

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	539N-1	COOK	49	1
ILLINOIS CONTRACT NO. 60W90				

04-25-14 LETTING ITEM 007

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

FAP ROUTE 351 (US 6 / 159th STREET)

SECTION: 539N-1

AT IL 83 / TORRENCE AVENUE

TRAFFIC SIGNAL MODERNIZATION

& CHANNELIZATION

PROJECT: ACHSIP-0351(025)

COOK COUNTY

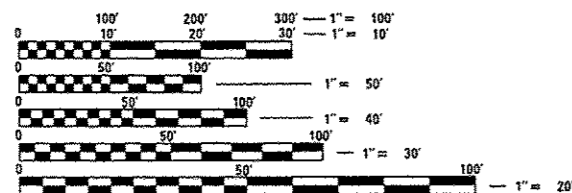
C-91-399-13

FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROJECT LOCATED IN
CITY OF CALUMET CITY

FUNCTIONAL CLASSIFICATION
OTHER PRINCIPAL ARTERIAL

US RTE 6: 2013 ADT=27,500 POSTED SPEED=35 MPH
IL RTE 83: 2013 ADT=23,700 POSTED SPEED=40 MPH

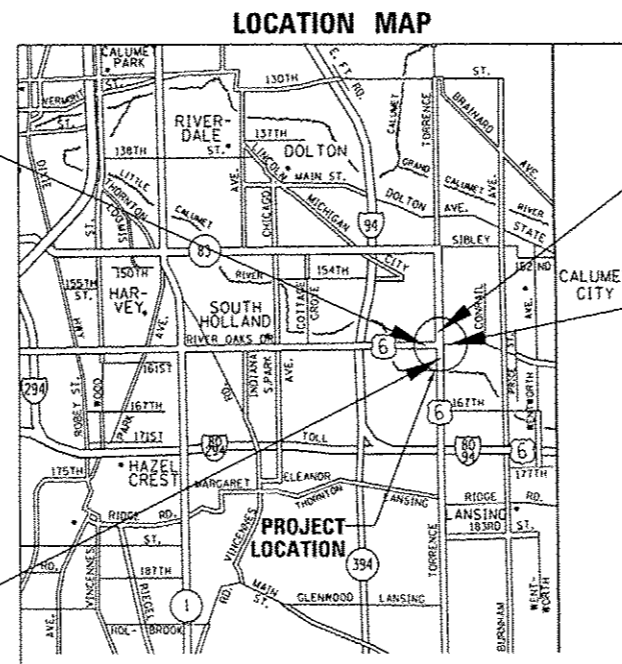


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT BEGINS
STA. 250 + 17

PROJECT BEGINS
STA. 6 + 02



PROJECT ENDS
STA. 16 + 01.3

PROJECT ENDS
STA. 258 + 36

LOCATION MAP
N.T.S.



LICENSE EXPIRATION DATE 4/30/15
SIGNATURE: [Signature] DATE: 2/11/2014

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED 2-13 2014

[Signature]
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

March 21 2014
John D. Baranzelli, P.E.
ENGINEER OF DESIGN AND ENVIRONMENT

March 21 2014
Omer Osman, P.E.
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PROJECT MANAGER: KEN ENG (IDOT) (847) 705-4247
PROJECT ENGINEER: BEHZAD AMINI (DBS) (312) 857-1006

CONTRACT NO. 60W90

GROSS LENGTH = 1818.3 FT. = 0.34 MILE
NET LENGTH = 1818.3 FT. = 0.34 MILE

DBS DB STERLIN CONSULTANTS, INC.
123 N. WACKER DRIVE SUITE 2000
CHICAGO, ILLINOIS 60606
TEL. (312) 857-1006 FAX. (312) 857-1056

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

INDEX OF SHEETS

STATE STANDARDS

GENERAL NOTES

SHEET NO.	DESCRIPTION	STANDARD NO.	DESCRIPTION
1	COVER SHEET	000001-06	TYPICAL SYMBOLS, ABBREVIATIONS AND PATTERNS
2	INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES	001006	DECIMAL OF AN INCH AND A FOOT
3-8	SUMMARY OF QUANTITIES	482011-03	HMA SHLD. STRIPS/SHLDS. WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
9-10	EXISTING AND PROPOSED TYPICAL SECTIONS	606001-05	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
11	SCHEDULE OF QUANTITIES	606301-04	PC CONCRETE ISLANDS AND MEDIAN
12	ALIGNMENT, TIES AND BENCHMARKS	701101-04	OFF-RD OPERATIONS, MULTILANE, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
13	EXISTING CONDITIONS AND REMOVAL PLAN	701427-02	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATIONS, FOR SPEEDS ≤ 40 MPH
14	ROADWAY PLAN AND PROFILE - US RTE. 6	701601-09	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NON TRAVERSABLE MEDIAN
15	ROADWAY PLAN AND PROFILE - IL RTE. 83	701701-09	URBAN LANE CLOSURE, MULTILANE INTERSECTION
16	EXISTING UTILITIES PLAN	701901-03	TRAFFIC CONTROL DEVICES
17	SUGGESTED MAINTENANCE OF TRAFFIC - TYPICAL SECTIONS	720001-01	SIGN PANEL MOUNTING DETAILS
18-19	SUGGESTED MAINTENANCE OF TRAFFIC	720011-01	METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
20	PAVEMENT MARKING AND SIGNING PLAN	729001-01	APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)
21-25	TEMPORARY TRAFFIC SIGNAL PLANS	781001-03	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
26-31	TRAFFIC SIGNAL PLANS	814001-02	HANDHOLES
32	(TC-10) TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS	814006-02	DOUBLE HANDHOLES
33	(TC-11) TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT)	857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
34	(TC-13) DISTRICT ONE TYPICAL PAVEMENT MARKINGS	862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)
35	(TC-14) TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)	873001-02	TRAFFIC SIGNAL GROUNDING & BOUNDING
36	(TC-16) PAVEMENT MARKING LETTER AND SYMBOLS FOR TRAFFIC STAGING	877001-05	STEEL MAST ARM ASSEMBLY AND POLE
37	(TC-22) ARTERIAL ROAD INFORMATION SIGN	878001-09	CONCRETE FOUNDATION DETAILS
38-43	(TS-05) DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS	880001-01	SPAN WIRE MOUNTED SIGNALS AND BEACON INSTALLATION
44	(TS-07) DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING	880006-01	TRAFFIC SIGNAL MOUNTING DETAILS
45-49	CROSS SECTIONS	886001-01	DETECTOR LOOP INSTALLATION

- ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE DETAILS IN THE PLANS, THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS, AND THE LATEST EDITION OF THE FOLLOWING STATE OF ILLINOIS SPECIFICATIONS: "THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED JANUARY 1, 2012 (REFERRED TO AS THE STANDARD SPECIFICATIONS), THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" AND THE "MANUAL OF TEST PROCEDURES FOR MATERIALS".
- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIELECTRIC, TELEPHONE, AND GAS FACILITIES. (48 HOUR NOTIFICATION REQUIRED).
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND COOK COUNTY.
- THE CONTRACTOR WILL NOT BE ABLE TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT THE WRITTEN PERMISSION OF THE DEPARTMENT.
- THE CONTRACTOR SHALL NOTIFY THE IDOT ARTERIAL TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- THE CONTRACTOR SHALL CONTACT PATRICE HARRIS AREA TRAFFICFIELD ENGINEER, AT (708) 597-9800 A MINIMUM OF TWO (2) WEEKS PRIOR TO PLACEMENT OF FINAL PAVEMENT MARKINGS.
- 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.
- BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (AND 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.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
- DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- THE CONTRACTOR SHALL REPLACE ALL THE PAVEMENT MARKINGS AS LAID OUT IN THE FIELD, AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER.
- THIS CONTRACT MUST BE COORDINATED WITH CONTRACT 60K78, WHICH IS JUST SOUTH OF THIS JOB.
- THE CONTRACTOR SHALL SLOPE THE RESURFACING PAVEMENT SECTION ADJACENT TO THE NEWLY CONSTRUCTED MEDIAN, TO CREATE POSITIVE DRAINAGE TOWARDS THE EXISTING CATCH BASINS AND THE EXISTING CURB AND GUTTER ALONG THE OUTSIDE EDGE OF THE EXISTING PAVEMENT. THIS ITEM SHALL BE PAID AS "HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70".

FILE NAME = #FILES

SHT_PLAN	USER NAME = #USER#	DESIGNED - BFH	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES US RTE. 6 (159TH STREET) AND IL RTE. 83 (TORRENCE AVENUE)	F.A.P. RTE.:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = #SCALE#	DRAWN - BFH	REVISED -			351	539N-1	COOK	49	2
	PLOT DATE = #DATE#	CHECKED - BA	REVISED -			CONTRACT NO. 60W90				
	DATE - 1/31/14	DATE -	REVISED -			ILLINOIS FED. AID PROJECT				
					SCALE:	SHEET 1	OF 1	SHEETS	STA.	TO STA.

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE			
				0021	0021	0021	0021
				90% FEDERAL 10% STATE ROADWAY	90% FEDERAL 7.5% STATE 2.5% CITY TRAF. SIGNALS	100% CITY SAFETY (EVP)	90% FEDERAL 10% STATE INTERCONNECT
	<i>URBAN</i>						
20200100	EARTH EXCAVATION	CU YD	192	192			
30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	494	494			
35600712	HOT-MIX ASPHALT BASE COURSE WIDENING, 9"	SQ YD	229	229			
35600718	HOT-MIX ASPHALT BASE COURSE WIDENING, 10 1/2"	SQ YD	386	386			
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	0.3	0.3			
40603085	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	TON	43	43			
40600300	AGGREGATE (PRIME COAT)	TON	0.3	0.3			
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	91	91			
40600027	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	63	63			
40603595	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90	TON	36	36			
44000100	PAVEMENT REMOVAL	SQ YD	254	254			
44000160	HOT-MIX ASPHALT SURFACE REMOVAL, 2 3/4"	SQ YD	413	413			
44003100	MEDIAN REMOVAL	SQ FT	2,138	2,138			
60619600	CONCRETE MEDIAN, TYPE SB-6.12	SQ FT	2,169	2,169			
60624600	CORRUGATED MEDIAN	SQ FT	213	213			
Δ 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	192	192			
Δ 66900450	SPECIAL WASTE PLANS AND REPORTS	L SUM	1	1			

FILE NAME: S:\FILES\...

SHT_PLAN

USER NAME: *USER*	DESIGNED - BFH	REVISED -
DRAWN - BFH	CHECKED - BA	REVISED -
PLOT SCALE: *SCALE*	DATE - 1/31/14	REVISED -
PLOT DATE: *DATE*		

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES
UR RTE. 6 (159TH STREET) AND IL RTE. 83 (TORRENCE AVENUE)

SCALE: N.T.S. SHEET 1 OF 6 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	539N-1	COOK	49	3
CONTRACT NO. 60W90			ILLINOIS FED. AID PROJECT	

Δ Specialty Hem Rev.

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE			
				0021	0021	0021	0021
				90% FEDERAL	90% FEDERAL	100%	90% FEDERAL
				10% STATE ROADWAY	7.5% STATE TRAF. SIGNALS	2.5% CITY SAFETY (EVP)	10% STATE INTERCONNECT
Δ 66900530	SOIL DISPOSAL ANALYSIS	EACH	2	2			
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	4	4			
67100100	MOBILIZATION	L SUM	1	1			
70300100	SHORT TERM PAVEMENT MARKING	FOOT	2084	2084			
70300210	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS	SQ FT	109	109			
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	4168	4168			
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	1877	1877			
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	233	233			
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	2903	2903			
Δ 72000100	SIGN PANEL - TYPE 1	SQ FT	75		75		
Δ 72000200	SIGN PANEL - TYPE 2	SQ FT	63		63		
Δ 72400100	REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	1	1			
Δ 72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	26	26			
Δ 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	473	473			

URBAN

Δ SPECIALTY ITEM

Rev.

FILE NAME = #FILE#

SHT.PLAN

USER NAME = #USER#	DESIGNED - BFH	REVISED -
DRAWN - BFH	CHECKED - BA	REVISED -
PLOT SCALE = #SCALE#	DATE - 1/31/14	REVISED -
PLOT DATE = #DATE#		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
UR RTE. 6 (159TH STREET) AND IL RTE. 83 (TORRENCE AVENUE)
SCALE: N.T.S. SHEET 2 OF 6 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	539N-1	COOK	49	4
CONTRACT NO. 60W90			ILLINOIS FED. AID PROJECT	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE			
				0021	0021	0021	0021
				90% FEDERAL 10% STATE ROADWAY	90% FEDERAL 7.5% STATE 2.5% CITY TRAF. SIGNALS	100% CITY SAFETY (EVP)	90% FEDERAL 10% STATE INTERCONNECT
			<i>URBAN</i>				
△ 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	1374	1374			
△ 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	2,038	2,038			
△ 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	15	15			
△ 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	218	218			
△ 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	188	188			
78300100	PAVEMENT MARKING REMOVAL	50 FT	3,543	3,543			
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	157	157			
△ 80500020	SERVICE INSTALLATION - POLE MOUNTED	EACH	1		1		
△ 81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	2162		1739		423
△ 81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2.5" DIA.	FOOT	48		48		
△ 81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	56		56		
△ 81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	508		508		
△ 81400100	HANDHOLE	EACH	6		6		
△ 81400200	HEAVY-DUTY HANDHOLE	EACH	4		4		

△ SPECIALTY ITEM

FILE NAME = #FILES#

SHT_PLAN	USER NAME = #USER#	DESIGNED - BFH	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = #SCALE#	DRAWN - BFH	REVISED -		351	539N-1	COOK	49	5			
	PLOT DATE = #DATE#	CHECKED - BA	REVISED -		SCALE: N.T.S. SHEET 3 OF 6 SHEETS STA. TO STA.			CONTRACT NO. 60W90				
	DATE - 1/31/14	REVISED -				ILLINOIS FED. AID PROJECT						

Rev.

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE			
				0021	0021	0021	0021
				90% FEDERAL 10% STATE ROADWAY	90% FEDERAL 7.5% STATE 2.5% CITY TRAF. SIGNALS	100% CITY SAFETY (EVP)	90% FEDERAL 10% STATE INTERCONNECT
△ 81400300	DOUBLE HANDHOLE	EACH	2		2		
△ 85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	2				2
△ 85000400	MAINTENANCE OF TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1		1		
△ 86000300	MASTER CONTROLLER IN TYPE V CABINET	EACH	1		1		
△ 86200300	UNINTERRUPTIBLE POWER SUPPLY, EXTENDED	EACH	1		1		
△ 86400100	TRANSCEIVER-FIBER OPTIC	EACH	1				1
△ 87100020	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F 5M12F	FOOT	1,350				1,350
△ 87300925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	1,350				1,350
△ 87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1325		1325		
△ 87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	4723		4723		
△ 87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	920		920		
△ 87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	3480		3480		
△ 87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	195		195		
△ 87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	830		830		

URBAN

△ SPECIALTY ITEM

Rev.

FILE NAME * #FILES* SHT_PLAN	USER NAME * #USER*	DESIGNED - BFH	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES UR RTE. 6 (159TH STREET) AND IL RTE. 83 (TORRENCE AVENUE)			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE * #SCALE*	DRAWN - BFH	REVISED -					351	539N-1	COOK	49	6
	PLOT DATE * #DATE*	CHECKED - BA	REVISED -					ILLINOIS FED. AID PROJECT				
DATE - 1/31/14				REVISED -	SCALE: N.T.S.	SHEET 4 OF 6 SHEETS	STA. TO STA.					

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE			
				0021	0021	0021	0021
				90% FEDERAL 10% STATE ROADWAY	90% FEDERAL 7.5% STATE 2.5% CITY TRAF. SIGNALS	100% CITY SAFETY (EVP)	90% FEDERAL 10% STATE INTERCONNECT
△ 87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	4		4		
△ 87700270	STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	1		1		
△ 87700230	STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1		1		
△ 87700290	STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.	EACH	1		1		
△ 87702659	STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 44 FT. AND 22 FT.	EACH	1		1		
△ 87700330	STEEL MAST ARM ASSEMBLY AND POLE, 56 FT.	EACH	2		2		
△ 87702782	STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 52 FT. AND 26 FT.	EACH	1		1		
△ 87800100	CONCRETE FOUNDATION, TYPE A	FOOT	16		16		
△ 87800150	CONCRETE FOUNDATION, TYPE C	FOOT	4		4		
△ 87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	26		26		
△ 87800420	CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	42		42		
△ 87900200	DRILL EXISTING HANDHOLE	EACH	2			2	
△ 88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	14		14		
△ 88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2		2		
△ 88030210	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2		2		
△ 88030240	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, 5-SECTION BRACKET MOUNTED	EACH	2		2		
△ 88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	14		14		
△ 88500100	INDUCTIVE LOOP DETECTOR	EACH	18		18		

△ SPECIALTY ITEM

FILE NAME = RFILE8

USER NAME = RUSER8	DESIGNED - BFH	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE = *SCALE*	DRAWN - BFH	REVISED -		UR RTE. 6 (159TH STREET) AND IL RTE. 83 (TORRENCE AVENUE)	351	539N-1	COOK	49	7	
PLOT DATE = *DATE*	CHECKED - BA	REVISED -		SCALE: N.T.S.	SHEET 5 OF 6 SHEETS	STA. TO STA.	CONTRACT NO. 60W90			
	DATE - 1/31/14	REVISED -		ILLINOIS FED. AID PROJECT						

Rev.

4051 & 1037

URBAN

CONSTRUCTION CODE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE			
				0021	0021	0021	0021
				90% FEDERAL 10% STATE ROADWAY	90% FEDERAL 7.5% STATE 2.5% CITY TRAF. SIGNALS	100% CITY SAFETY (EVP)	90% FEDERAL 10% STATE INTERCONNECT
Δ 88600100	DETECTOR LOOP, TYPE I	FOOT	985		985		
Δ 88700200	LIGHT DETECTOR	EACH	4			4	
Δ 88700300	LIGHT DETECTOR AMPLIFIER	EACH	1			1	
Δ 89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1		1		
Δ 89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1		1		
Δ 89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	9		9		
Δ 89502380	REMOVE EXISTING HANDHOLE	EACH	11		11		
Δ 89502382	REMOVE EXISTING DOUBLE HANDHOLE	EACH	1		1		
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1			
Δ X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	1035			1035	
Δ X8730250	ELECTRICAL CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	887			887	
X4060110	BITUMINOUS MATERIALS (PRIME COAT)	POUND	815	815			
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1			
Δ X8570226	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1		1		
Z0030850	TEMPORARY INFORMATION SIGNING	50 FT	103	103			
Δ X8600105	MASTER CONTROLLER (SPECIAL)	EACH	1			1	
Δ Z0033046	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2	EACH	1			1	
Δ X8620200	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1		1		
Δ X8710024	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F, 5M 24F	FOOT	1350			1350	
Δ Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1		1		

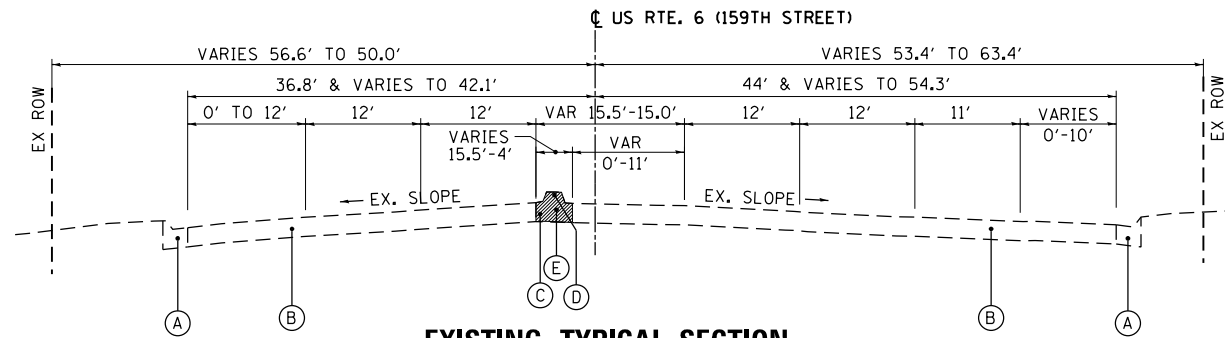
Δ SPECIALTY ITEM

Rev.

FILE NAME: WFILE#

USER NAME: #USER#	DESIGNED - BFH	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE: #SCALE#	DRAWN - BFH	REVISED -		UR RTE. 6 (159TH STREET) AND IL RTE. 83 (TORRENCE AVENUE)		351	539N-1	COOK	49	8
PLOT DATE: #DATE#	CHECKED - BA	REVISED -		SCALE: N.T.S.		SHEET 6 OF 6 SHEETS		STA.	TO STA.	
	DATE - 1/31/14	REVISED -						ILLINOIS FED. AID PROJECT		CONTRACT NO. 60W90

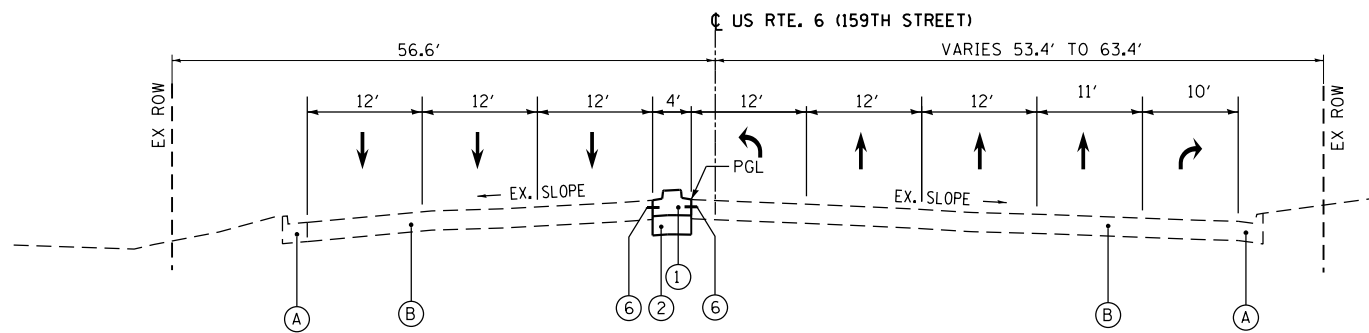
SHT. PLAN



EXISTING TYPICAL SECTION

U.S. ROUTE 6

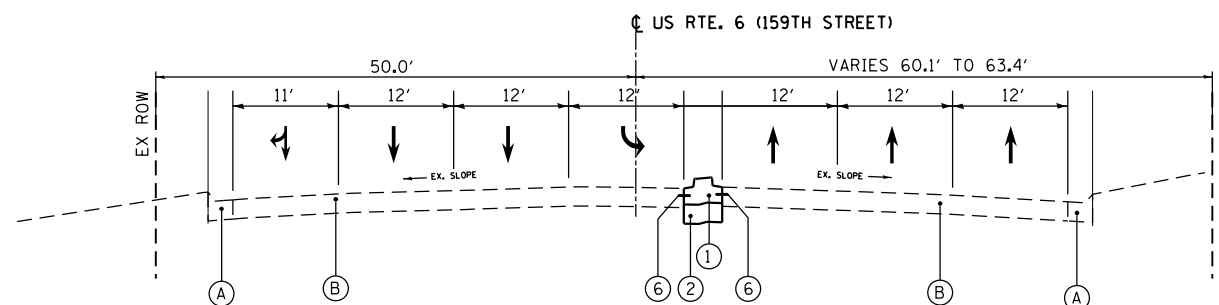
STA. 250+17 TO STA. 258+36



PROPOSED TYPICAL SECTION

U.S. ROUTE 6

STA. 250+17 TO STA. 254+37.89



PROPOSED TYPICAL SECTION

U.S. ROUTE 6

STA. 254+37.89 TO STA. 258+36

EXISTING LEGEND

- (A) EXISTING B-6.24 CURB & GUTTER
- (B) EXISTING PORTLAND CEMENT CONCRETE BASE COURSE WITH HMA OVERLAY MIX "F"
- (C) EXISTING B-6.12 CURB & GUTTER
- (D) EXISTING CONCRETE MEDIAN SURFACE
- (E) EXISTING SB-6.12 CONCRETE MEDIAN

PROPOSED LEGEND

- (1) PROPOSED CONCRETE MEDIAN, TYPE SB-6.12 (MONOLITHIC POURED MEDIAN)
- (2) PROPOSED AGGREGATE SUBGRADE IMPROVEMENT, 12"
- (3) PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 3/4"
- (4) PROPOSED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70 (2 1/4" MIN.) SEE DETAIL
- (5) PROPOSED HOT-MIX ASPHALT BASE COURSE WIDENING, 10 1/2"

(6) NO. 6 TIE BAR, EPOXY COATED, DEFORMED, 24" LONG SPACED AT 24" CTS (DRILL AND GROUT). INCLUDED IN THE COST OF THE PROPOSED CONCRETE MEDIAN.

LEGEND:

- 2 3/4" HMA SURFACE REMOVAL
- MEDIAN REMOVAL, SEE PLANS FOR LOCATIONS
- PAVEMENT REMOVAL, SEE PLANS FOR LOCATIONS

NOTE 1:

THE CONTRACTOR SHALL SLOPE THE RESURFACING PAVEMENT SECTION ADJACENT TO THE NEWLY CONSTRUCTED MEDIAN, TO CREATE POSITIVE DRAINAGE TOWARDS THE EXISTING CATCH BASINS AND THE EXISTING CURB AND GUTTER ALONG THE OUTSIDE EDGE OF THE EXISTING PAVEMENT. THIS ITEM SHALL BE PAID AS "HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70".

HOT-MIX ASPHALT MIXTURE REQUIREMENTS		QUALITY MANAGEMENT PROGRAM (QMP)
MIXTURE TYPE	PERCENT AIR VOIDS AT Ndes	
HOT-MIX ASPHALT PAVEMENT WIDENING		QC/OA
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL 9.5 mm), 1 3/4"	4% @ 70 GYR.	
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	4% @ 70 GYR.	
HOT-MIX ASPHALT BASE COURSE WIDENING, 10 1/2" (HMA BINDER IL-19.0)	4% @ 70 GYR.	QC/OA
QMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (QC/OA)		

- THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE QUANTITIES IS 112 LBS/50 YD/IN
- THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND 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.
- QUALITY MANAGEMENT PROGRAM (QMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE.

FILE NAME = \$FILEL\$

USER NAME = \$USER\$	DESIGNED - BFH	REVISED -
	DRAWN - BFH	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - BA	REVISED -
PLOT DATE = \$DATE\$	DATE - 1/31/14	REVISED -

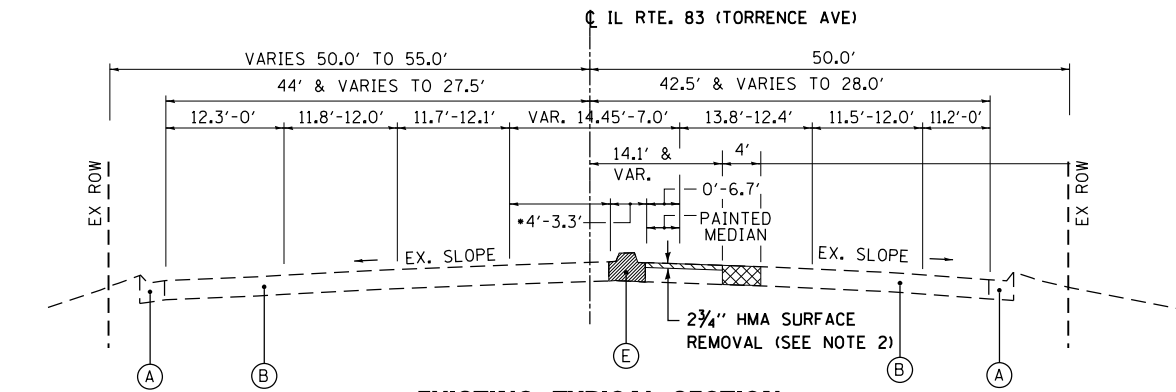
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING AND PROPOSED TYPICAL SECTIONS
US RTE. 6 (159TH STREET) AND IL RTE. 83 (TORRENCE AVENUE)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	539N-1	COOK	49	9
CONTRACT NO. 60W90				
ILLINOIS FED. AID PROJECT				

SHT.PLAN

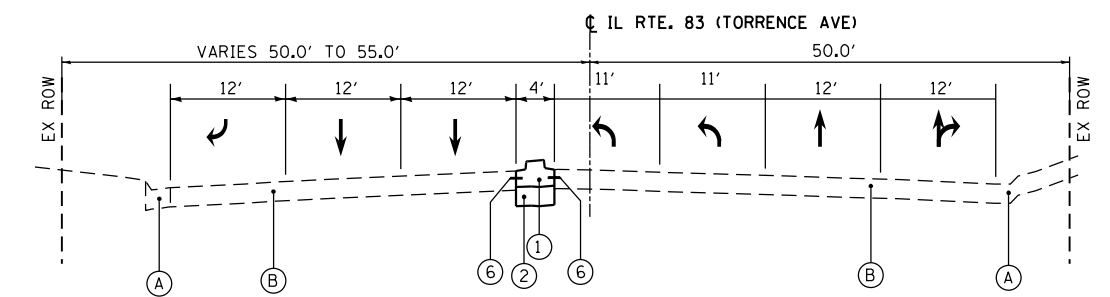
SCALE: 1"=10' SHEET 1 OF 2 SHEETS STA. TO STA.



**EXISTING TYPICAL SECTION
IL ROUTE 83**

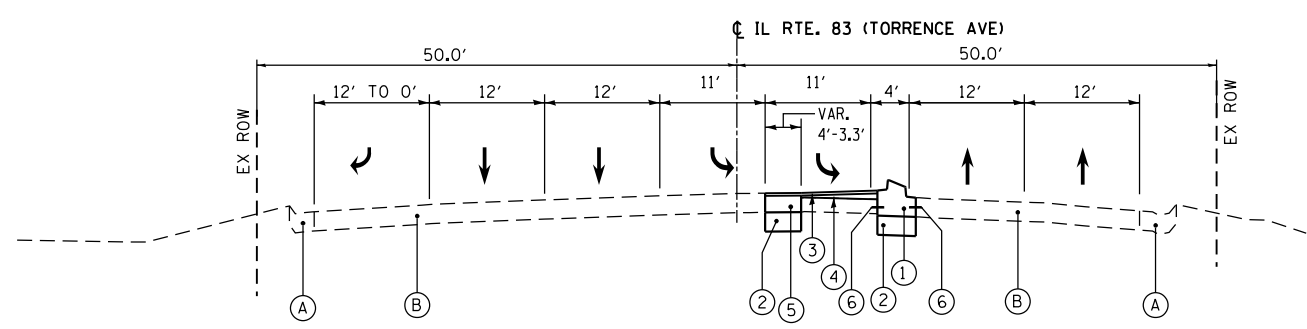
*STA. 14+75.5 - END OF BARRIER MEDIAN

STA. 6+02 TO STA. 16+01.3



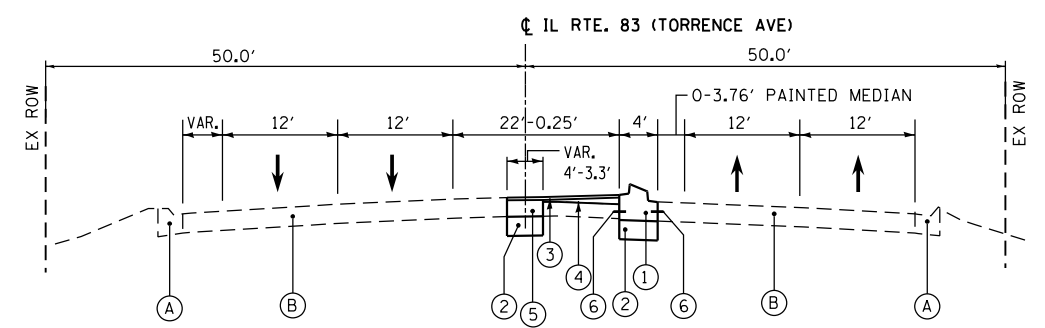
**PROPOSED TYPICAL SECTION
IL ROUTE 83**

STA. 6+02 TO STA. 10+00



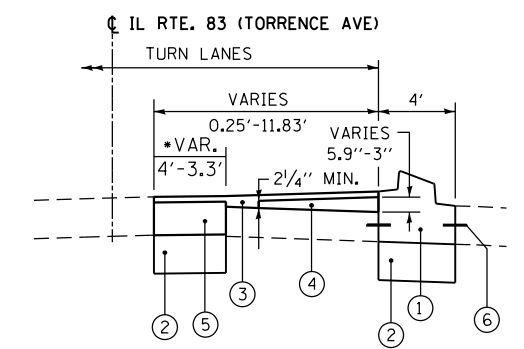
**PROPOSED TYPICAL SECTION
IL ROUTE 83**

STA. 10+00 TO STA. 12+99.32



**PROPOSED TYPICAL SECTION
IL ROUTE 83 - TAPER**

STA. 12+99.32 TO STA. 16+01.3



**VARIABLE DEPTH HMA BINDER COURSE
IL ROUTE 83 - RESURFACING**

STA. 10+50.43 TO STA. 16+01.3

EXISTING LEGEND

- (A) EXISTING B-6.24 CURB & GUTTER
- (B) EXISTING PORTLAND CEMENT CONCRETE BASE COURSE WITH HMA OVERLAY MIX "F"
- (C) EXISTING B-6.12 CURB & GUTTER
- (D) EXISTING CONCRETE MEDIAN SURFACE
- (E) EXISTING SB-6.12 CONCRETE MEDIAN

PROPOSED LEGEND

- ① PROPOSED CONCRETE MEDIAN, TYPE SB-6.12 (MONOLITHIC POURED MEDIAN)
- ② PROPOSED AGGREGATE SUBGRADE IMPROVEMENT, 12"
- ③ PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 3/4"
- ④ PROPOSED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70 (2 1/4" MIN.) SEE DETAIL
- ⑤ PROPOSED HOT-MIX ASPHALT BASE COURSE WIDENING, 10 1/2"
- ⑥ NO. 6 TIE BAR, EPOXY COATED, DEFORMED, 24" LONG SPACED AT 24" CTS (DRILL AND GROUT). INCLUDED IN THE COST OF THE PROPOSED CONCRETE MEDIAN.

NOTES:

1. THE CONTRACTOR SHALL SLOPE THE RESURFACING PAVEMENT SECTION ADJACENT TO THE NEWLY CONSTRUCTED MEDIAN, TO CREATE POSITIVE DRAINAGE TOWARDS THE EXISTING CATCH BASINS AND THE EXISTING CURB AND GUTTER ALONG THE OUTSIDE EDGE OF THE EXISTING PAVEMENT. THIS ITEM SHALL BE PAID AS "HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70".
2. SURFACE REMOVAL LIMIT FROM STA. 10+50.3 TO STA. 16+01.3 SEE PLANS FOR DETAILS

LEGEND:

- HOT-MIX ASPHALT SURFACE REMOVAL
- MEDIAN REMOVAL, SEE PLANS FOR LOCATIONS
- PAVEMENT REMOVAL, SEE PLANS FOR LOCATIONS

FILE NAME = \$FILEL\$

USER NAME = \$USER\$	DESIGNED - BFH	REVISED -
DRAWN - BFH	CHECKED - BA	REVISED -
PLOT SCALE = \$SCALE\$	DATE - 1/31/14	REVISED -
PLOT DATE = \$DATE\$		

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EXISTING AND PROPOSED TYPICAL SECTIONS
US RTE. 6 (159TH STREET) AND IL RTE. 83 (TORRENCE AVENUE)**

SCALE: 1"=10' SHEET 2 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	539N-1	COOK	49	10
CONTRACT NO. 60W90				
ILLINOIS FED. AID PROJECT				

EARTHWORK SCHEDULE - US RTE. 6 (159TH STREET)

STATION	STATION	EARTH EXCAVATION (20200100)	EXCAVATION TO BE USED IN EMBANKMENT ADJUSTED FOR SHRINKAGE	EMBANKMENT	EARTHWORK BALANCE (+/-) (+)=WASTE (-)=SHORTAGE
		CU YD	CU YD	CU YD	CU YD
253+43.18	253+65.61	4	3	0	3
253+65.61	0+00.00	0	0	0	0
253+65.61	253+88.20	6	5	0	5
253+88.20	0+00.00	0	0	0	0
254+00.00	254+87.40	11	9	0	9
254+87.40	255+00.00	4	3	0	3
255+00.00	255+26.22	7	6	0	6
255+26.22	255+43.30	4	3	0	3
255+43.30	0+00.00	0	0	0	0
256+00.00	257+00.00	0	0	0	0
257+00.00	258+00.00	0	0	0	0
258+00.00	259+00.00	0	0	0	0
US RT 6 TOTAL		36	29	0	29

NOTE: 15% SHRINKAGE FACTOR

EARTHWORK SCHEDULE - IL RTE. 83 (TORRENCE AVENUE)

STATION	STATION	EARTH EXCAVATION (20200100)	EXCAVATION TO BE USED IN EMBANKMENT ADJUSTED FOR SHRINKAGE	EMBANKMENT	EARTHWORK BALANCE (+/-) (+)=WASTE (-)=SHORTAGE
		CU YD	CU YD	CU YD	CU YD
8+96.77	9+00.00	1	1	0	1
9+00.00	9+18.00	3	3	0	3
9+18.00	0+00.00	0	0	0	0
9+18.00	9+50.54	7	6	0	6
9+50.54	0+00.00	0	0	0	0
10+00.00	10+50.26	4	3	0	3
10+50.26	10+74.40	4	3	0	3
10+74.40	0+00.00	0	0	0	0
10+74.40	11+00.00	7	6	0	6
11+00.00	12+00.00	29	25	0	25
12+00.00	13+00.00	29	25	0	25
13+00.00	14+00.00	29	25	0	25
14+00.00	14+75.26	22	19	0	19
14+75.26	15+00.00	6	5	0	5
15+00.00	16+00.00	15	13	0	13
IL RT 83 TOTAL		156	134	0	134

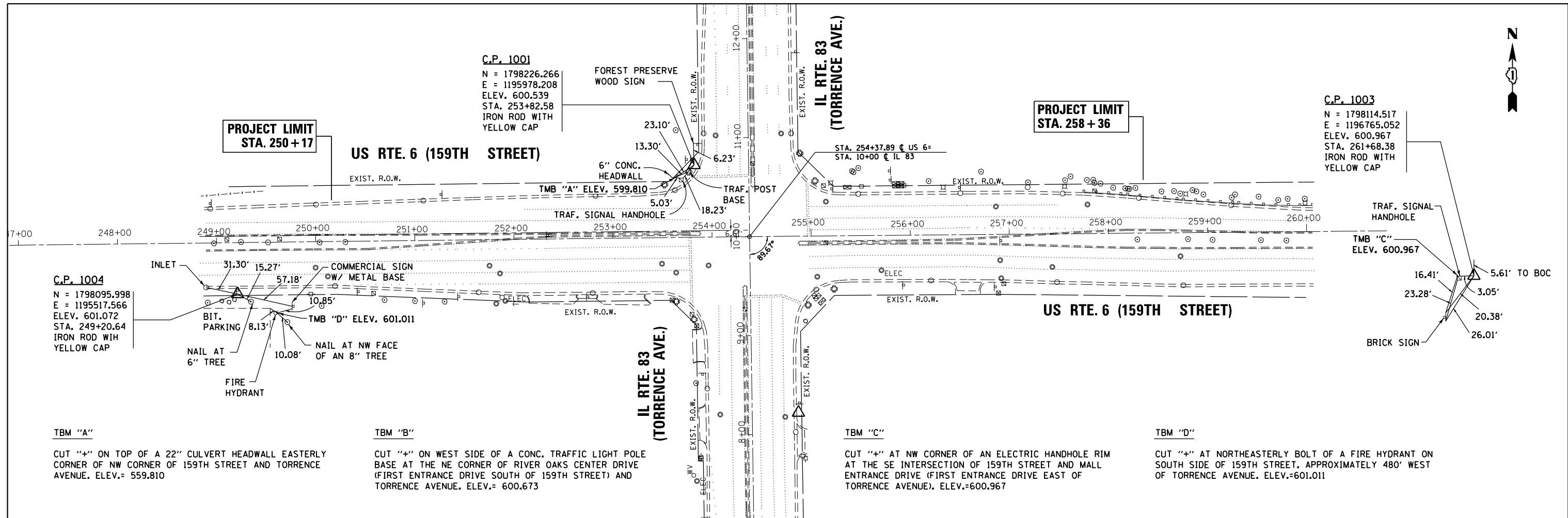
NOTE: 15% SHRINKAGE FACTOR

EARTHWORK SUMMARY TABLE

DESCRIPTION	QUANTITY	UNIT
EARTH EXCAVATION	192	CU YD
FURNISHED EXCAVATION	0	CU YD

- EXTRA EXCAVATION TO BE PLACED ON SITE.

FILE NAME = \$FILEL\$



TBM "A"

CUT "+\"/>

TBM "B"

CUT "+\"/>

TBM "C"

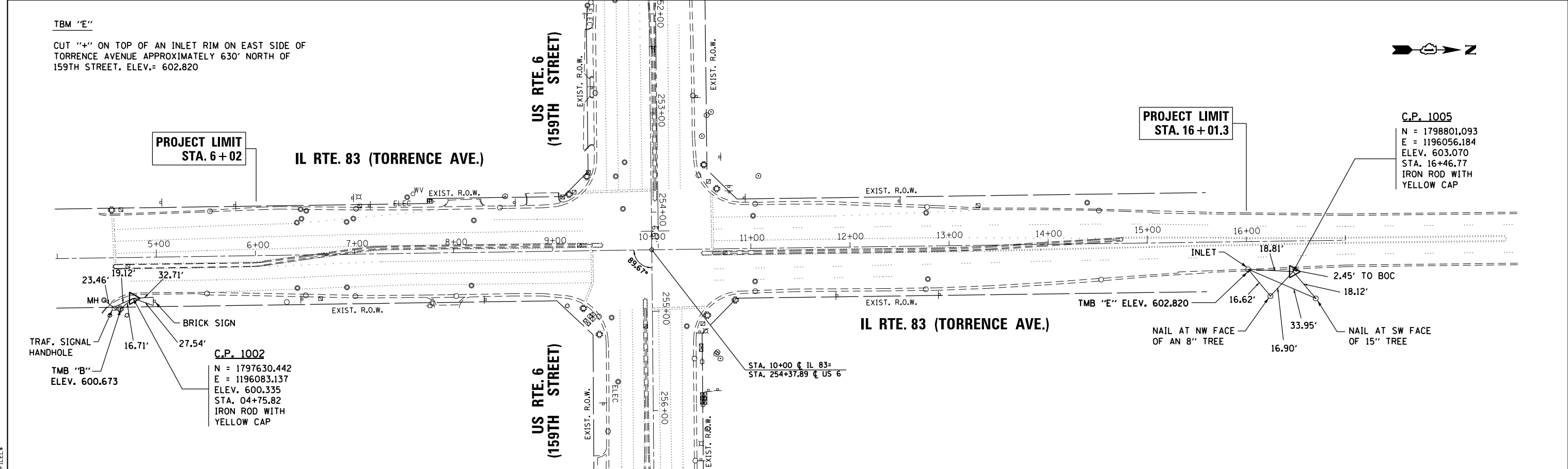
CUT "+\"/>

TBM "D"

CUT "+\"/>

TBM "E"

CUT "+\"/>



PROJECT LIMIT
STA. 6+02

PROJECT LIMIT
STA. 16+01.3

TBM "B"
ELEV. 600.673

C.P. 1002
N = 1797630.442
E = 1196083.137
ELEV. 600.335
STA. 04+75.82
IRON ROD WITH
YELLOW CAP

C.P. 1005
N = 1798801.093
E = 1196056.184
ELEV. 603.070
STA. 16+46.77
IRON ROD WITH
YELLOW CAP

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALIGNMENT, TIES AND BENCHMARKS
US RTE. 6 (159TH STREET) AND IL RTE. 83 (TORRENCE AVENUE)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	539N-1	COOK	49	12
CONTRACT NO. 60W90				
ILLINOIS FED. AID PROJECT				

FILE NAME = \$FILEL\$

USER NAME = \$USER\$	DESIGNED -	REVISIONS
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	BFH	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED -	REVISIONS
	BA	REVISED -
PLOT DATE = \$DATE\$	DATE -	REVISIONS
	1/31/14	REVISED -

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

MATCHLINE STA. 6 + 50
SEE BELOW

PROJECT LIMIT
STA. 6 + 02

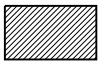
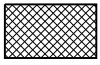
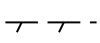
PROJECT LIMIT
STA. 16 + 01.3

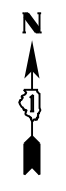
IL RTE. 83 (TORRENCE AVE.)

CONC. MEDIAN REMOVAL
STA. 10+50.3 TO STA. 14+75.3
SAWING INCIDENTAL TO REMOVAL ITEM
(1580.5 SQ FT)

PAVEMENT REMOVAL
STA. 10+74.3 TO STA. 16+01.3
SAWING INCIDENTAL TO REMOVAL ITEM
(233.4 SQ YD)

LEGEND

-  MEDIAN REMOVAL
-  PAVEMENT REMOVAL
-  PAVEMENT MARKING & RAISED REFLECTIVE PAVEMENT MARKING REMOVAL



PROJECT LIMIT
STA. 250 + 17

US RTE. 6 (159TH STREET)

CONC. MEDIAN REMOVAL
STA. 253+43.2 TO STA. 253+88.3
SAWING INCIDENTAL TO REMOVAL ITEM
(158.8 SQ FT)

CONC. MEDIAN REMOVAL
254+87.4 TO STA. 255+43.3
SAWING INCIDENTAL TO REMOVAL ITEM
(201.0 SQ FT)

PROJECT LIMIT
STA. 258 + 36

US RTE. 6 (159TH STREET)

PAVEMENT REMOVAL
STA. 253+65.7 TO STA. 253+88.3
SAWING INCIDENTAL TO
REMOVAL ITEM (5.1 SQ YD)

PAVEMENT REMOVAL
STA. 254+87.4 TO STA. 255+26.2
SAWING INCIDENTAL TO REMOVAL ITEM
(8.1 SQ YD)

PAVEMENT REMOVAL
STA. 9+16.1 TO STA. 9+50.5
SAWING INCIDENTAL TO REMOVAL ITEM
(7.3 SQ YD)

CONC. MEDIAN REMOVAL
STA. 8+97.0 TO STA. 9+50.5
SAWING INCIDENTAL TO REMOVAL ITEM
(197.5 SQ FT)

IL RTE. 83
(TORRENCE AVE.)

MATCHLINE STA. 6 + 50
SEE ABOVE

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USER NAME = \$USER\$	DESIGNED - BFH	REVISED -
DRAWN - BFH	REVISED -	
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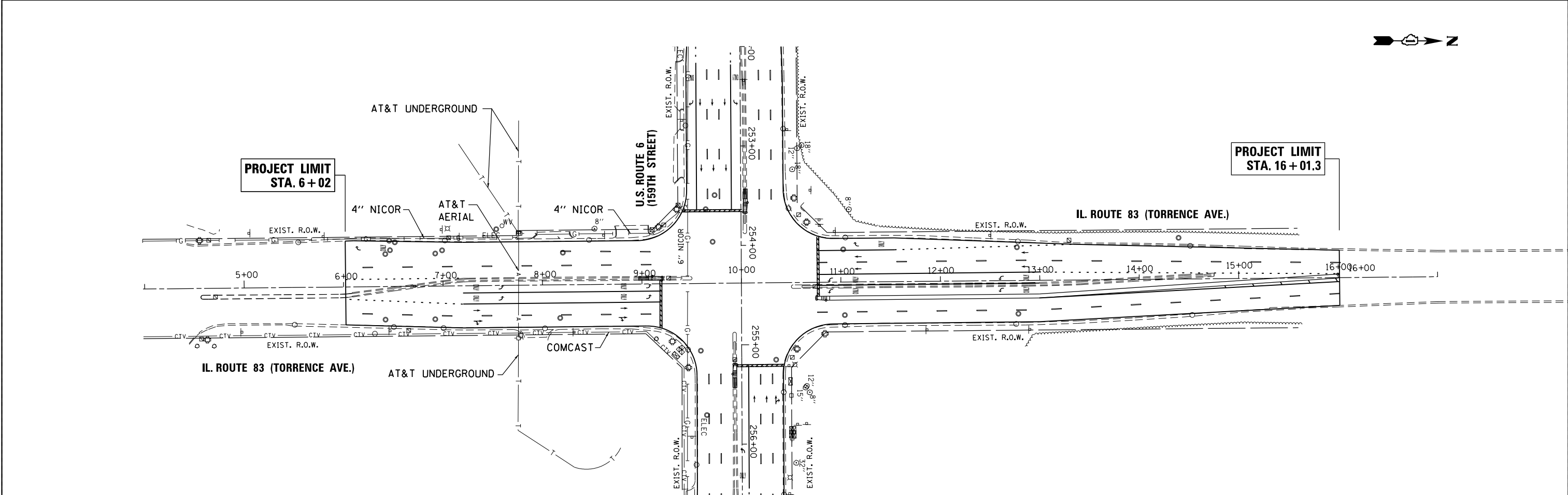
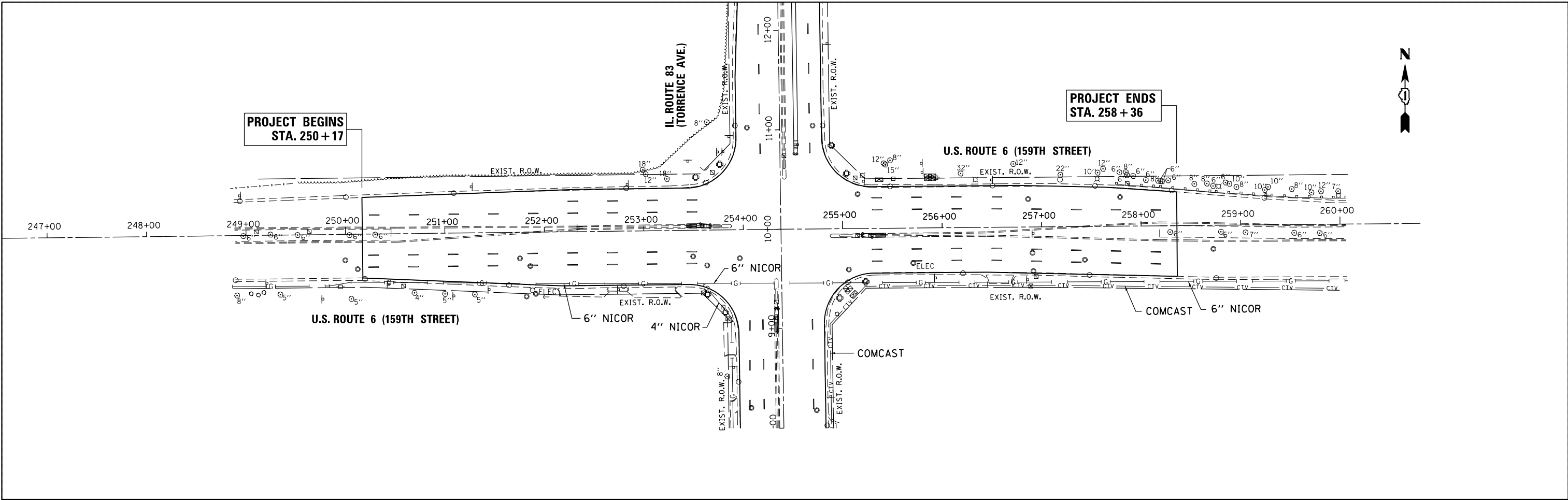
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING CONDITIONS AND REMOVAL PLAN
US RTE. 6 (159TH STREET) AND IL RTE. 83 (TORRENCE AVENUE)

SCALE: 1"=50' SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	539N-1	COOK	49	13
CONTRACT NO. 60W90				
ILLINOIS FED. AID PROJECT				

SHT.PLAN



FILE NAME = \$FILEL\$
SHT.PLAN

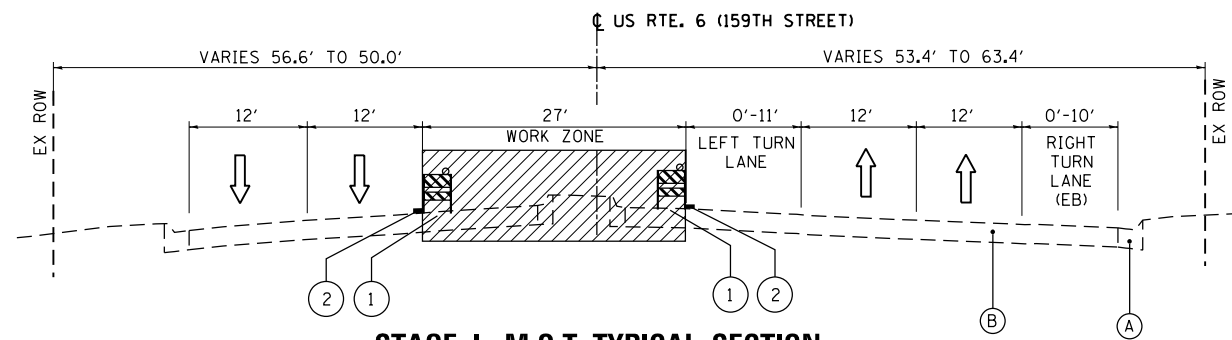
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PLOT DATE = \$DATE\$	DATE - 1/31/14	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

EXISTING UTILITIES PLAN
US RTE. 6 (159TH STREET) AND IL RTE. 83 (TORRENCE AVENUE)

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

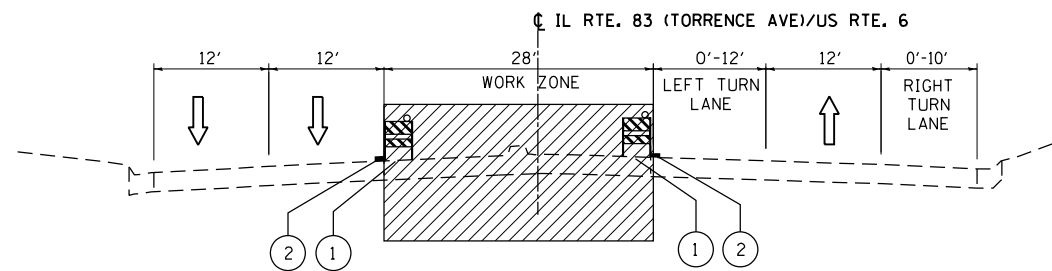
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	539N-1	COOK	49	16
CONTRACT NO. 60W90				
ILLINOIS FED. AID PROJECT				



STAGE I - M.O.T. TYPICAL SECTION

U.S. ROUTE 6

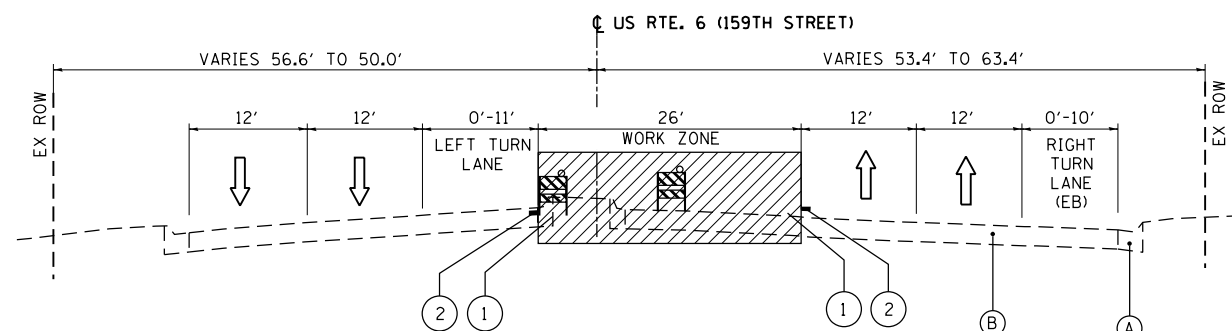
STA. 245+28 TO STA. 254+37
(LOOKING EAST)



STAGE I - M.O.T. TYPICAL SECTION

IL ROUTE 83

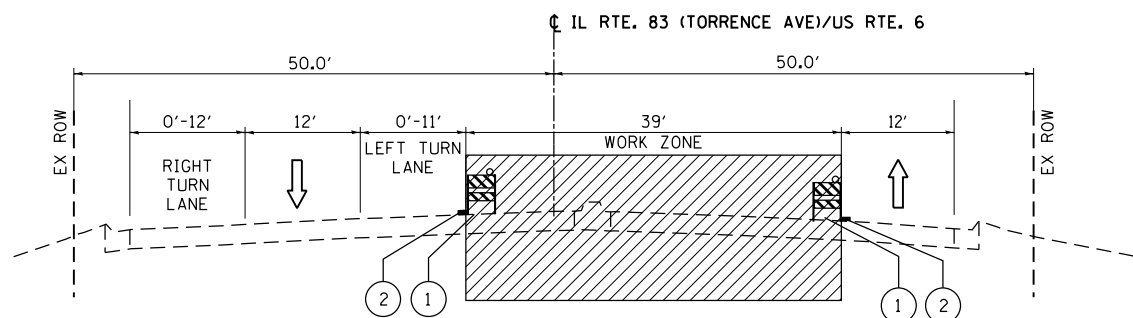
STA. 4+55 TO STA. 10+00
(LOOKING NORTH)



STAGE II - M.O.T. TYPICAL SECTION

U.S. ROUTE 6

STA. 254+37 TO STA. 258+73.5
(LOOKING EAST)



STAGE II - M.O.T. TYPICAL SECTION

IL ROUTE 83

STA. 10+00 TO STA. 16+01.3
(LOOKING NORTH)

LEGEND

- ① TYPE II BARRICADE OR DRUM WITH STEADY BURN MONO-DIRECTIONAL LIGHT
- ② TEMPORARY PAVEMENT MARKING - LINE 4" (YELLOW)
- ← DIRECTION OF TRAFFIC
- ▨ WORK ZONE

NOTES

1. PRIOR TO INSTALLING POST MOUNTED SIGNS, THE CONTRACTOR SHALL CONTACT J.U.L.I.E. AND MEADE ELECTRIC FOR LOCATES.
2. SEE STAGING PLAN AND STANDARD 701701 FOR ADDITIONAL INFORMATION.

FILE NAME = \$FILEL\$

SHT.PLAN

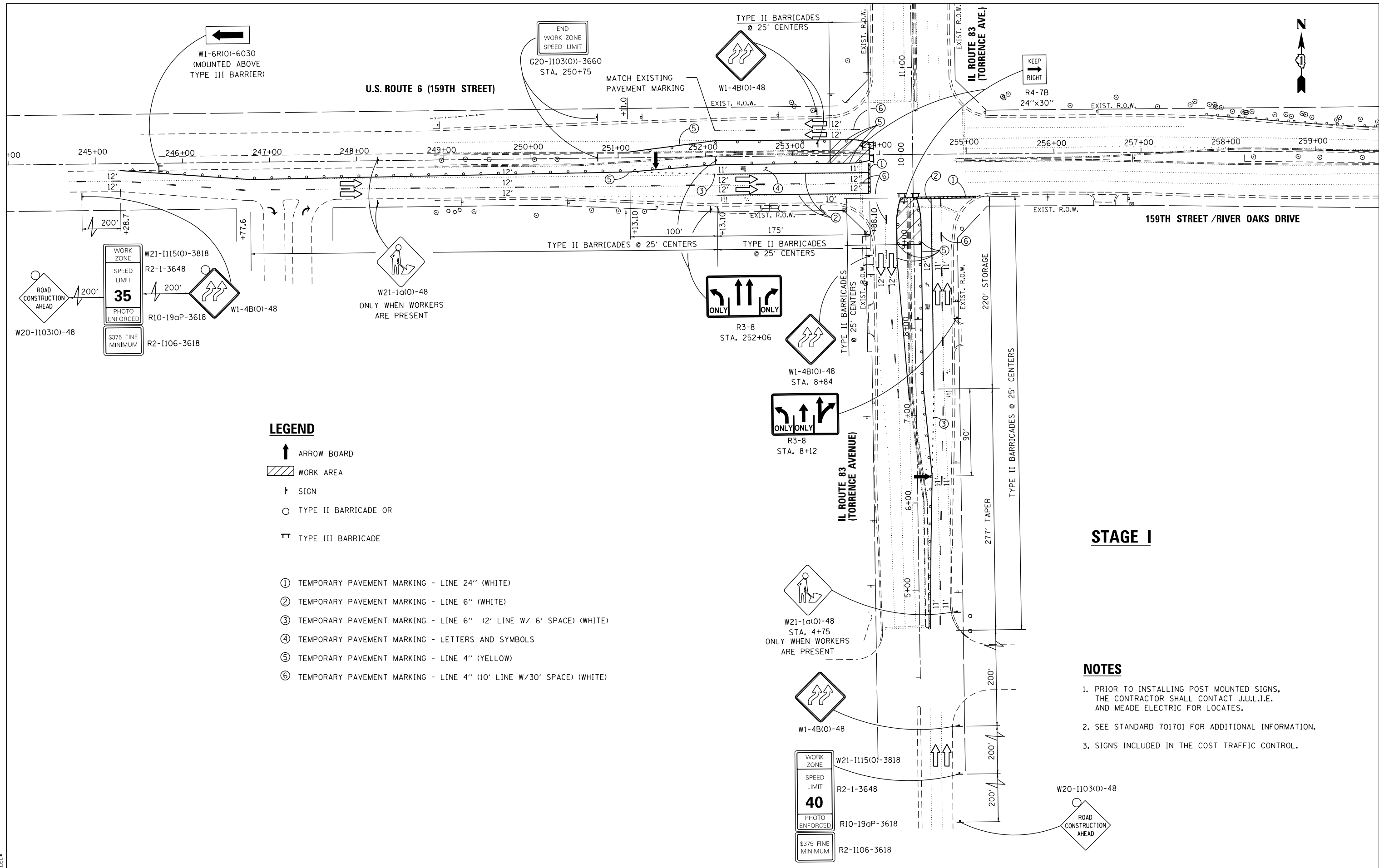
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PLOT SCALE = \$SCALE\$	CHECKED - BA	REVISED -
PLOT DATE = \$DATE\$	DATE - 1/31/14	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUGGESTED MAINTENANCE OF TRAFFIC - TYPICAL SECTIONS
US RTE. 6 (159TH STREET) AND IL RTE. 83 (TORRENCE AVENUE)**

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	539N-1	COOK	49	17
CONTRACT NO. 60W90				
ILLINOIS FED. AID PROJECT				



LEGEND

- ↑ ARROW BOARD
- ▨ WORK AREA
- † SIGN
- TYPE II BARRICADE OR
- ⊞ TYPE III BARRICADE

- ① TEMPORARY PAVEMENT MARKING - LINE 24" (WHITE)
- ② TEMPORARY PAVEMENT MARKING - LINE 6" (WHITE)
- ③ TEMPORARY PAVEMENT MARKING - LINE 6" (2' LINE W/ 6' SPACE) (WHITE)
- ④ TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS
- ⑤ TEMPORARY PAVEMENT MARKING - LINE 4" (YELLOW)
- ⑥ TEMPORARY PAVEMENT MARKING - LINE 4" (10' LINE W/30' SPACE) (WHITE)

STAGE I

NOTES

1. PRIOR TO INSTALLING POST MOUNTED SIGNS, THE CONTRACTOR SHALL CONTACT J.U.L.I.E. AND MAKE ELECTRIC FOR LOCATES.
2. SEE STANDARD 701701 FOR ADDITIONAL INFORMATION.
3. SIGNS INCLUDED IN THE COST TRAFFIC CONTROL.

FILE NAME = \$FILEL\$

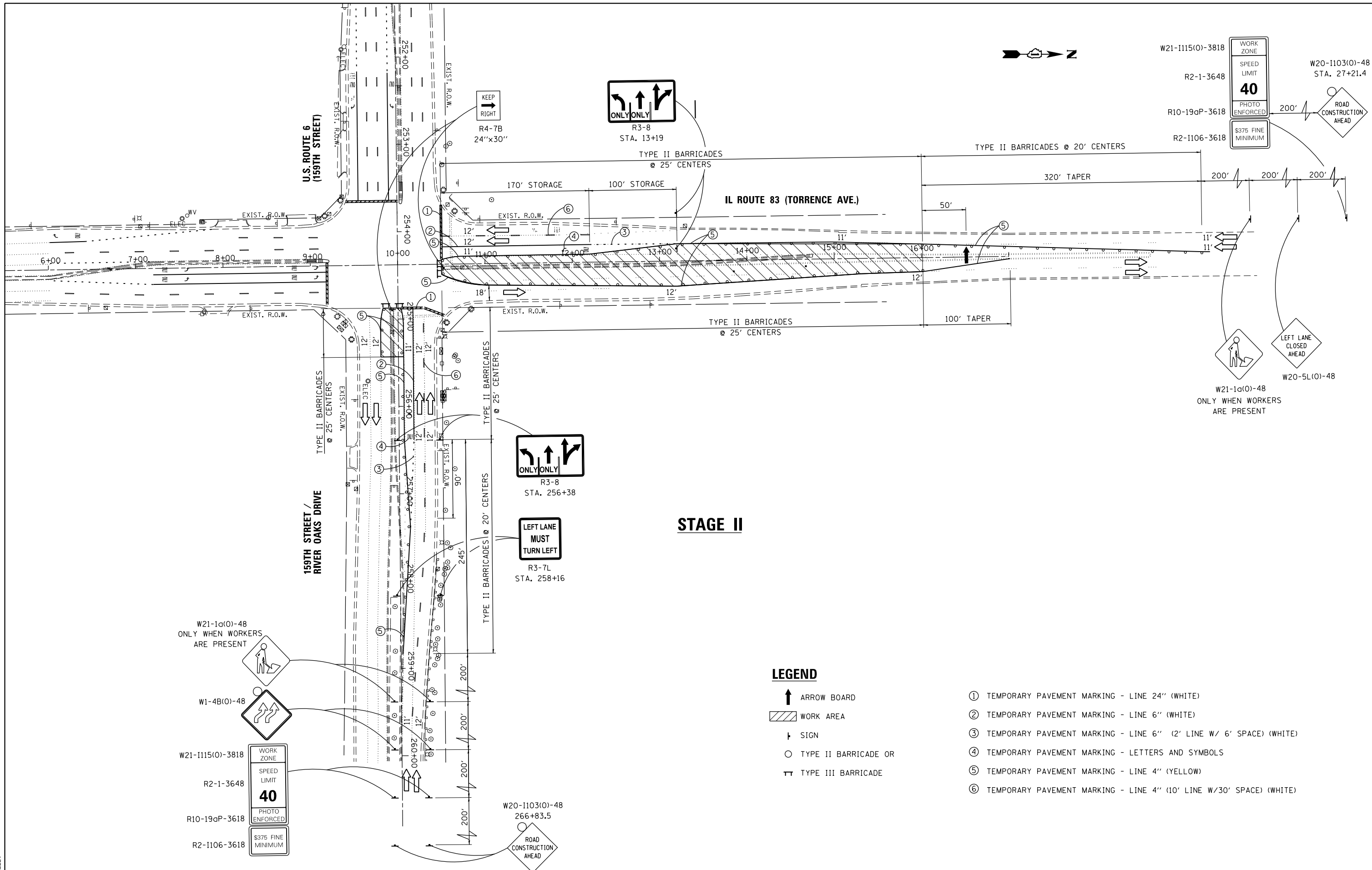
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PLOT DATE = \$DATE\$	DATE - 1/31/14	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUGGESTED MAINTENANCE OF TRAFFIC - STAGE I
US RTE. 6 (159TH STREET) AND IL RTE. 83 (TORRENCE AVENUE)**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	539N-1	COOK	49	18
CONTRACT NO. 60W90				

SCALE: 1"=50' SHEET OF SHEETS STA. TO STA. 1 2 ILLINOIS FED. AID PROJECT



STAGE II

LEGEND

↑ ARROW BOARD

▨ WORK AREA

† SIGN

○ TYPE II BARRICADE OR

▬ TYPE III BARRICADE

- ① TEMPORARY PAVEMENT MARKING - LINE 24" (WHITE)
- ② TEMPORARY PAVEMENT MARKING - LINE 6" (WHITE)
- ③ TEMPORARY PAVEMENT MARKING - LINE 6" (2' LINE W/ 6' SPACE) (WHITE)
- ④ TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS
- ⑤ TEMPORARY PAVEMENT MARKING - LINE 4" (YELLOW)
- ⑥ TEMPORARY PAVEMENT MARKING - LINE 4" (10' LINE W/30' SPACE) (WHITE)

W21-1a(0)-48
ONLY WHEN WORKERS
ARE PRESENT

W1-4B(0)-48

W21-1115(0)-3818
WORK ZONE

R2-1-3648
SPEED LIMIT
40

R10-19aP-3618
PHOTO ENFORCED

R2-1106-3618
\$375 FINE MINIMUM

W20-1103(0)-48
STA. 27+21.4

W21-1a(0)-48
ONLY WHEN WORKERS
ARE PRESENT

W20-5L(0)-48
LEFT LANE
CLOSED
AHEAD

FILE NAME = \$FILEL\$

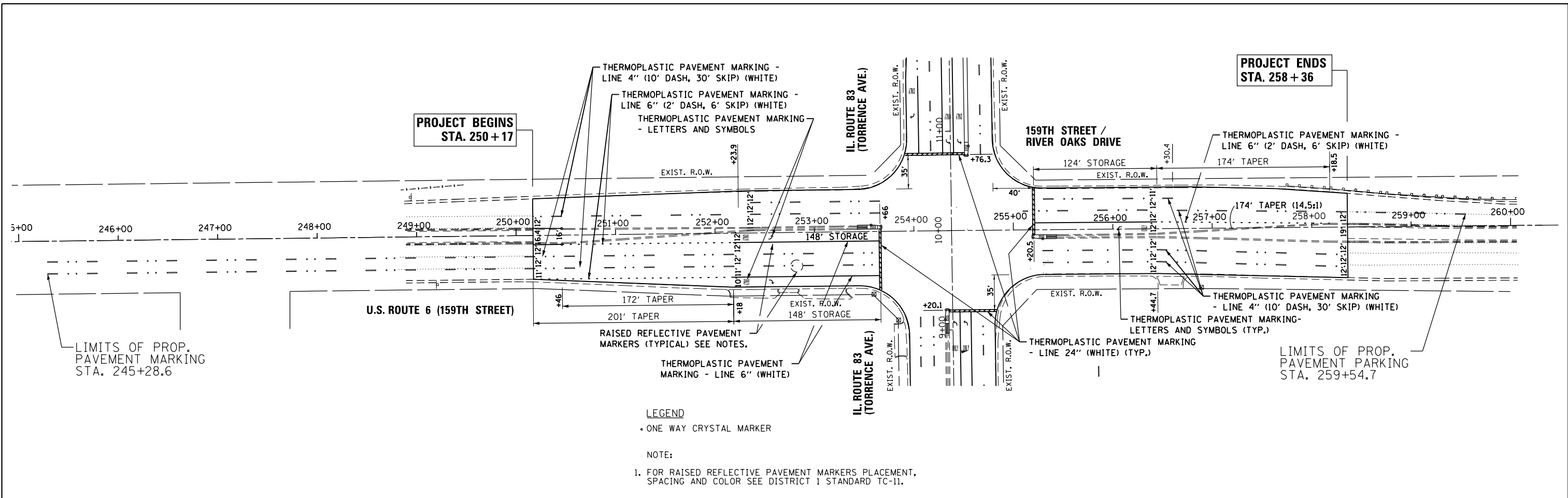
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DRAWN - BFH	REVISOR -	
PLOT SCALE = \$SCALE\$	CHECKED - BA	REVISED -
PLOT DATE = \$DATE\$	DATE - 1/31/14	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUGGESTED MAINTENANCE OF TRAFFIC - STAGE II
US RTE. 6 (159TH STREET) AND IL RTE. 83 (TORRENCE AVENUE)**

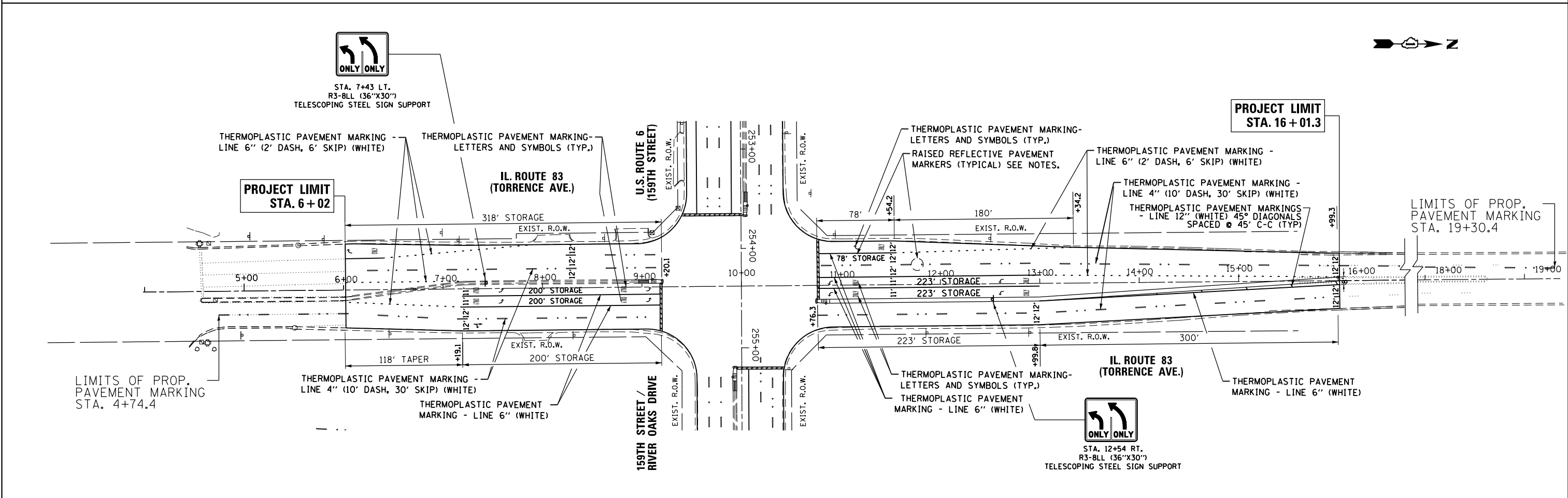
SCALE: 1"=50' SHEET 2 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	539N-1	COOK	49	19
CONTRACT NO. 60W90				
ILLINOIS FED. AID PROJECT				



LEGEND
 • ONE WAY CRYSTAL MARKER

NOTE:
 1. FOR RAISED REFLECTIVE PAVEMENT MARKERS PLACEMENT, SPACING AND COLOR SEE DISTRICT 1 STANDARD TC-11.



FILE NAME = \$FILEL\$

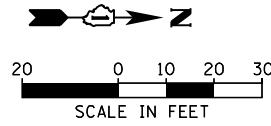
USER NAME = \$USER\$	DESIGNED - BFH	REVISED -
	DRAWN - BFH	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - BA	REVISED -
PLOT DATE = \$DATE\$	DATE - 1/31/14	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING AND SIGNING PLAN
 US RTE. 6 (159TH STREET) AND IL RTE. 83 (TORRENCE AVENUE)**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	539N-1	COOK	49	20
CONTRACT NO. 60W90				
ILLINOIS FED. AID PROJECT				

SCALE: 1"=50' SHEET 1 OF 1 SHEETS STA. TO STA.



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

MATCH LINE STA 252+75 SEE SHEET 22

**US ROUTE 6
(159TH STREET)**

TEMPORARY WOOD POLE, 10+64.12, 69.7' LT.

TEMPORARY WOOD POLE, 9+24, 63.5' LT.

TEMPORARY WOOD POLE, 9+41.00, 77.0' RT.

TEMPORARY WOOD POLE, 10+64.31, 67.2' RT.

LOCAL MASTER CONTROLLER "RCF"

**159TH ST./
RIVER OAKS DR.**

IL ROUTE 83 (TORRENCE AVE.)

MATCH LINE STA 256+25 SEE SHEET 22

NOTES FOR TEMPORARY TRAFFIC SIGNALS:

- ① ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL (S) SHALL BE FURNISHED BY THE CONTRACTOR.
- ② ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
- ③ ALL TRAFFIC SIGNAL SECTIONS SHALL BE 12" (300mm). HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD. ALL SIGNAL HEADS SHALL BE L.E.D.
- ④ ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
- ⑤ ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
- ⑥ THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
- ⑦ UNINTERRUPTIBLE POWER SUPPLY (UPS) SYSTEMS SHALL BE INSTALLED AND MADE OPERATIONAL AT TEMPORARY TRAFFIC SIGNAL INSTALLATIONS WHERE UPS IS INSTALLED AT THE EXISTING TRAFFIC SIGNAL, TEMPORARY TRAFFIC SIGNALS AT RAILROAD INTERSECTIONS, AND TEMPORARY TRAFFIC SIGNALS AT INTERSECTIONS WITH FIRE STATION ACTUATED EMERGENCY VEHICLE PRE-EMPTION, OR WHEN INDICATED ON THE PLANS.
- ⑧ TRAFFIC SIGNAL MANAGEMENT SYSTEMS SHALL BE MAINTAINED IN OPERATION AS INDICATED ON THE PLANS OR AS DIRECTED BY ENGINEER. REQUIRED EQUIPMENT SHALL BE AS SHOWN ON THE PLANS AND THE CONTRACTOR SHALL PLACE THE EQUIPMENT IN OPERATION TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE TRAFFIC SIGNAL MANAGEMENT SYSTEM.
- ⑨ DETECTION AT TEMPORARY TRAFFIC SIGNALS SHALL BE INCLUDED FOR ALL APPROACHES OF THE INTERSECTION UNLESS INDICATED OTHERWISE ON THE PLANS. THE DETECTION SYSTEM MUST MEET THE SPECIFICATIONS OF DISTRICT 1 AND THE CONTRACTOR SHALL PLACE THE DETECTORS INTO OPERATION TO THE SATISFACTION OF THE ENGINEER.

MATCH LINE STA 8+00 SEE SHEET 22

**IL ROUTE 83
(TORRENCE AVE.)**

NOTES FOR TEMPORARY TRAFFIC SIGNALS:

- ⑩ WHEN PAN, TILT, ZOOM CAMERAS ARE INSTALLED AT THE EXISTING INTERSECTION OR ARE CALLED FOR IN THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING THE CAMERAS TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR CAMERAS.

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE OF THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

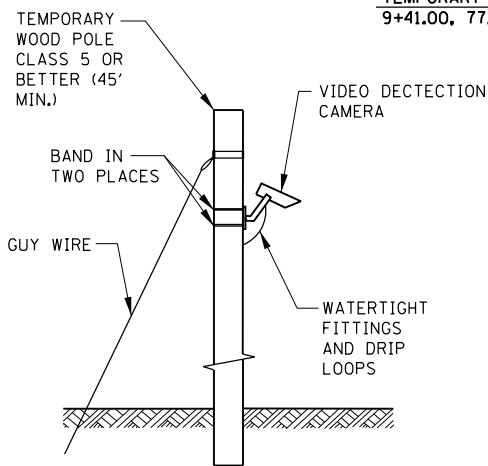
- 1 EACH MASTER CONTROLLER
- 1 EACH CONTROLLER AND CABINET (COMPLETE)
- 4 EACH SIGNAL POST
- 3 EACH ALUMINUM MAST ARM ASSEMBLY AND POLE
- 1 EACH STEEL MAST ARM ASSEMBLY AND POLE
- 8 EACH TRAFFIC SIGNAL BACKPLATE
- 4 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 6 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 1 EACH SIGNAL HEAD, 2-FACE, 5-SECTION
- 3 EACH SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
- 4 EACH EMERGENCY VEHICLE LIGHT DETECTOR
- 4 EACH CONFIRMATION BEACON
- 1 EACH LIGHT DETECTOR AMPLIFIER
- 1 EACH SERVICE INSTALLATION

CONSTRUCTION NOTES:

- ① ALL VIDEO DETECTION ZONES ARE TO BE REDEFINED DURING EACH STAGE OF CONSTRUCTION AND ARE INCLUDED IN THE COST OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION.
- ② CONTRACTOR SHALL RELOCATE ALL THE TEMPORARY SIGNAL HEADS FOR EACH CONSTRUCTION STAGE, AND THE COST OF THE RELOCATION SHALL BE INCLUDED IN THE TEMPORARY TRAFFIC SIGNAL INSTALLATION.

- THE CONTRACTOR SHALL DELIVER ALL THE EXISTING EVP EQUIPMENTS TO THE CITY OF CALUMET FIRE DEPARTMENT LOCATED:

CHIEF WILLIAM GALGAN
CALUMET CITY FIRE DEPARTMENT
1270 PULASKI ROAD
CALUMET CITY, ILLINOIS 60409
(708) 891-8145



TEMPORARY VIDEO DETECTION MOUNTING DETAIL

NOT TO SCALE

USER NAME = \$USER\$	DESIGNED - BFH	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - BFH	REVISED -
PLOT DATE = \$DATE\$	CHECKED - BA	REVISED -
	DATE - 1/31/14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**STAGE I - TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVE
EXISTING TRAFFIC SIGNAL EQUIPMENT PLAN
US RTE. 6 (159TH STREET) AND IL RTE. 83 (TORRENCE AVENUE)**

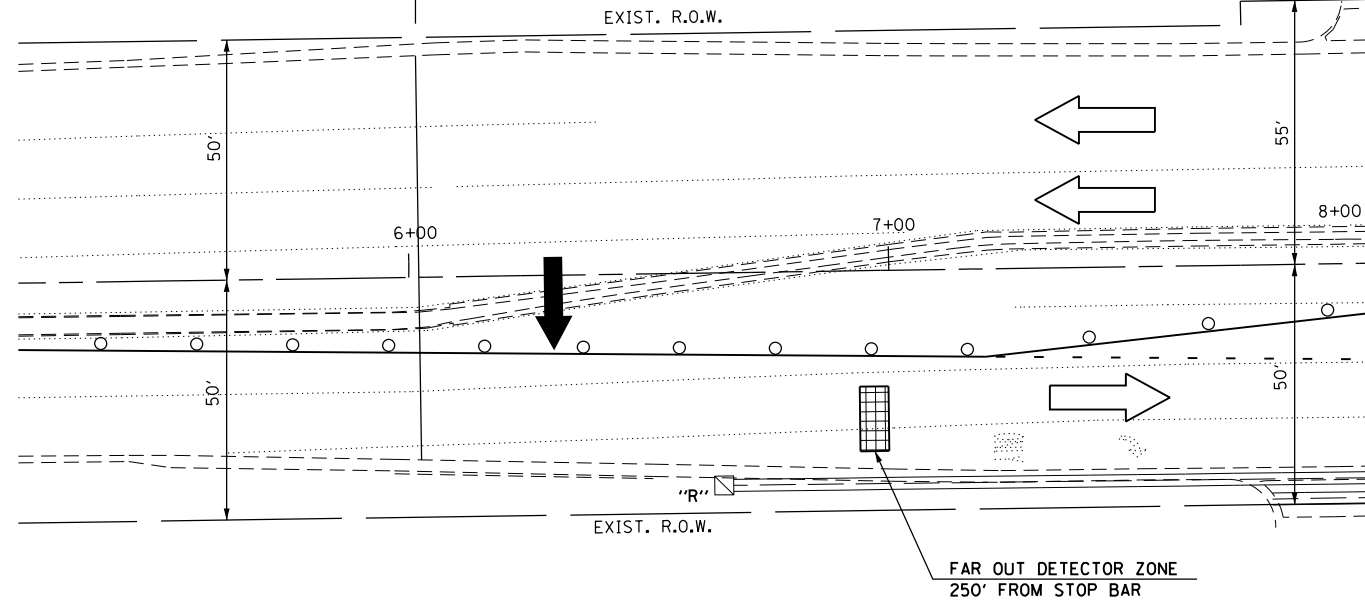
SCALE: 1"=20' SHEET 1 OF 5 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	539N-1	COOK	49	21
				CONTRACT NO. 60W90
ILLINOIS FED. AID PROJECT				

FILE NAME = \$FILEL\$
SHT.PLAN

**PROJECT LIMIT
STA. 6+02**

**IL ROUTE 83
(TORRENCE AVE.)**



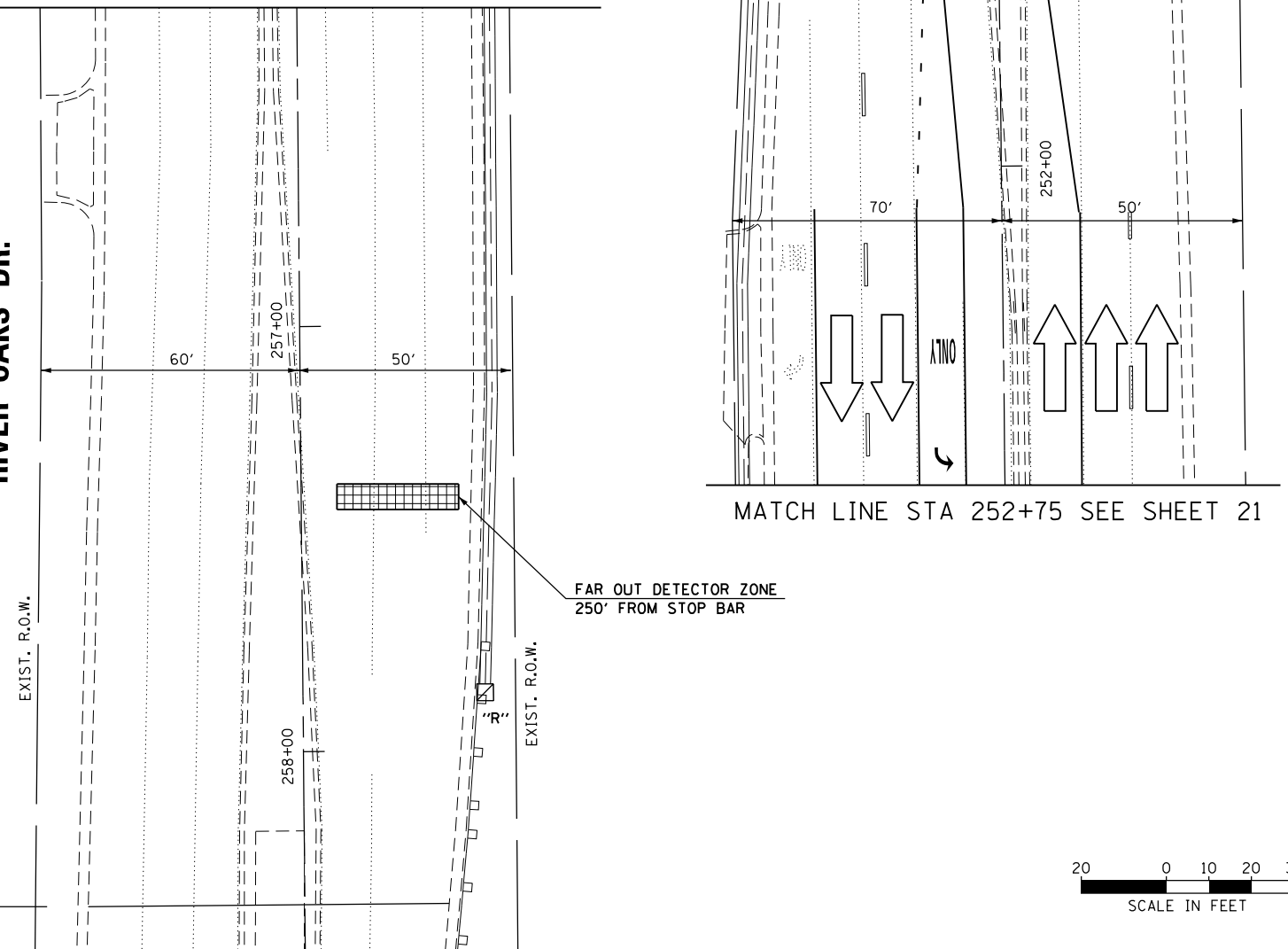
**PROJECT LIMIT
STA. 250+17**

**US ROUTE 6
(159TH STREET)**

FAR OUT DETECTOR ZONE
250' FROM STOP BAR

MATCH LINE STA 256+25 SEE SHEET 21

**159TH ST./
RIVER OAKS DR.**



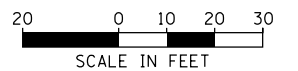
SIGN - (A)



R10-5
30" X 36" (TYP)
SIGN PANEL TYPE 1
4 REQUIRED

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

**PROJECT LIMIT
STA. 258+36**



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVE EXISTING
TRAFFIC SIGNAL EQUIPMENT PLAN
US RTE. 6 (159TH STREET) AND IL RTE. 83 (TORRENCE AVENUE)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	539N-1	COOK	49	22
CONTRACT NO. 60W90				

SCALE: 1"=20' SHEET 2 OF 5 SHEETS STA. TO STA.

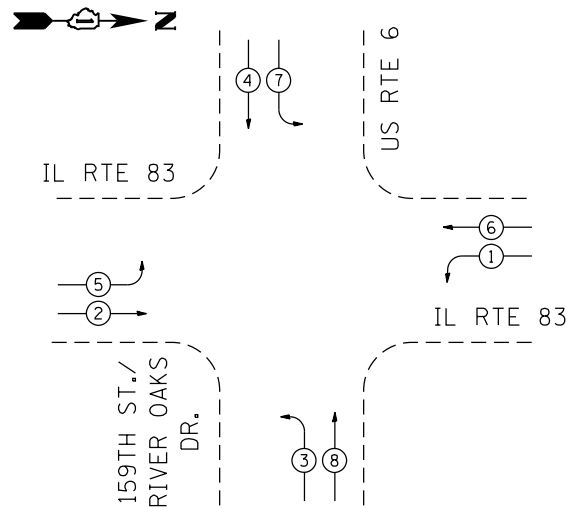
ILLINOIS FED. AID PROJECT

FILE NAME = \$FILEL\$

SHT.PLAN

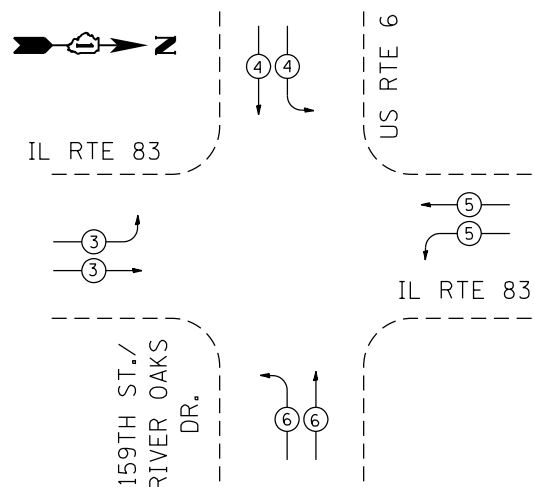
USER NAME = \$USER\$	DESIGNED -	REVISIONS
	BFH	REVISIONS
DRAWN -	BFH	REVISIONS
CHECKED -	BA	REVISIONS
DATE -	1/31/14	REVISIONS

CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE

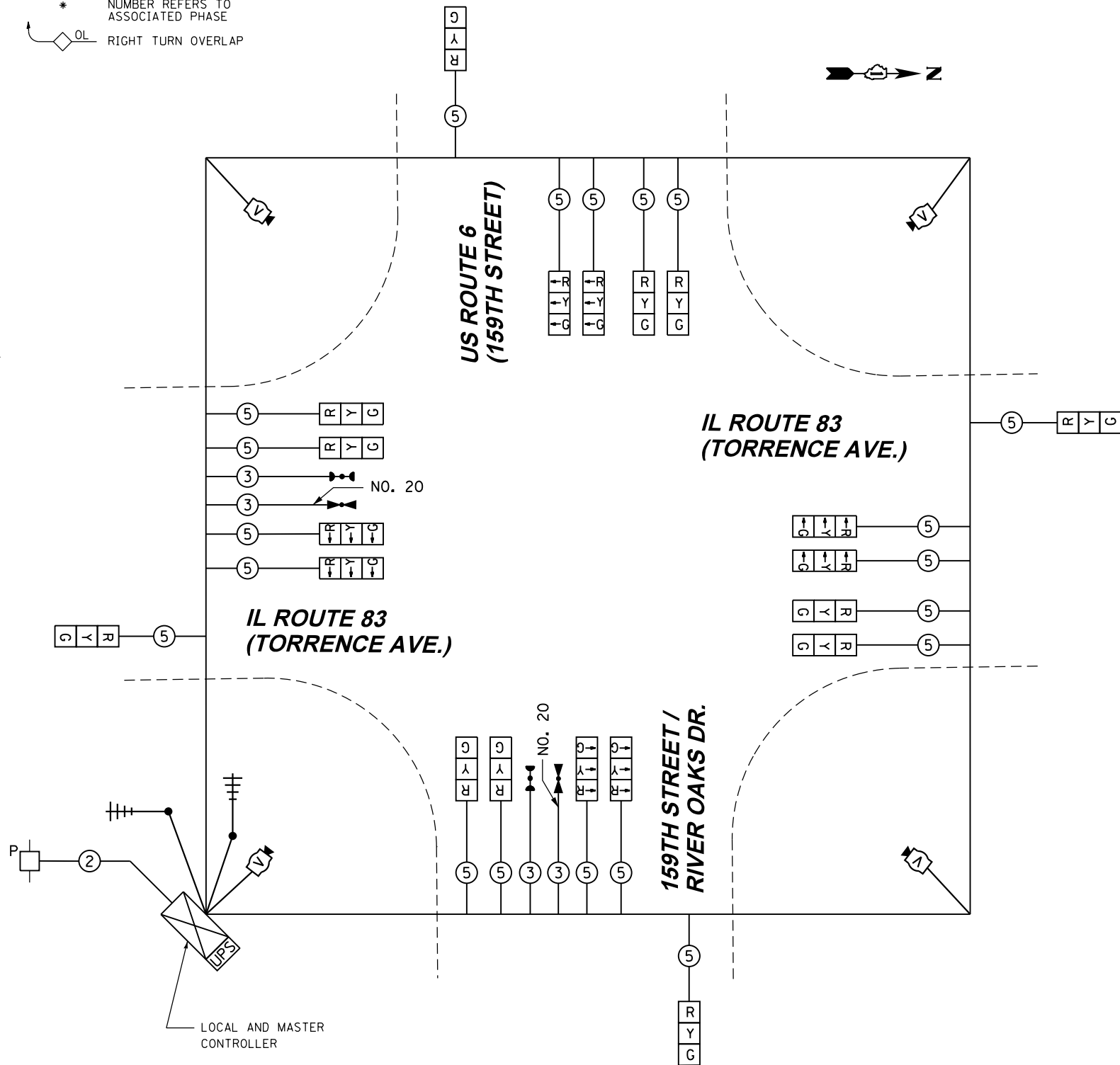
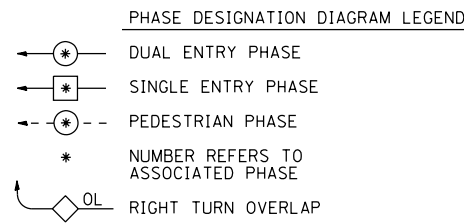


PROPOSED EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTORS	3	4	5	6
MOVEMENT				

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS						TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCAND.	LED	% OPERATION		
SIGNAL (RED)	20		17	0.50		170.0
(YELLOW)	12		25	0.25		75.0
(GREEN)	12		15	0.25		45.0
ARROW	16		12	0.10		19.2
PED. SIGNAL			25	1.00		
CONTROLLER	1	100		1.00		100.0
VIDEO SYSTEM	1	150		1.00		150.0
FLASHER			25	0.50		
ENERGY COST TO:					TOTAL=	559.2

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY: CONTACT: ANTHONY EXCALANTE
 PHONE: (708) 878-9908
 COMPANY: COMMONWEALTH EDISON



CABLE PLAN

RESTORATION OF WORK AREA, RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

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

FILE NAME = \$FILEL\$

USER NAME = \$USER\$	DESIGNED - BFH	REVISED -
DRAWN - BFH	REVISIONS -	
PLOT SCALE = \$SCALE\$	CHECKED - BA	REVISED -
PLOT DATE = \$DATE\$	DATE - 1/31/14	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN, PHASE DESIGNATION DIAGRAM
 AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
 US RTE. 6 (159TH STREET) AND IL RTE. 83 (TORRENCE AVENUE)

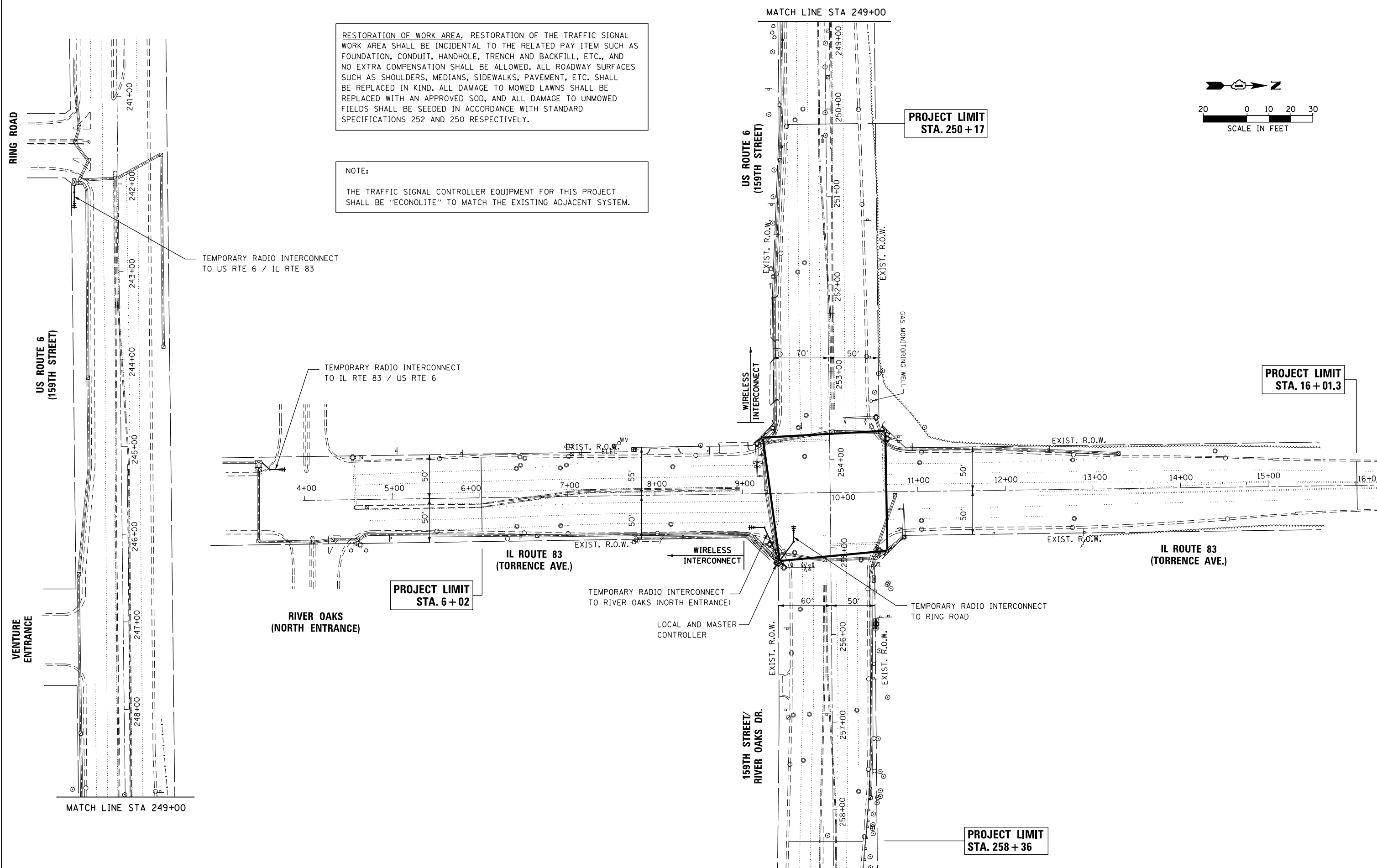
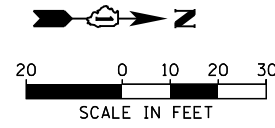
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	539N-1	COOK	49	23
CONTRACT NO. 60W90				

SCALE: N.T.S. SHEET 3 OF 5 SHEETS STA. TO STA.

ILLINOIS FED. AID PROJECT

RESTORATION OF WORK AREA, RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

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



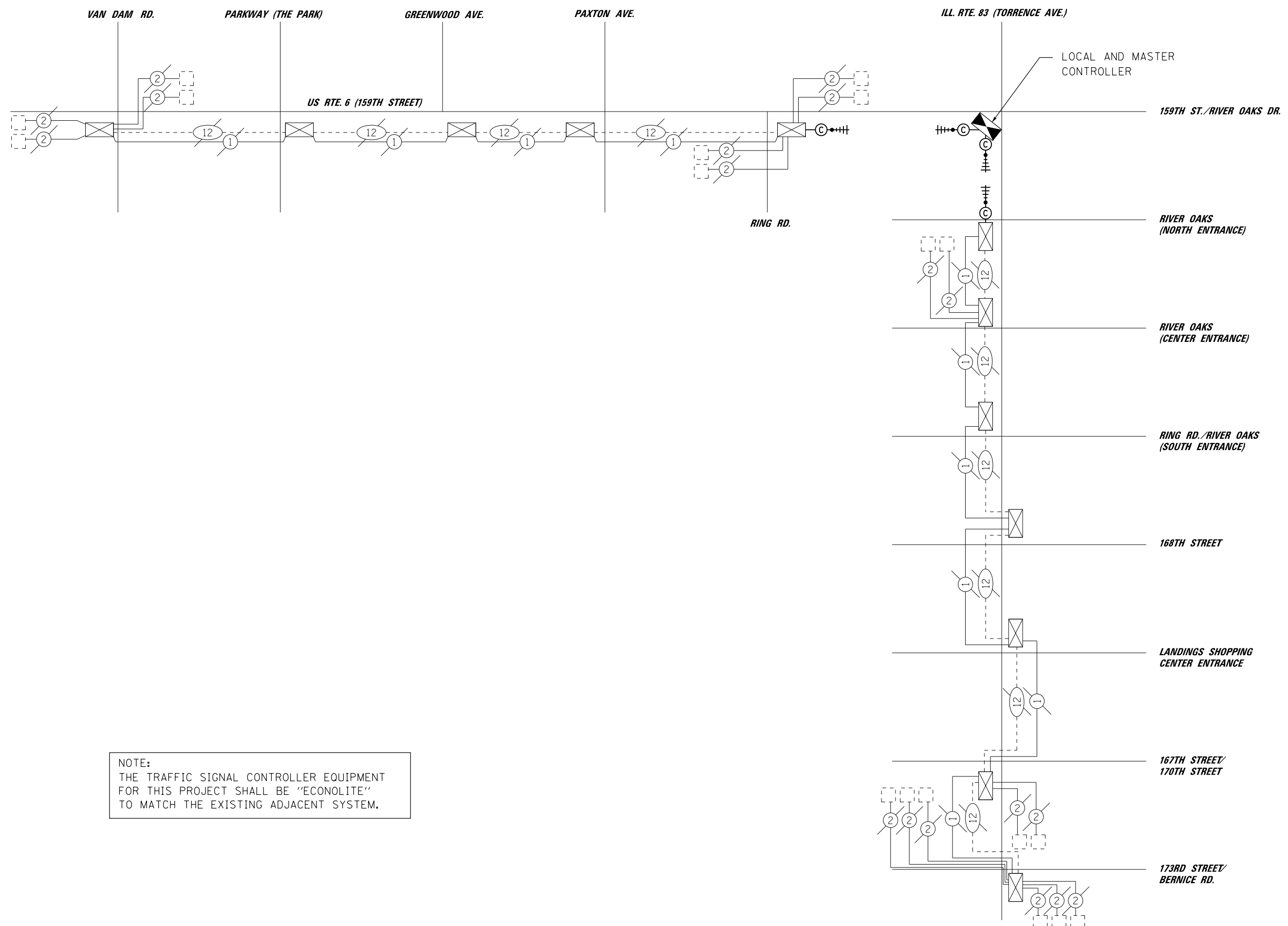
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SHT.PLAN

USER NAME = \$USER\$	DESIGNED - BFH	REVISED -
	DRAWN - BFH	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - BA	REVISED -
PLOT DATE = \$DATE\$	DATE - 1/31/14	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY INTERCONNECT PLAN
US RTE. 6 (159TH STREET) AND IL RTE. 83 (TORRENCE AVENUE)**
SCALE: 1"=50' SHEET 4 OF 5 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	539N-1	COOK	49	24
CONTRACT NO. 60W90				
ILLINOIS FED. AID PROJECT				



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

FILE NAME = \$FILEL\$

USER NAME = \$USER\$	DESIGNED - BFH	REVISED -
DRAWN - BFH	REVISIONS -	
PLOT SCALE = \$SCALE\$	CHECKED - BA	REVISED -
PLOT DATE = \$DATE\$	DATE - 1/31/14	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**TEMPORARY INTERCONNECT SCHEMATIC PLAN
 US RTE. 6 (159TH STREET) AND IL RTE. 83 (TORRENCE AVENUE)**

SCALE: N.T.S. SHEET 5 OF 5 SHEETS STA. TO STA.

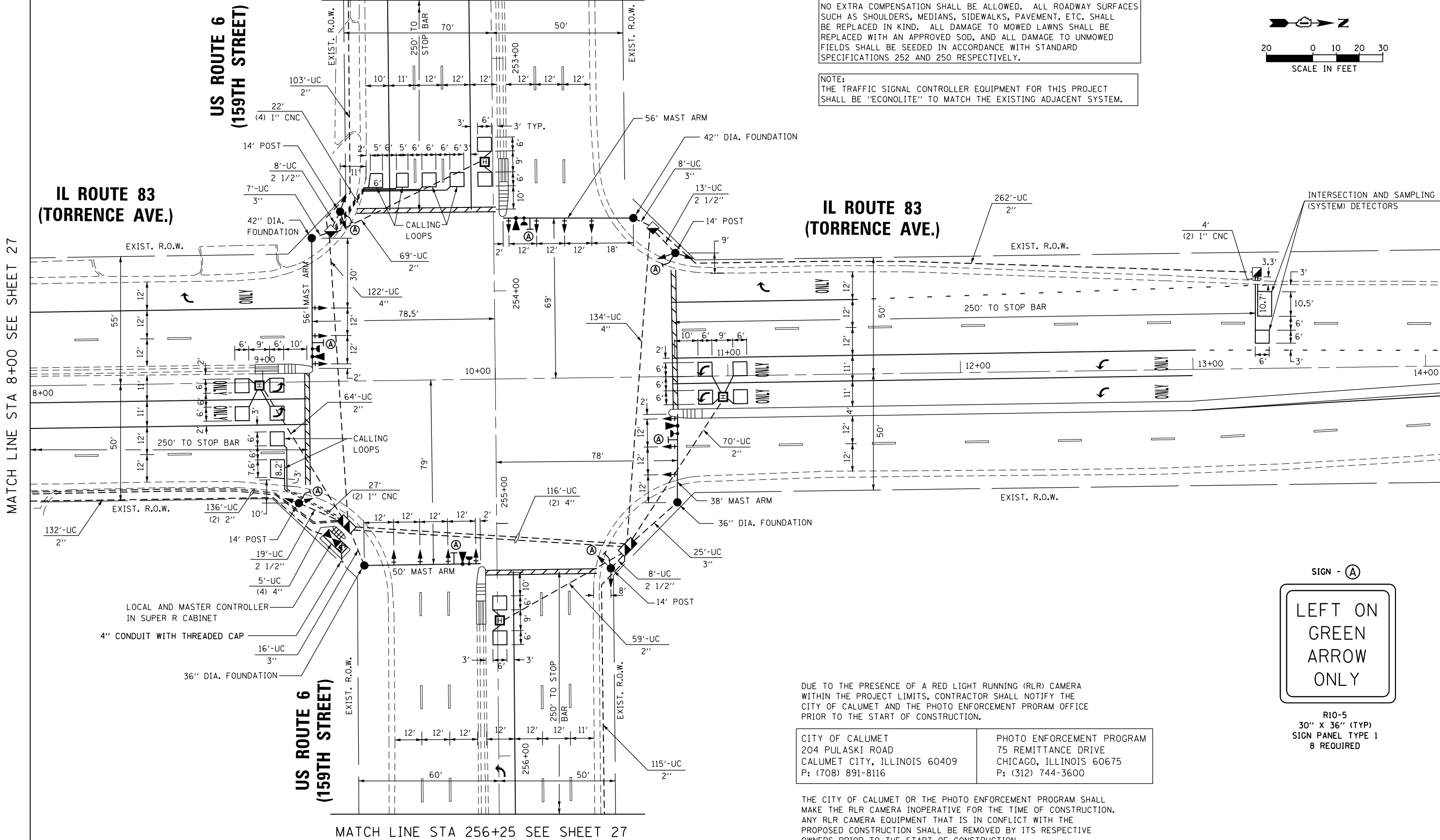
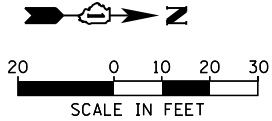
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	539N-1	COOK	49	25
CONTRACT NO. 60W90				
ILLINOIS FED. AID PROJECT				

SHT.PLAN

MATCH LINE STA 252+75 SEE SHEET 27

RESTORATION OF WORK AREA, RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

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



DUE TO THE PRESENCE OF A RED LIGHT RUNNING (RLR) CAMERA WITHIN THE PROJECT LIMITS, CONTRACTOR SHALL NOTIFY THE CITY OF CALUMET AND THE PHOTO ENFORCEMENT PROGRAM OFFICE PRIOR TO THE START OF CONSTRUCTION.

CITY OF CALUMET 204 PULASKI ROAD CALUMET CITY, ILLINOIS 60409 P: (708) 891-8116	PHOTO ENFORCEMENT PROGRAM 75 REMITTANCE DRIVE CHICAGO, ILLINOIS 60675 P: (312) 744-3600
--	--

THE CITY OF CALUMET OR THE PHOTO ENFORCEMENT PROGRAM SHALL MAKE THE RLR CAMERA INOPERATIVE FOR THE TIME OF CONSTRUCTION. ANY RLR CAMERA EQUIPMENT THAT IS IN CONFLICT WITH THE PROPOSED CONSTRUCTION SHALL BE REMOVED BY ITS RESPECTIVE OWNERS PRIOR TO THE START OF CONSTRUCTION.



R10-5
30" X 36" (TYP)
SIGN PANEL TYPE 1
8 REQUIRED

MATCH LINE STA 256+25 SEE SHEET 27

MATCH LINE STA 8+00 SEE SHEET 27

FILE NAME = \$FILEL\$

USER NAME = \$USER\$	DESIGNED - BFH	REVISED -
DRAWN - BFH	REVISIONS -	
PLOT SCALE = \$SCALE\$	CHECKED - BA	REVISIONS -
PLOT DATE = \$DATE\$	DATE - 1/31/14	REVISIONS -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN
US RTE. 6 (159TH STREET) AND IL RTE. 83 (TORRENCE AVENUE)

SCALE: 1"=20' SHEET 1 OF 6 SHEETS STA. TO STA.

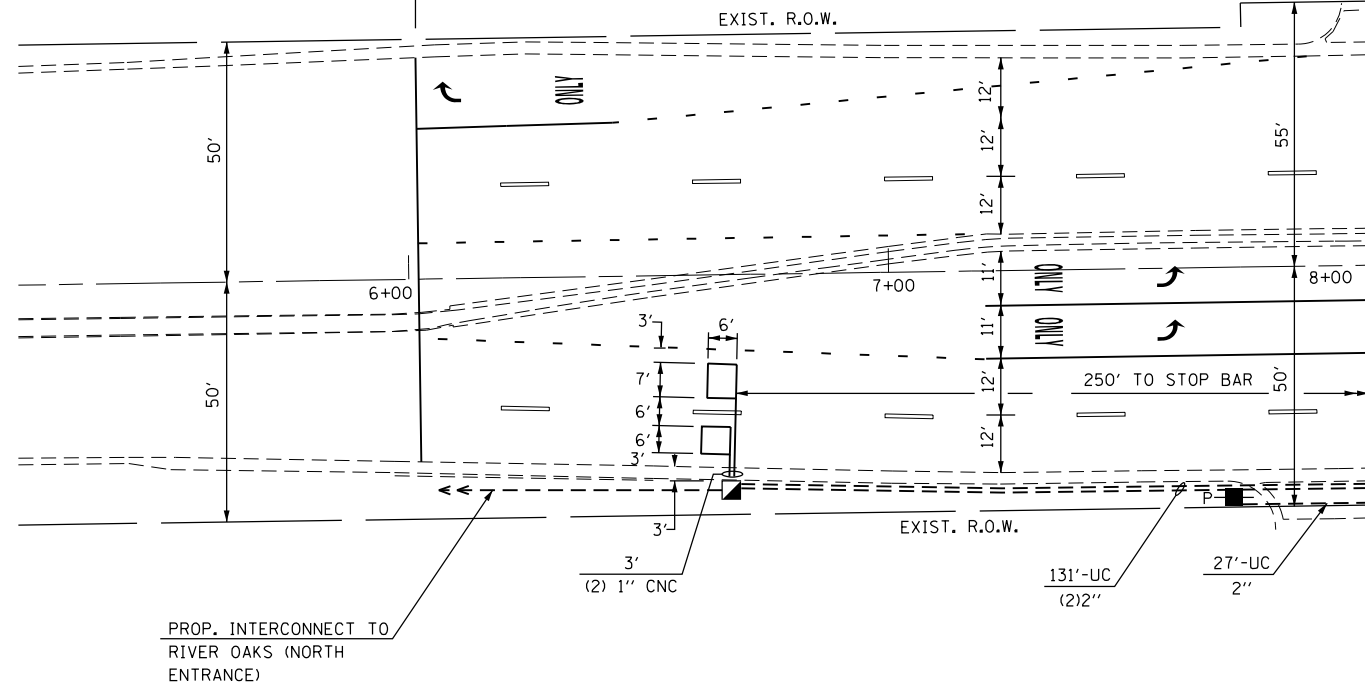
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	539N-1	COOK	49	26
CONTRACT NO. 60W90				
ILLINOIS FED. AID PROJECT				

TS 175

**PROJECT LIMIT
STA. 6 + 02**

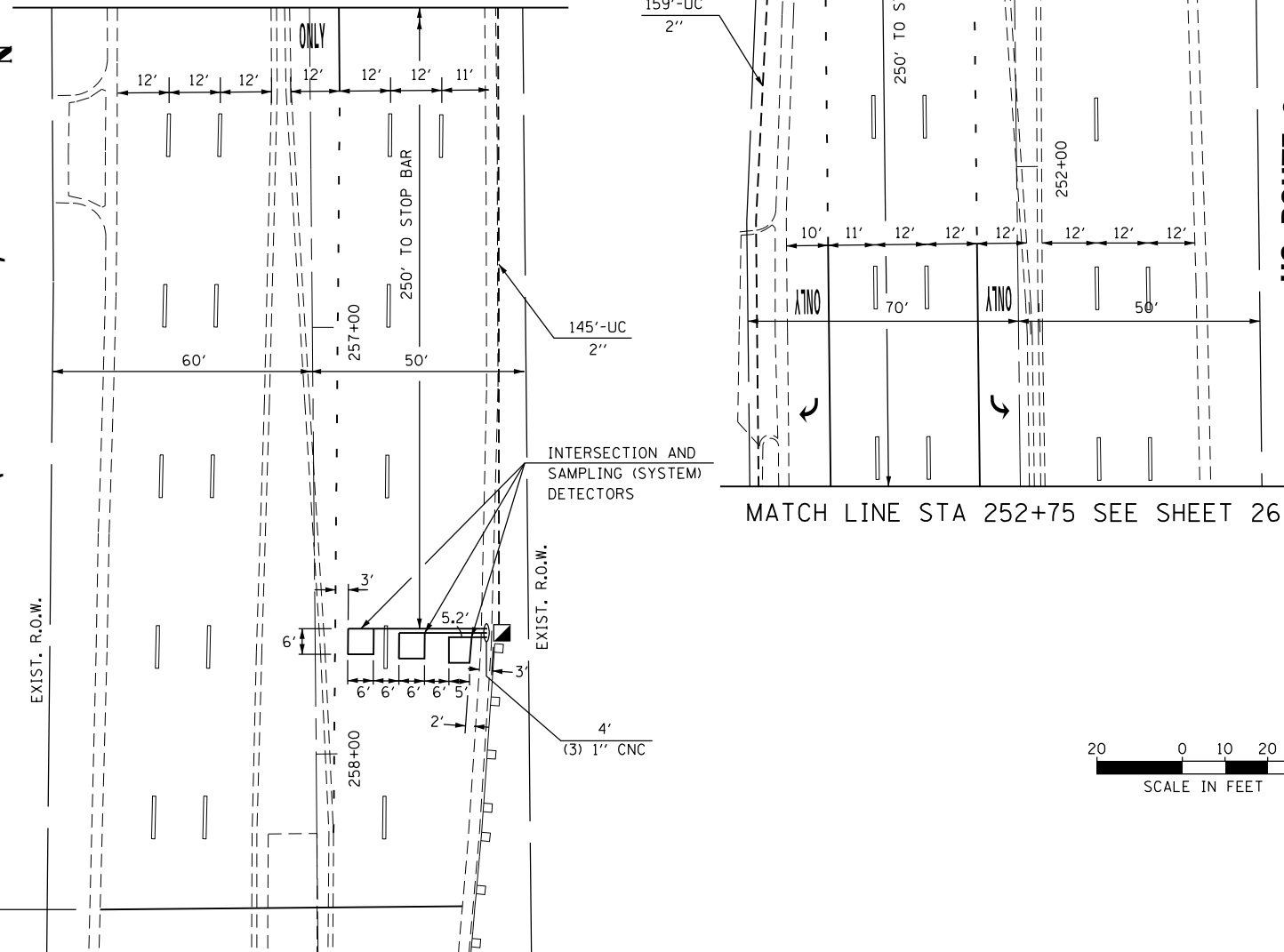
**IL ROUTE 83
(TORRENCE AVE.)**

**PROJECT LIMIT
STA. 250 + 17**



MATCH LINE STA 8+00 SEE SHEET 26

MATCH LINE STA 256+25 SEE SHEET 26



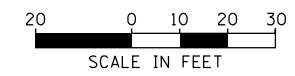
MATCH LINE STA 252+75 SEE SHEET 26

**US ROUTE 6
(159TH STREET)**

RESTORATION OF WORK AREA, RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

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

**PROJECT LIMIT
STA. 258 + 36**



FILE NAME = \$FILEL\$

USER NAME = \$USER\$	DESIGNED - BFH	REVISED -
	DRAWN - BFH	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - BA	REVISED -
PLOT DATE = \$DATE\$	DATE - 1/31/14	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODERNIZATION PLAN
US RTE. 6 (159TH STREET) AND IL RTE. 83 (TORRENCE AVENUE)**

SCALE: 1"=20' SHEET 2 OF 6 SHEETS STA. TO STA.

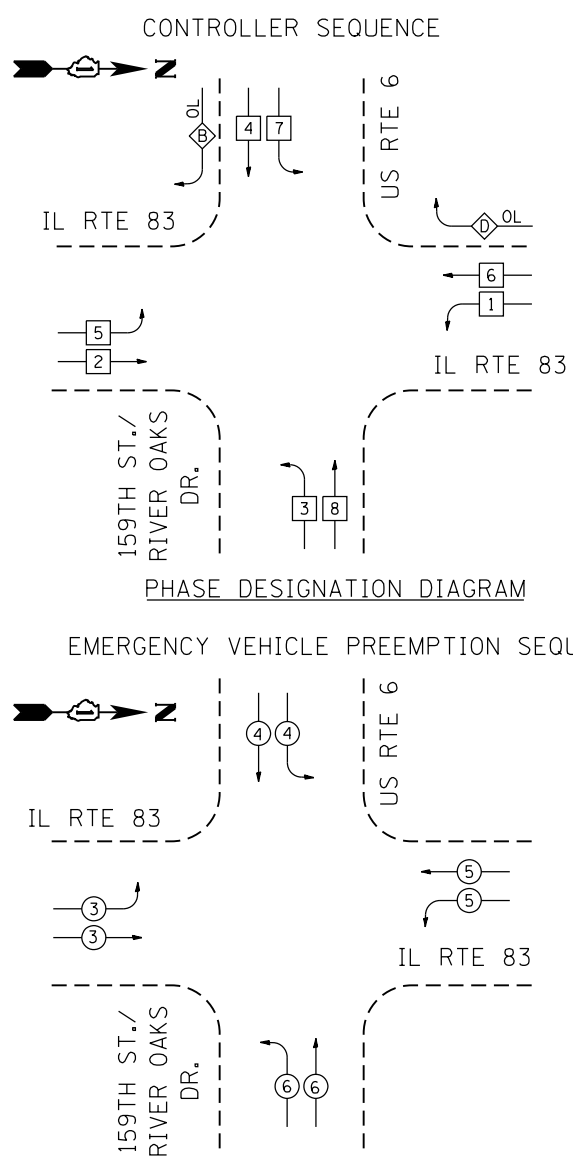
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	539N-1	COOK	49	27
CONTRACT NO. 60W90			ILLINOIS FED. AID PROJECT	

TS 175

SHT.PLAN

RESTORATION OF WORK AREA, RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.
THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

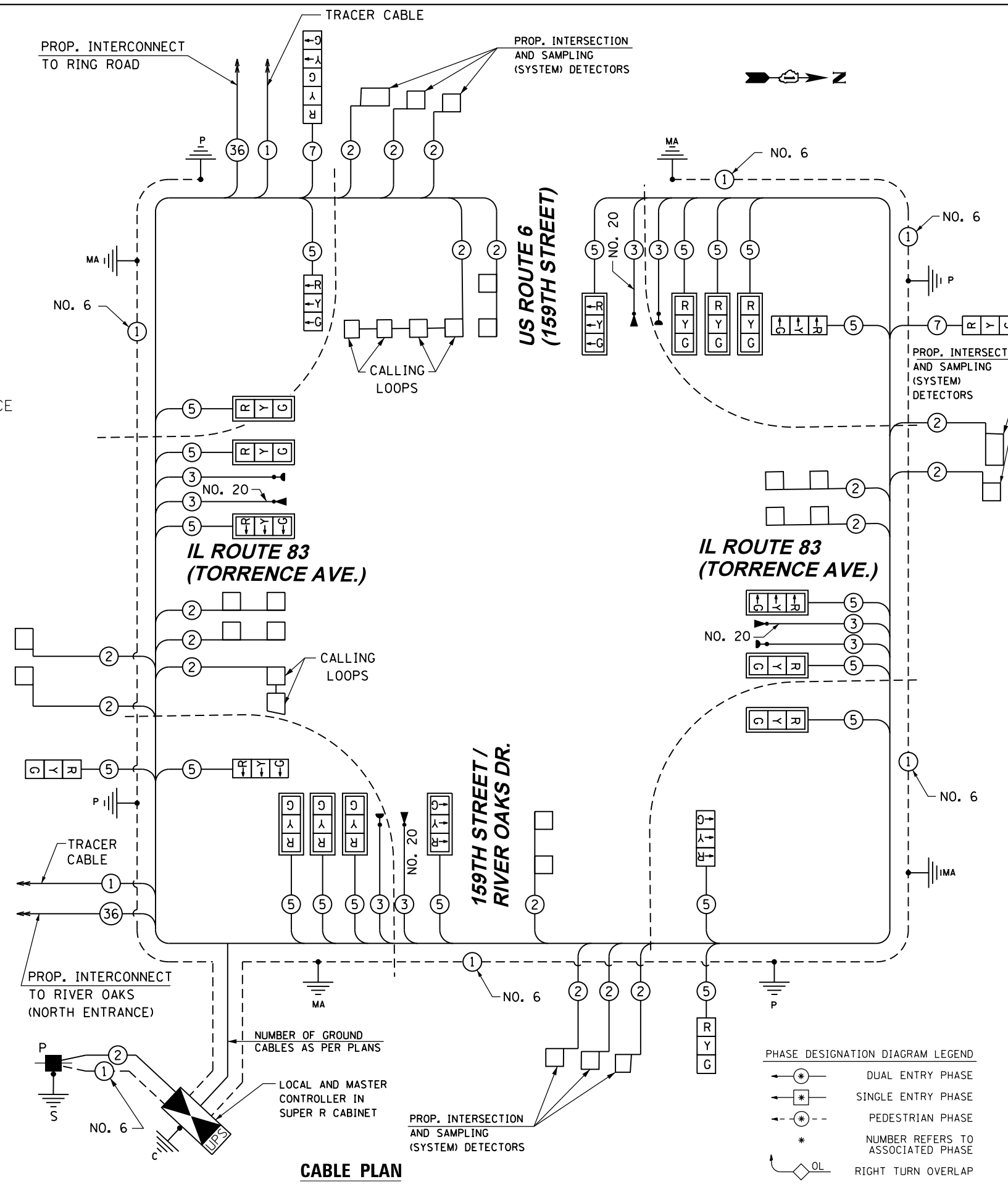


PROPOSED EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTORS	3	4	5	6
MOVEMENT				

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE (INCAND.)	LED	% OPERATION	
SIGNAL (RED)	14	17		0.50	119.0
(YELLOW)	14	25		0.25	87.5
(GREEN)	14	15		0.25	52.5
ARROW	28	12		0.10	33.6
PED. SIGNAL		25		1.00	
CONTROLLER	1	100		1.00	100.0
FLASHER		25		0.50	
ENERGY COST TO:					TOTAL= 392.6

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAY/DISTRICT 1
201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY: CONTACT: ANTHONY EXCALANTE
PHONE: (708) 878-9908
COMPANY: COMMONWEALTH EDISON



SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
SIGN PANEL - TYPE 1	SQ FT	75
SIGN PANEL - TYPE 2	SQ FT	63
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	1,739
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2.5" DIA.	FOOT	48
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	56
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	508
HANDHOLE	EACH	6
HEAVY-DUTY HANDHOLE	EACH	4
DOUBLE HANDHOLE	EACH	2
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1,325
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	4,723
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	920
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	3,480
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	195
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	830
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	4
STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 56 FT.	EACH	2
CONCRETE FOUNDATION, TYPE A	FOOT	16
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	26
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	42
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	14
SIGNAL HEAD, LED, 2-FACE,1-3-SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	14
INDUCTIVE LOOP DETECTOR	EACH	18
DETECTOR LOOP, TYPE I	EACH	985
* LIGHT DETECTOR	EACH	4
* LIGHT DETECTOR AMPLIFIER	EACH	1
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	11
REMOVE EXISTING DOUBLE HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
* EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR, NO. 20 3/C	FOOT	1,035
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

* 100% COST TO CALUMET CITY

FILE NAME = \$FILEL\$

USER NAME = \$USER\$	DESIGNED - BFH	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - BFH	REVISED -
PLOT DATE = \$DATE\$	CHECKED - BA	REVISED -
	DATE - 1/31/14	REVISED -

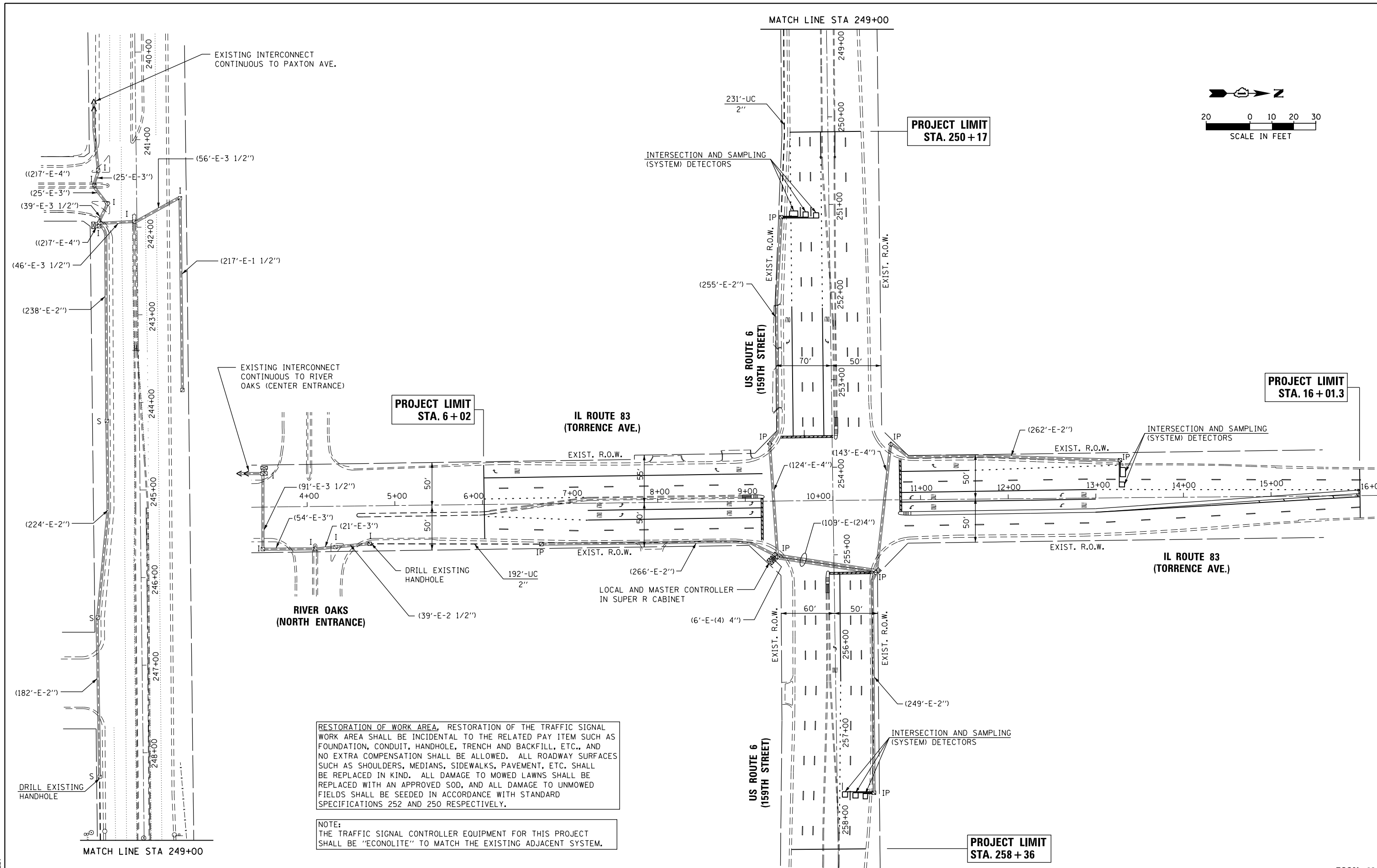
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
US RTE. 6 (159TH STREET) AND IL RTE. 83 (TORRENCE AVENUE)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	539N-1	COOK	49	28
CONTRACT NO. 60W90			ILLINOIS FED. AID PROJECT	

TS 175

SCALE: N.T.S. SHEET 3 OF 6 SHEETS STA. TO STA.



RESTORATION OF WORK AREA, RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

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

FILE NAME = \$FILEL\$
SHT.PLAN

USER NAME = \$USER\$	DESIGNED - BFH	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - BFH	REVISED -
PLOT DATE = \$DATE\$	CHECKED - BA	REVISED -
	DATE - 1/31/14	REVISED -

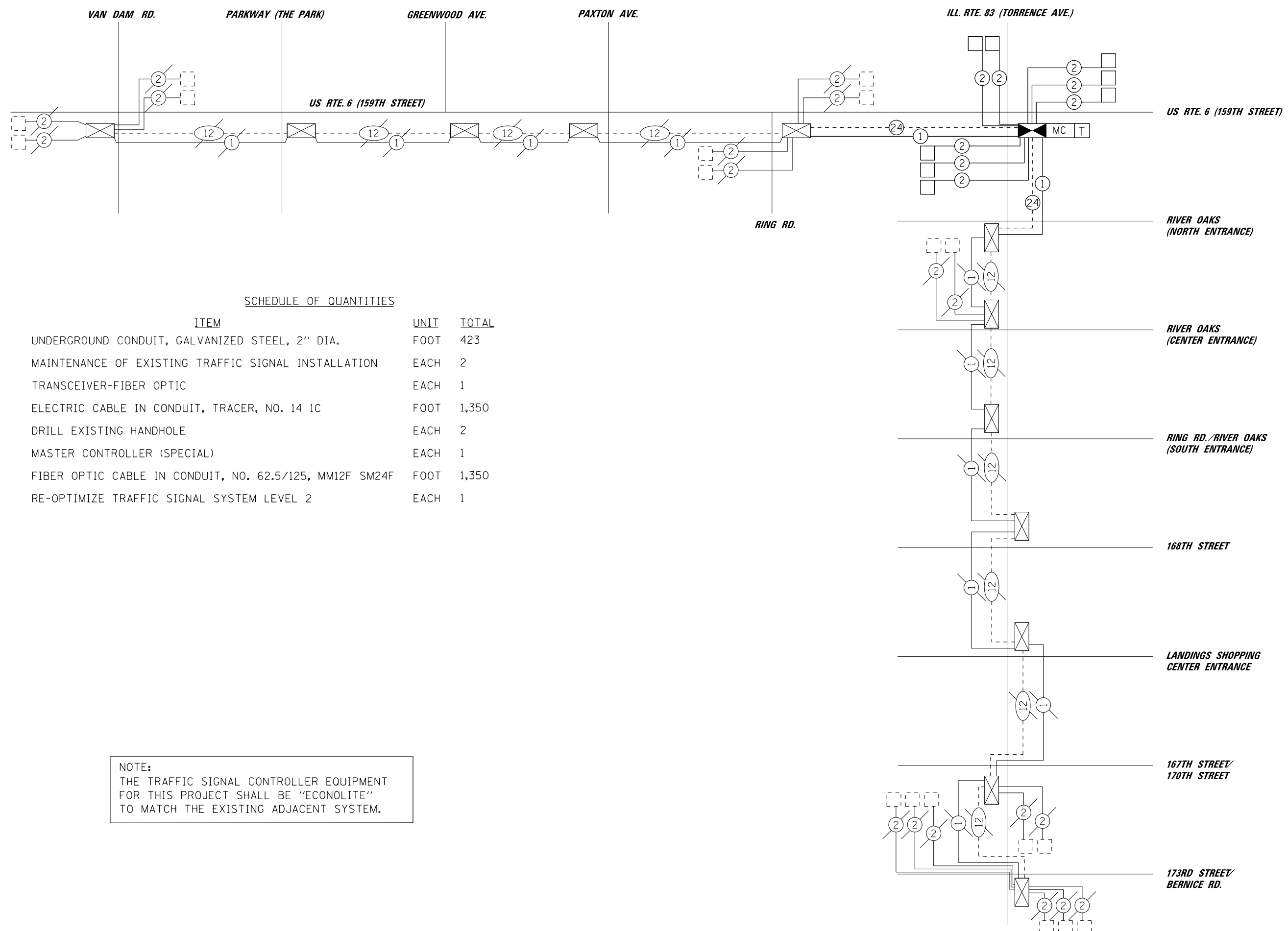
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
US RTE. 6 (159TH STREET) AND IL RTE. 83 (TORRENCE AVENUE)

SCALE: 1"=50' SHEET 4 OF 6 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	539N-1	COOK	49	29
CONTRACT NO. 60W90				
ILLINOIS FED. AID PROJECT				

ECON 49



SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	423
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	2
TRANSCIEVER-FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	1,350
DRILL EXISTING HANDHOLE	EACH	2
MASTER CONTROLLER (SPECIAL)	EACH	1
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	1,350
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2	EACH	1

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

FILE NAME = \$FILEL\$

USER NAME = \$USER\$	DESIGNED - BFH	REVISED -
	DRAWN - BFH	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - BA	REVISED -
PLOT DATE = \$DATE\$	DATE - 1/31/14	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

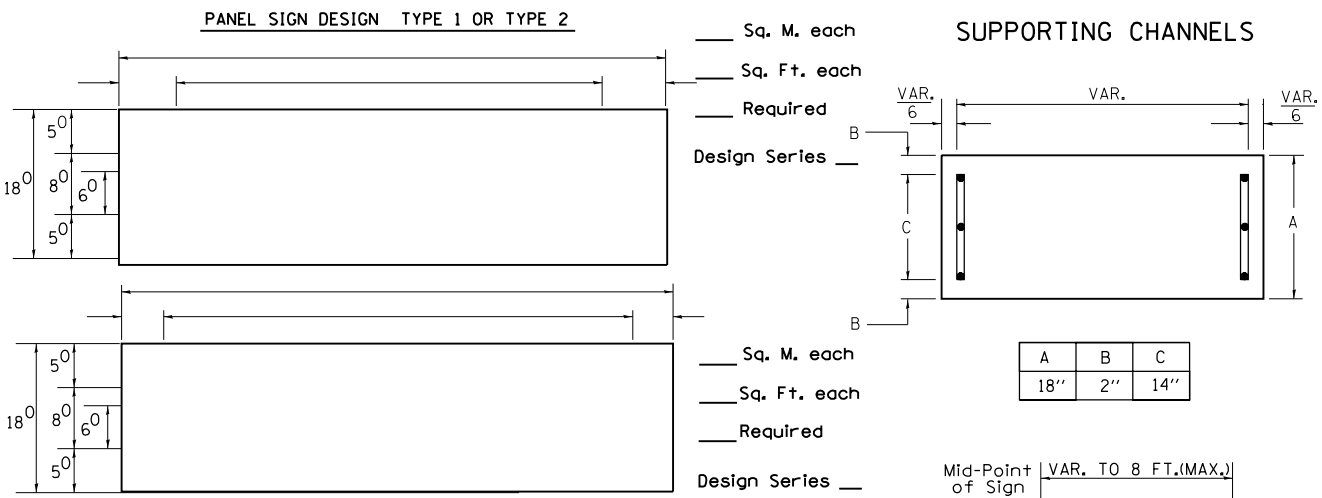
**INTERCONNECT SCHEMATIC PLAN
 US RTE. 6 (159TH STREET) AND IL RTE. 83 (TORRENCE AVENUE)**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	539N-1	COOK	49	30
CONTRACT NO. 60W90				
ILLINOIS FED. AID PROJECT				

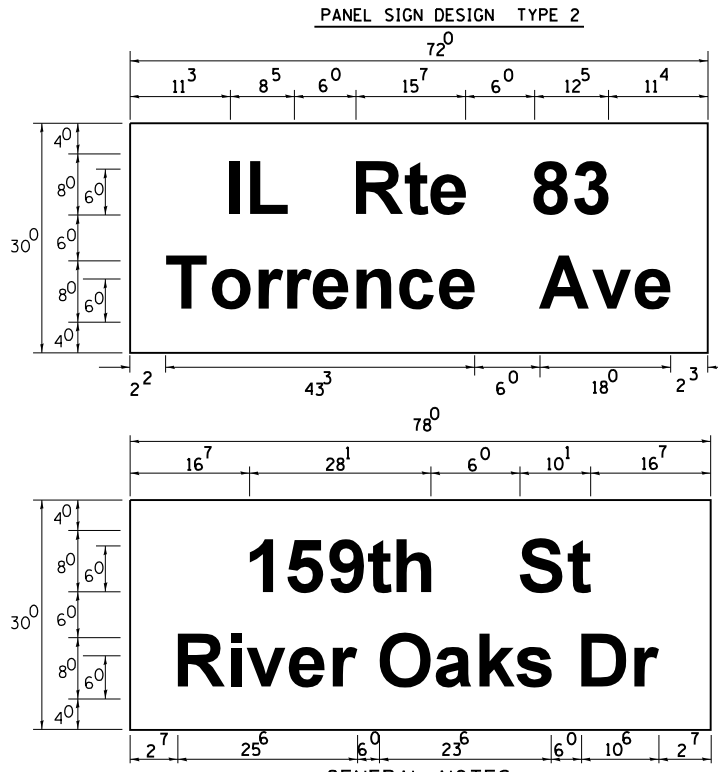
ECON 49

SHT.PLAN

SCALE: 1"=50' SHEET 5 OF 6 SHEETS STA. TO STA.



NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS



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 HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED BACKGROUND, TYPE A SHEETING.
- THE SIGN LENGTH SHOULD BE INCREASED IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHOULD NOT EXCEED 8'-0".
- ALL BORDERS SHALL BE 3/4" WIDE AND CORNER RADIUS SHALL BE 2-1/4".
- SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS. LOCAL SUPPLIERS OF THE SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM ARE:

* J.O. HERBERT CO. MIDLOTHIAN, VA. * WESTERN REMAC INC. WOODRIDGE, IL.

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

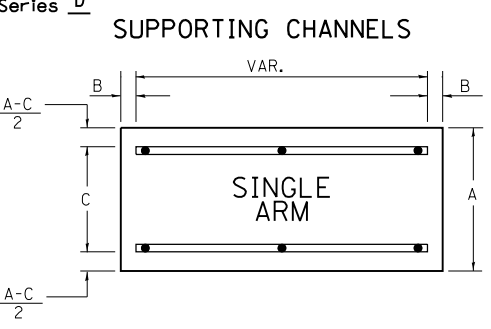
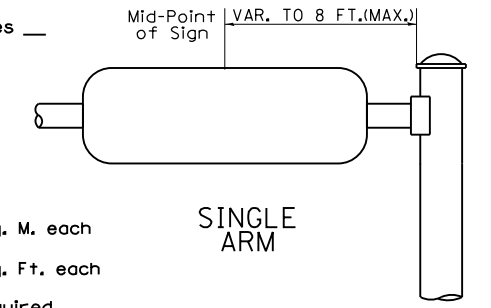
OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BACKET OF THE ABOVE PRODUCT.

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

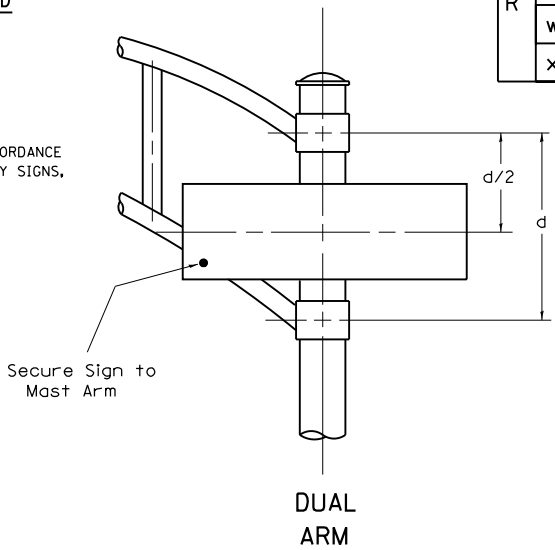
Upper Case To Lower Case
Spacing Chart 8-6 Inch Series "C & D"

SERIES	SECOND LETTER															
	acde		bhikl		f w		j		s t		v y		x		z	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
A W X	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ¹	1 ⁴	0 ⁶	1 ⁰	1 ¹	1 ²	1 ²	1 ⁴
B	1 ⁴	1 ⁵	2 ⁰	2 ¹	1 ⁴	1 ⁵	1 ¹	1 ²	1 ⁴	1 ⁵	1 ²	1 ⁴	1 ²	1 ⁴	1 ⁶	1 ⁷
C E G	1 ⁴	1 ⁵	2 ⁰	2 ¹	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ²	1 ⁴	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵
D O O R	1 ⁴	1 ⁵	2 ⁰	2 ¹	1 ⁴	1 ⁵	0 ⁶	1 ⁰	1 ²	1 ⁴	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵
F	0 ⁵	0 ⁶	1 ⁴	1 ⁵	0 ⁶	1 ⁰	0 ⁵	0 ⁶	0 ⁶	1 ⁰	0 ⁶	1 ⁰	0 ⁶	1 ⁰	1 ¹	1 ²
H I M N	2 ⁰	2 ¹	2 ²	2 ⁴	2 ⁰	2 ¹	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ⁶	1 ⁷	2 ⁰	2 ¹	2 ⁰	2 ¹
J U	2 ⁰	2 ¹	2 ⁰	2 ¹	1 ⁶	1 ⁷	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ⁶	1 ⁷	1 ⁶	1 ⁷	2 ⁰	2 ¹
K L	1 ¹	1 ²	1 ⁶	1 ⁷	1 ¹	1 ²	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴
P	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ²	1 ⁴	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴	1 ²	1 ⁴
S	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ²	1 ⁴	1 ²	1 ⁴	1 ²	1 ⁴	1 ²	1 ⁴
T	1 ¹	1 ²	1 ⁶	1 ⁷	0 ⁶	1 ⁰	0 ⁶	1 ⁰	1 ¹	1 ²	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴
V	0 ⁶	1 ⁰	1 ⁴	1 ⁵	1 ¹	1 ²	0 ⁶	1 ⁰	1 ²	1 ⁴	1 ²	1 ⁴	1 ²	1 ⁴	1 ²	1 ⁴
Y	0 ⁵	0 ⁶	1 ⁴	1 ⁵	0 ⁶	1 ⁰	0 ⁵	0 ⁶	0 ⁵	0 ⁷	0 ⁵	0 ⁶	0 ⁶	1 ⁰	1 ¹	1 ²
Z	1 ⁶	1 ⁷	2 ²	2 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ⁶	1 ⁷	1 ⁶	1 ⁷	2 ⁰	2 ¹

A	B	C
18"	2"	14"



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



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

SERIES	SECOND LETTER															
	acde		bhikl		f w		j		s t		v y		x		z	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
ad h g i j	1 ⁶	1 ⁷	2 ²	2 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ⁶	1 ⁷
l m n q u																
b f k o p s	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ¹	1 ²	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴	1 ²	1 ⁴
c e	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ²	1 ⁴	1 ²	1 ⁴	1 ²	1 ⁴	1 ²	1 ⁴
r	0 ⁶	1 ⁰	1 ²	1 ⁴	0 ⁶	1 ⁰	0 ³	0 ³	0 ⁵	0 ⁶	0 ⁵	0 ⁶	0 ⁶	1 ⁰	0 ⁶	1 ⁰
t z	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴	1 ²	1 ⁴
v y	1 ¹	1 ²	1 ⁴	1 ⁵	1 ¹	1 ²	0 ⁵	0 ⁶	0 ⁶	1 ⁰	0 ⁶	1 ⁰	1 ¹	1 ²	1 ¹	1 ²
w	1 ¹	1 ²	1 ⁴	1 ⁵	1 ¹	1 ²	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴
x	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ¹	1 ²	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴

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

SERIES	SECOND NUMBER																			
	0		1		2		3		4		5		6		7		8		9	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
0 9	1 ⁶	1 ⁷	1 ⁶	1 ⁷	1 ⁴	1 ⁵	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ⁶	1 ⁷
1	2 ⁰	2 ¹	2 ⁰	2 ¹	2 ⁰	2 ¹	1 ⁶	1 ⁷	1 ⁴	1 ⁵	2 ⁰	2 ¹	2 ⁰	2 ¹	1 ⁴	1 ⁵	2 ⁰	2 ¹	2 ⁰	2 ¹
2 3 4	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ²	1 ⁴	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ¹	1 ²	1 ⁶	1 ⁷	1 ⁴	1 ⁵
5	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ¹	1 ²	1 ¹	1 ²	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ¹	1 ²	1 ⁴	1 ⁵	1 ⁴	1 ⁵
6	1 ⁶	1 ⁷	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ²	1 ⁵	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ¹	1 ²	1 ⁴	1 ⁵	1 ⁴	1 ⁵
7	1 ²	1 ⁴	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ²	1 ⁵	0 ⁵	0 ⁶	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ¹	1 ²	1 ⁴	1 ⁵	1 ²	1 ⁴
8	1 ⁶	1 ⁷	1 ⁶	1 ⁷	1 ⁴	1 ⁵	1 ²	1 ⁵	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ⁴	1 ⁵

EXAMPLE, 2³ DENOTES 3/8

UPPER AND LOWER CASE LETTER WIDTHS

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

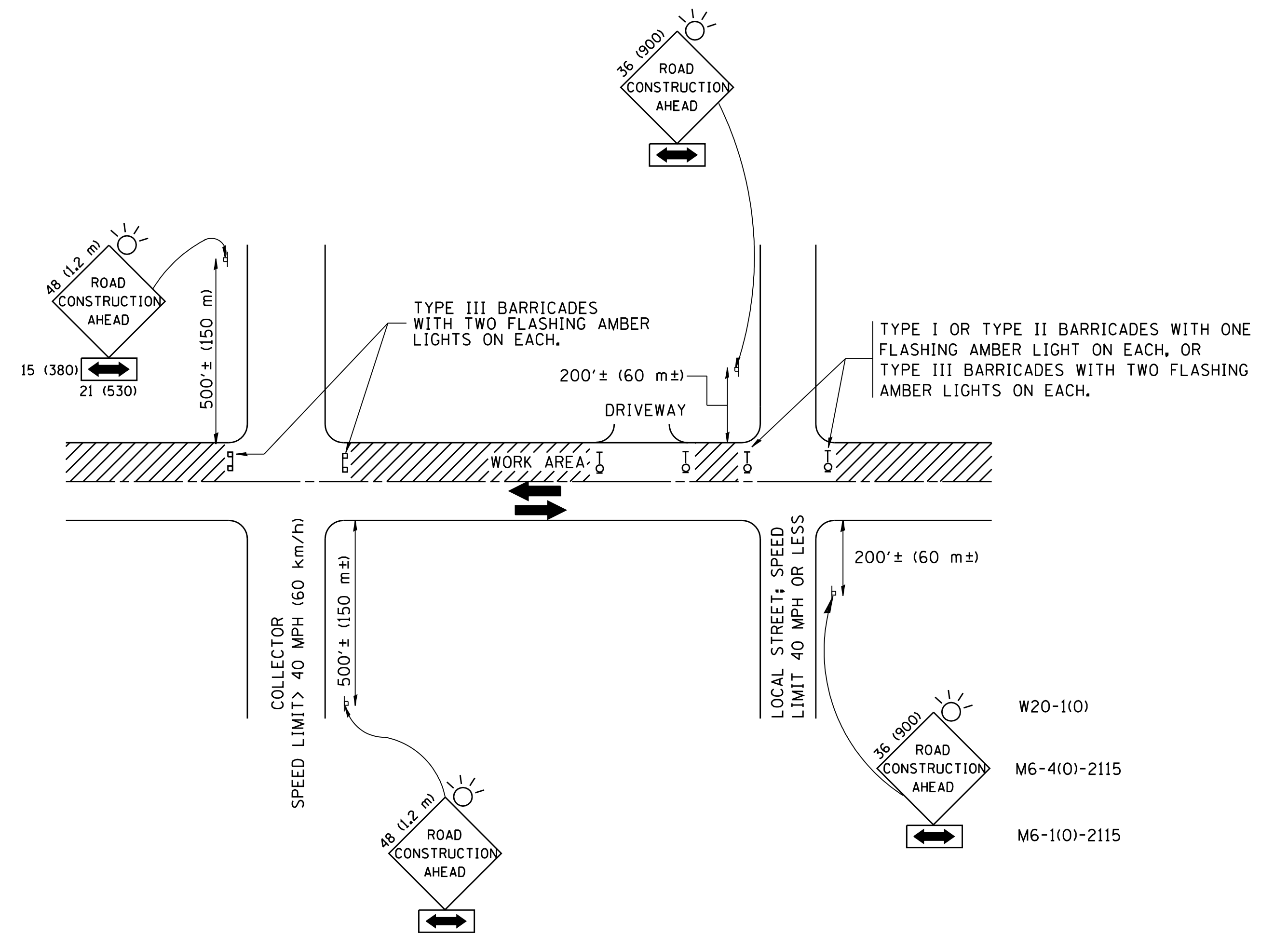
NUMBER	6 INCH SERIES		8 INCH SERIES	
	C	D	C	D
1	1 ²	1 ⁴	1 ⁵	2 ⁰
2	3 ²	4 ⁰	4 ³	5 ³
3	3 ²	4 ⁰	4 ³	5 ³
4	3 ⁵	4 ³	4 ⁷	5 ⁷
5	3 ²	4 ⁰	4 ³	5 ³
6	3 ²	4 ⁰	4 ³	5 ³
7	3 ²	4 ⁰	4 ³	5 ³
8	3 ²	4 ⁰	4 ³	5 ³
9	3 ²	4 ⁰	4 ³	5 ³
0	3 ⁴	4 ²	4 ⁵	5 ⁵

FILE NAME =	USER NAME = *USER*	DESIGNED - BFH	REVISED -
*FILE#		DRAWN - BFH	REVISED -
	PLOT SCALE = *SCALE*	CHECKED - BA	REVISED -
MODELNAME	PLOT DATE = *DATE*	DATE - 1/31/14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 - MAST ARM MOUNTED STREET NAME SIGNS
US RTE. 6 (159TH STREET) AND IL RTE. 83 (TORRENCE AVENUE)

F.A.P. RTE.	
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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

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE **ROAD CONSTRUCTION AHEAD** SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE **ROAD CONSTRUCTION AHEAD** SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

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

- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

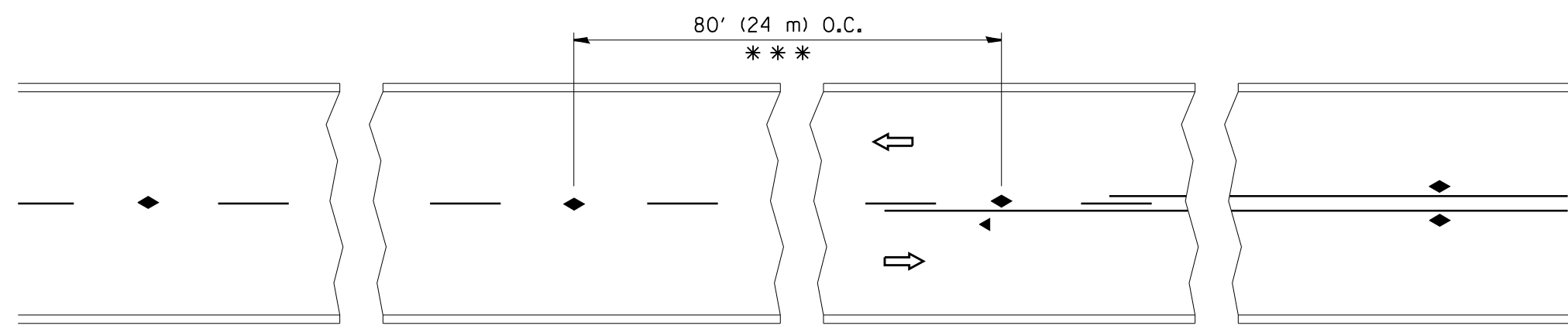
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	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

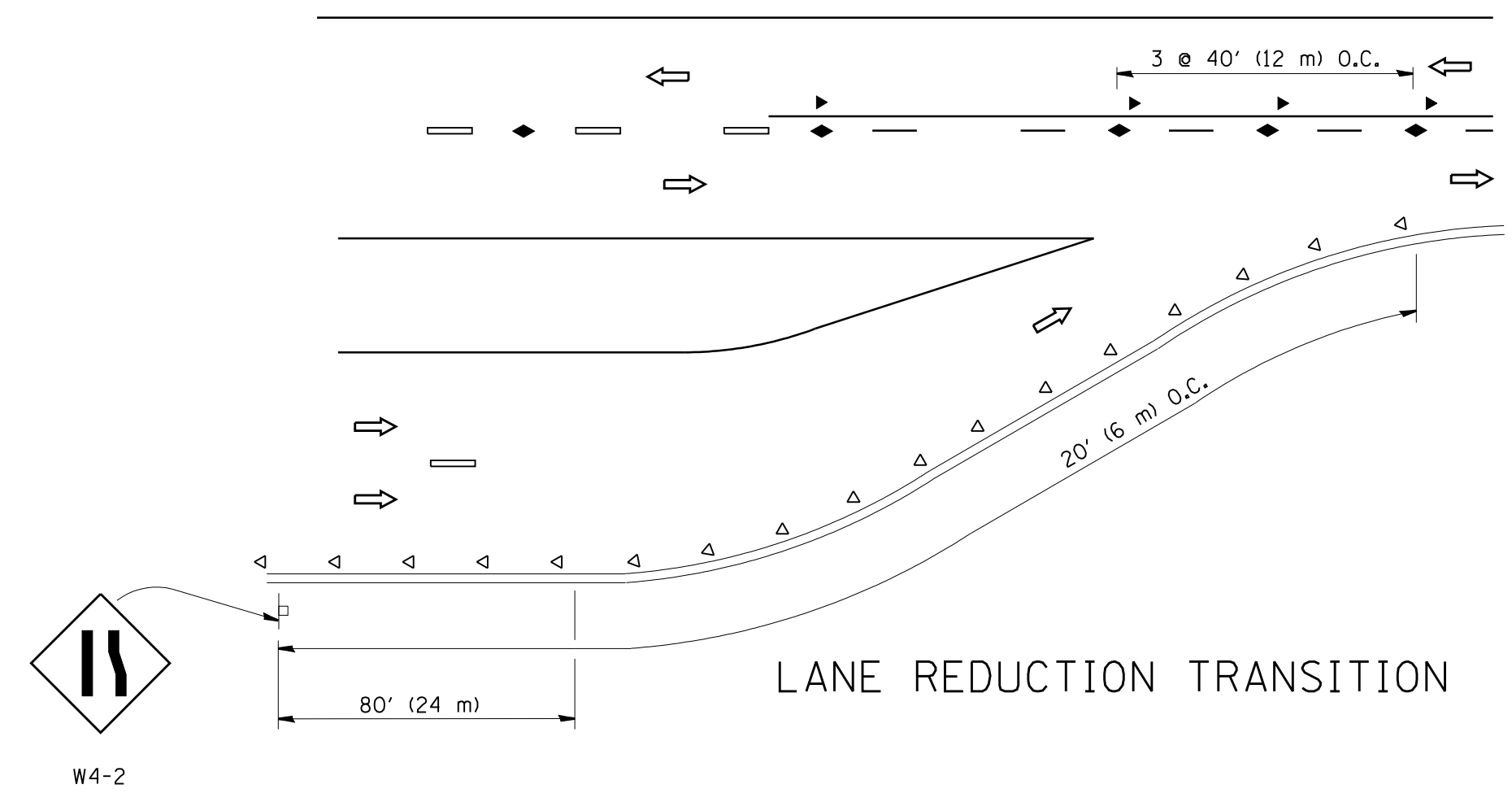
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	539N-1	COOK	49	32
TC-10		CONTRACT NO. 60W90		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

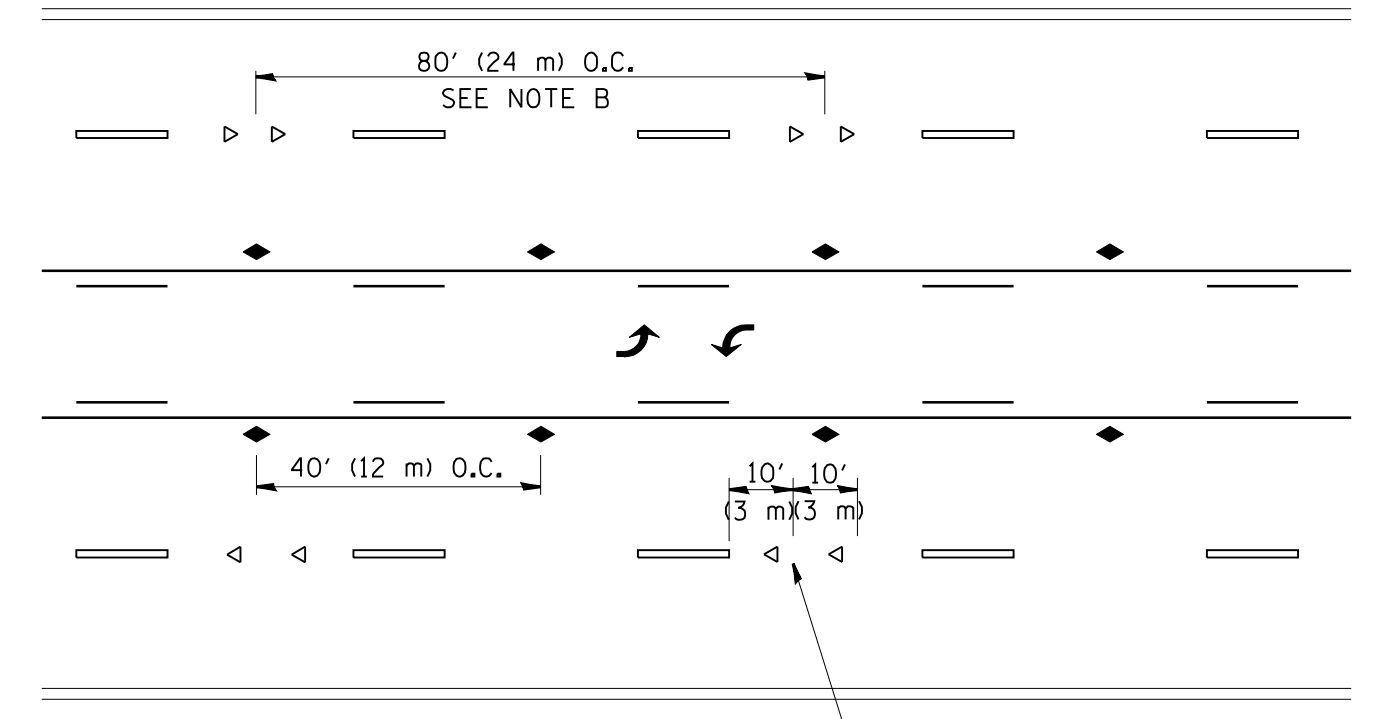


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

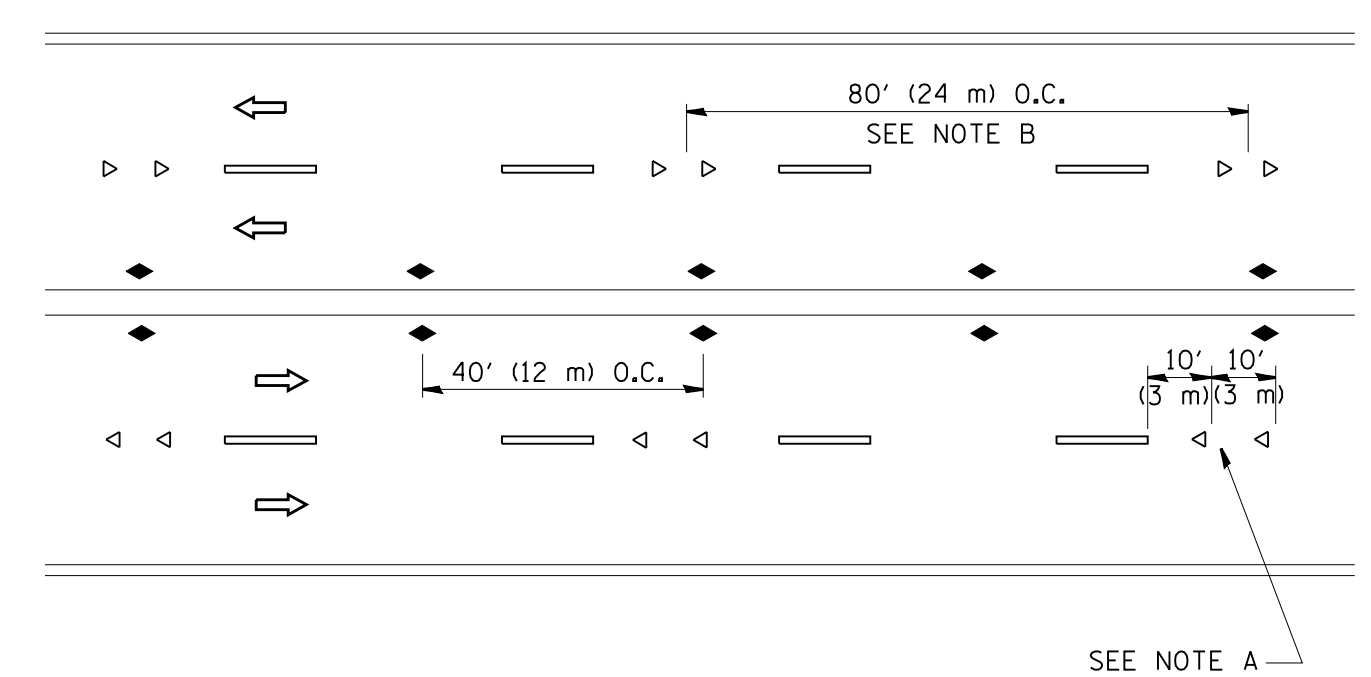
TWO-LANE/TWO-WAY



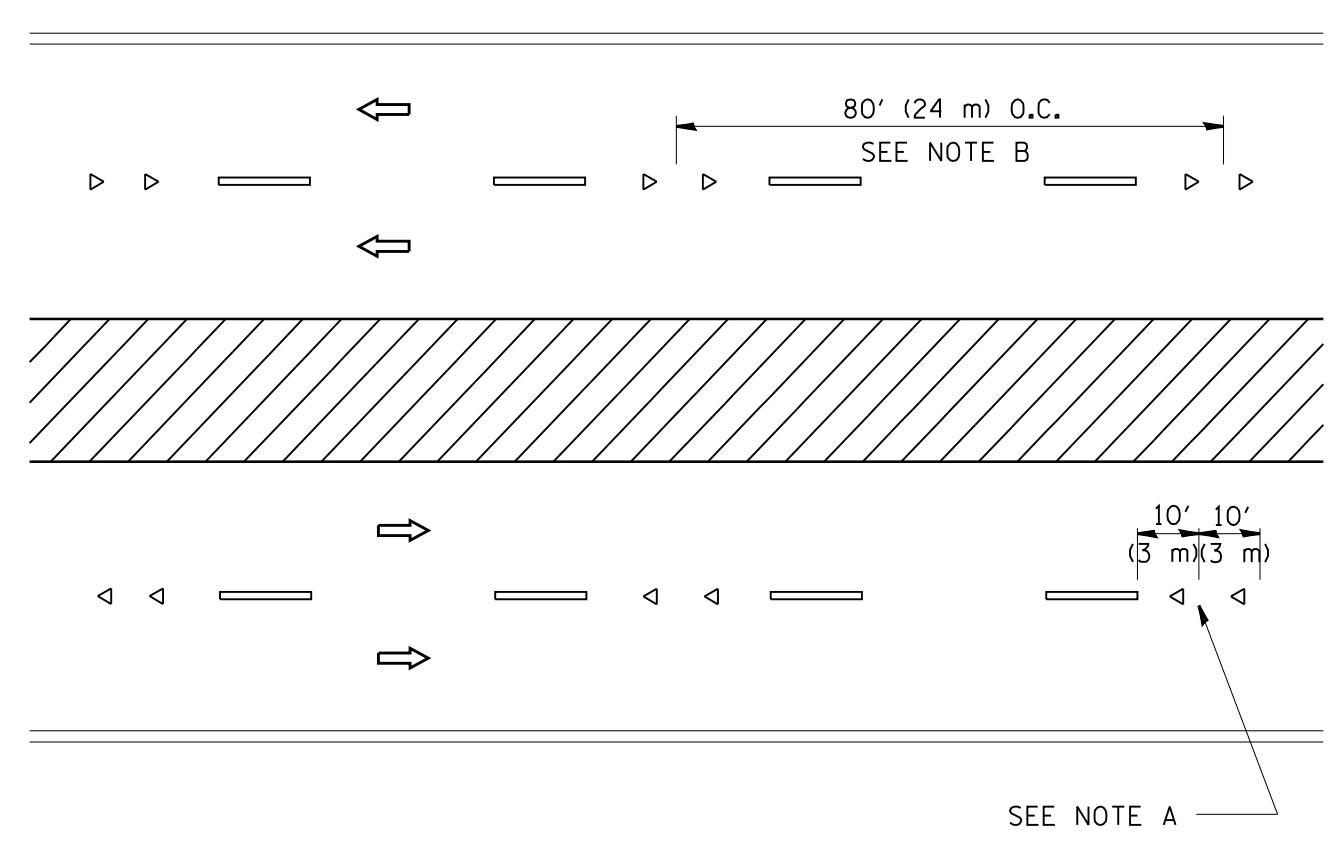
LANE REDUCTION TRANSITION



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

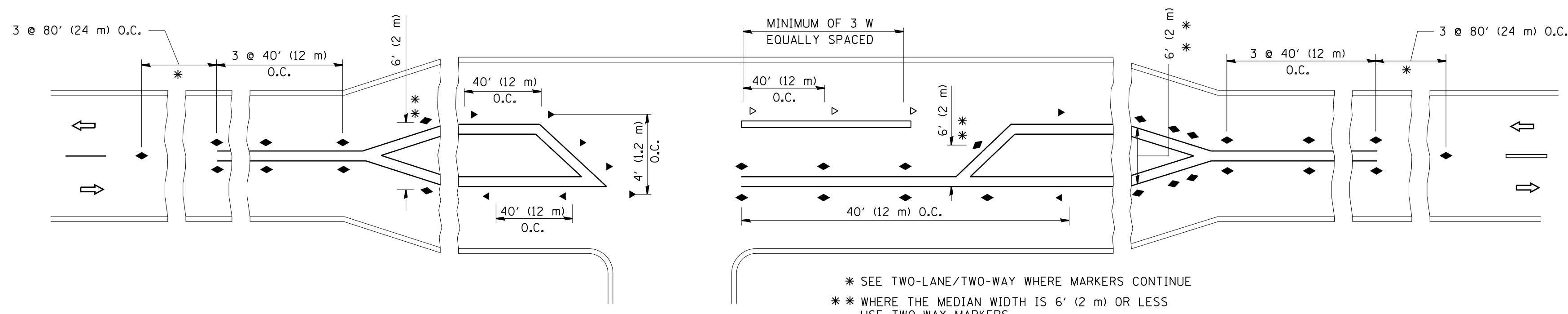
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

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.

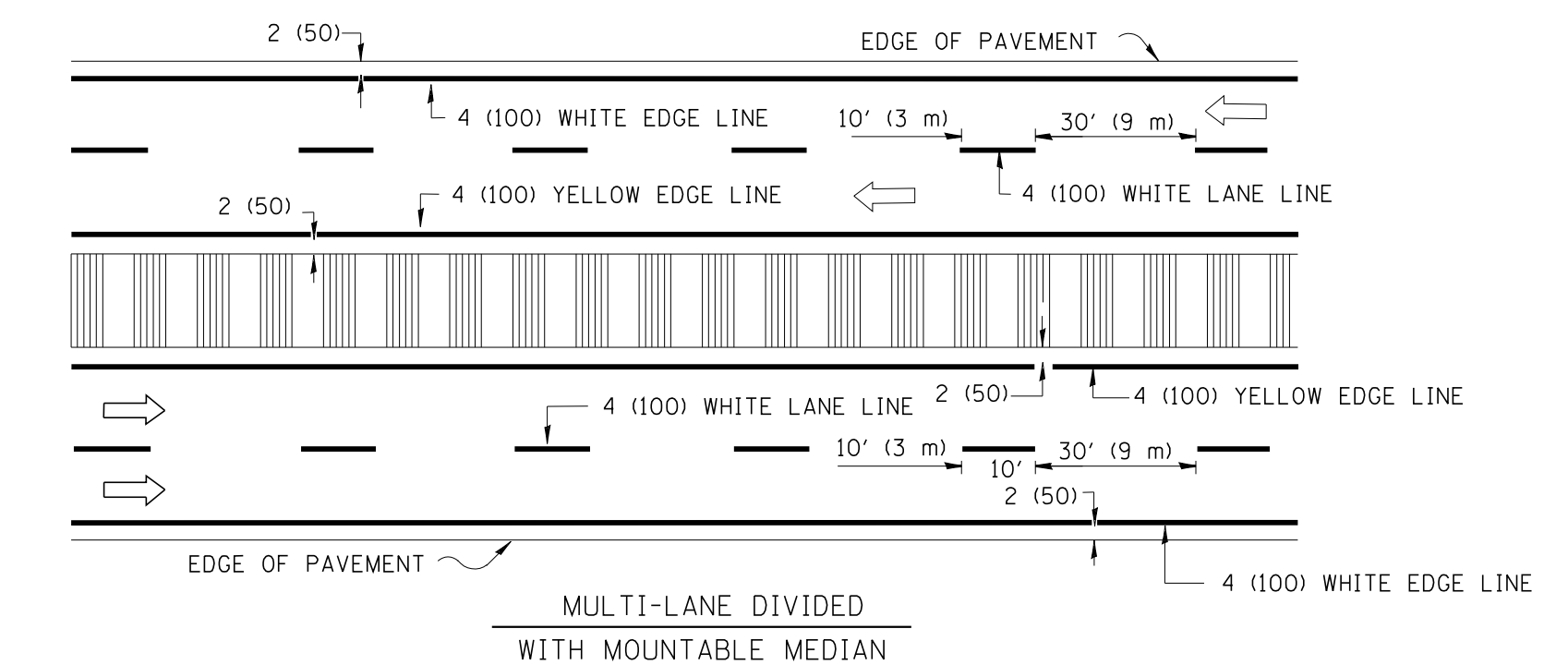
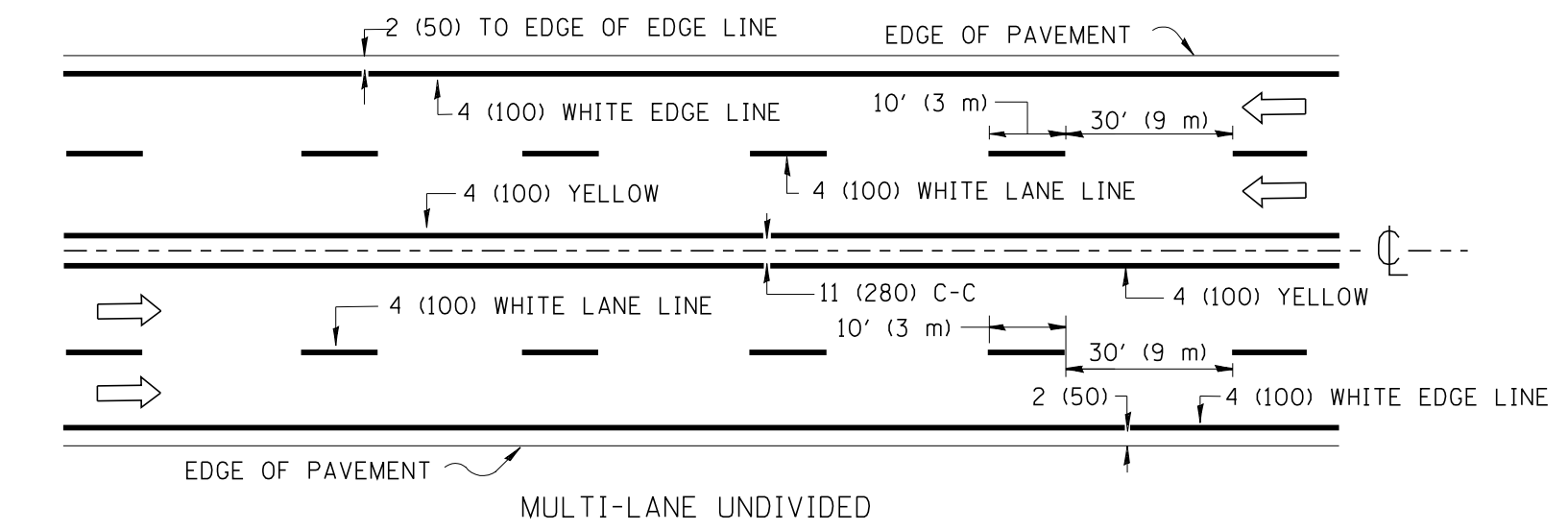
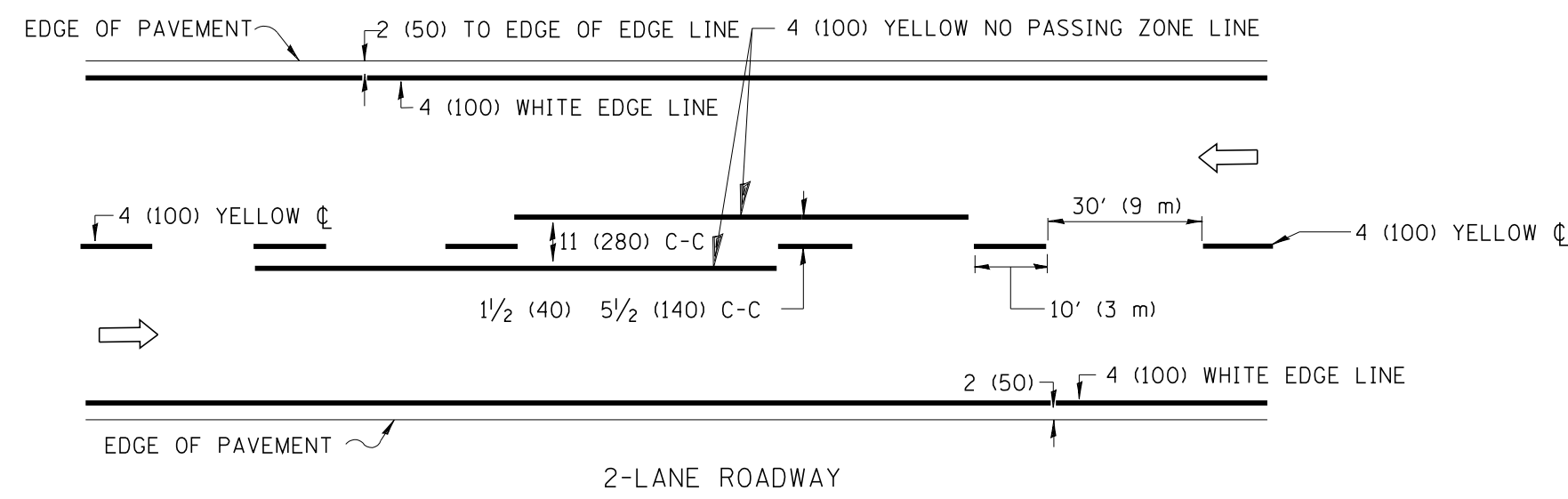


* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE
 ** WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

LEFT TURN

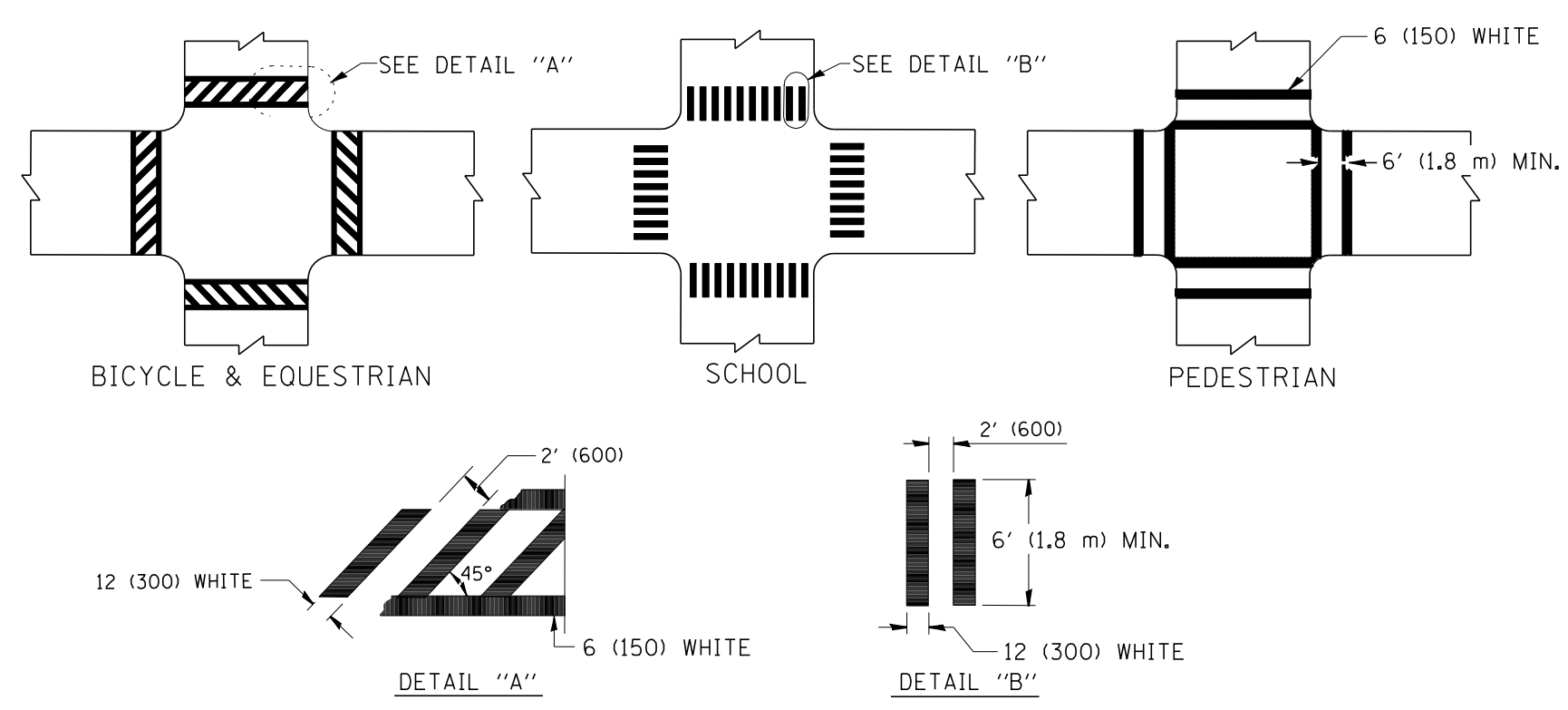
All dimensions are in inches (millimeters) unless otherwise shown.

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	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - T. RAMMACHER 01-06-00					TC-11		CONTRACT NO. = 60W90		
PLOT DATE = 3/2/2011	DATE =	REVISED - C. JUCIUS 09-09-09		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

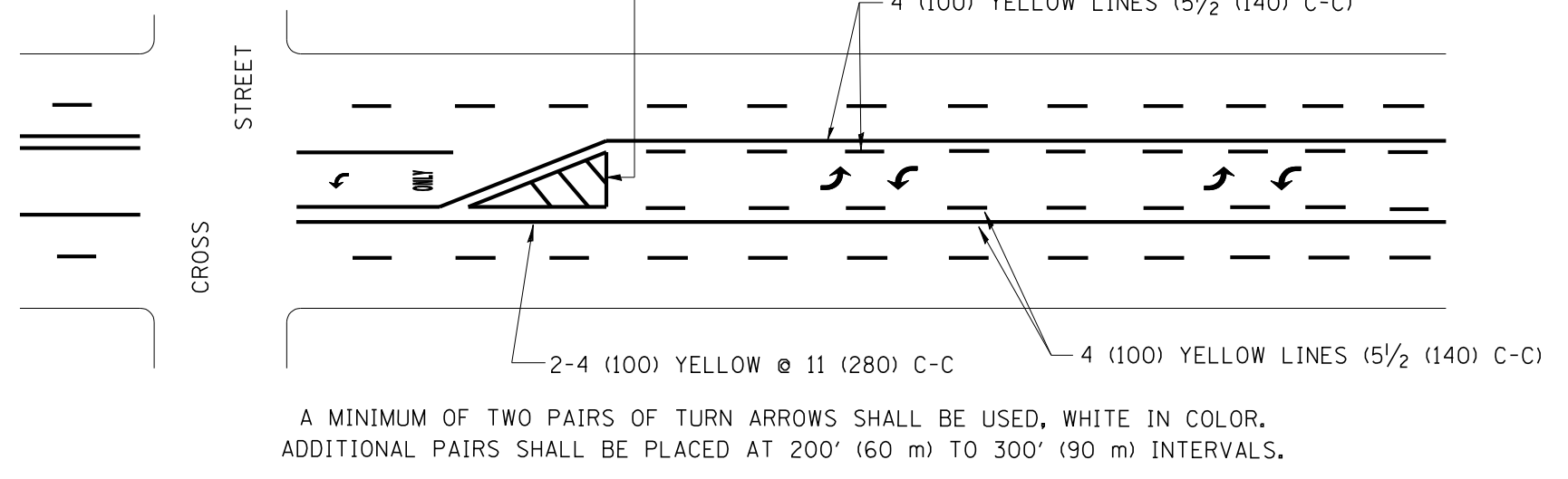
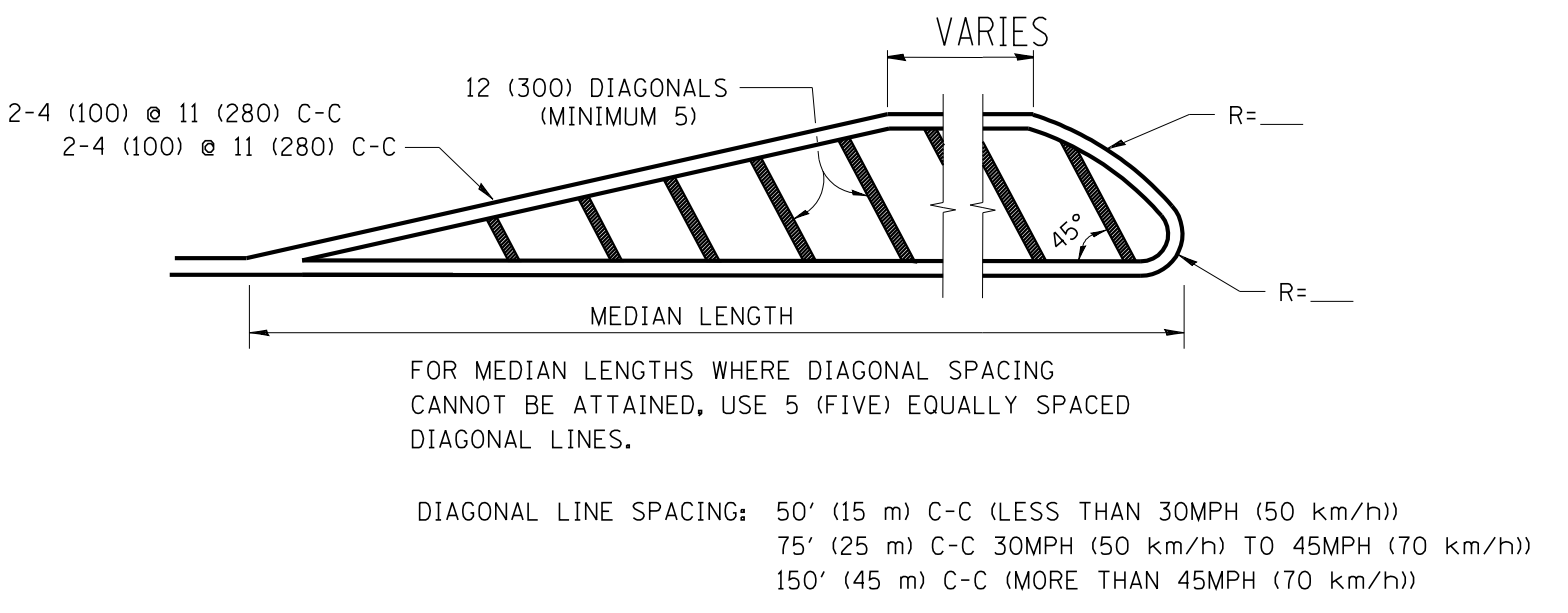
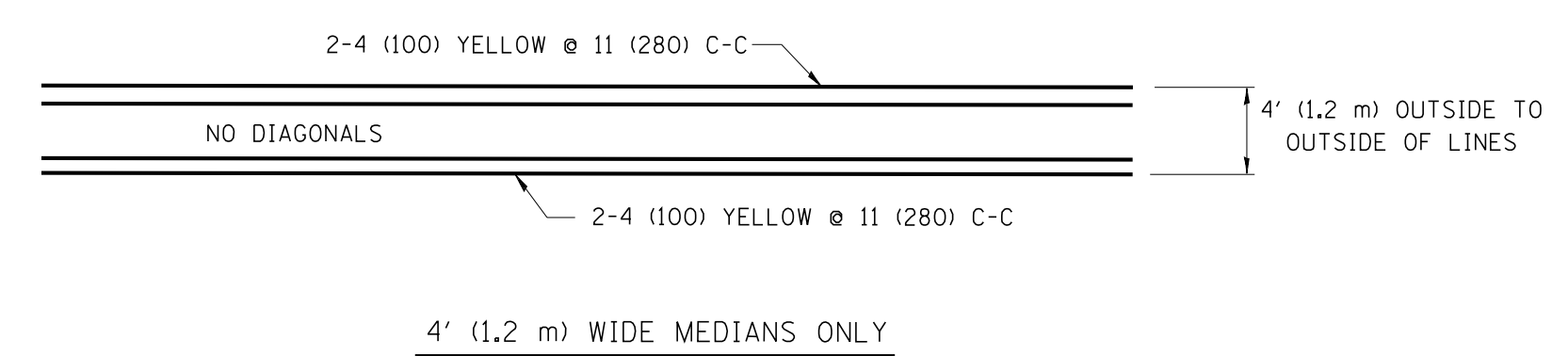


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

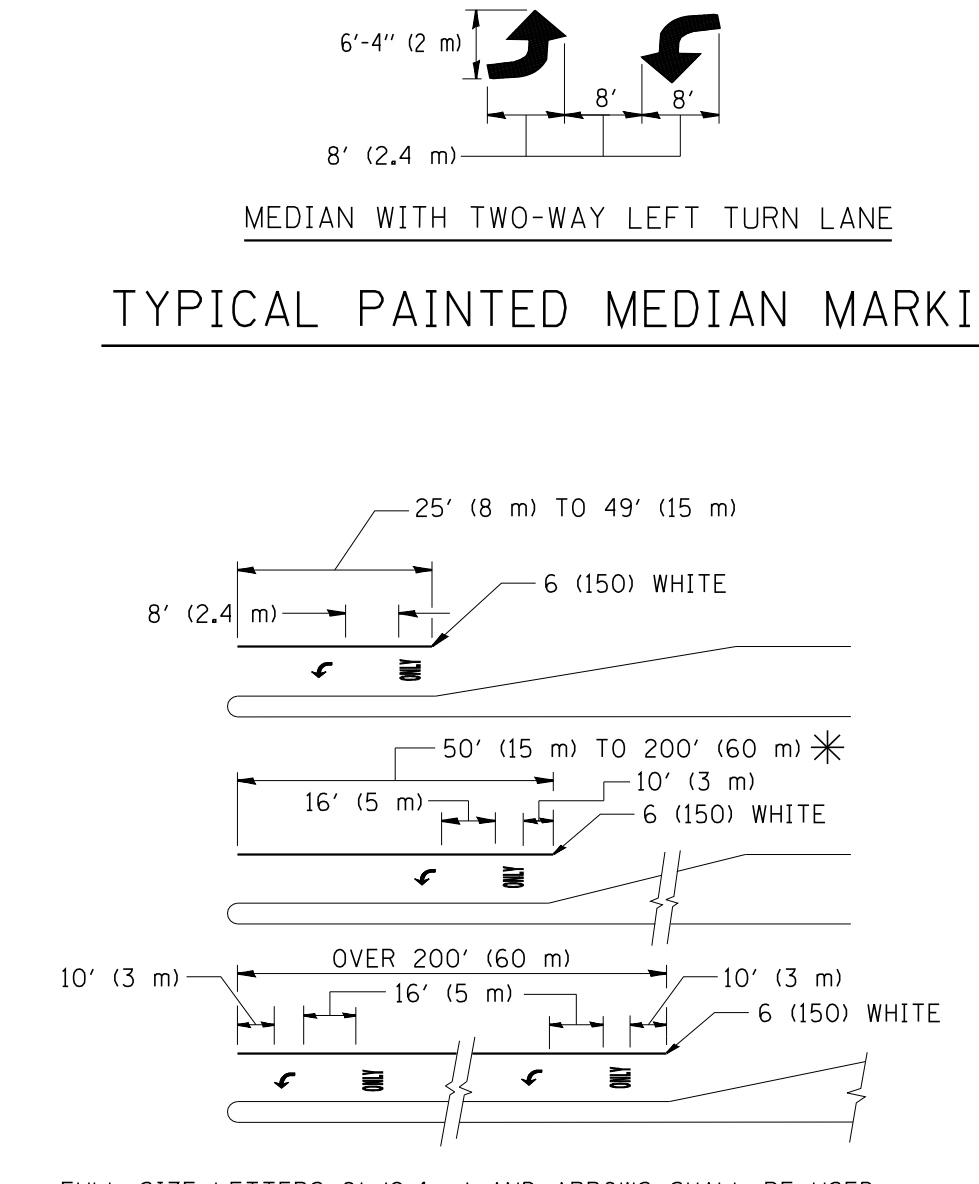
TYPICAL LANE AND EDGE LINE MARKING



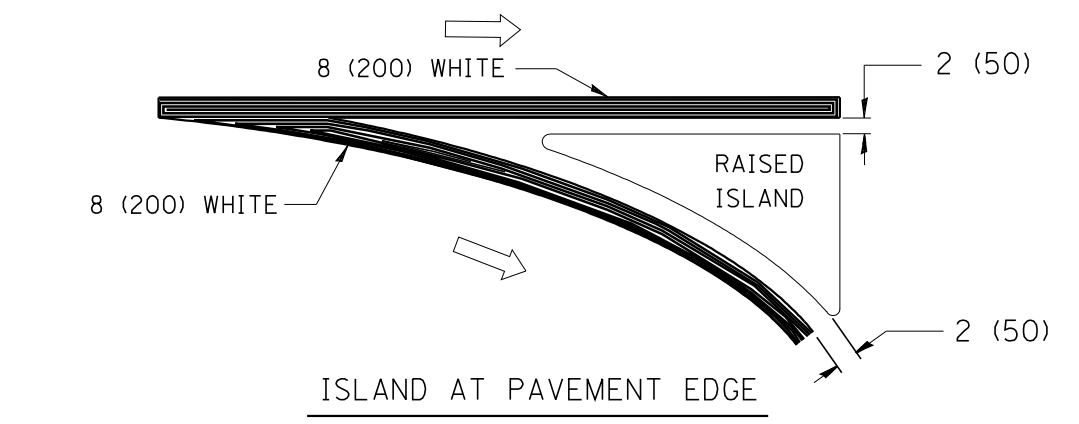
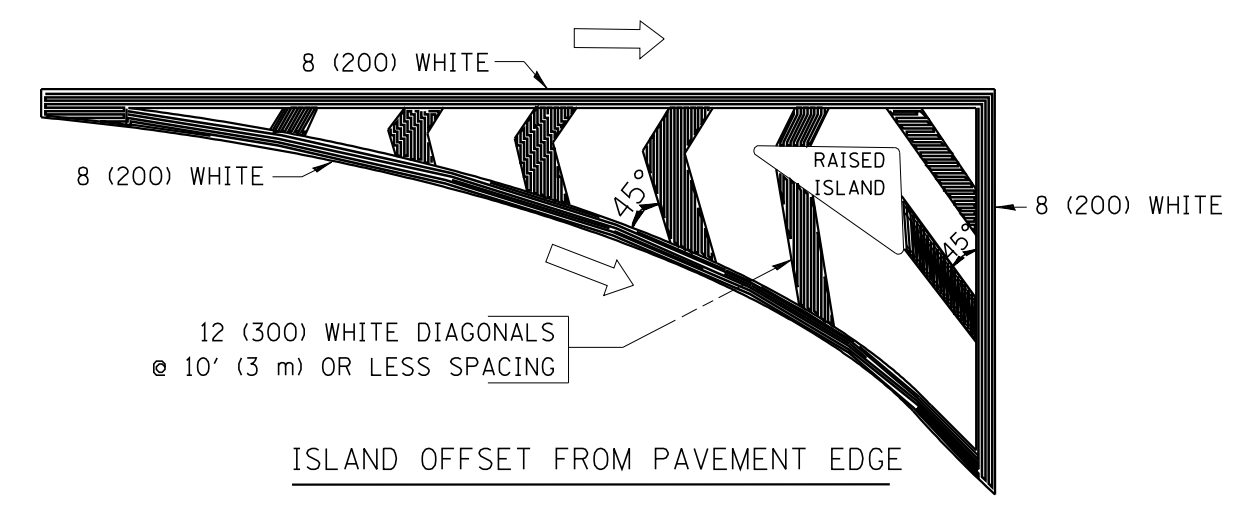
TYPICAL CROSSWALK MARKING



TYPICAL PAINTED MEDIAN MARKING



TYPICAL LEFT (OR RIGHT) TURN LANE



TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION	4 (100)	SOLID	YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE
NO PASSING ZONE LINES: FOR BOTH DIRECTIONS	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	8' (2.4m) LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN)	2 @ 6 (150)	SOLID	WHITE	NOT LESS THAN 6' (1.8 m) APART
A. DIAGONALS (BIKE & EQUESTRIAN)	12 (300) @ 45°	SOLID	WHITE	2' (600) APART
B. LONGITUDINAL BARS (SCHOOL)	12 (300) @ 90°	SOLID	WHITE	2' (600) APART
				SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45°	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
	NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS			
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 m²) EACH "X"=54.0 SQ. FT. (5.0 m²)
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.

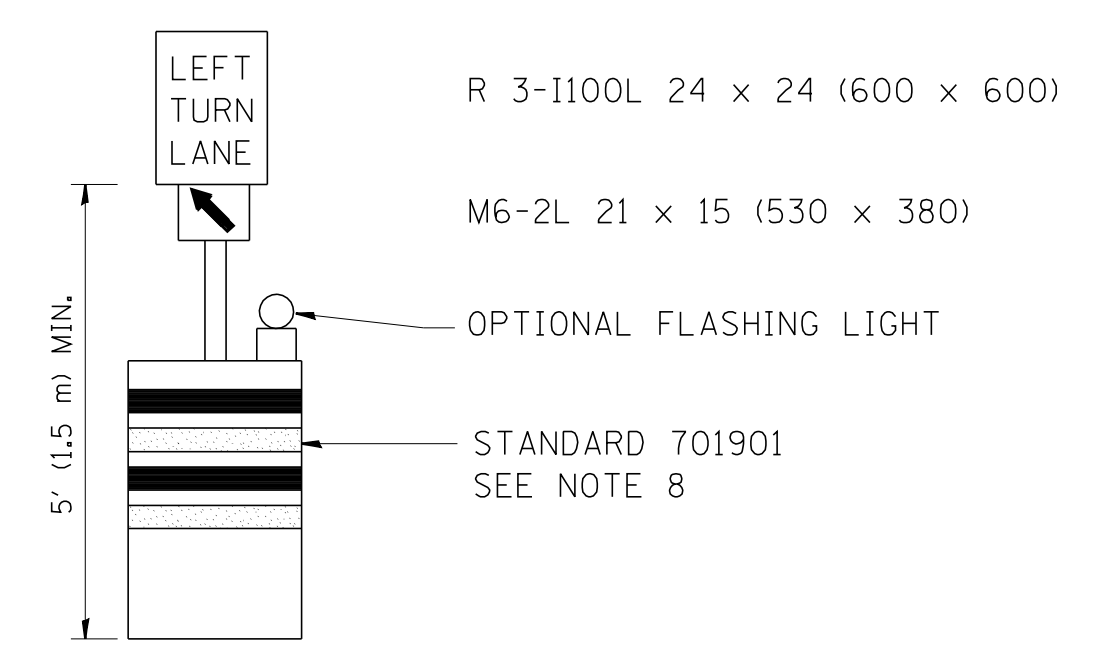
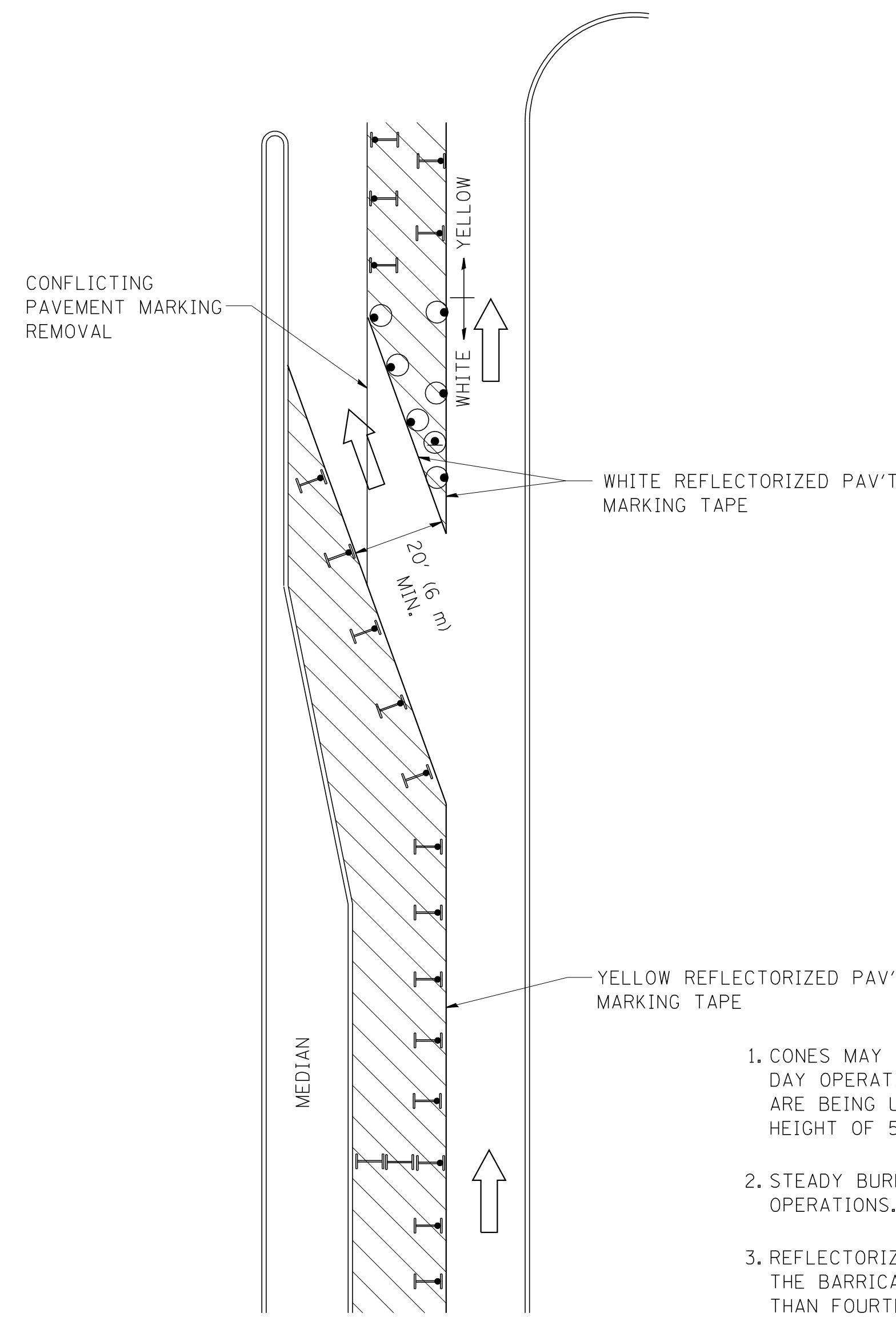
All dimensions are in inches (millimeters) unless otherwise shown.

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	PLOT SCALE = 50.000 1/ IN.	CHECKED -	REVISED -
	PLOT DATE = 9/9/2009	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.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	539N-1	COOK	49	34
TC-13		CONTRACT NO. 60W90		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

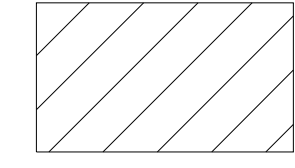
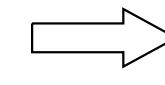
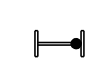


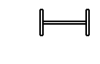


GENERAL NOTES

1. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 5' (1.5 m).
2. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
3. REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH TURN BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.
4. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-100 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
5. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
7. FORM OPER 725 IS REQUIRED.
8. IF A DRUM OR TYPE II BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHRP 350 PREQUIREMENTS.
9. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

LEGEND

-  WORK AREA
-  LANE OPEN TO TRAFFIC
-  TYPE I OR II BARRICADE WITH STEADY BURN LIGHT
-  DRUM WITH STEADY BURN LIGHT
-  DRUM WITH SIGN (WITH OPTIONAL FLASHING LIGHT) SEE DETAIL
-  TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

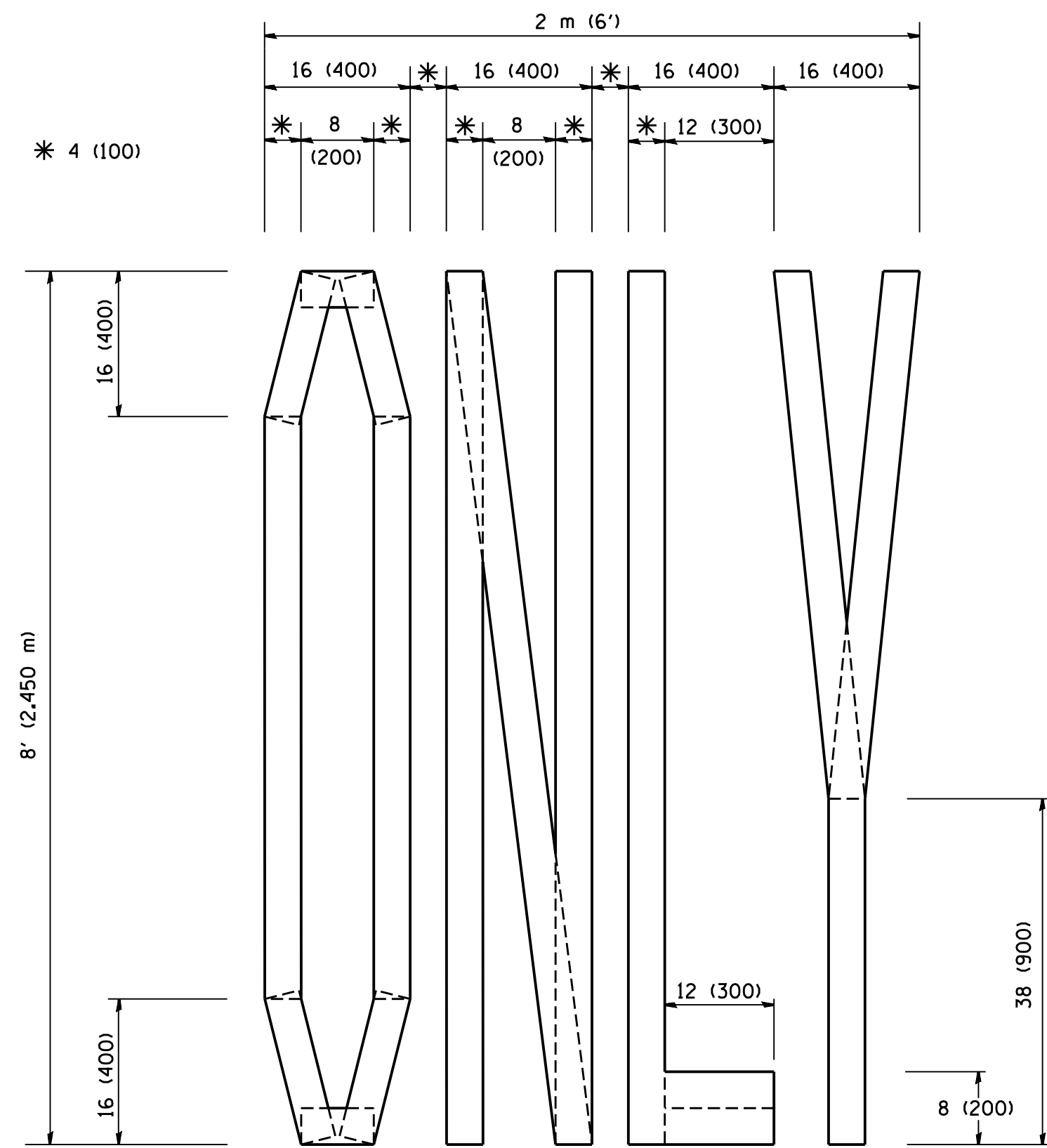
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

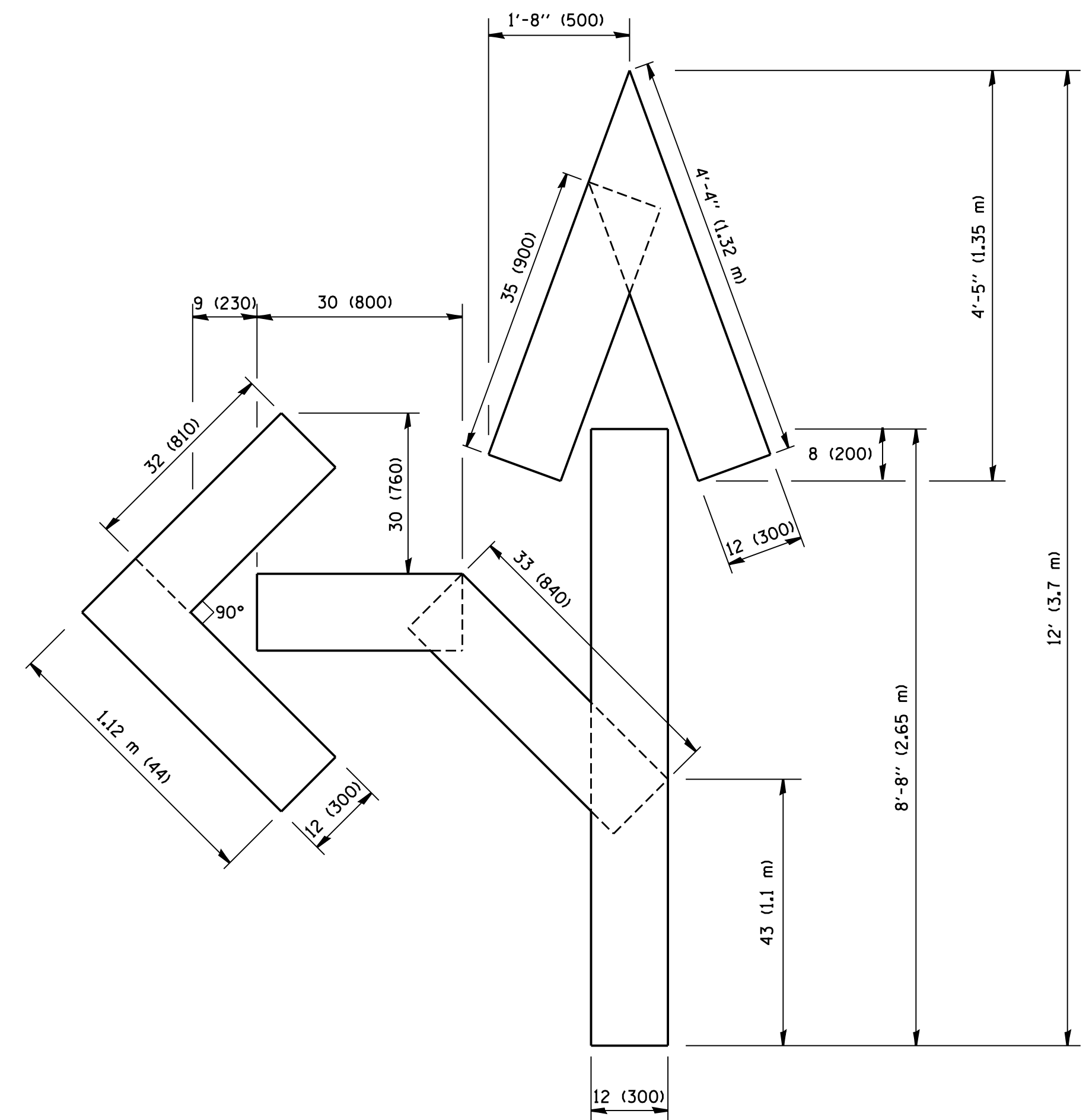
**TRAFFIC CONTROL AND PROTECTION AT TURN BAYS
(TO REMAIN OPEN TO TRAFFIC)**

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

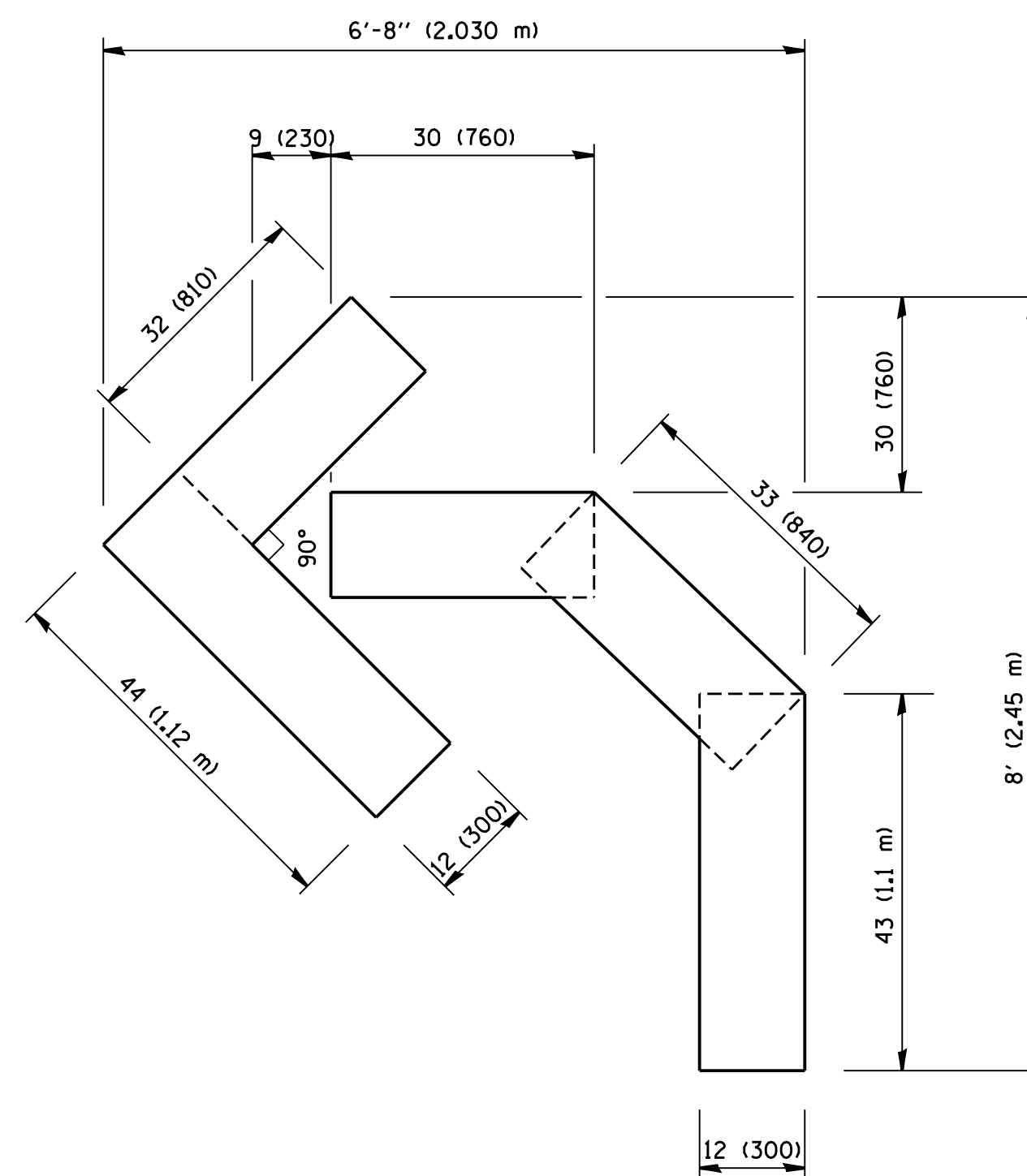
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	539N-1	COOK	49	35
TC-14		CONTRACT NO.	60W90	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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.

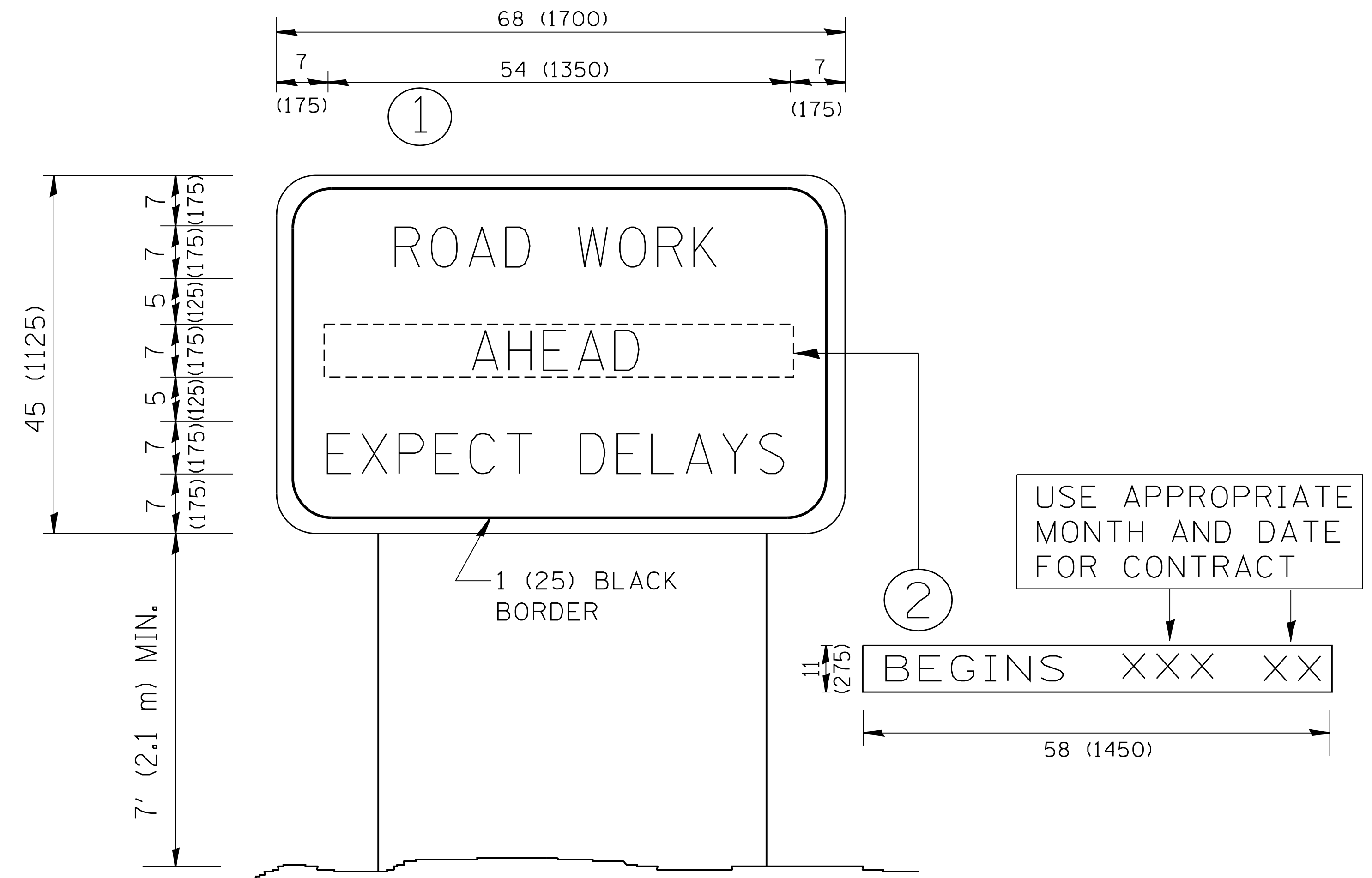
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	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -T. RAMMACHER 03-02-98
	PLOT DATE = 1/4/2008	DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00

**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.
351	539N-1	COOK	49	36
TC-16		CONTRACT NO. 60W90		
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 = W:\diststd\22x34\tc22.dgn	USER NAME = gaglianobt	DESIGNED - DRAWN -	REVISED - REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD
INFORMATION SIGN**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	539N-1	COOK	49	37
TC-22		CONTRACT NO. 60W90		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

TRAFFIC SIGNAL LEGEND

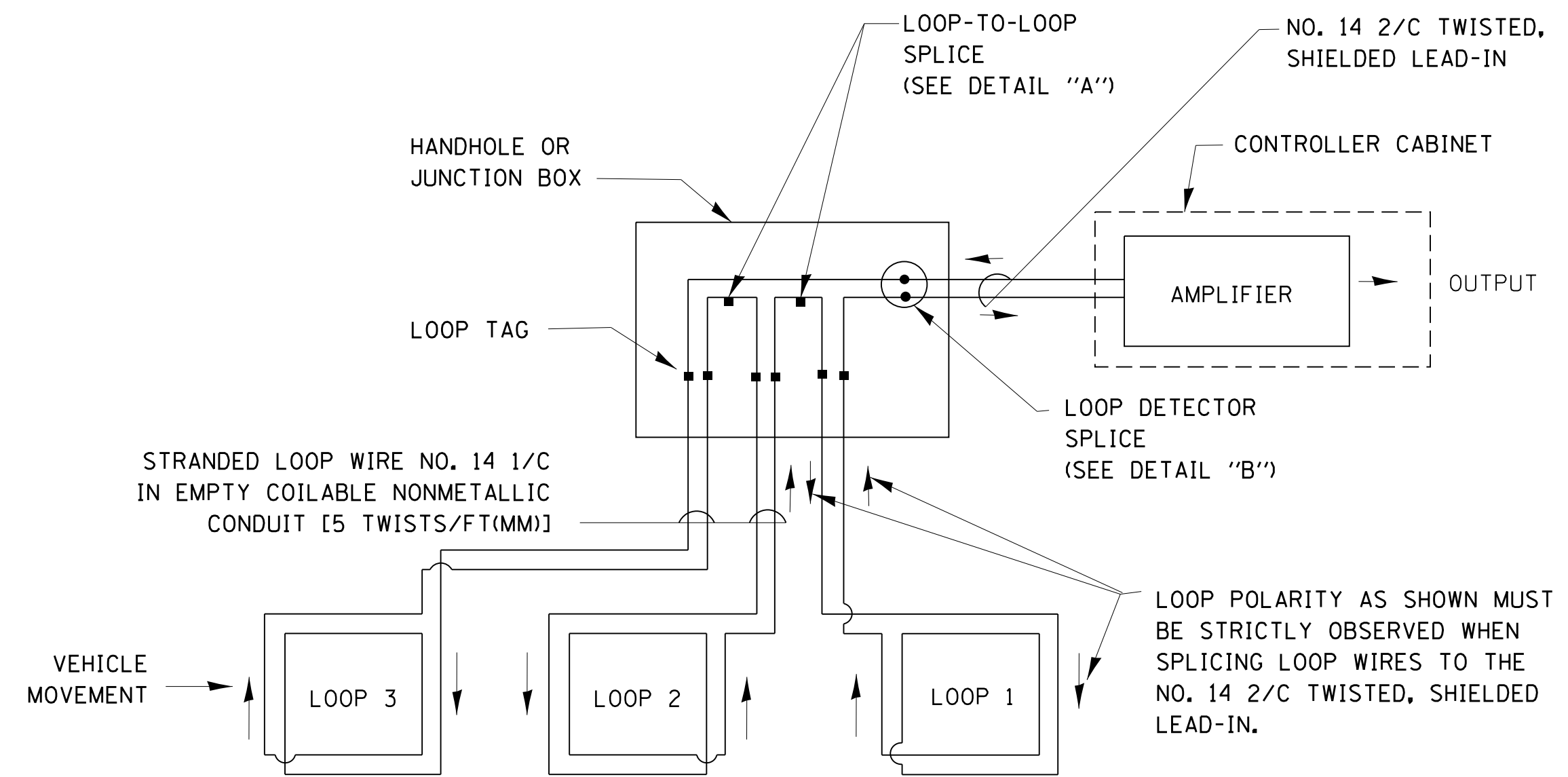
ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED
CONTROLLER CABINET				EMERGENCY VEHICLE LIGHT DETECTOR				ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE			
RAILROAD CONTROL CABINET				CONFIRMATION BEACON				COAXIAL CABLE			
COMMUNICATIONS 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							
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											

RAILROAD SYMBOLS

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

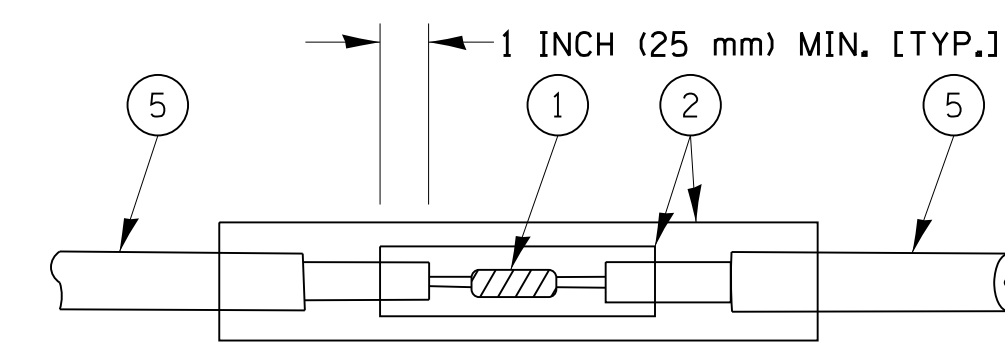
LOOP DETECTOR NOTES

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 DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

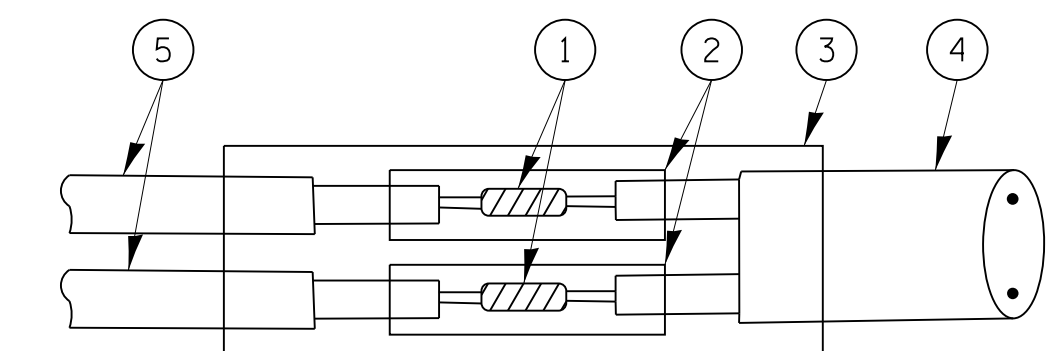


DETECTOR LOOP WIRING SCHEMATIC

- 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.



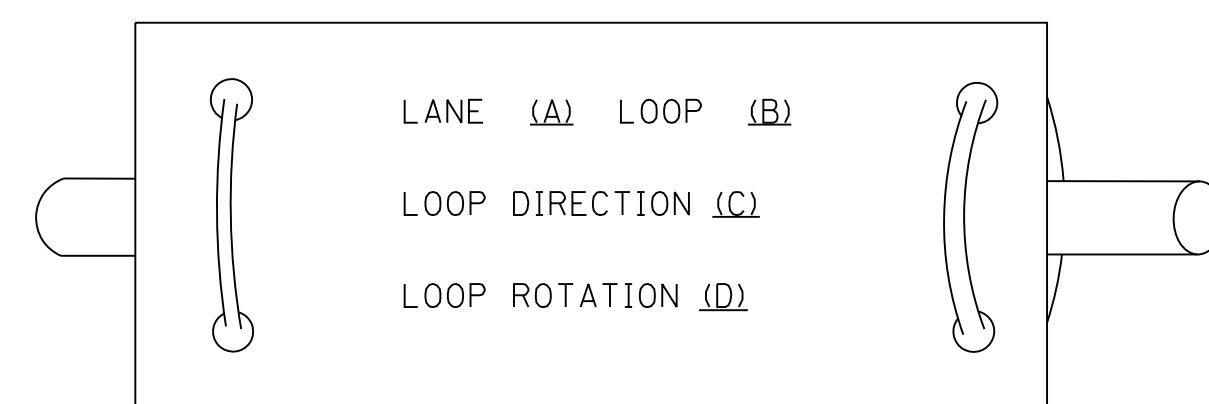
DETAIL "A"
LOOP-TO-LOOP SPLICE



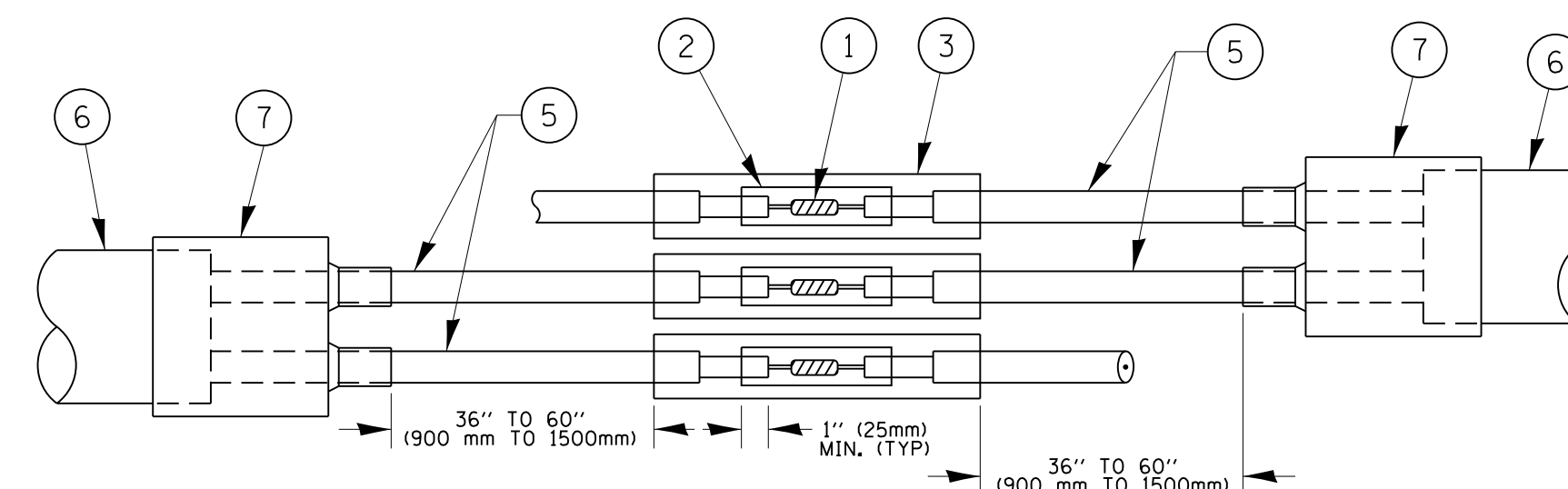
DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP

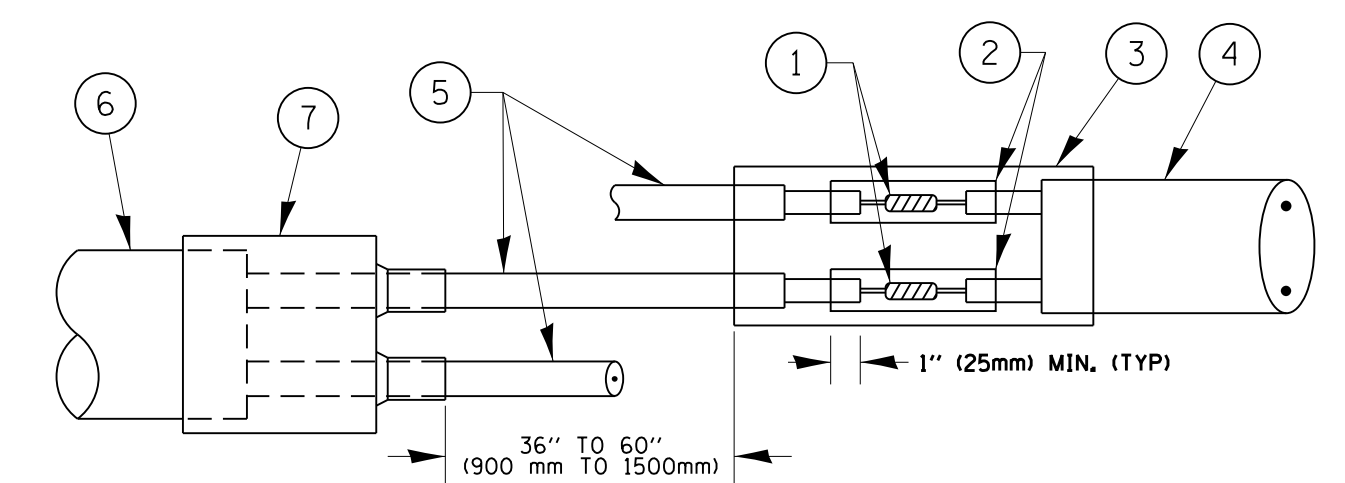
LOOP LEAD-IN CABLE TAG



- 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

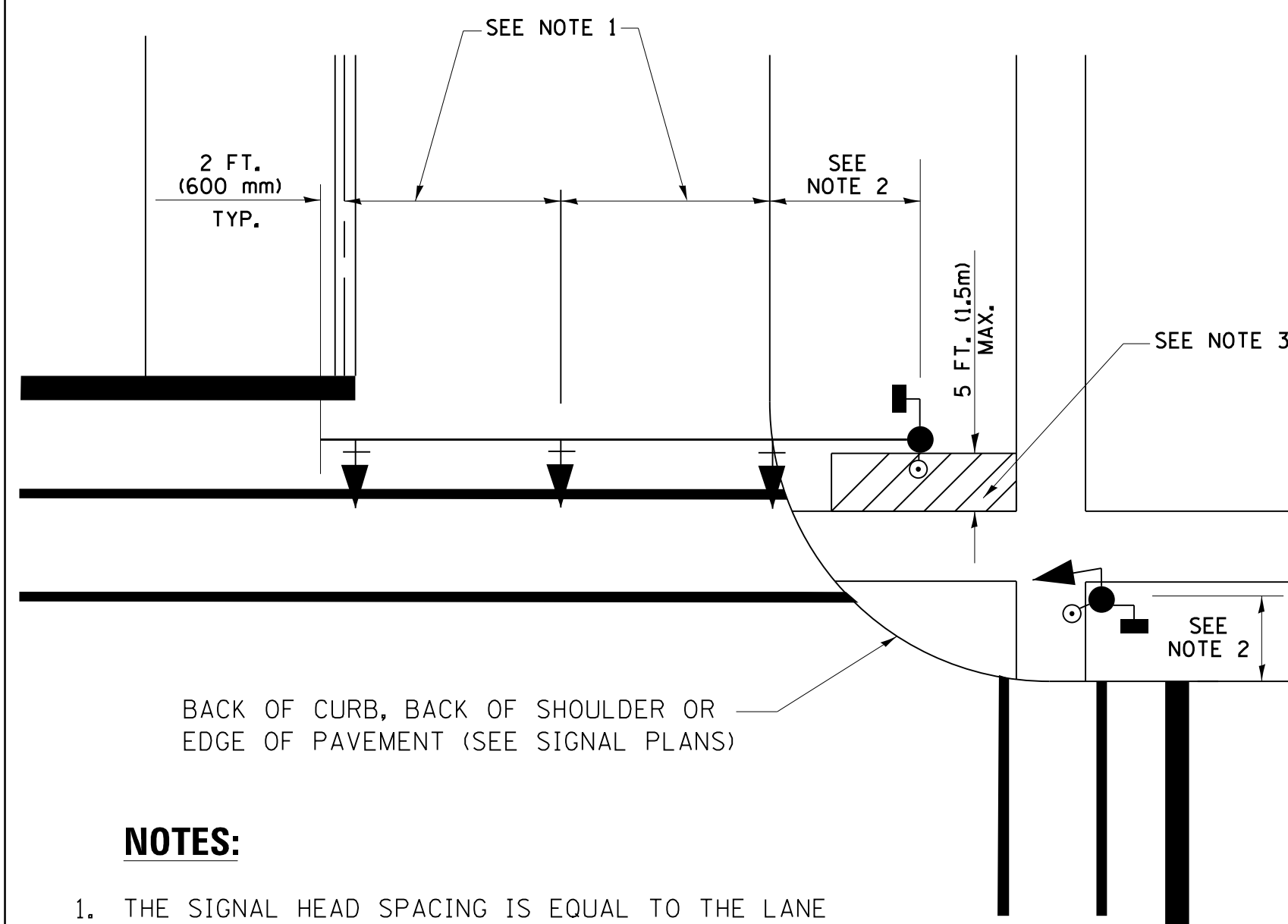
PREFORMED LOOP

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 PREFORMED LOOP
- ⑦ XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

FILE NAME =	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS		F.A.P. RTE. 351	SECTION 539N-1	COUNTY COOK	TOTAL SHEETS 49	SHEET NO. 39
et:\pw_work\p\dot\footemj\d0108315\ts05.dgn	PLOT SCALE = 50.0000' / in.	DRAWN - BCK	REVISED -		SCALE: NONE	SHEET NO. 2 OF 7 SHEETS	STA. TO STA.	TS-05		CONTRACT NO. 60W90	
	PLOT DATE = 1/13/2014	CHECKED - DAD	REVISED -		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT						
		DATE - 10-28-09	REVISED -								

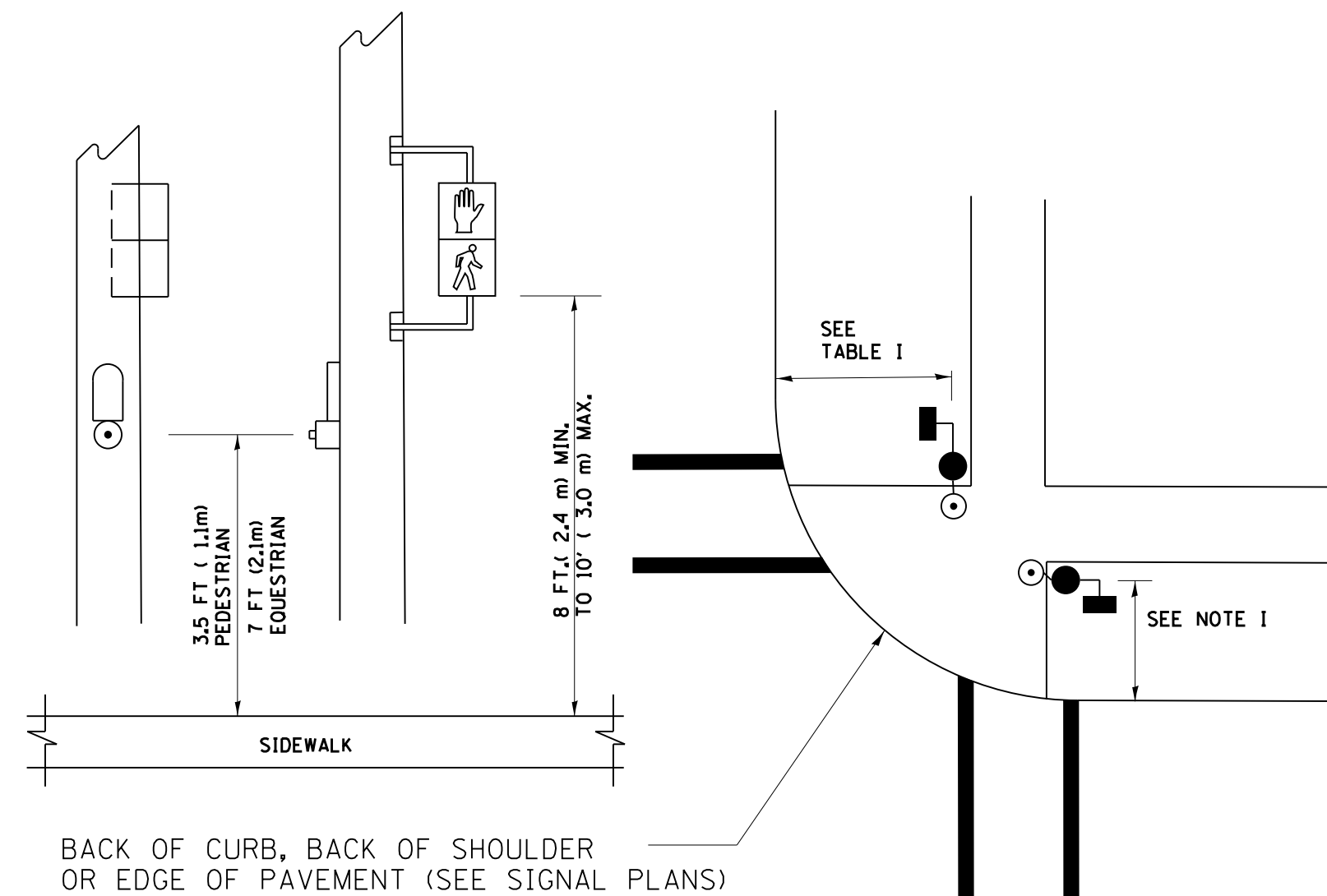
**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR
FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN
WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.**



NOTES:

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

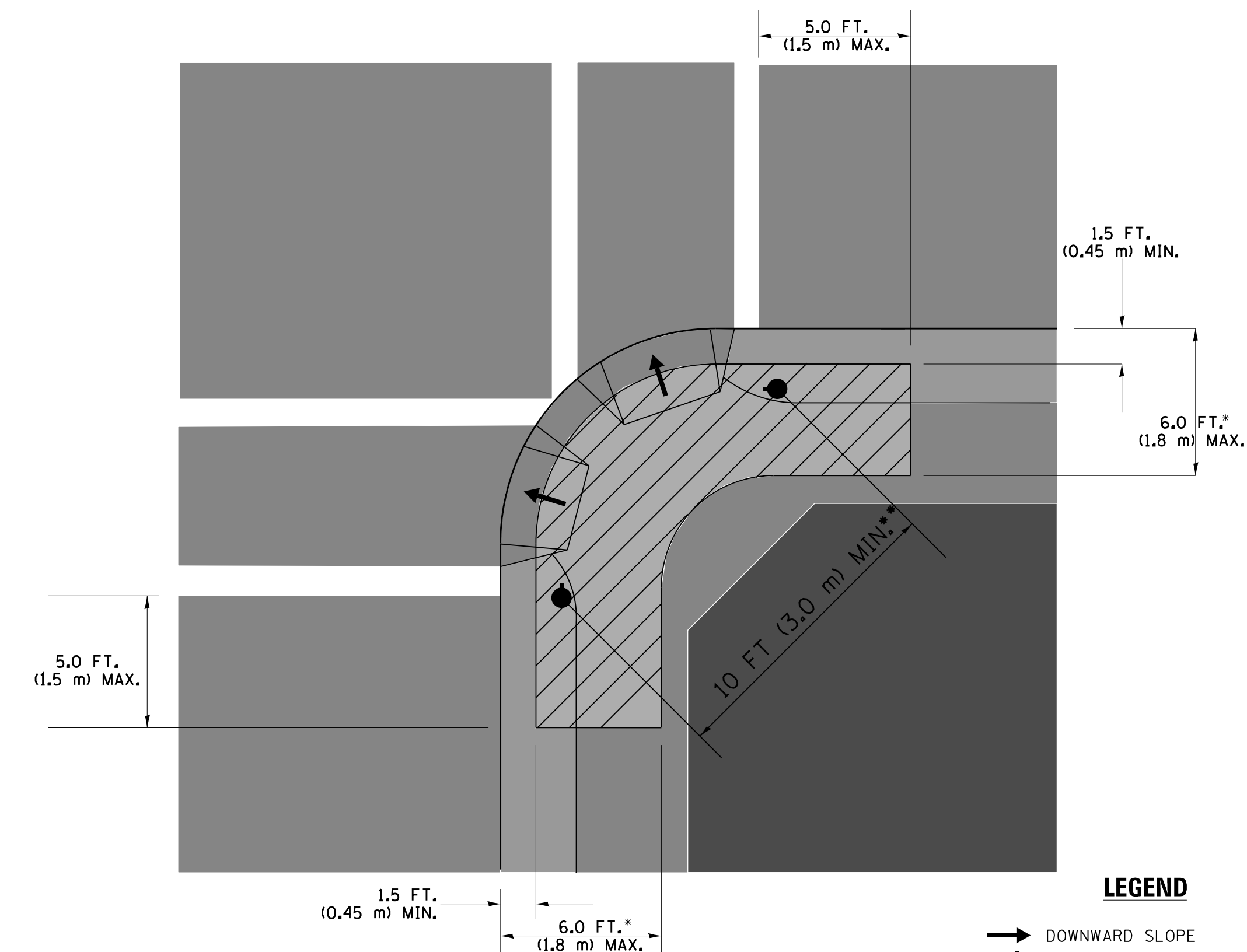
**PEDESTRIAN SIGNAL POST
AND
PEDESTRIAN PUSH BUTTON POST**



NOTES:

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

RECOMMENDED PUSHBUTTON LOCATIONS



LEGEND

- DOWNWARD SLOPE
- PEDESTRIAN PUSHBUTTON
- ▨ RECOMMENDED PUSHBUTTON LOCATIONS

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

NOTES:

1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

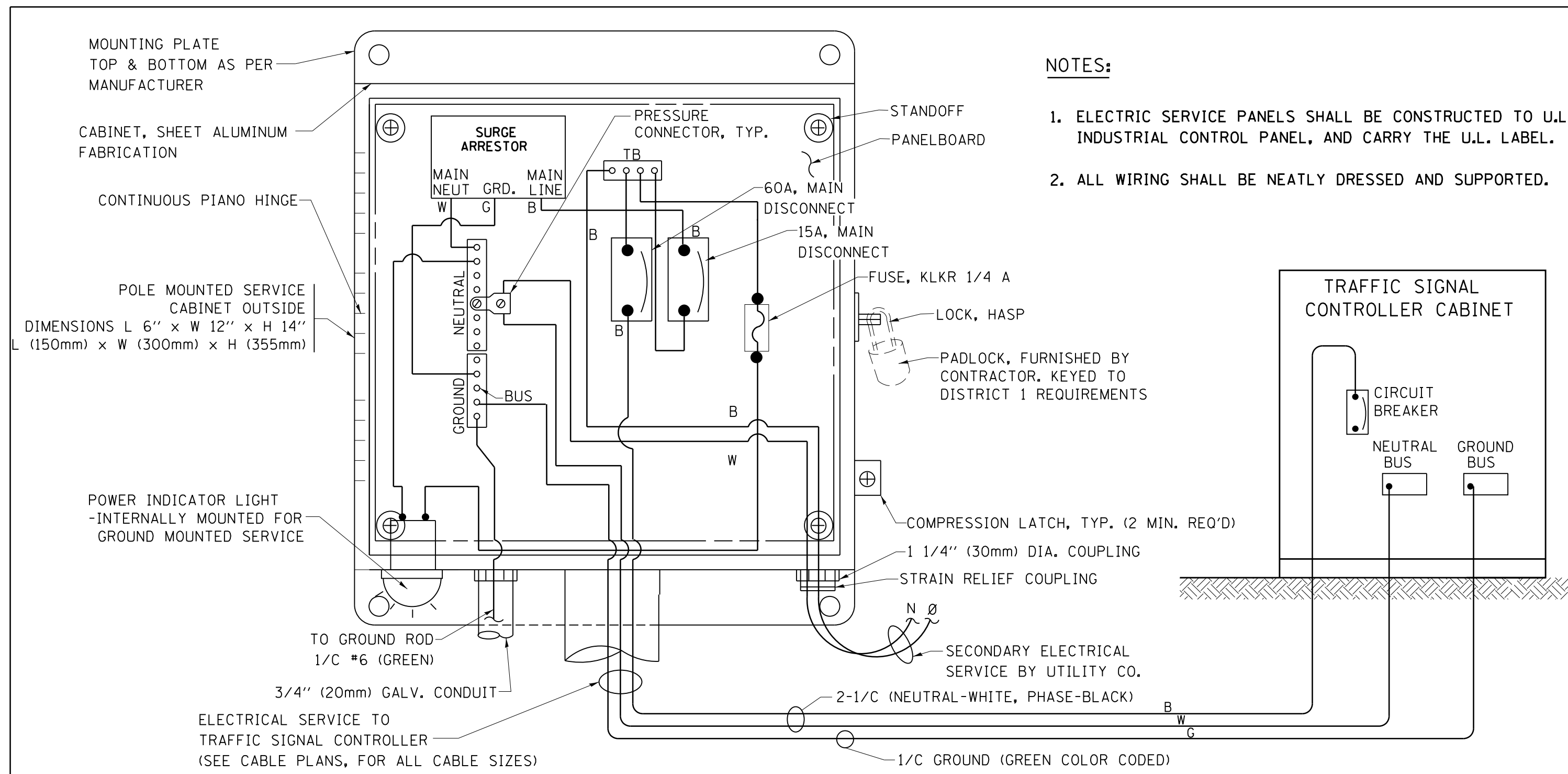
TRAFFIC SIGNAL EQUIPMENT OFFSET

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

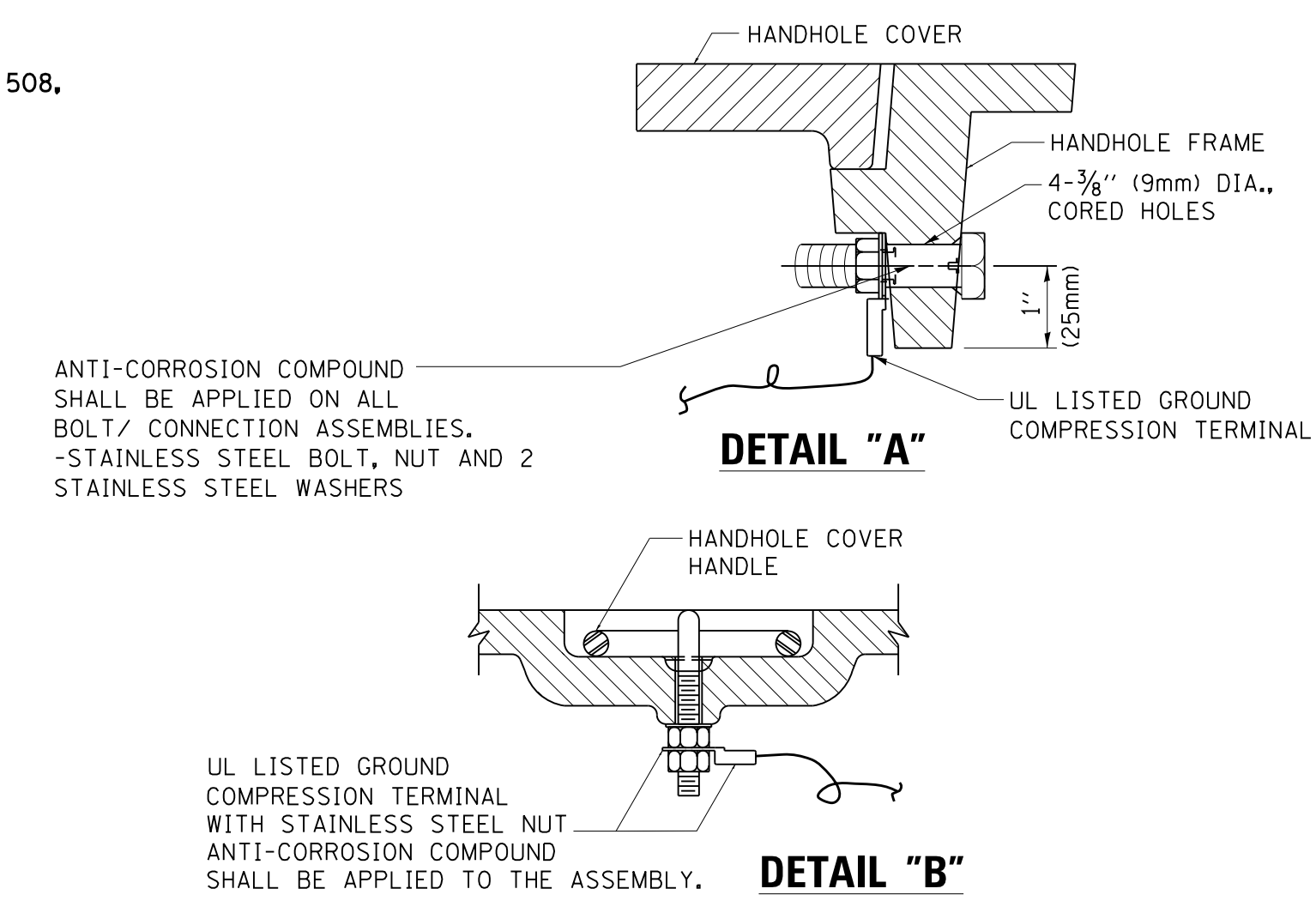
NOTES:

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

FILE NAME = c:\pwwork\pwwork\footemj\d0108315\ts05.dgn	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS	F.A.P. RTE. 351	SECTION 539N-1	COUNTY COOK	TOTAL SHEETS 49	SHEET NO. 40	
PLOT SCALE = 50.0000' / 1"	CHECKED - DAD	REVISED -	SCALE: NONE			SHEET NO. 3 OF 7 SHEETS	STA. TO STA.	TS-05		CONTRACT NO. 60W90	
PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -				FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

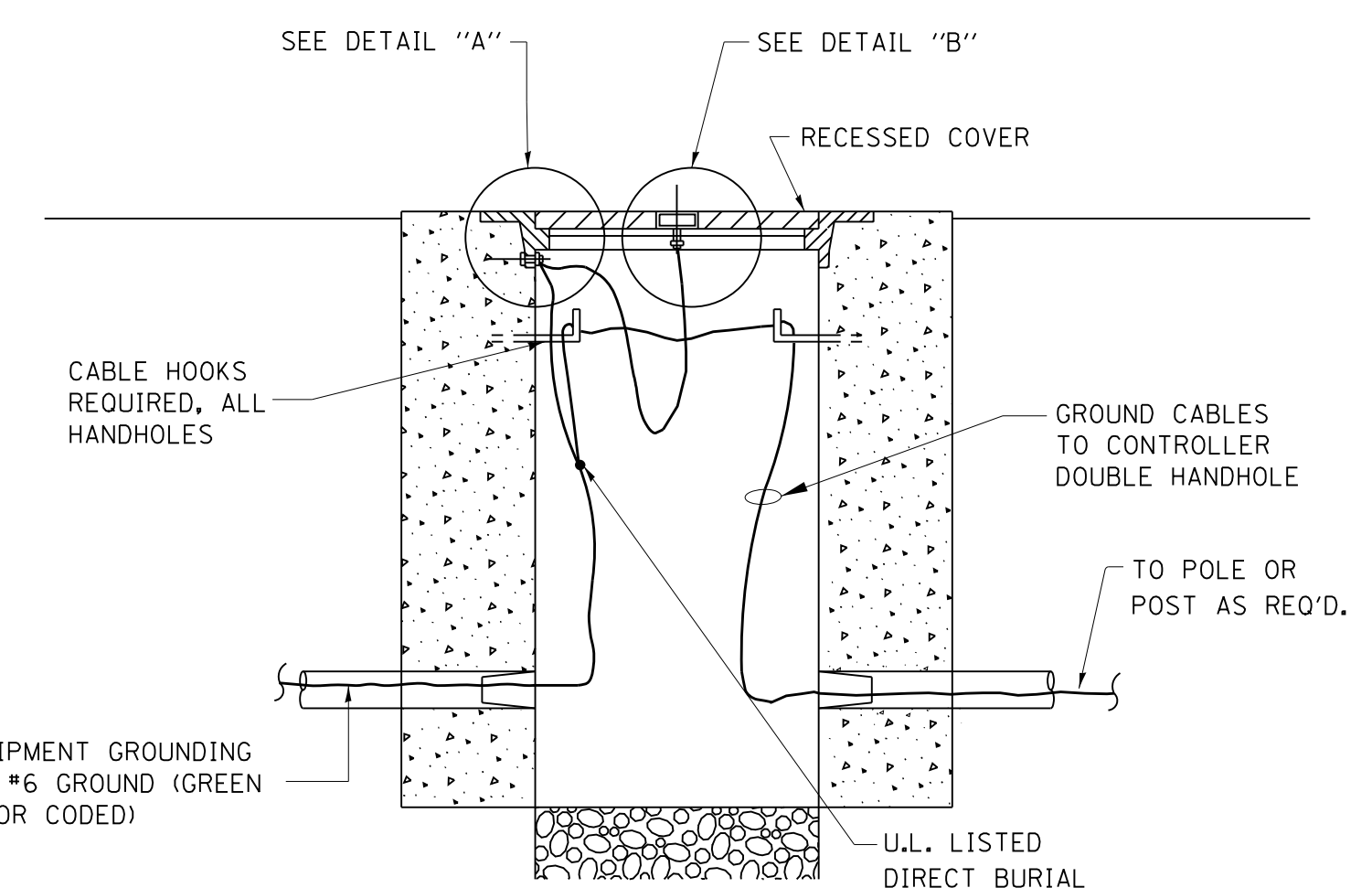


**ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
(NOT TO SCALE)**

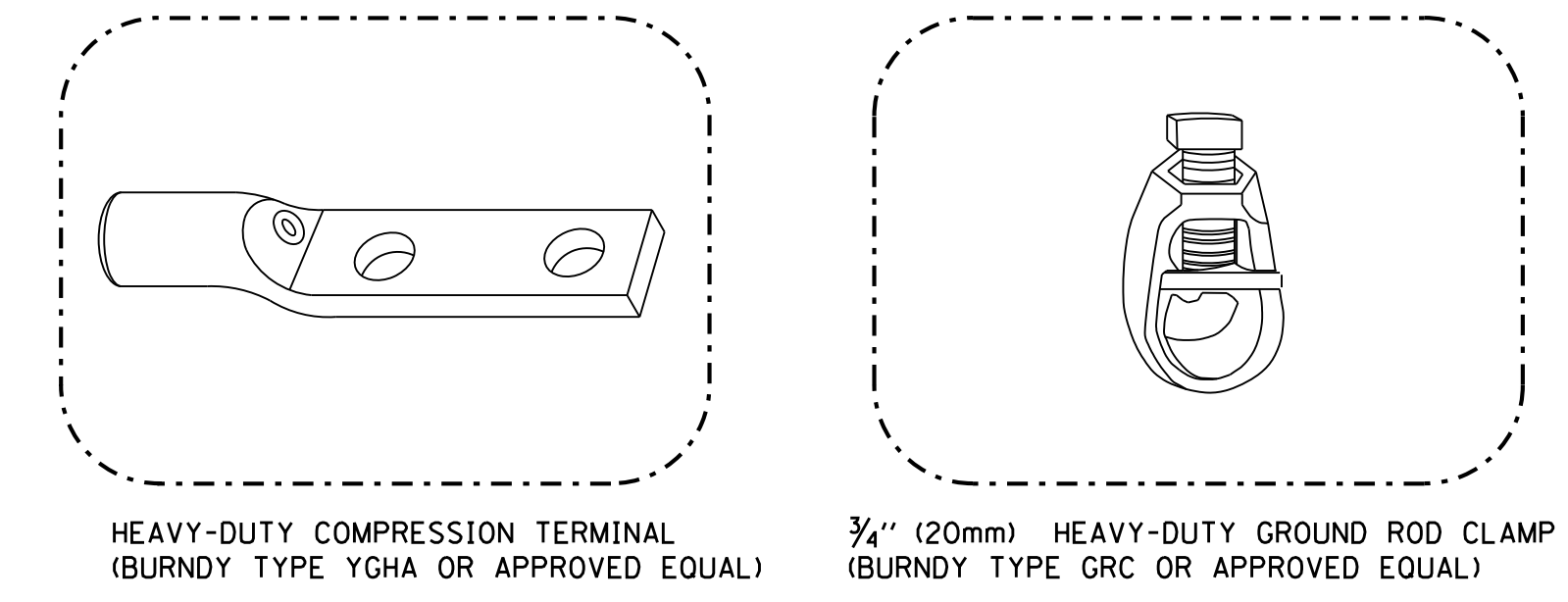


NOTES:
GROUNDING SYSTEM

- 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.
- 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.
- ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
- THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.

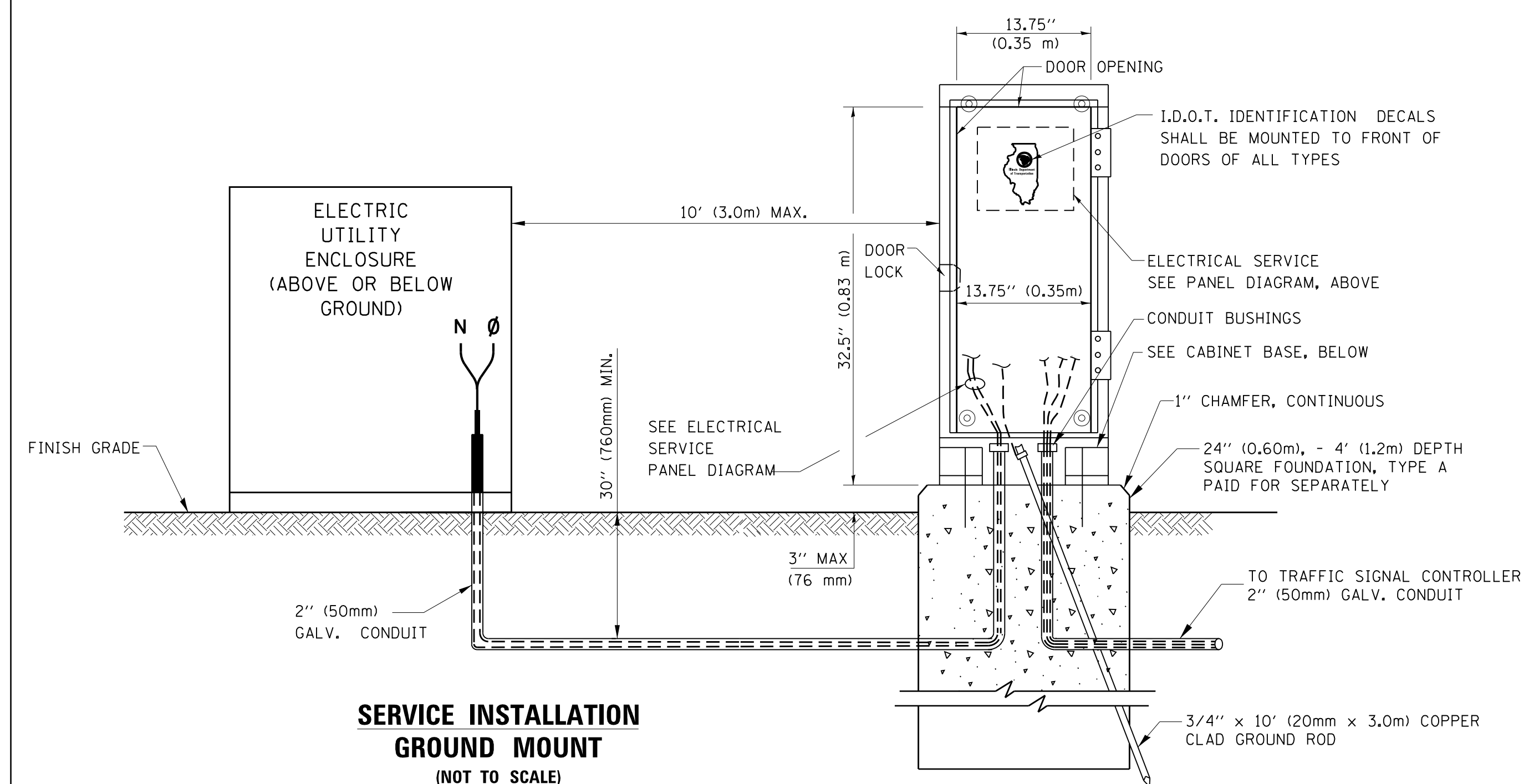


**HANDHOLE COVER & FRAME – GROUNDING DETAIL
(NOT TO SCALE)**

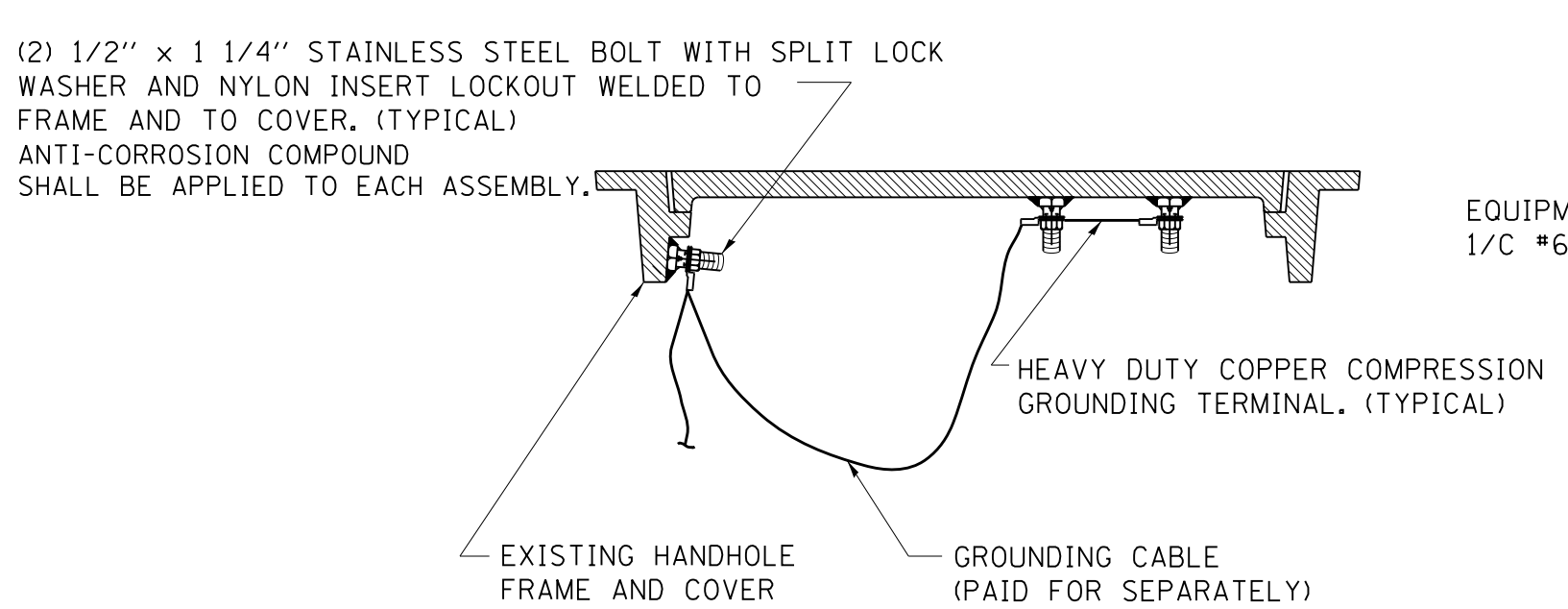


NOTES:

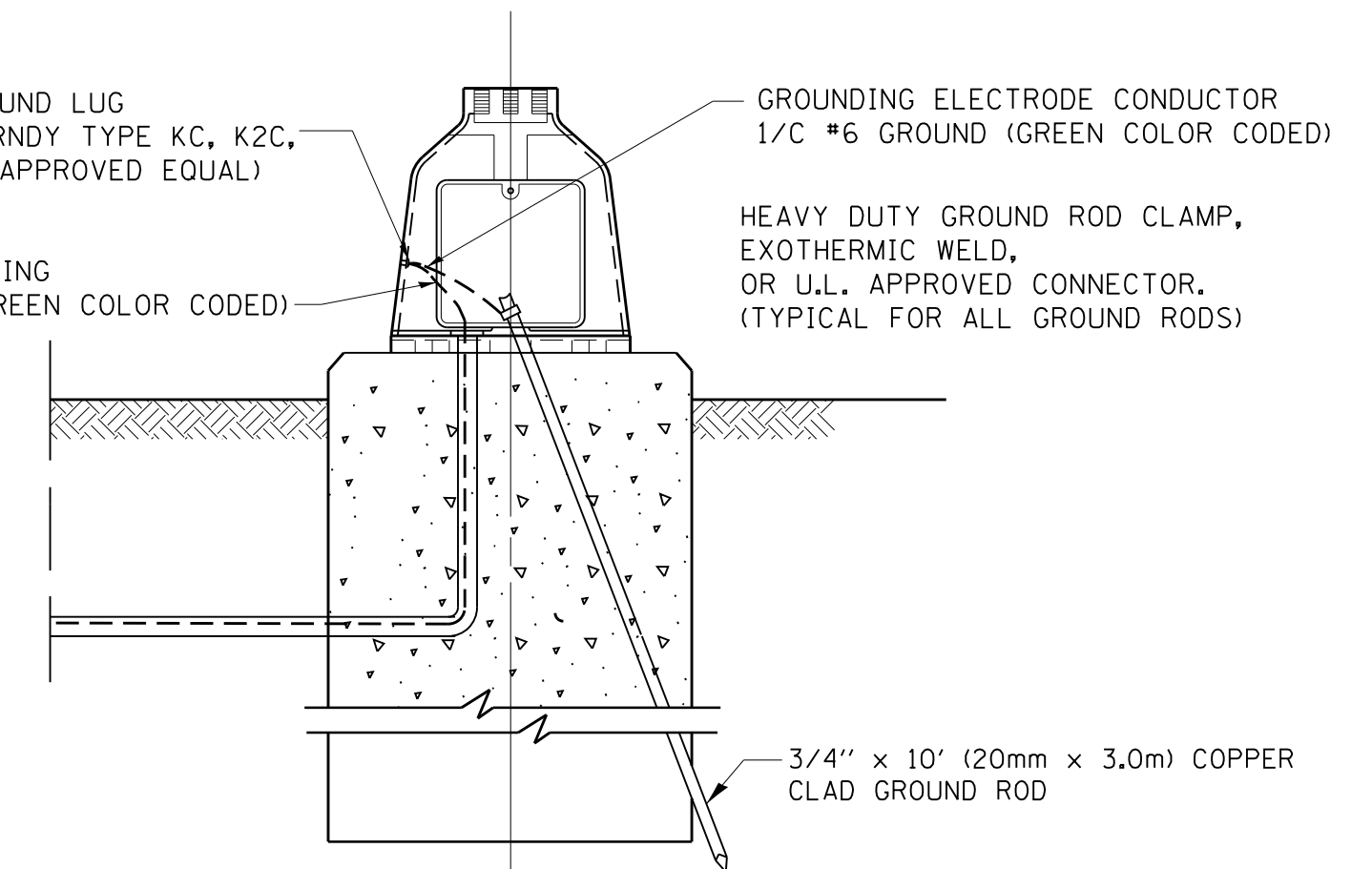
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES. 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES. 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



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

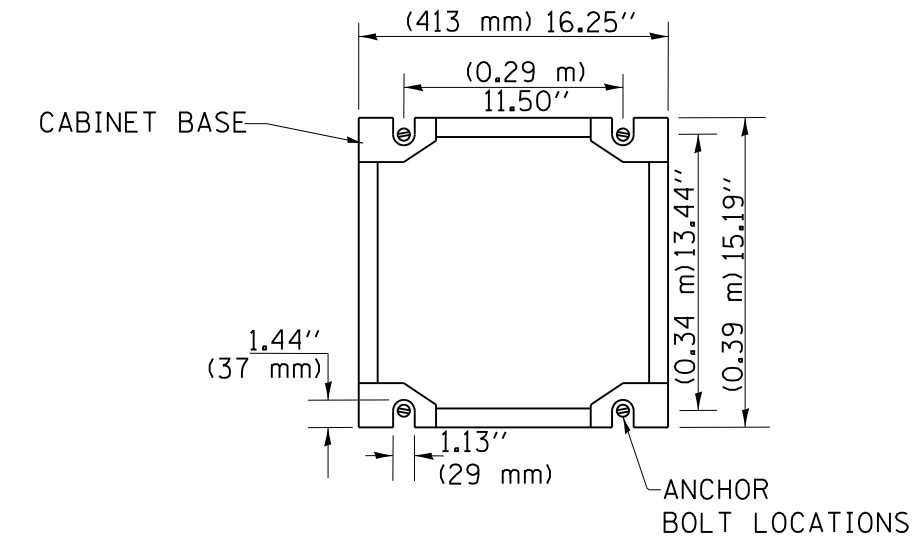


**EXISTING HANDHOLE COVER & FRAME – GROUNDING DETAIL
(NOT TO SCALE)**



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

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

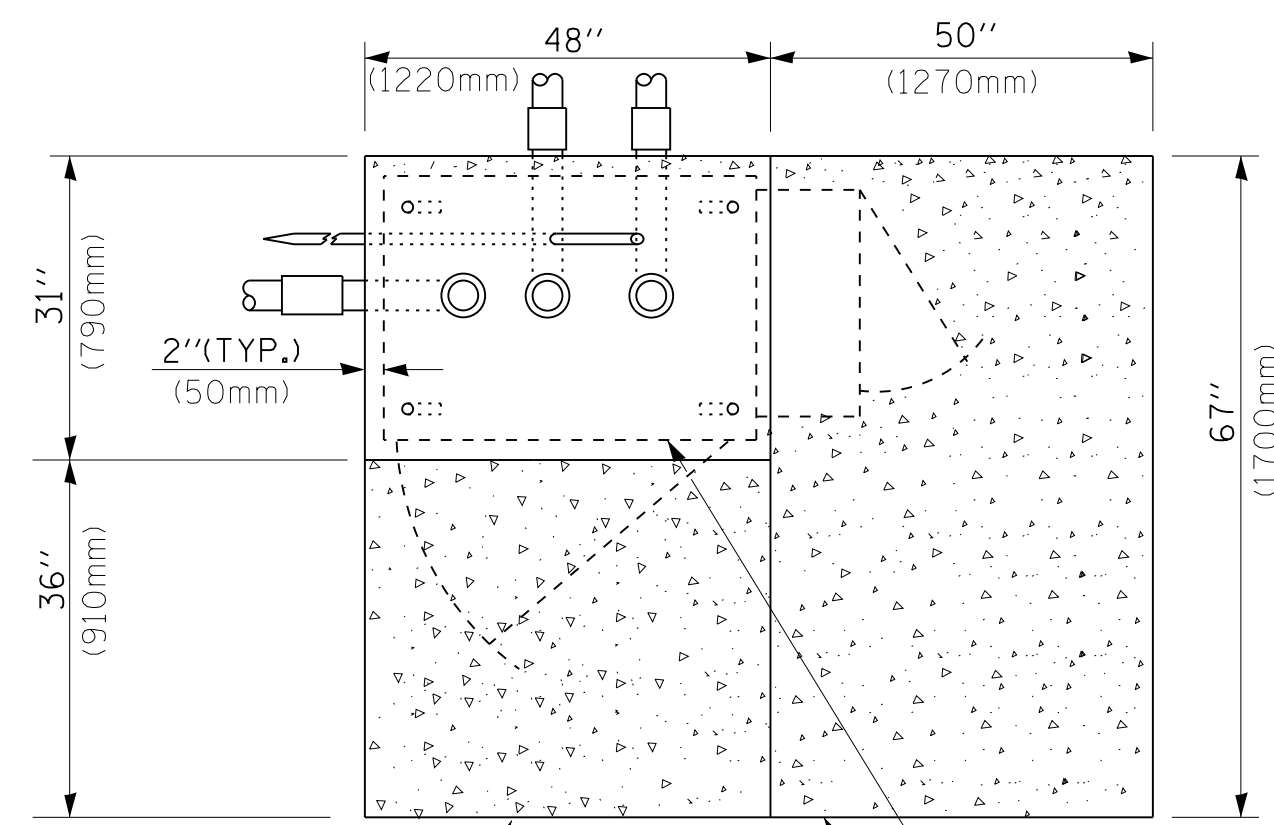


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		DATE - 10-28-09	REVISED -

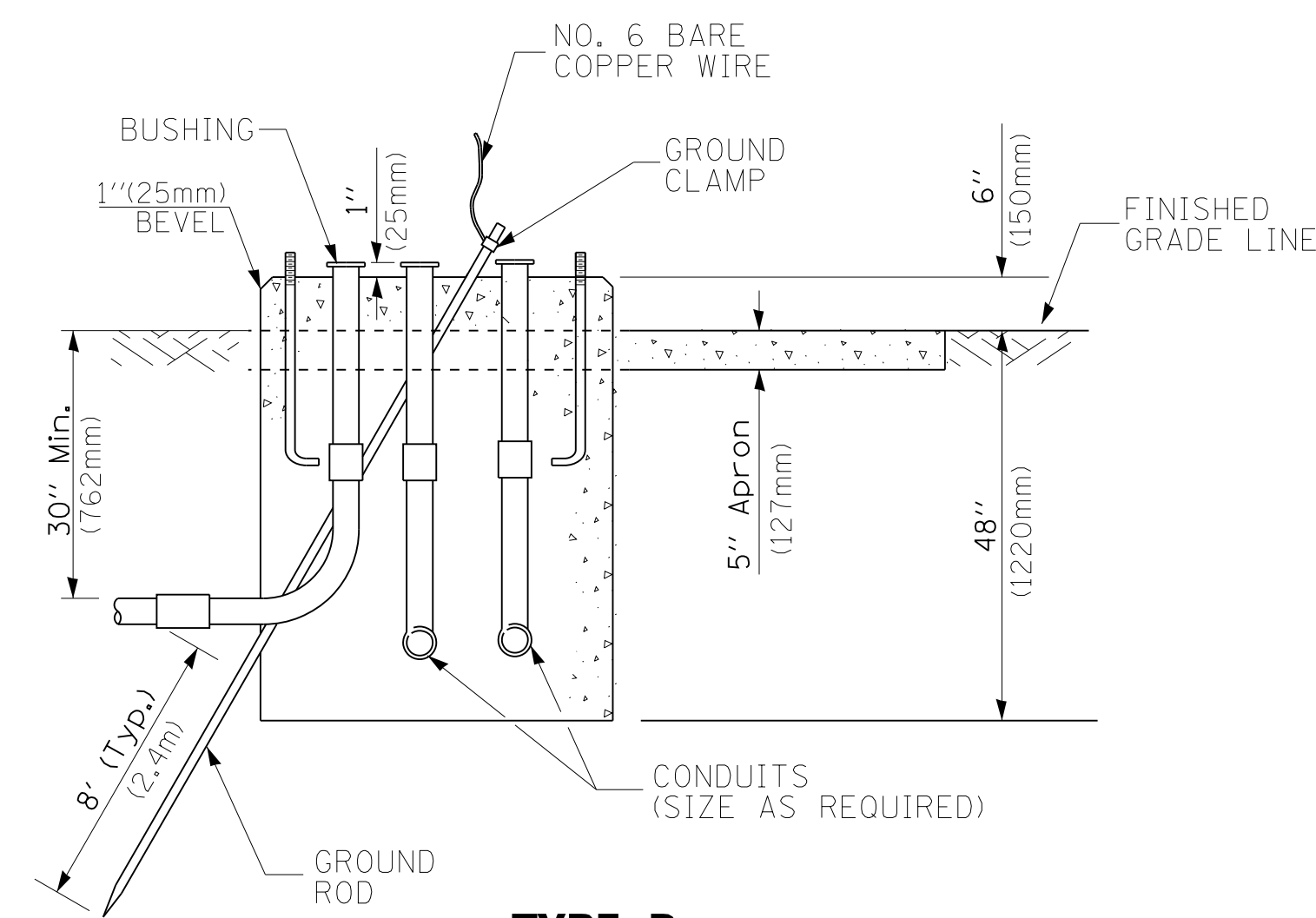
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE			
STANDARD TRAFFIC SIGNAL DESIGN DETAILS			
SCALE: NONE	SHEET NO. 4 OF 7 SHEETS	STA. TO STA.	

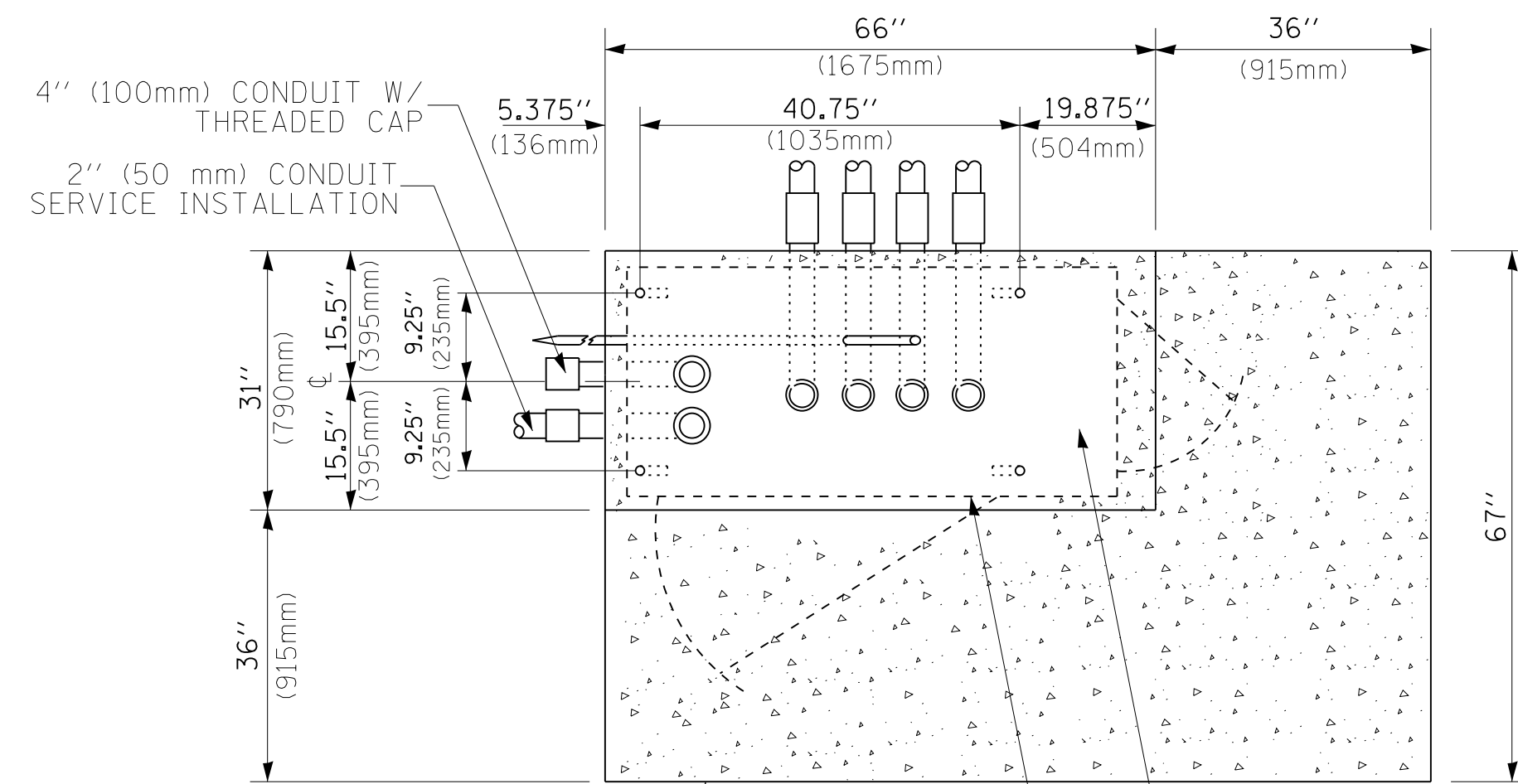
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	539N-1	COOK	49	41
TS-05		CONTRACT NO.	60W90	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



TOP VIEW



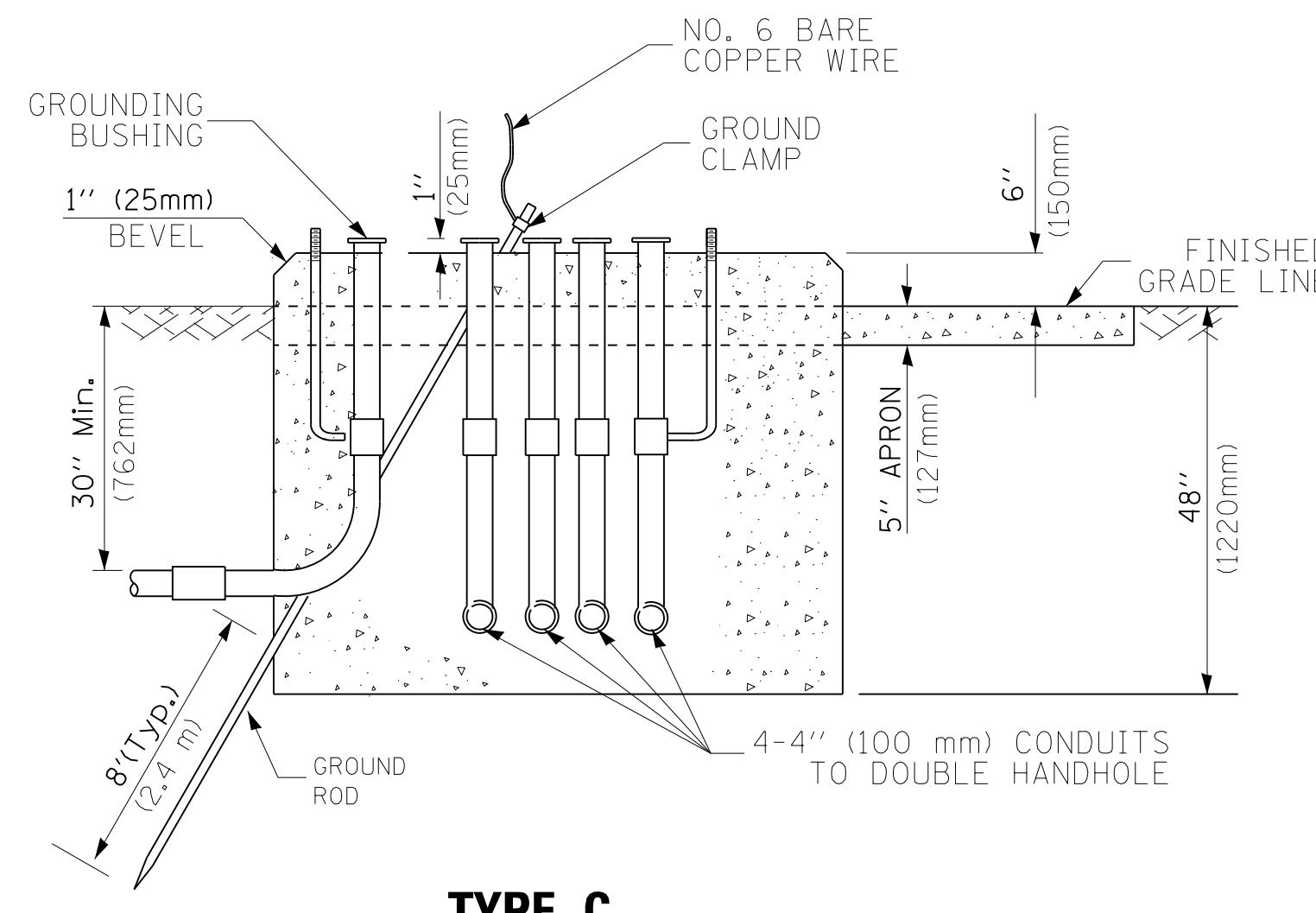
**TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET**



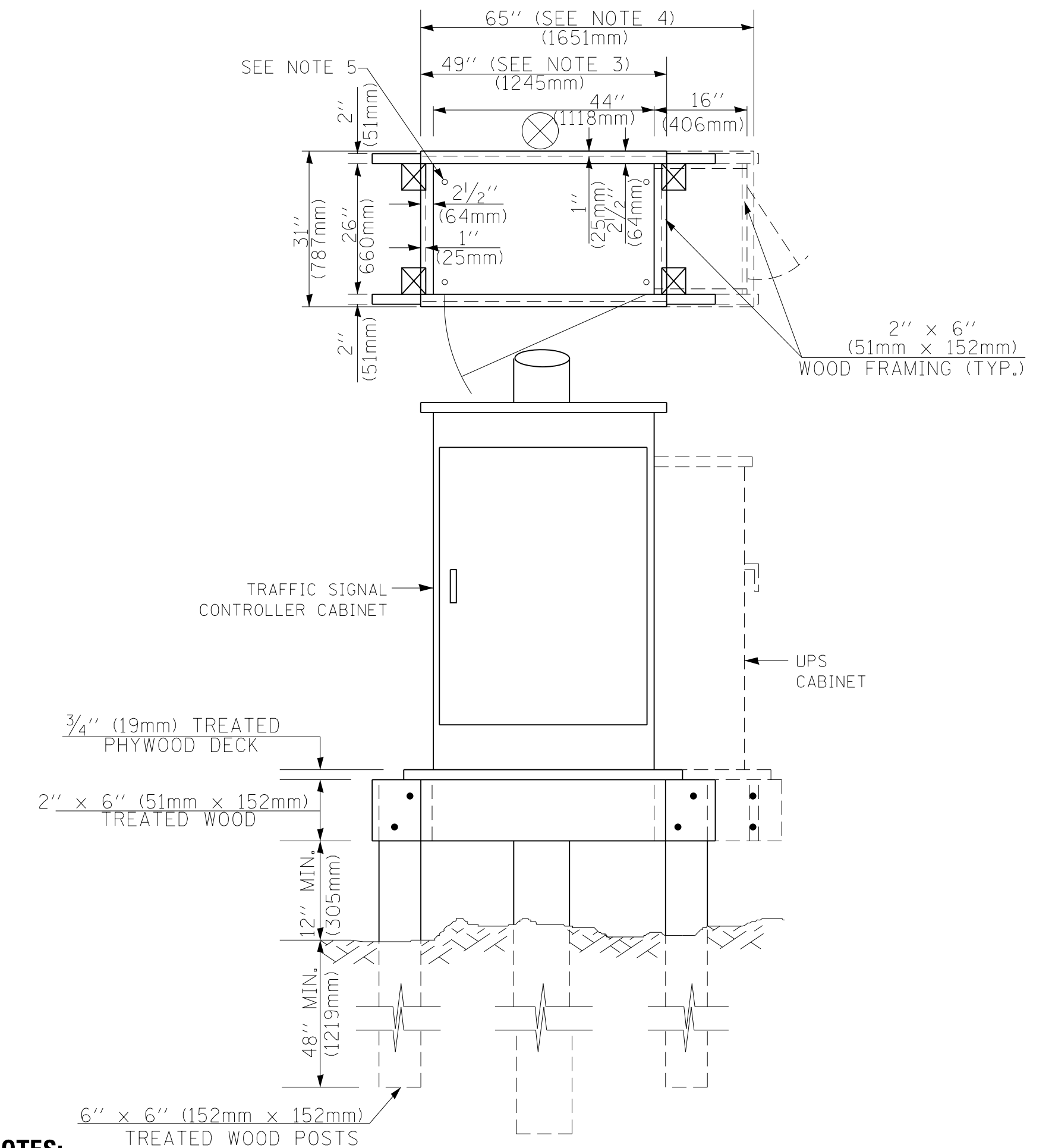
TOP VIEW

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 55' (16.8 m) and less than 65' (19.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

NOTES:

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

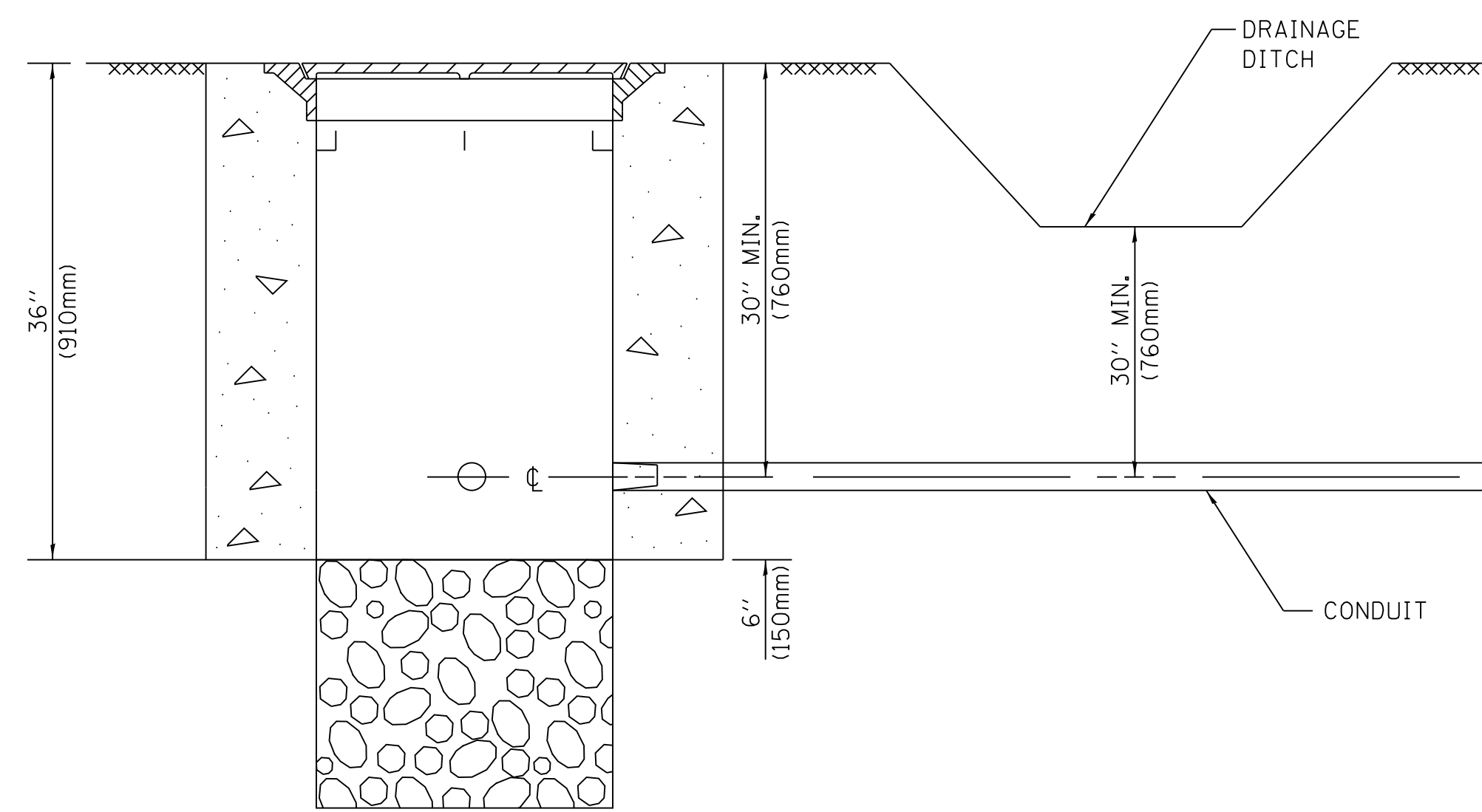
DEPTH OF MAST ARM FOUNDATIONS, TYPE E

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	PLOT SCALE = 50.0000' / 1"	CHECKED - DAD	REVISED -
	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE			
STANDARD TRAFFIC SIGNAL DESIGN DETAILS			
SCALE: NONE	SHEET NO. 5 OF 7 SHEETS	STA.	TO STA.

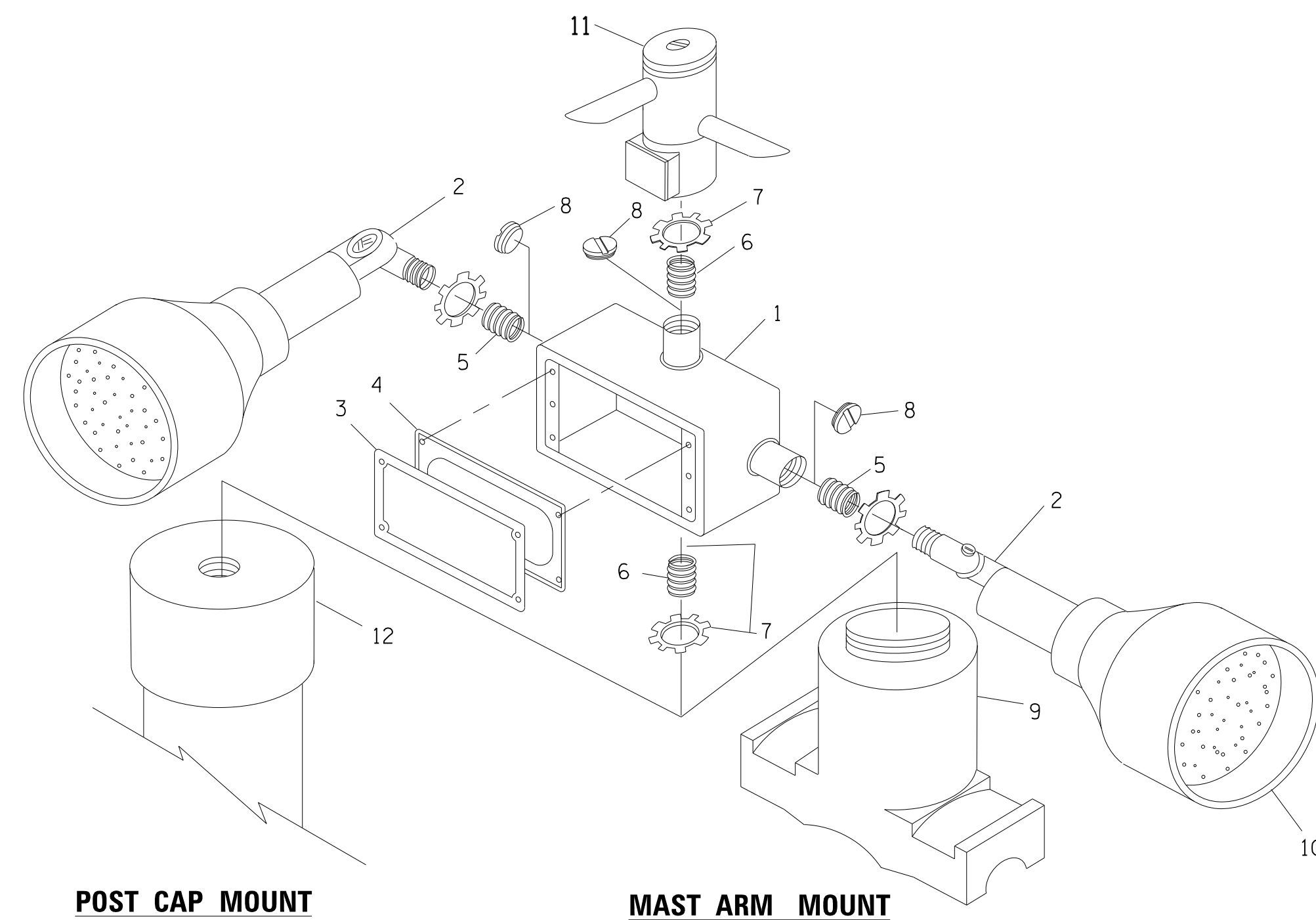
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	539N-1	COOK	49	42
TS-05		CONTRACT NO. 60W90		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



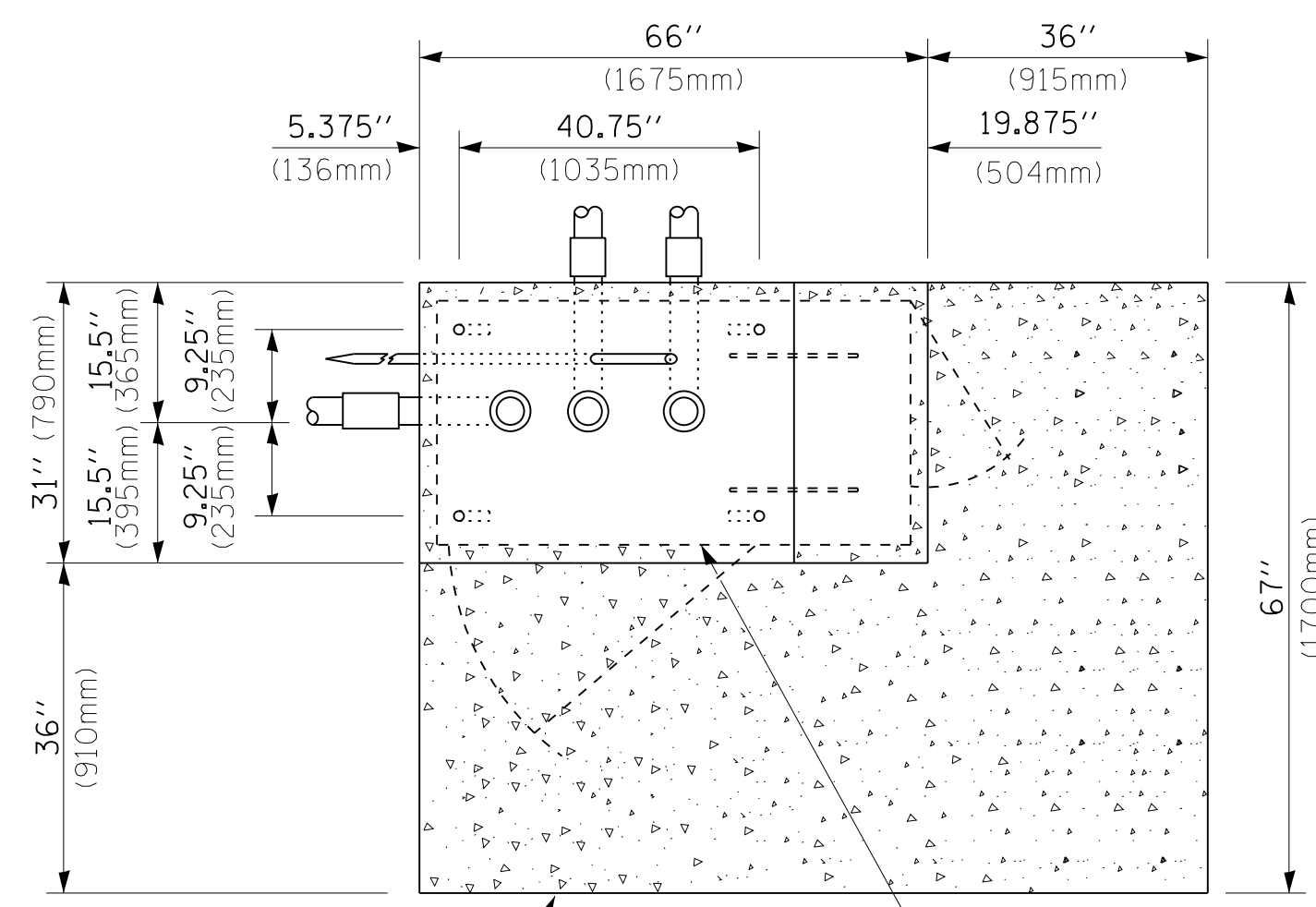
NOTES:

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.

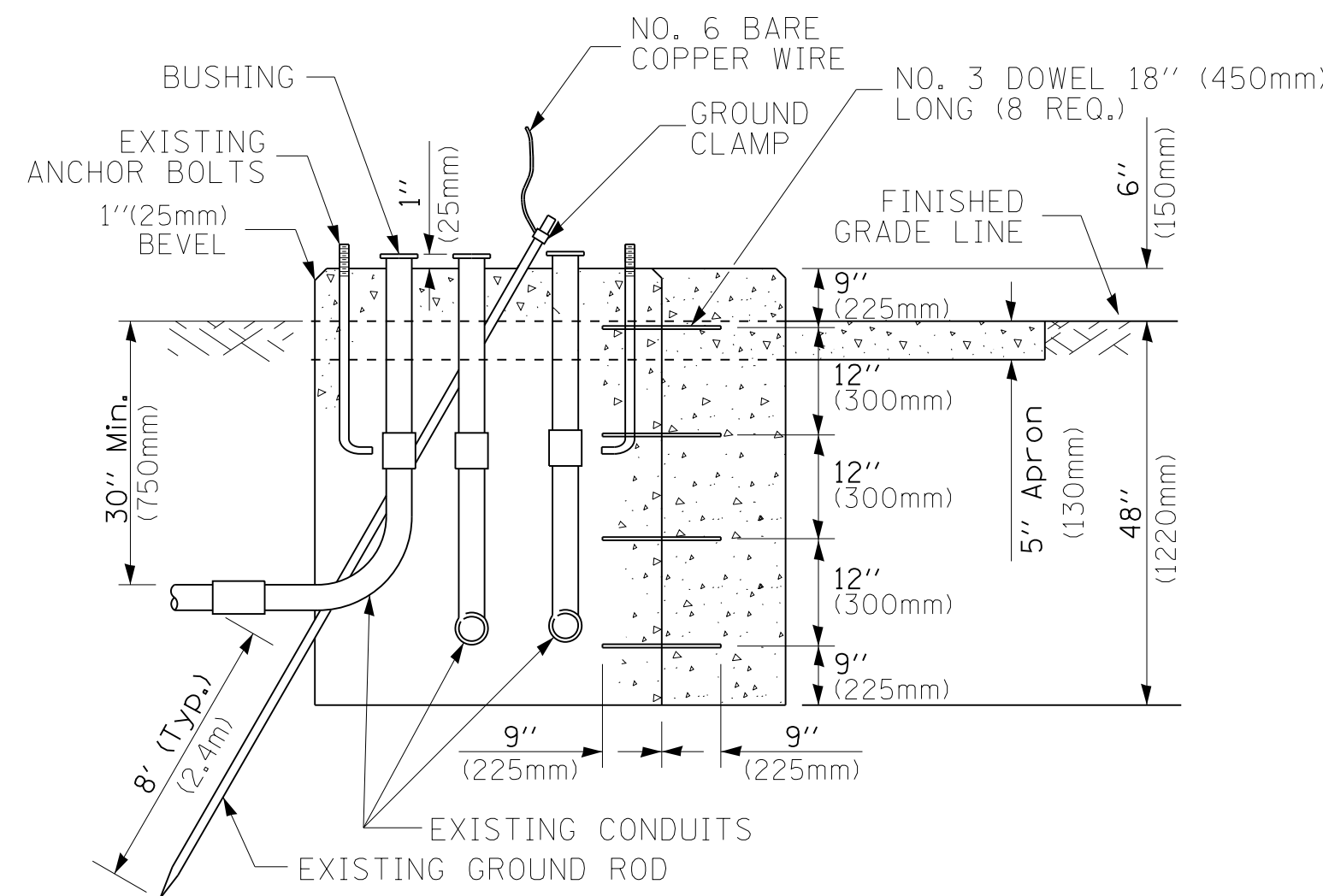
HANDHOLE WITH MINIMUM CONDUIT DEPTH
(NOT TO SCALE)



EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL



TOP VIEW
(NOT TO SCALE)

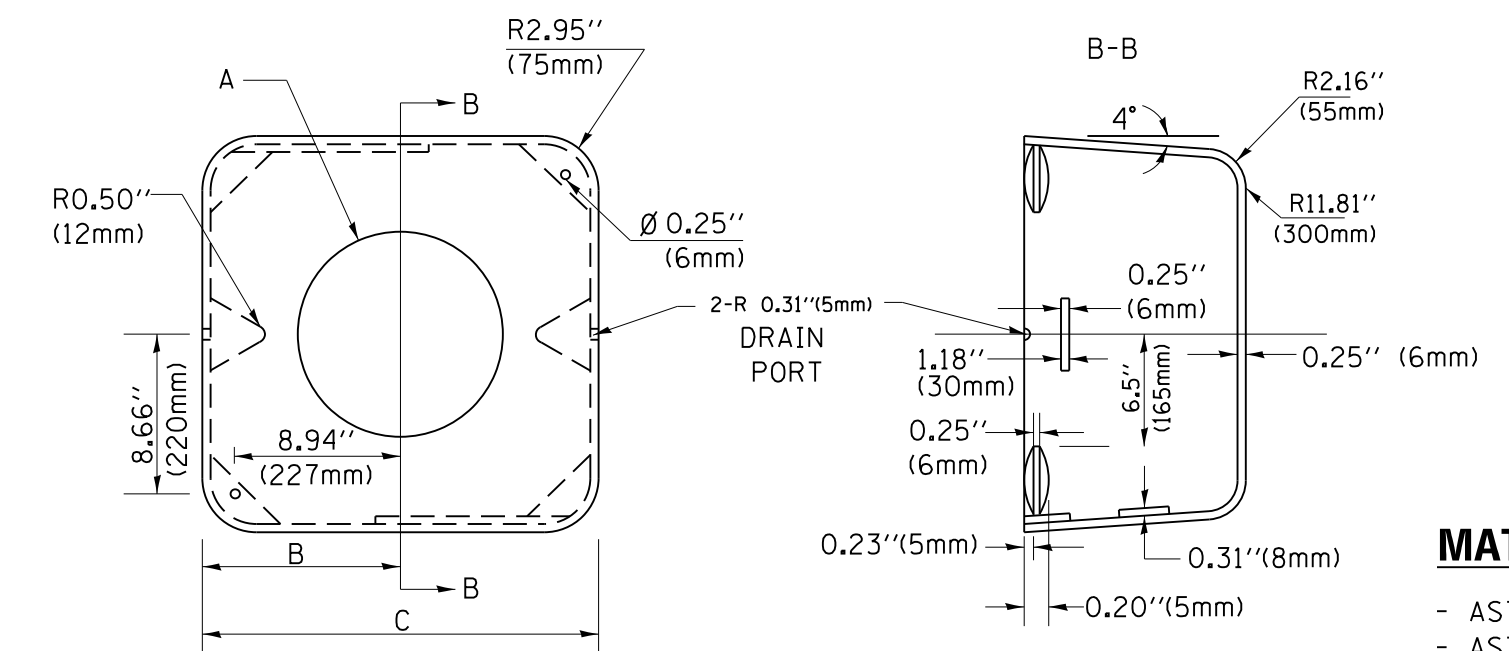


MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION
(NOT TO SCALE)

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)

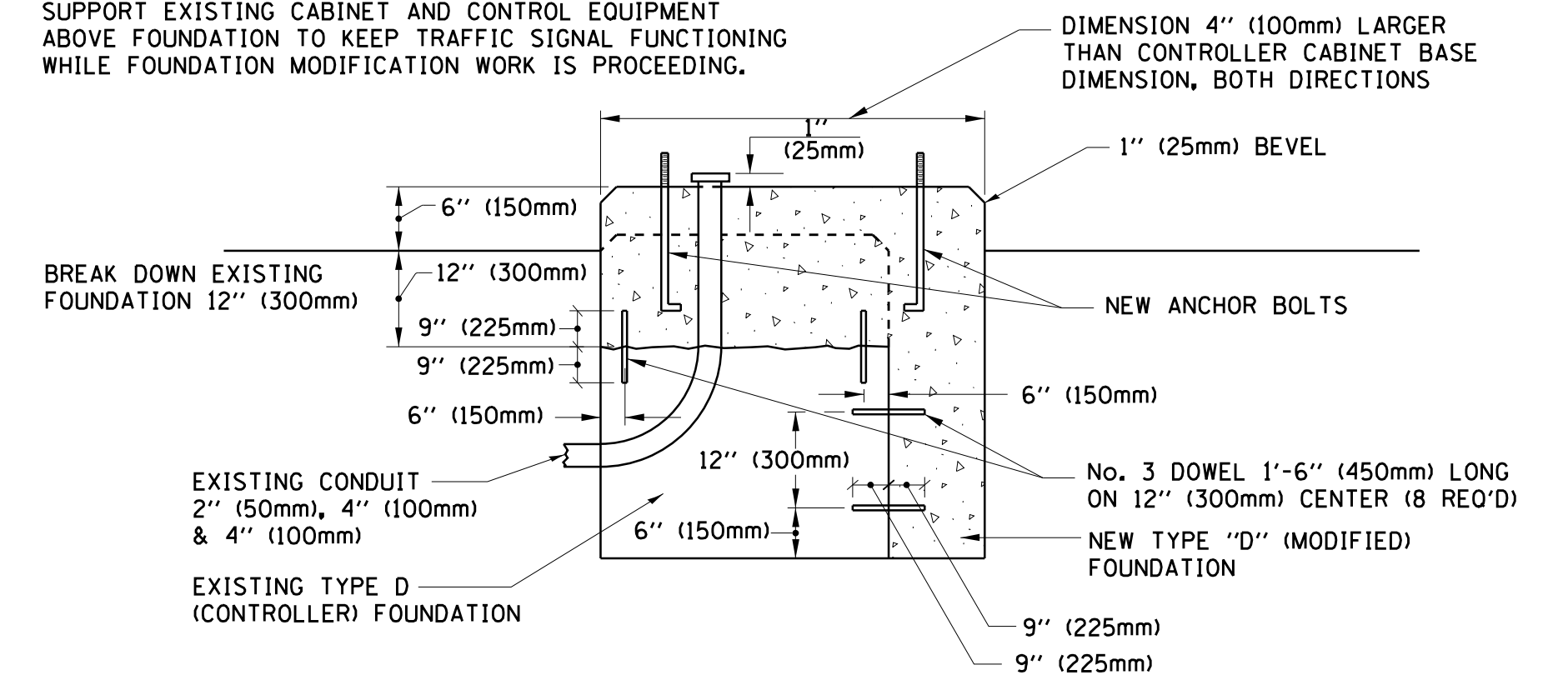
SHROUD

NOTES:

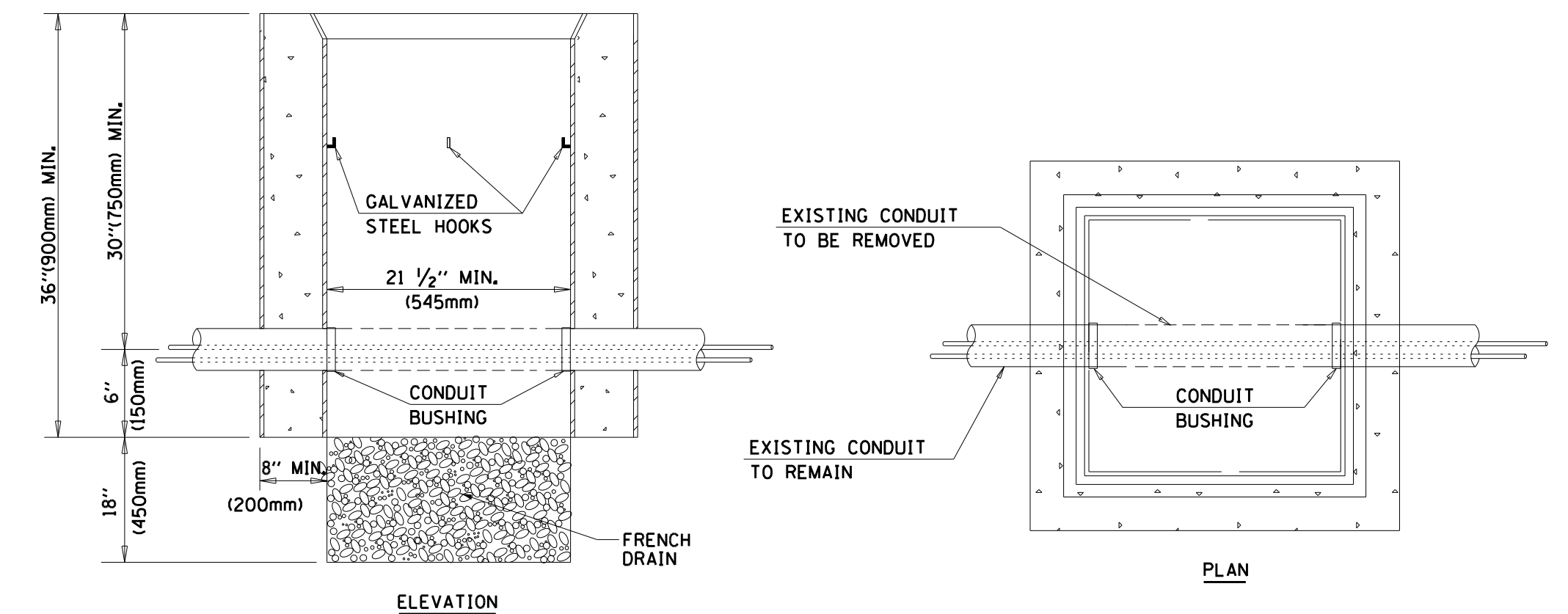
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

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

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	PLOT SCALE = 50.0000' / 1"	CHECKED - DAD	REVISED -
	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

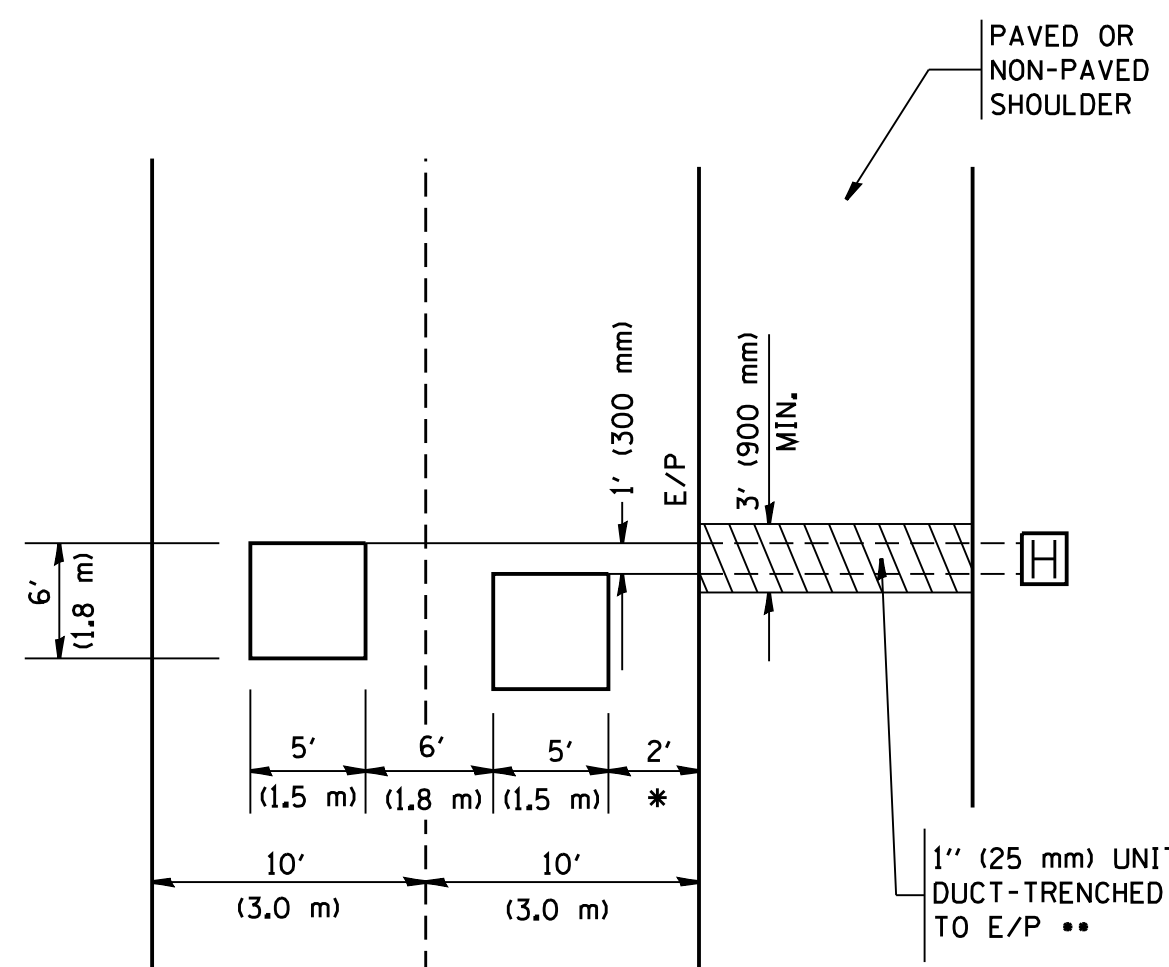
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	539N-1	COOK	49	43
TS-05		CONTRACT NO. 60W90		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

LOOPS NEXT TO SHOULDERS

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

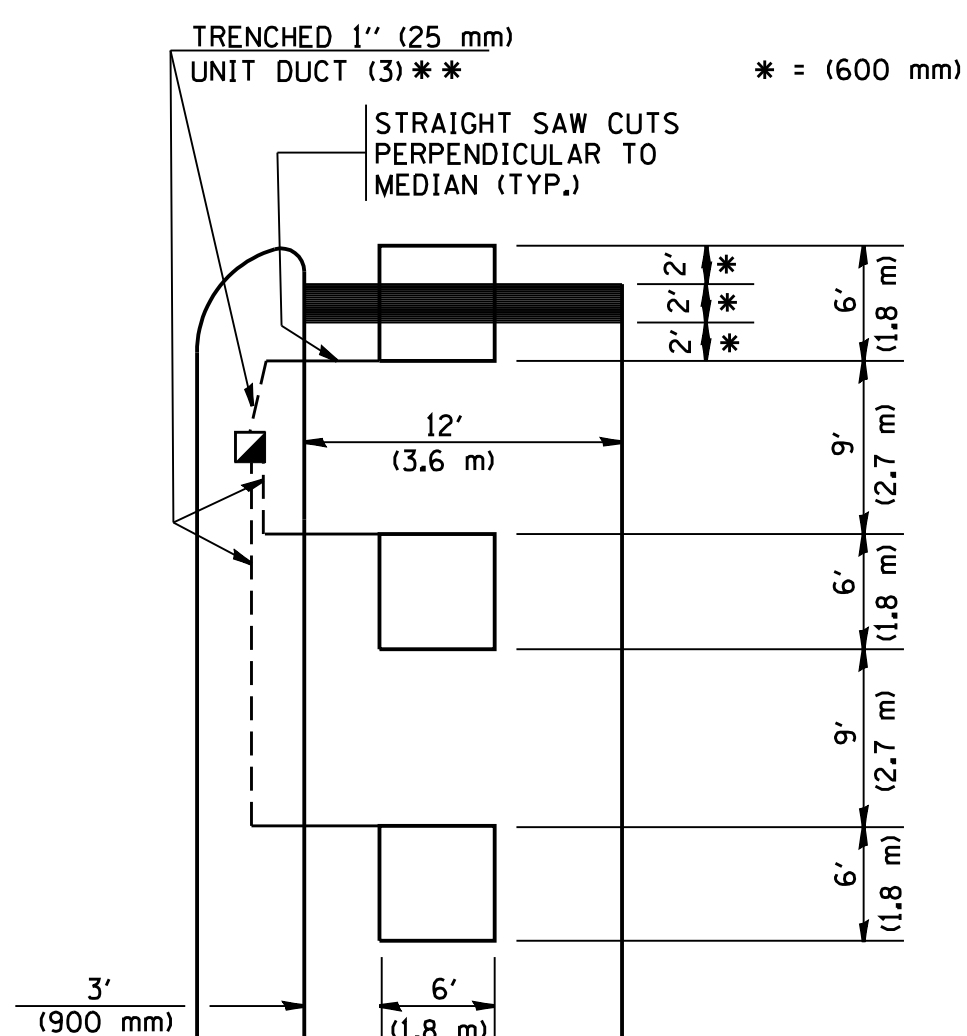


* = (600 mm)

** 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.

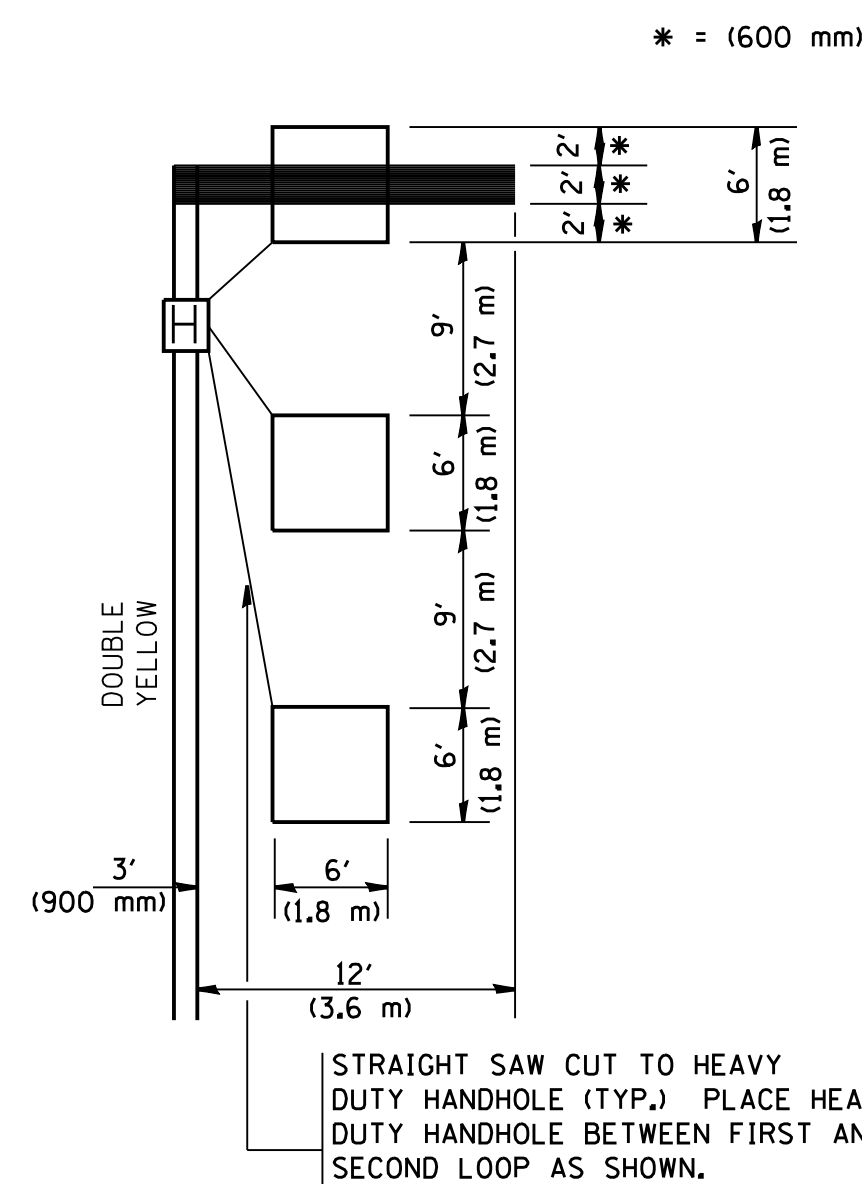


* = (600 mm)

** 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)

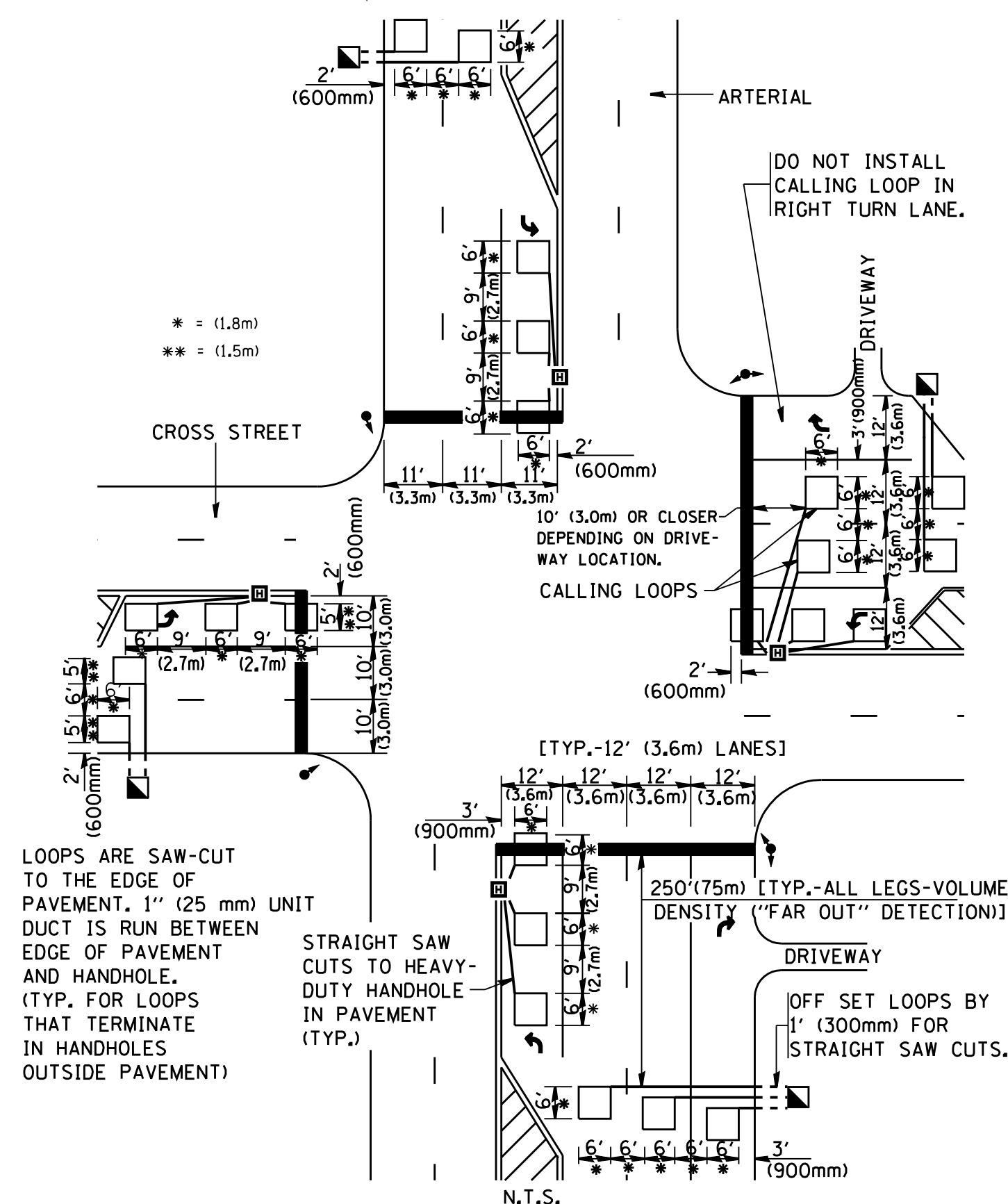
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

NOTES:

VEHICLES LOOP DETECTORS

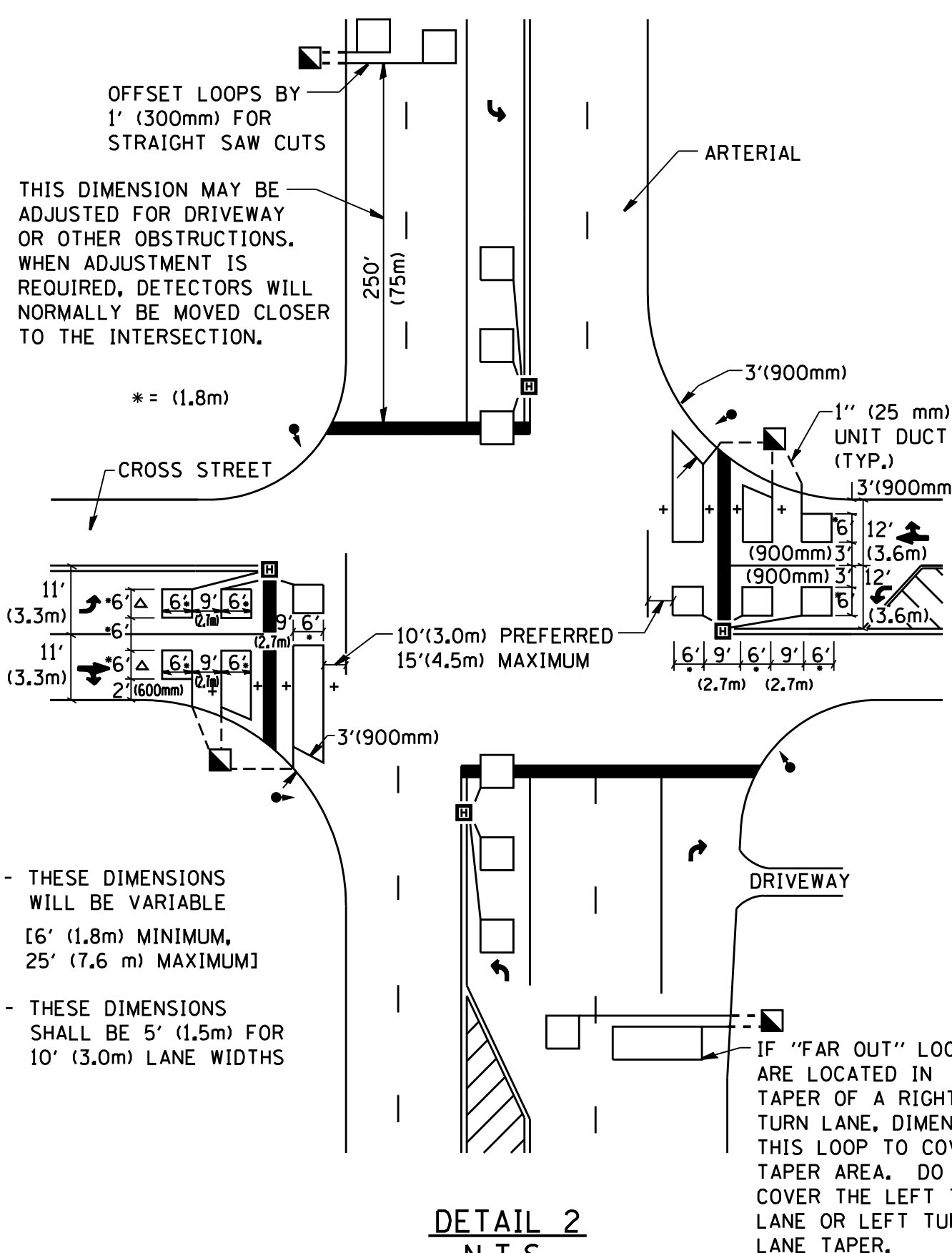
- * ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST 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 = W:\diststd\22x34\ts07.dgn	USER NAME = gaglanobt	DESIGNED -	REVISED -
		DRAWN -	REVISED -
		CHECKED - R.K.F.	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

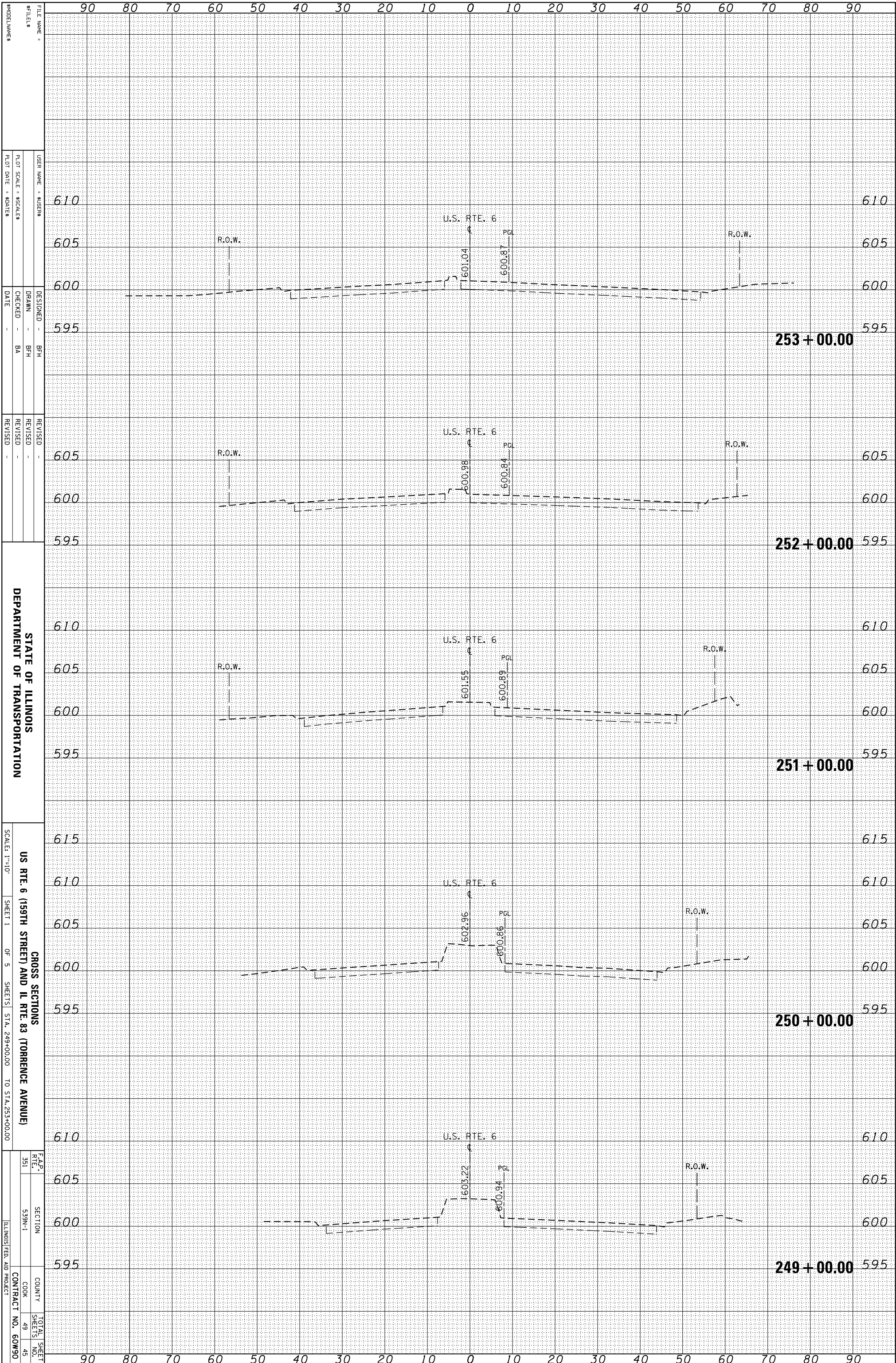
**DISTRICT 1 - DETECTOR LOOP INSTALLATION
DETAILS FOR ROADWAY RESURFACING**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	539N-1	COOK	49	44
TS-07		CONTRACT NO.	60W90	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

ORIGINAL SURVEY	SURVEYED _____	BY _____	DATE _____
NOTE BOOK	PLOTTED _____		
	TEMPLATE _____		
	AREAS _____		
	AREAS CHECKED _____		

FINAL SURVEY	SURVEYED _____	BY _____	DATE _____
NOTE BOOK	PLOTTED _____		
	TEMPLATE _____		
	AREAS _____		
	AREAS CHECKED _____		



**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

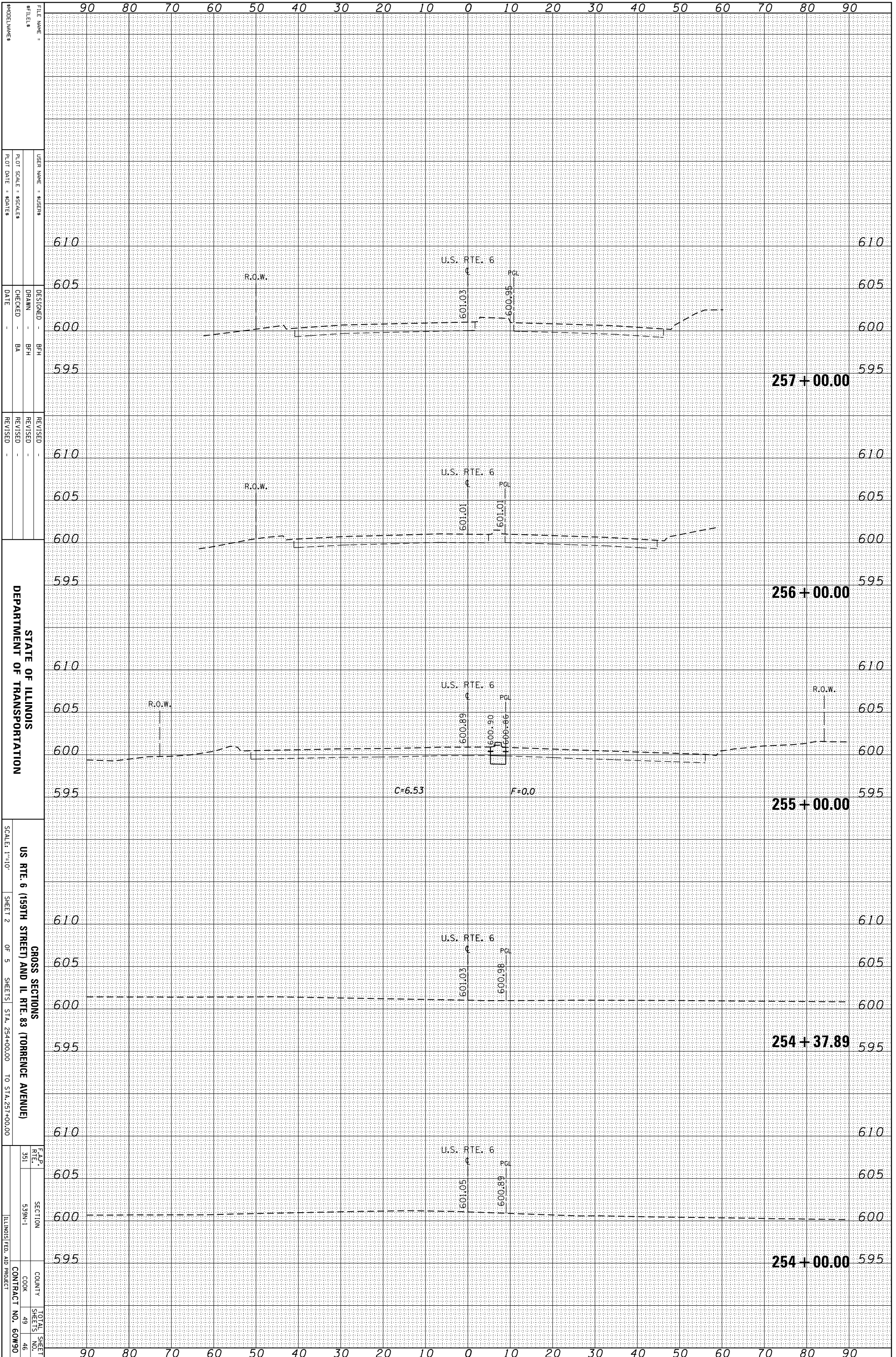
**CROSS SECTIONS
US RTE. 6 (159TH STREET) AND IL RTE. 83 (TORRENCE AVENUE)**

SCALE: 1"=10'
SHEET 1 OF 5 SHEETS STA. 249+00.00 TO STA. 253+00.00

F.A.P. RTE. NO. 351	SECTION 539N-1	COUNTY COOK	TOTAL SHEET NO. 49
		CONTRACT NO. 60W90	45
		ILLINOIS FED. AID PROJECT	

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

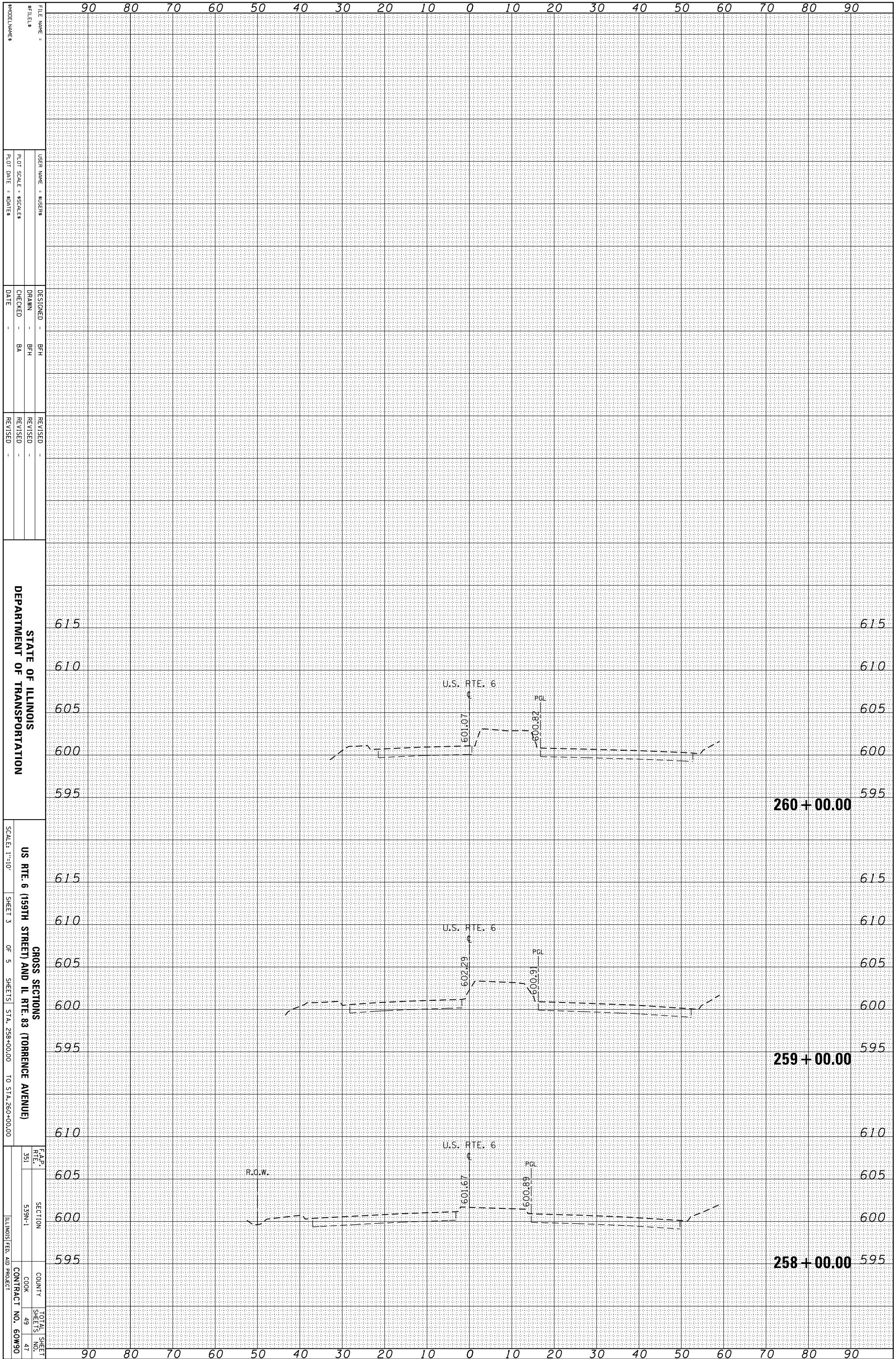
US RTE. 6 (159TH STREET) AND IL RTE. 83 (TORRENCE AVENUE)
SCALE: 1"=10'

GROSS SECTIONS
SHEET 2 OF 5 SHEETS STA. 254+00.00 TO STA. 257+00.00

F.A.P. RTE. NO.	SECTION	COUNTY	TOTAL SHEET NO.
351	539N-1	COOK	49
		CONTRACT NO.	60W90
		ILLINOIS FED. AID PROJECT	

ORIGINAL SURVEY	SURVEYED _____	BY _____	DATE _____
NOTE BOOK	PLOTTED _____		
	TEMPLATE _____		
	AREAS _____		
NO. _____	AREAS CHECKED _____		

FINAL SURVEY	SURVEYED _____	BY _____	DATE _____
NOTE BOOK	PLOTTED _____		
	TEMPLATE _____		
	AREAS _____		
NO. _____	AREAS CHECKED _____		



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GROSS SECTIONS
US RTE. 6 (159TH STREET) AND IL RTE. 83 (TORRENCE AVENUE)

SCALE: 1"=10'
SHEET 3 OF 5 SHEETS STA. 258+00.00 TO STA. 260+00.00

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DATE - _____
REVISIONS - _____

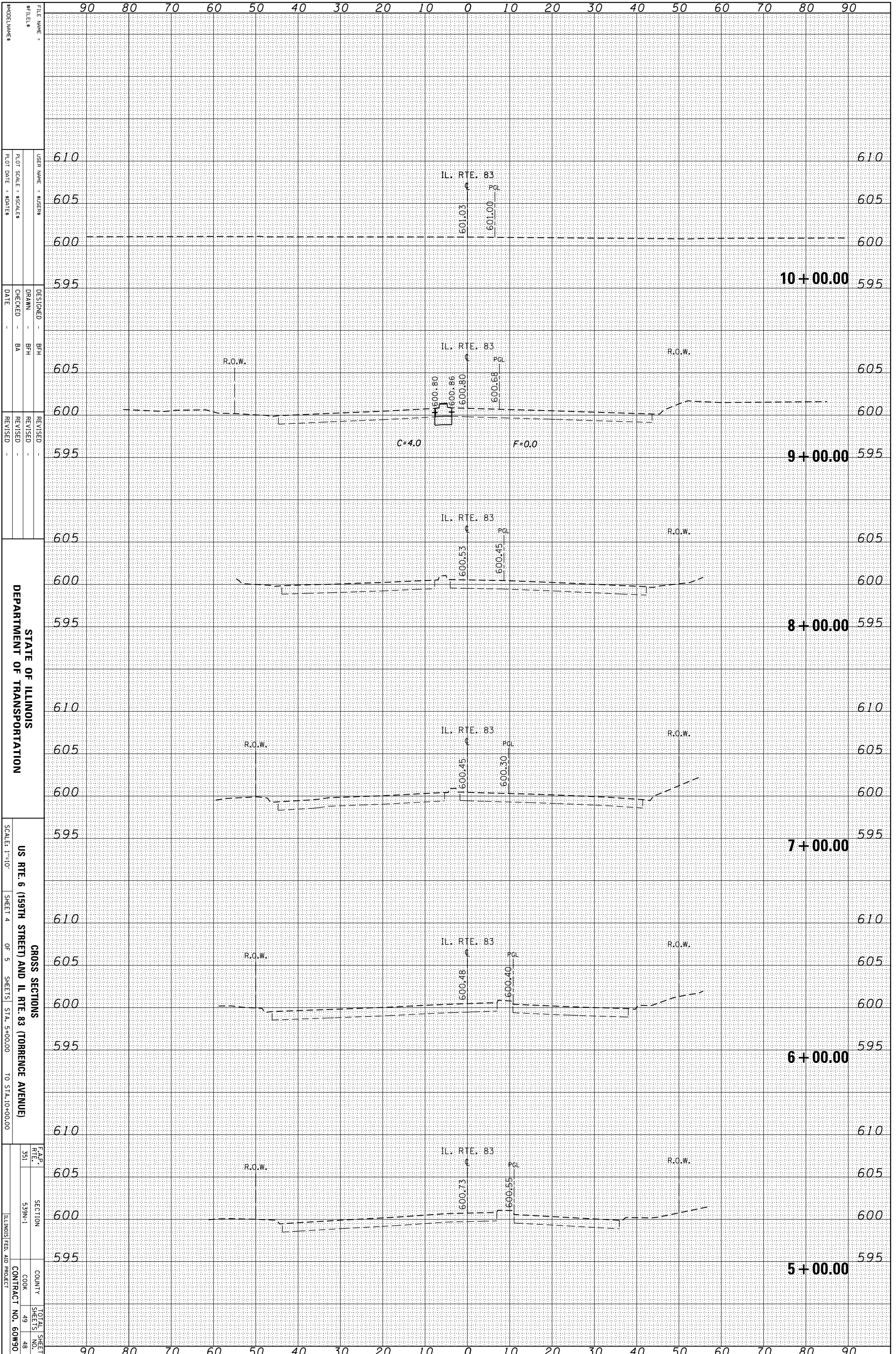
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F.A.P. RTE. 351 SECTION 539N-1 COUNTY COOK CONTRACT NO. 60W90

TOTAL SHEET NO. 49 SHEETS NO. 47 ILLINOIS FED. AID PROJECT

ORIGINAL SURVEY	SURVEYED _____	BY _____	DATE _____
NOTE BOOK	PLOTTED _____		
	TEMPLATE _____		
	AREAS _____		
	AREAS CHECKED _____		

FINAL SURVEY	SURVEYED _____	BY _____	DATE _____
NOTE BOOK	PLOTTED _____		
	TEMPLATE _____		
	AREAS _____		
	AREAS CHECKED _____		



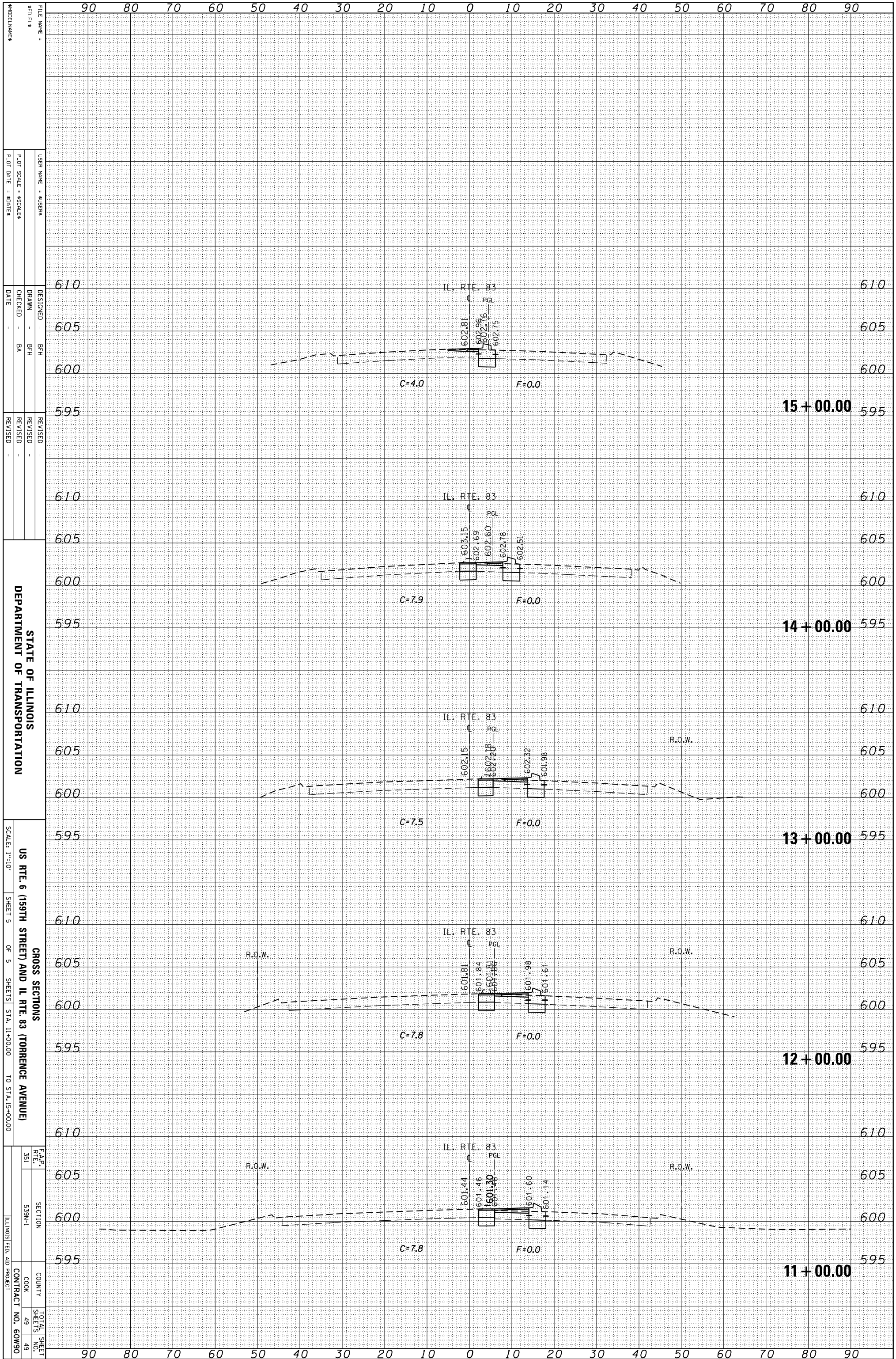
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GROSS SECTIONS
US RTE. 6 (159TH STREET) AND IL RTE. 83 (TORRENCE AVENUE)
SCALE: 1"=10'
SHEET 4 OF 5 SHEETS STA. 5+00.00 TO STA. 10+00.00

F.A.P. RTE. 351	SECTION 539N-1	COUNTY COOK	TOTAL SHEETS 49
			SHEET NO. 48
		CONTRACT NO. 60W90	
		ILLINOIS FED. AID PROJECT	

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	CHECKED		



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
US RTE. 6 (159TH STREET) AND IL RTE. 83 (TORRENCE AVENUE)

SCALE: 1"=10'
SHEET 5 OF 5 SHEETS STA. 11+00.00 TO STA. 15+00.00

F.A.P. RTE. 351 SECTION 539N-1 COUNTY COOK CONTRACT NO. 60W90

FILE NAME :	DESIGNED :	REVISION :
#FILES :	DRAWN :	REVISION :
PLLOT SCALE :	CHECKED :	REVISION :
PLLOT DATE :	DATE :	REVISION :

USER NAME :	DESIGNED :	REVISION :
#FILES :	DRAWN :	REVISION :
PLLOT SCALE :	CHECKED :	REVISION :
PLLOT DATE :	DATE :	REVISION :

SCALE:	SHEET	OF	SHEETS	STA.	TO
1"=10'	5	5		11+00.00	15+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS
351	539N-1	COOK	49
CONTRACT NO.			49
ILLINOIS FED. AID PROJECT			60W90