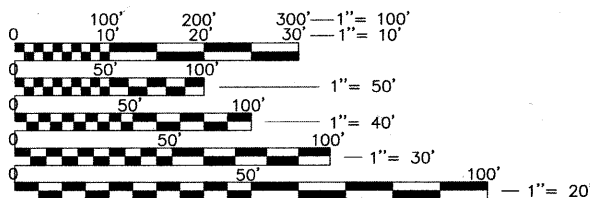


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**PLANS FOR PROPOSED FEDERAL  
AID HIGHWAY**  
**FAP 330 U.S. RTE 12/45 (LEE STREET)**  
**AT PERRY STREET**  
ROADWAY WIDENING AND TRAFFIC SIGNAL INSTALLATION  
SECTION: 10-00213-00-CH  
PROJECT NO. M-9003(821)  
JOB NO. C-91-559-11  
CITY OF DES PLAINES, ILLINOIS  
COOK COUNTY

**INDEX OF SHEETS**

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2. GENERAL NOTES & LEGEND
3. SUMMARY OF QUANTITIES
4. SUMMARY/SCHEDULE OF QUANTITIES
5. TYPICAL SECTIONS
6. TRAFFIC CONTROL PLAN
7. EXISTING CONDITIONS & DEMOLITION PLAN - US 12-45 (LEE ST)
8. EXISTING CONDITIONS & DEMOLITION PLAN - PERRY STREET
9. PLAN & PROFILE - US RTE 12-45 (LEE ST)
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14. CROSS SECTIONS - US RTE 12-45 (LEE ST)
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- 17.-26. DETAIL SHEETS
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33. TRAFFIC SIGNAL INSTALLATION PLAN
34. CABLE PLAN, PHASE DESIGNATION DIAGRAM AND SCHEDULE OF QUANTITIES
35. INTERCONNECT PLAN
36. INTERCONNECT SCHEMATIC
37. MAST ARM MOUNTED STREET NAME SIGNS
38. TEMPORARY LIGHTING PLAN
39. LIGHTING PLAN
40. WIRING DIAGRAM
41. LIGHTING CONTROLLER
42. LIGHTING NOTES
- 43.-47. LIGHTING DETAILS

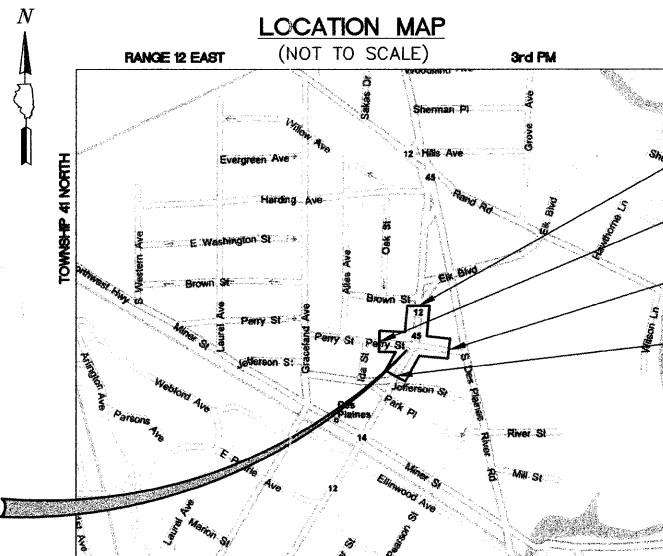
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE BELOW SCALES MAY BE USED.



CONTRACTOR IS RESPONSIBLE FOR CONTACTING J.U.L.I.E. AT 1-800-892-0123 AND MUST ACQUIRE A DIG NUMBER A MINIMUM OF 72 HOURS PRIOR TO ANY WORK BEING DONE.

**CONTRACT NO:63616****NOTE:**

THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOBSITE SAFETY.



END IMPROVEMENTS  
LEE ST-STA. 19+57

BEGIN IMPROVEMENTS  
PERRY ST-STA. 7+17

END IMPROVEMENTS  
PERRY ST-STA. 13+51

BEGIN IMPROVEMENTS  
LEE ST-STA. 11+43

**PROJECT INFORMATION****FUNCTIONAL CLASSIFICATIONS**

OTHER PRINCIPAL ARTERIAL - LEE STREET  
LOCAL ROAD - PERRY STREET

**POSTED SPEED LIMIT**

30 M.P.H. - LEE STREET  
25 M.P.H. - PERRY STREET

**GROSS AND NET LENGTH OF PROJECT**

LEE STREET	814 FEET
	0.15 MILES
PERRY STREET	634 FEET
	0.12 MILES

**STATION EQUATION**

0+15+00 LEE STREET  
0+10+00 PERRY STREET

**ADT (2009)**

22500 (VPD) - LEE STREET  
<5000 (VPD) - PERRY STREET

**BENCHMARK:**

SOURCE BENCHMARK 1: (CITY OF DES PLAINES #66)  
MONUMENT SET IN CONCRETE ON THE NORTH SIDE  
OF GOLF ROAD AT HOLY FAMILY HOSPITAL 34' EAST  
OF EAST ENTRANCE TO DRIVING RANGE AND 16'  
NORTH OF EDGE OF PAVEMENT OF GOLF.  
ELEVATION: 640.54

DATUM: NAVD 88

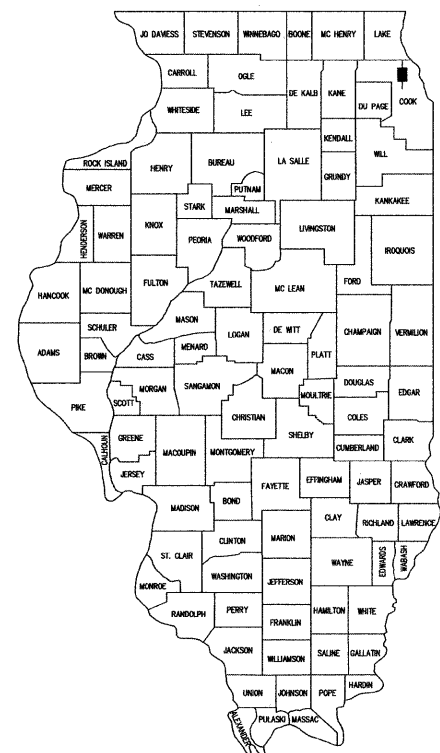
**SITE BENCHMARK 2:**

OUT CROSS IN SIDEWALK ±25' EAST OF CENTERLINE OF  
LEE STREET AND ±20' SOUTH OF CENTERLINE OF  
PERRY STREET.  
ELEVATION: 635.95

**CONTROL POINTS:**

DESC.	NORTHING	EASTING	ELEVATION
CP16-FXSW	1958329.58	1105432.83	638.46
CP17-SXSW	1958771.71	1105763.56	635.93
CP19-SXSW	1958795.69	1105454.50	639.77
CP49-XSW	1958535.05	1105554.52	638.05
CP1315-SMARKER	1959172.65	1105737.40	633.23

FAP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	10-00213-00-CH	LAKE	47	1
ILLINOIS FED. AID PROJECT			CONTRACT #: 63616	



LOCATION OF SECTION INDICATED THUS:

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

APPROVED: 9-14-11 20 11

*Thomas P. O'Connell*  
CITY OF DES PLAINES

PASSED: 9-15 20 11

*CT Holt*  
DISTRICT ONE ENGINEER OF LOCAL ROADS AND STREETS

RELEASING FOR BID  
BASED ON LIMITED REVIEW: SEPTEMBER 15 20 11

*Diane M. O'Keefe*  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ONE ENGINEER

PROFESSIONAL ENGINEER'S SIGNATURE & SEAL



*Bruce L. Shraake*  
BRUCE L. SHRAAKE  
DATE: 8/23/2011

EXPIRES: 11-30-11  
SEAL

PROFESSIONAL ELECTRICAL ENGINEER'S SIGNATURE & SEAL



*Arthur J. Penn*  
ARTHUR J. PENN  
DATE: 8/23/2011

EXPIRES: 11-30-11  
SEAL

**PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS**

**GHA GEWALT HAMILTON  
ASSOCIATES, INC.**

850 Forest Edge Drive ■ Vernon Hills, IL. 60061  
Phone: 847-478-9700 Fax: 847-478-9701

## GHA #3850.805

SUMMARY OF QUANTITIES

SUMMARY OF QUANTITIES

SP	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	STP/STU FUNDS			
					70% FED 30% CITY	70% FED 30% CITY	70% FED 30% CITY	0% FED 100% CITY
					ROADWAY 0004 URBAN	SAFETY 0021 URBAN	TRAINEES 0042 URBAN	PAINTING 0021 URBAN
	20100110	TREE REMOVAL (6 TO 15 UNIT DIAMETER)	UNIT	30	30			
	20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	60	60			
	20101100	TREE TRUNK PROTECTION	EACH	20	20			
	20101200	TREE ROOT PRUNING	EACH	10	10			
	20101400	NITROGEN FERTILIZER NUTRIENT	POUND	11	11			
	20101500	PHOSPHOROUS FERTILIZER NUTRIENT	POUND	11	11			
	20101600	POTASSIUM FERTILIZER NUTRIENT	POUND	11	11			
	20200100	EARTH EXCAVATION	CU YD	1,153	1,153			
	20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	125	125			
	20800150	TRENCH BACKFILL	CU YD	220	220			
	21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	100	100			
**	21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	860	860			
**	25200110	SODDING, SALT TOLERANT	SQ YD	860	860			
**	25200200	SUPPLEMENTAL WATERING	UNIT	15	15			
**	28000400	PERIMETER EROSION BARRIER	FOOT	220	220			
	28000510	INLET FILTERS	EACH	14	14			
	35101600	AGGREGATE BASE COURSE, TYPE B, 4"	SQ YD	1,105	1,105			
	35101800	AGGREGATE BASE COURSE, TYPE B, 6"	SQ YD	1,625	1,625			
	35400520	PORTLAND CEMENT CONCRETE BASE COURSE WIDENING, 12"	SQ YD	1,050	1,050			
	40201000	AGGREGATE FOR TEMPORARY ACCESS	TON	120	120			
	40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	735	735			
	40600300	AGGREGATE (PRIME COAT)	TON	14	14			
	40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	208	208			
	40600635	LEVELING BINDER (MACHINE METHOD), N70	TON	275	275			
	40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	360	360			
	40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	21	20	1		
	40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX C, N50	TON	70	70			
	40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX D, N70	TON	406	406			
	40800050	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	8	8			
	42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SQ YD	425	425			
	42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	5,810	5,810			
	42400800	DETECTABLE WARNINGS	SQ FT	170	170			
	44000100	PAVEMENT REMOVAL	SQ YD	240	240			
	44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	600	600			
	44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	1,975	1,975			
	44000600	SIDEWALK REMOVAL	SQ FT	4,860	4,860			
	44003100	MEDIAN REMOVAL	SQ FT	25	25			
	44201785	CLASS D PATCHES, TYPE I, 12"	SQ YD	200	200			
	44201789	CLASS D PATCHES, TYPE II, 12"	SQ YD	200	200			
	44201794	CLASS D PATCHES, TYPE III, 12"	SQ YD	175	175			
	550A0340	STORM SEWERS, CLASS A, TYPE 2 12"	FOOT	585	585			
	550A0360	STORM SEWERS, CLASS A, TYPE 2 15"	FOOT	20	20			
	55100300	STORM SEWER REMOVAL 8"	FOOT	20	20			
	55100400	STORM SEWER REMOVAL 10"	FOOT	40	40			
	55100500	STORM SEWER REMOVAL 12"	FOOT	50	50			
	56400100	FIRE HYDRANT TO BE MOVED	EACH	1	1			
*	56500600	DOMESTIC WATER SERVICE BOXES TO BE ADJUSTED	EACH	2	2			
	60200205	CATCH BASIN, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	1			
	60201330	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 23 FRAME AND GRATE	EACH	3	3			
	60201340	CATCH BASIN, TYPE A, 4'-DIAMETER, TYPE 24 FRAME AND GRATE	EACH	2	2			
	60208230	CATCH BASIN, TYPE C, TYPE 23 FRAME AND GRATE	EACH	4	4			
	60208240	CATCH BASIN, TYPE C, TYPE 24 FRAME AND GRATE	EACH	1	1			

\*\* SPECIALTY ITEMS

SP	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	STP/STU FUNDS			
					70% FED 30% CITY	70% FED 30% CITY	70% FED 30% CITY	0% FED 100% CITY
					ROADWAY 0004 URBAN	SAFETY 0021 URBAN	TRAINEES 0042 URBAN	PAINTING 0021 URBAN
	60219540	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 24 FRAME AND GRATE	EACH	1	1			
	60224439	MANHOLES, TYPE A, 7'-DIAMETER, TYPE 23 FRAME AND GRATE	EACH	1	1			
	60255500	MANHOLES TO BE ADJUSTED	EACH	15	15			
	60255800	MANHOLES TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	3	3			
	60257900	MANHOLES TO BE RECONSTRUCTED	EACH	2	2			
	60265700	VALVE VAULTS TO BE ADJUSTED	EACH	8	8			
	60266100	VALVE VAULTS TO BE RECONSTRUCTED	EACH	1	1			
	60266600	VALVE BOXES TO BE ADJUSTED	EACH	1	1			
*	60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	2	2			
	60500040	REMOVING MANHOLES	EACH	1	1			
	60500050	REMOVING CATCH BASINS	EACH	6	6			
	60500060	REMOVING INLETS	EACH	3	3			
	60500105	FILLING MANHOLES	EACH	1	1			
	60500205	FILLING CATCH BASINS	EACH	1	1			
	60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	1,360	1,360			
	60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	650	650			
	60618300	CONCRETE MEDIAN SURFACE, 4 INCH	SQ FT	75	75			
	63500310	REMOVE AND REINSTALL DELINEATORS	EACH	9	9			
	66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	715	715			
	66900450	SPECIAL WASTE PLANS AND REPORTS	L SUM	1	1			
	66900530	SOIL DISPOSAL ANALYSIS	EACH	8	8			
	67100100	MOBILIZATION	L SUM	1	1			
**	70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	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			
	70106800	CHANGEABLE MESSAGE SIGN	CAL MO	1		1		
	70300100	SHORT-TERM PAVEMENT MARKING	FOOT	3,150	3,150			
	70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	400	400			
	72000100	SIGN PANEL - TYPE 1	SQ FT	13.50		13.50		
	72000200	SIGN PANEL - TYPE 2	SQ FT	30.00		30.00		
	72400710	RELOCATE SIGN PANEL, TYPE 1	SQ FT	155	155			
	72900100	METAL POST, TYPE A	FOOT	95	95			
	72900200	METAL POST, TYPE B	FOOT	25	25			
**	78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	354	354			
**	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	3,705	3,705			
**	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	1,120	1,120			
**	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	715	715			
**	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	170	170			
**	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	80	80			
**	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	80	80			
**	80400100	ELECTRIC SERVICE INSTALLATION	EACH	1		1		
**	* 80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1		1		
**	80500010	SERVICE INSTALLATION - GROUND MOUNTED	EACH	1		1		
**	81000600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	157		157		
**	81000700	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	60		60		
**	81000800	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	79		79		
**	81001000	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	30		30		
**	81018500	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	1,063		1,063		
**	81018900	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	351		351		
**	81400100	HANDHOLE	EACH	4		4		
**	81400200	HEAVY-DUTY HANDHOLE	EACH	4		4		

\*\* SPECIALTY ITEMS



SUMMARY OF QUANTITIES

SUMMARY OF QUANTITIES

SP	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	STP/STU FUNDS			
					70% FED 30% CITY	70% FED 30% CITY	70% FED 30% CITY	0% FED 100% CITY
					ROADWAY 0004 URBAN	SAFETY 0021 URBAN	TRAINEES 0042 URBAN	PAINTING 0021 URBAN
**	81400300	DOUBLE HANDHOLE	EACH	2		2		
**	81702460	ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE) 3 1/C NO. 3/0	FOOT	155		155		
**	81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	287		287		
**	84200500	REMOVAL OF LIGHTING UNIT, SALVAGE	EACH	10		10		
**	84200804	REMOVAL OF POLE FOUNDATION	EACH	10		10		
**	85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1		1		
**	85100500	PAINT NEW TRAFFIC SIGNAL POST	EACH	4				4
**	85100600	PAINT NEW MAST ARM AND POLE, UNDER 40 FOOT	EACH	4				4
**	85700205	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1		1		
**	86200120	UNINTERRUPTIBLE POWER SUPPLY	EACH	1		1		
**	86400100	TRANSCEIVER-FIBER OPTIC	EACH	1		1		
**	87100020	FIBER OPTIC CABLE IN CONDUIT, NO 62.5/125, MM12F SM12F	FOOT	350		350		
**	87300925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	350		350		
**	87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1,161		1,161		
**	87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1,486		1,486		
**	87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1,126		1,126		
**	87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1,395		1,395		
**	87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1,595		1,595		
**	87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	153		153		
**	87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	684		684		
**	87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4		4		
**	87700170	STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.	EACH	1		1		
**	87700180	STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1		1		
**	87700220	STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1		1		
**	87700230	STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1		1		
**	87800100	CONCRETE FOUNDATION, TYPE A	FOOT	16		16		
**	87800150	CONCRETE FOUNDATION, TYPE C	FOOT	4		4		
**	87800200	CONCRETE FOUNDATION, TYPE D	FOOT	4		4		
**	87800415	CONCRETE FOUNDATION, TYPE E-36 INCH DIAMETER	FOOT	44		44		
**	87900200	DRILL EXISTING HANDHOLE	EACH	1		1		
**	88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6		6		
**	88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4		4		
**	88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	4		4		
**	88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8		8		
**	88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINIUM	EACH	10		10		
**	88500100	INDUCTIVE LOOP DETECTOR	EACH	8		8		
**	88600100	DETECTOR LOOP, TYPE I	FOOT	763		763		
**	88700200	LIGHT DETECTOR	EACH	2		2		
**	88700300	LIGHT DETECTOR AMPLIFIER	EACH	1		1		
**	88800100	PEDESTRIAN PUSH-BUTTON	EACH	8		8		
**	89502200	MODIFY EXISTING CONTROLLER	EACH	1		1		
**	X0301834	STORM SEWER TO BE FILLED	FOOT	40	40			
**	X0323523	REMOVE TEMPORARY LIGHTING	L SUM	1		1		
**	X0502600	TEMPORARY LIGHTING	L SUM	1		1		
**	X4401198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	6,350	6,350			
**	X8250505	LIGHTING CONTROLLER, SPECIAL	EACH	1		1		
**	X8360210	LIGHT POLE FOUNDATION, 24" DIAMETER, SPECIAL	FOOT	120		120		
**	X8730250	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	262		262		
**	XX000406	BRICK PAVER REMOVAL AND REPLACEMENT	SQ FT	25	25			
**	XX007295	LIGHTING UNIT A, COMPLETE	EACH	10		10		
**	XX007296	LIGHTING UNIT B, COMPLETE	EACH	2		2		
**	XX007584	CONDUIT, BORED AND PULLED, GALVANIZED STEEL, 2", SPECIAL	FOOT	1,475		1,475		

\*\* SPECIALTY ITEMS

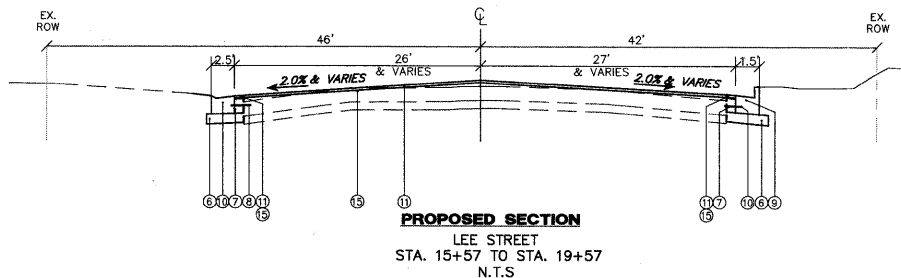
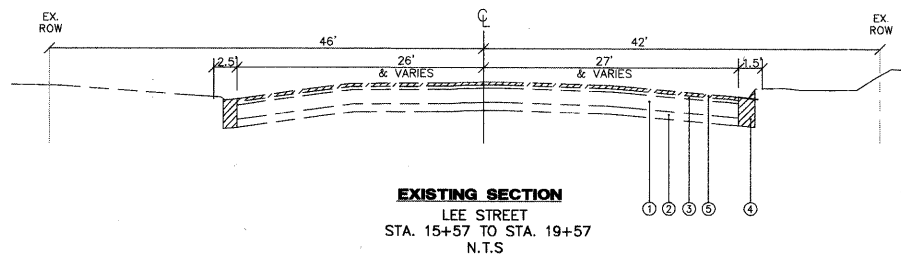
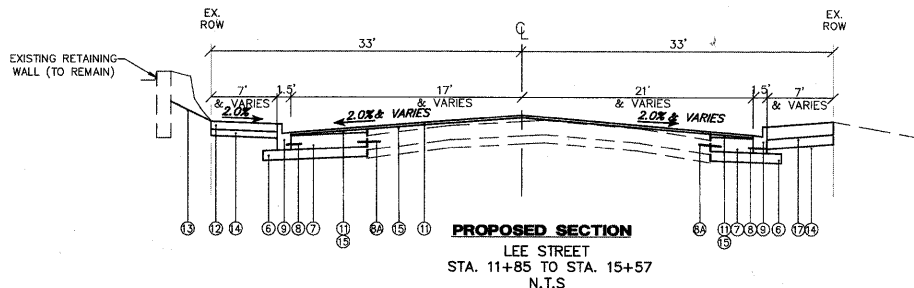
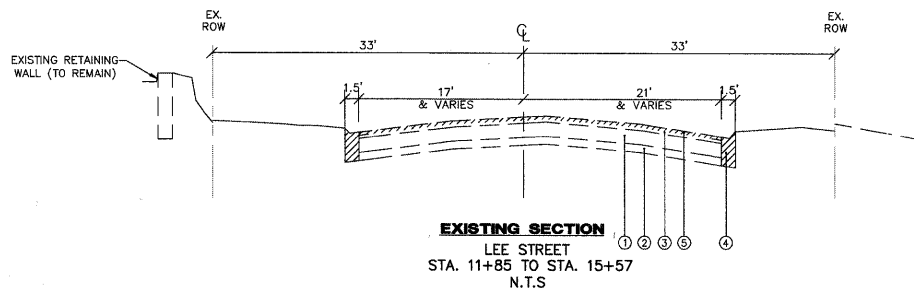
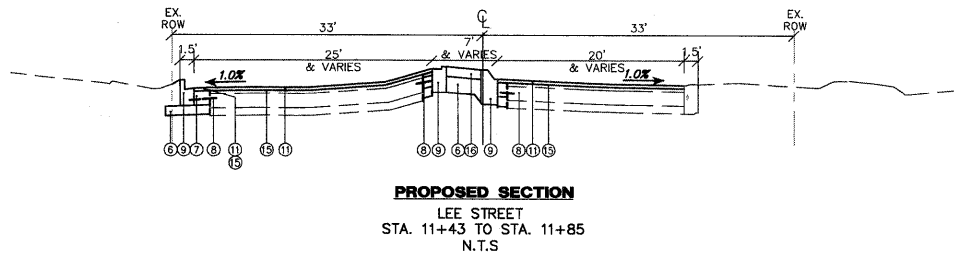
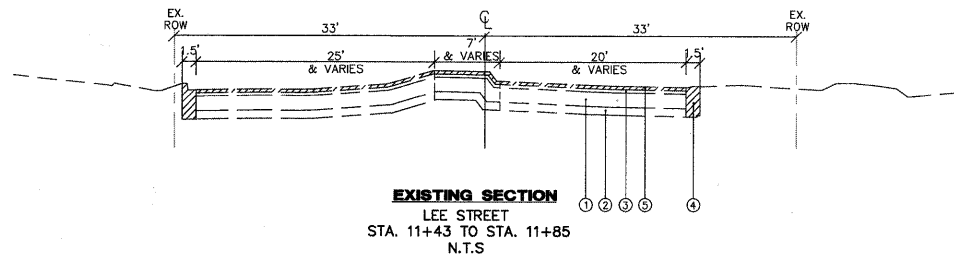
SP	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	STP/STU FUNDS			
					70% FED 30% CITY	70% FED 30% CITY	70% FED 30% CITY	0% FED 100% CITY
					ROADWAY 0004 URBAN	SAFETY 0021 URBAN	TRAINEES 0042 URBAN	PAINTING 0021 URBAN
*	Z0001110	GAS VALVE TO BE ADJUSTED	EACH	3	3			
*	Z0004530	HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 8"	SQ YD	60	60			
*	Z0018911	DRILL AND GROUT #6 TIE BARS	EACH	900	900			
*	Z0018913	DRILL AND GROUT #8 TIE BARS	EACH	925	925			
*	Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	103	103			
*	Z0033046	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2	EACH	1		1		
*	Z0042002	POROUS GRANULAR EMBANKMENT, SUBGRADE	CU YD	125	125			
*	Z0042300	PORTLAND CEMENT CONCRETE SIDEWALK CURB	FOOT	245	245			
*	Z0050600	REMOVE AND RESET ORNAMENTAL FENCE	FOOT	100	100			
*	Z0062450	SAWING PAVEMENT (FULL DEPTH)	FOOT	2,100	2,100			
*	Z0076600	TRAINEES	HOUR	500			500	
**	XX008592	ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE) 4/C NO. 8 & 1/C NO. 8 GROUND	FOOT	565		565		
**	XX008593	ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE) 6/C NO. 8 & 1/C NO. 8 GROUND	FOOT	835		835		

\*\* SPECIALTY ITEMS

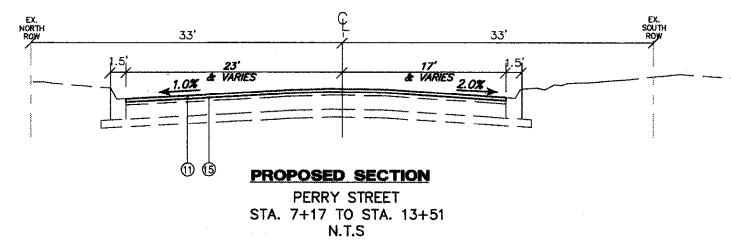
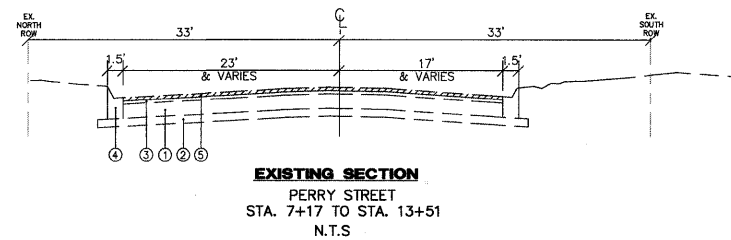
EARTHWORK SCHEDULE									
STATION			EARTH EXCAVATION	EARTH EXCAVATION VOLUME USED (15% SHRINKAGE)	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL (10%)	EMBANKMENT (10%)	EARTHWORK BALANCE W/ATE (+) OR SHORTAGE (-)		
LINE "LEESTREET"			(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)		
11+00	TO	11+50	0	0	0	0	0		
11+50	TO	12+00	26.5	23	2.3	2.3	18		
12+00	TO	12+50	60.8	51.7	5.2	5.2	41.3		
12+50	TO	13+00	73.6	62.6	6.3	6.3	50.0		
13+00	TO	13+50	79.6	67.7	6.8	6.8	54.1		
13+50	TO	14+00	70.8	60.2	6.0	6.0	48.1		
14+00	TO	14+50	77.0	65.5	6.5	6.5	52.4		
14+50	TO	15+00	80.0	68.0	6.8	6.8	54.4		
15+00	TO	15+50	45.1	38.3	3.8	3.8	30.7		
15+50	TO	16+00	62.5	53.1	5.3	5.3	42.5		
16+00	TO	16+30	29.6	25.2	2.5	2.5	20.1		
16+30	TO	16+50	24.1	20.5	2.0	2.0	16.4		
16+50	TO	17+00	45.4	38.6	3.9	3.9	30.9		
17+00	TO	17+17	20.8	17.7	1.8	1.8	14.1		
17+17	TO	17+50	32.7	27.8	2.8	2.8	22.2		
17+50	TO	18+00	50.7	43.1	4.3	4.3	34.5		
18+00	TO	18+40	39.7	33.7	3.4	3.4	27		
18+40	TO	18+50	9.2	7.8	0.8	0.8	6		
18+50	TO	19+00	13.0	11.1	1.105	1.105	9		
19+00	TO	19+50	0	0	0	0	0		
LEESTREET TOTALS			841.1	714.9	71.5	71.5	571.9		
LINE "PERRY STREET"			(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)		
7+17	TO	7+50	0	0.0	0	0	0		
7+50	TO	8+00	11.2	9.5	1.0	1.0	8		
8+00	TO	8+34	13.4	11.4	1.1	1.1	9.1		
8+34	TO	8+50	13.1	11.1	1.1	1.1	8.9		
8+50	TO	8+70	10.6	9.0	0.9	0.9	7.2		
8+70	TO	9+00	26.5	22.5	2.3	2.3	18.0		
9+00	TO	9+50	48.5	41.2	4.1	4.1	33.0		
9+50	TO	10+00	86.5	73.5	7.4	7.4	58.8		
10+00	TO	10+50	0	0	0	0	0		
10+50	TO	11+00	81.1	68.9	6.9	6.9	56.1		
11+00	TO	11+24	8.8	7.5	0.7	0.7	6.0		
11+24	TO	11+50	0	0	0	0	0		
PERRY STREET TOTALS			299.7	254.7	25.5	25.5	203.8		
EARTH EXCAVATION (CU YD)			1141						



# LEE STREET



# PERRY STREET



## LEGEND:

- ① EXISTING P.C.C. BASE COURSE
- ② EXISTING AGGREGATE SUB-BASE
- ③ EXISTING BITUMINOUS PAVEMENT (VARIES)
- ④ EXISTING B-6.12 CURB AND GUTTER WITH MONOLITHIC P.C.C. BASE COURSE.
- ⑤ PROPOSED HMA SURFACE REMOVAL (2"-PERRY ST), (VARIES-LEE ST)
- ⑥ PROPOSED 6" AGGREGATE BASE COURSE, TYPE B
- ⑦ PROPOSED 12" P.C.C. BASE COURSE WIDENING
- ⑧ PROPOSED DRILL AND GROUT #6 TIE BARS @ 24" C-C
- ⑧A PROPOSED DRILL AND GROUT #8 TIE BARS @ 24" C-C
- ⑨ PROPOSED B-6.12 CURB AND GUTTER
- ⑩ PROPOSED B-6.24 CURB AND GUTTER
- ⑪ PROPOSED 1 1/2" HOT-MIX ASPHALT SURFACE COURSE, (MIX D, N70 LEE ST), (MIX C, N50 PERRY ST)
- ⑫ PROPOSED P.C.C. SIDEWALK, 5"
- ⑬ PROPOSED 4" TOPSOIL AND SALT TOLERANT SOD
- ⑭ PROPOSED 4" AGGREGATE BASE COURSE, TYPE B
- ⑮ PROPOSED LEVELING BINDER (MACHINE METHOD) (3/4"-1")
- ⑯ PROPOSED 4" P.C.C. MEDIAN SURFACE
- ⑰ PROPOSED 8" P.C.C. DRIVEWAY

## HOT-MIX ASPHALT MIXTURE REQUIREMENTS

MIXTURE TYPE	AIR VOIDS @ Ndes	DEPTH	LOCATION
<b>HOT-MIX ASPHALT RESURFACING</b>			
HOT-MIX ASPHALT SURFACE COURSE, MIX 'C', N50 (IL 9.5 mm)	4% @ 50 GYR	1 1/2"	PERRY STREET
HOT-MIX ASPHALT SURFACE COURSE, MIX 'D', N70 (IL 9.5 mm)	4% @ 70 GYR	1 1/2"	LEE STREET
LEVELING BINDER (MACHINE METHOD), N50	4% @ 50 GYR	3/4"	PERRY STREET
LEVELING BINDER (MACHINE METHOD), N70	4% @ 70 GYR	1"	LEE STREET
<b>HOT-MIX ASPHALT PATCHING</b>			
HOT-MIX ASPHALT REPLACEMENT OVER PATCHES (HMA BINDER IL-19.0mm)	4% @ 50 GYR	VARIES	LEE STREET AND PERRY STREET
CLASS D PATCHES, HOT-MIX ASPHALT BINDER, IL-19.0mm	4% @ 70 GYR	12"	LEE STREET AND PERRY STREET
<b>HOT-MIX ASPHALT DRIVEWAY PAVEMENT</b>			
HOT-MIX ASPHALT SURFACE COURSE, MIX 'C', N50 (IL 9.5mm)	4% @ 50 GYR	2"	PERRY STREET
HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL-19.0) MIX 'C', N50	4% @ 50 GYR	6" (TWO LIFTS)	PERRY STREET
<b>MISCELLANEOUS</b>			
INCIDENTAL HOT-MIX ASPHALT SURFACING (HMA SURFACE COURSE, MIX 'C', N50) (IL 9.5mm)	4% @ 50 GYR	2" & VARIES	LEE STREET AND PERRY STREET

THE UNIT WEIGHT TO CALCULATE ALL HMA 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 OTHERWISE MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.

FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.

FILE NAME = 3850-805-PR1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - CAD	REVISED -	CITY OF DES PLAINES PROPOSED ROADWAY WIDENING AND TRAFFIC SIGNAL INSTALLATION	TYPICAL CROSS SECTIONS				F&P		SECTION		COUNTY		SHEET	
		DRAWN - CAD	REVISED -						RTE	10-00213-00-CH		COOK		47		5
	PLOT SCALE = 1/101	CHECKED - BLS	REVISED -		330											
	PLOT DATE = 8/23/2011	DATE - 8/23/2011	REVISED -													
				SCALE: NONE	SHEET NO.	OF	SHEETS	STA.	TO STA.	CONTRACT #: 63616						
										ILLINOIS FED. AID PROJECT						

TRAFFIC CONTROL GENERAL NOTES

1. ALL SIGNING SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JAN. 1, 2007", "THE QUALITY STANDARD FOR WORK ZONE TRAFFIC CONTROL DEVICES ADOPTED 2010", THE DETAILS IN THESE PLANS, AND THE LATEST EDITION OF THE STATE OF ILLINOIS "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES".
2. IF DEEMED NECESSARY BY THE ENGINEER, A PRE-CONSTRUCTION MEETING WITH THE CONTRACTOR SHALL BE HELD AT LEAST ONE WEEK PRIOR TO THE DAY OF THE ROADWAY CLOSURE IS TO BE IN EFFECT.
3. THE CONTRACTOR SHALL SUPPLY TO THE ENGINEER THE NAMES AND TELEPHONE NUMBERS OF HIS REPRESENTATIVES ON THE CONSTRUCTION SITE AND HIS REPRESENTATIVE RESPONSIBLE FOR THE TRAFFIC CONTROL PLAN SIGNING PRIOR TO THE START OF THE WORK.
4. LONGITUDINAL DIMENSIONS SHOWN ON THESE PLANS MAY BE ADJUSTED TO FIT FIELD CONDITIONS WITH THE APPROVAL OF THE ENGINEER.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL BARRICADES, SIGNS, LIGHTS, AND OTHER DEVICES INSTALLED BY HIM ARE IN PLACE AND OPERATION 24 HOURS EACH DAY INCLUDING SUNDAYS AND HOLIDAYS DURING THE TIME THE TRAFFIC CONTROL PLAN IS IN EFFECT.
6. THE TRAFFIC CONTROL SHOWN ON THIS PLAN IS THE MINIMUM NECESSARY TO ENSURE THESE ROADWAY IMPROVEMENTS. THE CONTRACTOR SHALL MAKE ALL CHANGES IN TRAFFIC CONTROL THAT IS DEEMED NECESSARY BY THE ENGINEER.
7. THE SIZES OF ALL SIGNS NOT SPECIFIED IN THESE PLANS SHALL BE AS REQUIRED BY THE ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
8. AS A MINIMUM, ALL AMBER FLASHING LIGHTS THAT ARE REQUIRED FOR THIS DETOUR SHALL MEET THE REQUIREMENTS FOR TYPE 'A' LOW INTENSITY FLASHING LIGHTS IN ARTICLE 1084.01 OF THE STANDARD SPECIFICATIONS. ALL LIGHTS SHALL OPERATE DURING THE HOURS OF DARKNESS. ONLY LIGHTS THAT HAVE BEEN APPROVED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION SHALL BE USED.
9. ALL BARRICADES SHALL HAVE REFLECTORIZED STRIPING ON BOTH SIDES OF THE BARRICADES. THE TYPE III BARRICADES USED AT THE POINT OF CLOSURE TO THRU TRAFFIC SHALL NOT EXCEED EIGHT FEET (2.4m) IN WIDTH EACH, FOR A SINGLE APPROACH LANE.

TRAFFIC CONTROL GENERAL NOTES Continued

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE VISIBILITY OF ALL TRAFFIC CONTROL AND CONSTRUCTION SIGNING, INCLUDING BRUSHING BACK VEGETATION IF DEEMED NECESSARY BY THE ENGINEER.
11. THE FOLLOWING ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARDS ARE APPLICABLE FOR THIS WORK:  
701101-02 OFF ROAD OPERATIONS - MULTILANE - LESS THAN 15 FT TO EOP  
701106-02 OFF ROAD OPERATIONS - MULTILANE - MORE THAN 15 FT AWAY  
701301-04 LANE CLOSURE 2L, 2W, SHORT TIME OPERATIONS  
701501-06 URBAN LANE CLOSURE 2L, 2W, UNDIVIDED  
701606-06 URBAN LANE CLOSURE MULTILANE, 2W WITH MOUNTABLE MEDIAN  
701701-07 URBAN LANE CLOSURE MULTILANE INTERSECTION  
701801-04 LANE CLOSURE, MULTILANE, 1W OR 2W, CROSSWALK OR SIDEWALK CLOSURE  
701901-01 TRAFFIC CONTROL DEVICES
12. BARRICADES WILL BE REQUIRED ADJACENT TO PAVEMENT EDGES WHERE CURB & GUTTER, WIDENING OR OVERLAYING WORK IS BEING DONE, AS SPECIFIED IN SECTIONS 701 AND 702 OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", EXCEPT THAT THE BARRICADES SHALL BE TYPE II (OR DRUMS), NON-METALLIC WITH STEADY-BURNING LIGHTS. SPACING SHALL BE AT 15m (49ft) CENTERS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
13. ROAD NAME PLATES SHALL BE INSTALLED UNDER "ROAD AHEAD" SIGNS AT THE LOCATIONS SHOWN. NAME PLATES SHALL BE 9" BLANKS WITH 6" UPPER CASE AND 5" LOWER CASE LETTERS.
14. ALL CONSTRUCTION SIGNS SHALL HAVE FLUORESCENT ORANGE BACKGROUNDS.
15. MAINTENANCE OF ALL TRAFFIC CONTROL DEVICES ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

LEGEND

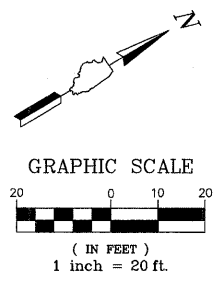
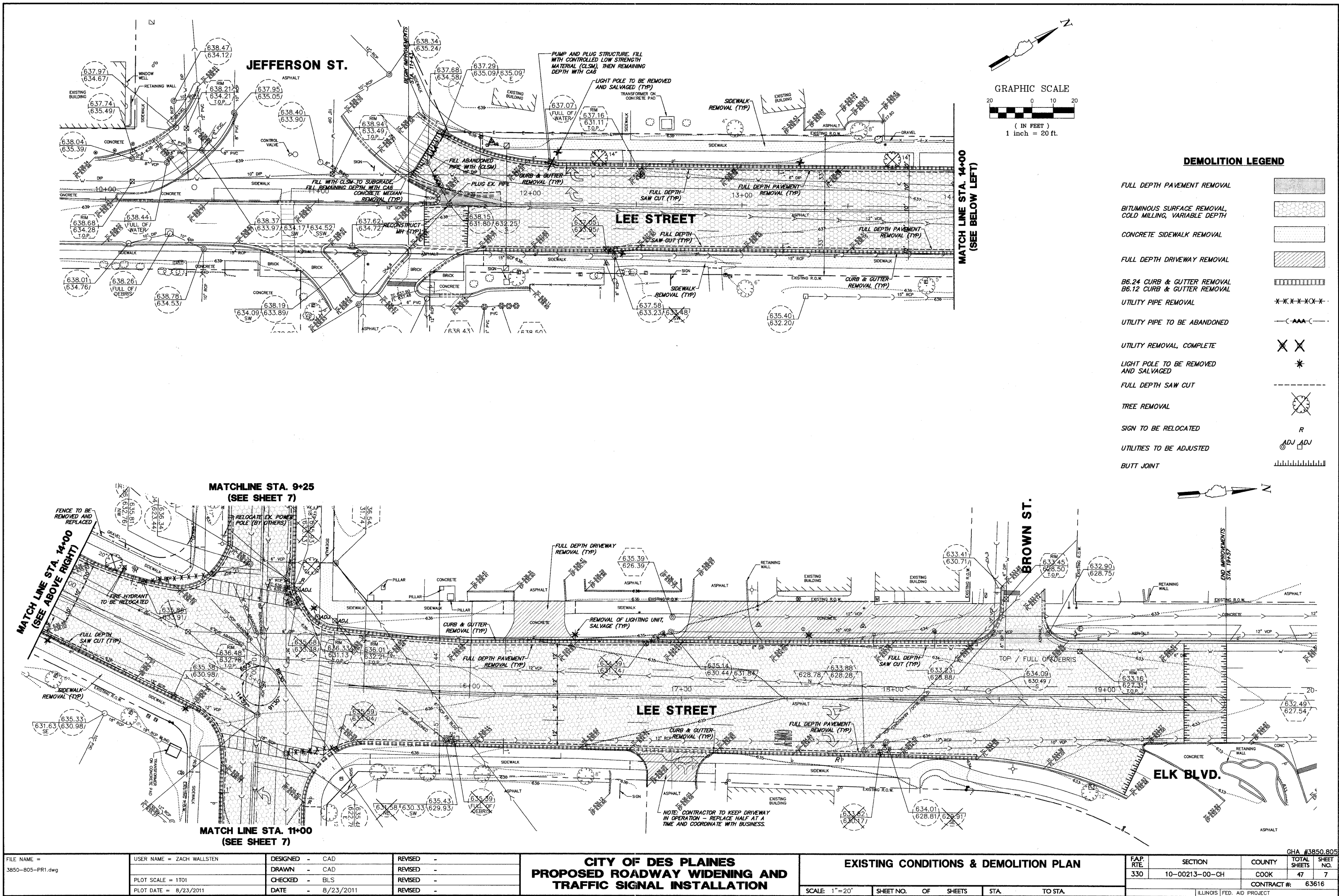
- SIGNALIZED INTERSECTION
- W20-1 48 IN. x 48 IN. CONSTRUCTION WARNING SIGN, WITH AMBER FLASHING LIGHT
- SIGN ON PERMANENT SUPPORT
- M6 SERIES SIGNS
- CONSTRUCTION WORK ZONE

SPEED LIMIT IS 30 MPH - US RTE 12-45 (LEE ST.)  
SPEED LIMIT IS 25 MPH - PERRY ST

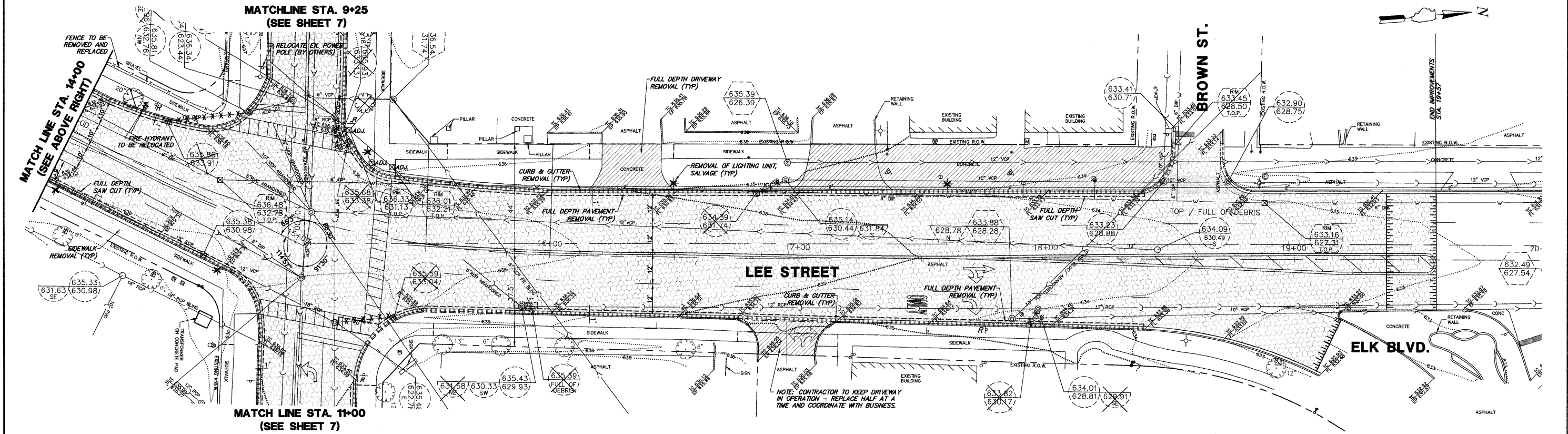
SIGN LEGEND

- A ROAD CONSTRUCTION 500' 2 REQUIRED
- B ROAD CONSTRUCTION AHEAD 2 REQUIRED  
LEE ST. SOUTH
- C ROAD CONSTRUCTION AHEAD 1 REQUIRED  
LEE ST. NORTH
- D ROAD CONSTRUCTION AHEAD 2 REQUIRED  
LEE ST.
- E ROAD CONSTRUCTION AHEAD 1 REQUIRED
- F END CONSTRUCTION 2 REQUIRED

FILE NAME =  3850-805-PR1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - CAD	REVISED -	CITY OF DES PLAINES PROPOSED ROADWAY WIDENING AND TRAFFIC SIGNAL INSTALLATION	TRAFFIC CONTROL PLAN				F&P RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - CAD	REVISED -						330	10-00213-00-CH	COOK	47	6
	PLOT SCALE = 1"=101'	CHECKED - BLS	REVISED -						CONTRACT #: 63616				
	PLOT DATE = 8/23/2011	DATE - 8/23/2011	REVISED -		SCALE: NONE	SHEET NO. OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT					

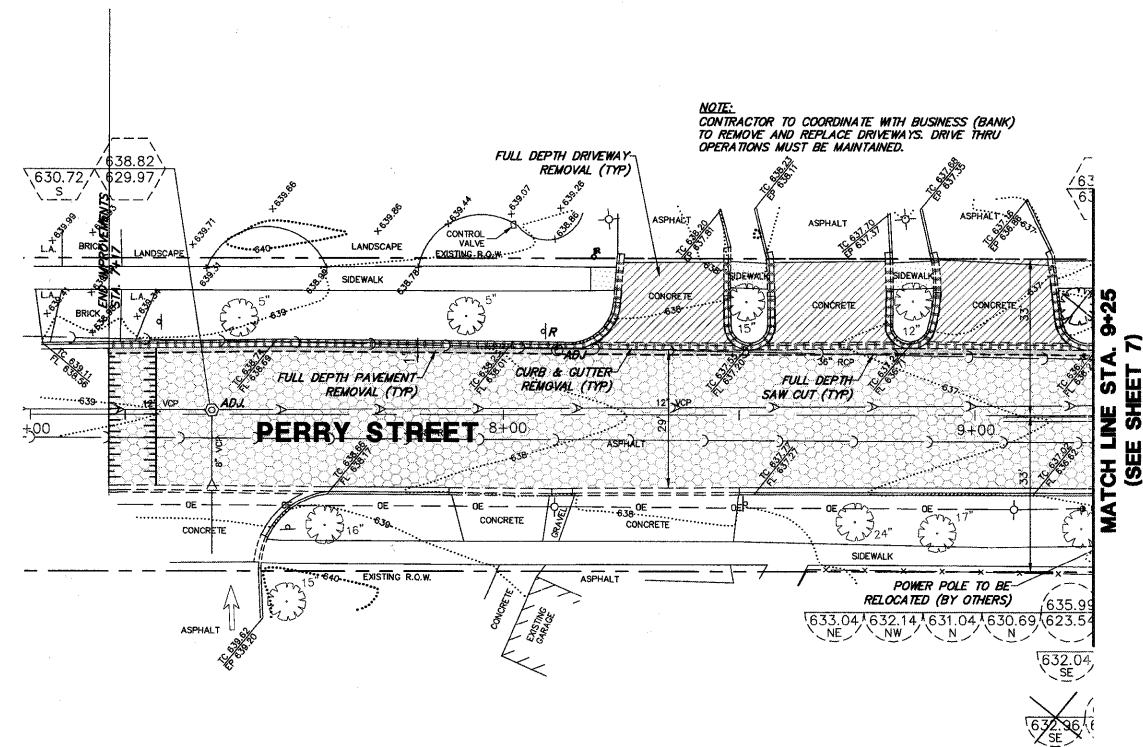


DEMOLITION LEGEND	
FULL DEPTH PAVEMENT REMOVAL	[Pattern]
BITUMINOUS SURFACE REMOVAL, COLD MILLING, VARIABLE DEPTH	[Pattern]
CONCRETE SIDEWALK REMOVAL	[Pattern]
FULL DEPTH DRIVEWAY REMOVAL	[Pattern]
B6.24 CURB & GUTTER REMOVAL B6.12 CURB & GUTTER REMOVAL	[Pattern]
UTILITY PIPE REMOVAL	[Symbol]
UTILITY PIPE TO BE ABANDONED	[Symbol]
UTILITY REMOVAL, COMPLETE	[Symbol]
LIGHT POLE TO BE REMOVED AND SALVAGED	[Symbol]
FULL DEPTH SAW CUT	[Symbol]
TREE REMOVAL	[Symbol]
SIGN TO BE RELOCATED	R
UTILITIES TO BE ADJUSTED	ADJ ADJ
BUTT JOINT	[Symbol]



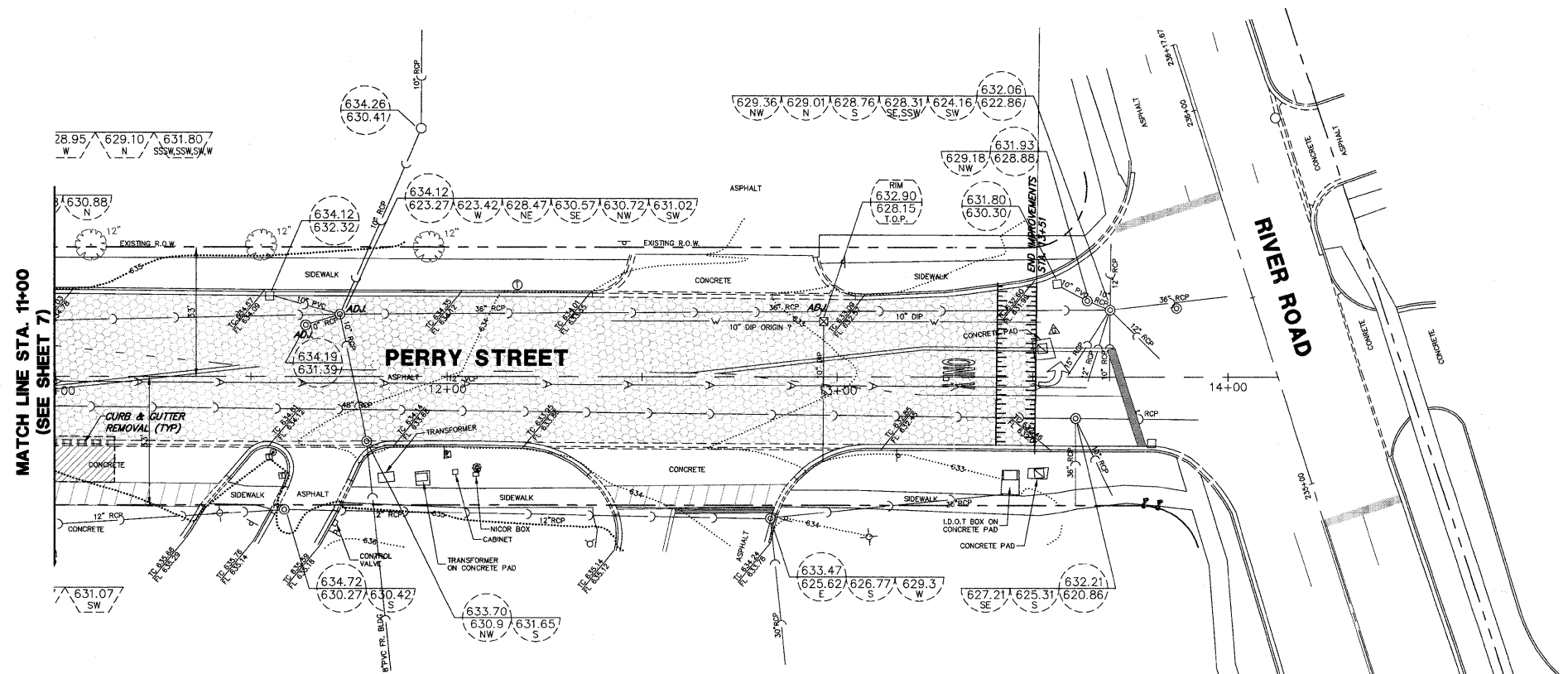
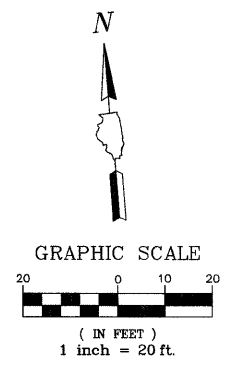
FILE NAME = 3850-805-PR1.dwg		USER NAME = ZACH WALLSTEN		DESIGNED - CAD	REVISED -	CITY OF DES PLAINES PROPOSED ROADWAY WIDENING AND TRAFFIC SIGNAL INSTALLATION		EXISTING CONDITIONS & DEMOLITION PLAN		FAP RTE. 330	SECTION 10-00213-00-CH	COUNTY COOK	TOTAL SHEETS 47	SHEET NO. 7
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CHECKED - BLS		DATE = 8/23/2011		REVISED -										



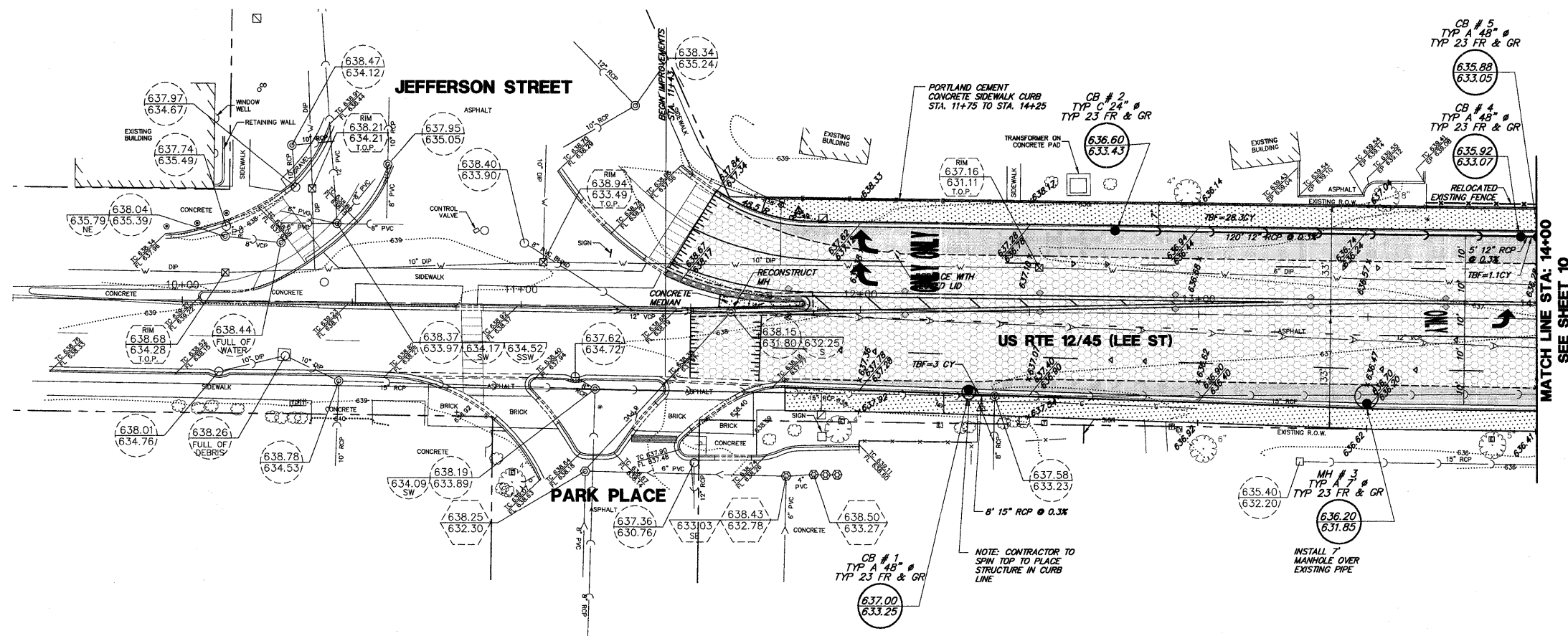
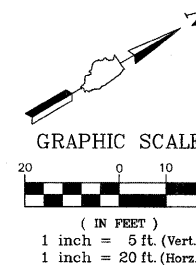


**DEMOLITION LEGEND**

FULL DEPTH PAVEMENT REMOVAL	
BITUMINOUS SURFACE REMOVAL, COLD MILLING, VARIABLE DEPTH	
CONCRETE SIDEWALK REMOVAL	
FULL DEPTH DRIVEWAY REMOVAL	
B6.24 CURB & GUTTER REMOVAL B6.12 CURB & GUTTER REMOVAL	
UTILITY PIPE REMOVAL	*****
UTILITY PIPE TO BE ABANDONED	---X---
UTILITY REMOVAL, COMPLETE	X X
LIGHT POLE TO BE REMOVED AND SALVAGED	*
FULL DEPTH SAW CUT	---
TREE REMOVAL	
SIGN TO BE RELOCATED	R
UTILITIES TO BE ADJUSTED	ADJ ADJ



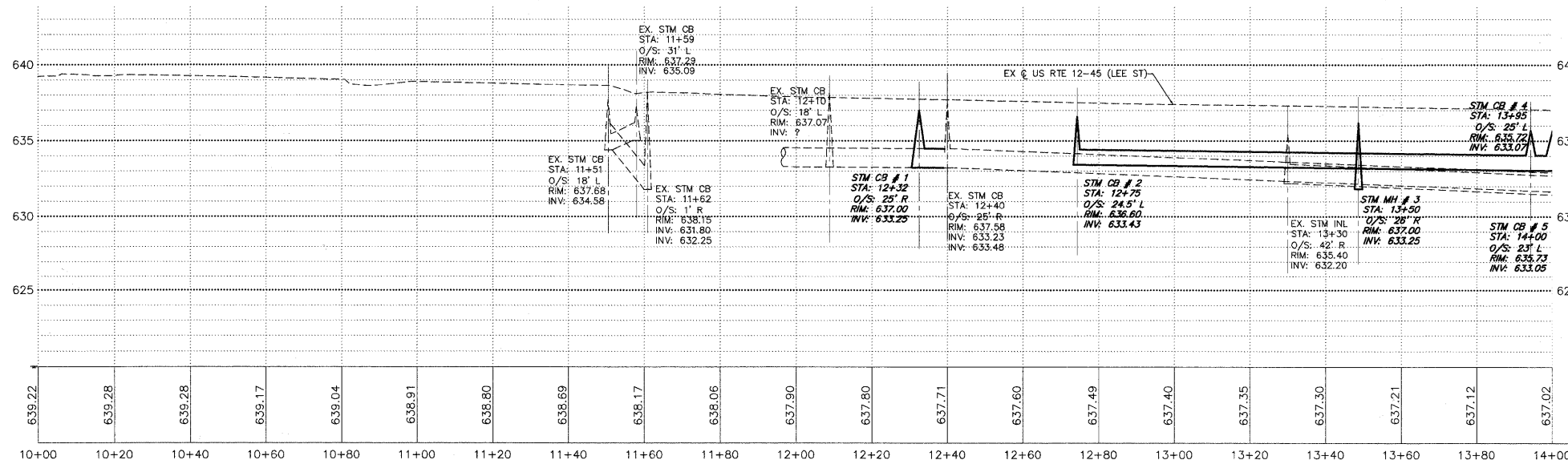
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	PLOT SCALE = 1/8"=1'	CHECKED - BLS	REVISED -					330	10-00213-00-CH	COOK	47	8	
	PLOT DATE = 8/23/2011	DATE - 8/23/2011	REVISED -		SCALE: 1"=20'			SHEET NO.	OF SHEETS	STA.	TO STA.	CONTRACT #: 63616	
	ILLINOIS FED. AID PROJECT												



**PROPOSED CONDITIONS LEGEND**

- PROPOSED FULL DEPTH PAVEMENT SEE TYPICAL SECTION
- PROPOSED RESURFACING
- PROPOSED SIDEWALK SEE TYPICAL CROSS SECTION
- PROPOSED CONCRETE DRIVEWAY SEE TYPICAL CROSS SECTION
- B-6.12 COMB. CONC. CURB & GUTTER
- B-6.24 COMB. CONC. CURB & GUTTER
- PROPOSED COMBINATION CURB AND GUTTER REVERSE PITCH
- DETECTABLE WARNINGS SEE DETAIL

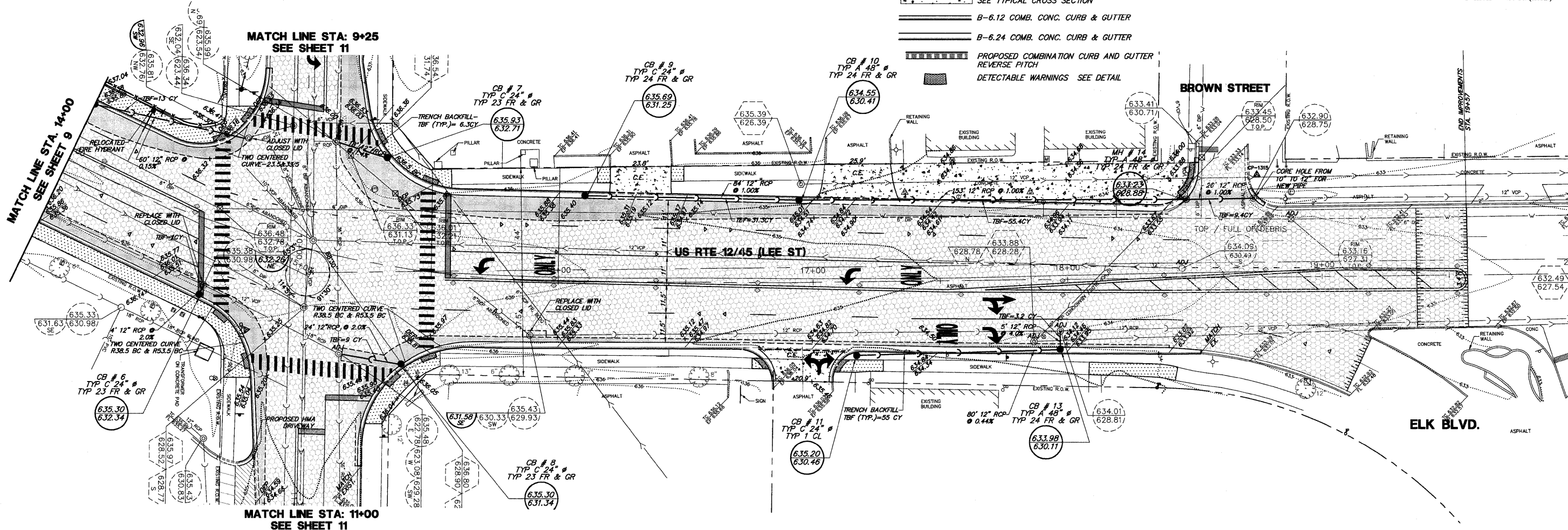
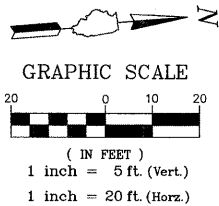
**US RTE 12/45 (LEE STREET)**



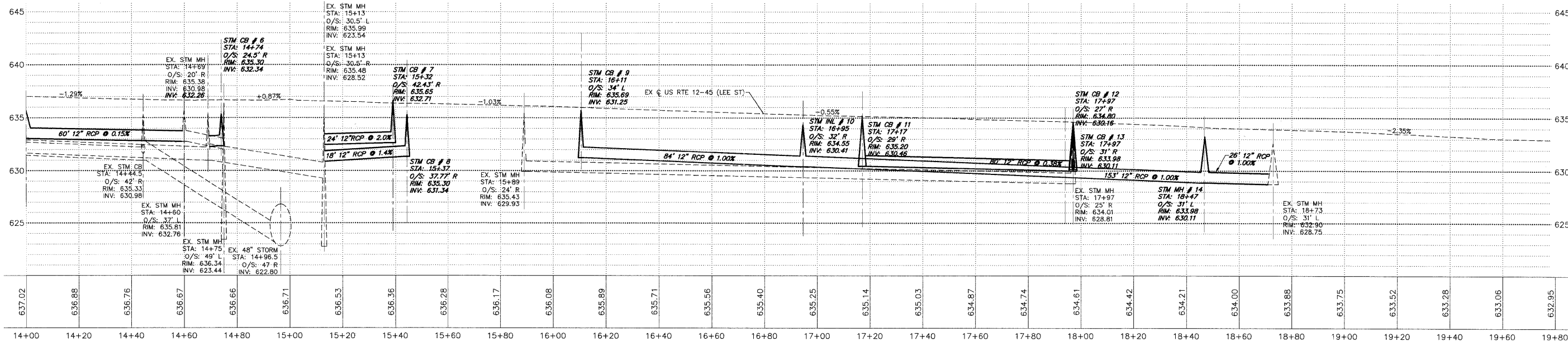
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		PLOT SCALE = 1/8"=1'		DRAWN - CAD	REVISED -					330	10-00213-00-CH	COOK	47	9
		PLOT DATE = 8/23/2011		CHECKED - BLS	REVISED -					CONTRACT #: 63616				
				DATE - 8/23/2011	REVISED -					ILLINOIS FED. AID PROJECT				

PROPOSED CONDITIONS LEGEND

- PROPOSED FULL DEPTH PAVEMENT  
SEE TYPICAL SECTION
- PROPOSED RESURFACING
- PROPOSED SIDEWALK  
SEE TYPICAL CROSS SECTION
- PROPOSED CONCRETE DRIVEWAY  
SEE TYPICAL CROSS SECTION
- B-6.12 COMB. CONC. CURB & GUTTER
- B-6.24 COMB. CONC. CURB & GUTTER
- PROPOSED COMBINATION CURB AND GUTTER  
REVERSE PITCH  
DETECTABLE WARNINGS SEE DETAIL



US RTE 12/45 (LEE ST)

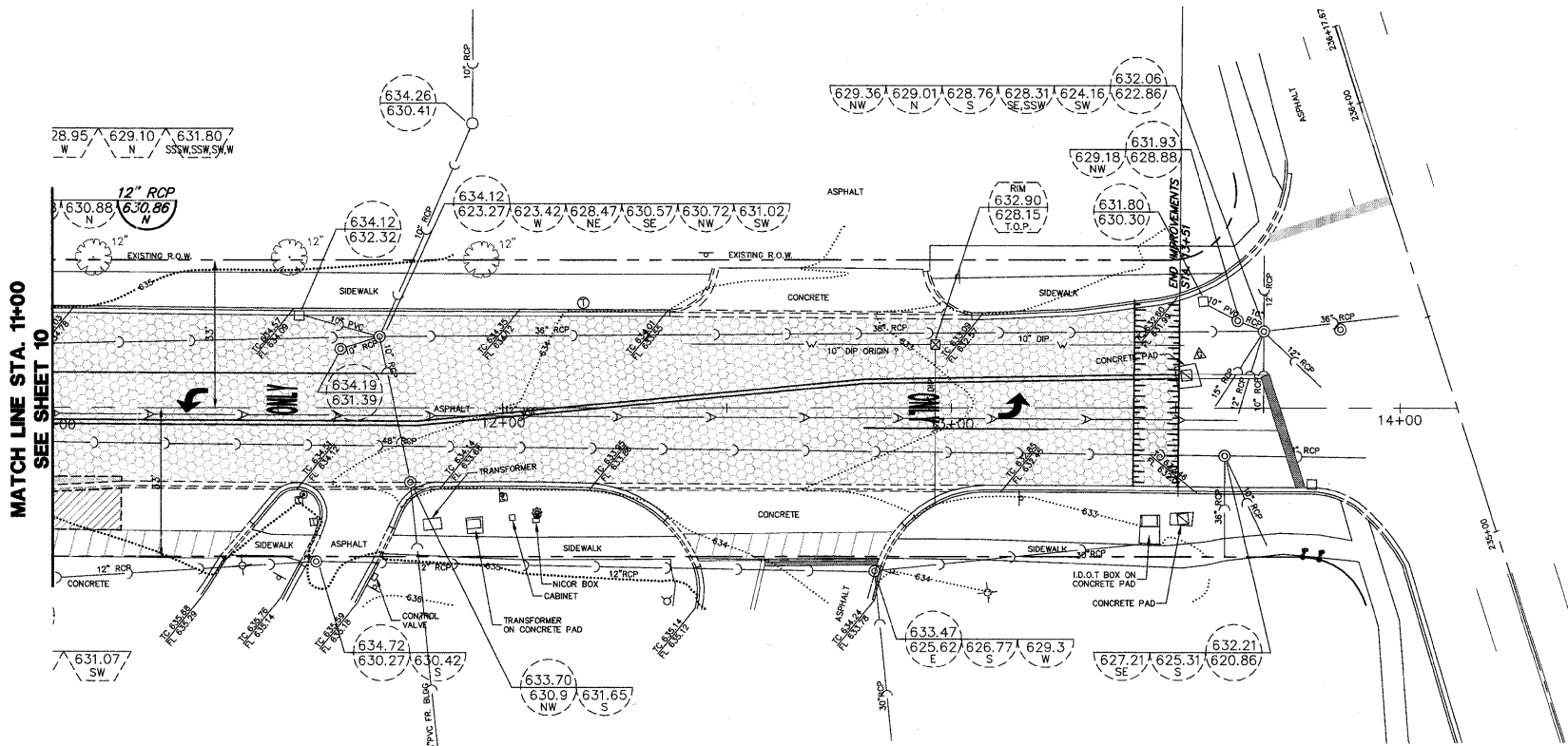
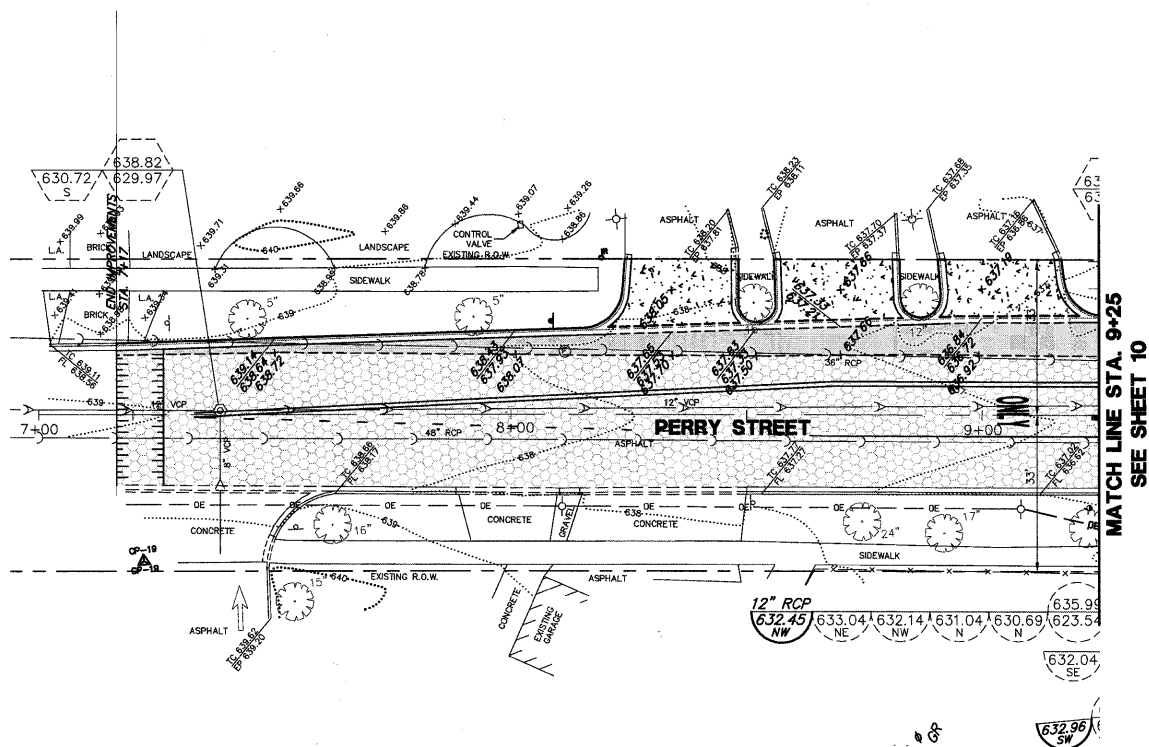
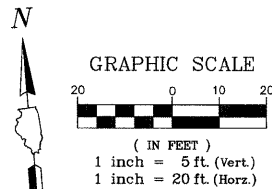


FILE NAME =  3850-805-PR1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - CAD	REVISED -	CITY OF DES PLAINES PROPOSED ROADWAY WIDENING AND TRAFFIC SIGNAL INSTALLATION	PLAN & PROFILE (LEE STREET)				F&P RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - CAD	REVISED -						330	10-00213-00-CH	COOK	47	10
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	PLOT DATE = 8/23/2011	DATE - 8/23/2011	REVISED -		SCALE: 1"=20'		SHEET NO. OF SHEETS		STA. 14+00 TO STA. 19+50		ILLINOIS FED. AID PROJECT		

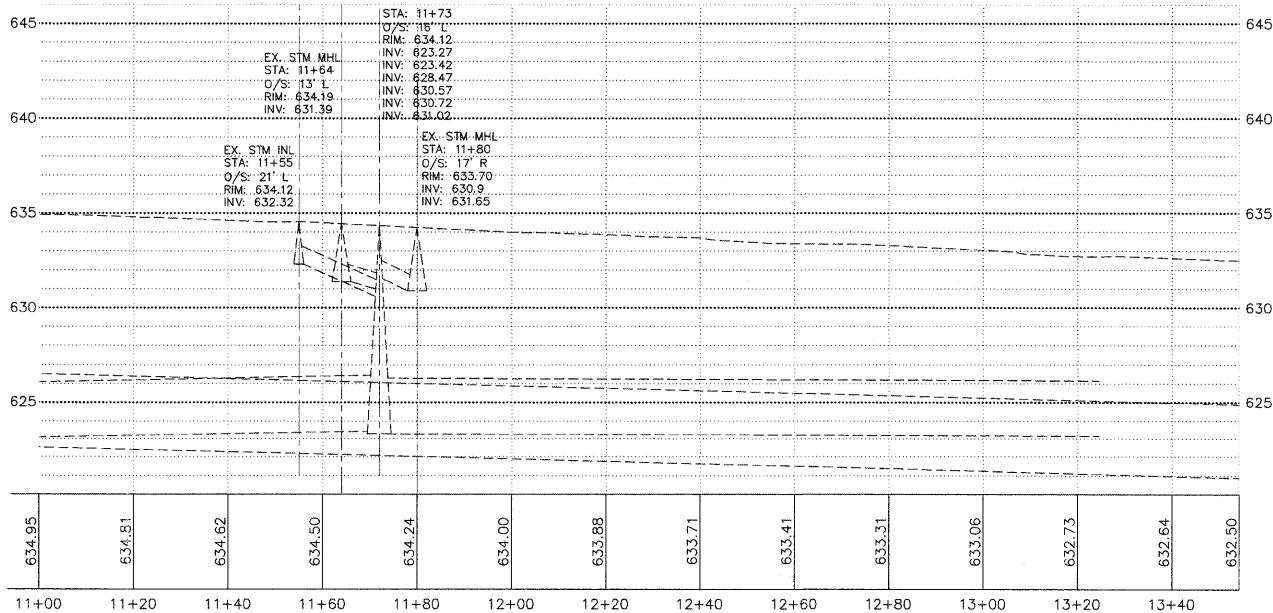
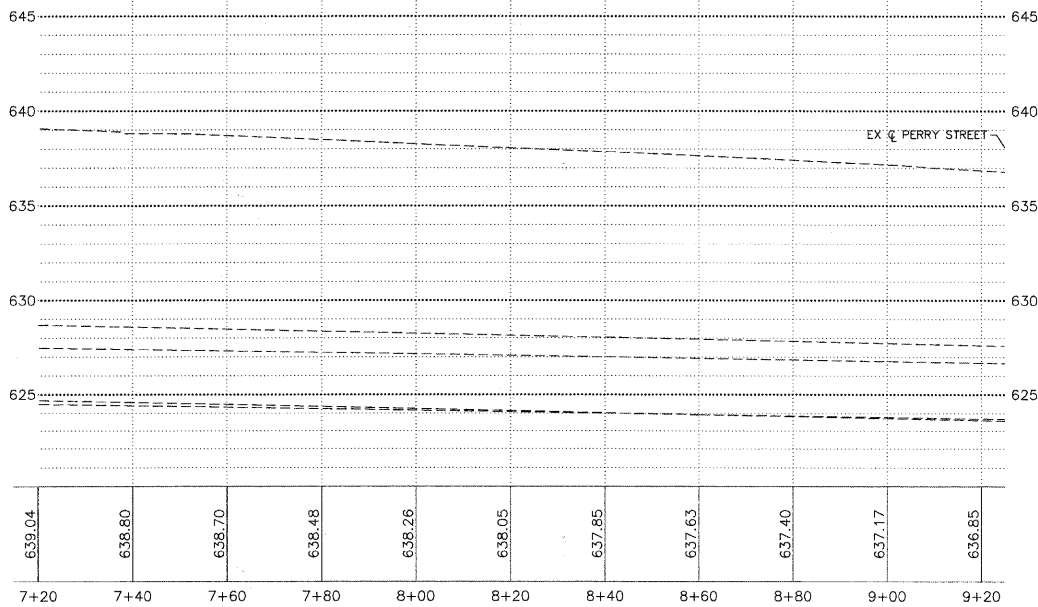


PROPOSED CONDITIONS LEGEND

- PROPOSED FULL DEPTH PAVEMENT  
SEE TYPICAL SECTION
- PROPOSED RESURFACING
- PROPOSED SIDEWALK  
SEE TYPICAL CROSS SECTION
- PROPOSED CONCRETE DRIVEWAY  
SEE TYPICAL CROSS SECTION
- B-6.12 COMB. CONC. CURB & GUTTER
- B-6.24 COMB. CONC. CURB & GUTTER



PERRY STREET



FILE NAME = 3850-805-PR1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - CAD	REVISED -	CITY OF DES PLAINES PROPOSED ROADWAY WIDENING AND TRAFFIC SIGNAL INSTALLATION	PLAN & PROFILE (PERRY STREET)				F&P RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - CAD	REVISED -						330	10-00213-00-CH	COOK	47	11
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	PLOT DATE = 8/23/2011	DATE - 8/23/2011	REVISED -		SCALE: 1"=20'	SHEET NO. OF SHEETS	STA. 7+00 TO STA. 11+50	ILLINOIS FED. AID PROJECT					

LEE - SOUTH BOUND

STA.11+26	RIGHT TURN ARROW
STA.11+50	NO LEFT TURN
STA.12+13	NO LEFT TURN
STA.12+66	EAST RT. 12/SOUTH RT. 45/RIGHT ARROW
STA.13+25	DUAL RIGHT TURN ARROWS/NO PARKING
STA.14+26	RIGHT TURN ARROW/15 MPH AHEAD
STA.15+60	PEDESTRIAN CROSSING/NO PARKING
STA.17+60	SCHOOL ZONE SPEED LIMIT 20 MPH

LEE - NORTH BOUND

STA.12+43	NO PARKING/SCHOOL ZONE/SPEED LIMIT 20
STA.14+75	PEDESTRIAN CROSSING
STA.15+49	DES PLAINES ELK LODGE
STA.17+52	SPEED LIMIT 30/NO PARKING
STA.18+55	RT. 45/RT. 12/RIGHT ARROW

PERRY - EAST BOUND

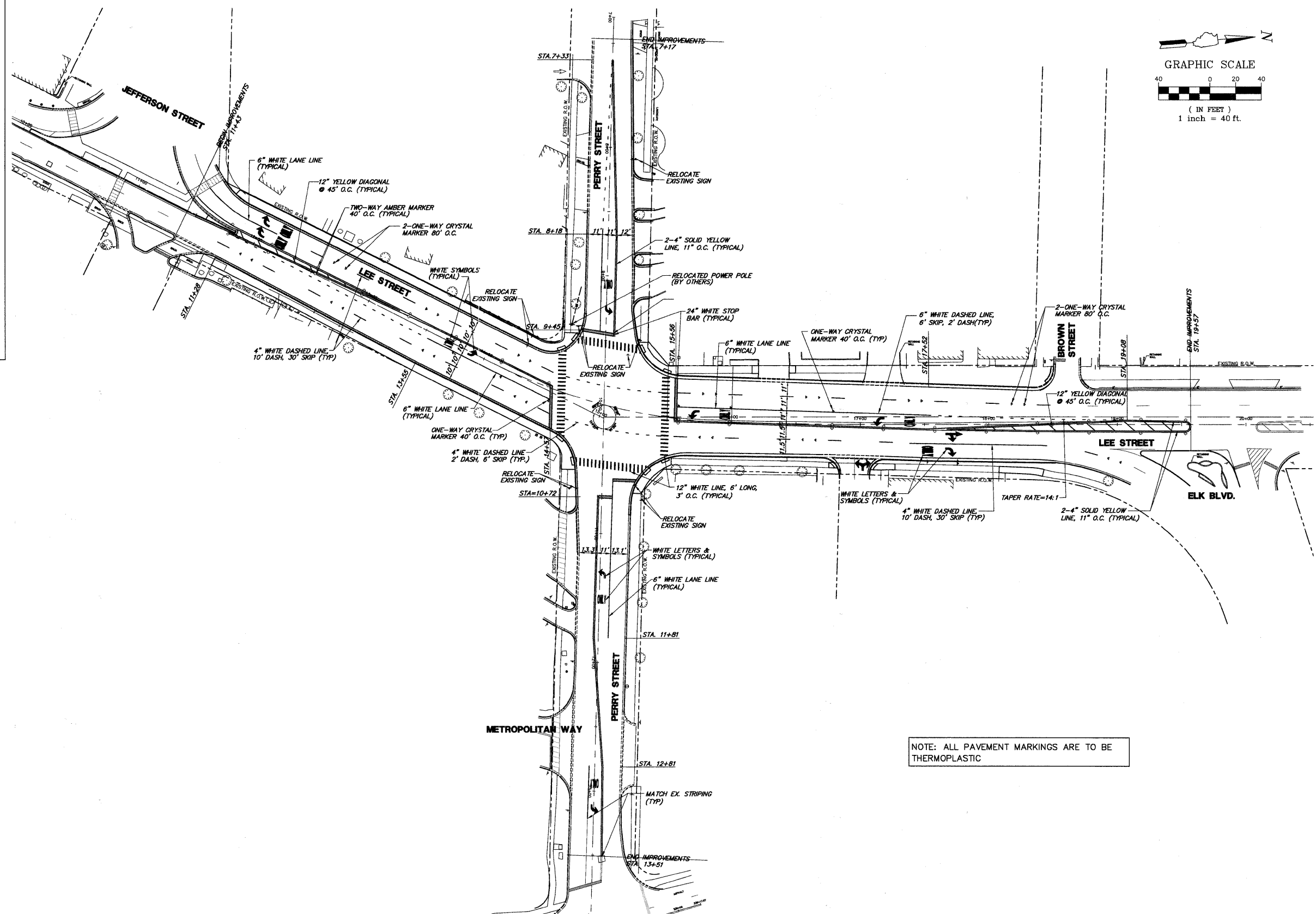
STA.7+54	PRIVATE PROPERTY
STA.8+51	PEDESTRIAN CROSSING/NO PARKING
STA.9+39	STOP SIGN/CROSS TRAFFIC DOES NOT STOP
STA.10+66	NO PARKING OR STOPPING
STA.11+95	NO PARKING OR STOPPING
STA.13+16	TURN ARROWS/NO PARKING OR STOPPING

PERRY - WEST BOUND

STA.7+27	NO PARKING/STOPPING
STA.8+09	SPEED LIMIT 25
STA.9+60	NO TRUCKS
STA.10+62	STOP SIGN/CROSS TRAFFIC DOES NOT STOP

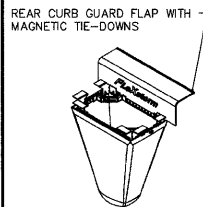
**EXISTING SIGNAGE NOTE:**

~~EXISTING SIGNAGE NOTE:~~  
THE CONTRACTOR SHALL BE RESPONSIBLE FOR  
RELOCATING ANY SIGN DUE TO ROADWAY WIDENING OR  
REPLACING ANY SIGN DAMAGED DUE TO CONSTRUCTION  
OPERATIONS.

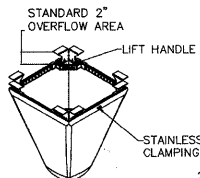


NOTE: ALL PAVEMENT MARKINGS ARE TO BE THERMOPLASTIC

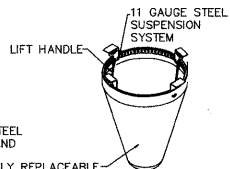
FILE NAME =		USER NAME = ZACH WALLSTEN	DESIGNED - CAD	REVISED -	CITY OF DES PLAINES PROPOSED ROADWAY WIDENING AND TRAFFIC SIGNAL INSTALLATION	PAVEMENT MARKING PLAN				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	GHA #3850.805
3850-805-PR1.dwg			DRAWN - CAD	REVISED -		330	10-00213-00-CH	COOK	47	12					
		PLOT SCALE = 1T01	CHECKED - BLS	REVISED -						CONTRACT #:		63616			
		PLOT DATE = 8/23/2011	DATE - 8/23/2011	REVISED -		SCALE: 1"=40'	SHEET NO.	OF	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT			



TYPICAL CURB BOX INLET FILTER



TYPICAL FLAT/RECTANGULAR/ROLLED CURB INLET FILTER



TYPICAL ROUND INLET FILTER

ACCEPTABLE MANUFACTURER'S AS LISTED BELOW  
1. INLET & PIPE PROTECTION, INC. Naperville, IL 60564 847 722-0690

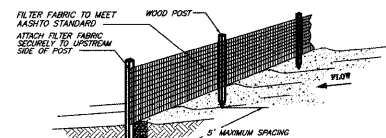
2. MARATHON MATERIALS, INC. Plainfield, IL 60544 800-983-9493

OR APPROVED EQUAL

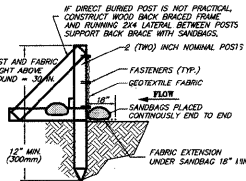
Material Property	Test Method	Value (min. ave.)	
> Inner Filter Bag Specs (2ft <sup>2</sup> min vol)		Non-Woven	Woven Mono
Grab Tensile	ASTM D 4632	100 lbs	200 lbs
Puncture Strength	ASTM D 4833	65 lbs	90 lbs
Trapezoidal Tear	ASTM D 4535	45 lbs	75 lbs
UV Resistance	ASTM D 4355	70% at 500 hrs	90%
App. Open Size (AOS)	ASTM D 4751	70 sieve	40 sieve
Permeability	ASTM D 4491	2.0/sec	2.1/sec
Water Flow Rate	ASTM D 4491	145 gpm/sqft	145 gpm/sqft
> Polyester Outer Reinforcement Bag Specifications			
Weight	ASTM D 3773	4.55 oz/sqyd	+/-15%
Thickness	ASTM D 1777	0.040 +/- .005	
> Frame Construction			
A36 Structural Steel	ASTM A 576	Tensile Strength > 38,000 psi	
11 Gauge, Zinc Plated		Yield Strength > 36,000 psi	

MAINTENANCE  
1. CLEAN OUT AFTER EVERY RAIN EVENT

## INLET FILTER BASKET DETAIL



TRENCH DETAIL



INSTALLATION WITHOUT TRENCHING

Geotextile Requirement	Test Method	MARV
Grab Strength	ASTM D 4632	350 N
Machine direction		450 N
Permeability	ASTM D 4491	0.05 sec <sup>-1</sup>
Apparent opening size*	ASTM D 4751	0.05 mm
Ultraviolet stability	ASTM D 4355	70% after 500 hours

\*Value for apparent opening size represents maximum average cell value.

### NOTES

1. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE EFFICIENCY.
2. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. 9" (225mm) MAXIMUM RECOMMENDED STORAGE HEIGHT.
3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
4. FABRIC AND INSTALLATION SHALL MEET THE REQUIREMENTS OF AASHTO STANDARD SPECIFICATION M-281-00.

## SILT FENCE INSTALLATION DETAIL

## EROSION CONTROL NOTES

1. THIS PLAN IS EXPRESSLY MADE A PORTION OF THE CONTRACT FOR THE EARTHWORK, PAVING, UNDERGROUND, BUILDING CONTRACTORS, AND LANDSCAPE CONTRACTORS WHO ARE SUBJECT TO THE PROVISIONS OF THE PLAN.
2. THIS PLAN WILL FOLLOW STANDARDS AND RECOMMENDATIONS IN ACCORDANCE WITH THE "STANDARD AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENTATION CONTROL," LATEST EDITION, PUBLISHED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, AND "PROCEDURES AND STANDARDS FOR URBAN SOIL EROSION AND SEDIMENTATION CONTROL," (GREENBOOK, LATEST EDITION) BY THE "NORTHEASTERN ILLINOIS SOIL EROSION AND SEDIMENTATION CONTROL STEERING COMMITTEE". ALL CONSTRUCTION WILL ADHERE TO THE REQUIREMENTS SET FORTH IN THE IEPA'S NEW CONSTRUCTION SITE ACTIVITIES NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER PERMIT.
3. THE PURPOSE OF THIS PLAN IS TO MINIMIZE AND TO CONTROL THE SOIL EROSION AND RESULTANT SEDIMENTATION, WHICH ARE RELATED TO THE DEVELOPMENT OF THE SITE. ALTHOUGH MOST OF THE MEASURES ARE TEMPORARY IN NATURE, THEY ALL TARGET THE LONG-RANGE CONTROL OF EROSION AND SEDIMENTATION IN DOWNSTREAM AREAS. THE SPECIFIC COMPONENTS OF THIS PLAN ARE DIRECTED TOWARD ALL AREA IMPROVEMENTS. ALL AREAS USED BY THE CONTRACTOR'S OPERATIONS ARE SUBJECT TO THE PROVISIONS OF THIS PLAN. THIS INCLUDES BOTH ACTIVE CUT/FILL ZONES AS WELL AS STOCK PILES AND STAGING AREAS.
4. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR PROPER INSTALLATION AND MAINTENANCE OF ALL EROSION CONTROL DEVICES.
5. THE CONTRACTOR SHALL PROVIDE QUALIFIED PERSONNEL TO INSPECT DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED, STRUCTURAL CONTROL MEASURES, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE AT LEAST ONCE EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS OF THE A STORM THAT IS OF 0.5 INCHES OR GREATER OR EQUIVALENT SNOWFALL.
6. DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM. EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. DISCHARGE LOCATIONS SHALL BE INSPECTED TO ASCERTAIN WHETHER SOIL CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATERS. LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFFSITE SEDIMENT TRACKING. ROADS WILL BE KEPT FREE OF STONE, MUD, SILT, ETC. AT ALL TIMES.
7. THE CONTRACTOR SHALL PREPARE A WRITTEN REPORT SUMMARIZING THE SCOPE OF EACH INSPECTION, NAMES AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION, THE DATE OF THE INSPECTION, MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF A STORMWATER POLLUTION PREVENTION PLAN, AND ACTIONS TAKEN IN ACCORDANCE WITH PARAGRAPH IV.D.4.B OF THE NPDES PERMIT NUMBER ILR000000 WHICH SHALL BE MADE AND RETAINED AS PART OF THE STORMWATER POLLUTION PREVENTION PLAN FOR AT LEAST 3 YEARS AFTER THE DATE OF THE INSPECTION.
8. THE CONTRACTOR SHALL RETAIN A COPY OF EACH REPORT AND SHALL UPON REQUEST PROVIDE COPIES OF THESE REPORTS TO THE IEPA, THE VILLAGE, OR THE ENGINEER. EACH INSPECTION SHALL INCLUDE PHOTOS OF THE EROSION CONTROL DEVICES DOCUMENTING THE PRESENCE AND EFFECTIVENESS OF THE DEVICES.
9. TO MINIMIZE THE EXTENT OF SOIL EXPOSED AT ANY GIVEN TIME, THE CONSTRUCTION ACTIVITIES WILL BE PHASED IN THE FOLLOWING MANNER:
  - A. PRIOR TO ANY EXCAVATION ON-SITE, TOED & REINFORCED SILT FENCE WILL BE INSTALLED AROUND THE PERIMETER OF THE AREAS TO BE DISTURBED AS SHOWN ON THIS PLAN. SILT FENCE MUST MEET AASHTO M288 STANDARDS.
  - B. UPON COMPLETION OF GRADING OPERATIONS, ALL DISTURBED AREAS WILL BE SPREAD WITH TOPSOIL AND SEEDED OR SODDED IMMEDIATELY. EROSION CONTROL BLANKET WILL BE UTILIZED ON ALL SLOPES 3:1 OR STEEPER OVER SEED IMMEDIATELY TO STABILIZE THE SOIL AND PROMOTE THE CATCHMENT OF GRASS.
  - C. ANY REQUIRED DRAINAGE CHANNELS MUST BE CONSTRUCTED SO THE CHANNEL FLOWS WILL NOT CAUSE EROSION OF EXCAVATED MATERIAL. OVERFLOW DRAINAGE CHANNELS AS NOTED ON THE PLANS SHALL BE RESTORED WITH TOPSOIL, SEED, AND NAG P-150 EROSION CONTROL BLANKET.
  - D. PUMPS MAY BE USED AS BYPASS DEVICES, BUT IN NO CASE WILL THE WATER BE DIVERTED OUTSIDE THE PROJECT LIMIT.
  - E. DURING PERIODS OF EXTENDED DRY WEATHER, THE CONTRACTOR SHALL KEEP A WATER TRUCK ON-SITE FOR THE PURPOSE OF WATERING DOWN SOIL WHICH MAY OTHERWISE BECOME AIRBORNE.

## SEDIMENTATION AND EROSION CONTROL NOTES

THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IS COMPRISED OF THIS DRAWING ("SITE MAP"), THE STANDARD DETAILS, THE PLAN NARRATIVE, PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE ILLINOIS PERMIT (LEID) AND BECOME FAMILIAR WITH THEIR CONTENTS.

BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.

SITE MAP MUST CLEARLY DELINEATE ALL STATE WATERS. PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.

GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES.

ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.

SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLotation BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.

DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.

RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.

ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS PLAN, AND IN THE SWPPP, SHALL BE INITIATED AS SOON AS PRACTICABLE.

IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT, IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE.

ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED BY THE END OF THE DAY.

ON-SITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.

SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.

ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY. THIS INCLUDES BACKFILLING OF TRENCHES FOR UTILITY CONSTRUCTION AND PLACEMENT OF GRAVEL OR BITUMINOUS PAVING FOR ROAD CONSTRUCTION.

SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. SOIL STABILIZATION MEASURES SHALL BE CONSIDERED THE TIME OF YEAR, SITE CONDITIONS AND THE USE OF TEMPORARY OR PERMANENT MEASURES.

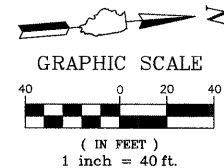
SOIL EROSION AND SEDIMENT CONTROL FEATURES SHALL BE CONSTRUCTED PRIOR TO THE COMMENCEMENT OF HYDROLOGIC DISTURBANCE OF UPLAND AREAS.

DISTURBED AREAS SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN 7 CALENDAR DAYS OF THE END OF ACTIVE HYDROLOGIC DISTURBANCE, REDISTURBANCE.

ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES MUST BE MAINTAINED AND REPAIRED AS NEEDED. THE PROPERTY OWNER SHALL ULTIMATELY RESPONSIBLE FOR MAINTENANCE AND REPAIR.

IF Dewatering SERVICES ARE USED, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION. DISCHARGES SHALL BE ROUTED THROUGH AN EFFECTIVE SEDIMENT CONTROL MEASURE (e.g. SEDIMENT TRAP, SEDIMENT BASIN, OR OTHER APPROPRIATE MEASURE).

THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER OR GOVERNING AGENCY.



## EROSION CONTROL LEGEND

SILT FENCE INSTALLATION

STORM SEWER INLET PROTECTION  
- INLET FILTER BASKET

SALT TOLERANT SOD

## CITY OF DES PLAINES PROPOSED ROADWAY WIDENING AND TRAFFIC SIGNAL INSTALLATION

## EROSION CONTROL PLAN

SCALE: 1"=40'

SHEET NO. OF SHEETS STA. TO STA.

FAP R/E	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	10-00213-00-CH	COOK	47	13
CONTRACT #:			63616	

ILLINOIS FED. AID PROJECT

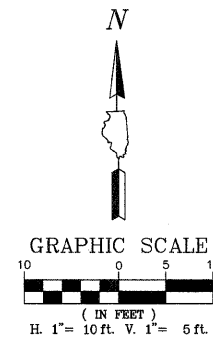
GHA #3850.805

FILE NAME =	USER NAME = ZACH WALLSTEN
3850-805-PR1.dwg	
PLOT SCALE = 1/101	
PLOT DATE = 8/23/2011	

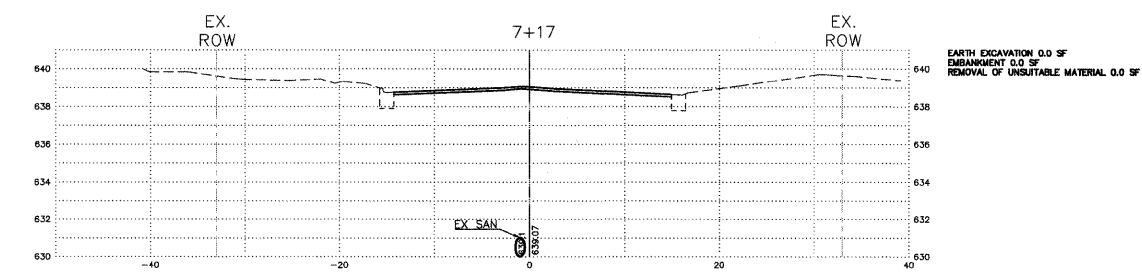
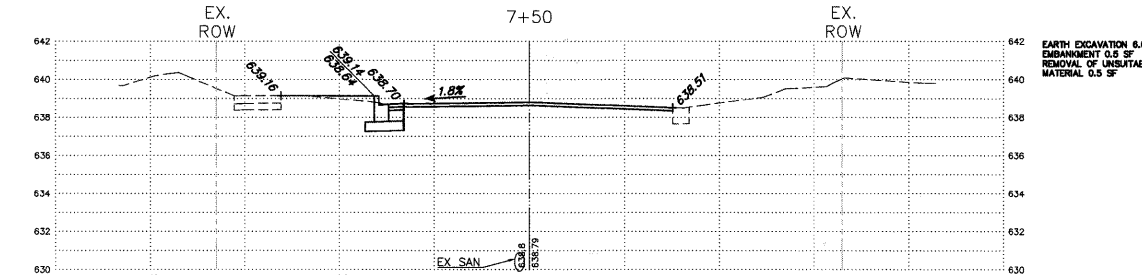
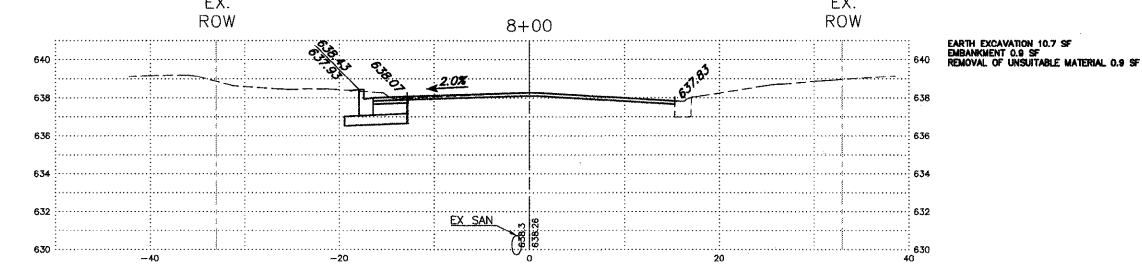
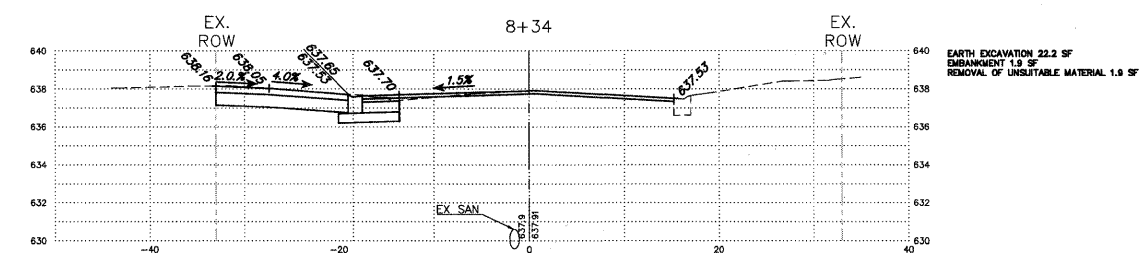
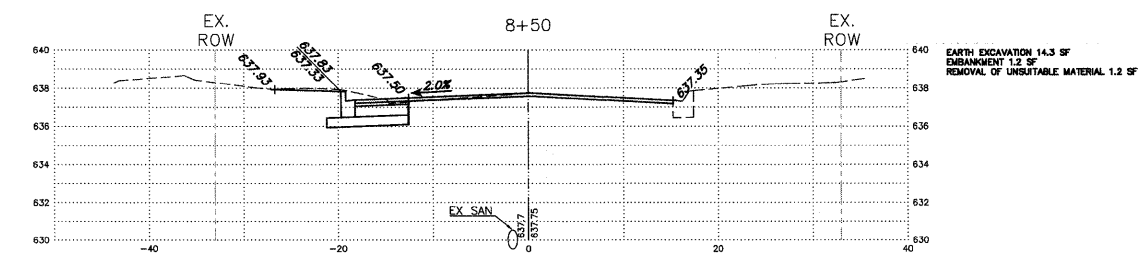
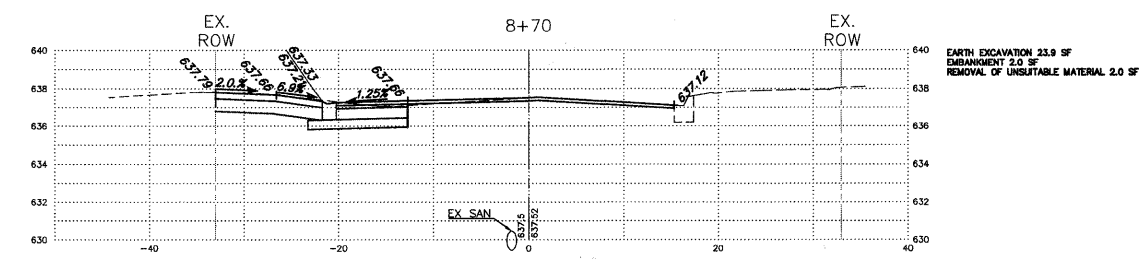
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DRAWN - CAD	REVISED -
CHECKED - BLS	REVISED -
DATE - 8/23/2011	REVISED -



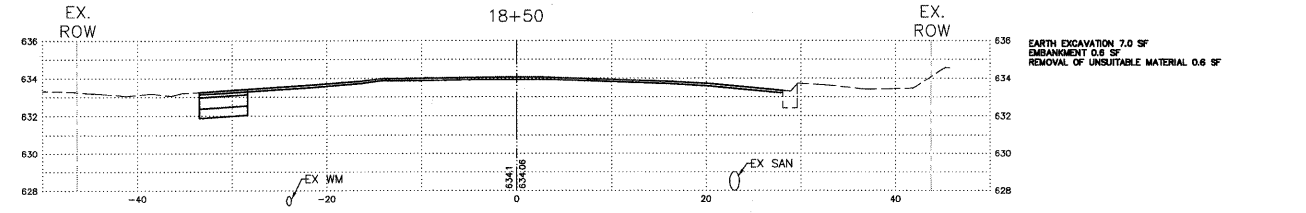
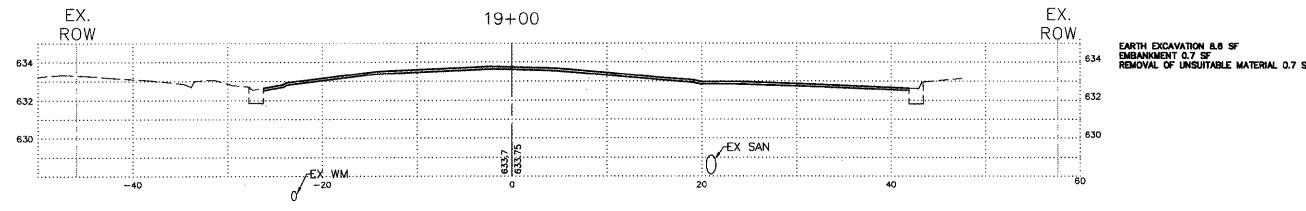
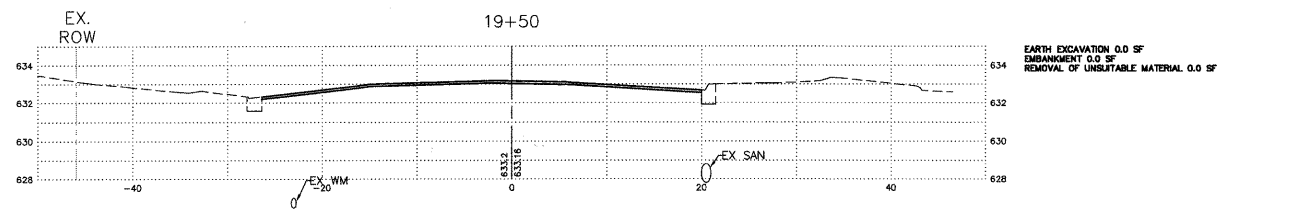




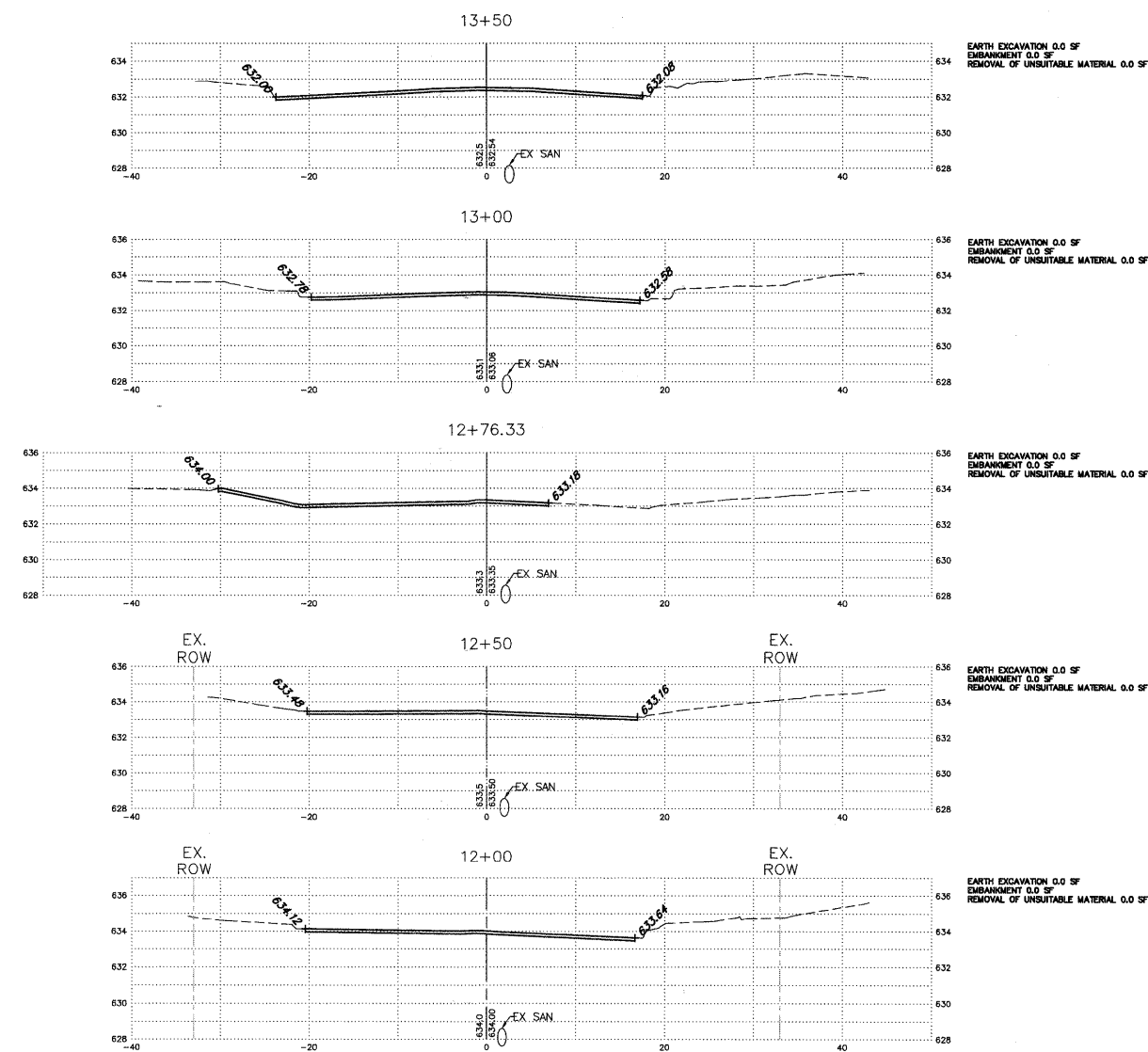
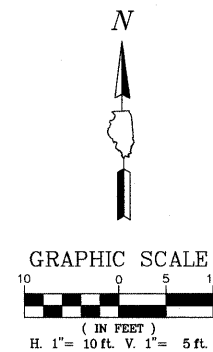
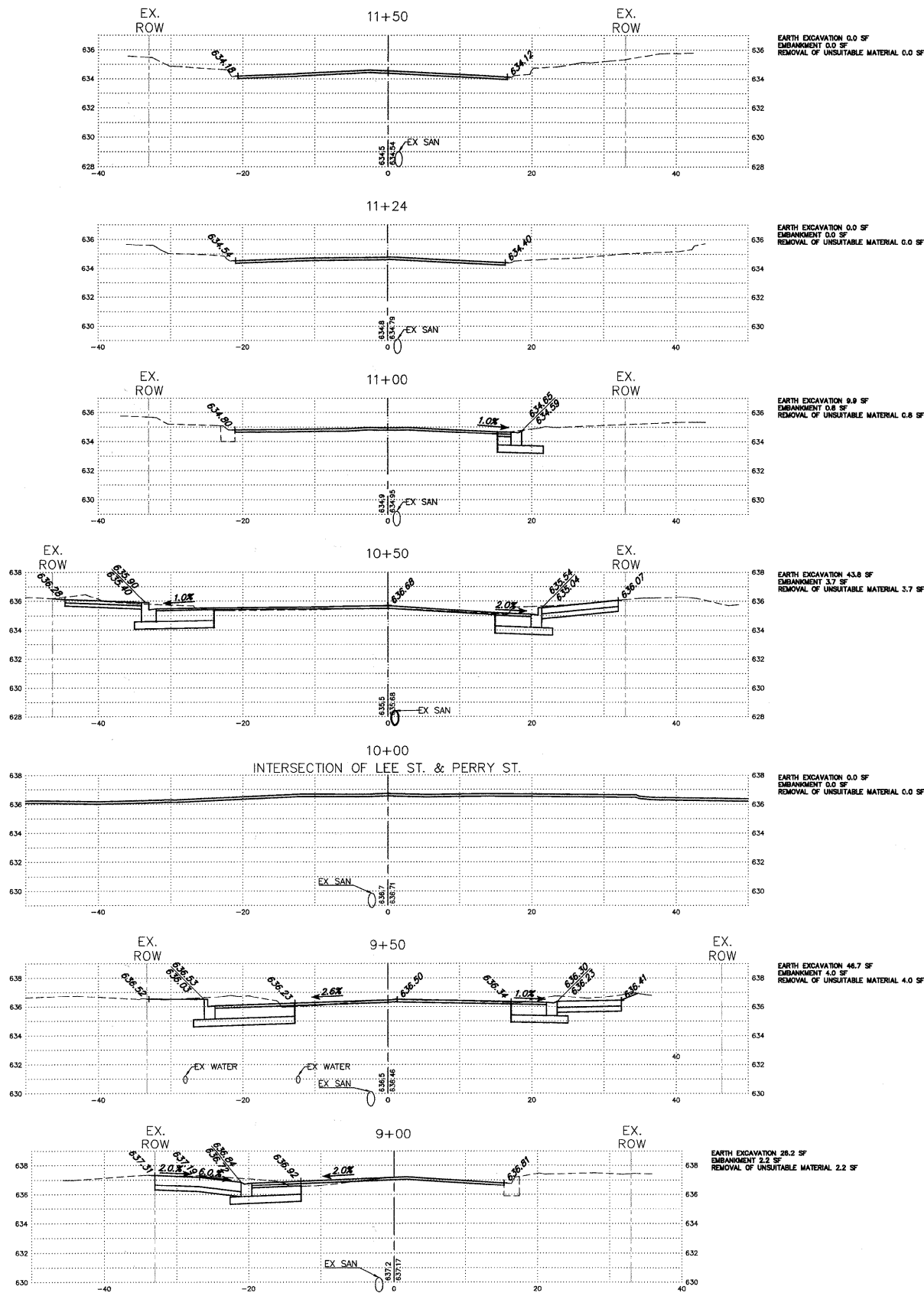
PERRY STREET



LEE STREET (CONTINUED)

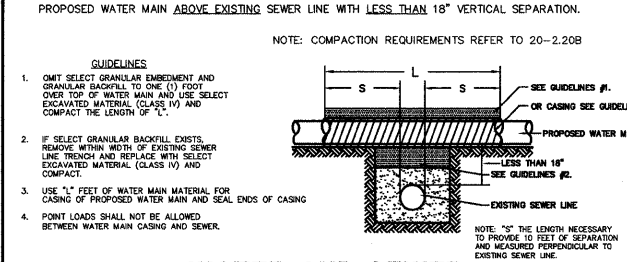
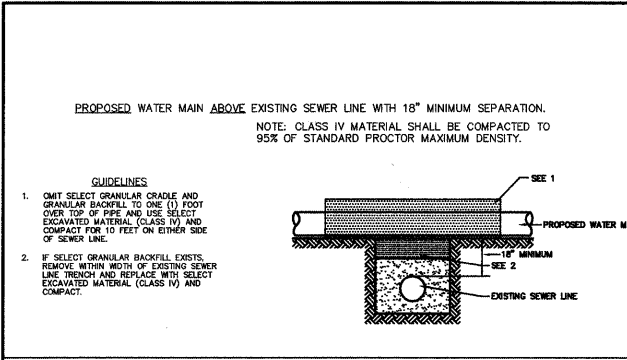


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			DRAWN - CAD	REVISED -		330	10-00213-00-CH	COOK	47	15				
		PLOT SCALE = 1"=10'	CHECKED - BLS	REVISED -						CONTRACT #:				
		PLOT DATE = 8/23/2011	DATE - 8/23/2011	REVISED -		SCALE: NONE	SHEET NO.	OF	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT		

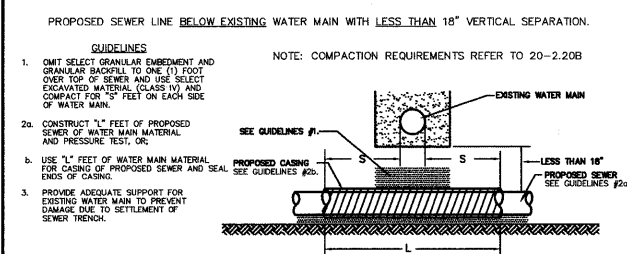
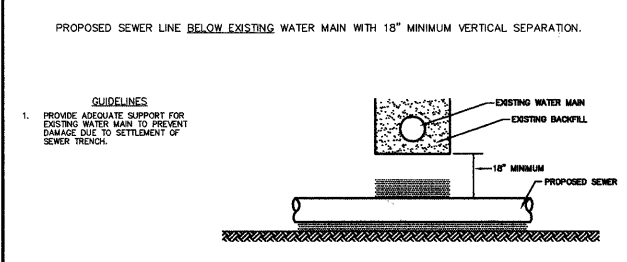


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		DRAWN - CAD	REVISED -						RTE.	SECTION	COUNTY	SHEETS	NO.	
	PLOT SCALE = 1/101	CHECKED - BLS	REVISED -		330	10-00213-00-CH	COOK	47	16					
	PLOT DATE = 8/23/2011	DATE = 8/23/2011	REVISED -		CONTRACT #:									
					SCALE: NONE	SHEET NO.	OF	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT			

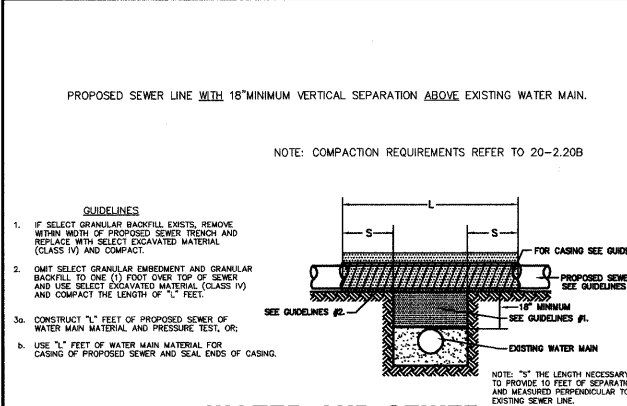
GHA #3850.805



### WATER AND SEWER SEPARATION REQUIREMENTS



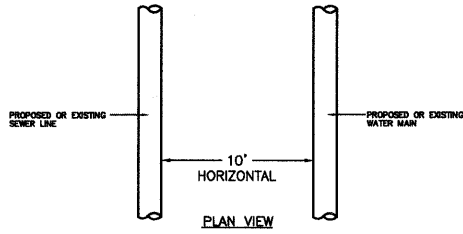
### WATER AND SEWER SEPARATION REQUIREMENTS



### WATER AND SEWER SEPARATION REQUIREMENTS

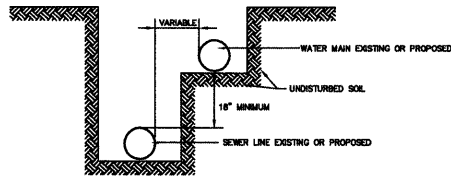
WHEN PROPOSED SEWER (OR WATER) IS LOCATED 10 FEET OR MORE FROM EXISTING WATER (OR SEWER), NO SPECIAL CONSTRUCTION REQUIRED.

SEE SECTION 41-2.01B (1)



WHEN PROPOSED SEWER (OR WATER) IS LOCATED LESS THAN 10 FEET FROM EXISTING WATER (OR SEWER), DETAILS BELOW SHALL APPLY.

SEE SECTION 41-2.01B (2)



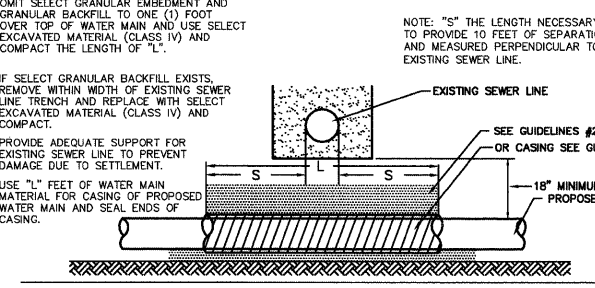
### WATER AND SEWER SEPARATION REQUIREMENTS

PROPOSED WATER MAIN BELOW EXISTING SEWER LINE WITH 18" MINIMUM VERTICAL SEPARATION.

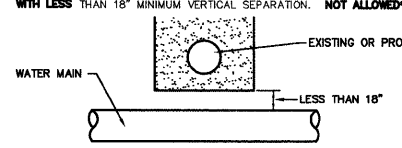
GUIDELINES

1. OMIT SELECT GRANULAR EMBEDMENT AND GRANULAR BACKFILL TO ONE (1) FOOT OVER TOP OF WATER MAIN AND USE SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT THE LENGTH OF "L".
2. IF SELECT GRANULAR BACKFILL EXISTS, REMOVE WITHIN WIDTH OF EXISTING SEWER LINE TRENCH AND REPLACE WITH SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT.
3. PROVIDE ADEQUATE SUPPORT FOR EXISTING SEWER LINE TO PREVENT DAMAGE DUE TO SETTLEMENT.
4. USE "L" FEET OF WATER MAIN MATERIAL FOR CASING OF PROPOSED WATER MAIN AND SEAL ENDS OF CASING.

NOTE: "S" THE LENGTH NECESSARY TO PROVIDE 10 FEET OF SEPARATION AND MEASURED PERPENDICULAR TO EXISTING SEWER LINE.

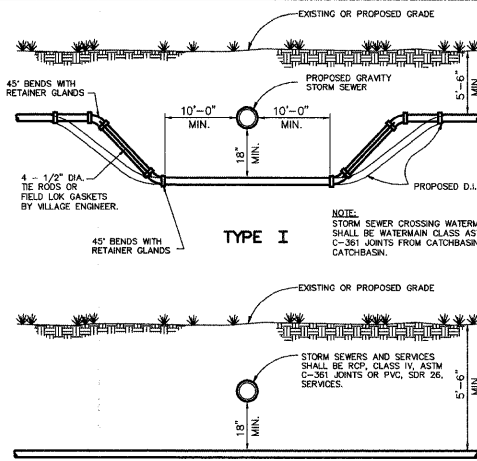


PLACEMENT OF WATER MAIN BELOW EXISTING OR PROPOSED SEWER LINE WITH LESS THAN 18" MINIMUM VERTICAL SEPARATION. NOT ALLOWED\*

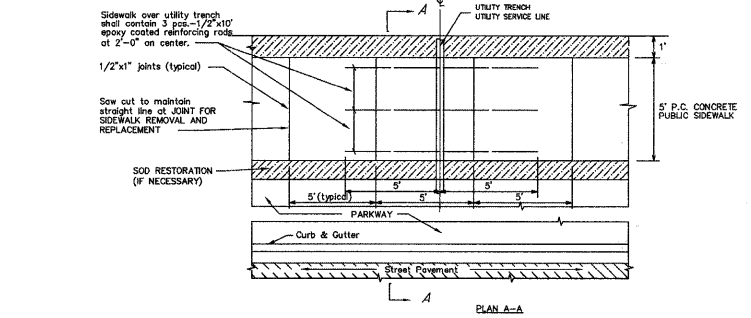


NOT ALLOWED\* MUST MAINTAIN 18" VERTICAL SEPARATION

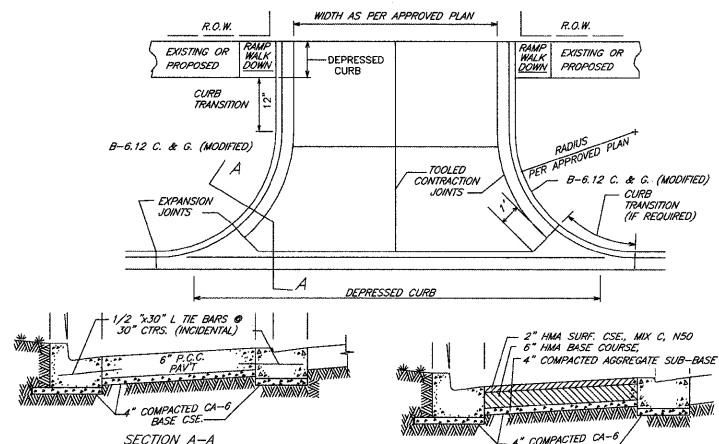
### WATER AND SEWER SEPARATION REQUIREMENTS



### WATERMAIN CROSSING

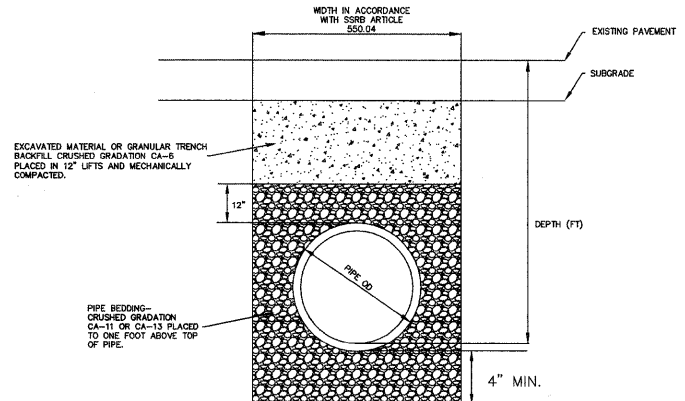


### CONCRETE PUBLIC SIDEWALK DETAIL



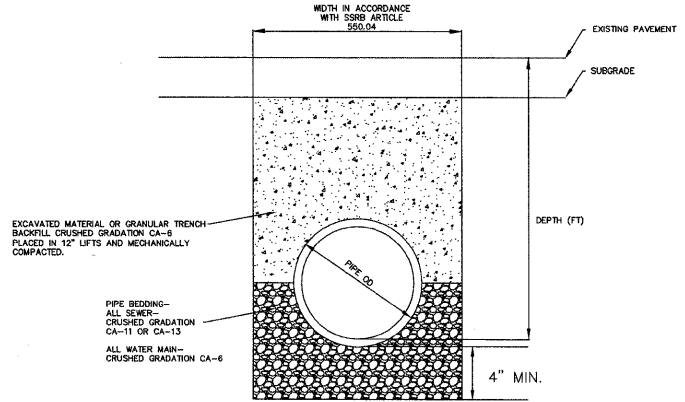
### COMMERCIAL DRIVEWAY APPROACH DETAILS

ALL TRENCH BACKFILL WILL BE MEASURED USING THE IDOT TRENCH BACKFILL TABLES



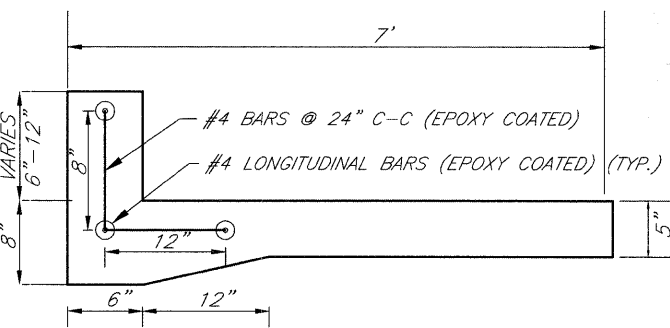
### TRENCH BACKFILL DETAIL PVC SEWER

ALL TRENCH BACKFILL WILL BE MEASURED USING THE IDOT TRENCH BACKFILL TABLES

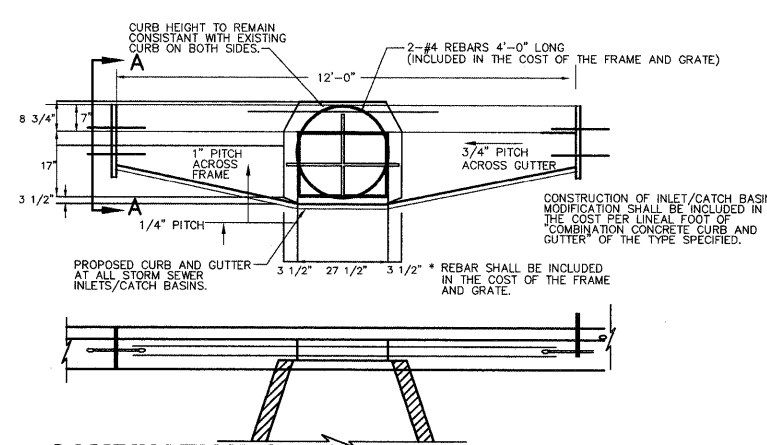


### TRENCH BACKFILL DETAIL ALL SEWER AND WATER (EXCEPT PVC)

1. PIPE OPENINGS TO BE PRECAST INTO WALLS.
2. PRECAST REINFORCED CONCRETE SECTIONS WITH PREFORMED BITUMINOUS JOINTS AND INTEGRAL PRECAST BOTTOMS.
3. FRAME TO BE LAID IN 3/4" MASTIC BED.
4. ADJUSTING RINGS NOT TO EXCEED 8".
5. NEENAH R-4340-B ROUND BEEHIVE GRATE IN GRASS AREAS.
6. INLETS IN PAVEMENT AREAS SHALL BE NEENAH R-2015-D.
7. TWO 10' LONG 4" PERFORATED PVC SDR 35 FINGER DRAINS REQUIRED IN ALL PROPOSED PAVEMENT AREAS. SEE FINGER DRAIN DETAIL.



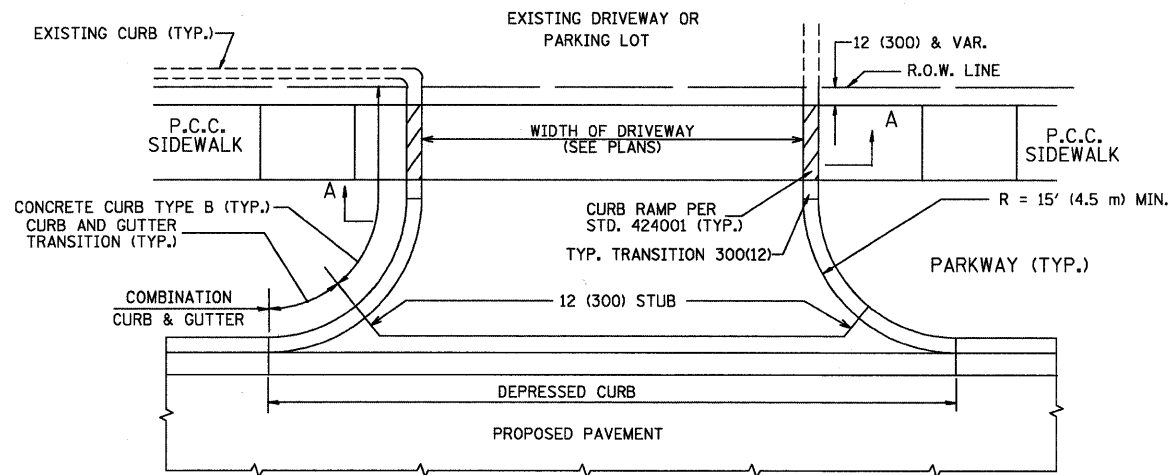
### PORTLAND CEMENT CONCRETE SIDEWALK CURB



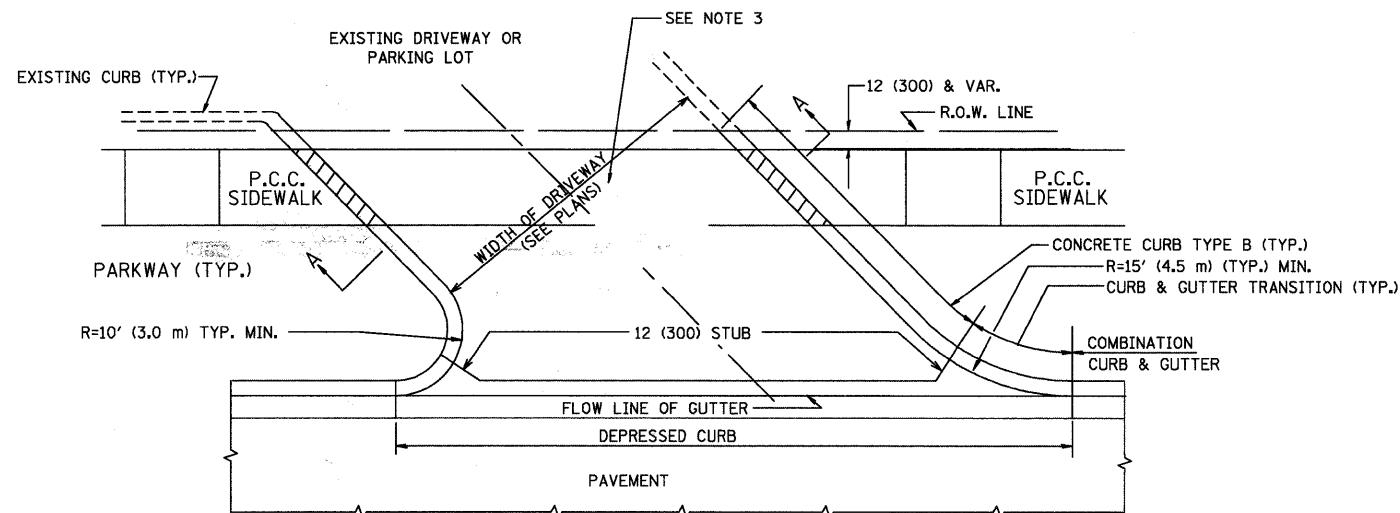
### COMBINATION CONCRETE CURB AND GUTTER WITH TYPE 23 FRAME AND GRATE

FILE NAME = 3850-805-DT1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED = CAD	REVISED =	CITY OF DES PLAINES PROPOSED ROADWAY WIDENING AND TRAFFIC SIGNAL INSTALLATION	DETAILS			FAP RTE 330	SECTION 10-00213-00-CH	COUNTY LAKE	TOTAL SHEETS 47	SHEET NO. 17	GHA #3850.805
	PLOT SCALE = 1/8"=1'	DRAWN = CAD	REVISED =										
	PLOT DATE = 8/23/2011	CHECKED = BLS	REVISED =										CONTRACT # 63616
		DATE = 8/23/2011	REVISED =					SCALE: NONE	SHEET NO. OF	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT

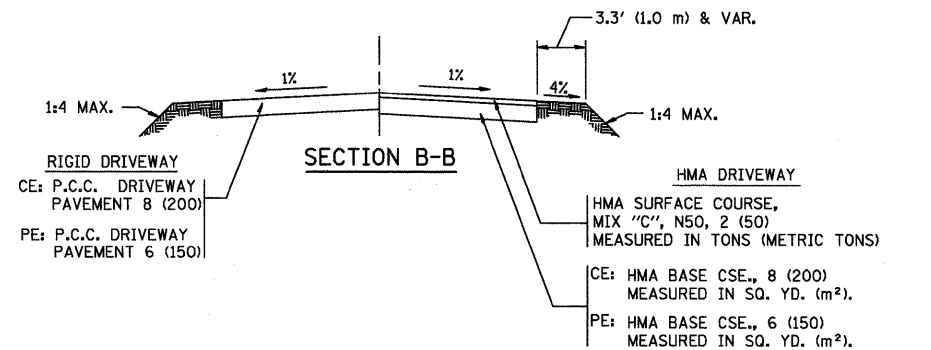
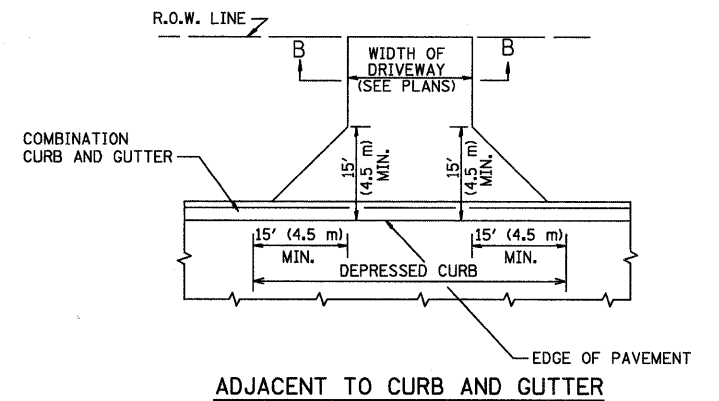
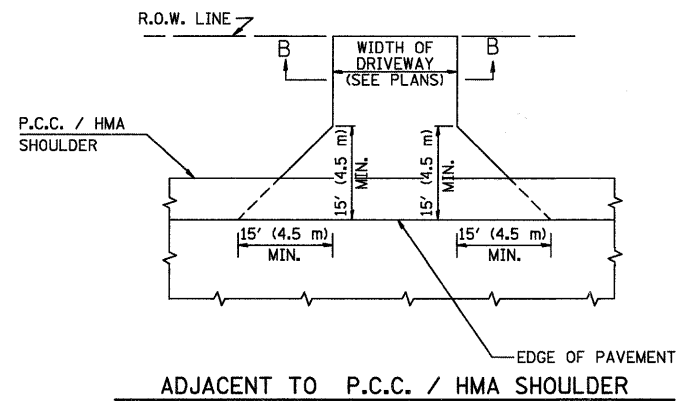
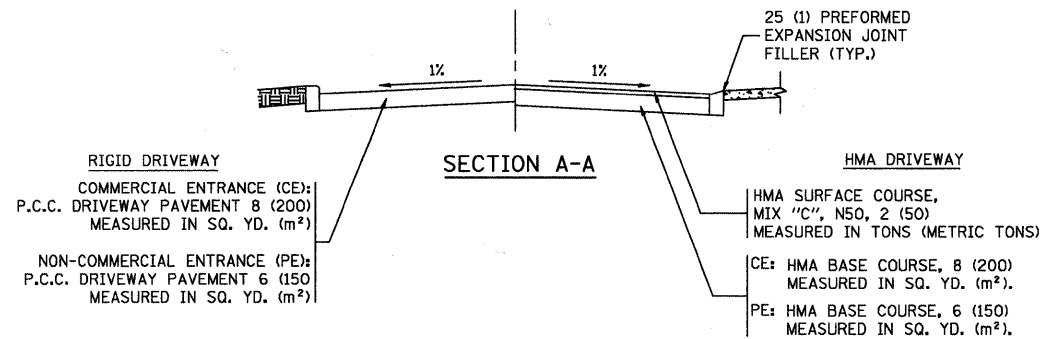




WITH CONCRETE CURB, TYPE B



WITH CONCRETE CURB, TYPE B



RURAL FIELD ENTRANCE (FE)  
HMA SURFACE COURSE,  
MIX "C", N50, 2 (50)  
MEASURED IN TONS (METRIC TONS)  
AGGREGATE BASE CSE., TYPE B, 8 (200)  
MEASURED IN SQ. YD. (m²).

#### GENERAL NOTES:

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.

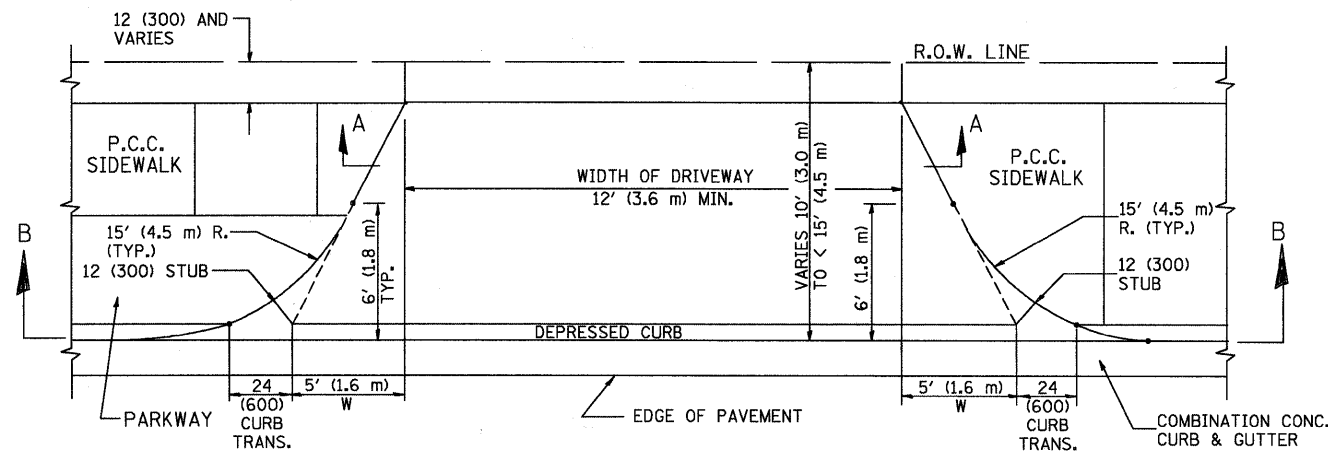
COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

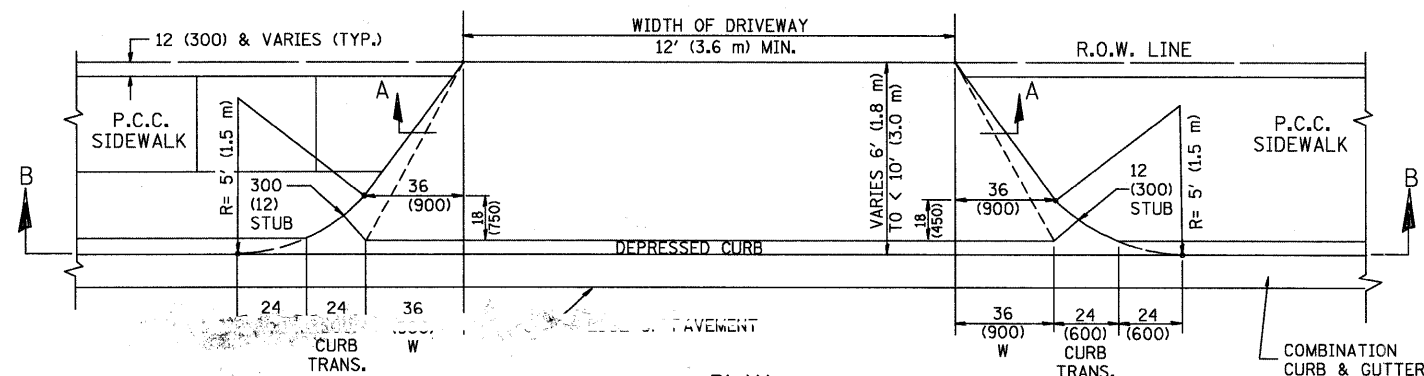
COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

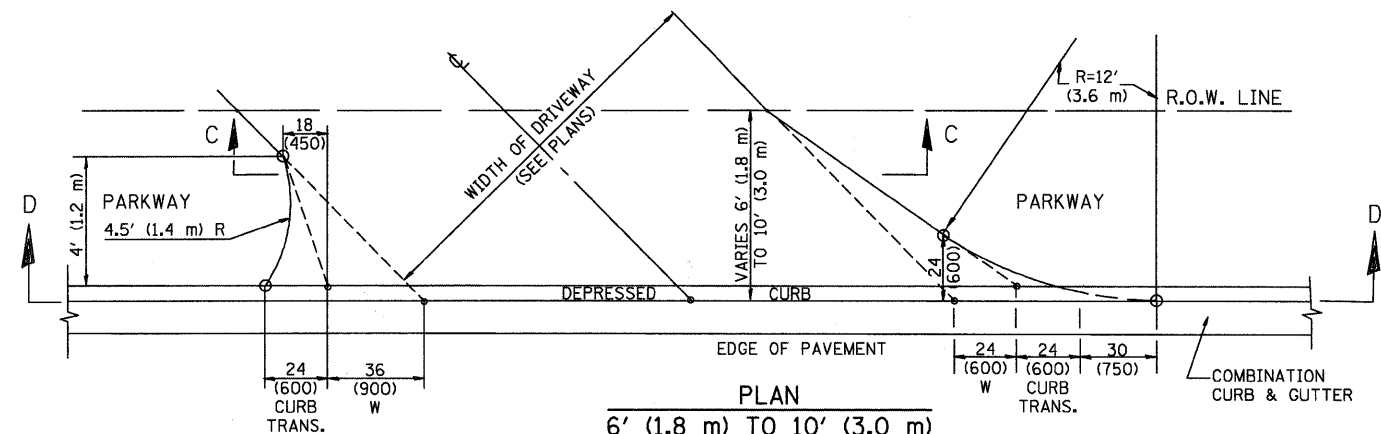
WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.



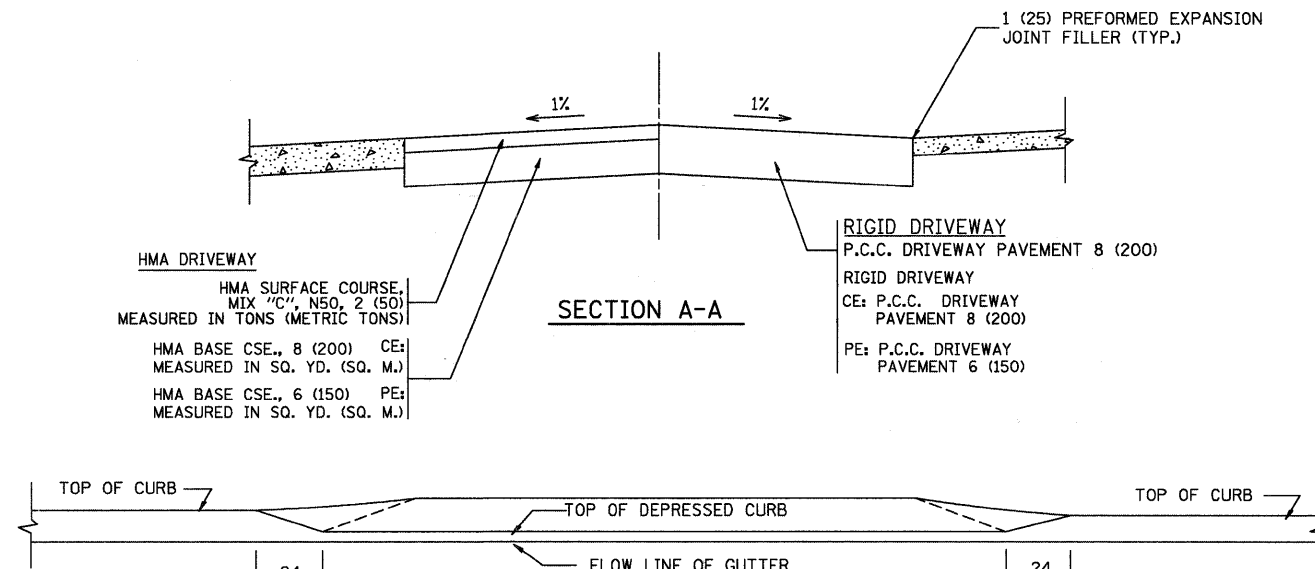
PLAN  
10' (3.0 m) TO < 15' (4.5 m)



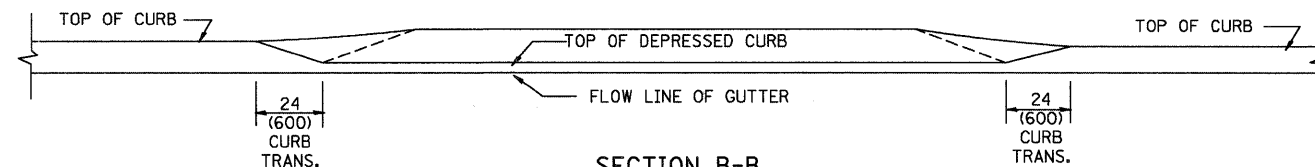
PLAN  
6' (1.8 m) TO < 10' (3.0 m)



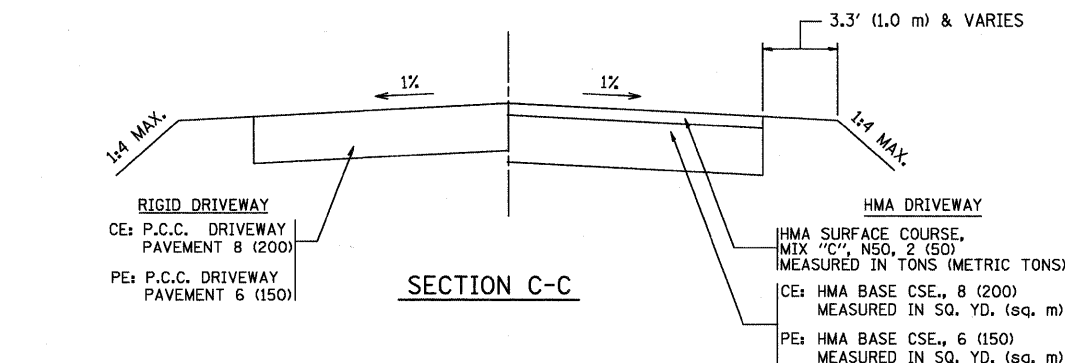
PLAN  
6' (1.8 m) TO 10' (3.0 m)



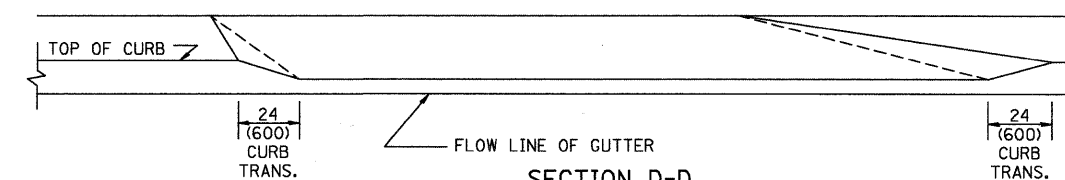
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

# GENERAL NOTES

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE 'HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS'. FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATION 10 IN THE PERMIT HANDBOOK. WHERE SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED WITH RIGID PAVEMENT. WHERE NO SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED IN KIND. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

WHEN THE DISTANCE BETWEEN R.O.W. AND THE BACK OF CURB IS EQUAL TO OR LESS THAN 8' (2.4 m), THE P.C.C. SIDEWALK SHALL EXTEND TO THE BACK OF CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

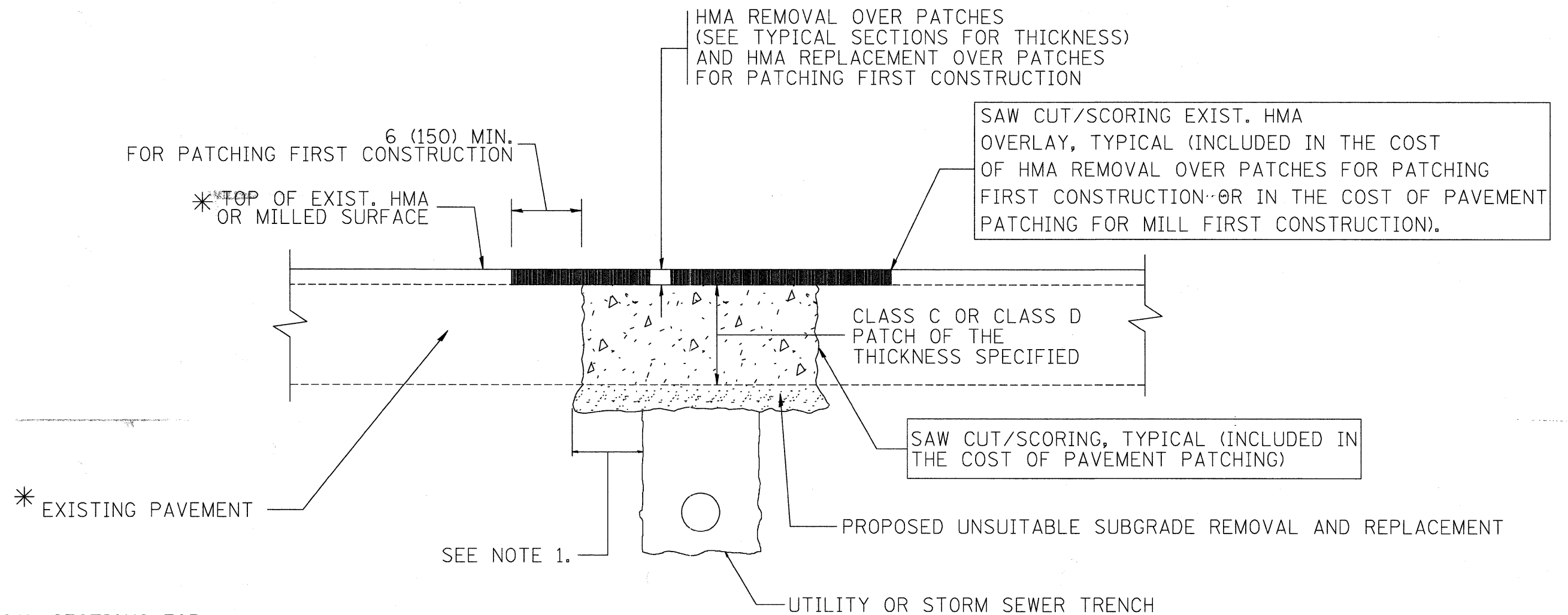
THE 1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

"W" VARIES FROM 36 (900) TO 5' (1.5 m) PROPORTIONAL TO THE LENGTH (L), FROM 6' (1.8 m) TO 10' (3 m).

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE NOTED.

FILE NAME = 3850-B05-DT1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - R. SHAH	REVISED - T. HOLTZ 04-08-97	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DRIVEWAY DETAILS		F.A.P. RTE. 330	SECTION 10-00213-00-CH	COUNTY LAKE	TOTAL SHEETS 47	SHEET NO. 19
		DRAWN -	REVISED - M. GOMEZ 04-06-01		DISTANCE BETWEEN ROW AND FACE OF CURB < 15'(4.5 m)						
		CHECKED -	REVISED - P. LOFLEUR 04-15-03		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.						
		DATE - 11-06-95	REVISED - R. BORO 01-01-07		BD400-02 (BD-02)						
							FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

FILE NAME = 3850-805-DT1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - R. SHAH	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING				FAP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED - R. WIEDEMAN 05-14-04						330	10--00213--00-CH	LAKE	47	20
	PLOT SCALE = 1" = .0833'	CHECKED -	REVISED - R. BORO 01-01-07		BD600-03 (BD-8)				CONTRACT #: 63616				
	PLOT DATE = 8/23/2011	DATE - 10-25-94	REVISED - R. BORO 03-09-11						SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. J. (ILLINOIS) FEE, AND PROJECT.	



\*SEE TYPICAL SECTIONS FOR  
THICKNESS AND MATERIALS

#### NOTES:

1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

#### SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

#### SEQUENCE OF CONSTRUCTION (MILLING FIRST)

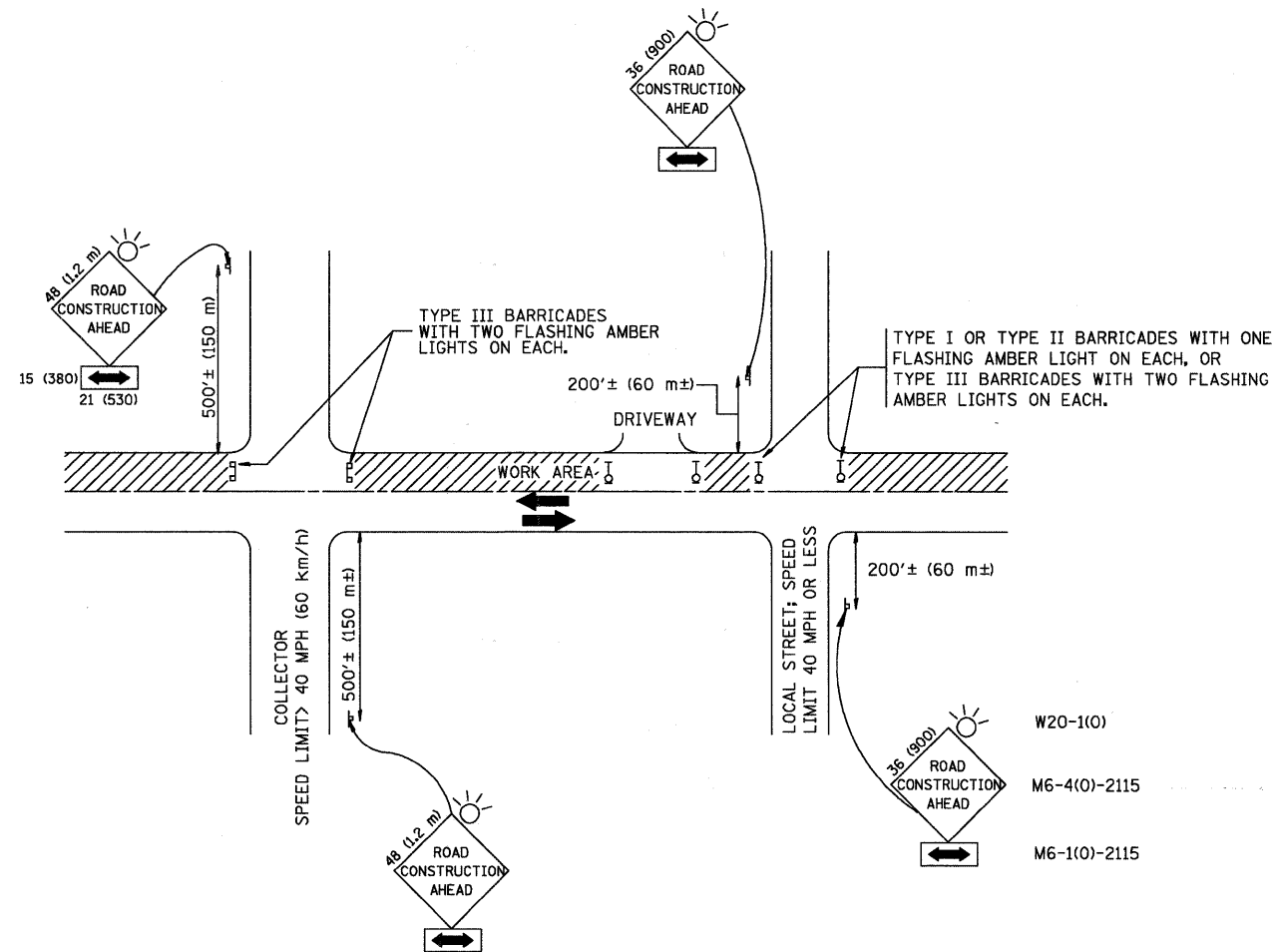
1. MILL HMA FIRST IF THERE IS AT LEAST 4 1/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME = 3850-805-DT1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT			FAP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED - R. BORO 01-01-07					330	10-00213-00-CH	LAKE	47	21
	PLOT SCALE = 1" = .0833'	CHECKED -	REVISED - R. BORO 09-04-07		BD400-04 (BD-22)			CONTRACT #:				
	PLOT DATE = 8/23/2011	DATE - 10-25-94	REVISED - K. ENG 10-27-08		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				







# NOTES:

## A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS

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 AND FLAG 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. 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).

## B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.

D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

GHA #3850.805

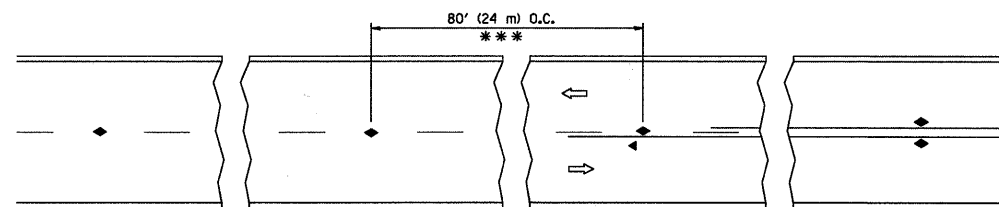
FILE NAME =	USER NAME = ZACH WALLSTEN	DESIGNED = LHA	REVISED = J. OBERLE 10-18-95
3850-B05-DT1.dwg		DRAWN =	REVISED = A. HOUSEH 03-06-96
	PLOT SCALE = 1" = .0833"	CHECKED =	REVISED = A. HOUSEH 10-15-96
	PLOT DATE = 8/23/2011	DATE = 06-89	REVISED = T. RAMMACHER 01-06-00

## STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

## TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

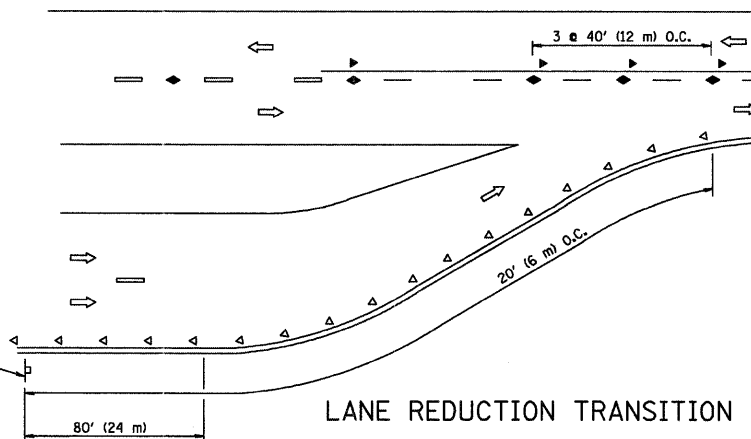
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F&P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	10-00213-00-CH	LAKE	47	23
TC-10		CONTRACT #: 63616		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

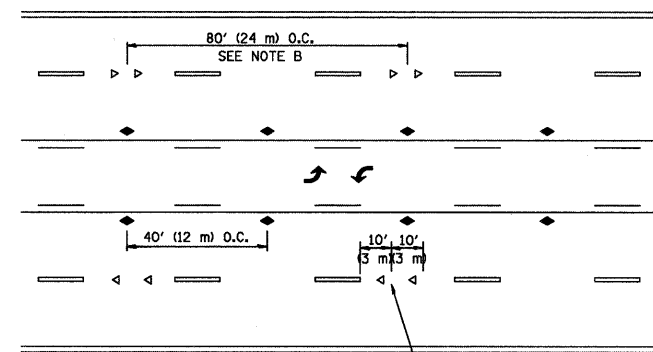


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

TWO-LANE/TWO-WAY

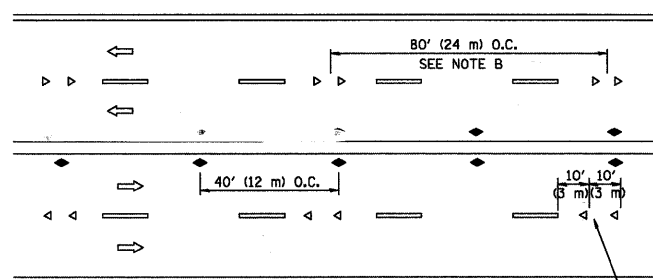


LANE REDUCTION TRANSITION



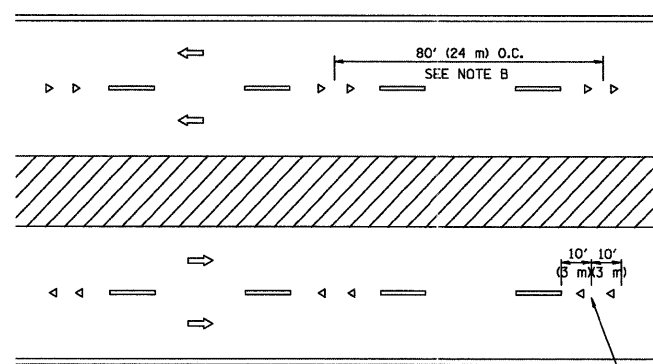
SEE NOTE A

TWO-WAY LEFT TURN



SEE NOTE A

MULTI-LANE/UNDIVIDED



SEE NOTE A

MULTI-LANE/DIVIDED

### GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

### LANE MARKER NOTES

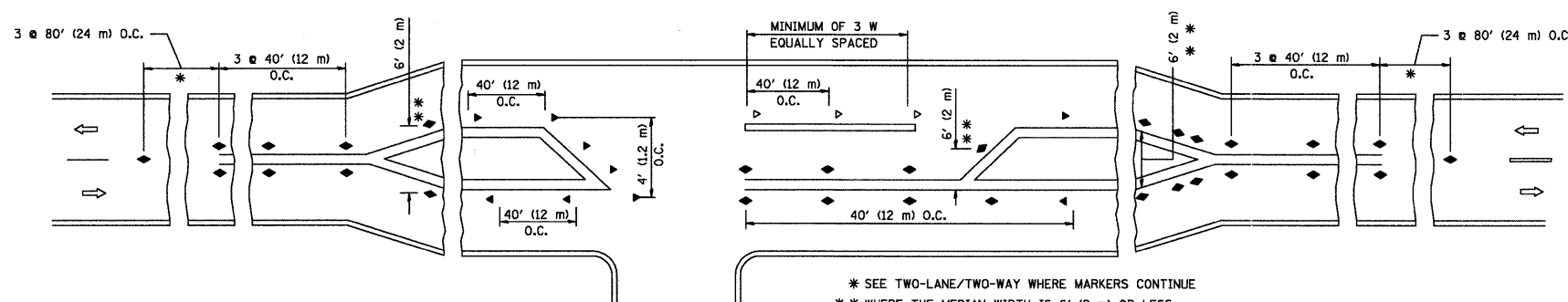
- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H. (20 km/h) LOWER THAN POSTED SPEEDS.

### SYMBOLS

- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◀ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

### DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.

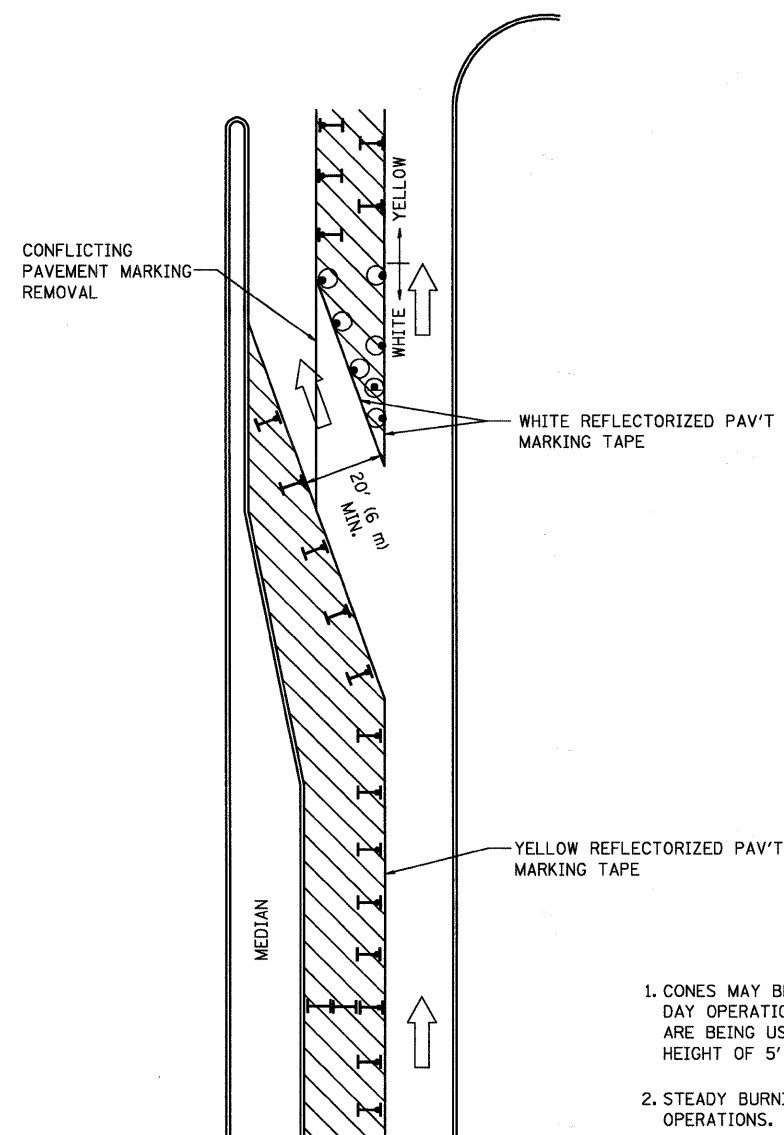


\* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE  
\*\* WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

LEFT TURN

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

FILE NAME = 3850-805-D11.dwg	USER NAME = ZACH WALLSTEN	DESIGNED -	REVISED - T. RAMMACH 09-19-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)			GFA #3850.805				
		DRAWN -	REVISED - T. RAMMACH 03-12-99					FAP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 1" = .0833'	CHECKED -	REVISED - T. RAMMACH 01-06-00					330	10-00213-00-CH	LAKE	47	24
	PLOT DATE = 8/23/2011	DATE -	REVISED - C. JUCIUS 09-09-09					TC-11		CONTRACT #:		63616
					SCALE: N.A.	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		



### GENERAL NOTES

1. 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. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 5' (1.5 m).
2. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
3. REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH TURN BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.
4. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-100 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
5. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
7. FORM BT 725 IS REQUIRED.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

2. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.

3. REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH TURN BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.

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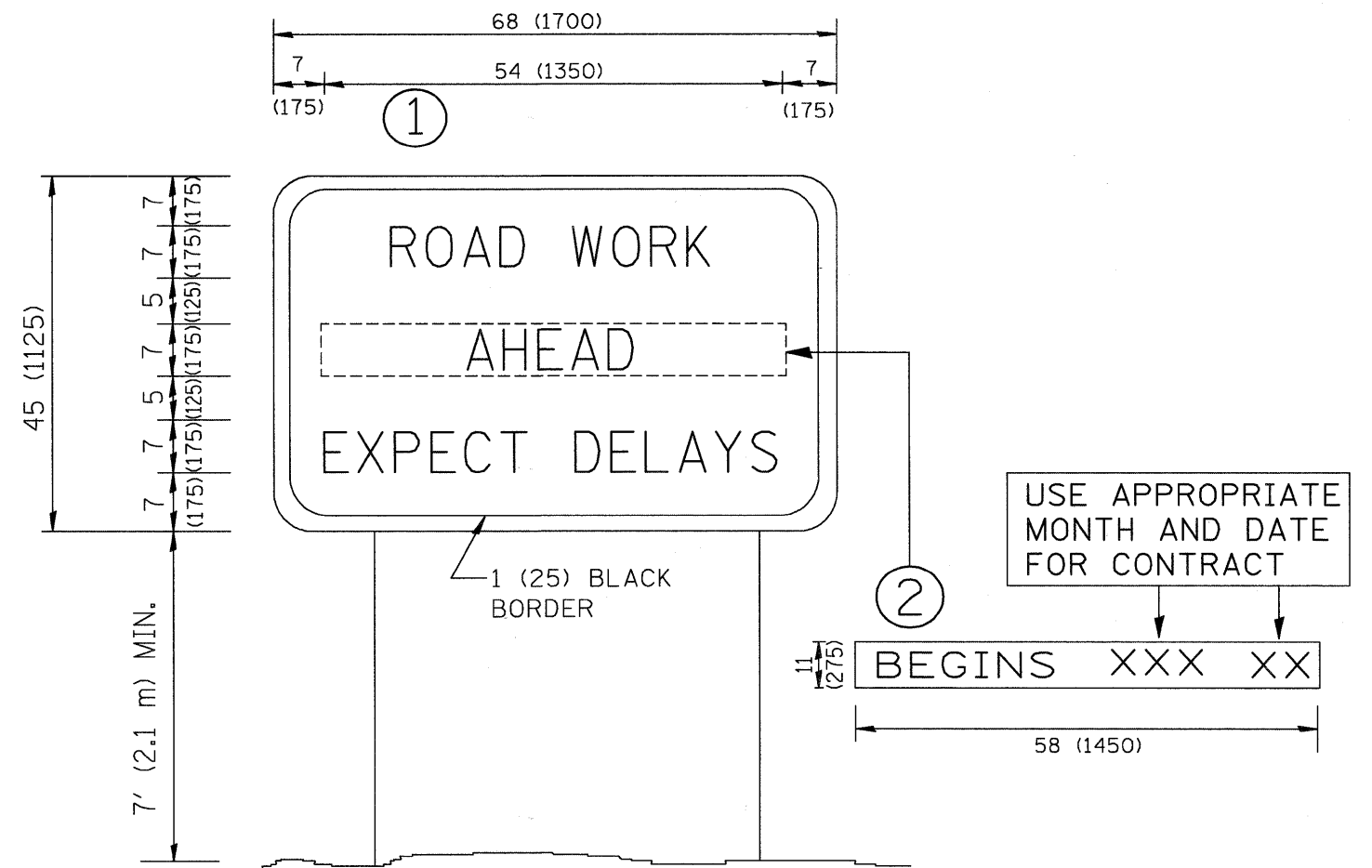
## LEGEND



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

FILE NAME = 3850-805-DT1.dwg	USER NAME = ZACH WALLSTEN	REVISED - T. RAMMACH 09-08-94	REVISED - R. BORO 09-14-09	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)	SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	GHA #0080.806	TOTAL SHEETS 47	SHEET NO. 25.	
		REVISED - A. HOUSEH 11-07-95	REVISED -										
PLOT SCALE = 1" = .0833'		REVISED - A. HOUSEH 10-12-96	REVISED -										
PLOT DATE = 8/23/2011		REVISED - T. RAMMACH 01-06-00	REVISED -										
										TC-14		CONTRACT #: 63616	





### NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)  
UNLESS OTHERWISE SHOWN.

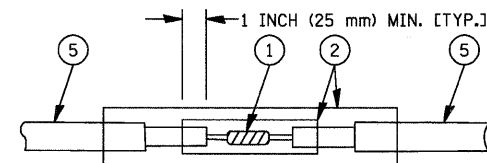
FILE NAME = 3850-B05-DT1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED -	REVISED - R. MIRS 09-15-97	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ARTERIAL ROAD INFORMATION SIGN			F&P RTE 330	SECTION 10-00213-00-CH	COUNTY LAKE	TOTAL SHEETS 47	SHEET NO. 26
		DRAWN -	REVISED - R. MIRS 12-11-97									
		CHECKED -	REVISED - T. RAMMACHER 02-02-99									
		DATE -	REVISED - C. JUCIUS 03-31-07									
				SCALE: NONE			SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT		
										GHA #3850.805		
										CONTRACT # 63616		

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

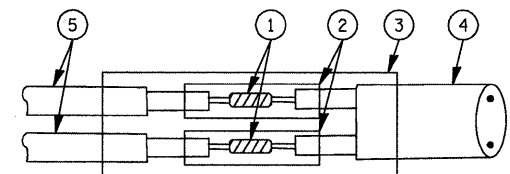
Diagram illustrating a sequencing gel setup with two lanes, (A) and (B). The gel shows bands in both lanes, indicating successful sequencing. The lanes are labeled (A) and (B). The bands are labeled (C) and (D). The gel is oriented with the wells at the top and the bottom at the bottom.

- 

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.



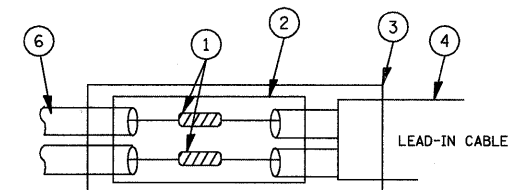
DETAIL "A"  
LOOP-TO-LOOP SPLICE



DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

A technical drawing of a mechanical assembly, likely a pump or valve mechanism, shown in a cross-sectional view. The drawing includes several numbered callouts: 1 points to a central shaft or rod; 2 points to a component on the left side of the shaft; 3 points to a component on the right side of the shaft; 4 points to a component on the far right; 5 points to a component on the far left; 6 points to a component on the far left; 7 points to a component on the right side of the shaft. The drawing shows various internal components, including what appears to be a piston or plunger, and a series of seals or gaskets. The components are labeled with numbers 1 through 7, which correspond to the list of parts provided in the accompanying text.

DETAIL "A"  
LOOP-TO-LOOP SPLICE



PRE-FORMED LOOP

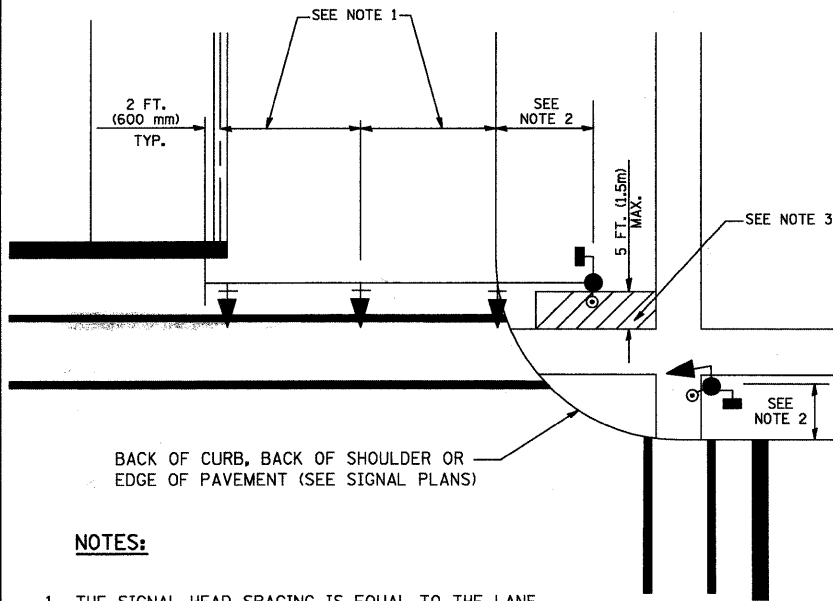
DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

- ① WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- ② WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- ③ WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- ④ NO. 14 2/C TWISTED, SHIELDED CABLE.
- ⑤ LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- ⑥ PRE-FORMED LOOP
- ⑦ XL POLYOLEFIN 2 CONDUCTOR  
BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

FILE NAME = 3850-805-TR1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - DAD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS			GPR #5830.805	
		DRAWN - BCK	REVISED -					RPT #	
	PLOT SCALE = 1" = .0833'	CHECKED - DAD	REVISED -		330	10-00213-00-CH	(COOK)	47	27
	PLOT DATE = 8/23/2011	DATE - 10-28-09	REVISED -		TS-05 CONTRACT #: 63616				
				SCALE: NONE	SHEET NO. 1 OF 6 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

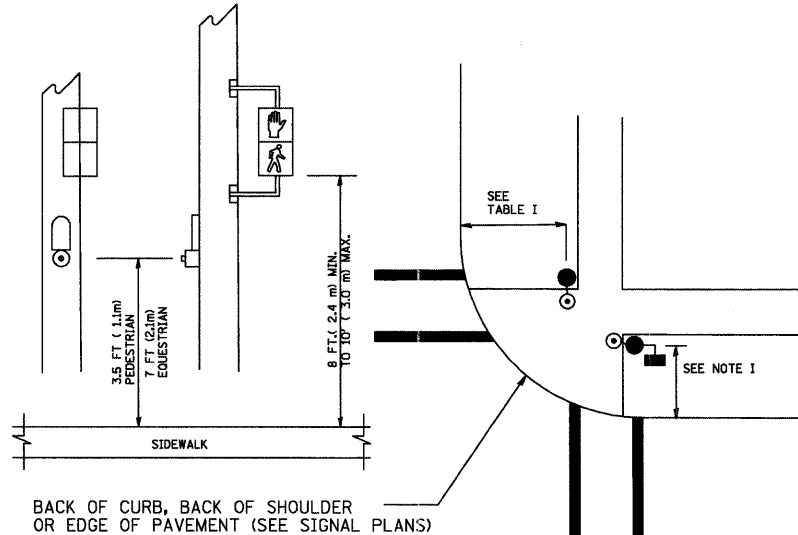
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



NOTES:

1. THE SIGNAL HEAD SPACING IS EQUAL TO THE LANE WIDTH OR AS SHOWN ON THE TRAFFIC SIGNAL PLAN.
2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

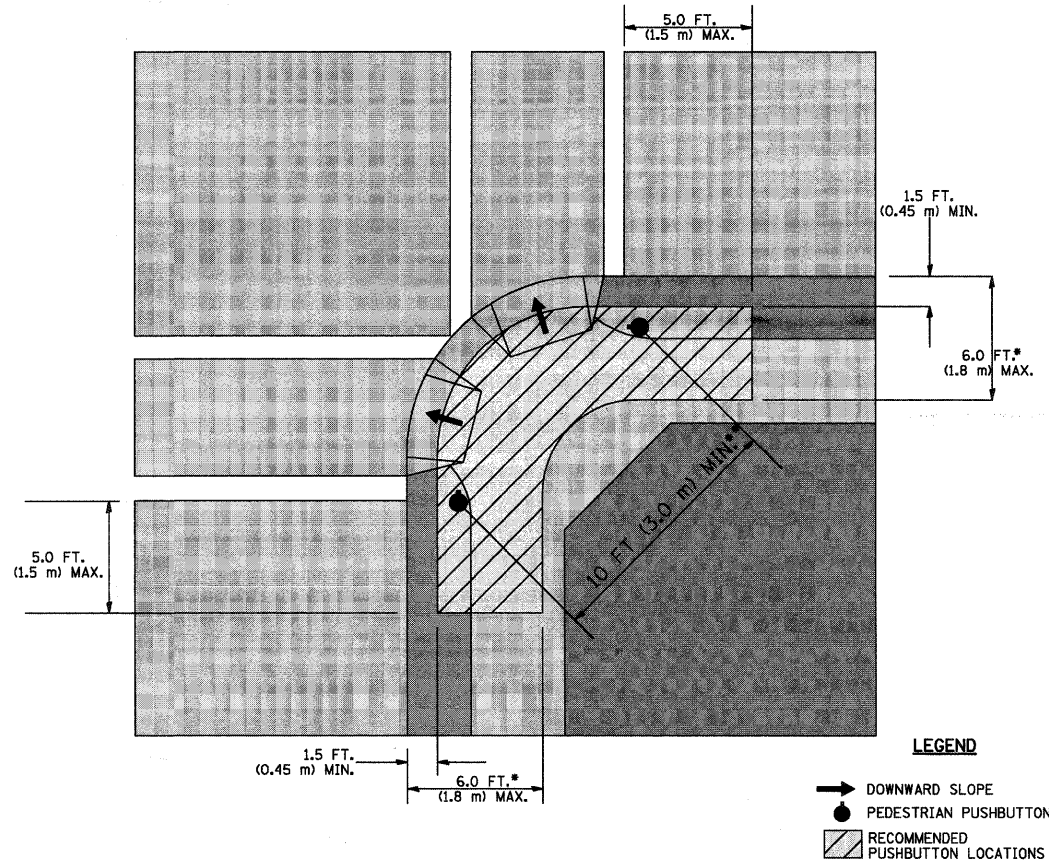
PEDESTRIAN SIGNAL POST  
AND  
PEDESTRIAN PUSH BUTTON POST



NOTES:

1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

RECOMMENDED PUSHBUTTON LOCATIONS



LEGEND

- DOWNWARD SLOPE
- PEDESTRIAN PUSHBUTTON
- RECOMMENDED PUSHBUTTON LOCATIONS

- WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT ( 1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

NOTES:

PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.

THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.

THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.

THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.

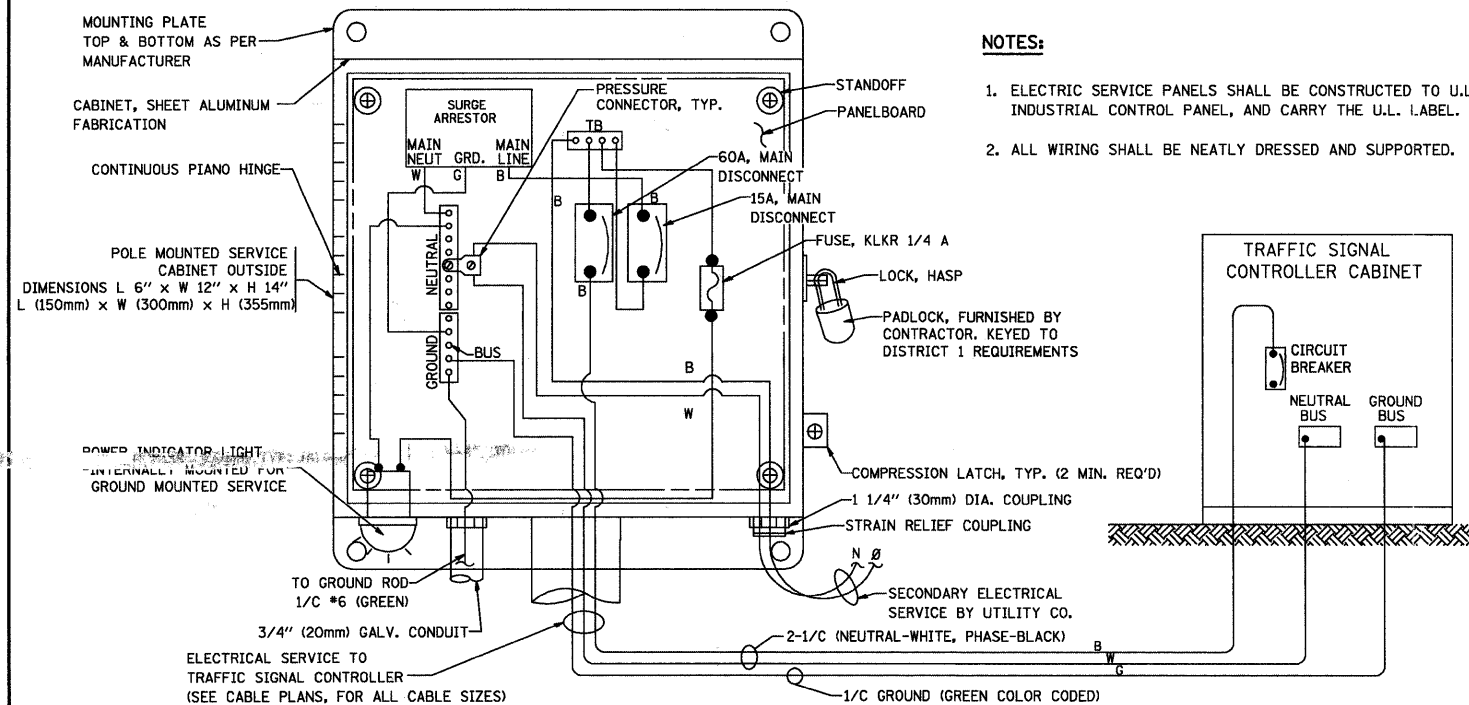
THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

TRAFFIC SIGNAL EQUIPMENT OFFSET

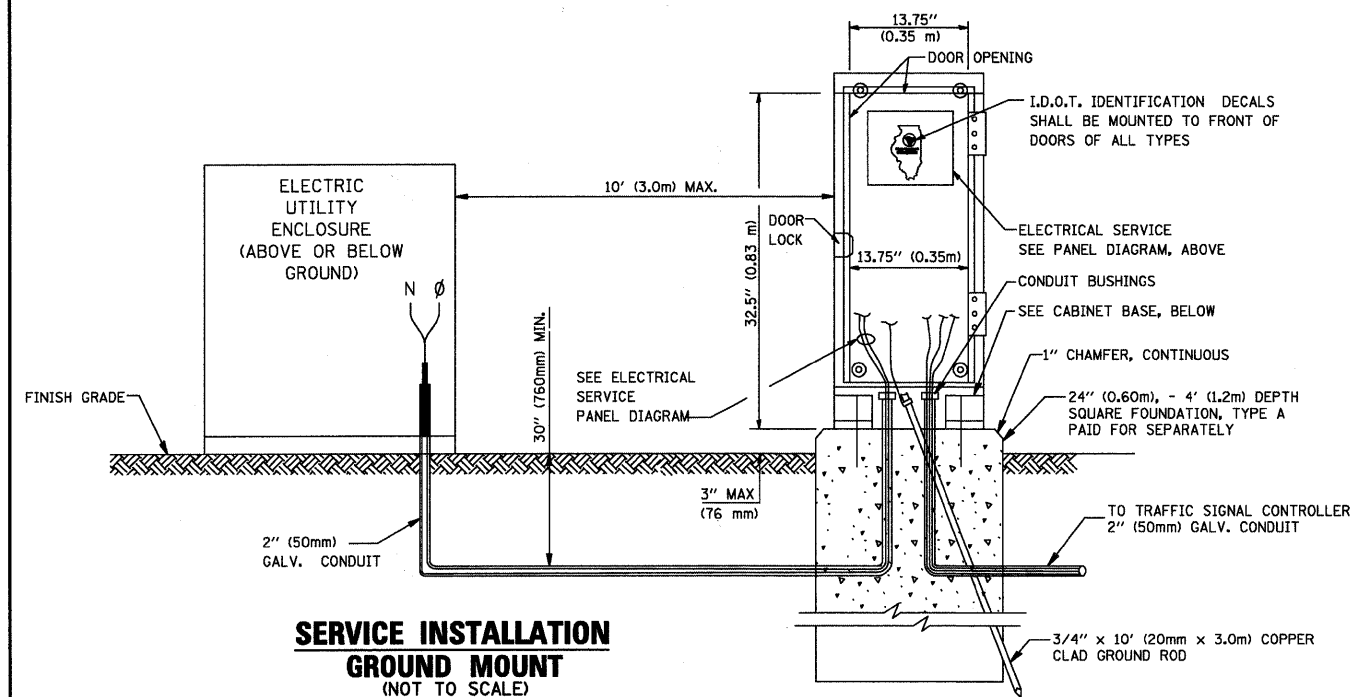
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.

NOTES:

1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TO THE ROADWAY SIDE OF THE FOUNDATION.
4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

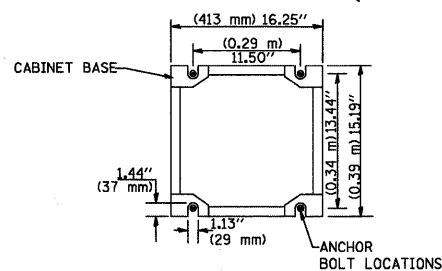


**ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)**  
**SERVICE INSTALLATION POLE MOUNT (SHOWN)**  
 (NOT TO SCALE)



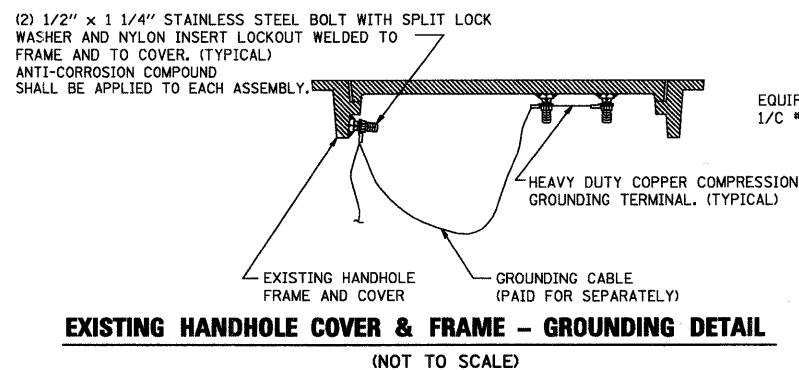
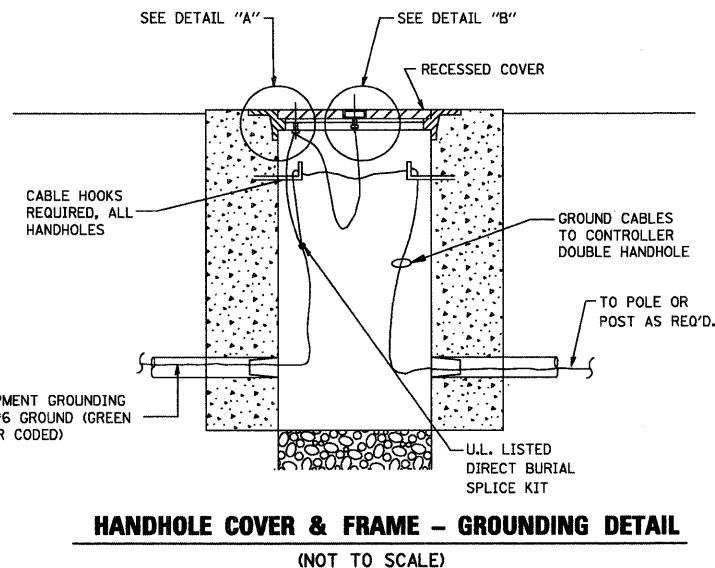
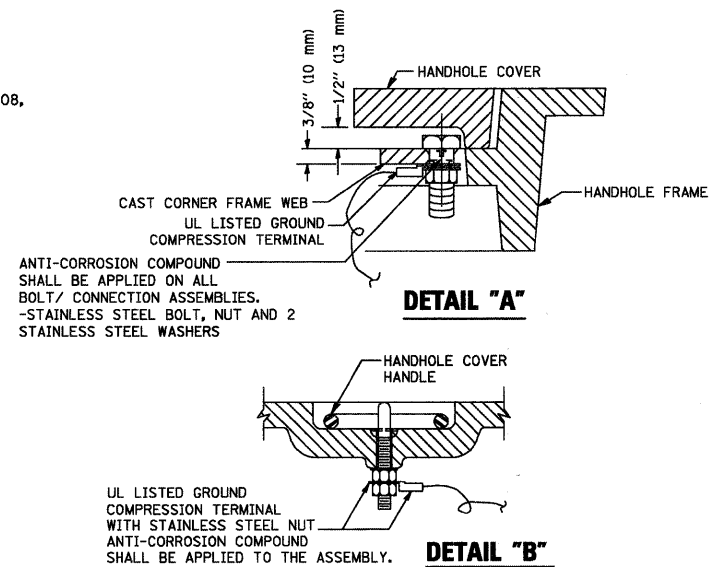
**SERVICE INSTALLATION GROUND MOUNT**  
 (NOT TO SCALE)

**CABINET - BASE BOLT PATTERN**  
 (NOT TO SCALE)



**NOTES:**

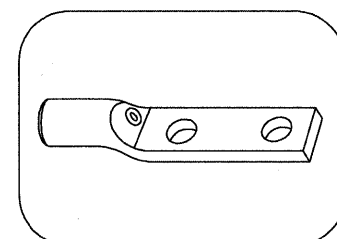
1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.
2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.



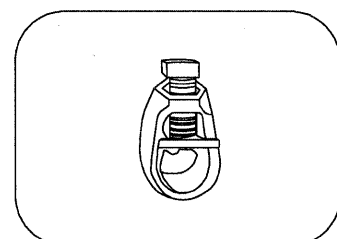
**NOTES:**

**GROUNDING SYSTEM**

1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



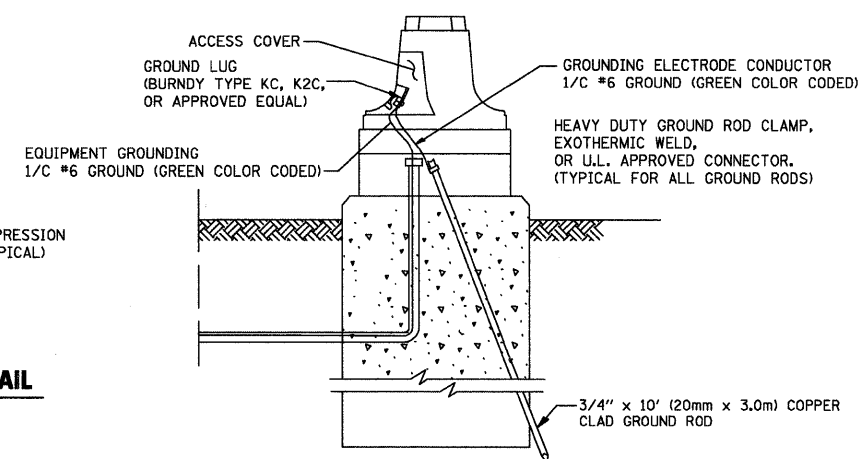
HEAVY-DUTY COMPRESSION TERMINAL  
 (BURNDY TYPE YGHA OR APPROVED EQUAL)



3/4" (20mm) HEAVY-DUTY GROUND ROD CLAMP  
 (BURNDY TYPE GRC OR APPROVED EQUAL)

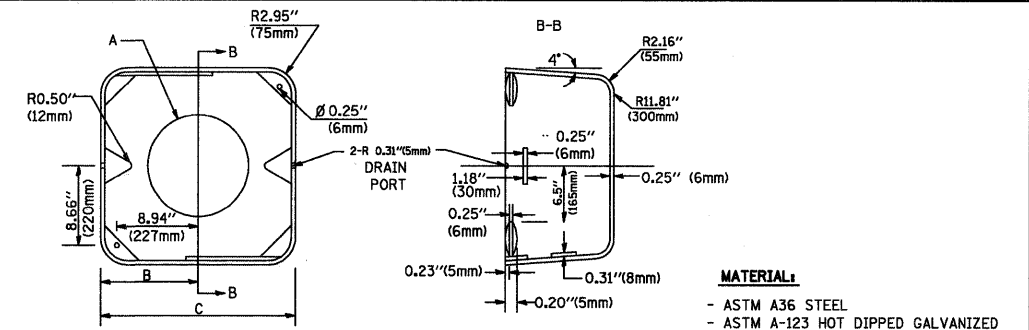
**NOTES:**

- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES. 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES. 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



**MAST ARM POLE / POST-GROUNDING DETAIL**  
 (NOT TO SCALE)

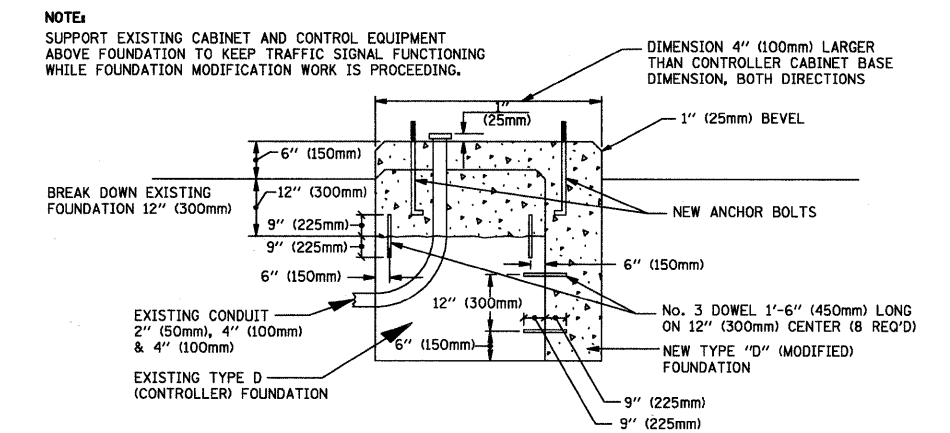
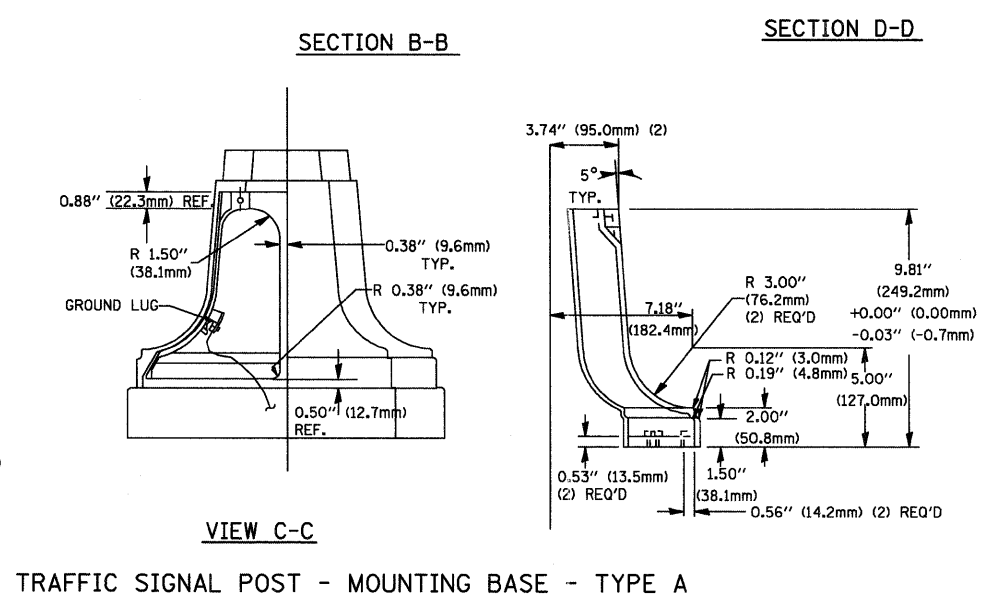




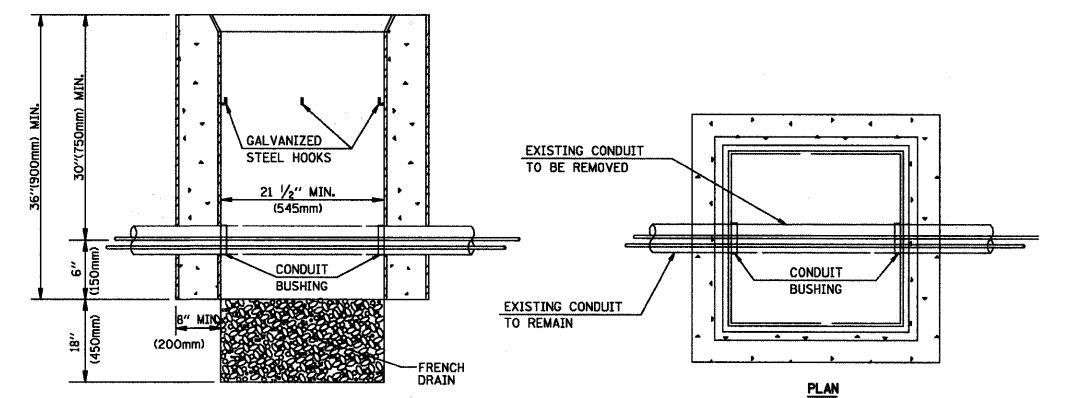
A	B	C	HEIGHT	WEIGHT
VARIES	9.5" (241mm)	19" (483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIES	10.75" (273mm)	21.5" (546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIES	13.5" (330mm)	26" (660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIES	18.5" (470mm)	37" (940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

**NOTES:**

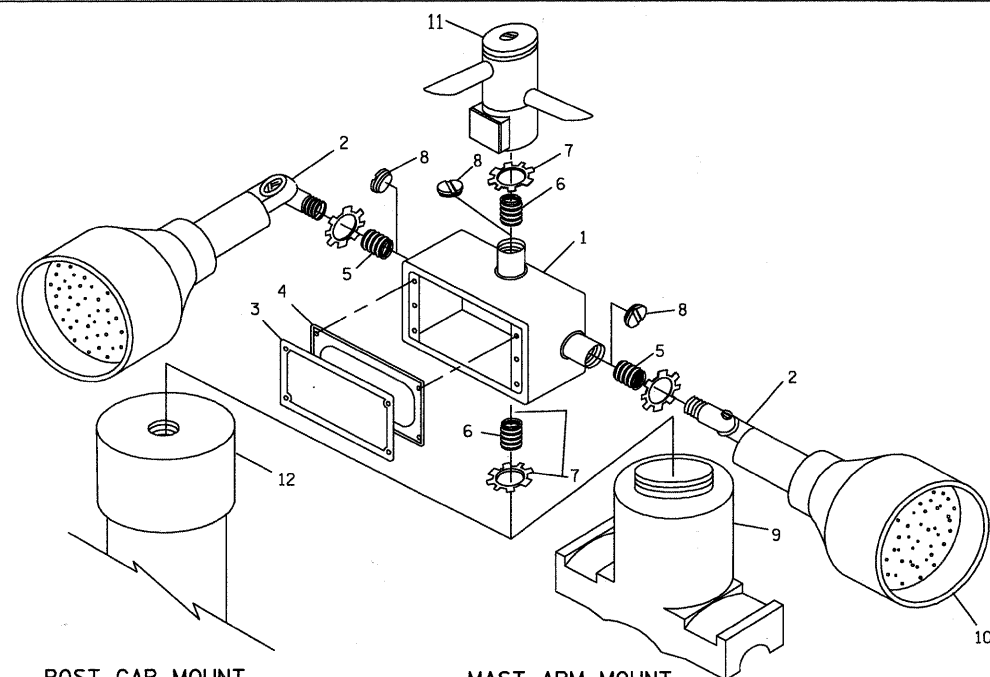
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.



MODIFY EXISTING TYPE "D" FOUNDATION



### HANDHOLE TO INTERCEPT EXISTING CONDUIT



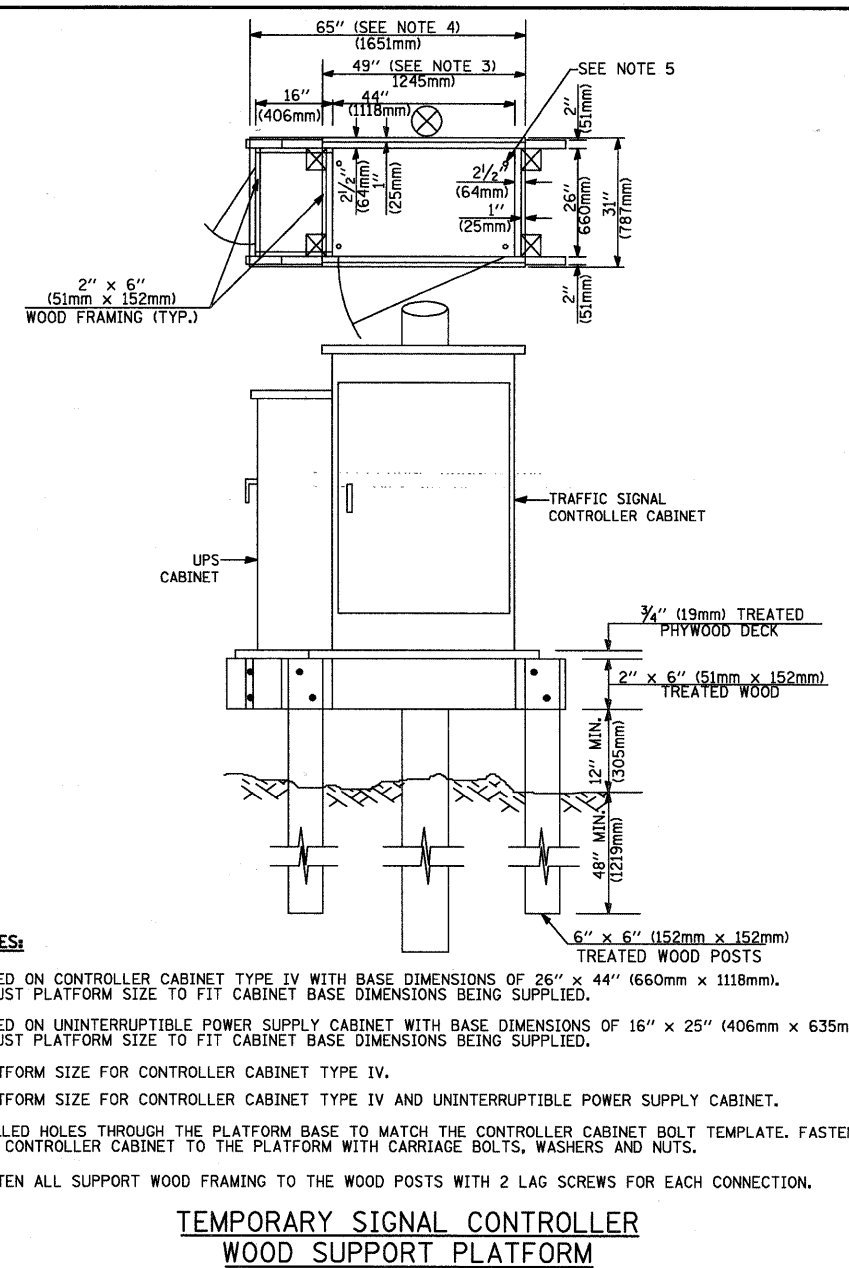
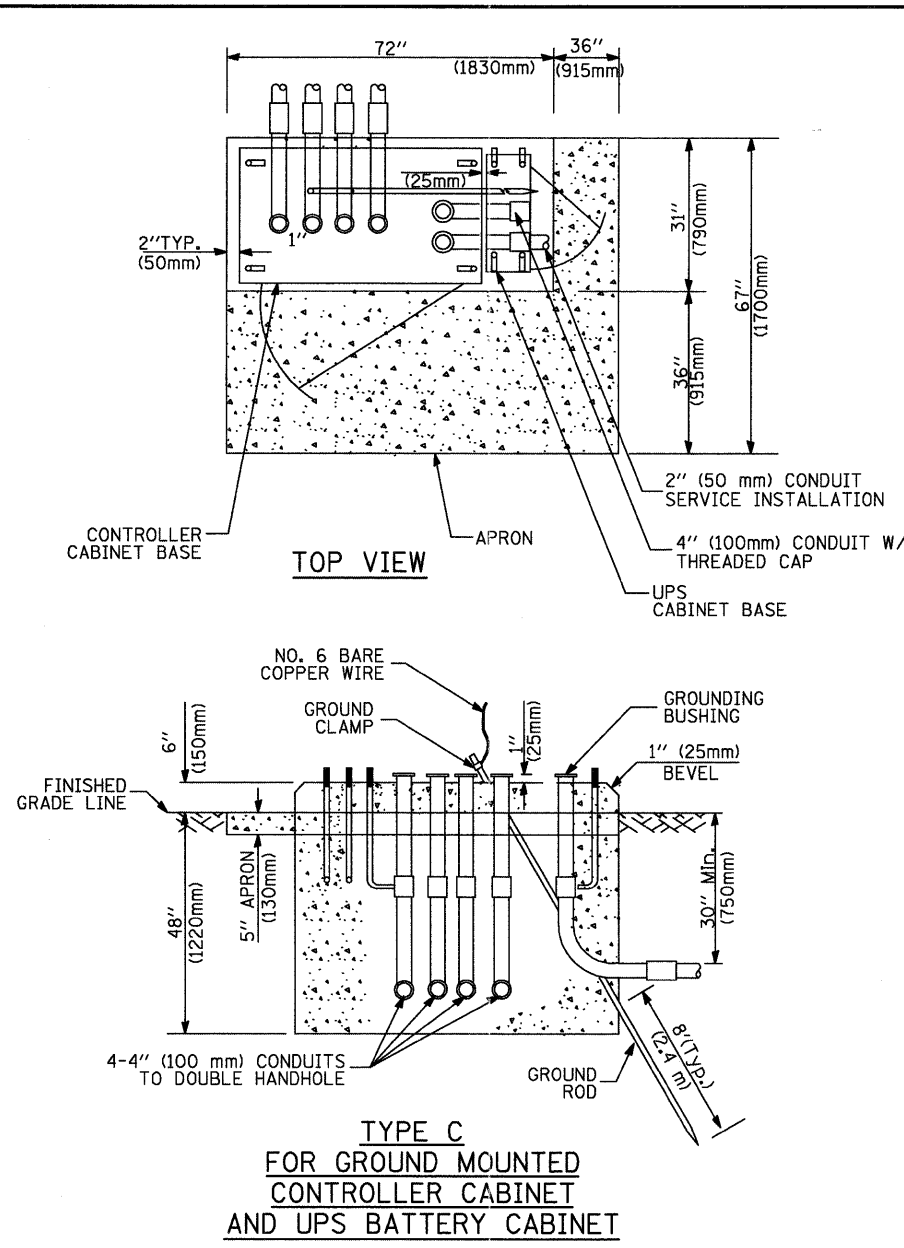
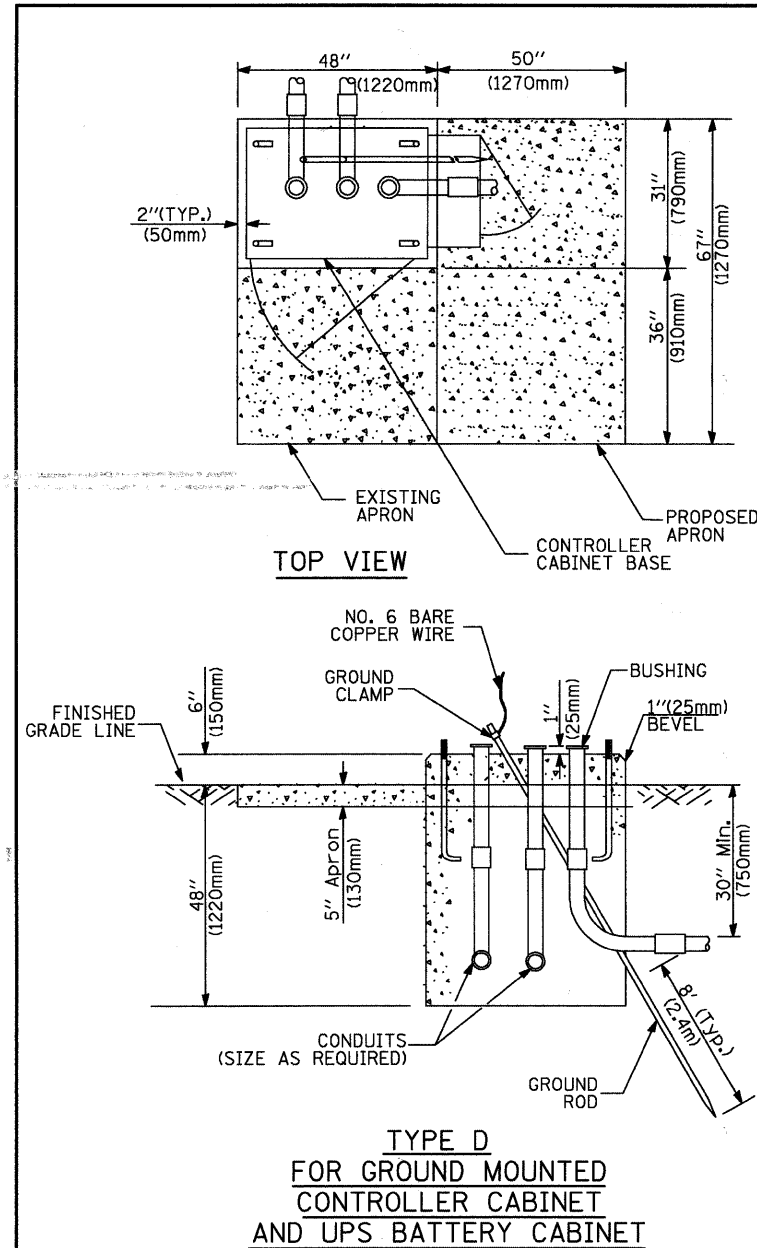
POST CAP MOUNT                      MAST ARM MOUNT

EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4" (19 mm) CLOSE NIPPLE
7	3/4" (19 mm) LOCKNUT
8	3/4" (19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP (18 FT. (5.4 m) POST MIN.)

**NOTES:**

1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT  
ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT  
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4"(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



- NOTES:**
1. BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
  2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
  3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
  4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
  5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
  6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION.

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

CABLE SLACK

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE (MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

VERTICAL CABLE LENGTH

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
TYPE D - CONTROLLER	4'-0" (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0" (1.2m)

DEPTH OF FOUNDATION

MAST ARM LENGTH	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 55' (16.8 m) and less than 65' (19.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

- NOTES:**
1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (QU) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & Structures should be contacted for a revised design if other conditions are encountered.
  2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
  3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations.
  4. For mast arm assemblies with dual arms refer to state standard 878001.

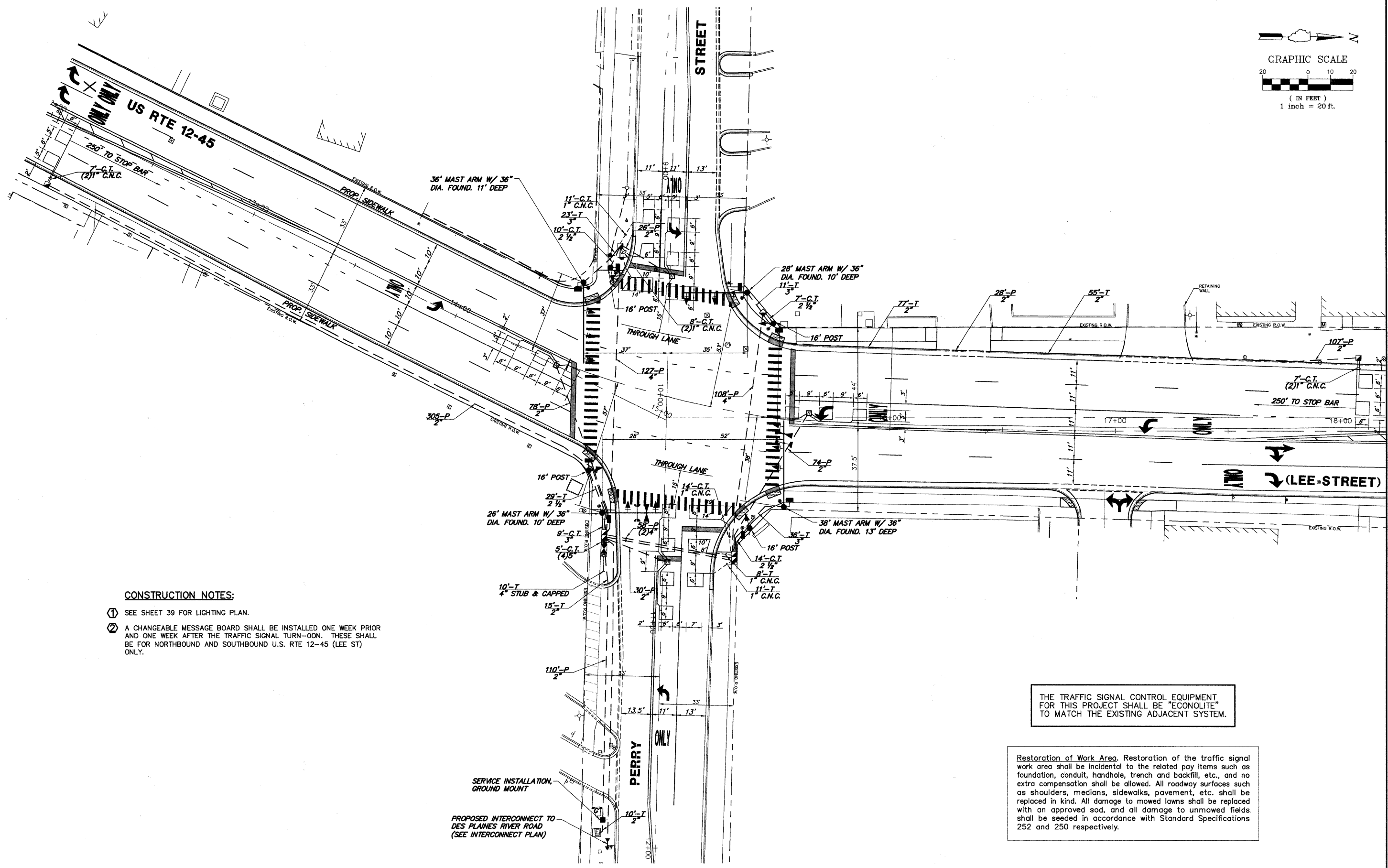
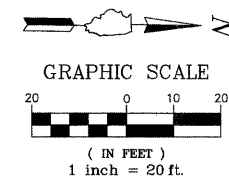
DEPTH OF MAST ARM FOUNDATIONS, TYPE E

## TRAFFIC SIGNAL LEGEND

ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED
CONTROLLER CABINET				EMERGENCY VEHICLE LIGHT DETECTOR				ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE			
RAILROAD CONTROL CABINET				CONFIRMATION BEACON				COAXIAL CABLE			
COMMUNICATIONS CABINET				HANDHOLE				VENDOR CABLE FOR CAMERA			
MASTER CONTROLLER				HEAVY DUTY HANDHOLE				COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED			
MASTER MASTER CONTROLLER				DOUBLE HANDHOLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F			
UNINTERRUPTIBLE POWER SUPPLY				JUNCTION BOX				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F			
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT				GALVANIZED STEEL CONDUIT IN TRENCH (T) OR PUSHED (P)				FIBER OPTIC CABLE NO. 62.5/125, (NUMBER OF FIBERS & TYPE TO BE NOTED ON PLANS)			
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT				TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE				GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE			
STEEL MAST ARM ASSEMBLY AND POLE				COMMON TRENCH			CT	CONTROLLER CABINET AND FOUNDATION TO BE REMOVED			
ALUMINUM MAST ARM ASSEMBLY AND POLE				COILABLE NONMETALLIC CONDUIT (EMPTY)			CNC	STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE				SYSTEM ITEM		S	S	ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA				INTERSECTION ITEM		I	IP	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED			
SIGNAL POST				REMOVE ITEM	R			SIGNAL POST AND FOUNDATION TO BE REMOVED			
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM				RELOCATE ITEM	RL			INTERSECTION & SAMPLING (SYSTEM) DETECTOR			
GUY WIRE				ABANDON ITEM	A			SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD				12" (300mm) TRAFFIC SIGNAL SECTION				EXISTING INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)				12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE				EXISTING PREFORMED INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD WITH BACKPLATE				SIGNAL FACE				PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD OPTICALLY PROGRAMMED				SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD				PREFORMED SAMPLING (SYSTEM) DETECTOR			
FLASHER INSTALLATION (S DENOTES SOLAR POWER)											
PEDESTRIAN SIGNAL HEAD											
PEDESTRIAN PUSHBUTTON DETECTOR											
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR											
ILLUMINATED SIGN "NO LEFT TURN"											
ILLUMINATED SIGN "NO RIGHT TURN"											
DETECTOR LOOP, TYPE I											
PREFORMED DETECTOR LOOP											
MICROWAVE VEHICLE SENSOR											
VIDEO DETECTION CAMERA											
VIDEO DETECTION ZONE											
PAN, TILT, ZOOM CAMERA											
WIRELESS DETECTOR SENSOR											
WIRELESS ACCESS POINT											

RAILROAD SYMBOLS											
				EXISTING	PROPOSED						
RAILROAD CONTROL CABINET											
RAILROAD CANTILEVER MAST ARM											
FLASHING SIGNAL											
CROSSING GATE											
CROSSBUCK											

FILE NAME = 3850--805--TR1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - DAD/BCK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS				FAP RTE. 330	SECTION 10--00213--00--CH	COUNTY (COOK)	TOTAL SHEETS 47	SHEET NO. 32
PLOT SCALE = 1" = .0833'		DRAWN - BCK	REVISED -		SCALE: NONE	SHEET NO. 6 OF 6 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
PLOT DATE = 8/23/2011		CHECKED - DAD	REVISED -		CONTRACT #: 63616								
DATE - 10--28--09		DATE - 10--28--09	REVISED -										



**CONSTRUCTION NOTES:**

- ① SEE SHEET 39 FOR LIGHTING PLAN.
- ② A CHANGEABLE MESSAGE BOARD SHALL BE INSTALLED ONE WEEK PRIOR AND ONE WEEK AFTER THE TRAFFIC SIGNAL TURN-ON. THESE SHALL BE FOR NORTHBOUND AND SOUTHBOUND U.S. RTE 12-45 (LEE ST) ONLY.

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

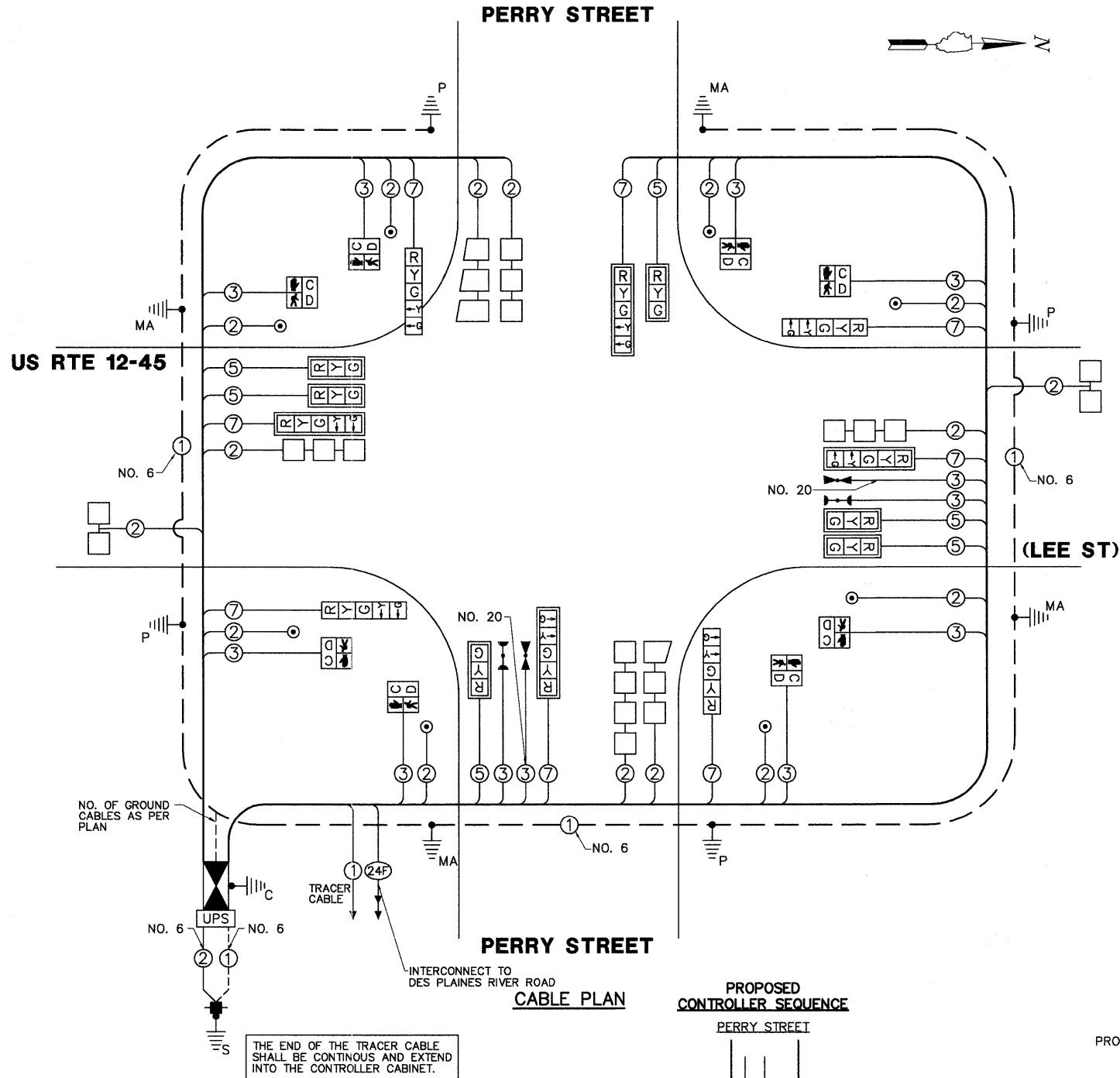
**Restoration of Work Area.** Restoration of the traffic signal work area shall be incidental to the related pay items such as foundation, conduit, handhole, trench and backfill, etc., and no extra compensation shall be allowed. All roadway surfaces such as shoulders, medians, sidewalks, pavement, etc. shall be replaced in kind. All damage to mowed lawns shall be replaced with an approved sod, and all damage to unmowed fields shall be seeded in accordance with Standard Specifications 252 and 250 respectively.

FILE NAME = 3850-805-TR1.dwg		USER NAME = ZACH WALLSTEN	DESIGNED - CAD	REVISED -	CITY OF DES PLAINES PROPOSED ROADWAY WIDENING AND TRAFFIC SIGNAL INSTALLATION				TRAFFIC SIGNAL INSTALLATION PLAN U.S. RTE 12-45 (LEE ST) AT PERRY STREET				FAP. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
			DRAWN - CAD	REVISED -									330	10-00213-00-CH	COOK	47	33		
		PLOT SCALE = 1/8"=1'-0"	CHECKED - KLB	REVISED -									CONTRACT #:					63616	
		PLOT DATE = 8/23/2011	DATE - 8/23/2011	REVISED -									SCALE: 1"=20'	SHEET NO.	OF	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT

SCHEDULE OF QUANTITIES  
U.S. RTE 12-45 (LEE ST) AT PERRY STREET

NO.	QUANT.	UNIT	
1.	1	TON	HOT-MIX APHALT REPLACEMENT OVER PATCHES
2.	1	CAL MO	CHANGEABLE MESSAGE SIGN
3.	13.50	SQ FT	SIGN PANEL - TYPE 1
4.	30.00	SQ FT	SIGN PANEL - TYPE 2
5.	1	EACH	SERVICE INSTALLATION - GROUND MOUNTED
6.	157	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
7.	60	FOOT	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL
8.	79	FOOT	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL
9.	30	FOOT	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL
10.	758	FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL
11.	351	FOOT	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL
12.	4	EACH	HANDHOLE
13.	4	EACH	HEAVY-DUTY HANDHOLE
14.	2	EACH	DOUBLE HANDHOLE
15.	287	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
* 16.	4	EACH	PAINT NEW TRAFFIC SIGNAL POST
* 17.	4	EACH	PAINT NEW MAST ARM AND POLE, UNDER 40 FOOT
18.	1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
19.	1	EACH	UNINTERRUPTIBLE POWER SUPPLY
20.	1	EACH	TRANSCEIVER-FIBER OPTIC
21.	1,161	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
22.	1,486	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
23.	1,126	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
24.	1,395	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
25.	1,595	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
26.	153	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C
27.	684	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
28.	4	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
29.	1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.
30.	1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.
31.	1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.
32.	1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.
33.	16	FOOT	CONCRETE FOUNDATION, TYPE A
34.	4	FOOT	CONCRETE FOUNDATION, TYPE C
35.	44	FOOT	CONCRETE FOUNDATION, TYPE E-36 INCH DIAMETER
36.	6	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
37.	4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
38.	4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
39.	8	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
40.	10	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINIUM
41.	8	EACH	INDUCTIVE LOOP DETECTOR
42.	763	FOOT	DETECTOR LOOP, TYPE I
* 43.	2	EACH	LIGHT DETECTOR
* 44.	1	EACH	LIGHT DETECTOR AMPLIFIER
45.	8	EACH	PEDESTRIAN PUSH-BUTTON
* 46.	262	FOOT	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED

\* 100% COST CITY OF DES PLAINES



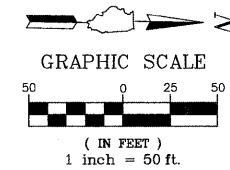
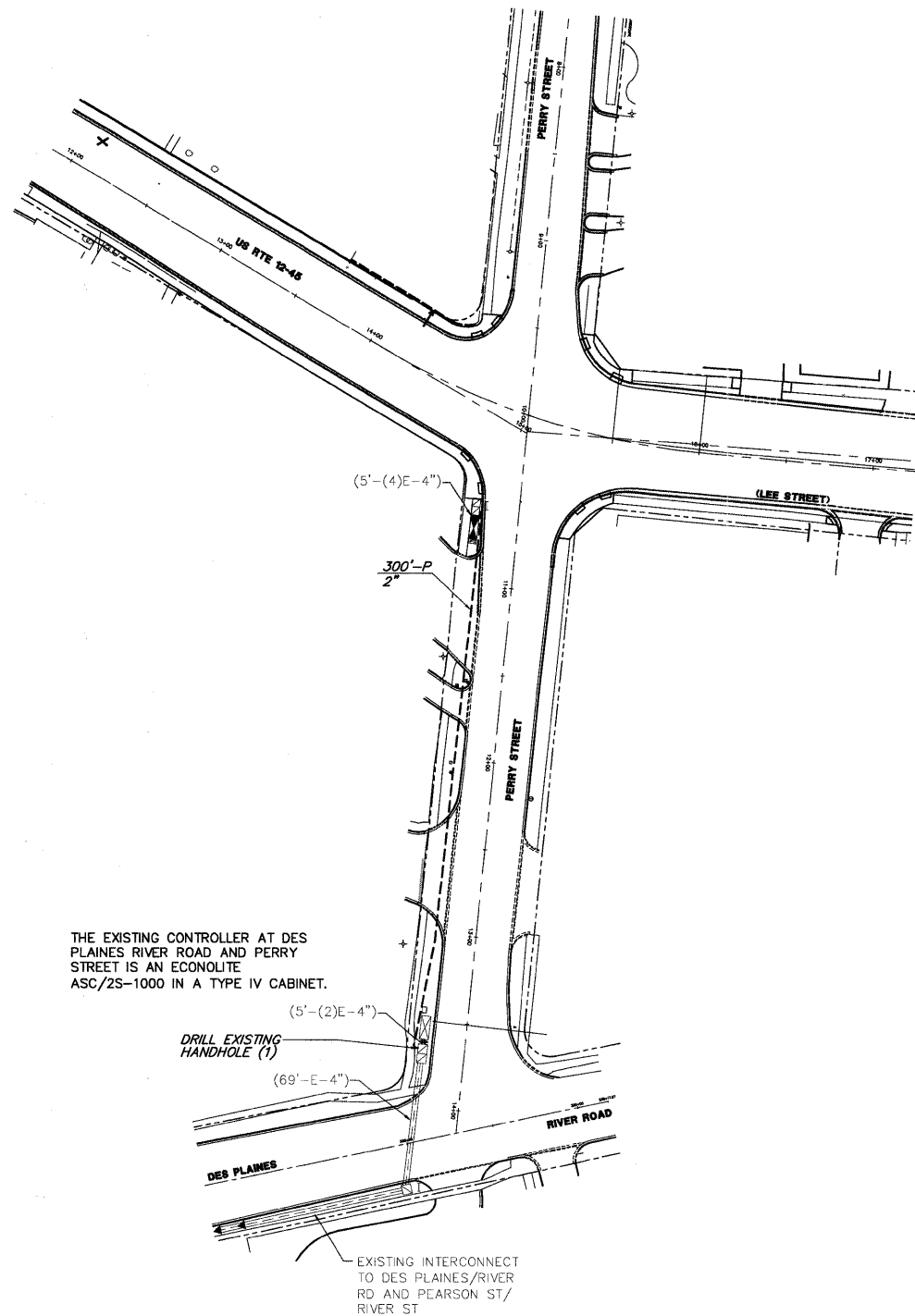
**Restoration of Work Area.** Restoration of the traffic signal work area shall be incidental to the related pay items such as foundation, conduit, handhole, trench and backfill, etc., and no extra compensation shall be allowed. All roadway surfaces such as shoulders, medians, sidewalks, pavement, etc. shall be replaced in kind. All damage to mowed lawns shall be replaced with an approved sod, and all damage to unmowed fields shall be seeded in accordance with Standard Specifications 252 and 250 respectively.

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE	INCAND.	L.E.D.	
SIGNAL (RED)	14	135	17	0.50	119.0
SIGNAL (YELLOW)	14	135	25	0.25	87.5
SIGNAL (GREEN)	14	135	15	0.25	52.5
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	201.0
CONTROLLER	1	100	100	1.00	100.0
FLASHER				0.05	
TOTAL =					579.2

ENERGY COSTS - (BILLED TO: CITY OF DES PLAINES (ADDRESS) 1420 MINER ST. DES PLAINES, IL 60016)  
ENERGY SUPPLY - CONTACT: MIGUEL MASTACHE  
PHONE: (847) 870-2125  
COMPANY: COMED

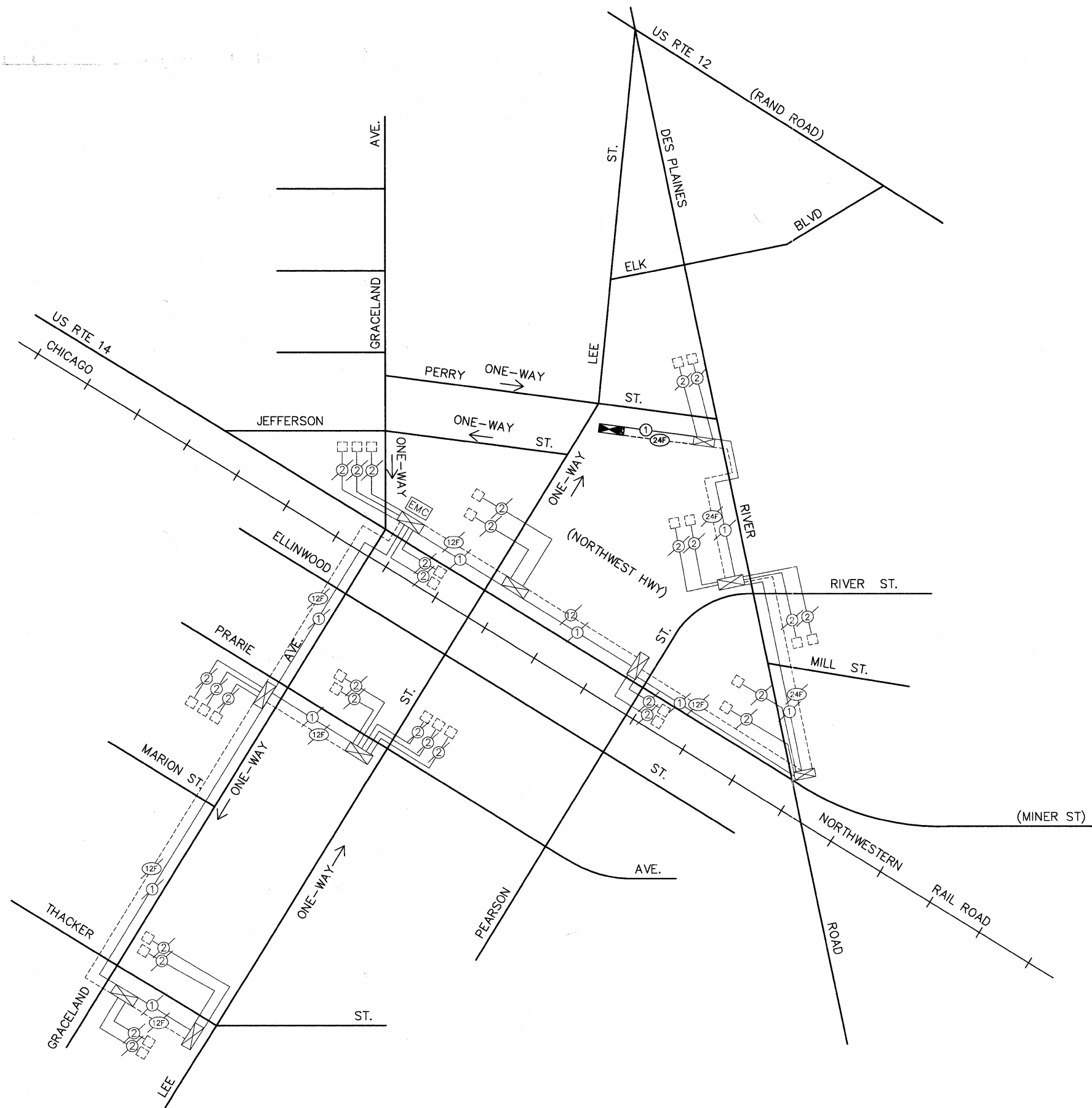
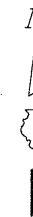
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.





**Restoration of Work Area.** Restoration of the traffic signal work area shall be incidental to the related pay items such as foundation, conduit, handhole, trench and backfill, etc., and no extra compensation shall be allowed. All roadway surfaces such as shoulders, medians, sidewalks, pavement, etc. shall be replaced in kind. All damage to mowed lawns shall be replaced with an approved sod, and all damage to unmowed fields shall be seeded in accordance with Standard Specifications 252 and 250 respectively.

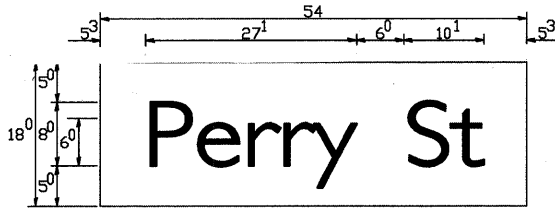
FILE NAME = 3850-805-TR1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - CAD	REVISED -	CITY OF DES PLAINES PROPOSED ROADWAY WIDENING AND TRAFFIC SIGNAL INSTALLATION	INTERCONNECT PLAN - PERRY STREET BETWEEN U.S. RTE 12-45 (LEE ST) AND DES PLAINES RIVER ROAD				FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - CAD	REVISED -		330	10-00213-00-CH	COOK	47	35				
	PLOT SCALE = 1/101	CHECKED - KLB	REVISED -		CONTRACT # 63616				ILLINOIS FED. AID PROJECT				
	PLOT DATE = 8/23/2011	DATE = 8/23/2011	REVISED -		SCALE: 1"=50'	SHEET NO.	OF SHEETS	STA.	TO STA.				



SCHEDULE OF QUANTITIES			
INTERCONNECT - U.S. RTE 12-45 (LEE ST) AT PERRY STREET			
NO.	QUANT.	UNIT	
1.	305	FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL
2.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
3.	350	FOOT	FIBER OPTIC CABLE IN CONDUIT, NO 62.5/125, MM12F SM12F
4.	350	FOOT	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C
5.	1	EACH	DRILL EXISTING HANDHOLE
6.	1	EACH	MODIFY EXISTING CONTROLLER
7.	1	EACH	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2

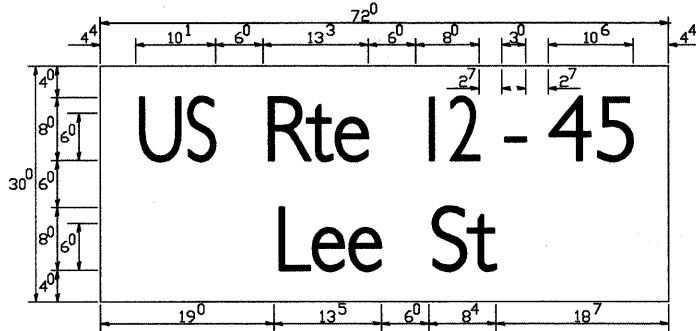
FILE NAME =  3850-805-TR1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - CAD	REVISED -	CITY OF DES PLAINES PROPOSED ROADWAY WIDENING AND TRAFFIC SIGNAL INSTALLATION	INTERCONNECT SCHEMATIC			F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - CAD	REVISED -					330	10-00213-00-CH	COOK	47	36
	PLOT SCALE = 1/101	CHECKED - KLB	REVISED -					CONTRACT # 63616				
	PLOT DATE = 8/23/2011	DATE - 8/23/2011	REVISED -		SCALE: N.A.	SHEET NO. OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT				

# PANEL SIGN DESIGN TYPE 1



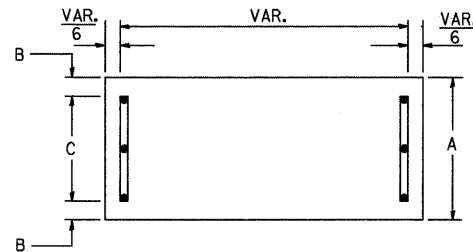
— Sq. M. each  
6.75 Sq. Ft. each  
2 Required  
Design Series D

# PANEL SIGN DESIGN TYPE 2



— Sq. M. each  
15.00 Sq. Ft. each  
2 Required  
Design Series C

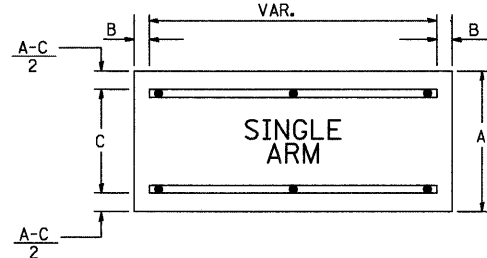
# SUPPORTING CHANNELS



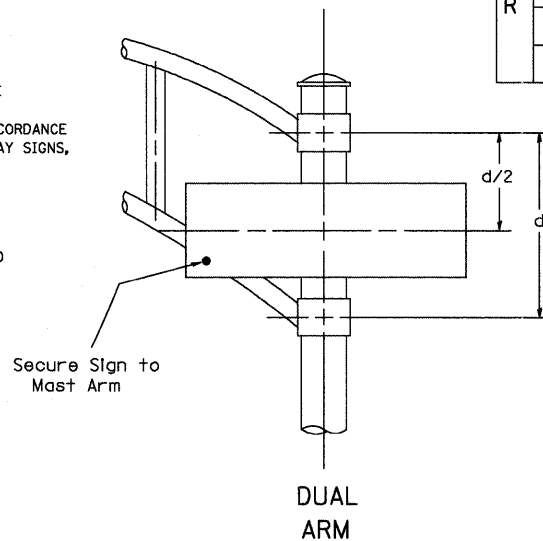
A	B	C
18"	2"	14"

# SINGLE ARM

# SUPPORTING CHANNELS



A	B	C
18"	2"	12"
30"	2"	22"



# DUAL ARM

SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM shall be used. See Note #5.

# Upper Case To Lower Case Spacing Chart 8-6 Inch Series "C & D"

SERIES	SECOND LETTER															
	a	c	d	e	g	o	q	b	h	i	k	l	m	n	p	r
	g	o	q	m	n	p	r	f	w	J	s	t	v	y	x	z
A W X	12	14	14	15	12	14	10	11	14	10	11	14	10	11	12	14
B	14	15	20	21	14	15	11	12	14	15	12	14	12	14	16	17
C E G	14	15	20	21	12	14	10	12	14	12	14	14	15	14	15	15
D O Q R	14	15	20	21	14	15	10	12	14	12	14	14	15	14	15	15
F	05	06	14	15	06	10	05	06	10	06	10	06	10	11	12	12
H I M N	20	21	22	24	20	21	14	15	16	17	16	17	20	21	20	21
J U	20	21	20	21	16	17	14	15	16	17	16	17	16	17	20	21
K L	11	12	16	17	11	12	05	06	11	12	11	12	11	12	12	14
P	12	14	14	15	12	14	05	06	11	12	11	12	12	14	12	14
S	12	14	16	17	12	14	06	10	12	14	12	14	12	14	12	14
T	11	12	16	17	06	10	06	10	11	12	11	12	11	12	12	14
V	06	10	14	15	11	12	06	10	12	14	12	14	12	14	12	14
Y	05	06	14	15	06	10	05	06	05	07	05	06	06	10	11	12
Z	16	17	22	24	16	17	12	14	16	17	16	17	16	17	20	21

# Lower Case To Lower Case Spacing Chart 6 Inch Series "C & D"

SERIES	SECOND LETTER															
	a	c	d	e	g	o	q	b	h	i	k	l	m	n	p	r
	g	o	q	m	n	p	r	f	w	J	s	t	v	y	x	z
ad h g l j	16	17	22	24	16	17	12	14	14	15	14	15	16	17	16	17
l m n q u	16	17	22	24	16	17	12	14	14	15	14	15	16	17	16	17
b f k o p s	12	14	16	17	11	12	05	06	11	12	11	12	12	14	12	14
c e	12	14	16	17	12	14	06	10	12	14	12	14	12	14	12	14
r	06	10	12	14	06	10	03	03	05	06	05	06	06	10	06	10
t z	12	14	16	17	12	14	06	10	11	12	11	12	12	14	12	14
v y	11	12	14	15	11	12	05	06	06	10	06	10	11	12	11	12
w	11	12	14	15	11	12	05	06	11	12	11	12	11	12	12	14
x	12	14	16	17	11	12	05	06	11	12	11	12	11	12	12	14

# Number To Number Spacing Chart 8 Inch Series "C & D"

SERIES	SECOND NUMBER															
	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
0 9	16	17	16	17	14	15	12	14	14	15	16	17	12	14	16	17
1	20	21	20	21	20	21	16	17	14	15	20	21	20	21	14	15
2 3 4	14	15	14	15	14	15	12	14	14	15	14	15	11	12	16	17
5	14	15	14	15	14	15	11	12	11	12	14	15	11	12	14	15
6	16	17	14	15	14	15	12	14	14	15	14	15	11	12	14	15
7	12	14	12	14	14	15	12	15	05	06	12	14	14	15	11	12
8	16	17	16	17	14	15	12	15	12	14	14	15	16	17	12	14

EXAMPLE, 2<sup>3</sup> DENOTES  $\frac{3}{8}$

# UPPER AND LOWER CASE LETTER WIDTHS

L E T T E R S	6 INCH UPPER CASE LETTERS		8 INCH UPPER CASE LETTERS		L E T T E R S	6 INCH LOWER CASE LETTERS	
	SERIES		SERIES			SERIES	
	C	D	C	D		C	D
A	3 <sup>6</sup>	5 <sup>0</sup>	5 <sup>0</sup>	6 <sup>5</sup>	a	3 <sup>5</sup>	4 <sup>2</sup>
B	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	b	3 <sup>5</sup>	4 <sup>2</sup>
C	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	c	3 <sup>5</sup>	4 <sup>1</sup>
D	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	d	3 <sup>5</sup>	4 <sup>2</sup>
E	3 <sup>0</sup>	3 <sup>5</sup>	4 <sup>0</sup>	4 <sup>7</sup>	e	3 <sup>5</sup>	4 <sup>2</sup>
F	3 <sup>0</sup>	3 <sup>5</sup>	4 <sup>0</sup>	4 <sup>7</sup>	f	2 <sup>3</sup>	2 <sup>6</sup>
G	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	g	3 <sup>5</sup>	4 <sup>2</sup>
H	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	h	3 <sup>5</sup>	4 <sup>2</sup>
I	0 <sup>7</sup>	0 <sup>7</sup>	1 <sup>1</sup>	1 <sup>2</sup>	i	1 <sup>1</sup>	1 <sup>1</sup>
J	3 <sup>0</sup>	3 <sup>6</sup>	4 <sup>0</sup>	5 <sup>0</sup>	j	2 <sup>0</sup>	2 <sup>2</sup>
K	3 <sup>2</sup>	4 <sup>1</sup>	4 <sup>3</sup>	5 <sup>4</sup>	k	3 <sup>5</sup>	4 <sup>2</sup>
L	3 <sup>0</sup>	3 <sup>5</sup>	4 <sup>0</sup>	4 <sup>7</sup>	l	1 <sup>1</sup>	1 <sup>1</sup>
M	3 <sup>7</sup>	4 <sup>5</sup>	5 <sup>1</sup>	6 <sup>1</sup>	m	6 <sup>0</sup>	7 <sup>0</sup>
N	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	n	3 <sup>5</sup>	4 <sup>2</sup>
O	3 <sup>4</sup>	4 <sup>2</sup>	4 <sup>5</sup>	5 <sup>5</sup>	o	3 <sup>6</sup>	4 <sup>3</sup>
P	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	p	3 <sup>5</sup>	4 <sup>2</sup>
Q	3 <sup>4</sup>	4 <sup>2</sup>	4 <sup>5</sup>	5 <sup>5</sup>	q	3 <sup>5</sup>	4 <sup>2</sup>
R	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	r	2 <sup>6</sup>	3 <sup>2</sup>
S	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	s	3 <sup>6</sup>	4 <sup>2</sup>
T	3 <sup>0</sup>	3 <sup>5</sup>	4 <sup>0</sup>	4 <sup>7</sup>	t	2 <sup>7</sup>	3 <sup>2</sup>
U	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	u	3 <sup>5</sup>	4 <sup>2</sup>
V	3 <sup>5</sup>	4 <sup>4</sup>	4 <sup>7</sup>	6 <sup>0</sup>	v	4 <sup>2</sup>	4 <sup>7</sup>
W	4 <sup>4</sup>	5 <sup>2</sup>	6 <sup>0</sup>	7 <sup>0</sup>	w	5 <sup>5</sup>	6 <sup>4</sup>
X	3 <sup>4</sup>	4 <sup>0</sup>	4 <sup>5</sup>	5 <sup>3</sup>	x	4 <sup>4</sup>	5 <sup>1</sup>
Y	3 <sup>6</sup>	5 <sup>0</sup>	5 <sup>0</sup>	6 <sup>6</sup>	y	4 <sup>6</sup>	5 <sup>3</sup>
Z	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	z	3 <sup>6</sup>	4 <sup>3</sup>

NUMBER	6 INCH SERIES		8 INCH SERIES	
	C	D	C	D
1	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>5</sup>	2 <sup>0</sup>
2	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
3	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
4	3 <sup>5</sup>	4 <sup>3</sup>	4 <sup>7</sup>	5 <sup>7</sup>
5	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
6	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
7	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
8	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
9	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
0	3 <sup>4</sup>	4 <sup>2</sup>	4 <sup>5</sup>	5 <sup>5</sup>

NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS

# GENERAL NOTES

1. WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.

2. ALL SIGNS SHALL HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED BACKGROUND, TYPE A SHEETING.

3. THE SIGN LENGTH SHOULD BE INCREASED IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHOULD NOT EXCEED 8'-0".

4. ALL BORDERS SHALL BE 3/4" WIDE AND CORNER RADIUS SHALL BE 2-1/4".

5. SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS. LOCAL SUPPLIERS OF THE SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM ARE:

\* J.O. HERBERT CO.  
MIDLOTHIAN, VA.

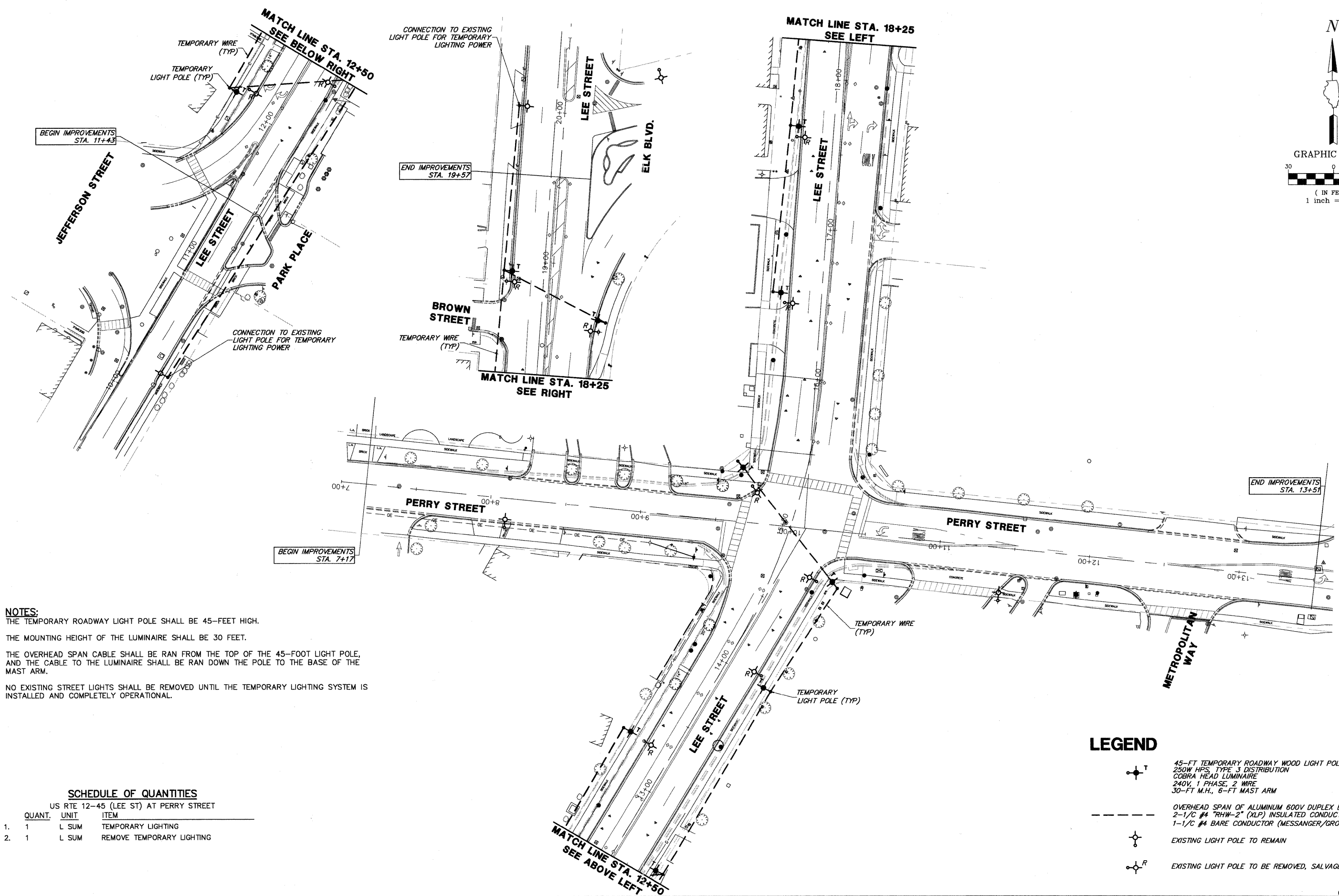
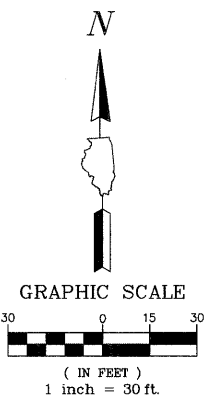
\* WESTERN REMAC INC.  
WOODRIDGE, IL.

# PARTS LISTING:

SIGN CHANNEL PART #HPN053 (MED. CHANNEL)  
SIGN SCREWS 1/4" x 14 x 1" H.W.H. #3

BRACKETS PART #HPN034 (UNIVERSAL)  
CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BACKET OF THE ABOVE PRODUCT.

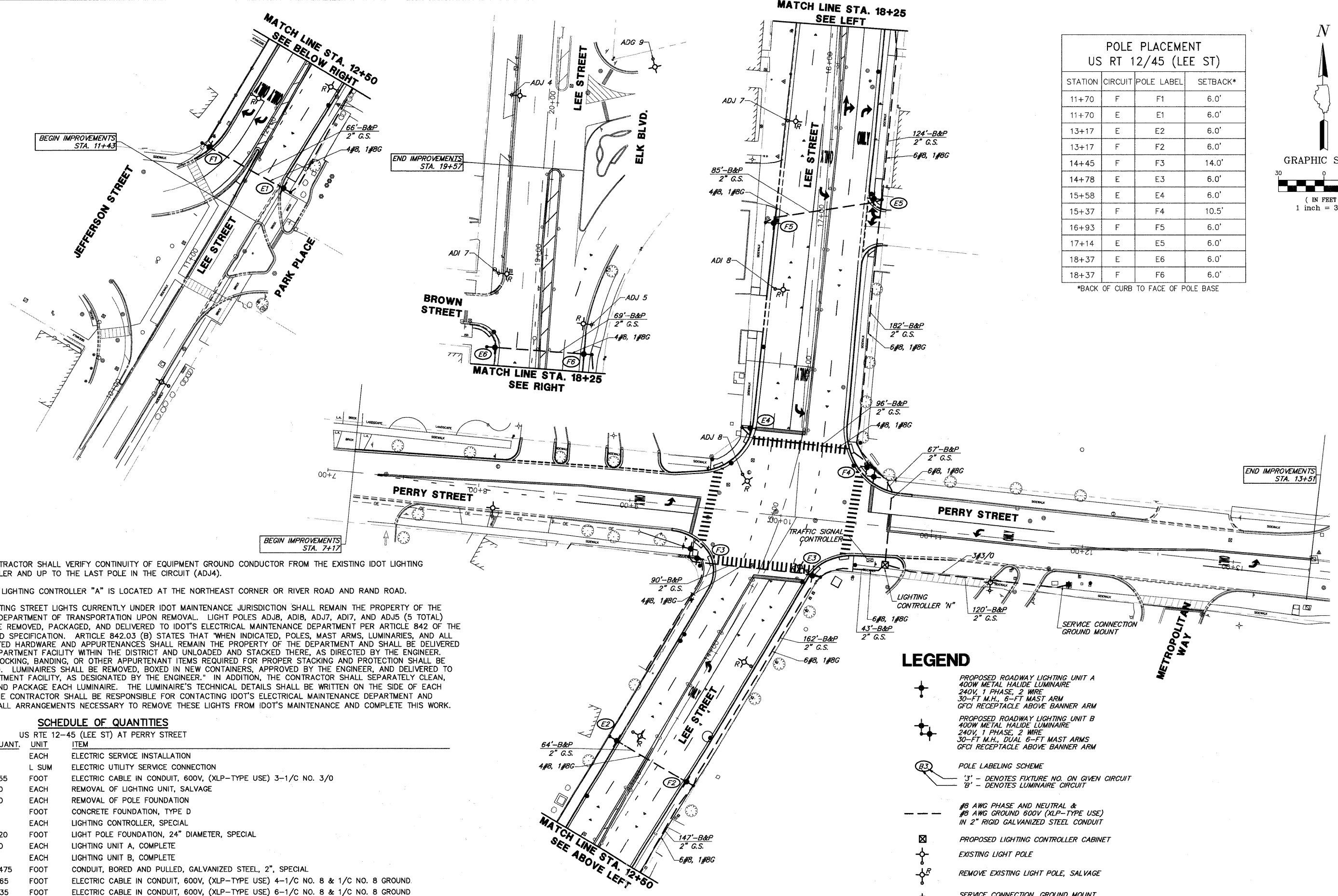


**NOTES:**  
THE TEMPORARY ROADWAY LIGHT POLE SHALL BE 45- FEET HIGH.  
THE MOUNTING HEIGHT OF THE LUMINAIRE SHALL BE 30 FEET.  
THE OVERHEAD SPAN CABLE SHALL BE RAN FROM THE TOP OF THE 45-FOOT LIGHT POLE, AND THE CABLE TO THE LUMINAIRE SHALL BE RAN DOWN THE POLE TO THE BASE OF THE MAST ARM.  
NO EXISTING STREET LIGHTS SHALL BE REMOVED UNTIL THE TEMPORARY LIGHTING SYSTEM IS INSTALLED AND COMPLETELY OPERATIONAL.

SCHEDULE OF QUANTITIES		
US RTE 12-45 (LEE ST) AT PERRY STREET		
QUANT.	UNIT	ITEM
1.	L SUM	TEMPORARY LIGHTING
2.	L SUM	REMOVE TEMPORARY LIGHTING

LEGEND	
	45-FT TEMPORARY ROADWAY WOOD LIGHT POLE 250W HPS, TYPE 3 DISTRIBUTION COBRA HEAD LUMINAIRE 240V, 1 PHASE, 2 WIRE 30-FT M.H., 6-FT MAST ARM
	OVERHEAD SPAN OF ALUMINUM 600V DUPLEX DROP CABLE, 2-1/C #4 "RHW-2" (XLP) INSULATED CONDUCTORS & 1-1/C #4 BARE CONDUCTOR (MESSANGER/GROUND)
	EXISTING LIGHT POLE TO REMAIN
	EXISTING LIGHT POLE TO BE REMOVED, SALVAGED

FILE NAME = 3850-B05-EL.dwg		USER NAME = ZACH WALLSTEN		DESIGNED - AJP	REVISED -	CITY OF DES PLAINES PROPOSED ROADWAY WIDENING AND TRAFFIC SIGNAL INSTALLATION		TEMPORARY LIGHTING PLAN		FAP RTE. 330	SECTION 10-00213-00-CH	COUNTY COOK	TOTAL SHEETS 47	SHEET NO. 38
PLOT SCALE = 1"=30'		PLOT DATE = 6/22/2011		DRAWN - JDJ	REVISED -					SCALE: 1"=30'		SHEET NO. OF SHEETS		STA. TO STA.
				CHECKED - BLS	REVISED -									CONTRACT # 63616
				DATE - 8/18/2011	REVISED -									ILLINOIS FED. AID PROJECT



POLE PLACEMENT US RT 12/45 (LEE ST)			
STATION	CIRCUIT	POLE LABEL	SETBACK*
11+70	F	F1	6.0'
11+70	E	E1	6.0'
13+17	E	E2	6.0'
13+17	F	F2	6.0'
14+45	F	F3	14.0'
14+78	E	E3	6.0'
15+58	E	E4	6.0'
15+37	F	F4	10.5'
16+93	F	F5	6.0'
17+14	E	E5	6.0'
18+37	E	E6	6.0'
18+37	F	F6	6.0'

\*BACK OF CURB TO FACE OF POLE BASE

**NOTES:**  
THE CONTRACTOR SHALL VERIFY CONTINUITY OF EQUIPMENT GROUND CONDUCTOR FROM THE EXISTING IDOT LIGHTING CONTROLLER AND UP TO THE LAST POLE IN THE CIRCUIT (ADJ4).  
EXISTING LIGHTING CONTROLLER "A" IS LOCATED AT THE NORTHEAST CORNER OF RIVER ROAD AND RAND ROAD.  
THE EXISTING STREET LIGHTS CURRENTLY UNDER IDOT MAINTENANCE JURISDICTION SHALL REMAIN THE PROPERTY OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION UPON REMOVAL. LIGHT POLES ADJ8, ADJ8, ADJ7, ADJ7, AND ADJ5 (5 TOTAL) SHALL BE REMOVED, PACKAGED, AND DELIVERED TO IDOT'S ELECTRICAL MAINTENANCE DEPARTMENT PER ARTICLE 842 OF THE STANDARD SPECIFICATION. ARTICLE 842.03 (B) STATES THAT "WHEN INDICATED, POLES, MAST ARMS, LUMINAIRES, AND ALL ASSOCIATED HARDWARE AND APPURTENANCES SHALL REMAIN THE PROPERTY OF THE DEPARTMENT AND SHALL BE DELIVERED TO A DEPARTMENT FACILITY WITHIN THE DISTRICT AND UNLOADED AND STACKED THERE, AS DIRECTED BY THE ENGINEER. WOOD BLOCKING, BANDING, OR OTHER APPURTENANT ITEMS REQUIRED FOR PROPER STACKING AND PROTECTION SHALL BE INCLUDED. LUMINAIRES SHALL BE REMOVED, BOXED IN NEW CONTAINERS, APPROVED BY THE ENGINEER, AND DELIVERED TO A DEPARTMENT FACILITY, AS DESIGNATED BY THE ENGINEER." IN ADDITION, THE CONTRACTOR SHALL SEPARATELY CLEAN, WRAP, AND PACKAGE EACH LUMINAIRE. THE LUMINAIRE'S TECHNICAL DETAILS SHALL BE WRITTEN ON THE SIDE OF EACH BOX. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING IDOT'S ELECTRICAL MAINTENANCE DEPARTMENT AND MAKING ALL ARRANGEMENTS NECESSARY TO REMOVE THESE LIGHTS FROM IDOT'S MAINTENANCE AND COMPLETE THIS WORK.

**SCHEDULE OF QUANTITIES**

US RTE 12-45 (LEE ST) AT PERRY STREET

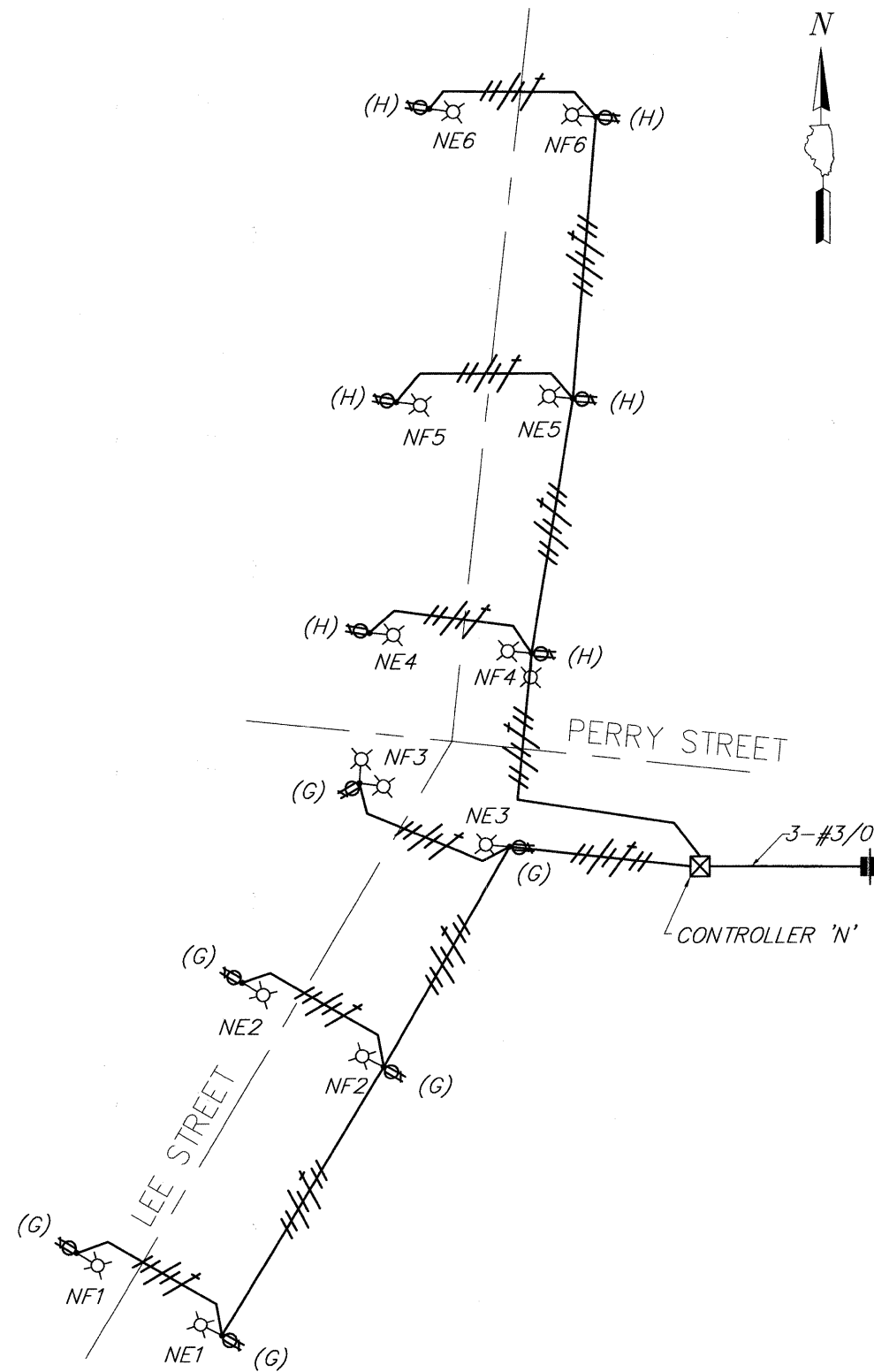
QUANT.	UNIT	ITEM
1.	EACH	ELECTRIC SERVICE INSTALLATION
2.	L SUM	ELECTRIC UTILITY SERVICE CONNECTION
3.	155	FOOT ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE) 3-1/C NO. 3/0
4.	10	EACH REMOVAL OF LIGHTING UNIT, SALVAGE
5.	10	EACH REMOVAL OF POLE FOUNDATION
6.	4	FOOT CONCRETE FOUNDATION, TYPE D
7.	1	EACH LIGHTING CONTROLLER, SPECIAL
8.	120	FOOT LIGHT POLE FOUNDATION, 24" DIAMETER, SPECIAL
9.	10	EACH LIGHTING UNIT A, COMPLETE
10.	2	EACH LIGHTING UNIT B, COMPLETE
11.	1475	FOOT CONDUIT, BORED AND PULLED, GALVANIZED STEEL, 2", SPECIAL
12.	565	FOOT ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE) 4-1/C NO. 8 & 1/C NO. 8 GROUND.
13.	835	FOOT ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE) 6-1/C NO. 8 & 1/C NO. 8 GROUND

**LEGEND**

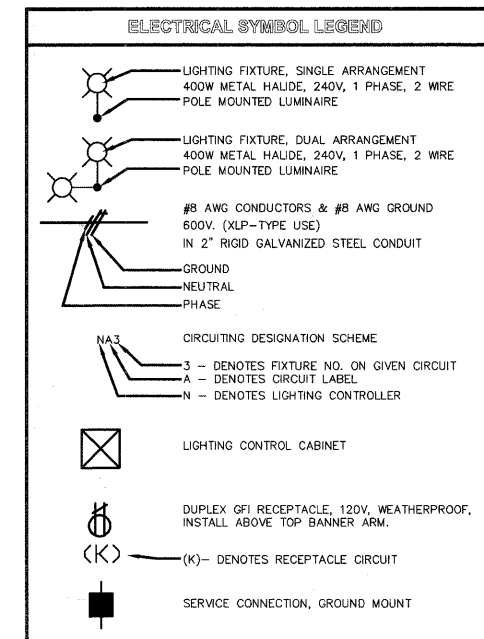
- PROPOSED ROADWAY LIGHTING UNIT A  
400W METAL HALIDE LUMINAIRE  
240V, 1 PHASE, 2 WIRE  
30-FT M.H., 6-FT MAST ARM  
GFCI RECEPTACLE ABOVE BANNER ARM
- PROPOSED ROADWAY LIGHTING UNIT B  
400W METAL HALIDE LUMINAIRE  
240V, 1 PHASE, 2 WIRE  
30-FT M.H., DUAL 6-FT MAST ARMS  
GFCI RECEPTACLE ABOVE BANNER ARM
- POLE LABELING SCHEME  
'3' - DENOTES FIXTURE NO. ON GIVEN CIRCUIT  
'B' - DENOTES LUMINAIRE CIRCUIT
- #8 AWG PHASE AND NEUTRAL &  
#8 AWG GROUND 600V (XLP-TYPE USE)  
IN 2" RIGID GALVANIZED STEEL CONDUIT
- PROPOSED LIGHTING CONTROLLER CABINET
- EXISTING LIGHT POLE
- REMOVE EXISTING LIGHT POLE, SALVAGE
- SERVICE CONNECTION, GROUND MOUNT.  
120/240/1 PHASE/3 WIRE

FILE NAME = 3850-B05-EL.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - AJP	REVISED -	CITY OF DES PLAINES PROPOSED ROADWAY WIDENING AND TRAFFIC SIGNAL INSTALLATION		LIGHTING PLAN		F.A.P. RTE. 330	SECTION 10-00213-00-CH	COUNTY COOK	TOTAL SHEETS 47	SHEET NO. 39
PLOT SCALE = 1/8"=1'-0"		DRAWN - JDJ	REVISED -	SCALE 1"=30'		SHEET NO. OF SHEETS		STA. TO STA.		CONTRACT # 63616		
PLOT DATE = 6/22/2011		CHECKED - BLS	REVISED -	DATE - 8/18/2011						ILLINOIS FED. AID PROJECT		





LOAD TABULATION AND VOLTAGE DROP FOR LIGHTING CONTROLLER "N"			
CIRCUIT	VOLT AMPS	AMPS	HIGHEST VOLTAGE DROP ON CIRCUIT
E LTG	2700	11.25 @ 240V	0.9% (E6)
F LTG	3600	15 @ 240V	0.76% (F6)
G RECEPTS	1080	9 @ 120V	2.5% (F1)
H RECEPTS	1080	9 @ 120V	2.8% (F6)
TOTAL	8460	44.25	



1 WIRING DIAGRAM - CONTROLLER 'N'

FILE NAME = 3850-805-EL.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - AJP	REVISED -	<b>CITY OF DES PLAINES</b> <b>PROPOSED ROADWAY WIDENING AND</b> <b>TRAFFIC SIGNAL INSTALLATION</b>	<b>LIGHTING CONTROLLER</b>					F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - JDJ	REVISED -							330	10-00213-00-CH	COOK	47	41
	PLOT SCALE = 1TO1	CHECKED - BLS	REVISED -		CONTRACT #:					63616				
	PLOT DATE = 6/22/2011	DATE - 8/18/2011	REVISED -		SCALE: N.T.S.	SHEET NO.	OF SHEETS	STA.	TO STA.	ILLINOIS	FED. AID	PROJECT		

GENERAL LIGHTING NOTES:

THE OWNER OF THE PROPOSED LIGHTING SYSTEM SHALL BE THE CITY OF DES PLAINES.

ALL WORK SHALL CONFORM TO THE NATIONAL ELECTRICAL CODE, THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND ANY APPLICABLE LOCAL CODES. IF DISCREPANCIES EXIST THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER TO DETERMINE THE PROPER COURSE OF ACTION.

ALL PAY ITEMS REFER TO IDOT'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.

THE EXACT LOCATIONS OF ALL UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR BEFORE 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.

CONDUIT SHALL BE POSITIONED IN THE FIELD TO AVOID CONFLICT WITH TREES, BUSHES, DRAINS AND OTHER UTILITIES.

CARE SHALL BE TAKEN 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 VILLAGE.

ALL PROPOSED LIGHT POLES SHALL SATISFY IDOT'S MINIMUM SETBACK REQUIREMENTS.

THE CONTRACTOR SHALL MARK THE PROPOSED LOCATIONS OF ALL LIGHT POLES AND CONTROLLERS FOR VERIFICATION AND APPROVAL BY THE ENGINEER, PRIOR TO STARTING WORK.

UNLESS OTHERWISE NOTED, ALL CONDUIT PROVIDED BY THIS CONTRACT SHALL BE 2" GALVANIZED STEEL CONDUIT CONFORMING TO SECTION 1088.01(d) OF IDOT'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

NO MATERIALS SHALL BE DELIVERED TO THE JOB SITE UNTIL A STORAGE LOCATION AND ALL PERTINENT SUBMITTALS HAVE BEEN APPROVED BY THE ENGINEER.

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 SHALL REMAIN WITH THE CONTRACTOR.

CONTRACTOR SHALL COORDINATE ALL SERVICE CONNECTIONS WITH THE LOCAL UTILITY COMPANY.

THE ELECTRICAL SUPPLY SHALL BE A PROPERLY GROUNDED AC SYSTEM.

ALL FOUNDATIONS SHALL BE EQUIPPED WITH A GROUNDING ROD, AS SPECIFIED.

GROUNDING CONNECTIONS AT THE FOUNDATIONS SHALL BE EXOTHERMICALLY WELDED, AS SPECIFIED, AND SHALL BE INSPECTED AND APPROVED BY THE RESIDENT ENGINEER PRIOR TO FRAMING LIGHT POLE.

THE GROUNDING CONDUCTOR SHALL BE INSULATED.

THE GROUNDING CONDUCTOR SHALL EXTEND CONTINUOUSLY WITH ALL CIRCUIT CONDUCTORS, IN THE SAME RACEWAY, AND SHALL BE BONDED TO THE SYSTEM GROUND AT THE SERVICE DISCONNECT.

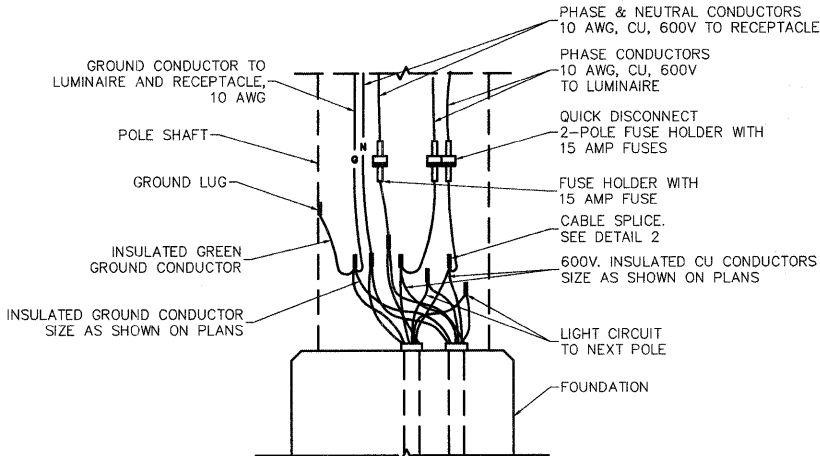
THE GROUNDING CONDUCTOR SHALL BE SPLICED AND BONDED AT EACH POLE.

ALL CONDUCTORS AND EQUIPMENT SHALL HAVE PROPER OVERCURRENT PROTECTION. OVERCURRENT PROTECTION SHALL BE PROVIDED FOR EACH LUMINAIRE AND ITS ASSOCIATED BRANCH CIRCUIT THROUGH THE USE OF POLE BASE FUSING, OR OTHER MEANS AS APPROVED BY THE ENGINEER.

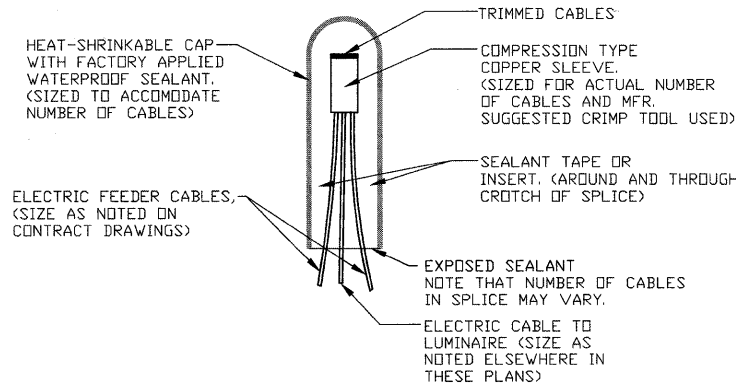
NO POLES SHALL BE ERECTED UNTIL THE RESPECTIVE FOUNDATIONS HAVE CURED, AS APPROVED BY THE ENGINEER.

POLES WITH MAST ARMS SHALL NOT BE ERECTED AND LEFT TO STAND WITHOUT LUMINAIRES, AND THE PROPOSED LIGHT POLES WILL NOT BE CONSIDERED COMPLETE WITHOUT THE LUMINAIRES INSTALLED.

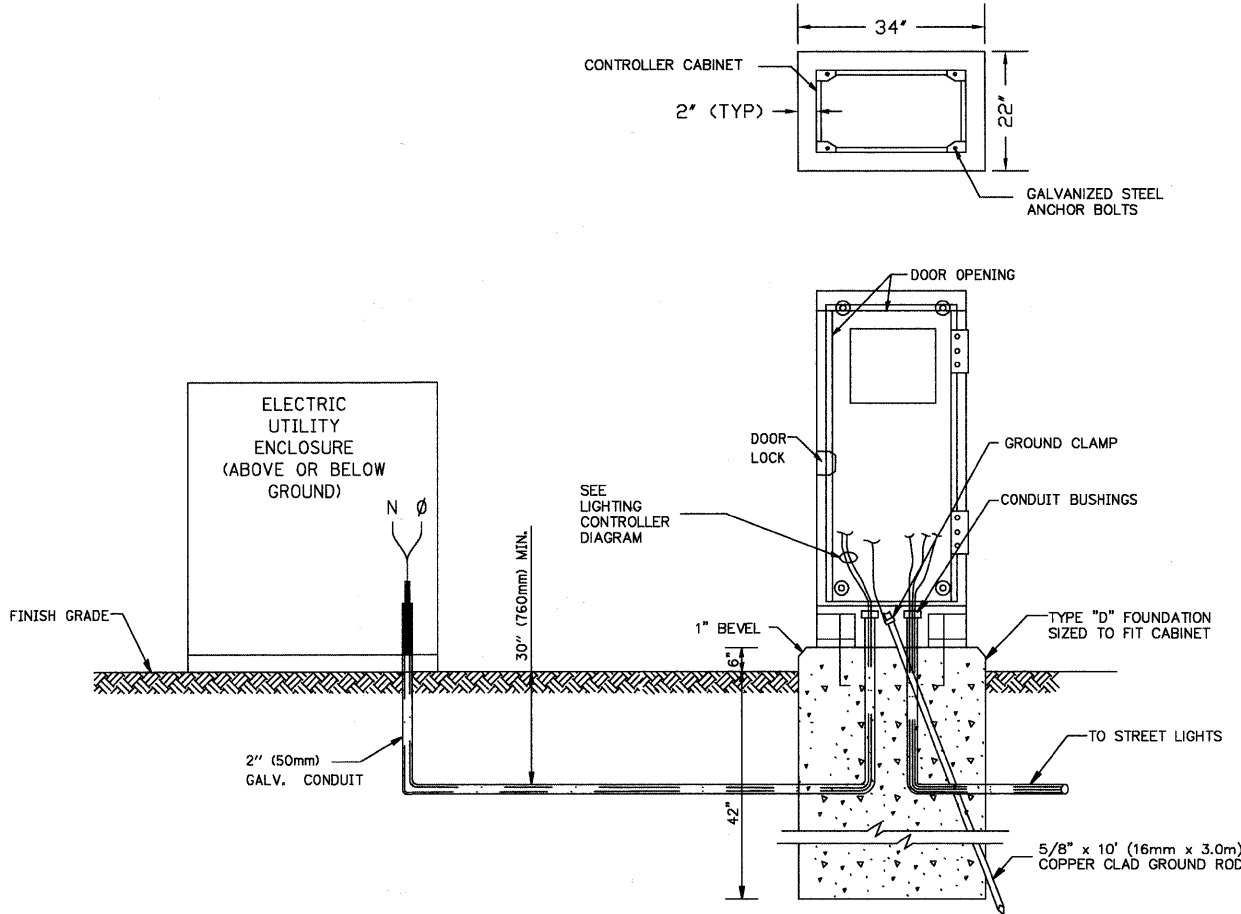
UPON COMPLETION OF THE PERMANENT LIGHTING SYSTEM, THE CONTRACTOR SHALL REQUEST IN WRITING A PREFINAL INSPECTION. A MINIMUM OF THREE DAYS NOTICE SHALL BE GIVEN TO THE CITY OF DES PLAINES. UPON COMPLETION OF INSPECTION AND APPROVAL OF WORK, THE CITY SHALL TAKE MAINTENANCE OF THE LIGHTING SYSTEM.



1 POLE BASE WIRING DIAGRAM  
NO SCALE



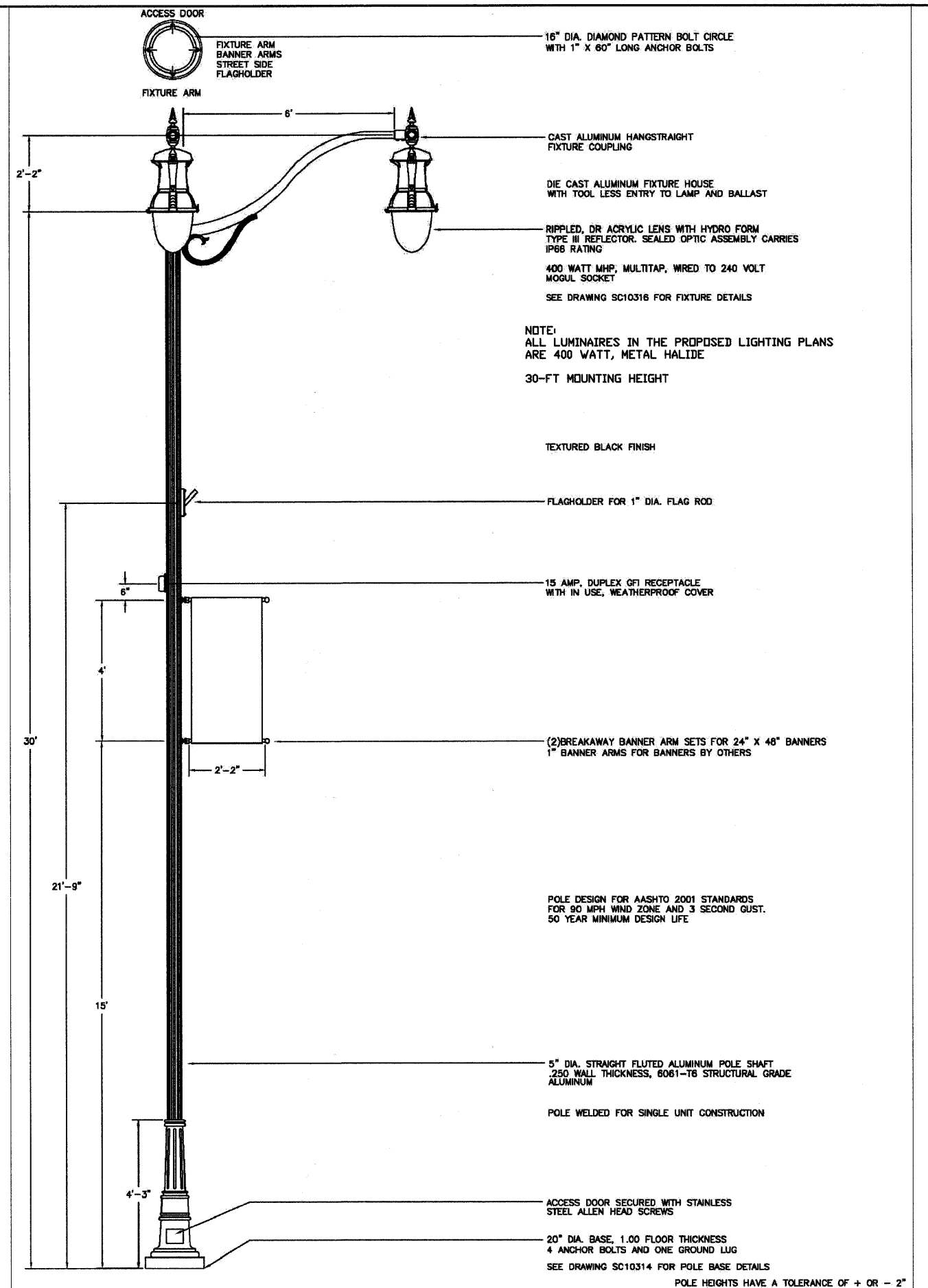
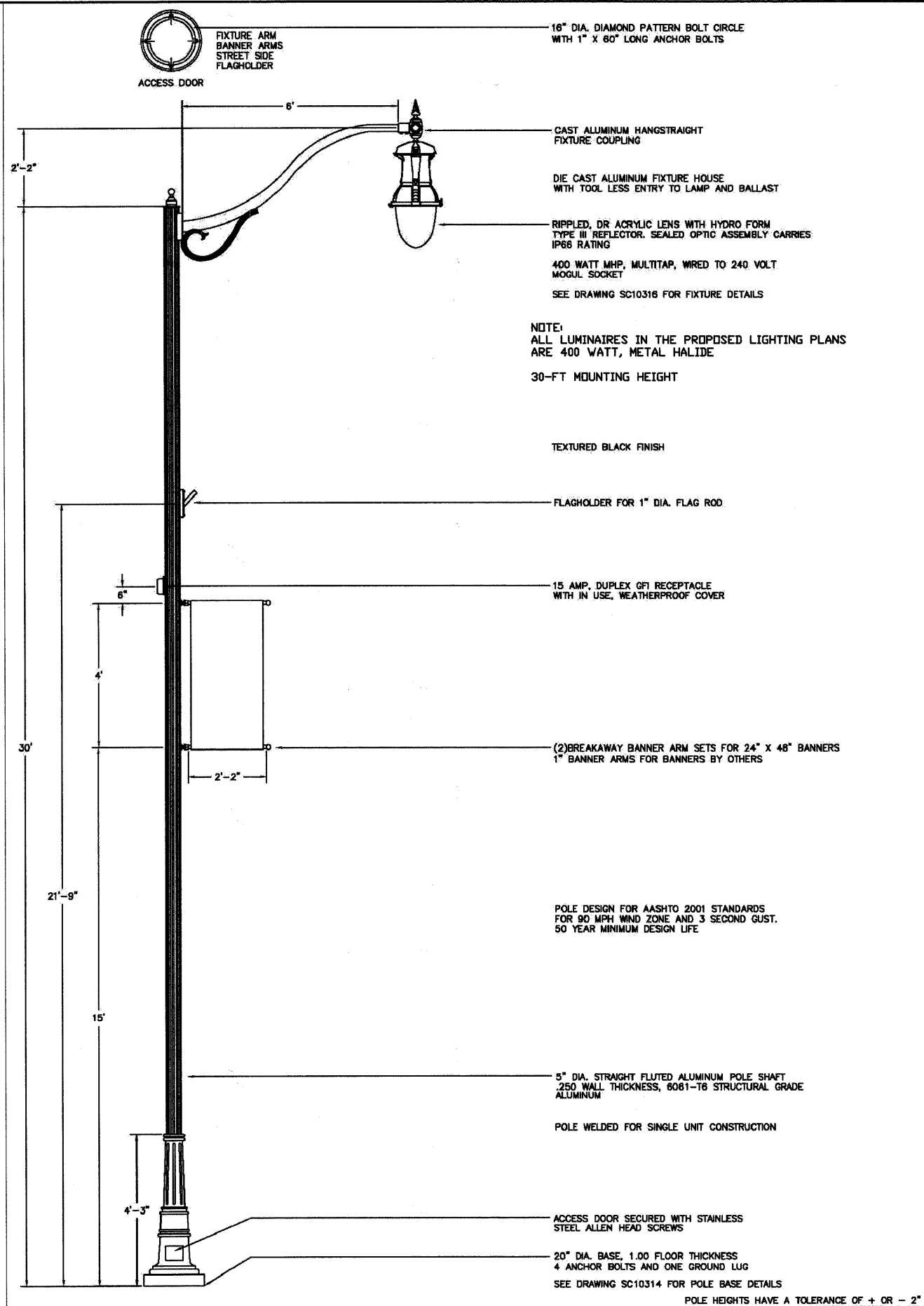
2 SPLICING ELECTRIC CABLES  
BASIC MATERIALS AND METHODS  
NO SCALE



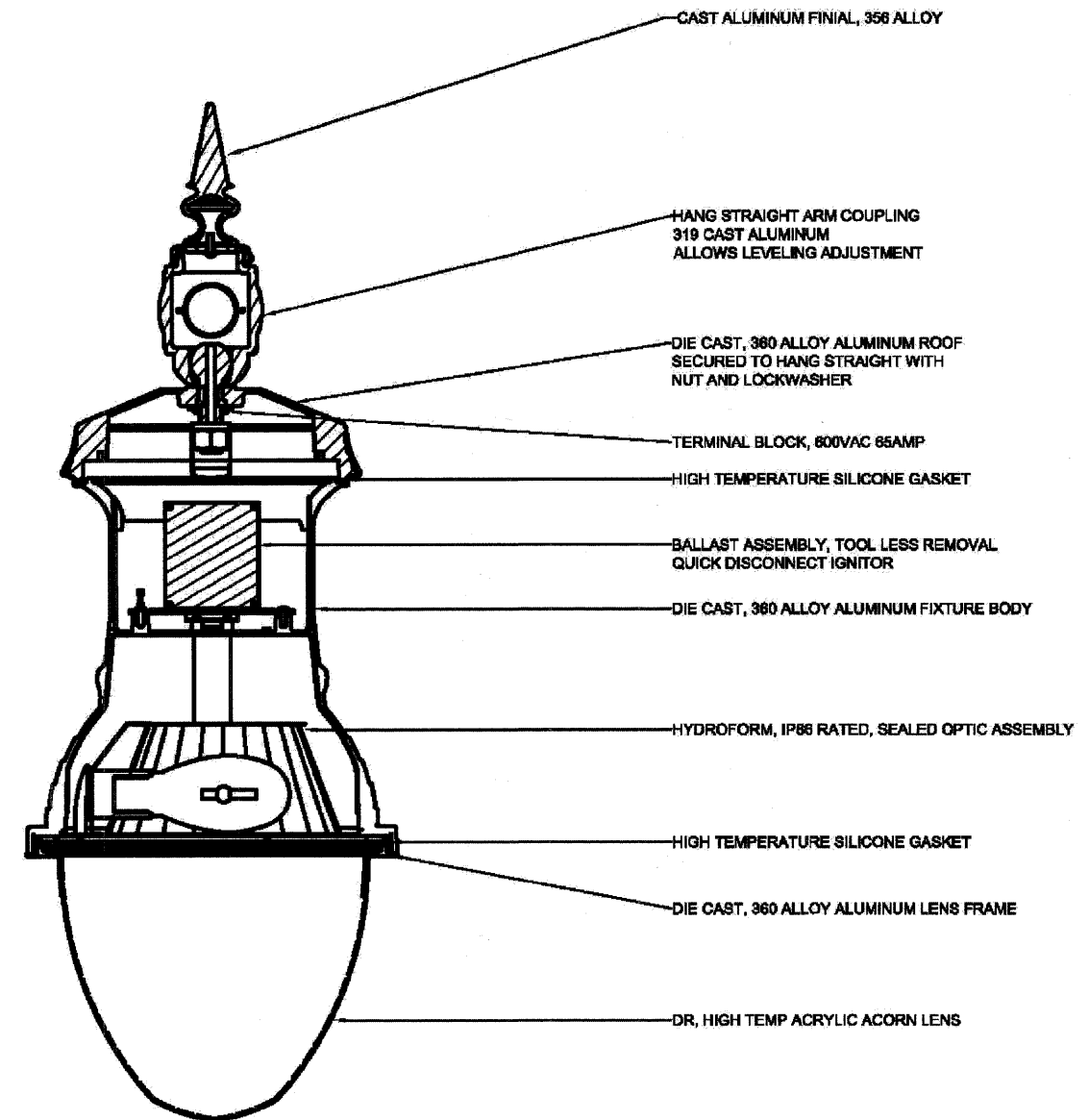
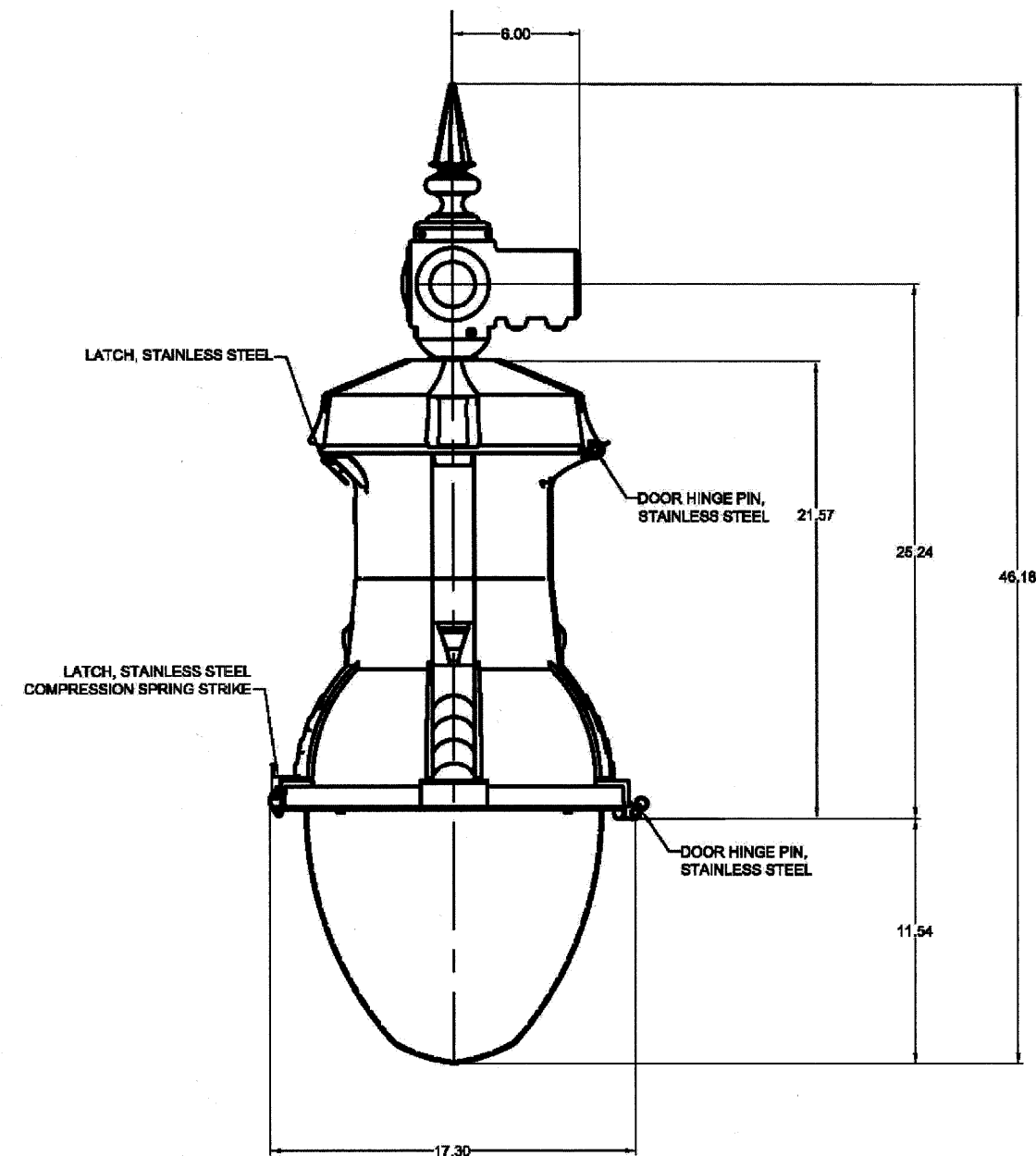
3 SERVICE INSTALLATION - GROUND MOUNT  
NO SCALE

NOTE:  
A 48"x48"x4" PCC WORK PAD SHALL BE PROVIDED IN FRONT OF CONTROLLER CABINET UNLESS CABINET IS POSITIONED ADJACENT TO SIDEWALK.

FILE NAME =  3850-805-EL.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - AJP	REVISED -	CITY OF DES PLAINES PROPOSED ROADWAY WIDENING AND TRAFFIC SIGNAL INSTALLATION	ELECTRICAL NOTES				F&P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - JDJ	REVISED -						330	10-00213-00-CH	COOK	47	42
	PLOT SCALE = 1/01	CHECKED - BLS	REVISED -				CONTRACT #:			63616			
	PLOT DATE = 6/22/2011	DATE - 8/18/2011	REVISED -		SCALE: N.T.S.		SHEET NO. OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT				



FILE NAME = 3850-805-EL.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - AJP	REVISED -	CITY OF DES PLAINES PROPOSED ROADWAY WIDENING AND TRAFFIC SIGNAL INSTALLATION	LIGHTING PLAN DETAILS	FAP RTE. 330	SECTION 10-00213-00-CH	COUNTY COOK	GHA #3850.805	
		DRAWN - JDJ	REVISED -						TOTAL SHEETS 47	SHEET NO. 43
PLOT SCALE = 1/101	PLOT DATE = 6/22/2011	CHECKED - BLS	REVISED -	SCALE N.T.S.	SHEET NO. OF SHEETS	STA. TO STA.	CONTRACT #	ILLINOIS FED. AID PROJECT	63616	
		DATE - 8/18/2011	REVISED -							



NOTE:  
ALL LUMINAIRES IN THE PROPOSED LIGHTING PLANS ARE 400 WATT, METAL HALIDE

POLE HEIGHTS HAVE  
A TOLERANCE OF  
+ OR - 2"

1/4/2010

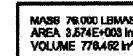
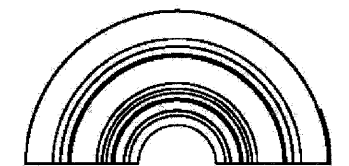
1:8

DRAWING NUMBER

SC10316

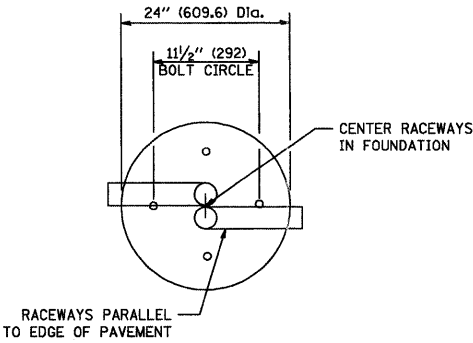
FILE NAME = 3850-805-EL.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - AJP	REVISED -	CITY OF DES PLAINES PROPOSED ROADWAY WIDENING AND TRAFFIC SIGNAL INSTALLATION	LIGHTING PLAN DETAILS				FAP		SECTION		COUNTY	TOTAL	SHEET
		DRAWN - JDJ	REVISED -						RTE				SHEETS	NO.	
	PLOT SCALE = 1/101	CHECKED - BLS	REVISED -		330	10-00213-00-CH	COOK	47	44						
	PLOT DATE = 6/22/2011	DATE - 8/18/2011	REVISED -				CONTRACT #:		63616						
					SCALE	N.T.S.	SHEET NO.	OF	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT			



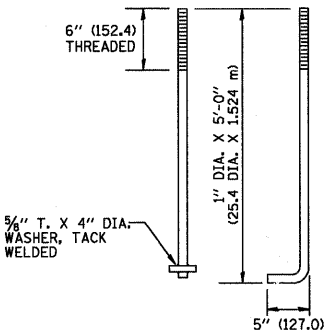


LIGHT POLE FOUNDATION DEPTH TABLE  
30 FT. (9.144 m) TO 35 FT. (10.668 m) MOUNTING HEIGHT

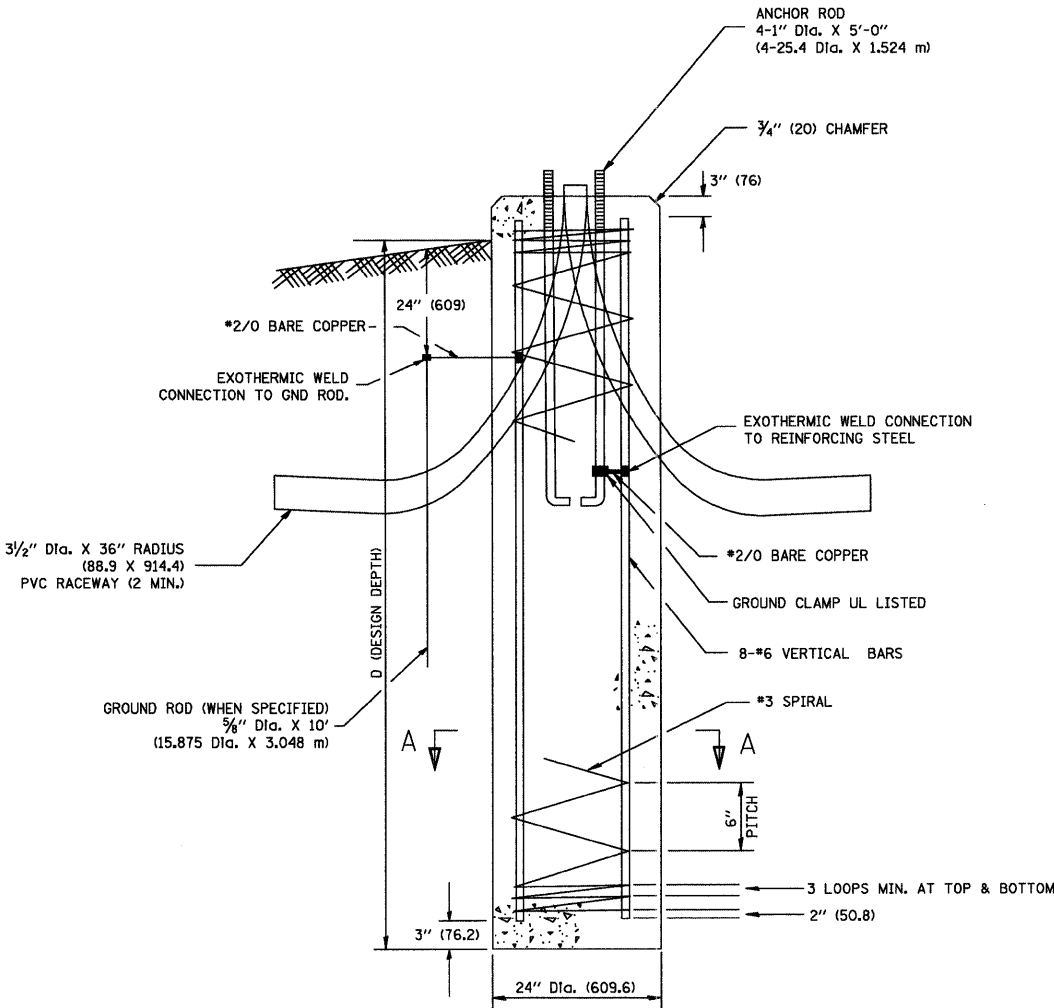
SOIL CONDITIONS	DESIGN DEPTH "D" OF FOUNDATION	
	SINGLE ARM POLE	TWIN ARM POLE
SOFT CLAY Qu = 0.375 TON/SQ. FT.	11'-0" (3.35 m)	12'-8" (3.85 m)
MEDIUM CLAY Qu = 0.75 TON/SQ.FT	9'-0" (2.74 m)	14'-10" (4.52 m)
STIFF CLAY Qu = 1.50 TON/SQ. FT.	7'-6" (2.29 m)	8'-7" (2.61 m)
LOOSE SAND φ = 34°	9'-6" (2.90 m)	10'-7" (3.22 m)
MEDIUM SAND φ = 37.5°	9'-0" (2.74 m)	9'-10" (2.99 m)
DENSE SAND φ = 40°	8'-3" (2.51 m)	9'-7" (2.91 m)



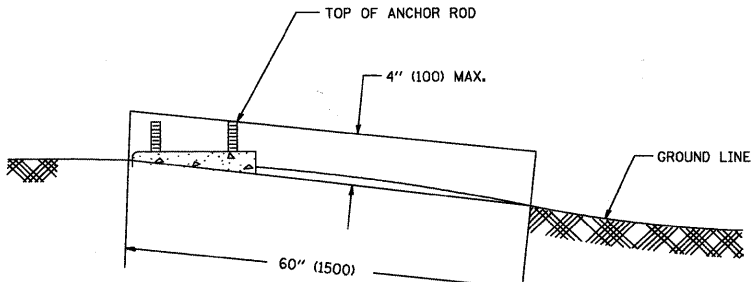
TOP VIEW



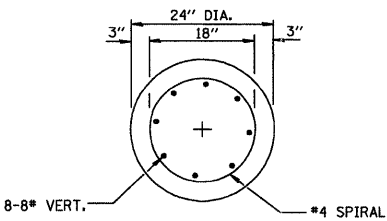
ANCHOR BOLT DETAIL



FOUNDATION DETAIL



FOUNDATION EXTENSION DETAIL

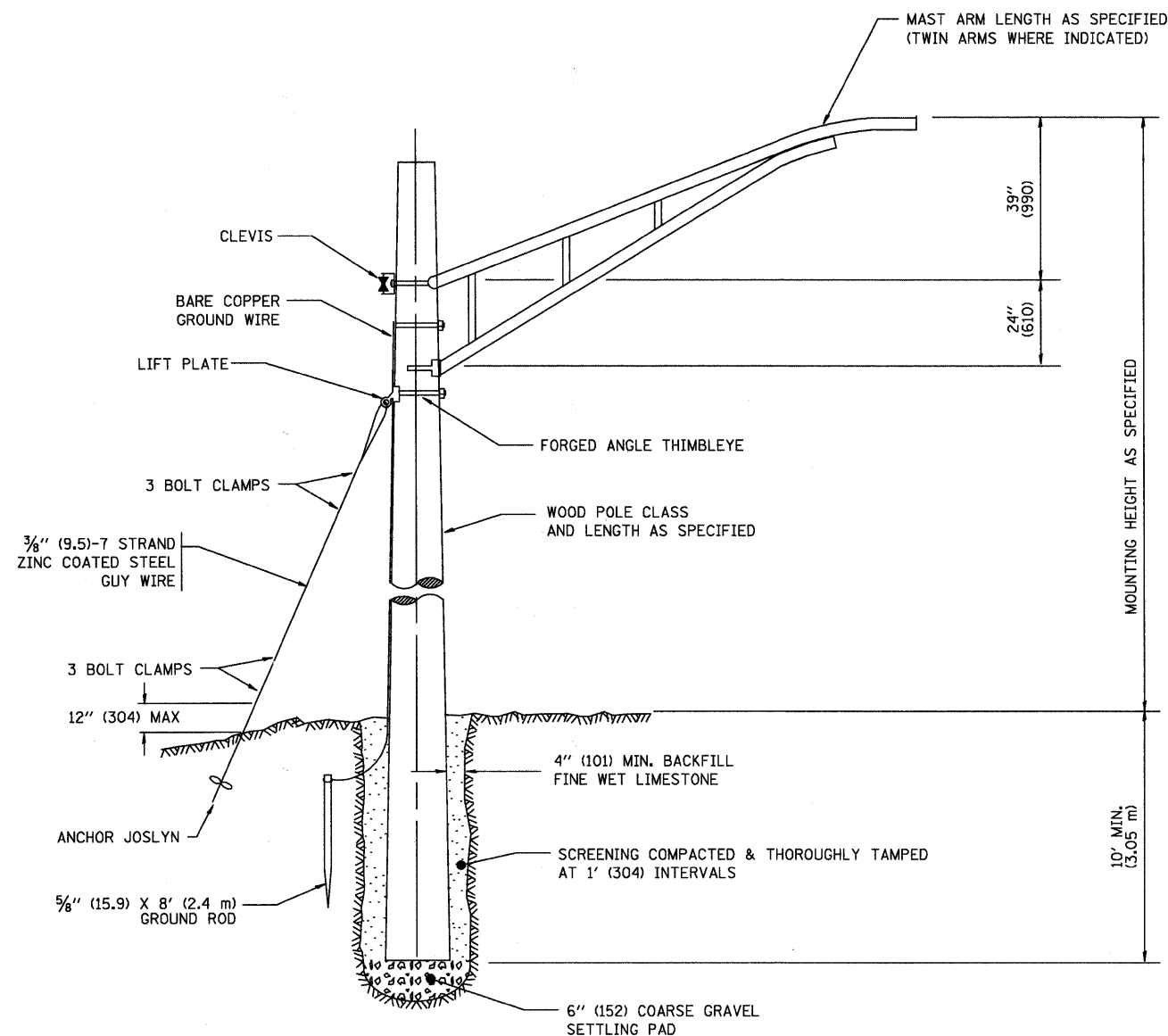


SECTION A-A

NOTES:  
REFER TO MANUFACTURE'S SPECIFICATIONS FOR  
BOLT CIRCLE DIAMETER

NOTES

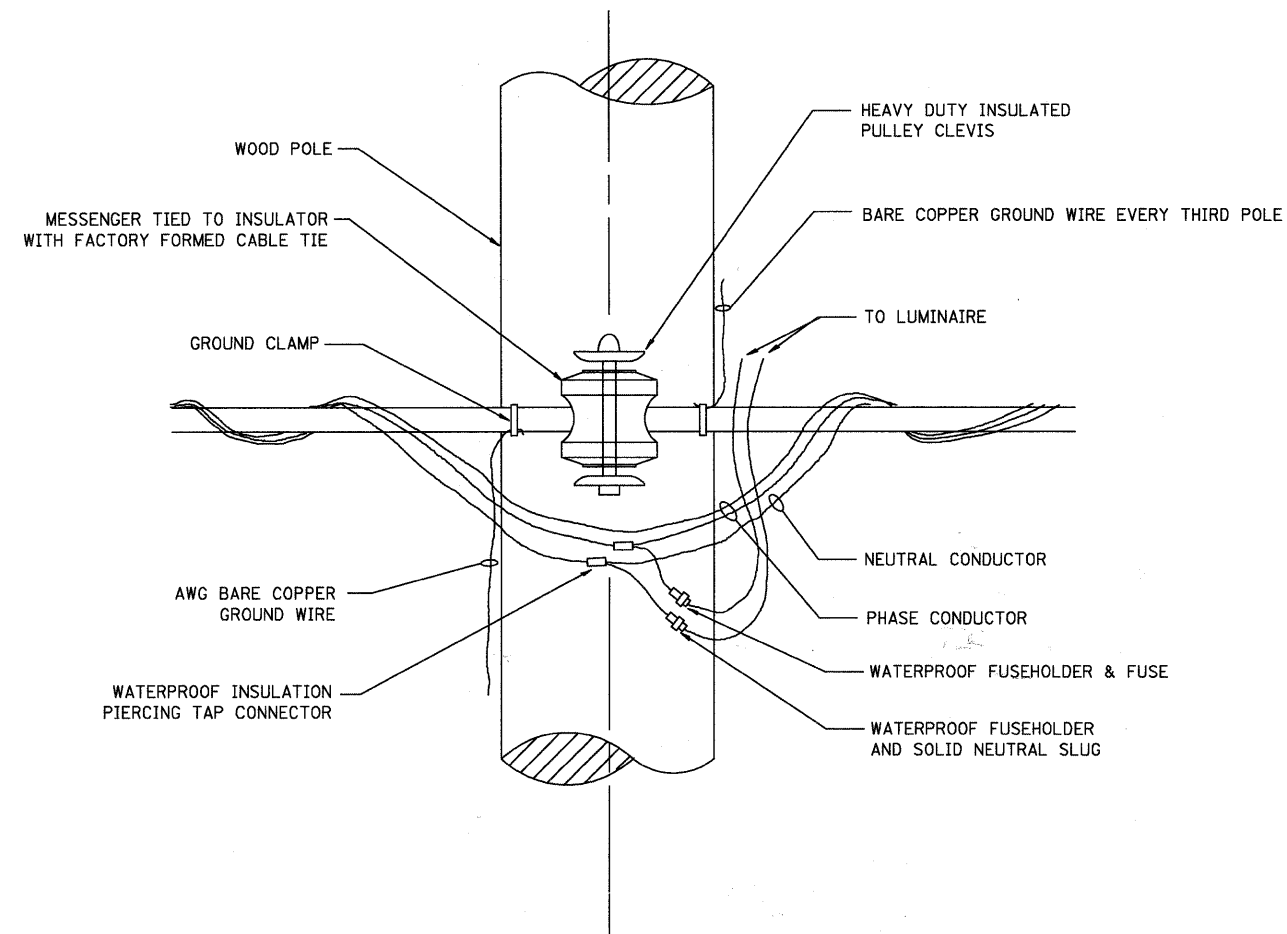
- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED.
- THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 4 IN. (100 mm) ABOVE THE FINISHED GRADE WITHIN A 60 IN. (1.5 m) CHORD ACROSS THE FOUNDATION, 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 DH, 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 UM(6 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.



TEMPORARY LIGHT POLE DETAIL

**NOTES:**

1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED



TEMPORARY LIGHT POLE ATTACHMENT DETAIL

**NOTES:**

- A GROUNDING ROD SHALL BE INSTALLED AT EVERY TEMPORARY LIGHT POLE.
- THE TEMPORARY LIGHTING SYSTEM IS A SINGLE PHASE 3 WIRE SYSTEM.
- THERE ARE 2 PHASE CONDUCTORS AND A MESSENGER/GROUND CONDUCTOR - NO NEUTRAL CONDUCTOR.
- THE PHASE CONDUCTORS SHALL BE EQUIPED WITH TWO POLE WATERPROOF FUSEHOLDER WITH 15 AMP FUSES.

FILE NAME = 3850-805-EL.dwg	USER NAME = ZACH WALLSTEN	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY LIGHTING PLAN DETAILS			F&P RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -					330	10-00213-00-CH	COOK	47	47
PLOT SCALE = 1/8" = 1'-0"	PLOT DATE = 6/22/2011	CHECKED -	REVISED -		SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
		DATE -	REVISED -					CONTRACT #: 63616				