

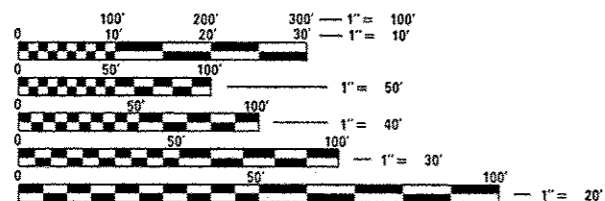
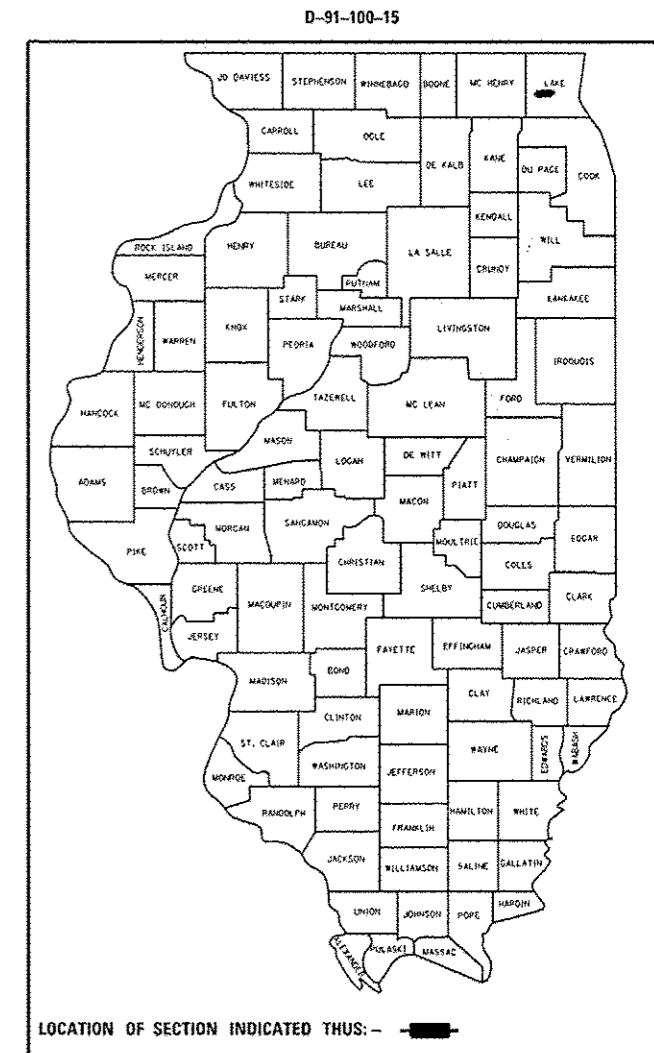
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	TH-TS-1	LAKE	36	1
ILLINOIS			CONTRACT NO. 62A19	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROJECT LOCATED IN THE VILLAGE OF WAUCONDA

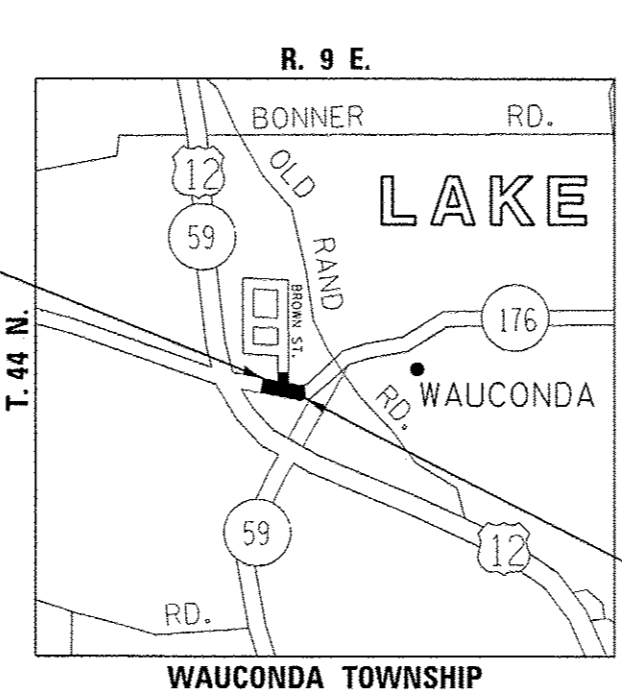
PROPOSED HIGHWAY PLANS
F.A.P. 335 /IL 176 (LIBERTY ST.)
AT BROWN ST.
TRAFFIC SIGNAL INSTALLATION
AND RESURFACING (MAINTENANCE)
SECTION NO.: TH-TS-1
PROJECT NO.: ACNHPP-0335(019)
LAKE COUNTY
C-91-100-15



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

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

PROJECT BEGINS
STA. 507 + 49



TRAFFIC DATA:
IL 176 (LIBERTY ST.)
2011 ADT - 14300
SPEED LIMIT - 30 MPH

BROWN ST.
2012 ADT - 1500
SPEED LIMIT - 25 MPH

PROJECT ENDS
STA. 514 + 02

PROJECT ENGINEER: JENPAI CHANG (847) 705-4432
PROJECT MANAGER: KEN ENG
CONTRACT NO. 62A19

GROSS AND NET LENGTH OF IMPROVEMENT - 653 FEET - .01 MILES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
SUBMITTED May 6 2015
John F. [Signature]
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
Aug 14 2015
John D. Baranzelli, P.E.
ENGINEER OF DESIGN AND ENVIRONMENT
Aug 14 2015
Omer Osman, P.E.
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

INDEX OF SHEETS

SHEET NO. DESCRIPTION

STATE STANDARDS

GENERAL NOTES:

1	COVER SHEET	000001-06 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
2-3	INDEX OF SHEETS	442001-03 CLASS C AND D PATCHES
4-7	SUMMARY OF QUANTITIES	604001-04 FRAMES AND LIDS, TYPE 1
8	TYPICAL SECTIONS	606001-06 CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
9-10	EXISTING AND PROPOSED ROADWAY PLANS	701006-05 OFF-RD OPERATIONS, 2L, 2W, 15' (4.5m) TO 24" (600mm) FROM PAVEMENT EDGE
11	RIGHT-OF-WAY PLATS	701011-04 OFF ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY
12	PAVEMENT MARKING PLANS	701301-04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
13-17	TRAFFIC SIGNAL INSTALLATION PLANS	701311-03 LANE CLOSURE, 2L, 2W, MOVING OPERATIONS DAY ONLY
18	DETECTOR LOOP REPLACEMENT PLAN	701502-06 URBAN LANE CLOSURE, 2L, 2W, WITH BI-DIRECTIONAL LEFT TURN LANE
19	DISTRICT ONE MAST ARM MOUNTED NAME SIGN (TS-02)	701701-04 URBAN LANE CLOSURE, MULTILANE, INTERSECTION
20-26	DISTRICT ONE TRAFFIC SIGNAL DESIGN DETAILS (TS-05)	701801-05 SIDEWALK CORNER OR SIDEWALK CLOSURE
27	DISTRICT ONE - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING (TS-07)	701901-04 TRAFFIC CONTROL DEVICES
28	DETAILS FOR FRAMES AND LIDS ADJUSTMENTS WITH MILLING (BD-08)	720001-01 SIGN PANEL MOUNTING DETAILS
29	DETAILS FOR PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT (BD-22)	780001-05 TYPICAL PAVEMENT MARKINGS
30	DETAILS FOR CURB AND GUTTER REMOVAL AND REPLACEMENT (BD-24)	781001-03 TYPICAL APPLICATION RAISED REFLECTIVE PAVEMENT MARKERS
31	DETAILS FOR BUTT JOINT AND HMA TAPER DETAILS (BD-32)	805001-01 ELECTRICAL SERVICE INSTALLATION DETAILS
32	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS (TC-10)	814001-03 HANDHOLES
33	TYPICAL APPLICATIONS FOR RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT) (TC-11)	814006-02 DOUBLE HANDHOLES
34	DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)	857001-01 STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
35	PAVEMENT MARKING--LETTERS AND SYMBOLS FOR TRAFFIC STAGING (TC-16)	862001-01 UNINTERRUPTABLE POWER SUPPLY
36	ARTERIAL ROAD INFORMATION SIGNING (TC-22)	873001-02 TRAFFIC SIGNAL GROUNDING AND BONDING
		877001-05 STEEL MAST ARM ASSEMBLY AND POLE
		878001-10 CONCRETE FOUNDATION DETAILS
		880006-01 TRAFFIC SIGNAL MOUNTING DETAILS POST AND BRACKET MOUNT
		886001-01 DETECTOR LOOP INSTALLATIONS
		886006-01 TYPICAL LAYOUT FOR DETECTION LOOPS

BEFORE STARTING ANY EXCAVATION THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 OR "CUAN" (CHICAGO UTILITY ALERT NETWORK) AT 312-744-7000 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES, (48 HOURS NOTIFICATION IS REQUIRED).

10 FEET (3 METERS) TRANSITION SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURBS AND GUTTERS AND MEDIANS IN THE FIELD, UNLESS OTHERWISE SHOWN, THE TRANSITION SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH THE UTILITY COMPANIES AND THE VILLAGE OF WAUCONDA.

THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.

ANY PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS OBLITERATED BY MILLING AND RESURFACING OPERATIONS ON SIDE STREETS AND ENTRANCES SHALL BE REPLACED AND PAID FOR IN KIND.

ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT NO ADDITIONAL COST TO THE DEPARTMENT.

ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

LOCATION OF COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT (OR COMBINATION CURB AND GUTTER (THE TYPE SPECIFIED ON THE PLANS)), WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

DRAINAGE ADJUSTMENT OR RECONSTRUCTION LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS AND BEGINNING CONSTRUCTION, THIS SHALL INCLUDE LOCATING THE MAST ARM FOUNDATIONS AND VERIFYING THE MAST ARM LENGTHS.

THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE ORDERING ANY MATERIALS AND STARTING ANY WORK. FOR LOCATIONS OF UTILITIES, LOCALLY OWNED EQUIPMENT, LEASED ENFORCEMENT CAMERA SYSTEM FACILITIES AND IDOT UNDERGROUND FACILITIES, CONTACT THE LOCAL COUNTIES, MUNICIPALITIES AND IDOT FOR LOCATIONS. THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 OR 811. IN THE CITY OF CHICAGO CONTACT DIGGER AT (312) 744-7000 FOR FIELD LOCATIONS OF BURIED UTILITIES (48 HOURS NOTIFICATION REQUIRED).

IF THIS CONTRACT REQUIRES THE SERVICES OF AN ELECTRICAL CONTRACTOR, THE CONTRACTOR SHALL BE RESPONSIBLE AT HIS/HER OWN EXPENSE FOR LOCATING EXISTING IDOT ELECTRICAL FACILITIES PRIOR TO PERFORMING ANY WORK. IF THIS CONTRACT DOES NOT REQUIRE THE SERVICES OF AN ELECTRICAL CONTRACTOR, THE CONTRACTOR MAY REQUEST ONE FREE LOCATE FOR EXISTING IDOT ELECTRICAL FACILITIES FROM THE DISTRICT ONE ELECTRICAL MAINTENANCE CONTRACTOR PRIOR TO THE START OF ANY WORK. ADDITIONAL REQUEST MAY BE AT THE EXPENSE OF THE CONTRACTOR. THE LOCATION OF UNDERGROUND TRAFFIC FACILITIES DOES NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY TO REPAIR ANY FACILITIES DAMAGED DURING CONSTRUCTION AT THEIR EXPENSE.

THE CONTRACTOR SHALL CHECK THE PROPOSED TRAFFIC SIGNAL EQUIPMENT LOCATIONS FOR OVERHEAD UTILITY CONFLICTS. THE CONTRACTOR SHALL COORDINATE ANY CONFLICTS WITH THE UTILITY COMPANIES AND THE RESIDENT ENGINEER BEFORE ORDERING MATERIALS.

FILE NAME: d:\p\work\p\dot\std\stdp\id0318721\1146	USER NAME: STEESPA	DESIGNED: []	REVISION: []	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES F.A.P. 335 / IL 176 (LIBERTY ST.) AT BROWN ST.	F.A.P. RTE: 335	SECTION: TH-TS-1	COUNTY: LAKE	TOTAL SHEETS: 36	SHEET NO.: 2
PLANT SCALE: 1/2"=1'-0"	CHECKED: []	REVISION: []	SCALE: []			SHEET OF [] SHEETS: STA. [] TO STA. []	ILLINOIS TCD, A10 PROJECT			
PLANT DATE: 11/03/2010	DATE: []	REVISION: []								

GENERAL NOTES (CONT.):

RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACED SUCH AS SHOULDERS, MEDIAN, 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 THE STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

FRAMES AND GRATES ADJUSTMENT OF PRIVATE UTILITIES WITHIN THE LIMITS OF THE IMPROVEMENT SHALL BE DONE BY THEIR RESPECTIVE OWNERS AND ARE NOT IN PART OF THIS CONTRACT.

BEFORE BEGINNING ANY WORK, THE CONTRACTOR RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.

WHEN THE MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES (40mm) WHERE THE SPEED LIMIT IS 40 MPH (60 km/h) AND 1 INCH (25mm) WHERE THE SPEED LIMIT IS GREATER THAN 40 MPH (60 km/h). WITH WRITTEN APPROVAL OF THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES (75mm) MAY BE ALLOWED IF THE EDGE OF THE MILLING MACHINE IS SLOPED A MINIMUM OF (1:3).

THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

PERMANENT PAVEMENT MARKING SHALL BE THERMOPLASTIC (OF THE EXTRUDED TYPE) AND SHOULD BE PLACED IN ACCORDANCE WITH THE "DISTRICT ONE TYPICAL PAVEMENT MARKINGS" DETAIL (TC-13)

THE RESIDENT ENGINEER SHALL CONTACT WALTER CZARNY, AREA TRAFFIC ENGINEER, AT (847) 438-2300. A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.

TWO (2) WEEKS PRIOR TO SIGNAL TURN-ON, THE CONTRACTOR SHALL PLACE ONE CHANGEABLE MESSAGE SIGN IN EACH DIRECTION OF IL 176 (LIBERTY ST.) WITH THE FOLLOWING MESSAGES:

NEW TRAFFIC SIGNAL	STARTING AUG 25
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ON THE DAY OF THE TURN-ON, THE MESSAGES SHALL BE REPLACED WITH FOLLOWING FOR AN ADDITIONAL TWO (2) WEEKS:

NEW TRAFFIC SIGNAL

FILE NAME	USER NAME - JEBECPA	DESIGNED	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES F.A.P. 335 / IL 176 (LIBERTY ST.) AT BROWN ST.	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEET	
	PA Design	DRAWN	REVISED			335	TH-TS-1	LAKE	36	SHEET NO.
	PLT SCALE - 1/8"=1'-0"	CHECKED	REVISED							3
	PLM DATE - 11/06/2019	DATE	REVISED			SCALE: SHEET OF SHEETS STA. TO STA.		CONTRACT NO. 62A19		
ILLINOIS FED. AID PROJECT										

SUMMARY OF QUANTITIES				URBAN CONSTRUCTION TYPE CODE				SUMMARY OF QUANTITIES				URBAN CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	TRAFFIC SIGNALS				CODE NO	ITEM	UNIT	TOTAL QUANTITIES	TRAFFIC SIGNALS				
				ROADWAY RESURFACING ITEMS 80% FEDERAL 10% STATE 20% STATE 0005	80% FEDERAL 10% STATE 10% WAUCONDA 0021	80% FEDERAL 20% STATE INTERCONNECT 0021	100% WAUCONDA 0021					ROADWAY RESURFACING ITEMS 80% FEDERAL 10% STATE 20% STATE 0005	80% FEDERAL 10% STATE 10% WAUCONDA 0021	80% FEDERAL 20% STATE INTERCONNECT 0021	100% WAUCONDA 0021	
21101615	TOPSOIL FURNISH AND PLACE, 4"	SO YD	17	17				67201100	SEALING ABANDONED MONITORING WELLS	EACH	5	5				
25200110	SODDING, SALT TOLERANT	SO YD	17	17				70102622	TRAFFIC CONTROL AND PROTECTION, STANDARD 701502	L SUM	1	1				
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	1264	1264				70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1				
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	210	210				70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1				
42400800	DETECTABLE WARNINGS	SO FT	51	51				70106800	CHANGEABLE MESSAGE SIGN	CAL MO	2	2				
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SO YD	1872	1872				70300100	SHORT TERM PAVEMENT MARKING	FOOT	120	120				
44201789	CLASS D PATCHES, TYPE II, 12 INCH	SO YD	47	47				70300210	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS	SO FT	73	73				
44201794	CLASS D PATCHES, TYPE III, 12 INCH	SO YD	29	29				70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	442	442				
44201796	CLASS D PATCHES, TYPE IV, 12 INCH	SO YD	19	19				70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	83	83				
44300200	STRIP REFLECTIVE CRACK CONTROL TREATMENT	FOOT	260	260				70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	130	130				
* 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	55	55				70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	43	43				
* 66900450	SPECIAL WASTE PLANS AND REPORTS	L SUM	1	1				70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SO FT	420	420				
* 66900530	SOIL DISPOSAL ANALYSIS	EACH	1	1				* 72000100	SIGN PANEL - TYPE 1	SO FT	13.5	13.5				
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	3	3				* 72000200	SIGN PANEL - TYPE 2	SO FT	25	25				
67100100	MOBILIZATION	L SUM	1	1												

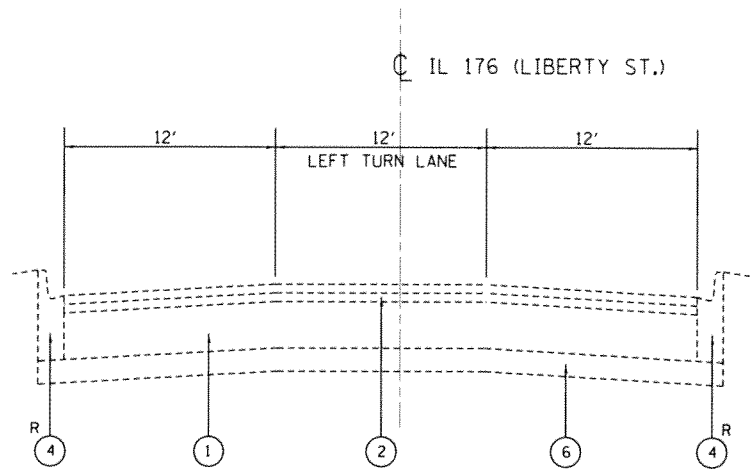
* SPECIALTY ITEMS
 NON-PARTICIPATING ITEMS

SUMMARY OF QUANTITIES				URBAN	CONSTRUCTION TYPE CODE				SUMMARY OF QUANTITIES				URBAN	CONSTRUCTION TYPE CODE			
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	ROADWAY RESURFACING ITEMS 80% FEDERAL 20% STATE 0005	TRAFFIC SIGNALS				CODE NO	ITEM	UNIT	TOTAL QUANTITIES	ROADWAY RESURFACING ITEMS 80% FEDERAL 20% STATE 0005	TRAFFIC SIGNALS			
					80% FEDERAL 10% STATE 10% WAUCONDA 0021	80% FEDERAL 20% STATE INTERCONNECT 0021	100% WAUCONDA 0021							80% FEDERAL 10% STATE 10% WAUCONDA 0021	80% FEDERAL 20% STATE INTERCONNECT 0021	100% WAUCONDA 0021	
*87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	100		100				*87900200	DRILL EXISTING HANDHOLE	EACH	1			1		
*87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	550		550				*88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6		6			
*87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1		1				*88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2		2			
*87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2		2				*88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2		2			
*87700160	STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	1		1				*88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2		2			
*87700190	STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1		1				*88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2		2			
*87700200	STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1		1				*88200410	TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	8		8			
*87700210	STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1		1				*88500100	INDUCTIVE LOOP DETECTOR	EACH	8		8			
*87800100	CONCRETE FOUNDATION, TYPE A	FOOT	12		12				*88600100	DETECTOR LOOP, TYPE I	FOOT	640		640			
*87800150	CONCRETE FOUNDATION, TYPE C	FOOT	4		4				*88600600	DETECTOR LOOP REPLACEMENT	FOOT	54		54			
*87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	50.5		50.5				*88700200	LIGHT DETECTOR	EACH	2				2	
									*88700300	LIGHT DETECTOR AMPLIFIER	EACH	1				1	
									*88800100	PEDESTRIAN PUSH-BUTTON	EACH	2		2			

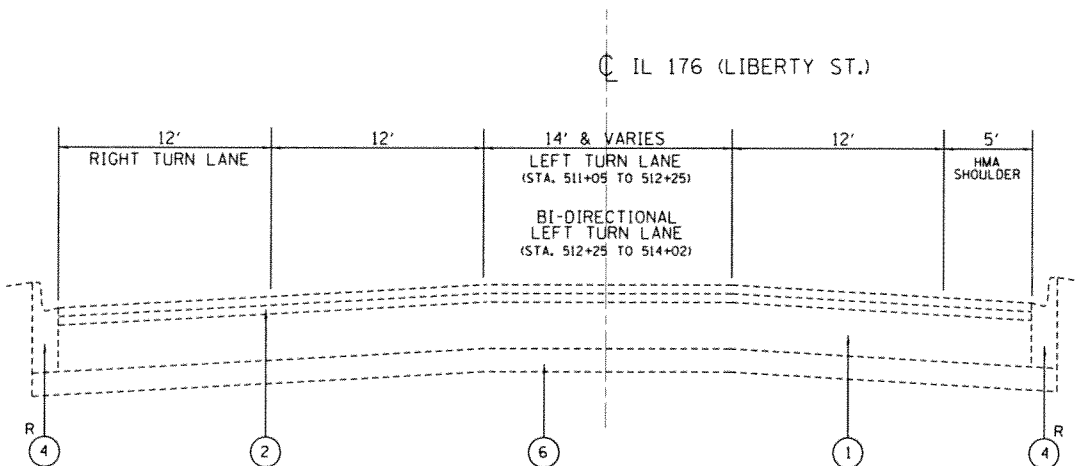
* SPECIALTY ITEMS
 NON-PARTICIPATING ITEMS

SUMMARY OF QUANTITIES			URBAN	CONSTRUCTION TYPE CODE				SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE							
CODE NO	ITEM	UNIT		TOTAL QUANTITIES	TRAFFIC SIGNALS				CODE NO	ITEM		UNIT	TOTAL QUANTITIES	TRAFFIC SIGNALS					
					ROADWAY RESURFACING ITEMS 80% FEDERAL 20% STATE 0005	80% FEDERAL 10% STATE 10% WAUCONDA 0021	80% FEDERAL 20% STATE INTERCONNECT 0021	100% WAUCONDA 0021						ROADWAY RESURFACING ITEMS 80% FEDERAL 20% STATE 0005	80% FEDERAL 10% STATE 10% WAUCONDA 0021	80% FEDERAL 20% STATE INTERCONNECT 0021	100% WAUCONDA 0021		
*X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE	FOOT	250				250												
	SENSOR CABLE, NO. 20 3/C																		
*X1400081	FULL-ACTUATED CONTROLLER AND TYPE SUPER	EACH	1		1														
	P CABINET (SPECIAL)																		
X6030310	FRAMES AND LIDS TO BE ADJUSTED	EACH	5	5															
	(SPECIAL)																		
*X8620200	UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1		1														
*X8710024	FIBER OPTIC CABLE IN CONDUIT, NO.	FOOT	565			565													
	62.5/125, MM12F SM24F																		
*Z0004562	COMBINATION CONCRETE CURB AND GUTTER	FOOT	98	98															
	REMOVAL AND REPLACEMENT																		
Z0030850	TEMPORARY INFORMATION SIGNING	50 FT	77.1	77.1															
*Z0033046	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL	EACH	1			1													
	2																		

* SPECIALTY ITEMS
 NON-PARTICIPATING ITEMS



EXISTING TYPICAL SECTION
STA. 507+49 TO 510+19

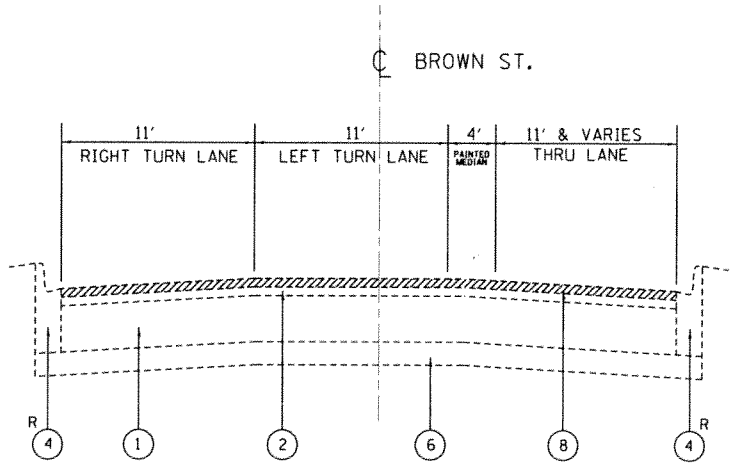


EXISTING TYPICAL SECTION
STA. 511+05 TO 514+02

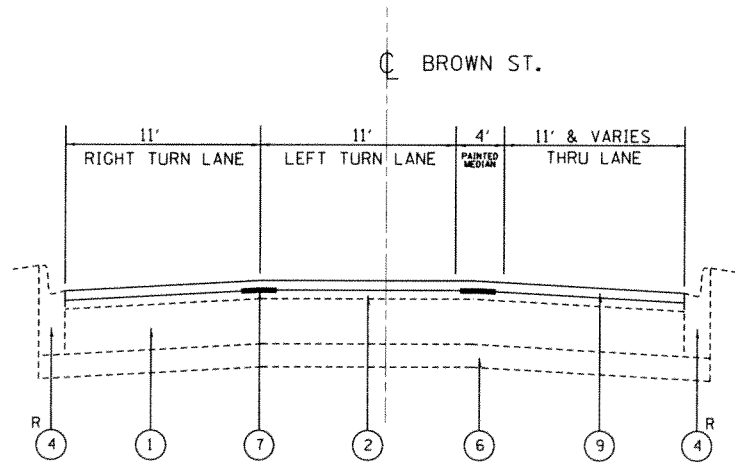
NOTE:
IL 176 (LIBERTY ST.) HAS BEEN RECENTLY
RESURFACED AS PART OF CONTRACT NO. 60N62

LEGEND:

- ① EXIST. P.C.C. PAVEMENT, ±9"
 - ② EXIST. HOT-MIX ASPHALT SURFACE ±3" (AFTER MILLING)
 - ③ EXIST. COMB. CONC. CURB AND GUTTER, TYPE B-6.12
 - ④ EXIST. COMB. CONC. CURB AND GUTTER, TYPE B-6.24
 - ⑤ EXIST. P.C.C. SIDEWALK
 - ⑥ EXIST. STABILIZED SUB-BASE
 - ⑦ PROP. STRIP REFLECTIVE CRACK CONTROL TREATMENT
 - ⑧ PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 2"
 - ⑨ PROP. HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 2"
- R CURB AND GUTTER REMOVAL AND REPLACEMENT (AS DIRECTED BY THE ENGINEER)



EXISTING TYPICAL SECTION
STA. 10+00 TO 12+60



PROPOSED TYPICAL SECTION
STA. 10+00 TO 12+60

MIXTURE REQUIREMENTS

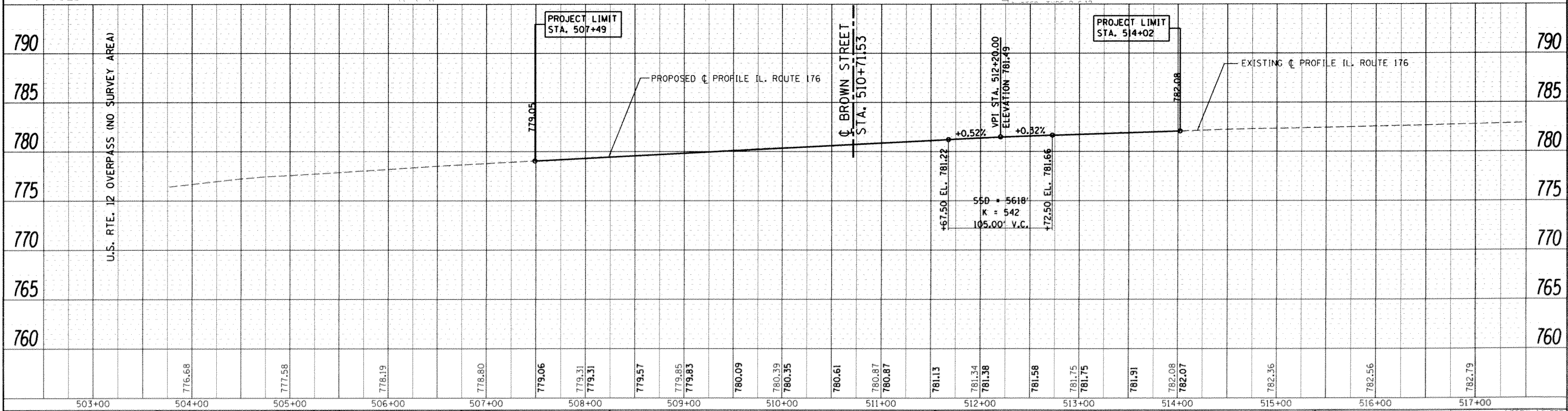
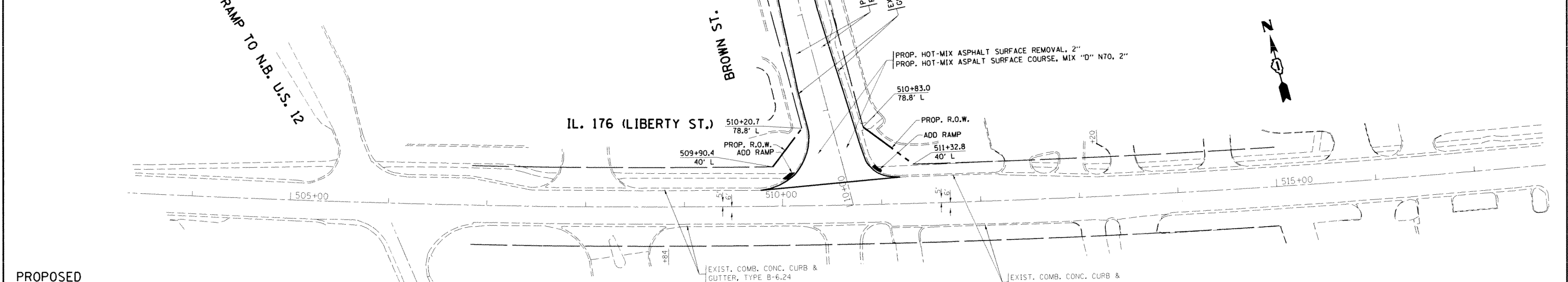
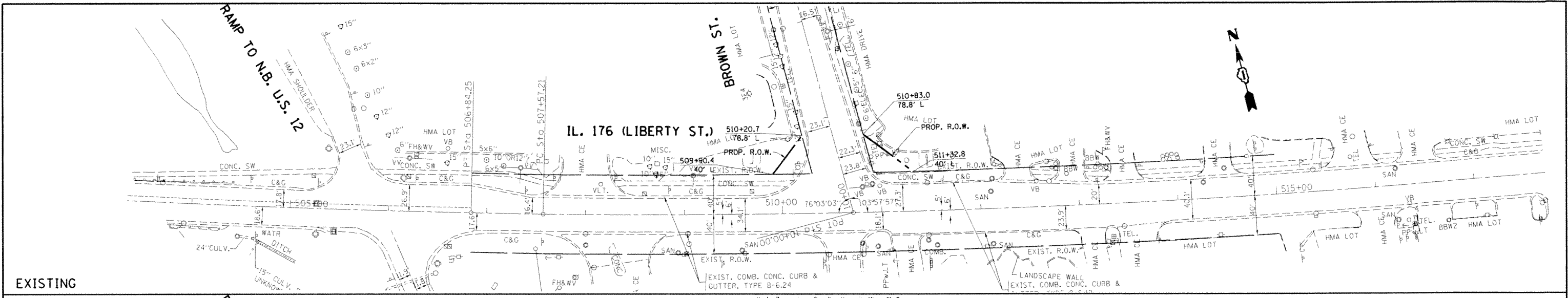
MIXTURE TYPE	AIR VOIDS @ Ndes	OMP
PATCHING		
CLASS "D" PATCHES (HMA BINDER COURSE, IL-19MM)	4% @ 70 GYR.	OC / OA
PAVEMENT RESURFACING		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL - 9.5mm)	4% @ 70 GYR.	OC / OA
OMP DESIGNATION: QUALITY CONTROL FOR PERFORMANCE (QCP); QUALITY CONTROL / QUALITY ASSURANCE (QC / OA); PAY FOR PERFORMANCE (PFP)		

NOTES:

- THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT QUANTITIES IS 112 LBS./SQ. YD./ IN.
- FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64 -22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.
- FOR USE OF RECYCLED MATERIALS SEE DISTRICT ONE SPECIAL PROVISIONS.
- THE MILLING SHALL BE DONE PRIOR TO PATCHING
- QUALITY MANAGEMENT PROGRAM (QMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE

DATE	BY	SURVEYED
		ALIGNED
		CHECKED
		NO. OF WAY CHECKED
		ROAD FILE NAME
PLAN		

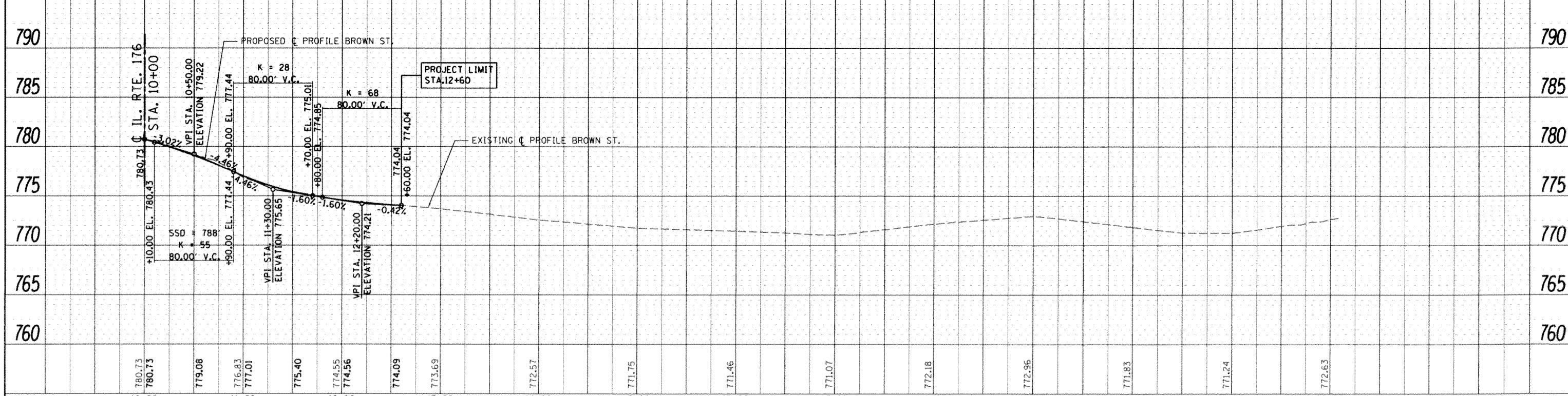
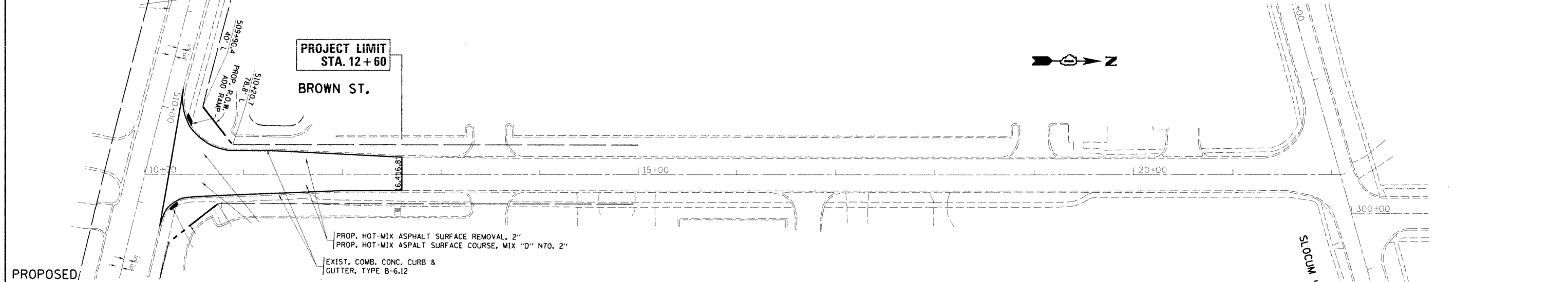
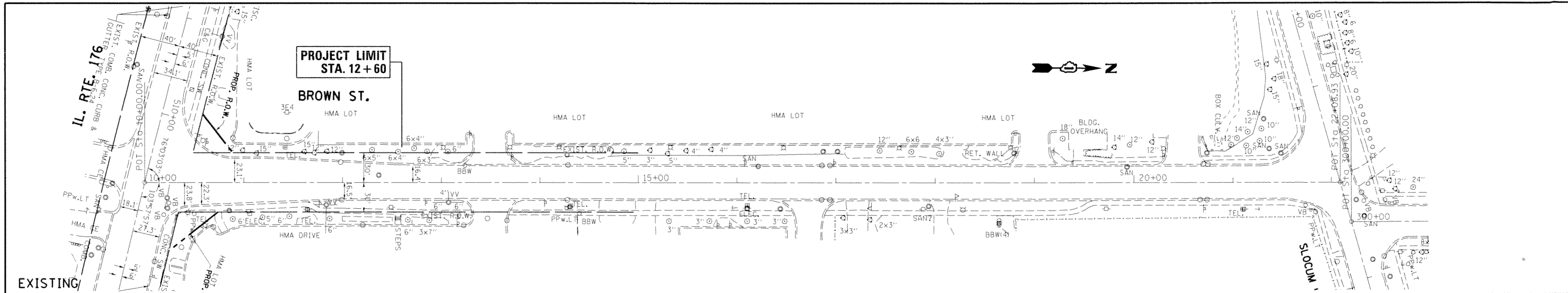
DATE	BY	SURVEYED
		GRADES CHECKED
		BLM. NOTED
		STRUCTURE NOTATIONS OK'D
PROFILE		



FILE NAME =	USER NAME = STEEDPA	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ROADWAY PLAN & PROFILE IL. ROUTE 176 AT BROWN STREET	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pw_work\pwidot\stedpa\0318726\P14648	shh-plnpr.f.dgn	DRAWN -	REVISED -			335	TH-TS-1	LAKE	36	9
PLLOT SCALE = 100.00000' / in.		CHECKED -	REVISED -			CONTRACT NO. 62A19				
PLLOT DATE = 5/13/2015		DATE -	REVISED -			ILLINOIS FED. AID PROJECT				
				SCALE: 1"=50'		SHEET NO. OF SHEETS STA. TO STA.				

PLAN	SURVEYED	DATE
	ALIGNED	BY
	NOTED	
	CHECKED	
	FILE NAME	

PROFILE	SURVEYED	DATE
	GRADES	BY
	NOTED	
	CHECKED	
	STRUCTURE	
	NOTATIONS	



FILE NAME =	USER NAME = STEEOPA	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ROADWAY PLAN & PROFILE IL. ROUTE 176 AT BROWN STREET			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pw\work\p\uidot\steeopa\0316726\p146489\sh\p\p146489.f.dgn		DRAWN -	REVISED -					335	TH-TS-1	LAKE	36	10
PLOT SCALE = 1/8"=1'-0"		CHECKED -	REVISED -					CONTRACT NO. 62A19				
PLOT DATE = 5/13/2015		DATE -	REVISED -					ILLINOIS FED. AID PROJECT				

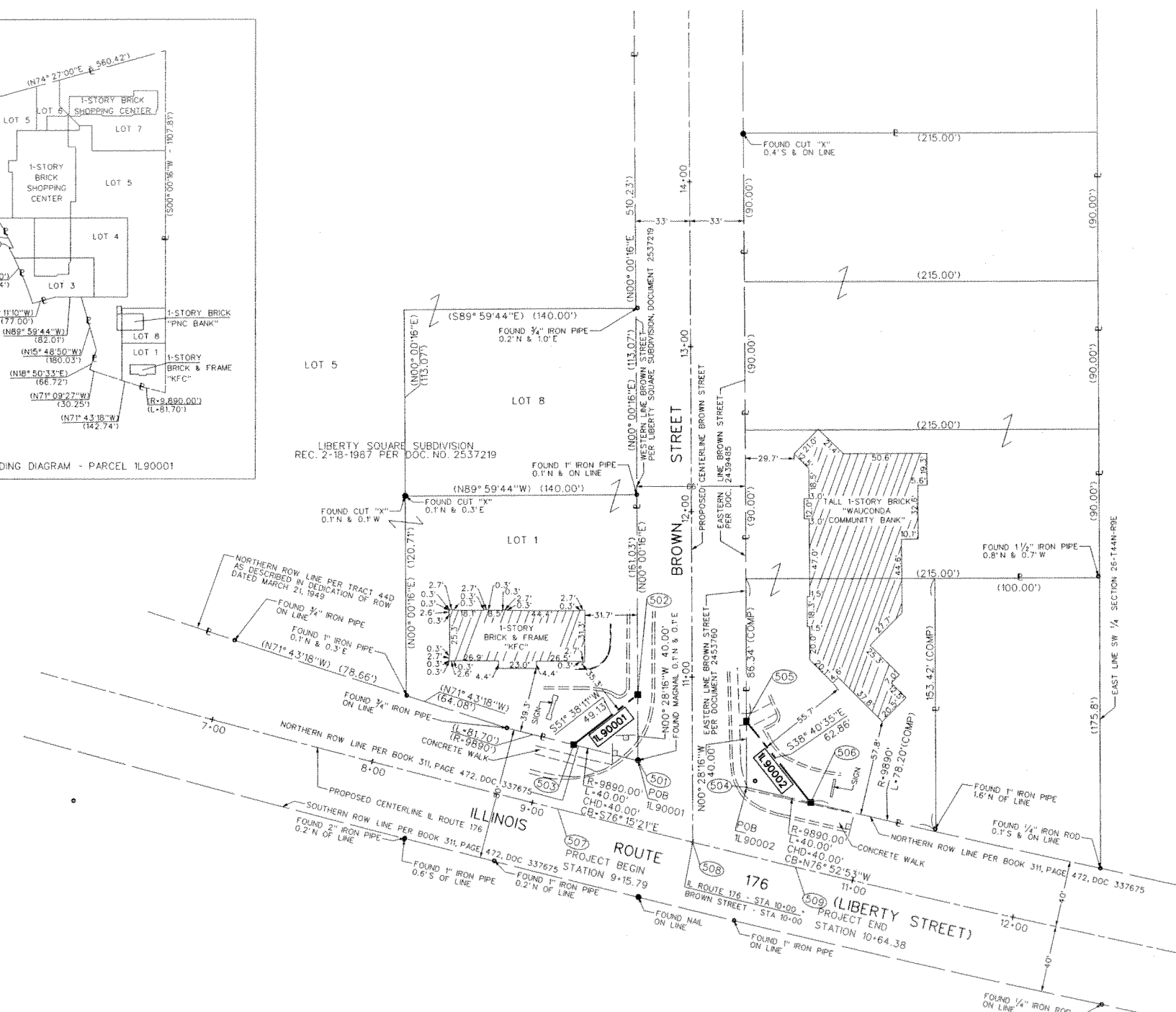
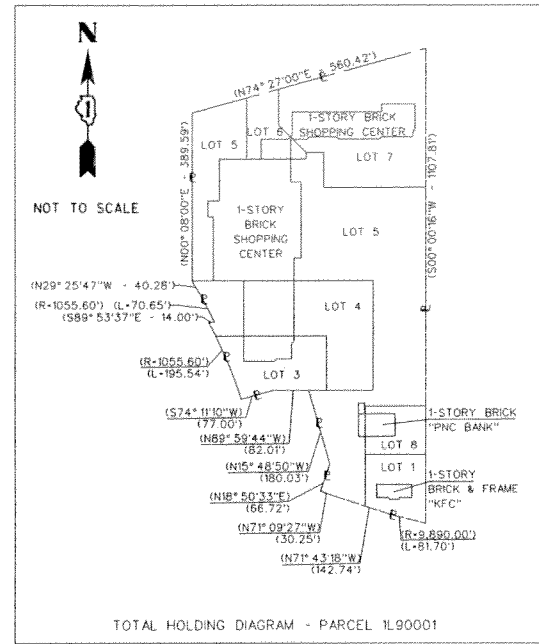
PART OF THE SW1/4 OF SECTION 26 , TWP. 44 N., R. 09 E. OF THE 3RD. P.M., IN LAKE COUNTY, ILLINOIS.

LEGEND

SECTION / QUARTER SECTION LINE
 PLATTED LOT LINES
 PROPERTY (DEED) LINE
 APPARENT PROPERTY LINE
 EXISTING CENTERLINE
 PROPOSED CENTERLINE
 EXISTING RIGHT OF WAY LINE
 PROPOSED RIGHT OF WAY LINE
 EXISTING EASEMENT
 PROPOSED EASEMENT
 AC - EXISTING ACCESS CONTROL LINE
 AC - PROPOSED ACCESS CONTROL LINE
 MEASURED DIMENSION
 COMPUTED DIMENSION
 RECORDED DIMENSION
 EXISTING BUILDING

129.32'
 129.32' (COMP)
 129.32'

○ IRON PIPE OR ROD FOUND ⊕ 'MAG' NAIL SET
 + CUT CROSS FOUND OR SET ● 5 / 8" REBAR SET
 ■ STAKING OF PROPOSED RIGHT OF WAY SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN, IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
 ■ M STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. BURIED 5/8 INCH METAL ROD 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY MARKER POSITION IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
 ⊙ PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 2135 (TO BE SET BY OTHERS)
 □ RIGHT OF WAY STAKING PROPOSED TO BE SET



STATE OF ILLINOIS)
 COUNTY OF DUPAGE)

THIS IS TO CERTIFY THAT I, TIMOTHY G. WOLFE, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, (WE, JACOB & HEFNER ASSOCIATES, INC., AN ILLINOIS PROFESSIONAL DESIGN FIRM LAND SURVEYING CORPORATION, NUMBER 184-003073,) HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN PART OF THE SW 1/4 OF SECTION 26, TOWNSHIP 44 NORTH, RANGE 9 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN LAKE COUNTY, ILLINOIS; THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT LOMBARD, ILLINOIS THIS 26TH DAY OF JUNE, 2014 A.D.

ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-003535
 LICENSE EXPIRATION DATE: NOVEMBER 30, 2014

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.



JACOB & HEFNER ASSOCIATES, INC.
 ENGINEERS - SURVEYORS
 1910 S. Highland Avenue, Suite 100
 Lombard, IL 60148
 (630) 852-4800

PARCEL NUMBER	TOTAL HOLDINGS ACRES	PART TAKEN ACRES	AREA IN EXISTING R.O.W. ACRES	REMAINDER AREA ACRES	EASEMENT AREA		PARCEL INDEX NUMBER
					ACRES	SQUARE FEET	
IL90001	10.174	0.018	N.A.	10.156	N.A.	N.A.	09-26-307-008
							09-26-307-005
							09-26-307-022
							09-26-307-002
							09-26-307-021
IL90002	1.702	0.018	N.A.	1.684	N.A.	N.A.	09-26-300-084
							09-26-300-080
							09-26-300-019
							09-26-300-019
							09-26-300-078

PROJECT COORDINATES ILLINOIS STATE PLANE, EAST ZONE, NAD83 (2011)				
POINT NUMBER	NORTHING	EASTING	STATION	OFFSET
501	2036459.6830	1033690.9113	9+55.95	40.00' LT.
502	2036499.6816	1033690.5823	9+46.13	78.79' LT.
503	2036469.1866	1033652.0566	9+15.79	40.00' LT.
504	2036443.8897	1033757.0434	10+24.22	40.00' LT.
505	2036483.8883	1033756.7144	10+14.67	78.86' LT.
506	2036434.8100	1033795.9995	10+64.38	40.00' LT.
507	2036430.3512	1033642.4745	9+15.79	00.00' RT.
508	2036410.5255	1033724.3167	10+00.00	00.00' RT.
509	2036395.8366	1033786.9995	10+64.38	00.00' RT.

NOTES:
 ALL DIMENSIONS ARE MEASURED UNLESS OTHERWISE SPECIFIED.
 BEARINGS AND DISTANCES SHOWN HEREON REFERENCE THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NORTH AMERICAN DATUM OF 1983 (2011 ADJUSTMENT) "GRID". ALL MEASURED AND CALCULATED DISTANCES ARE "GRID" NOT "GROUND". TO OBTAIN GROUND DISTANCES, DIVIDE GRID DISTANCES BY THE COMBINATION FACTOR OF 0.99994059217. AREAS SHOWN ON THIS PLAT ARE "GRID".

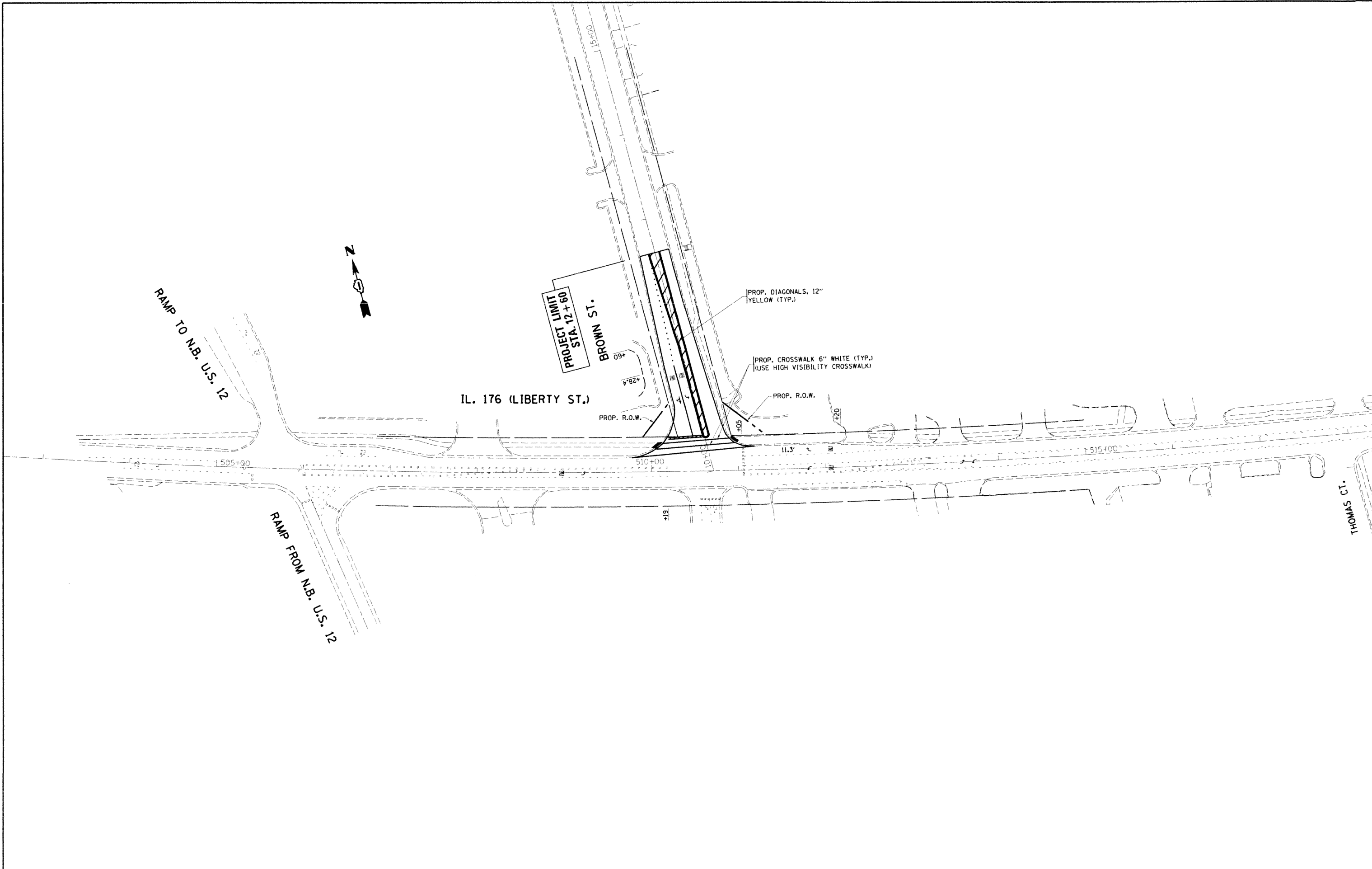
REVISION DATE: 07/16/2014 REVISION MADE BY:

IDOT USE ONLY
 RECEIVED
 JUL 17 2014
 PLATS & LEGALS

PLAT OF HIGHWAYS
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 176 (LIBERTY STREET)

LIMITS: AT BROWN STREET COUNTY: LAKE
 SECTION: TO STA. 10+64.38 JOB NO.: R-91-041-13
 STA. 9+15.79 TO STA. 10+64.38
 SCALE: 1"=40' SHEET 2 OF 2 SHEETS

BUREAU OF LAND ACQUISITION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196



FILE NAME =	USER NAME = STEEDPA	DESIGNED -	REVISED -
c:\pw_work\pvidot\steadpa\0318726\p145	09-sh1-pmk.dgn	DRAWN -	REVISED -
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	PLOT DATE = 5/13/2015	DATE -	REVISED -

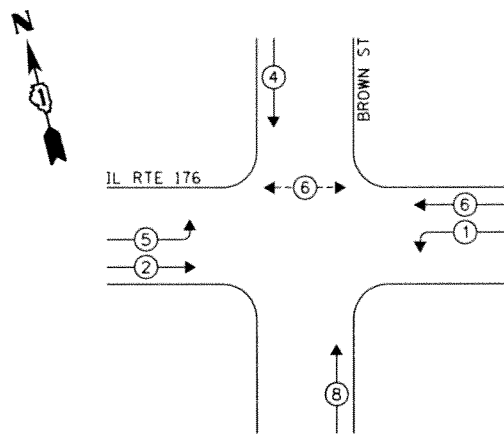
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING PLAN
IL. ROUTE 176 AT BROWN ST.**

SCALE: 1"=50' SHEET OF SHEETS STA. 507+49 TO STA. 514+02

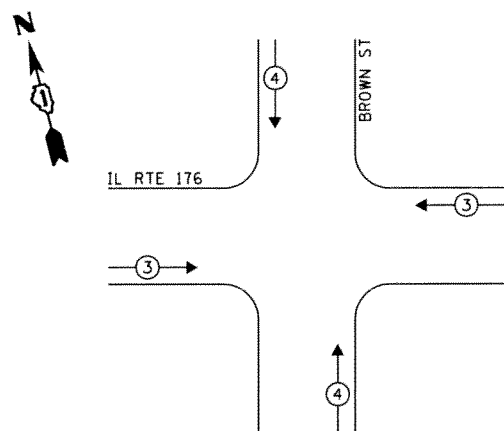
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	TH-TS-1	LAKE	36	12
CONTRACT NO. 62A19				
ILLINOIS FED. AID PROJECT				

PROPOSED CONTROLLER SEQUENCE



- LEGEND**
- ◀ ◻ ▶ SINGLE ENTRY PHASE
 - ◀ ◉ ▶ DUAL ENTRY PHASE
 - ◀ ◉ ◉ ▶ PEDESTRIAN PHASE
 - ◀ ◊ ▶ OVERLAP

PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	WATTAGE		TOTAL WATTAGE
		LED	% OPERATION	
SIGNAL (RED)	12	11	50	66.0
(YELLOW)	12	20	5	12.0
(GREEN)	12	12	45	64.8
PERMISSIVE ARROW	8	10	10	8.0
PED. SIGNAL	2	20	100	40.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
TOTAL =				315.8

ENERGY COSTS TO:
 VILLAGE OF WAUCONDA
 101 N. MAIN ST.
 WAUCONDA, IL 60084

ENERGY SUPPLY: CONTACT: TERRI BLECK
 PHONE: (847) 816-5239
 COMPANY: COMMONWEALTH EDISON
 ACCOUNT NUMBER: 0829153022

TS SHT NO. 10

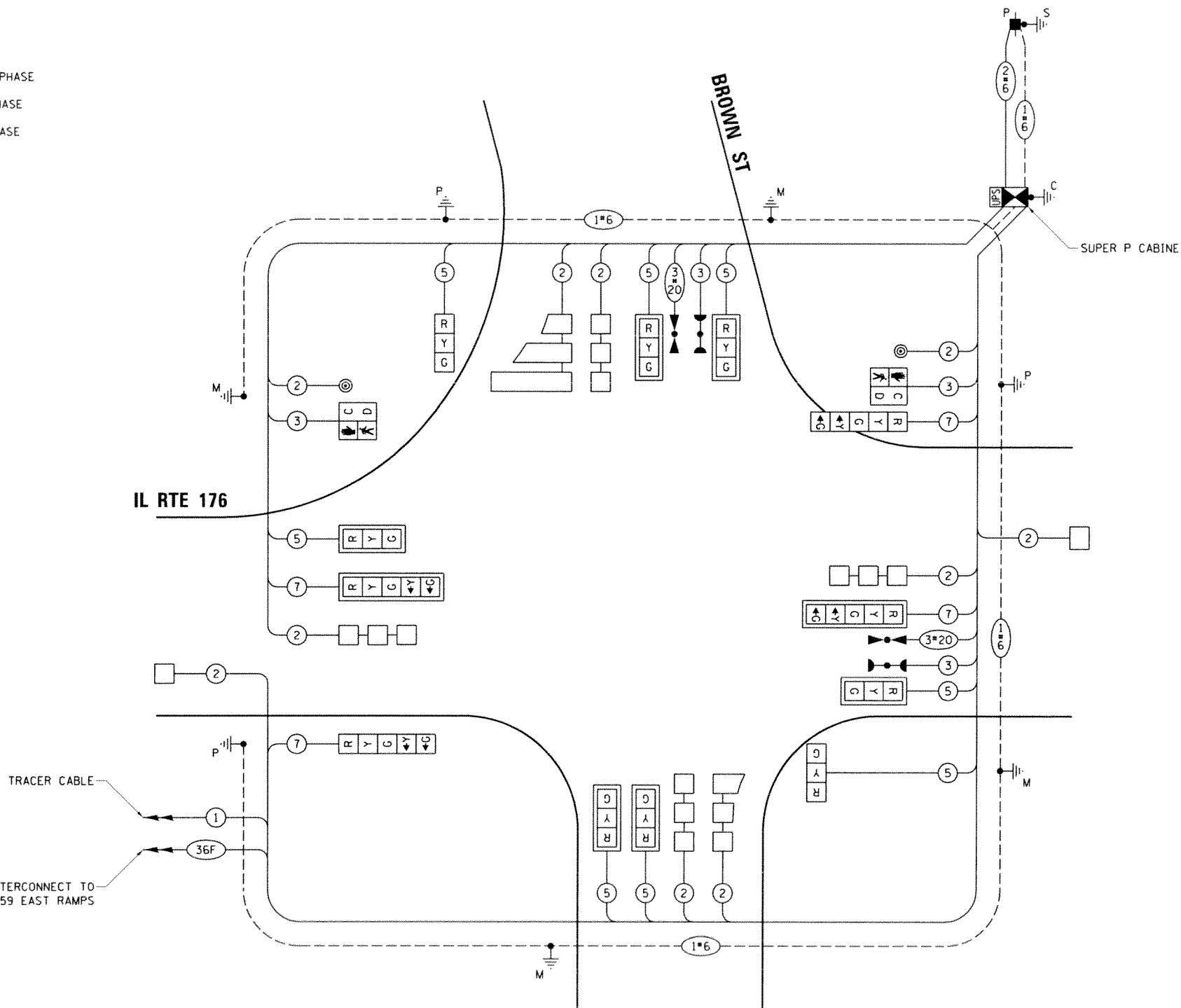
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Default	PLOT SCALE = 48.0000 "/in.	CHECKED - LP	REVISED -
	PLOT DATE = 5/7/2015	DATE - 12/15/2014	REVISED -

PROPOSED INTERCONNECT TO
 US RTE 12 / IL RTE 59 EAST RAMP

TRACER CABLE

IL RTE 176

BROWN ST



CABLE PLAN
 (NOT TO SCALE)

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

TS 7155

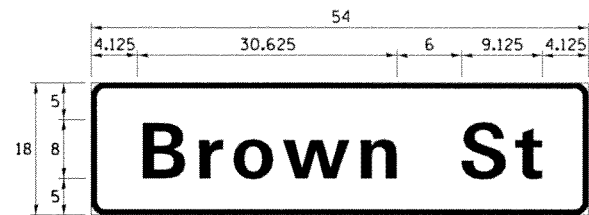
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM,
 AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
 IL RTE 176 AND BROWN ST

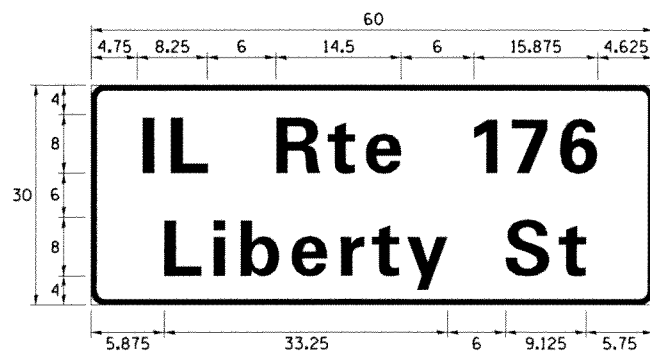
F.A.P. RTE. 335	SECTION TH-TS-1	COUNTY LAKE	TOTAL SHEETS 36	SHEET NO. 14
CONTRACT NO. 62A19				
ILLINOIS FED. AID PROJECT				

SCALE: SHEET OF SHEETS STA. TO STA.

SIGN PANEL - TYPE 1 OR TYPE 2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	6.75	1	ZZ	2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	12.5	2	ZZ	2

NOTE: FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGNS DETAIL

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY.
CHANGEABLE MESSAGE SIGN	CAL MO	2
SIGN PANEL - TYPE 1	SQ FT	13.5
SIGN PANEL - TYPE 2	SQ FT	25
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	711
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	27
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	57
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	231
HANDHOLE	EACH	5
HEAVY-DUTY HANDHOLE	EACH	3
DOUBLE HANDHOLE	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	195
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	450
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1,215
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	590
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1,470
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	100
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	550
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	12
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	50.5
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	8
DETECTOR LOOP, TYPE I	FOOT	640
PEDESTRIAN PUSH-BUTTON	EACH	2
* LIGHT DETECTOR	EACH	2
* LIGHT DETECTOR AMPLIFIER	EACH	1
* EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	250
* FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1

* 100% COST TO THE WAUCONDA FIRE PROTECTION DISTRICT

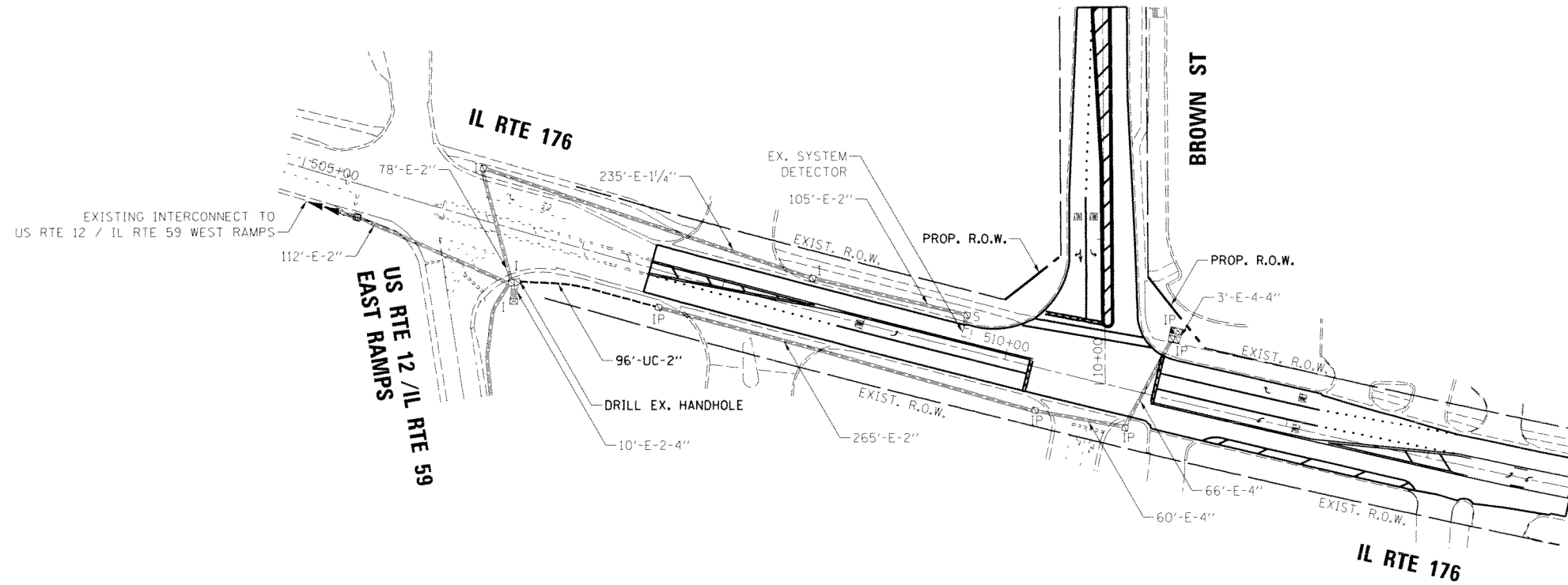
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

TS SHT NO. 11

TS 7155

FILE NAME =	USER NAME = plascencia	DESIGNED - IP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MAST ARM MOUNTED STREET NAME SIGNS AND SCHEDULE OF QUANTITIES IL RTE 176 AND BROWN ST	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\p\work\p\dot\plascencia\2015\7\11\	45489.sht-ts.dgn	DRAWN - IP	REVISED -			335	TH-TS-1	LAKE	36	15	
PLOT SCALE = 48,0000' / in.		CHECKED - LP	REVISED -			CONTRACT NO. 62A19					
Default	PLOT DATE = 5/7/2015	DATE - 12/15/2014	REVISED -			ILLINOIS FED. AID PROJECT					

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

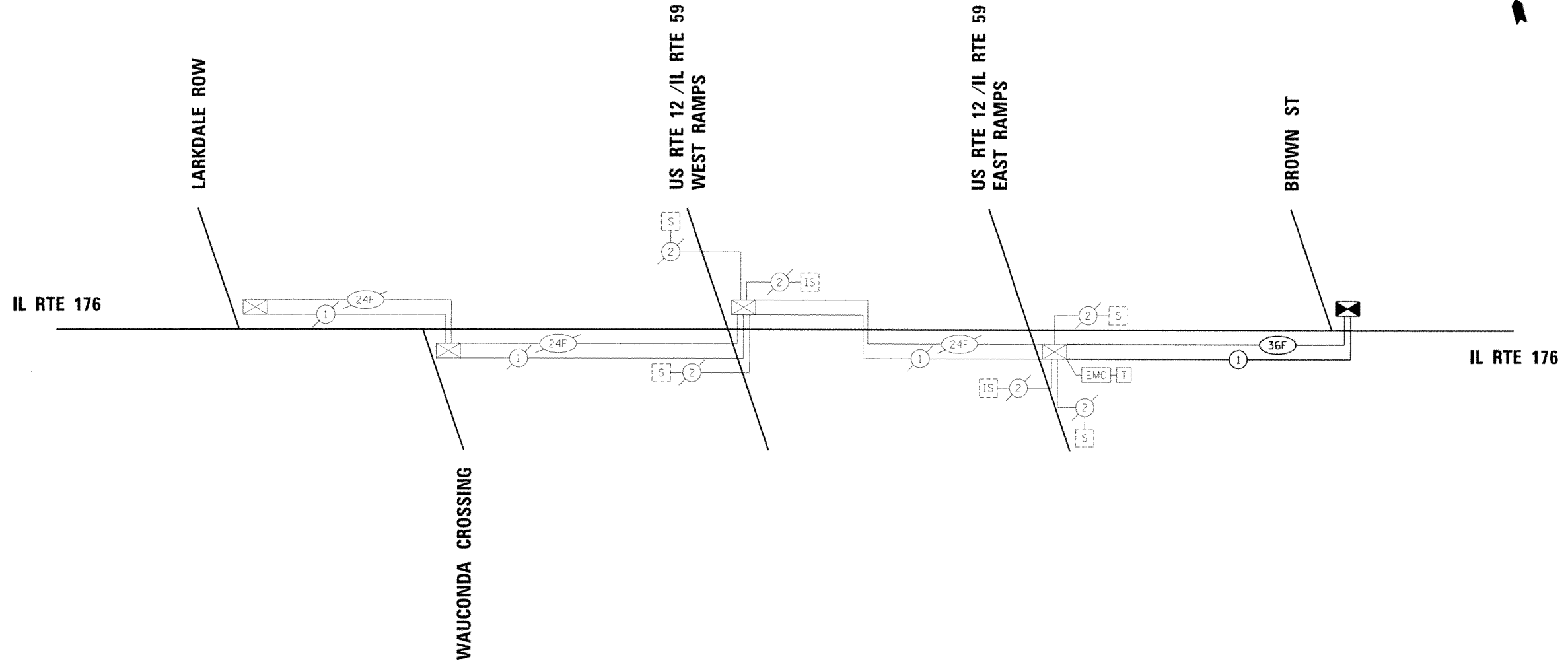


TS SHT NO. 12

EAGLE 1B

FILE NAME = c:\pwwork\pwwork\plascencia\td83187391\46489_sht-ts.dgn	USER NAME = plascencia	DESIGNED - IP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED INTERCONNECT PLAN			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 1/88.8888" = 1' in.	CHECKED - LP	REVISED -		335	TH-TS-1	LAKE	36	16			
Default	PLOT DATE = 5/7/2015	DATE - 12/15/2014	REVISED -	IL RTE 176 - US RTE 12 / IL RTE 59 EAST RAMPS TO BROWN ST			CONTRACT NO. 62A19			ILLINOIS FED. AID PROJECT		
				SCALE: SHEET OF SHEETS STA. TO STA.								

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



SCHEDULE OF QUANTITIES

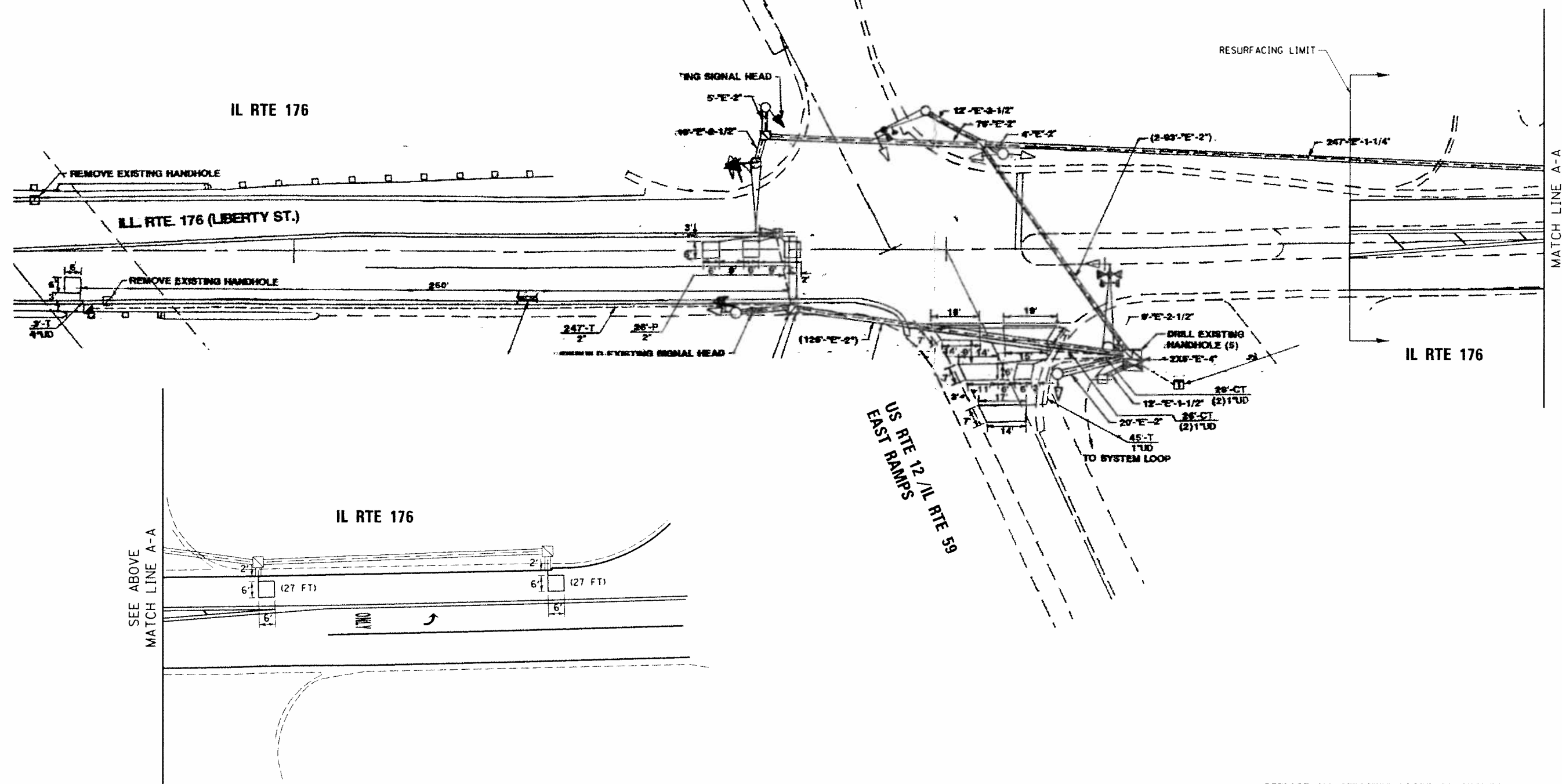
ITEM DESCRIPTION	UNITS	TOTAL QTY.
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	96
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	565
DRILL EXISTING HANDHOLE	EACH	1
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	565
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2	EACH	1

TS SHT NO. 13

EAGLE 1B

FILE NAME = d:\pwork\pwork\plascencia\0318739\F	USER NAME = plascencia 46489.sht-ts.dgn	DESIGNED - IP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED INTERCONNECT SCHEMATIC AND SCHEDULE OF QUANTITIES IL RTE 176 - LARKDALE ROW TO BROWN ST	F.A.P. RTE. 335	SECTION TH-TS-1	COUNTY LAKE	TOTAL SHEETS 36	SHEET NO. 17		
Default	PLOT SCALE = 100.0000' / in.	CHECKED - LP	REVISED -			SCALE: SHEET OF SHEETS STA. TO STA.		CONTRACT NO. 62A19				
	PLOT DATE = 5/7/2015	DATE - 12/15/2014	REVISED -			ILLINOIS FED. AID PROJECT						

WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION, "TRAFFIC SIGNAL SPECIFICATIONS FOR DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION ON ROADWAY GRINDING, RESURFACING AND PATCHING OPERATIONS". SPECIAL ATTENTION MUST BE MADE TO THE SECTIONS "INSPECTION OF CONSTRUCTION" AND "DETECTOR LOOP REPLACEMENT" FOR INSTALLATION AND INSPECTION REQUIREMENTS. LOOP REPLACEMENT WORK THAT DOES NOT MEET THE CONTRACT REQUIREMENTS SHALL NOT BE PAID. WORK NECESSARY TO COMPLETE THE LOOP REPLACEMENT WORK MAY BE ASSIGNED BY THE ENGINEER TO IDOT'S ELECTRICAL MAINTENANCE CONTRACTOR (EMC); ALL RELATED COSTS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.



THIS PLAN IS FOR THE SOLE PURPOSE OF
DETECTOR LOOP REPLACEMENTS ONLY

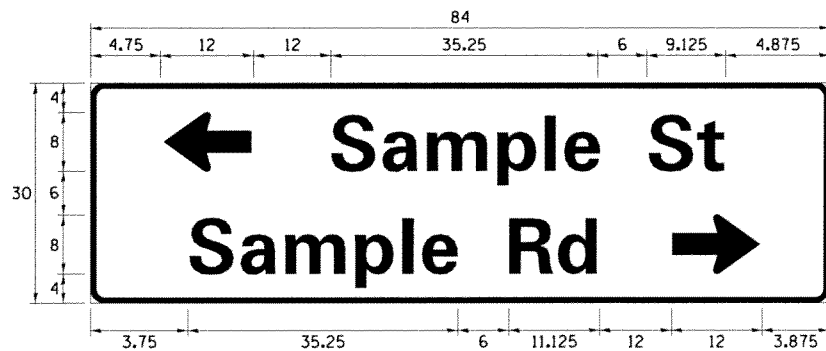
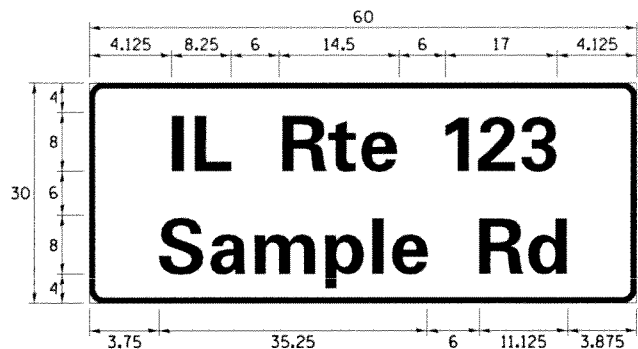
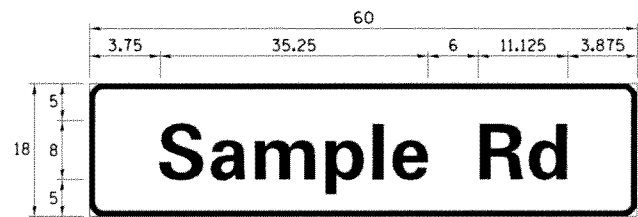
REPLACE ALL DETECTOR LOOPS AS SHOWN
(WITHIN THE RESURFACING LIMITS)

CODE	QUANTITY	UNIT	ITEM
88600700	54	FOOT	DETECTOR LOOP REPLACEMENT

TS SHT NO. 14

FILE NAME : c:\pwwork\pwwork\plascencia\120316729\14	USER NAME : plascencia	DESIGNED - IP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE - DETECTOR LOOP REPLACEMENT IL RTE 176 AND US RTE 12 /IL RTE 59 EAST RAMP				F.A.P. RTE. 335	SECTION TH-TS-1	COUNTY LAKE	TOTAL SHEETS 36	SHEET NO. 18
PLOT SCALE : 48.0000 / in.	CHECKED - LP	REVIS	REVIS		SCALE: NTS	SHEET NO.	OF SHEETS	STA.	TO STA.	CONTRACT NO. 62A19			
PLOT DATE : 5/7/2015	DATE - 12/15/2014	REVIS	REVIS		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT								

SIGN PANEL – TYPE 1 OR TYPE 2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D OR C	-	1 OR 2	ZZ	-

COMMON STREET NAME ABBREVIATIONS AND WIDTHS

NAME	ABBREVIATION	WIDTH (INCH)	
		SERIES "C"	SERIES "D"
AVENUE	Ave	15.000	18.250
BOULEVARD	Blvd	17.125	20.000
CIRCLE	Cir	11.125	13.000
COURT	Ct	8.250	9.625
DRIVE	Dr	8.625	10.125
HIGHWAY	Hwy	18.375	22.000
ILLINOIS	IL	7.000	8.250
LANE	Ln	9.125	10.750
PARKWAY	Pkwy	23.375	27.375
PLACE	Pl	7.125	7.750
ROAD	Rd	9.625	11.125
ROUTE	Rte	12.625	14.500
STREET	St	8.000	9.125
TERRACE	Ter	12.625	14.625
TRAIL	Tr	7.750	9.125
UNITED STATES	US	10.375	12.250

GENERAL NOTES

- 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.
- ALL SIGNS SHALL CONSIST OF A WHITE LEGEND AND BORDER (TYPE ZZ SHEETING) ON A GREEN BACKGROUND (TYPE ZZ SHEETING)
- THE SIGN LENGTH SHALL BE IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHALL NOT EXCEED 8'-0". ALL BORDERS SHALL BE 3/4" WIDE. CORNER RADIUS SHALL BE 1-7/8". THE SPACING BETWEEN THE WORDS SHOULD BE 6". IF POSSIBLE, BUT MAY BE REDUCED TO 5" WHEN SPACING IS CRITICAL. A MINIMUM OF 2-1/2" SHALL BE INCLUDED BETWEEN THE WORD AND THE RIGHT AND LEFT EDGES OF THE SIGN.
- A PREFERRED METHOD FOR THE SIGN DESIGN IS TO USE SERIES "D" LETTER ON A ONE-LINE SIGN 18" IN HEIGHT AND A MAXIMUM OF 8'-0" IN WIDTH. IF SERIES "D" DOES NOT FIT ON A 8'-0" SIGN, THEN SERIES "C" SHOULD BE TRIED. IF SERIES "C" DOES NOT FIT ON A 8'-0" SIGN, A 30" HIGH TWO-LINE SIGN CAN BE USED. THE CROSSROAD DESIGNATION AS TO STREET, AVENUE, ETC. SHOULD BE SPELLED OUT ON THE SECOND LINE, IF THERE IS SPACE AVAILABLE.
- LED ILLUMINATED STREET NAME SIGNS CAN BE USED IN PLACE OF REGULAR SIGN PANELS BUT ANY SPECIAL WORDING AND SYMBOLGY MUST BE APPROVED BY THE DEPARTMENT. GENERAL DESIGN REQUIREMENT AS LISTED ABOVE (COLOR, FONT, SIZE, ETC.) MUST BE FOLLOWED.
- SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS.

LOCAL SUPPLIERS:

J.O. HERBERT COMPANY, INC
MIDLOTHIAN, VA

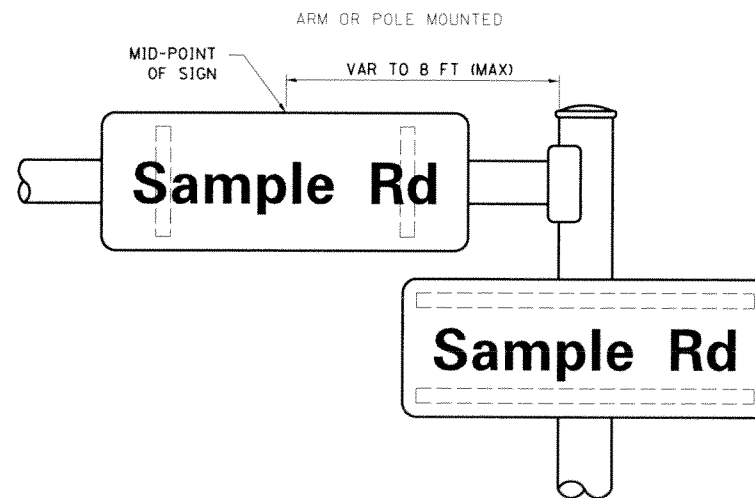
WESTERN REMAC, INC.
WOODRIDGE, IL

PARTS LISTING:

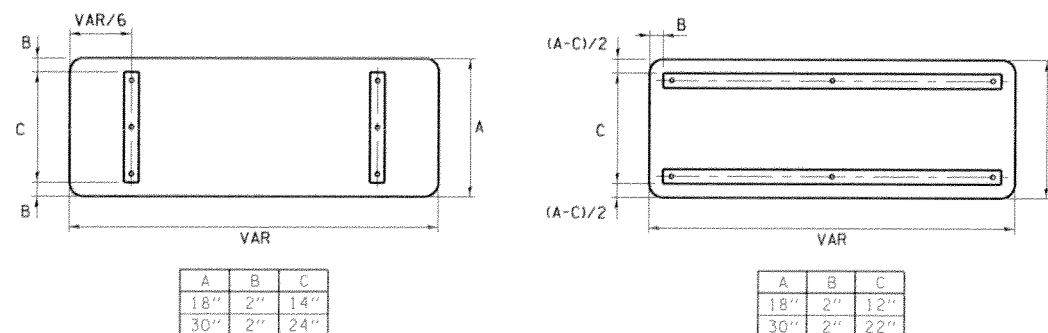
SIGN CHANNEL PART *HPN053 (MED. CHANNEL)
SIGN SCREWS 1/4" x 14 x 1" H.W.H. #3
SELF TAPPING WITH NEOPRENE WASHER
PART *HPN034 (UNIVERSAL)
BRACKETS CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

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

MOUNTING LOCATION



SUPPORTING CHANNELS



STANDARD ALPHABETS SPACING CHART

(8") UPPER CASE AND (6") LOWER CASE

FHWA SERIES "C"				FHWA SERIES "D"			
CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)	CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)
A	0.240	5.122	0.240	A	0.240	6.804	0.240
B	0.880	4.482	0.480	B	0.960	5.446	0.400
C	0.720	4.482	0.720	C	0.800	5.446	0.800
D	0.880	4.482	0.720	D	0.960	5.446	0.800
E	0.880	4.082	0.480	E	0.960	4.962	0.400
F	0.880	4.082	0.240	F	0.960	4.962	0.240
G	0.720	4.482	0.720	G	0.800	5.446	0.800
H	0.880	4.482	0.880	H	0.960	5.446	0.960
I	0.880	1.120	0.880	I	0.960	1.280	0.960
J	0.240	4.082	0.880	J	0.240	5.122	0.960
K	0.880	4.482	0.480	K	0.960	5.604	0.400
L	0.880	4.082	0.240	L	0.960	4.962	0.240
M	0.880	5.284	0.880	M	0.960	6.244	0.960
N	0.880	4.482	0.880	N	0.960	5.446	0.960
O	0.720	4.722	0.720	O	0.800	5.684	0.800
P	0.880	4.482	0.720	P	0.960	5.446	0.240
Q	0.720	4.722	0.720	Q	0.800	5.684	0.800
R	0.880	4.482	0.480	R	0.960	5.446	0.400
S	0.480	4.482	0.480	S	0.400	5.446	0.400
T	0.240	4.082	0.240	T	0.240	4.962	0.240
U	0.880	4.482	0.880	U	0.960	5.446	0.960
V	0.240	4.962	0.240	V	0.240	6.084	0.240
W	0.240	6.084	0.240	W	0.240	7.124	0.240
X	0.240	4.722	0.240	X	0.400	5.446	0.400
Y	0.240	5.122	0.240	Y	0.240	6.884	0.240
Z	0.480	4.482	0.480	Z	0.400	5.446	0.400
a	0.320	3.842	0.640	a	0.400	4.562	0.720
b	0.720	4.082	0.480	b	0.800	4.802	0.480
c	0.480	4.002	0.240	c	0.480	4.722	0.240
d	0.480	4.082	0.720	d	0.480	4.802	0.800
e	0.480	4.082	0.320	e	0.480	4.722	0.320
f	0.320	2.480	0.160	f	0.320	2.882	0.160
g	0.480	4.082	0.720	g	0.480	4.802	0.800
h	0.720	4.082	0.640	h	0.800	4.722	0.720
i	0.720	1.120	0.720	i	0.800	1.280	0.800
j	0.000	2.320	0.720	j	0.000	2.642	0.800
k	0.720	4.322	0.160	k	0.800	5.122	0.160
l	0.720	1.120	0.720	l	0.800	1.280	0.800
m	0.720	6.724	0.640	m	0.800	7.926	0.720
n	0.720	4.082	0.640	n	0.800	4.722	0.720
o	0.480	4.082	0.480	o	0.480	4.882	0.480
p	0.720	4.082	0.480	p	0.800	4.802	0.480
q	0.480	4.082	0.720	q	0.480	4.802	0.800
r	0.720	2.642	0.160	r	0.800	3.042	0.160
s	0.320	3.362	0.240	s	0.320	3.762	0.240
t	0.080	2.882	0.080	t	0.080	3.202	0.080
u	0.640	4.082	0.720	u	0.720	4.722	0.800
v	0.160	4.722	0.160	v	0.160	5.684	0.160
w	0.160	7.524	0.160	w	0.160	9.046	0.160
x	0.000	5.202	0.000	x	0.000	6.244	0.000
y	0.160	4.962	0.160	y	0.160	6.004	0.160
z	0.240	3.362	0.240	z	0.240	4.002	0.240
1	0.720	1.680	0.880	1	0.800	2.000	0.960
2	0.480	4.482	0.480	2	0.800	5.446	0.800
3	0.480	4.482	0.480	3	1.440	5.446	0.800
4	0.240	4.962	0.720	4	0.160	6.004	0.960
5	0.480	4.482	0.480	5	0.800	5.446	0.800
6	0.720	4.482	0.720	6	0.800	5.446	0.800
7	0.240	4.482	0.720	7	0.560	5.446	0.560
8	0.480	4.482	0.480	8	0.800	5.446	0.800
9	0.480	4.482	0.480	9	0.800	5.446	0.800
0	0.720	4.722	0.720	0	0.800	5.684	0.800
-	0.240	2.802	0.240	-	0.240	2.802	0.240

TS SHT NO. 8

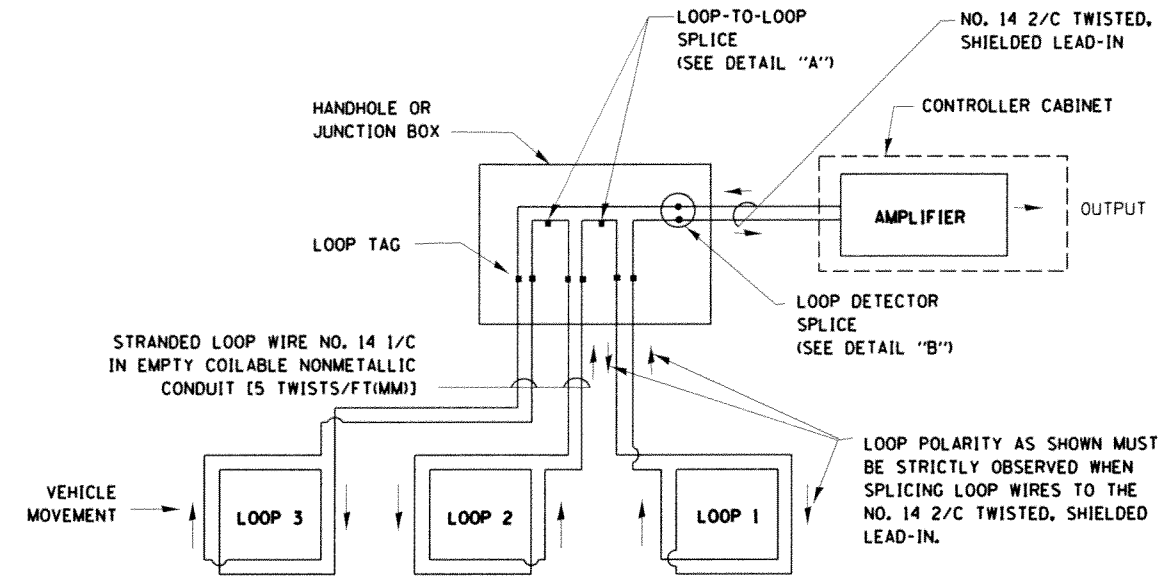
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Default	PLOT SCALE: 100.0000 / 1	CHECKED: IP	REVISED: -		SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	TS-02 CONTRACT NO. 62A19		
	PLOT DATE: 5/7/2015	DATE: 10/01/2014	REVISED: -		ILLINOIS FED. AID PROJECT								

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															
UNINTERRUPTABLE POWER SUPPLY				JUNCTION BOX				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F															
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT				UNDERGROUND CONDUIT, GALVANIZED STEEL (UC)				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM24F															
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT				TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM24F															
STEEL MAST ARM ASSEMBLY AND POLE				COMMON TRENCH				GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE															
ALUMINUM MAST ARM ASSEMBLY AND POLE				COILABLE NONMETALLIC CONDUIT (EMPTY)				CONTROLLER CABINET AND FOUNDATION TO BE REMOVED															
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE				SYSTEM ITEM				STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED															
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA				INTERSECTION ITEM				ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED															
SIGNAL POST				REMOVE ITEM				STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED															
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM				RELOCATE ITEM				SIGNAL POST AND FOUNDATION TO BE REMOVED															
GUY WIRE				ABANDON ITEM				INTERSECTION & SAMPLING (SYSTEM) DETECTOR															
SIGNAL HEAD				12" (300mm) TRAFFIC SIGNAL SECTION				SAMPLING (SYSTEM) DETECTOR															
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)				12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE				QUEUE DETECTOR															
SIGNAL HEAD WITH BACKPLATE				SIGNAL FACE				PREFORMED QUEUE DETECTOR															
SIGNAL HEAD OPTICALLY PROGRAMMED				SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD				PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR															
FLASHER INSTALLATION (S DENOTES SOLAR POWER)				"RB" INDICATES REFLECTIVE BACKPLATE				PREFORMED SAMPLING (SYSTEM) DETECTOR															
PEDESTRIAN SIGNAL HEAD				12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL				<h2 style="margin: 0;">RAILROAD SYMBOLS</h2> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">EXISTING</th> <th style="width: 50%;">PROPOSED</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </tbody> </table>				EXISTING	PROPOSED										
EXISTING	PROPOSED																						
PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED																			
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID																			
ILLUMINATED SIGN "NO LEFT TURN"				PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER																			
ILLUMINATED SIGN "NO RIGHT TURN"				RADIO INTERCONNECT																			
DETECTOR LOOP, TYPE I				RADIO REPEATER																			
PREFORMED DETECTOR LOOP				DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED																			
MICROWAVE VEHICLE SENSOR				GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)																			
VIDEO DETECTION CAMERA																							
VIDEO DETECTION ZONE																							
PAN, TILT, ZOOM CAMERA																							
WIRELESS DETECTOR SENSOR																							
WIRELESS ACCESS POINT																							

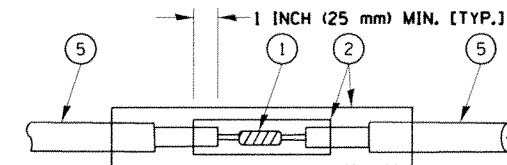
LOOP DETECTOR NOTES

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 DIVESHOLES 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.

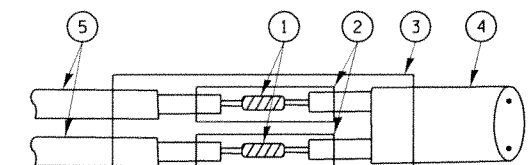


DETECTOR LOOP WIRING SCHEMATIC

- 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.



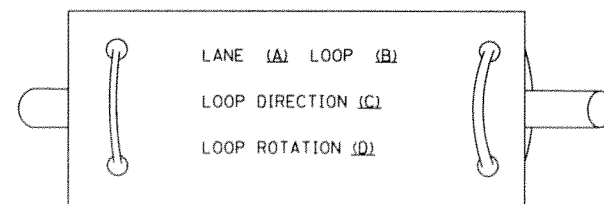
**DETAIL "A"
LOOP-TO-LOOP SPLICE**



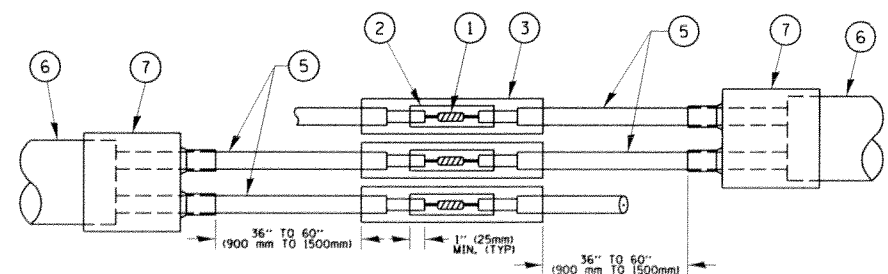
**DETAIL "B"
LOOP-TO-CONTROLLER SPLICE**

TYPE I LOOP

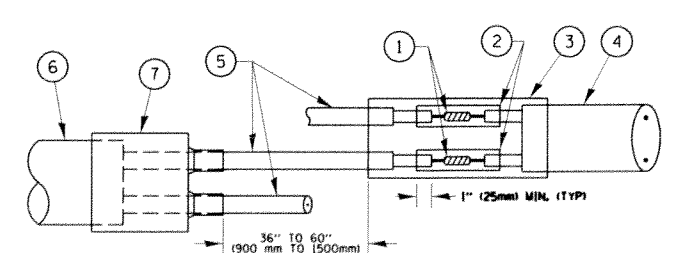
LOOP LEAD-IN CABLE TAG



- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



**DETAIL "A"
LOOP-TO-LOOP SPLICE**

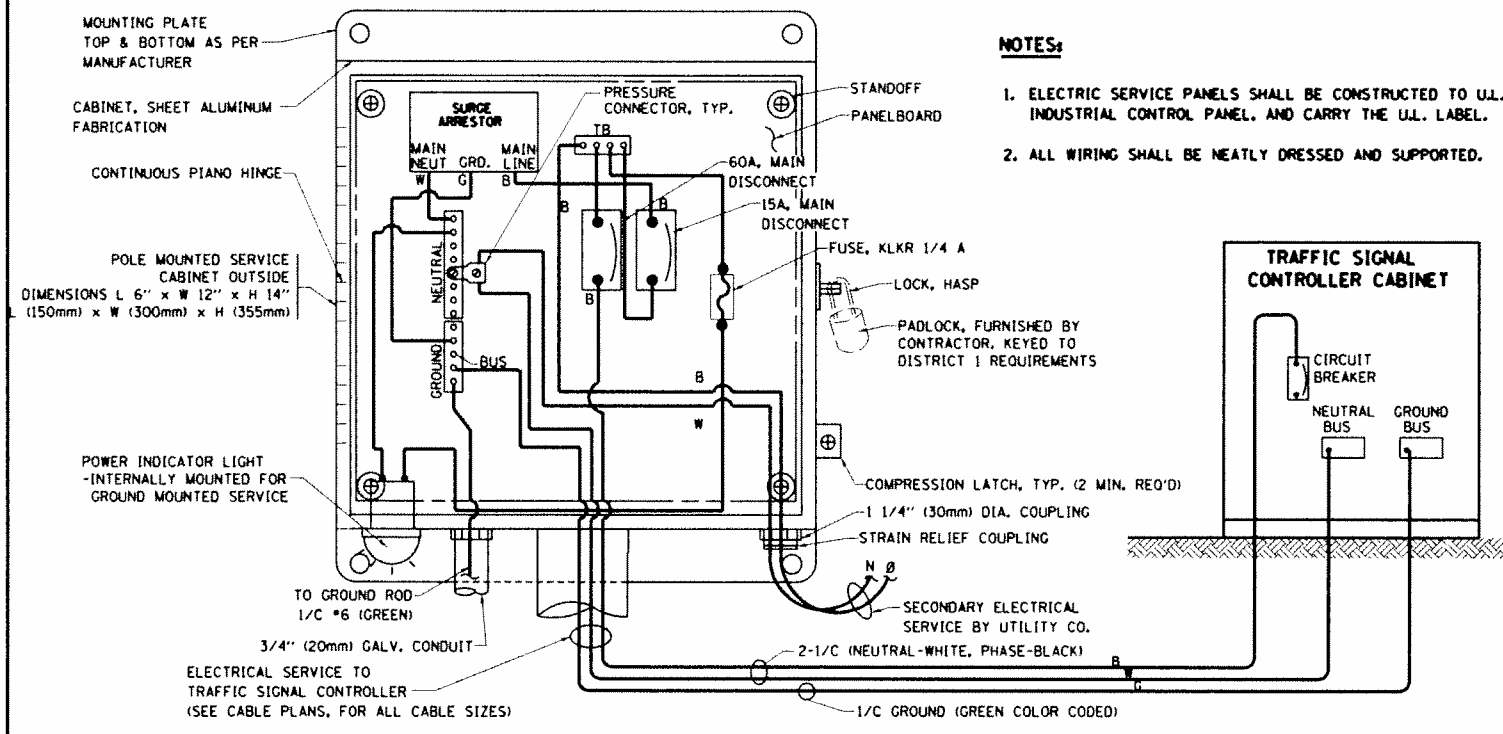


**DETAIL "B"
LOOP-TO-CONTROLLER SPLICE**

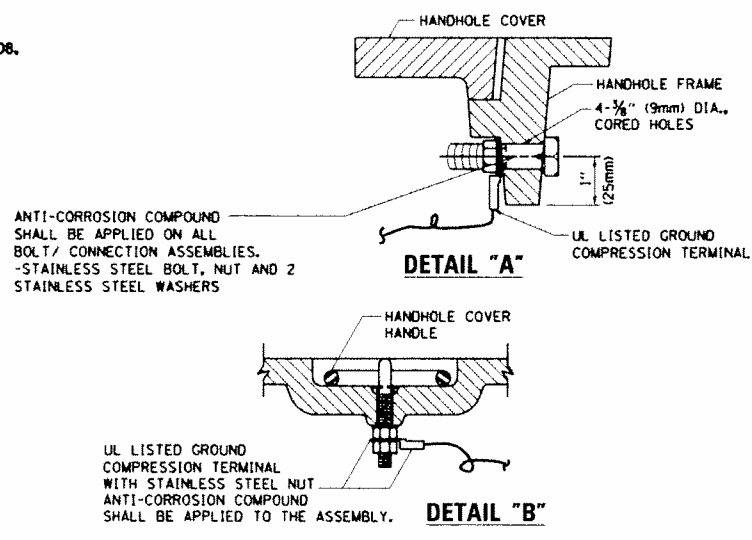
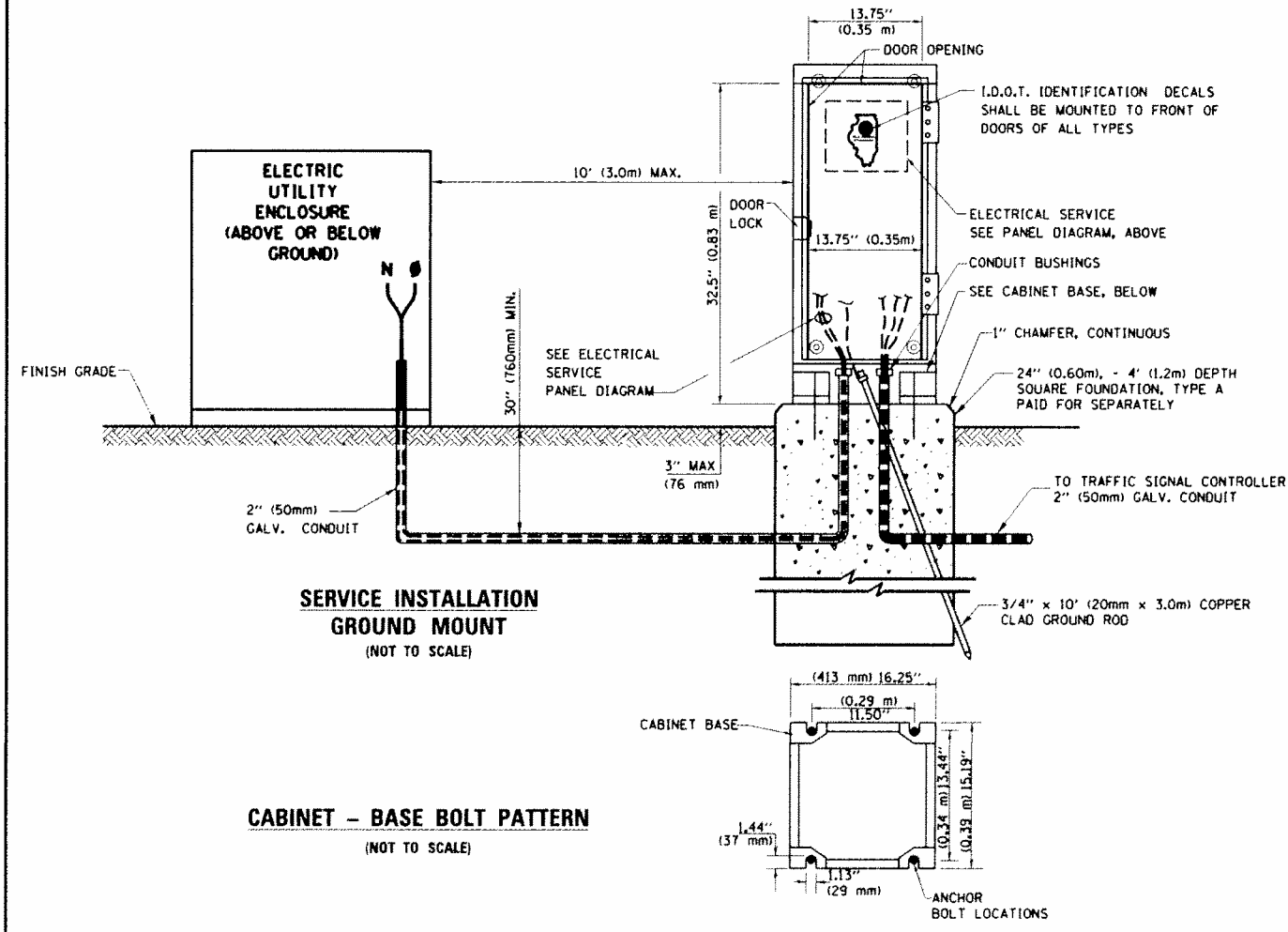
LOOP DETECTOR SPLICE

- 1 WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- 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

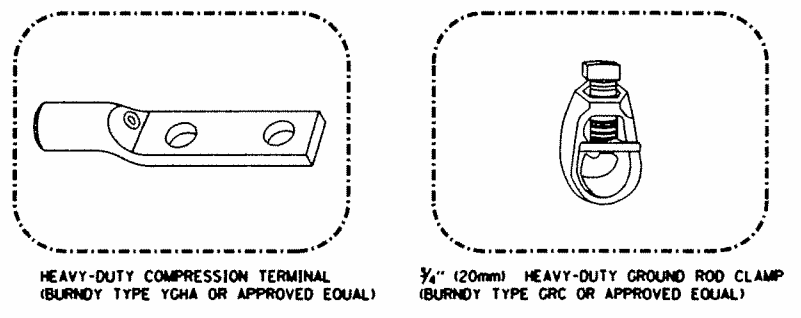
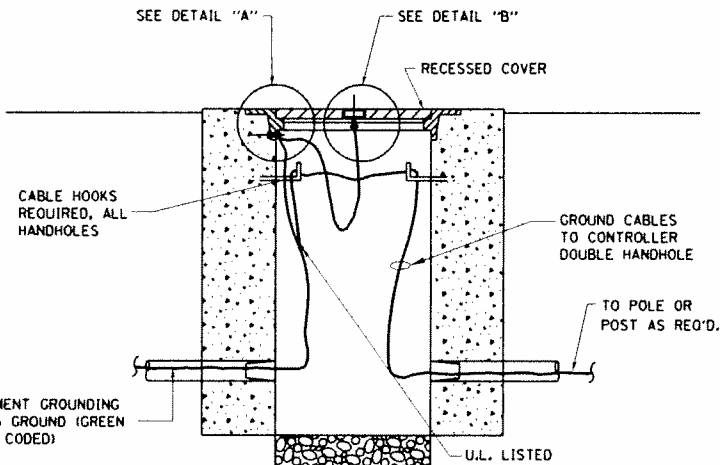
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PLOT SCALE = 100.0000 / in.	DATE - 10-28-09	REVISED -	REVISED -			CONTRACT NO. 62A19						
PLOT DATE = 5/12/2015												



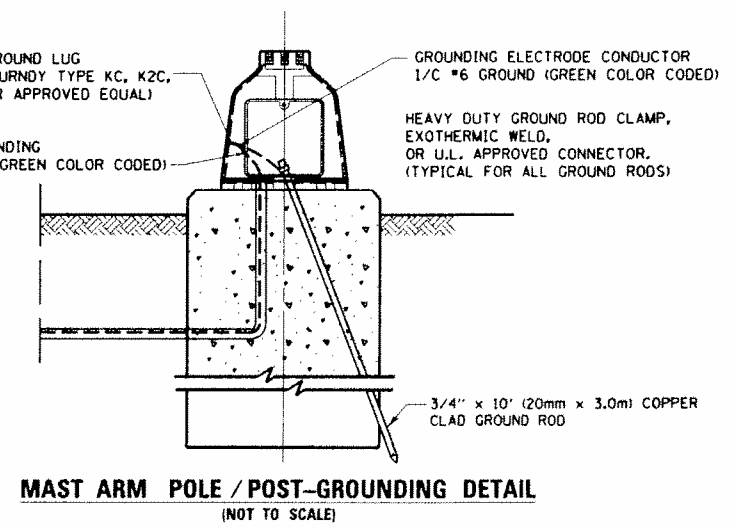
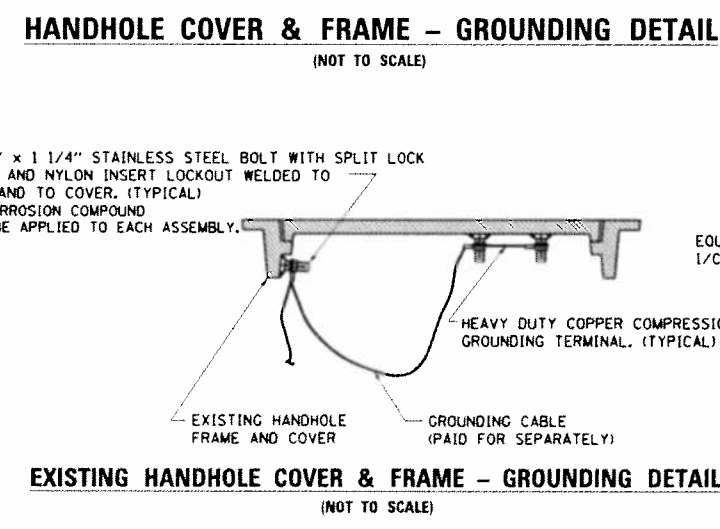
ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
 (NOT TO SCALE)

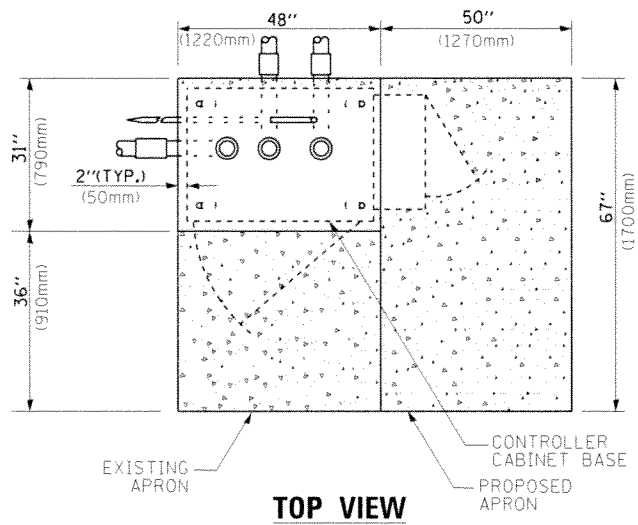


- NOTES:**
- GROUNDING SYSTEM**
1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED 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.

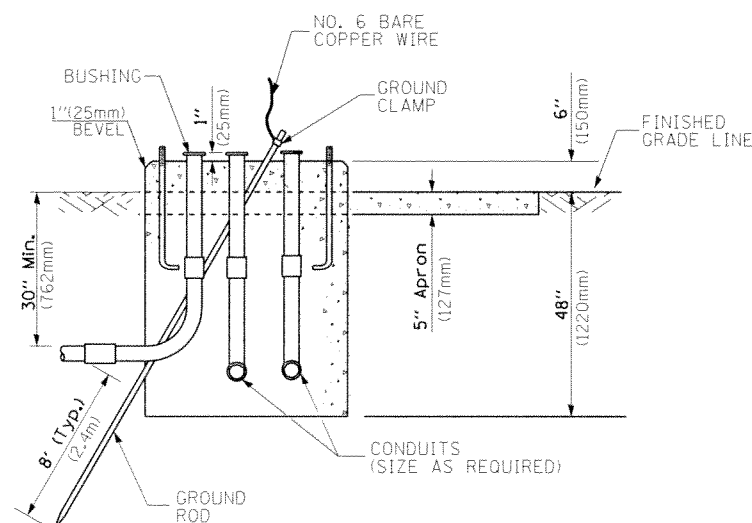


- NOTES:**
- ALL CLAMPS SHALL BE BRONZE OR COPPER, U.L. APPROVED.
 - GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES. 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES. 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.

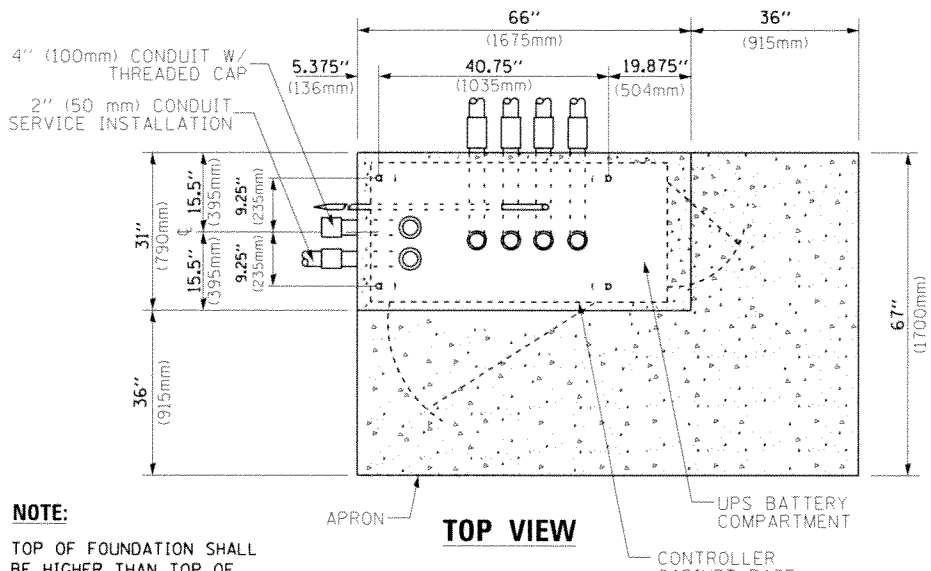




TOP VIEW

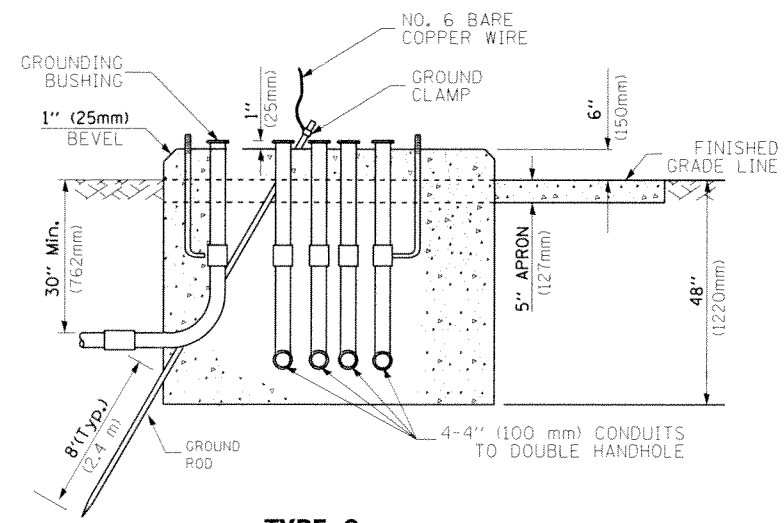


**TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET**

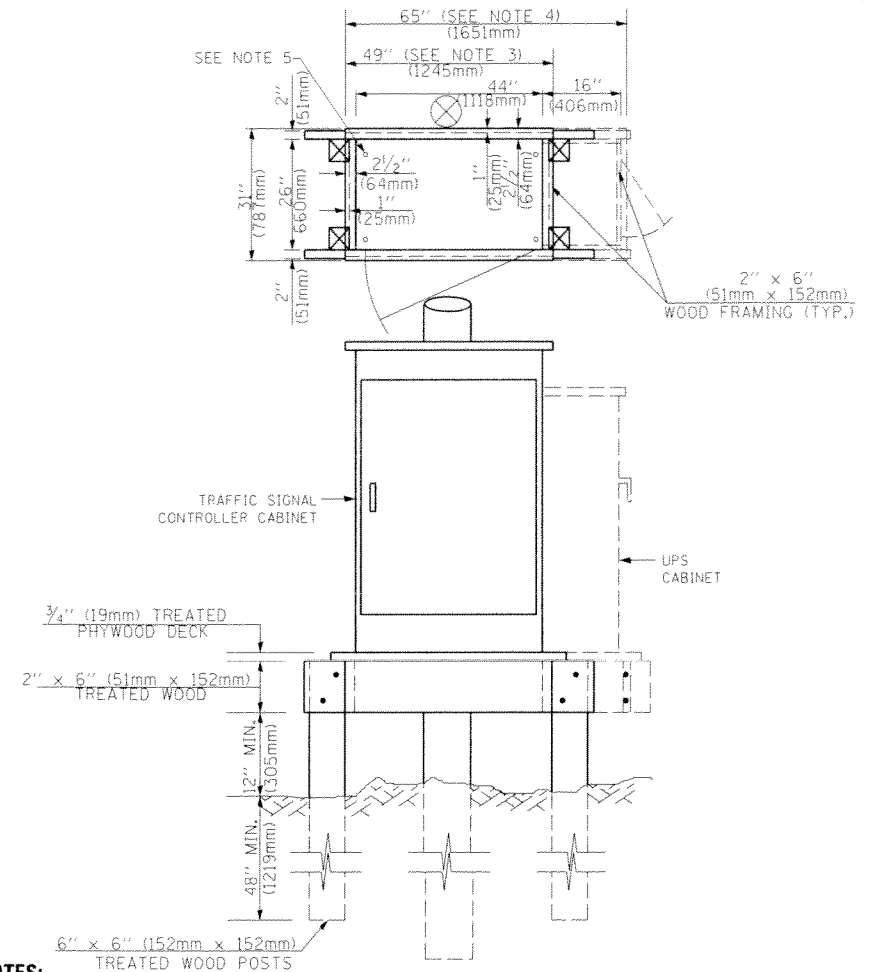


TOP VIEW

NOTE:
TOP OF FOUNDATION SHALL BE HIGHER THAN TOP OF DOUBLE HANDHOLE



**TYPE C
FOR GROUND MOUNTED
SUPER P (TYPE IV) AND SUPER R (TYPE V)
CONTROLLER CABINETS**



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.

**TEMPORARY SIGNAL CONTROLLER
WOOD SUPPORT PLATFORM**

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)

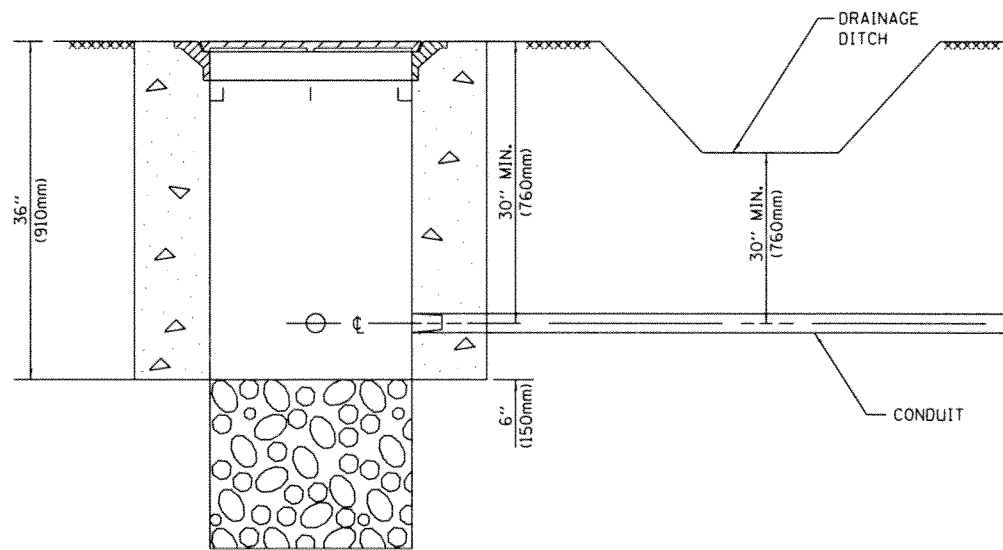
DEPTH OF FOUNDATION

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 56' (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..

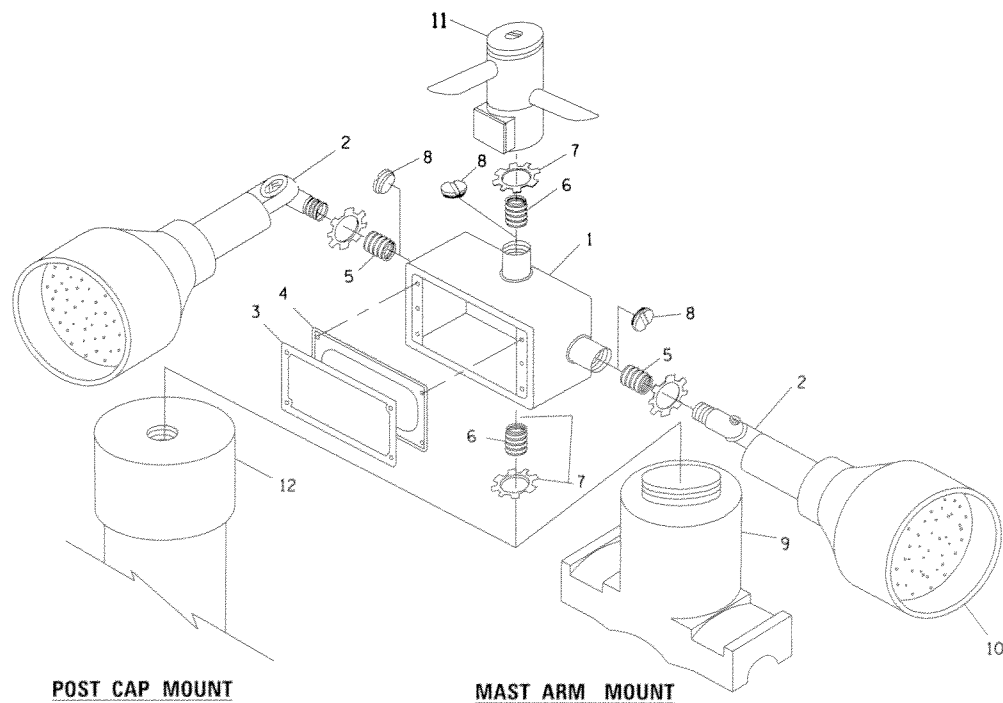
DEPTH OF MAST ARM FOUNDATIONS, TYPE E



NOTES:

1. CONDUIT DEPTH SHALL BE A MINIMUM OF 30" (760mm) BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING GROUND
2. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL CONDUIT PLACED UNDER ROADWAY PAVEMENT, MULTI-USE PATHS, SIDEWALKS AND SOIL SURFACES.
3. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

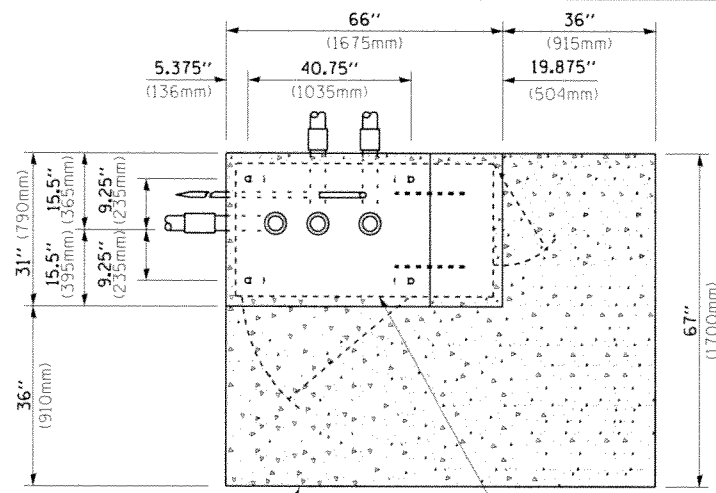
HANDHOLE WITH MINIMUM CONDUIT DEPTH
(NOT TO SCALE)



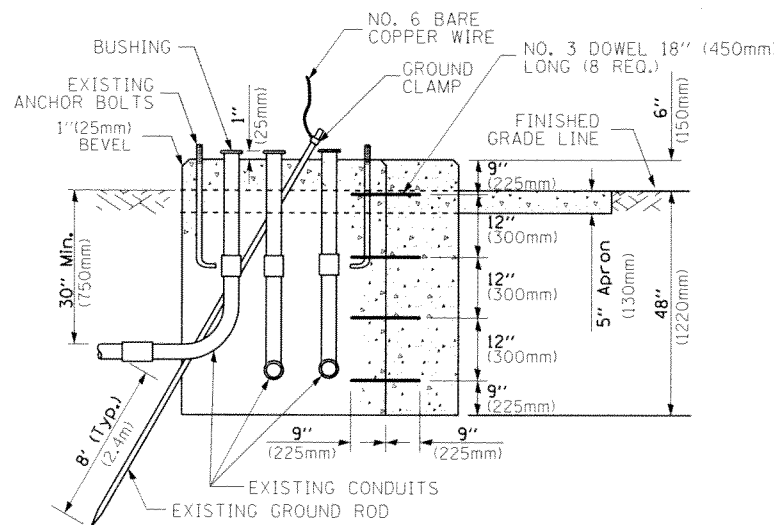
POST CAP MOUNT

MAST ARM MOUNT

EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL



TOP VIEW
(NOT TO SCALE)

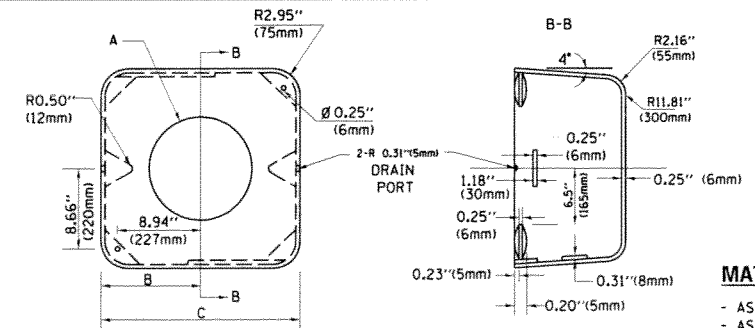


MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION
(NOT TO SCALE)

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-0-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.



MATERIAL:
- ASTM A36 STEEL
- ASTM A-123 HOT DIPPED GALVANIZED

A	B	C	HEIGHT	WEIGHT
VARIABLES	9.5" (241mm)	19" (483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIABLES	10.75" (273mm)	21.5" (546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIABLES	13.0" (330mm)	26" (660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIABLES	18.5" (470mm)	37" (940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

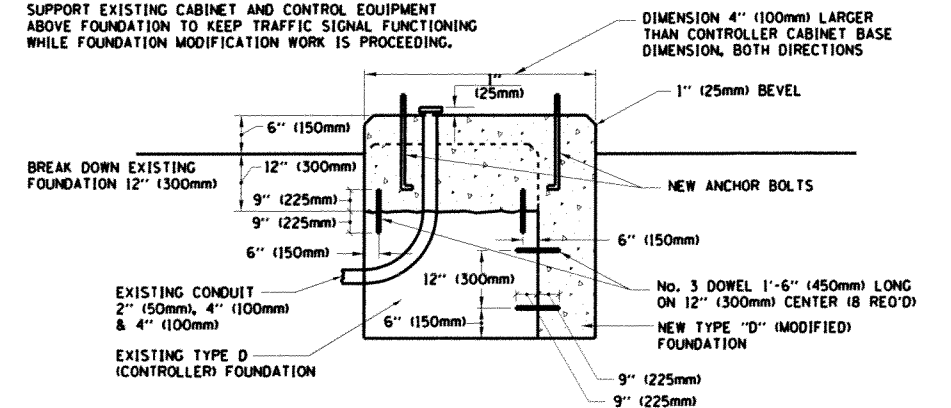
SHROUD

NOTES:

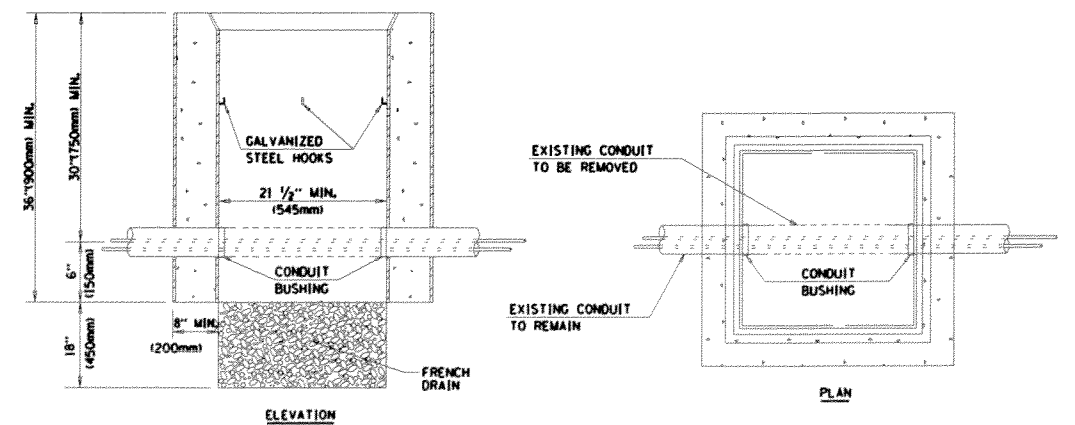
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

NOTE:

SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.



MODIFY EXISTING TYPE "D" FOUNDATION



NOTES:

1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

HANDHOLE TO INTERCEPT EXISTING CONDUIT

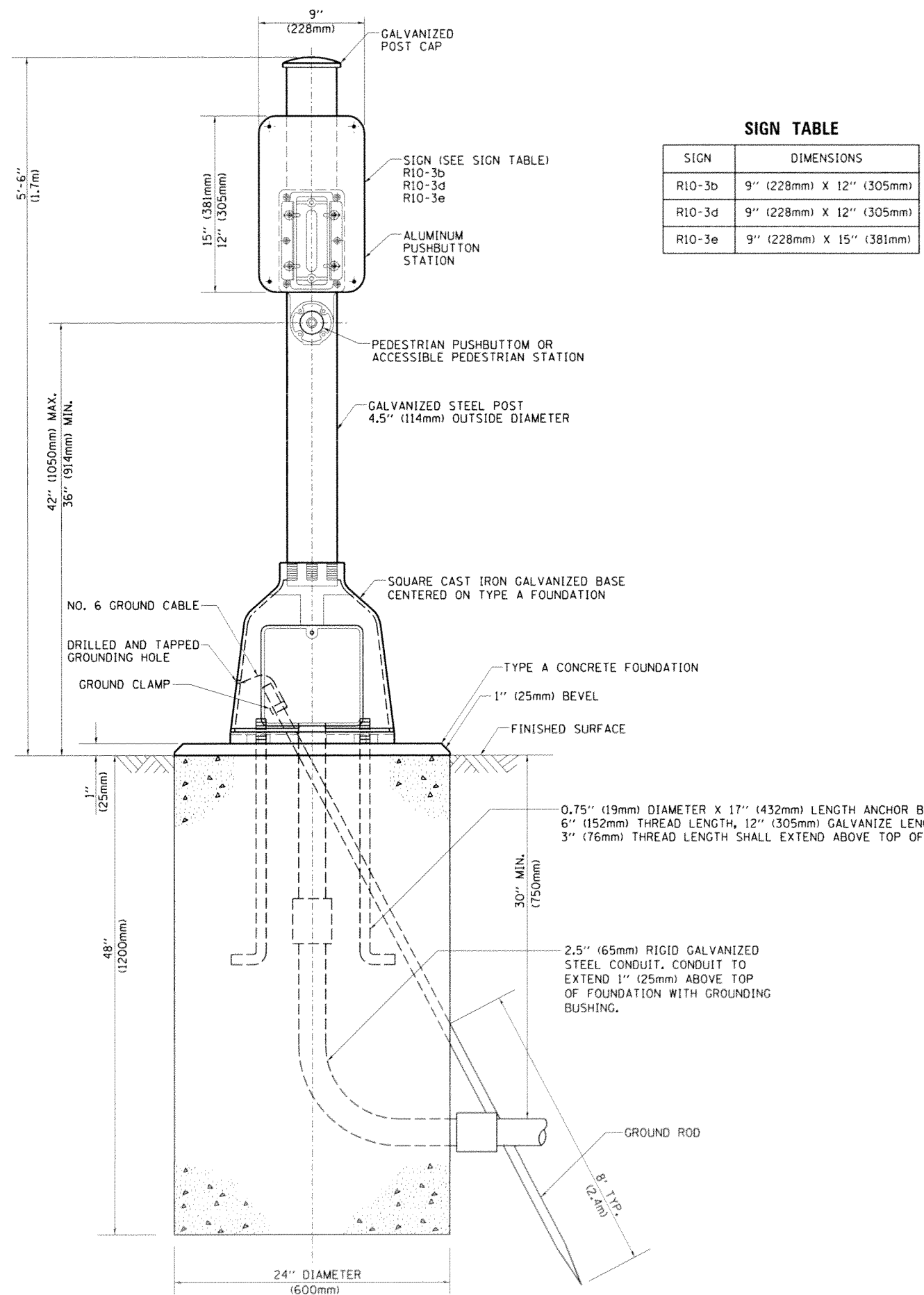
FILE NAME *	USER NAME * STEEDPA	DESIGNED - DAD	REVISED - DAG 1-1-14
c:\p\work\p\std\std\std\std\std\dgn		DRAWN - BCK	REVISED -
	PLOT SCALE = 100.0000 1" = 10'	CHECKED - DAD	REVISED -
	PLOT DATE = 5/12/2015	DATE - 10-28-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

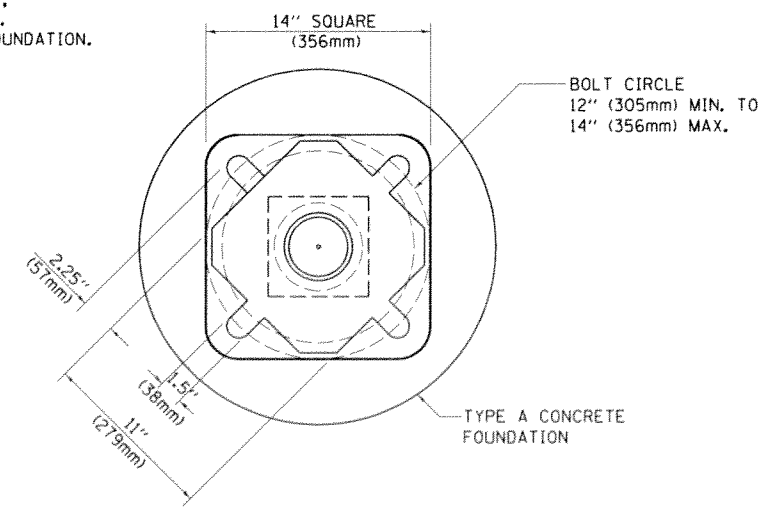
F.A.P. RTE. 335	SECTION TH-TS-1	COUNTY LAKE	TOTAL SHEETS 36	SHEET NO. 25
TS-05		CONTRACT NO. 62A19		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

SCALE: NONE SHEET NO. 6 OF 7 SHEETS STA. TO STA.



SIGN TABLE

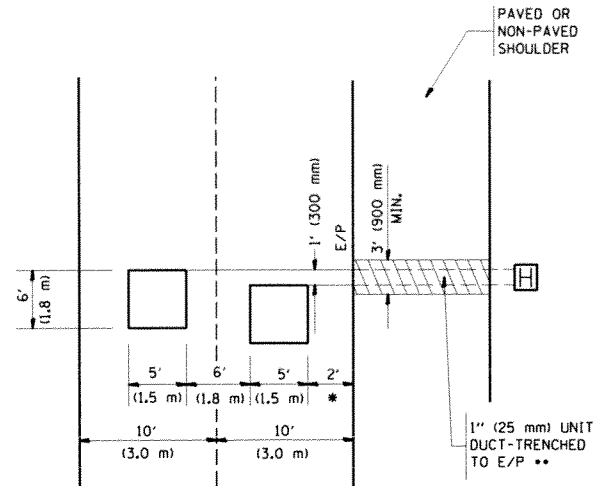
SIGN	DIMENSIONS
R10-3b	9" (228mm) X 12" (305mm)
R10-3d	9" (228mm) X 12" (305mm)
R10-3e	9" (228mm) X 15" (381mm)



BOLT PATTERN
PEDESTRIAN PUSH BUTTON POST, TYPE A

LOOPS NEXT TO SHOULDERS

PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER.



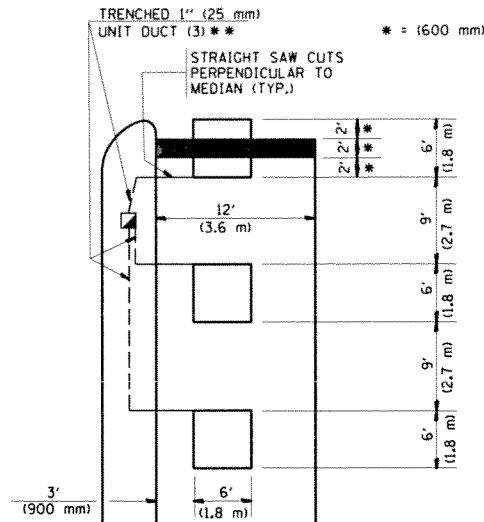
* = (600 mm)

** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

**LEFT TURN LANES WITH MEDIANS
VOLUME DENSITY ("FAR OUT" DETECTION)
ON SAME APPROACH**

(PROTECTED / PERMITTED LEFT TURN PHASING)

HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.



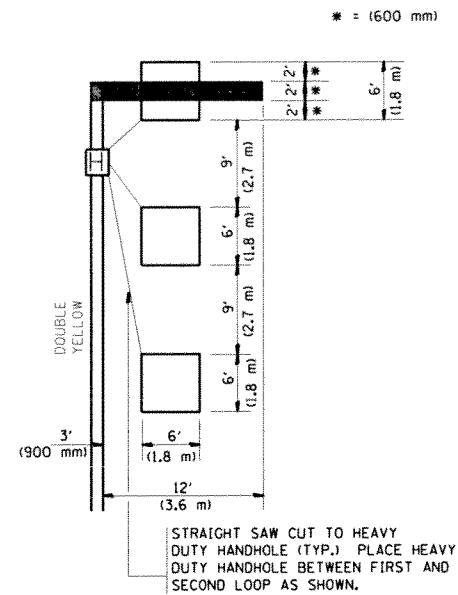
* = (600 mm)

** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

**LEFT TURN LANES WITHOUT MEDIANS
VOLUME DENSITY ("FAR OUT" DETECTION)
ON SAME APPROACH**

(PROTECTED / PERMITTED LEFT TURN PHASING)



* = (600 mm)

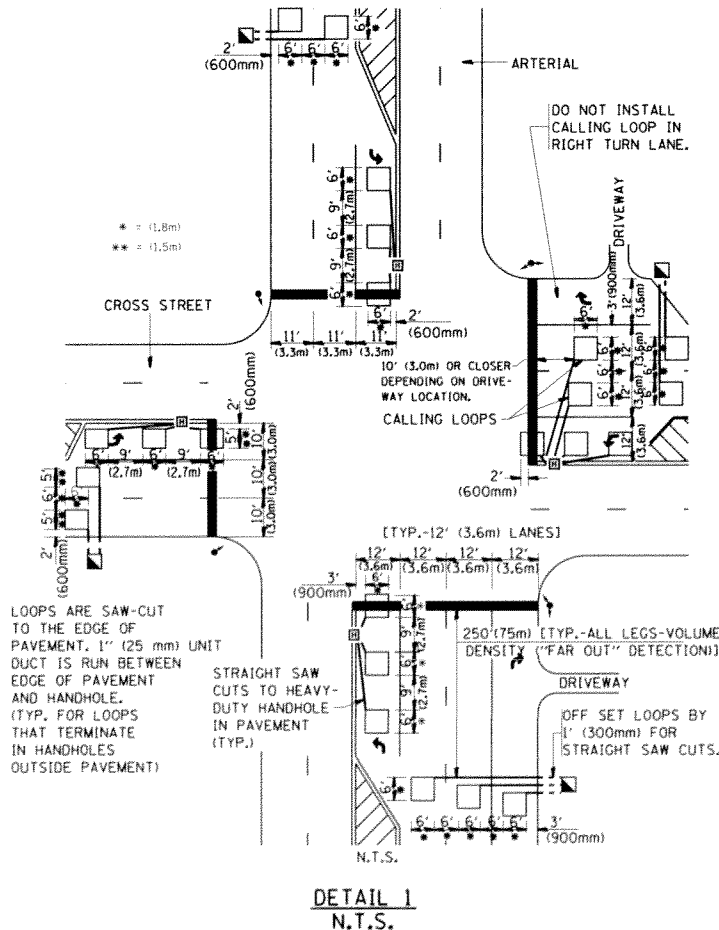
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

NOTES:

VEHICLES LOOP DETECTORS

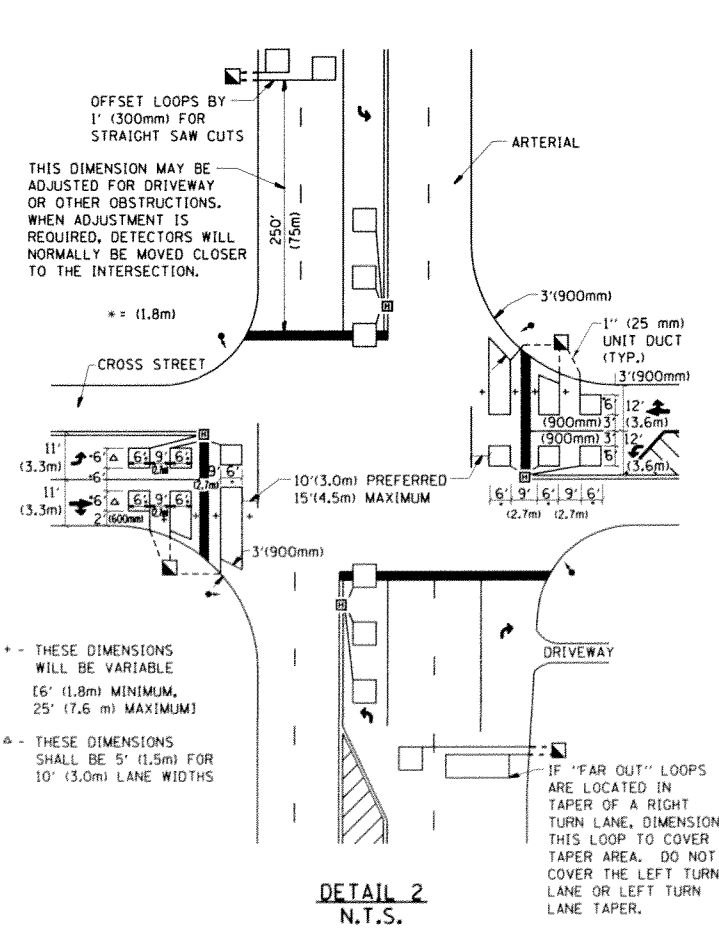
- * ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATELY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- * ONE DIMENSION OF ALL DETECTOR LOOPS SHALL BE SIX FEET (1.8 m)
- * EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
- * WHEN NON-LOCKING, PRESENCE DETECTION IS USED, MORE THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR (i.e. 1-1/2, 1-3/4, 2).
- * WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

**ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)
CROSS STREET-VOLUME DENSITY ("FAR OUT" DETECTION)**



DETAIL 1
N.T.S.

**ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)
CROSS STREET-NON VOLUME DENSITY ("UPTIGHT" PRESENCE DETECTION)**



DETAIL 2
N.T.S.

PLACEMENT OF DETECTORS

THE FOLLOWING FIGURES REPRESENT THE MOST COMMON DETECTOR LOOP LOCATIONS AND SIZES. ADJUSTMENTS WILL BE NECESSARY FOR SPECIFIC GEOMETRIC CONSIDERATIONS.

LOCATIONS AND DEMENSIONS OF DETECTOR LOOPS ARE REQUIRED ON ALL SIGNAL LAYOUT PLAN SHEETS.

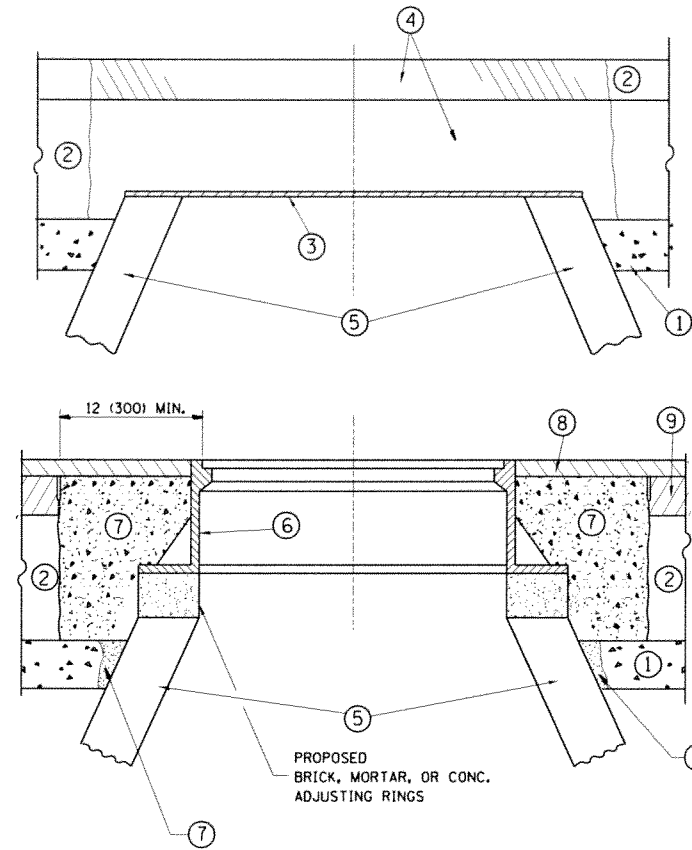
"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0 m-4.5 m) BEHIND THE CROSSING STREET'S EDGE OF PAVEMENT EXTENDED.

NOTE:

ALL DETAILS AND NOTES SHOWN ARE FROM THE I.D.O.T. DISTRICT 1 TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

FILE NAME =	USER NAME = STEEDPA	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
cd:\pw\work\pwr\dtd\steedpa\d0318727\01stc\d.dgn		DRAWN -	REVISED -				335	TH-TS-1	LAKE	36	27
PLOT SCALE = 100.0000 / in.		CHECKED - R.K.F.	REVISED -				TS-07		CONTRACT NO. 62A19		
PLOT DATE = 5/13/2015		DATE -	REVISED -				FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT				
				SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.					



CONSTRUCTION PROCEDURES

- STAGE 1 (BEFORE PAVEMENT MILLING)**
- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
 - B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
 - C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
 - D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1 1/2 (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

- STAGE 2 (AFTER PAVEMENT MILLING)**
- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
 - B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
 - C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS PP-1* CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.
- * UNLESS OTHERWISE SPECIFIED IN THE PLANS.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS EXCEPT THAT "THE CONTRACTOR SHALL ADJUST THE STRUCTURES TO THE FINISHED PAVEMENT ELEVATION NO MORE THAN 5 CALENDAR DAYS PRIOR TO PLACEMENT OF THE FINAL LIFT OF SURFACE UNLESS APPROVED BY THE ENGINEER."

LEGEND

- ① SUB-BASE GRANULAR MATERIAL
- ② EXISTING PAVEMENT
- ③ 36 (900) DIAMETER METAL PLATE
- ④ PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- ⑤ EXISTING STRUCTURE
- ⑥ FRAME AND LID (SEE NOTES)
- ⑦ CLASS PP-1* CONCRETE
- ⑧ PROPOSED HMA SURFACE COURSE
- ⑨ PROPOSED HMA BINDER COURSE

LOCATION OF STRUCTURES:

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

BASIS OF PAYMENT:

REMOVING FRAMES AND LIDS ON DRAINAGE AND UTILITY STRUCTURES IN THE PAVEMENT PRIOR TO MILLING, AND ADJUSTING TO FINAL GRADE PRIOR TO PLACING THE SURFACE COURSE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)."

THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.

NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

NOTES:

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.

CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.

THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME *	USER NAME * STEEDPA	DESIGNED - R. SHAH	REVISED - R. WIEDEMAN 05-14-04
c:\p\work\p\dot\st\stedpa\08318727\Dist\td.dgn		DRAWN -	REVISED - R. BORO 01-01-07
PLOT SCALE * 100.0000' / 1"		CHECKED -	REVISED - R. BORO 03-09-11
PLOT DATE * 5/7/2015		DATE - 10-25-94	REVISED - R. BORO 12-06-11

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	TH-TS-1	LAKE	36	28
BD600-03 (BD-8)		CONTRACT NO. 62A19		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

VARIABLE - TO MEET EXISTING DIMENSIONS AND FIELD CONDITIONS (SEE NOTE ②)

PROP. CONC. CURB OR CURB AND GUTTER REPLACEMENT IN ACCORDANCE WITH STATE STANDARD 606001. (SEE NOTE ②)

SAW CUT FULL DEPTH - INCLUDED IN THE COST OF SIDEWALK, DRIVEWAY OR MEDIAN SURFACE REMOVAL PAY ITEM.

SEE STATE STANDARD 606001
EXISTING OR PROPOSED HMA SURFACE (IF APPLICABLE)

1/4" (5) **

18" (450) MAX.

EXISTING SIDEWALK, DRIVEWAY, MEDIAN SURFACE, SOD OR GROUND.

PROPOSED SIDEWALK, DRIVEWAY PAVEMENT, MEDIAN SURFACE OR SODDING SALT TOLERANT WITH TOP SOIL, 4" (100) SOD RESTORATION (SEE NOTE ①).

EXISTING CONCRETE PAVEMENT, CONCRETE BASE COURSE OR FLEXIBLE PAVEMENT

3" (75) MIN.

SUITABLE BACKFILL MATERIAL (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT)

PROPOSED 3/4" (20) PREFORMED EXPANSION JOINT AT CONCRETE SIDEWALKS, DRIVEWAYS, AND MEDIANS. (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.)

* 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.

** IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

NOTE: ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.

SODDING, SALT TOLERANT AND TOP SOIL, FURNISH AND PLACE 4" WILL BE PAID FOR SEPARATELY.

② FERTILIZER FOR THE PLACEMENT OF THE SOD IS NOT REQUIRED

③ CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.

④ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.

⑤ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑥ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑦ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.

⑧ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.

REMOVAL AND REPLACEMENT 4" (100) OR LESS IS INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

REMOVAL AND REPLACEMENT IN EXCESS OF 4" (100) WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

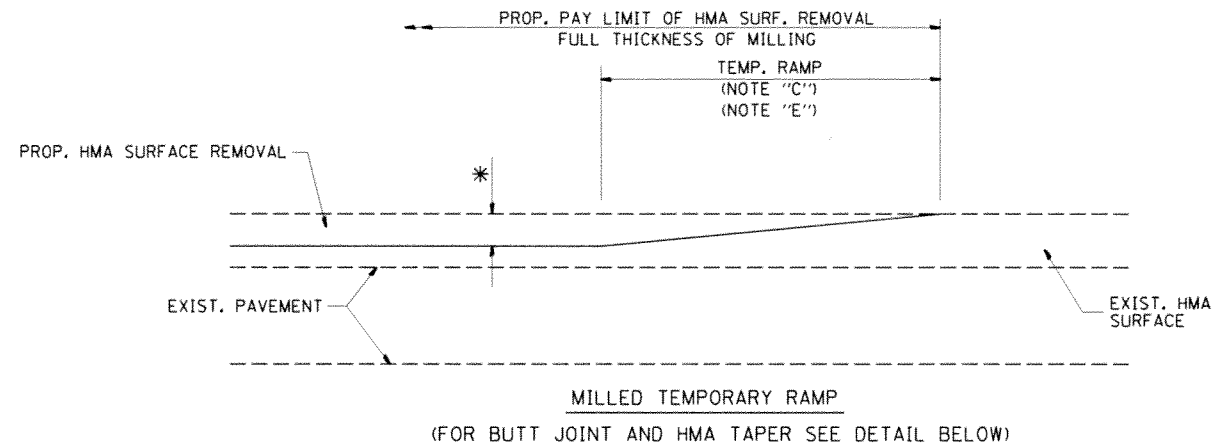
BASIS OF PAYMENT:

THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT (METER) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

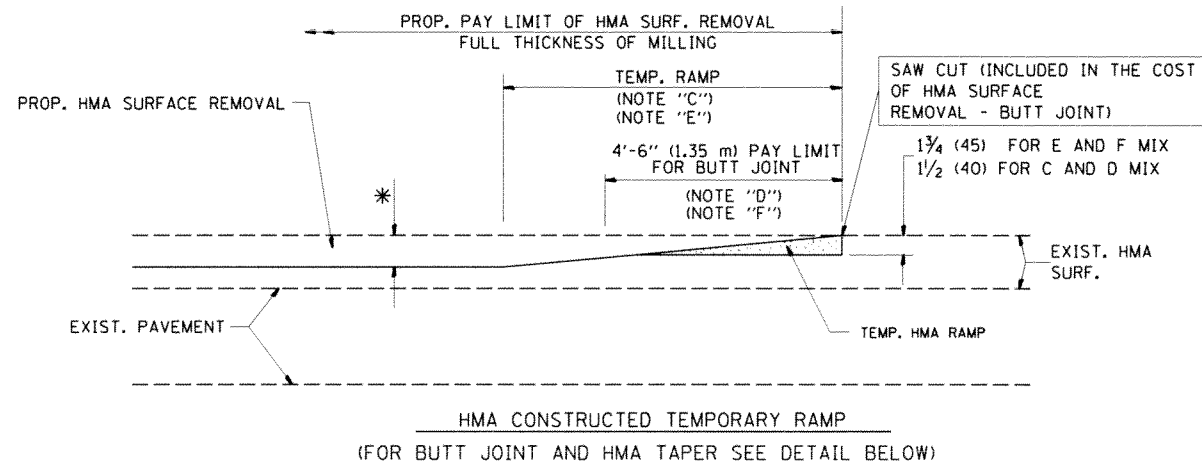
CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

FILE NAME *	USER NAME * STEEDPA	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pw_work\pwork\stedpa\0318727\01st	std.dgn	DRAWN -	REVISED - A. ABBAS 03-21-97		335	TH-TS-1	LAKE	36	30			
	PLOT SCALE = 100.0000 1/16" = 1'	CHECKED -	REVISED - M. GOMEZ 01-22-01		BD600-06 (BD-24)			CONTRACT NO. 62A19				
	PLOT DATE = 5/7/2015	DATE - 03-11-94	REVISED - R. BORO 12-15-09		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

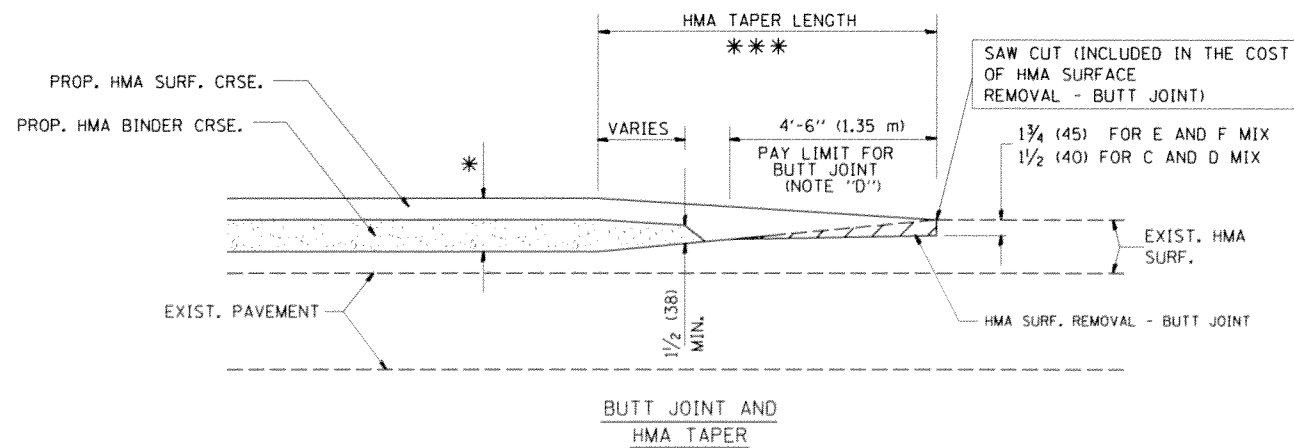


OPTION 1

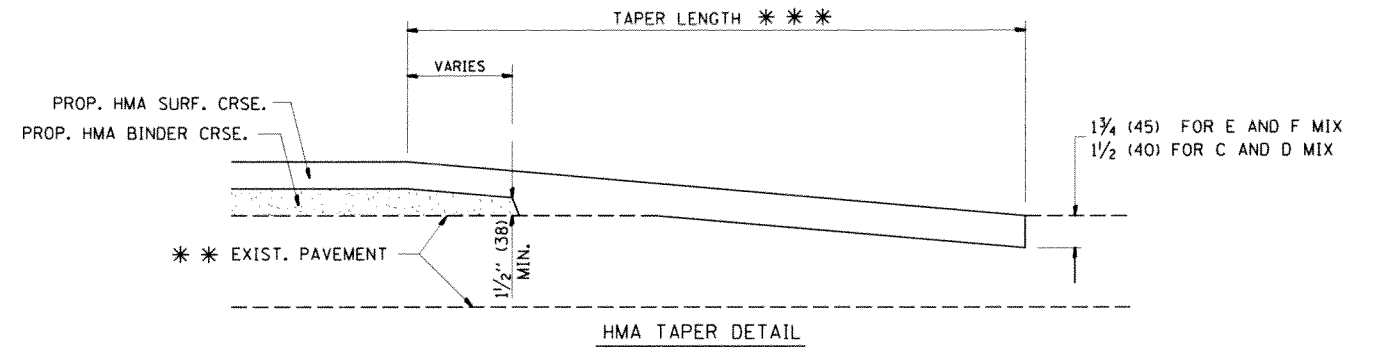
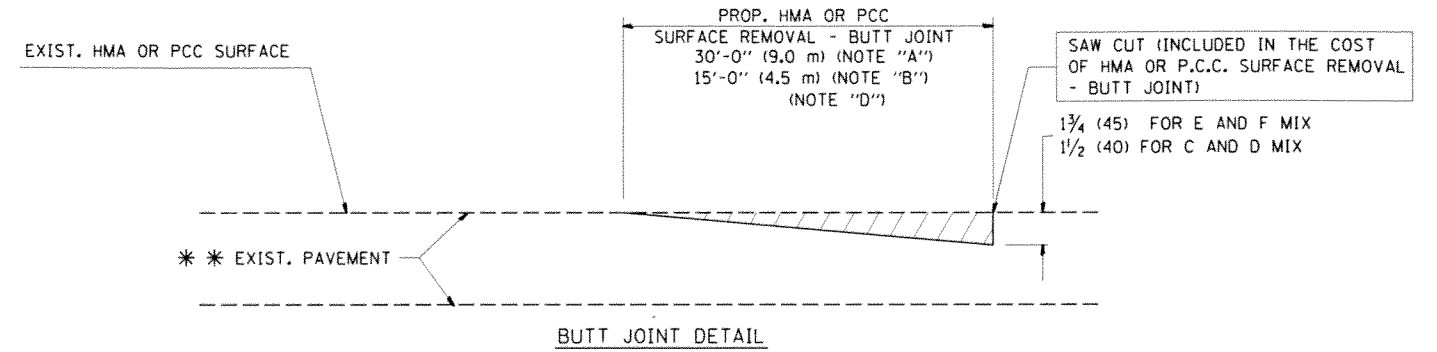


OPTION 2

TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING



TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

*** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
 - B: MINOR SIDE ROADS.
 - C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
 - D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
 - E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
 - F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
 - G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- * SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- *** 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

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

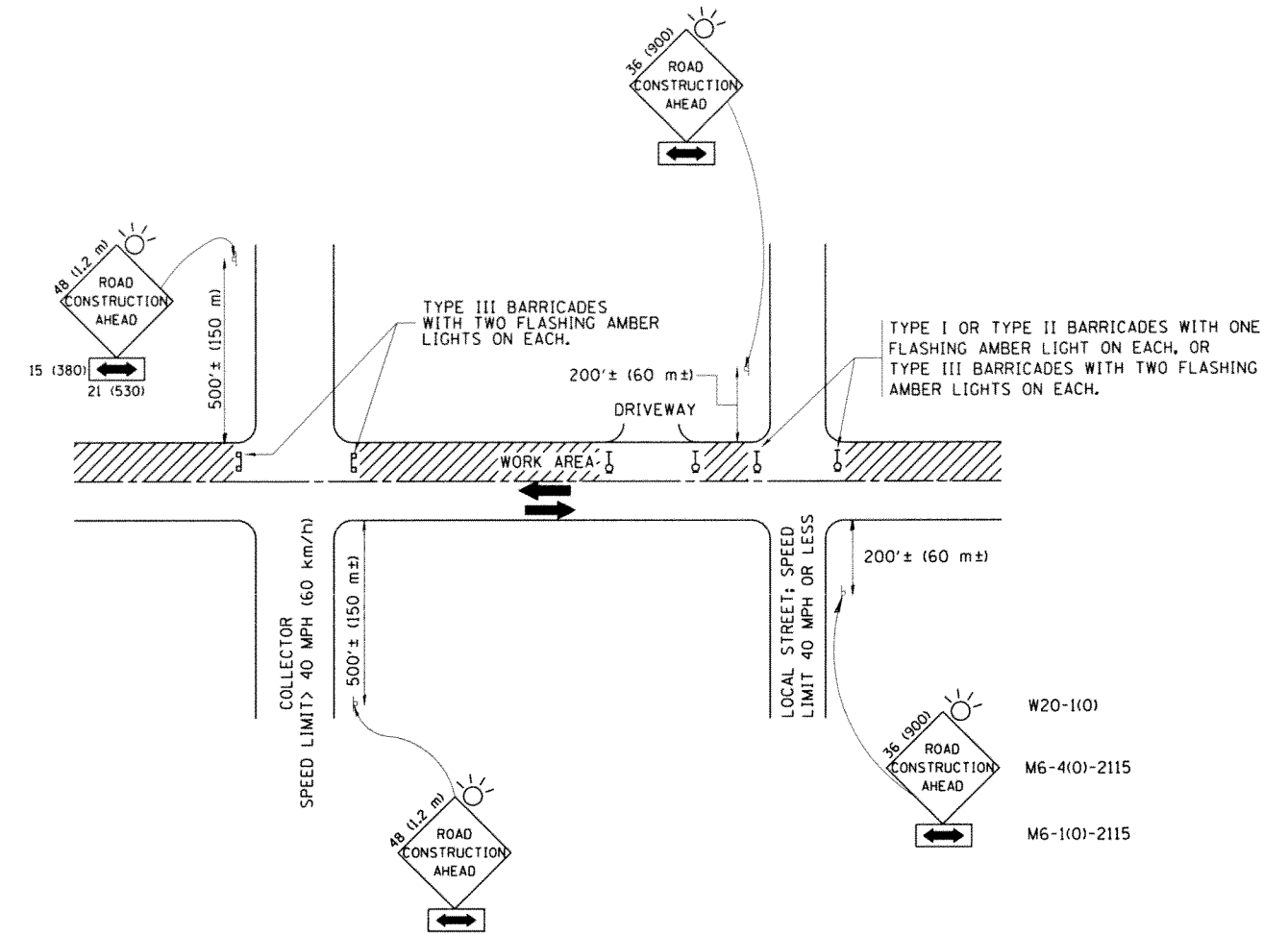
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ct:\pw_work\p\dot\steedpa\0318727\01st	td.dgn	DRAWN -	REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 100.0000 1/16"	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 5/7/2015	DATE - 06-13-90	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BUTT JOINT AND
HMA TAPER DETAILS**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	TH-TS-1	LAKE	36	31
BD400-05 BD32			CONTRACT NO. 62A19	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



W20-1(0)
M6-4(0)-2115
M6-1(0)-2115

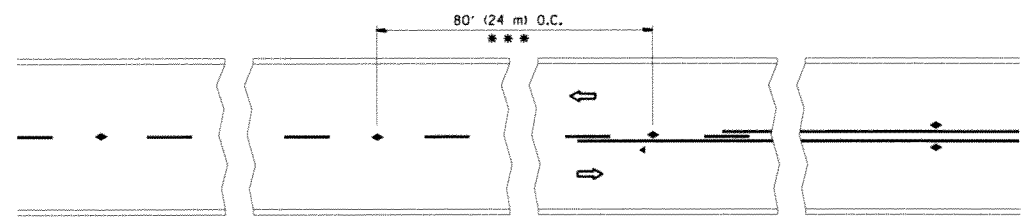
TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS**
- 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:
 - 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.
 - 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.
 - SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - 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.
 - 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.
 - 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.**

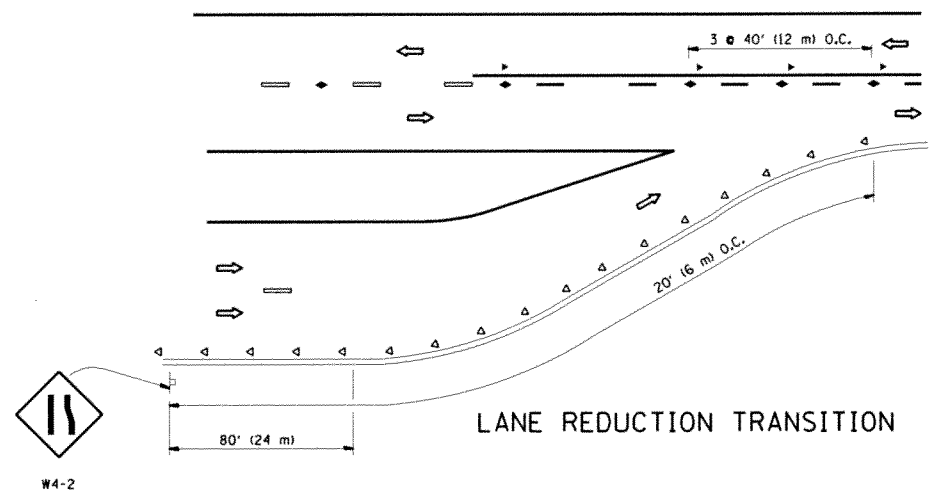
All dimensions are in millimeters (inches) unless otherwise shown.

FILE NAME =	USER NAME = STEEDPA	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pw\work\pwr\d01\steedpa\d0318727\01sta.dgn		DRAWN -	REVISED - A. HOUSEH 03-06-96		335	TH-TS-1	LAKE	36	32			
PLOT SCALE = 100.00000 ' / in.		CHECKED -	REVISED - A. HOUSEH 10-15-96		SCALE: NONE		SHEET NO. 1 OF 1 SHEETS		STA.	TO STA.	CONTRACT NO. 62A19	
PLOT DATE = 5/7/2015		DATE - 06-89	REVISED - T. RAMMACHER 01-06-00		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							

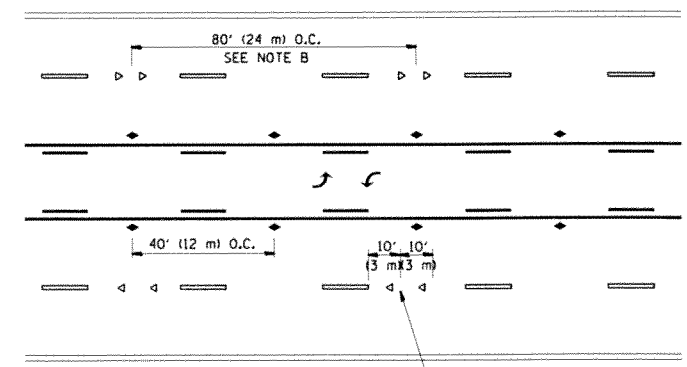


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

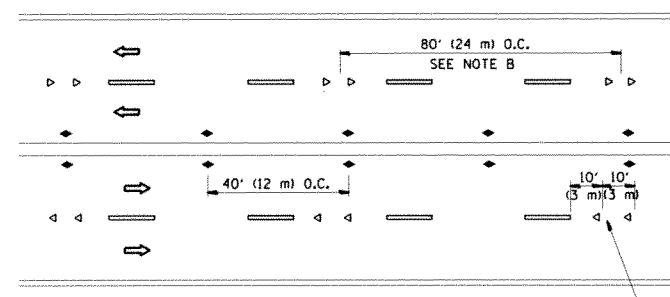
TWO-LANE/TWO-WAY



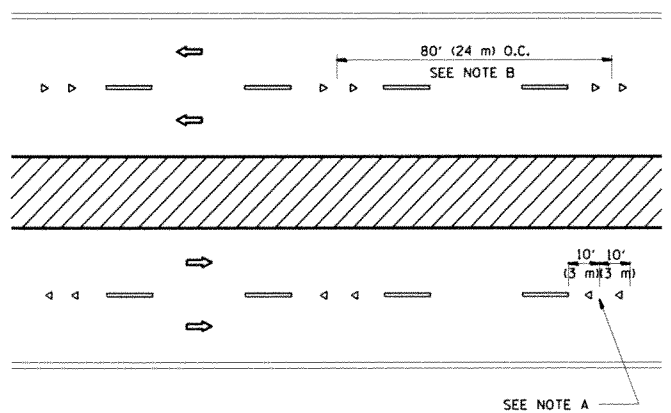
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



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.

SYMBOLS

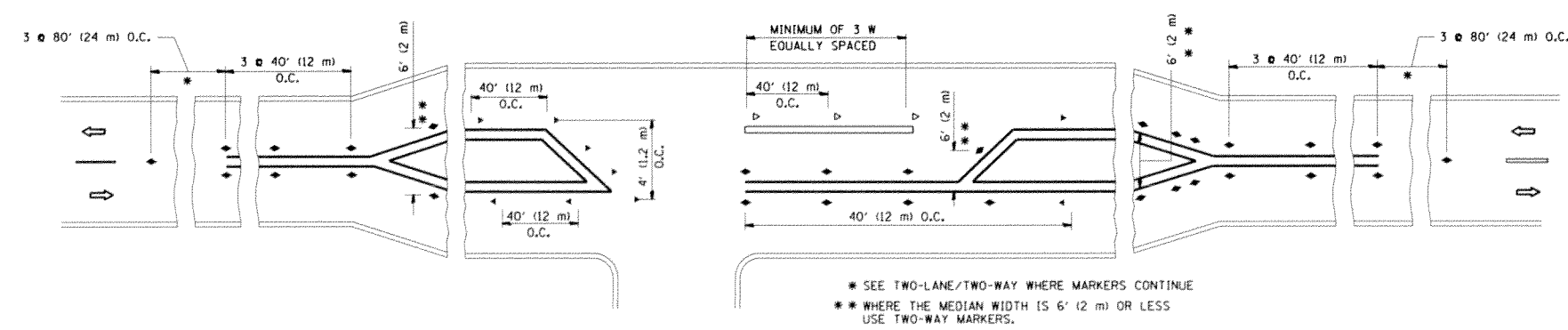
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

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.

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 SHALL BE INCLUDED IN THE PLANS WHEN STANDARD SPECIFICATIONS ARE NOT BEING USED.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.

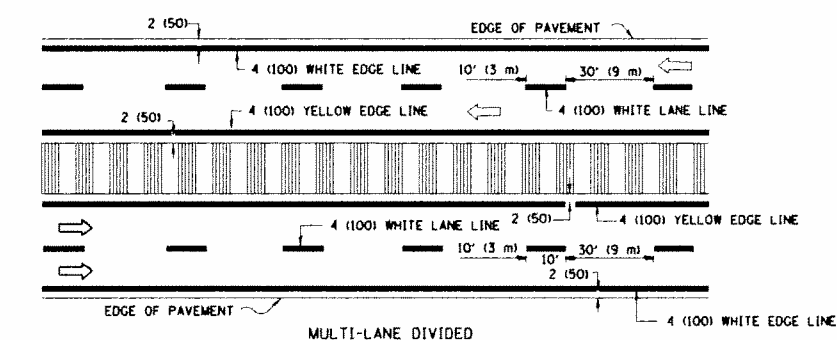
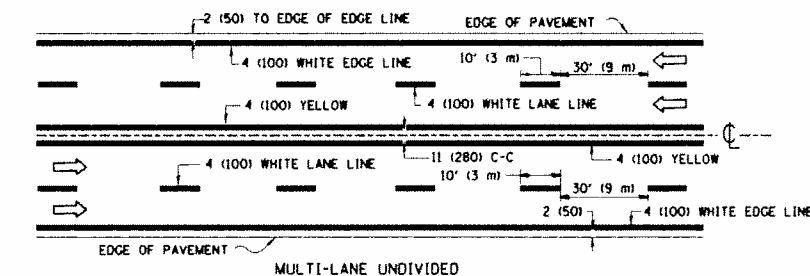
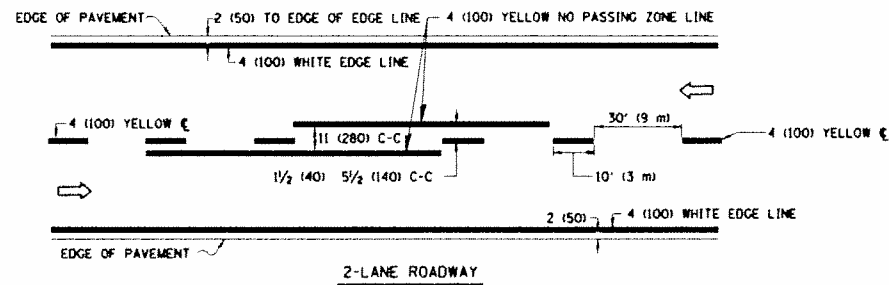


LEFT TURN

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

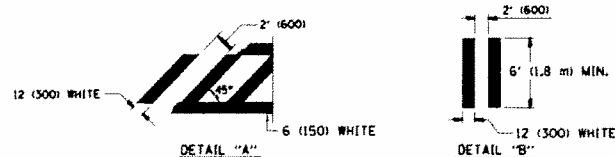
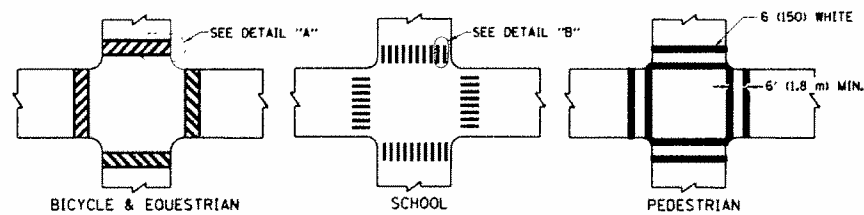
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME: c:\pwork\pwork\stedpa\0318727\Dist\std.dgn	USER NAME: STEEDPA	DESIGNED: -	REVISED: - T. RAMMACHER 09-19-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)			F.A.P. RTE. 335	SECTION TH-TS-1	COUNTY LAKE	TOTAL SHEETS 36	SHEET NO. 33
PLOT SCALE: 100.0000' / 1" =	CHECKED: -	REVISED: - T. RAMMACHER 03-12-99	REVISED: - T. RAMMACHER 01-06-00		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	TC-11 CONTRACT NO. 62A19				
PLOT DATE: 5/7/2015	DATE: -	REVISED: - C. JUCIUS 09-09-09										
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT												

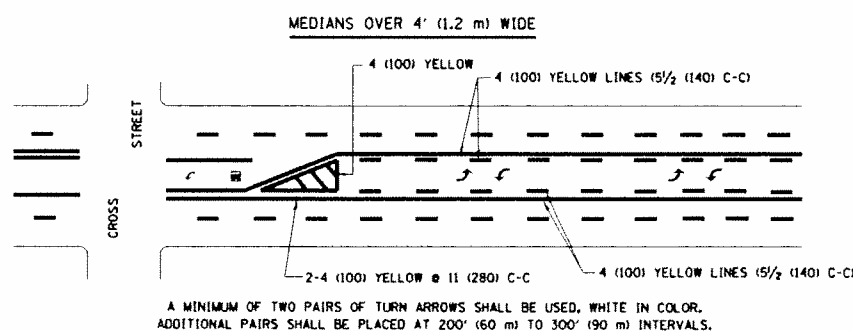
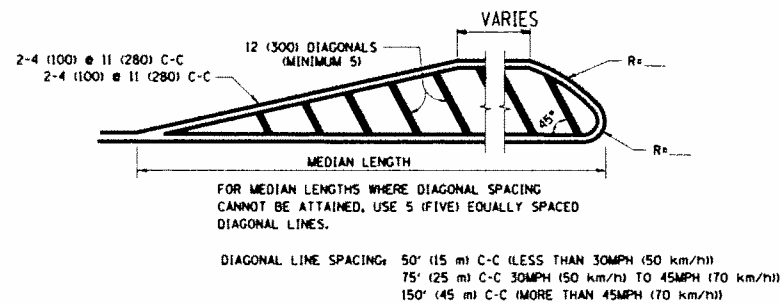
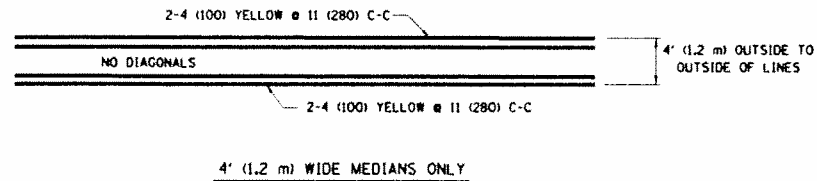


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

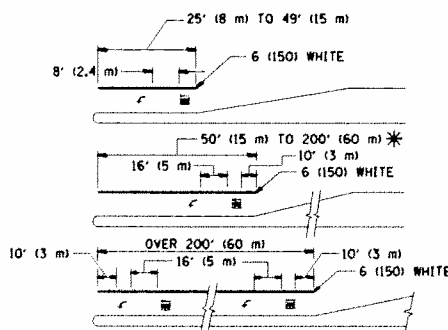
TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING

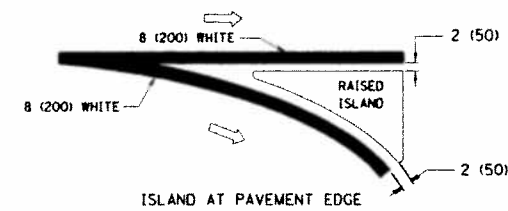
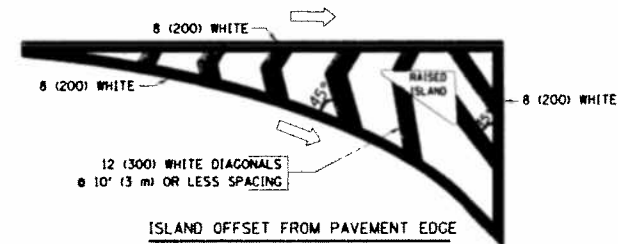


TYPICAL PAINTED MEDIAN MARKING



FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
↵ AREA = 15.6 SQ. FT. (1.5 m²) ; ↵ AREA = 20.8 SQ. FT. (1.9 m²)
* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL TURN LANE MARKING



TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5 1/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5 1/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" 15 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

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

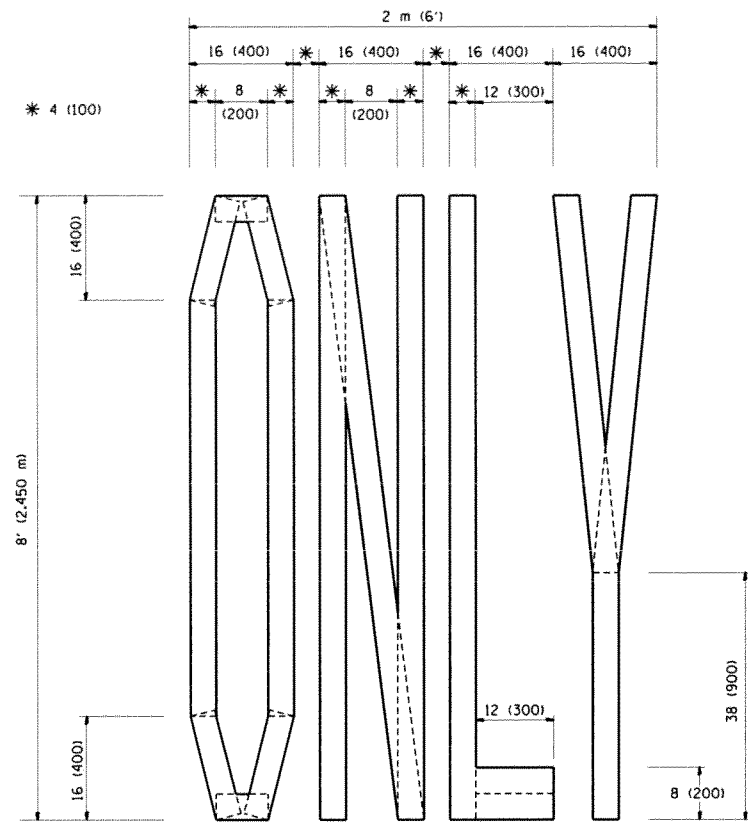
All dimensions are in inches (millimeters) unless otherwise shown.

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dd.dgn		DRAWN:	REVISED: C. JUCIUS 09-09-09
PLOT SCALE: 100.0000 / in.		CHECKED:	REVISED:
PLOT DATE: 5/7/2015		DATE: 03-19-90	REVISED:

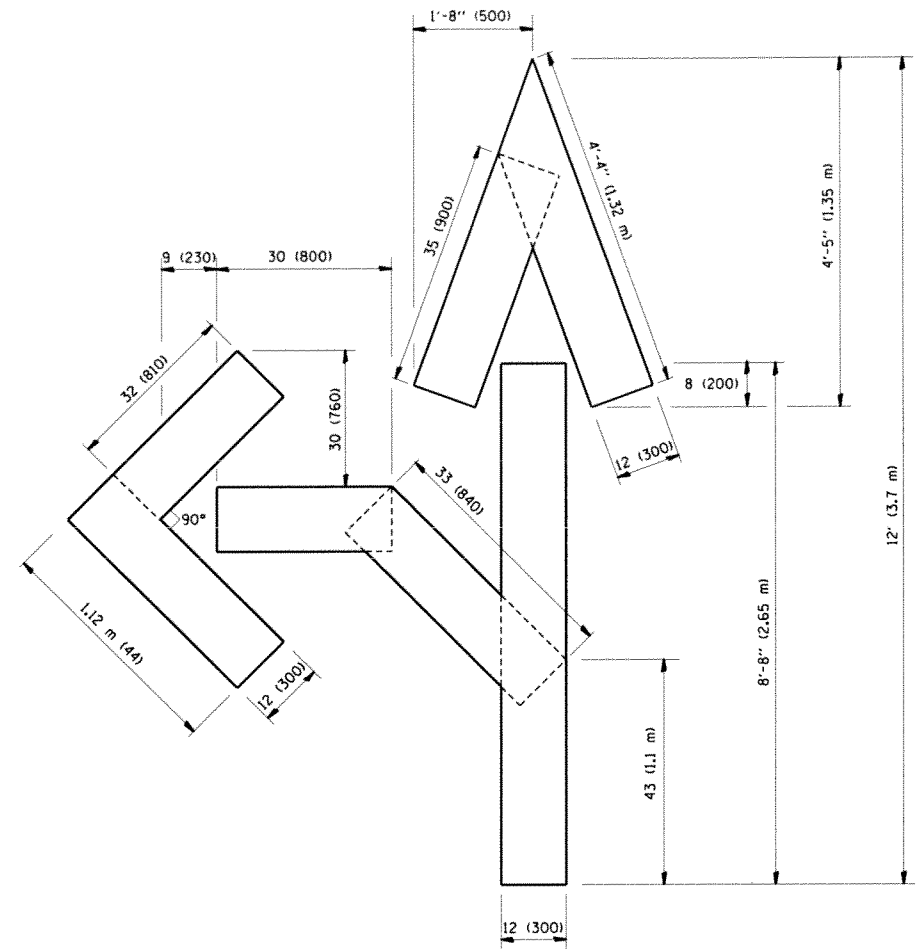
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE			
TYPICAL PAVEMENT MARKINGS			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	

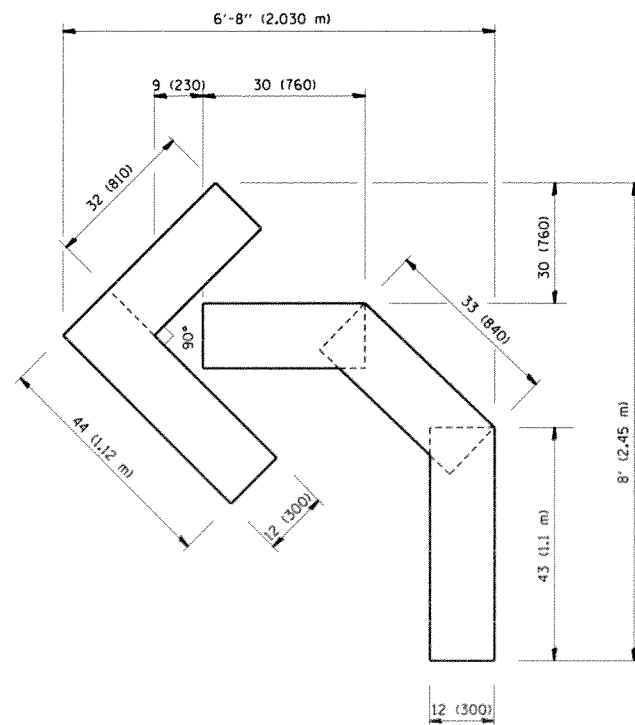
F.A.P. RTE. 335	SECTION TH-TS-1	COUNTY LAKE	TOTAL SHEETS 36	SHEET NO. 34
TC-13			CONTRACT NO. 62A19	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



QUANTITY
 4 (100) LINE = 64.1 ft. (19.7 m)
 21.1 sq. ft. (1.97 sq. m)



QUANTITY
 4 (100) LINE = 82.5 ft. (25.3 m)
 27.5 sq. ft. (2.53 sq. m)



QUANTITY
 4 (100) LINE = 45.5 ft. (13.9 m)
 15.2 sq. ft. (1.39 sq. m)

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

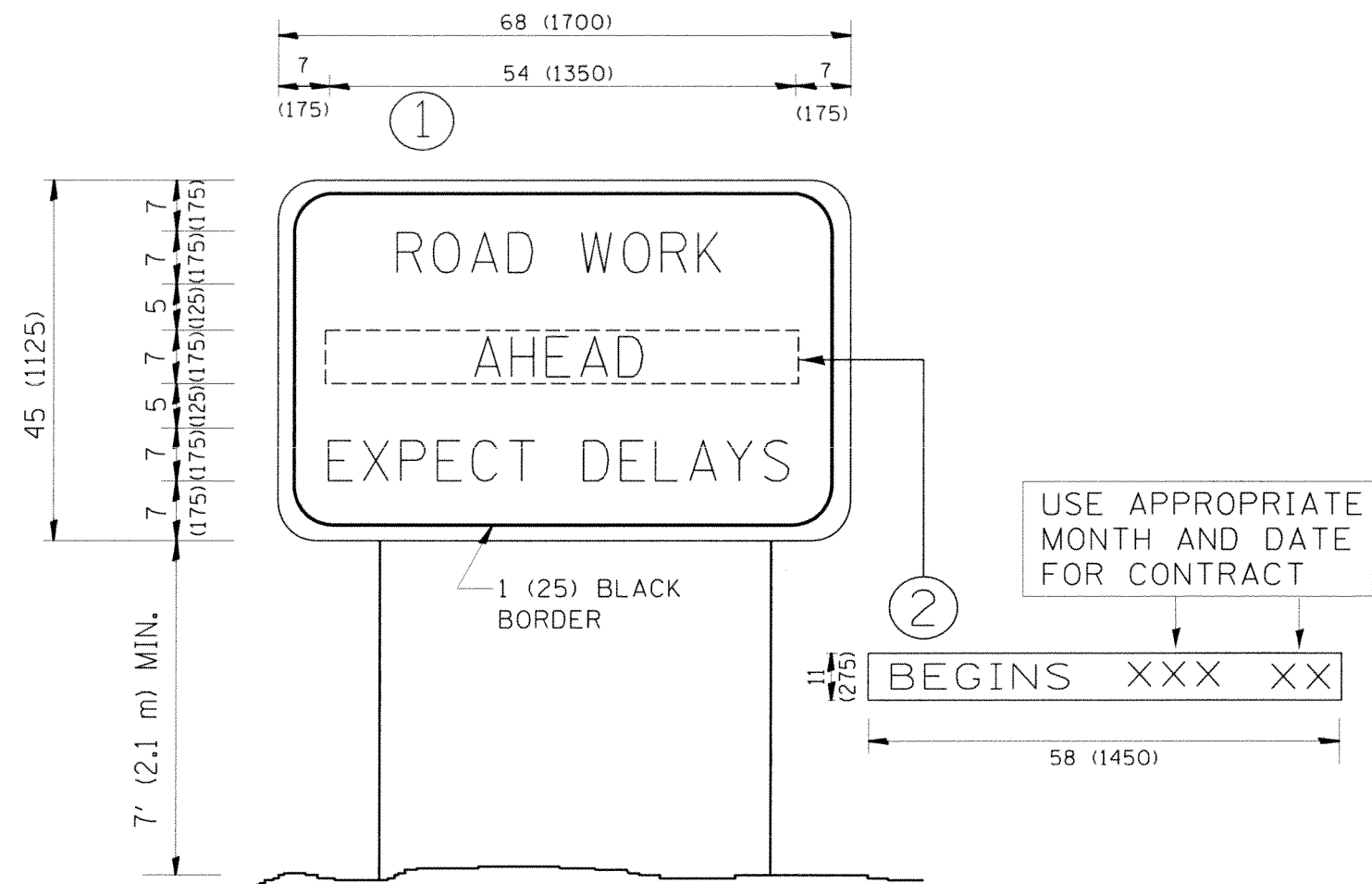
FILE NAME =	USER NAME = STEEDPA	DESIGNED -	REVISED - T. RAMMACHER 06-05-96
c:\pw\work\pwidot\steadpa\0318727\Dist	td.dgn	DRAWN -	REVISED - T. RAMMACHER 11-04-97
PLOT SCALE = 100.0000 1/ in.	CHECKED -	REVISED - T. RAMMACHER 03-02-98	
PLOT DATE = 5/7/2015	DATE = 09-18-94	REVISED - E. GOMEZ 08-28-00	

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS
 FOR TRAFFIC STAGING

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	TH-TS-1	LAKE	36	35
TC-16			CONTRACT NO. 62A19	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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 *	USER NAME = STEEDPA	DESIGNED -	REVISED - R. MIRS 09-15-97	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ARTERIAL ROAD INFORMATION SIGN	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pw_work\pwidot\steadpa\d0318727\Dist	td.dgn	DRAWN -	REVISED - R. MIRS 12-11-97			335	TH-TS-1	LAKE	36	36
PLOT SCALE = 100.00000 / in.	CHECKED -	REVISED - T. RAMMACHER 02-02-99				TC-22		CONTRACT NO. 62A19		
PLOT DATE = 5/7/2015	DATE -	REVISED - C. JUCIUS 01-31-07				FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
					SCALE: NONE	SHEET NO. 1 OF 1 SHEETS		STA.	TO STA.	