
REVISION	DATE
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PULASKI ROAD
STREET LIGHTING
CONSTRUCTION DETAILS

FAU RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3776	06-00082-01-LT	COOK	17	15
CONTRACT NO. 63126				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT HPP M-9003(774)				

SCALE: SHEET NO. 15 OF 17 SHEETS STA. TO STA.



NOTES:

1. ALL DIMENSION IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
2. ALL MATERIAL SHALL BE GALVANIZED 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.	14.5"	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)

FILE NAME = 08626_02.DTLS-01 - DTLS P16)

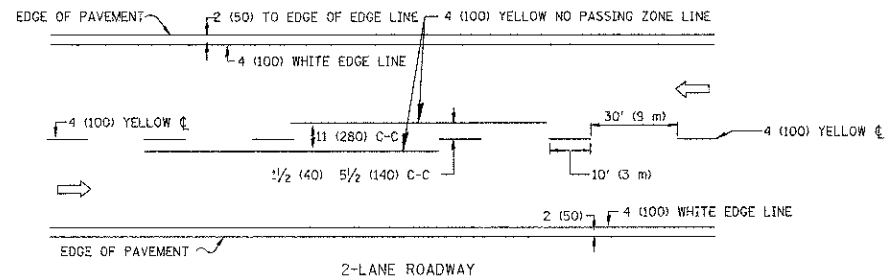
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

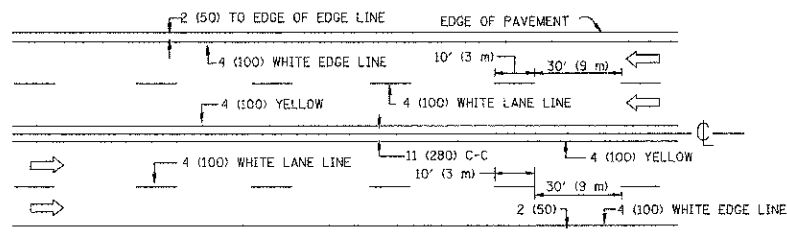
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STREET LIGHTING
LIGHT POLE FOUNDATION, METAL

SCALE: SHEET NO. 16 OF 17 SHEETS STA. TO STA.

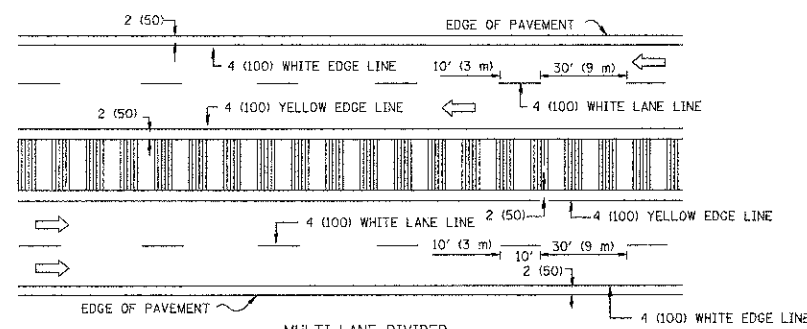
FAU RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3778	08-00082-01-LT	COOK	17	16
BE-305			CONTRACT NO. 63126	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT HPP M-9003(774)				



2-LANE ROADWAY



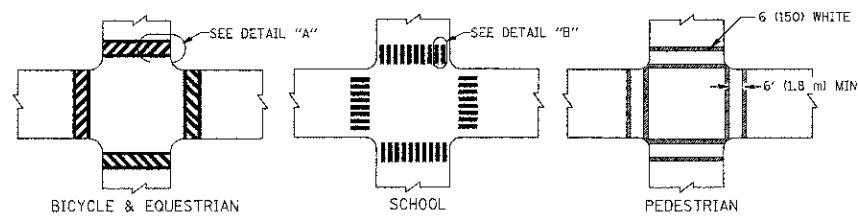
MULTI-LANE UNDIVIDED



MULTI-LANE DIVIDED WITH MOUNTABLE MEDIAN

NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

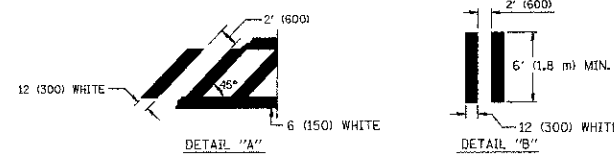
TYPICAL LANE AND EDGE LINE MARKING



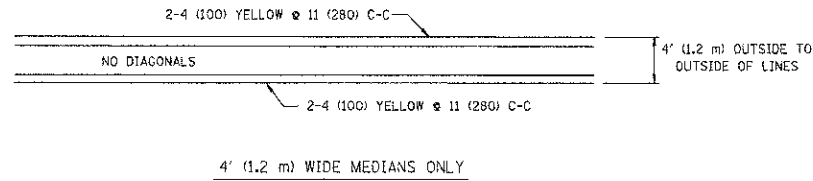
BICYCLE & EQUESTRIAN

SCHOOL

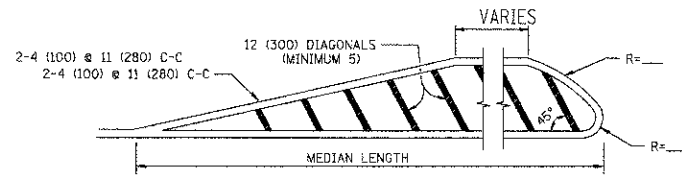
PEDESTRIAN



TYPICAL CROSSWALK MARKING



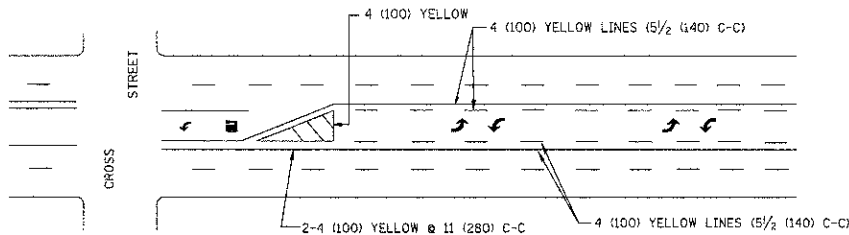
4' (1.2 m) WIDE MEDIANS ONLY



FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

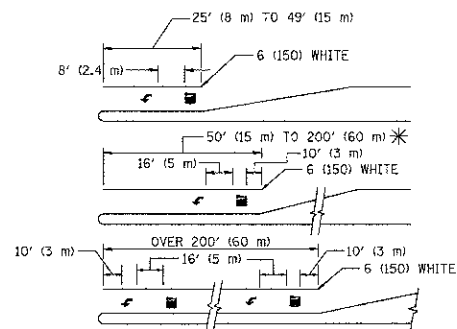
DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

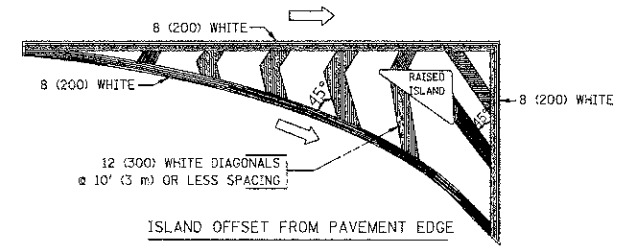


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

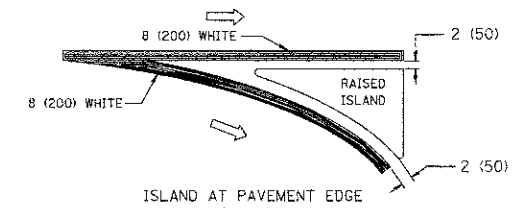
* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES FOR ONE DIRECTION	4 (100)	SOLID	YELLOW	5 1/2 (140) C-C FROM SKIP-DASH CENTERLINE
NO PASSING ZONE LINES FOR BOTH DIRECTIONS	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5 1/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	8' (2.4m) LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN)	2 @ 6 (150)	SOLID	WHITE	NOT LESS THAN 6' (1.8 m) APART
A. DIAGONALS (BIKE & EQUESTRIAN)	12 (300) @ 45°	SOLID	WHITE	2' (600) APART
B. LONGITUDINAL BARS (SCHOOL)	12 (300) @ 90°	SOLID	WHITE	2' (600) APART
				SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT; OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45°	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD T80001 AREA OF "R"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

FILE NAME *	USER NAME = drivakoegn	DESIGNED - EVERS	REVISED -T. RAMMACHER 10-27-94
al:\pwork\psdbt\drivakoegn\080315\to3.dgn		DRAWN -	REVISED -C. JUCIUS 09-09-09
	PLOT SCALE = 50.000 "/ IN.	CHECKED -	REVISED -
	PLOT DATE = 9/9/2009	DATE - 03-19-90	REVISED -

STATE OF ILLINOIS
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DISTRICT ONE		FAUJ	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TYPICAL PAVEMENT MARKINGS		3778	06-00682-01-LT	COOK	17	17
SCALE: NONE		SHEET NO. 17 OF 17 SHEETS		STA. TO STA.	CONTRACT NO. 63726	
		FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	HPP M-9003(774)	